

Cisco ICM Software Supervisor Guide

ICM Software Version 4.5

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Preface

Purpose

This manual describes how to monitor enterprise call center activity with the real-time and historical reporting features of the GEOTEL Intelligent *CallRouter* (ICR).

Audience

This document is intended for the Intelligent *CallRouter* supervisor. The supervisor has an understanding of call center management and the specific types of data that are used to report on call center activity and resources.

This document assumes that you have some familiarity with Microsoft® Windows™ applications and common tasks such as moving and resizing windows and using a mouse.

Organization

Chapter 1, “Overview”

Introduces the Intelligent *CallRouter* and the ICR call center enterprise.

Chapter 2, “The Admin Workstation”

Introduces the Admin Workstation (AW) with a special emphasis on call center reporting and the Monitor ICR reporting application.

Chapter 3, “Creating a Report”

Guides you through the process of creating a simple report using the predefined report templates of Monitor ICR.

Chapter 4, “Reporting Basics”

Describes how to use the basic features of Monitor ICR.

Chapter 5, “Setting Thresholds and Drill-Downs”

Describes how to set threshold values and drill-down templates in Monitor ICR reports.

Chapter 6, “Scheduling Reports”

Describes how to schedule reports to print automatically by using the ICR Job Scheduler tool.

Chapter 7, “Available Data”

Describes the most commonly used data available in the ICR databases.

Chapter 8, “Template Reference”

Documents the predefined report templates that come with Monitor ICR.

Typographic Conventions

This manual uses the following conventions:

Boldface type is used for emphasis; for example:

Real-time information is **not** stored in the central database.

Italic type indicates one of the following:

- A newly introduced term; for example:
A skill group is a collection of agents who share similar skills.
- A generic syntax item that you must replace with a specific value; for example:
IF (*condition, true-value, false-value*)
- A title of a publication; for example:
For more information, see the *Intelligent CallRouter Database Schema Handbook*.

Sans serif type with small caps represents keys on your keyboard; for example:

Press the **SHIFT** key to select a range of items.

An arrow (→) indicates an item from a pull-down menu. For example, the Save command from the File menu is referenced as File→Save.

Text you must type is shown in a sans serif type. For example:

Date and Time

Other Publications

- *Intelligent CallRouter Custom Screen Builder Tutorial*
- *Intelligent CallRouter Database Schema Handbook*
- *Intelligent CallRouter Installation Guide*
- *Intelligent CallRouter Planning Guide*
- *Intelligent CallRouter Product Description*
- *Intelligent CallRouter Quick Start Guide*
- *Intelligent CallRouter Supervisor Guide*
- *Intelligent CallRouter System Manager Guide*
- *GEOTEL•Web View Administrator Guide*

For information about the GEOTEL•*Network ICR* product, see the following documents:

- *Network ICR Product Description*
- *Network ICR User Guide*

1. Overview

The GEOTEL Intelligent CallRouter (ICR) improves the level of customer service offered by geographically distributed call centers. The Intelligent CallRouter's main function is to route toll-free calls to the most appropriate agent or answering resource available. The system also provides a set of computer telephony integration (CTI), reporting, monitoring, and scheduling tools that help you to manage a distributed call center enterprise.

This chapter provides an overview of the Intelligent CallRouter and describes its role in a multiple call center environment.

1.1. What is the Intelligent CallRouter?

The Intelligent CallRouter (ICR) is a software-based call processing system that provides call-by-call routing to geographically distributed call centers. The ICR links agents from multiple call centers to create a *virtual call center*.

In the virtual call center model, agents from distributed call centers can be grouped logically according to their areas of expertise. For example, a financial company might have call centers in several cities across the country. Each call center has groups of agents organized into *skill groups*.

The agents in these skill groups are trained to handle certain types of calls. Basic calls can be routed to skill groups that are trained to provide general services. Callers who have more complicated transactions can be routed to more specialized skill groups.

Figure 1 shows how calls are routed to the best available agents in the call center enterprise.

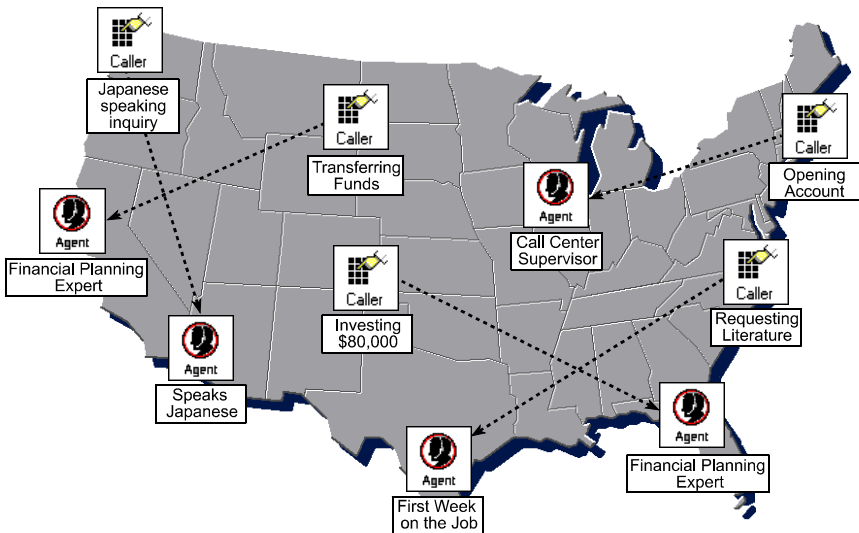


Figure 1: ICR Call Routing

What happens if several callers require the services of a specialized agent? For example, you might have several callers who need the assistance of a financial planner. This type of specialized agent may not always be immediately available at one call center. However, since the Intelligent CallRouter is aware of the status of the entire enterprise, it can quickly find financial planners at other call centers and route the calls accordingly.

1.1.1. Where Does the ICR Fit In?

The Intelligent CallRouter works directly with call centers and the interexchange carrier (IXC) that supplies the toll-free service. The IXC is a long-distance telephone company that offers toll-free call routing services. Figure 2 shows how the Intelligent CallRouter operates between the IXC network and distributed call centers.

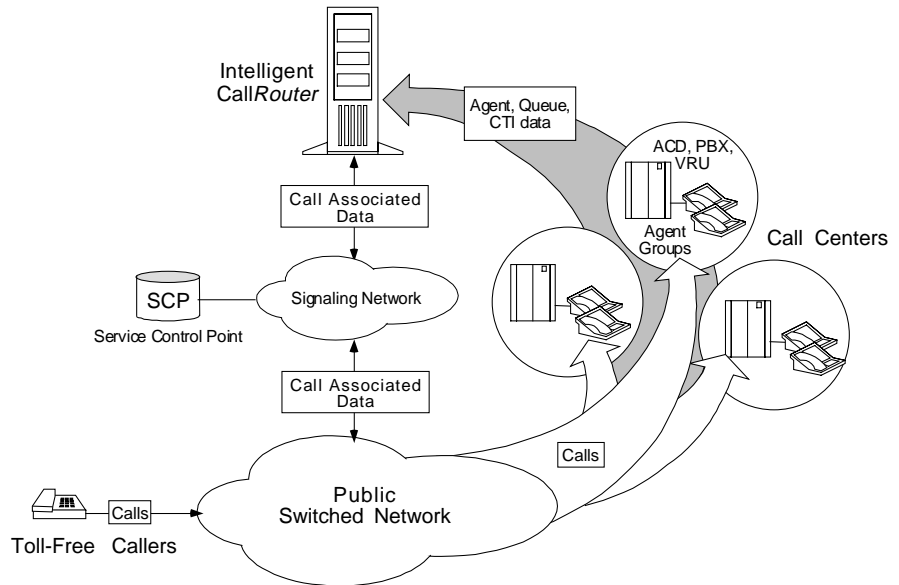


Figure 2: Intelligent CallRouter Overview

The IXC *signaling network* controls how calls are routed in the public switched network. In addition to connecting to the signaling network, the ICR has data connections to each call center peripheral. A *peripheral* may be an Automatic Call Distributor (ACD), Private Branch Exchange (PBX), or Voice Response Unit (VRU). The data connections to each peripheral provide the ICR with real-time data on agent group and call activity.

The ICR has two main functions in the call center enterprise: routing calls and collecting management information. The management information is used to make informed decisions on where to route calls. It is also used to monitor and report on call center performance. In a GEOTEL•Enterprise CTI environment, management data can also be used in a variety of integrated desktop and server CTI applications.

1.1.2. Call Routing

A typical ICR-routed call goes through the following stages. Figure 3 illustrates these stages in detail.

- ① The Intelligent CallRouter is constantly receiving data from call centers on agent availability, queue status, and call handling performance.
- ② A caller dials the toll-free number.
- ③ The Local Exchange Carrier (LEC) passes the call to the IXC.

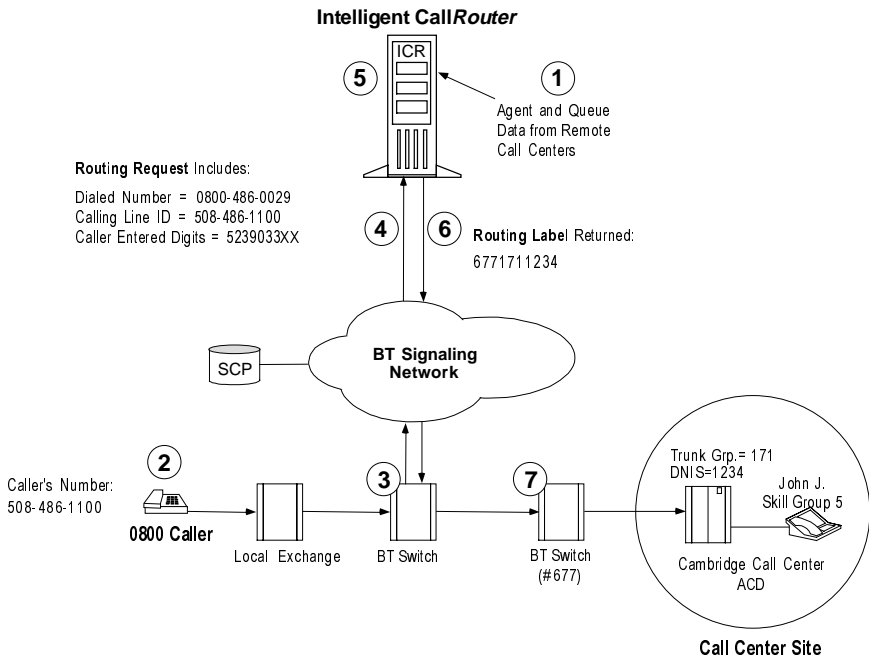


Figure 3: ICR Call Flow Diagram

- ④ The IXC signaling network sends call information from its computer (the Service Control Point (SCP)) to the ICR in the form of a routing request.
- ⑤ The ICR, using the information from the IXC routing request and the data it has been receiving from call centers, determines the best agent group based on skills, current agent availability, and queue status.
- ⑥ The ICR returns a routing label (destination) for the call to the IXC.
- ⑦ The IXC then connects the call to the ACD where an appropriate agent is located.

1.1.3. Pre-Routing

The Intelligent CallRouter uses Pre-Routing[®] to ensure that incoming calls reach the appropriate agent resource the first time. In Pre-Routing, the ICR executes routing decisions before the call terminates at a call center.

As shown in Figure 3, every time a caller dials the toll-free number, the IXC passes a routing request through the signaling network to the Intelligent CallRouter. The interexchange carrier acts as a *routing client*, while the Intelligent CallRouter acts as the *routing server*.

The IXC *routing request* includes information about the call such as

- Number dialed.
- Calling Line ID (CLID) or Automatic Number Identification (ANI).
- Caller Entered Digits (CED).

The final routing decision, or the call's destination, is contained in a *routing label* which the ICR returns to the interexchange carrier. The carrier is then responsible for connecting the call and maintaining the voice path.

1.1.4. Post-Routing

Optionally, the ICR can perform the same routing functions used in Pre-Routing for transfers and internal calls (that is, for calls originating at a call center or another agent location). The ICR uses Post-Routing[®] to make these “secondary” routing decisions. Post-Routing also lets you implement intelligent transfer applications in which calls are routed between agents and VRUs. Post-Routing ensures that subsequent call transactions are routed in a timely manner to an appropriate resource.

In Post-Routing calls, the ICR uses the same routing scripts and call processing as it does in Pre-Routing calls. The difference is that the peripheral (ACD, PBX, or VRU) generates the routing request rather than the IXC. The Intelligent CallRouter processes the routing request, returns a destination address (routing label), and then directs the peripheral to send the call to the best resource available.

1.1.5. Enterprise CTI

As an enterprise call routing system, the ICR collects data from different systems and telecommunications environments throughout the call center enterprise. Often these systems are implemented on heterogeneous hardware and software platforms and distributed across multiple sites. GEOTEL•Enterprise CTI gathers enterprise call and transaction data from these dissimilar systems and makes it available to agent desktop and CTI server applications.

See also: For more information on Enterprise CTI, see the *Intelligent CallRouter Product Description*.

1.1.6. Call Routing Scripts

To determine the best destination for a call, the ICR processes routing requests through *call routing scripts*. A routing script is a graphical, flowchart-like diagram that specifies how to route a call. A script usually has several branches that can be followed depending on current conditions at the call centers.

In order to make a routing decision, the script uses the information contained in the routing request along with real-time information on the status of resources at each call center. The system manager typically defines a number of routing scripts to use in the ICR system.

Scripts can be scheduled as required to route calls among call centers based on the type of service the caller needs, the time of day the call is being placed, and where suitably qualified agents are available to handle the call.

See also: For more information on the routing scripts, see the *Intelligent CallRouter System Manager Guide*.

1.1.7. Reporting and Monitoring

The ICR uses real-time, near real-time, and historical data on agent and call center status to make its routing decisions. To make the best routing decision possible, the ICR constantly collects information about *agent activity* at each call center, such as:

- Current agent state
- Logon duration
- Number of agents available
- Number of agents talking
- The time agents spend in particular call handling states

The ICR also collects information about *calls* coming into the call centers, such as

- Number of calls in progress
- Number of calls handled and finished
- How calls were routed
- How long callers were on hold

Although this management data is essential to call routing, it is also important for monitoring and reporting on agent and agent group performance. The ICR stores the management data in industry-standard historical and real-time relational databases.

The Intelligent CallRouter provides many ways for you to analyze trends and gauge service levels using real-time and historical management data. The main ICR reporting tool, called *Monitor ICR*, allows you to generate many types of reports on agent and call activity. Monitor ICR is described in more detail later in this chapter.

1.1.8. Network ICR

GEOTEL•*Network ICR* is the carrier-class version of the Intelligent CallRouter. It allows a network service provider to offer virtual call center services to its customers. The Network ICR functions much like a Service Control Point (SCP) by distributing incoming calls to individual network service customers based on the number dialed, the call's point of origin, and caller-entered digits.

The Network ICR product uses a two-tiered architecture in which one ICR passes route requests to a second ICR. The first ICR, called the *Network ICR* or *NICR*, typically receives routing requests from a carrier network. The NICR can either return a label itself or pass the route request to a second ICR, called the *Customer ICR* or *CICR*.

Each CICR can process all calls for one or more customers. The CICR receives the route request, runs its own routing scripts to determine the destination for the call, and returns a routing label to the NICR. The NICR then returns the label to the original carrier network. This architecture lets a service provider perform simple routing (within the NICR) for some customers while providing full ICR functionality (in a CICR) for other customers.

See also: For more information about Network ICR, see the *Network ICR Product Description*.

1.2. The Call Center Enterprise

An Intelligent CallRouter treats a customer's multiple distributed call centers as a single enterprise. You can think of the *call center enterprise* as an entire company or agency that spans many call centers. The enterprise typically includes all call centers served by an ICR.

You can create different organizational entities within a call center enterprise. For example, you might organize distributed groups of agents into a shared resource pool that spans call centers. You might also create entities that are tied to specific peripherals. The term *peripheral* refers to the individual switch (ACD, PBX, or VRU) that distributes incoming calls at each call center.

From a reporting perspective, you can view agent and call routing statistics on an enterprise-wide or peripheral-by-peripheral basis. *Enterprise reporting* gives you a view of performance across the entire call center enterprise. *Peripheral reporting* focuses your reports on specific areas of the call center enterprise.

To become more familiar with the ICR call center enterprise, it might help to review the types of organizational entities you can define.

See also: Table 1, later in this chapter, provides information on how ICR call center terms map to the terms used by ACD vendors.

1.2.1. Services and Skill Groups

A *service* is a particular type of call processing that the caller requires. In most cases, a service can be thought of as a certain type of call. For example, in a software company's call center, callers who have questions about installing software might be directed to the Technical Support service.

A *skill group*, on the other hand, is a set of agents who handle similar types of calls or have a common set of skills. A skill group might contain agents who are able to handle a particular type of call (for example, calls from customers who speak Spanish). Figure 4 shows the hierarchy of services and skill groups within a call center enterprise.

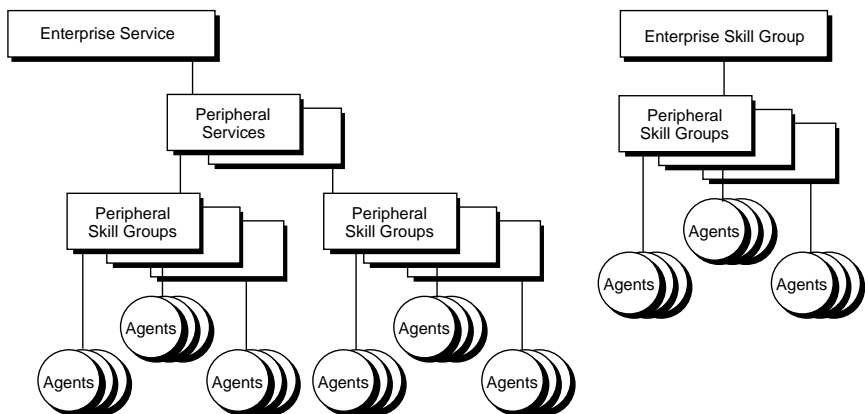


Figure 4: Service and Skill Group Hierarchy

As shown in Figure 4, you can group services and skill groups to create *enterprise services* and *enterprise skill groups*. These are simply collections of services and skill groups that span call centers.

A *peripheral service* is a service that is tied to a specific ACD or PBX. You might have several Sales peripheral services. Each Sales peripheral service is tied to, or associated with, a specific peripheral somewhere in the call center enterprise. The Sales services can be logically grouped

across peripherals to form an enterprise Sales service. Figure 5 shows the relationship between enterprise and peripheral services.

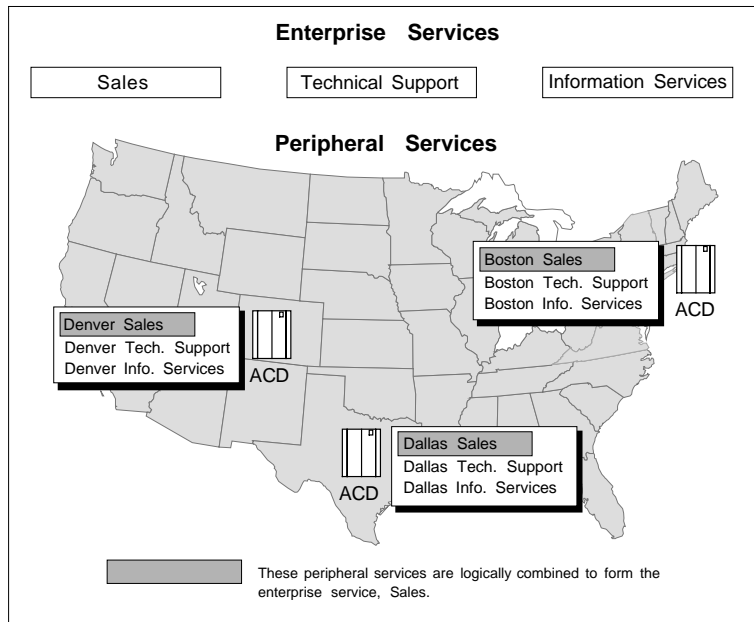


Figure 5: Enterprise and Peripheral Services

Peripheral services typically include a number of skill groups, each of which can be set up to handle specific types of calls. For example, within a Sales peripheral service you might have Spanish and Japanese skill groups to support Sales calls from callers who speak these languages.

Peripheral skill groups are skill groups that are tied to a specific ACD or PBX. Each skill group contains a number of agents. Agents can be assigned to one or more peripheral skill groups. Like services, skill groups can be combined on an enterprise basis.

Figure 6 shows the relationship between enterprise and peripheral skill groups.

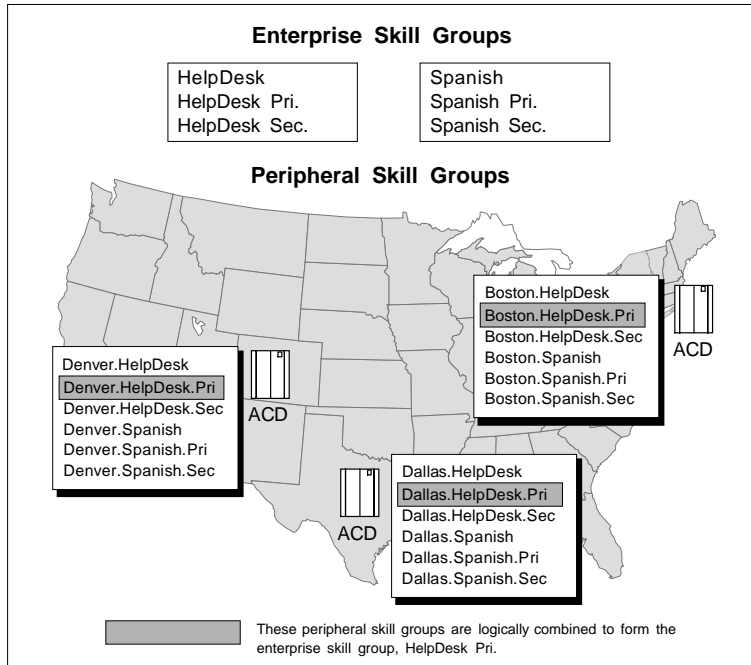


Figure 6: Enterprise and Peripheral Skill Groups

On Lucent DEFINITY ECS ACDs running in EAS mode, and on Rockwell Galaxy ACDs, each skill group has primary and secondary subgroups. The ICR emulates this by automatically creating additional skill groups for these peripheral types. For example, if you configured a HelpDesk skill group for a Galaxy ACD, the ICR would automatically create HelpDesk.Pri and HelpDesk.Sec skill groups in addition to the base HelpDesk skill group.

In routing and reporting, you can reference the .Pri and .Sec skill groups directly or you can refer to the *base skill group*. In Figure 6, the base skill groups are Denver.HelpDesk, Boston.HelpDesk, and Dallas.HelpDesk. These base skill groups include the .Pri and .Sec HelpDesk skill groups configured on the ACD. These base skill groups can be combined to form the enterprise skill group, HelpDesk, which would include all HelpDesk skill groups across the enterprise.

1.2.2. Agents and Agent Teams

Within the call center enterprise, an *agent* is anyone who can answer incoming phone calls. A *peripheral agent* is an agent who is associated with a particular peripheral (ACD, PBX) in the call center enterprise. A peripheral agent can be a member of one or more skill groups. (Some peripheral types limit each agent to one skill group assignment.)

Figure 7 shows how agents are organized in a call center enterprise.

