Genesys Interactive Insights 7.6

User's Guide

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Preface

Welcome to the *Genesys Interactive Insights 7.6 User's Guide*. This document introduces you to the concepts and functionality of Genesys Interactive Insights, which is powered by BusinessObjects Enterprise (BOE) XI 3.1 software.

This document is valid only for the 7.6.*x* release(s) of this product.

This preface provides an overview of this document, identifies the primary audience, introduces document conventions, lists related reference information, and includes the following sections:

Interactive Insights provides contact center reports for the data stored in your Genesys Info Mart.

Intended Audience

Discussions in this document revolving around the Genesys Interactive Insights reports are intended primarily for business users and report designers. Information about Interactive Insights universe elements requires extended experience with relational management database systems, and is intended primarily for database and BOE system administrators. The material addressed to both audiences assumes that you have a basic understanding of:

- Computer-telephony integration (CTI) concepts, processes, terminology, and applications.
- Network design and operation.
- Your own network configurations.
- Contact center functions and operations.
- The Genesys telephony models.

In addition to these prerequisites, database and system administrators should be familiar with:

- The new features provided with Genesys Info Mart (GIM) 7.6 and Interaction Concentrator (ICON) 7.6 software.
- GIM 7.6 and ICON 7.6 configuration.
- BOE setup—including users, authentication, licensing, connection to the appropriate tenant schema in Info Mart, and so forth.

This manual assumes that users have had basic training in the installation, configuration, and use of BusinessObjects Enterprise XI 3.1 software.

Chapter Summaries

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

- Chapter 1, “Introducing Genesys Interactive Insights,” on page 9, which describes BOE XI 3.1 licensing from the Genesys-provided image, emphasizes the requisite GIM 7.6 schema, describes the optimal time to run reports, and lists the new features offered with this release.
- Chapter 2, “Managing Your BOE Environment,” on page 13, which describes a few of the administrative tasks that you can perform within the BOE XI 3.1 Central Management Console to access the Info Mart and the Interactive Insights reports.
- Chapter 3, “Understanding the Interactive Insights Reports,” on page 19, which describes some nuances with BOE XI 3.1 software when running the Interactive Insights reports and other general information about report operation.
- Chapter 4, “Understanding the Interactive Insights Universe,” on page 35, which describes how measures have been organized in `GI2_Universe`.
- Chapter 5, “Customizing the GI2 Universe and Reports,” on page 45, which provides several examples of how to customize the universe and reports to accomplish specific results.

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Chapter

1 Introducing Genesys Interactive Insights

This guide picks up where the *Genesys Interactive Insights 7.6 Deployment Guide* leaves off. After you have configured Genesys Info Mart 7.6 and its supporting applications to measure and record contact center activity, after you have installed and set up your Business Objects environment, and after you have installed and imported the Interactive Insights reports and universe, this document assists you in managing the 25 reports deployed with the Genesys Interactive Insights 7.6 release and in creating and/or modifying reports and universe elements using BusinessObjects Enterprise (BOE) XI 3.1 software.

This document does not describe how to operate Business Objects software in and of itself, because this information is aptly presented in the documentation set provided by SAP. You can review Business Objects documents from the Genesys Interactive Insights – Platform Components –Documentation CD or you can acquire the complete set of documents required to master this software from SAP's website at `http://help.sap.com/`, if you are a direct SAP customer. Customers who obtained BOE software through Genesys can use the following URL:

```
http://service.sap.com/sap/bc/bsp/spn/oem_portal/infouser_
request.htm?pid=0000279980&code=574DA18E763BA5920D1769FC17946653
&dstamp=20090604
```

You are directed to these manuals when faced with a how-to question on operating Web Intelligence, Info View, and/or Designer.

What this document does describe is how to use the features that Genesys has designed using BOE XI 3.1 software, how universe elements are organized to paint a picture of contact center activity within your environment, and some fundamental principles about how to tailor these the reports and universe elements to meet your business's needs.

The following sections are included in this chapter:

Please refer to the *Genesys Interactive Insights 7.6 Universe Guide* for an in-depth discussion of Interactive Insights universe elements and reports.

Note: Because you can customize the appearance and functionality of BOE's user interfaces, screenshots in this guide may appear differently in your environment.

Licensing Restrictions

The Business Objects Enterprise license included with the Genesys-provided DVD is a restricted license enabling you to use BOE tools to access Info Mart. This license covers the Interactive Insights reports and custom reports that you may design and run against Genesys Info Mart (GIM) 7.6-generated data. Using this license to access data that is not created by or used in conjunction with GIM 7.6 is prohibited. The restrictions regarding the number of concurrent users operating Business Objects software in your environment is bound by the number of Genesys Interactive Insights seats purchased. To obtain unrestricted licenses that enable you to freely access data sources other than GIM 7.6, contact SAP, at `www.sap.com`.

Genesys Interactive Insights 7.6 is based on the "Professional Edition – Query, Reporting, and Analysis" of BOE XI 3.1. Business Objects is available in two other editions:

- The Premium Edition
- The Professional – Enterprise Reporting Edition

One key difference between the editions relevant to Interactive Insights is the number of content types available within InfoView. The Professional editions allow one content type while the Premium edition allows more than one. For details on the differences in features offered by each edition, please refer to *BusinessObjects Enterprise XI Editions* document. Also, refer to the licensing agreement for further specific details.

More on GIM 7.6

The Interactive Insights reports summarize data that is processed by a GIM 7.6 server. Running these reports on 7.5 data will yield errors because the GIM 7.5 schema neither defines the tables nor populates the requisite data on which these reports rely. Refer to the *Genesys Info Mart 7.6 Reference Manual* for your RDBMS for a listing and descriptions of the new tables and columns. Refer to the *Genesys Interactive Insights 7.6 Universe Guide* to see the relationship between Interactive Insights report measures and Info Mart table columns.

It is assumed that your system's GMT (Greenwich Mean Time) setting is accurate and synchronized among the servers in your environment.

Optimal Time to Run Reports

The Interactive Insights reports provide a snapshot of contact center activity as of the last transformation and aggregation runs in Info Mart. Running the reports several hours after these runs will not include the last hours' worth of contact center activity. For completed interactions in completed reporting intervals falling prior to the last transformation and aggregation runs, the reports will consistently provide the same results every time the reports are run (assuming that this data is not purged). However, the reports may likely reflect different results for interactions that are still active and/or incomplete intervals—running a month-type report mid month, for an obvious example, will yield results that are different from those obtained by running the same monthly report at the end of the month.

For the smaller aggregation levels, the variances in report results, are more pronounced, given the timing of transformation and aggregation runs. It is important to emphasize here that Genesys Info Mart is an *historical*-reporting application. You must give care to the interpretation of report results when you use Interactive Insights as a near real-time tool to obtain daily reports—for example, when the day has not yet completed or only has just recently completed and when the reaggregation/retransformation of data occurs relatively infrequently (such as once a day, using the default GIM configuration).

For example, consider running `Job_LoadGIM` manually before you run the `Daily Agent State Detail`, `Daily Agent Login-Logout`, `Interaction Handling Attempt`, and `Interaction Flow` reports—especially when trying to obtain results for today. The default schedule (set by the `load-start-time` configuration option) runs this job only once a day 45 minutes before midnight. Under these circumstances, running the `Daily` or `Interaction Detail` reports will yield no data at all for today, for the bulk of the day.

The headers of each report display the report date. This represents the timestamp when the report was run—which is entirely different from when the

last transformation and aggregation jobs were run. The date and time of the last runs of the data transformation and aggregation are reflected nowhere in the report, yet it is this very information that identifies the moment when the report's data accurately reflects contact center activity.

Many factors contribute to this latency in data availability (between the last transformation and aggregation runs and when the report is run), including:

- The scheduling of ETL jobs and job performance.
- Call volume and number of segments per call.
- The number of configured key-value pairs.
- Hardware and RDBMS used in your environment.
- The performance of ICON's merge procedure.

Read more about these factors in the Genesys Info Mart 7.6 documentation set and in the *Genesys Hardware Sizing Guide*.

New in This Release

This *Genesys Interactive Insights 7.6 User's Guide* includes the following new features over the 7.6.1 release:

- Beginning on page 24, additional information appears that describes the behavior of user prompts when you specify certain values.
- A new section, Preventing Voluminous Amounts of Data from Crashing the WebI Server, was added to this document, beginning on page 28.
- General information about printing the reports is provided on page 32.
- The measure composition of two new classes (`Flow` and `Handling Attempt`, subclasses of the `Interaction Details` class) is described on page 42. This section of the document also classifies new measures that were added to the following classes in the 7.6.2 release:
  - `Business Attribute`, which includes a second `Calls Offered` measure (`Calls Offered with Objective`) to capture in the count only those calls that had a defined a baseline-service objective that is greater than zero.
  - `Activity`, which includes three new measures: `Calls Abandoned Ringing`, `Calls Short Talk`, and `Calls RONA`.

  Refer to the *Genesys Interactive Insights 7.6 Universe Guide* for descriptions of these new classes and measures.
- Beginning on page 55, additional instructions are provided on how to add attached data columns to the `Interaction Detail` reports.

Refer to the *Genesys Interactive Insights 7.6 Universe Guide* for information about the new reports and other new universe elements that were introduced with the 7.6.2 release.

Chapter

2 Managing Your BOE Environment

Use the Business Objects Enterprise (BOE) Central Management Console (CMC) to manage your Business Objects environment. Figure 1 shows the CMC home page, which summarizes the tasks that administrators can perform by using this tool.

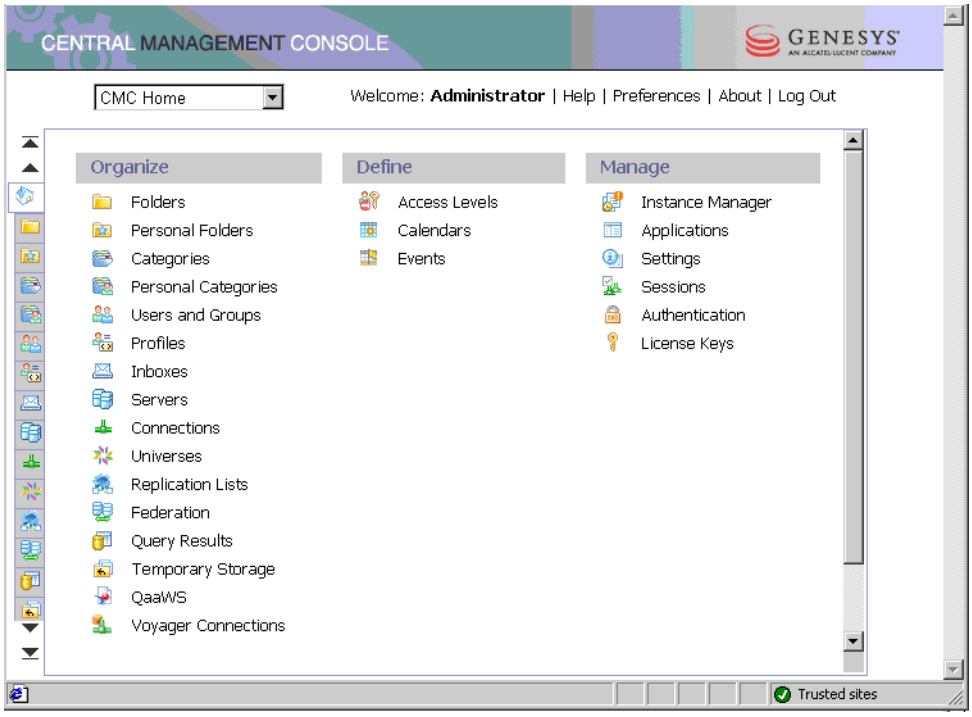

Figure 1: The CMC Home Page

CMC is relatively easy-to-use, web-based application. Users can access this console to set their individual preferences after being granted permission to do so by the BOE Administrator. Please refer to “Working with the Central Management Console” chapter and other related chapters in the

BusinessObjects Enterprise Administrator's Guide or the *BusinessObjects Enterprise Central Management Console User's Guide* for detailed instructions on how to use this tool.

This chapter discusses a few of the administrative tasks as they pertain to using the CMC to access Info Mart and the Interactive Insights reports. This chapter contains the following sections:

Managing Folders

BOE software uses folders to organize repository reports and documents. Access to these folders and to specific items within them can be controlled by setting permissions appropriately, as shown in Figure 2.

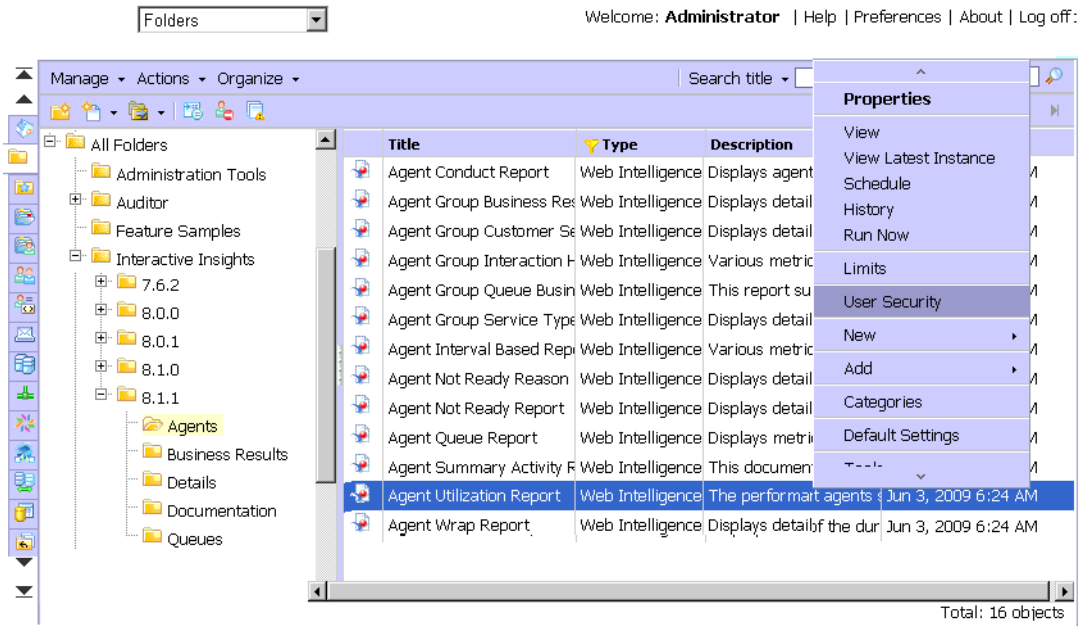

Figure 2: Setting Folder Permissions Within CMC

Note: Beginning with the 7.6.2 release, a release-specific subfolder of `Interactive Insights` houses the `Agents`, `Business Results`, `Documentation`, `Interaction Details`, and `Queues` subfolders. This folder structure enables you to maintain the customizations that you might have applied to previous Interactive Insights universes. Text references and screen shots that appear throughout this documentation set, however, may omit the subfolder that contains the release number.

