Reporting and Analytics Aggregates 8.0

Deployment Guide

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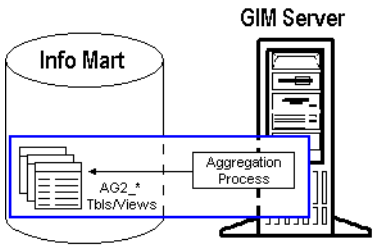
Preface

Welcome to the *Reporting and Analytics Aggregates 8.0 Deployment Guide.* This document introduces you to the configuration and installation procedures that are relevant to deployment the Genesys Info Mart (GIM) Aggregation Layer. This guide is valid only for the 8.0.*x* releases of Reporting and Analytics Aggregates.

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 starting on page 39.

About Reporting and Analytics Aggregates



Reporting and Analytics Aggregates

Reporting and Analytics Aggregates (RAA) 8.0 is an optional Genesys Info Mart process that GIM-only users can add to an existing GIM environment to create and populate predefined aggregation tables and views within an 8.0 Genesys Info Mart. This aggregation process is essential to Genesys Interactive Insights (GI2) environments and is silently deployed with each GI2 installation.

Note: To reiterate, if you intend to install Interactive Insights, you do not need to first install Reporting and Analytics Aggregates because the RAA installation package is already included within the Interactive Insights installation package.

Aggregation tables and views provide the metrics that summarize contact center activity by year, quarter, month, week, day, hour, and subhour to facilitate reporting. They serve as the primary source of data for the Genesys

Interactive Insights reports and universe. The tables are indexed for performance and conveniently grouped into distinct subject areas that are keyed to various Info Mart dimension tables.

Refer to the *Reporting and Analytics Aggregates 8.0 Reference Manual* for detailed information about the aggregate tables, views, indexes, and subject areas. Refer to the *Reporting and Analytics Aggregates 8.0 User's Guide* for instructions on how to run the aggregation process, how to customize it to aggregate user data, and to see business views of the subject areas.

Intended Audience

This guide serves primarily two audiences: namely, network, IT, and contact center administrators for:

- Genesys Info Mart
- Genesys Interactive Insights

> Note: Genesys provides Interactive Insights reports and universes for both GIM and intelligent Workload Distribution (iWD) data sources. RAA does not apply to iWD Data Mart users.

The guide assumes that both audiences have a basic understanding of:

- Computer-telephony integration (CTI) concepts, processes, terminology, and applications.
- Network design and operation.
- The administration and operation of your relational database management system (RDBMS).
- Your own network configurations.

Both audiences should also be familiar with Genesys Info Mart configuration. In addition, GIM-only users should be familiar with operation of the Genesys Info Mart Administration Console and general Genesys Info Mart functionality.

Chapter Summaries

In addition to this preface, this guide contains the following chapters:

- Chapter 1, "Installing Reporting and Analytics Aggregates," on page 9, describes how to install the stand-alone version of RAA.
- Chapter 2, "Post-Installation Setup," on page 13, describes how to import into your GIM application the configuration file that is deployed during installation and prepare the environment for aggregation.

- Chapter 3, "Fine-Tuning GIM Aggregation," on page 17, describes the configuration options that you can set to affect how data is aggregated.
- Chapter 4, "Aggregation Runtime Parameters," on page 29, describes the runtime parameters that you can issue from the command line, a batch file, or a shell script.
- Chapter 5, "Application Files," on page 33, describes the files that are deployed upon installation of RAA.
- Chapter 6, "Uninstalling Reporting and Analytics Aggregates," on page 35, describes how to uninstall an RAA installation, how to clean up aggregation-related database objects, and reconfigure your GIM application to prevent it from calling the aggregation process.

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New in this Release

This section describes the changes that have been incorporated within this guide since the 8.0.0 release of RAA:

- The `ojdbc5.jar` Oracle JDBC driver is no longer provided within the RAA installation package. If you want to run aggregation in autonomous mode, you must download this driver (version 11.2.x) and place it in the `..\agg\lib` subdirectory (see page 34). (Running aggregation in integrated mode relies on GIM-provided drivers so no additional setup is required.)

Other changes, describing the changes to database schema and hierarchies, are provided in the *Reporting and Analytics Aggregates 8.0 Reference Manual* and *Reporting and Analytics Aggregates8.0 User's Guide* respectively.

Chapter

1 Installing Reporting and Analytics Aggregates

No utility exists for the migration of Genesys Info Mart (GIM) 7.6 data to a GIM 8.0 environment—neither for the base fact or dimension tables nor for the aggregation tables. You must install RAA anew to use the aggregation process. All GIM 7.6 aggregation tables and most of their columns not only have been renamed in 8.0, but most column definitions have been expanded, new columns have been added, and some columns have been deleted altogether. The 7.6 aggregate tables, however, can coexist with 8.0.*x* aggregate tables within an 8.0 Info Mart, but the RAA aggregation engine does not populate the 7.6 tables.

This chapter contains the following sections:

Predeployment Considerations

There are no prerequisites for the installation Reporting and Analytics Aggregates (RAA)—other than it should be installed only on a supported platform where Genesys Info Mart has been installed. However, to run the aggregation process, the following conditions must be met:

- Genesys Info Mart 8.0 must be installed (or upgraded) on the target computer. (The *Genesys Info Mart 8.0 Deployment Guide* describes the installation of this product.)
- You must have administrative privileges on the target computer.
- You must have administrative access to Info Mart.
- You must know and have write access to the root directory of GIM.

- Info Mart must have adequate table space for the creation of the aggregate tables and the population of their data. (Refer to the *Genesys Info Mart Database Sizing Spreadsheet* to estimate the space that is required given the configuration of objects in your contact center and expected interaction flow activity.)

Installing the Aggregation Layer

You can install Reporting and Analytics Aggregates on UNIX and Microsoft Windows platforms. Refer to the *Genesys Supported Operating Environment Reference Manual* for a listing of the supported platforms.

After you have successfully installed RAA, perform the steps in the next chapter, beginning on page 13, to complete the setup for running the aggregation process.