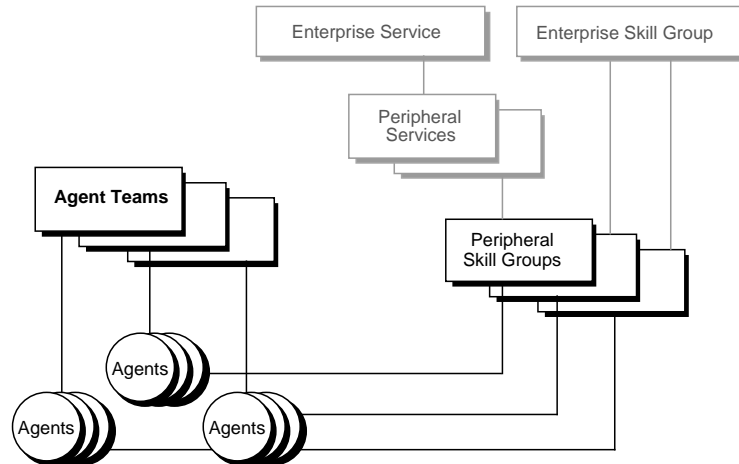


Figure 7: Agent Hierarchy

Peripheral agents are grouped first into peripheral skill groups. You can group peripheral skill groups into services or enterprise skill groups. Optionally, you can group peripheral agents into agent teams. *Agent teams* are groups of peripheral agents configured on the same peripheral to meet a business need. You can have an agent team that includes agents at the call center and agents who work at home. Although these agents are at different locations, they are associated with a particular ACD at the call center. Members of an agent team can also be members of one or more skill groups.

1.2.3. Trunk and Network Trunk Groups

A *trunk group* is a collection of trunks (that is, telephone lines). Trunk groups typically contain trunks that are used for a common purpose. The ICR routes calls to specific trunk groups; not to specific trunks. Within Monitor ICR, you can monitor activity for a specific trunk group, but not for a specific trunk.

A simple trunk group is associated with a single peripheral and typically reflects the peripheral's view of the trunks (that is, how the peripheral organizes its trunks). However, trunks can also be viewed from the routing client's perspective. A *routing client* is an entity that sends routing requests to the ICR.

A *network trunk group* is a group of trunks organized to reflect the routing client's view of trunks. A network trunk group can map to one or more peripheral trunk groups. For example, say you have two VRUs at a call center site in Dallas. Each VRU has two T1 circuits (see Figure 8).

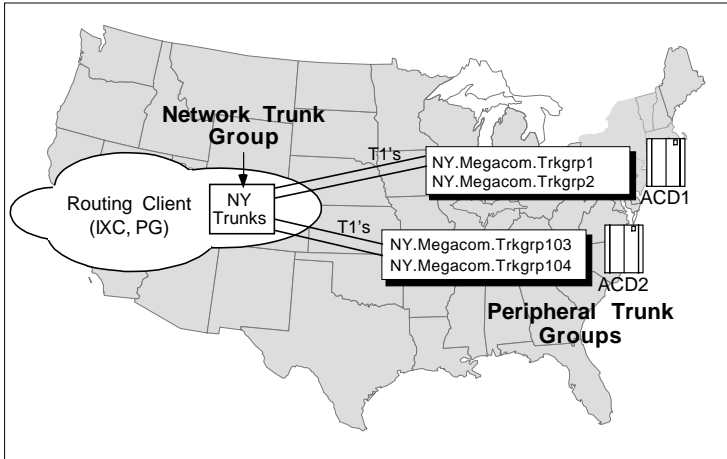


Figure 8: Network and Peripheral Trunk Groups

The VRU may divide its trunk groups differently than the routing client (for example, the IXC). In this example, the VRUs view each T1 circuit as a trunk group (two trunk groups on each VRU). To the routing client, however, the four T1 circuits might represent a single pool of 96 trunks. The routing client can deliver calls with the same Dialed Number Information Service (DNIS) to any of these 96 trunks, so it treats this pool of trunks as a single entity—a network trunk group.

The use of network trunk groups simplifies the configuration of trunk groups for some types of ACDs. Rather than deliver calls to specific trunk groups and peripherals, the routing client need only deliver the call to a network trunk group. The peripheral can then choose a target that matches the DNIS and thereby classify the call.

1.2.4. Service Arrays

Service arrays are closely tied to network trunk groups. Typically, service arrays are defined in instances where you have similar peripheral services defined on multiple VRUs and the VRUs all share the same network trunk group. By grouping the services of multiple VRUs into a service array, you can send calls to a single target (a service array) and let the network deliver the call to any one of the peripheral services that make up the service array.

Figure 9 shows an example of how service arrays relate to peripheral services and network trunk groups.

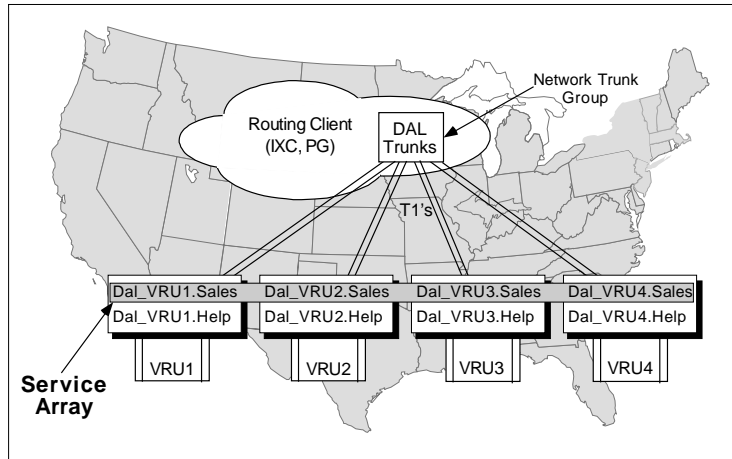


Figure 9: Service Arrays

When several VRUs each support a peripheral service, as shown in Figure 9, you can define a service array for those VRUs. You can define one or more peripheral services on a VRU. Each VRU can have more than one service array defined.

Service arrays also give you flexibility in reporting on call center performance by providing a separate view into the performance of peripheral services on VRUs. For example, in Figure 9 a peripheral service report would provide data for one VRU. An enterprise service report would provide data for an arbitrary collection of VRUs and ACDs. A service array report, however, would provide data on one group of VRUs that are sharing a network trunk group.

1.2.5. Routes

A *route* is a value that is returned by a routing script. The value maps to a target at a peripheral. This target can be a service, skill group, agent, or translation route. More simply, a route is the destination of the call after the ICR has made its routing decisions.

Routes are associated with a single peripheral and are not organized on an enterprise-wide basis. Figure 10 shows some examples of routes and how they map to individual peripheral targets.

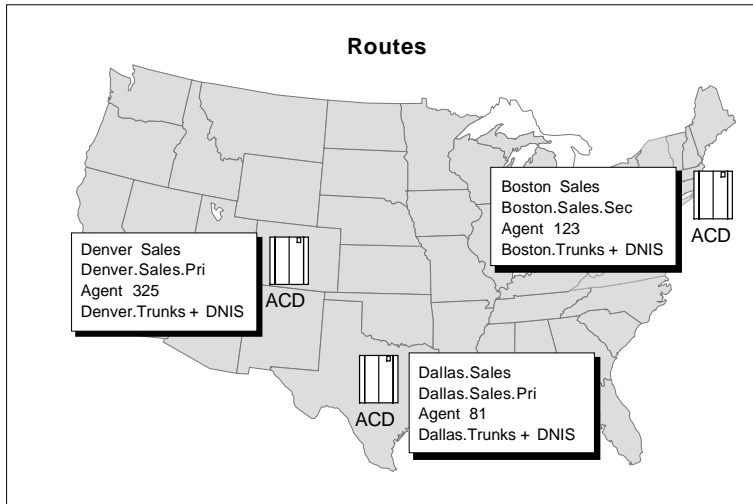


Figure 10: Routes

The ICR converts the route value that is returned by the routing script to a *routing label*. This routing label is then returned to the routing client. The routing client uses the routing label to deliver the call to the appropriate trunk group and DNIS combination.

See also: The *Intelligent CallRouter System Manager Guide* contains a more in-depth discussion of routes and how they are mapped to specific targets.

1.2.6. Other Parts of the Enterprise

In addition to viewing data for services, skill groups, agents, trunk groups, and routes, you can view data for the following call center entities:

Application Gateways

You can report on data related to the Application Gateways set up in the system. The GEOTEL•Gateway feature allows the ICR to interface to host systems that are running other call center applications.

The Application Gateway is implemented via a node in the ICR Script Editor. A routing script that contains an Application Gateway node can query an application running on a host system in order to obtain data to use in call routing. The ICR can then base subsequent routing decisions on the results obtained from the query.

Call Types

A *call type* is a category of incoming calls. Calls are categorized based on dialed number (DN), caller-entered digits (CED), and calling line ID (CLID). Each call type has a schedule that determines which routing script or scripts are active for that call type at any time. In reports, you might want to display data such as the number of calls of a certain call type that used default routing during a specified interval.

Peripherals

A peripheral is the switch (for example, ACD, PBX, or VRU) that receives the calls routed by the ICR. In the course of managing the call center enterprise, you might want to view switch-specific hardware and software status data along with call and agent information. You can view this type of data for any supported peripheral in the call center enterprise.

Routing Clients

A *routing client* is an entity that sends routing requests to the ICR. A routing client typically corresponds to a subsystem within an interexchange carrier or to a peripheral (ACD, VRU, PBX) that is performing *Post-Routing*. You can report on statistics for the different routing clients defined in the ICR system. For example, you might want to report on the maximum delay of route responses to the routing client for a specified interval.

Schedules

The GEOTEL•*Schedule Link* option allows the Intelligent CallRouter to import schedule data from an external workforce management system. The Intelligent CallRouter can then use the workforce scheduling data to make call routing decisions.

You can also generate reports on staffing schedule data that has been imported from a third-party workforce management system. The ICR Workforce Management System is an optional tool for the AW that allows you to import schedule data and store it in *Schedule_Import* tables in the ICR database. For example, you might create a report that compares scheduled agent states to actual real-time states monitored by the ICR (for example, Logged In, Ready, Closed Key). You can also export data for use in ACD reports.

1.3. Peripheral-Specific Terminology

The ICR supports several models of call center peripherals. Specifically, the ICR supports the following ACDs:

- Alcatel 4400
- Aspect CallCenter
- Ericsson ACP1000
- Lucent DEFINITY ECS
- NEC NEAX 2400
- Nortel DMS-100, SL-100
- Nortel Meridian
- Rockwell Galaxy
- Rockwell Spectrum
- Siemens Hicom 300E (Release 9006)
- Siemens Rolm 9751CBX (Release 9005)
- VRUs from AT&T, Brite, Edify, IBM, InterVoice, Lucent, Microlog, Periphonics, Tandem, and VoiceTek.

See also: For more information on VRU support, see the *Intelligent CallRouter Product Description*.

Each of these peripherals has its own terminology to describe the call center. In most cases, the ICR terms map very closely to the corresponding ACD terms. In some cases, the mapping of ICR to ACD terms is not as precise. For example, although it might make sense to associate each VDN on a DEFINITY ECS with an ICR service, you could also map each hunt group to a service. Tables 1, 2, and 3 summarize the mapping of ICR call center terminology to ACD-specific terminology.

On Rockwell Galaxy ACDs, and on Lucent DEFINITY ECS ACDs running in EAS mode, each skill group has primary and secondary subgroups. The ICR emulates this by automatically creating additional skill groups for these peripheral types. In reports and scripts, you can reference the .pri and .sec skill groups directly or you can refer to the base skill group. The *base skill group* is an inclusive skill group that organizes related primary and secondary subgroups.

Table 1: Aspect, Lucent, and Nortel—ICR Terminology Mapping

GEOTEL ICR	Aspect CallCenter	Lucent DEFINITY ECS	Nortel DMS-100/ SL-100	Nortel Meridian
Service	Application	Vector Directory Number (VDN)	Primary or supplementary ACD DN	ACD Directory Number (ACD DN) or ACD Controlled Directory Number (ACD CDN) ¹
Skill Group	Agent group	Skill group or hunt group ²	ACD group	ACD DN
Agent	Agent	Agent	Agent	Agent
Trunk Group	Trunk group	Trunk group	None ³	Route
Trunk	Instrument ⁴	Trunk	None	Member of route
Peripheral Target	Trunk group and DNIS ⁵	Trunk group and DNIS ⁶	Primary or supplementary ACD DN	Trunk group and DNIS

¹ Without Customer Controlled Routing (CCR), one or more services map to an ACD DN. With CCR, one or more services map to an ACD CDN.

² If Expert Agent Selection (EAS) is configured, a skill group maps to an ECS skill group; otherwise, it maps to a hunt group.

³ One network trunk group and one associated trunk group are defined for each DMS-100 ACD.

⁴ A CallCenter instrument can be a trunk, a teleset, or a workstation.

⁵ The CallCenter maps a trunk group and DNIS to a Call Control Table (CCT).

⁶ The DEFINITY ECS uses the trunk group and DNIS for incoming calls. It uses the VDN extension for other calls. A DNIS can refer to either a VDN extension or hunt group extension.

Table 2: Rockwell and Siemens—ICR Terminology Mapping

GEOTEL ICR	Rockwell Spectrum	Rockwell Galaxy	Siemens HICOM 300E (9006)	Siemens Rolm 9751 CBX (9005)
Service	Application	Gate	ACD Routing Table (ART)	Pilot Number associated with ART
Skill Group	Agent group	Primary, secondary, and tertiary groups for a gate.	ACD Group	ACD Group
Agent	Agent	Agent	Agent	Agent
Trunk Group	Trunk group	Trunk group	Trunk group	Trunk group
Trunk	Trunk	Trunk group	Trunk	Trunk
Peripheral Target	Trunk group and DNIS	DNIS	Destination ACD Number (DNIT)	Destination ACD Number (DNIT)

Table 3: Alcatel, NEC, and Ericsson—ICR Terminology Mapping

GEOTEL ICR	Alcatel 4400	NEC NEAX 2400	Ericsson ACP1000
Service	Pilot	CCV number	Trunk group/called number
Skill Group	Agent PG	Split number	Agent group
Agent	Agent	Agent	Agent
Trunk Group	None	Trunk group	Trunk group
Trunk	None	Trunk	Trunk
Peripheral Target	DNIS	Pilot number	Trunk group or queue

The ICR comprises a set of the functions of the supported peripherals. Because the features of each ACD vary, one type of ACD cannot take advantage of every capability the ICR offers. Some ACDs have limitations that prevent them from making full use of specific features of the ICR. Table 4 summarizes these limitations.

Table 4: Features Not Supported for Specific Peripherals

Peripheral Type	Restrictions
Aspect CallCenter	Only one skill group assignment per agent.
Alcatel 4400	No trunk group monitoring.
Ericsson ACP1000	Only one skill group assignment per agent.
Nortel DMS-100/ SL-100	No trunk group monitoring.
Nortel Meridian	Limited trunk group monitoring ¹ . No peripheral service level reporting. Ring time for a call is included in either queue time or delay time. Cannot specifically track agents as Talking Out (this time is included in Talking Other).
Rockwell Galaxy	No Post- <i>Routing</i> or translation routing. GEOTEL• <i>Enterprise CTI</i> not supported. GEOTEL• <i>Agent Reporting</i> not supported. No duplexed PG operation. No Longest Available Agent (LAA) routing. Can route only to services; not to specific agents or skill groups. (The ACD chooses the best group or agent to provide the service.) No real-time agent state data (but accumulated times in each state are reported).

(continued)

¹ The Meridian ACD supports a subset of trunk group real-time and half-hour data in the ICR database schema.

Peripheral Type	Restrictions
Rockwell Spectrum	No trunk group monitoring. Duplexed PG operation supported only for TCP/IP Transaction Link configurations.
Siemens HICOM 300E (9006)	No trunk group monitoring. Limited conference call monitoring.
Siemens/Rolm 9751CBX (9005)	No <i>Post-Routing</i> or translation routing. GEOTEL• <i>Enterprise CTI</i> not supported. GEOTEL• <i>Agent Reporting</i> not supported. No Automatic Configuration. No Longest Available Agent (LAA) routing. No routing to a specific agent. No trunk group monitoring. No termination call detail data. Limited real-time service and skill group routing.

2. The Admin Workstation

The Admin Workstation (AW) is the human interface to the Intelligent CallRouter. The Admin Workstation is a PC running GEOTEL software on the Microsoft® Windows NT™ operating system. Admin Workstations can be located throughout the call center enterprise.

Using the Admin Workstation, you can

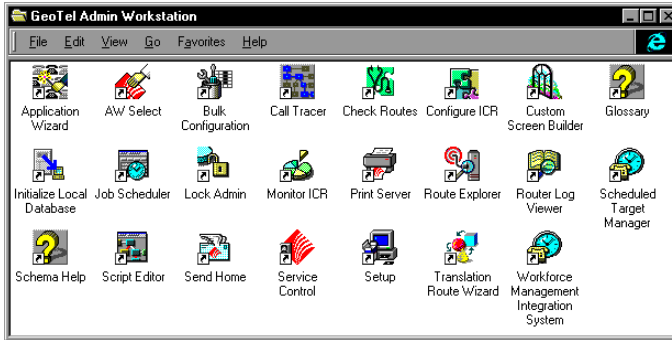
- Monitor the performance of agents, skill groups, services, routes, and trunks.
- Generate historical reports.
- Provide web access to ICR reports and scripts.
- Change the ICR system configuration.
- Define, modify, and view call routing and administrative scripts.
- Monitor the execution of scripts.

This chapter introduces the Admin Workstation (AW) with a special emphasis on call center reporting.

See also: For information on ICR system configuration or call routing scripts, see the *Intelligent CallRouter System Manager Guide*. For information on system maintenance tasks, see the *Intelligent CallRouter Administrator Guide*.

2.1. The GEOTEL Admin Workstation Group

Each Admin Workstation contains the GEOTEL Admin Workstation group. When open, the GEOTEL Admin Workstation group appears as follows:



Not all AWs have an identical sets of tools. The tools on each AW may vary depending on the ICR features you ordered. In general, the following programs are available:

- **Application Wizard.** Lets you setup the configuration elements need to route a call from a routing client to a target at a peripheral.
- **AW Select.** Lets you start and stop the services needed to run Admin Workstation applications.
- **Bulk Configuration.** Lets you efficiently add or modify multiple rows in certain ICR configuration tables.
- **Call Tracer.** Lets you send test calls to the ICR and see how they are processed and the target chosen for the call.
- **Check Routes.** Lets you validate the configuration of routes referenced by a script.
- **Configure ICR.** Lets you set up and maintain your GEOTEL environment. The configuration includes the hardware within the system, the services provided by the system, and the agents who provide them.
- **Custom Screen Builder.** Lets you create your own report templates for use in the Monitor ICR reporting application.
- **Glossary.** Defines terms related to the ICR.
- **Initialize Local Database.** Lets you copy current information from the ICR's central database to the local database on the Distributor Admin Workstation. (Normally, this is done automatically.)
- **Job Scheduler.** Lets you schedule reports to be generated and printed at a later time.

- **Lock Admin.** Lets you check or change the status of locks in the ICR central database.
- **Monitor ICR.** Lets you view graphs and reports to monitor the performance of specific agents, skill groups, services, and other groups within the ICR call center enterprise.
- **Print Server.** Works with the Job Scheduler to allow you to automatically print reports at specific times.
- **Route Explorer.** Displays the associations between dialed numbers, labels, peripheral targets, services, and routes.
- **Router Log Viewer.** Displays information about calls processed by the ICR and any errors encountered in processing them.
- **Scheduled Target Manager.** Lets you configure and manage scheduled targets.
- **Schema Help.** Describes the structure of the ICR databases.
- **Script Editor.** Lets you create, modify, and schedule routing scripts. The ICR executes these scripts to determine where to route each call.
- **Send Home.** Lets you report issues or submit orders directly to GEOTEL Customer Support.
- **Service Control.** Lets you stop and start ICR-related services.
- **Setup.** Lets you modify ICR setup parameters.
- **Translation Route Wizard.** Lets you configure and manage translation routes.
- **Workforce Management Integration System.** Lets you exchange data between the ICR and an external workforce management system. It also lets you define custom or periodic schedules.

These tools are covered in detail in the ICR product documentation.

2.2. Distributor and Client Admin Workstations

One Admin Workstation at each site maintains a connection directly with the Intelligent CallRouter central controller. The *ICR central controller* contains the call routing logic for the system. It also acts as historical and real-time data server for the system.

The connection between the ICR central controller and an AW is referred to as the *real-time feed*. The real-time feed connection is used to send real-time monitoring data to a Distributor AW. The *Distributor Admin Workstation* receives the real-time data and acts as a data distributor to all other AWs at the site. Admin Workstations that do not serve as data distributors are called *Client Admin Workstations*.

Each Distributor AW has its own local database that contains a copy of data from the central database. The ICR's Update AW background process automatically keeps the local database synchronized with the central database.

2.2.1. Real-Time and Historical Data

The ICR collects real-time and historical data from each call center to determine where to route each call. The *real-time data* provides current information about specific skill groups, services, trunk groups, routes, and scripts. Real-time data are stored in the Distributor AW's local database where it is constantly overwritten by new data. The *historical data* are stored in the ICR central database in summary five-minute and half-hour intervals. The ICR also saves call detail records in the central database for each call routed.

2.2.2. Historical Database Server (HDS)

A Distributor AW may optionally serve as an *Historical Data Server (HDS)*. In this configuration, the ICR Logger (the system's database server) automatically forwards historical data to the Distributor AW where it is stored in a special HDS database. Other AWs at the site can read historical data from the Distributor AW rather than from the central database.

2.2.3. Monitor-Only AW

Some Intelligent CallRouter systems might incorporate a monitor-only version of the Admin Workstation. This is a scaled-down client AW that allows you to use the ICR's reporting tools on desktop PCs running Windows 95 or Windows NT. The monitor-only AW is used exclusively for reporting and does not have the tools necessary for changing call routing and system configuration data, or scheduling reports for printing.

See also: The monitor-only AW comes with on-line help that explains the workstation's features in more detail.

2.2.4. Admin Workstation Users

Three kinds of people use the Admin Workstation:

- **System Manager.** Uses the Admin Workstation to update the ICR system configuration, create and edit call routing scripts, and download Admin Workstation configuration information from the central database.
- **Supervisor.** Uses the Admin Workstation to monitor call center, agent, and agent group performance and produce real-time and historical call center management reports. The tool of most importance to the Supervisor is Monitor ICR.
- **Administrator.** Uses the Admin Workstation to maintain the ICR databases, register new users in Windows NT, and view system event log files.

2.2.5. Open Database Architecture

The ICR employs an open database architecture. Monitor ICR is just one of many tools you can use to access the ICR central and local databases. Other third-party tools can be used to manage the data in these databases.

Applications like Microsoft[®] Excel, Microsoft Visual Basic, and Powersoft InfoMaker[™] allow you to access the databases and create reports. You are also free to use other standard Windows tools to access data. For example, you can access data directly from the ICR databases using Microsoft SQL Server and Open Database Connectivity (ODBC) tools.

Note: Although you can read any data you want from the ICR databases, GEOTEL recommends that you **do not** directly modify data in the central database by using third-party tools. Modifying data with third-party tools can cause disruptions in the system. Use the ICR tools when modification is necessary.

2.3. Monitor ICR Reporting



Monitor ICR

Monitor ICR is the reporting and monitoring tool of the Admin Workstation. It is an integral part of the AW and is the main subject of this manual. Monitor ICR features an extensive set of predefined report templates. The ICR *report templates* allow you to quickly generate reports of the call center and agent performance data that are stored in the ICR databases.

See also: Chapter 8, “Template Reference,” provides details on each report template that comes with Monitor ICR.