A BusinessObjects Enterprise (BOE) XI 3.1 installation deploys many default folders—such as `Administration Tools`, `Auditor`, and `Report Samples`—that are not used by Interactive Insights. Interactive Insights report users can ignore these folders. As the Business Objects administrator, you might consider hiding them so that their presence does not lead users to believe that they apply to Interactive Insights. To hide folders from select groups of users, apply no-access levels to those groups within the security profile of the folder's properties. Refer to the "Setting Folder Permissions" section of the *Genesys Interactive Insights 7.6 Deployment Guide* for further details.

The instructions in the *Genesys Interactive Insights 7.6 Deployment Guide*, for redeploying Interactive Insights or reimporting the *same* Interactive Insights universe version, advise that you first delete the `Interactive Insights` folder. This is because the Interactive Insights installation routine creates a new folder, `Interactive Insights (1)`, if the `Interactive Insights` folder already exists. (In addition, the installation routine may overwrite a preexisting `GI2_Universe`, so you should export it to a BIAR (Business Intelligence Archive Resource) file for backup before you reimport the universe.) When you customize reports, consider using a storage location that minimizes the need to relocate these custom reports when new releases of Interactive Insights become available. Additionally, take care to archive any custom reports that might exist in this folder before you delete the folder.

Managing Servers

You can view and modify server settings and stop and start BOE servers by using the Central Management Console or Central Configuration Manager. Use either tool to troubleshoot your BOE environment when you cannot access the Interactive Insights universe or reports. A BOE XI 3.1 installation deploys more servers than are used by Interactive Insights; if you do not need them, you can safely stop any server that Interactive Insights does not use, including the following:

- Predictive Analysis Server
- Adaptive Processing Server
- Dashboard Server
- Dashboard Analytics Server

Figure 3 shows one unused server being stopped within the Central Management Console.

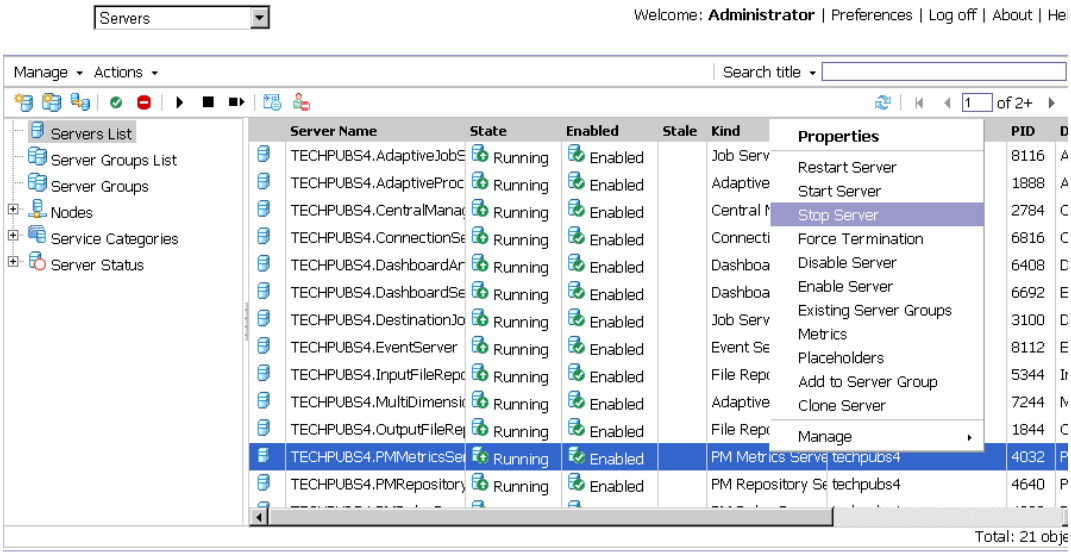

Figure 3: Stopping the PM Metrics Server Using CMC

If you use other BOE functionality, such as scheduling reports, or setting up rules or events, you must have some of these servers running. Refer to the *BusinessObjects Enterprise Administrator's Guide* for a description of each server and how to manage BOE servers using these tools.

Managing Connections

The Interactive Insights installation routine copies a `GI2_GIM_DB` connection when the Interactive Insights universe is imported into the Business Objects repository. This connection is reserved for Genesys use. You must define your own connection to tie-in the Interactive Insights universe with your data source; namely, your Info Mart. Refer to "Linking the Universe to Info Mart" in the *Genesys Interactive Insights 7.6 Deployment Guide* for step-by-step instructions on how to define a connection.

Managing the Universe

A Business Objects installation deploys several sample universes in the `Universes` root folder, including `eFashion`, `Island Resorts Marketing`, and `Activity`. These universes are not used by the Interactive Insights report and you can ignore them. The Interactive Insights installation routine deploys `GI2_Universe`, which is stored in a release-specific subfolder of the `Interactive Insights` folder.

Note: Prior releases of Interactive Insights stored `GI2_Universe` in the root folder, along with other BOE universes.

The Administrator can, *and should*, control who has write access to `GI2_Universe` by setting user permissions appropriately in CMC. Unfettered access enables users to change definitions of universe elements at will. This, in turn, can potentially affect report results and all who receive and interpret them, especially if the changes are imported back into the repository. The *Genesys Interactive Insights 7.6 Universe Guide* describes which measures are directly used in the Interactive Insights reports.

Note: Business Objects has no mechanism for tracking or reversing the changes made to a universe that has been imported into the BOE repository.

Managing Users and Groups

The `insights.biar` file, which is deployed during installation of Interactive Insights, includes the Interactive Insights groups shown in Table 1. To complete the setup and make the various objects of the Interactive Insights repository available to other users in your contact center, you should set up BOE accounts using the identification information of the users. You can assign these users to the predefined Interactive Insights user groups or you can assign users to the groups that you create. Refer to the *BusinessObjects Enterprise XI 3.1 Installation and Configuration Guide* for your specific operating system, for instructions on how to assign users in a BOE environment.

Table 1: Interactive Insights User Groups*

Group	Summary of Permissions
Interactive Insights report developers	Interactive Insights report developers can create reports in Web Intelligence from scratch, delete them, and edit and view their underlying SQL. Report developers can also schedule reports for later running and distribution and save them in other formats, such as PDF and Microsoft Office Excel.

Table 1: Interactive Insights User Groups* (Continued)

Group	Summary of Permissions
Interactive Insights report editors	Interactive Insights report editors can modify existing reports and copy them in order to create new reports. However, they cannot create new reports within `GI2_Universe` in any other way. Report editors can also schedule reports and save results in other formats.
Interactive Insights report viewers	Interactive Insights report viewers can specify values at the user prompts when they run the reports, and they can view report results. Report viewers can also schedule reports and save results in different formats.

* Refer to the *Genesys Interactive Insights 7.6 Deployment Guide* for a complete list of permissions that should be assigned to BOE applications, `GI2_Universe`, user-defined connections to Info Mart, and the `Interactive Insights` folder and its sub-folders.

Note: The Business Objects installation routine creates other groups and users that might not be pertinent to Interactive Insights.

Chapter

3 Understanding the Interactive Insights Reports

The reports that are provided with the Genesys Interactive Insights 7.6 release compile inbound voice activity and agent summarized states for their voice DNs. Data that summarizes virtual interactions, virtual agent activity, and Interactive Voice Response (IVR) port activity is excluded from agent-based reports. Data that pertains to IVR ports, however, is included in the business attribute and interaction detail reports if IVRs are configured as handling resources in your environment.

This chapter describes some nuances that become apparent when running the Interactive Insights reports, and includes the following sections:

About the Reports

The Genesys Interactive Insights 7.6 release includes 13 agent activity reports, 6 queue activity reports, 2 interaction detail reports, and 5 business attribute reports, all of which were designed by using Web Intelligence, an application in the BusinessObjects Enterprise (BOE) XI 3.1 suite. The reports use the hierarchies, classes, dimensions, details, conditions (filters), measures, and

prompts that are defined in an Interactive Insights universe. Figure 4 shows the organization of some of the reports in the `Agents` folder and some of the operations that you can perform within InfoView—the BOE portal to Web Intelligence. To learn about performing basic report operations, such as running and scheduling reports and printing, sharing, and exporting their results, refer to the BOE XI 3.1 documentation set.

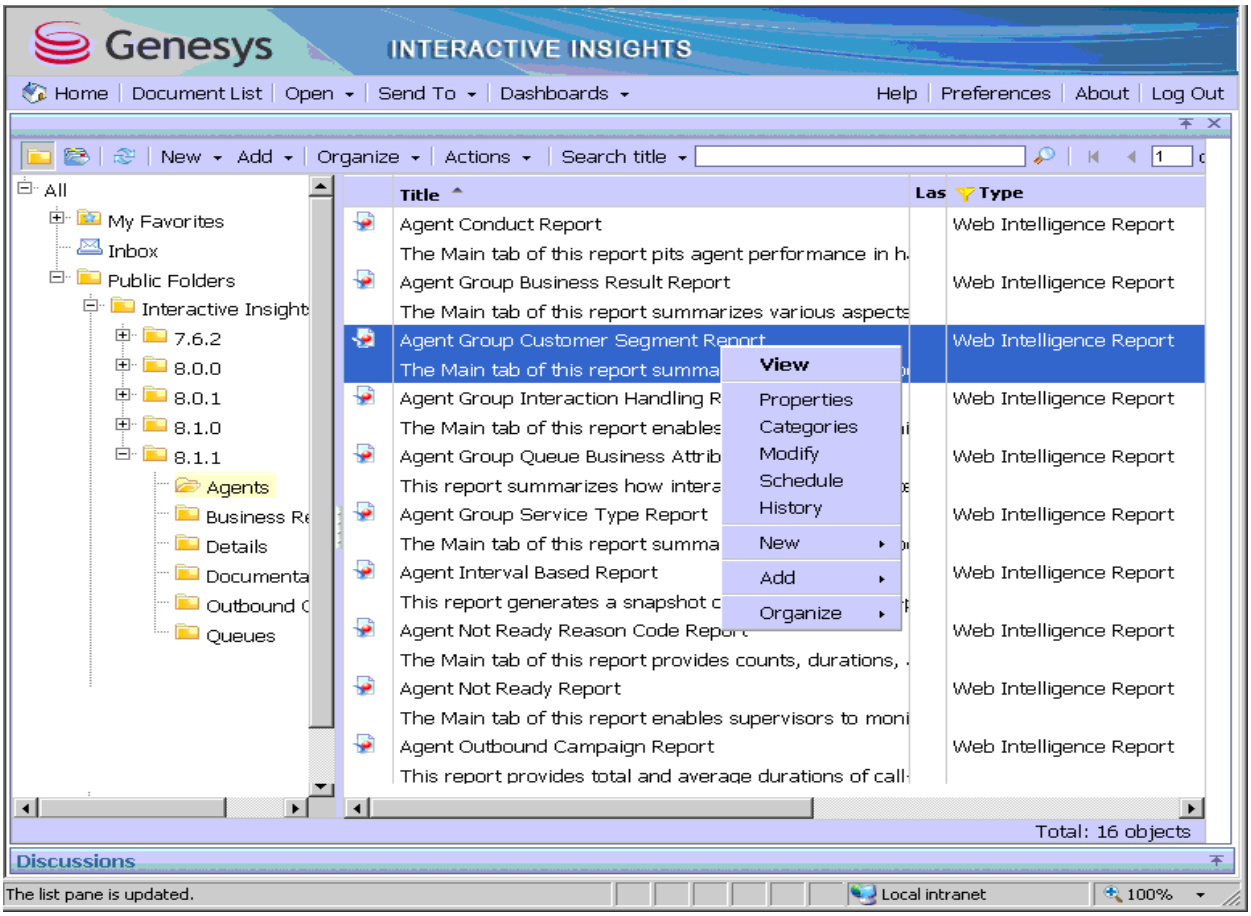

Figure 4: Managing Interactive Insights Reports Using InfoView

When you view, run upon demand, or modify a report, the report opens in the Web Intelligence interface that is shown in Figure 5. The operations that you can perform in Web Intelligence and your ability to use Web Intelligence are determined by the permissions that the administrative user has granted to your user account. The design of each report for all users, however, includes a `User Prompt Input` area, a `Main` tab that contains a report, and a tab containing the report's description. Beginning with release 7.6.2, many of the reports also include one or more `Summary` tabs that highlight exceptional events occurring within your contact center. Depending on the report, these exceptions might be highlighted in one or more colors to enable you to focus on problem areas quickly. Figure 6 shows sample data on the `Summary` tab of the `Call Volume Service Type Report`. Some other areas of the Web Intelligence interface are depicted in Figure 5.

