

Genesys Agent Scripting 7.2

Deployment Guide

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Alcatel-Lucent's Genesys solutions feature leading software that manages customer interactions over phone, Web, and mobile devices. The Genesys software suite handles customer conversations across multiple channels and resources—self-service, assisted-service, and proactive outreach—fulfilling customer requests and optimizing customer care goals while efficiently using resources. Genesys software directs more than 100 million customer interactions every day for 4000 companies and government agencies in 80 countries. These companies and agencies leverage their entire organization, from the contact center to the back office, while dynamically engaging their customers. Go to www.genesyslab.com for more information.

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Table of Contents



Preface

Welcome to the *Genesys Agent Scripting 7 Deployment Guide*. This guide describes system requirements, installation of the Genesys Agent Scripting application, installation of supporting applications, and Genesys Agent Scripting Collaboration mode.

This guide is valid only for the 7.x release of this product.

This chapter provides an overview of this guide, identifies the primary audience, introduces document conventions, lists related reference information, and so on:

- "Intended Audience" on page 8
- "Document Conventions" on page 8
- "Chapter Summaries" on page 10
- "Related Resources" on page 10
- "Making Comments on This Document" on page 11
- "Contacting Genesys Technical Support" on page 12
- "Document Change History" on page 12

Genesys Agent Scripting is a development tool that enables you to create and maintain browser-based web applications called "agent scripts." An agent script guides agents through an effective customer interaction flow and helps them complete a structured business process.

Agent scripts provide many benefits. A script ensures the quality of the interaction, adds structure and clarity to the definition of the process, integrates data access and data entry capabilities, maximizes the probability of success, and minimizes the training required by the agent. Genesys Agent Scripting assists in constructing the interfaces to other back office systems.

Intended Audience

This guide is primarily intended for system administrators or script developers. It is also intended for contact center agents who will install and use Genesys Agent Scripting. The guide assumes that you have a basic understanding of:

- CTI concepts, processes, terminology, and applications.
- Network design and operation.
- Your own network configurations.

You should also be familiar with:

- Scripting using Active Server Pages (ASPs) or Java Server Pages (JSPs).
- Apache Tomcat 4.1, 5.0, 5.5; or Microsoft IIS 5.0 or 6.0 web servers.
- HTML editing.

Document Conventions

This document uses certain stylistic and typographical conventions introduced here—that serve as shorthands for particular kinds of information.

Document Version Number

A version number appears at the bottom of the inside front cover of this document. Version numbers change as new information is added to this document. Here is a sample version number:

80fr_ref_06-2008_v8.0.001.00

You will need this number when you are talking with Genesys Technical Support about this product.

Screen Captures Used in This Document

Screen captures from the product graphical user interface (GUI), as used in this document, may sometimes contain minor spelling, capitalization, or grammatical errors. The text accompanying and explaining the screen captures corrects such errors *except* when such a correction would prevent you from installing, configuring, or successfully using the product. For example, if the name of an option contains a usage error, the name would be presented exactly as it appears in the product GUI; the error would not be corrected in any accompanying text.

Type Styles

Table 1 describes and illustrates the type conventions that are used in this document.

Table 1: Type Styles

Type Style	Used For	Examples
Italic	 Document titles Emphasis Definitions of (or first references to) unfamiliar terms Mathematical variables Also used to indicate placeholder text within code samples or commands, in the special case where angle brackets are a required part of the syntax (see the note about angle brackets on page 10). 	Please consult the <i>Genesys Migration</i> <i>Guide</i> for more information. Do <i>not</i> use this value for this option. A <i>customary and usual</i> practice is one that is widely accepted and used within a particular industry or profession. The formula, $x + 1 = 7$ where x stands for
Monospace font (Looks like teletype or typewriter text)	 All programming identifiers and GUI elements. This convention includes: The <i>names</i> of directories, files, folders, configuration objects, paths, scripts, dialog boxes, options, fields, text and list boxes, operational modes, all buttons (including radio buttons), check boxes, commands, tabs, CTI events, and error messages. The values of options. Logical arguments and command syntax. Code samples. Also used for any text that users must manually enter during a configuration or installation procedure, or on a command line. 	Select the Show variables on screen check box. In the Operand text box, enter your formula. Click OK to exit the Properties dialog box. T-Server distributes the error messages in EventError events. If you select true for the inbound-bsns- calls option, all established inbound calls on a local agent are considered business calls. Enter exit on the command line.
Square brackets ([])	A particular parameter or value that is optional within a logical argument, a command, or some programming syntax. That is, the presence of the parameter or value is not required to resolve the argument, command, or block of code. The user decides whether to include this optional information.	smcp_server -host [/flags]

Type Style	Used For	Examples
Angle brackets (<>)	A placeholder for a value that the user must specify. This might be a DN or a port number specific to your enterprise.	smcp_server -host ⟨confighost⟩
	Note: In some cases, angle brackets are required characters in code syntax (for example, in XML schemas). In these cases, italic text is used for placeholder values.	

Table 1: Type Styles (Continued)

Chapter Summaries

In addition to this opening chapter, this guide contains these chapters:

- Chapter 1, "Overview of Genesys Agent Scripting" on page 13, introduces the major components, key features, and benefits of this release of the Genesys Agent Scripting application.
- Chapter 2, "System Requirements" on page 17, describes the minimum system and software requirements for installing and using this product.
- Chapter 3, "Installing Genesys Agent Scripting" on page 29, provides basic installation instructions for this product.
- Chapter 4, "Installing Supporting Applications" on page 35, describes how to obtain and install the applications that the product requires, and how to set up the appropriate environment.
- Chapter 5, "Installing Genesys Agent Scripting for Use with Genesys Agent Interaction Layer" on page 43, provides instructions for Genesys software administrators who will be integrating agent scripts generated by Genesys Agent Scripting into their Agent Desktop workflow.
- Chapter 6, "Using Genesys Agent Scripting in Collaboration Mode" on page 49, provides information for system administrators on how to set up Genesys Agent Scripting in a multiple-user environment, and how to set up and manage users and Project Books.
- The Appendix, "Genesys Integration with the ASP.NET (ASPX) Platform" on page 83, provides information for Genesys software administrators who will support Genesys Agent Scripting on the ASP.NET platform.

Related Resources

Consult these additional resources as necessary:

- *Genesys Agent Scripting 7.2 Help*, which provides details on the features and functionality of the Genesys Agent Scripting application. This Help file is available from within the Genesys Agent Scripting Development Environment and provides reference material for the graphical user interface (GUI).
- *Genesys Agent Scripting 7.2 User Guide,* which describes how to use the installed software to create new projects; compile, test, and deploy existing projects; and integrate projects with Genesys Outbound software.
- *Genesys Technical Publications Glossary*, which ships on the Genesys Documentation Library CD and which provides a comprehensive list of the Genesys and CTI terminology and acronyms used in this document.

Release Notes and Product Advisories for this product, which are available on the Genesys Technical Support website at <u>http://genesyslab.com/support</u>.

Information on supported hardware and third-party software is available on the Genesys Technical Support website in the following documents:

- *Genesys Desktop 7.6 Deployment Guide*, which ships on the Genesys Documentation Library CD and outlines Genesys Desktop configuration and installation procedures.
- *Genesys Desktop 7.6 Developer's Guide*, which ships on the Genesys Documentation Library CD and describes how to customize Genesys Desktop with buttons, menus, and other features.
- Genesys Supported Operating Systems and Databases
- Genesys Supported Media Interfaces
- Interaction SDK (Java) Deployment Guide
- Genesys Integration Server Deployment Guide
- Genesys 7.6 Desktop .NET Toolkit Developer's Guide
- Genesys 7.6 Desktop Developer's Guide
- *Framework 8.0 Deployment Guide*, which provides reference to the SOAP options in the Genesys Configuration Server.
- *Outbound Contact 8.0 Reference Manual*, which provides information needed for the Outbound Script objects.

Genesys product documentation is available on the:

- Genesys Technical Support website at <u>http://genesyslab.com/support</u>.
- Genesys Documentation Library DVD, which you can order by e-mail from Genesys Order Management at <u>orderman@genesyslab.com</u>.

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You can comment on what you regard as specific errors or omissions, and on the accuracy, organization, subject matter, or completeness of this document. Please limit your comments to the scope of this document only and to the way in which the information is presented. Contact your Genesys Account Representative or Genesys Technical Support if you have suggestions about the product itself.

When you send us comments, you grant Genesys a nonexclusive right to use or distribute your comments in any way it believes appropriate, without incurring any obligation to you.

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Before contacting technical support, refer to the *Genesys Technical Support Guide* for complete contact information and procedures.

Document Change History

This document has been updated for new and changed functionality in the 7.2.002.15 release of Genesys Agent Scripting (GAS), as described in the Release Notes and online help.



Chapter

1

Overview of Genesys Agent Scripting

Genesys Agent Scripting is a development tool that enables you to create and maintain browser-based web applications called "agent scripts." An agent script guides contact center agents through an interaction with a contact and helps them complete a structured business process. Typical business processes include filling out an application, identifying the right type of expert contact to handle an inquiry, troubleshooting a system, and so on.

An agent script enables a contact center agent to work with the contact to complete a task. The script provides text (such as well-pointed questions) and data that help the agent deliver a consistently high level of service to the contact.

In addition to providing a simple linear flow of script text and related controls, a Genesys agent script can react dynamically to information from a customer. This means that, using Genesys Agent Scripting, you can design an agent script to handle normal variations in a structured business process. As necessary, the script can respond dynamically to the answers to scripted questions. Depending on the feedback, the flow of the script may change from one course to another. If the default flow is not correct for the contact's circumstances, the script may adjust by displaying a different page of text to the agent.

Agent scripts provide many benefits. A script ensures the quality of the interaction, adds structure and clarity to the definition of the process, integrates data access and data entry capabilities, maximizes the probability of success, and minimizes the training required by the agent. Genesys Agent Scripting assists in constructing the interfaces to other back office systems.

The information in this chapter is divided between the following topics:

- Genesys Agent Scripting Components, page 14
- New in This Release, page 15

Genesys Agent Scripting Components

This section describes the components that make up the Genesys Agent Scripting application.

The Agent Scripting Editor

The *Agent Scripting Editor* is a Windows-based, call-flow designer that script developers use to write and edit complex scripts for business processes.

It provides two design modes:

- Graphical requires the installation of Microsoft Visio 2003 Professional software. This design mode employs customized flowchart elements to create, edit, or display the individual components of a call flow.
- Tree-Structured is the default design mode if you do not install Microsoft Visio 2003 Professional. This design mode employs a standard tree structure to create, edit, or display pages, streams, process flows, and projects.

Genesys Agent Scripting contains a *compiler* that script developers use to compile their newly created scripts and generate source files. The source files are one of the following types:

- Active Server Page (ASP) or ASP.NET (ASPX) source files that run on a Microsoft IIS 5.0 or IIS 6.0 web server.
- Java Server Page (JSP) source files that run on an Apache Tomcat 4.1, 5.0, or 5.5 web server, version 4.1, 5.0, or 5.5, or on the WebSphere Application Server, version 5.1 or 6.0.