You can change the predefined templates to suit your particular business needs by using the optional ICR Custom Screen Builder. The Custom Screen Builder is a client database access application that is based on Powersoft™ InfoMaker. The Custom Screen Builder also allows you to create new report templates for use in Monitor ICR.

See also: The *Intelligent CallRouter Custom Screen Builder Tutorial* provides an introduction to the ICR Custom Screen Builder tool.

2.3.1. Enterprise and Peripheral Reporting

The ICR’s reporting structure allows you to view organizational entities independently or generally over the entire enterprise. For example, in one report you can see how calls are being handled generally by using an enterprise service. In a second report, you can see how calls are being handled by individual agents, agent teams, peripheral services, or skill groups. Figure 11 shows an example of two Monitor ICR reports:

Enterprise Service Report

MidTier enterprise service →

Enterprise Service	Over Last 5 minutes				For Current Half Hour				For the Day			
	Offer	Answer	Aband	Serv.Lev	Offer	Answer	Aband	Serv.Lev	Offer	Answer	Aband	Serv.Lev
MidTier	336	336	0	100.0%	328	328	0	100.0%	41047	41047	0	100.0%
NewMarkets	182	182	0	100.0%	177	177	0	100.0%	22326	22326	0	100.0%
Registration	144	144	0	100.0%	141	141	0	100.0%	17660	17660	0	100.0%
Service	141	141	0	100.0%	137	137	0	100.0%	17176	17176	0	100.0%
Summary:	803	803	0		783	783	0		98209	98209	0	

Peripheral Service Report

MidTier peripheral services →

Peripheral Service	Date	Service Level	ASA			Calls				
			ASA	AHT	Delay	Offer	Handle	Aband		
Bellevue.MidTier	08 Jan 97	100.0%	0	150		15726	15724	100.0%	0	0.0%
	09 Jan 97	100.0%	0	150		9822	9826	100.0%	0	0.0%
Service Summary:	100.00%		0	150		25548	25550		0	
Boston.MidTier	08 Jan 97	100.0%	0	150		3708	3708	100.0%	0	0.0%
	09 Jan 97	100.0%	0	150		6066	6066	100.0%	0	0.0%
Service Summary:	100.00%		0	150		15774	15775		0	
Denver.MidTier	08 Jan 97	100.0%	0	150		11967	11964	100.0%	0	0.0%
	09 Jan 97	100.0%	0	150		7494	7495	100.0%	0	0.0%
Service Summary:	100.00%		0	150		19461	19459		0	

Figure 11: Enterprise and Peripheral Reporting

The first report contains data for several enterprise services. One of these services is called MidTier. Like all enterprise services, the MidTier enterprise service has several component peripheral services. The enterprise service report provides data for the component peripheral services on an enterprise-wide basis.

To see the data broken out by individual peripheral service, you would generate a peripheral service report. Three components of the MidTier enterprise service are the subject to the peripheral service report: Bellevue.MidTier, Boston.MidTier, and Denver.MidTier.

2.3.2. Agent Reporting

GEOTEL•*Agent Reporting* is an optional feature that can be licensed for peripherals (ACDs, PBXs) in the call center enterprise. With this feature enabled, you can generate reports of agent-level data through Monitor ICR. (The Siemens 9751 CBX (9005) and Rockwell Galaxy ACDs do not support agent reporting.)

The types of reports you can generate vary in scope. For example, you might want to report on the activity of specific agents within the enterprise. Optionally, you might report on the activity of agents associated with a particular skill group or agent team. Table 5 summarizes the types of agent reports you can generate.

Table 5: Agent Report Types

Report Type	Scope
Peripheral agent	Displays information about selected agents throughout the enterprise regardless of peripheral associations.
Agent by peripheral	Displays information about each agent currently logged into one or more selected peripherals.
Agent by skill group	Displays information about each agent currently logged into one or more selected skill groups.
Agent by team	Displays information about each agent in one or more selected agent teams.

The data that are displayed in these reports include real-time and historical data that cover:

- Agent status
- Agent activity
- Agent performance

See also: Chapter 7 “Available Data,” provides an overview of the data available for agent-level reporting. Chapter 8, “Template Reference,” provides details on each agent-level Monitor ICR report template.

Enabling Agent Reporting

A call center enterprise can contain many agents whose states are changing frequently. Consequently, while monitoring agent states the ICR might generate and store a large amount of data. To limit the amount of data generated and stored, the ICR provides two ways to control the generation of agent data:

- Specify which peripherals in the enterprise provide agent data.
- Define the flow of data from a specific peripheral to a Distributor AW site. This is called an *agent distribution*.

See also: The *Intelligent CallRouter System Manager Guide* provides specific instructions for enabling agent-level reporting. Some general guidelines are presented here.

➤ **To specify which peripherals provide agent data:**



Configure ICR

Run Configure ICR. In the Peripheral Configuration window, set the Agent Reporting option for each peripheral you want to provide agent-level data. You can set this option on a peripheral-by-peripheral basis.

➤ **To define an agent distribution:**



Configure ICR

Run Configure ICR. In the Agent_Distribution_Configuration window, define which peripherals feed agent data to each Distributor AW site. You can enable or disable an agent distribution at any time. Disabling an agent distribution allows you to stop the flow of all agent data to a Distributor AW when you are not viewing real-time agent reports.

Enabling Agent State Trace

Optionally, you can track **every state** an agent passes through and display this data in Monitor ICR reports. You can enable the agent state trace feature for individual agents.

➤ **To enable agent state trace:**



Configure ICR

Run Configure ICR. Enable the Agent State Trace option in the Agent Configuration window.

Tracking every state of an agent puts an added load on the ICR. Therefore, you should use this feature **only** for short-term tracking of specific agents.

See also: See the *Intelligent CallRouter System Manager Guide* for more guidelines on using the agent state trace feature.

2.4. Monitor ICR Reporting Scenario

In order to quickly detect changes in call volumes and service levels, you need access to up-to-the-minute data. You also need historical data in order to analyze trends and gauge resources across the call center enterprise. Monitor ICR allows you to combine real-time and historical data in a single report. In addition, you can and have several reports displayed on the workstation screen at once.

2.4.1. Viewing Multiple Reports

By viewing multiple reports, you can get a clear picture of current and past call center performance. For example, say you are viewing a report that shows service levels for several enterprise services. You notice that the PremiumSales enterprise service has had a sharp drop in its service

level over the last half-hour. To further investigate the problem, you open two additional call analysis reports:

- One report provides real-time data such as calls offered, calls abandoned, average speed of answer, and service levels for the PremiumSales enterprise service.
- The other report displays the same data for the PremiumSales enterprise service, but historically over the last two weeks.

You now have three reports on the screen, each displaying a different set of data for the PremiumSales enterprise service. Figure 12 shows an example.

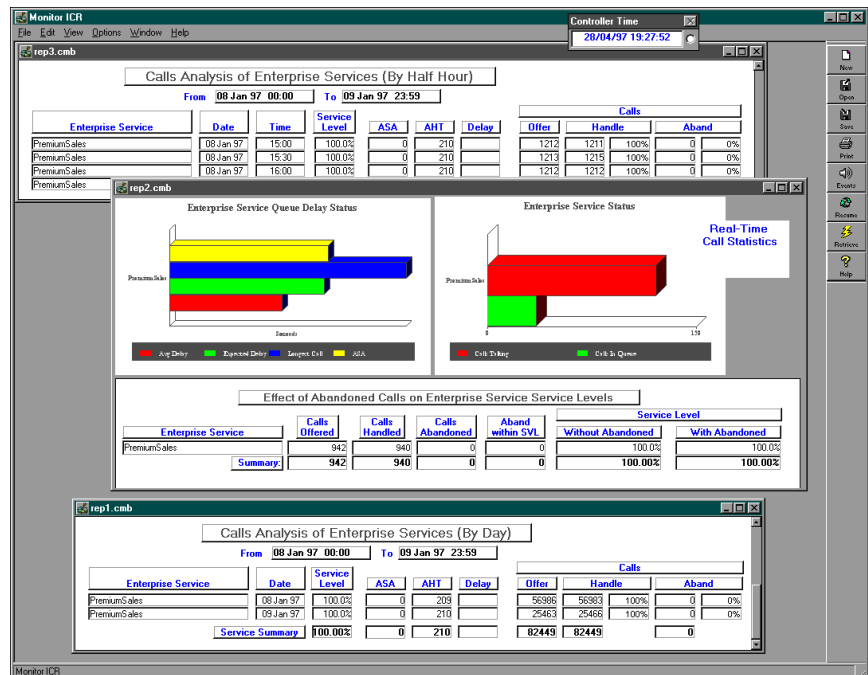


Figure 12: Sample Report

2.4.2. Analyzing the Data

As you analyze the historical data, a trend becomes obvious: between 3:00 and 5:00 P.M. each day, the number of calls offered to the PremiumSales enterprise service increases dramatically. Since agents become increasingly busy during this time, calls are being held longer than necessary, which consequently causes the service level to drop.

2.4.3. Correcting the Situation

To correct the situation, you consider two options:

- First, you find out if there is an excess of qualified agents in other skill groups in the call center enterprise. Are these agents available to handle PremiumSales calls between 3:00 and 5:00 P.M.? If they are, you can add these skill groups to the search list of the ICR call routing script currently in effect for the PremiumSales enterprise service. The routing script will activate the backup skill groups as necessary to ensure that service levels remain high.
- As a second option, you may decide to work with the appropriate site personnel to determine if you can add more agents. For example, you might have several call centers in the enterprise each assign an agent to the PremiumSales enterprise service.

2.4.4. Monitor ICR Reporting Terms

Before you begin using Monitor ICR, it may be helpful to review some of the terms that are frequently used in this manual:

- **Template.** You use templates to create reports. A *template* is a file that specifies the types of data to be displayed in a report and how the data will be displayed (for example, in a graph, a chart, etc.). The types of data and the display format are fixed in the template file. However, you can specify that you want data for a particular agent, service, skill group, trunk group, route, etc. You can also specify a range of dates for which to retrieve data.

A number of predefined templates are provided with Monitor ICR. You can use the ICR Custom Screen Builder to modify these templates or to create new ones.

- **Historical template.** A *historical template* is a template that is based on historical data from the ICR central database. You can use historical templates to create reports that contain half-hour and daily summaries of agent and call center data.
- **Real-time template.** A *real-time template* is a template that is based on real-time data from the Distributor AW local database tables. You use real-time templates to create reports that provide a view into current agent and call center activity.
- **Report.** A *report* is the final presentation of data, titles, dates and times, and graphic elements displayed on the AW screen or printed. A single report can include components generated by one or more templates. For example, one report can contain a real-time pie chart and a historical grid, each generated with a different template. Once the report is displayed on the screen, it can be saved as a report definition.

- **Report definition.** A *report definition* is a file that specifies the templates the report uses to retrieve data. The report definition also specifies other values that the report includes (for example, dates and times, particular services, skill groups, etc.). Report definitions are saved as files with .CMB extensions in the subdirectories of the `icr\aw\custname\custom` directory. They can be displayed at any time in Monitor ICR.

2.5. Web View

GEOTEL•*Web View* is the web-based reporting and script monitoring tool of the ICR. You can install Web View on an Admin Workstation to make it a web server in your corporate intranet. Other computers with access to the web can use the GEOTEL•*Web View* Server to generate ICR reports and monitor call routing scripts in real-time. Figure 13 shows an example of the type of Web View report that can be displayed in a web browser:

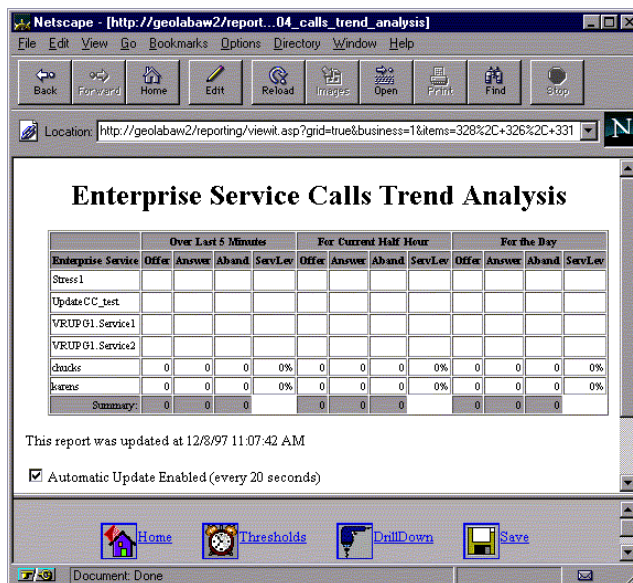


Figure 13: Web View Report

The URL for the Web View internal web site address depends on the name of the Distributor AW machine where the server component is installed. See your network administrator for more information.

Web View currently supports Microsoft® Internet Explorer version 4.0 or Netscape Navigator™ versions 3.0 or higher. The Web View on-line help provides instructions on generating web-based reports.

See also: For details on using and installing Web View, refer to the *GEOTEL•Web View Administrator Guide*.

3. Creating a Report

The Monitor ICR reporting tool allows you to report on call and agent activity throughout the call center enterprise. You can use real-time data, historical data, or a combination of the two in a single report. You can also display multiple reports on the screen, save reports, and print reports.

This chapter provides a tutorial that guides you through the process of generating a report. In this tutorial, you will learn how to:

- Start Monitor ICR.
- Set up the Template Launcher.
- Set thresholds in reports.
- Add drill-downs to reports.
- Save report definitions.
- Display reports automatically at startup.

See also: If you need details on the features and functions of Monitor ICR, see Chapter 4, “Reporting Basics.”

3.1. The Report Example

The report you will be creating includes a *real-time bar graph* that displays call queue status data for selected peripheral services. This data includes:

- Average Delay in Queue
- Expected Delay in Queue
- Longest Call in Queue
- Average Speed of Answer (ASA)

The data for the real-time bar graph is taken from the Service_Real_Time table in the Admin Workstation local database.

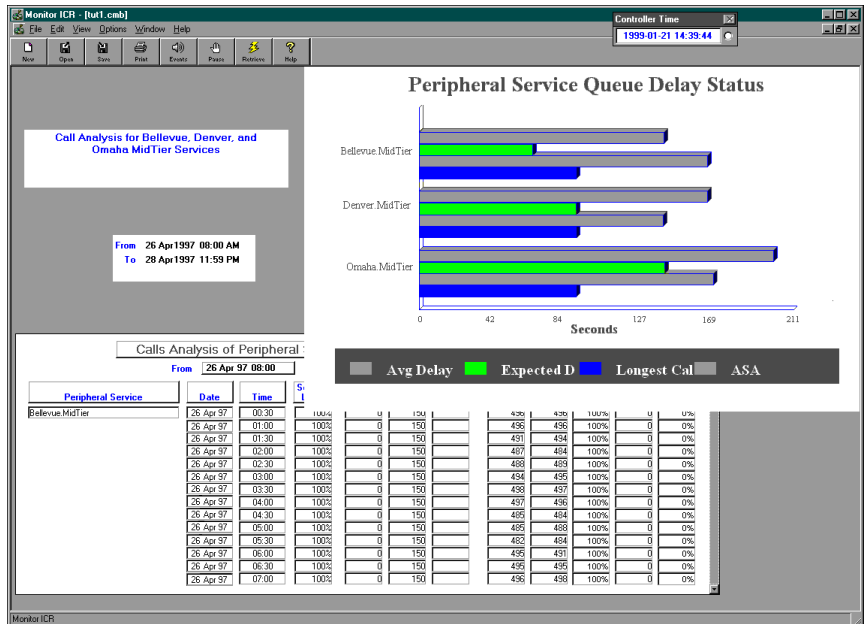
See also: For more information on the tables of the central and local databases, see the *Intelligent CallRouter Database Schema Handbook*.

The report example also includes a *historical grid* that displays half-hour call analysis data for selected peripheral services. This data includes:

- Service Level
- Average Speed of Answer (ASA)
- Average Handle Time (AHT)
- Average Delay in Queue
- Calls Offered
- Calls Handled
- Calls Abandoned in Queue

The historical data is taken from the Service_Half_Hour table in the ICR central database. The historical grid displays data for a specific range of dates and times that you specify.

The completed report looks similar to the following example:



Often when using Monitor ICR, you create reports that contain only one report component (for example, a real-time graph showing the delay in queue). In some cases, you might want to display real-time and historical data in a single report. With Monitor ICR, you can launch several report templates at the same time to create a report with multiple real-time and historical components.

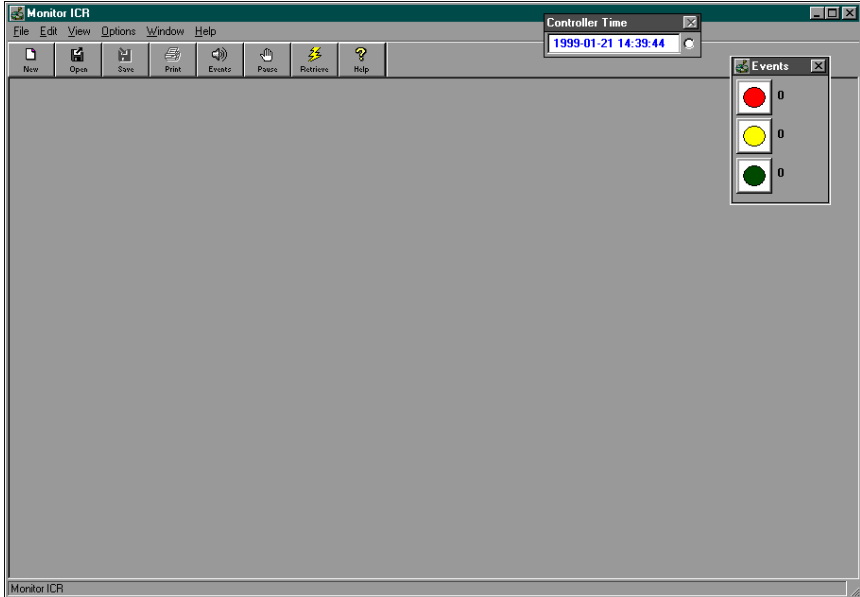
Although the report generation process is basically the same whether you use one or more templates, some Monitor ICR features are specific to multiple-component reports. Therefore, it's worthwhile to learn how to use Monitor ICR by creating a multiple-component report.

3.2. Starting Monitor ICR



Monitor ICR

To start Monitor ICR, click Start, then point to Programs. In the Programs menu, point to GEOTEL Admin Workstation and click Monitor ICR. The Monitor ICR main window appears:

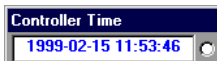


The Monitor ICR toolbar provides buttons that allow you to quickly activate the most common functions (for example, New, Open, and Save).

See also: The Monitor ICR buttons are described in more detail in the on-line help and in Chapter 4, “Reporting Basics.”

3.2.1. Controller Time

The *Controller Time* window appears whenever the Monitor ICR window is displayed:



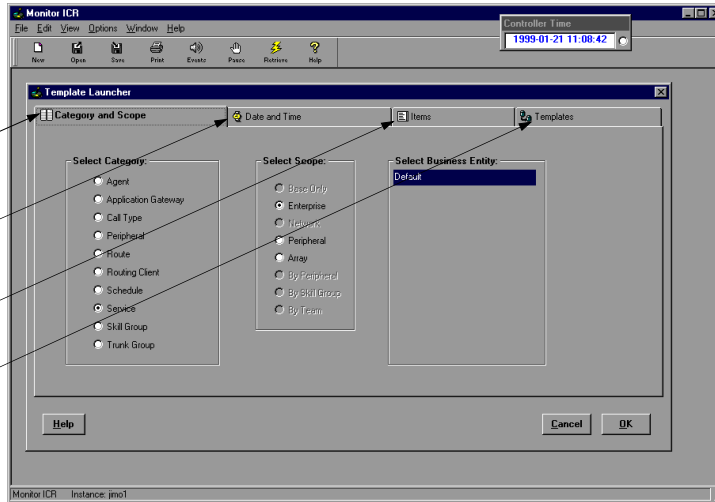
This window shows the current date and time at the Intelligent CallRouter central controller. The *central controller* is the computer that is routing calls and logging management data to the ICR databases. The main central controller processes are the CallRouter and the Logger (Database Server).

3.3. Setting Up the Template Launcher

To generate the report, open the Template Launcher window.

➤ **To open the Template Launcher:**

In the Monitor ICR window, click the New button. The Template Launcher window appears:



Category and Scope Tab

Date and Time Tab

Items Tab

Templates Tab

The Template Launcher allows you to choose reporting options from several tabs.

➤ **Choose the Category and Scope options:**

1. Select Service as the data Category. (By default, Service is already selected.)
2. Select Peripheral as the Scope. (In this tutorial, you are reporting on *peripheral services* rather than *enterprise services*. Peripheral services are services that are tied to specific ACDs or VRUs.)

The Category and Scope selections you make specify the general subject of the report.

➤ **Choose a Business Entity:**

If your ICR system has more than one business entity, choose one from this list. Otherwise, accept the default selection. The business entity specifies which subset of the ICR enterprise you will be reporting on. For example, a business entity may represent a division within a large corporation or a single customer within a service bureau.

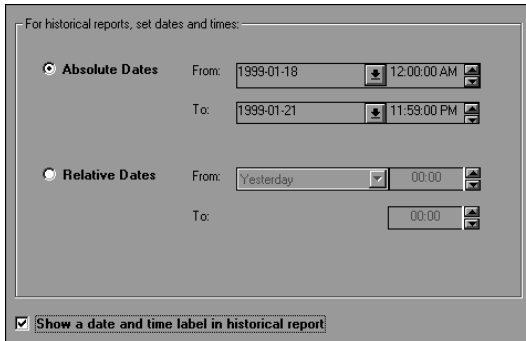
➤ **Choose the Date and Time options:**

1. Click on the Date and Time tab and choose Absolute Dates (the default). (Dates and times have no effect on the real-time portion of the report, but you need them for the historical report component.)

- In the From field, click on the down-arrow. A calendar appears:



- Double-click on a day (three or more days ago). A date is entered in the From field.
- For this tutorial, do not change the To field. The default setting will provide data up to the present day.
- Enter 8:00 in the From time field by highlighting the first two digits and incrementing the time using the up-arrow.
- Leave the To time set to the default (11:59 PM). This provides data up to the current time.
- Click on the “Show a date and time label...” option to indicate that you want to show the dates and times as a separate component in the report. Your dates and times should appear similar to the following:



You can now choose the specific parts of the call center enterprise that the report will cover.

➤ **Choose the specific Items on which to report:**

In the Items tab, click on two or more peripheral services from the selection list. This specifies that you want data for these specific peripheral services.

- To select more than one item, hold down the CTRL key as you click on each item.
- To select a range of items, click the first item in the range, press SHIFT, and click on the last item in the range.
- To select and deselect all items in the list, click the Select All button.