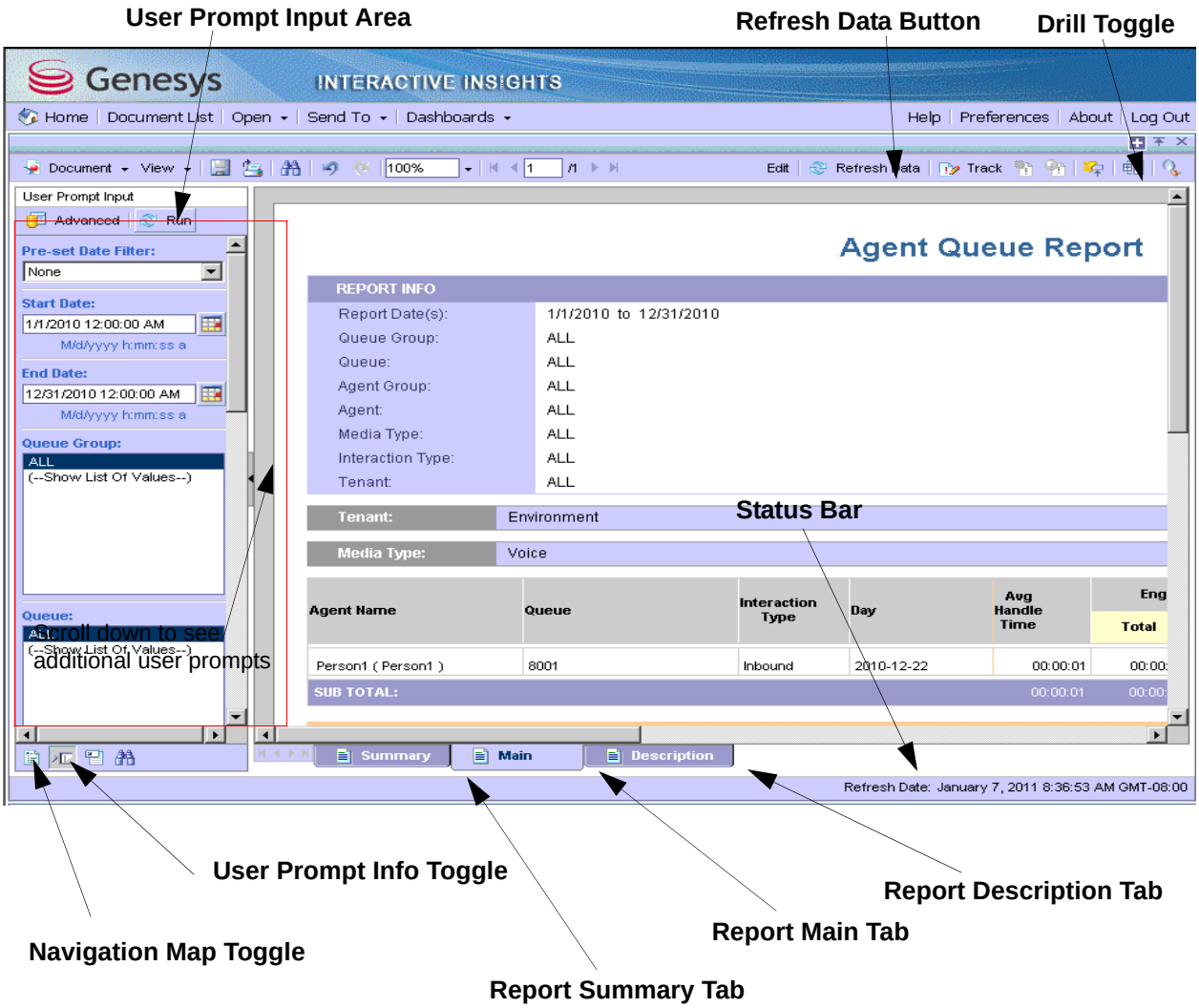

Figure 5: Viewing Interactive Insights Reports Using Web Intelligence

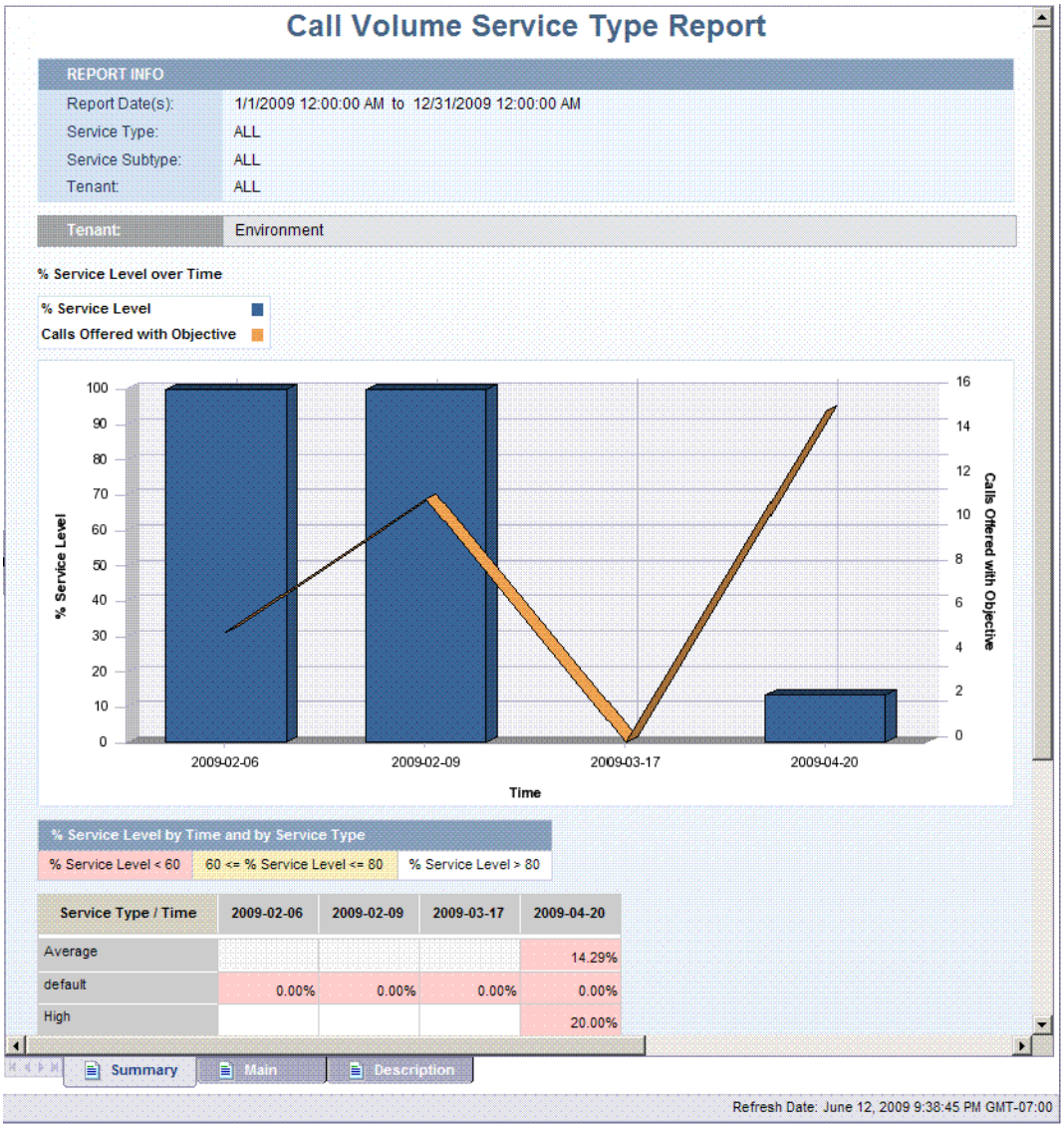

Figure 6: Summary Tab of the Call Volume Service Type Report

Report Nuances in Web Intelligence

For in-depth discussions about Web Intelligence, please refer to the Business Objects documentation set. This section focuses on pointing out some nuances that become apparent when you apply BOE features to the Interactive Insights reports.

Using the Prompts

Each Interactive Insights report contains several user prompts that filter the data the report will retrieve. (Refer to the `User Prompt Input` area of Figure 5.) The values specified at these prompts apply to all tabs of the report. If the

default specifications for these prompts are cleared and new values are not provided, you will not be able to run the report.

Hour Prompts

For the hourly reports, you must restrict your specification of hours to a range of hours within one calendar day. You could not, for instance, request results for one Interactive Insights report where the shift operates from 9:00 P.M. of one day to 3:00 AM of the next. Instead, you would have to run two reports—one from 9:00 PM to 11:59 PM of one day and the other from 12:00 AM to 3:00 AM of the next. (Alternatively, to accomplish this end, you could customize the day range prompts for the report to recognize hours.)

Date Prompts

With the exception of the `Interaction Detail` reports, prompts that request user input of dates also show a time component that InfoView and Web Intelligence ignores. This is common in the `Start Date`, `End Date`, and `Report Date` prompts of Interactive Insights reports. If you explicitly select a specific time in conjunction with a specific date, the Interactive Insights reports will ignore this set time and only use the specified date component. Figure 7 highlights the time component that automatically appears with all date settings.

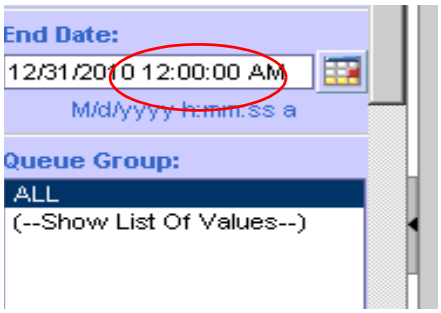

Figure 7: BOE Ignores the Time Component of Start and End Date Prompts

Regardless of the time that appears in the prompts, Interactive Insights inherently uses the following:

- `12:00:00 AM` as the start time for all dates that are specified under `Start Date`
- `11:59:59 PM` as the end time for all dates that are specified under `End Date`—even though `12:00:00 AM` appears in this field.

So, to run a report for one day—for example, for July 30, 2008—you would designate both of the following:

- `07/30/2008 12:00:00 AM` (or any other time value) for the `Start Date` prompt
- `07/30/2008 12:00:00 AM` (or any other time value) for the `End Date` prompt.

where these user prompts appear in the reports. That which appears to be the same moment in time, actually spans 24 hours.

For the Interaction Detail reports, the `Start Time` and `End Time` user prompts actually *do* recognize the time values that you designate in these fields.

Free-Text Prompts

Some user prompts in a few of the reports enable you to type in values instead of allowing you to select them from a list. The Interaction Handling Attempt report, for example, contains the following free-text prompts:

- `Customer ID`
- `ANI`
- `DNIS`
- `Interaction ID`

The values that you supply in these fields must match exactly the values that are to be retrieved from the Info Mart; wildcard characters and operators, such as > and <, are not recognized. To specify more than one value in a field, separate each value with a semicolon [;]—for example:

```
4155551234;5066746767;6504662829
```

To have Web Intelligence retrieve all values for these fields (satisfying the report's other conditions):

- Type `ALL` (in uppercase) in character-based, free-text fields, such as `Customer ID`, `ANI`, and `DNIS`.
- Type `0` in number-based, free-text fields, such as `Interaction ID`.

Running a report with these fields cleared will cause Web Intelligence to display a dialog box that prompts you to specify the missing values.

Prompt Interrelationships

With the exception of the `Interaction Flow` report, there are no interrelationships between the user prompts in Interactive Insights reports. From the perspective of InfoView or Web Intelligence, the selections that you make at one prompt are independent of the selections that you make at another. Although relationships between resources and resource groups are well defined within the Info Mart, selecting a particular agent group from the `Agent Group` prompt, for instance, does not restrict the agents who are available for you to select at the `Agent Name` prompt to only those who belong to the selected agent group. Therefore, you should take care to make sensible selections at all prompts.

For the `Interaction Flow` report, the selections that you make at the `Target Agent` and `Target Queue/VQ` prompts are interdependent. A selection of `ALL` targeted queues, for instance, returns all interactions (meeting the report's other conditions) that pass through any queue that is associated with the indicated

agent at the Target Agent prompt, and vice versa. In addition, although the values you select at other prompts in this report are independent—bearing no relationship to each another—the report will retrieve *all* legs of an interaction in which the criteria that you specify may indicate to retrieve fewer than the entire life of the interaction.

Many of the reports have more than one date prompt; including Preset Date Filter, Start Date, and End Date prompts. Know that the selection that is specified in the Pre-set Date Filter trumps any other date specification that you make. Also, if your preset date selection is set to a date for which there is no data in Info Mart, your report will return no results, regardless of any range of dates that you might have specified in the Start Date and End Date user prompts. For the report to recognize the values that you specify for Start Date and End Date, you must explicitly set None at the Pre-set Date Filter prompt. Furthermore, Web Intelligence does not validate for meaningless specifications at the user prompts—such as end dates that occur before start dates.

Drilling Up and Drilling Down

The ability to drill up and drill down within a report to view results from a wider or narrower perspective is available through Web Intelligence and is controlled by the ordering of dimensions in the hierarchies that are defined in a universe. The Interactive Insights universe uses the following hierarchies:

Time Hierarchy: Year > Quarter > Month > Day > Hour > 30 minutes

Service Type Hierarchy: Service Type > Service Subtype

Agent Hierarchy: Agent Group > Agent Name

Queue Hierarchy: Queue/VQ Group > Queue/VQ

Tenant Hierarchy: Tenant Name

Drill down from aggregated results to the call- or call-segment level is not provided in this release; however, the data is available in the Info Mart and reports could be created to provide this level of detail. (The Interaction Detail reports provide call- and call-segment levels of detail without drilling.)

Drill-up operations display results for the new aggregation level that are based on the original selection criteria that you specified. So, drilling up from a daily report instance that span two days, for example, provides results for only the two days that originally were selected for the new report instance, which, according to the Time hierarchy, will be aggregated by month. Further drill-up from the one-month report instance, in our example, provides partial quarter results—containing data just for those two days that originally were selected—and similarly for drill-up to a year report instance. Reverse drilling also respects the original selection criteria.

The results that are rendered upon drilling up in reports that contain interval-based counts should be interpreted with care. Drilling up from one aggregation level to another, such as from subhour to hour, in such reports yields data that might be difficult to interpret because interval-based results are not additive;

day counts cannot be derived from the sum of hourly results in the day for interval-based reports. Instead, you should create custom reports for the desired aggregation level to achieve explainable results. Or, in a copy of the report, change the aggregation function in the properties of interval measures to `Database delegated`, which will force the database server to reissue the query to the Info Mart upon drill. Reports that use measures from the `Interval` and `State` classes, such as the `Agent Interval Based` and `Agent ACW` reports, provide interval-based results that should be interpreted with care when drilling is invoked.

Refreshing Data

You should refresh a report's data following the completion of the `Job_LoadRecent` and/or `Job_AggregateGIM` processes and prior to first opening the report following job termination. Indeed, you *must* refresh the data prior to opening a report that has never been opened at all in order for that report to display any results. The process of opening a report, in and of itself, does not refresh the report's data. Refreshing the report's data is especially important if the report was previously saved with its results. If data is not refreshed, Web Intelligence instead uses the data that is saved in the *report's cube*—which may contain outdated data. (Refer to Business Objects documentation for information about the content of report cubes.)

Click the `Refresh Data` button, shown in Figure 5, on page 21, to refresh a report's data. The Web Intelligence status bar, a portion of which is shown below in Figure 8, reflects the last date and time when the report was refreshed.