Agent Scripting provides two code-generation modes:

- Incremental (generates only what has changed since the last compile)
- Full (compiles all elements)

Developers can use the Simulate action in Genesys Agent Scripting to start an Internet Explorer browser, and test scripts before actual deployment.

The Runtime Engine

The *runtime engine* provides agents access to the developed business processes (deployed scripts), which reside on a web server and which the agent accesses and uses through a web browser.

The agent carries out an interaction with a customer. The runtime engine provides:

- An intuitive display within the web browser.
- Automatic and transparent script updates.

- Data-entry validation.
- Navigation capabilities for the agent.

These features facilitate the agent's use of the designed script and guide the agent to a smooth interaction with the customer.

Collaboration Mode

Collaboration mode allows you to: convert Project Books to a multi-user format; check in and check out files; lock and unlock Project Books; and access the administration function to manage users and servers (for system administrators only).

The following functions are available in Collaboration mode:

- Conversion of Project Books for multiple users
- A Collaboration Check In / Check Out feature to manage multiple-user Project Books
- Login with password protection for system-administrator access to Collaboration Administration
- The ability to add, delete, activate, or deactivate user accounts and to update user information
- The ability to lock and unlock multiple-user Project Books and to change the Lock mode

In many cases, it may be necessary for several script developers to combine their efforts, or *collaborate*, on a large script design/development project. After conversion to Collaboration mode, the Project Book remains in this mode. It cannot be restored to a single user mode.

New in This Release

This section describes the new features in Genesys Agent Scripting release 7.2.0.

- Support for custom integration with the Genesys .NET Desktop Toolkit. See the new Appendix, "Genesys Integration with the ASP.NET (ASPX) Platform" on page 83.
- Support for custom desktops and other applications created with Genesys 6.x and 7.x SDKs.
- Mapping of asynchronous events to regular fields, and dynamic updating of regular fields while an agent is on the page. See the help topic Define > Async Interfaces.

Catalog enhancements that dynamically reflect your addition, deletion, and moving of pages in the editor. See the help topic Define > Catalogs > Catalog Properties.

- Support in the Assignment Rules dialog for wildcards, and for comparing two Genesys fields to each other in assignment rules. See the help topic Compile > Assignment Rules.
- Separate environment and compiler settings for design and run-time environments. See the help topic Compile > Target Environment.
- Support for listener field values in branching operations.

The following feature was removed from this release:

• The Function tab is removed from the Field Properties dialog box.



Chapter



System Requirements

This chapter outlines the software requirements for the Genesys Agent Scripting 7 application.

The information in this chapter is divided among the following topics:

- Requirements for Running the Agent Scripting Editor, page 17
- Requirements for Deploying Generated Scripts, page 18
- Web Archive Deployment in a Web Server, page 23
- Requirements for Collaboration Mode, page 23
- Requirements for Using Deployed Business Processes, page 25
- Migration of Database Interfaces that Use Stored Procedures, page 25

Requirements for Running the Agent Scripting Editor

This section outlines the operating system and software requirements for running the Genesys Agent Scripting application's Agent Scripting Editor. Review these requirements before installing Genesys Agent Scripting.

- One of these following operating systems:
 - Windows 2000 Professional with Service Pack 4
 - Windows 2000 Server running on a 32-bit Intel processor
 - Windows 2000 Professional SP4
 - Windows XP Professional
 - Windows 2003 Server running on a 32-bit Intel processor
- Microsoft Visio 2003 Professional (required only for Graphical design mode showing process flow and stream diagrams within Genesys Agent Scripting).

Requirements for Deploying Generated Scripts

This section outlines the operating system and software requirements for compiling and running scripts created or modified within Genesys Agent Scripting.

The requirements depend on the nature of the web server that will host the generated source files.

Please review these requirements before installing Genesys Agent Scripting.

Deploying Applications

Web pages generated by Genesys Agent Scripting require write access to their target directory. When deploying Genesys Agent Scripting applications, please ensure that the web server has write authority to the target directory.

Deploying Applications Under Microsoft IIS

Use a Microsoft IIS web server if you are working with one of the following combinations:

- ASP or ASP.NET without Asynchronous (Async)
- ASP.NET with Async* (see additional step)

For either of the above combinations, complete these additional steps for deployment:

- **1.** From the Windows Start Menu, go to the Control Panel and select Administrative Tools.
- 2. Select Internet Information Services (IIS) Manager.
- 3. In the Internet Information Services (IIS) Manager window, navigate to the target directory folder under (computer name) > Web Sites > Default Web Site > (target directory).

Genesys Agent Scripting must be deployed as a separate application. To set this up:

- 1. Right-click the folder and select Properties.
- **2.** On the Home Directory tab, click the Create button next to the Application name.

ASP.NET with Async*

If you are using ASP.NET with Async, complete these additional steps:

- 1. Right-click the Async sub-directory folder and select Properties.
- 2. Click the Create button next to the Application name.

Deploying Applications Under Tomcat

When using an Apache Tomcat web server, the generated script created by the Genesys Agent Scripting editor is deployed as a separate application. During deployment, context information (folder WEB-INF) is automatically included, enabling Tomcat to recognize the application. If the generated Agent Scripting Web Application is deployed in the webapps folder of Tomcat, then Tomcat must be restarted to make the application available.

If you are using Tomcat 5.0 or 5.5 and you are not deploying the generated Agent Scripting Web Application in the Tomcat's webapps folder, then you need to use Tomcat Web Application Manager to tell Tomcat where the application is deployed.

You can start the Tomcat Web Application Manager and begin the deployment by performing the following steps:

- 1. Open a Web browser.
- 2. Go to http://machineName:8080/manager/html (machineName is the name of the machine on which Tomcat is installed).
- **3.** In the Tomcat Web Application Manager, specify the sub-directory folder of the generated Web application you wish to deploy.

Improving Performance

To improve the performance of Genesys Agent Scripting applications, set Tomcat's Maximum Memory Pool value to 1024 MB., as follows:

- 1. Run: <*Tomcat Installation Directory*>/bin/TomcatW.exe.
- 2. Click the Java Properties tab.
- 3. Set Maximum Memory Pool to 1024 MB.

Deploying Applications Under WebSphere

See the section "Web Archive Deployment in a Web Server" on page 23 for instructions on how to generate a Web Archive (.WAR) file suitable for deploying in WebSphere 5.1 or 6.0.

Active Server Pages

If you want to deploy Active Server Pages (.asp) or Active Server Pages for .NET (.aspx) pages, you will need to compile the script and deploy the generated .asp or .aspx source files on a Microsoft IIS web server.

The required operating system and web server software consists of either of the following:

- Microsoft Windows 2000 Server with Microsoft IIS 5.0 web server.
- Microsoft Windows 2003 Server with Microsoft IIS 6.0 web server.

Upon installation of (or upgrade to) the Microsoft Windows 2000 Server, Microsoft IIS 5.0 web server is installed automatically. Upon installation of (or upgrade to) the Microsoft Windows 2003 Server, Microsoft IIS 6.0 web server is installed automatically.

When you are ready to compile and deploy scripts, you will need to identify the path to the Microsoft IIS web server within Genesys Agent Scripting.

Figure 1 on page 21 shows an example of the Genesys Agent Scripting Target Environment dialog box as it might be set up for ASP deployment:

. Target Environmer	nt Properties		×
General	Advanced	Configuration File	Default Parameters
Target Environment Na Default_Target	ime		
Description			
This target was autom	atically created as part of	the project-book setup.	
J			
Target Directory c:\inetpub\www.root\\	WGDemo		Browse
Simulate URL			
http://hostname.comp	any.com/WWGDemo		
Code Target	asp 💌		
		OK	Cancel

Figure 1: Setting Target Environment for ASP Deployment

Java Server Pages

If you want to deploy Java Server Pages (JSP), you will need to compile the script and deploy the generated JSP source files on an Apache Tomcat web server, or WebSphere.

The required operating system and software consists of:

- Microsoft Windows 2000 Server, Microsoft Windows 2003 Server, or Microsoft Windows 2000 Professional SP4.
- Apache Tomcat 4.1, 5.0, or 5.5 web server, or WebSphere Application Server, Version 5.1 or 6.0.
- Sun's Java 2 Enterprise Edition (J2EE) v1.4 SDK or Java 2 SDK, Enterprise Edition, v1.3.1.

To set up the Apache Tomcat web server, or WebSphere, you must first download and install both the J2EE SDK and Apache Tomcat, or WebSphere. See "Installing Supporting Applications for JSP" on page 38 for details.

The Apache Tomcat web server, or WebSphere, may reside on the same computer as the Genesys Agent Scripting application, or may reside on a networked host. When you are ready to compile and deploy scripts, you will need to identify the path to the web server within Genesys Agent Scripting.

Figure 2 on page 22 shows an example of the Genesys Agent Scripting Target Environment Properties dialog box as it might be set up for JSP deployment:

i, Target Environmer	nt Properties		<u>></u>
General	Advanced	Configuration File	Default Parameters
Target Environment Na ApacheTomcat41	ime		
Description			
For JSP			
Target Directory C:\Program Files\Apac Simulate URL	che Group\Tomcat 4.1\w	ebapps\\WWGDemo	Browse
http://localhost:8080/	WWGDemo		
Code Target	jsp 💌		
		OK	Cancel

Figure 2: Setting Target Environment for JSP Deployment

One additional step is necessary at the Java Web Server. The Genesys Agent Scripting library wwg.jar must be installed in a directory that is accessible by the Java Web Server. This file are shipped with Genesys Agent Scripting and is located in its installed path ...\GenesysIntegration\Lib.

For example, in Tomcat, you might put it in the ...\shared\lib directory.

Web Archive Deployment in a Web Server

Genesys Agent Scripting provides the capability to generate Web Archive (.WAR) files for deployment to Java-based web servers, such as Tomcat or WebSphere. When a Project Book is compiled with the "Create Target as a .WAR File" option selected, a file will be placed into the target directory that has the form ProjectBookName.WAR. This file can then be deployed as a Web application using the administration utilities available for the desired web server.

🐂 Target Environmen	t Properties		×
General	Advanced	Configuration File	Default Parameters
Post Compile Procedure Do Not Overwrite C Compile with JMeter Use Async Framewr Advanced Java Optic F Create Target as Java SDK Di	e onfiguration File Support ork ns s a .WAR File		Browse
			Cancel

Figure 3: Setting Target Environment for JSP Deployment - Creating the Target as a .WAR File

Figure 3 shows the Advanced Tab, with the option checked to Create Target as a .WAR File.

Requirements for Collaboration Mode

This section outlines the operating system and software requirements for using Collaboration mode.

The requirements depend on the type of collaboration server that you will be using.

Review these requirements before installing Genesys Agent Scripting.

Note: It is not necessary for the collaboration server to be running on the same server, or have the same target language, as the generated scripts.

Microsoft IIS Collaboration Server

If you are setting up a Microsoft IIS Collaboration Server, the operating system and software requirements include either of the following:

- Microsoft Windows 2000 Server with Microsoft IIS 5.0 web server.
- Microsoft Windows 2003 Server with Microsoft IIS 6.0 web server.