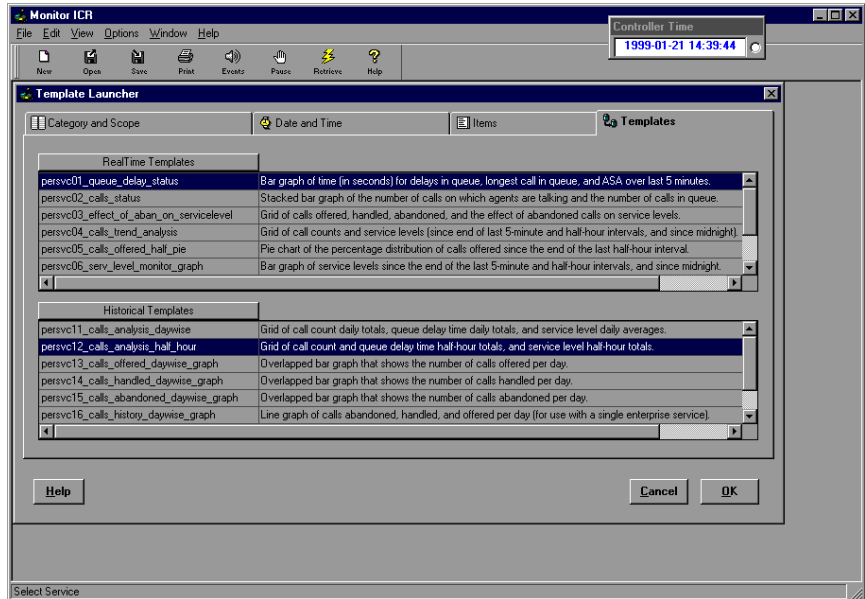
You can now choose the templates to use in the report.

➤ **Choose the Templates:**

In the Templates tab, choose the following templates:

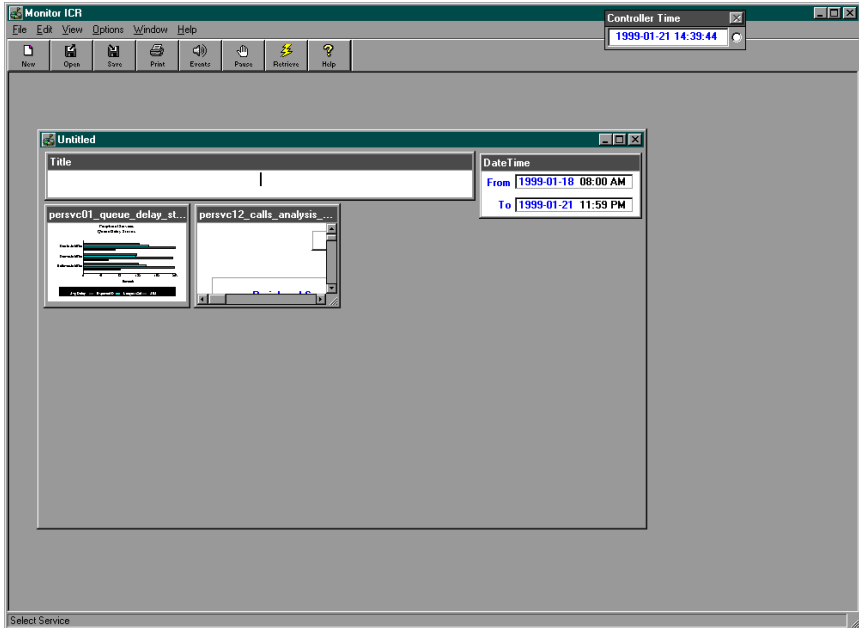
- persvc01_queue_delay_status
- persvc12_calls_analysis_half_hour

The Template Launcher is now set up to generate a report. Your screen should appear similar to the following example:




3.4. Launching the Report

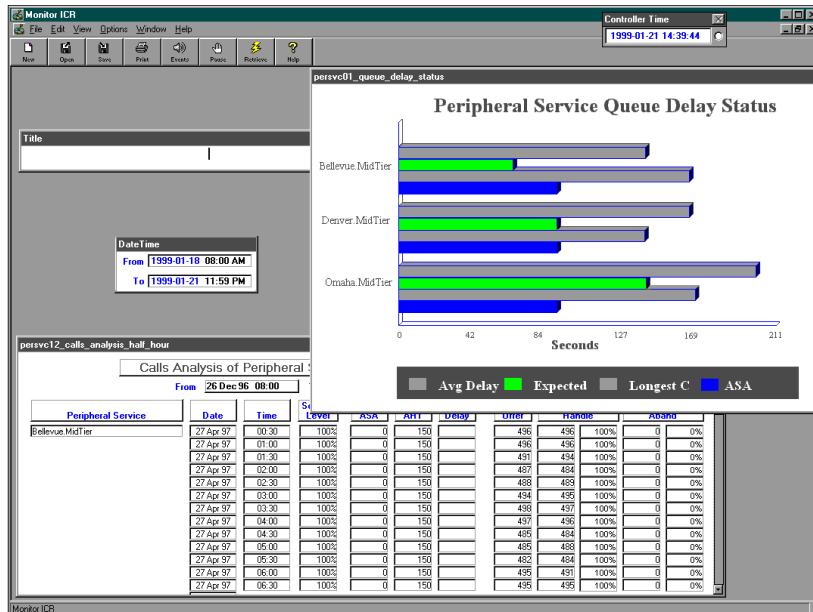
To launch the report, click OK. An untitled report window appears:



➤ **To design the report:**

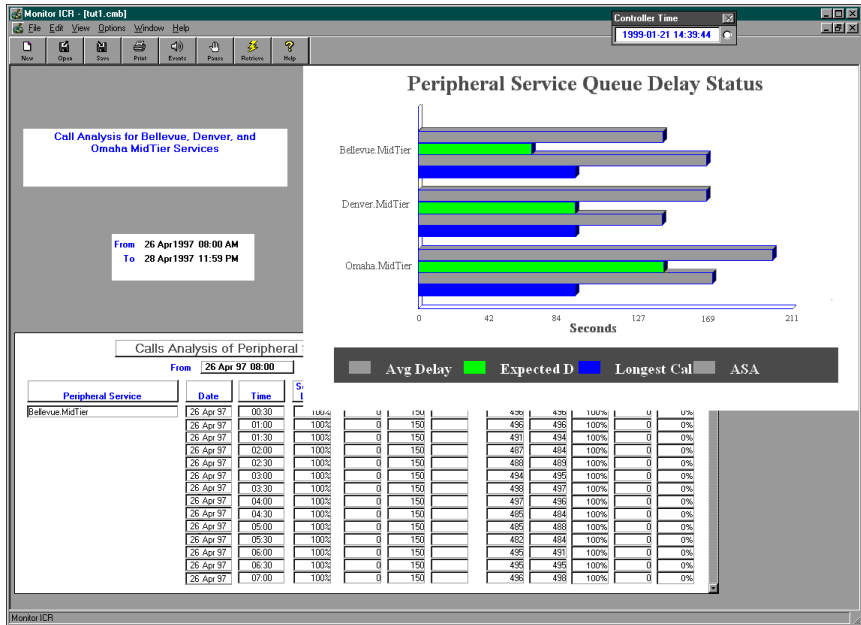
1. Click on the Maximize button  in the upper right corner of the report window. The report window is maximized. You may also want to maximize the Monitor ICR window.
2. Drag the graph, chart, and text objects and resize them. Try to lay out the report so that you can see all the data and the graph and chart titles. In tabular report components, like persvc12, you can use the scroll bar on the right side of the window to view more data.

The following example shows the items in the report resized and repositioned. You may choose to use a different layout:



3. Click inside the title box and enter a title for the report (for example, "Call Analysis for Bellevue, Denver, and Omaha MidTier Services"). Resize the Title window, if necessary.
4. When you are satisfied with the appearance of the report, choose Edit→Shuffle Mode from the Monitor ICR menu to deselect Shuffle Mode. When you deselect Shuffle Mode, the window borders and title bars of the individual report components are hidden.

Your report should appear similar to the following example:



3.4.1. What the Report Shows

The report you created contains a real-time bar graph that shows the average delay in queue, expected delay in queue, length of the longest call in queue, and the average speed of answer for each service. In this example, the real-time monitoring data is displayed for three peripheral services. Notice that the real-time data in the bar graph is continually updated.

The historical section of the report displays several categories of information related to call analysis for each of the peripheral services. Some categories in historical reports are displayed as counts, while others such as Service Level are displayed as a percentage. Depending on the type of data, the summary rows total, average, or perform another calculation on the data for each column.

See also: Chapter 7, “Available Data,” describes the common types of data displayed in Monitor ICR reports. The Monitor ICR on-line help system also provides information on how specific data is calculated.

3.4.2. The Status Bar

If you click on a bar in the graph, a message appears in the status bar at the bottom of the Monitor ICR window. The status bar describes what the bar represents and its current numerical value. For example:

Longest Call for Bellevue.MidTier is 121.00

You can use this feature to get a precise reading of a value in the graph or to differentiate the bars if you have trouble distinguishing their colors.

3.5. Retrieving the Latest Historical Data

Now that the report is displayed on the screen, you can retrieve the latest half-hour summary data accumulated by the ICR while you were creating the report.

➤ **To retrieve the latest historical data:**



Click the Retrieve button. The historical grid is updated with new half-hour summary data that has been collected by the ICR.

3.6. Printing the Report



With the report displayed, choose File→Print, or click the Print button in the tool bar. The report is sent to the printer.

3.7. Saving the Report

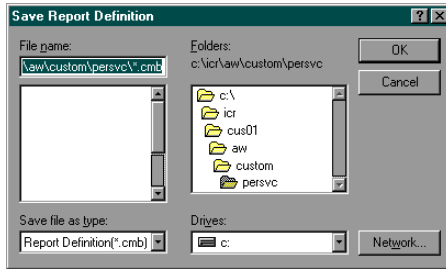
At this point, it's a good idea to save the report. After you save the report, you can open it again at any time without having to re-launch the templates.

Within Monitor ICR, reports are saved as report definitions, which are files that specify the templates to be used to retrieve data. Report definitions also specify other items that the report includes, such as dates and times or the particular subjects of the report (for example, specific peripheral services or skill groups). Report definitions can be opened at any time in Monitor ICR.



➤ **To save the report definition:**

1. Choose File→Save, or click the Save button. The Save Report Definition dialog box appears.



Since you created a report on peripheral services, the Save Report Definition dialog box defaults to the **persvc** directory. The “persvc” directory is reserved for storing peripheral services report definitions. Similarly, other subdirectories of the Admin Workstation’s \custom directory exist to hold other types of report definitions (for example, skill group, route, and trunk group reports).

2. Type TUTOR as the file name. The .CMB extension is retained.
3. Click OK. The report definition is saved.
4. At the Monitor ICR menu, choose File→Close. The report file is closed, but the Monitor ICR window remains displayed.

The next time you open the TUTOR.CMB report, the real-time graph component of the report displays real-time data. The historical grid displays data for the range of dates you specified when you originally created the report. Since you did not change the end date and end time, the historical grid always displays data up to the present date and time.

You can change report definitions like TUTOR.CMB by using the Monitor ICR Definition Editor. For example, you might want to change the start dates and times in the historical component of the report.

See also: The Definition Editor is described in Chapter 4, “Reporting Basics.”

Note: The saved report definition (TUTOR.CMB) does not appear in the Template Launcher list of templates. It is stored as a .CMB report definition file, **not** as a template.

Now that you have created and saved a report definition, you can open the report and make changes and improvements such as setting thresholds and adding drill-downs. *Thresholds* allow you to set yellow and red indicators on important fields of data in a report. *Drill-downs* allow you to launch additional reports from within the current report window.

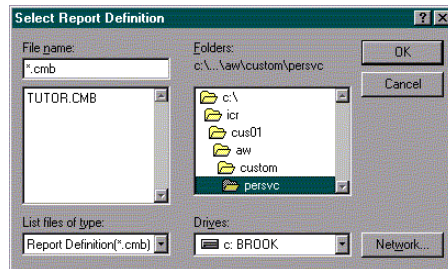
3.8. Opening the Report

You can open the TUTOR.CMB report by selecting the Open command from the File menu or by clicking the Open button.



➤ **To open the TUTOR.CMB report:**

1. In the Monitor ICR window, choose File→Open, or click the Open button. The Select Report Definition dialog box appears.
2. Scroll down in the Folders list and double-click the persvc folder (this is the subdirectory in which the TUTOR.CMB report was saved). The TUTOR.CMB report definition appears in the file list:



3. Choose TUTOR.CMB from the list.
4. Click OK. The report is opened and appears on the screen.

Now you are ready to set thresholds in both the real-time and historical components of the report.

3.9. Setting Thresholds

As you examine data in the report, you might decide that you want certain data categories to stand out, especially if the values are out of an expected performance range. For example, maybe you'd like the Service Level column in a report to turn red when the service level drops too low. You can set thresholds such as these to alert you when certain values exceed or fall below expected levels.

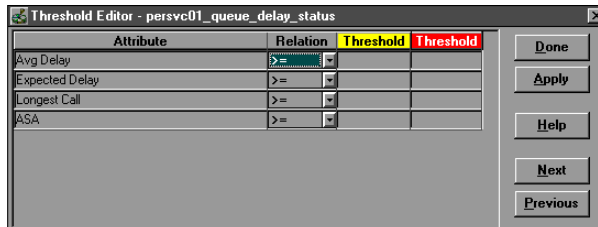
In the real-time bar graph, the threshold alert notifies you immediately of an unacceptable condition. In the historical grid, the threshold alert highlights areas that were out of an expected performance range over a period of time.

➤ **To set thresholds in the real-time graph:**

1. With the TUTOR.CMB report displayed, place the mouse pointer over the real-time graph and hold down the right mouse button. A pop-up menu appears:

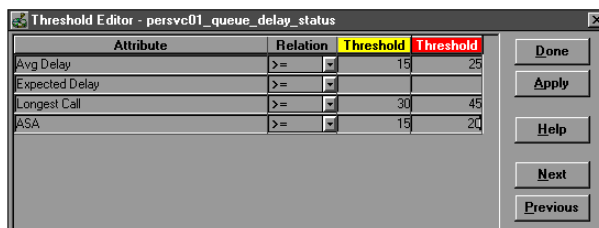


- Choose Thresholds. The mouse pointer changes to a cross hair (+). (Alternately, you can choose the Thresholds option from the Edit menu.)
- Click anywhere inside the real-time graph. The Threshold Editor dialog box appears:



You can set thresholds for the four attributes displayed in the Queue Delay Status bar graph (that is, Avg. Delay, Expected Delay, Longest Call, and Average Speed of Answer (ASA)). These thresholds can be set for all the peripheral services displayed in the graph.

- The default Relation (>=) is appropriate for the Avg. Delay thresholds you are about to set, so press TAB. (In the real-time graph, you want to highlight values that equal or exceed (>=) a certain threshold.)
- Enter 15 as the yellow threshold and press TAB.
- Enter 25 as the red threshold and press TAB.
- Tab down to the Longest Call yellow threshold field. (You do not have to set a threshold for the Expected Delay attribute. The Expected Delay is the ICR's predicted delay for a new call added to the service queue.)
- Set the thresholds for Longest Call and Average Speed of Answer (ASA) as you did for Avg. Delay. Enter the values as shown:



- Click on Apply. (Don't close the Threshold Editor yet.)

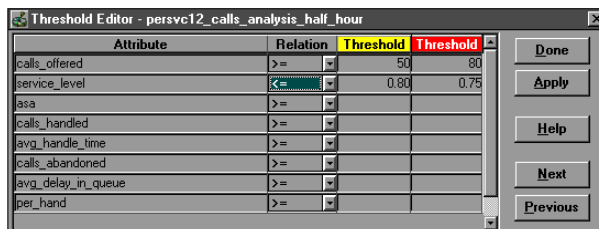
The thresholds you just set will have the following effects, possibly immediately, depending on the values in the graph:

- When the Average Delay in Queue is greater than or equal to 15 seconds, the Avg. Delay bar in the real-time graph will turn yellow, indicating a first-level warning. The first-level warning (yellow) is intended to inform you when a count or value is approaching an unacceptable level.
- When the Average Delay in Queue is greater than or equal to 25 seconds, the bar in the graph will turn red, indicating a more serious condition. This indicates that for the affected peripheral services, the Average Delay in Queue has reached an unacceptable level.
- When the Longest Call (Waiting in Queue) is greater than or equal to 30 seconds but less than 45 seconds, the Longest Call bar in the graph will turn yellow, indicating that the 30 second delay is approaching an unacceptable level. If that number equals or goes over 45 seconds, it means that an unacceptable performance level has been reached or exceeded. The Longest Call bar will turn red to indicate this more serious condition.
- The Average Speed of Answer yellow and red thresholds will also be triggered when performance levels equal or exceed 15 and 20 seconds respectively.

You can now set thresholds in the historical portion of the report.

➤ **To set thresholds in the historical grid:**

1. Within the Threshold Editor, click the Next button. The Threshold Editor displays the data attributes for the historical Calls Analysis grid.
2. Enter the threshold values as shown in the following example. (Note that service level threshold values must be set in decimal format.)



3. **(Important.)** Be sure to change the Relation for service_level to <=. You want the Service Level threshold to be triggered when the value equals or falls below a certain value.
4. click Apply.

You just set the number of Calls Offered thresholds to highlight the column if the number of calls equals or exceeds (>=) 50 and 60 in any

half-hour interval. You also set the Service Level thresholds to \leq to 80 percent for the yellow warning and \leq 75 percent for the red warning.

If the Service Level equals or falls below 80 percent, the Service Level column in the chart will turn yellow to indicate that the Service Level approached an unacceptable level. If the Service Level equals or falls below 75 percent, a red warning will indicate that a serious performance problem existed.

Note: Setting thresholds on the service level can alert you to other potential performance problems. A service level that is dropping indicates that some type of performance problem exists. To find out what is causing the service level to drop and to see if the problem still exists, you can launch an appropriate real-time template or open another report definition.

➤ **To set the other attributes:**

Choose relations and enter values that you feel set proper threshold levels for the other attributes listed in the Threshold Editor.

When you are ready to close the Threshold Editor, click Apply and then click Done.

➤ **To preserve the thresholds you set:**

Although you applied thresholds to the report, you **must** save the report itself in order to keep the threshold settings. Save the report definition by choosing File→Save from the menu bar, or by clicking the Save button.



3.10. Adding Drill-Downs

The DrillDown Editor lets you add another level of detail to the report. For example, if you are looking at information about a peripheral service, you might want to see more information about the individual routes associated with the service. Similarly, if you have a report on an enterprise service you might want to “drill-down” to see data for the component peripheral services. The DrillDown Editor allows you to get this kind of detail quickly and easily from within a report window.

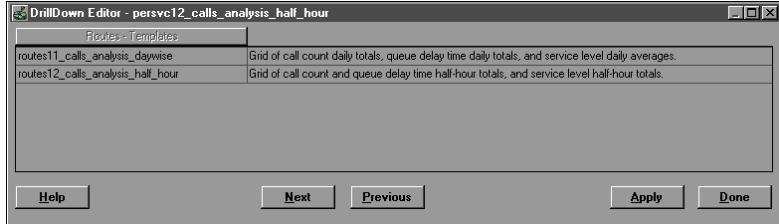
➤ **To add drill-downs to a report:**

1. Open the TUTOR.CMB report definition.
2. Choose Edit→DrillDown. The report window is maximized.

Now that you have added drill-down capability to the real-time graph, you can do the same with the historical grid.

➤ **To add drill-downs to the historical grid component:**

1. Click on Next. The DrillDown Editor changes to reflect the route templates that can be added to the historical grid.



2. Click the "routes12_calls_analysis_half_hour" template in the DrillDown Editor.
3. Click Apply to assign the drill-down template to the Call Analysis chart.
4. When you are finished, click Done. The DrillDown Editor is closed and you are returned to the original report window.

You will also be able to invoke a drill-down report for each peripheral service displayed in the historical grid.

You **must** save the changes you made to the report in order for the drill-down capabilities to take effect. If you close the report without saving it, the drill-down capabilities will be lost.

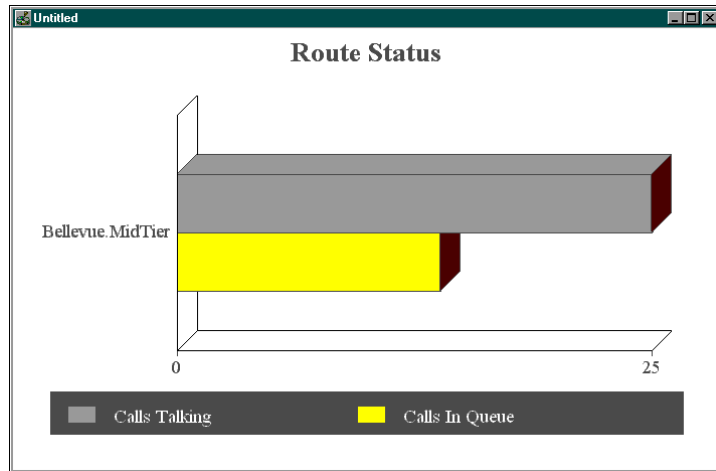
➤ **To save the drill-down capabilities:**



Choose File→Save or click the Save button. You can now invoke the drill-downs you just set.

➤ **To invoke the drill-downs:**

1. With the report displayed, double-click on a bar in the "Peripheral Services Queue Delay Status" real-time graph. A "Route Status" drill-down report appears.



2. Double-click on a bar for another peripheral service to specify that you want data for that peripheral service. A new “Routes Status” drill-down report appears.
3. To close a drill-down report, make the window active and choose File→Close.

For the historical portion of the report, follow this same procedure, but invoke the drill-down by double-clicking on a **specific name** in the Peripheral Service column of the grid:

Double-click on a name to invoke a drill-down

Calls Analysis of Peripheral Services (By Half Hour)									
		From	26 Dec 96 08:00		To	30 Dec 96 23:59			
Peripheral Service	Date	Time	Service Level	ASA	AHT	Delay	Calls		
							Offer	Handle	Aband
Bellevue.MidTier	26 Dec 96	00:30	100%	0	150		436	456	100%
	26 Dec 96	01:00	100%	0	150		436	456	100%
	26 Dec 96	01:30	100%	0	150		431	434	100%
	26 Dec 96	02:00	100%	0	150		437	444	100%
	26 Dec 96	02:30	100%	0	150		438	453	100%
	26 Dec 96	03:00	100%	0	150		434	455	100%
	26 Dec 96	03:30	100%	0	150		438	457	100%
	26 Dec 96	04:00	100%	0	150		437	456	100%
	26 Dec 96	04:30	100%	0	150		435	464	100%

Once displayed, the drill-down reports can be saved as Monitor ICR report definitions.

See also: Chapter 5, “Setting Thresholds and Drill-Downs,” provides more information on saving drill-downs as report definitions.

You can now learn how to set up Monitor ICR to save your workspace.

3.11. Saving Your Workspace

You can have Monitor ICR display the screen as you left it each time you start the application. This feature is useful in displaying your most important and frequently used reports immediately upon startup.

For example, say that the first thing you want to see at the start of the workday is a real-time report on call queue delays for a certain group of peripheral services. You can easily set up Monitor ICR to display this report at startup.

Note: Only saved report definitions (.CMB files) can be displayed at startup.

➤ **To set up Monitor ICR for automatic report display:**



1. Open the TUTOR.CMB report.
2. Choose Edit→Shuffle Mode and adjust the report to appear the way you want it displayed at startup. (For example, you may want to enlarge the real-time graph in the report.)
3. When you are satisfied with the appearance of the report, choose Edit→Shuffle Mode again to disable shuffle mode.
4. Choose Options→Save Settings Now. This saves the current screen settings and component positions.

Note: Make sure that Options→Save Settings on Exit is **not** selected when you exit from Monitor ICR; otherwise, the settings you have saved will be overwritten.

➤ **To test the startup settings:**

Choose File→Exit to end the current Monitor ICR session. Then double-click on the Monitor ICR icon to restart the application. The report is displayed automatically.

➤ **To return to default display mode:**

1. Start Monitor ICR.
2. Choose File→Close to close the TUTOR.CMB report.
3. Choose Options→Save Settings Now.
4. Ensure that Options→Save Settings on Exit is deselected when you exit from Monitor ICR.