Figure 8: Web Intelligence Status Bars Shows Refresh Date

The `Status` bar displays the following message if the report has never been refreshed:

```
Refresh Date: Data is not refreshed.
```

The default schedule for how often the `Job_AggregateGIM` process runs (defined by the `aggregate-start-time` configuration option) is once a day (when the `run-aggregates` option is set to `TRUE`). Refer to your own configuration of the Genesys Info Mart application to learn the aggregation (and transformation) schedule that is used in your environment.

Effect of Changing Configuration Options for Aggregated Data

The GIM Server populates aggregate tables given the values of configuration options that are in effect when aggregation begins. The aggregation job picks up any dynamic changes that you make to configuration-option settings the *next* time that the job is run, which is once a day, at 1:00 A.M, using GIM's default configuration. The aggregation process does not automatically reaggregate data that has been previously aggregated, even though the source data might still exist in the supporting `*_FACT` tables.

For instance, if you change the `populate-virtual-queue-facts` option from `FALSE` to `TRUE` midday on July 1, the `AG2_INB_V_QUEUE_*` tables will store aggregated data for virtual queues from July 2 and forward. If you want the ability to reflect virtual-queue data for the full year in the Interactive Insights reports, you must manually rerun the GIM aggregation job and specify your desired start date of the reporting interval, January 1, to reaggregate year-to-date data.

Refer to the *Genesys Info Mart 7.6 Operations Guide* for more information about how to operate `Job_AggregateGIM` from the GIM Administration Console.

Purging Data

As the GIM Server propagates aggregated data to higher-level aggregation tables, data that is stored in the lower-level aggregation tables becomes redundant. The presence of this redundant and ever-growing data will eventually affect the performance of data-retrieval operations; over time, the reports will gradually take longer and longer to display results. Consider periodically purging this redundant data to improve report performance—do you really need hour-by-hour results for each day of the month 10 months ago, or will the data that is stored in the `*_DAY` and `*_MONTH` tables suffice for reporting purposes?. If not, review the configuration options that GIM provides (several `days-to-keep...` options) to purge redundant data from lower-level aggregation tables. These options do not purge data from the underlying `*_FACT` tables in which the data originated; so, if absolutely necessary, reaggregation *could* be performed for a defined period of time to restore aggregated data that has been purged.

Refer to the *Genesys Info Mart 7.6 Deployment Guide* for a description of the `days-to-keep...` configuration options.

Note: Purging of quarterly or yearly data is not required, because quarterly and yearly reports are based on views of `*_MONTH` tables.

What 0 Signifies in the Interactive Insights Reports

Whenever the underlying query for an Interactive Insights report returns no rows, the report will display no data at all. For example, a query to retrieve activity for a particular agent for a shift that the agent did not work will return no data. On rare occasions, Web Intelligence will return `No data to retrieve in Main Query.`

For those Interactive Insights reports that do return rows, but where a particular field is not applicable, the reports return a value of `0`. For example, all of the calls for a particular day were answered within the first five service time intervals—none were answered beyond the fifth interval. As a result, the `Speed of Answer Report` displays `0` values for the each of the sixth through tenth intervals.

The reports also return `0` for measures when the corresponding Info Mart columns on which measures are based hold `0` values. Additionally, when a report is based on a query that gathers data from more than one aggregation table, empty cells in reports are possible where other cells contain data.

For composite measures, such as percentages and averages, wherever a `0` count or `0` duration ensues, the reports display `0` for these measures. The average duration of calls placed on hold, for instance, is `0` in the circumstances where either no calls were placed on hold during the interval, or where the duration of held calls was `0` seconds.

The custom reports that you create might behave differently depending on their design. Please refer to BOE XI 3.1 documentation for further information.

Preventing Voluminous Amounts of Data from Crashing the WebI Server

As the size of your Info Mart grows with contact center data, the likelihood that users will request an Interactive Insights report with seemingly boundless data rises. Running such a report without restriction can potentially crash the BO system when user selections are not refined. This occurs because BO stores the data that it retrieves in memory. If there is insufficient memory, overflow will result. Specifically, BO returns the following error message when it is unable to handle a report with voluminous amounts of data or if it is charged to handle requests from too many concurrent users running reports in parallel:

`Unexpected behavior: Java heap space.`

To prevent overflow due to insufficient memory, Genesys recommends that you fine-tune system configuration including setting or adjusting any or all of the following:

- The memory pool size of your web server.
- The virtual memory of the host on which BO runs.
- The document cache of the Web Intelligence server.

Managing the Memory Pool Size of Your Web Server

Microsoft Windows x86 applications are limited to 2 GB each for maximum memory pool size. The default memory pool size for the Tomcat web server application that is deployed with BusinessObjects Enterprise, however, is 1 GB. To increase this value, you can modify Tomcat configuration to set maximum memory pool size to 2,048 MB.

Having this maximum number of pre-allocated of memory blocks available for Tomcat enables memory allocation with constant execution. To change this setting for the Tomcat application, perform the following steps:

1. From your Microsoft Windows platform, open the Tomcat program group and select `Tomcat Configuration`.
2. On the `Java` tab, set the initial and maximum memory pool size to `512` and `2048` respectively as shown in Figure 9. These values are the recommended values stated in BO documentation.

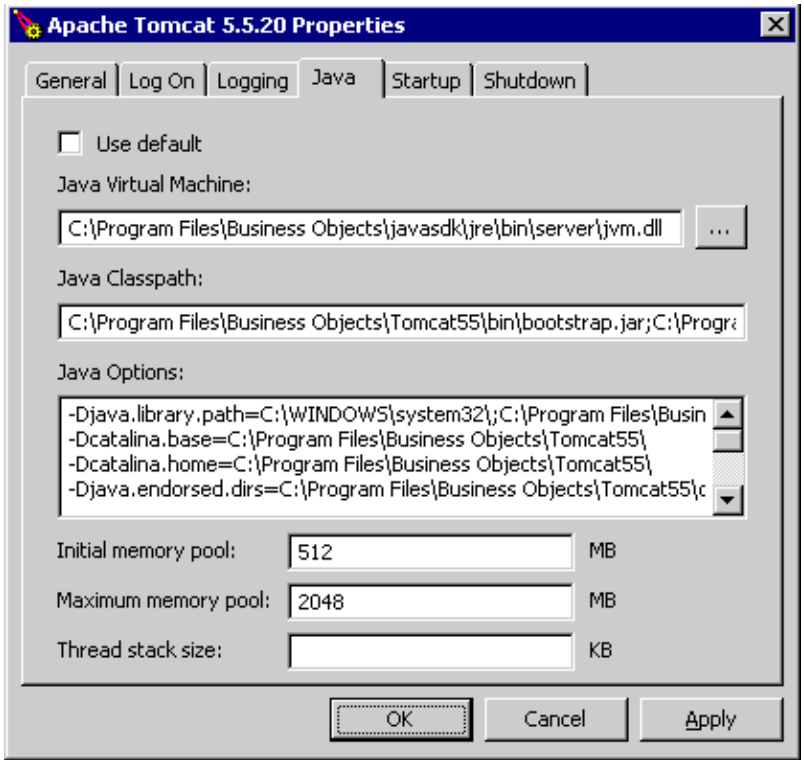

Figure 9: Setting Memory Pool Size Within Tomcat Configuration

3. Restart Tomcat.

Refer to the *SAP BusinessObjects Enterprise Administrator's Guide.* for additional information.

Managing the Virtual Memory of Your Host

When your computer lacks adequate physical memory to perform an operation or run a program, Microsoft Windows uses virtual memory to compensate. You should set the amount of virtual memory to a size at least 1.5 times that of your host's random access memory for efficient GI2 operation.

To adjust your host's virtual memory, perform the following steps:

1. Open the properties associated with `My Computer`.
2. On the `General` tab, note the amount of RAM.
3. On the `Advanced` tab, in the `Performance` frame, click `Settings`. The `Performance Options` dialog box opens.
4. On the `Advanced` tab, in the `Virtual memory` frame, click the `Change` button. The `Virtual Memory` dialog box, shown in Figure 10, appears.

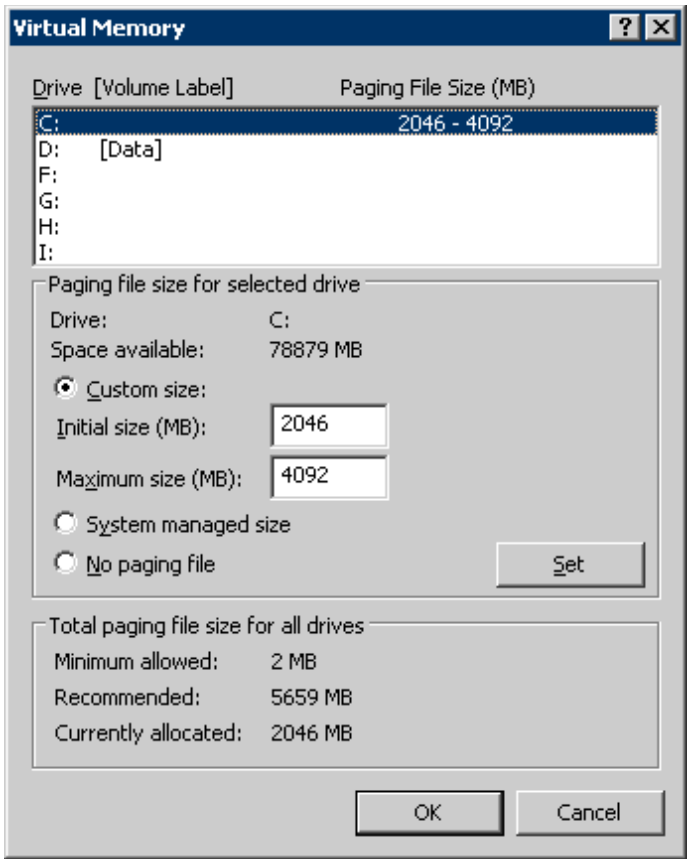

Figure 10: Setting Virtual Memory on the BO Host Computer

5. In the `Initial size` field, set the value for the initial page file size equal to the amount of RAM noted in Step 2.
6. In the `Maximum size` field, set the value at least 1.5 times the initial size.
7. Click `Set`, and then click `OK` to close the `Virtual Memory` dialog box.
8. Click `OK` to close the `Performance Options` dialog box.
   Click `OK` to close the `System Properties` dialog box.

A restart might be necessary, especially if you reduced the size of the paging file.

Managing the WebI Document Cache

Depending on the design of an Interactive Insights report and the types of actions being performed against it, memory requirements will vary. Refreshing a report demands the greatest amount of memory for a Web Intelligence document because BO must query Info Mart and transfer the entire dataset to the Web Intelligence server.

File caching allows BO's web services to handle very large attachments without buffering them in memory. File caching compromises performance because BO's web services must process information by using files instead of memory. If file caching is not enabled, however, all JVM memory could be utilized when handling very large attachments and replication can fail. You can configure BO web services to use file cashing for large transfers to a file and to use memory for smaller files.

To manage the WebI document cache, perform the following steps:

1. Within the Central Management Console (CMC), click `Servers`.
2. Open the properties of Web Intelligence Processing server. Figure 11 shows a portion of WebI properties in which the default values are set.
3. Set the value in the `Document Cache Cleanup Interval` field to `600` seconds.
4. Set the value in the `Cache Timeout` field to `20` minutes. This value indicates how often BO will clear the document cache.
5. If it is marked, clear the `Disable Cache Sharing` checkbox.
6. Set the value in the `Maximum Document Cache Size` field to `10240` KB.
7. Restart the Web Intelligence Processing server.
8. Locate and back up the `webi.properties` file. BO references this file from the following location:

   ```
   <Drive>:\Program Files\BusinessObjects\Tomcat55\webapps\
   AnalyticalReporting\WEB-INF\classes
   ```

9. Edit this file to uncomment the following lines:

   ```
   WID_FAILOVER_SIZE=60
   WID_STORAGE_TOKEN_STACK_SIZE=60
   MAX_HEAP_SIZE=1073741824
   ```

10. Restart the server computer.

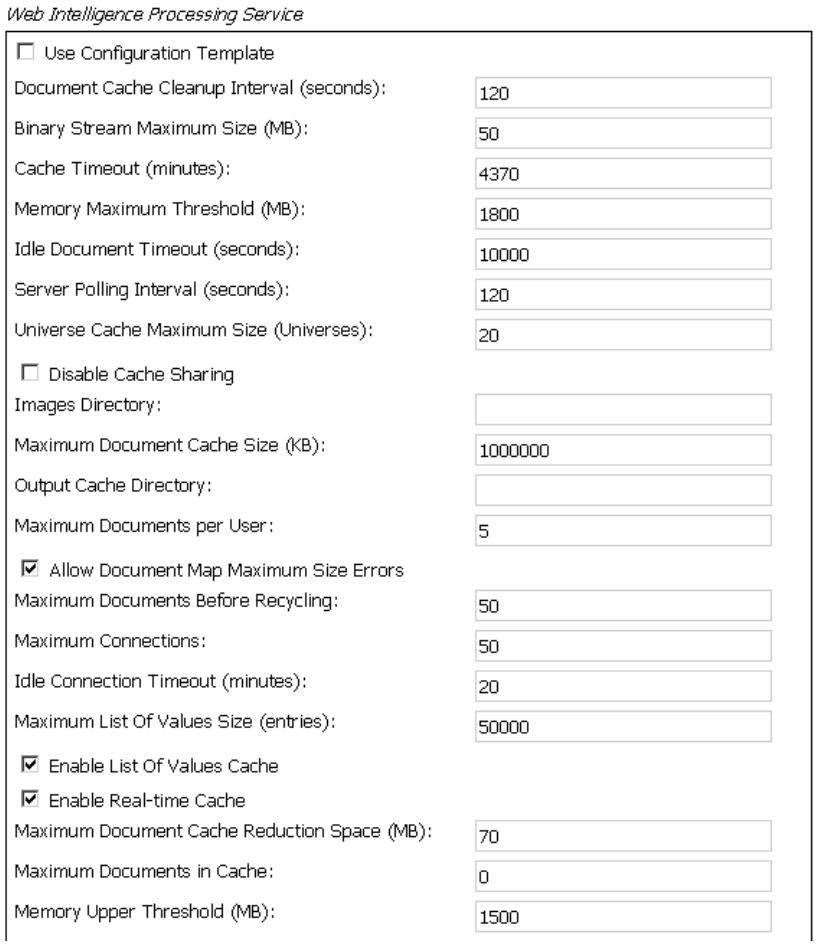

Figure 11: Setting Web Intelligence Processing Parameters

Refer to the *SAP BusinessObjects Enterprise Administrator's Guide* and the *Sizing Companion for SAP BusinessObjects Version 3.1* for further information.