On UNIX

1. From the RAA image, locate the `install.sh` shell script.
2. Run this script from the command line by typing: `sh install.sh`.
3. Specify the installation mode for aggregation: `GIM Plugin` or `Standalone`. This selection determines where the installation package will be deployed:
   - For `GIM Plugin`, the installer returns a listing of directories where GIM is installed. You must select one of these directories.
   - In `Standalone` mode, you have to freedom to specify any directory.
4. Specify the destination directory into which you want to deploy RAA.

As soon as the installation process completes, a message announces that installation was successful. The routine creates a subdirectory (named `agg`) in the current directory and places RAA files in it.

On Windows

1. From the RAA image, locate and invoke the `setup.exe` file.
2. At the `Welcome` screen click `Next`.
3. At the `Select Installed Application` screen, select the Genesys Info Mart application into which to deploy the RAA option. Click `Next` to proceed.
4. At the `Ready to Install` screen, click `Install`.

   The Wizard displays a progress-of-completion bar on the `Installation Status` screen while it copies the necessary files and registers dynamic-link libraries (DLLs).
5. At the `Installation Complete` screen, click `Finish`.

The Wizard creates a `Reporting and Analytics Aggregates` program group inside the `Genesys Solutions`, program group with one menu item: `ReadMe`—a shortcut to information about the RAA installation package. The Wizard also creates a subfolder inside the GIM root folder—named, `\agg`—and deploys RAA files therein.

Chapter

2 Post-Installation Setup

Following installation, there are two additional tasks that you must complete to ready your environment [whether it be a Genesys Info Mart (GIM)-only environment or an environment that contains both GIM and Genesys Interactive Insights (GI2)] for aggregation. This chapter describes these tasks and contains the following sections:

Preparing an Aggregation Environment

To avail the aggregation layer to the GIM Server, the files that are deployed by the Reporting and Analytics Aggregates (RAA) installation routine must be positioned within the Genesys Info Mart root folder and the `GIM_EXT_LIBS` environment variable must be set to point to the aggregation Java archive (if it is not already set). Both GIM and GI2 audiences must perform these actions. (Aggregation becomes seamless for GI2 users only after all setup has been completed and aggregation starts for the first time.)

1. From the appropriate directory, either:
   - The Interactive Insights root directory
   - The RAA root directory

   move the `\agg` subdirectory and its contents to the GIM installation root directory, if it does not already exist there.

   Note: The aggregation process can function from other than GIM's root directory. However, to facilitate troubleshooting, Genesys recommends that it be positioned there. The remaining preparatory steps presume this location.

2. (Windows only) From the GIM root directory, open the `gim_etl_paths.bat` batch file and add the following line to the bottom of the section that sets the `GIM_EXT_LIBS` environment variable, if it is not already present:

   ```
   set GIM_EXT_LIBS=%GIM_EXT_LIBS%;./agg/GIMAgg.jar
   ```

   Close and save the file.

   Note: `gim_etl_paths.bat` is deployed by the GIM installation routine.

3. (UNIX only) From the GIM root directory, open the `gim_etl_paths` file and add the following line to the bottom of the section that sets the `GIM_EXT_LIBS` environment variable, if it is not already present:

   ```
   GIM_EXT_LIBS="${GIM_EXT_LIBS}:./agg/GIMAgg.jar"
   ```

   Close and save the file.

   Note: The `gim_etl_paths` file is deployed by the GIM installation routine.

4. Restart the GIM application so that it picks up environment changes and is aware of the `GIMAgg.jar` archive.

Importing RAA Options

The RAA installation routine deploys a configuration file—`gim_agg_application_options.cfg`—to the `\agg` subdirectory. This file contains the requisite configuration sections and options for running the aggregation process. This file also supplies default values for those options. The descriptions of all options in this file, and their defaults, are described in Chapter 3 beginning on page 17.

Within Configuration Manager, you can import the contents of this file into an existing Genesys Info Mart application to engage the aggregation process. When they are imported, the values of options in the configuration file might overwrite those that might already be set in your GIM `Application` object. Before you execute the following procedure to import the options, study the differences so that your application will continue to behave as expected after importation.

1. Within Configuration Manager, open the application properties of the targeted GIM application and click `Export to Configuration File` so that you have a backup of your current configuration. Save the file to a location of your choosing.
2. Click the `Import from Configuration File` button and navigate to the `\agg` subdirectory.
3. Select `gim_agg_application_options.cfg` and click `Open`.
4. When Configuration Manager prompts you to overwrite the existing configuration, click `No`.

Selecting No enables Configuration Manager to import the sections and options that are defined in the configuration file such that they coexist with the current configuration. (Selecting Yes will wipe out the current configuration and replace it with the contents of the imported file.)

Note: The gim_agg_application_options.cfg file does not contain the full default GIM configuration that is offered by the Genesys Info Mart application template. gim_agg_application_options.cfg contains only a small subset of options that are required for running the aggregation process.

5. Where the same options exist in both the configuration file and the current configuration, and where the values of these options differ, Configuration Manager prompts you to choose the preferred value, as shown in Figure 1. Click Yes or No, as appropriate.

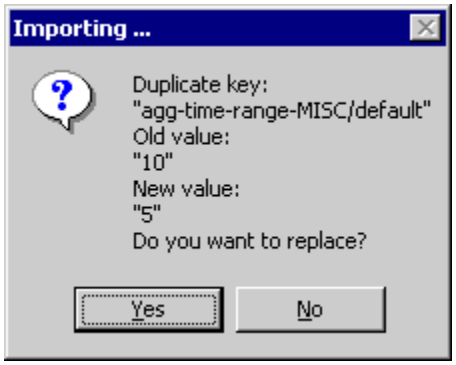

Figure 1: Resolving Differing Values in Configuration

6. After you have resolved differences in configuration-option values, select OK to save the configuration and close the application's properties.

The options are now defined within your GIM application and will take effect during the next run of the appropriate GIM job. (The moment at which changes take effect is described for each option in Chapter 3.) To tailor the speed-of-accept, abandon-delay, and short-talk thresholds or other aggregation-related options, fine-tune the configuration as described in Chapter 3.

Setting Up Attached Data

If you have configured custom dimensions in Info Mart that you want the aggregation process to recognize during aggregations, you must set up the user-data-map.ss file, which the aggregation process recognizes, and place it in the GIM root folder.

