GENESYS
AN ALCATEL·LUCENT COMPANY

Interaction Workspace 8.0

Deployment Guide

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Preface

Welcome to the *Interaction Workspace Deployment Guide*. This document introduces you to the concepts, terminology, and procedures that are relevant to deploying Interaction Workspace.

This document also provides a high-level overview of Interaction Workspace features and functions, together with software-architecture information and deployment-planning materials.

Note: For versions of this document that have been created for other releases of this product, please visit the Genesys Technical Support website, or request the Documentation Library DVD, which you can order by e-mail from Genesys Order Management at `orderman@genesyslab.com`.

This preface contains the following sections:

For information about related resources and about the conventions that are used in this document, see the supplementary material that starts on .

About Interaction Workspace

Interaction Workspace is the customer-interaction interface for the Genesys 8 suite. The Interaction Workspace application enables agents to manage from their workstation desktops both Public Switched Telephone Network (PSTN) and Voice over IP–based contact and internal interactions.

Interaction Workspace comprises a collection of modules that encompass privileges and sets of related privileges that enable agents to handle customer interactions, manage their status, and interact with others in the contact center.

Interaction Workspace displays a set of atomic and composite views on the agent's workstation desktop that enables the agent to perform the privileges

that are assigned to the agent's role. Atomic views typically have a single function, such as viewing case data or specifying a disposition code. Composite views enable you to perform multiple functions such as previewing and accepting interactions, or managing your status, meetings, and contacts.

The Interaction Workspace application can be personalized in the Genesys Configuration Layer by the administrator, or agents can personalize the application through settings that enable them to specify font size, font color, column order, and so on.

Interaction Workspace is customizable. You can create your own modules that plug-in through the application-interface criteria. Refer to the *Interaction Workspace Developer's Guide* for information about writing custom modules or modifying existing modules to better meet your needs.

Intended Audience

This document is primarily intended for anyone who is configuring and installing Genesys Interaction Workspace 8.0. It has been written with the assumption that you have a basic understanding of:

- Computer-telephony integration (CTI) concepts, processes, terminology, and applications.
- Network design and operation.
- Your own network configurations.

You should also be familiar with Genesys Framework architecture and the use of Genesys Administrator.

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Document Change History

This section lists topics that are new or that have changed significantly since the first release of this document.

New in Document Version 8.0.201.00

The following topics have been added or significantly changed since the initial 8.0 release:

- The Procedure: Enabling client-side port definition, on page 52, was added to the section "Preparing the Configuration Layer for Interaction Workspace" on page 50 in Chapter 3, "Deployment Procedures," on page 49.

- The Procedure: Deploying the Interaction Workspace downloadable package (ClickOnce) on your web server, on page 59, was updated to include information on installing Interaction Workspace SIP Endpoint.

- The section "Installing the Interaction Workspace SIP Endpoint" on page 78, was added to Chapter 3, "Deployment Procedures," on page 49.

- The section "Managing Agent Inactivity" on page 87 was added to Chapter 4, "Interaction Workspace Functionality Overview," on page 83.

- The section "Interaction Workspace SIP Endpoint" on page 90 was added to Chapter 4, "Interaction Workspace Functionality Overview," on page 83.

- The section "Hiding Selected Data in Logs" on page 98 was added to Chapter 4, "Interaction Workspace Functionality Overview," on page 83.

- The section "Client-side Port Security" on page 99 was added to Chapter 4, "Interaction Workspace Functionality Overview," on page 83.

- The Procedure: Enabling an agent to use the Interaction Workspace SIP Endpoint, on page 112 was added to the section "Enabling Internal and External Communications" on page 107 in Chapter 5, "Provisioning Interaction Workspace," on page 101.

- The section "Supported Switches" on page 124 has been updated.

- New options to configure behavior for inactivity-timeout have been added to the Security section.

- New options have been added to the Log section.

- Options to configure the behavior of the Interaction Workspace SIP Endpoint have been added.

1 Introduction to Interaction Workspace

This chapter introduces you to Interaction Workspace, the next-generation Genesys agent desktop interface. Privilege- and role-driven capabilities, as well as features that focus on the needs of the user, make Interaction Workspace a total agent solution. The Interaction Workspace agent interface enables users to invoke interactions that are related to existing interactions— thus ensuring a consistent customer experience. Interaction Workspace is a modular application that permits expansion and customization. See the *Interaction Workspace 8.0 .NET Developer's Guide & API Reference* and *Interaction Workspace 8.0 Extension Examples* for information on customizing and extending Interaction Workspace.

This chapter contains the following sections:

Interaction Workspace Concepts and Features

Interaction Workspace features a unified user interface (UI) that empowers contact-center employees to make their contact center truly dynamic by enabling them to respond in real time to real-time information from a wide variety of touch points and channels.

Benefits   Interaction Workspace enhances internal communications, user performance, and quality. Interaction Workspace features a privilege-driven flow of information based on roles that you assign to your agents.

> **Note:** The functionality that is assigned to agents through their defined role determines the footprint of the Interaction Workspace application that is downloaded to their workstation. Agents who have simple roles assigned to them do not require as much space for the application as agents whose roles contain many privileges.

Main Features   The following is a list of some of the main features of Interaction Workspace:

- Role-based application
- Open Framework for integration and expendability
- Advance Multi-Model Interaction
- Inbound Voice for both SIP and TDM
- Team Communicator
- Internal Instant Messaging
- Agent and Contact-Center performance tracking
- Broadcast Message viewing
- Disposition codes
- Silent monitoring and coaching
- Multi-site support
- Main Window view or Gadget based interface.

High-Level Architecture   Interaction Workspace incorporates Genesys interactions into a multi-modal paradigm that enables agents to invoke interactions within interactions to ensure a consistent customer experience.

Interaction Workspace is integrated with Genesys 8 components and applications, including Enterprise SDK, Platform SDK, Management Framework, T-Servers, Universal Contact Server, Configuration Server Data Base, Statistics Server for Reporting, and SIP Server. Interaction Workspace is dependent upon Genesys Administrator. See "Architecture" on page 17 for a more detailed description of the Interaction Workspace architecture.

Time Zones   Interaction Workspace displays all dates based on the time zone and the locale of the workstation where the user is logged in.

Interaction Workspace and Genesys 8

Interaction Workspace is the key agent interface for Genesys 8. Interaction Workspace is built on top of the primary Genesys 8 SDKs. See Table 1 for a list and description of the components of Interaction Workspace and Table 2 for a list of miscellaneous deliverables that ship with Interaction Workspace.

Table 1: Components of Interaction Workspace

Component	Description
Interaction Workspace	Core application
Platform SDK	Low-level SDK that is used to access Genesys back-end servers
Enterprise SDK	High-level SDK that is built on top of Platform SDK to render models, services, and so on

Table 2: Miscellaneous Deliverables of Interaction Workspace

Component	Description
Interaction Workspace Deployment Manager	Wizard that is used during deployment to prepare the ClickOnce packages
Interaction Workspace Extension Samples	Set of examples that illustrate how to implement extensions for Interaction Workspace

Topology

You can deploy Interaction Workspace in two different deployment configurations, depending upon the arrangement of your network; they are:

• Oversimplified deployment with a Client-server in a local setup.

• Client-server with centralized deployment based on Click-Once

This section shows the key components of the Interaction Workspace network topology and indicates how Interaction Workspace is related to other Genesys components.

Figure 1 shows a minimal deployment that consists of agent workstations that are connected directly to the Genesys back-end servers. For the procedure on deploying Interaction Workspace in this configuration, see the Procedure: Installing Interaction Workspace on the Windows operating system, on page 55.
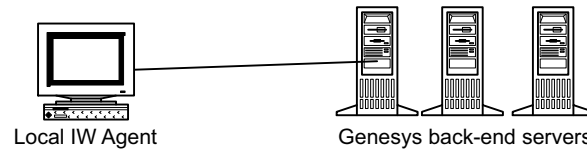
Figure 1: Simple client-server deployment of Interaction Workspace

Figure 2 shows the standard deployment of Interaction Workspace in an environment in which the deployment is controlled from a centralized place and in which remote agents can be connected to Genesys back-end through a Virtual Private Network.
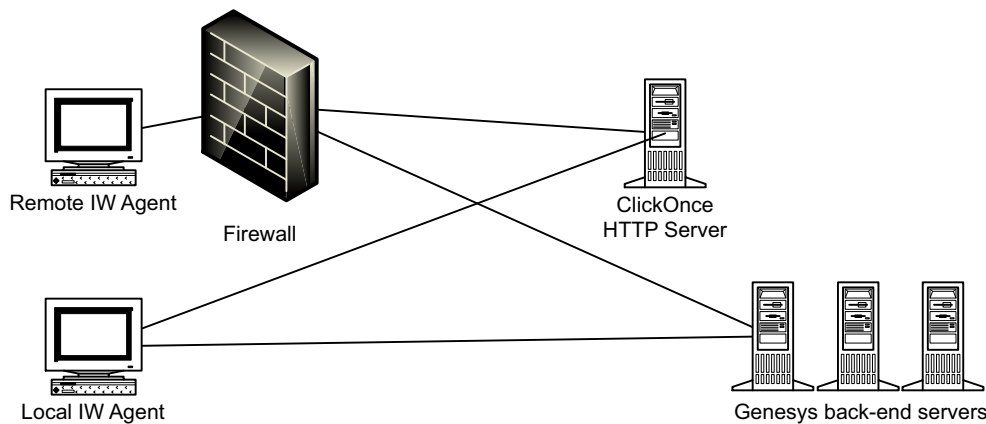
Figure 2: Standard deployment of Interaction Workspace with a ClickOnce server

Connections to Genesys Components

Figure 3 shows the connections to various Genesys components. Interaction Workspace requires connections to the following Genesys Components:

• Configuration Server—Through Genesys Administrator, provides authentication, the list of connections, Role- Based Access Control, agent and place management, the object hierarchy for team communication, and application hierarchical configuration

• T-Server—Enables voice handling

• SIP Server—Enables voice and IM handling

• Real Time Metric Engine—Maintains statistics and target agent/group presence

• Universal Contact Server—Maintains the contact history

Refer to the documentation that accompanies Genesys Administrator and each of these components for information on setting up connections.
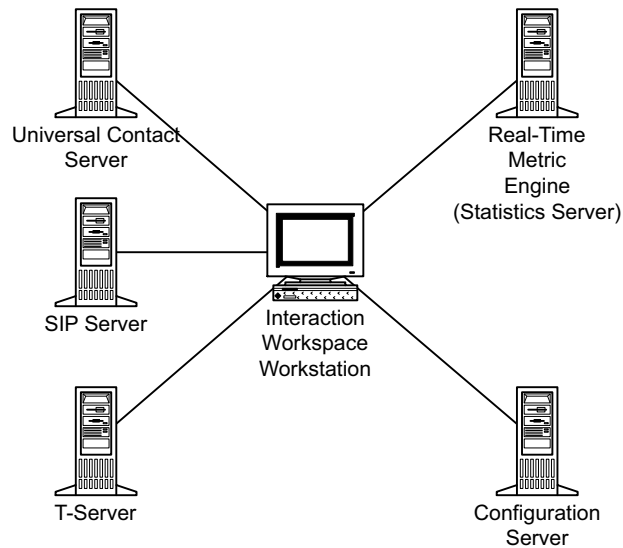
Figure 3: Interaction Workspace connections to the Genesys 8 Suite

Architecture

Interaction Workspace is integrated with the following Genesys 8 applications:

- Embedded components:
    - Enterprise SDK
    - Platform SDK
- Direct connections:
    - T-Server
    - Universal Contact Server
    - Configuration Server
    - Statistics Server for Reporting
    - SIP Server
- Dependencies:
    - Genesys Administrator

Interaction Workspace features a modular design that divides the application into several components that are served out to agents based on their roles. All agents receive common modules such as the Login and Go Ready module and the Main Window module, while other modules, such as the Contact Management module and the Team Communicator module are distributed only to agents whose roles include those modules.

Interaction Workspace relies on both Enterprise SDK and Platform SDK (refer to Figure 4). This architecture enables developers to build customization for Interaction Workspace at any level.

Interaction Workspace
Enterprise SDK
Platform SDK
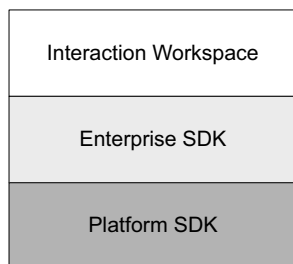
Figure 4: Interaction Workspace architecture

Customization Support
This architecture supports the following customization:

- Interaction Workspace—User-interface customization
- Enterprise SDK—Business logic customization using a high-level API
- Platform SDK—Business logic customization using a low-level API

Refer to *Interaction Workspace 8.0 .NET Developer's Guide & API Reference* and *Interaction Workspace 8.0 Extension Examples* for information on how to customize Interaction Workspace.

Refer to *Enterprise SDK 8.0 Developer's Guide* and *Platform SDK 8.0 .NET API Reference and Developer's Guide* for information on lower-level customization capabilities.

Common System Aspects

The goal of Genesys 8 and Interaction Workspace is to provide a consistent, simplified, and comprehensive application that enables each user at every level to be efficient and productive. Genesys 8 and Interaction Workspace focus on a set of criteria that deliver a higher level of productivity. Interaction Workspace is designed "from the ground up" to have a high degree of usability, with the goal of enhancing agent productivity.

Accessibility and Navigation

Section 508 Accessibility
You can use a screen-reader application or the keyboard to navigate the agent desktop interface.

Screen Readers
Interaction Workspace is designed to maximize content readability for screen-reader applications. Interaction Workspace can be configured to be compatible with screen readers that support Microsoft UI Automation API, such as the Freedom Scientific application: Job Access With Speech (JAWS) version 11. Screen readers enable visually impaired (blind and low-vision) agents to use the desktop interface through text-to-speech or text-to-Braille systems. Interaction Workspace must be configured in the Configuration Layer to enable this compatibility (see"Accessibility" on page 131). These options can be set in the Configuration Layer as default values that can be overridden in the Agent Annex following the standard hierarchy configuration.

Keyboard Navigation of Interface

You can navigate the Interaction Workspace interface by using a keyboard or other accessibility device that is enabled by keyboard navigation. This feature improves the accessibility of the interface by not forcing the user to navigate by using the mouse. Navigation works panel to panel and, within a panel, component to component.

In general, you can use the TAB key to set the focus on the next component; use the SHIFT-TAB key combination to set the focus on the previous component. You can use this method to navigate the Menu bar, the interaction interface, the tabs, and so on.

Access Keys and Keyboard Shortcuts

Interaction Workspace follows the Microsoft Windows convention of enabling interface navigation by using access keys. Access keys are alphanumeric keys that are employed in combination with the ALT key to replicate a menu command or button click on the interface.

Interaction Workspace also provides shortcut keys. Shortcut keys, which are intended mostly for advanced users, enable quick access to frequently performed actions. Shortcut keys can be reconfigured by Tenant, Group, and/or User by using Genesys Administrator. These key combinations are documented in the *Genesys Interaction Workspace 8.0 User's Guide*.

Security

RADIUS

Interaction Workspace implements the Remote Authentication Dial-In User Service (RADIUS) security protocol to prevent illegal system access, track system use, and limit the access of autheticated users. To access the system, users must provide their credentials and connection parameters for authentification before they can be granted limited system access.

The user must provide both a user name and a password to gain access to the Configuration Layer, which is used to obtain a list of existing places, privileges that are specified for the user, and configuration of the agent application. A place is mandatory for all Interaction Workspace agent scenarios. A role or roles are assigned to agents upon login. Agents do not have access to system aspects outside of those that are defined by their assigned roles.

Transport Layer Security (TLS)

Interaction Workspace also employs Transport Layer Security (TLS), which is a cryptographic protocol that provide security and data integrity for communications over networks such as the Internet. TLS encrypts the segments of network connections at the transport layer from end to end.

For more information about TLS, refer to the Genesys TLS Configuration chapter of the *Genesys 8.0 Security Deployment Guide*.

Licensing

There are no technical licensing requirements for Interaction Workspace.

Framework and Solutions Compatibility

Interaction Workspace is part of the Genesys 8 suite of products. See Table 3 for a list of key compatibilities. Also see the following system guides for details on compatibility and system requirements:

- *Genesys Hardware Sizing Guide*
- *Genesys Interoperability Guide*
- *Genesys Licensing Guide*
- *Genesys Supported Media Interfaces Reference Manual*
- *Genesys Supported Operating Systems and Databases*

Table 3: Key Genesys 8 Framework and Solution Compatibility Requirements

Component	Versions	Scope
Configuration Server	8.0.2 and higher	All deployments
Genesys Administrator	8.0.2 and higher	All deployments
Management Framework	8.0.2 and higher	All deployments
Statistics Server	7.6, 8.0 and higher	InteractionWorkspace.KPI InteractionWorkspace.ObjectStatistics InteractionWorkspace.GadgetStatistics InteractionWorkspace.TeamCommunicator (only if presence information is required)
Universal Contact Server	8.0 and higher	InteractionWorkspace.Contacts
T-Server	7.6, 8.0 and higher	InteractionWorkspace.Voice InteractionWorkspace.BroadcastMessage
SIP Server	7.6, 8.0 and higher	InteractionWorkspace.SIP.Monitoring InteractionWorkspace.SIP.Recording InteractionWorkspace.IM InteractionWorkspace.Voice InteractionWorkspace.BroadcastMessage

Role-Based Approach of Genesys 8

Genesys Administrator is used to create roles that contain a list of privileges. Roles are defined as the set of privileges that are either Allowed or Not Assigned. Each agent receives only what is needed to complete the privileges that relate to the role of that agent; everything else is inaccessible. Genesys

Administrator enables the assignment of a Role to an Access Group or a Person.

Note: Users have no default assigned Role. Roles have no default granted privileges.

Depending on the privileges that are granted to an agent, Interaction Workspace enables the following:

• Module activation—Triggering of module download from the ClickOnce server; this modifies the footprint of the agent desktop application.

• User Interface rendering—Includes the display of menu items, toolbar buttons, and views.

Refer to the Procedure: Creating a Role, allowing an Interaction Workspace privilege, and assigning a Role to an agent or agent group, on page 103 to create or modify a role and assign privileges to an agent or Agent Group.

Role- and Privilege-Based Models

Interaction Workspace implements Role-Based Access Control (RBAC). RBAC enables administrators to limit agents to specific channels, interactions, and so on, based on their permissions.

Note: RBAC requires Configuration Server 8.0.2 or higher and Genesys Administrator 8.0.2 or higher.

The system administrator defines a role for each agent. The role has a series of privileges that are associated with it; in this way, agents do not have access to privileges or functionality that are outside their assigned roles.

RBAC enhances system security by limiting agent access to the system. This is critical for protecting the system against accidental or intentional damage. Accidental damage can occur if an agent is accessing a part of the system that is outside of the area of responsibility of that agent.

RBAC enables you to update your system easily. If agents change responsibilities or new agents are added, you do not have to assign permissions to those agents based on their username. When you create or modify an agent, all that you have to do is set the role of that agent; system access is determined automatically. As soon as the agent logs into the system, the identity of that agent determines access. Individual permissions do not have to be set for new or modified users.

To facilitate RBAC, Interaction Workspace is constructed as a collection of modules that encompass privileges or related privileges. RBAC selects only those modules that pertain to the role of the agent and are necessary for the context of the functions that are accessible to the agent.

The `security.disable-rbac` configuration option in the `interaction-workspace` section determines whether agents have all privileges granted or whether the Role Based Access Control (RBAC) control system is used. You can set this option to `true` when you deploy the application in your testing lab to evaluate and test the application. Refer to "Role Privileges" on for a list of all the privileges.

Views (Modules and Groups of Privileges)

Modules are assembled into views. Each module, set of modules, or view is related to a privilege or set of privileges. Privileges are implemented by modules. In a ClickOnce environment; when an agent logs in to Interaction Workspace, modules are transferred to the client desktop. The modules that are transferred are dependent upon the role that is assigned to the user with that login.

Privileges Implemented by Interaction Workspace

This section introduces the privileges that are implemented by Interaction Workspace. The privileges are grouped logically by action and access type:

- Voice Actions
- Instant Messaging Actions
- Statistics Access
- Contact Actions
- Team Communicator Actions

Voice Actions

Voice action privileges enable a variety of capabilities, including the use of the Voice media, transfer, conference, disposition, answering, rejecting, and making calls.

Instant Messaging Actions

Instant Messaging (IM) actions enable agents to use the IM media for internal communication, and to make and release IM sessions.

Statistics Access

Statistics access privileges enable the viewing of Key Performance Indicators (KPIs) and contact center statistics by agents.

Contact Actions

Contact action privileges can be used to enable a wide variety of contact related privileges including marking done interactions, merging contacts and interactions, creating contacts, deleting contacts, and saving changes to contacts. Contact action privileges also enable access to Interaction Workspace features such as Contact history, information, directory, details, notepad, and case data.

Team Communicator Actions

Team Communicator privileges enable contacts to use the Team Communicator feature to contact internal targets, create and use favorites, and view recent contacts.

For more information on the privileges implemented by Interaction Workspace, refer to Chapter 4, "Interaction Workspace Functionality Overview," on .

Configuration and Administration by Using Options and Annexes

Interaction Workspace privileges are assigned to users based on the role that is configured for them in the Configuration Layer. Interaction Workspace privileges are associated with modules. Under the terms of RBAC, agents must be configured to have access to Interaction Workspace modules. Later, agents may be granted the ability to set preferences that personalize the modules. As with the other Genesys 8 applications, Interaction Workspace is first set up and configured through the Genesys Administrator interface. After the initial configuration, the settings of each Interaction Workspace module can be assigned hierarchically to:

1. An Application.

2. A Tenant.

3. An Agent Group.

4. A Person.

The option settings are applied to an agent upon login to Interaction Workspace in the following override order:

1. Default settings that are defined in the application code, which are overridden by:

2. Settings that are specified in the Application, which are overridden by:

3. Settings that are specified in the Tenant of the agent, which are overridden by:

4. Settings that are specified in the Agent Group(s) to which an agent belongs (in cases in which an agent is a member of more than one group, Interaction Workspace considers the union of options that are set in each group; if an option is declared in two different groups, each of which has a different value, Interaction Workspace uses built-in rules to resolve the conflict (see "Conflict Resolution for Configuration Options" on page 24 for information on how such conflicts are resolved. **Note:** Virtual Agent Groups are not supported), which are overridden by:

5. Settings that are specified in the Person object that corresponds to the agent.

You can override options only in the `interaction-workspace` section. Therefore, you must replicate the `interaction-workspace` section to the annex of the object level at which you want the override to occur (Tenant, Group, User, or Transaction).

Other Applicable Object Hierarchies   Some specific Interaction Workspace options can be defined in other objects and object hierarchies, such as:

Action Codes—For example: Not Ready reason codes.

Overriding Options by Using a Routing Strategy

A Routing Strategy can be used to override configuration options that you have defined by using the hierarchies that are described in "Configuration and Administration by Using Options and Annexes" on page 23.

Interaction Workspace uses Transaction Objects of type `object list`. You can attach a transaction name or list of transaction names to your strategy. The transaction names in the list should be separated by commas. Interaction Workspace reads the transaction objects at rendering time to override the static options.

Overriding options enables you to change the appearance of interactions based on a key-value pair that is defined in the annex of each listed transaction object. The attached data contains the name of the transaction object to be used for the interaction.

Transaction objects are configured in Genesys Administrator or Composer, by using the standard approach that is used for other object types in the hierarchy.

Use the `interaction.override-options` option to define the key in which the Transaction object(s) are to be listed in attached data. If you set an override value, Interaction Workspace will look for the transaction object that corresponds to the key-value pair.

Not all the options in the `interaction-workspace` section can be overridden by transaction objects. Refer to "Section: interaction-workspace" on page 130 to determine which options support overriding by transaction objects. To apply this approach, you must replicate in the annex of the transaction object the structure that is used in the `interaction-workspace` section of the Interaction Workspace Application object. The option name must be the same key as in the Interaction Workspace Application object template.

Conflict Resolution for Configuration Options

In the hierarchy that is described in the previous sections, conflicts might occur during the resolution of option inheritance. Typically, an agent can be a member of more than one Agent Group. If group options conflict with one another, Interaction Workspace considers the conflict to be an administration error. An arbitrary resolution is applied.

Single Value Option Types

The arbitrary conflict resolution for single-value options proceeds as follows:

1. Agent Groups are sorted into ascending order by the name of the Agent Group.

2. The values of the options for each section are compared.

3. If there is a conflict, the value that is set for the agent corresponds to the value that is set for the group name that comes first in the sort order. For example, values that are set for options in the "Support" group take precedence over values that are set for options in the "Pre-Sales" group.

Transaction Object Conflicts
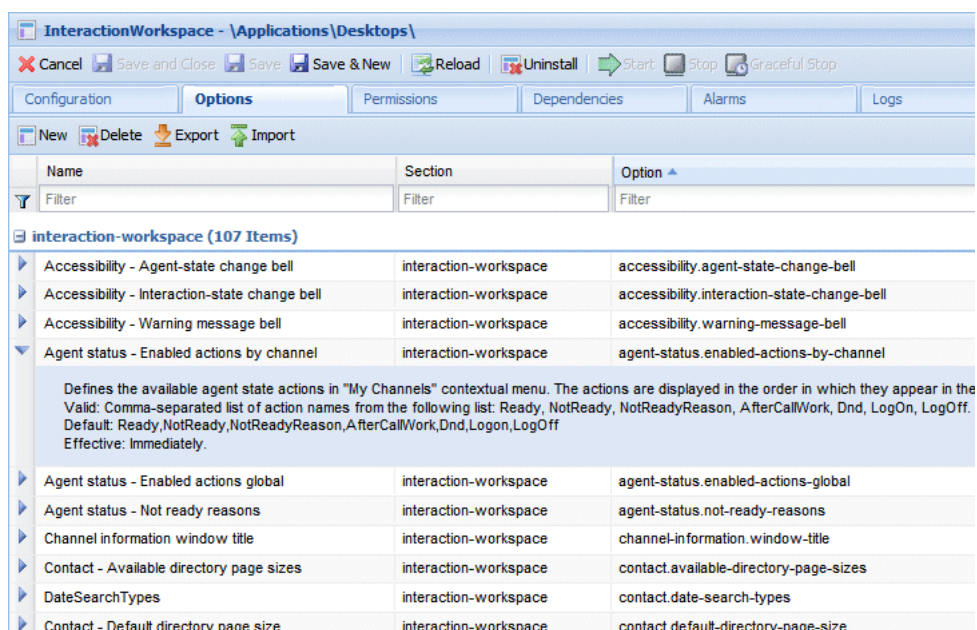
If there is a conflict between transaction objects as specified by the list of override options, the first value that is set in a transaction, starting from the

beginning of the list, is taken into account. All the subsequent values that are specified for the same option are ignored.

Using Options in Genesys 8 and Interaction Workspace

Each object in Genesys Framework, including agents and the Interaction Workspace application, can be configured using Genesys Administrator. Refer to *Framework 8.0 Genesys Administrator Help* and *Genesys Administrator Deployment Guide* for detailed information on how to use Genesys Administrator and Management Framework to set up your contact center and configure objects such as agents, groups, privileges, and applications.

All configuration options in Genesys 8 are divided first into sections. Sections are groups of related configuration options. Within a section, each option is named by its functional area, and then by its name or specific function. Figure 5 on page 25 shows examples of Interaction Workspace options in the KPIs and interaction-workspace sections, such as agent-status.not-ready-reasons. The functional area is agent-status, and the option name is not-ready-reasons.

Figure 5: Examples of Interaction Workspace sections and configuration options, derived from metadata, displayed in the Genesys Administrator interface

Option-Value Types

Option values are of the following types:

* String—Open content or a comma-separated list of valid string or numeric values; some lists may have an open number of members to be determined by the user.

- Numeric—Specific values or ranges of values.

- Boolean—Either `true` or `false`.

Appendix B, "Interaction Workspace Configuration Options Reference," on contains a list of all the Interaction Workspace options. It includes descriptions of their type and use. Refer also to Chapter 2, "Deploying Interaction Workspace," on , when you are planning your implementation of Interaction Workspace.

Effect of Privileges and Hierarchical Options on the Behavior of Interaction Workspace

The behavior of Interaction Workspace is controlled by a compilation of settings in various systems and components of the Genesys 8 suite. The behavior is controlled by the following components:

- Privileges are assigned to logged-in agents through the Genesys RBAC security system (refer to "Role- and Privilege-Based Models" on).

- Option and Annex settings that are defined in the applicable objects of the configuration layer.

Warning!   Privileges are part of the security of the Genesys 8 suite; therefore, they have a higher priority than application and user settings. It is important to note that the options that are defined in the configuration layer and the routing strategy will never override any privilege management.

Under this hierarchy of control, options act only on the feature set that is permitted by the privilege that is specified for a given role. For example, a graphical module is configured to be visible by the application settings; however, none of the privileges that are implemented by this module are granted to the agent; therefore the module is not visible for this agent.

Configuring the Appearance and Content of the User Interface

Many of the Interaction Workspace views can be configured to display certain elements depending on the context—for example:

- Case data key-value pairs

- The values that are displayed for a Case History

- The title of the Main Toolbar

- The party identifier in Voice Media view

- The information that is displayed in the Preview window

There are three ways to specify the appearance and functionality of Interaction Workspace: Administration, Personalization, and Customization.

Administration   Administration is configuration that is performed by system administrators. It managed through Genesys Administrator by setting configuration options on the Interaction Workspace Application object. Administration settings are stored in the Genesys Configuration Layer.

Personalization   Interaction Workspace is personalized at the user level by the setting of Personal Preferences. Personalization data are stored in the agent annex or in the personal-data directory on the local workstation, as specified by the `options.record-option-locally-only` option.

For more information on setting preferences, see *Interaction Workspace User's Guide* and *Interaction Workspace Context-Sensitive Help* (which is available by clicking the Help icon in the Interaction Workspace Main Window, or, with the Interaction Workspace Main Window open, by pressing `F1` on your keyboard).

Agents have control over the display location of various Interaction Workspace Windows, as well as the arrangement and appearance of text and fields within the display.

Customization   Customization is accomplished through development. Interaction Workspace features an open framework that enables developers to add value and extend the capabilities of the application. Interaction Workspace employs a modular design that enables you to expand and integrate your application by using multiple data sources and systems. Interaction Workspace enables you to customize views and create or customize extensions. For more information on extending Interaction Workspace, see *Interaction Workspace .NET Developer's Guide & API Reference* and *Interaction Workspace Extension Examples*.

Customization

Interaction Workspace can be customized through development. Refer to the *Interaction Workspace .NET Developer's Guide & API Reference* and *Interaction Workspace Extension Examples*. for more information.

To customize the Interaction Workspace, you must install the Interaction Workspace Developer's Kit. For more information see: Procedure: Installing Interaction Workspace Customization on the Windows operating system, on page 71.

2 Deploying Interaction Workspace

This chapter provides an overview of the deployment procedures for Interaction Workspace and discusses the prerequisites and other items that should be considered prior to deployment.

This chapter contains the following sections:

Planning Your Deployment

Before you deploy Interaction Workspace, you should take time to define your needs in terms of load, bandwidth, scale, the type of network that you have or want to develop, the number of resources you plan to manage, and the type of deployment (ClickOnce or non-ClickOnce) that you want.

Defining Your Needs

This section provides items that you should consider when you are planning your deployment.

Load, IIS vs. Apache

Interaction Workspace is designed to be equally compatible with Microsoft Internet Information Services (IIS) or Apache web servers. Your choice depends on the server-side operating system and HTTP server that you are

running. Refer to the following system guides for details on compatibility and system requirements:

*   *Genesys Hardware Sizing Guide*

*   *Genesys Interoperability Guide*

*   *Genesys Supported Operating Environment Reference Manual*

Usage Scale

No issues with deployment scale have been identified.

Type of Network

Refer to the following system guides for details on compatibility and system requirements:

*   *Genesys Hardware Sizing Guide*

*   *Genesys Interoperability Guide*

*   *Genesys Supported Operating Systems and Databases*

Number of Resources

No issues with the number of resources have been identified.

Choosing Between a ClickOnce Deployment and a Non-ClickOnce Deployment

You might require a centralized (managed) deployment approach in your environment if you do not have the ability to push applications, updates, and configurations to your agents. When you choose between a ClickOnce deployment and a non-ClickOnce deployment you must decide whether you want a Managed Services deployment (ClickOnce) or a Standard Deployment (non-ClickOnce). Refer to the "Deployment Overview", "ClickOnce Deployment", and "Non-ClickOnce Deployment" sections for information about different deployment scenarios.

Memory Usage

Interaction Workspace uses between 185 MB (Voice only) and 230 MB (all features) of memory on agent workstations.

Deployment Overview

Interaction Workspace can be deployed in one of three ways, depending on whether you want a ClickOnce or a non-ClickOnce deployment. Optionally, you can choose to install the developer package to customize and extend the capabilities of Interaction Workspace. Refer to Table 4 for the list and description of items that are installed by the Interaction Workspace Deployment Application.

ClickOnce Deployment

ClickOnce enables a safe and secure workflow that enables agents to be authenticated and then granted access only to specific privileges. Initially, agents are given a URL (through e-mail, a corporate portal, or a desktop shortcut) that links to the ClickOnce server. When they navigate to the server, the Interaction Workspace application is downloaded to their workstation. The application automatically starts, and agents are prompted to authenticate through the login window. When upgrades are made available, they are automatically delivered to agents upon login.

The basic steps for a ClickOnce deployment are as follows:

1. Perform Procedure: Installing Interaction Workspace on the Windows operating system, on page 55, which guides you through the steps for installing Interaction Workspace on your Windows web server from the Interaction Workspace CD/DVD.

2. Deploy the ClickOnce package on your web server by using the following procedure: Procedure: Deploying the Interaction Workspace downloadable package (ClickOnce) on your web server, on page 59.

3. Start the application bootstrap to install, upgrade, or start the application.

4. Test the client application by using the following procedure: Procedure: Configuration verification: Testing the client, on page 69.

Non-ClickOnce Deployment

You can install Interaction Workspace on a workstation without a ClickOnce deployment. This installation includes only the agent application. This installation option is used mainly to test Interaction Workspace on your system, not for enterprise-wide deployment.

The basic steps for a Non-ClickOnce deployment are as follows:

1. Modify the Configuration Server host, port, and application name parameters in the `InteractionWorkspace.exe.config` file to conform with your system. This file is in the Interaction Workspace directory on the Interaction Workspace CD/DVD.

2. Perform Procedure: Installing the Interaction Workspace application on a client desktop, on page 74, which guides you through the steps for installing Interaction Workspace on an end-user desktop from the Interaction Workspace CD/DVD.

3. Start the application.

4. Test the client application by using the following procedure: Procedure: Configuration verification: Testing the client, on page 69.

Customization Package Deployment

You can install the Interaction Workspace application, API references, Deployment Manager, and Samples on a development workstation as follows:

◆ Perform Procedure: Installing Interaction Workspace Customization on the Windows operating system, on page 71, which guides you through the steps for installing Interaction Workspace Customization on a development workstation from the Interaction Workspace CD/DVD.