Upon installation of (or upgrade to) the Microsoft Windows 2000 Server, Microsoft IIS 5.0 web server is installed automatically. Upon installation of (or upgrade to) the Microsoft Windows 2003 Server, Microsoft IIS 6.0 web server is installed automatically.

When you are ready to set up a Microsoft IIS Collaboration Server, see "Microsoft IIS Collaboration Server" on page 37 for instructions.

Apache Tomcat Collaboration Server

If you are setting up an Apache Tomcat 4.1, 5.0, or 5.5 Collaboration Server, the operating system and software requirements are:

- One of the following:
 - Microsoft Windows 2000 Server
 - Microsoft Windows 2003 Server
- Apache Tomcat 4.1, 5.0, or 5.5 web server
- Sun's Java 2 Enterprise Edition v1.4 SDK or Java 2 SDK, Enterprise Edition, v1.3.1
- MySQL Database Server and a properly configured MySQL database

The Apache Tomcat may reside on the same computer as the Genesys Agent Scripting application, or it may reside on a networked host. When you are ready to set up an Apache Tomcat Collaboration Server, see "Apache Tomcat 4.1, 5.0, 5.5 or WebSphere 5.1, 6.0 Collaboration Server" on page 37 for instructions.

WebSphere Collaboration Server

If you are setting up a WebSphere Application Server, Version 5.1 or 6.0, the operating system and software requirements are:

- Microsoft Windows 2000 Server or Microsoft Windows 2003 Server
- WebSphere Application Server, Version 5.1 or 6.0
- MySQL Database Server and a properly configured MySQL database

The WebSphere Application Server may reside on the same computer as the Genesys Agent Scripting application, or it may reside on a networked host. When you are ready to set up a WebSphere Application Server, see "Apache Tomcat 4.1, 5.0, 5.5 or WebSphere 5.1, 6.0 Collaboration Server" on page 37 for instructions.

Requirements for Using Deployed Business Processes

One of the following web browsers is required for running deployed business processes (scripts):

- Internet Explorer 6.x or 7.x
- Netscape Navigator 6.2, 7.0, 7.1, or 7.2.

Migration of Database Interfaces that Use Stored Procedures

Note: The information in this section applies only to Project Books containing Database Interfaces that use Stored Procedures from Releases 7.0 and 7.0.1, and that you are upgrading to 7.0.101 or higher.

After migrating a project book to the new version of Genesys Agent Scripting 7.0.101 or higher, some special considerations exist.

If the project book contains the Database Interface for Stored Procedures, you will need to perform some manual changes, using the Genesys Agent Scripting Editor. This section explains how to make these changes.

Genesys Agent Scripting versions 7.0.101 or higher support output parameters and return values for Stored Procedures.

Defining Specific Parameters

To support this feature, you must define the Stored Procedures parameters that have the following directions and SQL Types.

Directions:

- Input
- Output
- Input/Output
- Return Value

SQL Types:

- INTEGER
- FLOAT
- VARCHAR
- DATE
- TIMESTAMP
- CURSOR
- REAL
- SMALLINT
- BIGINT
- DOUBLE
- DECIMAL
- TIME

For existing project books that contain Stored Procedures parameters, Genesys Agent Scripting automatically migrates the parameter definitions. It defines them with a direction of Input and a SQL Type of VARCHAR. This automatic migration might cause a discrepancy of types during runtime if the input parameter is not supposed to be of the type VARCHAR. Therefore, we recommend that you check all of the parameter definitions for all of the Database Interfaces.

Special Considerations for Oracle Databases

Genesys Agent Scripting version 7.0.101 or higher performs additional migration of all parameter definitions for the Oracle Database. In previous versions of Genesys Agent Scripting, a Stored Procedure Database Interface could only call Stored Procedures that contained output parameters that matched the columns defined in the Database Interface. The call to the Stored Procedure would result in data being returned in these columns. The columns are mapped to the Table Field defined in the Database Interface. The result was the return of one table row. This restricted the stored procedure from returning multiple rows for a table. This restriction was the result of the Oracle Database forcing all outputs from a stored procedure to be returned as output parameters, including SQL query results.

Now, with the support of CURSOR output parameters, Genesys Agent Scripting is no longer forced to treat the defined columns as output parameters. The migration of Database Interfaces now results in defining new Output parameters of the type VARCHAR. This parameter applies to each of the defined columns whose output values are mapped to the Table Fields previously associated with the columns.

The execution of the migrated Database Interface results in the associated fields being updated with the values from each output parameter. However, it does not force the defined Table Field associated with these fields to be updated. So, you must perform manual changes to force the Table Field to be reloaded. Or, you can change the Stored Procedure to remove the output parameter for each column, and to define an output parameter of the SQL Type

CURSOR. This will save the results of a SQL query into the Table Field defined for the Database Interface.





Chapter

3

Installing Genesys Agent Scripting

This chapter describes how to install the Genesys Agent Scripting application.

The Genesys Agent Scripting installation process uses an InstallShield Wizard.

If you have a previously installed version of Genesys Agent Scripting on your computer, this version must be uninstalled before proceeding with the installation of the current version.

To install Genesys Agent Scripting:

1. Insert the CD in the CD drive.

The CD should begin the installation automatically. If it doesn't start, go to the CD drive from Windows Explorer and double-click setup.exe.

This should begin the installation procedure. Figure 4 appears, informing you that the system is preparing for installation.



Figure 4: InstallShield Prepares the Genesys Installation Wizard

Once the application is ready to be installed, the screen shown in Figure 5 appears, welcoming you to the installation for Genesys Agent Scripting.



Figure 5: Welcome to the Installation of Genesys Agent Scripting

2. Click Next to continue.

At any point in the install, you may quit by clicking Cancel or the X in the upper-right corner of any screen. When canceling, the following confirmation screen shown in Figure 6 appears.



Figure 6: Confirm Cancellation of Genesys Agent Scripting Installation

To confirm cancellation, click Yes.

To return to the screen in Figure 5, click No, then click Next to continue the installation.

Genesys Installation Wizard			×		
Choose Destination Location					
Genesys Installation Wizard will install Genesys	Genesys Installation Wizard will install Genesys Agent Scripting in the following Destination Folder.				
To install to this folder, click Next. To install to a different folder, click Browse and select another folder. To restore a path to default Destination Folder, click Default.					
Destination Folder]		
C:\Program Files\GCTI\Genesys Agent Scriptin	ng				
		Default	Browse		
	< Back	Next >	Cancel		

Figure 7: Choose Destination Location

Figure 7 shows the Choose Destination Location screen.

The default installation directory is C:\Program Files\GCTI\Genesys Agent Scripting\. You can change the installation directory by clicking the Browse button and selecting or creating a new directory.

- **Note:** Genesys recommends using the default directory. Instructions later in the guide assume that Genesys Agent Scripting is installed in the default directory.
- 3. Click Next to continue with the installation.

The screen shown in Figure 8 on page 32 appears, indicating that the Wizard is ready to install the Scripting application.



Figure 8: Ready to Install

4. Click the Install button to start the installation process and to open the screen shown in Figure 9.

Genesys Installation Wizard	×
Installation Status	
Genesys Installation Wizard is performing the requested operations for Genesys Agent Scripting.	
Generating script operations for action:	_
Cancel]

Figure 9: Installing Genesys Agent Scripting

This screen displays installation status. When the application has finished installing, the screen shown in Figure 10 on page 33 appears.



Figure 10: Installation Complete

5. When Genesys Agent Scripting has completed its installation, click Finish to close the Installation Wizard.

Genesys Agent Scripting is installed.

To run Genesys Agent Scripting, select Start > Programs > Genesys Solutions > Genesys Agent Scripting > Start Agent Scripting from the main taskbar.

Genesys Agent Scripting contains a Help system that provides reference information on all the elements of the graphical user interface (GUI). Once you have started the Genesys Agent Scripting application, access the Help system in one of the following ways:

- Press F1.
- Select Help > Genesys Agent Scripting Help.

Help information is organized in a structure similar to the menu structure within Genesys Agent Scripting.

Chapter 3: Installing Genesys Agent Scripting



Chapter



Installing Supporting Applications

This chapter describes how to install the supporting applications that Genesys Agent Scripting needs to run properly.

The information in this chapter is divided amongst the following topics:

- Preparing to Install, page 35
- Installing Microsoft Visio 2003 Professional, page 37
- Installing HTMLDOC, page 38
- Installing Supporting Applications for ASP, page 38
- Installing Supporting Applications for JSP, page 38

Preparing to Install

Genesys Agent Scripting requires the presence of certain supporting applications to ensure smooth operation of all of its features and functions. The type of environment you will be using and the level of functionality you require from Genesys Agent Scripting determine which supporting applications you must install, as well as other configuration changes that may be required.

For system administrators wishing to use a Genesys Agent Scripting JSP Collaboration Server, additional software installations are required. See "Apache Tomcat 4.1, 5.0, 5.5 or WebSphere 5.1, 6.0 Collaboration Server" on page 37 for details.

Microsoft Visio 2003 Professional

Process flows and streams are two of the building blocks used to build scripting applications for end users. If agents intend to use process flow or stream diagrams to conceptualize and/or build process flows or streams, you must install Microsoft Visio 2003 Professional on any system running Genesys Agent Scripting.

Obtain Microsoft Visio 2003 Professional from any software retailer/vendor.

Easy Software Product's HTMLDOC

If you intend to use the HTML to PDF file generation capabilities of Genesys Agent Scripting, you must install an additional supporting application called HTMLDOC from Easy Software Products. This application is downloadable for free from their website http://www.easysw.com/htmldoc.

Compiling and Running Scripts: ASP

If you intend to build Agent Scripting applications with Active Server Pages (ASPs), you will need access to a Microsoft IIS 5.0 or 6.0 web server to successfully compile, simulate, and run the script pages.

Upon installation of (or upgrade to) the Microsoft Windows 2000 Server operating system, Microsoft IIS 5.0 web server is installed automatically.

Upon installation of (or upgrade to) the Microsoft Windows 2003 Server operating system, Microsoft IIS 6.0 web server is installed automatically.

Agent Scripting Applications with Active Server Pages.NET (ASPXs)

If you intend to build Agent Scripting applications with Active Server Pages.NET (ASPXs), you must have Microsoft.NET Framework Version 1.1 installed on your IIS server.

- IIS 5.0—available to download for free from Microsoft's website.
- IIS 6.0—comes with Microsoft.NET Framework version 1.1 already installed.

Compiling and Running Scripts: JSP

If you intend to build Agent Scripting applications with Java Server Pages (JSPs), you must install or have access to:

- The Java 2 Enterprise Edition (J2EE) v1.4 SDK.
- An Apache Tomcat 4.1, 5.0, or 5.5 web server, or WebSphere Application Server, Version 5.1 or 6.0, to successfully compile and run script pages.
J2EE SDK

The Java 2 Enterprise Edition v1.4 SDK is required to enable Apache Tomcat 4.1, 5.0, or 5.5 to compile Java Server Pages (JSPs).

Obtain this SDK at no cost from Sun's Java website at http://java.sun.com/j2ee/1.4/download.html.