The format of this file is described in the *Reporting and Analytics Aggregates 8.0 User's Guide*. This file maps the provided user data fields, USER_DATA_KEY1 and USER_DATA_KEY2, in the H_AGENT, H_AGENT_CAMPAIGN, H_AGENT_QUEUE,

H_CAMPAIGN, and H_ID hierarchies to your custom dimensions. Refer also to this document for a description of these hierarchies.

Automatic Database Setup

In and of itself, the process of running the aggregation process creates all aggregation tables and views in Info Mart. All supporting database objects, including the internal queue of to-be-aggregated data (PENDING_AGR), are also created. Furthermore, the aggregation engine creates new columns, as needed, on the fly, for any new measures that might be introduced in future releases and hot fixes.

In autonomous mode, you invoke the aggregation process as described in the *Reporting and Analytics Aggregates 8.0 User's Guide.* In integrated mode, you invoke the aggregation process from the Genesys Info Mart Administration Console, which is described in the *Genesys Info Mart 8.0 Operations Guide.* The modes of operation for the aggregation process are described in the former document.

Chapter

3 Fine-Tuning GIM Aggregation

This chapter describes the options that you can configure within a Genesys Info Mart (GIM) application to affect whether the aggregation process is run, and when it starts and stops, and to tailor the time-range boundaries that determine how data is grouped before it is aggregated. Options that belong to configuration sections that are prefaced with `[agg-...]` are unique to Reporting and Analytics Aggregates (RAA) and are not described elsewhere. Descriptions of other options on whose values the aggregation process depends are repeated in this chapter both for completeness and because RAA default values might differ from those that are described in the *Genesys Info Mart 8.0 Deployment Guide*.

RAA default values reflect those that are in effect when the `gim_agg_application_options.cfg` configuration file has been imported to the GIM application. (This procedure was described in section "Importing RAA Options" on page 14.) A GIM application without such configuration might have different defaults. Refer to the *Genesys Info Mart 8.0 Deployment Guide* for GIM-assigned default values.

`Note:` Default values do not reflect how the GIM application behaves when options are altogether absent from configuration.

This chapter contains the following sections:

- Date-and-Time Section, page 26

The names of all configuration sections, options, and their values are case sensitive.

Note: The aggregation process overlooks the values of some options that are defined in the GIM application if the process is invoked in autonomous mode and the specified runtime parameters indicate different values. Refer to the *Reporting and Analytics Aggregates 8.0 User's Guide* for a discussion of the different modes of running aggregation and to Chapter 4, beginning on page 29, for a listing and description of runtime parameters.

ETL Section

The ETL section of a GIM application provides options for you to configure the extraction, transformation, and loading (ETL) of data. This section also defines the location of the aggregation engine and must be named `[gim-etl]`. Table 1 describes the one option in this section that is related to aggregation. Other options that are available in this section are described in the *Genesys Info Mart 8.0 Deployment Guide.*

Table 1: ETL Configuration Option for Aggregation

Option	Description
aggregation-engine-class-name	Specifies the name of the Java class that controls the aggregation process. This value must be set to `GIMAgg.GimInterfaceImpl.AggregationImpl` to enable aggregation. Default Value: `GIMAgg.GimInterfaceImpl.AggregationImpl` Valid Values: `GIMAgg.GimInterfaceImpl.AggregationImpl, none` Changes Take Effect: At the next run of `Job_MaintainGIM`. **Note:** GIM jobs are described in the *Genesys Info Mart 8.0 Operations Guide.*

Schedule Section

The schedule section of a GIM application provides options for scheduling the extraction, transformation, loading, and aggregation of data. This section must be named `[schedule]`. Table 2 describes only those scheduling options that are related to the aggregation process. Other options available in this section, such as those for ETL, are described in the *Genesys Info Mart 8.0 Deployment Guide.*

Table 2: Scheduling Configuration Options for GIM Aggregation

Option	Description
run-scheduler	Specifies whether to stop or start the scheduler. If the scheduler is currently scheduling jobs, and this option is set to `false`, the scheduler pauses. If the option is set to `true`, the scheduler resumes at the point at which it stopped. Default Value: `true` Valid Values: `true, false` Changes Take Effect: Immediately
run-aggregates	Specifies whether to start the aggregation process at the scheduled time (as determined by the `aggregate-schedule` option). The `run-scheduler` configuration option must be set to `true` for the aggregation process to be invoked. Default Value: `true` Valid Values: `true, false` Changes Take Effect: Immediately
aggregate-duration	Specifies the length of time that the aggregation process will run after it is launched by the scheduler. Both the `run-aggregates` and `run-scheduler` configuration options must be set to `true`, and the `aggregate-schedule` must be appropriately set. **Note:** To run continuous aggregation and not have the aggregation process terminate for any period of time, in concert with appropriately setting the aforementioned options, set this option's value to `23:59`. Default Value: `22:30` (22.5 hours) Valid Values: *HH*:*mm* where *HH* and *mm* represent the number of hours (`0`–`23`) and minutes (`0`–`59`) Changes Take Effect: Immediately
aggregate-schedule	When the `run-aggregates` configuration option is set to `true`, this option specifies the schedule that determines when the aggregation process will start. Default Value: `0 1` (once a day starting at 1:00 am) Valid Values: Valid CRON expression of two fields (see Examples below) Changes Take Effect: Immediately **Note:** To run continuous aggregation and not have the aggregation process terminate for any period of time, in concert with appropriately setting the `aggregate-duration` option, set this option's value to `0 0`. Examples: • A value of `0 0` launches the aggregation process once a day at 00:00. • `0 0,3/2` launches aggregate process once a day at 00:00, 03:00, and every 2 hours thereafter.

Aggregate Section

The aggregate section of a GIM application defines the general behavior of the aggregation process affecting all aggregation tables. This section must be named `[agg]`. Table 3 describes this section's configuration options.