Table 4: Interaction Workspace Install Mode Deployment Packages

Package name	Purpose	Folder contents
Prepare a ClickOnce package	Enables IT and administrators to install the Interaction Workspace ClickOnce package on a WebServer.	The Interaction Workspace folder contains the following folders or files: • `InteractionWorkspace`—Interaction Workspace application • `InteractionWorkspaceDeploymentManager`—Deployment Manager application • `WebPublication`—`publish.htm` (bootstrap for client side) and `setup.exe` (prerequisites)
Install Interaction Workspace Developer Toolkit	Intended for developers, testers, or those who are demonstrating the application. It contains all the deliverables, including the API references, Interaction Workspace, Deployment Manager, and Samples. **Note:** In this prototype release, this mode is not yet available. If you choose this option, not everything that you require will be installed.	The destination folder contains the following folders or files: • `Bin`—List of assemblies (DLLs) available for customization of Interaction Workspace (API) • Doc—API Reference documentation • `InteractionWorkspace`—Interaction Workspace application • `InteractionWorkspaceDeploymentManager`—Deployment Manager application • `WebPublication`—`publish.htm` (bootstrap for client side) and `setup.exe` (prerequisites) • `Samples`—Samples of extensions for developers
Install Interaction Workspace application	Intended for agents, testers, or those who are demonstrating the application. It contains only the agent application.	The destination folder contains the following folder: • `InteractionWorkspace`—Interaction Workspace application.

ClickOnce Deployment Principles

ClickOnce provides a smooth experience for both the user and the network administrator. The user launches the application by using either a URL or a desktop icon. The URL can be provided to agents by e-mail, a corporate portal, a desktop shortcut, or other means. This simple method enables you to install the Interaction Workspace application on every workstation easily.

When an agent accesses the URL the Interaction Workspace application is downloaded to the agent's workstation; it automatically starts and the login window is displayed.

For subsequent application starts, the agent can reuse the initial URL or execute the application through a desktop icon or through the Start menu.

If a hot fix or update is required or made available on the server, Interaction Workspace automatically upgrades the next time that the agent starts the application without you having to push-out a fix or update to every user.

ClickOnce enables you to deploy a security-enabled centralized WebService. Microsoft ClickOnce deployment technology that simplifies the privilege of publishing Windows-based applications to a web server or other network file share.

ClickOnce eliminates the need to reinstall the entire application whenever updates occur. Updates are provided automatically when an agent logs in. Only those portions of the application that have changed are downloaded to the client.

ClickOnce applications are entirely self-contained, they do not rely on shared resources. This means that you can update other resources without any impact on Interaction Workspace, or you can update Interaction Workspace without breaking other applications.

Another advantage of ClickOnce is that administrative permissions are not required for the update to be installed. The update is installed automatically from the server when an authorized client logs in.

Scenarios: ClickOnce Principles

The following three scenarios demonstrate the utility of the ClickOnce approach to application and system security management:

*   Initial installation

*   Application patch

*   Update of agent privilege permissions

Note: The application patch and permission-update scenarios can occur simultaneously.

Initial Installation   For the initial installation onto the client workstation, the following
prerequisites must be met:

- The Interaction Workspace application must be installed as a ClickOnce
  package on the HTTP Server that enables ClickOnce.

- Microsoft .NET Framework 3.5 SP 1 must be installed on the client
  workstation.

Figure 6 on shows the steps in a typical first installation of Interaction
Workspace in a ClickOnce environment:

1. The administrator manages the roles and privileges of the contact-center
   agent by using Genesys Administrator and stores the configurations in the
   Configuration Layer. Through e-mail, the corporate portal, or other
   notification, agents are provided with the application URL.

2. Agents use the URL to go to the ClickOnce HTTP Server and initiate the
   download.

3. The Interaction Workspace Application Bootstrap is delivered to the agent
   workstation; then the Interaction Workspace application launches and
   agents are prompted for authentication information.

   Agents provide their credentials and are authenticated on the network.

4. The Interaction Workspace application loads the list of privileges that are
   granted to each agent, based on agent authentication.

5. The Interaction Workspace application then downloads the libraries that
   are required to execute the granted privileges.

6. Interaction Workspace is fully initialized and ready to be used.

Figure 6: Initial ClickOnce installation of the Interaction Workspace (IW) application

Applying a Patch   To apply a patch to the installation on the client workstation, the following prerequisites must be met:

• The agent has run Interaction Workspace and has been successfully authenticated at least once on the current workstation.

• Privileges that are granted to the agent have not been changed since their previous authentication.

Figure 7 on shows the steps in a typical patch installation of Interaction Workspace in a ClickOnce environment:

1. The administrator installs a new version of the Interaction Workspace Bootstrap and upgrades one or more libraries.

2. Agents launch the Interaction Workspace application on their desktop by using the URL or by double-clicking the desktop icon. The agent is authenticated.

3. The Interaction Workspace application checks the ClickOnce HTTP Server to determine if the bootstrap binaries are up to date.

4. The updated bootstrap libraries are delivered to the agent workstation.

5. The Interaction Workspace application loads the list of privileges that are granted to each agent, based on agent authentication.

6. The Interaction Workspace application checks the ClickOnce HTTP Server to determine if the optional binaries are up to date.

7. Updated binaries, if any, are delivered to the agent workstation.

8. The Interaction Workspace application is fully initialized and ready for agent use.

5.
IW application
loads the list of
privileges
granted to this
Agent

2.
Agent launches
IW Application

1.
Administrator
installs a new
version of IW.
Bootstrap and
some libraries are
upgraded

Configuration Layer

Agent Desktop

8.
IW is fully
initialized and
ready to be used

3.
IW Application checks if
bootstrap binaries are
up-to-date

6.
IW Application
checks if
optional binaries
are up-to-date

4.
Updated
Bootstrap
binaries are
delivered to the
Agent Desktop

7.
Updated optional
binaries are
delivered to the
Agent Desktop

ClickOnce HTTP
Server

Figure 7: Patching of the Interaction Workspace (IW) application through ClickOnce

Limitation of Patching with ClickOnce

Because of the architecture of Interaction Workspace and the underlying Platform SDK and Enterprise SDK on which it is built, patches are applied to groups of assemblies, not just to a single assembly. Therefore if one assembly in a group is updated, the whole group must be patched.

Update Agent Privilege Permissions

To update the Interaction Workspace installation on the client workstation with updated privilege permissions, the following prerequisites must be met:

•   The agent has run Interaction Workspace and has been successfully authenticated at least once on the current workstation.

•   The Interaction Workspace application has not been upgraded on the ClickOnce server since the previous login.

Privilege Updates While the Agent is Not Logged In

Figure 8 shows the steps in a typical privilege-permission upgrade of Interaction Workspace in a ClickOnce environment if the agent is *not* already logged in:

1. The administrator modifies the roles and privileges of the contact-center agent by using Genesys Administrator and stores the modified configurations in the Configuration Layer.

2. Agents launch the Interaction Workspace application on their desktop by using the URL or by double-clicking the desktop icon. The agents are authenticated.

3. The Interaction Workspace application loads the list of privileges that are granted to each agent, based on agent authentication.

4. The Interaction Workspace application then downloads the missing libraries that are required to execute the new granted privileges.

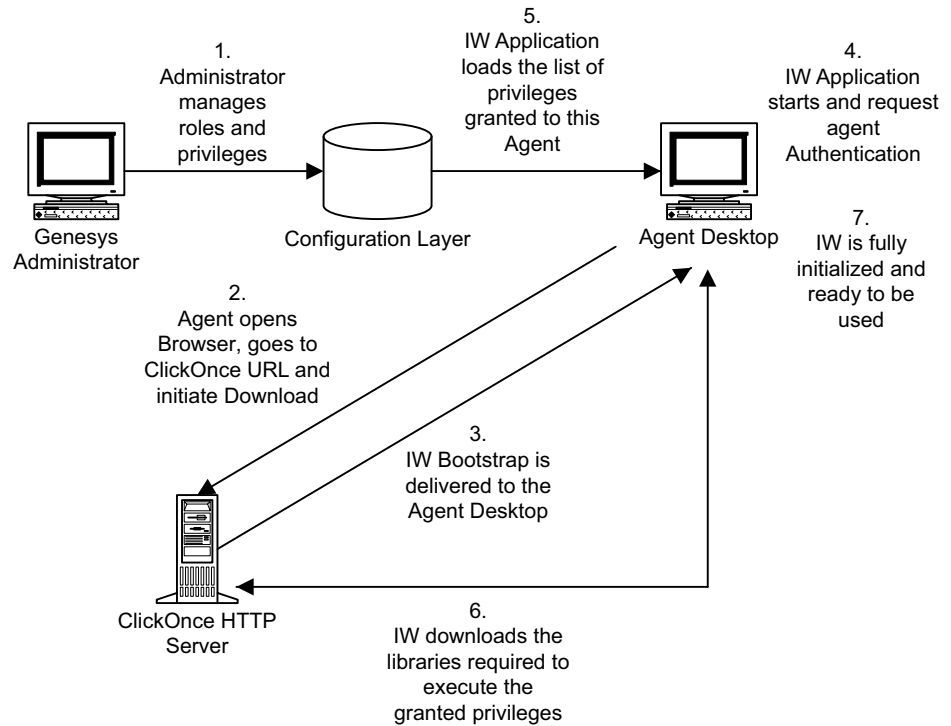5. Interaction Workspace is fully initialized and ready for agent use.
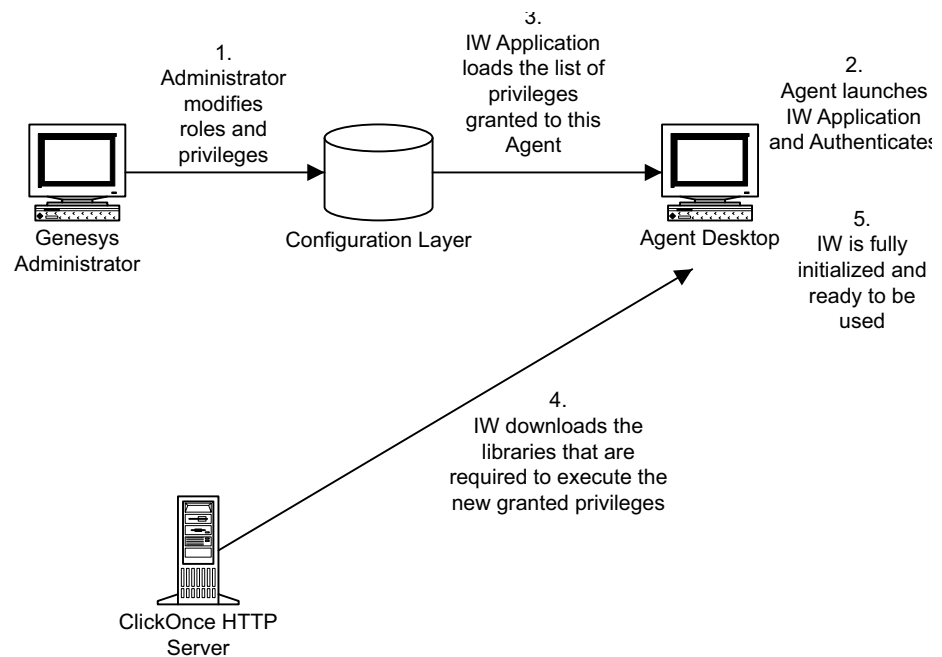
Figure 8: Update of the agent's role through ClickOnce (IW = Interaction Workspace)

Privilege Updates While the Agent Is Logged In   If new privileges are granted to the agent while the agent is logged in, the additional libraries will not be downloaded to the agent's workstation; however, if privileges are removed, this change is taken into account immediately to ensure security.

ClickOnce Updates for Shared Workstations   If multiple users share the same workstation, the download behavior depends on whether each agent has a unique account or whether all agents share the same account.

If each agent has a unique account, then updates are downloaded by account. Therefore, each user will have to download updates. The advantage of this scenario is that multiple agents with different roles can share the same workstation without compromising security.

If all users share a generic account, then only a single instance of the application is downloaded. This means that each user will have the same role as that assigned to the first user to download the application.

Security Constraints

To deploy Interaction Workspace, three deliverable subsets are installed on the agent workstation:

- Prerequisites: Microsoft .NET Framework 3.5 Service Pack 1.

- Mandatory executable: Interaction Workspace Application Bootstrap (`.exe` file and mandatory DLL assemblies.

- Optional assemblies: The list of optional assemblies depends on the privileges that are granted to the agent who logs in to the application.

The .NET Framework and service pack are not installed through the ClickOnce system; they are installed by the ClickOnce Bootstrap application (see Figures 6 and 7). Therefore, more rights are required on the target computer to install the prerequisite than to install Interaction Workspace.

The Interaction Workspace Application Bootstrap and the optional assemblies are pure ClickOnce deliverables; therefore, the full ClickOnce security model applies to these installables. However, the .NET Framework does not have the same security constraints. Therefore, Genesys recommends that you deploy the agent application in two phases:

1. Installation of .NET Framework by the administrator:
   - By using the ClickOnce Bootstrapper, or
   - By using the standard network distribution.

2. Installation of Interaction Workspace by the agents at the initial login.

Note: You can find more information about ClickOnce security at:

   `http://msdn.microsoft.com/en-us/library/76e4d2xw(VS.80).aspx`

Code Access Security

Code Access Security (CAS) is a mechanism that limits system access to the permissions that are granted to each code. CAS protects resources and operations and enables you to grant permissions to assemblies—giving a high degree of control over what resources the assemblies can access. For example, restrictions can be applied to file-system locations, the registry, and specific name spaces.

Setting Code Access Security Permissions

You must set CAS permissions for both the Interaction Workspace ClickOnce application and the zone from which the application will be installed (for example, your local intranet, the Internet, and so on).

Interaction Workspace must be defined as a Full Trust application. A Full Trust application is granted all access to any resource. Granting this level of permission is necessary because some of the embedded DLLs require Full Trust permissions. If Interaction Workspace is not defined as a Full Trust application, execution failures will occur when the application tries to access a restricted resource.

Machine Access Security

The Interaction Workspace application, which is deployed by ClickOnce, uses CAS permissions. This means that Interaction Workspace might require more

permissions than are allowed by your security policy. In this case, ClickOnce will allow an automatic elevation of privileges. However, if the publisher is not trusted, a Machine Access security warning is prompted, but no security warning is prompted if the publisher of Interaction Workspace is trusted.

Note: ClickOnce supports Windows Vista User Account Control (UAC); therefore no additional messages are displayed.

ClickOnce and Installation Security

The minimum class privilege for running a ClickOnce application is `User`. A `Guest` account cannot deploy a ClickOnce application through the network. If an agent is logged in with a `User` account, ClickOnce will automatically elevate the privileges for installing the application on the agent's workstation. If the publisher of ClickOnce deployment is Trusted, the installation will run without any prompting; however, if the publisher is not Trusted, the agent will be prompted to Trust the publisher of the deployment.

ClickOnce and Location Security

To deploy an application via ClickOnce, the ClickOnce HTTP server must be in a Trusted Zone, such as your local intranet, or be listed in Trusted Sites.

ClickOnce and Publisher Security

You must consider two publishers when you are deploying a ClickOnce application: the publisher of the application and the publisher of the deployment.

The Interaction Workspace Deployment Wizard updates some application files; therefore, the application manifest must be signed after these updates. The Interaction Workspace Deployment Wizard must be enabled to sign both the application and deployment manifests.

To sign the manifests, the Interaction Workspace Deployment Wizard requires a security certificate. The same security certificate can be used to sign both manifests.

Certificate Deployment Overview

You must provide a permanent certificate that is used to sign the Interaction Workspace installer manifest. This certificate is pointed to during installation. You can obtain your own certificate by one of the following methods:

* Generate a self-signed certificate by using the `Makecert.exe` file.
* Purchase a third-party verified certificate
* Generate a certificate by using Windows Certificate Server

Note: The certificate can be stored on the client side and the server side in the Windows domain. The certificate must be on the target workstation. The certificate can be declared at the Network level.

Refer to the *Genesys 8.0 Security Deployment Guide* to review a detailed procedure about how to create a certificate.

Deploying Certificates on a Workstation

The Interaction Workspace Deployment Wizard requires you to do one of the following:

- Provide a security certificate.
- Generate a self-signed security certificate in the Interaction Workspace Deployment Wizard.

Warning! You must retain the Certificate file for all upcoming updates. If the updated version is signed by a different certificate, ClickOnce will consider it as a new installation, which means that you will have to uninstall the previous version by using `Add/Remove Programs` command *on each client workstation*.

**Application and Deployment Signing Cases**

Table 5 provides a summary of the cases for signing the application and the deployment for the Integrator and the User, along with the impact for the user.

Table 5: Summary of the Cases for Signing the Application and the Deployment

	Integration	User administration	User impact
Application Verisign Certificate	Non-modifiable application		A prompt to trust the known publisher is displayed.
		Add the certificate in Trusted Publishers store (see Figure 9).	No warning is displayed.
Application Self-Certification	Non-modifiable application		A prompt to trust the unknown publisher is displayed.
		Add the certificate in the Trusted Root Certification Authorities store (see Figure 10) and in the Trusted Publishers store (see Figure 9).	No warning is displayed.
Deployment Verisign Certificate	N/A	Sign the Deployment.	A prompt to trust the known publisher is displayed.
		Sign the Deployment and Add the certificate in the Trusted Publishers store (see Figure 9).	No warning is displayed.

Table 5: Summary of the Cases for Signing the Application and the Deployment

	Integration	**User administration**	**User impact**
Deployment Self-Certification	N/A	Sign the Deployment.	A prompt to trust the unknown publisher is displayed.
		Sign the Deployment and Add certificate in the Trusted Root Certification Authorities store (see Figure 2) and in the Trusted Publishers store (see Figure 1).	No warning is displayed.
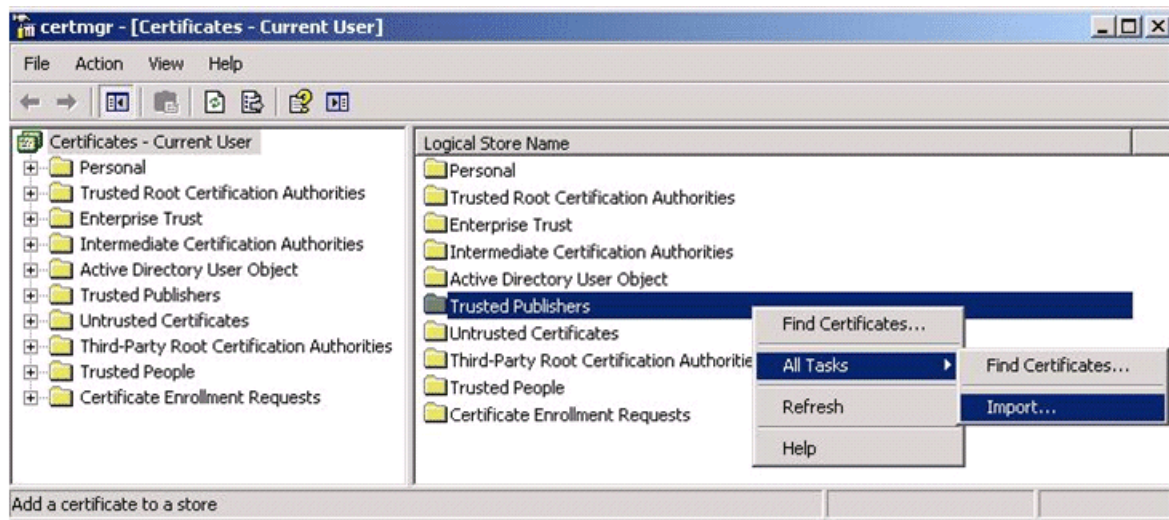
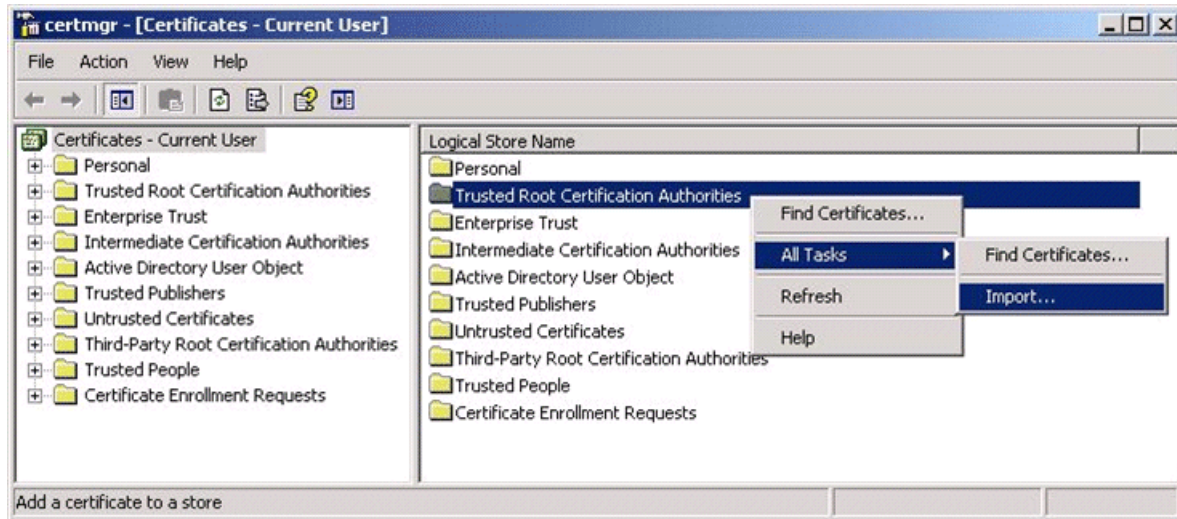**Figure 9: Importing a Trusted Publisher**

Figure 10: Importing a Trusted Root Certification Authority

Trusted Publishers For a publishers to be consider a Trusted Publisher, the following criteria must be met:

- The publisher certificate must be installed in the Trusted Publishers certificate store on the user's computer.

- The issuing authority of the publisher certificate must have its own certificate installed in the Trusted Root Certification Authorities certificate store (This is already included in Verisign).

If the issuer of the certificate is not in the Trusted Root Certification Authorities certificate store, or if the publisher is not in the Trusted Publishers certificate store, the user will be prompted with a dialog box that asks for confirmation. For more information on Trusted Publisher certificates, refer to the following article:

http://msdn.microsoft.com/en-us/library/ms996418.aspx

Deploying Certificates on the Network

There are two methods for deploying certificates over a network to a large number of client workstations:

1. Active Directory domain

2. `certmgr.exe` tool

Active Directory Domain If you run in an Active Directory (AD) domain, use the AD Group Policy Objects (GPO) to distribute certificates centrally. For the root Certificate Authorities (CA) certificate, add a GPO to AD, and then link to the appropriate level (usually the domain level).

1. Go to: `Computer Settings>Windows Settings>Security>Public Key Policies`.

2. Add the root CA certificate under `Trusted Root Certification Authorities`.

Next you must distribute the trusted publisher. Add a GPO to AD and link at the appropriate level (usually for the organizational unit that should trust the application).

1. Go to `User Settings>Windows Settings>Internet Explorer Maintenance>Security>Authenticode Settings`.

2. Click `Import`.

3. Click `Modify`.

4. Enable the `Lock down Trusted Publishers` feature to prevent users from modifying their Trusted Publisher certificate store.

After the standard GPO-replication-to-clients occurs, every client trusts your CA and the Trusted Publisher certificate. Users will not receive Trust challenges for applications that are signed with corporate certificates. For more information on this topic, refer to the following technical article:

http://msdn.microsoft.com/en-us/library/aa719097.aspx#clickonce_topic6

certmgr.exe Tool   You can use the `certmgr.exe` tool to install the certificate on each client workstation. See the following technical article for more information:

http://msdn.microsoft.com/en-us/library/ms996418.aspx#clickoncetrustpub_topic5

Modifying Agent Workstations

Installation of Interaction Workspace results in the following modifications to your agent workstations:

• Interaction Workspace is added to the `Start` menu.

• Interaction Workspace is added to the `Add/Remove Programs` group in the Control Panel.

• The Interaction Workspace icon is added to the desktop.

• ClickOnce stores the application binaries and associated data files in directories that it creates and manages in the user-profile `Local Settings` folder or other location.

Notes: To determine the folder locations at which ClickOnce has stored the application binaries, launch Interaction Workspace, and open the `About` dialog box from the `Help` menu. Press `Ctrl-Click` on the Genesys icon to display hidden buttons that enable you to access the `exe`, `data`, `log`, and `GC` folders.

Nothing is added to the `Program Files` folder or the registry. No administrative rights are required for the agent to install the application.

ClickOnce Deployment

ClickOnce provides a centralized deployment environment that enables you to distribute software and updates from a single server to all agent workstations.

ClickOnce Deployment Prerequisites

A ClickOnce deployment requires certain conditions to be met both on the client-side and on the server side. This section summarizes the prerequisites for deployment on different web severs and on the client workstation.

Licensing and Certificate Management

For details on deploying security certificates, refer to "Security Constraints" on page 38.

Deployment on an Apache Server

You must have a Windows server, Linux server, or Solaris server, and Apache Server 2.2 (refer to Appendix A, "System Support," on page 123). You must also configure Apache by using the following Procedure: Configuring Apache to enable the ClickOnce package, on page 69.

Deployment on an IIS Server

You must have Windows Server 2003 or 2008 and Microsoft IIS 6.0 or higher.

The Interaction Workspace Deployment Manager is installed on the server along with the application material. To deploy Interaction Workspace, launch the Interaction Workspace Deployment Manager wizard. The wizard prompts for the required information. You must sign the ClickOnce deployment using a corporate certificate or a test certificate.

Deployment on the Client

Interaction Workspace runs on the following client-side operating systems: Windows XP, Vista, 2003, or 2008. The workstation must have the .NET Framework 3.5, SP 1 installed. The following browsers are supported: Microsoft Internet Explorer 6, 7, and 8; and Mozilla Firefox 2 and 3.

Note: Other browsers, such as Safari, Opera, and Chrome are not officially supported and might not function correctly.

Mass Deployment of .NET Framework

If you do not have the .NET Framework installed on all of your client workstation, you can use the procedures that are found on the Microsoft Developer Network to perform a mass deployment.

http://msdn.microsoft.com/en-us/library/cc160717.aspx

Non-ClickOnce Deployment

A non-ClickOnce deployment does not give you the advantages of managing updates to privileges, permissions, or software upgrades. A non-ClickOnce deployment is done typically for testing or development purposes where the agent workstation is not in a production environment. Only the Interaction Workspace application is installed on the client workstation.

Non-ClickOnce Deployment Prerequisites

Interaction Workspace runs on the following client-side operating systems: Windows XP, Vista, 2003, or 2008. The workstation must have the .NET Framework 3.5, SP 1 installed. The following browsers are supported: Microsoft Internet Explorer 6, 7, and 8; and Mozilla Firefox 2 and 3.

Note: Other browsers, such as Safari, Opera, and Chrome are not officially supported and may not function correctly.

Mass Deployment of .NET Framework

If you do not have the .NET Framework installed on all of your client workstation, you can use the procedures found on the Microsoft Developer Network to perform a mass deployment.

http://msdn.microsoft.com/en-us/library/cc160717.aspx

Configuring System-Access Permissions

For Interaction Workspace to run correctly, the agent application must be granted permission to access specific system objects. When Interaction Workspace is launched, it connects to Configuration Server using the credentials of the agent who is logging in. Therefore, the required permissions to access system objects are typically much higher than those granted to an agent who uses Interaction Workspace.

To mitigate this situation you must assign three different kinds of permissions to the agent login:

- Write permissions
- Execute permissions
- Read permissions

The following subsections describe how to configure these permissions in the Permissions tab of the specified object. You can choose to configure agents individually by the Person object, or as a group by Access Group.

Refer to *Framework 8.0 Genesys Administrator Help* and *Genesys Security Guide* for detailed information on how to use Genesys Administrator and Management Framework to configure access permissions

Configuring Write Permissions

If you have configured the agent to store preferences in their Person annex instead of on their local desktop, you must grant that agent write permissions on their Person object. If you have configured your system to prompt for a the agent's phone number at login time (this requires SIP Server), you must grant write access to the agent on the SIP DN in which the agent logs in, to set the `request-uri`.

Configuring Execute Permissions

You must grant execute permissions for the Interaction Workspace application to each agent or groups of agents so that Interaction Workspace can connect to Configuration Server to start the application.

Configuring Read Permissions

Agents might require permissions to read from the Application objects that are referenced in the Connection list of the Interaction Workspace application object. They might be required to connect to one of these servers to activate its associated features. The following is a list of items to which an agent might require read access:

- The host of any application objects that are referenced in the Connection list of the Interaction Workspace application object.
- The Person object that corresponds to the agent.
- The Place object that corresponds to the voice channel to which the agent is assigned.
- The DN object that determines the capacity of the channel (Voice, IM). This information is stored in annex of the DN.
- The Switch and/or the T-Server object to determine the possible channel.
- The Tenant object.
- The Person objects of the Tenant to enable Team Communicator to access the firstname, lastname, and username of internal targets.
- The Skills objects of the Tenant to enable TeamCommunicator to access the names of Skills.

- The Agent Group objects of the Tenant to enable TeamCommunicator to access the names of Agent Groups.

- The Routing Point objects of the Tenant to enable TeamCommunicator to access the number, name, and switch.name of Routing Points.

- The ACD Queue objects of the Tenant to enable TeamCommunicator to access the number, name, and switch.name of ACD Queues.

- The User Properties of the agent's Tenant, logged in application, and agent's Agent Groups, to read corporate favorites for display in Team Communicator.

- The Business Attributes of the Tenant to enable the Contact module to use Business Attributes.

- The transaction object of the Tenant that can be used for overriding options of the strategy.

3 Deployment Procedures

This chapter provides the procedures that are required to install and deploy Interaction Workspace in a Genesys 8 environment.

This chapter contains the following sections:

The following task table provides an overview of how to set up your Genesys 8 Configuration Layer for Interaction Workspace, install and deploy Interaction Workspace, and perform additional (optional) installations.

Refer to *Framework 8.0 Genesys Administrator Help* and *Genesys Security Guide* for detailed information on how to use Genesys Administrator and Management Framework to configure access permissions

Task: Preparing the Configuration Layer and Installing Interaction Workspace

Objective	Related procedures and actions
1. Preparing the Configuration Layer for Interaction Workspace	• Installing Interaction Workspace on the Windows operating system, on page 55 • Using Genesys Administrator to set up the Interaction Workspace application, on page 52 • (Optional) Enabling client-side port definition, on page 52
2. Installing the Interaction Workspace Deployment Package	Installing Interaction Workspace on the Windows operating system
3. (Optional) Deploying the ClickOnce Application on Your Web Server. Choose this option if you want to deploy Interaction Workspace as a ClickOnce application.	1. Deploying the Interaction Workspace downloadable package (ClickOnce) on your web server 2. (Optional) Installing the Interaction Workspace SIP Endpoint 3. Configuring Apache to enable the ClickOnce package 4. Configuration verification: Testing the client
4. (Optional) Installing the Interaction Workspace Developer Toolkit. Choose this option if you want to deploy the Interaction Workspace developer package.	1. Installing Interaction Workspace Customization on the Windows operating system 2. (Optional) Installing the Interaction Workspace SIP Endpoint
5. (Optional) Installing the Interaction Workspace Application. Choose this option if you want to deploy a non-ClickOnce version of Interaction Workspace.	1. Installing the Interaction Workspace application on a client desktop 2. (Optional) Installing the Interaction Workspace SIP Endpoint

Preparing the Configuration Layer for Interaction Workspace

Interaction Workspace is designed to be used with the Genesys 8 Suite. Before you install Interaction Workspace, you must deploy the Genesys 8 Management Framework. You must also be familiar with Genesys

Administrator 8.0.2 or higher. For more information on these products, please consult the following documents:

* Genesys Framework documentation set
* *Genesys Administrator Deployment Guide*
* *Framework 8.0 Genesys Administrator Help*

Procedure:
Using Genesys Administrator to create and provision the Interaction Workspace application

Purpose: To create and configure an Interaction Workspace `Application` object in Genesys Administrator to enable you to deploy and provision Interaction Workspace.

The Interaction Workspace Application Template and the configuration metadata are included in the standard application-template set that comes with Genesys Suite 8.

Use the `Options` tab of the Interaction Workspace `Application` object to provision Interaction Workspace by setting configuration options. Refer to Chapter 5, "Provisioning Interaction Workspace," on page 101 for more details.

Note: To use the `clientPort` feature with Configuration Server, you must use the `Interaction_Workspace_802.apd` (or later) template for your application.

Prerequisites

* Genesys Administrator 8.0.2, configured to show Advanced View
* A working knowledge of Genesys Administrator 8

Start of procedure

1. In Genesys Administrator, choose the Provisioning view.

2. Upload the following Application Template:
   `Interaction_Workspace_802.apd`

3. Upload the following application metadata:
   `Interaction_Workspace_802.xml`

4. Save the Application Template.

5. Create a new Interaction Workspace application.

6. Set the application name.

7. Save the application.

End of procedure

Next Steps

- Procedure: Using Genesys Administrator to set up the Interaction Workspace application, on page 52

Procedure:
Using Genesys Administrator to set up the Interaction Workspace application

Purpose: After you create the Interaction Workspace `Application` object, you must set up connections to various Genesys components.

Prerequisites

- Procedure: Using Genesys Administrator to create and provision the Interaction Workspace application, on page 51

Start of procedure

1. In Genesys Administrator, choose the Provisioning view.

2. Open the Interaction Workspace `Application` object that you created.

3. Add the following connections:
   - T-Server (for Voice feature)
   - Statistics Server (for Statistics)
   - Universal Contact Server (for Contact Management)

End of procedure

Next Steps

- (Optional) Procedure: Enabling client-side port definition, on page 52
- "Installing the Interaction Workspace Deployment Package" on page 55

Procedure:
Enabling client-side port definition

Purpose: To enhance security by defining a client-side port.

Defining the access ports for each application to which Interaction Workspace connects ensures the security of the system. This feature is configured partially

on Framework Configuration Server and partially on the Interaction Workspace application in Genesys Administrator.

Prerequisites

- Procedure: Using Genesys Administrator to set up the Interaction Workspace application, on page 52. To use the `clientPort` feature with Configuration Server, you must use the `Interaction_Workspace_802.apd` (or later) template for your application.

Start of procedure

1. Configure the connection to Configuration Server.
   a. Open the `InteractionWorkspace.exe.config` file. This file is in the Interaction Workspace directory on the Interaction Workspace CD/DVD.
   b. In the `appSettings` section, modify the value of the `transport-port` and `transport-address` keys as follows:

      For the `transport-address` key, specify the IP address or the host name that a client will use to make a TCP/IP connection to Configuration Server. If the value is empty, this parameter is not used.

      For the `transport-port` key, specify the port number that a client will use to make a TCP/IP connection to Configuration Server. If the value is empty, this parameter is not used.

```
<appSettings>
  <add key="login.url" value="tcp://[ToBeChanged config_hostname]:[ToBeChanged config_port]
    /[ToBeChanged config_ApplicationName]" />
    <add key="login.connections.parameters.isenable" value="true" />
    <add key="options.record-option-locally-only" value="false" />
    <add key="about.view-region.isvisible" value="false"/>
    <add key="transport-address" value="[ToBeChanged transport_address]"/>
    <add key="transport-port" value="[ToBeChanged transport_port]"/>
</appSettings>
```

2. Configure the connection to Statistic Server. For additional information, refer to the *Client-Side Port Definition* chapter of the *Genesys 8.0 Security Deployment Guide*.
   a. In Genesys Administrator, open the Interaction Workspace application.
   b. Select `StatSever` in the Connections area.
   c. Click `Edit`.
   d. In the `Connection Info` dialog box, click the `Advanced` tab.

      e.   In the `Transport Parameters` field (see Figure 11), specify the following parameters:

          `port=<port number>;address=<IP address>`

          Where: `<port number>` is the port number that a client will use for its TCP/IP connection to the server, and `<IP address>` is the IP address (or host name) that a client will use for its TCP/IP connection to the server.