Printing the Reports

Although some effort was made to make the reports legible when they are printed, the primary focus of the Interactive Insights report designs was to optimize them for onscreen viewing.

Some of the charts and tables that are presented on the summary tabs of reports use colors (for example, green, red, and yellow) to summarize the information that is provided in the main report tab; these colors might be difficult to differentiate when the report is printed to a black-and-white printer.

Printing most reports requires tabloid-sized paper (11x17″); most are output with landscape orientation. Also, a few of the reports, such as the `Queue-`

`Virtual Queue Summary` and `Agent Inbound Utilization` reports, are packed with so much data that they encroach the minimum margin space required for some printers. If you find that your printed output is cropped at the margins, consider scaling down the report output a bit to satisfy the minimum allowable margins for your printer. You can typically accomplish this either by adjusting the settings in the `Print` dialog box of your printer driver or through the `Print Setup` or `Page Setup` menu items of the software application of the report output. The ability to scale output is provided with some of the supported BOE output formats. Consult the software documentation of your targeted output format to learn about its ability to scale, as well as the hardware documentation for your specific printer for information about minimum margin widths.

Chapter

4 Understanding the Interactive Insights Universe

The following sections are included in this chapter:

About the Interactive Insights Universe

The Genesys Interactive Insights universe consists of nearly 300 measures; over 30 conditions (otherwise known as filters); queue, agent, and several time-related dimensions; hierarchies; lists of values; and hidden elements. These elements are organized and managed in the Business Objects Enterprise (BOE) Universe Designer application (see Figure 12). Most of the elements used by the Interactive Insights reports are defined in the universe. (Other elements, such as the labels, the page footer, column headers, and a portion of report headers are defined in the report's structure using Web Intelligence.) However, the inverse is not true; there are several universe elements that are not used in the reports. The *Genesys Interactive Insights 7.6 Universe Guide* describes each element and the reports that rely on them, if any.

Because universe elements serve as the semantic layer for all users, Genesys recommends that you do not allow your general user population to modify universe elements. Universe restructuring should be limited to a minute subset of users in your organization who possess a profound understanding of Info Mart tables and columns and commensurate knowledge of BusinessObjects Enterprise (BOE) XI 3.1 software. Genesys does not support modifications to universe elements beyond the customizations that are listed on page 46.

The Interactive Insights Universe in Designer

The elements provided within the Interactive Insights universe constitute the business-friendly semantic layer of the Info Mart. This universe contains:

- Pre-defined SQL-based objects that map to SQL structures (tables, columns, database functions) in the Info Mart.
- A schema of the tables and joins used in the Info Mart. (The right pane in Figure 12 shows only a portion of this schema).

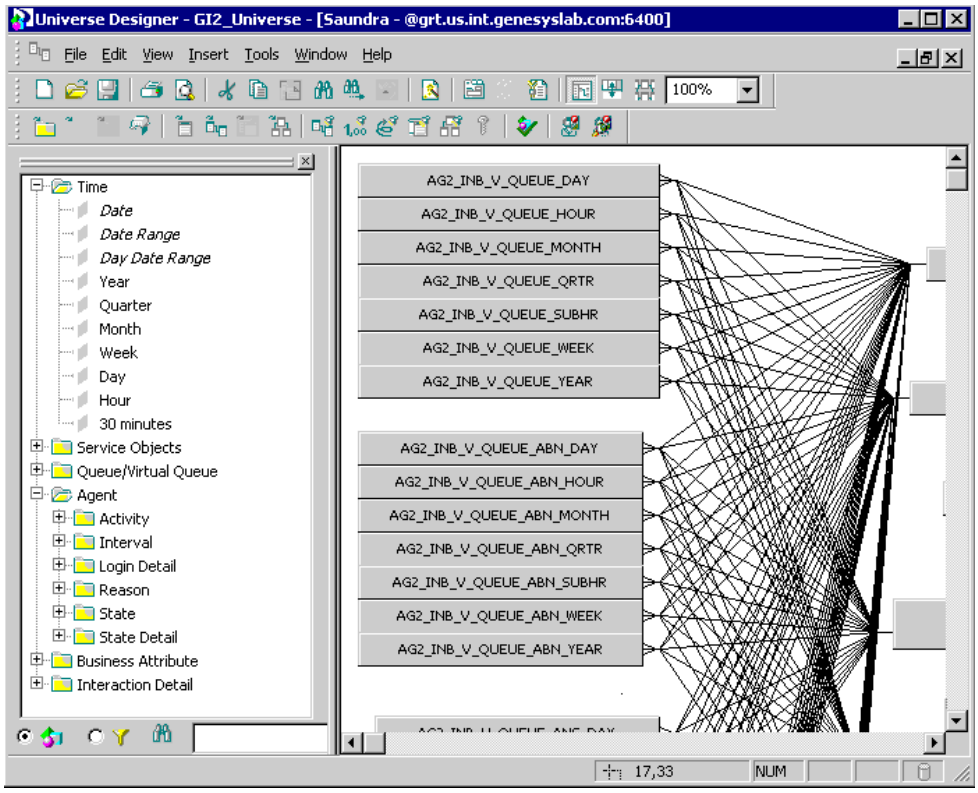

Figure 12: Business Objects Enterprise Universe Designer

Designer is the Business Objects tool that was used to define this layer and the tool that you (having been granted the appropriate rights) can use to:

- Modify the objects to impact which results are retrieved by the Interactive Insights reports.
- Create new universe objects (or universes) for use in Web Intelligence reports.
- See the extended definitions of objects that belong to the Interactive Insights universe. (Basic descriptions of measures are visible to all in the InfoView and Web Intelligence interfaces.)
- Specify connection parameters to one or more database middleware.

Through Web Intelligence, report users seamlessly connect to the Interactive Insights universe and run queries against their Info Mart. Report users can perform data analysis and create new reports, choosing objects from the Interactive Insights universe, without ever seeing or having to understand Info Mart's complex data structures.

Read the *BusinessObjects Enterprise XI 3.1 Universe Designer* for instructions on how to use this component of the BOE XI 3.1 suite.

Certain modifications to universe elements are supported; these are indicated in the description of a particular measure in the *Genesys Interactive Insights 7.6 Universe Guide*. In addition, if alternate definitions exist, they are provided in the measure's properties on the `Source Information` tab, which is shown in Figure 13. In Designer, supported alternate definitions begin with the phrase "`Developer use only`" in the measure's description. (You might have to scroll down to read all of the alternate definitions.) Refer to "Customizing Measure Definitions" on page 46 for the preferred procedure for changing these definitions.

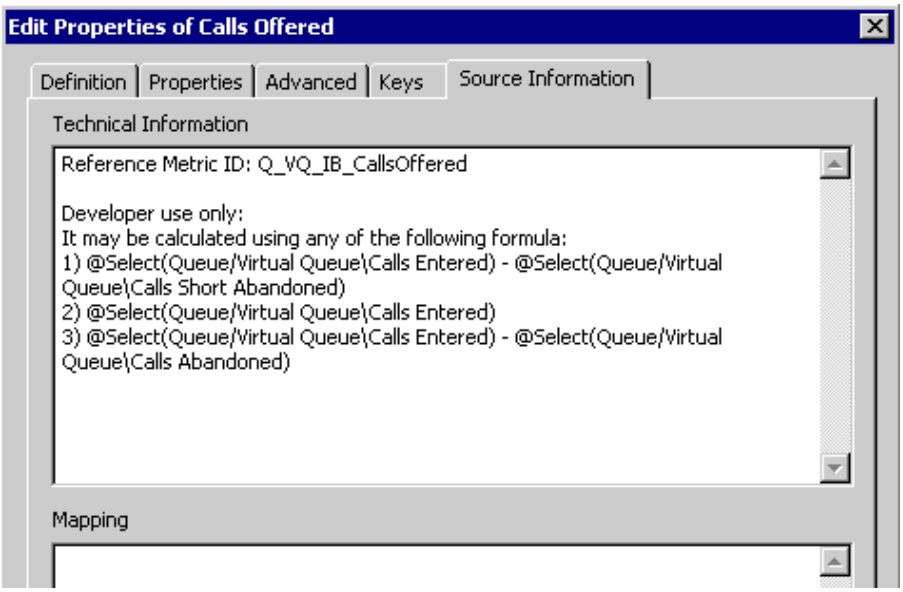

Figure 13: Supported Alternate Definitions of the Calls Offered Measure

Classification of Measures

In this release, all measures are classified as one of the three types:

- Detail
- Interval
- Disposition

Note: The Interactive Insights universe contains an `Interval` class that houses only some of the universe's interval-type measures.

Detail Measures

Detail measures, in this release, are all time-related—each providing the duration of one and only one activity. In this aspect, they differ from interval and disposition measures, which aggregate information about a number of interactions that occur over a period of time. Some examples of detail measures include the following:

- `Login Detail\Login Time Detail`
- `State Detail\State Time Detail`

The use of `Detail` in the name of Interactive Insights measures should not be confused with BOE's terminology for `Detail` objects. The two concepts are entirely different.

Timestamps are another type of detail measure. A timestamp provides the instantaneous duration of one activity—the specific moment in time when an activity occurred. This information includes both the date and time of the activity in the time zone that is indicated by the underlying Info Mart column for the measure. Timestamps are reported in the Interactive Insights reports in the standard tenant's time zone. (The Info Mart stores timestamps for other time zones, such as in Greenwich Mean Time, but this information is not referenced by the Interactive Insights reports.)

Some examples of timestamp measures in the Interactive Insights universe include:

- `Login Detail\Login Timestamp`
- `Login Detail\Logout Timestamp`
- `State Detail\State Timestamp`

Interval Measures

Interval measures measure the activities occurring within the reporting interval as they occur, whether or not the interactions complete during the interval and whether or not the interval completes. Counts and durations of such measures are clipped where interactions cross over multiple intervals and are attributed to each of the intervals in which the activities occur. So, in the scenario in which an interaction is still waiting in queue when the hour changes, the time that the interaction actually waited in queue (3:58–4:03 PM, for instance) during the first interval (two minutes, in our example) gets attributed to the first interval (3:30–3:59 PM). The remaining three minutes, in our example, get attributed to the second interval (4:00–4:29 PM). Furthermore, a count is attributed to each interval in which the interaction persists—that is, a count of `1` for the interaction waiting in queue during the first interval and another count of `1` for the same interaction, waiting in queue, during the second interval. This example illustrates another point about interval measures; namely, that their counts are not additive across reporting intervals.

Interval measures provide an interpretation of the interactions that occurred during an interval. Some examples of interval measures include the following:

- `Interval\Calls Answered`
- `Interval\Talk Time`
- `State\ACW`
- `State\Unknown State Time`

Disposition Measures

Disposition measures provide a different interpretation of the count and duration of interactions that occur with a contact center, attributing their measure to the interval in which the interaction was received by the contact-center resource—whether the resource is a mediation DN or a handling resource, such as an agent. So, in the scenario in which an agent talks to a customer over a two-day span (11:45 PM–12:15 AM, for instance), all of the talk time (30 minutes, in this example) gets attributed to the first reporting interval (Day 1) and no time gets attributed to the latter interval(s) (Day 2). Likewise, the count (of `1` interaction) gets attributed to the first interval; no count at all gets attributed to the second. As such, disposition measures *are* additive; their counts from one interval can be added to the counts of other intervals to obtain a total count across all intervals, without over-counting.

Some examples of disposition measures include the following:

- `Activity\Avg Consult Time`
- `Business Attribute\% Calls Transferred Agent`
- `Queue/Virtual Queue\Hold`

Naming Convention

All interval measures are sourced from aggregation tables that contain `_I_` in the Info Mart table name; for example:

- `AG2_INB_V_I_IXN_AGENT_SUBHR`
- `AG2_INB_V_I_IXN_ID_SUBHR`
- `AG2_INB_V_I_SESS_STATE_SUBHR`

Detail measures are sourced from the following Info Mart tables:

- `SM_RES_STATE_FACT`
- `SM_RES_STATE_REASON_FACT`
- `MEDIATION_SEGMENT_FACT`
- `INTERACTION_RESOURCE_FACT`
- `VOICE_RES_FACT_EXT`

No special naming convention identifies a table as one that contain disposition measures, other than that they are all sourced from aggregation tables that do not to use _I_ in the table name; for instance:

- AG2_INB_V_AGENT_QUEUE_HOUR
- AG2_INB_V_QUEUE_HOUR
- AG2_INB_V_QUEUE_ABN_HOUR
- AG2_INB_V_QUEUE_ANS_HOUR
- AG2_INB_V_QUEUE_GRP_HOUR
- AG2_INB_V_IXN_AGENT_HOUR
- AG2_INB_V_IXN_AGENT_GRP_HOUR
- AG2_INB_V_IXN_ID_HOUR

Because higher-level aggregation interval tables cannot be derived from lower-level aggregation tables, the GIM Server populates all aggregations of interval tables directly from the detail tables (*_FACT tables). This is a resource-expensive operation so to minimize performance-related issues, the 7.6 release of Genesys Info Mart provides a reduced number of aggregation levels for each interval table, which have the following suffixes: _SUBHR, _HOUR, and _DAY. Each disposition table type has seven tables and views, which have the following suffixes: _SUBHR, _HOUR, _DAY, _WEEK, _MONTH, _QRTR, and _YEAR.

Reference Metric ID

Many measures are identically named across different classes. The full name of a measure includes the class in which the measure belongs, which makes it unique. This full name, however, can be unwieldy and long. To further assist in the identification of a measure, most have been assigned a reference metric ID which appears on the Source Information tab of the measure's properties. This ID is informational only and is not referenced by any of the reports. However, if you need to contact Genesys Technical Support for assistance, this ID may be useful when describing the measures.

Figure 14 shows the ID that is assigned to the Calls Entered measure belonging to the Queue/Virtual Queue class. By contrast, the reference ID of the like-named measure in the Business Attribute class is ST_IB_CallsEntered.