Table 3: Configuration Options of the Aggregate Section

Option	Description
level-of-log	Specifies the detailed level of log messages that GIM Server generates for aggregation-relate activity. Default Value: `.:INFO` Valid Values: `[`*`category`*`]:[<`*`value`*`>][,`*`category`*`:[<`*`value`*`>]...]` where *`category`* is "`.`" (for the root logging category) or "`AGG`" and *`value`* corresponds to the desired level of information: `SEVERE`—GIM Server logs only severe messages from the corresponding category. `WARNING`—GIM Server logs severe and warning messages. `INFO`—GIM Server logs severe, warning, and informational messages. `CONFIG`—GIM Server logs severe, warning, informational, and configuration messages. `FINE`—Same as `CONFIG` plus an even finer level of messages. `FINER`—Same as `FINE` plus an even finer level of messages. `FINEST`—Same as `FINER` plus an even finer level of messages. `ALL`—GIM Server logs all messages. `OFF`—GIM Server logs no messages from the corresponding category. The higher the `value`, the greater the detail that GIM Server logs. When you specify no value, GIM Server uses `INFO`.
number-of-writers	Specifies the number of threads that the aggregation process dedicates to writing chunks of data to Info Mart. Each thread opens one connection to Info Mart. Upon startup, connections are opened, and aggregation jobs are dynamically assigned to these connections. If your environment uses high-performance RDBMSs, you might notice performance improvements when you increase the value of this option. Default Value: `5` Valid Values: `1–16` Changes Take Effect: Upon restart of the aggregation process

Table 3: Configuration Options of the Aggregate Section (Continued)

Option	Description
sub-hour-interval	Specifies the lowest time level of aggregation, in minutes, for the `AG2_*_SUBHR` tables. **Warning:** You must choose a value for this option before the aggregation engine writes subhour data to the subhour aggregation tables (for example, `AG2_I_AGENT_SUBHR`) and avoid changing it afterwards. Otherwise, aggregation results will be difficult to interpret. If data has been written to the subhour tables, you must stop aggregation and purge all subhour aggregation tables (`*_SUBHR`) of all data before resetting this option's value. In addition, if it is necessary to have data for the period of time that data was purged, you must rerun aggregation for that period. Default Value: `30min` Valid Values: `15min, 30min` Changes Take Effect: On the next start of the GIM Server **Note:** Out of the box, the Interactive Insights reports, require that this value be set to `30min`. Refer to "Using 15-Minute Aggregation" in the *Genesys Interactive Insights 8.0 User's Guide* for instructions on how to customize the Interactive Insights reports reports, so that they use a 15-minute value.

Populate Aggregates Section

The populate aggregates section of a GIM application defines which aggregate tables the aggregation process populates for each tenant. The default behavior is that the aggregation process populates all aggregation hierarchies. This section must be named `[agg-populate-disable]`. Table 4 describes this section's configuration options.

Table 4: Configuration Options for Populating Aggregate Data

Option	Description
default	Specifies which hierarchies the aggregation process excludes from aggregation. By default, the aggregation process populates data for all hierarchies in the aggregate (`AG2_*`) tables. Default Value: No value specified Valid Values: Comma-separated list containing one or more of the following or no value at all: `H_AGENT, H_AGENT_GRP, H_AGENT_QUEUE, H_ID, H_I_AGENT, H_I_SESS_STATE, H_I_STATE_RSN, H_QUEUE, H_QUEUE_ABN, H_QUEUE_ACC_AGENT, H_QUEUE_GRP` Changes Take Effect: Upon start of the next aggregation cycle

Table 4: Configuration Options for Populating Aggregate Data (Continued)

Option	Description
default (continued)	Some hierarchies, such as `H_AGENT_GRP`, are populated by using data from other hierarchies. So, for example, if you specify a value of `H_AGENT` only for this option, the aggregation process will not populate the `H_AGENT_GRP` hierarchy, even though it was not specified. For more information about hierarchies, their interrelationships, and the aggregate tables to which data is written, refer to the *Reporting and Analytics Aggregates 8.0 User's Guide.*

Abandon Time Ranges Section

The abandon time ranges section of a GIM application provides options for you to configure up to 19 thresholds for classifying, by tenant, when interactions are abandoned. This section must be named `[agg-time-range-ABN]`. Table 5 describes this section's configuration options.

Table 5: Thresholds for Classifying Abandoned Interactions

Option	Description
default	Specifies up to 19 thresholds for the time, in seconds, that interactions are abandoned. This option controls what data the aggregation process writes to the `ABANDONED_STI` columns of the `AG2_QUEUE_ABN_*` aggregate tables. (Refer to the *Reporting and Analytics Aggregates Reference Manual* for information about this group of tables.) Default Value: `5,15,30,45,60,90,120,180,240,3600,7200,14400, 28800,43200,57600,72000,86400,172800,259200` Valid Values: `a,b,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,r,s` (19 integers) where each letter represents an integer from `0` to 2^{31}`-1` and the sequence must increase monotonically. Changes Take Effect: Upon start of the next aggregation cycle To illustrate, interactions are attributed to the `ABANDONED_STI_1` column if the amount of time that elapsed before the interactions were abandoned, x_i, falls within the first bucket: `0 <` x_i `<= 1stThreshold`, where `1stThreshold`, by default, is `5` seconds (and `i` represents a specific interaction) Interactions are attributed to the `ABANDONED_STI_18` column if they were abandoned within the 18th bucket, which is defined, by default, as: `86400 <` x_i `<= 172800` And, `ABANDONED_STI_20` receives the tally of all interactions that were abandoned beyond the 19th threshold (`259200` seconds or 3 days, by default).

Table 5: Thresholds for Classifying Abandoned Interactions (Continued)

Option	Description
default (continued)	If you specify fewer than 19 thresholds, the aggregation process internally supplies values of `0` for the unspecified thresholds—that is: `5,15,30` is equivalent to `5,15,30,0,0,0,0,0,0,0,0,0,0,0,0,0,0.` **Note:** This option's value is not applied to previously calculated aggregates, unless reaggregation for the reporting interval is performed.
name	Specifies an extended description or type of time range. This field could be useful in locales in which time-range code is not sufficiently descriptive. Default Value: `Abandoned` Valid Values: Any text string Changes Take Effect: Upon the next run of aggregation **Note:** The GIM Server recognizes other types of time ranges that are defined in other sections. Refer to the `name` option of the `[agg-time-range-ACC]` and `[agg-time-range-MISC]` sections for additional information.
tenant-<*tenantID*>	Specifies up to 19 thresholds (alike the `default` option that is described immediately above) of interaction-abandon times, in seconds, for the tenant that is identified by the number portion of the name of this option, *<tenantID>.* This number must correspond to the ID that is defined in Info Mart for the intended tenant and the option name must follow the naming convention of "`tenant`"+ "–" + *tenantID.* Default Value: Refer to the default value of the `default` option. Valid Values: Refer to the valid values of the `default` option. Changes Take Effect: Upon the next run of aggregation. If specified, this option's value overrides values that are specified by the `default` option.

