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About This Software

Composer is an Integrated Development Environment (IDE) used to develop applications for:

- Genesys Voice Platform (GVP)—a VoiceXML-based media server for network service providers and enterprise customers, and
- Genesys Orchestration Server (ORS)—an SCXML engine that works in conjunction with the Genesys Universal Routing Server (URS) and Genesys Interaction Server for routing of both voice and non-voice interactions.

Although the product name is Composer, the terms “Composer Voice” and “Composer Route” used in some places in the product, refer to the collection of capabilities that are used specifically for GVP application development, and ORS/URS application development, respectively. Users may hide Composer Voice and/or Composer Route capabilities through a Composer preference setting. This is useful for developers who are only using one of these Genesys platforms.

Composer is an Eclipse-based application. The use of Eclipse as the underlying framework enables the use of third party IDE plug-ins, supporting integration with third party source code control systems, server-side development enhancements, and side-by-side development of any business logic required to support your applications.

Composer can run on the Windows 2003, Windows 2008 (32-bit), Windows XP, Windows Vista, and Windows 7 (32-bit) operating systems.

Application Development

Composer provides both a drag and drop graphical development of voice applications (or “callflows”) and routing strategies (or “workflows”) as well as syntax-directed editing of these applications.

For GVP applications, Composer supports editing of VoiceXML 2.1, CCXML1.0 and SRGS 1.0.

For ORS/URS applications, Composer supports editing of SCXML 1.0. ORS/URS applications which may be developed in an “offline” mode, without requiring the user to connect to Genesys

Configuration Server. Depending on what the user needs to do, she may be required to connect to Configuration Server or another system. For example, the user would need to connect to Configuration Server in order to access configuration objects through the Target block. Similarly, she would be required to connect to a database server in order to create a database query through Composer's Query Builder.

GVP Application Debugging

Composer provides real-time debugging capabilities for GVP voice applications. The debugger is integrated with GVP for making test calls, viewing call traces, and debugging applications. It supports accessing SOAP and REST-based Web Services. Database access is possible using server-side logic and a Web Services interface.

New Features in Release 8.0.x

Composer 8.0.4. The following new features are included in this release:

- Features related to application development for the Genesys Voice Platform (GVP):
 - Context Services support—This release expands support for the Context Services capability of the Genesys Universal Contact Server and its underlying database. Starting with this release, VXML application developers can access customer profile, preference, and resource-related information through Context Services function blocks. This data can then be used within a self-service application.
 - The following Context Services blocks are now available for VXML applications: Associate Service, Complete Service, Complete State, Complete Task, Enter State, Create Customer, Identify Customer, Query Customer, Query Services, Query States, Query Tasks, Start Service, Start Task, and Update Customer.
 - This release adds support for multi-valued Context Services extension data, which is applicable to all Context Services blocks. Note: Universal Contact Server 8.0.2 or later is required for multi-valued extension support.
 - You can map returned data to application variables for the following VXML/SCXML Context Services blocks; Query Customer, Identify Customer, Query Services, and Query States.
 - Additional VXML schemas can be added into Composer and used in namespaces for new VXML files created through Composer's VXML editor.
 - The Set Call Result block for voice applications allows tagging of calls with SQA call status (success, failure).
 - The Disconnect block adds a Reason field. The content can be either an ECMAScript expression created in Expression Builder or free-form text.
- Features related to application development for the Genesys Orchestration Server (ORS):
 - Additional Context Services support—Building on the Context Services blocks introduced in Composer 8.0.3, the 8.0.4 release includes additional blocks for managing customer conversations:
 - The following new Context Services blocks are available for SCXML applications: Create Customer, Start Task, Complete Task, and Query Task.
 - You can map returned data to application variables for the following VXML Context Services blocks; Query Customer, Identify Customer, Query Services, and Query States.
 - Additional features for routing of inbound voice interactions—These new features move Composer to parity with Universal Routing's strategy creation

tool, Interaction Routing Designer (IRD):