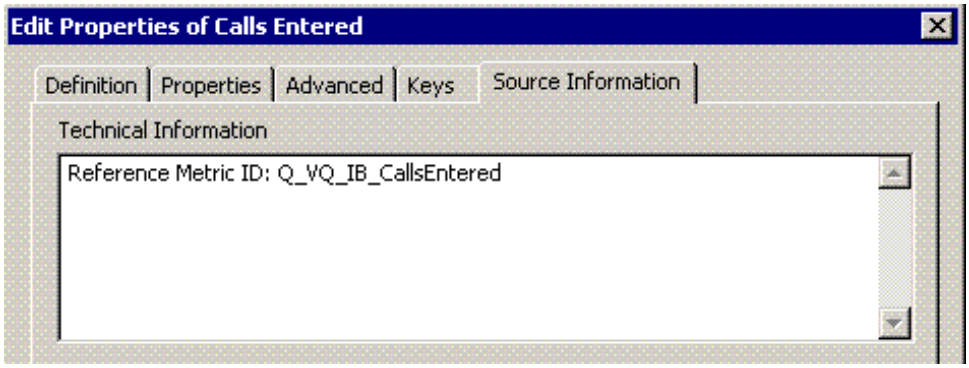

Figure 14: Reference Metric ID of the Queue/Virtual Queue\Calls Entered Measure

Note that reference metric IDs might not be unique. All of the `Calls Answered STI` measures in the `Queue/Virtual Queue` class, for example, share the same reference ID: `Q_VQ_IB_CallsAnsweredAgent_XtoYs`.

Source of Aggregated Information

The immediate source of contact center data for the Interactive Insights reports is the aggregation tables that are deployed with Genesys Info Mart 7.6. The reports, built on top of these tables, enable you to view the performance of contact center resources as voice interactions pass through them or are handled by them, in conjunction with the following dimensions:

- `DATE_TIME`
- `RESOURCE_`
- `RESOURCE_GROUP_COMBINATION`
- `TENANT`
- `TIME_RANGE`

The "Interactive Insights Reports" chapter of the *Genesys Interactive Insights 7.6 Universe Guide* lists the supporting tables for each report and the configuration options controlling GIM's population of data to them. You should also read the *Genesys Info Mart 7.6 User's Guide* to learn how data is populated in the Info Mart.

Class Makeup

Tables 2 through 11 summarize the measures provided within each Interactive Insights class.

Table 2: Classification of Measures in the Activity Class

	Count		Duration			
	Total	%	Total	%	Avg	Max
Abandoned Ringing	✓					
ACW	✓		✓		✓	
Conference Initiated	✓					
Conference Received	✓					
Consult	✓		✓		✓	
Consult ACW			✓			
Handle			✓		✓	
Hold	✓		✓		✓	
Inbound	✓					
Ring			✓			
RONA	✓					
Short Talk	✓					
Talk			✓		✓	
Transferred	✓	✓				

Table 3: Classification of Measures in the Business Attribute Class

	Count		Duration			
	Total	%	Total	%	Avg	Max
Abandon	✓	✓	✓		✓	✓
ACW	✓		✓		✓	
Answer	✓	✓	✓		✓	✓
Answer in Threshold	✓					
Consult	✓		✓		✓	
Entered	✓					
Handle			✓		✓	
Hold	✓		✓		✓	
Offered	✓					
Offered w/Objective	✓					
Service Level		✓				
Short Abandoned	✓					
Talk			✓		✓	
Transferred	✓	✓				

Table 4: Classification of Measures in the Flow Class

	Count		Duration			
	Total	%	Total	%	Avg	Max
To Target			✓			

Table 5: Classification of Measures in the Handling Attempt Class

	Count		Duration			
	Total	%	Total	%	Avg	Max
Customer ACW			✓			
Customer Dial			✓			
Customer Handle			✓			
Customer Hold			✓			
Customer Ring			✓			
Customer Talk			✓			
Conference Initiated			✓			
Conference Received			✓			
Queue			✓			
Response			✓			
Routing Point			✓			
Skill Matched	✓					
Skill Requested	✓					
To IRF			✓			

Table 6: Classification of Measures in the Interval Class

	Count		Duration			
	Total	%	Total	%	Avg	Max
ACW	✓		✓	✓		
Answered	✓					
Consult	✓		✓	✓		
Consult ACW			✓			
Hold	✓		✓	✓		
Login			✓			
Talk			✓	✓		

Table 7: Classification of Measures in the Login Detail Class

	Count		Duration			
	Total	%	Total	%	Avg	Time-stamp
Login			✓			✓
Logout						✓

Table 8: Classification of Measures in the Queue/Virtual Queue Class

	Count		Duration			
	Total	%	Total	%	Avg	Max
Abandon	✓	✓	✓		✓	✓
Abandon Ringing	✓	✓				
Abandon STI	✓	✓				
ACW	✓		✓		✓	
Answered	✓	✓			✓	✓
Answer Agent	✓	✓				
Answer in Threshold	✓					
Answer Others	✓					
Answer STI	✓	✓				
Consult	✓		✓			
Consult ACW			✓			
Distributed	✓	✓				
Diverted	✓					
Entered	✓					
Handle			✓		✓	
Hold	✓		✓		✓	
Inbound					✓	
Offered (Service Factor)	✓	✓				
RONA	✓					
Routed Other	✓					
Short Abandoned	✓	✓				
Standard Abandoned	✓		✓			✓
Talk			✓			
Transferred	✓	✓				
Wait			✓			

Table 9: Classification of Measures in the Reason Class

	Count		Duration			
	Total	%	Total	%	Avg	Time-stamp
Login Rsn			✓			
Not Ready Rsn			✓	✓		
Not Ready Reason	✓		✓	✓		
Logout						✓

Table 10: Classification of Measures in the State Class

	Count		Duration			
	Total	%	Total	%	Avg	Time-stamp
ACW	✓		✓	✓		
ACW InCall	✓		✓	✓		
ACW OutCall	✓		✓	✓		
Login			✓			
Not Ready	✓		✓	✓		
Not Ready Incall	✓		✓	✓		
Not Ready Outcall	✓		✓	✓		
Occupancy				✓		
Ready			✓	✓		
Unknown State			✓	✓		

Table 11: Classification of Measures in the State Detail Class

	Count		Duration			
	Total	%	Total	%	Avg	Time-stamp
Login Time Detail			✓			
Login Timestamp						✓
Logout Timestamp						✓
State Time Detail			✓			
State Timestamp						✓

The following agent-related, total-count measures are provided both as interval measures and disposition measures:

- `ACW`
- `Consult`
- `Consult ACW`
- `Hold`
- `Inbound`
- `Talk`

All queue- and business attribute-type measures in this release are classified as disposition measures; there are no comparable interval-based queue or business attribute measures.

Chapter

5 Customizing the GI2 Universe and Reports

This chapter provides general guidelines for how to customize Interactive Insights universe and reports. Please note that even though Genesys does not support the custom reports that you may create, we do realize that in this initial, major release of Interactive Insights, you may want additional functionality that we have not provided.

This chapter provides some direction on how to develop the functionality yourself. Emphasis is placed on customizing a *copy* of the reports and/or making a copy of the `GI2_Universe` universe. Business Objects does not maintain versioning of the changes you make and there are no rollback operations once reports are saved and universe elements are exported to the repository.

This chapter contains the following sections:

After customizing definitions in the universe, remember that you must export the universe back to the Business Objects repository so that your changes are available to report users. This procedure is described in the *Genesys Interactive Insights 7.6 Deployment Guide*, under the “Exporting the Universe Back to the Repository” section.

Warning! Genesys does not support the implementation of the procedures that are described in this chapter other than where it is explicitly noted. Universe customizations should be carefully designed, thoughtfully implemented, and fully tested in your own environment before they are placed into production. Genesys Quality Assurance has not tested these procedures, but believes that when they are used as guidelines, they will enhance your Interactive Insights experience.

Customizing Measure Definitions

Genesys supports limited customization of the following measures in the Interactive Insights universe:

Queue/Virtual Queue Class

- % Calls Abandoned
- % Calls Answered
- % Calls Answered Agent
- % Calls Distributed
- % Service Level
- Avg Handle Time
- Calls Abandoned
- Calls Offered
- Handle Time

Activity Class

- Avg Handle Time
- Handle Time

Business Attribute Class

- % Service Level

State Class

- % Occupancy

The supported alternate definitions for each measure are provided only in the measure's `Source Information` properties in Designer, as shown in Figure 15. This information is not provided in Interactive Insights documentation.

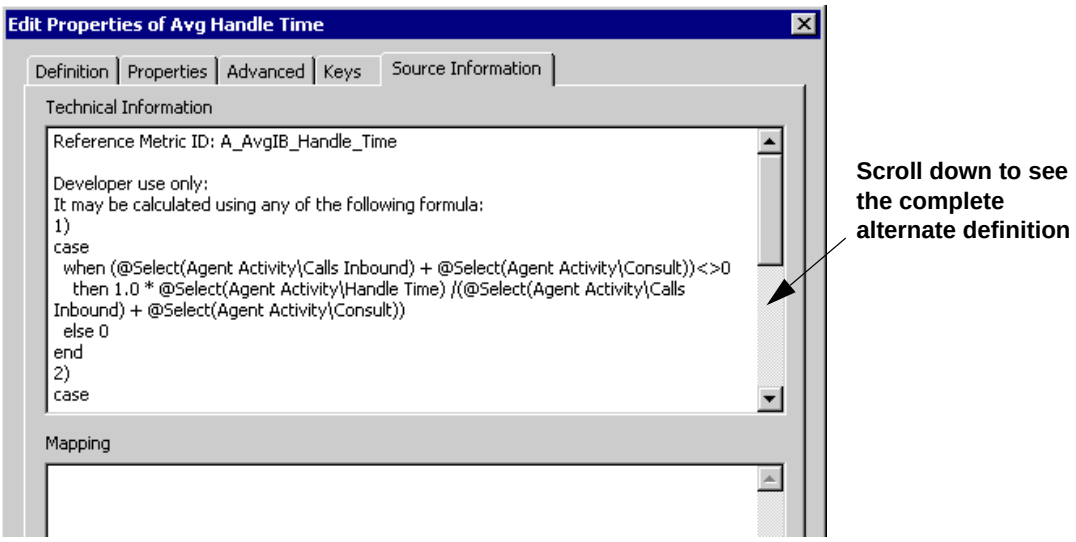

Figure 15: Alternate Definition of the Activity\Avg Handle Time Measure

Composite measures are based on the definitions of their supporting measures, which have definitions that might also be customizable; so, if you customize one definition, be sure to consider customizing the supported definitions for the entire family of measures that is affected by your change. Another thing to consider are the full ramifications of your changes, as some of the measures are used by more than one Interactive Insights report. The `Activity\Avg Handle Time` measure, for instance, is used by the following seven reports:

- `Agent Conduct Report`
- `Agent Group Business Result Report`
- `Agent Group Customer Segment Report`
- `Agent Group Inbound Call Handling Report`
- `Agent Group Service Type Report`
- `Agent Inbound Utilization Report`
- `Agent Inbound Call Handling VQ Report`

Changing a measure's definition in Designer affects all of the reports in which the measure is used. Refer to each measure's description in the *Genesys Interactive Insights 7.6 Universe Guide* for a listing of Interactive Insights reports that employ a measure. This guide also lists whether customization for a particular measure is supported under the `Alternate?` field.

To change a measure's definition within Designer:

1. Open the measure's properties.
2. On the `Source Information` tab, copy the appropriate alternate definition from the `Technical Information` frame. There may be more than one alternate for you to choose from.
3. On the `Definition` tab, replace the definition listed in the `Select` frame with the alternate definition you copied.
4. On the `Properties` tab, verify that the correct aggregation function is assigned. (Designer may reset this value to `Sum` when you make certain changes to measures.)
5. In the `Description` frame, edit the measure's description to match the definition that you chose.
6. Click `OK` to save and close the measure's properties.

Incidentally, you should also update measure descriptions, as appropriate, in the reports in which these customized measures are used so that report users do not see inaccurate descriptions. The reports do not inherit descriptions from Designer; they must be updated manually. These descriptions exist on the `Descriptions` tab of each report in Web Intelligence (see Figure 16).

Agent Group Service Type Report

Report Description

Displays details about the duration and count of calls that an agent answered, grouped by Service Type and the agent's group.

Metrics Description

Metrics Name	Description
Calls Inbound	The total number of times that inbound calls, assigned a business attribute, were answered by agents belonging to this agent group.
Handle Time	The total amount of time, in seconds, that agents belonging to this agent group spent handling inbound calls.
Avg Handle Time	The average amount of time, in seconds, that agents belonging to this agent group spent handling inbound calls.
Talk Time	The total amount of time, in seconds, that agents, belonging to this agent group, spent talking with customers on inbound calls, assigned a business attribute, that the agents received.
Avg Talk Time	The average amount of time, in seconds, spent by agents belonging to this agent group talking to customers on inbound calls received within the reporting interval.
Hold Time	The total amount of time, in seconds, that agents, belonging to this agent group, had inbound calls, assigned a business attribute, on hold.
Avg Hold Time	The average amount of time, in seconds, that agents belonging to this group had inbound calls on hold.
Consult Calls Received	The total number of times that agents, belonging to this agent group, received and answered consult calls where the consultations were associated with inbound calls assigned a business attribute.
Consult Time	The total amount of time, in seconds, that agents, belonging to this agent group, spent talking to other agents on consult calls assigned a business attribute, where the consultations were associated with inbound calls and the agents were the recipients of the consult requests.
Avg Consult Time	The average amount of time, in seconds, spent by agents belonging to this agent group on inbound consult calls the agents received.
ACW Time	The total amount of time, in seconds, that agents belonging to this agent group spent in call-related ACW state for inbound calls that the agents received and that were assigned a business attribute.
Avg ACW Time	The average amount of time, in seconds, spent by agents belonging to this agent group on inbound calls while in ACW state.
Transfers Made	The total number of times that agents, belonging to this agent group, transferred inbound calls that were assigned a business attribute.
% Transfers Made	The percentage of answered inbound calls that were transferred by agents belonging to this agent group during the reporting interval to the total number of inbound calls that agents belonging to this agent group answered during the reporting interval.