First-Response Thresholds Section

The first-response time-range section of a GIM application provides options for you to configure up to 19 thresholds for classifying agent-response times for the first handling of interactions by tenant. This section must be named `[agg-time-range-ACC]`. Table 6 describes this section's configuration options.

Table 6: Thresholds for Classifying First-Response Times

Option	Description

default	Specifies up to 19 thresholds of agent-response times, in seconds, for the first-handling of contact center interactions. This option controls what data the aggregation process writes to the `ACCEPTED_AGENT_STI` columns of the `AG2_QUEUE_ACC_AGENT_*` aggregate tables. (Refer to the *Reporting and Analytics Aggregates Reference Manual* for information about this group of tables.)
	Default Value: `5,15,30,45,60,90,120,180,240,3600,7200,14400, 28800,43200,57600,72000,86400,172800,259200`
	Valid Values: `a,b,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,r,s` where each letter represents an integer from `0` to 2^{31}`-1` and the sequence must increase monotonically.
	Changes Take Effect: Upon start of the next aggregation cycle
	To illustrate, interactions are attributed to the `ACCEPTED_AGENT_STI_1` column if the agent's response times, x_a, for the interactions fall within the first bucket:
	`0 <` x_a `<= 1stThreshold,` where `1stThreshold,` by default, is `5` seconds (and `a` represents a specific agent).
	Interactions are attributed to the `ACCEPTED_AGENT_STI_9` column if the agent's response times fall within the 9th bucket, which is defined, by default, as:
	`180 <` x_a `<= 240`
	And `ACCEPTED_AGENT_STI_20` receives the tally of all interactions in which agents respond beyond the 19th threshold (`259200` seconds or 3 days, by default).
	If you specify fewer than 19 thresholds, the aggregation process internally supplies values of `0` for the unspecified thresholds—that is:
	`5,15,30` is equivalent to `5,15,30,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.`
	Note: This option's value is not applied to previously calculated aggregates, unless reaggregation for the reporting interval is performed.

name	Specifies the type of time range. This field could be useful in locales where time range code is not sufficiently descriptive. Default Value: `Accepted` Valid Values: Any text string Changes Take Effect: Upon start of the next aggregation cycle **Note:** The GIM Server recognizes other types of time ranges that are defined in other sections. Refer to the `name` option of the `[agg-time-range-ABN]` and `[agg-time-range-MISC]` sections for additional information.

Table 6: Thresholds for Classifying First-Response Times (Continued)

Option	Description
tenant-<*tenantID*>	Specifies up to 19 thresholds (alike the `default` option that is described immediately above) of agent-response times, in seconds, for the first handling of contact center interactions for the tenant that is identified by the number portion of the name of this option, *<tenantID>.* This number must correspond to the ID that is defined in Info Mart for the intended tenant and the option name must follow the naming convention of "`tenant`"+ "–" + *tenantID.* Default Value: Refer to the default value of the `default` option. Valid Values: Refer to the valid values of the `default` option. Changes Take Effect: Upon the next run of aggregation. If specified, this option's value overrides values that are specified by the `default` option.

Miscellaneous Time Ranges Section

The miscellaneous time ranges section of a GIM application provides options for you to configure short-engagement (or short-talk) thresholds for each tenant. This section must be named `[agg-time-range-MISC]`. Table 7 describes this section's configuration options.

Table 7: Miscellaneous Thresholds for Classifying Interactions

Option	Description
default	Specifies one threshold that defines the amount of time, in seconds, in which the useful exchange of information with customers (for those interactions that an agent accepts) could not have taken place, such as when an agent accepts and then immediately releases the interaction—whether intentionally or not. This option controls what data the aggregation process writes to the `SHORT` column of the `AG2_AGENT_*` aggregate tables. (Refer to the *Reporting and Analytics Aggregates Reference Manual* for information about this group of tables.) Default Value: `5` Valid Values: `0` – 2^{31}`-1` Changes Take Effect: Upon start of the next aggregation cycle **Notes:** Alike the `default` option in the `[agg-time-range-ABN]` and `[agg-time-range-ACC]` sections, this option actually enables the configuration of up to 19 thresholds; however, for the initial 8.0 release, no aggregates use the 2nd through 19th thresholds. This option's value is not applied to previously calculated aggregates, unless reaggregation for the reporting interval is performed.

Table 7: Miscellaneous Thresholds for Classifying Interactions (Continued)

Option	Description
name	Specifies the type of time range. This field could be useful in locales where time range code is not sufficiently descriptive. Default Value: `Miscellaneous` Valid Value: Any text string Changes Take Effect: Upon start of the next aggregation cycle **Note:** The GIM Server recognizes other types of time ranges that are defined in other sections. Refer to the `name` option of the `[agg-time-range-ABN]` and `[agg-time-range-ACC]` sections for additional information.
tenant-<*tenantID*>	Specifies one short-engagement threshold (alike the `default` option described immediately above) for the tenant that is identified by the number portion of the name of this option, *<tenantID>.* This number must correspond to the ID that is defined in Info Mart for the intended tenant and the option name must follow the naming convention of "`tenant`"+ "–" + *tenantID.* Default Value: Refer to the default value of the `default` option. Valid Values: Refer to the valid values of the `default` option. Changes Take Effect: Upon the next run of aggregation. If specified, this option's value overrides values that are specified by the `default` option.

Date-and-Time Section

The date-and-time section of a GIM application provides options that instruct how the GIM Server should populate and maintain data in the `DATE_TIME` and custom-calendar tables. With respect to aggregation, this section must be named `[date-time]` although this section, nor any of its options, appear in the configuration file. Custom calendars can be defined within other user-defined sections; however, the aggregation process does not recognize them.

`Note:` In relation to aggregation, the default settings for options in this section rely on simple-week numbering, which facilitates rollups of week results to annual results for custom reports. (Of the reports that are provided by Interactive Insights, none provides results aggregated by week.) Such settings are not ISO 8601-compliant. Refer to the *Genesys Info Mart 8.0 Deployment Guide* for descriptions of `date-time` options and examples on how to set them to be compliant with ISO 8601 standards.