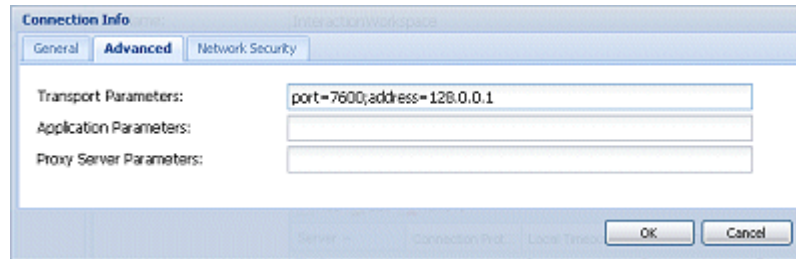   You can configure one or two parameters. If you configure two parameters, they must be separated by a semicolon.

Figure 11: Genesys Administrator Application Connection Info dialog box

      f.   Click `OK`.

      g.   In the Interaction Workspace application configuration window, click either `Save` or `Save and Close`.

3.   Configure the connection to T-Server and/or SIP Server. For additional information, refer to the *Client-Side Port Definition* chapter of the *Genesys 8.0 Security Deployment Guide*.

      a.   In Genesys Administrator, open the Interaction Workspace application.

      b.   In the Connections area, select your T-Server. If you have connections to more than one T-Server, repeat Step 3 for each connection.

      c.   Click `Edit`.

      d.   In the `Connection Info` dialog box, click the `Advanced` tab.

      e.   In the `Transport Parameters` field (see Figure 11), specify the following parameters:

          `port=<port number>;address=<IP address>`

          Where: `<port number>` is the port number that a client will use for its TCP/IP connection to the server, and `<IP address>` is the IP address (or host name) that a client will use for its TCP/IP connection to the server.

          You can configure one or two parameters. If you configure two parameters, they must be separated by a semicolon.

      f.   Click `OK`.

      g.   In the Interaction Workspace application configuration window, click either `Save` or `Save and Close`.

    4. Configure the connection to Universal Contact Server. For additional information, refer to the *Client-Side Port Definition* chapter of the *Genesys 8.0 Security Deployment Guide*.

      a. In Genesys Administrator, open the Interaction Workspace application.

      b. Select `UCS` in the Connections area.

      c. Click `Edit`.

      d. In the `Connection Info` dialog box, click the `Advanced` tab.

      e. In the `Transport Parameters` field (see Figure 11), specify the following parameters:

        `port=<port number>;address=<IP address>`

        Where: `<port number>` is the port number that a client will use for its TCP/IP connection to the server, and `<IP address>` is the IP address (or host name) that a client will use for its TCP/IP connection to the server.

        You can configure one or two parameters. If you configure two parameters, they must be separated by a semicolon.

      f. Click `OK`.

      g. In the Interaction Workspace application configuration window, click either `Save` or `Save and Close`.

End of procedure

Next Steps

- "Installing the Interaction Workspace Deployment Package" on page 55.
- "Enabling Client-side Port Definition" on page 63

Installing the Interaction Workspace Deployment Package

This section explains how to begin installation on the supported operating system by using the Procedure: Installing Interaction Workspace on the Windows operating system, on page 55.

Procedure:
Installing Interaction Workspace on the Windows operating system

Purpose: To install the deployment files for Interaction Workspace on the Windows web server.

Note: After running one of the Windows installers, inspect the directory tree of your system to make sure that the files have been installed in the location that you intended.

Prerequisites

- Have Administrative rights to the web server
- Framework .NET 2.0 installed

Start of procedure

1. On your desktop, open the Interaction Workspace CD/DVD or the Interaction Workspace IP and double-click the `Setup.exe` file.

   You might be asked to reboot your system to delete or rename certain system files before the Installation Wizard runs.

Note: You might have to reboot more than once. If you do not want to reboot or if the warning message that requests a reboot is still displayed after you reboot, do the following to force the installation:

   In Registry Editor, rename the `PendingFileRenameOperations` in the following key:

   `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Session Manager`

   to `Start IP`

   After setup is complete, you can rename the registry item back to the original value.

   The Genesys Installation Wizard launches and the `Welcome` panel is displayed.

2. On the `Welcome` panel, do one of the following:
   - Click `Next` to begin the installation procedure.
   - Click `Cancel` to exit the Genesys Installation Wizard.
   - Click `About` to open the Interaction Workspace `ReadMe` file in your default browser.

   If you clicked `Next`, the `Select Options` panel is displayed.

3. On the `Select Options` panel, do one of the following:
   - Choose `Prepare a ClickOnce package`, and click `Next`.
   - Click `Back` to return to the `Welcome` panel.

- Click `Cancel` to exit the Genesys Installation Wizard.

For more information about installation options, see Table 4 on page 32).

If you clicked `Next`, the `Choose Destination Location` panel is displayed (see Figure 12).

4. On the `Choose Destination Location` panel, specify the location on your web server in which Interaction Workspace is to be installed by doing one of the following:

- Type a location in the `Destination Folder` text box.
- Click `Default` to reset the location to the default location.
- Click `Browse` to navigate to a destination folder.
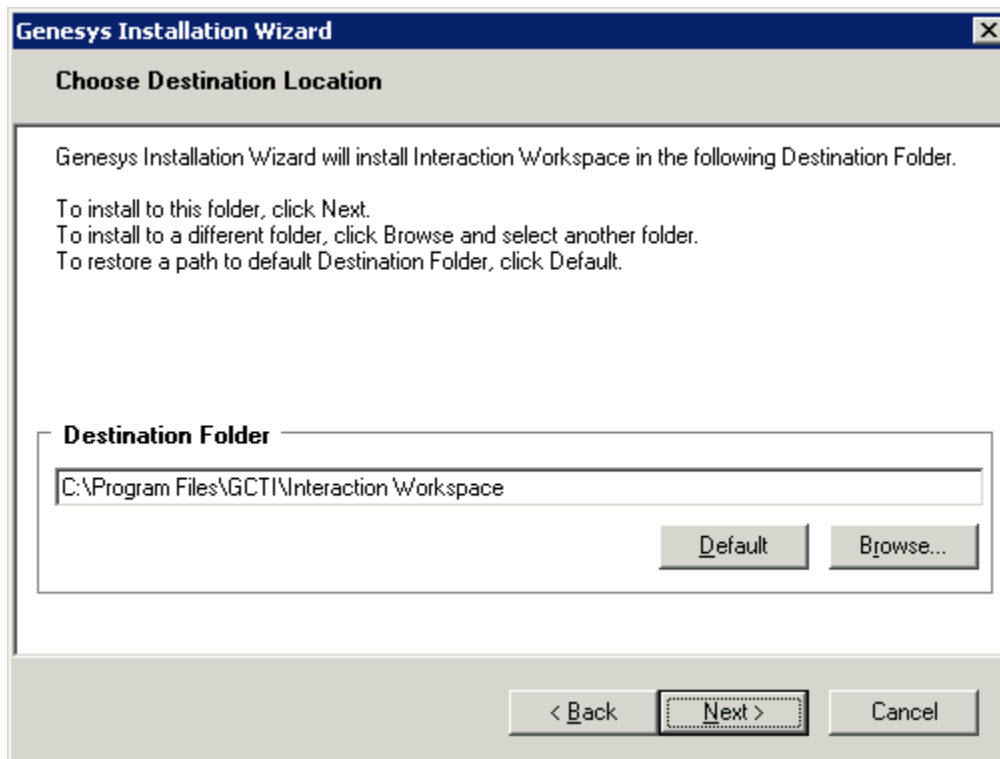
Figure 12: Choose Destination Location panel of the Genesys Installation Wizard

5. With the destination folder specified, do one of the following:

- Click `Next`.
- Click `Back` to return to the `Select Options` panel.
- Click `Cancel` to exit the Genesys Installation Wizard.

If you clicked `Next`, the `Ready to Install` panel is displayed.

6. On the `Ready to Install` panel, do one of the following:

- Click `Install` to install Interaction Workspace on your web server.
- Click `Back` to return to the `Choose Destination Location` panel.

- Click `Cancel` to exit the Genesys Installation Wizard.

If you clicked `Next`, Interaction Workspace is installed in the location that you specified. When installation is complete, the `Installation Complete` panel is displayed.

Figure 13 shows the files that are installed by the `Prepare a ClickOnce package` option (for more information about installation options, see Table 4 on page 32).

- The `InteractionWorkspace` folder contains the Interaction Workspace application files.
- The `InteractionWorkspaceDeploymentManager` folder contains the application files required for deployment, including the Deployment Manager application: `InteractionWorkspaceDesktop.exe`. This folder contains the following subfolder:
  - `WebPublication`—Contains the `publish.htm` and `setup.exe` (the bootstrap for client-side prerequisites). For more information, see Procedure: Deploying the Interaction Workspace downloadable package (ClickOnce) on your web server, on page 59.
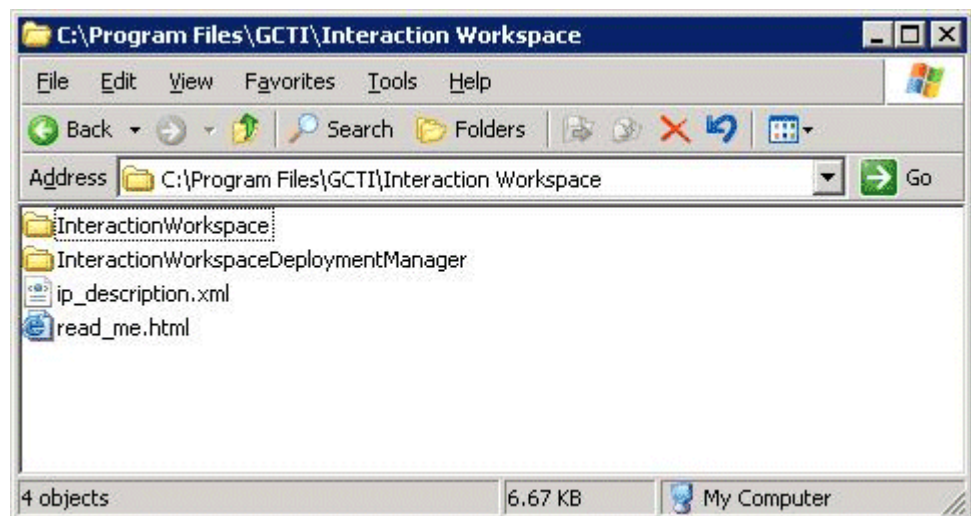
Figure 13: Contents of the Interaction Workspace install disc or image copied onto the web-server host

7. Click `Finish` to exit the Genesys Installation Wizard.

End of procedure

Next Steps

- (optional) Procedure: Installing the Interaction Workspace SIP Endpoint, on page 78
- Procedure: Deploying the Interaction Workspace downloadable package (ClickOnce) on your web server, on page 59

Deploying the ClickOnce Application on Your Web Server

Use the Interaction Workspace Deployment Manager wizard to generate the file hierarchy that is required by the ClickOnce application on your web server.

During the deployment of the ClickOnce application, you are required to enter the following information in the Deployment Manager:

• The deployment URL

• The deployment version

• The deployment certificate:

  ◆ If you do have a deployment certificate, select the `Sign with a provided certificate` option, and then browse to select the certificate. You must also input the password in the dedicated text box.

  ◆ If you do not have a deployment certificate, do not select the `Sign with a provided certificate` option. Without a signed package, a security warning is displayed whenever the client downloads the package.

Be sure to have this information ready before you begin.

Procedure: Deploying the Interaction Workspace downloadable package (ClickOnce) on your web server contains the deployment steps for deploying Interaction Workspace on your web server.

Note: You can put the Interaction Workspace downloadable package in a shared directory instead of on your web server, and then install Interaction Workspace from a shared directory.

Procedure:
Deploying the Interaction Workspace downloadable package (ClickOnce) on your web server

Purpose: Deploy the Interaction Workspace downloadable package on your web server by using the Interaction Workspace Deployment Manager Wizard

---

Note: The following procedure employs a Windows-based Deployment Wizard. If your HTTP server is running on a Solaris or Linux server, you must first build the deployment package on a computer that is running the Windows Operating System, and then copy the package to a compatible location on your Solaris or Linux HTTP server.

Prerequisites

- Install the Deployment Manager and associated files from the Genesys Interaction Workspace disc or download image. See Procedure: Installing Interaction Workspace on the Windows operating system, on page 55.

- Create an `Application` object of type `Interaction Workspace` from the Interaction Workspace Application template.

- Microsoft .NET Framework 2.0 installed on the computer on which you run the wizard. This can be the computer on which you run your web server.

Start of procedure

1. Open the `InteractionWorkspaceDeploymentManager` folder. This folder contains the application files required for deployment, including: `InteractionWorkspaceDesktop.exe.`

2. Launch the `InteractionWorkspaceDeploymentManager.exe` application by double-clicking the file or selecting it from the Start menu. The Deployment Manager installs the ClickOnce files on your web server. The `Welcome` pane of the Deployment Manager is displayed (refer to Figure 14).
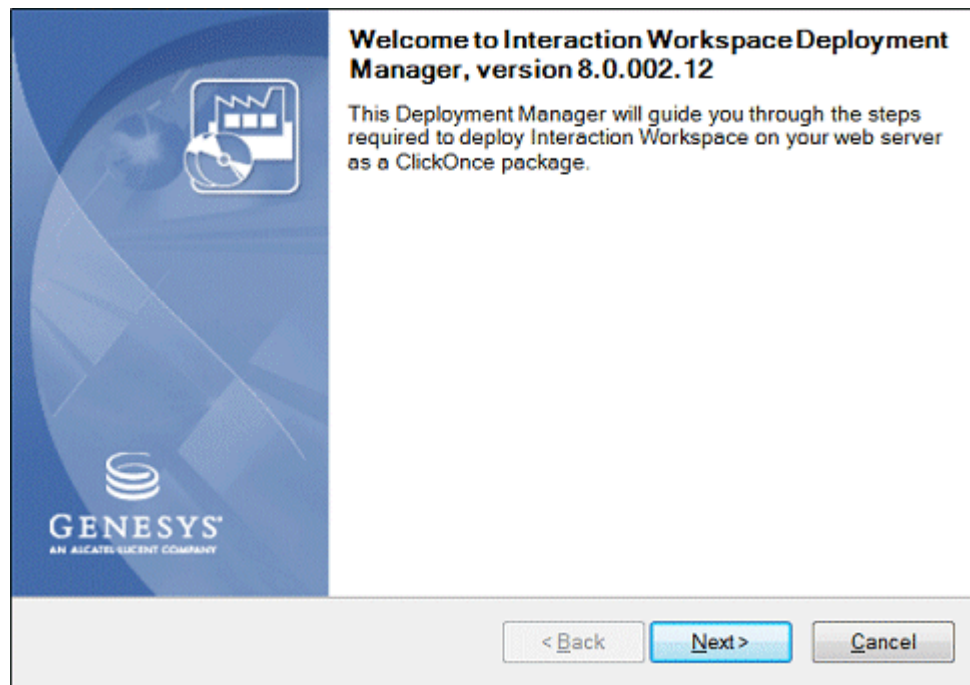
Figure 14: The Interaction Workspace Deployment Manager splash page

3. Click `Next` to proceed with the installation. Click `Cancel` to cancel the deployment.

4. If you clicked `Next`, the `Deployment Folder` pane is displayed (refer to Figure 15). Specify the location on your server in which you want the ClickOnce files to be deployed. If you are deploying to a Solaris server or a

Linux server, specify a local folder on the Windows-based computer on which you are running the Deployment Wizard. From this location, you will build the deployment package that you must manually copy to your Solaris or Linux HTTP server.
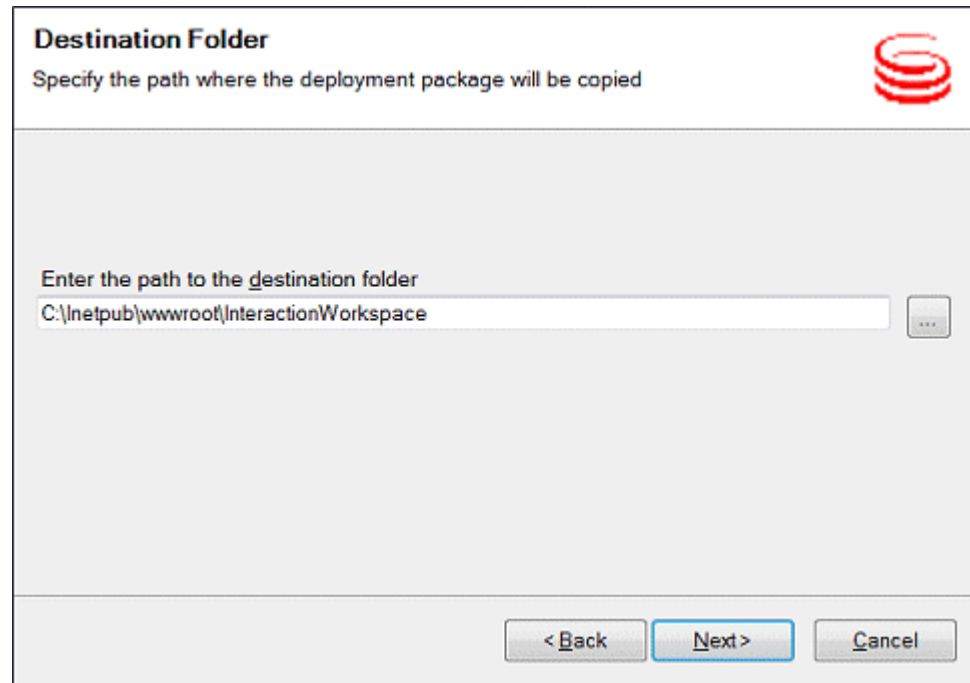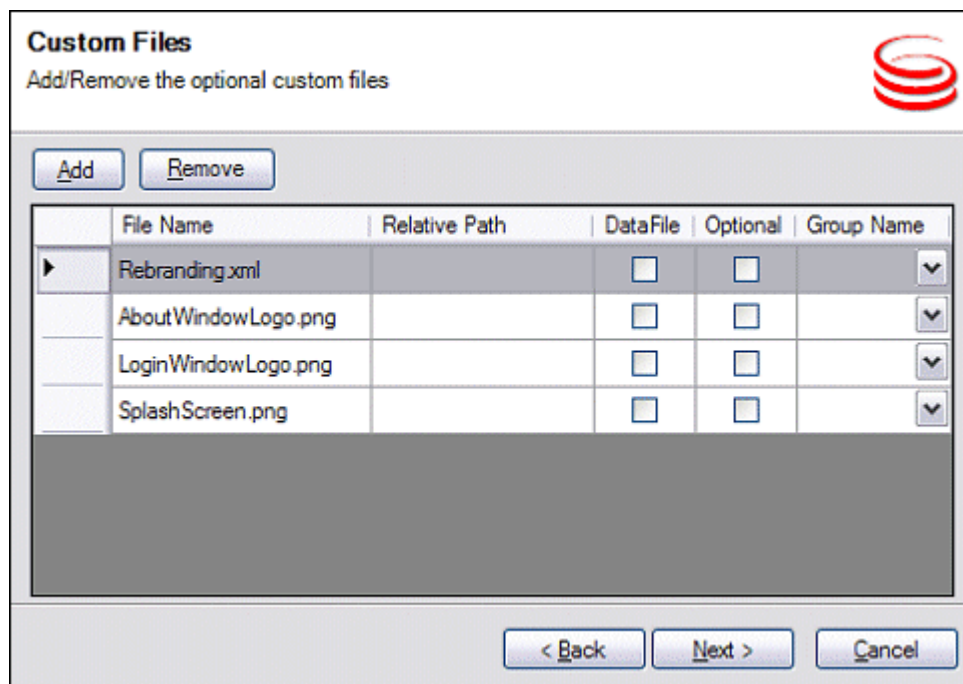

Figure 15: Interaction Workspace Deployment Manager Deployment Folder pane

5. Click `Next` to proceed with the installation. Click `Cancel` to cancel the deployment. Click `Back` to return to the previous panel.

6. If you clicked `Next`, the `Package Information` pane is displayed (refer to Figure 16). This pane is filled in automatically. Modify these parameters only if necessary.
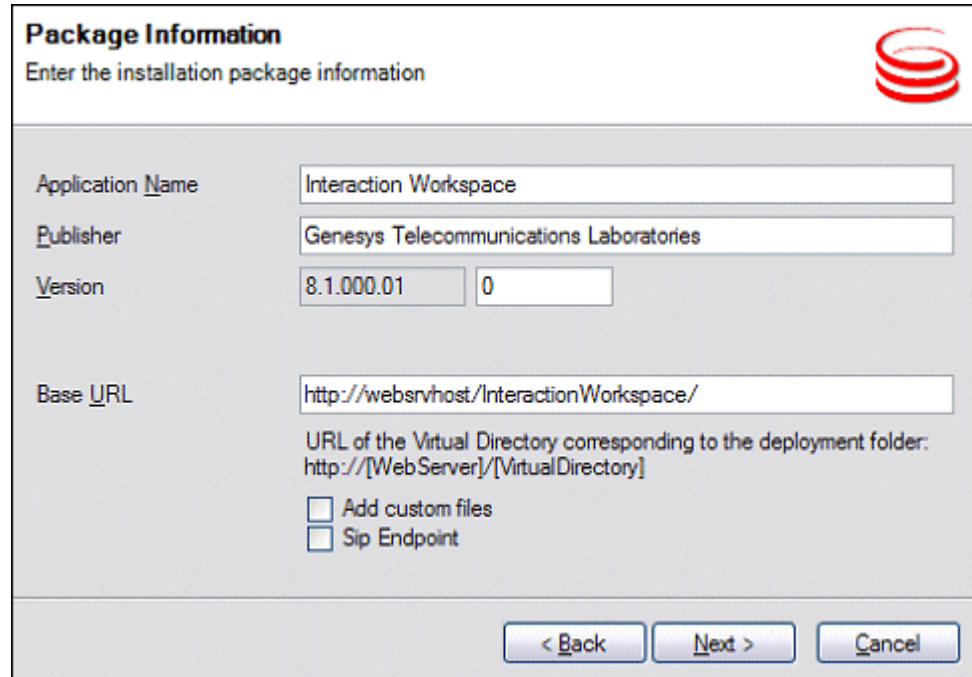
Note: You can change the application name, the publisher (which is displayed in the `publish.htm` page), and the base URL, which is the URL that corresponds with the virtual directory that is linked to the deployment folder.

There are two optional check boxes that you can use to add plug-ins to the Interaction Workspace application:

- `Add custom files`—Select to add custom content such as simple data files, including rebranding icons or sound files, or file assemblies that implement your Interaction Workspace Customization API.

- `Sip Endpoint`—Select to use the Interaction Workspace SIP Endpoint, which must be installed in the same folder as Interaction Workspace (see "Installing the Interaction Workspace SIP Endpoint" on page 78).

Click `Next` to proceed with the installation. Click `Cancel` to cancel the deployment. Click `Back` to return to the previous panel.

Figure 16: Interaction Workspace Deployment Manager Package Information pane

7. If you clicked `Next`, and if you selected `Add Custom Files` in the previous view, the `Custom Files` panel is displayed (refer to Figure 17). This window enables you to add custom content to the out-of-the-box Interaction Workspace.

Figure 17: Interaction Workspace Deployment Manager Custom Files pane

8. Click `Next` to proceed with the installation. Click `Cancel` to cancel the deployment. Click `Back` to return to the previous panel.

9. If you clicked `Next`, the `Client Configuration` pane is displayed (refer to Figure 18). In this pane, provide the following information:
- The address and port number of your local Genesys Configuration Server
- The name of the Interaction Workspace (client) application that you created in the Configuration Layer by using Genesys Administrator

Enabling Client-side Port Definition

To define the client-side port functionality, check `Use Client-side Port by specifying the port number and/or the IP address`. Checking this option enables the following two text fields:
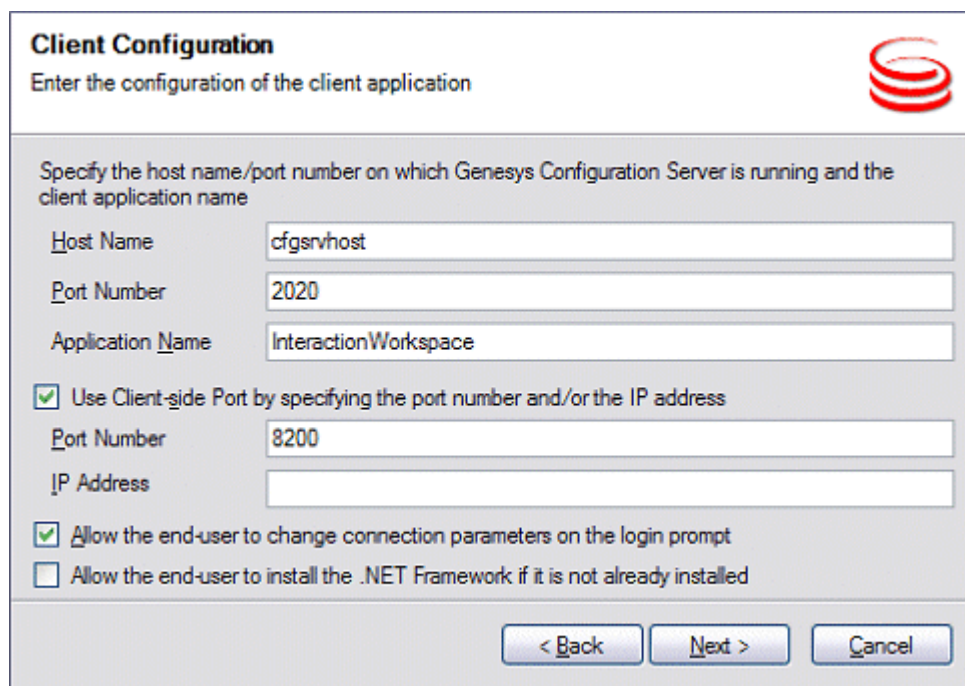- `Port Number`—The port number that a client will use to make a TCP/IP connection to Configuration Server. If the value is empty, this parameter is not used.
- `IP Address`—The IP address or the host name that a client will use to make a TCP/IP connection to Configuration Server. If the value is empty, this parameter is not used.

If you specify one or both values, they will be set in the `InteractionWorkspace.exe.config` file.

There are two additional options in this dialog box:
- `Allow the end-user to change connection parameters on the login prompt`—Enables agents to change their connection parameters when they log in.

- `Allow the end-user to install the .NET Framework if it is not
already installed`—Enables an agent to download and install .NET
Framework to their workstation if you have not already installed it on
the workstation.

**Figure 18: Interaction Workspace Deployment Manager Client Configuration
pane**

10. Click `Next` to proceed with the installation. Click `Cancel` to cancel the
deployment. Click `Back` to return to the previous panel.

11. If you clicked `Next`, the `Signing` pane is displayed (refer to Figure 19). For more information on how to create or obtain a signing certificate, refer to the "ClickOnce Deployment and Authenticode" page on the Microsoft Developer Network web site:
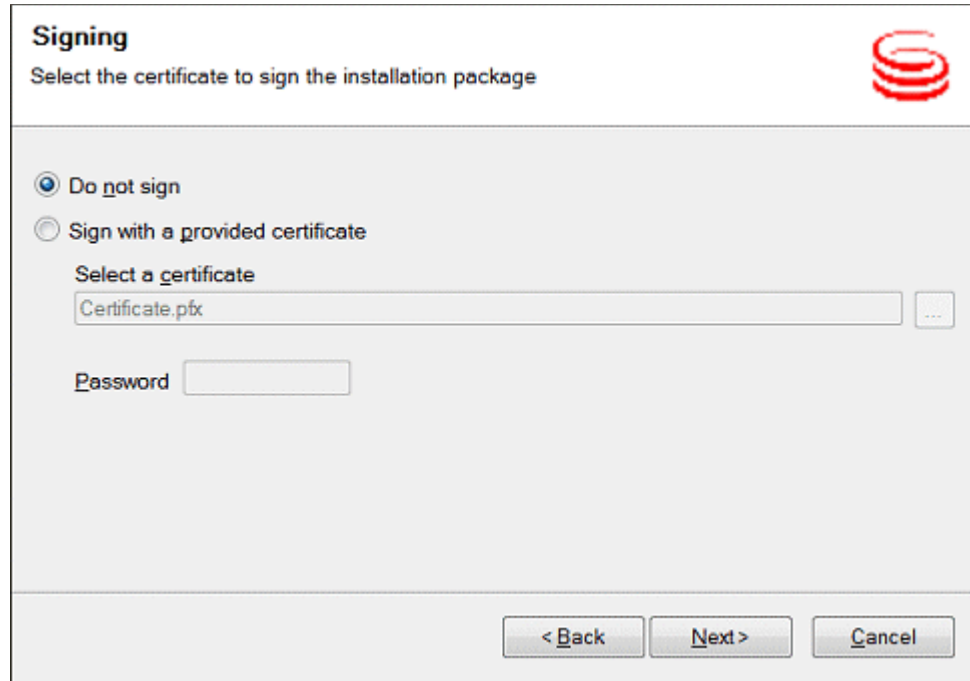
http://msdn.microsoft.com/en-us/library/ms172240.aspx

Figure 19: Interaction Workspace Deployment Manager Signing pane

12. Choose the type of signing certificate that you are using:
- Click `Do not Sign`. If you do not provide a certificate, a security warning is displayed whenever the client downloads the package.
- Click `Sign with a provided certificate` to enable the `Selects a certificate` field.
  - **i.** Click the browse button to navigate to the certificate.
  - **ii.** Enter the password for the certificate in the `Password` field.

13. Click `Next` to proceed with the installation. Click `Cancel` to cancel the deployment. Click `Back` to return to the previous panel.

14. If you clicked `Next`, the `Ready to Build` pane is displayed (refer to Figure 20). This pane contains a summary of the files that will be deployed on your web server and a confirmation of the deployment URL.
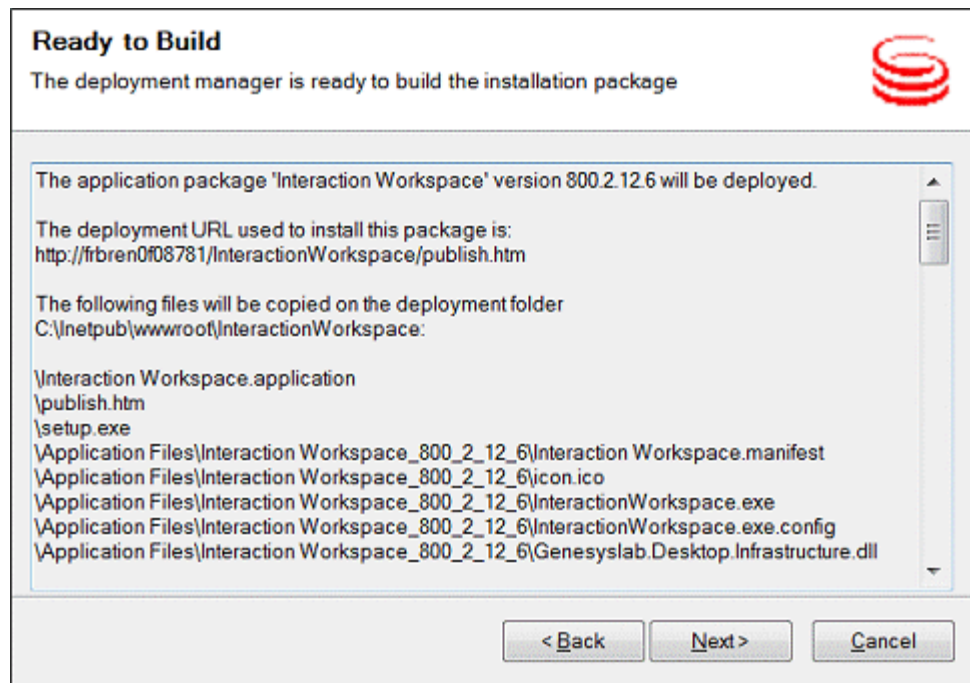

Figure 20: Interaction Workspace Deployment Manager Ready to Build pane

15. Click `Next` to complete the deployment. Click `Cancel` to cancel the deployment. Click `Back` to modify any of the previous panes.

16. If you clicked `Next`, the Deployment Manager will deploy the Interaction Workspace ClickOnce application in the path that you specified at the beginning of the wizard execution. This can be the appropriate place on your web server.

When the deployment is complete, the `Deployment Finished` pane is displayed (refer to Figure 21). This pane contains messages that relate to the success of the deployment.
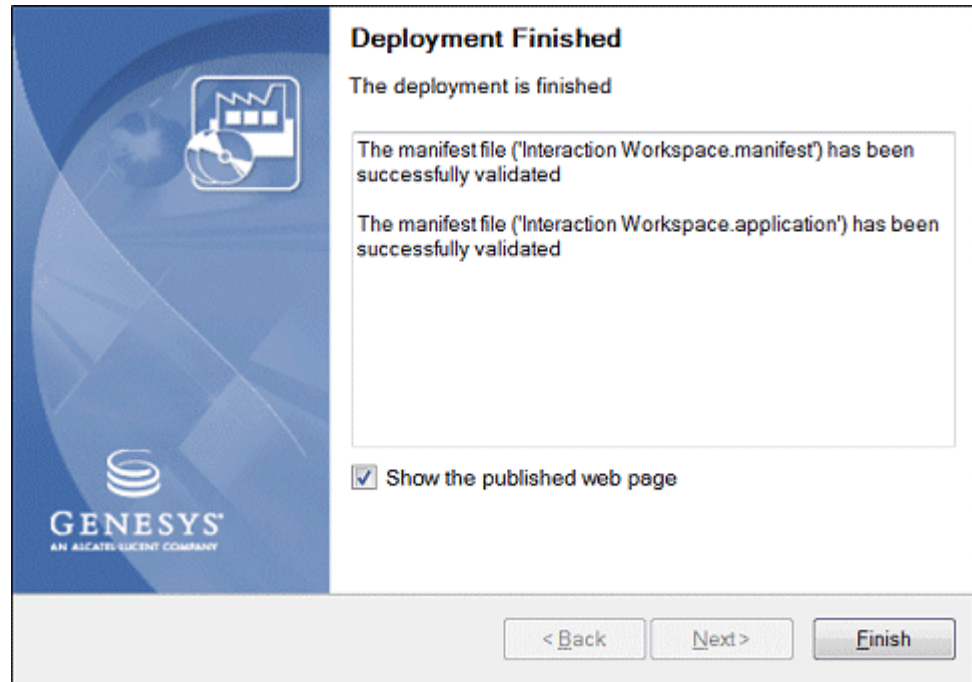
Figure 21: Interaction Workspace Deployment Manager Deployment Finished pane

17. Click Finish to close the Interaction Workspace Deployment Manager.

Deployment proceeds. When deployment is complete, the publish.htm web page is opened in your default browser automatically (refer to Figure 22).
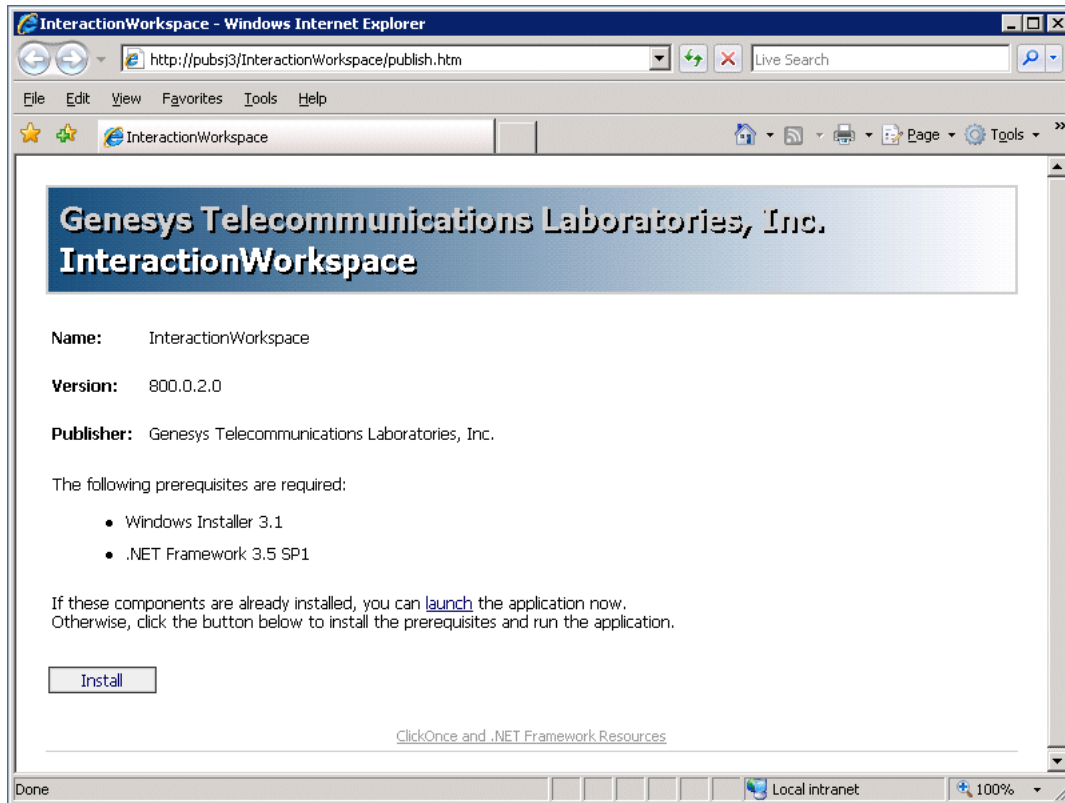
Figure 22: Interaction Workspace pubish.htm web page viewed through Microsoft Internet Explorer

The `publish.htm` web page confirms that the Interaction Workspace package is published and provides you with the version number.