Microsoft IIS Collaboration Server

You do not need to install any additional software on your Microsoft Windows 2000 or 2003 Server to build and use a Microsoft IIS Collaboration Server (ASP environment).

When running on Microsoft IIS, the Microsoft IIS 5.0 or 6.0 Collaboration Server database is set up automatically.

When running Genesys Agent Scripting applications as ASPs, the Microsoft XML Parser Version 3.0 or higher must be installed on the Server system.

- IIS 5.0: available to download from Microsoft's website.
- IIS 6.0: the appropriate version is already installed with the operating system.

Apache Tomcat 4.1, 5.0, 5.5 or WebSphere 5.1, 6.0 Collaboration Server

There are special requirements to build and use an Apache Tomcat or WebSphere web server as the Collaboration Server (JSP environment).

A MySQL database is required to run in Collaboration mode on a Tomcat server. This database server must be installed and started. Genesys Agent Scripting provides a SQL file to create the tables and fields that the Collaboration Server requires.

These steps must precede the conversion of a Project Book to Collaboration mode within Genesys Agent Scripting.

See "Installing MySQL for JSP Collaboration Mode" on page 39 for more details.

Installing Microsoft Visio 2003 Professional

Genesys Agent Scripting looks for the presence of Microsoft Visio 2003 Professional. If found, process flow and stream diagrams, as well as diagramcreation features, become available. If Genesys Agent Scripting does not find Microsoft Visio 2003 Professional, the application functions normally, but without process flow and stream diagramming.

Install Microsoft Visio 2003 Professional as you would any other Windowsbased application. Follow the instructions throughout the installation process.

After installation is completed, activate Microsoft Visio 2003 Professional. To activate, start Microsoft Visio 2003 Professional and click Activate Product on the Help menu. This launches the Activation Wizard, and activates the application.

Installing HTMLDOC

After you obtain the correct version of HTMLDOC for the Windows platform you use, extract the application and run its installation routine (setup.exe). The HTMLDOC executable must be installed in a location that is accessible from the Web Server that is hosting the deployed Agent Scripts.

Installing Supporting Applications for ASP

For Active Server Pages, you must have a Microsoft IIS 5.0 or 6.0 web server on your system, or have network access to a server that is running Microsoft IIS 5.0 or 6.0. To deploy scripts, you will need remote access to the Microsoft IIS server that will host the scripts.

For ASP.NET, the Microsoft.NET Framework Version 1.1 and the latest available Service Packs must be installed on the IIS Server.

When running Genesys Agent Scripting applications as ASPs, the Microsoft XML Parser Version 3.0 or higher must be installed on the Server system for either of the following:

- IIS 5.0 available to download from Microsoft's website.
- IIS 6.0 the appropriate version is already installed with the operating system.

Installing Supporting Applications for JSP

For Java Server Pages, you will need to install either the Java 2 Enterprise Edition v1.4 SDK or v1.3.1. In addition, you must install the Apache Tomcat web server or the WebSphere 5.1 or 6.0 application server on your system or have network access to a server running an Apache Tomcat web server or a WebSphere 5.1 or 6.0 application web server. Note: To correctly set up with Tomcat in Collaboration mode under JSP, it is necessary to download the activation.jar and mail.jar files needed by Tomcat. They are not deployed by default. You can download these from http://java.sun.com/products/javamail/. Put them in ...\common\lib directory under Tomcat.

Finally, if you will be using Collaboration mode for JSP, you must have a MySQL database available and you must install the open source MySQL Database Server on the computer running Genesys Agent Scripting.

Installing the Java 2 Enterprise Edition v1.4 SDK

Download the Java 2 Enterprise Edition v1.4 SDK from Sun's Java website at http://java.sun.com/j2ee/1.4/download.html. You will obtain a self-extracting archive such as j2eesdk-1_4-dr-windows-eval.exe (the name of the file you obtain may differ).

Double-click the self-extracting archive file and follow the instructions to install the SDK.

Installing Apache Tomcat

Download the Apache Tomcat 4.1, 5.0, or 5.5 binary files at no cost from the Apache website at http://jakarta.apache.org/tomcat/. You will obtain a self-extracting archive such as jakarta-tomcat-4.1.29.exe (the name of the file you obtain may differ).

Note: Install the Java 2 Enterprise Edition v1.4 SDK *before* installing Tomcat. The Apache Tomcat 4.1, 5.0, or 5.5 installation looks for an installed Java Development Kit.

Double-click the self-extracting archive file and follow the instructions to install Apache Tomcat 4.1, 5.0, or 5.5.

Installing IBM WebSphere 5.1 or 6.0 Application Server

Install WebSphere Application Server as you would any other Windows-based application. Follow the instructions throughout the installation process.

Installing MySQL for JSP Collaboration Mode

The 7.0 release of Genesys Agent Scripting requires the presence of a MySQL database to convert a Project Book from single-user to multiple-user (Collaboration) mode within a JSP environment.

To use Collaboration mode for JSP, you must have a MySQL database available and you must install the open source MySQL Database Server on the computer that is running Genesys Agent Scripting.

For instructions on setting up a MySQL database, see "Creating and Setting Up a MySQL Database" on page 40.

Installing MySQL Database Server

Download the open source MySQL Database Server at no cost from http://www.mysql.com/downloads/index.html. You will obtain a ZIP file such as mysql-4.0.18-win.zip (the name of the file you obtain may differ).

Extract the installation files from the ZIP file, double-click setup.exe, and follow the instructions to install MySQL Database Server.

You now need to create a MySQL database if you intend to use the Genesys Agent Scripting Collaboration Module with JSP. See the next section for more details.

Creating and Setting Up a MySQL Database

To create and set up a MySQL database, run MySQL Database Server from a command line and perform the following steps:

Note: This procedure assumes that MySQL Database Server was installed into the default directory: c:\mysql.

- Copy the SQL command file SQL_WWC_NEW_7-0-1.sql from the Genesys Agent Scripting JSP Collaboration folder (by default c:\Program Files\GCTI\Genesys Agent Scripting\Collaborate jsp Web Folder\) to the mysql\bin directory.
- Access a Command Prompt in Windows, and change to the MySQL server directory: cd \mysgl\bin
- 3. Start the MySQL Database Server administrator tool if it is not already running:

c:\mysql\bin>winmysqladmin

- Log in as administrator: c:\mysql\bin>mysql --user=root mysql
- 5. Create a user called wwc for Genesys Agent Scripting Collaboration: mysql> GRANT ALL PRIVILEGES ON *.* TO 'wwc'@'hostname' IDENTIFIED BY 'wwc' WITH GRANT OPTION;

You may substitute other values for the user ('wwc') and the password ('wwc'). If you do, however, you will need to change the default values in

the connection string file. See "Copying the Connection String File for the JSP Collaboration Server" on page 50.

hostname: This is the hostname from which the user 'wwc' will access the MySQL database. The hostname must be a fully qualified name, or can be set to % to indicate that the user can access this database from any host.

6. Create a database called WWC to use for Genesys Agent Scripting Collaboration:

mysql> CREATE DATABASE WWC;

You may substitute another value for the database name (WWC). If you do, however, you will need to change the default value in the connection string file. See "Copying the Connection String File for the JSP Collaboration Server" on page 50.

- Select this database (make it active): mysql> USE WWC;
- 8. Invoke the SQL command file (SQL_WWC_NEW_7-0-1.sql) to create the tables needed for Genesys Agent Scripting Collaboration: mysql > SOURCE SQL_WWC_NEW_7-0-1.sql
- Exit MySQL Administration: mysql> EXIT
- 10. Close the Command Prompt window.

The database is now set up properly.

Installing the MySQL Connector/J Driver

Download the MySQL Connector/J Driver from

http://www.mysql.com/downloads/index.html. (This is open-source software, available at no cost.) You will obtain a ZIP file whose name has the following form:

mysql-connector-java-3.0.11-stable.zip

The name of the file you obtain may differ. After downloading the file, install it as follows:

- 1. Extract the installation files from the ZIP file.
- 2. Locate the file mysql-connector-java-3.0.11-stable-bin.jar (the name of the .jar may differ), and copy it to the following location:

For Tomcat: <TOMCAT >\shared\Lib

...where *<TOMCAT>* is the path to the Tomcat directory.

The procedure above assumes that Apache Tomcat 4.1, 5.0, or 5.5 was installed in its default directory.

Note: No action is necessary when running on WebSphere Application Server version 5.1 or 6.0.

You have now installed all the supporting applications and drivers you need to run in Genesys Agent Scripting JSP Collaboration mode.

See Chapter 6 to continue the steps required to use Collaboration mode for JSP.

Upgrading a MySQL Database from Genesys Agent Scripting Version 7.0.0

If you are upgrading from Genesys Agent Scripting version 7.0.0 to version 7.0.1 or higher, the MySQL Collaboration database must be upgraded. This is accomplished by running the SQL command file SQL_WWC_UPDATE_7-0-1.sqL against your current Genesys Agent Scripting 7.0.0 Collaboration database.



Chapter



Installing Genesys Agent Scripting for Use with Genesys Agent Interaction Layer

This chapter is intended for Genesys software administrators. It describes how to install Genesys Agent Scripting (GAS) for use with the Genesys Agent Interaction layer, which is implemented in Java®.

Genesys Agent Scripting provides a Java Servlet that can be integrated with the Agent Desktop's software to provide access to Genesys Agent Interaction Layer. Data from an interaction can be used to determine the server location and the starting point of the Agent Script to be used to process the interaction.

The information in this chapter is divided among the following topics:

- Agent Desktop Integration with Genesys Agent Scripting, page 44
- Genesys Agent Desktop Integration with Genesys Agent Scripting, page 44
- Creating the Genesys Application for Genesys Agent Scripting, page 46
- Configuring Genesys Configuration Server for Outbound Operations, page 47
- Genesys Agent Scripting Server, page 47
- Genesys Agent Scripting Project Book, page 47
- T-Server Configuration, page 48

Agent Desktop Integration with Genesys Agent Scripting

Note: If you are using the Genesys Agent Desktop (version 7.0.1 or higher), skip this section and proceed to the section entitled "Genesys Agent Desktop Integration with Genesys Agent Scripting" on page 44.

To integrate an Agent Desktop using Genesys Agent Scripting with Genesys Agent Interaction Layer, perform the following steps:

- 1. Install the file containing the Java Servlet from the Agent Scripting install path ...\GenesysIntegration\Lib\WWG.jar into a directory of the Java Web Server that is accessible by the Agent Desktop application.
- **2.** Ensure that the Genesys Interaction SDK (version 7.1) has been installed and is accessible to the Java Web Server. For more detailed information, refer to the Interaction SDK (Java) Deployment Guide.
- 3. Update the web.xml file in the Java Server's Web Application directory ...\WEB-INF to identify the Genesys Agent Scripting integration components. Code snippets are provided in web.xml.Sample in the Genesys Agent Scripting Install directory ...\GenesysIntegration\.
 - a. Add the GASAssignerServlet definition.
 - **b.** Add the GASAssignerServlet mapping section.