Changing DATE_TIME Options

Runtime changes that you make to DATE_TIME configuration options—or changes that you make to these options after Info Mart initialization—can have a detrimental impact on report results. For instance, if you change the time zone option, date-time-tz, the reports can mix the results displaying data from different time zones within the same reporting interval, depending on when the option change occurred. To properly effect date-time configuration-option changes, change must be propagated beyond configuration-option settings—namely, data in the aggregation tables should be re-aggregated as well.

Here is the suggested procedure for changing date-time configuration options after Info Mart has been initialized. This procedure applies for all except the date-time-min-days-ahead and date-time-max-days-ahead options:

1. Stop aggregation. (Refer to "Stopping the Aggregation Process" in the *Reporting and Analytics Aggregates 8.0 User's Guide.*)
2. Within Configuration Manager, set date-time configuration options as desired.
3. Purge all records from the DATE_TIME table.
4. Run Job_MaintainGIM. (This job is described in the *Genesys Info Mart 8.0 Operations Guide.*)
5. Run re-aggregation in autonomous mode over the desired reporting interval. (This is described in "Re-aggregating Data over a Certain Time Range" section in the *Reporting and Analytics Aggregates 8.0 User's Guide.*)

Once re-aggregation completes, report results will conform.

Chapter

4 Aggregation Runtime Parameters

In addition to the values of configuration options that are set within the GIM application, you can affect how the aggregation engine operates by specifying certain runtime parameters when the aggregation engine is invoked manually or via a batch or shell script. Invoking the aggregation engine from the command line follows this format:

`java -jar agg/GIMAgg.jar -user=<dbo> -pass=<password> -jdbcurl=<URL> <OtherParams>` on UNIX platforms

or

`java -jar agg\GIMAgg.jar -user=<dbo> -pass=<password> -jdbcurl=<URL> <OtherParams>` on Microsoft Windows platforms

A hyphen (–) precedes each parameter. Refer to Table 8 for a description of these parameters. The options use camel case and are optional unless otherwise specified. Invoking aggregation is discussed further in the *Reporting and Analytics Aggregates User's Guide.*

Note: The values of the runtime parameters described in this chapter supersede the values of configuration options that are set within the GIM `Application` object in Configuration Manager.

Table 8: Aggregation Runtime Parameters

Runtime Parameter	Description
conf	Specifies the file name from which the aggregation engine reads parameter values that are not specified at the command line. Precede this file with a relative path or absolute path, if the file is not located in the same directory as the aggregation jar archive. If absent, the aggregation engine uses only those parameters that are issued at the command line. For example: `java -jar agg/GIMAgg.jar -conf runagg`

insertPendingAggRaw	Submits a request to run the aggregation engine over the specified time period at some later time. The value for this parameter must follows this format:
	`-insertPendingAggRaw ALLTENANTS:ALLSETS:<`*`start_key`*`>:<`*`end_key`*`>`
	where:
	<*start_key*> is a DATE_TIME_KEY value from DATE_TIME table that indicates the beginning of the reporting interval.
	<*end_key*> is a DATE_TIME_KEY value from DATE_TIME table that indicates the end of the reporting interval.
	For example:
	`... -insertPendingAggRaw ALLTENANTS:ALLSETS:1256084100:1259748000`
	Refer to the *Reporting and Analytics Aggregates 8.0 User's Guide* for guidance on how to determine start and end time keys.

insertTimeRange	Specifies the boundaries for the specified tenant of the time ranges that are used in conjunction with the `Speed of Accept` and `Abandon Delay` Interactive Insights reports. The value for this parameter follows this format:
	`-insertTimeRange <`*`TENANT`*`>:<RANGE_TYPE_CODE>:<RANGE_TYPE>:`
	`<BOUND1>:<BOUND2>:. . .:<BOUND19>`
	where:
	<TENANT> is the tenant's ID as recorded within Info Mart or the phrase ALLTENANTS, which indicates that the defined ranges apply to all tenants.
	<RANGE_TYPE_CODE> is one of the following:
	ABN, for abandon-delay time ranges
	ACC, for speed-of-accept time ranges
	MISC, for some other time range
	<RANGE_TYPE> is one of the following and corresponds to the range-type code that is specified above:
	Abandoned
	Accepted
	Miscellaneous

Table 8: Aggregation Runtime Parameters (Continued)

Runtime Parameter	Description
insertTimeRange (continued)	<BOUND1> is the inclusive upper boundary of the first time range. <BOUND2> is the inclusive upper boundary of the second time range. .... <BOUND19> is the inclusive upper boundary of the nineteenth time range. The values that are set by this runtime parameter override the values that are set by the default configuration options in the [agg-time-range-ABN], [agg-time-range-ACC], and [agg-time-range-MISC] configuration sections. For example: `... -insertTimeRange ALLTENANTS:ABN:Abandoned:30:60:90`
jdbcurl	Specifies the string that is sent to the JDBC driver to indicate the database that the Genesys Info Mart server is to use. Specifying this parameter is mandatory, and it must be formatted as follows: • `jdbcurl=oracle:thin:@<`*`dbhost`*`>:<`*`dbport`*`>:<`*`SID`*`>` (for Oracle) • `jdbcurl=jtds:sqlserver://<`*`dbhost`*`>:<`*`dbport`*`>;DatabaseName=<`*`dbname`*`>` (for Microsoft SQL Server)
levelOfLog	Specifies the detailed level of log messages that GIM Server generates for aggregation-related activity. For example: `... -levelOfLog=.:FINE` Refer to the level-of-log option on page 20 for additional information.
numberOfWriters	Specifies the number of threads up to five that the aggregation process dedicates to writing data chunks to Info Mart. Each thread opens one connection to Info Mart. Upon startup connections are opened, and aggregation jobs are dynamically assigned to these connections. If your environment uses high-performance RDBMSs, you might notice performance improvements when you increase the value of this option. Refer to the number-of-writers option on page 20 for additional information.
pass	Unencrypted password of the database owner. Specifying this parameter is mandatory. For example: `java -jar agg/GIMAgg.jar -user=Administrator -pass=$y5t3m`

Table 8: Aggregation Runtime Parameters (Continued)