If you have not installed the prerequisites, the page contains a link to the prerequisite installers.

18. If you are deploying on a Solaris or Linux HTTP server, copy the collection of files that was created by the Deployment Wizard on your Windows-based computer to your HTTP server.

End of procedure

Next Steps

•   If you have not installed the prerequisites, in the `publish.htm` web page, click `Install` to launch `setup.exe` to install the prerequisite installers.

•   If you already have installed the prerequisites, the application bootstrap either installs a new version automatically, upgrades your existing version, if necessary, or starts the application, if it is installed and up to date.

Procedure:
Configuring Apache to enable the ClickOnce package

Purpose: By default, the Apache web server does not permit the download of documents of specific MIME types. Apache must be configured to enable the ClickOnce package.

Prerequisites

- Windows Server 2003 or Windows Server 2008 server or Solaris Server or RHEL (Linux) server
- Apache Server 2.2

Start of procedure

1. In the `conf/mime.types` file (in the Apache install folder), add the following lines:

   ```
   application/x-ms-application application
   application/x-ms-application manifest
   application/octet-stream deploy
   ```

2. Save the file.

End of procedure

Next Steps

-

Procedure:
## Configuration verification: Testing the client

Purpose: To ensure that the Interaction Workspace application was correctly deployed on your web server and client workstation.

Prerequisites

-
-

Start of procedure

1. On a client workstation, open a new Internet browser window.

2. In the `Address` field, enter the URL of the Interaction Workspace web application:

   `http://<host>/<application name>/publish.htm`

   For example:

   `http://SUITE80/InteractionWorkspace/publish.htm`

3. Press `Enter` on your keyboard. The Interaction Workspace ClickOnce publish window opens (see Figure 23).
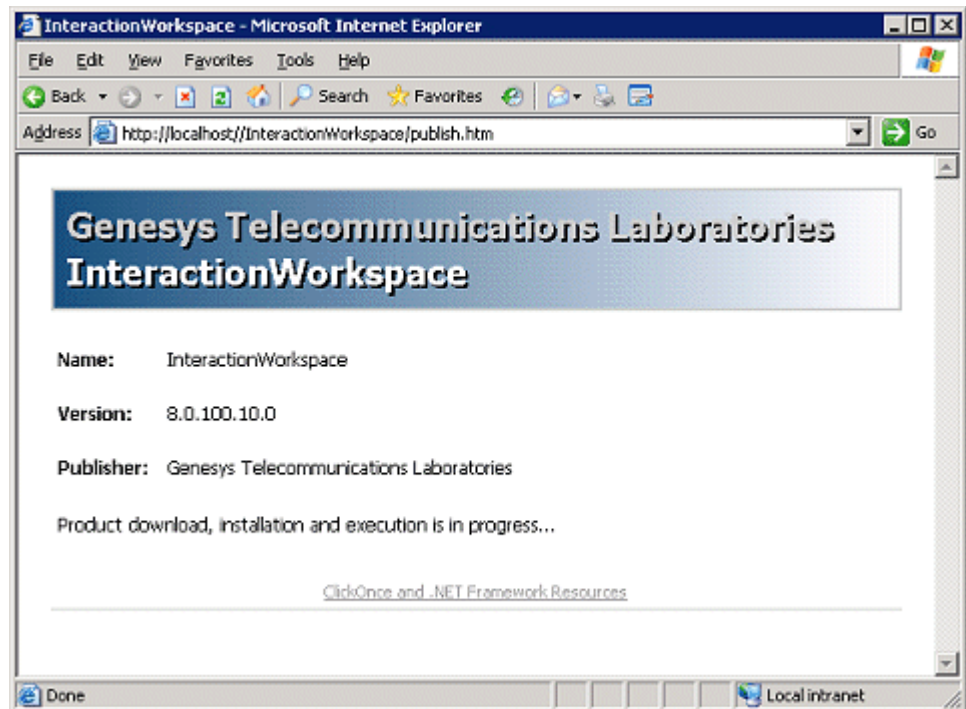
Figure 23: Interaction Workspace publish window

4. If all prerequisites are installed, setup is started automatically. If all prerequisites are not installed, a warning is displayed with the list of missing prerequisites. Click `Install` to install the Interaction Workspace application prerequisites.

5. If a security-warning dialog box appears, click `Install`.

   When installation is complete, a shortcut is placed on the desktop, after which the application launches. The Interaction Workspace agent-login window is displayed.

6. Enter the following information into the agent-login panel and the connection-parameters panel:
   • `User Name`—A valid user name that is configured in the Configuration Layer

- `Password`—The valid password for the specified user name

7. Click `Login` to continue logging in to Interaction Workspace; click `Cancel` to close the agent-login window without logging in.

Refer to *Interaction Workspace User's Guide* for more information on how to log in to Interaction Workspace and use the application.

End of procedure

Next Steps

- Installation is complete. You can now provision Interaction Workspace functionality:
  - Chapter 4, "Interaction Workspace Functionality Overview," on page 83
  - Chapter 5, "Provisioning Interaction Workspace," on page 101

Installing the Interaction Workspace Developer Toolkit

Use Procedure: Installing Interaction Workspace Customization on the Windows operating system to install the Interaction Workspace application and Developer's Kit on your development workstation. This procedure installs everything that is required to build and test an Interaction Workspace extension. For information on how to build a custom extension or to customize Interaction Workspace, see *Interaction Workspace Developer's Guide*.

Procedure: Installing Interaction Workspace Customization on the Windows operating system

Purpose: To install the deployment files for Interaction Workspace Customization on your development workstation.

Prerequisites

- "Preparing the Configuration Layer for Interaction Workspace" on page 50
- Microsoft Visual Studio 2008 or Microsoft Visual Studio 2008 Express Edition
- .NET Framework 3.5, SP 1

Start of procedure

1. On your desktop, open the Interaction Workspace disc or the Interaction Workspace IP and double-click the `Setup.exe` file.

   You might be asked to reboot your system to delete or rename certain system files before the Installation Wizard runs.

Note: You might have to reboot more than once. If you do not want to reboot or if the warning message that requests a reboot is still displayed after you reboot, do the following to force the installation:

In Registry Editor, rename the `PendingFileRenameOperations` in the following key:

`HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Session Manager`

to `Start IP`

After setup is complete, you can rename the registry item back to the original value.

   The Genesys Installation Wizard launches and the `Welcome` panel is displayed.

2. On the `Welcome` panel, do one of the following:
   - Click `Next` to begin the installation procedure.
   - Click `Cancel` to exit the Genesys Installation Wizard.
   - Click `About` to open the Interaction Workspace `ReadMe` file in your default browser.

   If you clicked `Next`, the `Select Options` panel is displayed.

3. On the `Select Options` panel, do one of the following:
   - Choose `Install Interaction Workspace Developer Toolkit`, and click `Next`.
   - Click `Back` to return to the `Welcome` panel.
   - Click `Cancel` to exit the Genesys Installation Wizard.

   For more information on installation options, see Table 4 on .

   If you clicked `Next`, the `Choose Destination Location` panel is displayed (see Figure 12).

4. On the `Choose Destination Location` panel, specify the location on your development workstation in which the Interaction Workspace customization files are to be installed by doing one of the following:
   - Type a location in the `Destination Folder` text box.
   - Click `Default` to reset the location to the default location.
   - Click `Browse` to navigate to a destination folder.

5. With the destination folder specified, do one of the following:

  • Click Next.
  • Click Back to return to the Select Options panel.
  • Click Cancel to exit the Genesys Installation Wizard.

  If you clicked Next, the Ready to Install panel is displayed.

6. On the Ready to Install panel do one of the following:
  • Click Install to install the Interaction Workspace customization files.
  • Click Back to return to the Choose Destination Location panel.
  • Click Cancel to exit the Genesys Installation Wizard.

  If you clicked Install, the Interaction Workspace customization files are installed in the location that you specified (see Figure 24).
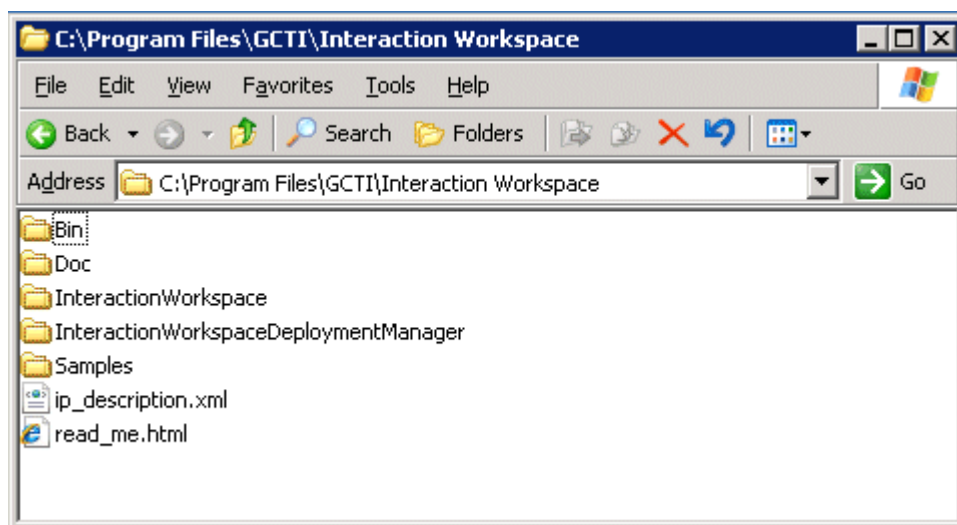

**Figure 24: Contents of the Interaction Workspace install disc or image
copied onto the web-server host**

The Interaction Workspace folder contains the following:
  • The Bin folder, which contains the Interaction Workspace API
  • The Doc directory, which contains the *Interaction Workspace 8.0 Developer's Guide & API Reference* (InteractionWorkspaceSDKNet.chm)
  • The InteractionWorkspace folder, which contains Interaction Workspace application files
  • The InteractionWorkspaceDeploymentManager folder, which contains the application files that are required to deploy customized code, including the Deployment Manager application (InteractionWorkspaceDeploymentManager.exe), and the following subfolder:
    — WebPublication—Contains publish.htm and setup.exe files (the bootstrap files for client-side prerequisites)
  • The Samples directory, which contains code samples that demonstrate Genesys best-practices recommendations for developers

7. When installation is complete, the `Installation Complete` panel is
displayed.
- Click `Finish` to exit the Genesys Installation Wizard.

End of procedure

Next Steps

- (optional) Procedure: Installing the Interaction Workspace SIP Endpoint,
on page 78.

- Refer to *Interaction Workspace Developer's Guide & API Reference* for
information on using the toolkit and samples to customize Interaction
Workspace.

Installing the Interaction Workspace Application

Install the out-of-the-box Interaction Workspace application on an end-user
desktop. The installation contains only the agent application. Use these
procedures if you are not going to use the ClickOnce centralized deployment.

Procedure:
Installing the Interaction Workspace application on a client desktop

Purpose: To install the Interaction Workspace client application on your local
agent workstation or virtual machine to test the Interaction Workspace
application.

Prerequisites

- .NET Framework 3.5, SP 1

Start of procedure

1. On your desktop, open the Interaction Workspace disc or the Interaction
Workspace IP and double-click the `Setup.exe` file.

You might be asked to reboot your system to delete or rename certain
system files before the Installation Wizard runs.

Note: You might have to reboot more than once. If you do not want to reboot or if the warning message that requests a reboot is still displayed after you reboot, do the following to force the installation:

In Registry Editor, rename the `PendingFileRenameOperations` in the following key:

`HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Session Manager`

to `Start IP`

After setup is complete, you can rename the registry item back to the original value.

The Genesys Installation Wizard launches, and the `Welcome` panel is displayed.

2. On the `Welcome` panel, do one of the following:
   - Click `Next` to begin the installation procedure.
   - Click `Cancel` to exit the Genesys Installation Wizard.
   - Click `About` to open the Interaction Workspace `ReadMe` in your default browser.

   If you clicked `Next`, the `Select Options` panel is displayed.

3. On the `Select Options` panel, do one of the following:
   - Choose `Install Interaction Workspace application,` and click `Next`.
   - Click `Back` to return to the `Welcome` panel.
   - Click `Cancel` to exit the Genesys Installation Wizard.

   If you clicked `Next`, the `Choose Destination Location` panel is displayed (see Figure 12).

4. On the `Choose Destination Location` panel, specify the location on your agent workstation in which Interaction Workspace is to be installed by doing one of the following:
   - Enter a location in the `Destination Folder` text box.
   - Click `Default` to reset the location to the default location.
   - Click `Browse` to navigate to a destination folder.

5. With the destination folder specified, do one of the following:
   - Click `Next`.
   - Click `Back` to return to the `Select Options` panel.
   - Click `Cancel` to exit the Genesys Installation Wizard.

   If you clicked `Next`, the `Ready to Install` panel is displayed.

6. On the `Ready to Install` panel, do one of the following:
   - Click `Install` to install Interaction Workspace on the client desktop.
   - Click `Back` to return to the `Choose Destination Location` panel.

- • Click `Cancel` to exit the Genesys Installation Wizard.

  If you clicked `Next`, the Interaction Workspace client application is installed in the location that you specified. When installation is complete, the `Installation Complete` panel is displayed.

  The Interaction Workspace agent application is installed by the `Install Interaction Workspace application` option into the folder that you specified (for more information about installation options, see Table 4 on page 32).
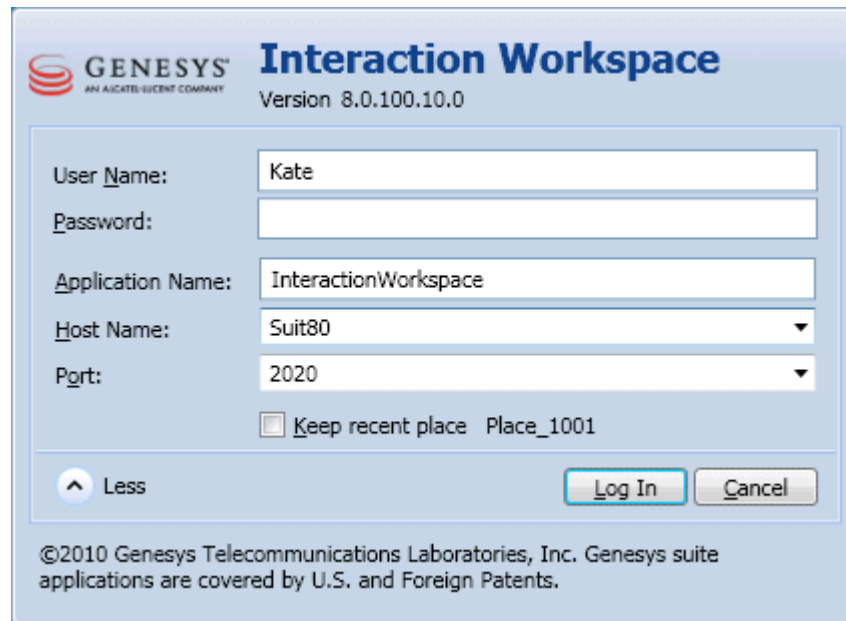
7. Click `Finish` to exit the Genesys Installation Wizard.

8. (optional) Procedure: Installing the Interaction Workspace SIP Endpoint, on page 78.

9. To launch the Interaction Workspace client application on the client desktop, select it from the `Start` menu or navigate to the installation folder that you specified and double-click the `InteractionWorkspace.exe` file .

   The Interaction Workspace login window is displayed on the client desktop (see Figure 25). The connection panel of the login window indicates that no connection has been specified. Before the agent can log in, you must connect to the Interaction Workspace application in your Genesys Framework.

Figure 25: Interaction Workspace agent Login window with no connection parameters

10. Click the `More Options` drop-down list to open the connection options panel (see Figure 26).

Figure 26: Interaction Workspace agent Login window with the connection-parameters panel displayed

11. Enter the following information into the agent-login panel and the connection-parameters panel:

- `User Name`—A valid user name that is configured in the Configuration Layer
- `Password`—The valid password for the specified user name
- `Application Name`—The name that is specified for the Interaction Workspace `application` object to which you want to connect
- `Host Name`—The name of the web server.
- `Port`—The port that is configured for your web-server application

See Figure 26 for an example of how to populate the fields in the Interaction Workspace login window.

12. Click `Login` to continue logging in to Interaction Workspace; click `Cancel` to close the agent-login window without logging in.

Refer to *Interaction Workspace User's Guide* for more information on how to log in to Interaction Workspace and use the application.

End of procedure

Next Steps

- Chapter 4, "Interaction Workspace Functionality Overview," on page 83
- Chapter 5, "Provisioning Interaction Workspace," on page 101

Installing the Interaction Workspace SIP Endpoint

The Interaction Workspace SIP Endpoint is an optional plug-in for Interaction Workspace. It is available as a separate IP that you install from a separate CD/DVD. Install the Interaction Workspace SIP Endpoint after you install the Interaction Workspace application on your server, but before you run the Interaction Workspace Deployment Manager.

If you deploy Interaction Workspace SIP Endpoint as part of a ClickOnce deployment, the behavior of the ClickOnce download depends on the privileges that are assigned to the agent who is logging in. If the agent is granted the privilege to execute a local Interaction Workspace SIP Endpoint, the following files are downloaded to the agent workstation:

• The SIP Endpoint Communication plug-in (part of Interaction Workspace runtime)

• The Interaction Workspace SIP Endpoint executable and associated assemblies.

Procedure:
Installing the Interaction Workspace SIP Endpoint

Purpose: To install the Interaction Workspace SIP Endpoint on your web server, an agent workstation, or a development workstation.

Prerequisites

• .NET Framework 3.5, SP 1

• Install the Interaction Workspace application by using one of the following procedures:
    ⬥ "Deploying the ClickOnce Application on Your Web Server" on . Choose this option if you want to deploy Interaction Workspace as a ClickOnce application.
    ⬥ "Installing the Interaction Workspace Developer Toolkit" on . Choose this option if you want to deploy the Interaction Workspace developer package.
    ⬥ "Installing the Interaction Workspace Application" on . Choose this option if you want to deploy a non-ClickOnce version of Interaction Workspace.

Start of procedure

1. On your desktop, open the Interaction Workspace SIP Endpoint disc or the Interaction Workspace SIP Endpoint IP and double-click the `Setup.exe` file.

   You might be asked to reboot your system to delete or rename certain system files before the Installation Wizard runs.

   The Genesys Installation Wizard launches and the `Welcome` panel is displayed.

2. On the `Welcome` panel, do one of the following:
   - Click `Next` to begin the installation procedure.
   - Click `Cancel` to exit the Genesys Installation Wizard.
   - Click `About` to open the Interaction Workspace SIP Endpoint `ReadMe` in your default browser.

   If you clicked `Next`, the `Select Installed Application` panel is displayed (see Figure 27).
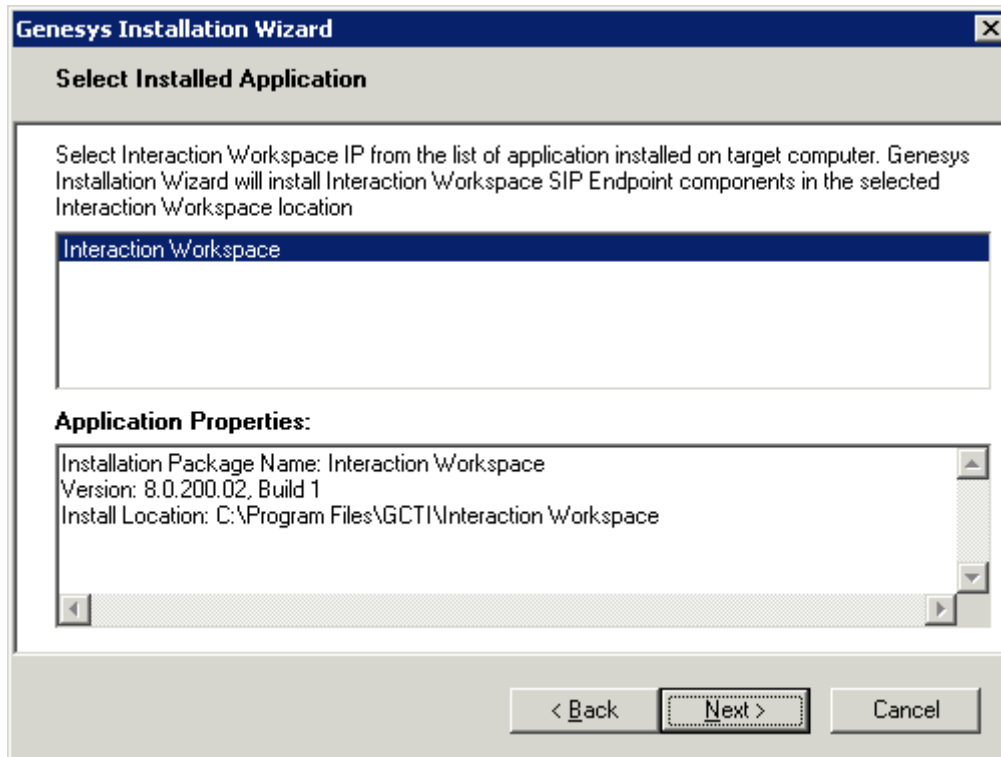

Figure 27: Select Installed Application Panel of the Genesys Installation Wizard

3. The `Select Installed Application` panel enables you to select the Interaction Workspace application instance to which you want to add Interaction Workspace SIP Endpoint as a plug-in.

The Genesys Installation Wizard searches the target computer for an installed version of Interaction Workspace. Select the version of Interaction Workspace in the location in which you want Interaction Workspace SIP Endpoint to be installed.

The `Application Properties` pane displays the name, version, and location of the selected Interaction Workspace application (see Figure 27 on page 79).

4. After you have selected the version of Interaction Workspace that you want to use with Interaction Workspace SIP Endpoint, do one of the following:
- Click `Next` to proceed to the next panel.
- Click `Cancel` to exit the Genesys Installation Wizard.
- Click `Back` to return to the previous panel.

If you clicked `Next`, the `Ready to Install` panel is displayed.

5. On the `Ready to Install` panel do one of the following:
- Click `Install` to install Interaction Workspace SIP Endpoint on your web server, development workstation, or agent workstation.
- Click `Back` to return to the `Select Installed Application` panel.
- Click `Cancel` to exit the Genesys Installation Wizard.

If you clicked `Next`, Interaction Workspace SIP Endpoint is installed in the location that you specified. When installation is complete, the `Installation Complete` panel is displayed.

6. Click `Finish` to exit the Genesys Installation Wizard.

A folder that is named `InteractionWorkspaceSIPEndpoint` is created in the `Interaction Workspace` folder. The `InteractionWorkspaceSIPEndpoint` folder contains the Interaction Workspace SIP Endpoint application and associated files.

After the Interaction Workspace SIP Endpoint application is installed on the agent or developer workstation, or after it is downloaded by the ClickOnce application (see "Deploying the ClickOnce Application on Your Web Server" on page 59), and after the agent is granted permission to use the application, agents must login Interaction Workspace on a Place that is associated with a SIP DN to start the Interaction Workspace SIP Endpoint. The Interaction Workspace SIP Endpoint process is started automatically when Interaction Workspace application is being initialized.

End of procedure

Next Steps

- (Optional) If you are deploying Interaction Workspace as a ClickOnce application on your web server, go to "Deploying the ClickOnce Application on Your Web Server" on page 59.

- Installation is complete. You can now provision Interaction Workspace SIP Endpoint functionality. Refer to:
  - Chapter 4, "Interaction Workspace Functionality Overview," on page 83.
  - Chapter 5, "Provisioning Interaction Workspace," on page 101.

![Genesys - An Alcatel-Lucent Company logo]

Chapter

4

Interaction Workspace Functionality Overview

This chapter introduces the functionality of Interaction Workspace. For details about using the functionality, refer to *Interaction Workspace User's Guide* and *Interaction Workspace Context-Sensitive Help*.

Interaction Workspace provides a secure agent interface to the Genesys 8 Suite. The functionality of Interaction Workspace is controlled for each agent by Role Based Access Control (RBAC). This section describes the functionality in general terms. Refer to *Interaction Workspace User's Guide* and *Interaction Workspace Context-Sensitive Help* for detailed explanations of the functionality and interface use.

The general functionality of Interaction Workspace is described in the following sections:

Interaction Workspace features two modal views: Main View and Gadget. Refer to *Interaction Workspace User's Guide* and *Interaction Workspace Context-Sensitive Help* for detailed explanations of how to use these two different views. For information about configuring the Main View, see "Main view" on . For information about configuring the Gadget, see "Gadget and Statistics Gadget" on .

Agent Login and Authentication

Agent login is a two-step process:

1. User authentication in the primary login dialog box

2. Selection of Place and advanced parameters in the secondary login dialog box, when it is required

Interaction Workspace enhances the security of your system by limiting agent login to basic authentication. Interaction Workspace further enhances security by enabling you to limit the choices that are presented to an agent at login.

User Authentication

When Interaction Workspace is launched by an agent, the agent must provide a user name and password as authentication. After authentication the Configuration Layer is accessed by Interaction Workspace to obtain the list of existing places and privileges that are granted to the agent as well as the configuration of the Interaction Workspace application for that agent.

Place Selection

Genesys 8 requires that each agent connect to a unique Place. After authentication, the agent must specify a Place. The default Place that is specified by the agent is displayed in the `Place` field of the secondary login dialog box. Place information is stored locally and is provided to the agent for confirmation. Agents can be configured to specify a Place other than their default Place.

Specification of Advanced Login Parameters

Advanced login parameters are defined by the privileges that are assigned to a particular agent. The privileges assigned to a particular agent, therefore, determine which advanced parameters, if any, are displayed in the secondary login dialog box.

The Place that is specified by an agent also determines the advanced login parameters that is available to be specified by the agent. For example, if the Place is associated with a voice channel, the agent must also provide login and

queue information for each assigned DN. Other advanced parameters that might be required include SIP phone numbers.

Advanced parameters can be preset for agents—making it unnecessary for the agent to specify advanced parameters.

Application Options that Control Login

Use the following application options in the `interaction-workspace` section to control agent login:

- `login.default-place`—Specifies the default Place that is proposed to the authenticated agent at login.

- `login.enable-place-completion`—Enables the name of the Place to be completed as the agent types.

- `login.im.can-unactivate-channel`—Specifies whether the agent can select and deselect (activate and deactivate) IM channels.

- `login.im.prompt-agent-login-id`—Specifies whether the agent can select a login id from the configured ones for the IM channel in the login window.

- `login.im.prompt-dn-password`—If applicable, prompts for the IM channel password in the secondary login dialog box.

- `login.im.prompt-queue`—If applicable, prompts for the ACD Queue in the secondary login dialog box.

- `login.prompt-place`—Specifies whether the agent must enter a place in the login window.

- `login.store-recent-place`—Specifies whether the most recently used Place on the workstation is stored and displayed for the agent at the next login.

- `login.voice.can-unactivate-channel`—Specifies whether the agent can select and deselect (activate and deactivate) voice channels.

- `login.voice.prompt-agent-login-id`—Specifies whether the agent can select a login id from those configured for the voice channel in the login window.

- `login.voice.prompt-dn-less-phone-number`—Specifies whether a DN-less phone number is prompted for in the login window. This option is specific to the SIP Server environment.

- `login.voice.prompt-dn-password`—If applicable, prompts for the DN password in the secondary login dialog box.

- `login.voice.prompt-queue`—If applicable, prompts for the ACD Queue in the secondary login dialog box.

- `login.workmode`—Specifies the work mode that is applied when the user of the voice DN logs in. If set to `auto-in`, the agent is automatically in Ready state. If set to `manual-in`, the agent must manually activate the Ready state. To determine whether your switch supports the work mode, refer to the Deployment Guide of the relevant T-Server.

Managing Agent Status

Interaction Workspace provides options that enable agents to control their status. Use these options to populate the Interaction Workspace status menu with one or more of the following privileges:

- Global Ready
- Global Not Ready (with reason code)
- Global DND (Do Not Disturb)
- Global After Call Work
- Global Log Off
- Global Login

The options enable the following Agent States:

- Logged off
- DND (Do Not Disturb)
- After Call Work
- Not Ready - Full (Multiple Reasons)
- Not Ready - Full (Single Reason)
- Ready - Partial (for example, ready on one channel)
- Ready - Full

Interaction Workspace also enables detailed agent and Place status management through options. Agents can set individual channels to the following states:

- Ready
- Not Ready
- Do Not Disturb
- After Call Work
- Logged off
- Call Forwarded (for voice)

Other configurable agent privileges include the following:

- Refine advanced login parameters, when applicable (for example, Place, and Queue)

You can use the following options in the `interaction-workspace` section to control the contents of the command menu in the Interaction Workspace Main Window.

- `agent-status.enabled-actions-by-channel`—Specifies the name of the Business Attribute that contains the Attribute Values that is used to filter and render attached data. This option can be overridden by a routing strategy.

- `agent-status.enabled-actions-global`—Defines the available agent states in the global Status menu. The agent state commands are displayed in the order in which they appear in the list.

Managing Agent Inactivity

For security purposes, Interaction Workspace can be configured to lock the application, if an agent has not used the keyboard or mouse for a period that you specify. All user input is blocked until the agent provides login information to unlock the application.

When Interaction Workspace is locked, the following conditions occur:

- The following windows are minimized or hidden when the application is locked:
  - Main window
  - Gadget
  - Statistics Gadget
  - Interaction window
  - My Channels
  - My History
  - My Statistics
  - My Contact Center Statistics
  - My Messages
- The following windows/controls remain visible, but are disabled:
  - Interaction notifications
  - System tray icon
- An authentication dialog window is displayed.
- A notification that the agent should authenticate to unlock Interaction Workspace is displayed.
- System notices are not locked.

You can use the following option in the `interaction-workspace` section to control the inactivity timeout.

- `security.inactivity-timeout`—Specifies the amount of time in minutes of agent inactivity (no mouse or keyboard usage) that triggers application locking. If the agent has been inactive longer than the number of minutes that are specified by the inactivity timeout, the agent must reauthenticate to be able to use the Interaction Workspace application. A value of `0` disables this functionality.

- `security.inactivity-set-agent-not-ready`—Specifies whether the agent is automatically set to Not Ready when agent inactivity is detected.

- `security.inactivity-not-ready-reason`—Specifies the Not Ready Reason if the `security.inactivity-set-agent-not-ready` option is set to `true`.

Previewing Incoming Interactions

Interaction Preview is rendered through an Interactive Notification pop-up from the System Tray from the Interaction Workspace icon. The Interactive Notification pop-up preview handles inbound notification for both ringing voice interactions (SIP or TDM) or SIP interaction preview. The preview contains sufficient information to enable agents to determine whether to accept or reject an interaction. The following privileges enable these actions:

- Accept Call or Accept Preview
- Reject Call or Decline Preview

If the `Reject` privilege is granted to an agent, the Reject function is available only for an incoming voice call if T-Server provides information about the queue or Routing Point that is used to deliver the call to the agent.

Note: You can control the behavior of the Reject function by using the interaction.reject-route configuration option.

You can use the following options in the `interaction-workspace` section to configure the Interaction preview:

- `interaction.case-data.format-business-attribute`—Specifies the case-data format.
- `interaction.case-data.frame-color`—Specifies the color of the border of the Case Data view frame. Examples: #FFFFBA00 for a Gold color, #FF6F7074 for a Silver color, and #FFB8400B for a Bronze color. This option can be overridden by a routing strategy.
- `voice.ringing-bell`—Specifies the voice channel ringing sound configuration string.
- `interaction.override-option-key=IW_OverrideOptions`.

To configure an agent for SIP Preview, see Procedure: Enabling an agent to use the SIP Preview feature, on page 108.

Handling Interactions

Voice Interactions

Interaction Workspace employs the following privileges for all voice interactions:

- Release Call
- Hold Call
- Resume Call

- Mark done
- Set Disposition
- Send DTMF

Interaction Workspace also enables privileges for outbound interactions:

- Can Make Call

You use the following options in the `interaction-workspace` section to configure voice interactions:

- `voice.mark-done-on-release`—Specifies whether the Mark Done function is required to complete the release of the call.

- `voice.auto-answer`—Specifies whether a voice interaction is automatically answered when a TServer Ringing event is received. This option can be overridden by a routing strategy.

- `interaction.disposition.is-mandatory`—Specifies whether it is mandatory for the agent to set a disposition code before Marking Done an interaction. This option can be overridden by a routing strategy.

- `interaction.disposition.is-read-only-on-idle`—Prevents changes to the disposition code after the interaction has been released. This option can be overridden by a routing strategy.

- `interaction.disposition.key-name`—The key that is used to populate attached data or a user event when a disposition code is submitted to the back-end system, such as T-Server, Interaction Server, and Contact Server. This option can be overridden by a routing strategy.

- `interaction.disposition.use-attached-data`—Enables the adding of attached data from the interaction in UserEvent. This option can be overridden by a routing strategy.

- `interaction.disposition.use-connection-id`—Specifies whether the connection id is sent as part of the user event that is sent for disposition code. This option can be overridden by a routing strategy.

- `interaction.disposition.value-business-attribute`—A character string that specifies the name of the Business Attribute that contains the Attribute Values that are used as an enumerated value for a disposition code. This option can be overridden by a routing strategy.

Customer Case

The concept of a Customer Case enables the grouping of all the information about the active interactions of all types for a single customer in one location. The Customer Case facilities enable agents to store all information about the following actions in one location, as well as:

- Handle two voice calls simultaneously.
- Toggle between two calls.
- Transfer/conference one or all interaction(s).

Evolution and Behavior of Attached Data or Case Data

Attached data that is relevant to a call evolves and changes as a call progresses through the system in a contact center. For example, during a Transfer or Conference, information on who transferred a call and when it is attached to the case data. Not all agents in the chain will see the same case data. This information can be retrieved through the contact database by agent that have the following privileges assigned:

- Can Use Contact History CaseData
- Can Use Contact My History

Interaction Workspace SIP Endpoint

You can install an optional SIP Endpoint that can be added as a privilege to enable the agent workstation to handle SIP Voice-over-IP calls. The Interaction Workspace SIP Endpoint does not have an interface; instead, it adds interface elements to the Voice Interaction window, including muting and volume control for both the microphone channel and the speaker channel of the selected audio device(s) on the agent workstation.