The report you created in this chapter used some of the major features of Monitor ICR. However, Monitor ICR has other features that can help you manage your call center enterprise data.

See also: Chapter 4, “Reporting Basics,” provides more details on the Monitor ICR interface and several other reporting and monitoring features.

4. Reporting Basics

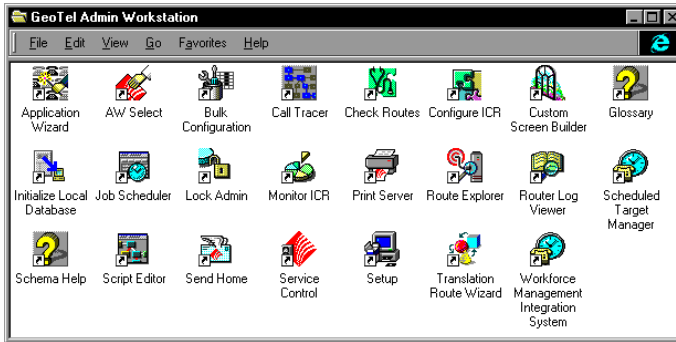
This chapter describes the basics of creating reports with the Monitor ICR tool. It provides details on using the toolbar, menu commands, on-line help, and the Template Launcher. Several common reporting tasks are covered in this chapter, including:

- Starting Monitor ICR.
- Working with templates and reports.
- Exporting report data.
- Printing reports.

This chapter also describes how to set Admin Workstation preferences such as the real-time refresh rate and the background color used in reports.

4.1. The GEOTEL Admin Workstation Group

From the Windows NT desktop, open the GEOTEL Admin Workstation group. The group contains several applications:



The following applications are used in reporting on and monitoring call center activity:

- **Job Scheduler.** Lets you schedule reports to be generated and printed at a later time.
- **Monitor ICR.** Lets you view graphs and reports to monitor the performance of the system as a whole or specific services and skill groups within the system. You can also generate new graphs and reports using templates provided.
- **Print Server.** Works with the Job Scheduler to allow you to automatically print reports at specific times.

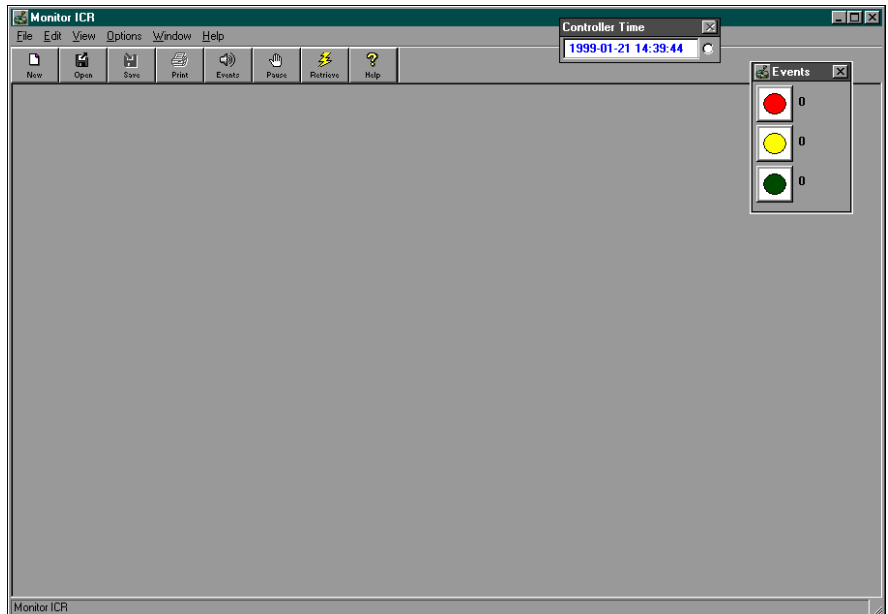
See also: See the *Intelligent CallRouter System Manager Guide*, *Installation Guide*, and *Administrator Guide* for information on the other ICR applications.

4.2. Starting Monitor ICR



Monitor ICR

To start Monitor ICR, double-click the Monitor ICR icon in the GEOTEL Admin Workstation group. The Monitor ICR main window appears:












See also: For information on starting Monitor ICR from the command prompt, see “Command Prompt Startup Options,” later in this chapter. For information on starting Monitor ICR from the Windows NT Explorer see “File Association,” later in this chapter.

4.2.1. Toolbar Options

You can use the buttons on the Monitor ICR toolbar to quickly activate the most common functions. Table 6 summarizes these buttons.

Table 6: Monitor ICR Toolbar

Button	Action
	Create a new report.
	Open a report that you have previously saved.
	Save the current report to a file.
	Print the current report.
	Invoke the ICR Event Viewer.
	Pause the real-time refreshing of the Monitor ICR screen.
	Resume the real-time refreshing of the Monitor ICR screen.
	Retrieve the latest half-hour historical data from the central database.
	Invoke on-line help.

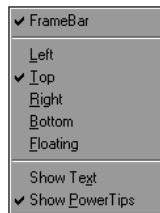
You can also invoke these actions by using menu commands. A few of the commands also have keyboard shortcuts.

See also: The Monitor ICR on-line help provides more information about the toolbar and keyboard shortcuts.

You can toggle the Options→Show Text option from the Monitor ICR menu to display the toolbar without text:

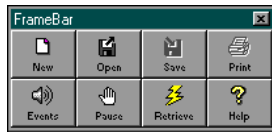


Monitor ICR provides a pop-up menu that allows you to display the toolbar in several different ways. Click the right mouse button in the area to the right of the toolbar. A menu appears:



Toggle the Frame Bar option to hide the toolbar. To redisplay the toolbar, choose Options→Toolbar from the Monitor ICR menu. The other options in this window (except Show Text) allow you to display the toolbar in different positions and toggle between displaying large buttons with text (Show Text) or smaller buttons with no text.

Toolbars can appear “docked” to an edge of the window or floating as in the following example:



You can drag a floating toolbar anywhere within the window. If you drag it to an edge of the window, it docks to that edge.

4.2.2. On-Line Help

The on-line help system provides information on the user interface and menus of Monitor ICR. For details on the menu options and other subjects, invoke the Monitor ICR on-line help.



➤ **Invoke on-line help by using one of these methods:**

- In the Monitor ICR window, click the Help button.
- Select Help from the Help menu.
- Press F1.

The Help contents window is shown in the following example:

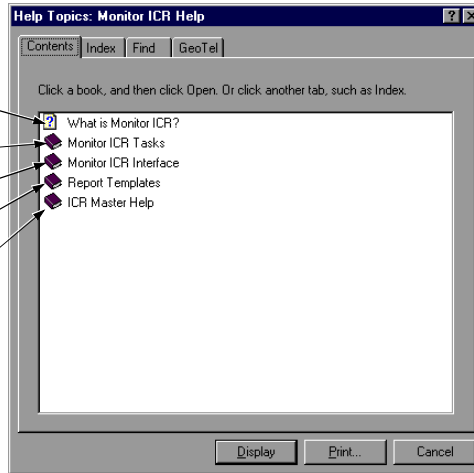
Provides a brief overview of the application.

Provides access to step-by-step instructions for common tasks.

Contains details on the user interface of the application.

Provides in-depth template reference material.

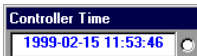
Starts master help, which gives you access to help for each ICR tool



Each Help system on the Admin Workstation works in the same way. If you click the Master Help button in any of the ICR help systems, another help window appears which lets you navigate to other help systems via a Help Topics window.

4.2.3. Controller Time

The Controller Time window appears whenever the Monitor ICR window is displayed. You can position the Controller Time window anywhere on the screen while you are working in Monitor ICR. It is part of the Monitor ICR application and is closed and minimized along with Monitor ICR:



The Controller Time window shows the current date and time at the ICR Central Controller. The *Central Controller* is the computer or computers running the *CallRouter* and the Database Server. An up-to-date controller time indicates that the real-time feed process is active and providing real-time data to the Admin Workstation. You can click on the radio button (O) to display the time zone for the Central Controller.

By default, the controller time is updated approximately every 10 to 30 seconds, depending on the AW type. You can change these values on some AWs by using the Preferences dialog box.

To change the refresh rate, change the value in the Refresh Rate field in the Preferences dialog box. This field also affects the rate at which real-time data is updated in Monitor ICR real-time reports.

See also: See “Setting Workstation Preferences,” later in this chapter, for more information on using the Preferences dialog box.

You may also want to see the *local time* at the Admin Workstation while you run Monitor ICR. To display the local time, run the Clock task from the Windows NT Run window.

4.2.4. Command Prompt Startup Options

You can start Monitor ICR and open existing reports from the DOS command prompt. For example, in a DOS command prompt window you can type:

```
C:\>monitor \icr\custome\aw\custom\persvc\filename.cmb
```

This command starts Monitor ICR and opens the specified report definition file. To open a specific report, you must provide the complete path along with the filename.

If you want to start Monitor ICR without opening a specific report, you can type the following command:

```
C:\>monitor
```

The monitor command can be entered in any DOS command prompt window or in the Task List window. You can open the Task List window by pressing CTRL + ESC.

Once Monitor ICR and the specified report are displayed on the screen, you can open additional reports by issuing the command again. For example, the following command opens a report from the “trkgrp” directory:

```
C:\>monitor \icr\custome\aw\custom\trkgrp\filename.cmb
```

Each time you enter the monitor command, the specified report is opened and a new instance of Monitor ICR is started.

See also: For information on starting Monitor ICR and opening reports from the Windows NT File Manager or the NT Explorer, see “File Association,” later in this chapter.

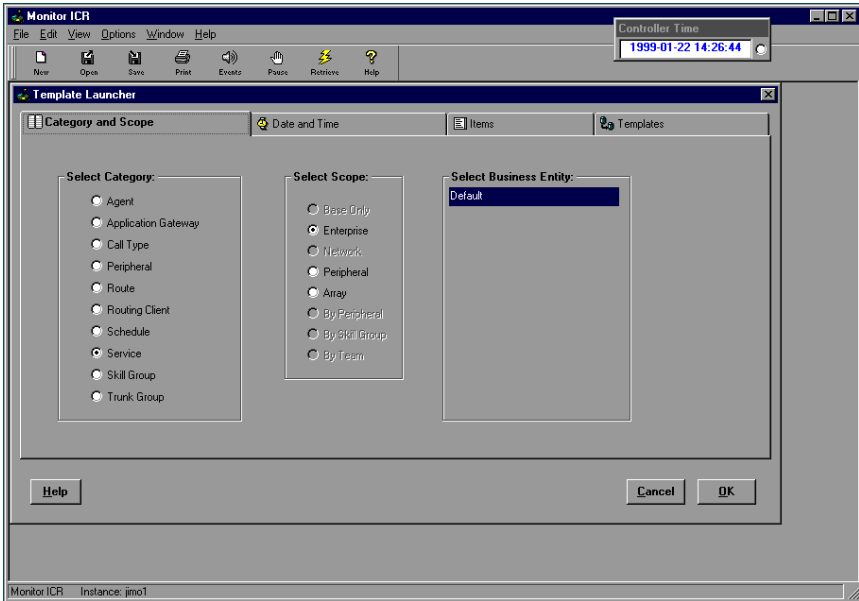
4.3. Working with the Template Launcher

The Template Launcher allows you to generate a new report using the predefined templates that come with Monitor ICR. You can also launch any custom templates that were created with the ICR Custom Screen Builder. Once you launch the selected templates, you can add features, lay out the report components, and save the report as a report definition. Report definitions can later be opened and modified.

➤ **To invoke the template launcher:**



In the Monitor ICR window, click the New button. The Template Launcher window appears:



In the Template Launcher window, you choose the options that define how a report will be generated. These options include:

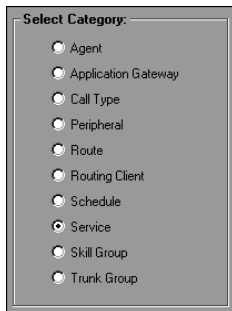
- Category and Scope
- Date and Time
- Items
- Templates

After you select options in each tab, you can click OK to launch the report.

The Template Launcher window can be closed. To close the Template Launcher, choose Close from the Template Launcher's control panel or click the Close (X) button.

4.3.1. Category and Scope

Choose a report Category. You can select only one category on which to base the report.



Select Category:


- Agent
- Application Gateway
- Call Type
- Peripheral
- Route
- Routing Client
- Service
- Skill Group
- Trunk Group

You can create reports on the following logical groups, or categories, within the call center enterprise:

- **Agent:** An *agent* is anyone who can answer incoming phone calls. A *peripheral agent* is an agent who is associated with a particular peripheral (ACD, PBX) in the call center enterprise. A peripheral agent can be a member of one or more skill groups. (Some peripheral types limit each agent to one skill group assignment.)
- **Application Gateway.** You can report on several types of data related to the Application Gateways set up in the system. The *Application Gateway* allows the ICR to query host systems that are running other call center applications. The ICR can then base routing decisions on the results obtained from the query. For Application Gateways, you can report on data such as the number of query requests issued to a host system and the delay involved in making queries.
- **Call Type.** You can report on statistics for the call types defined in the ICR system. A *call type* is a category of incoming calls. Calls are categorized based on dialed number (DN), caller-entered digits (CED), and calling line ID (CLID). In reports, you might want to display data such as the number of calls of a certain call type that used default routing during a specified interval.
- **Peripheral.** You can use the Peripheral category to report on switch-specific hardware and software status and some types of call and agent information.
- **Route.** For routes, you can report on data such as the number of calls in progress, calls in queue, or calls handled. A *route* is value that is returned by a routing script. This value maps to a service and a specific target at a peripheral (for example, a service, skill group, agent, or translation route).

- **Routing Client.** You can report on statistics for the different routing clients defined in the ICR system. A *routing client* is an entity that sends routing requests to the ICR. Routing clients typically correspond to a subsystem within the interexchange carrier (IXC) or to a peripheral (ACD or PBX) that is performing *Post-Routing*. Within Monitor ICR, you might want to report on the maximum delay of route responses to the routing client for a specified interval.
- **Schedule.** You can generate reports that include staffing schedule data that has been imported from a third-party workforce management system. The GEOTEL Workforce Management Import System allows you to import schedule data and store it in the ICR database. The exact data that appears in Monitor ICR reports depends on the specific workforce management system you are using with the ICR system.
- **Service.** You can report on many types of data for services, such as service level, number of calls abandoned, number of calls offered, and average handle time. A *service* is a particular type of processing that the caller requires. For example, in a software company's call center, callers having questions about installing software would be directed to the Technical Support service.
- **Skill Group.** A *skill group* is a collection of agents who share a common set of skills, such as being able to handle Spanish-speaking callers. For skill groups, you can generate reports that cover agent activity (for example, the number of agents talking, available, or in wrap-up for a particular skill group).
- **Trunk Group.** A *trunk group* is a collection of trunks that are associated with a single peripheral. Often, the trunks in a trunk group are used for a common purpose. In Monitor ICR, you can report on trunk group (and network trunk group) data, such as the number of trunks in service, number of trunks idle, and the time during which all trunks in a trunk group were simultaneously busy (All Trunks Busy).

Specify the Scope of the report. These options help you to further focus your report on specific services, skill groups, routing clients, etc.



A dialog box titled "Select Scope:" with a list of radio button options. The "Enterprise" option is selected.

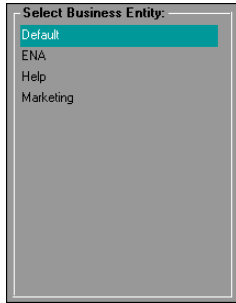
- Base Only
- Enterprise
- Network
- Peripheral
- Array
- By Peripheral
- By Skill Group
- By Team

The Scope options include:

- **Base Only.** This option is available only if you select Skill Group as the Category. Base skill groups are used to organize related subgroups on some types of ACDs. For example, you might have skill groups called HelpDesk.pri and HelpDesk.sec to prioritize call routing. In a report, you can reference the .pri and .sec skill groups directly or you can refer to the base skill group.
- **Enterprise.** Select Enterprise to report on enterprise services or enterprise skill groups. Enterprise services and skill groups are collections of services and skill groups that span call centers.
- **Network.** This option is available only if you choose Trunk Group as the Category. Select Network to report on Network Trunk Groups.
- **Peripheral.** This option allows you to report on Peripheral Agents, Peripheral Services, Peripheral Skill Groups, or Peripheral Trunk Groups.
- **Array.** Select Array to report on Service Arrays. A *Service Array* is a collection of peripheral services across VRUs that share a common network trunk group.
- **By Peripheral.** This option is available only if you choose Agent as the Category. It allows you to report on each agent currently logged into one or more selected peripherals.
- **By Skill Group.** This option is available only if you choose Agent as the Category. It allows you to report on each agent currently logged into one or more selected skill groups.
- **By Team.** This option is available only if you choose Agent as the Category. It allows you to display information about each agent in one or more selected agent teams.

See also: For more information on call center entities such as Network Trunk Groups and Service Arrays, see Chapter 1, “Overview.”

Specify the Business Entity. A *business entity* is a subset of the ICR enterprise that contains its own scripts, enterprise services, enterprise skill groups, enterprise agent groups, and schedules.

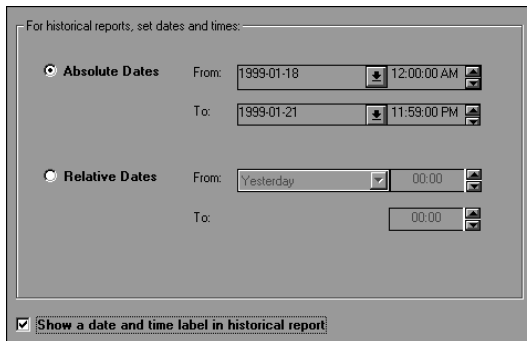


A business entity may represent a division within a large corporation or a single customer within a service bureau. By default, the ICR enterprise consists of only one business entity. If you enable partitioning, you can define multiple business entities.

If you have only one entry under Select Business Entity, you need not make a selection. Otherwise, select a business entity from the list.

4.3.2. Date and Time

For historical reports, choose the type of date and time you want to use in the report:

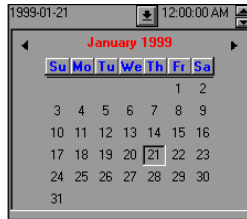


Absolute Dates

Absolute dates allow you to enter an exact period of time with From and To dates and times. Choose this option if you want the report to display data from a specific time period (for example, from January 18, 1999 to January 21, 1999).

The default From and To dates and times are from the present date at 12:00 AM (midnight) to 11:59 PM. These defaults provide data up to the present time.

If you select **Absolute Dates**, click the down arrow in the From and To boxes to display a calendar:



Double-click on a day in the calendar to select it. You can also click on the left and right arrows in the calendar to display different months.

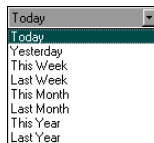
To enter times, highlight the time values and use the up and down arrows to adjust them. Time is shown in 24-hour format. For example, 8:00 is 8:00 A.M. and 17:00 is 5:00 P.M.

If you leave the To time field set to 23:59, the report displays data up to the current time. (Optionally, you can type dates and times directly into the From and To boxes.)

Relative Dates

Relative dates allow you to select a predefined period of time for the report relative to today's date. Choose this option if, for example, you want the report to display data for the previous day, last week, or the current month. For example, if you choose Relative, you can choose an option such as "Last Week" as a Date Time. This would provide data for the last full week (that is, Sunday through Saturday).

If you select **Relative Dates**, click the down arrow in the From box to display a drop-down list of relative date ranges:



Choose options such as Today, This Week, or Yesterday. Enter From and To times by highlighting the values and using the up and down arrows to adjust the times. If you leave the To time field set to 23:59, the report will display data up to the current time. (Optionally, you can type the dates and times directly into the From and To boxes.)

The Relative options include:

- **Today.** Provides data for the current day and the time period entered. (The 00:00 to 23:59 defaults provide data from midnight of the current day up to the current time.)
- **Yesterday.** Provides data for the previous day and the time period entered. (The 00:00 to 23:59 defaults provide data for the full day (that is, midnight to 11:59 P.M.).)
- **This Week.** Provides data for the current week beginning on Sunday and ending on the current day. You can specify a From time for the first day in the week (Sunday) and a To time for the current day. (The 00:00 to 23:59 defaults provide data from midnight on Sunday to the current day and time.)
- **Last Week.** Provides data for the last full week (Sunday through Saturday). For example, if today is Sunday, the last full week would be the previous Sunday through Saturday. You can specify a From time for Sunday and a To time for Saturday. For example, you might only want to include data from 8:00 A.M. on Sunday to 5:00 P.M. on Saturday. (The 00:00 to 23:59 defaults provide data from midnight on Sunday to Saturday at 11:59 P.M.)
- **This Month.** Provides data from the first of the month up to the current day. For example, if today's date is Feb. 22, data for this month would be Feb. 1 to Feb. 22. You can specify a From time for the first day in the month and a To time for the current day. (The 00:00 to 23:59 defaults provide data from midnight on the first day of the month to the current day and time.)
- **Last Month.** Provides data for the last full month. For example, if the current date is Feb. 8., then the last full month of data would be Jan 1. to Jan 31. You can specify a From time for the first day of the month and a To time for the last day. (The 00:00 to 23:59 defaults provide data from midnight on the first day of the month to the last day at 11:59 P.M.)
- **This Year.** Provides data for this year from 1 Jan. to the current day. You can specify a From time for the first day in the year and a To time for the current day. (The 00:00 to 23:59 defaults provide data from midnight of the first day to the current day and time.)
- **Last Year.** Provides data for the last full year. For example, if the current month is April 1997, the last full year would be Jan. 1, 1996 to Dec. 31, 1996. (The 00:00 to 23:59 defaults provide data from midnight on the first day of the year to the last day at 11:59 P.M.)

Advantages of Using Relative Dates

The Relative Dates option provides a unique advantage over entering specific dates and times. When you use relative dates, you do not have to edit the report definition to change the report dates and make them current. Every time you bring up the report, you get data for the specified period of time relative to the present date.

For example, if you created a report and specified “Last Week” as the relative date, you could open the report on any day and automatically see data for last week. You could have other reports that displayed data for yesterday or for the last month. By using reports with different relative dates, you can see daily activity as well as activity on a weekly, monthly, or even yearly basis.

Show Date and Time Option

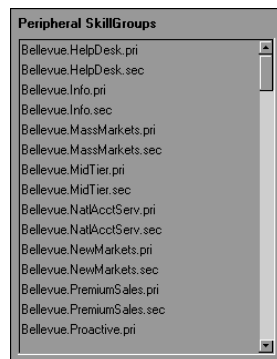
Click the “Show a date and time...” check box to display the date and time range as a label in the report.

Hourly Boundaries

When you indicate an hourly boundary such as 10:00 in a historical report, you get data for the 9:30 to 10:00 half-hour summary interval, not for the 10:00 to 10:30 interval. Also, the ICR central database provides half-hour summary data only for complete intervals. Half-hour summary data for the 10:00 to 10:30 half-hour interval is not available until 10:30.