Runtime Parameter	Description
subHourInterval	Specifies the lowest time level of aggregation, in minutes, for the `AG2_*_SUBHR` tables. You must choose a value for this option at deployment and avoid changing it afterwards. The value for this parameter is either `15min` or `30min`. For example: `... -subHourInterval 15min` Refer to the `sub-hour-interval` option on page 21 for additional information.
updateAliases	Specifies the name of the file that defines which tenants map to which tenant accounts. Using tenant aliases enables automated maintenance of aliases in all configured tenant accounts. Precede this file by a relative path or absolute path if the file is not located in the same directory as the aggregation jar archive. The aggregation module only maintains those tables and views that are related to aggregation. You must run an alias update each time a tenant is added or removed from configuration or the definition of any of the aggregates changes. For example: `java -jar agg/GIMAgg.jar -conf runagg -updateAliases AliasFile` The *Reporting and Analytics Aggregates 8.0 User's Guide* describes how to format the alias mapping file.
user	Account name of the database owner. Specifying this parameter is mandatory. For example: `java -jar agg/GIMAgg.jar -user=Administrator -pass=$y5t3m`

Chapter

5 Application Files

The Genesys Interactive Insights installation routine automatically and silently deploys the aggregation layer for use by the Interactive Insights universe and reports. Files from this installation are deployed to the `\agg` subdirectory of the Interactive Insights root directory. For a Reporting and Analytics Aggregates (RAA) standalone installation, files are written to the `\agg` subdirectory of the GIM root folder on Microsoft Windows platforms and to the supplied directory on UNIX platforms.

Table 9 describes the contents of the root folder when RAAs is installed as a stand-alone application. Table 10 describes the contents of the `\agg` subfolder. Table 11 describes the one subfolder of the `\agg` folder—`\lib`—and its contents.

Table 9: Contents of the Root Folder

File Name	Description
`agg`	Subfolder that contains files that support the Reporting and Analytics Aggregates (RAA) 8.0 component of Genesys Info Mart
ip_description.xml* (Unix only)	File that lists the contents of the installation package
ospatchlist.txt	List of patches installed to Unix hosts.
read_me.html* (Unix only)	File that contains general information about the installation package

*. On Microsoft Windows platforms, these files are written to an InstallShield-specific folder.

Table 10: Contents of the agg Folder

File Name	Description
gim_agg_application_options.cfg	File that contains configuration sections, configuration options, and default values for importing into an existing Genesys Info Mart application (see Chapter 2, "Importing RAA Options," on page 14).
GIMAgg.jar	Main archive of the aggregation engine
lib	Subfolder that contains third-party libraries and drivers that are referenced by the aggregation engine

Table 11: Contents of the lib Subfolder

File Name	Description
aggrapi.jar	GIM aggregation API
aopalliance.jar	Third-party library
guice.jar	Third-party library
jtds.jar	Third-party Microsoft SQL JDBC driver
kawa.jar	Third-party library
lib.jar	Genesys Aggregation library
sqljdbc4.jar	Third-party DB2 JDBC driver

Chapter

6 Uninstalling Reporting and Analytics Aggregates

In addition to installing Reporting and Analytics Aggregates (RAA), the setup file that is deployed with an RAA installation also uninstalls this application by deleting the majority of files that are deployed during installation and the application instance from the Microsoft Windows registry. This wizard-driven utility, however, does not remove all traces of RAA from your computer; for example, the uninstall routine does not:

- Stop the aggregation process.
- Reconfigure the GIM application to prevent its calling the aggregation process.
- Drop the aggregate tables and views (`AG2_*`), or the internal aggregate-related tables (`AGR_*`) that support them, from Info Mart.
- Delete the `\agg` subdirectory, if it has been moved to GIM's root directory.

Additional manual cleanup is required to finish the task—if this meticulous course of action is the one that you choose to take. You do not have to uninstall the previous RAA version to reinstall it or to install a new version.

This chapter guides you through the steps that you must perform to uninstall RAA completely. It contains the following sections:

The RAA Uninstall Routine

You can uninstall RAA by using either the setup file that is provided in the installation package or the `Add/Remove Programs` utility that is assessed from the Windows Control Panel.

From Installation Maintenance

1. From the Reporting and Analytics Aggregates installation package, double-click the `setup.exe` file.
2. From the `Welcome` page, click `Remove`.

From the Control Panel

1. Select and open `Add/Remove Programs`.
2. Select the `Reporting and Analytics Aggregates 8.0` application.
3. Click `Add/Remove`.

This routine deletes from the root directory and the program instance in the Microsoft Windows registry all files that are *deployed* by the RAA installation routine. Any additional files that have been placed in this directory after initial deployment, such as any personal files, remain. And, if you directed the RAA installation routine to deploy files to GIM's root directory, other GIM files that are unrelated to GIM aggregation will remain. Consider backing up this directory before you delete any of its files manually. Next, perform the additional manual steps that are listed in the following sections to complete the uninstall.

Reconfiguring the GIM Application

If you have uninstalled the RAA application (described in the previous section), you must also reconfigure the GIM application to prevent it from performing data aggregation and writing data to the aggregation tables. If you do not, errors will be sent to the GIM log. Table 12 provides a listing of the applicable GIM configuration options and their the settings, to reflect discontinued use of aggregation.

Table 12: Turning Off Aggregation

[Section] Option	Set Value to ...
[schedule] run-aggregates	`false`
[gim-etl] aggregation-engine-class-name	`none` (or, delete this option altogether)

You might also choose to remove all configuration sections that are prefaced with `[agg-...]`, such as `[agg-time-range-ACC]`. Take care, however, before you remove any other configuration sections or options that are described in Chapter 3. They might be necessary for other GIM functions.