- A new Routing Rule block provides the ability to use routing rules for target selection, which were previously created through IRD and stored in the Genesys Configuration Database. Supported routing rules include load balancing, percentage allocation, service level routing, and statistical routing.
- A new Force Routing block provides support for force routing of inbound voice interactions.
- The Target block, used for routing voice interactions, adds new properties to support building conditional expressions, such as those used for share agent by service level agreement routing. A new Threshold property allows you to build threshold expressions, which can use relational operators, user-defined variables, and the following URS threshold functions:
 - sdata for routing conditions based on statistics
 - acfgdata for routing conditions based on data stored in Configuration Server Application objects
 - callage to return the age of an interaction
 - lcfgdata for routing conditions stored in Lists objects
- The Target and Route Interaction blocks add a Priority property, which lets you select a variable that contains an expression returning the priority that the interaction will be given in the queue.
- The Branching block now supports segmenting incoming interactions based on call type and/or media type.
- The ECMAScript block (through Expression Builder) exposes the following functions:
 - findServiceObjective, which can find/retrieve a Configuration Server service objective for a given combination of Customer Segment, Service Type, and Media Type.
 - priorityTuning, which can adjust the priority of an interaction by taking into account age, expected wait time, and service objective.
- The User Input block adds support for verify digits, retry, success case, and failure case prompts.
- Voice Treatment blocks are added/enhanced:
 - The Pause block can be used to insert a pause between treatments.
 - The Create User Announcement block can be used to record an announcement from a user (supports multiple prompts).
 - The Delete User Announcement block can be used to delete an announcement from the Create User Announcement block, possibly in a different workflow.
 - The IVR block may be used to send an interaction to an Interactive Voice Response unit. It has both Compatibility and Non-Compatibility modes to support, for example, specifying a remote resource to be used for a treatment.
 - The User Input block adds support for verify digits, retry, success case, and failure case prompts.
 - The following Voice Treatment blocks add Wait for Treatment End and Request ID properties: Play Application, Play Message, and User Input.
- The Target block is enhanced to display the following busy treatments: verify digits, pause, and IVR.
- Additional features for routing of non-voice interactions:
 - Workbin blocks can be added to interaction process diagrams. The Workbin block, representing a temporary storage area for interactions, can be associated with agents, agent groups, places, or place groups. You have the

option to define one or more views for a workbin, which define the conditions for extracting interactions and directing them into workflows.

- The SMS block allows you to specify a pre-written text for the content of the SMS.
- The Route Interaction block adds a Workbin Name property. Its value will be used as the workbin for targets specified in the block.
- Other New Features
 - You can now save a callflow or workflow diagram as a template and have it appear on the list of available templates when creating a new diagram. Diagrams saved as templates can be exported to/imported from the file system.
 - When defining a database connection profile, you can enable connection pooling, which maintains a set of database connections that can be reused for requests to databases. You can use this feature to enhance performance by avoiding time-consuming re-establishment of connections to databases.
 - When defining the languages an application supports, you can now define custom locales. Also, new additional Composer-defined locales are introduced: Hong Kong Cantonese, English-Irish, English-India, English-Scottish, Mexican-Spanish, Icelandic-Iceland, Thai-Thailand, Bengali-India, Spanish-Argentina, United States-Spanish, Gujarati-India, Kannada-India, Malayalam-India, Marathi-India, Oriya-India, Punjabi-India, Tamil-India, Telugu-India
 - In cases where the DB Data block returns multiple records, a new Looping block, available for both callflows and workflows, can loop through all the records. For each iteration of the loop, mapped variables can be populated with the values of the next record.
 - A new *Composer 8.0 Routing Applications User's Guide*, available on the Genesys documentation library DVD, introduces first-time Composer users to the GUI, interaction process diagrams, and workflow diagrams.

Composer 8.0.3. The following new features are included in this release:

- Compatibility with GVP 8.1.2 release features. This includes:
 - Sample VXML code template as an example of how to handle N-Best results
 - All Composer blocks that support prompts now support RTSP URIs.
 - The Help documents how to create and import prompts recorded as per the Prompt Manager export specifications.
 - A new Entry block property allows suppression of data within the Nuance 9 platform ASR logs.
 - Non-numeric strings can be dialed for transfer destinations.
 - Support for the Call Progress Analysis/AMD on transfer feature using the Genesys media server, third party media gateways, and the PSTN Connector.
 - Support for the following AT&T transfer method options:
 - Out of Band Courtesy for blind transfer type
 - Out of Band Consult and Transfer for blind and consultation transfer types
 - Out of Band Conference and Transfer for blind and consultation transfer types
- Compatibility with ORS 8.0/URS 8.0 for routing workflow development. New features include:
 - Support for Context Management Services of Universal Contact Server and the Universal Contact Server Database, a repository of customer-related, service, and interaction-centric data (current and historical). Capabilities included allow you to create workflows that:
 - Identify customers and update their profiles
 - Extend customer profiles with user-defined information
 - Query a customer's profile

- Associate services with customers
 - Create/start/complete customer services
 - Query customers' active services
 - Enter and complete service states
 - Query service histories
 - Query active and completed service states
- Interaction Processing Diagrams (IPDs), where you define how interactions are processed from various media servers into staging queues and routing workflows
- An initial set of capabilities for developing workflows to process multimedia interactions, including workflows that can:
 - Create an outbound e-mail
 - Perform various types of processing on e-mails including sending
 - Route a multimedia interaction to a target
 - Place a multimedia interaction in a queue
 - Invoke functions through Genesys External Service Protocol
 - Create, process, and send a Short Message Service text message
 - Send Stop processing information for an interaction to Interaction Server and update the Universal Contact Server Database
- Additional features:
 - Documented ability to hide file types in Composer's File > New menu

Composer 8.0.2. The following new features are included in this release:

- Compatibility with GVP 8.1.1 release features. This includes:
 - Support for catching error.com.genesyslab.subdialog.maxdepthexceeded
 - Support for catching Call Progress Analysis events through custom event handling
 - Support for offboard DTMF recognition
- Application development features. These include:
 - Authoring of URS routing strategies, known as “workflows”, through drag-and-drop visual designer or direct creation and editing of SCXML files. URS 8.0 has the ability to execute strategies created in Composer and deployed to an application server. Composer supplies the following new routing blocks: Entry, Exit, Assign, ECMAScript, Disconnect, Subroutine, Target, Play Application, Play Sound, Play Message, User Input, Set Default Route, Branching DBData, and WebRequest.
 - Ability to write ECMAScript within a routing strategy, which will be executed by an application server during runtime. Examples of how ECMAScript would be used include data type and string manipulation functions.
 - Ability to connect to Genesys Configuration Server during application design time, to access specific Genesys configuration objects that are referenced in routing strategies
 - Ability to create routing statistics
 - Ability to create list objects for use in routing strategies
 - Validation of the SCXML routing strategy files, for syntax errors
 - Web services stubbing, which allows Composer users to work with Web services in an “offline” mode when they do not have access to the Web service itself or if the Web service is under development
 - Global exception handling available through the Entry block of a routing strategy.
 - New Query Builder for use with the DBData block, in both voice application callflows as well as routing strategy workflows.
 - Ability to execute database stored procedures, as a property of the DBData block

- The user may select the default and active locales to use for a project when creating a new project through Composer's Project wizard. This will drive the available locales within Composer's Grammar Builder and Prompts Manager. Additional locales may be added to the project at any time.
- Additional features:
 - Composer can optionally create pre-defined statistics for URS, when Composer is first connected to Configuration Server
 - The Composer user can define new statistics through Composer, which will be saved in the Genesys Configuration database. These statistics can then be used in Target blocks within a routing strategy.
 - Support for silent installation of the Composer installation package, enabling rapid deployment by IT to client desktops on the network
 - Import and export of Composer projects as well as individual routing strategy files.
 - Ability to create and then import and export custom function blocks
 - The Composer user can start and stop the bundled Tomcat server from within Composer

Composer Voice 8.0.1. The following new features are included in this release:

- Compatibility with GVP 8.1 release features. This includes:
 - New and updated application blocks including CTI blocks to work with CTIConnector.
 - Suppressing sensitive information in GVP metrics and logs.
 - Full call recording blocks, ASR engine release block.
- Application development features. These include:
 - New type of project - .NET Voice Project targeting ASP.NET/C# for server side development.
 - Prompt Editor for reviewing and managing prompts including playing and recording audio files in formats supported by GVP.
 - Grammar Builder for visually creating grammars and working simultaneously with multiple locales.
 - Code simulation view.
 - More debugging information available in exceptions.
- Support for working with databases through a set of new database blocks and a visual query builder.
- Support for additional webserver/application servers – JBoss 4.2.3, IBM WebSphere 6.1, Microsoft IIS 6.0, Microsoft IIS 7.0, and Tomcat 6.0 on Red Hat Linux.
- Automated migration and archival for Composer Voice 8.0 projects.
- User assistance features like new sample applications and cheat sheets.
- Updated context-sensitive Help System integrated within Eclipse Help.
- VMware support.

Composer Voice 8.0.0. The following features are included in this release: **Note:** Although Composer Voice draws upon the capabilities formerly within Genesys Studio, significant new capabilities have been added.

- Graphical drag and drop call flow designer.
- Rich palette of pre-built components, including server-side SOAP/REST/HTTP requests.
- Full Project Management capabilities.
- Integrated real-time debugger for VXML applications.
- Call flow annotations and error indicators.

- Full featured Java Server Page (JSP) editor.
- Full featured CCXML 1.0 and VoiceXML 2.1 editors with Context Sensitive Help.
- GRXML 1.0 development Editor with Context Sensitive Help.
- Customizable code template libraries.
- Integrated support for SIP Server-based CTI.
- Voice Application Reporter palette objects.

Directories on This CD

documentation

Contains the ReadMe file, the graphics for the ReadMe, and the versions.html file.

solution_specific

Contains the installation files for the software.

templates

Contains the application templates used for configuration.

Documentation

Product documentation and release notes are available on the Genesys [Technical Support website](#) and on a separate documentation library DVD shipped with your software. We recommend that you read the release notes first, followed by the *Deployment Guide*.

Any information regarding this release that was discovered too late to be included in the documentation is available in the [Release Advisory](#).

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In addition to an updated library of product documentation, the Genesys Technical Support website also contains product advisories that describe recently discovered issues related to Genesys products.

Technical Support

Contacting

Genesys provides technical support to customers worldwide with support centers in eastern Canada, the United Kingdom, Australia, India, and Japan. You can contact Genesys Technical Support by telephone, e-mail, or on the World Wide Web.

For complete information on how and when to contact Technical Support, read the [Genesys Technical Support Guide](#). Please tell the Technical Support representative that you are a Composer 8.0 customer. For a list of the software versions that are on this CD, click [here](#).

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Configuration Support

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

- [Genesys Supported Operating Environment Reference Manual](#)
- [Genesys Supported Media Interfaces Reference Manual](#)

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