4.3.3. Items

A selection list on the left side of Items tab displays specific names based on the options you chose for Category and Scope. The header of the selection list indicates the type of items in the list. The following example shows an example of a Peripheral Skill Groups selection list:



Choose the specific names of the services, skill groups, peripherals, trunk groups, etc., that are going to be the subject of the report. This list is obtained from the ICR central database. It shows the items as they are

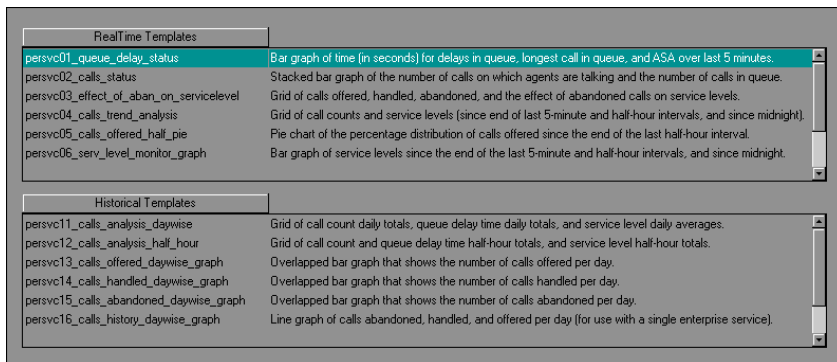
defined in the ICR system. You can scroll down in the list to view additional items.

You have several options for selecting items from this list:

- To select a single item, click on it.
- To select more items, press the **CTRL** key and click on the items.
- To select a range of items, click on the first item in the range. Press **SHIFT** and click on the last item in the range.
- To select (or deselect) all items in the list, click the **Select All** button.

4.3.4. Templates

The Templates tab contains the predefined real-time and historical templates and any templates you created with the ICR Custom Screen Builder. The templates you select here specify the type of report and the types of data you want to view. For example, if you selected a peripheral service as a report item, you could select the “persvc01_queue_delay_status” template to view the call queue status for that peripheral service.



Click on a template name in the list to select it. If necessary, use the scroll bar to view additional templates. To select multiple templates from one list, hold the **CTRL** key as you click on each template.

If you select a **single template**, such as a real-time graph, the report will contain one real-time graph component. If you select **multiple templates**, for example, two real-time graphs and a historical grid, the report will contain all three components.

Reports can have up to ten components. In other words, you can select up to ten templates to use in a single report. This allows you to mix and match real-time and historical templates to create a report that displays exactly the data you want to view.

The template lists provide the following information about each template:

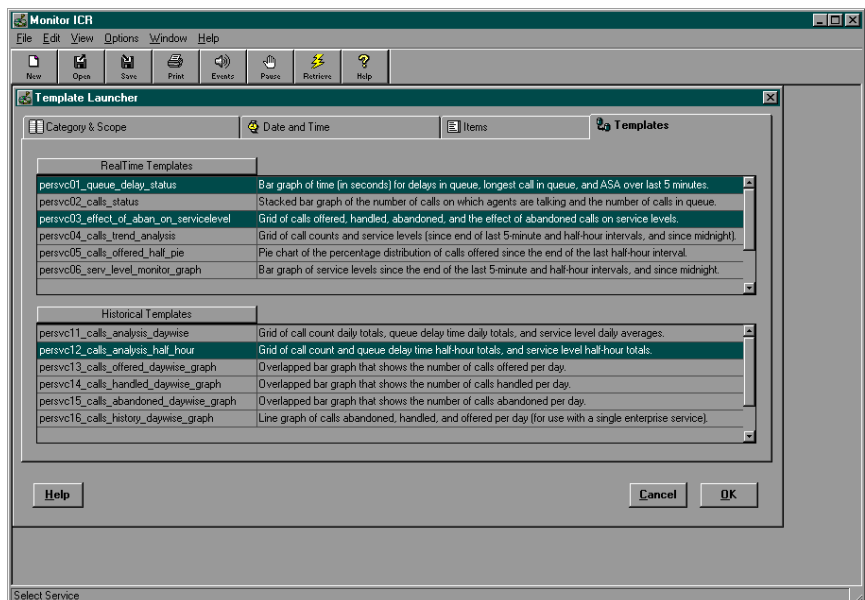
- **Template name.** The name of the template. Each template uses a naming convention that includes a directory (for example, persvc, routes, trkgrp), a number, and a brief descriptive title. This is a GEOTEL naming convention. If you create your own templates using the ICR Custom Screen Builder, be sure to use a different naming convention. Otherwise, you may risk overwriting one of the GEOTEL predefined report templates.
- **Description.** A description of the purpose of the template, including the display style (for example, graph, pie chart, or grid) and the types of data the template displays.

4.3.5. Launching Templates

To launch the templates, click OK. An untitled report window appears and the Template Launcher is closed.

Typically, you launch templates after you make your final selections in the Templates tab. However, you can launch the templates from within any of the other Template Launcher tabs. For example, if you needed to go back to change your Item selections, you could click OK from within the Items tab to launch the templates.

The following example shows the Template Launcher set up for launching two real-time templates and a historical template:



To close the Template Launcher without launching the templates, click Cancel.

4.4. Working with Reports

When a report first appears on the screen, it is untitled. To keep the report, you need to save it as a report definition file. This section describes several common tasks you perform when working with reports:

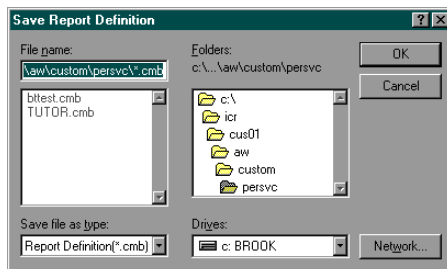
- Saving report definitions
- Working with multiple-component reports
- Using shuffle mode
- Printing reports
- Opening reports you have saved
- Displaying reports at startup
- Modifying report definitions
- Deleting report definitions

4.4.1. Saving Report Definitions

Once you save a report definition, you can open it at any time by using the File→Open command. Reports are saved as report definition files with .CMB extensions.

➤ **To save report definitions:**

1. Choose File→Save, or click the Save button. The Save Report Definition dialog box appears:



Notice that the Save Report Definition dialog box defaults to the appropriate directory for the report. For example, if you create a report on a peripheral service, the Report Definition dialog box defaults to the persvc directory. The persvc directory is reserved for storing only reports on peripheral services. Similarly, other \custom subdirectories on the AW exist to hold certain types of reports. See Table 7 for a list of these subdirectories.

2. Type a file name. The .CMB extension is retained.
3. Click OK. The report definition is saved.

If you have already saved the file, you can choose File→Save As to save the report definition to a new file with a new name. The File→Save As option also displays the Save Report Definition dialog box.

Note: Saved reports do not show up in the Template Launcher list of templates. You must open report definitions by using the File→Open command or clicking the Open button.

Table 7: Default ICR Subdirectories

Subdirectory	Report Category
agteam	Agent Teams
agtper	Agents by Peripheral
agtskg	Agents by Skill Group
agate	Application Gateways
caltyp	Call Types
entagt	Enterprise Agents ¹
entskg	Enterprise Skill Groups
entsvc	Enterprise Services
nettrk	Network Trunk Groups
peragt	Peripheral Agents
periph	Peripherals
perskg	Peripheral Skill Groups
persvc	Peripheral Services
routes	Routes
rtecli	Routing Clients
schimp	Schedules
trkgrp	Peripheral Trunk Groups

When you save a report definition, the saved version includes the following:

- The specific data elements (that is, the specific services, skill groups, etc.) displayed in the report.
- Relative or absolute dates and times for historical data.

¹ Not currently implemented.

- Any thresholds you have defined.
- Any drill-downs you have defined.
- The names of the templates used in the report. The templates themselves are not saved in the report. However, references to the templates are saved. Any subsequent modifications to the templates used by the report are reflected in the report.

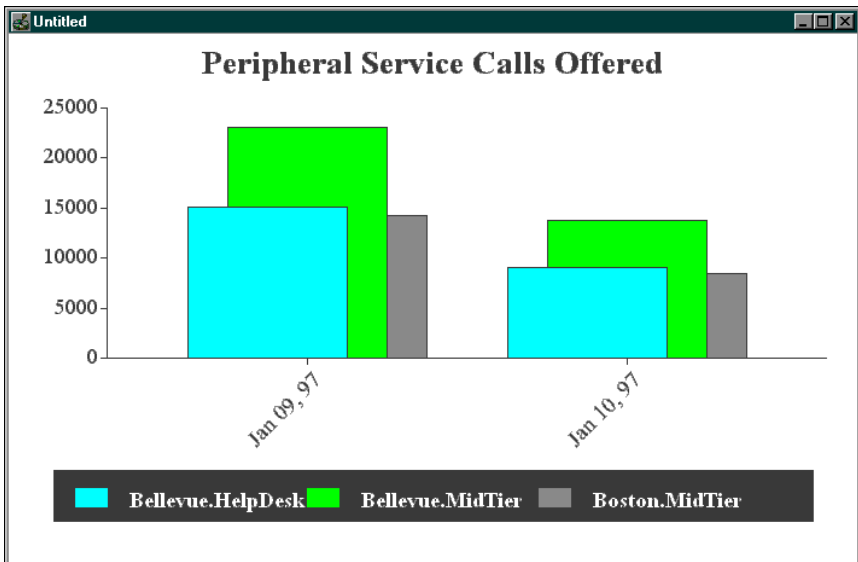
The current data values are **not** stored in the report.

See also: For information on saving just report data, see “Exporting Report Data,” later in this chapter.

4.4.2. Single- and Multiple-Component Reports

Each template you select in the Template Launcher becomes a component in the report. A report with a single component is straightforward. You generate a single-component report by using one template. Therefore, the report definition file references only one template.

For example, you might generate a report for several peripheral services using a single Calls Offered template. In this report, you might enter Last Week as a Relative date option. You could save this report and display it at any time. Each time you displayed the report, you would be able to see the number of calls offered over the last week for each peripheral service. The following report provides an example:



Single-component reports have standard window features and can be resized, moved, minimized, and maximized.

You might want to create a more complex report that uses more than one template. For example, if you launch two real-time templates and a historical template, the report contains three components. You save the report definition in the same way you save a single-component report definition. However, the multiple-component report definition references three templates instead of one. You can use up to ten templates to create a single report.

Multiple-component reports are useful in displaying different types of data in the same report. Real-time components display current data and historical components display data based on a range of dates and times that you enter.

The following example shows a report that has four components:

The screenshot shows the Monitor ICR interface with a report titled 'Calls Analysis - Real-Time and Historical'. The report is composed of four distinct components, each with its own title bar:

- persvc02_calls_status**: A horizontal bar chart titled 'Peripheral Service Status' showing 'Calls in Prog' (red) and 'Calls in Queue' (green) for three service levels.
- persvc05_calls_offered_half_pie**: A 3D pie chart titled 'Peripheral Service Calls Offered over Half Hour'.
- persvc03_effect_of_aban_on_servicelevel**: A table titled 'Effect of Abandoned Calls on Peripheral Service Service Levels'.
- persvc12_calls_analysis_half_hour**: A detailed table titled 'Calls Analysis of Peripheral Services (By Half Hour)'.

Annotations on the left side of the image point to the 'Report title bar' at the top of the window and 'Individual component title bars' for each of the four report components.

This example is one report, not four different reports. You can distinguish the difference by looking at the title bars of each component. A *report component* displays a template name (for example, persvc02_calls_status). A *report window* displays a .CMB title in its title bar. This report example is shown in Shuffle Mode, which is a display mode that allows you to move and resize report components on the screen.

A multiple-component report can be enclosed in one window or expanded by clicking on the Maximize and Minimize buttons. Expanding the report removes the window border and report title bar. In addition, three options in the Window menu place a window around a multiple-component report: Tile, Layer, and Cascade. These options are used in arranging reports on the Monitor ICR screen.

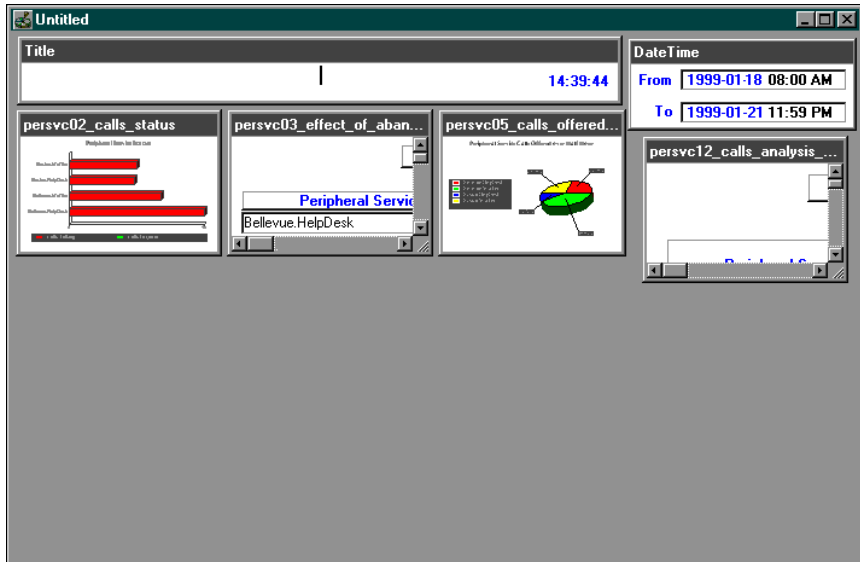
See also: For more information on working with more than one report on the screen, see “Working with Several Reports,” later in this chapter.

Multiple-component reports can be useful in displaying different types of data in a single report. Note, however, that each component can display only one type of data (that is, real-time or historical). This is because a single template can retrieve data from only one source: the local database or the central database. A single template cannot retrieve data from both databases.

A report created with several templates, on the other hand, can display data from both the local and central databases.

4.4.3. Shuffle Mode

When you have a report that contains more than one component, you need a way to move and resize the components within the report window. Shuffle mode allows you to lay out and resize report components on the screen. The following example shows how a report with two components first appears after it is created through the Template Launcher. When a multiple-component report first appears, it is automatically displayed in Shuffle Mode.

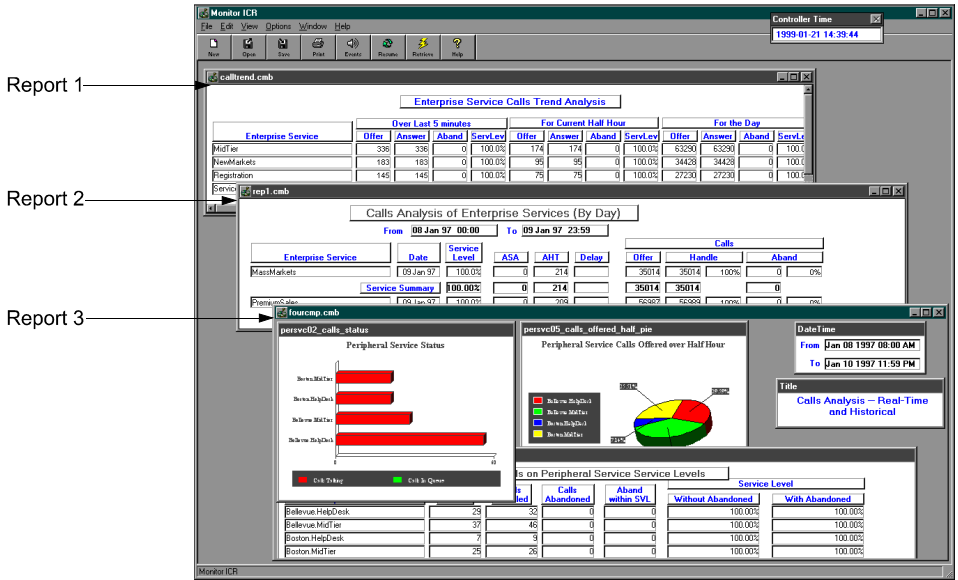


Note: Shuffle Mode is not required in a single-component report.

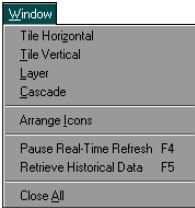
When you lay out report components, it helps to click the Maximize button so you have more screen area in which to work.

4.4.4. Working with Several Reports

Often, you will have more than one report displayed on the screen. You can move between reports by clicking on a window to make it active. The following example shows a Monitor ICR screen with three reports displayed (one of the reports, fourcmp.cmb, is a multiple-component report).



You can also use the options of the Window menu to move between report windows and arrange reports on the screen.



The Windows menu provides the following options for working with more than one report on the screen:

- **Tile Horizontal.** Arranges all currently open windows within Monitor ICR horizontally on the screen. The windows are sized evenly and fit within the Monitor ICR screen without overlapping.
- **Tile Vertical.** Arranges all currently open windows within Monitor ICR vertically on the screen. The windows are sized evenly and fit within the Monitor ICR screen without overlapping.

- **Layer.** Stacks all windows within Monitor ICR on top of each other.
- **Cascade.** Arranges all windows within Monitor ICR so that they overlap, but each is still partially visible.
- **1, 2, 3...** Lets you quickly change to a different report window.

The other options of the Window menu are described in the on-line help system.

4.4.5. Status Bar

If you click on a bar in a graph style report, a message appears at the bottom left corner of the Monitor ICR window describing what the bar represents and its current numerical value. For example:

Bellevue.NewMarkets for Mar 11, 95 is 7120.00

You can use this feature to get a precise reading of a value in the graph or to differentiate the bars if you have trouble distinguishing their colors.

4.4.6. Retrieving Historical Data

Although Monitor ICR automatically updates real-time data while you are viewing a report, it does not automatically update the historical half-hour data that is displayed. While a historical report is displayed, you can click the Retrieve button to update the report with new half-hour data that has been collected by the ICR.



For example, if you had a historical report displayed on the screen and you left your desk for an hour or so, you would need to click the Retrieve button when you returned in order to display the latest half-hour data. Monitor ICR retrieves the latest half-hour data from the ICR central database and updates the data displayed in the report.

4.4.7. Pausing the Screen Refresh

You can pause the real-time refreshing of the Monitor ICR screen. The Pause button allows you to prevent real-time reports from being continually refreshed while you are working in Monitor ICR. This feature is useful in several ways. For example, say you are viewing a real-time graph and you notice that an unusual number of calls are being offered to a particular service. You might want to “freeze” the real-time graph in its current state in order to print it, or you might want to simply keep the graph displayed the way it is while you further investigate the condition.

You might also want to pause screen refreshing while you are working with the Definition Editor, the Threshold Editor, or the DrillDown Editor. This ensures that the function you are working with (for example, the Definition Editor) is not interrupted by the real-time refreshing of the screen.



To pause the real-time refreshing of the screen, click the Pause button in the Monitor ICR tool bar. To enable the real-time refreshing of the screen, click the Resume button.

See also: For more information on the Threshold Editor and the DrillDown Editor, see Chapter 4, “Setting Thresholds and Drill-Downs.”

4.5. Reconnecting to the Central Database

If the Admin Workstation loses its connection to the ICR central database or the Distributor AW’s local database, a dialog box appears on the screen to inform you that the connection has been lost. If this happens, choose File→Reconnect to reestablish the Admin Workstation’s connection to the ICR central or Distributor AW local database. At all other times, the Reconnect option is not available.

The Admin Workstation can lose its connection to the central or local database if there are problems with the network or with the central controller *CallRouter* or *Logger*. The Reconnect option allows you to quickly connect to the databases without having to restart Monitor ICR.

4.6. Printer Setup

Before you print reports with Monitor ICR, check to see which printer you are using. You may want to use a special printer for Monitor ICR reports such as a high-resolution or color printer.

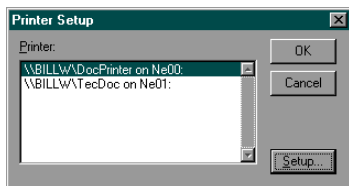
In addition, you should set up the printer (through Monitor ICR) to use landscape paper orientation rather than portrait orientation. Although you can use portrait paper orientation to print reports, reports with several columns of data may not fit properly on the pages.

When you use landscape printing, Monitor ICR repeats titles and dates on each page and inserts page breaks where appropriate. Often, several pages are required to print lengthy, grid-style historical reports. Graph-style reports typically require only one page; however, you should still use landscape orientation to print graphs. This ensures that even wide graphs print properly. In general, landscape paper orientation provides a more consistent and neater format than portrait orientation.

Note: Once you make these changes to the printer setup, they are in effect for every report generated in Monitor ICR (until you change the settings again).

➤ **To specify the report printer:**

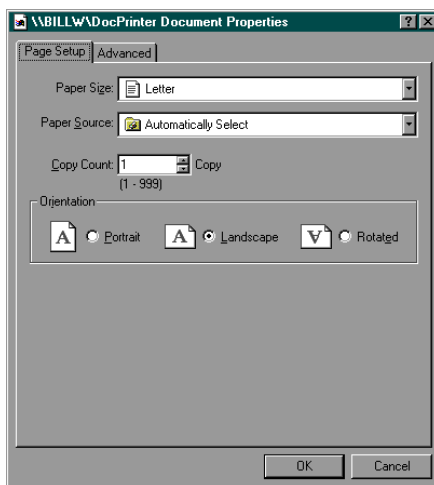
1. Choose File→Printer Setup. The Printer Setup dialog box appears.



2. Click on a printer to use for reports and perform one of the following steps:
 - Click on OK to save the printer settings and close the Printer Setup dialog box.
 - Click the Setup button to specify landscape printing for reports.

➤ **To set up reports for landscape printing:**

1. In the Page Setup tab, select the Landscape option:



2. Click OK to save your changes and dismiss the Document Properties dialog box.
3. Click OK again to close the Printer Setup dialog box.

You can also use the Document Properties window to choose form type, color, or black and white printing, and number of copies. To get more information on printing options, click the Help button in the Document Properties box.

4.7. Printing Reports



You can print reports that are displayed on the Monitor ICR screen. First, display the report and make it the active (current) window. Then choose File→Print from the Monitor ICR menu or click the Print button in the toolbar. The report is sent to the printer. A dialog box appears to inform you that the report is printing.

Note: Print reports using landscape paper orientation to ensure that all data and graphic elements fit properly on the pages. See the previous section, “Printer Setup,” for information on setting up reports for landscape printing.

You can also print reports that you have not yet saved. For example, when you create a report, it remains untitled until you save it as a report definition file. You might have one or more untitled report windows displayed on the screen. To print an untitled report, make it the active window and choose File→Print.

4.7.1. Printing Multiple-Component Reports

When you print a multiple-component report, Monitor ICR selects one report component at a time and sends it to the printer. You can see the order in which the components will print by displaying the report and choosing Edit→Definition to view the report definition. The order of printing follows the top down order of the templates selected in the report definition.

To print reports with multiple components, follow the same procedure as in the previous section, “Printing Reports.” A new printing dialog box appears for each report component sent to the printer. Monitor ICR runs through each component in the report until the entire report is printed.

4.8. Opening Saved Reports

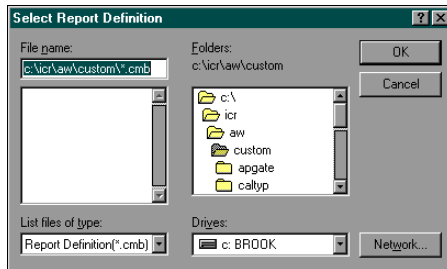
After you have saved a report definition, you can invoke it at any time by choosing the Open command from the File menu or by clicking on the Open button.

Note: You do not launch saved reports through the Template Launcher.



➤ **To open a report:**

1. In the Monitor ICR window, choose File→Open, or click the Open button. The Select Report Definition dialog box appears.



Only report definition files appear in the Select Report Definition dialog box. You do not see the templates, although they are also stored in these directories. (To open templates, use the ICR Custom Screen Builder.)

2. In the Folders (or Directories) list, double-click the directory where you saved the report.

By default, reports are saved in subdirectories under icr\aw\custom. The specific subdirectory depends on the data that is included in the report. See Table 7, earlier in this chapter, for a list of the custom subdirectories and their contents.

3. Choose the file name (for example, MYREPORT.CMB) from the list on the left side of the dialog box.
4. Click OK. The report appears in the Monitor ICR window.