Other SIP Voice features include: automatic gain control, beep tone, auto-answer, unavailable headset detection, log-level support, Real-time Transport Protocol (RTP) support, and speaking detection.

The options related to Interaction Workspace SIP Endpoint is started and stopped by Interaction Workspace. Both applications employ a keep-alive mechanism that allows each to detect when the other is no longer running. If the SIP Endpoint detects that Interaction Workspace is no longer running, it waits for any active calls to end, and then exits. If Interaction Workspace detects that the SIP Endpoint is no longer running, it starts a new instance of Interaction Workspace SIP Endpoint.

The Interaction Workspace SIP Endpoint can be configured at any level of the configuration layer hierarchy, from Tenant to agent. Interaction Workspace employs the following privilege for activating the Interaction Workspace SIP Endpoint:

- Use SIP Endpoint

Note: If there is a USB headset connected to the agent workstation, it is selected automatically. If there is no USB headset connected to the agent workstation, the default audio devices that are specified for the workstation are selected.

Recording SIP Voice Interactions

Agents can record SIP Voice interactions if you are running a Genesys Suite that include Genesys SIP Server and Genesys Stream Manager or Genesys Media Server. The SIP recording feature is implemented as a hidden conference with a special SIP DN (gcti::record). SIP call recordings are made by Genesys Stream Manager. Registered calls are placed in a Stream Manager subdirectory.

Monitoring SIP Voice Interactions

You can enable agents to be monitored by a supervisor that is using a Supervisor application, such as Genesys 7.6 Supervisor Desktop, if you are running a Genesys Suite that include Genesys SIP Server and Genesys Stream Manager or Genesys Media Server. The SIP monitoring feature is implemented as a hidden conference with the SIP DN of a supervisor.

If configured, the agent is notified through the Interaction Workspace interface during supervisor monitoring, unless the supervisor is conducting silent monitoring. All monitoring is conducted through the supervisor application. If the supervisor is using whisper coaching or barge-in, an "eye" icon is displayed within the voice interaction window to indicate that the call is monitored. When the supervisor leaves the call, the icon disappears.

Communicating Internally

Interaction Workspace supports two modes of internal communication: Voice and Instant Messaging. The various interaction interfaces, such as Interactive Notifications, Interaction Window title bars, and lists of parties involved in an interaction, support the display of internal parties and/or party DNs.

Voice Communication

Interaction Workspace provides many facilities for voice communication between agents, between agents and supervisors, and between agents and internal experts. The following functionality is available:

- Originating a consultation call
- One-step transfer
- Two-step transfer
- One-step conference
- Two-step conference
- Sending DTMF from a consultation call

- Holding a call
- Retrieving a call
- Alternating (toggling) between calls
- Canceling calls

This functionality is handled by the following privileges:

- Complete Transfer
- Complete Conference
- Alternate
- Reconnect (Cancel consult)
- Send DTMF

You can use the following options in the `interaction-workspace` section to configure internal voice communications:

- `voice.one-step-trsf-mode`—Specifies the type of one-step transfer. If you specify default, the default one step transfer type for your switch is applied. For a Lucent G3 switch, the default type is `mute-transfer`; for a SIP switch, the default type is `single-step-transfer`; for an Alcatel A4400 switch, the default type is `single-step-transfer`.

Voice Conference Functions

Interaction Workspace supports four-way conferencing. Agents can mute and parties can drop out without ending the call. Interaction Workspace provides the following privileges for voice conferencing:

- Prevent a party from listening to the conversation
- Re-allow a party to listen to the conversation
- Remove a party from the conference

Instant Messaging Communication

Interaction Workspace provides many facilities for instant-messaging communication between agents, between agents and supervisors, and between agents and internal experts. The following functionality is available:

- Invite an internal target to join an Instant Messaging session
- Accept or Reject an invitation to join an Instant Messaging session
- Time-out if the internal target does not respond to an invitation

Use the following option in the `interaction-workspace` section to configure internal instant-messaging conferences:

- `im.toast-timeout`—Defines the duration, in seconds, of Interactive Notification for interaction instant messaging in the Information area of the Main Window. The value `0` means the Interactive Notification is not displayed.

Transitioning to a Different Channel

During a collaboration with an agent or a knowledge worker, agents can change from an Instant Message consultation to a Voice consultation, or from a Voice consultation to an Instant Message consultation. When an IM is transferred or conferenced to a different agent, or if an internal IM consultation is transitioned to a Voice consultation, or *vice versa*, all the information about the transferring agent is included with the interaction.

Viewing Broadcast Messages

Interaction Workspace enables agents to receive messages that are sent simultaneously (broadcast) to multiple contact center parties. You must use an application that can publish messages, associated by topic, to a common communication DN. Interaction Workspace employs a simple protocol based on communication DN and provisioning to enable this functionality.

Agents can be provisioned to receive messages that are addressed, by topic, to a property of the agent, a property of an agent group, or a property of a role (see "Enabling agents to view Broadcast Messages" on).

Messages are displayed to agents by an Interactive Notification that is similar to the new interaction Interactive Notification. An audio alert can be configured to alert agents when a new broadcast message arrives. Messages are also displayed in the Interaction Workspace Main Window as a summary table in the `Messages` drop-down area. If the agent opens the message, a detailed view is displayed. If the agent uses the Gadget view, messages are displayed in a message gadget.

A broadcast protocol message is defined by the following attributes:

- `Message`—The content of the message.
- `Sender`—The identity of the sender.
- `Message Type`—The type of message, such as Error, Information, Notification, and so on.
- `Subject`—The subject of the message (optional).
- `Priority`—The relative importance of the broadcast message. The following subcategories are predefined; however, you can also configure your own values:
  - `Minimal`
  - `Low`
  - `Normal`
  - `High`
  - `Important`
- `Date`—The date sent, in local time of the agent.
- `Topic`—To which topic the message was sent.
- `Custom Data`—Any custom data included with the message.

Use the following protocol on your supervisor client configuration:
```
IWS_Message
IWS_Sender
IWS_MessageType
IWS_Subject
IWS_Priority
IWS_Date (RFC1123 pattern.)
IWS_Topic
IWS_CustomData
```

The following is an example of a `UserEvent` configuration:
```
Event:EventUserEvent
    Server:65200
    ReferenceID:7
    CustomerID:Resources
    ThisDN:BroadcastDN
    UserData:
        (Str) IWS_Subject         Coffee Break
        (Int) IWS_Priority       3
        (Str) IWS_Message Please take your coffee break NOW !!!
        (Str) IWS_Date          Thu, 11 Feb 2010 16:15:16 GMT
        (Str) IWS_Topic         Agent4
        (Str) IWS_Sender        Ministrator
        (Str) IWS_MessageType       Error
    Seconds:1265904964
    USeconds:234000
    Server Time:11/02/2010@17:16:04.234
```

You can use the following options in the `interaction-workspace` section to configure Broadcast Messaging:

- `broadcast.color.xxx-priority`—Specifies the Hexidecimal-color code of the border of the Message view frames for messages that have the xxx priority.

- `broadcast.displayed-columns`—Specifies the attribute columns that are displayed in the Broadcast Message window and the item tooltip in the My Messages tab/window.

- `broadcast.dn`—The name of the DN and switch that is used for broadcasting. Use the following value format: `DN@switch`

- `broadcast.mark-read-timeout`—Specifies the duration after which a message, as a tooltip, is considered to be read.

- `broadcast.message-content`—Specifies the attributes that are displayed in the Broadcast Message window and the item tooltip in the My Messages tab/window.

- `broadcast.preview-timeout`—Specifies the duration after which a message preview is closed.

- `broadcast.sound.xxx-priority`—Specifies the sound configuration string for messages that have priority xxx.

- `broadcast.subscribed.topics`—Specifies the list of subscription topics.

- `broadcast.toast-summary`—Specifies the attributes that are displayed in the Interactive Notification.

- `broadcast.value-business-attribute`—Specifies the name of the Business Attribute that contains the Attribute Values that are used as an enumerated value for a custom attribute of message.

Message types can be customized by adding the following lines to the `Genesyslab.Desktop.Modules.Windows.en-US.xml` dictionary file:

```
<Value Id="Broadcast.MessageType.System" String="System"/>
<Value Id="Broadcast.MessageType.Error" String="Error"/>
<Value Id="Broadcast.MessageType.Information" String="Information"/>
<Value Id="Broadcast.MessageType.Internal Note" String="Internal
Note"/>
```

The value that is set in the `String` property is displayed as the message type.

Viewing User and Group Metrics

Interaction Workspace enables agents to view real-time metrics of their performance and the performance of the contact center in a table view or in a dedicated gadget component. Statistical information is displayed in the form of industry standard- and contact center-defined Key Performance Indicators (KPIs). KPIs enable agents to focus on their efficiency and to compare their performance against that of their colleagues.

Interaction Workspace enables you to configure which KPIs are displayed to your agents, with what frequency, and with what alarm conditions.

Examples of statistics that can be displayed in Interaction Workspace:

Login-time statistics:

- Login duration
- Ready duration
- Wrap duration
- Talk duration
- Hold duration
- Number of interaction transferred
- Number of internal calls
- Number of refused interactions
- Total number of interactions
- Average handling time
- Number of voice interactions
- Average handling time voice interactions

- Number of e-mail interactions
- Average handling time e-mail interactions
- Number of chat
- Average handling time chat

You can use the following options in the `interaction-workspace` section to configure the behavior of KPIs in Interaction Workspace:

- `kpi.displayed-kpis`—Defines the KPIs that are displayed to the agent. The KPI names refer to names of the sections that are defined by the Application KPI options.
- `kpi.show-agent-groups`—Defines whether KPIs are also calculated for the Agent Groups that contain the agent.
- `kpi.refresh-time`—Defines the frequency of notification (in seconds) for statistics.

You can use configuration options in each section that defines a KPI to configure the behavior of KPIs in Interaction Workspace (refer to "Section: <KPI Name>" on page 176).

Statistics are displayed in both the Main Window and the Statistics Gadget.

Viewing Contact-Center Metrics

Interaction Workspace enables agents to view real-time metrics of the performance of the contact center. Statistical information is displayed in the form of industry standard- and contact center-defined metrics. Metrics enable agents to focus on their efficiency and to compare their performance against that of their colleagues. Statistics are displayed only for the Tenant to which the agent is logged.

Interaction Workspace enables you to configure which metrics are displayed to your agents, with what frequency, and with what alarm conditions.

Queue statistics:

- Number of interactions in queue (In the Login Queue)
- Average waiting time (In the Login Queue)
- Number of distributed calls (In the Login Queue)
- Number of abandoned calls (In the Login Queue)
- Number of agents logged in to the ACD Queue

The Interaction Workspace default statistics are controlled by the following privileges set in the `interaction-workspace` section, except where noted otherwise:

- `statistics.refresh-time`—Defines the frequency of notification (in seconds) for statistics.

- `statistics.queues`—Specifies the list of queues for which queue statistics are calculated. A comma-separated list of queues are defined as follows: `<QueueName>@<SwitchName>`. This option is part of the regular option hierarchy; therefore, you can define the list of applicable objects per Tenant, Group, or User; however, if the list is defined in the statistic section, the list is global.

- `statistics.routing-points`—Specifies the list of Routing Points for which routing point statistics are calculated. A comma-separated list of queues are defined as follows: `<RoutingPoint>@<SwitchName>`. This option is part of the regular option hierarchy; therefore, you can define the list of applicable objects per Tenant, Group, or User; however, if the list is defined in the statistic section, the list is global.

Statistics are calculated in the following way, the statistic is calculated for the list of objects specified by the `statistics.queues` option, which can be populated with the following tags; however, if the section contains an option named "object-id", the statistic is calculated only for that specific object:

- `$Agent.LoginQueue$`—Returns the list of queue identifiers on which the agent logs in. Set this value either in the `object-id` option in the contact center statistics section, or in the `statistics.queues` option.

- `$AgentGroup.OriginationDns$`—Returns the list of origination DNs for the list of agent groups to which the agent currently logged in. This value IS set by the `object-id` option in the contact center statistics section.

Contact Center Metrics are displayed in both the Main Window and the Statistics Gadget.

Managing Contacts

Interaction Workspace enables agents to manage contacts. The privileges that can be enabled for an agent are the following:

- View Contact Record
- Edit Contact Record
- Delete Contact
- Create Contact
- Merge Contact
- Undo Merge Contact
- Search the Contact database

Use the options in the `contact` section to configure the way in which agents can manage contacts.

- `contact.directory-displayed-columns`—The list of contact fields displayed when the results of a contact search is rendered.

- `contact.directory-search-attributes`—The list of Contact fields that can be used as search parameters.
- `contact.displayed-attributes`—The list of Contact fields that are displayed when a Contact record is rendered.
- `contact.multiple-value-attributes`—A list of contact attributes that are allowed for use as contact field names.
- `contact.directory-search-types`—The list of search types that are available for the agent to use to search the contact database. Specifying the value `contains` may have a performance impact.
- `contact.default-directory-page-size`—The default value for the number of rows per page in the contact directory search result grid view. A value must be defined in the `contact.available-page`-size option.
- `contact.available-directory-page-sizes`—The number of rows per page in the contact directory search result list view.
- `contact.timeout-delay`—The delay, in seconds, before a UCS request times out.
- `contact.history-displayed-columns`—Defines the list of Contact History items that are displayed in the interaction view.
- `contact.history-search-attributes`—Defines the list of Contact History items that an agent can use to search the History database.
- `contact.date-search-types`—The list of search types that are available for the agent to use to search the contact database by date.
- `contact.lookup.enable`—Specifies that the Universal Contact Server (UCS) identify service is to be used for contact lookup.
- `contact.lookup.enable-create-contact`—Specifies that the Universal Contact Server (UCS) create a contact service is to be used if the identify service fails to find the contact.
- `contact.ucs-interaction.enable`—Activates the Interaction Workspace feature that generates the voice interaction history in Universal Contact Server (UCS) based on the inbound and outbound interactions handled by Interaction Workspace.
- `contact.ucs-contact.attributefielddefaultmaxlength`—The maximum field length for attributes in Universal Contact Server (UCS).

Hiding Selected Data in Logs

Interaction Workspace enables you to specify and filter the contents of the application logs. You can choose to hide content by using asterisks or to skip specific key-value pairs.

Use the options in the `log` section to configure the way in which logs are filtered.

- `log.default-filter-type`—Specifies the default filter type for logging.
- `log.filter-data.<key_name>`—Specifies the treatment of log data. This option enables you to filter for specific attached data keys, by specifying the key name in the option name. This option overrides any values specified by the `log.default-filter-type` option.

Client-side Port Security

Use the Procedure: Enabling client-side port definition, on page 52 to define the access ports for each application to which Interaction Workspace connects to ensure the security of the system. This feature is configured partially on Framework Configuration Server and partially on the Interaction Workspace application in Genesys Administrator. The *Client-Side Port Definition* chapter of the *Genesys 8.0 Security Deployment Guide*. provides detailed information on client-side port definition

Notes:
- When you set the client-side port for the connection to Configuration Server, ensure that you use the `Interaction_Workspace_802.apd` template; do not use the `Interaction_Workspace_AgentDesktop_802.apd` template.
- If a connection to at least one back-end server is configured with an explicit client-side port, after exiting, the agent must wait for a system timeout before they are able to initialize Interaction Workspace application again. The timeout is positioned at the Windows OS level through the following registry key: `TcpTimedWaitDelay`. This is a system level limitation.

5 Provisioning Interaction Workspace

This chapter demonstrates how to provision the Interaction Workspace functionality and environment by using Genesys Administrator. For details on how to use Genesys Administrator, refer to *Framework 8.0 Genesys Administrator Help* and *Genesys Administrator Deployment Guide*. For details about using the functionality, refer to *Interaction Workspace User's Guide* and *Interaction Workspace Context-Sensitive Help*.

This chapter contains the following sections:

Provisioning Interaction Workspace Functionality

This section contains procedures that demonstrate how to configure frequently used Interaction Workspace functionality. Many of the procedures in this section are applicable to more than one privilege. For example, the procedure, "Provisioning Interaction Workspace for the Voice Channel" provides the general principles for connecting to a media channel.

You can create a a configuration that is segmented by tenants or groups. Instead of creating your configurations at the Environment level, assign the settings of each Interaction Workspace module to a tenant, agent group, or

agent. For more information, see to "Configuration and Administration by Using Options and Annexes" on .

The following task table provides an overview of how to configure agents to use Interaction workspace.

Refer to *Framework 8.0 Genesys Administrator Help* and *Genesys Security Guide* for detailed information on how to use Genesys Administrator and Management Framework to configure access permissions

Task Summary: Configuring Agents to Use Interaction Workspace

Objective	Related Procedure and Actions
Set up agents on the system	• Procedure: Creating a Role, allowing an Interaction Workspace privilege, and assigning a Role to an agent or agent group • Procedure: Optimizing the Login Window • Procedure: Provisioning Interaction Workspace for the Voice channel • Procedure: Declaring and using new Not-Ready Reason codes
Enable internal and external communications	• Procedure: Enabling an agent to use the SIP Preview feature • Procedure: Enabling an agent to use Team Communicator to call/transfer to an agent group or a skill • Procedure: Enabling an agent to use Team Communicator to call a contact • Procedure: Enabling agents to use Instant Messaging • Procedure: Enabling an agent to use the Interaction Workspace SIP Endpoint • Procedure: Enabling an agent to use disposition codes • Procedure: Enabling agents to manage case history • Procedure: Enabling agents to view Broadcast Messages
Enable agents to view KPIs and contact center statistics	• Procedure: Enabling an agent to view My Statistics (KPIs) • Procedure: Enabling an agent to view Contact Center Statistics (Object Metrics) • Procedure: Enabling an agent to view My Statistics (KPIs) and Contact Center Statistics in the Statistics Gadget
Enable agents to manage contacts	• Procedure: Enabling agents to manage contacts • Procedure: Configuring the Interaction Workspace application and Universal Contact Server to enable custom contact attributes
Modify a routing strategy to override Interaction Workspace options, based on attached data	• Procedure: Modifying a Routing Strategy to override an Interaction Workspace option based on attached data

Setting Up Agents on the System

Refer to *Framework 8.0 Genesys Administrator Help* and *Genesys Security Guide* for detailed information on how to use Genesys Administrator and Management Framework to configure access permissions

Procedure:
Creating a Role, allowing an Interaction Workspace privilege, and assigning a Role to an agent or agent group

Purpose: To restrict the privileges that are assigned to an agent.

The `security.disable-rbac` configuration option in the `interaction-workspace` section determines whether agents have all privileges granted or whether the Role-Based Access Control (RBAC) control system is used.

Note: RBAC requires Configuration Server 8.0.2 or higher.

If `security.disable-rbac` is set to `true`, RBAC is disabled and all privileges are assigned to all agents and Agent Groups. If `rbac.enabled` is set to `false`, RBAC is enabled and you must assign roles to agents and Agent Groups.

For more information about roles refer to "Role-Based Approach of Genesys 8" on page 20.

Prerequisites

*   Genesys Administrator 8.0.200.29 or higher, configured to show Advanced View.
*   Configuration Server 8.0.2 or higher.
*   A working knowledge of Genesys Administrator 8.
*   Interaction Workspace Application Template in the Configuration Layer.

Start of procedure

1. Create the Interaction Workspace `Application` object from the Interaction Workspace Application Template.
2. From the `Tenant` drop-down list, select the Tenant for which you want to create the role.
3. In the Genesys Administrator `Provisioning` view, select `Accounts` in the `Navigation` column.
4. Select the `Roles` view.

5. In the `Roles` view, click `New`.

6. In the `Configuration` tab, specify the following `General` parameters:
   - A name for the role.
   - A description of the role (optional).
   - Whether or not the role is enabled.

7. In the `Configuration` tab, specify a list of users or access groups in the `Members` view.

8. In the `Role Privileges` tab, click `Interaction Workspace privileges`.

9. Initially, all privileges are unassigned. To assign a privilege, click the drop-down list in the `Value` column that is associated with the privilege and select `Allowed`. Refer to "Role Privileges" on page 182 for a list of all the privileges.

10. To save the new role, click `Save and Close`. The new role is now applied to the specified agents and Agent Groups. For information on privilege conflicts, refer to "Conflict Resolution for Configuration Options" on page 24.

    To discard the new role without saving your changes, click `Cancel`.

End of procedure

Procedure:
Optimizing the Login Window

Purpose: To control the behavior of the Interaction Workspace Agent Login Window.

Agent login can be configured as either a one-step or a two-step process depending on whether you want to prompt the agent for connection parameters in the secondary login window or specify the parameters for the agent.

For a list of configuration options that are related to login, refer to "Login" on page 156.

Prerequisites

- Genesys Administrator 8.0.2, configured to show Advanced View.
- A working knowledge of Genesys Administrator 8.
- Interaction Workspace `Application` object exists in the Configuration Database.

Start of procedure

1. Configure the agent for two-step login by setting the options that control Password, Queue, Switch, and Place.

   a. If the agent must enter a phone-set Password, set the `login.prompt-dn-password` option to `true`. The second login window is displayed after the agent is authenticated. A phone-set Password prompt will be displayed in the secondary login window.

   b. If the agent must enter a Queue at login, set the `login.prompt-queue` option to `true`. A Queue prompt will be displayed in the secondary login window.

      If the switch has multiple logins for the agent, the agent will be prompted to enter the particular login that they want to use.

   c. Several options control Place login:

      i. If the agent must enter a Place at each login, set the `login.prompt-place` option to `true`.

      ii. If the agent always logs in to a default Place at each login, do the following:
         — Assign a default Place in the Agent Advanced tab.
         — Set the `login.prompt-place` option to `false`.
         — Set the `login.use-default-place` option to `true`.

      iii. If the agent must specify a Place only the first time that the agent logs in (**Note:** The Place is stored in the local settings of the agent):
         — Set the `login.use-default-place` option to `false`.
         — Set the `login.prompt-place` option to `false`.

2. Configure the agent for one-step login by using the following configuration-option settings:

   • Set the `login.prompt-dn-password` option to `false`.
   • Set the `login.prompt-queue` option to `false`.
   • Set the `login.prompt-place` option to `false`.

   Note: If the default Place in the Agent Advanced tab is blank, the agent will have to perform a two-step login the first time that the agent logs in to a particular workstation.

End of procedure

Procedure:
Provisioning Interaction Workspace for the Voice channel

Purpose: To enable an agent to log in to the Voice channel.

Prerequisites

- Genesys Administrator 8.0.2, configured to show Advanced View.
- A working knowledge of Genesys Administrator 8.
- Interaction Workspace `Application` object exists in the Configuration Database.
- T-Server with associated switch and switching office.
- A Switch that is configured with DNs that correspond to agent devices in the switch.
- Agent logins that are configured in the Switch that can be referred by agents.
- A Place that contains one or more DNs from the Switch.

Start of procedure

For each agent that you want to configure to use the Voice channel, do the following:

1. Reference at least one `AgentLogin` from the Switch.

2. Check the `isAgent` flag.

3. Set a default Place. (Optional)

4. Allow the voice media privilege (see Table 17, "Voice Privileges," on page 183) for the role to which the agent is assigned (refer to the Procedure: Creating a Role, allowing an Interaction Workspace privilege, and assigning a Role to an agent or agent group).

5. Allow the voice media privileges that you want the agent to use (see Table 17, "Voice Privileges," on page 183).

6. Configure the voice options in the `interaction-workspace` section of the Interaction Workspace `Application` object (refer to the "Voice" configuration option reference for a list of Voice options and a description of how to configure them).

End of procedure

Procedure:
Declaring and using new Not-Ready Reason codes

Purpose: To enable an agent to use custom Not-Ready Reason codes and to support the `aux work` mode.

The only Not-Ready Reasons that Interaction Workspace supports by default are `Unknown` and `After Call Work`. Custom Not-Ready Reason codes are

defined in the `Action Codes` folder of the `Desktop` folder in the `Provisioning` view of Genesys Administrator.

Prerequisites

- Genesys Administrator 8.0.2, configured to show Advanced View.
- A working knowledge of Genesys Administrator 8.
- Interaction Workspace `Application` object exists in the Configuration Database.

Start of procedure

1. Create a new Action Code in the following Genesys Administrator view: `Provisioning > Desktop > Action Code`.

2. Enable the new Action Code so that it can be used in the Configuration Layer.

3. To enable the Action Code to display in the Agent Interface, configure the `agent-status.enabled-actions-global` option in the `interaction-workspace` section of the Interaction Workspace `Application` object (refer to the "Agent status" configuration option reference for a list of agent status options and a description of how to configure them).

4. Configure the Interaction Workspace `agent-status.not-ready-reasons` option to include the value that is specified in the Action Code (refer to the "Agent status" configuration option reference). Not-Ready Reasons are displayed in the order that is defined by the value of the `agent-status.not-ready-reasons` option. If no value is specified for the `agent-status.not-ready-reasons` option, the default behavior is to display all Not-Ready Reasons that are defined and enabled in the Action Code folder.

End of procedure

Enabling Internal and External Communications

Refer to *Framework 8.0 Genesys Administrator Help* and *Genesys Security Guide* for detailed information on how to use Genesys Administrator and Management Framework to configure access permissions

Procedure:
Enabling an agent to use the SIP Preview feature

Purpose: To enable an agent to view a display that contains a preview of an inbound SIP interaction.

Prerequisites

- Target agents are using an internal or external SIP endpoint.
- Genesys Administrator 8.0.2, configured to show Advanced View.
- A working knowledge of Genesys Administrator 8.
- Interaction Workspace `Application` object exists in the Configuration Database.

Start of procedure

1. Configure a SIP DN for an agent with the preview feature by setting the value of the `preview-interaction` option to `true` in the `TServer` section of the annex of the DN.
2. To test the configuration, log the agent in to Interaction Workspace on the place that contains the DN that you configured in Step 1.
3. Use a SipEndpoint sample application to connect to a different SIP DN.
4. Make a call to a queue (Call to `sip:<QueueNumber>@<HostofTheSIPSErver>`) that routes interactions to the agent's Place Group that contains the agent.
5. The SIP Preview Interactive Notification is displayed on the agent's desktop.

End of procedure

Procedure:
Enabling an agent to use Team Communicator to call/transfer to an agent group or a skill

Purpose: To enable an agent to use Team Communicator to call or transfer to an agent group or a skill.

Prerequisites

- Genesys Administrator 8.0.2, configured to show Advanced View.
- A working knowledge of Genesys Administrator 8.
- Interaction Workspace `Application` object exists in the Configuration Database.

Start of procedure

1. In the `Configuration` tab of the Interaction Workspace application, add a connection to Statistics Server.

2. In the connection, add a reference to the T-Server in which the agent logs in.

3. Allow the Team Communicator privileges (see Table 22, "Team Communicator Privileges," on page 186) for the role to which the agent is assigned (refer to the Procedure: Creating a Role, allowing an Interaction Workspace privilege, and assigning a Role to an agent or agent group).

4. Configure the Team Communicator options in the `interaction-workspace` section of the Interaction Workspace `Application` object (refer to the "Team Communicator" configuration option reference for a list of Team Communicator options and a description of how to configure them).

5. In your routing configuration, configure a routing strategy that uses the routing targets that are connected to Interaction Workspace (see "intercommunication.im.routing-based-targets" and "intercommunication.voice.routing-points").

6. Load the routing strategy on the Routing Point that is defined by the `intercommunication.voice.routing-points` option.

7. Enable the agent to use the voice media by using the Procedure: Provisioning Interaction Workspace for the Voice channel.

8. Allow any applicable privileges from the following list of voice privileges for the role to which the agent is assigned:
   - Can Answer Call
   - Can Forward Call
   - Can Hold/Retrieve Call
   - Can Make Call
   - Can One Step Conference
   - Can One Step Transfer
   - Can Reject Call
   - Can Release Call
   - Can Send DTMF
   - Can Set InteractionDisposition
   - Can Two Step Conference
   - Can Two Step Transfer

End of procedure

Procedure:
Enabling an agent to use Team Communicator to call a contact

Purpose: To enable an agent to use Team Communicator to call a contact that is stored in the Universal Contact Server (UCS).

Prerequisites

- Genesys Administrator 8.0.2, configured to show Advanced View.
- A working knowledge of Genesys Administrator 8.
- Interaction Workspace Application object exists in the Configuration Database.
- Interaction Workspace has a connection to Universal Contact Server.
- Procedure: Enabling agents to manage contacts.
- Procedure: Provisioning Interaction Workspace for the Voice channel.

Start of procedure

1. Allow the Team Communicator privileges (see Table 22, "Team Communicator Privileges," on page 186) for the role to which the agent is assigned (refer to the Procedure: Creating a Role, allowing an Interaction Workspace privilege, and assigning a Role to an agent or agent group).

2. Configure the Team Communicator options in the interaction-workspace section of the Interaction Workspace Application object (refer to the "Team Communicator" configuration option reference for a list of Team Communicator options and a description of how to configure them).

3. Allow the following voice privileges for the role to which the agent is assigned:
   - Can Hold/Retrieve Call
   - Can Make Call
   - Can Release Call

4. Allow the following contact management privileges for the role to which the agent is assigned:
   - Can Use Contact Directory
   - Can Use Contact Information
   - Contact Module

End of procedure

Procedure:
Enabling agents to use Instant Messaging

Purpose: To enable an agent to use Instant Messaging (IM) to send and receive text messages with an internal target.

Prerequisites

- Genesys Administrator 8.0.2, configured to show Advanced View.
- A working knowledge of Genesys Administrator 8.
- Interaction Workspace `Application` object exists in the Configuration Database.
- A connection to SIP Server

Start of procedure

1. Allow the Team Communicator privileges (see Table 22, "Team Communicator Privileges," on page 186) for the role to which the agent is assigned (refer to the Procedure: Creating a Role, allowing an Interaction Workspace privilege, and assigning a Role to an agent or agent group).

2. Configure the Team Communicator options in the `interaction-workspace` section of the Interaction Workspace `Application` object (refer to the "Team Communicator" configuration option reference for a list of Team Communicator options and a description of how to configure them).

3. Allow the following IM privileges for the role to which the agent is assigned:
   - Can Release IM
   - Can Make IM
   - Can Use IM

4. Configure the IM options in the `interaction-workspace` section of the Interaction Workspace application object (refer to the "IM" configuration option reference for a list of IM options and a description of how to configure them).

5. Ensure that the SIP DN of the Place used for Instant Messaging has the following options defined in the `TServer` section:
   - `sip-signaling-chat` = `false`
   - `multimedia` = `true`
   - `voice` = `false` (optional)

End of procedure

Procedure:
Enabling an agent to use the Interaction Workspace SIP Endpoint

Purpose: To enable an agent to use the Interaction Workspace SIP Endpoint to send and receive SIP-based interactions.

Prerequisites

- Genesys Administrator 8.0.2, configured to show Advanced View.
- A working knowledge of Genesys Administrator 8.
- Interaction Workspace `Application` object exists in the Configuration Database.

Start of procedure

1. Allow the SIP Endpoint privileges (see Table 18, "SIP Endpoint Privileges," on page 184) for the role to which the agent is assigned (refer to the Procedure: Creating a Role, allowing an Interaction Workspace privilege, and assigning a Role to an agent or agent group).

2. If required, configure the SIP Endpoint options in the `interaction-workspace` section of the Interaction Workspace `Application` object (refer to the "SIP Endpoint" configuration option reference for a list of SIP Endpoint options and a description of how to configure them).

3. Set the following `TServer` section options for the DNs of the Place to which the agent is logging in:
   - `refer-enabled = false`
   - `sip-cti-control = talk,hold`
   - `voice = true`

4. Install Interaction Workspace SIP Endpoint (refer to Procedure: Installing the Interaction Workspace SIP Endpoint, on page 78).

End of procedure

Procedure:
Enabling an agent to use disposition codes

Purpose: To enable an agent to specify the outcome (disposition) of an interaction.

Prerequisites

- Genesys Administrator 8.0.2, configured to show Advanced View.

- A working knowledge of Genesys Administrator 8.
- Interaction Workspace `Application` object exists in the Configuration Database.
- "Creating a Role, allowing an Interaction Workspace privilege, and assigning a Role to an agent or agent group"
- "Provisioning Interaction Workspace for the Voice channel"

Start of procedure

1. In the Interaction Workspace application `Configuration` tab, create or update a Business Attribute in the tenant(s) that contain(s) your agents.
   - The `Type` of the Business Attribute is `Interaction Operation Attributes`.
   - The `Display Name` of the Business Attribute is used as the name of the section in the Agent interface.
   - The Attribute values are the codes that are available for the agent:
     — `name`—Used in attached data.
     — `display name`—Used in the Agent interface.

2. In the `interaction-workspace` section, set the value of the `voice.disposition.value-business-attribute` option to the name of the business attribute that you previously configured.

3. Allow the `Can Set Interaction Disposition` privilege (see Table 17, "Voice Privileges," on page 183) for the role to which the agent is assigned (refer to the Procedure: Creating a Role, allowing an Interaction Workspace privilege, and assigning a Role to an agent or agent group).

4. Configure the following Interaction options in the `interaction-workspace` section of the Interaction Workspace `Application` object (refer to the "Interaction" configuration option reference for a list of Interaction options and a description of how to configure them):
   - `interaction.disposition.is-mandatory`
   - `interaction.disposition.is-read-only-on-idle`
   - `interaction.disposition.key-name`
   - `interaction.disposition.use-attached-data`
   - `interaction.disposition.use-connection-id`
   - `interaction.disposition.value-business-attribute`

End of procedure

Procedure:
Enabling agents to manage case history

Purpose: To enable an agent to view and update the case history of a contact.

Prerequisites

- Genesys Administrator 8.0.2, configured to show Advanced View.
- A working knowledge of Genesys Administrator 8.
- Interaction Workspace `Application` object exists in the Configuration Database.
- Interaction Workspace has a connection to Universal Contact Server.
- "Creating a Role, allowing an Interaction Workspace privilege, and assigning a Role to an agent or agent group".
- "Provisioning Interaction Workspace for the Voice channel".

Start of procedure

1. Allow the following Contact Actions privileges (see Table 21, "Contact Management Privileges," on page 185) for the role to which the agent is assigned (refer to the Procedure: Creating a Role, allowing an Interaction Workspace privilege, and assigning a Role to an agent or agent group):
   - Can Use Contact Directory
   - Can Use Contact History
   - Can Use Contact History CaseData
   - Can Use Contact History Detail
   - Can Use Contact History Notepad
   - Can Use Contact Information
   - Can Use Contact my History
   - Can Use Save Contact
   - Contact Module
2. Configure the Contact options in the `interaction-workspace` section of the Interaction Workspace `Application` object (refer to the "Contact" configuration option reference for a list of Contact options and a description of how to configure them).

End of procedure

Procedure:
Enabling agents to view Broadcast Messages

Purpose: To enable an agent to receive and view messages that are sent simultaneously (broadcast) to multiple contact center parties.

Prerequisites

- Genesys Administrator 8.0.2, configured to show Advanced View.
- A working knowledge of Genesys Administrator 8.

- Interaction Workspace `Application` object exists in the Configuration Database.
- Procedure: Creating a Role, allowing an Interaction Workspace privilege, and assigning a Role to an agent or agent group, on page 103.

Start of procedure

1. Allow the following Broadcast Message privilege (see Table 23, "Broadcast Privileges," on page 186) for the role to which the agent is assigned (refer to the Procedure: Creating a Role, allowing an Interaction Workspace privilege, and assigning a Role to an agent or agent group):
   - Can Use Broadcast Message

2. Create a communication DN and configure it in `broadcast.dn`.

3. Configure the broadcast message topics to which an agent can be subscribed by using `broadcast.subscribed.topics`.

   Topics can be associated with different configuration objects such as agents (`$Agent$`), agent groups (`$AgentGroup$`), and roles (`$Role$`); or they can be the names of custom topics such as team (for example, `billing`) or site (for example `main_campus`).