The Genesys Agent Scripting servlet provides a public method with the signature:

public String getAssignedPFURL(String interactionID) throws Exception

This method may be used to determine where a particular Interaction should be directed. This method returns a string that provides the URL used to invoke the desired Agent Script. It is based on data referenced by the Interaction. The URL may be used unmodified, since it contains the location and all required Query parameters; or additional Query parameters may be appended, as determined by the needs of the deployed Agent Script. Refer to ...\GenesysIntegration\gdesktop\custom\AgentScripting.jsp for sample usage.

Genesys Agent Desktop Integration with Genesys Agent Scripting

To integrate the Genesys Agent Desktop (version 7.0.1 or higher) with Genesys Agent Scripting using Genesys Agent Interaction Layer, perform the steps listed below. Use these instructions instead of the instructions in the previous section entitled "Agent Desktop Integration with Genesys Agent Scripting".

Note: These instructions assume that you have a basic Genesys Agent Desktop (GAD) installation. If the GAD has already been customized, these instructions must be modified accordingly.

For detailed information about the Genesys Agent Desktop application, refer to the *Genesys Desktop 7 Deployment Guide* and the *Genesys Desktop 7 Developer's Guide*.

- **Note:** Genesys requires you to run the Genesys Agent Desktop on its own dedicated Java web server. Therefore the Genesys Agent Scripting scripts should be deployed to a separate Java web server.
- 1. If Genesys Agent Desktop has NOT been previously customized:
 - a. Copy the entire directory from the GAS Install path ...\GenesysIntegration\gdesktop\custom directly to the GAD Java Server's Web Application path ...\gdesktop\custom.
 - b. Copy the file custom.properties from the GAS Install path ...\GenesysIntegration\gdesktop to the GAD Java Server's Web Application path ...\gdesktop\WEB-INF\classes. The string "Agent Scripting" may be changed to any value that you want to use as a label on the AgentScripting tab.
- **2.** If Genesys Agent Desktop HAS been customized, you must update the customization files to include the Genesys Agent Scripting customization, as follows:
 - a. Modify ...\gdesktop\custom\custom.xml, which is located in the GAD Java Server's Web Application directory, to include the AgentScripting Tab information from the supplied sample AgentScripting.xml file from the ...\GenesysIntegration\gdesktop\custom directory.
 - **b.** Include the javascript-onload section for the GAD window in the custom.xml file.
 - c. Put AgentScripting.jsp in the GAD Java Server's Web Application directory ...\gdesktop\custom. AgentScripting.jsp is located in the Genesys Agent Scripting Install directory ...\GenesysIntegration\gdesktop\custom.
 - d. Add the following line AgentScripting=<Agent Scripting> to this file

...\WEBINF\classes\custom.properties

where $\langle Agent Scripting \rangle$ is the name displayed on the AgentScripting tab.

3. Put the WWG.jar file in the ...\WEB-INF\Lib directory.

This file is in the Agent Scripting install directory: ...\GenesysIntegration\Lib\WWG.jar.

- 4. Update the web.xml file in the Java Server's Web Application directory ...\gdesktop\WEB-INF to identify the Genesys Agent Scripting integration components. Code snippets are provided in web.xml.Sample in the Genesys Agent Scripting Install directory ...\GenesysIntegration\.
 - a. Add the GASAssignerServlet definition
 - b. Add the GASAssignerServlet mapping section
 - **c.** Add the <init-param> for AgentScripting.xml to the <initUAD> servlet definition.

Creating the Genesys Application for Genesys Agent Scripting

In order for Genesys Agent Scripting to access other Genesys components, you must set up an application for Genesys Agent Scripting in Genesys Configuration Manager 7. To do this, complete the following steps:

- In Configuration Manager, open the Environment folder, then the Application Templates folder. If Genesys_Agent_Scripting templates are absent, import them from the Template folder on the Genesys Agent Scripting CD at: //templates/Genesys_Agent_Scripting_702.apd
- 2. Create a new application from Configuration Manager using the Genesys_Agent_Scripting_702 template.
- On the General tab, enter an Application Name. This name will be used by the GAS Server and should be supplied to the parameter G_Config_ApplName located in the Target Environment Properties dialog box, Configuration File tab.
- **4.** In a multi-tenant environment, select the tenant tab and add the tenant with which this application will interact. Choose only one tenant.
- 5. On the Start Info tab enter a period "." for the Working Directory and the Command line sections. This Start Info tab is not used.
- 6. On the Connections tab add a connection to the Premise T-Servers that your Agent Desktop application uses. Also, if your Agent Desktop application uses Contact Server, add this Contact Server.
- 7. On the Options tab fill in the license section with your appropriate information.

For more detailed information, refer to the *Interaction SDK (Java) Deployment Guide*.

Configuring Genesys Configuration Server for Outbound Operations

If you are using Outbound Contact Solution (requires version 7.0.100.08 or higher) with Genesys Agent Scripting, then an additional section must be added to your Configuration Server's config file. The section name and options are below:

[soap] port = debug =

client_lifespan =

For more information on these options, please refer to the *Framework 7 Configuration Options Reference Manual*, Chapter 4, and particularly the section on SOAP.

Note: Restarting any web server—GAD or GAS Tomcats, GAS IIS, or Genesys Integration Server—requires that you also restart all Outbound campaigns.

Genesys Agent Scripting Server

When using deployed Agent Scripts integrated with Genesys Agent Interaction software, one additional step is necessary at the Java web server. The Genesys Agent Interaction software Java files must be installed in a directory that is accessible by the Java Web Server. These files are shipped with Genesys Agent Scripting and are located in its installed path ...\GenesysIntegration\lib.

For example, in Tomcat, you might put them in the ...\shared\lib directory.

Genesys Agent Scripting Project Book

Genesys Agent Scripting provides built-in Agent Scripting objects that can be used by scripts to display Genesys information and perform actions on Genesys Interactions. To create Agent Scripts that operate in this "Genesys Integrated" mode, follow these steps:

- 1. When creating a new Project Book, select the base toolkit "Genesys Agent Interaction toolkit" from the Project Book Properties panel.
- 2. In Compile->Assignment Rules, on the Deployment Settings tab, set the "Genesys Agent Scripting Assigner Servlet URL" to the URL used to access the application hosting this servlet.

- This URL must end in the name of the servlet and match the appropriate mapping, which is specified in either "Agent Desktop Integration with Genesys Agent Scripting" in Step 3b, or "Genesys Agent Desktop Integration with Genesys Agent Scripting" in Step 4b. The default is GASAssigner.
- **3.** In Compile->Assignment Rules, set the Default URL to the deployed location of this Project Book.
- 4. Deploy the Assignment rules (even if empty, the Default URL must be set). Please note, the Agent Desktop Web Server needs to be running since the GAS Assigner Servlet from Step 2 will actually be invoked.
- 5. For each Target environment, the Configuration file parameters must be set (including the CME Application name created from the procedure in the topic "Creating the Genesys Application for Genesys Agent Scripting" on page 46).

T-Server Configuration

GAS will attach interaction data to the call when a transfer with data is issued. In order for this data to be properly propagated to the new interaction an option in T-Server must be checked. Open the T-Server application and go to the Options tab. Select the **T-Server** section and check the value of consult-userdata. This value must be inherited or joint for the GAS transfer to work properly. For more information on these options please consult your T-Server deployment guide.



Chapter

6

Using Genesys Agent Scripting in Collaboration Mode

This chapter is intended for system administrators or script developers. It describes how to convert Genesys Agent Scripting Project Books for use in a multiple-user environment, and how to set up and manage users and Project Books in Collaboration mode.

The information in this chapter is divided among the following topics:

- Preparing for the Conversion, page 49
- Converting a Project Book to Collaboration Mode, page 51
- Managing Users and Project Books, page 63
- Using Genesys Agent Scripting Collaboration Administration, page 70

Preparing for the Conversion

To use Genesys Agent Scripting in a multiple-user environment, databases - (called Project Books), must be converted to a format that allows for multiple users. Genesys refers to these converted Project Books as multiple-user or Collaboration mode Project Books.

You should have already completed the following:

- 1. Installed the Genesys Agent Scripting application.
- 2. Installed the appropriate supporting applications.

Backing Up Your Project Book

Before attempting to convert a Project Book to Collaboration mode, Genesys strongly recommends that you create a backup copy of the Project Book and store it in a safe location.

This is recommended for two reasons:

- Converted Project Book files cannot be restored to Single-User mode.
- Should a Project Book file be damaged during or subsequent to conversion, your backup assures that the original file is intact.

Example: Backing Up WWGDemo.mdb

Genesys Agent Scripting first opens with a Project Book called WWGDemo (file name WWGDemo.mdb). You can assume this will be the candidate Project Book to convert to Collaboration mode. To back up this Project Book file:

- 1. Locate the WWGDemo.mdb file in C:\Program Files\GCTI\Genesys Agent Scripting (assuming the default installation path).
- 2. Make a copy of this file and store it in the same folder.

Copying the Connection String File for the JSP Collaboration Server

The steps in this section apply only when you are setting up a JSP Collaboration Server.

- Note: If you plan to convert additional Project Books to Collaboration mode: If the additional Project Books do *not* use the same Collaboration Server as your initial converted Project Book, *do not* carry out this procedure at this time!
 Instead, carry out this procedure before performing Step 8 in the section "Converting the Project Book" on page 53.
- Navigate the following path: C:\Program Files\GCTI\Genesys Agent Scripting\Collaborate jsp Web Folder
- 2. Select the file WWCConfigExample.inc.jsp and copy it.
- 3. Rename the copy to WWCConfig.inc.jsp.
- 4. Double-click WWCConfig.inc.jsp to open it.

Notepad opens with the file information shown in Figure 11 on page 51.

📕 WWCConfig.inc.jsp - Notepad	
File Edit Format View Help	
<pre>K% String config_jdbc_class = "com.mysql.jdbc.Driver"; String config_jdbc_connect_str = "jdbc:mysql://localhost:3306/wwc?user=wwc&pass wwc"; %></pre>	sword=

Figure 11: WWCConfig.inc.jsp file

- 5. If you set up the MySQL database and user information as described earlier, the information in this connection string should be correct (hostname = localhost, database = wwc, user = wwc, password = wwc).
- **6.** If you created a different database, user, or password, then update the connection string with your values:
 - /wwc? is replaced with /<your database name>?
 - user=<your user name>
 - password=<*your password*>
- 7. If you installed MySQL on a different machine, you need to change Localhost to the machine name where the MySQL database resides.
- 8. If you make any changes to this file, select File > Save.
- 9. Exit from Notepad.

Converting a Project Book to Collaboration Mode

You are now ready to convert Project Books to Collaboration mode in Genesys Agent Scripting.

Creating a Folder for the Collaboration Server

You must create a folder for the Collaboration Server:

- For a Microsoft IIS server (serving ASPs), create a WWC folder inside C:\Inetpub\wwwroot\.
- For an Apache Tomcat 4.1, 5.0, or 5.5 server (serving JSPs), create a WWC folder inside:

For Tomcat: <TOMCAT>\webapps

...where $\langle TOMCAT \rangle$ is the path to the Tomcat directory.

The procedure above assumes that Apache Tomcat 4.1, 5.0, or 5.5 was installed in its default directory.