4.9. File Association

The most common way to open report definition files is to click the Open button from within Monitor ICR and then choose a report file from the Select Report Definition dialog box. However, you might want to quickly open a specific report without having to start Monitor ICR and go through the menu selections. It might be easier to simply double-click on a report definition file name from within NT Explorer to start Monitor ICR and open the report, especially when Monitor ICR is not yet running.

File association makes it possible to associate a file's file name extension with an application. For example, once you associate the .CMB extension with the Monitor ICR application, you can double-click any .CMB report file from within Windows NT Explorer to start Monitor ICR and open the report. Once Monitor ICR is started you can double-click on other .CMB files to open those reports. Additional reports are opened in the currently active Monitor ICR application. Monitor ICR is not started again.

➤ **To apply file association through NT Explorer:**

1. Start the Windows NT Explorer program.
2. Change to the ICR's \custom directory.
3. Open one of the custom subdirectories (for example, persvc), and select (highlight) a .CMB report definition.
4. Press SHIFT and click the right mouse button. A pop-up menu appears.
5. Choose Open With. The Open With dialog box appears with a list of standard Windows NT executables.
6. Click Other. A secondary Open With dialog box appears, prompting you to look in a directory for a specific executable to apply.
7. Change to the \icr\bin directory.
8. Within the \icr\bin directory, find "monitor.exe."
9. Select monitor.exe and click Open. You are returned to the Open With dialog box.
10. Check the option, "Always use this program to open this type of file."
11. Click OK to associate .CMB files with Monitor ICR. You can now open reports by double-clicking on .CMB file names.

4.10. Saving Your Workspace

To maintain continuity between Monitor ICR sessions, you might choose to save your workspace automatically when you exit. This means that the state of your workspace at the end of the session will be restored when you next start Monitor ICR.

You can also set up Monitor ICR to always give you the same initial workspace. For example, you might want to see a certain Calls Offered pie chart each time you start Monitor ICR. To do this, you set up your workspace once and save it manually. Monitor ICR displays the same initial workspace until you change it again.

Note: Only reports that have been saved can be displayed at startup.

➤ **To automatically save your workspace when you exit:**

Choose Option→Save Settings on Exit from the main menu.

➤ **To manually save your workspace:**

1. Set up your workspace. For example, you might open one or more reports and arrange them on the screen.
2. When you are satisfied with the appearance of the screen, choose Options→Save Settings Now. This saves the current workspace settings.



Note: Before you exit from Monitor ICR, make sure that Options→Save Settings on Exit is **deselected**. Otherwise, the settings you have saved will be overwritten by the settings in place when you exit.

To test the settings, choose File→Exit to end the current Monitor ICR session. Double-click on the Monitor ICR icon to restart the application. You can easily change the start-up display if you want to return to default mode or if you want to display different reports.

➤ **To return to default display at startup:**

1. Start Monitor ICR.
2. Use the File→Close command to close any open reports. (You can also close the template launcher window if it is displayed.)
3. Choose Options→Save Settings Now.
4. Make sure that Options→Save Settings on Exit is deselected.

4.11. Modifying Report Definitions

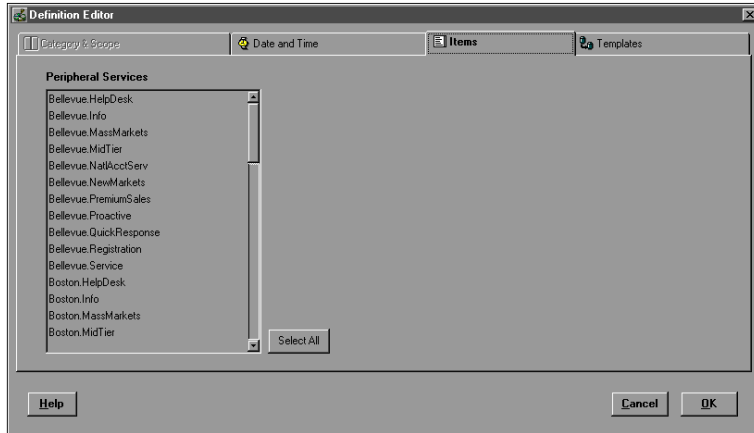
You can edit report definitions to choose additional items to include in the report, to change dates and times, or to select different templates to use in the report.

The fields of the Definition Editor match those of the Template Launcher. However, in the Definition Editor you are not allowed to change the Category or Scope of a report. The Definition Editor is not used to launch reports, but rather to change existing reports. If you need to change the Category and Scope of a report, use the Template Launcher to create a new report.

Note: If you are modifying a real-time report, you may want to click the Pause button to pause the real-time refreshing of the screen. This ensures that the continual refreshing does not interrupt your work with the Definition Editor.

➤ **To modify a report definition:**

1. With a report displayed, choose Edit→Definition. The Definition Editor appears.



2. Make the changes you want, such as choosing different Items (services, skill groups, etc.), or entering different dates and times.

Note: You cannot make changes to the Category and Scope of the report. If you want to change the Category and Scope of a report, you should generate a new report through the template launcher.

3. Click OK to save your changes. The changes take effect immediately. For example, if you chose another template to include in the report, that template is launched and appears in the report.

You **must** save the report in order to preserve the changes you made to the report definition.

➤ **To save changes in the report definition:**

Choose File→Save to save the changes in the same report definition file. Optionally, you can choose File→Save As to save the report as a new report definition file. You are required to enter a new file name.

4.12. Deleting Report Definitions

If you want to delete a report definition, you need to know the report file name and the directory in which it is stored. By default, reports are stored in subdirectories under the \custom directory. The specific subdirectory depends on the data elements included in the report. See Table 7, earlier in this chapter, for more information on ICR custom subdirectories.

Warning: Be sure that you want to delete the report definition file. The DEL command is irreversible.

➤ **To delete a report definition:**

1. Invoke the DOS Command Prompt from the Windows NT Program Manager.
2. Change to the directory that contains the report definition. For example:

```
cd \icr\customer\aw\custom\persvc
```

3. Locate the file you want to delete. Report files have the suffix .CMB. For example, to locate a file named MYREPORT.CMB, type:

```
dir MYREPORT.CMB
```

4. Delete the file by using the DEL command with the file name. For example, to delete the file MYREPORT.CMB, type:

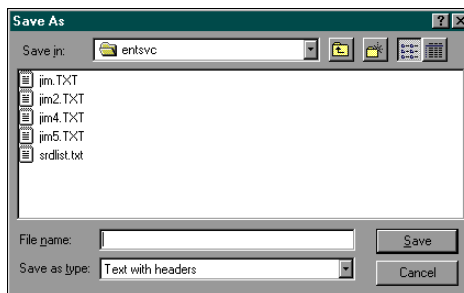
```
del MYREPORT.CMB
```

4.13. Exporting Report Data

Monitor ICR provides an option that allows you to save just the data that appears in a report. The Export Data option lets you take data from a Monitor ICR report and save it for use in another application such as a spreadsheet or word processing program.

➤ **To export report data:**

1. Open a report.
2. Choose File→Export Data. The cursor changes to a cross hair.
3. Click inside the report component that contains the data you want to save. The Save As dialog box appears:



4. Click on the Save as type field down arrow and choose a file format from the drop-down menu.
5. Some of these file formats allow you to include **column headers** in the export file. Depending on the format you choose, the headings are saved as either part of the table definition or as an additional row of data. See Table 8 for descriptions of the file export options.

6. Enter a file name. (You do not have to enter an extension.) By default, the file is stored in a custom subdirectory based on the type of report from which you are exporting data (for example, persvc, trkgrp, etc.).
7. Click OK to save the data.

Table 8: File Format Options

Format	Description
CSV	Comma-separated values (.CSV). .CSV with headers is also available.
Dbase2	dBASE-II format (.DBF).
Dbase3	dBASE-III format (.DBF).
DIF	Data interchange format (.DIF).
Excel	Microsoft Excel format (.XLS). Excel with headers is also available.
HTML Table	Hypertext Markup Language (.HTM).
Powersoft Report	Powersoft report format (.PSR).
SQL	Saves a SQL CREATE TABLE statement for the table and an INSERT INTO statement for each row. The statements are saved into a text file with the .SQL extension. The simple file name is used as the table name in the SQL statements.
SYLK	Microsoft Multiplan format (.SLK). SYLK with headers is also available.
Text	Text file format (.TXT). Values are tab-separated and each row ends with a carriage return. Text with headers is also available.
WKS	Lotus 1-2-3 format (.WKS). WKS with headers is also available.
WK1	Lotus 1-2-3 format (.WK1). WK1 with headers is also available.
WMF	Windows Metafile (.WMF).

4.14. Setting Workstation Preferences

The Preferences dialog box allows you to set several workstation preferences related to report background color and the real-time data refresh rate. The Preferences dialog box also provides information on the local and central databases and the directory in which the ICR software is installed.

➤ **To change workstation preferences:**

1. Choose Options→Preferences. The Preferences dialog box appears:

2. Change the workstation preferences using the following guidelines:

Note: These guidelines vary based on the type of AW.

- **ICR Directory.** Shows the drive and directory where the ICR software resides.
- **ICR Instance AW Directory.** Displays the ICR, customer, and Admin Workstation directories for this AW.
- **Refresh Rate.** Lets you set the rate in seconds at which the Admin Workstation is updated with real-time data. This value also affects the rate at which the Controller Time is updated. For Standard, Network, and Limited AWs, the default value is 15 seconds; the minimum value you can enter is 10. For monitor-only AWs, the default value and minimum value is 30 seconds.
- **Background Color.** Lets you set the background color of Monitor ICR reports. You can set the red, green, and blue values to numbers between 1 and 255. Enter the numbers directly or highlight the values and increment them by using the up and down arrows. After you change a value, move the cursor to another field to see the new color in the preview box on the right.
- **Real-Time Feed Failures Before Exit.** Lets you set the number of real-time feed failures that Monitor ICR must detect before it requests a restart. You can enter any value from 1 to 999 in this field. The default value is 20. This value is multiplied by the Refresh Rate. For example:

20 * 15 = 300 seconds (or five minutes)

In the previous example, Monitor ICR would display an Event Feed Warning dialog box if it did not receive real-time data for five minutes. (See “Event Feed Warning,” later in this section for instructions on what to do if the Event Feed Warning dialog box appears.)

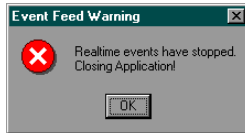
- **Show Event Traffic-Light On Startup.** Select this option to have the Event Monitor displayed each time you start Monitor ICR.

The Preferences dialog box also provides information on the central database or Historical Database Server (HDS) and the Distributor AW database. You cannot modify the information in these fields:

- **Computer Name**
 - **Historical/Central Database.** The name of the server on which the ICR Logger and Database Manager reside (for example, GEOABCLGRA). On some Admin Workstations, this may be the name of the Historical Database Server (HDS).
 - **Local Database.** The name of the Distributor AW. For monitor-only AWs, this is the name of the AW that is providing the host AW database.
- **Database Name**
 - **Historical/Central Database.** The name of the central database (either sideA or sideB), depending on which side of the duplexed ICR system is active. Network AWs (NICR and CICR AWs) may have a customer-specific prefix.
 - **Local Database.** The name of the Distributor AW local database (or host AW database). This name is typically awdb. However, network AWs may have a customer-specific prefix.
- **User Name**
 - **Central Database.** The user name used by the ICR. This name is typically sa.
 - **Local Database.** The logon ID of the Admin Workstation user (also typically sa).
- **Password**
 - **Central Database.** The logon password used by the ICR.
 - **Local Database.** The logon password of the Admin Workstation user.

4.14.1. Event Feed Warning

The Event Feed Warning dialog box appears if there is a problem with data connectivity to either the Central Controller or the real-time distributor Admin Workstation. Rather than allowing Monitor ICR to continue running, in which case reports may display inaccurate real-time data, the workstation displays the following warning message:



➤ **If this warning appears, follow these steps:**

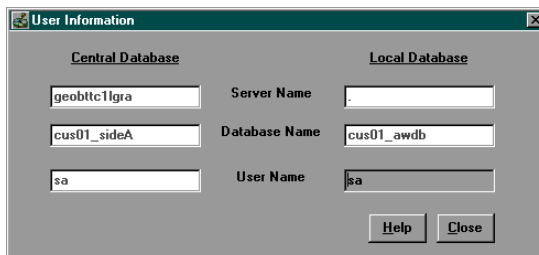
1. Click OK in the Event Feed Warning dialog box to exit from Monitor ICR.
2. After a short time, restart Monitor ICR.
3. In the Monitor ICR main window, check the Controller Time.

An up-to-date Controller Time indicates that the real-time feed is active and providing real-time data to the Admin Workstation.

See also: You can set the number of real-time failures that Monitor ICR must detect before it requests a restart. See the Real-Time Failures Before Exit option, earlier in this section, for more instructions.

4.15. User Information

You can display user information by choosing User Information from the Help menu. The User Information dialog box appears:



Click Close to dismiss the dialog box.

The User Information dialog box provides information for the ICR central database and the Admin Workstation local database, including:

- **Central database server name.** The name of the server on which the ICR Database Server (Logger) and database manager reside (for example, GEOABCLGRA). On some AWs, this might be the name of the Historical Database Server (HDS).
- **Local database server name.** The name of the local Admin Workstation that is providing the local database. On a monitor-only AW, this is the name of the workstation that is providing the real-time host AW database.
- **Central database name.** The name of the central database (either sideA or sideB), depending on which side of the duplexed ICR system is active. NICR and CICR AWs may have a customer-specific prefix.
- **Local database name.** The name of the Admin Workstation local database. This name is typically awdb. NICR and CICR AWs may have a customer-specific prefix.
- **Central database user name.** The user name used by the ICR (typically sa).
- **Local database user name.** The logon ID of the Admin Workstation user (typically sa).

5. Setting Thresholds and Drill-Downs

You can set up reports to alert you when certain values exceed or fall below expected levels. The Threshold Editor allows you to set thresholds on one or more data attributes in a report. For example, within a report you might set a threshold value of 70 percent on the Service Level column. When the service level drops below 70 percent, that column of the report will turn red.

You can also set up reports to allow you to launch new, related reports from within the currently displayed report. By using the DrillDown Editor, you can specify a report template to “drill-down” to, or launch, from within a report.

This chapter describes how to add thresholds and drill-downs to reports.

5.1. Setting Thresholds in Reports

The Threshold Editor lets you set threshold alerts on certain data in a report. A threshold alert might notify you of call centers where the delay in queue is approaching an unacceptable level or where all agents are currently busy. When a threshold is reached or exceeded, a red or yellow threshold alert is displayed in the report.

In a real-time report, the threshold alert notifies you immediately of an unacceptable condition. In a historical report, the threshold alert highlights areas in the report that were out of an expected performance range over a period of time.

➤ To set thresholds in a report:

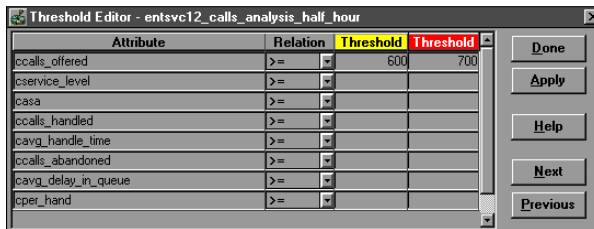


1. Open a report definition (.CMB) file.
2. Choose Edit→Thresholds. Optionally, you can position the cursor over a report component, hold down the right mouse button, and choose Thresholds from the pop-up menu:

Thresholds	Ctrl+T
DrillDown	Ctrl+D
Definition	Ctrl+N
✓ Shuffle Mode	Ctrl+S

The mouse pointer changes to a cross hair (+). The report window is maximized.

3. Click anywhere inside a report component (for example, inside a graph or a grid). The Threshold Editor dialog box appears:



The Threshold Editor allows you to set thresholds for the data attributes displayed in the report component (for example, Calls Offered and Service Level). The Threshold Editor dialog box displays the following information and options:

- **Attribute.** This list displays each data attribute in the report component for which you are setting thresholds.

- **Relation.** This option toggles to the \geq or \leq relations by clicking on the down-arrows. These relations specify how the data attribute will be evaluated against the threshold values. In the Threshold Editor screen example, \geq specifies that if the daily count of Calls Offered equals or exceeds 600, then a yellow threshold alert will appear in the report. A red threshold alert will appear if the daily count of Calls Offered equals or exceeds 700. The \leq relation is used to trigger threshold alerts when a value equals or falls below the threshold value.
 - **Threshold (yellow).** This field is for the first level threshold value. The value you place in this field will trigger a first level yellow threshold alert. The first level warning is intended to inform you that the value for that attribute is approaching an unacceptable level.
 - **Threshold (red).** This field is for the second level threshold value. The value you place in this field will trigger the second level red threshold alert. This alert indicates a more serious condition.
4. Set thresholds for the data attributes by toggling the relations and entering threshold values. You can press **TAB** to move from field to field.

Note: Service Level thresholds must be entered in decimal format, (for example, 0.80 to indicate 80 percent, 0.90 to indicate 90 percent).
 5. Click **Apply** to apply the thresholds to the report component. The thresholds are enabled as soon as you click on **Apply**.
 6. Click **Done** when you are finished setting thresholds in the report.

The thresholds apply to all the subjects in the report component. For example, if you had a Queue Delay Status report for three peripheral services, and you set thresholds on the Average Delay in Queue, those thresholds would apply to all three peripheral services in the report.

5.1.1. Setting Thresholds in Multiple-Component Reports

If you want to set thresholds in another component of the report, click the **Next** button in the Threshold Editor dialog box. The dialog box displays the data attributes for the currently selected report component. You can move through several report components in this manner, setting thresholds for each as you continue. Similarly, you can return to the previous report component by clicking on the **Previous** button.

5.1.2. Saving Threshold Settings

You must save the report in order for the threshold settings to be saved in the report definition. If you close the report without saving it, the threshold settings will be lost.

➤ **To save the threshold settings:**



Choose File→Save in the Monitor ICR window or click on the Save button. The next time you open the report, the thresholds will be in place and enabled.

5.2. Using Drill-Downs in Reports

The DrillDown Editor lets you add another level of detail to a report. The details are in the form of an additional report template, which you can launch from within the current report. For example, if you are viewing a report about an enterprise service, you might want to “drill down” to see more data from the enterprise service’s component peripheral services. The DrillDown Editor allows you to get this kind of detail quickly and easily from within a report window simply by double-clicking on a data attribute in the report.

You can also save drill-downs as separate reports. Once a drill-down report is displayed on the screen, it can be saved like other Monitor ICR reports. In this way, you can create a new report from within the current report without having to return to the Template Launcher and generate the report from scratch.

A report that is generated through the DrillDown Editor retains the date and time options of the report from which it was launched. However, the drill-down report does not retain the original report’s category and scope options. If you save the drill-down as a separate report, you can change the category, scope, and date and time options by using the Definition Editor.

5.2.1. Drill-Down Hierarchy

Table 9 summarizes the rules for assigning drill-downs to reports. The hierarchy specifies which drill-down templates are available from specific types of Monitor ICR reports. For example, from an enterprise service real-time report, you can choose drill-downs from a list of peripheral service real-time templates.

Table 9: Drill-Down Hierarchy

Type of Report (or report component)	Drill-Downs available
Base-only skill groups	Peripheral skill group templates
Enterprise service	Peripheral services templates
Enterprise skill group	Peripheral skill group templates
Peripheral service	Routes templates
Peripheral	Peripheral service templates
Service array	Peripheral service templates

If you are adding drill-downs to a historical report, only historical drill down templates appear in the DrillDown Editor. Similarly, you can add only real-time drill-downs to real-time reports.

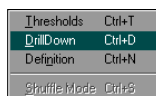
Drill downs are not supported for the other report types.

5.2.2. Adding Drill-Downs

You can add drill-downs to existing reports, or you can create a report, add drill-downs, and save the report. In either case, you must save the report in order for the drill-down assignments to be saved.

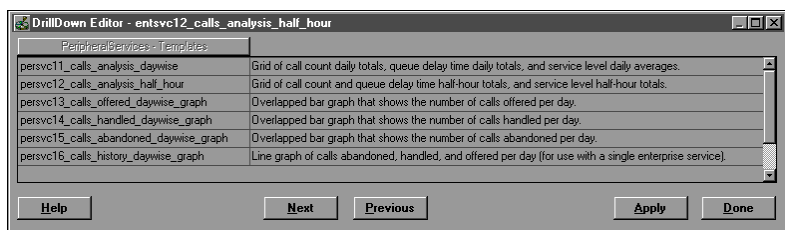
➤ To add drill-downs to a report:

1. Open an existing report or create a new report.
2. With the report displayed on the screen, choose Edit→DrillDown. Optionally, you can position the cursor over a report component, hold down the right mouse button, and choose DrillDown from the pop-up menu:



The report window is maximized and the mouse pointer changes to a cross hair (+).

3. Click anywhere inside a report component (for example, inside a graph or grid). The DrillDown Editor dialog box appears:



The DrillDown Editor dialog box lists the drill-down templates available for the report component. Monitor ICR has rules that specify which drill-down templates can be added to report components. Refer to Table 9, earlier in this section, for a list of the drill-down rules.

The DrillDown Editor dialog box provides the following information:

- **Title Bar 1.** The first title bar identifies the report component to which you are adding drill-downs.
- **Title Bar 2.** The second title bar identifies the types of drill-down templates available for the report component. For example, an enterprise service report component would display peripheral service templates in the DrillDown Editor.
- **Template name.** The names of the templates available for drill-down. These are the same template names that appear in the Template Launcher. The templates that appear in this list depend on the rules in Table 9.
- **Description.** Any comments that were entered when the template was created to describe the purpose of the template.

Applying a Drill-Down Template

Be sure to choose a template from the DrillDown Editor that displays the specific data you want to view. For example, if the report, or report component, is a peripheral services Calls Status real-time graph, you might want to set the drill-down template to be a Call Trend Analysis graph. This would provide you with additional five-minute, half-hour, and daily data for the routes associated with the peripheral service.

➤ **To select a drill-down template:**

1. With the DrillDown Editor displayed, click on a template in the list.
2. Click Apply to assign the new template to the selected report component.
3. Click Done. The DrillDown Editor is closed and you are returned to the report window.

You can apply one drill-down template to each report component. The drill-downs you assign to a report component are applied to all the elements in the component. For example, if you apply a drill-down template to a bar graph that displays data for three peripheral services, you can invoke a separate instance of that drill-down report for each of the three peripheral services.

If a drill-down template is already applied to a report component, the currently applied drill-down template is highlighted when you open the DrillDown Editor.

Moving Between Report Components

You can assign drill-downs to other components in the same report by using the Next and Previous buttons within the DrillDown Editor:

To assign a drill-down to another component in the report, click the Next button. The DrillDown Editor dialog box is refreshed. The title bar changes to indicate the currently selected report component and a new list of drill-down templates appears.

You can move through several report components in this manner, assigning drill-downs for each as you continue. You can also return to the previous report component by clicking on the Previous button.

5.2.3. Saving Drill-Down Assignments

You must save the report in order for the drill-down capabilities to be saved. If you close the report without saving it, the drill-down capabilities are lost.

➤ **To save the drill-downs:**



Choose File→Save or click the Save button in the toolbar. (For new reports, you will be prompted to enter a file name.)