Figure 16: The Report's Description Tab in Web Intelligence

You can also create new measures that are based on the definitions of existing universe measures by using the `Formula Toolbar` within Web Intelligence. These new measures would only be available within the Web Intelligence report in which they were created. Genesys, however, does not recommend this approach to define new measures. Allowing report users to use the custom formula capability can result in multiple versions of the truth. Customizing the universe should be a restricted feature in your environment.

Resetting Dimensions to Distinguish Same-Named Queues

The design of the Interactive Insights universe presumes that the contact center objects in your environment are distinct and uniquely named. While this fact is

given in single-switch environments, it might not be the case in more complex environments that contain more than one switch. The names of queue objects, in this scenario, *could* be identical from one switch to the next.

With this assumption in place, the queue-based Interactive Insights reports consider only the name of the queue when retrieving data about queue objects. The reports do not filter data based on the switch from whence this data originated. As such, you should carefully interpret the results of queue-based reports in multi-switch environments. The queue-based Interactive Insights reports will display the results for *all* queue objects sharing the same name instead of only the results of the intended queue.

You can reset the definition of queue dimensions to recognize the queue's switch. To do so, within Designer:

1. In the definitions of all `Queue/VQ` dimensions, wherever they occur, replace the `SELECT` statement with the following:

   ```
   RESOURCE_Q.RESOURCE_NAME,'@',RESOURCE_Q.SWITCH_NAME
   ```

2. Change the `WHERE` clause of all `Queue or VQ` conditions, wherever they occur, from:

   ```
   (@Select(Queue/Virtual Queue\Queue/VQ) IN @Prompt...
   ```

   to

   ```
   (RESOURCE_Q.RESOURCE_NAME IN @Prompt...
   ```

3. Save your work and test the results.
4. When done, export the universe back to the repository.

With these changes, queue-based reports will now display the name of the queue's switch along with the name of the queue object instead of displaying only the queue's name. And, as a result, *`queue@switch`* values may be too long to fit in the report headers, labels, and table cells where they may occur. As a final step, you may have to adjust the layout of queue-based reports for better presentation.

Creating Week-Level Reports

This release of Interactive Insights includes no weekly reports; although the GIM Server regularly aggregates and populates week-level data in `AG2_*_WEEK` tables in the Info Mart. You can use these tables as the source for week-level Interactive Insights reports that you might create. The direction that you take from here depends on which type of week-level report you want to create, namely:

- Drillable week-level reports or
- Week-level only reports

If you want week-level-only reports with no drill up or drill down functionality to the other time dimensions, you need only replace the time dimension that is

used in the reports with the Week dimension. Follow the steps that are provided in "Week Level–Only Reports" on page 50.

For drillable week-level reports, you must do the following:

- Redefine the Day dimension to be a week-compatible day or create a new day-type dimension altogether (see "Creating a Week-Compatible Day Dimension" on page 51)
- Modify the universe's Time hierarchy to define one drill path along the desired dimensions (which includes the Week dimension). Refer to Business Objects documentation for details about editing hierarchies.
- Replace the time dimension used in the applicable reports with the Week dimension (to create week-level reports). If, however, you want report users to be able to drill up for week-level results, then this step is not necessary.

Business Objects Enterprise enables the creation of hierarchies to facilitate multi-dimensional analysis in the reports. Although it is possible to create and maintain two or more time-related hierarchies within one universe:

- 30 minutes > Hour > Day > Week and
- 30 minutes > Hour > Day > Month > Quarter > Year

there are many caveats in implementing such a sophisticated system with respect to performing drill operations in the reports. If hierarchies share the same dimensions, as demonstrated above, then drill operations become less convenient.

No further modification to the reports is required to enable users to drill up for week-level results. Be sure, however, to inform your users of a week's boundaries as they are defined in the Info Mart. This is discussed in "Understanding Info Mart's Week Boundaries" on page 52.

Week Level–Only Reports

The Week dimension has been omitted from the Time hierarchy in Interactive Insights reports in this release, which disables drilling up or down for week-level results. You can, however, create new copies of some of the reports and customize them to summarize contact center activity in week-only time buckets. Week-level-only reports cannot be drilled along the Time hierarchy.

You can enable week-level reporting in all of the queue and business attribute reports, and in certain agent reports for which AG2_*_WEEK tables are provided and populated in the Info Mart. You can enable week-level reporting in the following seven agent reports:

- Agent Conduct Report
- Agent Group Business Result Report
- Agent Group Customer Segment Report
- Agent Group Inbound Call Handling Report

- Agent Group Service Type Report
- Agent Inbound Call Handling VQ Report
- Agent Inbound Utilization Report

For interval-based reports, the Info Mart does not store week-level data for the underlying interval-based tables; creating week-level reports for interval reports is therefore meaningless.

To provide week-level-only reporting, customize a copy of an Interactive Insights report as follows:

1. In InfoView, open a copy of a report.
2. Click Edit to start Web Intelligence.
3. Edit the report to add the Week dimension to both the report's query and the report's layout.
4. (Optional) Edit the prompts to display a selection of dates along week boundaries. This is not a trivial task. In lieu of this, however, you can inform your report users of the week boundaries as defined within the Info Mart. Refer to "Understanding Info Mart's Week Boundaries" on page 52 for information on this topic.
5. Remove any other time dimension from both the report's query and its layout.

Test your changes by the running the report and verifying its results.

When all changes have been made, you will need to export your work to the Business Objects repository. This procedure is described in the *Genesys Interactive Insights 7.6 Deployment Guide*, under the "Exporting the Universe Back to the Repository" section.

Note: Week-level data stored in the Info Mart is not ISO 8601-compliant. Refer to the Genesys Info Mart documentation set for further information.

Creating a Week-Compatible Day Dimension

You must create a week-compatible day dimension if you intend to enable your report users to drill up from or down to day-level results in the reports that you customize. Under default configuration, the Day dimension in the Time class is a month-compatible day, sourced from the LABEL_YYYY_MM_DD column of the DATE_TIME Info Mart table. This field references a particular day with respect to the month and year in which the day falls; days are consequently numbered as 01 through 31. To reference a particular day within a given week, this Day dimension should be sourced instead from the CAL_DAY_NUM_IN_WEEK field of this table, which stores the day number of a week, starting with 1 for Sunday and ending with 7 for Saturday. To this end, within Designer, you can do either of the following:

- Redefine the existing `Day` dimension.
- Create and define a new dimension altogether, such as `Day in Week`.

If you opt for the latter method, you must substitute this new dimension, in both the query panel and report layout, in all reports for which you want to generate week-level results. If you opt for the former, this new definition will affect the results of all other reports that provide day- and month-level results.

When you have finished customizing the universe, you must export your work to the Business Objects repository so that this redefined or new dimension is available to report users. This procedure is described in the *Genesys Interactive Insights 7.6 Deployment Guide*, under the "Exporting the Universe Back to the Repository" section.

Understanding Info Mart's Week Boundaries

Whole weeks in the Info Mart begin on Sunday and end on Saturday. If report users specify any other week range in the `User Prompt Input` area of the week reports that you create, such as Monday to Sunday, the generated results will display data for two partial weeks instead of one seven-day period. In the Monday–Sunday example, this breaks down to:

- Six days, Monday–Saturday, for the first partial week and
- One day, Sunday–Sunday, for the second partial week.

In addition, in the Info Mart, the first and last weeks of the year are usually partial weeks, depending on whether the first week starts on a Sunday and whether the last week ends on a Saturday. If the last Sunday–Saturday week crosses two years, the weekly reports will display two records that hold partial week data for this one-week range; namely:

- The last Sunday of the year through December 31 and
- January 1 through the first Saturday.

For the last week of 2009, the boundary dates of these partial weeks are the following:

- 12/28/09–12/31/09 and
- 1/1/10–1/3/10.

Refer to the discussion of the `DATE_TIME` table in the *Genesys Info Mart 7.6 Reference Manual* for more information about the definition of a week used by Genesys Info Mart.

Using 15-Minute Aggregation

All of the out-of-box Interactive Insights reports (except for the Detail reports) enable drill down of results to a 30-minute level, by default, to enable you to review performance of your contact center for each half hour of a day. The `sub-hour-level-aggregation` GIM configuration option controls this aspect of

reporting to this subhour level. GIM configuration, however, permits a value of `15` for this option which would enable 15-minute aggregations, and therefore reporting at a 15-minute level.

To enable 15-minute reporting in the Interactive Insights reports, you would have to set this option to `15`, re-run the aggregation job, and customize the universe and reports to use the `15 minutes` dimension. Changing this option after it has been set, however, should be done thoughtfully. The *Genesys Info Mart 7.6 Deployment Guide*, in fact, recommends that the decision on which aggregation level to use be made upon the initial installation of Genesys Info Mart and that it not be changed thereafter.

Note: Either 15 or 30 minutes is allowed—not both simultaneously. Therefore, drill-up operations from the 15-minute level in the Interactive Insights reports that you customize will take you directly to hour-level results, and not to 30-minute results first.

All of these activities can be performed only from Microsoft Windows platforms:

1. In the Genesys Configuration Manager, open the GIM application object that controls Info Mart population.
2. Disable the scheduler by setting the `run-scheduler` configuration option to `FALSE`, and ensure that no jobs are running in the GIM Administration Console.
3. Change the `sub-hour-level-aggregation` option to `15` and save your changes.
4. Run the GIM script (`load_gim_staging_area_15.sql`) to load 15-minute aggregation metadata into the staging area database.
5. Run the GIM script (`make_gim_agg_views_15.sql`) for 15-minute aggregation level against the Info Mart.
6. Re-enable the scheduler by setting `run-scheduler` to `TRUE`.
7. Open the Genesys Info Mart Administration Console. From the `Schedule` tab, click `Run Job` and select `Job_AggregateGIM`.

   This step should be performed during the time of day when the re-aggregation process does not interfere with ETL's processing of new data or with end-user querying of existing Info Mart data.
8. Specify input parameters (tenant, start date, end date) and run the aggregation following the recommendations in the *Genesys Info Mart 7.6 Operations Guide* for manageable runs.

   This process deletes previously aggregated rows for the parameters that are provided and replaces them with re-aggregated data. When the aggregation runs have completed, all `AG2_*_SUBHR` aggregate tables will contain that is data that is aggregated in 15-minute chunks.

9. Close the Genesys Configuration Manager, and open the Business Objects Designer application.
10. Under the `Time` class, rename the `30 minutes` dimension appropriately—to `15 minutes`, for example.

> **Note:** Genesys recommends that you rename the existing dimension instead of creating a new one.

11. In the dimension's properties, set the `SELECT` statement to the following and apply your changes:
    - `DATE_TIME.LABEL_YYYY_MM_DD_HH24_15INT` or
    - `LABEL_YYYY_MM_DD_HH_15INT`.

Your Interactive Insights reports will now display subhour results at the 15-minute level when you drill down from hour results.

Refer to the *Genesys Info Mart 7.6 Deployment Guide* and *Genesys Info Mart 7.6 Operations Guide* for more detailed instructions.

Removing Fields from Reports

As you customize the Interactive Insights reports to meet your business's needs, there are some specific rules you should observe with regard to removing undesired dimensions and/or measures from the reports. Otherwise, under some circumstances, you may encounter database and/or other errors when running them.

- If you remove a measure or dimension from the report's query, be sure also to remove it from the presentation layer. (The converse is not necessarily true, however: if you remove a measure from the presentation layer, you need not remove it from the report's query though you may choose to do so because this may improve report performance.)
- If the measure or dimension targeted for removal from the report is the last one belonging to a particular class, in addition to removing that dimension or measure, then, you must also remove any corresponding `Combination` condition that pertains only to that dimension or measure.

The `Combination` conditions (`Agent Group Combination`, `Agent-Interval Group Combination`, and `Queue Group Combination`, for example) are distinguished from the non-`Combination` conditions in that they provide filtering only against a named series of aggregate tables. For example, whereas the `Queue Group or VQ Group` condition (a non-`Combination` condition) can be used to filter mediation DN groups from any Info Mart table that stores queue-related data, the `Queue Group Combination ABN` condition can only be used to filter queue group–related data from the `AG2_INB_V_QUEUE_ABN_*` series of Info Mart tables.

If the Combination condition remains among a report's query filters when no measures remain to gather data from the aggregate table, the query will return a database error when it is executed against Info Mart.

You are likely to encounter this situation when removing measures from those reports that query more than one series of aggregate tables, as is the case with the Agent Inbound Utilization and Agent Not Ready Reason Code reports. The Agent Inbound Utilization Report returns data from the following aggregate tables:

- AG2_INB_V_IXN_AGENT_*
- AG2_INB_V_I_SESS_STATE_*

The Combination conditions that are used to filter the agent groups that have been retrieved from these tables are respectively:

- Agent Group Combination
- Agent State Group Combination

If you were to remove from this report all six agent-state measures:

- % Not Ready Time
- % Ready Time
- % Occupancy
- Not Ready Time
- Ready Time
- Login Time

you should also remove the respective Combination condition (Agent State Group Combination) to maintain a properly designed query.

For additional information, refer to the descriptions of reports and conditions in the *Genesys Interactive Insights 7.6 Universe Guide*.

Using Attached Data

The universe includes two sample UserData dimensions in the Handling Attempt class: User Data Detail 1 and User Data Dim 1, which you can customize to refine data further in the Interaction Handling Attempt report. These dimensions correspond to two keys, which, if configured in your environment, capture information about changes in the attached data that accompany telephony events recorded by ICON and further processed by GIM ETL runtime processes. The "Interactive Insights Dimensions" chapter of the *Genesys Interactive Insights 7.6 Universe Guide* describes these dimensions.

Tailoring these dimensions to match the setup of your environment and adding them to the Interaction Handling Attempt report will further your investigations and report analysis as to what events transpired with regard to specific interaction handling attempts and why those attempts yielded the technical results that were reported.

The INTERACTION_RESOURCE_FACT table enables your environment to store up to 20 different attributes of high-cardinality UserData in the USER_DATA_1 through USER_DATA_20 fields. Likewise, the ability to store up to 10 low-cardinality UserData attributes is afforded by the USER_DATA_STRING_1 through USER_DATA_STRING_10 fields of the USER_DATA table. Also, the USER_DATA_2 table contains the USER_DATA_2_STRING_1 through USER_DATA_2_STRING_10 fields that

store up to 10 additional, low-cardinality attributes of attached data. Table 12 summarizes general information about these fields and provides a column for you to note the specific attached data attribute in use within your environment. The instructions for universe and report customization that follow apply to all of these fields.