4. Ensure that you have a Sender application that implements the protocol described in "Viewing Broadcast Messages" on page 93 that sends messages to topics that match what is configured in your system.

End of procedure

Enabling Agents to View KPIs and Contact Center Statistics

Refer to *Framework 8.0 Genesys Administrator Help* and *Genesys Security Guide* for detailed information on how to use Genesys Administrator and Management Framework to configure access permissions

Procedure:
Enabling an agent to view My Statistics (KPIs)

Purpose: To enable an agent to view their Key Performance Indictors (KPIs).

Prerequisites

- Genesys Administrator 8.0.2, configured to show Advanced View.
- A working knowledge of Genesys Administrator 8.

- Interaction Workspace Application object exists in the Configuration Database.
- Interaction Workspace has a connection to Stat Server.

Start of procedure

1. Configure Stat Server as described in *Framework Stat Server 8.0 Deployment Guide*. to produce the metrics that you want to employ to measure the KPIs in your contact center.

2. In the Interaction Workspace Application, configure the Interaction Workspace KPIs section following the option reference in "Section: <KPI Name>" on page 176.

3. Allow the following Statistics Access privileges (see Table 20, "Statistics Access Privileges," on page 184) for the role to which the agent is assigned (refer to the Procedure: Creating a Role, allowing an Interaction Workspace privilege, and assigning a Role to an agent or agent group):
   - KPI module

4. Configure the KPI options in the `interaction-workspace` section of the Interaction Workspace `Application` object (refer to the "KPI" configuration option reference for a list of KPI options and a description of how to configure them).

End of procedure

Procedure:
Enabling an agent to view Contact Center Statistics (Object Metrics)

Purpose: To enable an agent to view the overall performance of the contact center by viewing statistics regarding Queues, Routing Points, and so on.

An agent can log in to a queue or a routing point if the estimated wait times are particularly high or if the object is displaying a warning or error. Agents should log in to those queues that are experiencing high levels of abandoned calls.

For each Contact Center Statistic (Object Metric) that you want to define and use, you must define a section in the Interaction Workspace `Application` object in the Configuration Database.

Prerequisites

- Genesys Administrator 8.0.2, configured to show Advanced View.
- A working knowledge of Genesys Administrator 8.
- Interaction Workspace `Application` object exists in the Configuration Database.

- Interaction Workspace has a connection to Statistics Server.

Start of procedure

1. In Genesys Administrator, create a new section named after the Object Statistic that you want to use.

2. Define the mandatory and optional options and values for the statistic (refer to "Section: <Object Statistic Name>" on page 179).

3. Allow the following Statistics Access privileges (see Table 20, "Statistics Access Privileges," on page 184) for the role to which the agent is assigned (refer to the Procedure: Creating a Role, allowing an Interaction Workspace privilege, and assigning a Role to an agent or agent group):
   - Object Statistics module

4. Configure the Statistics options in the `interaction-workspace` section of the Interaction Workspace `Application` object (refer to the "Statistics" configuration option reference for a list of Statistics options and a description of how to configure them).

End of procedure

Procedure:
Enabling an agent to view My Statistics (KPIs) and Contact Center Statistics in the Statistics Gadget

Purpose: To enable an agent to view Statistics and Contact Center Metrics in the Statistics Gadget.

The Statistics Gadget provides a small, convenient viewer for Statistics and Contact Center Metrics that does not require agents to keep opening the `My Statistics` tab and the `Contact Center Statistics` tab in the `Workspace`. The Statistics Gadget provides continuous updates and warnings.

Prerequisites

- Genesys Administrator 8.0.2, configured to show Advanced View.
- A working knowledge of Genesys Administrator 8.
- Interaction Workspace `Application` object exists in the Configuration Database.
- Interaction Workspace has a connection to Statistics Server.
- Complete one or both of the following:
  - Procedure: Enabling an agent to view My Statistics (KPIs), on page 115

Start of procedure

1. Allow the following Statistics Access privilege (see Table 20, "Statistics Access Privileges," on page 184) for the role to which the agent is assigned (refer to the Procedure: Creating a Role, allowing an Interaction Workspace privilege, and assigning a Role to an agent or agent group, on page 103):
   • Gadget Statistics module

2. Configure the Statistics Gadget options in the `interaction-workspace` section of the Interaction Workspace `Application` object (refer to the "Gadget and Statistics Gadget" on page 143 configuration option reference for a list of Statistics options and a description of how to configure them).

End of procedure

Enabling Agents to Manage Contacts

Refer to *Framework 8.0 Genesys Administrator Help* and *Genesys Security Guide* for detailed information on how to use Genesys Administrator and Management Framework to configure access permissions

Procedure:
Enabling agents to manage contacts

Purpose: To enable an agent to view and manage contact information.

Prerequisites

• Genesys Administrator 8.0.2, configured to show Advanced View.

• A working knowledge of Genesys Administrator 8.

• Interaction Workspace `Application` object exists in the Configuration Database.

• Interaction Workspace has a connection to Universal Contact Server.

• "Creating a Role, allowing an Interaction Workspace privilege, and assigning a Role to an agent or agent group"

• "Provisioning Interaction Workspace for the Voice channel"

Start of procedure

1. Allow the applicable Contact Actions privileges (see Table 21, "Contact Management Privileges," on page 185) for the role to which the agent is assigned (refer to the Procedure: Creating a Role, allowing an Interaction Workspace privilege, and assigning a Role to an agent or agent group):

2. Configure the Contact options in the `interaction-workspace` section of the Interaction Workspace `Application` object (refer to the "Contact" configuration option reference for a list of Contact options and a description of how to configure them).

End of procedure

Procedure:
Configuring the Interaction Workspace application and Universal Contact Server to enable custom contact attributes

Purpose: To enable an agent to search for and manage contacts based on custom Business Attributes. Business Attributes must be configured to be searchable and sortable.

In the Universal Contact Server (UCS), each contact is defined by a set of attributes that are known as Business Attributes. Business Attributes are metadata for the contact fields in the contact database. Each Business Attribute value contains a description of one of the contact fields in the contact database.

Prerequisites

- Genesys Administrator 8.0.2, configured to show Advanced View.
- A working knowledge of Genesys Administrator 8.
- Interaction Workspace `Application` object exists in the Configuration Database.
- Interaction Workspace has a connection to UCS.
- Procedure: Enabling agents to manage contacts

Start of procedure

1. In Genesys Administrator, create a new Business Attribute by using the name and display name of the Custom Contact Attribute.

2. Configure the new Business Attribute as follows:
   - Set the `is-searchable` to `true` option to make the Business Attribute available to contact searches.

- Set the `is-sortable` to `true` option to make the Business Attribute available in the directory view.

3. Add the Business Attribute to the list of searchable attributes in the Interaction Workspace `contact.directory-search-attributes` option.

4. Configure the Interaction Workspace `contact.directory-displayed-columns` option by using the display name of the Business Attribute to enable the Business Attribute to appear as a column heading in search results (refer to the "Contact" configuration option reference for a list of Contact options and a description of how to configure them).

5. To enable the Business Attribute to display in the record details for the contact, configure the Interaction Workspace `contact.displayed-attributes` option that is displayed (refer to the "Contact" configuration option reference for a list of Contact options and a description of how to configure them).

End of procedure

Modifying a Routing Strategy to Override Interaction Workspace Options Based on Attached Data

Refer to *Framework 8.0 Genesys Administrator Help* and *Genesys Security Guide* for detailed information on how to use Genesys Administrator and Management Framework to configure access permissions

Procedure:
Modifying a Routing Strategy to override an Interaction Workspace option based on attached data

Purpose: To override previously defined configuration options by using a Routing Strategy.

A Routing Strategy can be used to override configuration options that you have defined by using the hierarchies described in "Configuration and Administration by Using Options and Annexes" on page 23.

Interaction Workspace uses Transaction Objects of type `object list`. Attach a transaction name or list of transaction names to your strategy. The transaction names in the list should be separated by commas. Interaction Workspace reads the transaction objects at rendering time to override the static options.

Overriding options enables you to change the appearance of interactions based on a key-value pair that is defined in the annex of each line of business. The attached data contains the name of the transaction object to be used for the interaction.

Prerequisites

- Chapter 2, "Deploying Interaction Workspace," on
- Strategy that routes to your Interaction Workspace agent workstations.

Start of procedure

1. Configure one or more Transaction objects, of type `list`, in Genesys Administrator or Composer, by using the standard approach that is used for other object types in the hierarchy.

   You can only override options in the `interaction-workspace` section. Therefore, you must replicate the `interaction-workspace` section to the annex of the object level where you want the override to occur (Tenant, Group, User, or Transaction).

2. Configure the option `interaction.override-options` to define the key where the Transaction object(s) are to be listed in attached data (refer to the "Interaction" configuration option reference for a list of Interaction options and a description of how to configure them). If you set an override value, Interaction Workspace will look for the transaction object that corresponds to the key-value pair. The key is the name of the attached data that is defined in the list of transaction object(s).

End of procedure

Appendix

A System Support

This appendix lists supported systems and their limitations and constraints.

This appendix contains the following section:

- Tables of Supported Systems, page 123

Tables of Supported Systems

Table 6 lists the supported operating systems for client-side deployment of Interaction Workspace.

Table 6: Interaction Workspace Deployment Client-Side Platform Supported Operating Systems

Operating System
Microsoft Windows2003
Microsoft Windows 2008
Microsoft Windows XP/Intel 32-bit
Microsoft Windows Vista
Microsoft Windows 7

ClickOnce Deployment System Requirements

Table 7 on page 124 lists the supported operating systems for server-side deployment of ClickOnce and Interaction Workspace.

Table 7: Interaction Workspace Deployment Server-Side Platform Supported Operating Systems

OS	Version range
Microsoft Windows Server/Intel 32-bit & 64-bit	2003, 2008
Solaris/Sparc 32-bit	7, 8, 9, 10
Solaris/Sparc 64-bit	7, 8, 9, 10
Linux	RHEL 5.0 - 32-bit

ClickOnce requires one of the web server applications that are listed in Table 8.

Table 8: Interaction Workspace Supported Web Server Applications

Web server	Version range
Apache	2.2
IIS	6, 7

Table 9 lists the supported client-side browsers for a ClickOnce deployment.

Table 9: Interaction Workspace Client-Side Platform Supported Browsers

Browser	Version range
Microsoft Internet Explorer	6.0-8.x
Mozilla FireFox[a]	2.0-3.x

a. To use Mozilla Firefox, you must install the following add-on : `"Microsoft .NET Framework Assistant 1.2"`. This add-on enables you to start the application directly and have Framework .NET detection. This add-on is found here: `https://addons.mozilla.org/en-US/firefox/addon/9449`

Supported Switches

The following switches are supported:

• Avaya Communication Server

- SIP Server

- Alcatel OmniPCX Enterprise (OXE)/A4400

- Cisco CallManager (CM) IP PBX

- EADS Telecom Intecom E Series

- EADS Telecom Intecom M6880 PointSpan

- Ericsson MD110

- Ericsson MX-ONE

- Nortel Communication Server 1000

- Nortel Communication Server 2000/2100

- NEC Small TDM

- NEC Large TDM

- NEC Small Hybrid

- NEC Large Hybrid

- NEC SV7000

- Spectrum

- Siemens HiPath 4000 v (including family: 4000, 4300, 4500, 4900)

See *Genesys Supported Media Interfaces Reference Manual* for a list of switches that are supported by the Interaction Workspace Voice Section.

To achieve full support of the following switches, configure the place at which the agent logs in as described in the following tables, for the following DN configurations:

- Table 10, "Place Configuration for Agent Login: 2 DNs (1 Extension and 1 Position)," on

- Table 11, "Place Configuration for Agent Login: 1 DN or More," on

- Table 12, "Place Configuration for Agent Login: 1 DN (1 Extension or 1 Position)," on

- Table 13, "Place Configuration for Agent Login: Alcatel OmniPCX Enterprise (OXE)/A4400-specific," on

Table 10: Place Configuration for Agent Login: 2 DNs (1 Extension and 1 Position)

Switches	DN in Configuration Manager	Agent Login in Configuration Manager	DN ID Reflected
Nortel Communication Server 1000 with SCCS/MLS (formerly Nortel Symposium and Nortel Meridian 1) Nortel Communication Server 2000/2100 (formerly DMS 100) NEC APEX (American Version) NEC SV7000	2 DNs: • 1 Extension • 1 ACD Position	No constraint	1 Voice DN (ACD Position number)

Table 11: Place Configuration for Agent Login: 1 DN or More

Switches	DN in Configuration Manager	Agent Login in Configuration Manager	DN ID Reflected
Ericsson MD110 Ericsson MX-ONE NEC SV7000	1 DN or more: • 1 Extension (ODN) • n= 0/1 ACD Positions (ADN)	No constraint	1 Voice DN (Extension number)

Table 12: Place Configuration for Agent Login: 1 DN (1 Extension or 1 Position)

Switches	DN in Configuration Manager	Agent Login in Configuration Manager	DN ID Reflected
Avaya Definity G3 Cisco CallManager EADS Telecom M6500 EADS (Intecom) E EADS (Intecom) Point Span Rockwell Spectrum Siemens HiPath 4000 CSTA 3 SIP Server	1 DN: • 1 Extension *or* • 1 ACD Position	No constraint	1 Voice DN (Extension number or ACD Position number)

Table 13: Place Configuration for Agent Login: Alcatel OmniPCX Enterprise (OXE)/A4400-specific

Switches	DN in Configuration Manager	Agent Login in Configuration Manager	DN ID Reflected
Alcatel OmniPCX Enterprise (OXE)/A4400 Agent Substitute	In switch: • 1 Extension • 1 ACD Position In place: • Shortcut to Extension only	LoginID equal to ACD Position number	`(T-server option: agent-substitute= true)` Extension if logged out Position if logged in
Alcatel OmniPCX Enterprise (OXE)/A4400 Agent emulated	In switch: • 1 Extension In place: • Shortcut to Extension	Not define position for login ID	`agent-substitute= true/false`

> **Note:** In some cases, for some of the switches that are listed in Table 10, an agent cannot see all of the DNs in the place configuration; sometimes only one DN is visible that includes the features of all of the other DNs.

For some switches you must set the following option in the switch annex or the DN annex to specify the operating mode of the switch:

Section: interaction-workspace

spl.switch-policy-label

Possible values:

For the Nortel CS 1000 switch:

Default Value: `NortelMeridianCallCenter::MLS`

Valid Values: `NortelMeridianCallCenter::MLS`, `NortelMeridianCallCenter::SCCS`

For the Nortel Communication Server 2000 switch:

Default Value: `NortelDMS100`

Valid Values: `NortelDMS100`, `NortelDMS100::PDNMode`

Appendix

B Interaction Workspace Configuration Options Reference

This appendix contains the list of Interaction Workspace configuration options, grouped by Configuration Section.

This appendix contains the following sections:

Introduction to Configuration Options

As with all other Genesys 8 applications, the Interaction Workspace configuration options are loaded into the configuration layer by using an XML metadata file that is delivered with Genesys Administrator. Use Genesys Administrator to view, access, and configure Interaction Workspace configuration options.

KPI and statistics options are not part of the XML metadata file, because they are not composed of fixed key names. To use the KPIs section, create as many option blocks as the number of KPIs that you want to declare. For details, see "Section: <KPI Name>" on page 176. To use the Statistics section, create as many option blocks as the number of statistics that you want to declare. For details, see "Section: <Object Statistic Name>" on page 179.

Lists of privileges are currently implemented as Boolean options in the Annex of individual agents (see "Role Privileges" on page 182).

For information on how to secure your deployment, see the Security options that are contained in the *Genesys 8.0 Security Deployment Guide*.

For general information on configuring and extension, refer to "Configuration and Administration by Using Options and Annexes" on page 23.

For general procedures on how to configure specific agent functionality, refer to Chapter 5, "Provisioning Interaction Workspace," on page 101.

Some options can be configured on the Application, the Tenant, an Agent Group, or an Access Group, while others must be configured on a Person object in the Agent Annex. The description of each configuration option specifies to what object the option is applicable. Options that are specific to the Person object (Agent Annex) are listed separately in this appendix.

The `security.disable-rbac` configuration option in the `interaction-workspace` section determines whether agents have all privileges allowed or whether the Role Based Access Control (RBAC) control system is used. Refer to "Role Privileges" on page 182 for a list of all the privileges.

Note: RBAC requires Configuration Server 8.0.2 or higher.

Refer to *Framework 8.0 Genesys Administrator Help* and *Genesys Security Guide* for detailed information on how to use Genesys Administrator and Management Framework to configure access permissions

Section: interaction-workspace

These options can be configured on the Interaction Workspace `Application` object, a Tenant, a Group, or an Access Group.

The options are grouped into the following categories:

- **Accessibility**—Options that enhance the application for hearing and visually impaired agents
- **Agent status**—Options that control how agents set their Ready status
- **Broadcast**—Options that control how broadcast messages appear and behave
- **Contact**—Options that control contact management
- **Display formats**—Options that control the appearance of various text elements in the various application windows
- **Gadget and Statistics Gadget**—Options that control the use and appearance of the Gadget and Statistics Gadget
- **IM**—Options that control the appearance and behavior of the Internal Instant Messaging interface

- **Interaction**—Options that control the behavior and appearance of various elements related to the Interaction window
- **Intercommunication**—Options that control the routing of internal IM and voice interactions
- **Keyboard**—Options that enable keyboard shortcuts
- **KPI**—Options that control the display of My Statistics (KPIs) on the agent Workspace
- **Log**—Options that control logging of the application
- **Login**—Options that control the appearance and behavior of the agent login window
- **Main view**—Options that control the behavior of the Main Window
- **Security**—Options that control the timing and behavior of the keyboard and mouse inactivity timeout feature and other security features
- **SIP Endpoint**—Options that control the functionality and display of Interaction Workspace SIP Endpoint enabled interactions
- **Statistics**—Options that control the display of contact center statistics on the agent Workspace
- **Team Communicator**—Options that control the appearance and behavior of the Team Communicator
- **Toast (Interactive Notification)**—Options that control the appearance and behavior of the interaction preview Interactive Notification
- **Voice**—Options that control various features of the Voice channel
- **Miscellaneous**—Options that control the appearance of the Interaction Workspace application windows, the recording of options, the evaluation of presence, the enabling of RBAC, and many other miscellaneous features

Accessibility

accessibility.agent-state-change-bell

Default Value: ""
Valid Values: Letters A to Z and a to z. Numbers 0 through 9. All special characters that are valid Windows file names.
Changes take effect: At the next interaction.

Description: Specify the agent state change sound configuration string—for example: `Sounds\bell.mp3|7|0`

The value has three components that are separated by the character '|':

1. The file name and folder relative to the application folder.

2. The priority—The higher the integer the higher the priority.

3. The duration:

   a. `0` means play the whole sound one time.

    b. An integer > `0` means a time, in milliseconds, to play and repeat the sound.

accessibility.interaction-state-change-bell

Default Value: ""
Valid Values: Letters A to Z and a to z. Numbers 0 through 9. All special characters that are valid Windows file names.
Changes take effect: At the next interaction.

Description: Specify the interaction state change sound configuration string—for example: `Sounds\chord.mp3|5|0`

The value has three components that are separated by the character '|':

1. The file name and folder relative to the application folder.

2. The priority. The higher the integer the higher the priority.

3. The duration:

    a. `0` means play the whole sound one time.

    b. An integer > `0` means a time, in milliseconds, to play and repeat the sound.

accessibility.warning-message-bell

Default Value: ""
Valid Values: Letters A to Z and a to z. Numbers 0 through 9. All special characters that are valid Windows file names.
Changes take effect: At the next interaction.

Description: Specify the warning message sound configuration string—for example: `Sounds\warning.mp3|10|0`

The value has three components that are separated by the character '|':

1. The file name and folder relative to the application folder.

2. The priority—The higher the integer the higher the priority.

3. The duration:

    a. `0` means play the whole sound one time.

    b. An integer > `0` means a time, in milliseconds, to play and repeat the sound.

Agent status

agent-status.enabled-actions-by-channel

Default Value: `Ready, NotReady, NotReadyReason, AfterCallWork, Dnd, Logon, LogOff`
Valid Values: Comma-separated list of action names from the following list: `LogOn, LogOff, Ready, NotReady, Dnd, AfterCallWork, NotReadyReason`
Changes take effect: Immediately.

Description: Defines the available agent state actions in the My Channels contextual menu. The actions are displayed in the order in which they appear in the list.

agent-status.enabled-actions-global

Default Value: `Ready, NotReady, NotReadyReason, AfterCallWork, Dnd, Logon, LogOff`
Valid Values: Comma-separated list of action names from the following list: `LogOn, LogOff, Ready, NotReady, Dnd, AfterCallWork, NotReadyReason`
Changes take effect: Immediately.

Description: Defines the available agent states in the global Status menu. The agent state commands are displayed in the order in which they appear in the list.

agent-status.not-ready-reasons

Default Value: `""`
Valid Values: Comma-separated list of Action Code names of type "Not Ready"; empty means all not ready action codes are considered.
Changes take effect: Immediately.

Description: Defines the available reasons in the Agent Status menus (global and My Channels). The reason commands are displayed in the order in which they appear in the list.

Broadcast

broadcast.color.minimal-priority

Default Value: `#FFCCCCCC`
Valid Values: `<hexidecimal color value>`
Changes take effect: Immediately.

Description: The color of the Interactive Notification border that indicates that the message has the lowest (minimal) priority.

broadcast.color.low-priority

Default Value: `#FF999999`
Valid Values: `<hexidecimal color value>`
Changes take effect: Immediately.

Description: The color of the Interactive Notification border that indicates that the message has low priority.

broadcast.color.normal-priority

Default Value: `#FFDFE8F6`
Valid Values: `<hexidecimal color value>`
Changes take effect: Immediately.

Description: The color of the Interactive Notification border that indicates that the message has normal priority.

broadcast.color.high-priority

Default Value: `#FF663399`
Valid Values: `<hexidecimal color value>`
Changes take effect: Immediately.

Description: The color of the Interactive Notification border that indicates that the message has high priority.

broadcast.color.important-priority

Default Value: `#FFFF0000`
Valid Values: `<hexidecimal color value>`
Changes take effect: Immediately.

Description: The color of the Interactive Notification border that indicates that the message has highest priority.

broadcast.displayed-columns

Default Value: `MessageTypeIcon,MessageType,Sender,Subject,Priority,Date,Topic`
Valid Values: `MessageTypeIcon, MessageType, Sender, Subject, Priority, Date, Topic, Id, <any custom key>`
Changes take effect: When the application is started or restarted.

Description: Specifies the columns that are displayed, and the column, order in the `My Messages` tab.

broadcast.dn

Default Value: `""`
Valid Values: `<DN@switch>`
Changes take effect: When the application is started or restarted.

Description: Specifies the name of the DN and switch used for broadcasting messages.

broadcast.mark-read-timeout

Default Value: `5`
Valid Values: Any integer from `0` to `MAXINT`.
Changes take effect: When the application is started or restarted.

Description: Specifies the duration after which a message, as a tooltip, is considered to be read. If the duration is `0`, this feature is not applied; then, the message is not considered to be read until the agent selects it for reading.

broadcast.message-content

Default Value: `Subject, Sender, Priority, Date, Topic, Body`
Valid Values: `Subject, Sender, Priority, Date, Topic, Body, MessageType, Id, <any custom key>`

Changes take effect: At the next message.

Description: Specifies the content of the message when the message window is displayed. This option also configures the content of the tooltip in the My Messages tab. Any property that is not listed is not displayed.

broadcast.preview-timeout

Default Value: 10
Valid Values: Any integer from 0 to MAXINT.
Changes take effect: At the next interaction.

Description: Specifies the time, in seconds, that the broadcast message Interactive Notification is displayed if the agent does not click Show or Dismiss. The value 0 means the Interactive Notification is not displayed.

broadcast.sound.minimal-priority

Default Value: ""
Valid Values: Letters A to Z and a to z. Numbers 0 through 9. All special characters that are valid Windows file names.
Changes take effect: At the next interaction.

Description: Specify sound that is played when the Interactive Notification is displayed if the priority of the message is minimal (lowest) priority using the new message configuration string—for example:
Sounds\minimal-bell.mp3|7|0

The value has three components that are separated by the character '|':

1. The file name and folder relative to the application folder.

2. The priority. The higher the integer, the higher the priority.

3. The duration:
    a. -1 means play the whole sound and repeat the sound until the Interactive Notification is closed.
    b. 0 means play the whole sound one time.
    c. An integer > 0 means a time, in milliseconds, to play and repeat the sound.

broadcast.sound.low-priority

Default Value: ""
Valid Values: Letters A to Z and a to z. Numbers 0 through 9. All special characters that are valid Windows file names.
Changes take effect: At the next interaction.

Description: Specify sound that is played when the Interactive Notification is displayed if the priority of the message is low priority using the new message configuration string—for example: Sounds\low-bell.mp3|7|0

The value has three components that are separated by the character '|':

1. The file name and folder relative to the application folder.

2. The priority—The higher the integer the higher the priority.

3. The duration:

    a. `-1` means play the whole sound and repeat the sound until the Interactive Notification is closed.

    b. `0` means play the whole sound one time.

    c. An integer > `0` means a time, in milliseconds, to play and repeat the sound.

broadcast.sound.normal-priority

Default Value: ""
Valid Values: Letters A to Z and a to z. Numbers 0 through 9. All special characters that are valid Windows file names.
Changes take effect: At the next interaction.

Description: Specify sound that is played when the Interactive Notification is displayed if the priority of the message is normal priority using the new message configuration string—for example: `Sounds\normal-bell.mp3|7|0`

The value has three components that are separated by the character '|':

1. The file name and folder relative to the application folder.

2. The priority—The higher the integer the higher the priority.

3. The duration:

    a. `-1` means play the whole sound and repeat the sound until the Interactive Notification is closed.

    b. `0` means play the whole sound one time.

    c. An integer > `0` means a time, in milliseconds, to play and repeat the sound.

broadcast.sound.high-priority

Default Value: ""
Valid Values: Letters A to Z and a to z. Numbers 0 through 9. All special characters that are valid Windows file names.
Changes take effect: At the next interaction.

Description: Specify sound that is played when the Interactive Notification is displayed if the priority of the message is high priority using the new message configuration string—for example: `Sounds\high-bell.mp3|7|0`

The value has three components that are separated by the character '|':

1. The file name and folder relative to the application folder.

2. The priority—The higher the integer the higher the priority.

    a. `-1` means play the whole sound and repeat the sound until the Interactive Notification is closed.

    b. `0` means play the whole sound one time.

    c. An integer > `0` means a time, in milliseconds, to play and repeat the sound.

broadcast.sound.important-priority

Default Value: ""
Valid Values: Letters A to Z and a to z. Numbers 0 through 9. All special characters that are valid Windows file names.
Changes take effect: At the next interaction.

Description: Specify sound that is played when the Interactive Notification is displayed if the priority of the message is important (highest) priority using the new message configuration string—for example:
`Sounds\important-bell.mp3|7|0`

The value has three components that are separated by the character '|':

1. The file name and folder relative to the application folder.

2. The priority—The higher the integer the higher the priority.

3. The duration:

    a. `-1` means play the whole sound and repeat the sound until the Interactive Notification is closed.

    b. `0` means play the whole sound one time.

    c. An integer > `0` means a time, in milliseconds, to play and repeat the sound.

broadcast.subscribed.topics

Default Value: `All,$Agent$,$AgentGroup$`
Valid Values: `<any string>`
Changes take effect: When the application is started or restarted.

Description: Specifies the list of topics to which agents can be subscribed. `$Agent$` defines the username of the agent; `$AgentGroup$` defines all agent groups that contain the agent.

broadcast.toast-summary

Default Value: `Sender,Priority,Subject,FewWords`
Valid Values: `Sender, Priority, Subject, FewWords, Topic, MessageType, <any key of custom data>`
Changes take effect: At the next message.

Description: Specifies the content of the Interactive Notification. Items are displayed in the Interactive Notification in the order that is specified. Any item that is not specified is not displayed.

broadcast.value-business-attribute

Default Value: ""
Valid Values: `<any string>`
Changes take effect: When the application is started or restarted.

Description: Specifies the name of the business attribute that contains the attribute values that are used for the custom attribute of the message

Contact

contact.available-directory-page-sizes

Default Value: `5, 10, 25, 50`
Valid Values: A comma-separated list of numbers that define the number of rows per result page from which the agent can make selections.
Changes take effect: When the application is started or restarted.

Description: The possible values for number of rows per page in the contact directory search result view.

contact.cache-timeout-delay

Default Value: `600`
Valid Values: An integer from `1` through `3600`.
Changes take effect: When the application is started or restarted.

Description: The delay, in seconds, before the cache of the result of a Universal Contact Server request is cleared.

contact.date-search-types

Default Value: `On, OnOrAfter, Before`
Valid Values: `On, OnOrAfter, Before`
Changes take effect: When the application is started or restarted.

Description: The list of search types that are available for the agent to use to search the contact database by date.

contact.default-directory-page-size

Default Value: `10`
Valid Values: An integer from `1` through `50`.
Changes take effect: When the application is started or restarted.

Description: The default value for the number of rows per page in the contact directory search result view. The value must be defined in the `contact.available-directory-page-sizes` option.

contact.directory-advanced-default

Default Value: `LastName, PhoneNumber`
Valid Values: A comma-separated value list of Attribute Value names that correspond to searchable contact field names.
Changes take effect: When the application is started or restarted.

Description: The list of Contact fields that can be used as search advanced.

contact.directory-displayed-columns

Default Value: `LastName,FirstName,PhoneNumber,EmailAddress`
Valid Values: A comma-separated value list of Attribute Value names corresponding to contact field names—for example:
`LastName,FirstName,PhoneNumber,EmailAddress.`
Changes take effect: When the application is started or restarted.

Description: The list of contact fields displayed when the results of a contact search is rendered.

contact.directory-search-attributes

Default Value: `LastName,FirstName,PhoneNumber,EmailAddress`
Valid Values: A comma-separated value list of Attribute Value names that correspond to searchable contact field names.
Changes take effect: When the application is started or restarted.

Description: The list of Contact fields that can be used as search parameters.

contact.directory-search-types

Default Value: `contains,begins-with,is`
Valid Values: A comma-separated list of values from the following: `contains, begins-with,is`
Changes take effect: When the application is started or restarted.

Description: The list of search types that are available for the agent to use to search the contact database. Specifying the value contains may have a performance impact.

contact.displayed-attributes

Default Value: `Title,FirstName,LastName,PhoneNumber,EmailAddress`
Valid Values: A comma-separated value list of Attribute Value names that correspond to contact field names.
Changes take effect: When the application is started or restarted.

Description: The list of Contact fields that are displayed when a Contact record is rendered.

contact.history-advanced-default

Default Value: `Status,StartDate`
Valid Values: A comma-separated value list of Contact History items to display in the interaction view.
Changes take effect: When the application is started or restarted.

Description: The list of Contact History items that an agent can use in an advanced search.

contact.history-displayed-columns

Default Value: `Status,Subject,StartDate,EndDate`

Valid Values: A comma-separated value list of Contact History items to display in the interaction view—for example: `Status, Subject, StartDate, EndDate`.
Changes take effect: When the application is started or restarted.

Description: Defines the list of Contact History items that are displayed in the interaction view.

contact.history-search-attributes

Default Value: `Status, StartDate, EndDate`
Valid Values: A comma-separated value list of Contact History items to display in the interaction view—for example: `Status, StartDate, EndDate`.
Changes take effect: When the application is started or restarted.

Description: Defines the list of Contact History items that an agent can use to search the History database.

contact.lookup.enable

Default Value: `true`
Valid Values: `true, false`
Changes take effect: Immediately.

Description: Activates the Interaction Workspace feature that rely on the Universal Contact Server (UCS) identify service for contact lookup on interaction handling.

contact.lookup.enable-create-contact

Default Value: `true`
Valid Values: `true, false`
Changes take effect: Immediately.

Description: When option contact.lookup.enable is set to true, this option specifies that the Universal Contact Server (UCS) can create a contact if the identify service can not find any existing contact.

contact.mandatory-attributes

Default Value: `Title, FirstName, LastName, PhoneNumber, EmailAddress`
Valid Values: A comma-separated value list of Attribute Value names that correspond to contact field names.
Changes take effect: When the application is started or restarted.

Description: The list of Contact fields that must be filled to be able to save a contact.

contact.multiple-value-attributes

Default Value: `EmailAddress, PhoneNumber`
Valid Values: A comma separated value list of Attribute Value names that correspond to contact field names.
Changes take effect: When the application is started or restarted.

Description: A list of contact attributes that can support multiple values.

contact.timeout-delay

Default Value: `60`
Valid Values: An integer from 1 through `3600`.
Changes take effect: When the application is started or restarted.

Description: The delay, in seconds, before a UCS request times out.

contact.ucs-interaction.enable

Default Value: `true`
Valid Values: `true`, `false`
Changes take effect: Immediately.

Description: Activates the Interaction Workspace feature that generates the voice interaction history in Universal Contact Server (UCS) based on the inbound and outbound interactions handled by Interaction Workspace.

Display formats

display-format.acd-queue.name

Default Value: `$ACDQueue.Alias$|$ACDQueue.Number$@$ACDQueue.Location$`
Valid Values: `$ACDQueue.Number$, $ACDQueue.Alias$, $ACDQueue.Location$`
Changes take effect: Immediately.

Description: Defines the display format of ACD Queues by specifying a string that contains the following field codes:

`$ACDQueue.Number$, $ACDQueue.Alias$, $ACDQueue.Location$`

If all field codes are empty, the following field codes are used:

`$ACDQueue.Number$@$ACDQueue.Location$`

display-format.agent-name

Default Value: `$Agent.FullName$|$Agent.UserName$`
Valid Values:
`$Agent.UserName$, $Agent.LastName$, $Agent.FirstName$, $Agent.EmployeeId$`
Changes take effect: Immediately.

Description: Defines the display format of other agents by specifying a string that contains the following field codes:

`$Agent.UserName$, $Agent.LastName$, $Agent.FirstName$, $Agent.EmployeeId$.`

display-format.caller-name

Default Value: `$Contact.FirstName$ $Contact.LastName$|$Interaction.MainParty$`
Valid Values:
`$Interaction.CaseId$, $Interaction.Id$, $Interaction.MainParty$, $Contact.X$, $AttachedData.Y$`
Changes take effect: Immediately.

Description: Defines the content of the voice interaction call history based on the contact data items and attached data types that are specified by a string that contains the following field codes:

`$Interaction.CaseId$,$Interaction.Id$,$Interaction.MainParty$,$Contact.X$,$AttachedData.Y$`

Where `X` is the name of contact attribute and `Y` is the name of the attached data key.

If all field codes are empty, the following field codes are used:

`$Interaction.MainParty$`

display-format.case-name-format

Default Value: `$Contact.FirstName$ $Contact.LastName$|$Interaction.MainParty$`
Valid Values:

`$Case.Id$,$Interaction.Id$,$Interaction.MainParty$,$Contact.X$,$AttachedData.Y$`
Changes take effect: Immediately.

Description: Defines the display format of the case label that is currently used by the application by specifying a string that contains the following field codes:

`$Case.Id$,$Interaction.Id$,$Interaction.MainParty$,$Contact.X$,$AttachedData.Y$`

Where `X` is the name of contact attribute and `Y` is the name of the attached data key.

display-format.current-agent-name

Default Value: `$Agent.FullName$|$Agent.UserName$`
Valid Values:

`$Agent.UserName$,$Agent.LastName$,$Agent.FirstName$,$Agent.EmployeeId$`
Changes take effect: Immediately.