Drop Database Objects

The following is a listing of all tables, views, and indexes that are created by the RAA installation routine. To complete the uninstallation, consider dropping these objects from your database. Doing so will free up table space and improve Info Mart performance. Please note, however, that this step is optional:

Info Mart's Aggregation-Related Tables

- AG2_AGENT_HOUR
- AG2_AGENT_DAY
- AG2_AGENT_MONTH
- AG2_AGENT_CAMPAIGN_HOUR
- AG2_AGENT_CAMPAIGN_DAY
- AG2_AGENT_CAMPAIGN_MONTH
- AG2_AGENT_GRP_HOUR
- AG2_AGENT_GRP_DAY
- AG2_AGENT_GRP_MONTH
- AG2_AGENT_QUEUE_HOUR
- AG2_AGENT_QUEUE_DAY
- AG2_AGENT_QUEUE_MONTH
- AG2_CAMPAIGN_HOUR
- AG2_CAMPAIGN_DAY
- AG2_CAMPAIGN_MONTH
- AG2_I_AGENT_SUBHR
- AG2_I_AGENT_HOUR
- AG2_I_AGENT_DAY
- AG2_I_SESS_STATE_SUBHR
- AG2_I_SESS_STATE_HOUR
- AG2_I_SESS_STATE_DAY
- AG2_I_STATE_RSN_SUBHR
- AG2_I_STATE_RSN_HOUR
- AG2_I_STATE_RSN_DAY
- AG2_ID_HOUR
- AG2_ID_DAY
- AG2_ID_MONTH
- AG2_QUEUE_HOUR
- AG2_QUEUE_DAY
- AG2_QUEUE_MONTH
- AG2_QUEUE_ABN_HOUR
- AG2_QUEUE_ABN_DAY
- AG2_QUEUE_ABN_MONTH
- AG2_QUEUE_ACC_AGENT_HOUR
- AG2_QUEUE_ACC_AGENT_DAY
- AG2_QUEUE_ACC_AGENT_MONTH
- AG2_QUEUE_GRP_HOUR
- AG2_QUEUE_GRP_DAY
- AG2_QUEUE_GRP_MONTH
- AGR_DEPENDENCY_I
- AGR_DIMENSION_I
- AGR_LEVEL_I
- AGR_LOCK
- AGR_METRIC_I
- AGR_NOTIFICATION
- AGR_QUERY_I
- AGR_SCN_I
- AGR_SEQUENCE
- AGR_SET_I
- AGR_TABLE_I
- AGR_TIME_RANGE
- AGR_TIME_RANGE_MAP_I
- AGR_TIME_RANGE_SCHEDULE
- AGR_TIME_ZONE
- PENDING_AGR

Info Mart's Aggregation-Related Views

- AG2_AGENT_SUBHR
- AG2_AGENT_WEEK
- AG2_AGENT_QRTR
- AG2_AGENT_YEAR
- AG2_AGENT_CAMPAIGN_SUBHR
- AG2_AGENT_CAMPAIGN_WEEK
- AG2_AGENT_CAMPAIGN_QRTR
- AG2_AGENT_CAMPAIGN_YEAR
- AG2_AGENT_GRP_SUBHR
- AG2_AGENT_GRP_WEEK
- AG2_AGENT_GRP_QRTR
- AG2_AGENT_GRP_YEAR
- AG2_AGENT_QUEUE_SUBHR
- AG2_AGENT_QUEUE_WEEK
- AG2_AGENT_QUEUE_QRTR
- AG2_AGENT_QUEUE_YEAR
- AG2_CAMPAIGN_SUBHR
- AG2_CAMPAIGN_WEEK
- AG2_CAMPAIGN_QRTR
- AG2_CAMPAIGN_YEAR
- AG2_ID_SUBHR
- AG2_ID_WEEK
- AG2_ID_QRTR
- AG2_ID_YEAR
- AG2_QUEUE_SUBHR
- AG2_QUEUE_WEEK
- AG2_QUEUE_QRTR
- AG2_QUEUE_YEAR
- AG2_QUEUE_ABN_SUBHR
- AG2_QUEUE_ABN_WEEK
- AG2_QUEUE_ABN_QRTR
- AG2_QUEUE_ABN_YEAR
- AG2_QUEUE_ACC_AGENT_SUBHR
- AG2_QUEUE_ACC_AGENT_WEEK
- AG2_QUEUE_ACC_AGENT_QRTR
- AG2_QUEUE_ACC_AGENT_YEAR
- AG2_QUEUE_GRP_SUBHR
- AG2_QUEUE_GRP_WEEK
- AG2_QUEUE_GRP_QRTR
- AG2_QUEUE_GRP_YEAR
- AGR_DEPENDENCY
- AGR_DIMENSION
- AGR_LEVEL
- AGR_METRIC
- AGR_QUERY
- AGR_SCN
- AGR_SET
- AGR_TABLE
- AGR_TIME_RANGE_MAP

Info Mart's Aggregation-Related Indexes

- IDX_IRF_IID
- IDX_IRF_AGR_DB
- IDX_IRSF_AGR_DB
- IDX_RSSF_AGR_DB
- IDX_RSRF_AGR_DB
- IDX_RSF_AGR_DB

Info Mart's Aggregation-Related Rows and Columns

The installation routine also adds the following rows and columns to existing tables:

- Adds a row to the CTL_SCHEMA_INFO table where schema_name='Genesys Aggregator' (The GIM Server creates this table.)
- Adds the DURATION_BUCKET column to the following tables on Microsoft SQL Server platforms:
  - INTERACTION_RESOURCE_FACT
  - IXN_RESOURCE_STATE_FACT
  - SM_RES_SESSION_FACT
  - SM_RES_STATE_FACT
  - SM_RES_STATE_REASON_FACT

Deleting the \agg Subdirectory

If you moved the \agg subdirectory to the GIM root directory, as instructed earlier, the uninstall routine does not delete it. You can delete it manually to complete uninstallation.

Related Documentation Resources

The following resources provide additional information that is relevant to this software. Consult these additional resources as necessary.

Reporting and Analytics Aggregates

- *Reporting and Analytics Aggregates 8.0 User's Guide,* which describes the different modes of running aggregation, the aggregation hierarchies, and how to configure RAA to aggregate data based on these user-defined dimensions.
- *Reporting and Analytics Aggregates 8.0 Reference Manual,* which describes the aggregate tables and subject areas.

Genesys Info Mart

- *Genesys Info Mart 8.0 Deployment Guide*, for information about configuring the ICON and GIM servers to recognize user data.
- *Genesys Info Mart 8.0 Reference Manual* for your RDBMS, which describes the aggregate tables and subject areas.

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 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:

80ii_dep-raa_03-2011_v8.0.101.00

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

Table 13: 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 42).	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 13: 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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