Table 12: Some of the Attached Data Fields in Info Mart

Table	Field	GIM Key	Data Type	Your Applied Use *(fill in the blank)*
INTERACTION_RESOURCE_FACT (high cardinality data)	CASE_ID	10048	Char 255	
	USER_DATA_1	10021	Decimal	
	USER_DATA_2	10022	Decimal	
	USER_DATA_3	10023	Decimal	
	USER_DATA_4	10024	Decimal	
	USER_DATA_5	10025	Decimal	
	USER_DATA_6	10026	Integer	
	USER_DATA_7	10027	Integer	
	USER_DATA_8	10028	Integer	
	USER_DATA_9	10029	Integer	
	USER_DATA_10	10030	Integer	
	USER_DATA_11	10031	Char 255	
	USER_DATA_12	10032	Char 255	
	USER_DATA_13	10033	Char 255	
	USER_DATA_14	10034	Char 255	
	USER_DATA_15	10035	Char 255	
	USER_DATA_16	10036	Char 128	
	USER_DATA_17	10037	Char 128	
	USER_DATA_18	10038	Char 128	
	USER_DATA_19	10039	Char 128	
	USER_DATA_20	10040	Char 128	

Table 12: Some of the Attached Data Fields in Info Mart (Continued)

Table	Field	GIM Key	Data Type	Your Applied Use *(fill in the blank)*
USER_DATA (low cardinality data)	USER_DATA_STRING_1	10001	Char 255	
	USER_DATA_STRING_2	10002	Char 255	
	USER_DATA_STRING_3	10003	Char 255	
	USER_DATA_STRING_4	10004	Char 255	
	USER_DATA_STRING_5	10005	Char 255	
	USER_DATA_STRING_6	10006	Char 255	
	USER_DATA_STRING_7	10007	Char 255	
	USER_DATA_STRING_8	10008	Char 255	
	USER_DATA_STRING_9	10009	Char 255	
	USER_DATA_STRING_10	10010	Char 255	
USER_DATA_2 (low cardinality data)	USER_DATA_2_STRING_1	10011	Char 128	
	USER_DATA_2_STRING_1	10012	Char 128	
	USER_DATA_2_STRING_1	10013	Char 128	
	USER_DATA_2_STRING_1	10014	Char 128	
	USER_DATA_2_STRING_1	10015	Char 128	
	USER_DATA_2_STRING_1	10016	Char 128	
	USER_DATA_2_STRING_1	10017	Char 128	
	USER_DATA_2_STRING_1	10018	Char 128	
	USER_DATA_2_STRING_1	10019	Char 128	
	USER_DATA_2_STRING_10	10020	Char 128	

Refer to the *Genesys Info Mart 7.6 Deployment Guide* for instructions on how to map user-defined key-value pairs to GIM keys to record information about attached data in your contact center. By default, this mapping is stored in the `ccon_adata_spec_GIM_example.xml` file.

Predefined attached data also appears in other Info Mart tables, including:

- `INTERACTION_DESCRIPTOR`
  - `CUSTOMER_SEGMENT`
  - `SERVICE_TYPE`
  - `SERVICE_SUBTYPE`
  - `BUSINESS_RESULT`
- `CUSTOMER`
- `STRATEGY`

- REQUESTED_SKILL
- ROUTING_TARGET

Using the attached data from these tables falls outside the scope of this section. Several Interactive Insights reports, however, are already provided for the attached data-related fields in the INTERACTION_DESCRIPTOR table. Refer to the "Worksheet for Mapping Attached Data" in the *Genesys Info Mart 7.6 Deployment Guide* for additional information.

Defining UserData Dimensions to the Universe

The application of UserData noted in Table 12 will be helpful when you define new UserData dimensions to the Interactive Insights universe. If you haven't already done so, fill out the last column of this table. The information you jot down there can double as the name of new UserData dimensions that you create.

To define UserData dimensions to the Interactive Insights universe:

1. Within Designer, open the Interaction Details > Handling Attempt folder.
2. Rename the User Data Detail 1 and User Data Dim 1 dimensions, as appropriate, to refer to their applied use—for example, OrderNo and Product respectively.
3. Add new dimensions for every other UserData attribute defined within your environment that is important enough for results to be reported.

   Each dimension should refer to the appropriate Info Mart table and column and be assigned the correct data type. You can validate the syntax for each SELECT statement during creation by clicking the Parse button on the Definition tab of the dimension's Properties page.

   Refer to *BusinessObjects Enterprise XI 3.1 Universe Designer* for information about how to create and define dimensions.
4. Export your changes back to the repository.

Double Checking GIM Configuration

You have several options available for configuring the Genesys Info Mart application and, thus, affect what data is written to Info Mart. Some of these options, such as the extract-user-event-data and user-event-data-timeout options, apply specifically to UserData. The interim 7.6 releases of Genesys Info Mart have also introduced new configuration options that affect report results. Review the *Genesys Info Mart 7.6 Deployment Guide* and the *Genesys Info Mart 7.6 Release Notes* for a listing and description of such options.

Adding Dimensions to the Interaction Handling Attempt Report

As soon as attached data dimensions have been defined for your environment and the changes have been exported to the repository, you can customize the `Interaction Handling Attempt` report to include one or more of these dimensions therein.

Within Web Intelligence:

1. Open the `Interaction Handling Attempt` report.
2. Edit the report's query to add the desired UserData dimensions.
3. Edit the report's layout to add the desired UserData columns.
4. Save and test your changes.

Refer to BusinessObjects documentation for instructions on how to edit reports within Web Intelligence.

Setting the Scope of Analysis

When you run and save a report, Business Objects stores analytical information about the report in the report's cube. This information includes referenced universe elements, the database query, the returned results, and the report's *scope of analysis*, which defines the degree of data that will be retrieved from the Info Mart as a result of a query. This degree of data corresponds directly to the additional hierarchical levels, lower than those initially designed to be included in the query.

Figure 17 shows the unaltered `Scope of Analysis` pane for the `Call Volume Service Type Report`. This pane becomes visible when you edit a report's query within Web Intelligence and click the `Show/Hide Scope of Analysis Pane` icon ( ) on the menu bar.

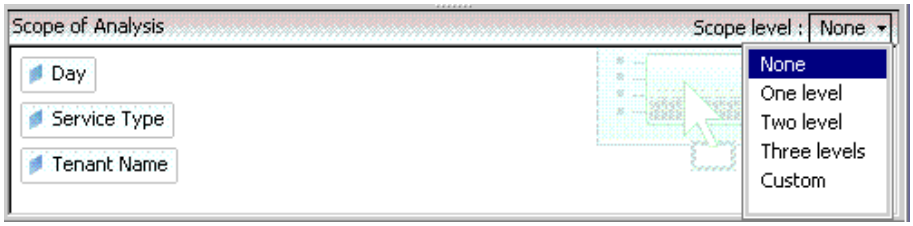

Figure 17: Scope of Analysis for the Call Volume Service Type Report

The Interactive Insights reports have all been saved with the `None` setting for the scope of analysis; this means that no extra data is stored within the report's cube other than the dimensions that are directly used by the query to organize and retrieve results. This was done intentionally in order to minimize the size of a report's cube and, in turn, to maximize the report's performance —specifically, to reduce the time that is required to run a report (retrieving

data from the Info Mart) and have its results displayed on screen. However, you can customize each report to broaden its scope of analysis if extra data should be available to your users at some later point. In addition to the `None` setting, Business Objects provides the capability to set the following scopes:

- `One level`
- `Two levels`
- `Three levels`
- `Custom`, where you can selectively designate the additional objects that should be included in the query.

Refer to the *BusinessObjects Enterprise XI 3.1 Performing on-report analysis with Web Intelligence* document for further information about this feature.

Dealing with Incompatibility

It is possible for your custom reports to generate results that are difficult to interpret, to generate errors, or to require excessively long query-processing times when certain combinations of Interactive Insights measures and dimensions are included in a report. These conditions can occur under several circumstances including:

- Improperly combining disposition and interval measures in the same report.
- Drilling up in interval-only reports.
- Improperly combining incompatible dimensions, such as `Queue/VQ` and `State Name`, in the same report.

For this reason, Genesys recommends that when you create or customize new reports, you try to employ measures and dimensions that belong to the same class. Additionally, you should select one or more dimensions from the `Time` class in every report. Observing this rule will minimize confusion and error.

Nevertheless, incompatibilities can result even when you select members within the same class in custom reports. This is true particularly of members in the `Activity` class, which includes one dimension, `Queue/VQ`, that is not compatible when it is used with certain measures in that class, such as `Calls RONA`, `Calls Short Talk`, and `Calls Conference Initiated`. Figure 18, for example, illustrates the message box that Web Intelligence displays when this dimension is used along with these measures in a custom report.

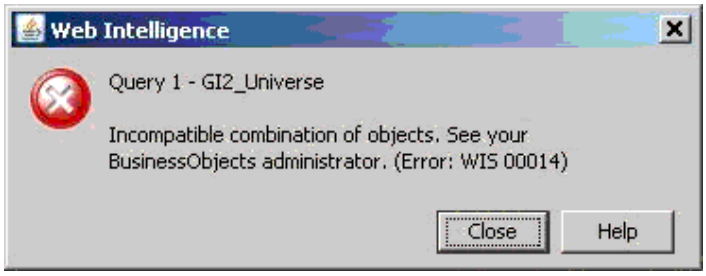

Figure 18: Incompatible Objects Error Message

The measures in this class pull data from the following Info Mart tables:

- AG2_INB_V_AGENT_QUEUE
- AG2_INB_V_IXN_AGENT
- AG2_INB_V_IXN_AGENT_GRP

However, in Info Mart's schema, the AG2_INB_V_AGENT_QUEUE table does not contain the following columns, to name a few, which are present in the other two tables:

- TOTAL_RONA_COUNT
- TOTAL_SHORT_TALK_COUNT
- TOTAL_ABANDONED_RINGING_COUNT
- TOTAL_TRANSFER_INITIATED_COUNT
- TOTAL_CONF_INITIATED_COUNT
- TOTAL_CONF_RECEIVED_COUNT

Therefore, report requests for this combination of data will elicit such an error.

Another dialog box that you may encounter when building custom reports, even when selecting objects from the same class, is the Query Contexts dialog box, shown in Figure 19.

Web Intelligence displays this dialog box when the resulting query of your custom report is ambiguous—that is, when the query does not uniquely identify the table from which data should be retrieved, but the query can instead be executed against more than one table in the database. For example, if you fail to include in your report a time-related dimension from the Time class, then Web Intelligence will display this dialog box before executing the query—like results are stored in all of the _SUBHR, _HOUR, _DAY, _WEEK, _MONTH, _QRTR, and _YEAR aggregation tables and views. Only after you specify the appropriate context will Web Intelligence display the report's results.

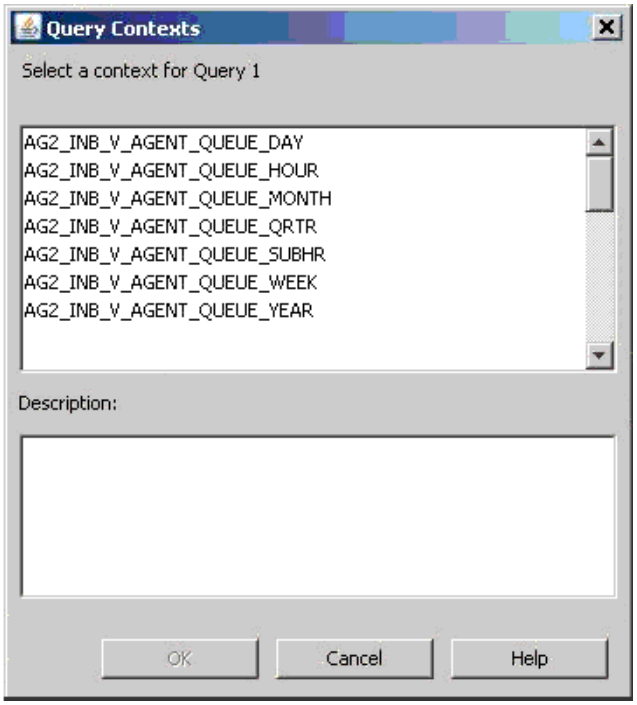

Figure 19: The Query Contexts Dialog Box Displays—When the Report Query is Ambiguous

As another example, if you attempt to run a custom report where you had added just the `Queue/VQ` and `Queue/VQ Group` dimensions from the `Queue` class to the query definition and nothing else, you would see a similar dialog box. Queue-related data from this class can be retrieved from any of the following aggregate tables:

- `AG2_INB_V_AGENT_QUEUE_*`
- `AG2_INB_V_QUEUE_*`
- `AG2_INB_V_QUEUE_ABN_*`
- `AG2_INB_V_QUEUE_ANS_*`
- `AG2_INB_V_QUEUE_GRP_*`

Such a query, without any measures or a time-related dimension, provides insufficient information for Web Intelligence to determine the table (or view) from which it should retrieve the desired data.

To repress this dialog box from your report viewers, add the appropriate universe elements that satisfy Web Intelligence's request for additional information. Even if you choose not to display these elements in the report, they should be part of the underlying query. Optionally, you could pre-select the appropriate context so that the dialog box is not displayed to users. Refer to Business Objects documentation for further information.

Finally, as is the case with any report design, study the results of your generated custom report to ensure they make sense.

Supplements

Related Documentation Resources

BusinessObjects Enterprise XI 3.1

- *BusinessObjects Enterprise XI 3.1 InfoView User's Guide.*
- *BusinessObjects Enterprise XI 3.1 Universe Designer.*
- *BusinessObjects Enterprise XI 3.1 Building Reports using the Java Report Panel.*[*]

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*

* Genesys believes that some Business Objects documents that were available as of the publication of this *Genesys Interactive Insights 7.6 User's Guide* were mistitled. The references we provide to such documents use the intended titles.

- *Genesys Hardware Sizing Guide*, which provides information about Genesys hardware sizing guidelines for the Genesys 8.*x* releases.

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 wiki at http://docs.genesyslab.com/.
- Genesys Documentation Library DVD and/or the Developer Documentation CD, 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:

76ii_user_08-2009_v7.6.201.00

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 66).	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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