Description: Defines the display format of the agent that is currently using the application by specifying a string that contains the following field codes:

`$Agent.UserName$,$Agent.LastName$,$Agent.FirstName$,$Agent.EmployeeId$.`

If all field codes are empty, the following field codes are used:

`$Agent.UserName$`

display-format.interaction-im-name

Default Value: `$Interaction.MainParty$`
Valid Values: `$Interaction.CaseId$, $Interaction.Id$, $AttachedData.Y$, $Interaction.MainParty$`
Changes take effect: Immediately.

Description: Defines the display format of IM Interaction by specifying a string that contains the following field codes:

`$Interaction.Id$,$Interaction.MainParty$,$AttachedData.Y$`

Where `Y` is the name of the attached data key.

display-format.interaction-voice-name

Default Value: `$Contact.FirstName$ $Contact.LastName$|$Interaction.MainParty$`
Valid Values:
`$Interaction.CaseId$,$Interaction.Id$,$Interaction.MainParty$,$Contact.X$,$AttachedData.Y$`
Changes take effect: Immediately.

Description: Defines the display format of Voice Interaction by specifying a string that contains the following field codes:
`$Interaction.CaseId$,$Interaction.Id$,$Interaction.MainParty$,$Contact.X$,$AttachedData.Y$`
Where `X` is the name of contact attribute and `Y` is the name of the attached data key.

display-format.routing-point.name

Default Value:
`$RoutingPoint.Alias$|$RoutingPoint.Number$@$RoutingPoint.Location$`
Valid Values:
`$RoutingPoint.Number$,$RoutingPoint.Alias$,$RoutingPoint.Location$`
Changes take effect: Immediately.

Description: Defines the display format of Routing Points by specifying a string that contains the following field codes:
`$RoutingPoint.Number$,$RoutingPoint.Alias$,$RoutingPoint.Location$`
If all field codes are empty, the following field codes are used:
`$RoutingPoint.Number$@$RoutingPoint.Location$`

Gadget and Statistics Gadget

gadget.window-title

Default Value: `$Window.Title$`
Valid Values:
`$Window.Title$,$Application.Title$,$Application.Name$,$Agent.UserName$,$Agent.LastName$,$Agent.FirstName$,$Agent.EmployeeId$`
Changes take effect: Immediately.

Description: Defines the title of the window in which the Gadget is rendered by specifying a string that contains the following field codes:
`$Window.Title$,$Application.Title$,$Application.Name$,$Agent.UserName$,$Agent.LastName$,$Agent.FirstName$,$Agent.EmployeeId$`
If all field codes are empty, the default string is:
`$Window.Title$`
This title is visible in the Task Bar only.

gadget-statistics.displayed-call-center-statistics

Default Value: ""

Valid Values: A comma-separated list of Statistic names.

Changes take effect: When the application is started or restarted.

Description: Specifies the Contact Center Statistics that are displayed in the Statistics Gadget. The Contact Center Statistics specified by this option match the names of the statistics defined in the options of the Application sections.

gadget-statistics.nb-tagged-stats-per-page

Default Value: 5

Valid Values: An integer from 1 to 10.

Changes take effect: When the application is started or restarted.

Description: Defines the number of tagged statistics that are displayed as individual gadget pages with the Gadget. If the number of tagged statistics is exceeded, paging buttons are displayed on the Gadget Statistics page area. The agent tags and untags statistics for display on statistics pages by clicking the Tag and Untag buttons. Untagged statistics are displayed only in the Statistics Ticking area of the Statistics Gadget.

gadget-statistics.displayed-kpis

Default Value: ""

Valid Values: A comma-separated list of KPI names.

Changes take effect: When the application is started or restarted.

Description: Defines the KPIs that are displayed to the agent in the Statistics Gadget. The KPI names refer to the names of the Application Option sections that are defining the KPIs.

gadget-statistics.show

Default Value: true

Valid Values: true, false

Changes take effect: When the application is started or restarted.

Description: Specifies whether or not the Statistics Gadget is displayed when the application is launched.

IM

im.agent.prompt-color

Default Value: #FF385078

Valid Values: Valid hexidecimal (HTML) color code.

Changes take effect: Immediately.

Description: Specifies the color of the prompt for the messages entered by the agent in the IM view.

im.agent.text-color

Default Value: #FF000000

Valid Values: Valid hexidecimal (HTML) color code.

Changes take effect: Immediately.

Description: Specifies the color of the text of the messages entered by the agent in the IM view.

im.auto-answer

Default Value: `false`
Valid Values: `true, false`
Changes take effect: Immediately.

Description: Specify whether an IM interaction is automatically answered when a TServer Ringing event is received. This option can be overridden by a routing strategy as described in "Overriding Options by Using a Routing Strategy" on .

im.new-message-bell

Default Value: ""
Valid Values: Letters A to Z and a to z. Numbers 0 through 9. All special characters that are valid Windows file names.
Changes take effect: Immediately.

Description: Specify the new Instant Message sound configuration string—for example: `Sounds\bell.mp3|7|0`

The value has three components that are separated by the character '|':

1. The file name and folder relative to the application folder.

2. The priority—The higher the integer the higher the priority.

3. The duration:
   a. `0` means play the whole sound one time.
   b. An integer > `0` means a time, in milliseconds, to play and repeat the sound.

im.other-agent.prompt-color

Default Value: `#FFD88000`
Valid Values: Valid hexidecimal (HTML) color code.
Changes take effect: When the application is started or restarted.

Description: Specifies the color of the text of the messages entered by the target agent in the IM view.
Changes take effect: Immediately.

im.other-agent.text-color

Default Value: `#FF000000`
Valid Values: Valid hexidecimal (HTML) color code.
Changes take effect: Immediately.

Description: Specifies the color of the text of the messages entered by the target agent in the IM view.

im.system.text-color

Default Value: `#FF8C8C8C`
Valid Values: Valid hexidecimal (HTML) color code.
Changes take effect: Immediately.

Description: Specifies the color of the text of the system messages in the IM view.

im.toast-timeout

Default Value: `10`
Valid Values: An integer from `0` to `MAXINT`.
Changes take effect: At the next interaction.

Description: Defines the duration, in seconds, of Interactive Notification for interaction instant messaging in the Information area of the Main Window. The value `0` means the Interactive Notification is displayed until the agent accepts or rejects the instant message invitation.

Interaction

interaction.case-data.format-business-attribute

Default Value: ""
Valid Values: Letters A to Z and a to z. Numbers 0 through 9. The underscore character.
Changes take effect: At the next interaction.

Description: Specifies the name of the Business Attribute that contains the Attribute Values that is used to filter and render attached data. This option can be overridden by a routing strategy as described in "Overriding Options by Using a Routing Strategy" on .

interaction.case-data.frame-color

Default Value: `#FFFFBA00`
Valid Values: Valid hexidecimal (HTML) color code.
Changes take effect: At the next interaction.

Description: Specifies the color of the border of the Case Data view frame. Examples: `#FFFFBA00` for a Gold color, `#FF6F7074` for a Silver color, and `#FFB8400B` for a Bronze color. This option can be overridden by a routing strategy as described in "Overriding Options by Using a Routing Strategy" on .

interaction.disposition.is-mandatory

Default Value: `false`
Valid Values: `true`, `false`

Changes take effect: When the application is started or restarted.

Description: Specify whether it is mandatory for the agent to set a disposition code before Marking Done an interaction. This option can be overridden by a routing strategy as described in "Overriding Options by Using a Routing Strategy" on .

interaction.disposition.is-read-only-on-idle

Default Value: `false`
Valid Values: `true`, `false`
Changes take effect: At the next interaction.

Description: Prevents changes to the disposition code after the interaction has been released. This option can be overridden by a routing strategy as described in "Overriding Options by Using a Routing Strategy" on .

interaction.disposition.key-name

Default Value: `DispositionCode`
Valid Values: Letters A to Z and a to z. Numbers 0 through 9. The underscore and space characters.
Changes take effect: At the next interaction.

Description: The key that is used to populate attached data or a user event when a disposition code is submitted to the back-end system, such as T-Server, Interaction Server, and Contact Server. This option can be overridden by a routing strategy as described in "Overriding Options by Using a Routing Strategy" on .

interaction.disposition.use-attached-data

Default Value: `false`
Valid Values: `true`, `false`
Changes take effect: At the next interaction.

Description: Enables the adding of attached data from the interaction in UserEvent. This option can be overridden by a routing strategy as described in "Overriding Options by Using a Routing Strategy" on .

interaction.disposition.use-connection-id

Default Value: `true`
Valid Values: `true`, `false`
Changes take effect: At the next interaction.

Description: Specifies whether the connection id is sent as part of the user event that is sent for disposition code. This option can be overridden by a routing strategy as described in "Overriding Options by Using a Routing Strategy" on .

interaction.disposition.value-business-attribute

Default Value: ""

Valid Values: Letters A to Z and a to z. Numbers 0 through 9. The underscore and the Space characters.

Changes take effect: At the next interaction.

Description: A character string that specifies the name of the Business Attribute that contains the Attribute Values that are used as an enumerated value for a disposition code. This option can be overridden by a routing strategy as described in "Overriding Options by Using a Routing Strategy" on page 24.

interaction.evaluate-real-party-for-agent

Default Value: `true`
Valid Values: `true`, `false`
Changes take effect: When the application is started or restarted.

Description: Specifies whether the name of the party or the DN of the party is displayed to the agent during an interaction.

interaction.override-option-key

Default Value: `IW_OverrideOptions`
Valid Values: A comma-separated list of transaction objects.
Changes take effect: At the next interaction.

Description: Enables overriding of certain application options by using a transaction object. This option provides the key name of the attached data that contains the list of transaction objects.

interaction.reject-route

Default value: `""`
valid values: `<any valid string>`
Changes take effect: At the next interaction.

Specifies how the `Reject` button of the Voice interaction preview window should behave. If set to empty, the call is redirected to the DN specified in the attribute `ThisQueue` of the `Ringing` event (typically an ACD Queue or a Routing Point).

If set to a valid string, Interaction Workspace uses the string as a key to get the reject route that is specified in the attached data of the current call. The actual route must be set in advance as an attached data value in the following format: `<dn_number>@<switch_name>`.

The field format `<switch_name>` is optional. It is used only in the case of multi-site routing (pull-back operation).

If the user clicks `Reject`, Interaction Workspace redirects or reroutes the call to the specified destination.

interaction.window-title

Default Value: (`$Contact.FirstName$ $Contact.LastName$|$Interaction.MainParty$) - $Interaction.Type$ - $Window.Title$`

Valid Values: `$Window.Title$`, `$Application.Title$`, `$Application.Name$`, `$Agent.UserName$`, `$Agent.LastName$`, `$Agent.FirstName$`, `$Agent.EmployeeId$`, `$Contact.FirstName$`, `$Contact.LastName$`, `$Interaction.MainParty$`, `$Interaction.Type$`

Changes take effect: When the application is started or restarted.

Description: Defines the title of the interaction window that appears in the Windows Task Bar by specifying a string that contains the following field codes:

`$Window.Title$,$Application.Title$,$Application.Name$,$Agent.UserName$,$Agent.LastName$,$Agent.FirstName$,$Agent.EmployeeId$,$Contact.FirstName$, $Contact.LastName$,  $Interaction.MainParty$,$Interaction.Type$`

Intercommunication

intercommunication.im.routing-based-actions

Default Value: `MakeIM`
Valid Values: `MakeIM`
Changes take effect: When the application is started or restarted.

Description: Defines the list of Routing Based actions.

intercommunication.im.routing-based-targets

Default Value: `""`
Valid Values: A comma-separated list of valid object types from the following: `Agent`, `ACDQueue`, `RoutingPoint`
Changes take effect: At the next interaction.

Description: Defines the list of targets that are contacted through the routing based mechanism for requests that are defined by the following option: `intercommunication.voice.routing-based-actions`

Note: The targets `AgentGroup` and `Skill` are always addressed through routing; therefore, these are not affected by this option.

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intercommunication.im.routing-points

Default Value: `""`
Valid Values: A comma-separated list of call number names in the following format: `$dn_name@switch$`
Changes take effect: At the next interaction.

Description: Determines the call number that is used by the Routing Base feature. The following attached data are added by Interaction Worskspace:

`IW_RoutingBasedOriginalEmployeeId, IW_RoutingBasedTargetId, IW_RoutingBasedTarget`
`Type,  IW_RoutingBasedActionType, IW_RoutingBasedLocation`

intercommunication.voice.routing-based-actions

Default Value:
`MakeCall, OneStepConference, InitConference, OneStepTransfer, InitTransfer`
Valid Values: A comma-separated list of valid operation names from the
following list: `MakeCall, OneStepTransfer, InitTransfer, InitConference,`
`OneStepConference.`
Changes take effect: At the next interaction.

Description: Defines the list of Routing Based Actions that an agent may
perform.

intercommunication.voice.routing-based-targets

Default Value: `""`
Valid Values: A comma-separated list of valid object types from the following
list: `Agent, ACDQueue, RoutingPoint, Contact, TypeDestination.`
Changes take effect: At the next interaction.

Description: Defines the list of targets that are contacted through the routing
based mechanism for the requests that are defined in the option
`intercommunication.voice.routing-based-actions.`

Note: The targets `AgentGroup` and `Skill` are always addressed through
routing; therefore, these are not affected by this option.

intercommunication.voice.routing-points

Default Value: `""`
Valid Values: A comma-separated list of call number names in the following
format: `$dn_name@switch$`
Changes take effect: At the next interaction.

Description: Determines the call number that is used by the Routing Base
feature. The following attached data are added by Interaction Worskspace:
`IW_RoutingBasedOriginalEmployeeId, IW_RoutingBasedTargetId, IW_RoutingBasedTarget`
`Type, IW_RoutingBasedActionType,  IW_RoutingBasedLocation`

Keyboard

keyboard.shortcut.action.help

Default Value: `F1`
Valid Values: Only the name of a key or a key combination that begins with
one of the following modifier key names: `Ctrl`, `Shift`, `Alt`, and `Win`, and ends
with a character key. Separate the modifier key name from the character key by
using the + character.
Changes take effect: When the application is started or restarted.

Description: A valid shortcut key—for example: `Win+A`, `D1`, `SPACE`, `Ctrl+Alt+V`, `Ctrl+Shift+Alt+V`.

keyboard.shortcut.contact.reset

Default Value: `Ctrl+R`
Valid Values: Only the name of a key or a key combination that begins with one of the following modifier key names: `Ctrl`, `Shift`, `Alt`, and `Win`, and ends with a character key. Separate the modifier key name from the character key by using the + character.
Changes take effect: When the application is started or restarted.

Description: A valid shortcut key—for example: `Win+A`, `D1`, `SPACE`, `Ctrl+Alt+V`, `Ctrl+Shift+Alt+V`.

keyboard.shortcut.contact.save

Default Value: `Ctrl+S`
Valid Values: Only the name of a key or a key combination that begins with one of the following modifier key names: `Ctrl`, `Shift`, `Alt`, and `Win`, and ends with a character key. Separate the modifier key name from the character key by using the + character.
Changes take effect: When the application is started or restarted.

Description: A valid shortcut key—for example: `Win+A`, `D1`, `SPACE`, `Ctrl+Alt+V`, `Ctrl+Shift+Alt+V`.

keyboard.shortcut.interaction.answer-call

Default Value: `Ctrl+G`
Valid Values: Only the name of a key or a key combination that begins with one of the following modifier key names: `Ctrl`, `Shift`, `Alt`, and `Win`, and ends with a character key. Separate the modifier key name from the character key by using the + character.
Changes take effect: When the application is started or restarted.

Description: A valid shortcut key—for example: `Win+A`, `D1`, `SPACE`, `Ctrl+Alt+V`, `Ctrl+Shift+Alt+V`.

keyboard.shortcut.interaction.disconnect

Default Value: `Ctrl+D`
Valid Values: Only the name of a key or a key combination that begins with one of the following modifier key names: `Ctrl`, `Shift`, `Alt`, and `Win`, and ends with a character key. Separate the modifier key name from the character key by using the + character.
Changes take effect: When the application is started or restarted.

Description: A valid shortcut key—for example: `Win+A`, `D1`, `SPACE`, `Ctrl+Alt+V`, `Ctrl+Shift+Alt+V`.

keyboard.shortcut.interaction.mark-done

Default Value: `Ctrl+E`

Valid Values: Only the name of a key or a key combination that begins with one of the following modifier key names: `Ctrl`, `Shift`, `Alt`, and `Win`, and ends with a character key. Separate the modifier key name from the character key by using the + character.

Changes take effect: When the application is started or restarted.

Description: A valid shortcut key—for example: `Win+A`, `D1`, `SPACE`, `Ctrl+Alt+V`, `Ctrl+Shift+Alt+V`.

keyboard.shortcut.state.logout

Default Value: `Ctrl+Alt+X`

Valid Values: Only the name of a key or a key combination that begins with one of the following modifier key names: `Ctrl`, `Shift`, `Alt`, and `Win`, and ends with a character key. Separate the modifier key name from the character key by using the + character.

Changes take effect: When the application is started or restarted.

Description: A valid shortcut key—for example: `Win+A`, `D1`, `SPACE`, `Ctrl+Alt+V`, `Ctrl+Shift+Alt+V`.

keyboard.shortcut.state.not-ready

Default Value: `Ctrl+Alt+N`

Valid Values: Only the name of a key or a key combination that begins with one of the following modifier key names: `Ctrl`, `Shift`, `Alt`, and `Win`, and ends with a character key. Separate the modifier key name from the character key by using the + character.

Changes take effect: When the application is started or restarted.

Description: A valid shortcut key—for example: `Win+A`, `D1`, `SPACE`, `Ctrl+Alt+V`, `Ctrl+Shift+Alt+V`.

keyboard.shortcut.state.not-ready-after-call-work

Default Value: `Ctrl+Alt+Z`

Valid Values: Only the name of a key or a key combination that begins with one of the following modifier key names: `Ctrl`, `Shift`, `Alt`, and `Win`, and ends with a character key. Separate the modifier key name from the character key by using the + character.

Changes take effect: When the application is started or restarted.

Description: A valid shortcut key—for example: `Win+A`, `D1`, `SPACE`, `Ctrl+Alt+V`, `Ctrl+Shift+Alt+V`.

keyboard.shortcut.state.ready

Default Value: `Ctrl+Alt+R`

Valid Values: Only the name of a key or a key combination that. begins with one of the following modifier key names: `Ctrl`, `Shift`, `Alt`, and `Win`, and ends

with a character key. Separate the modifier key name from the character key by using the + character.

Changes take effect: When the application is started or restarted.

Description: A valid shortcut key—for example: `Win+A`, `D1`, `SPACE`, `Ctrl+Alt+V`, `Ctrl+Shift+Alt+V`.

KPI

kpi.displayed-kpis

Default Value: `""`
Valid Values: A comma-separated list of KPI names.
Changes take effect: When the application is started or restarted.

Description: Defines the KPIs that are displayed to the agent. The KPI names refer to the names of the Application Option sections that are defining the KPIs.

kpi.refresh-time

Default Value: `10`
Valid Values: An integer value greater than `0`.
Changes take effect: When the application is started or restarted.

Description: Defines the frequency of notification (in seconds) for KPIs.

kpi.show-agent-groups

Default Value: `true`
Valid Values: `true`, `false`
Changes take effect: When the application is started or restarted.

Description: Specify if agent group KPI information is displayed to the agent for all groups to which the agent is a member.

Log

log.default-filter-type

Default Value: `Copy`
Valid Values: `Copy`, `Hide`, `hide-first`, `hide-last`, `unhide-first`, `unhide-last`, `Skip`
Changes take effect: Immediately.

Description: Specifies the default filter type for logging. To filter for specific attached-data keys, use the `log.filter-data.<key_name>` option, where `<key_name>` represents an attached-data key.

copy	The keys and values of the KVList pairs are copied to the log.
hide	The keys of the KVList pairs are copied to the log; the values are replaced with asterisks.
hide-first,<n>	The keys of the KVList pairs are copied to the log; the first <n> characters of the value are replaced with asterisks. If <n> exceeds the number of characters in the value, the number of asterisks will be equal to the number of characters in the value.
hide-last,<n>	The keys of the KVList pairs are copied to the log; the last <n> characters of the value are replaced with asterisks. If <n> exceeds the number of characters in the value, the number of asterisks will be equal to the number of characters in the value.
unhide-first,<n>	The keys of the KVList pairs are copied to the log; all but the first <n> characters of the value are replaced with asterisks. If <n> exceeds the number of characters in the value, the value of the key appears, with no asterisks.
unhide-last,<n>	The keys of the KVList pairs are copied to the log; all but the last <n> characters of the value are replaced with asterisks. If <n> exceeds the number of characters in the key, the value of the key appears, with no asterisks.
skip	The KVList pairs are not copied to the log.

log.ESDK

Default Value: All
Valid Values: One value from this list: All, Debug, Trace, Interaction, Alarm.
Changes take effect: Immediately.

Description: Defines the level of logging for ESDK API.

log.expire

Default Value: 10
Valid Values: An integer value from 1 through 100.
Changes take effect: Immediately.

Description: Specifies if log files are to be stored. If they are stored, specifies the maximum number of files (segments) to be stored before the oldest file is removed. The value $number$ sets the maximum number of log files to store.

log.filter-data.<key_name>

Default Value: Copy
Valid Values: Copy, Hide, hide-first, hide-last, unhide-first, unhide-last, Skip
Changes take effect: Immediately.

Description: Specifies the treatment of log data. Enables you to filter for specific attached data keys, by specifying the key name in the option name. This option overrides any values specified by the `log.default-filter-type` option.

`copy`	The keys and values of the KVList pairs are copied to the log.
`hide`	The keys of the KVList pairs are copied to the log; the values are replaced with asterisks.
`hide-first,<n>`	The keys of the KVList pairs are copied to the log; the first <n> characters of the value are replaced with asterisks. If <n> exceeds the number of characters in the value, the number of asterisks will be equal to the number of characters in the value.
`hide-last,<n>`	The keys of the KVList pairs are copied to the log; the last <n> characters of the value are replaced with asterisks. If <n> exceeds the number of characters in the value, the number of asterisks will be equal to the number of characters in the value.
`unhide-first,<n>`	The keys of the KVList pairs are copied to the log; all but the first <n> characters of the value are replaced with asterisks. If <n> exceeds the number of characters in the value, the value of the key appears, with no asterisks.
`unhide-last,<n>`	The keys of the KVList pairs are copied to the log; all but the last <n> characters of the value are replaced with asterisks. If <n> exceeds the number of characters in the key, the value of the key appears, with no asterisks.
`skip`	The KVList pairs are not copied to the log.

log.max-age

Default Value: `0`
Valid Values: Any positive integer.
Changes take effect: When the application is started or restarted

Description: Specifies the maximum number of days for which Interaction Workspace log files are kept. If the option value is greater than `0`, the application deletes the old log files (older than the value of this option) at startup. If the option value is set to `0`, log files are not deleted at startup.

log.PSDK

Default Value: `Standard`
Valid Values: One value from this list: `All`, `Debug`, `Trace`, `Interaction`, `Standard`, `Alarm`.
Changes take effect: Immediately.

Description: Define the level of logging for the PSDK API.

log.segment

Default Value: `10MB`
Valid Values: The value `$number$KB` sets the maximum segment size, in kilobytes. The minimum segment size is `100KB`. The value `$number$MB` sets the maximum segment size, in megabytes.
Changes take effect: When the application is started or restarted.

Description: If set, specifies that there is a segmentation limit for a log file and defines the limit size in either kilobytes (KB) or megabytes (MB). If the current log segment exceeds the defined size, the file is closed and a new one is created.

log.Trace

Default Value: `$Application.RootApplicationData$\log\InteractionWorkspace`
Valid Values: A valid URL.
Changes take effect: When the application is started or restarted.

Description: Defines the full path of the log file. The file name requires the following extension:
`*.%date{yyyyMMdd_HHmmss_fff}.log`

The full path can also contain the following field codes:
`$Agent.UserName$, $Agent.LastName$, $Agent.FirstName$, $Agent.Employee Id$, $Application.Exe$, $Application.ApplicationData$, $Application.Ro otApplicationData$`

log.verbose

Default Value: `Trace`
Valid Values: One value from the following list: `All`, `Debug`, `Trace`, `Interaction`, `Standard`, `Alarm`.
Changes take effect: When the application is started or restarted.

Description: Defines the level of logging.

Login

login.default-place

Default Value: `""`
Valid Values: Letters A to Z and a to z. Numbers 0 through 9. The underscore character.
Changes take effect: When the application is started or restarted.

Description: Specify the place name populated by default during login. This option can be filled by the variable `$Agent.DefaultPlace$` (if the agent has a default place specified in the agent configuration, that place is used. However, if no default place exists, the agent must enter their place in the Place field).

login.enable-place-completion

Default Value: `true`

Valid Values: `true`, `false`

Changes take effect: When the application is started or restarted.

Description: Enables the name of the Place to be completed as the agent types.

login.im.available-queues

Default Value: `ACDQueue`
Valid Values: "" or a combination of: `ACDQueue,RoutingPoint,VirtualQueu`
Changes take effect: When the application is started or restarted.

Description: Specifies the way the list of available queues is displayed to the agent. If the option value is left blank, no queue is displayed to the agent; the agent can enter any valid login queue name. If set to a combination of the valid values, the agent must select the queue from the list of objects that is provided by the configuration.

login.im.can-unactivate-channel

Default Value: `false`
Valid Values: `true`, `false`
Changes take effect: When the application is started or restarted.

Description: Specifies whether the agent can select and deselect (activate and deactivate) Instant Messaging channels.

login.im.prompt-agent-login-id

Default Value: `false`
Valid Values: `true`, `false`
Changes take effect: When the application is started or restarted.

Description: Specifies whether the agent can select a login id from the configured ones for the IM channel in the login window.

login.im.prompt-dn-password

Default Value: `false`
Valid Values: `true`, `false`
Changes take effect: When the application is started or restarted.

Description: Specifies whether the agent must enter a password for the IM channel in the login window.

login.im.prompt-queue

Default Value: `false`
Valid Values: `true`, `false`
Changes take effect: When the application is started or restarted.

Description: Specifies whether the agent must enter the ACD Queue for the IM channel in the login window.

login.prompt-place

Default Value: `false`

Valid Values: `true`, `false`

Changes take effect: When the application is started or restarted.

Description: Specifies whether the agent must enter a place in the login window.

login.store-recent-place

Default Value: `true`
Valid Values: `true`, `false`
Changes take effect: When the application is started or restarted.

Description: Specifies whether the most recently used Place on the workstation is stored and displayed for the agent at the next login.

login.voice.available-queues

Default Value: `ACDQueue`
Valid Values: "", or a combination of `ACDQueue`, `RoutingPoint`, `VirtualQueue`
Changes take effect: When the application is started or restarted.

Description: Specifies the way the list of available queues is displayed to the agent. If the option value is left blank, no queue is displayed to the agent; the agent can enter any valid login queue name. If set to a combination of the valid values, the agent must select the queue from the list of objects that is provided by the configuration.

login.voice.can-unactivate-channel

Default Value: `false`
Valid Values: `true`, `false`
Changes take effect: When the application is started or restarted.

Description: Specifies whether the agent can select and deselect (activate and deactivate) voice channels.

login.voice.prompt-agent-login-id

Default Value: `false`
Valid Values: `true`, `false`
Changes take effect: When the application is started or restarted.

Description: Specifies whether the agent can select a login id from the configured ones for the voice channel in the login window.

login.voice.prompt-dn-less-phone-number

Default Value: `true`
Valid Values: `true`, `false`
Changes take effect: When the application is started or restarted.

Description: Specifies whether a DN-less phone number is prompted for in the login window. This option is specific to SIP Server environment.

login.voice.prompt-dn-password

Default Value: `true`
Valid Values: `true`, `false`
Changes take effect: When the application is started or restarted.

Description: Specifies whether the agent must enter his password for the voice channel in the login window.

login.voice.prompt-queue

Default Value: `true`
Valid Values: `true`, `false`
Changes take effect: When the application is started or restarted.

Description: Specifies whether the agent must enter the ACD Queue for the voice channel in the login window.

login.workmode

Default Value: `unknown`
Valid Values: `unknown`, `auto-in`, `manual-in`
Changes take effect: When the application is started or restarted or if the agent changes place.

Description: Specifies the workmode that is applied when the voice DN logs in. If set to `auto-in`, the agent is automatically in Ready state. If set to `manual-in`, the agent must manually activate the Ready state. To determine whether your switch supports the workmode, refer to the Deployment Guide of the relevant T-Server.

Main view

main-window.dockable

Default Value: `true`
Valid Values: `true`, `false`
Changes take effect: When the application is started or restarted.

Description: Enables the docking feature of the Main Window. If set to `true`, the Main Window can be docked to the top or the bottom of the display. If set to `false`, the Main Window is not dockable.

main-window.window-title

Default Value: `$Window.Title$`
Valid Values:
`$Window.Title$,$Application.Title$,$Application.Name$,$Agent.UserName$,$Agent.LastName$,$Agent.FirstName$,$Agent.EmployeeId$`
Changes take effect: Immediately.

Description: Defines the title of the Main Window that appears in the Windows Task Bar by specifying a string that contains the following field codes:

`$Window.Title$,$Application.Title$,$Application.Name$,$Agent.UserName$,`
`$Agent.LastName$,$Agent.FirstName$,$Agent.EmployeeId`

If all field codes are empty, the following field codes are used:

`$Window.Title$`

Security

security.disable-rbac

Default Value: `false`
Valid Values: `true`, `false`
Changes take effect: When the application is started or restarted.

Description: Disables role based access (RBAC). If this option is set to `true`, all the Interaction Workspace privileges are available to the agents. If this option is set to `false`, the list of agent privileges must be defined in Genesys Administrator.

security.inactivity-timeout

Default Value: `0`
Valid Values: Any positive integer.
Changes take effect: Immediately.

Description: Specifies the amount of time in minutes of agent inactivity (no mouse or keyboard usage) that triggers application locking. If the agent has been inactive longer than the number of minutes that are specified by the inactivity timeout), the agent must reauthenticate to be able to use the Interaction Workspace application. A value of `0` disables this functionality.

security.inactivity-set-agent-not-ready

Default Value: `true`
Valid Values: `true`, `false`
Changes take effect: When application is started or restarted.

Description: Specifies whether the agent is automatically set to `Not Ready` when agent inactivity is detected.

security.inactivity-not-ready-reason

Default Value: `""`
Valid Values: A valid Not Ready Reason.
Changes take effect: When application is started or restarted.

Description: Specifies the Not Ready Reason if the `inactivity.set-agent-not-ready` option is set to `true`.

SIP Endpoint

sipendpoint.audio.headset.audio_in_agc_enabled

Default Value: `true`
Valid Values: `true`, `false`.
Changes take effect: When the application is started or restarted.

Description: Specifies whether automatic gain control (AGC) is enabled for the outgoing headset audio stream.

sipendpoint.audio.incoming.use_agc

Default Value: `true`
Valid Values: `true`, `false`.
Changes take effect: When the application is started or restarted.

Description: Specifies whether automatic gain control (AGC) is enabled for the incoming audio stream.

sipendpoint.genesyslab.beeptone.beeptone_timeout

Default Value: `30000`
Valid Values: Any positive integer value.
Changes take effect: When the application is started or restarted.

Description: Timeout time, in milliseconds, for the SIP beep tone that signals an incoming SIP interaction.

sipendpoint.genesyslab.beeptone.enable_beeptone

Default Value: `true`
Valid Values: `true`, `false`.
Changes take effect: When the application is started or restarted.

Description: Specifies whether the beeptone that signals an incoming SIP interaction is enabled.

sipendpoint.genesyslab.beeptone.play_locally

Default Value: `false`
Valid Values: `true`, `false`.
Changes take effect: When the application is started or restarted.

Description: Specifies whether the beeptone that signals an incoming SIP interaction is played on the agent workstation or only in the selected speaker audio device.

sipendpoint.genesyslab.control.auto_answer

Default Value: `false`
Valid Values: `true`, `false`.
Changes take effect: When the application is started or restarted.

Description: Specifies whether incoming SIP interactions are automatically answered.

sipendpoint.genesyslab.device.audio_in_device

Default Value: ""
Valid Values: A valid audio device name.
Changes take effect: When the application is started or restarted.

Description: Device name for the agent's microphone.

sipendpoint.genesyslab.device.audio_out_device

Default Value: ""
Valid Values: A valid audio device name.
Changes take effect: When the application is started or restarted.

Description: Device name for the agent's speakers.

sipendpoint.genesyslab.device.error_code_when_headset_na

Default Value: 480
Valid Values: Any positive integer value.
Changes take effect: When the application is started or restarted.

Description: Error code for an unavailable USB headset. The error code is sent if a call is rejected because of the unavailability of a headset.

sipendpoint.genesyslab.device.headset_name

Default Value: ""
Valid Values: A valid audio device name.
Changes take effect: When the application is started or restarted.

Description: The name of the agent's USB headset device.

sipendpoint.genesyslab.device.manual_audio_devices_configure

Default Value: false
Valid Values: true, false.
Changes take effect: When the application is started or restarted.

Description: Specifies that a non-USB headset is used.

sipendpoint.genesyslab.device.reject_call_when_headset_na

Default Value: false
Valid Values: true, false.
Changes take effect: When the application is started or restarted.

Description: Specifies whether calls are rejected if a headset is unavailable.

sipendpoint.genesyslab.device.use_headset

Default Value: false
Valid Values: true, false.

Changes take effect: When the application is started or restarted.

Description: Specifies that a USB headset is used.

sipendpoint.genesyslab.dtmf.pause_start_stop_dtmf

Default Value: `100`
Valid Values: Any positive integer value.
Changes take effect: When the application is started or restarted.

Description: Specifies the pause time, in milliseconds, between each DTMF when the application in dialing.

sipendpoint.genesyslab.dtmf.play_locally

Default Value: `false`
Valid Values: `true`, `false`.
Changes take effect: When the application is started or restarted.

Description: Specifies whether the DTMF tones are played on the agent workstation or in the selected speaker audio device.

sipendpoint.genesyslab.system.log_level_AbstractPhone

Default Value: `0`
Valid Values: A positive integer value that corresponds to a valid log level.
Changes take effect: When the application is started or restarted.

Description: Specifies the log level for an abstract phone.

sipendpoint.genesyslab.system.log_level_Audio

Default Value: `0`
Valid Values: A positive integer value that corresponds to a valid log level.
Changes take effect: When the application is started or restarted.

Description: Specifies the log level for audio level.

sipendpoint.genesyslab.system.log_level_Auto_Configuration

Default Value: `0`
Valid Values: A positive integer value that corresponds to a valid log level.
Changes take effect: When the application is started or restarted.

Description: Specifies the log level for autoconfiguration.

sipendpoint.genesyslab.system.log_level_CCM

Default Value: `0`
Valid Values: A positive integer value that corresponds to a valid log level.
Changes take effect: When the application is started or restarted.

Description: Specifies the log level for call control manager (CCM).

sipendpoint.genesyslab.system.log_level_Conferencing

Default Value: `0`

Valid Values: A positive integer value that corresponds to a valid log level.
Changes take effect: When the application is started or restarted.

Description: Specifies the log level for conferencing.

sipendpoint.genesyslab.system.log_level_Contacts

Default Value: 0
Valid Values: A positive integer value that corresponds to a valid log level.
Changes take effect: When the application is started or restarted.

Description: Specifies the log level for contacts.

sipendpoint.genesyslab.system.log_level_DNS

Default Value: 0
Valid Values: A positive integer value that corresponds to a valid log level.
Changes take effect: When the application is started or restarted.

Description: Specifies the log level for Domain Name Systems (DNSs).

sipendpoint.genesyslab.system.log_level_Endpoint

Default Value: 0
Valid Values: A positive integer value that corresponds to a valid log level.
Changes take effect: When the application is started or restarted.