The Collaboration Server folder is populated automatically during the Project Book conversion when you click the Test button on Step 8, page 55. Also, the WEB-INF folder will be deployed telling Tomcat that this is a runnable application. After the Collaboration Server folder has been populated, you must restart Tomcat to enable Tomcat to detect the application.

Starting the Web Server

Before running Genesys Agent Scripting to convert Project Books to Collaboration mode, you should start the web server you will be using for collaboration as follows:

- For ASP, start the Microsoft IIS 5.0 or 6.0 web server.
- For JSP, start the Apache Tomcat 4.1, 5.0, or 5.5 web server, or WebSphere 5.1 or 6.0.
- For JSP, when you are using WebSphere as a collaboration server. See "Using a WebSphere Application Server for the Collaboration Server" on page 58.

Starting Genesys Agent Scripting

You can start Agent scripting after you have completed the following:

- Installed the supporting applications
- Installed the Genesys Agent Scripting application
- Created the Collaboration Server folder
- For JSP, after you have created and set up a MySQL Database for running a JSP Collaboration Server

After these have been completed, perform the following steps:

- Start Genesys Agent Scripting from the main taskbar by selecting Start > Programs > Genesys Solutions > Genesys Agent Scripting > Start Agent Scripting.
- You may see a message to set up a path called C:\Inetpub\wwwroot\WWGDemo. This is for Microsoft IIS web servers and ASP.
 - If you will be using ASP, click Yes.
 - If you will be using JSP, click No.
- **3.** You may see an information box for Genesys Agent Scripting. Click Close (or wait for the box to close on its own).

When starting Genesys Agent Scripting for the first time, the WWGDemo Project Book opens by default and is displayed in the main window.

The WWGDemo Project Book (file name WWGDemo.mdb) is the file to use as an example for conversion.

Note: If you have not backed up the WWGDemo.mdb file, see "Backing Up Your Project Book" on page 50 and follow the instructions. Genesys strongly recommends that you back up any Project Book file that you intend to convert to Collaboration mode.

Converting the Project Book

Carry out the following steps to convert a Project Book to Collaboration mode. Again, the WWGDemo.mdb file is the example.

 From the Genesys Agent Scripting main menu, select File > Convert to Collaborate Mode.

This opens the first screen of the conversion wizard as shown in Figure 12. This first screen warns you to back up your Project Book file before carrying out the conversion.

🐂 Convert to Collaborate	×
Once this project book has been converted to Collaborate, it can not be undone. In order to run in Collaborate mode you need a Web Server configured that is running the Genesys Agent Scripting Collaborate Serv module. Please make sure you have a backup copy of this Genesys Agent Scripting project book.	er
Previous (Next) Finish Cancel	

Figure 12: Convert to Collaborate Wizard, Backup Warning

Note: You must convert a Project Book to Collaboration mode before any of the multiple-user options (such as Administrate or Lock/Unlock Database) become available.

2. Click Next to proceed to the next screen of the wizard shown in Figure 13. 🛋 Convert to Collaborate X In order to complete the conversion to collaborate mode, please provide the URL for the Collaborate Server, then click on the Test button to make sure you can connect. If you need to find an existing server, or to create a new one, click on Find Server below. Server Language • asp Server Location Server URL Find Server Test Previous Next Finish Cancel

Figure 13: Convert to Collaborate Wizard, Find Server

- 3. Select asp or j sp as desired in the Server Language field.
- 4. Click Find Server to locate the server that will populate the Server Location field.

The Select Target Directory for Collaborate Server dialog box opens as shown in Figure 14.

Select target dir	ectory for Collab	orate Server			? ×
Look in:	🔁 WWC		•	(+ 🗈 💣 🎹	-
My Recent Documents					
Desktop					
My Documents					
My Computer					
S					
My Network	File name:	× ×		▼	Open
Places	Files of type:			•	Cancel

Figure 14: Convert to Collaborate Wizard, Navigate to WWC

- 5. In this dialog box, navigate to the folder you set up in "Creating a Folder for the Collaboration Server" on page 51 and click 0pen.
- 6. Click 0K if you see a JSP Environment message.

The Server Location and Server URL fields are now populated in the conversion wizard as shown in Figure 15 on page 55.

🖹 Convert to Collaborate 🛛 🗶
In order to complete the conversion to collaborate mode, please provide the URL for the Collaborate Server, then click on the Test button to make sure you can connect. If you need to find an existing server, or to create a new one, click on Find Server below.
Server Language 👔
Server Location C:\Program Files\Apache Group\Tomcat 4.1\webapps
Server URL http://localhost:8080/w/WC/w/WCDispatch.jsp
Find Server Test Previous Next Finish Cancel

Figure 15: Convert to Collaborate Wizard, Fields Populated

7. Replace the host string in the Server URL field with the fully qualified host name and port used to access the Collaboration Server. This is the URL string that designers of this Project Book will use to address this Collaboration Server.

The default port for Apache Tomcat is 8080. The modified Server URL string is shown in Figure 15.

- **Note:** Before proceeding to the next step, be sure to carry out the instructions detailed in "Copying the Connection String File for the JSP Collaboration Server" on page 50, if you have not already done so. The Test step will not work correctly unless you have copied (and updated) this connection string file.
- 8. Click Test to test the connection to the Collaboration Server.

If successful, the screen shown in Figure 16 appears.

Note: Clicking Test deploys the Collaboration Server, populating the WWC folder. For JSP, this includes the creation of a WEB-INF subfolder, which tells Tomcat that you have a runnable server. You must restart Tomcat to pick up this change.

💐 Convert to Co	llaborate 🔀			
The server is installed and connected. To continue with this process you will need a valid UserID and password.				
Click Next to contin	ue.			
Server Language	İsp 💌			
Server Location	C:\Program Files\Apache Group\Tomcat 4.1\webapps			
Server URL	http://localhost:8080/w/WC/w/WCDispatch.jsp			
Find Server	Test Previous Next Finish Cancel			

Figure 16: Convert to Collaborate Wizard, Server Installed/Connected

9. Click Next to proceed to the screen shown in Figure 17.

💐 Convert	to Collaborat	e			×
Provide you click Login.	r Genesys Agei	nt Scripting L	JserID and	l Password I	pelow, then
UserID	admin				
Password	@@@@@				Login
		Previous	Next	Finish	Cancel



- **10.** Enter admin in the User ID field.
- 11. Enter admin in the Password field.
- 12. Click Login.

You are now logged in as shown in Figure 18.

💐 Convert	to Collaborat	e			×
Your login v	vas successful				
Click Next to) continue.				
UserID			_		
OsenD	admin				
Password	@@@@@@				(t.ogîn)
		Previous	Next	Finish	Cancel

Figure 18: Convert to Collaborate Wizard, Login Successful

13. Click Next to open the dialog box shown in Figure 19.



Figure 19: Convert to Collaborate Wizard, Start Conversion

- 14. Start the conversion of your Project Book to Collaboration mode by clicking Check In.
- **Warning!** Depending on the size of the Project Book, this conversion process may require a lot of time. Once you start it, you cannot stop it without destroying the Project Book file.

The conversion process proceeds as shown in Figure 20. Allow the conversion process to complete.

🖺 Convert to Collaborate			
At this time the project book can be converted. The conversion process will check in all objects (e.g. Streams, Pages, Fields, and Actions) into the server. This process can take a long time.			
Click Check In to proceed. Warning: This process cannot be undone. Once you click Check In you cannot cancel.			
Processing Object 111 of 111			
Previous Next (Finish) Cancel			

Figure 20: Convert to Collaborate Wizard, Converting Project Book



Figure 21: Convert to Collaborate Wizard - Conversion Complete

15. Click Finish when you see the screen shown in Figure 21.

Using a WebSphere Application Server for the Collaboration Server

The Genesys Agent Scripting install directory contains a file called WWC.war. This file is suitable for deployment on the WebSphere Application Server. To use a WebSphere Application Server, follow these steps:

1. After WWC.war has been installed as a Web Application on the WebSphere Application Server, update the WWCConfig.inc.jsp file to use the appropriate configuration string for accessing the mySQL database (see Figure 11).

- 2. Update the XMLServer tag in the WWGConfig.xml file to contain the correct URL specification for the WebSphere Server (the default port number for WebSphere is 9080).
- **3.** Once these changes are complete, start the Web Application using the WebSphere Administration utility.

Converting a Project Book to Collaboration Mode using WebSphere for the Collaboration Server

Carry out the following steps to convert a Project Book to Collaboration mode for WebSphere as the Collaboration Server. Again, the WWGDemo.mdb file is the example.

 From the Genesys Agent Scripting main menu, select File > Convert to Collaborate Mode.

This opens the first screen of the conversion wizard as shown in Figure 22. This first screen warns you to back up your Project Book file before carrying out the conversion.

💐 Convert to Collabora	ate	×
Once this project book ha undone. In order to run in configured that is running module. Please make sure Agent Scripting project bo	Collaborate mode you ne the Genesys Agent Scrip e you have a backup cop	ed a Web Server oting Collaborate Server
	Previous (Niex()	Finish Cancel

Figure 22: Convert to Collaborate Wizard, Backup Warning

Note: You must convert a Project Book to Collaboration mode before any of the multiple-user options (such as Administrate or Lock/Unlock Database) become available.

2. Click Next to proceed to the next screen of the wizard shown in Figure 23.

🖹, Convert to Collaborate	×
In order to complete the conversion to collaborate mode, please provide the URL for the Collaborate Server, then click on the Test button to make sure you can connect. If you need to find an existing server, or to creat a new one, click on Find Server below.	
Server Language asp	
Server Location	
Server URL	
Find Server Test Previous Next Finish Cancel	

Figure 23: Convert to Collaborate Wizard, Find Server

3. Select j sp in the Server Language field.

🖷, Convert to Collaborate 🛛 🗙
In order to complete the conversion to collaborate mode, please provide the URL for the Collaborate Server, then click on the Test button to make sure you can connect. If you need to find an existing server, or to create a new one, click on Find Server below.
Server Language
Server Location
Server URL http://websphereAS:9080/WWC/WWCDispatch.jsp
Find Server Test Previous Next Finish Cancel

Figure 24: Convert to Collaborate Wizard, Fields Populated: WebSphere

4. Replace the host string in the Server URL field with the fully qualified host name and port used to access the Collaboration Server. This is the URL string that designers of this Project Book will use to address this Collaboration Server.

The default port for WebSphere Application Server is 9080. The modified Server URL string is shown in Figure 24.

5. Click Test to test the connection to the Collaboration Server.

If successful, the screen shown in Figure 25 appears.

🖹, Convert to Collaborate	X
In order to complete the conversion to collaborate mode, please provide the URL for the Collabor Server, then click on the Test button to make sure you can connect. If you need to find an exist server, or to create a new one, click on Find Server below.	
Server Language jsp	
Server Location	
Server URL http://websphereAS:9080/w/WC/w/WCDispatch.jsp	
Find Server Test Previous Next Finish Cance	

Figure 25: Convert to Collaborate Wizard, Server Installed/Connected

6. Click Next to proceed to the screen shown in Figure 26.

💐 Convert	to Collaborat	e			×
Provide your click Login.	Genesys Agei	nt Scripting U	iserID and	l Password I	below, then
UserID Password	admin @@@@@@				Login
		Previous	Next	Finish	Cancel

Figure 26: Convert to Collaborate Wizard, Provide Login Information

- 7. Enter admin in the User ID field.
- 8. Enter admin in the Password field.
- 9. Click Login.

You are now logged in as shown in Figure 27.

💐 Convert	to Collaborat	e			×
Your login v	vas successful				
Click Next to	continue.				
UserID	admin				
Password	@@@@@@				(Login)
		Previous	Next	Finish	Cancel

Figure 27: Convert to Collaborate Wizard, Login Successful

10. Click Next to open the dialog box shown in Figure 28.

🐂 Convert to Collaborate	X			
At this time the project book can be converted. The conversion process will check in all objects (e.g. Streams, Pages, Fields, and Actions) into the server. This process can take a long time.				
Click Check In to proceed. Warning: This process cannot be undone. Once you click Check In you cannot cancel.				
Check	In			
Previous Next Finish Cancel				

Figure 28: Convert to Collaborate Wizard, Start Conversion

11. Start the conversion of your Project Book to Collaboration mode by clicking Check In.

Warning! Depending on the size of the Project Book, this conversion process may require a lot of time. Once you start it, you cannot stop it without destroying the Project Book file.

The conversion process proceeds as shown in Figure 29. Allow the conversion process to complete.

🛎, Convert to Collaborate	×			
At this time the project book can be converted. The conversion process will check in all objects (e.g. Streams, Pages, Fields, and Actions) into the server. This process can take a long time.				
Click Check In to proceed. Warning: This process cannot be undone. Once you click Check In you cannot cancel.				
Processing Object 111 of 111				
Previous Next (

Figure 29: Convert to Collaborate Wizard, Converting Project Book



Figure 30: Convert to Collaborate Wizard - Conversion Complete

12. Click Finish when you see the screen shown in Figure 30.

Managing Users and Project Books

Once you have converted a Project Book to Collaboration mode, you can access the tools that enable you to manage users and Project Books.

For example, the File menu changes when you are in multiple-user (Collaboration) mode, as shown in Figure 31.

🗑 Genesys Agent Scripting [C:\Program Files\GC					
File Edit Project Pro	ocess Flow Stream P	age Foi			
Settings	🛛 🔟 Gene	sys Age			
Collaborate	Check In				
Lock Exclusive	Check Out				
Open Project Book New Project Book Import	Apply Update: Build Project E Scan for Error	Book			
Page Layouts	Administrate				
User Defined Function	ns				
Exit					

Figure 31: File Menu for Collaboration Mode

The Collaborate option on the File menu opens a submenu with several options. The following subsections provide descriptions of the options. Also, note that the File menu items called Lock Exclusive and Unlock Exclusive are available only in a multiple-user environment.

Lock Exclusive/Unlock Exclusive

In Collaboration mode, you can lock the Project Book for your exclusive use, and release the lock after you have made changes and checked in all objects.

Lock Exclusive

The Lock Exclusive feature enables you to lock the Project Book for your exclusive use. Lock Exclusive appears in the File menu only when Genesys Agent Scripting is in Collaboration mode.

In this operational mode, you do not need to check out individual records to make changes. However, you must check in all changes prior to releasing the exclusive lock. If a Project Book is locked exclusively, another user cannot modify any objects until the exclusive lock is released.

When you select File > Lock Exclusive, the dialog box shown in Figure 32 opens (Database means Project Book).

Genesys Agent Scripting	×	
Database has been locked in exclusive mode.		
ОК		

Figure 32: Lock Exclusive

Click 0K to confirm the message. The current Project Book is now locked for your exclusive use.

Unlock Exclusive

If you have been working with an exclusively locked Project Book, you can use the Unlock Exclusive option to release the exclusive lock.

- When a Project Book is locked, the Unlock Exclusive option appears in the File menu, replacing the Lock Exclusive option that appears when you are in Collaboration mode. You can use this option to release the exclusive lock.
- Before releasing the lock, you must check in all objects as described in "Check In" on page 66.
- When you select File > Unlock Exclusive, the dialog box shown in Figure 33 opens (database means Project Book).

Genesys Agent Scripting	×
All Changes must be checked in prior to unlocking the	database.
ОК	

Figure 33: Unlock Exclusive

• Click 0K to confirm the message. If you have checked in all objects, the current Project Book is now unlocked and available to other users.

Check In

The Check In option checks in changes that you or another user has made to objects, updating the collaboration database and making the objects available for other users to modify. When you select this option, the dialog box shown in Figure 34 opens.

	Select Objects from the list below that you wish to check in.						
		Object	Name	Description	Check Out Date		
		Page	Initial_Page	This page was automatically created as p	22.03.2006 19:34:24		
		Process Flow	Default_ProcessFlow	This process-flow was automatically creat	22.03.2006 19:34:24		
	Γ	Stream	Initial_Stream	This stream was automatically created as	22.03.2006 19:34:25		
	Select All Clear All Close Close						

Figure 34: Collaboration Check In

The Object column in this dialog box lists all objects in the Project Book that are currently checked out. Other columns provide the name of each object that has been checked out, a description of the object, and the date the object was checked out.

- To select an object for check in, select the box to the left of the object under the 0bject column.
- Before checking in changes to the Admin database, you must provide a comment describing the changes that you have made.
- Click Check In to check in the selected objects. Once objects are checked in, other users can view the changes.

Check Out

Use the Check Out option to lock Project Book objects so they can be safely updated without affecting the work of other users. When you select this option, the dialog box shown in Figure 35 opens.

	LOL:	Name	Description
-	Object		Description -
	Action	G_Agent_Clear	E
_	Action	G_Agent_Get	Executes XML Interface to get the Agent's In
-	Action	G_Contact_Add_Email	This Action adds a new Email address for a s
_	Action	G_Contact_Add_Phone	
1	Action	G_Contact_Clear	Clears all Agent Scripting fields (set them to "
2	Action	G_Contact_Create	Executes an XML Interface to call AIL to cre-
	Action	G_Contact_Delete	Execute XML Interface that calls AIL to delet
2	Action	G_Contact_Delete_Email	Executes XML Interface that calls AIL to rem
	Action	G_Contact_Delete_Phone	Executes XML Interface that calls AIL to rem
	Action	G_Contact_Get	Execute XML Interface that calls AIL to get ti
	Action	G_Contact_Update	Executes XML Interface to update a specific
1	Action	G_Contact_Update_Email	This action updates the Email Address for a s
	Action	G_Contact_Update_Phone	This action updates the Email Address for a s
	Action	G_Initialization	Execute XML Interface G_Initialization
	Action	G_Contact_Update_Phone	This action updates the Email Address for

Figure 35: Collaboration Check Out

Note: By default, objects are automatically checked out when you edit them. However, you can turn off this automatic check out by going to File > Settings > Collaborate tab and deselecting the box labelled Automatically Lock Pages When the User Clicks on the Page in the Script View.

This is useful when you are simply looking at a Project Book and don't want to be required to check in all the Process Flows/Streams and pages just because you looked at them.

However, if you attempt to edit a page which is not checked out, you will get a warning dialog box, This page cannot be edited at this time. You will need to check out the page before editing it.

• Use the Show Objects of Type drop-down list to filter the Object list to only show objects of a certain type. Valid types are [ALL], Projects, Process Flows, Streams, Pages, Fields, Actions, Database Interfaces, XML Interfaces, Functions, and API Interface. • The Object column lists all objects in the Project Book that are currently not checked out. Objects are described under the Description column. To check out an object, select the check box next to it.

Note: Objects are automatically checked out when you edit them from any Genesys Agent Scripting dialog box.

- Click Check Out to check out the selected objects. Until an object is checked back in, other users cannot modify or delete it.
- The Progress pane at the bottom of the Collaboration Check Out dialog box shows the progress as each object is checked out.

Apply Updates

The Apply Updates option applies all changes checked in by other users to the local copy of the Project Book.

- **Note:** Before checking out an object, Genesys Agent Scripting automatically updates the local copy.
- When you select File > Collaborate > Apply Updates, the dialog box shown in Figure 36 opens (Build database means Rebuild Project Book).

🐂 Build database		×
	A by Lie debes	
	Apply Updates	(Cancet)

Figure 36: Apply Updates

• Click Apply Updates to rebuild the local Project Book with all changes that you have checked in.

Build Project Book

The option to build a Project Book builds a new copy of a Collaboration Server-controlled, Genesys Agent Scripting Project Book. You will need to build a copy of the Project Book for each user of the project and they will be required to log onto the server before doing any editing with that Project Book. While users will have their own Project Books, all changes are stored in the common Collaboration Server.

- **Note:** The assigned Admin user should not be a script editor. This Admin user is responsible for maintaining users and building Collaboration mode Project Books.
- When you select File > Collaborate > Build Project Book, the dialog box shown in Figure 37 opens. (Note that Build database means Build Project Book).

🖷 Build database		×
	Setup New Database	(Cancel)



- Click Setup New Database to create a new copy of the Project Book.
- **Warning!** Make sure that you regularly back up your Project Book files to a secure location. If you do not make backup copies of your Project Book files, you will not be able to recover any lost information.

Scan for Errors

Genesys Agent Scripting Project Books can run in either of two modes:

- Pessimistic mode
- Optimistic mode

In *Pessimistic mode*, the Project Book assumes that users are going to do things that conflict with each other, so the Project Book prevents this from happening. For example, this mode prevents a user from adding a new reference to an object that a different user is currently attempting to delete.

In *Optimistic mode*, the Project Book assumes that users are not going to do things that conflict with each other. It operates as if these situations are very rare and not worth the cycle time.

Use the Scan for Errors option to scan the Project Book for any errors that may occur when the Project Book is running in Optimistic mode.

• When you select File > Collaborate > Scan for Errors, the dialog box shown in Figure 38 opens.

i	, Scan for Errors			X			
	Click scan to check for errors.						
	Double click a row to jump to the selected object						
	Object Name Description Error message						
	Scan			Close			

Figure 38: Scan for Errors

• Click Scan to check for errors in the Project Book.

Administrate

Use this option to launch Genesys Agent Scripting Collaboration Administration, which is described in detail in the next section.

Using Genesys Agent Scripting Collaboration Administration

As a system administrator or script developer in a multiple-user Genesys Agent Scripting environment, you can set up, update, and manage users and Project Books.

 $Select \ \texttt{File} > \texttt{Collaborate} > \texttt{Administrate} \ to \ \texttt{run} \ Collaboration \ Administration.$

Note: You must be running in Collaboration mode in order to access Collaboration Administration.

Login Screen

The Login screen as shown in Figure 39 opens in a web browser when you launch Collaboration Administration.