Description: Specifies the log level for the SIP Endpoint.

sipendpoint.genesyslab.system.log_level_Jitter

Default Value: 0
Valid Values: A positive integer value that corresponds to a valid log level.
Changes take effect: When the application is started or restarted.

Description: Specifies the log level for Jitter.

sipendpoint.genesyslab.system.log_level_Licensing

Default Value: 0
Valid Values: A positive integer value that corresponds to a valid log level.
Changes take effect: When the application is started or restarted.

Description: Specifies the log level for licensing.

sipendpoint.genesyslab.system.log_level_Media

Default Value: 0
Valid Values: A positive integer value that corresponds to a valid log level.
Changes take effect: When the application is started or restarted.

Description: Specifies the log level for media.

sipendpoint.genesyslab.system.log_level_Privacy

Default Value: 0
Valid Values: A positive integer value that corresponds to a valid log level.

Changes take effect: When the application is started or restarted.

Description: Specifies the log level for privacy.

sipendpoint.genesyslab.system.log_level_RTP

Default Value: 0
Valid Values: A positive integer value that corresponds to a valid log level.
Changes take effect: When the application is started or restarted.

Description: Specifies the log level for Real-time Transfer Protocol (RTP).

sipendpoint.genesyslab.system.log_level_Security

Default Value: 0
Valid Values: A positive integer value that corresponds to a valid log level.
Changes take effect: When the application is started or restarted.

Description: Specifies the log level for security.

sipendpoint.genesyslab.system.log_level_Storage

Default Value: 0
Valid Values: A positive integer value that corresponds to a valid log level.
Changes take effect: When the application is started or restarted.

Description: Specifies the log level for storage.

sipendpoint.genesyslab.system.log_level_STUN

Default Value: 0
Valid Values: A positive integer value that corresponds to a valid log level.
Changes take effect: When the application is started or restarted.

Description: Specifies the log level for Session Traversal Utilities for Network Address Translator (STUN) network protocol.

sipendpoint.genesyslab.system.log_level_Transport

Default Value: 0
Valid Values: A positive integer value that corresponds to a valid log level.
Changes take effect: When the application is started or restarted.

Description: Specifies the log level for transport.

sipendpoint.genesyslab.system.log_level_USB_Devices

Default Value: 0
Valid Values: A positive integer value that corresponds to a valid log level.
Changes take effect: When the application is started or restarted.

Description: Specifies the log level for USB devices.

sipendpoint.genesyslab.system.log_level_Utilities

Default Value: 0
Valid Values: A positive integer value that corresponds to a valid log level.

Changes take effect: When the application is started or restarted.

Description: Specifies the log level for utilities.

sipendpoint.genesyslab.system.log_level_Voice_Quality

Default Value: `0`
Valid Values: A positive integer value that corresponds to a valid log level.
Changes take effect: When the application is started or restarted.

Description: Specifies the log level for voice quality.

sipendpoint.genesyslab.system.log_level_XMPP

Default Value: `0`
Valid Values: A positive integer value that corresponds to a valid log level.
Changes take effect: When the application is started or restarted.

Description: Specifies the log level for Extensible Messaging and Presence Protocol (XMPP).

sipendpoint.log.verbose

Default Value: `Trace`
Valid Values: One value from the following list: `All`, `Debug`, `Trace`, `Interaction`, `Standard`, `Alarm`
Changes take effect: When the application is started or restarted

Description: Defines the level of logging for the Interaction Workspace SIP Endpoint.

sipendpoint.rtp.2833.enabled

Default Value: `true`
Valid Values: `true`, `false`.
Changes take effect: When the application is started or restarted.

Description: Enable support for RFC 2833 out-of-band DTMF.

Set to `true` to enable local support for RFC 2833 out-of-band DTMF. Table 14 demonstrates how this option works with `system:dtmf:force_send_in_band` settings.

If RFC2833 is set to out-of-band, the application does not encode DTMF signals in the audio stream as regular tones. Typically, DTMF is not sent in-band, and is only used in specific situations. See `sipendpoint.system:dtmf:force_send_in_band` for examples.

Table 14: Effects of enabling and disabling RFC 2833 out-of-band DTMF

rtp.2833.enabled	system:dtmf:force_send_in_band	Result
true	true	Send out-of-band 2833; if that is not accepted, default to in-band.
true	false	Send out-of-band 2833; if that is not accepted, default to INFO
false	true	Send in-band DTMF.
false	false	Send out-of-band INFO.

sipendpoint.rtp.2833.hold_over_time_in_ms

Default Value: `100`
Valid Values: Any positive integer value.
Changes take effect: When the application is started or restarted.

Description: Specifies the minimum length of time to send 2833 packets. If `sipendpoint.system.dtmf.force_send_in_band` is set to `false` and `sipendpoint.rtp.2833.enabled` is set to `true`, then this option specifies the minimum length of time (in milliseconds) for which to send 2833 packets. This ensures that the packet time is longer than the key press time, which, depending on the agent, might be too short for some systems.

sipendpoint.rtp.2833.packet_time_in_ms

Default Value: `100`
Valid Values: Any positive integer value.
Changes take effect: When the application is started or restarted.

Description: Specifies the time between 2833 packets, if the `sipendpoint.system.dtmf.force_send_in_band` option is set to `false,` and the `sipendpoint.rtp.2833.enabled` option is set to `true`, only audio is sent during the time between packets. This setting is useful if your system cannot handle back-to-back 2833 packets.

sipendpoint.rtp.2833.payload_number

Default Value: `101`
Valid Values: Any positive integer value.
Changes take effect: When the application is started or restarted.

Description: Specifies the payload number for DTMF if `system.dtmf.force_send_in_band` is set to `false`.

sipendpoint.rtp.inactivity.timer_enabled

Default Value: `false`
Valid Values: `true`, `false`.
Changes take effect: When the application is started or restarted.

Description: Specifies whether Interaction Workspace hangs up if it detects that the RTP session is inactive.

sipendpoint.system.diagnostics.enable_logging

Default Value: `true`
Valid Values: `true`, `false`.
Changes take effect: When the application is started or restarted.

Description: Specifies whether logging is enabled for Interaction Workspace SIP Endpoint.

sipendpoint.system.diagnostics.log_level

Default Value: `Error`
Valid Values: `None`, `Critical`, `Error`, `Warning`, `Info`, `Debug`, `MaxDetails`
Changes take effect: When the application is started or restarted.

Description: Specifies the log level for Interaction Workspace SIP Endpoint.

sipendpoint.system.dtmf.force_send_in_band

Default Value: `false`
Valid Values: `true`, `false`.
Changes take effect: When the application is started or restarted.

Description: Specifies whether DMTF is sent in-band. Set as described in Table 14 on .

Sending DTMF in-band is recommended in the following scenarios:

1. Gateways are owned by you, and:
    *   One or more of your gateways does not support 2833 or does not handle it well.
    *   Your gateway is using codecs that reproduce DTMF tones well.

    In this scenario, setting this option to `true` ensures that DTMF tones get through, because the DTMF tones bypass the gateway, and that the DTMF tones are reproduced accurately by the receiver.

2. Gateways are owned by you, and:
    *   One or more of your gateways does not support 2833 or does not handle it well.
    *   Your gateway is using codecs that do not reproduce DTMF tones well because they are designed to handle voice instead of artificial sounds.

    In this scenario, setting this option to `true` does *not* ensure that DTMF tones get through. There is no solution to this particular scenario.

sipendpoint.system.dtmf.minimum_rfc2833_play_time

Default Value: `40`
Valid Values: Any positive integer value.
Changes take effect: When the application is started or restarted.

Description: Specifies the minimum play duration, in milliseconds, for DTMF tones.

sipendpoint.system.indialog_notify.enable_indialognotify

Default Value: `false`
Valid Values: `true`, `false`.
Changes take effect: When the application is started or restarted.

Description: Specifies whether `in-dialog Notify` is enabled.

sipendpoint.system.network.dtx_enabled

Default Value: `false`
Valid Values: `true`, `false`.
Changes take effect: When the application is started or restarted.

Description: Specifies whether Discontinuous Transmission (DTX) is enabled. If DTX is enabled, transmission to the remote party is suspended when the application detects that the local user is not speaking. If this option is set to `true`, DTX is enabled; and silence is not transmitted.

sipendpoint.system.qos.audio

Default Value: `""`
Valid Values: A valid QOS type.
Changes take effect: When the application is started or restarted.

Description: Specify the type of quality-of-service (QOS) that is supported for audio, and if supported, whether bandwidth is to be reserved.

sipendpoint.tuning.mixer.allow_master_volume_change

Default Value: `false`
Valid Values: `true`, `false`
Changes take effect: When the application is started or restarted.

Description: Specifies whether the master volume is set when the speaker volume is set (`true`) or the wave volume is set when the speaker volume is set (`false`).

Statistics

statistics.displayed-statistics

Default Value: `""`
Valid Values: A comma-separated list of Statistic names.
Changes take effect: When the application is started or restarted.

Description: Specifies the statistics that are displayed in the Contact Center Statistics tab. The statistics specified by this option match the names of the statistics defined in the options of the Application sections.

statistics.queues

Default Value: ""
Valid Values: A comma-separated list of queue identifiers in the following format: (`<queueNumber>@<switchName>`)
Changes take effect: When the application is started or restarted.

Description: Specifies the list of queues for which queue statistics are calculated. List of queues can be set through a variable: `$AGENT.LOGINQUEUE$` (the queue on which the agent logged in), `$AGENTGROUP.ORIGINATIONDNS$` (the queue that is set as the origination DN in the agent groups to which this agent belongs).

statistics.refresh-time

Default Value: `10`
Valid Values: An integer value greater than `0`.
Changes take effect: When the application is started or restarted.

Description: Defines the frequency of notification, in seconds, for statistics.

statistics.routing-points

Default Value: ""
Valid Values: A comma-separated list of Routing Point identifiers in the following format: (`<routingPointNumber>@<switchName>`)
Changes take effect: When the application is started or restarted.

Description: Specifies the list of routing points for which routing point statistics are calculated.

Team Communicator

teamcommunicator.contact-favorite-fields

Default Value: `Category,FirstName,LastName,PhoneNumber,EmailAddress`
Valid Values: A comma-separated list of values from the following list: `Contact,FirstName,LastName,PhoneNumber,EmailAddress`.
Changes take effect: When the application is started or restarted.

Description: The list of fields that are displayed to an agent when adding or editing a favorite that is created from a Contact.

teamcommunicator.custom-favorite-fields

Default Value: `Category,FirstName,LastName,PhoneNumber,EmailAddress`
Valid Values: A comma-separated list of values from the following list: `Category,FirstName,LastName,PhoneNumber,EmailAddress`.
Changes take effect: When the application is started or restarted.

Description: The list of fields that are displayed to an agent when adding or editing a favorite created from a typed phone number or e-mail address.

teamcommunicator.internal-favorite-fields

Default Value: `Category, DisplayName`
Valid Values: A comma-separated list of values from the following list: `Category, DisplayName`.
Changes take effect: When the application is started or restarted.

Description: The list of fields that are displayed to an agent when adding or editing a favorite that is created from a named resource.

teamcommunicator.list-filter-showing

Default Value: `Agent, AgentGroup, Skill, RoutingPoint, Queue, Contact`
Valid Values: A comma-separated list of values from the following list: `Agent, AgentGroup, Skill, RoutingPoint, Queue, Contact`
Changes take effect: When the application is started or restarted.

Description: Enables you to specify which categories are displayed in the Team Communicator search results. The value specifies the categories and the order in which they are displayed.

teamcommunicator.load-at-startup

Default Value: `true`
Valid Values: `true, false`
Changes take effect: When the application is started or restarted.

Description: Provides performance protection if you have a large number of agents that all login at the same time. Specifies whether all the configuration elements (`Agents`, `Agent Groups`, `Queues`, `Routing Points`, `Skills`) that are required by the Team Communicator are loaded at login. If set to `false`, the elements are not loaded at login; instead, they are loaded when the Team Communicator is used for the first time in the session.

teamcommunicator.max-suggestion-size

Default Value: `10`
Valid Values: An integer value from `1` through `50`.
Changes take effect: When the application is started or restarted.

Description: Maximum size of the suggestion list that is displayed while an agent is entering a contact or target name.

teamcommunicator.recent-max-records

Default Value: `10`
Valid Values: An integer value from `1` through `50`.
Changes take effect: When the application is started or restarted.

Description: The number of recent internal targets to display in the list of recent targets.

teamcommunicator.request-start-timer

Default Value: `300`
Valid Values: An integer value from `1` through `5000`.
Changes take effect: When the application is started or restarted.

Description: Request start timer wait interval, in milliseconds, between the last key pressed and the beginning of the search through the contact database.

Toast (Interactive Notification)

toast.window-title

Default Value: `($Contact.FirstName$ $Contact.LastName$|$Interaction.MainParty$) – $Window.Title$`
Valid Values: `$Window.Title$`, `$Agent.UserName$`, `$Agent.LastName$`, `$Agent.FirstName$`, `$Agent.EmployeeId$`, `$Interaction.CaseId$`, `$Interaction.Id$`, `$Contact.X$`, `$AttachedData.Y$`, `$Interaction.MainParty$`
Changes take effect: Immediately.

Description: Defines the title of the Interactive Notification window by specifying a string that contains the following field codes:
`$Window.Title$,$Agent.UserName$,$Agent.LastName$,$Agent.FirstName$,$Agent.EmployeeId$,$Interaction.CaseId$,$Interaction.Id$,$Interaction.MainParty$,$Contact.X$,$AttachedData.Y$`

Where `X` is the name of the contact attribute and `Y` is the name of the attached-data key.

If all field codes are empty, the following field codes are used:
`$Window.Title$ – $Interaction.MainParty$`

Voice

voice.auto-answer

Default Value: `false`
Valid Values: `true`, `false`
Changes take effect: When the application is started or restarted.

Description: Specify whether a voice interaction is automatically answered when a TServer Ringing event is received. This option can be overridden by a routing strategy as described in "Overriding Options by Using a Routing Strategy" on .

voice.mark-done-on-release

Default Value: `false`
Valid Values: `true`, `false`
Changes take effect: When the application is started or restarted.

Description: Specify if an interaction should be closed automatically if a TServer Release event is received. This option can be overridden by a routing

strategy as described in "Overriding Options by Using a Routing Strategy" on page 24.

voice.one-step-trsf-mode

Default Value: `default`
Valid Values: At least one item from the list: `default`, `single-step-transfer`, `mute-transfer`
Changes take effect: When the application is started or restarted.

Description: Specifies the type of one-step transfer. If you specify default, the default one step transfer type for your switch is applied. For a Lucent G3 switch, the default type is `mute-transfer`; for a SIP switch, the default type is `single-step-transfer`; for an Alcatel A4400 switch, the default type is `single-step-transfer`.

voice.ringing-bell

Default Value: `Sounds\Ring.mp3|10|-1`
Valid Values: Letters A to Z and a to z. Numbers 0 through 9. All special characters that are valid Windows file names.
Changes take effect: At the next interaction.

Description: Specify the voice channel ringing sound configuration string. For example: `Sounds\Ring.mp3|10|-1`

The value has three components that are separated by the character '|':

1. The file name and folder relative to the application folder.

2. The priority. The higher the integer the higher the priority.

3. The duration:
    a. `-1` means plays and repeats until an explicit message stops it. For example, the `established` event stops the ringing sound.
    b. `0` means play the whole sound one time.
    c. An integer > `0` means a time, in milliseconds, to play and repeat the sound.

Miscellaneous

application.available-layouts

Default Value: `main-window,gadget`
Valid Values: `main-window,gadget`
Changes take effect: When the application is started or restarted.

Description: Specifies whether the Main Window and/or the Gadget views are available on launch. If this option is left blank, neither view is accessible at launch time. The user will have to open the application from the system tray. The first item in the list defines the default view at the initial start up.

channel-information.window-title

Default Value: `$Window.Title$`
Valid Values:
`$Window.Title$,$Application.Title$,$Application.Name$,$Agent.UserName$,$Agent.LastName$,$Agent.FirstName$,$Agent.EmployeeId$`
Changes take effect: Immediately.

Description: Defines the title of the window that prompts for place and media login data that appears in the Windows Task Bar by specifying a string that contains the following field codes:
`$Window.Title$,$Application.Title$,$Application.Name$,$Agent.UserName$,`
`$Agent.LastName$,$Agent.FirstName$,$Agent.EmployeeId$`
If all field codes are empty, the following field codes are used:
`$Window.Title$`

general.gad.attached-data

Default Value: `false`
Valid Values: `true`, `false`
Changes take effect: At the next interaction.

Description: Specify whether attached data keys are added. If set to `true`, Interaction Workspace adds to the attached data the equivalent of `GAD Keys`. In the case where routing base is used, Interaction Workspace adds the following keys: `GD_TransferTargetType`, `GD_TransferTargetId`

options.record-option-locally-only

Default Value: `false`
Valid Values: `true`, `false`
Changes take effect: When the application is started or restarted.

Description: Specifies whether the display settings for the agent are stored locally or in the agent annex.

presence.evaluate-presence

Default Value: `true`
Valid Values: `true`, `false`
Changes take effect: Not applicable.

Description: Specify whether to evaluate presence or not. Set this option to `true` if presence has to be evaluated for agents, agent groups, queues, and Routing Points.

system-tray.tooltip

Default Value: `$Application.Title$`
Valid Values:
`$Window.Title$,$Application.Title$,$Application.Name$,$Agent.UserName$,$Agent.LastName$,$Agent.FirstName$,$Agent.EmployeeId$`
Changes take effect: When the application is started or restarted.

Description: Defines the tooltip of the Interaction Workspace system tray icon by specifying a string that contains the following field codes:

`$Window.Title$,$Application.Title$,$Application.Name$,$Agent.UserName$,$Agent.LastName$,$Agent.FirstName$,$Agent.EmployeeId$`

If all field codes are empty, the following field codes are used:

`$Window.Title$`

Section: queue-presence

error-level

Default Value: `10`
Valid Values: A positive integer or a double value.
Changes take effect: When application is started or restarted.

Description: The `queuePresenceErrorLevel` value. The value at which a statistic is considered as being at the upper threshold level.

statistic-name

Default Value: `CurrNumberWaitingCalls`
Valid Values: The name of a statistic server statistic queue.
Changes take effect: When application is started or restarted.

Description: The `queuePresenceStatisticName` value. The name of the statistic used to evaluate presence for queues.

statistic-text

Default Values: `interaction(s) waiting`
Valid Value: A short string.
Changes take effect: When application is started or restarted.

Description: The `queuePresenceStatisticText` value. The text that is displayed next to the statistic value.

warning-level

Default Value: `5`
Valid Values: A positive integer or a double value.
Changes take effect: When application is started or restarted.

Description: The `queuePresenceWarningLevel` value. The value at which a statistic is considered to be at the warning level.

Section: routing-point-presence

error-level

Default Value: `10`
Valid Values: A positive integer or a double value.
Changes take effect: When application is started or restarted.

Description: The `routingPointPresenceErrorLevel` value. The value at which the statistic is considered to be at error level.

statistic-name

Default Value: `CurrNumberWaitingCalls`
Valid Values: The name of a statistic server statistic queue.
Changes take effect: When application is started or restarted.

Description: The `routingPointPresenceStatisticName` value. The name of the statistic that is used to evaluate presence for queues.

statistic-text

Default Value: `interaction(s) waiting`
Valid Values: A short string.
Changes take effect: When application is started or restarted.

Description: The `routingPointPresenceStatisticText` value. The text that is displayed next to the statistic value.

warning-level

Default Value: `5`
Valid Values: A positive integer or a double value.
Changes take effect: When application is started or restarted.

Description: The `routingPointPresenceWarningLevel` value. The value at which a statistic is considered to be at the warning level.

Section: <KPI Name>

Each KPI that you want to define and use must have its own section defined in the Interaction Workspace Application object in the Configuration Database.

Note: KPIs are not part of the XML metadata file because they are not composed of fixed section names.

Defining a KPI Section
Use Genesys Administrator to define a new section at the level at which you want the KPI to be displayed. Use the KPI name as the name of the section.

Define the values that are to be displayed for the KPI as the Options and Values of the Section.

For example, for the `TotalTalkStatusTime` KPI, define a section that is named `TalkTime`, and then define a set of Options and specify values for those options. Table 15 provides a sample of Option names and values that you might define for this KPI.

Table 15: Sample Options and Values for the KPI Section

Option	Value
statistic-name	TotalTalkStatusTime
period	OneMinute
target-value	40
warning-level-low (optional)	
warning-level-high (optional)	
error-level-low (optional)	
error-level-high (optional)	
worst-value-low (optional)	0
worst-value-high (optional)	
weight	0.5
description	Total talk time for the agent
evaluation-display	Evaluation

Displaying KPIs   Interaction Workspace enables you to display the KPIs that you have defined on the Application object at one or more of the following levels:

- **Application level**—Display KPI to all agents.
- **Tenant level**—Display KPI to all the agents of the Tenant.
- **Agent Group level**—Display KPI to all the agents of the Agent Group.
- **Agent level**—Display KPI to the agent.

To display a KPI at a specific level, define and configure the `kpi.displayed-KPIs` option in the `interaction-workspace` section of the level. The value of this option is a comma-separated list of KPI sections that are to be displayed.

Setting the Warning, Error, and Worst Levels   Interaction Workspace provides eight non-mandatory options that you can use to define low and/or high levels of warning and error and low and/or high levels of worst values.

Some statistics are in an error state when they are below a certain value, while others are in an error state when they are above a certain value; for some statistics both a lower error threshold and a higher error threshold are required. The following non-mandatory options enable you to set a low and high threshold for a statistic:

- error-level-low—Values below this value are in an error state for the statistic.

- error-level-high—Values above this value are in an error state for the statistic.

Some statistics are in a warning state when they are below a certain value, while others are in a warning state when they are above a certain value; for some statistics both a lower warning threshold and a higher warning threshold are required. The following non-mandatory options enable you to set a low and high threshold for a statistic:

- warning-level-low—Values below this value are in a warning state for the statistic.

- warning-level-high—Values above this value are in a warning state for the statistic.

Use the error and warning options to specify ranges that are most suitable for the statistic.

Some statistics are performance based. The agent's result is compared to a target value to determine the agent's level of performance. Some statistics require a lower worst value and some require a higher worst value. For some statistics, both a lower and a higher worst value are required.

- worst-value-low—Values below this value result in a negative evaluation for the KPI.

- worst-value-high—Values above this value result in a negative evaluation for the KPI.

- target-value—The target value to be reached by the agent.

- evaluation-display—Specifies which value is displayed to the agent, a performance indicator or the raw statistic in the format of the statistic (for example, number, date, or percentage). If set to Result, the actual statistic value is displayed. If set to Evaluation, the performance of the agent is calculated by using the following formulae:

  If the statistic value is lower than the target value, the following evaluation is applied:

  Agent Performance = (Agent Result - worst-value-low) / (Target Value -worst-value-low) x 100

  or:

  If the statistic value is higher than the target value, the following evaluation is applied:

$$\text{Agent Performance} = (\texttt{worst-value-high} - \text{Agent Result}) / (\texttt{worst-value-high} - \text{Target Value}) \times 100$$

Section: <Object Statistic Name>

Each Object Statistic (contact-center statistic) that you want to define and use must have its own section defined in the Interaction Workspace Application object in the Configuration Database.

Note: Object Statistics are not part of the XML metadata file because they are not composed of fixed section names.

Defining a Object Statistic Section

Use Genesys Administrator to define a new section at the level at which you want the Object Statistic to be displayed. Use the Object Statistic name as the name of the section. Define the values that are to be displayed for the Object Statistic as the Options and Values of the section. Refer to Table 16 for a list of the mandatory and optional options that you can define for each Object Statistic.

Table 16: Mandatory and Optional Options for Object Statistics Section

Option	Value description	Mandatory
description	The value must be the display name for the statistic. It is displayed in the Interaction Workspace statistics list. If this option is not defined (empty), the value of the statistic-name option is displayed instead.	No
error-level-high	Values above this value result in an error state for the statistic.	No
error-level-low	Values below this value result in an error state for the statistic.	No
filter	The value must be the filter for the statistic calculation. This should correspond to an option name that is defined by the `Filters` section of Statistics Server.	No
long-description	The value must be a complete description of the statistic. It is displayed as a tooltip in the Interaction Workspace interface.	No

Table 16: Mandatory and Optional Options for Object Statistics Section (Continued)

Option	Value description	Mandatory

object-id	The value must be the ID of the object that requests this statistic.
	
	The format of a queue `object-id` is:
	
	    `<QueueName>@<SwitchName>`
	
	The format of a routing point `object-id` is:
	
	    `<RPName>@<SwitchName>`
		No

period	The value must be the period for the statistic calculation. This should correspond to an option name that is defined by the `TimeProfiles` section of Statistics Server.	No
refresh-time	The value must be the length of time, in seconds, between each update request from Statistics Server.	No
statistic-name	The value must be the name of the Statistic as defined in the Statistics Server options.	Yes
statistic-type	The value must be the type of the object—such as `Queue`, `RoutePoint`, or `GroupQueues`—as defined for the Object Statistic in Statistics Server.	Yes
time-range	The value must be the time range for the statistic calculation. This should correspond to an option name that is defined by the `TimeRanges` section of Statistics Server. Time ranges are used to calculate certain statistics such as those that specify a percentage.	No
time-range2	The value must be the secondary time range for the statistic calculation. This should correspond to an option name that is defined by the `TimeRanges` section of Statistics Server. Time ranges are used to calculate certain statistics such as those specify a percentage.	No
warning-level-high	Values above this value result in an error state for the statistic.	No
warning-level-low	Values below this value result in an error state for the statistic.	No

Setting the Warning and Error Levels

Interaction Workspace provides four non-mandatory options that you can use to define low and/or high levels of warning and error.

Some statistics are in an error state when they are below a certain value, while others are in an error state when they are above a certain value; for some statistics both a lower error threshold and a higher error threshold are required.

The following non-mandatory options enable you to set a low and high threshold for a statistic:

- `error-level-low`—Values below this value result in an error state for the statistic.

- `error-level-high`—Values above this value result in an error state for the statistic.

Some statistics are in a warning state when they are below a certain value, while others are in a warning state when they are above a certain value; for some statistics both a lower warning threshold and a higher warning threshold are required. The following non-mandatory options enable you to set a low and high threshold for a statistic:

- `warning-level-low`—Values below this value result in an error state for the statistic.

- `warning-level-high`—Values above this value result in an error state for the statistic.

Use the error and warning options to specify ranges that are most suitable for the statistic.

Displaying Object Statistics

Interaction Workspace enables you to display the Object Statistics that you have defined on the Application object at one or more of the following levels:

- **Application level**—Display Object Statistic to all agents
- **Tenant level**—Display Object Statistic to all the agents of the Tenant
- **Agent Group level**—Display Object Statistic to all the agents of the Agent Group
- **Agent level**—Display Object Statistic to the agent

To display an Object Statistic at a specific level, define and configure the `statistics.displayed-statistics` option in the `interaction-workspace` section of the level. The value of this option is a comma-separated list of Object Statistic sections that are to be displayed.

Figure 28 provides an example of a statistic section that is defined on the Interaction Workspace Application object.

**Figure 28: Sample section defined in Genesys Administrator for the Interaction Workspace
              Application object**

Role Privileges

In the privilege-based model that is implemented by Interaction Workspace, an agent is assigned privileges based on the role of the agent. Privileges are enabled or disabled depending on the role that is assigned to the agent. Privileges are assigned as configuration options in the `Role Privileges` tab of the Role object in Genesys Administrator (refer to the Procedure: Creating a Role, allowing an Interaction Workspace privilege, and assigning a Role to an agent or agent group, on page 103).

Refer to *Framework 8.0 Genesys Administrator Help* and *Genesys Security Guide* for detailed information on how to use Genesys Administrator and Management Framework to configure access permissions

Table 17 lists the voice privileges in the Interaction Workspace Voice Actions section of the `Role Privileges` tab that can be enabled for a role.

Table 17: Voice Privileges

Role privilege	Description
Can Answer Call	The agent can choose to answer a voice interaction that is routed to their desktop. Auto-answer is disabled.
Can Forward Call	The agent is permitted to forward voice interactions.
Can Hold/Retrieve Call	The agent is permitted to put voice interactions on hold and retrieve voice interactions that are on hold.
Can Make Call	The agent is permitted to call both internal targets and contacts.
Can Make Emergency Recording	The agent is permitted to perform an emergency recording of the call (this functionality is not available for all supported switches)
Can One Step Conference	The agent is permitted to start conferences without speaking with the target first.
Can One Step Transfer	The agent is permitted to transfer calls without speaking with the target first.
Can Reject Call	The agent can choose to reject a voice interaction that is routed to their desktop.
Can Release Call	The agent is permitted to end calls.
Can Send DTMF	The agent is permitted to attach DTMF to the call data.
Can Set Interaction Disposition	The agent is permitted to specify the call outcome by setting the disposition code.
Can Two Step Conference	The agent is permitted to contact and speak prior to starting a conference.
Can Two Step Transfer	The agent is permitted to contact and speak prior to transferring the voice interaction to the target.
Show Silent Monitoring	The agent is permitted to know when they are being silently monitored by a supervisor.
Voice Media	The agent is permitted to use the voice channel. The other voice privileges cannot be configured if the value is `Not Assigned`.

Table 18 lists the Interaction Workspace SIP Endpoint privileges in the Interaction Workspace SIP Tasks section of the Role Privileges tab that can be enabled for a role.

Table 18: SIP Endpoint Privileges

Role privilege	Description
Use SIP Endpoint	The agent is permitted to use the Interaction Workspace SIP Endpoint to connect to a SIP Switch or SIP Server.

Table 19 lists the IM privileges in the Interaction Workspace Instant Messaging Actions section of the Role Privileges tab that can be enabled for a role.

Table 19: IM Privileges

Role privilege	Description
Can Release IM	The agent is permitted to end Instant Messaging sessions.
Can Make IM	The agent is permitted to initiate Instant Messaging sessions.
Can Use IM	The agent is permitted to use the Instant Messaging media. The other IM privileges cannot be configured if the value is Not Assigned.

Table 20 lists the Statistics Access privileges in the Interaction Workspace Statistics Access section of the Role Privileges tab that can be enabled for a role.

Table 20: Statistics Access Privileges

Role privilege	Description
KPI module	The agent is permitted to use the My Statistics tab to view Key Performance Indicators.
Object Statistics module	The agent is permitted to use the Contact Center Statistics tab to view Object Metrics.
Gadget Statistics module	The agent is permitted to use the Statistics Gadget to view Key Performance Indicator and Contact Center Statistics.

Table 21 lists the Contact Management privileges in the Interaction Workspace Contact Actions section of the `Role Privileges` tab that can be enabled for a role.

Table 21: Contact Management Privileges

Role privilege	Description
Can Create Contact	The agent is permitted to create a new contact in the Universal Contact Server database.
Can Delete Contact	The agent is permitted to delete an existing contact from the Universal Contact Server database.
Can Mark Done Voice Interaction	The agent is permitted to mark an interaction as done.
Can Merge Contact	The agent is permitted to merge two contacts in the Universal Contact Server database.
Can Use Interaction Notepad	The agent is permitted to use the Notepad to view and edit notes that are included in the interaction.
Can Merge Interaction To Contact	The agent is permitted to merge interactions to an existing contact in the Universal Contact Server database.
Can Undo Merge Contact	The agent is permitted to unmerge a previously merged contact in the Universal Contact Server database.
Can Use Contact Directory	The agent is permitted to use the Contact Directory to view and manage contact information in the Universal Contact Server database.
Can Use Contact History	The agent is permitted to view and manage contact history.
Can Use Contact History CaseData	The agent is permitted to view and manage contact history case data.
Can Use Contact History Detail	The agent is permitted to view and manage contact history details.
Can Use Contact History Notepad	The agent is permitted to view and manage contact history notepad information.
Can Use Contact Information	The agent is permitted to view and manage contact information.
Can Use Contact my History	The agent is permitted to view and manage contact information for interactions that they have handled.

Table 21: Contact Management Privileges (Continued)

Role privilege	Description
Can Use Save Contact	The agent is permitted to update and save contact information.
Contact Module	The agent is permitted to perform contact management privileges. The other contact management privileges cannot be configured if the value is `Not Assigned`.

Table 22 lists the Team Communicator privileges in the Interaction Workspace Team Communicator section of the `Role Privileges` tab that can be enabled for a role.

Table 22: Team Communicator Privileges

Role privilege	Description
Team Communicator	The agent is permitted to use the Team Communicator. The other Team Communicator privileges cannot be configured if the value is `Not Assigned`.
Team Communicator - Can Manage Favorites	The agent is permitted to save favorite internal targets and contacts in the Team Communicator.
Team Communicator - Can View Favorites	The agent is permitted to see and use the favorite internal targets and contacts that they have saved in the Team Communicator.
Team Communicator - Can View Recent Calls	The agent is permitted to see and use the recent call list of internal targets and contacts that they have saved in the Team Communicator.

Table 23 lists the Team Communicator privileges in the Interaction Workspace Team Communicator section of the `Role Privileges` tab that can be enabled for a role.

Table 23: Broadcast Privileges

Role privilege	Description
Can Use Broadcast Message	The agent is permitted to receive and view broadcast messages.

Related Documentation Resources

The following resources provide additional information that is relevant to this software. Consult these additional resources as necessary.

Interaction Workspace

- The *Interaction Workspace 8.0 Developer's Guide,* which ships on the Genesys Documentation Library DVD and describes how to customize Interaction Workspace by using buttons, menus, and other features.

- Documentation about Tomcat, connectors, and other Apache components, which is available on the following Apache Foundation websites:
    - `http://www.apache.org`
    - `http://jakarta.apache.org` (for Apache Java-platform projects)

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

- The *eServices 8.0 Deployment Guide,* which introduces the architecture, required components, and procedures that are relevant to the deployment of a Genesys eServices (Multimedia) solution.

- The *Genesys 8.0 Security Deployment Guide* which describes Genesys security features and detailed instructions for deploying them. These features provide for secure data transfer between Genesys components, protection against unauthorized access, and protection against data loss in case of component failure.

Genesys

- *Genesys Technical Publications Glossary,* which ships on the Genesys Documentation Library DVD and which provides a comprehensive list of the Genesys and computer-telephony integration (CTI) terminology and acronyms used in this document.

- *Genesys Migration Guide*, which ships on the Genesys Documentation Library DVD, and which provides documented migration strategies for Genesys product releases. Contact Genesys Technical Support for more information.

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

Information about 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*

Consult these additional resources as necessary:

- *Genesys Hardware Sizing Guide,* which provides information about Genesys hardware sizing guidelines for the Genesys 8.x releases.

- *Genesys Interoperability Guide,* which provides information on the compatibility of Genesys products with various Configuration Layer Environments; Interoperability of Reporting Templates and Solutions; and Gplus Adapters Interoperability.

- *Genesys Licensing Guide,* which introduces you to the concepts, terminology, and procedures relevant to the Genesys licensing system.

For additional system-wide planning tools and information, see the release-specific listings of System Level Documents on the Genesys Technical Support website, accessible from the `system level documents by release` tab in the Knowledge Base `Browse Documents` Section.

Genesys product documentation is available on the:

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

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

Table 24: 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 190).	Please consult the *Genesys Migration Guide* for more information. Do *not* use this value for this option. A *customary and usual* practice is one that is widely accepted and used within a particular industry or profession. The formula, $x + 1 = 7$ where x stands for . . .

Table 24: Type Styles (Continued)

Type Style	Used For	Examples
Monospace font (Looks like `teletype` or `typewriter text`)	All programming identifiers and GUI elements. This convention includes: • The *names* 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]`
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. **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.	`smcp_server -host <confighost>`

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