🕗 http://localhost:8080/WWC/WWGPAGE_Login.jsp;jsessionid=DBD525790A 💶 🗖 🗙
File Edit View Favorites Tools Help 🥂
🕞 Back 👻 🕘 🖌 😰 🚮 🔎 Search 🤶 Favorites 🔇 Media 🥝 🎽
Address 🗃 http://localhost:8080/WWC/WWGPAGE_Login.jsp;jsessionid=Dt 🔽 🎅 Go 🛛 Links 🌺
GENESYS®
Welcome to the Genesys Agent Scripting Collaboration Administration application.
Please provide your UserID and Password.
UserID admin Password
Login
🝘 Done 🛛 👘 👘 🖉 Local intranet 🦷

Figure 39: Collaboration Administration Login Screen

The first time you open Collaboration Administration, the User ID and Password are both set to admin. You can change these values later when you update user information. See "Updating Users" on page 76. For now:

- 1. Enter admin in the User ID field.
- 2. Enter admin in the Password field.
- 3. Click Login.

The Home screen opens in the web browser as shown in Figure 40 on page 72.

Home Screen

Figure 40 on page 72 shows the Collaboration Administration Home Screen.

http://localhost:8080/WWC/WWGPAGE_Main_Menu.jsp?WWGProces
Eile Edit View Favorites Tools Help
🗘 Back 🔹 🤿 🖉 🚰 📿 Search 😹 Favorites 🎯 Media 🎲 🛃 🔹 👌
Address 🕘 http://localhost:8080/WWC/WWGPAGE_Main_Menu.jsp?W\🔽 🄗 Go 🛛 Links 👌
CENESVS®
GENESYS®
Login Welcome Admin
➡ <u>Home</u>
Update Please select an option from the list on the left hand side Users of the screen.
Update Servers
Done

Figure 40: Collaboration Administration Home Screen

Genesys Agent Scripting 7 Collaboration Administration has two main functions:

- User maintenance
- Project Book maintenance

You will click Update Users or Update Servers (Update Servers means Update Project Books) from the Home screen's left panel depending on which type of maintenance function you wish to run.
Setting Up and Managing Users (Update Users)

Overview

This section describes how to set up and manage Genesys Agent Scripting users who will be sharing Project Books that are converted to Collaboration mode.

The user maintenance function enables you to add new users or to modify and deactivate existing ones.

Click Update Users on the left panel to open the screen shown in Figure 41 in a web browser.

🚰 http://localhost:8080/WWC/WWGPAGE_Update_Users.jsp?WWGProcessFlowName=Admi 💶 🗖 🔀
<u>File Edit View Favorites Tools H</u> elp
🗘 Back 🔹 🔿 🔹 😰 🚰 🥘 Search 🕋 Favorites 🛞 Media 🎯 🛃 🚽 🎒 📰 🗐 🚉 🖳
Address 🙆 http://localhost:8080/WWC/WWGPAGE_Update_Users.jsp?WWGProcessFlowName 💌 🄗 Go 🛛 Links 🎽
Login Please select a user from the following list, or click Insert User to add a new user. C Update User Table Users User Table Users C Admin Admin ♥ To see all users (including Deleted users) click Show All Users User ID User ID User ID Admin ISER User ID User ID
🕘 Done 🛛 👘 👘 👘 👘 👘 👘

Figure 41: Update Users

Adding Users

The Insert User function enables an Admin user to add new users to the Admin database.

1. Click Insert User to open the screen shown in Figure 42 in the web browser:

http://localhost:8080/WWC/WWGPAGE_Insert_User.j	sp?WWGProcessFlowName=Admin 💶 🗙
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools <u>H</u> elp	
🗢 Back 🔹 🔿 🚽 🙆 👔 🖓 🧔 Search 📓 Favorites	🕐 Media 🧭 🛃 🎒 🖉 🗐 🕄 🙎
Address http://localhost:8080/WWC/WWGPAGE_Insert_User	r.jsp?WWGProcessFlowName=≠ 🗸 🄗 Go 🛛 Links ≫
	*
	7.5.0
G E N E S Y	Y 5 °
Login Enter User information below and	then click Insert.
Home	
UserID Users	
User Name Servers	
Password	
Admin User	
Insert User Cancel	
	v
Cone	Local intranet

Figure 42: Insert User

2. Enter a value in the UserID field.

This is the UserID to log into Genesys Agent Scripting in Collaboration mode, or into Genesys Agent Scripting Collaboration Administration. You

can enter up to 100 characters in this field. The value you enter must be unique.

3. Enter the user's name in the User Name field.

You can enter up to 200 characters in this field.

4. Enter a password for this user in the Password field.

This is the password to log into Genesys Agent Scripting in Collaboration mode, or into Genesys Agent Scripting Collaboration Administration. You can enter up to 100 characters in this field. Any text you enter will be hidden.

5. If you want this user to have access to Genesys Agent Scripting Collaboration Administration, select the Admin User check box.

If the check box is not selected, this user can run Genesys Agent Scripting in Collaboration mode, but will be unable to access Collaboration Administration.

6. Click Insert User to add the new user to the Genesys Agent Scripting Admin database.

Your new user is added to the list of user records in the User Table. In the example shown in Figure 43 on page 76, UserID = 2004, User Name= Sal Thomas, and the user is active but is not an Admin user.

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Agdress Phttp://localhost:8080/www.c/www.cPAGE_Update_Users.jsp/www.cProcessHowName @ @ co unix ** G E N E S Y S ® Login Home Please select a user from the following list, or click Insert User to add a new user. Update Users Update User TD User Name Admin V C 2004 Sal Thomas V C 200
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Figure 43: New User Added

Updating Users

The User Table shown in Figure 43 lists all user accounts. Use the radio button next to each user to select a specific user account to update, delete, or activate.

1. Click Show All Users to display all active and inactive user accounts.

Inactive user accounts are accounts that were deactivated or deleted. They are maintained in the Admin database, but the user is unable to log in. See Figure 44.

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Figure 44: Show All Users

2. Select the radio button beside a user record in the User Table that you want to update.

When you do this, the user record fields on the screen are populated with the user's information, as shown in Figure 45 on page 78.

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Address http://localhost:8080/WWC/WWGPAGE_Update_Users.jsp GENESYS GENESYS Voca Links * Cogin Home Users User Table Users User Table User Table C 2004 Sal Thomas C 2004 Sal Thomas C 2005 Tom Smith To see all users (including Deleted users) click Show All Users UserID 2005 User Name Tom Smith
Password ****
Admin User
Active User
Update User Delete User Activate User

Figure 45: Update User Information

- 3. Change any information that you want to update about this user.
 - To change the UserID, User Name, or Password: edit the appropriate field.
 - To give this user administration rights: select the Admin User check box.
 - To remove administration rights: clear the Admin User check box.

- 4. Complete your update by doing one of the following:
 - Click Update User to register the changes you made into the Admin database.
 - Click Delete User to deactivate this user account. The user record remains in the Admin database, but the user is unable to log in unless reactivated.
 - Click Activate User to activate or reactivate a user account that is currently inactive. In the example shown in Figure 45 on page 78, clicking Activate User adds a check mark to the Active User check box and allows this user to regain login rights.

Setting Up and Managing Project Books (Update Servers)

Overview

This section describes how to manage Genesys Agent Scripting Project Books that users will share.

Admin users can lock and unlock Project Books using the Project Book maintenance portion of Genesys Agent Scripting Collaboration Administration.

Click Update Servers in the left panel to open the screen shown in Figure 46 on page 80 in a web browser.

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Figure 46: Update Servers (Project Books)

As you can see in Figure 46, the Server Table contains a list of Project Book files that have been converted to Collaboration mode; the column Database Name contains the list of Project Book files. The following characteristics of the Project Book are provided in the table:

- Project Book file name
- Lock mode (Pessimistic or Optimistic)
- Whether the Project Book is currently locked
- Whether the Project Book has an exclusive lock (achieved by selecting File > Lock Exclusive as described earlier)
- If locked, the user name of the user who has locked the Project Book

Changing the Lock Mode

The Project Book can be locked in one of two ways:

In *Pessimistic mode*, the Project Book assumes that users are going to do things that conflict with each other, so the Project Book prevents this from happening.

For example, this mode prevents a user from adding a new reference to an object that a different user is currently attempting to delete.

In *Optimistic mode*, the Project Book assumes that conflict situations are very rare and not worth the cycle time.

- **Note:** You cannot change the lock mode if the Project Book is currently locked or if it has an exclusive lock. You must unlock the Project Book or release the exclusive lock (select File > Unlock Exclusive) before you can change the lock mode.
- 1. Select the radio button beside the Project Book file in the Server Table whose properties you want to modify.
- 2. Click Change Lock Mode.

You must check in all objects before you can change the lock mode. If you have objects that are checked out, check them in as described in "Check In" on page 66. If other users have checked out objects, these users must also check in their items before you can change the lock mode.

Once all items have been checked in, Change Lock Mode will change the Project Book from Pessimistic mode to Optimistic mode, or vice versa.

Unlocking the Project Book

Selecting the Locked? check box for a Project Book record in the Server Table places a database-wide lock on that Project Book.

As system administrator or script developer with Admin rights, you can clear this check box. If the Project Book also has an exclusive lock placed on it, you must release the exclusive lock before you can unlock the Project Book. Exclusive- lock maintenance is handled from within the Genesys Agent Scripting application.

- 1. Select the radio button beside the Project Book file in the Server Table whose properties you want to modify.
- 2. Click Unlock Database to clear the database-wide lock on the currently selected Project Book.

Why Unlock a Project Book?

When Genesys Agent Scripting is in the process of checking in or checking out components, it places a lock on the entire Project Book so that no one else can make changes to the project book during its operation. Under normal conditions, this lock is acquired and released automatically. However, if a user's machine crashes or the network goes down during the course of a check in or check out, this global lock might not be released. In these instances, use Collaboration Administration to manually clear this lock.

Notes: You should only clear a lock manually if it is apparent that the last check in or check out failed and is no longer processing.

Only Project Book-level locks are displayed in the Server Table. You must administer more specific locks, such as locks on individual Scripts, Pages, Fields, and so on, through the Genesys Agent Scripting application.

Exclusive Lock

Selecting the Locked Exclusive? check box for a Project Book record in the Server Table locks a Project Book for a user's exclusive use. In this mode, the user does not have to check out individual records to make changes. However, the user must check in all changes before releasing the exclusive lock.



Appendix

Genesys Integration with the ASP.NET (ASPX) Platform

Genesys Agent Scripting 7.2 supports Genesys integration with the ASP.NET (ASPX) platform. You can create an ASPX target environment for a Project Book with the Genesys Agent Interaction Toolkit.

Please note these requirements:

- To work within the Genesys environment, ASPX Scripts created with the Genesys Agent Interaction Toolkit require Genesys Integration Server version 7.2 or later.
- For release 7.2, new configuration fields for ASPX target environments were added:
 - G_NETServer_PrimaryHost
 - G_NETServer_PrimaryPort
 - G_NETServer_BackupHost
 - G_NETServer_BackupPort

To compile a Project Book for the ASPX target environment, you must populate these fields with the appropriate information about Genesys Integration Server, which is used by ASPX Agent Scripts.

These fields appear on the Configuration File tab. To access them, choose Target Environment from the Compile menu, then select (or create) an ASPX target environment, and click on the Configuration File tab.

For detailed information about Genesys Integration Server, refer to the Genesys Integration Server Deployment Guide.

Appendix: Genesys Integration with the ASP.NET (ASPX) Platform



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