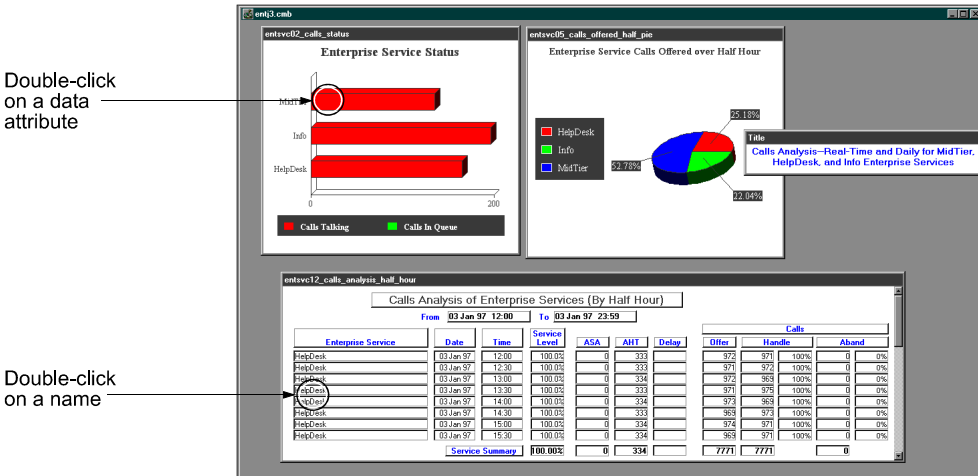
5.2.4. Invoking Drill-Downs

The drill-down assignments are embedded in the report definition file. This means that each time you open the report, you can invoke drill-down reports. You can invoke a drill-down for each of the data elements in a report component. For example, if the report contains data for three enterprise skill groups, you can invoke a separate drill-down for each enterprise skill group.

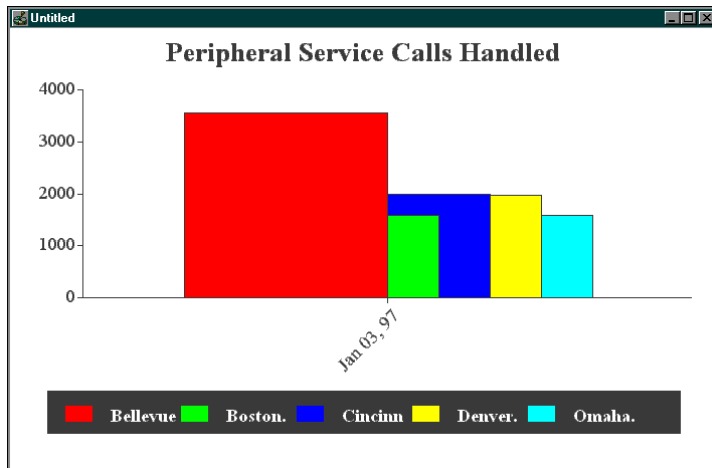
➤ **To invoke drill-downs:**

With the report displayed, perform one of the following steps, depending on the type of report component:

- In a graph or chart report component, double-click on a **data attribute** for a specific entity. In the following example, you could double-click on any of the bars in the graph to invoke a drill-down template for the specific peripheral service.
- In a grid style report component, double-click on the **name** of the specific service or skill group. In the following example, you could double-click on one of the peripheral service names.



A drill-down report window appears:



You can double-click on another data attribute or name in the original report component to invoke another drill-down.

Choose File→Close to close the active drill-down window.
Optionally, you can save the drill-down window as a separate report.

5.2.5. Saving Drill-Downs as Separate Reports

Drill-down report windows can be saved just like reports generated through the template launcher. The drill-down report, after it is saved, has the same dates and times in its report definition as those defined in the report from which it was launched. However, the category, scope, and the template used are different.

Drill-down reports are saved in the appropriate subdirectories of `icr\aw\custom`. For example, a peripheral services drill-down report is saved in the `persvc` directory. Although it is saved as a separate report, the drill-down remains set in the original report and can still be launched from the original report.

➤ **To save the drill-down as a report definition:**

1. Invoke the drill-down and make it the active window.
2. Choose File→Save or click the Save button. The Save Report Definition dialog box appears.
3. Name and save the report just as you would name and save a report generated with the template launcher.



See also: For more information on saving report definitions, see “Saving Report Definitions,” in Chapter 4, “Reporting Basics.”

6. Scheduling Reports

As you build a collection of Monitor ICR reports, you might decide that you'd like to have certain reports printed automatically. The Admin Workstation has a Job Scheduler tool that allows you to schedule Monitor ICR reports to print automatically on a regular basis, regardless of whether Monitor ICR is running.

This chapter describes how to use the ICR Job Scheduler to schedule reports to print automatically.

6.1. ICR Job Scheduler

As a supervisor, your most common use of the ICR Job Scheduler will be to print reports at specific dates and times. For example, say that you created a report that uses a relative date to display data. Because you used a relative date (for example, Today or Yesterday), the report always displays data for the relative date specified. If the report used the relative date Yesterday, you might schedule the report to be automatically printed each morning. You could then have a report of yesterday's call center activity automatically printed at the start of each day.

In a similar scenario, you could schedule a report that contains data for Last Week to print every Monday morning at 10:00 A.M. This would allow you to review a printed report of data for the previous week without even starting Monitor ICR. You can use the job scheduler to schedule jobs on a daily, weekly, or monthly basis. In each case, you can specify the exact time that the job will run.

The job scheduler works with both historical and real-time reports. As described in the previous examples, the job scheduler is particularly useful in printing historical reports that use relative dates. However, you can also print real-time reports through the job scheduler. Real-time reports printed in this manner contain a "snapshot" of the current data.

6.1.1. Job Scheduler Printing Requirements

Monitor ICR does not have to be running in order to print a scheduled report. However, the AW services, as well as the ICR Print Server process must be running. The necessary services and processes are typically always active at the Admin Workstation. In addition, the ICR Print Server may be started automatically when you log on to the AW. Print Server startup options can be changed through the ICR Setup tool.

ICR Print Server

If the ICR Print Server is not running, any scheduled print jobs that execute are saved in a queue. If you subsequently start the Print Server, any queued jobs will then print.

➤ **To start the Print Server:**

Double-click its icon in the GEOTEL Admin Workstation group. You can also use the Print Server to choose a specific printer on which to print your scheduled reports.

➤ **To choose a printer and set printing options:**

1. Once the Print Server is running, double-click its program icon to restore the ICR Print Server window.
2. Choose File→Printer Setup. A Printer Setup dialog box appears.



Print
Server

3. Click on a printer to use for reports.
4. Optionally, you can click on the Setup button to display a Document Properties dialog box and choose a form type to be used, the paper orientation, and number of copies. (Click the Help button in the Document Properties dialog box to find out more about these and other standard Windows NT printer options.)

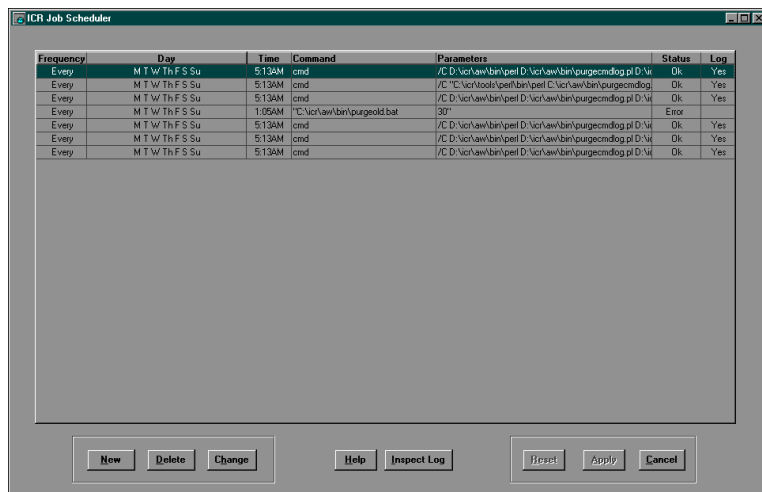
Note: GEOTEL recommends that you use landscape paper orientation to print Monitor ICR reports. See “Printer Setup” in Chapter 4, “Reporting Basics,” for more information on landscape printing.

6.1.2. Scheduling Reports to Print

You can schedule as many reports to print as you like. Before you schedule print jobs, make sure that you know the correct directory and report file names. For example, you might schedule a print job for the QSTAT.CMB report, which is in the Admin Workstation’s \custom\persvc directory. The ICR Job Scheduler starts its search for the report in the \custom directory, so you need only know the specific custom report subdirectory (for example, persvc) and the report name.

➤ To start the ICR Job Scheduler:

In the GEOTEL Admin Workstation group, double-click the Job Scheduler icon. The ICR Job Scheduler window appears:



The ICR Job Scheduler displays all jobs that are currently scheduled. Some of these jobs may be non-ICR jobs; that is, jobs that were initiated by users and processes other than the ICR Job Scheduler.

The initial window displays several fields of data:

- **Frequency.** Specifies the frequency with which the job will be executed. Possible entries include Every, Next, Today, Tomorrow. These options are described later in this section.
- **Day.** Specifies the day or days of the week on which the job will run. This field can also contain a number, which represents a day of the month.
- **Time.** Indicates the time, in A.M. or P.M., at which the job will run. All times are based on the Admin Workstation clock.
- **Command.** Provides the name of the command that will be executed:

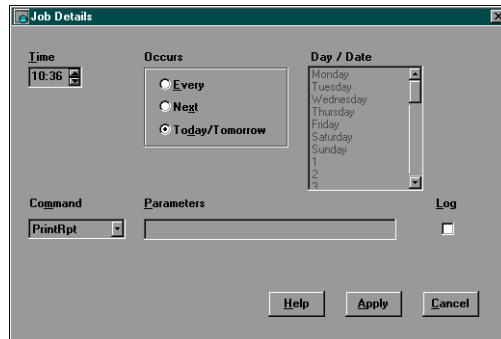
- **PrintRpt.** Prints a specified Monitor ICR report.

Other commands might also appear in the Job Scheduler, such as jobs that were scheduled through the DOS Command Prompt by using the “AT” command.

- **Parameters.** Shows the parameters to be passed to the command. The parameters for a PrintRpt command are the directory and the report name.
- **Status.** Indicates whether the job encountered problems while executing. Possible values are OK and Error. Typically, you will not see “Error” in this field for the PrintRpt command unless the printprt.exe command was not found. The printprt.exe command is in the Admin Workstation’s \bin directory. Other problems such as invalid report names or invalid time and date specifications are recorded in the ICRPRINT.LOG file.
- **Log.** Indicates whether information about the job is written to a log file. You can open the ICRPRINT.LOG file within the ICR Job Scheduler to see how jobs executed. In the event that a report fails to print, entries in the ICRPRINT.LOG file will point to the cause of the failure.

➤ **To set up the print job details:**

1. In the ICR Job Scheduler window, click the New button. The Job Details dialog box appears.



2. Enter information in this window using the following guidelines:
 - **Time.** Enter the time that you want the job to print. Highlight the hours and the minutes and use the up and down arrows to increment the numbers. The time is based on a 24-hour clock. For example, 15:00 is 3:00 P.M.; 8:00 is 8:00 A.M.
 - **Occurs.** Choose how often you want the report to print:
 - **Every.** Executes the print job on the days indicated in the Day/Date field. After the job executes, leave the job schedule unchanged so that the job executes again each time the day or date occurs again.
 - **Next.** Executes the print job once for each day indicated in the Day/Date field. After the job executes, remove the current day or date from the job schedule. When no more values remain for Day/Date, remove the job from the schedule.
 - **Today/Tomorrow.** Executes the job the next time the indicated Time occurs (which is either later today or tomorrow). If you choose Today/Tomorrow, the Day/Date field is ignored.
 - **Day/Date.** Scroll through the list and choose the days (Monday through Sunday) and dates (1 through 31) on which you want the report to print. You can single-click on one or more items to select and deselect them. The Day/Date option is not available when you choose Today/Tomorrow.
 - **Command.** Select PrintRpt.
 - **Parameters.** Enter the directory and the report definition file name. For example:

persvc\qstat.cmb

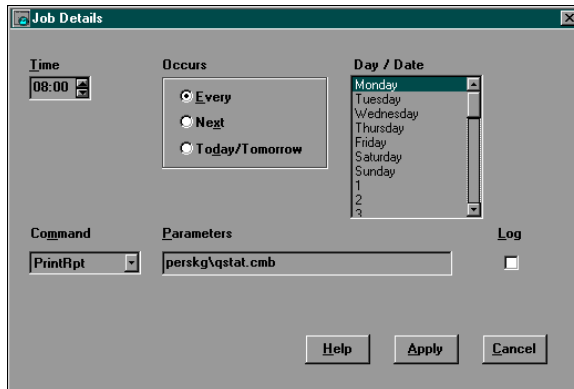
You can also enter a string of multiple reports to print:

persvc\qstat.cmb routes\calls.cmb perskg\trkstat.cmb

You must enter the directory name and the file name for each report. Also, for multiple entries, be sure to include spaces between each *directory/filename* combination.

- Log.** The Log check box is disabled for the PrintRpt command. All print jobs submit log entries to the ICRPRINT.LOG file. The print job log entries chronicle the progress of each print job executed by the job scheduler. The ICRPRINT.LOG file is described later in this section.

The following example shows a Job Details dialog box set up to print a report every Monday at 8:00 A.M.



➤ **To submit a print job schedule:**

1. Click the Apply button. You are returned to the ICR Job Scheduler window. The new entry appears in the window.
2. (Optional.) At this point, if you decide that you **do not** want to submit the print job, you can click Reset to return the ICR Job Scheduler settings to their original state (that is, to the settings in place when you opened the job scheduler).
3. **Important.** Click the Apply button in the ICR Job Scheduler window. This submits the job in the ICR Job Scheduler.

Notice that the value in the Time field changes from 24-hour format to A.M. or P.M. You can use this as an indicator that the job has been successfully submitted.

The print job will execute on the specified date and time.

6.1.3. Changing Scheduled Jobs

You can change a scheduled job at any time. For example, you might want to print a different report, or change the frequency with which a report is printed. You can use the Job Scheduler to change only PrintRpt jobs. You cannot change jobs that were scheduled through the DOS AT command.

➤ **To change a scheduled job:**

1. In the ICR Job Scheduler window, select a job from the list of scheduled jobs.
2. Click the Change button. The Job Details dialog box appears.
3. Change the fields as described in “Scheduling Reports to Print,” earlier in this chapter.
4. When you are satisfied with the new job details, click Apply.
5. (Optional.) To reset the ICR Job Scheduler settings to their original state, click the Reset button.
6. In the ICR Job Scheduler window, click Apply to submit the changes to the ICR Job Scheduler. The value in the Time field changes from 24-hour format to A.M. or P.M. You can use this as an indicator that the job has been successfully changed and submitted.

6.1.4. Deleting Scheduled Jobs

When you no longer need to have a particular report scheduled to print, you can remove it from the job scheduler. Print jobs scheduled using the “Next” and “Today/Tomorrow” options are automatically deleted from the scheduler after they have executed.

➤ **To delete a job:**

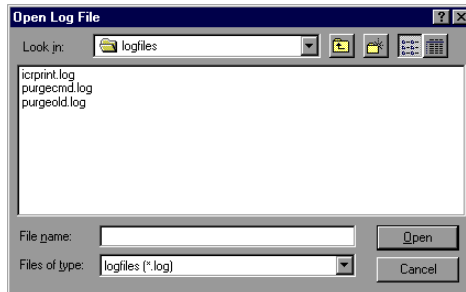
1. In the ICR Job Scheduler window, select a job from the list of scheduled jobs.
2. Click the Delete button. A dialog box appears to check if you are sure you want to delete the job.
3. Click OK to delete the job. The scheduled job is removed from the list.
4. (Optional.) If you unintentionally delete a job, click Reset. The ICR Job Scheduler settings will return to their original state.

6.1.5. Inspecting the Job Scheduler Log

The ICR Job Scheduler allows you to view log files for the different types of jobs that are scheduled. The log files contain information on how a job executed, which database connections were made, and whether a print job has finished printing. You can use this data as a diagnostic tool in case you have a problem printing a report.

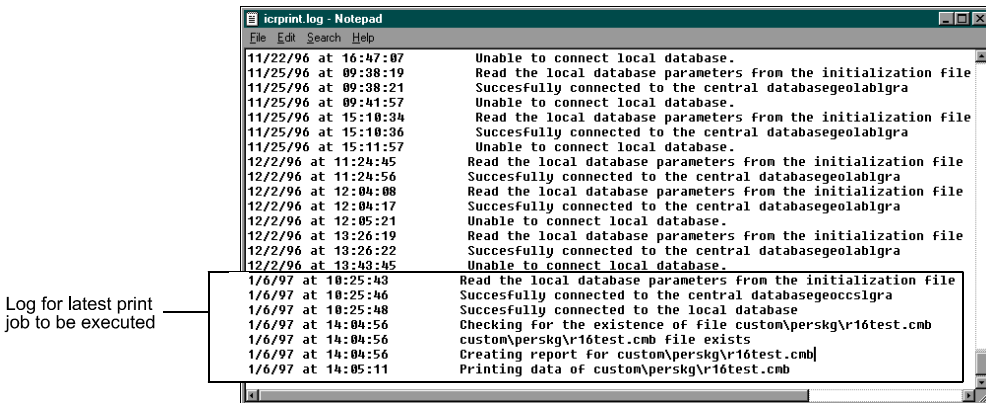
➤ **To inspect a log file:**

1. In the ICR Job Scheduler window, click the Inspect Log button. A Select Log dialog box appears:



2. Select the ICRPRINT.LOG file from the list of log files and click on OK. A standard Windows NT Notepad window appears to display the log file.

The following example shows a sample ICRPRINT.LOG file. The latest print job to be executed is logged at the bottom of the window.



3. Use the scroll bars to scroll through the log file.
4. Choose File→Exit to close the Notepad window.

6.1.6. Closing the ICR Job Scheduler

To close the ICR Job Scheduler, click the Cancel button.

7. Available Data

The Intelligent CallRouter databases collect historical and real-time data about agent activity and the calls being routed in the call center enterprise. Within Monitor ICR, you can display data for agents, skill groups, services, trunk groups, routes, and peripherals. You can also display data for application gateways, call types, routing clients, and workforce schedules.

The ICR can provide data for peripheral skill groups and services or it can combine data to provide an enterprise view of agent and call activity. Data from individual peripheral services can be combined to produce data for an enterprise service. Similarly, data from several peripheral skill groups can be combined to produce data for an enterprise skill group.

This chapter provides an introduction to the most commonly used real-time and historical ICR database tables.

See also: For more detailed information on the data gathered by the ICR, see the *Intelligent CallRouter Database Schema Handbook*. The on-line *Schema Help* also provides data definitions and reference information on the ICR database tables.

7.1. Skill Group Data

The ICR tracks information about the skill groups at each peripheral. A *skill group* is a collection of agents who share a common set of skills and therefore can handle similar types of calls. A *peripheral skill group* is a skill group that is associated with a specific peripheral (ACD). For example, a single peripheral might have one skill group defined for agents who can handle sales calls, and another skill group defined for agents who can speak Spanish.

Peripheral skill group data are stored in the `Skill_Group_Real_Time` and `Skill_Group_Half_Hour` tables. To arrive at daily values, the ICR sums the `Skill_Group_Half_Hour` rows for each day.

7.1.1. Skill Group Agent Data

The ICR tracks data for the agents in a skill group. Some examples of Skill Group agent data tracked in the Skill Group tables include:

- **Agents idle.** The number of agents who are in the Not Ready state (that is, logged on, not involved in a call or after-call work, and not available to receive a call).
- **Agents available.** The number of agents who are in the Available state (that is, not occupied with any call activity and ready to accept calls).
- **Agents ready.** The number of agents who are logged on and are either talking on a call or performing after-call work, but are presumed to be ready to accept calls when done.
- **Agents talking in.** The number of agents talking on inbound calls.
- **Agents talking out.** The number of agents talking on outbound calls.
- **Agents talking other.** The number of agents who are talking on calls other than inbound and outbound calls (for example, internal calls).
- **Agents in wrap-up.** The number of agents who are involved in after-call work. After-call work includes activities such as completing paperwork or consultation work. An agent performing after-call work is in either the Work Ready or Work Not Ready state.
- **Agents in hold.** The number of agents in the skill group who are in the Hold state (that is, agents who have all active calls on hold and are performing no other activity).

- **Agents reserved.** The number of agents currently in the reserved state. A reserved agent is awaiting an interflowed call and is unavailable to receive any incoming calls. This state applies to agents on Northern Telecom Meridian and Aspect CallCenter ACDs only.
- **Agents in busy other.** The number of agents who are in the Busy Other state (that is, busy in skill groups other than the one presently being examined). An agent can be active in only one skill group at a time. Therefore, while active in one skill group, the agent is considered by the other skill groups to be in the Busy Other state.

In addition to the numbers of agents in certain states within the skill group, the ICR tracks the time that a skill group's agents spend in these states.

See also: The section "Agent State and Time Allocations," later in this chapter, provides more information on the types of agent state and time allocation data tracked for skill groups.

7.1.2. Percent Utilization

The ICR reports a percent utilization for each skill group. The percent utilization data are taken from the Skill_Group_Real_Time table, which contains agent time allocation data such as Handle Time, Logged On Time, and Not Ready Time data for all agents in the skill group.

The percent utilization is computed by dividing the total time agents spent handling calls by the total time agents were ready to handle calls. The percent utilization is expressed as a percentage value for the individual skill group. The formula used is as follows:

$$\frac{(\text{TalkTime} + \text{WorkReadyTime} + \text{WorkNotReadyTime})}{(\text{LoggedOnTime} - \text{NotReadyTime})}$$

Percent utilization is measured since the end of the last five-minute or the last half-hour interval. Consequently, percent utilization data are stored in the skill group five-minute and half-hour tables.

7.1.3. Call Handling

The ICR tracks categories of data related to the calls handled by each skill group. A call is counted as handled when it is finished:

- **Calls handled.** The number of offered calls handled by the skill group during an interval. A call is counted as handled when the call is finished.
- **Number of agent out calls.** The number of outbound calls made by the skill group's agents.

7.2. Agent Data

With GEOTEL•*Agent Reporting* enabled, the ICR tracks data for the agents within the call center enterprise. An agent is anyone who can answer incoming phone calls. In a more precise way, a peripheral agent is an agent who is associated with a particular peripheral (ACD, PBX) in the call center enterprise. A peripheral agent can be a member of one or more skill groups. (Some peripheral types limit each agent to one skill group assignment.)

Optionally, peripheral agents can be grouped into agent teams. Agent teams are groups of peripheral agents configured on the same peripheral.

The ICR allows you to report on three general categories of agent-level data: agent status, agent activity, and agent performance. You have several options for defining the scope of agent-level reports:

- **Peripheral agents.** Report on selected agents from throughout the enterprise regardless of peripheral, skill group, and agent team assignments.
- **Agent by peripheral.** Report on the agents logged on to one or more selected peripherals.
- **Agent by skill group.** Report on the agents logged on to one or more specific skill groups.
- **Agent team.** Report on the agents within one or more agent teams.

7.2.1. Agent Tables

Real-time agent data are stored in the `Agent_Real_Time` and `Agent_Skill_Group_Real_Time` tables of the Distributor AW local database. Historical agent data are stored in the following tables of the ICR central database:

- `Agent_Half_Hour`
- `Agent_Skill_Group_Half_Hour`
- `Agent_Logout`
- `Agent_State_Trace`

Agent state reports also use data from the `Termination_Call_Detail` table.

7.2.2. Agent Status

The ICR tracks agent status by position, skill group, and by agent name. Specifically, the ICR records the following data on agent status in ICR real-time and half-hour tables:

- **Position.** The current extension on which the agent is working.
- **Agent name.** The first and last name of the agent.
- **Skill group.** The name of the skill group to which the agent is logged on.
- **Logon date/time.** The date and time that the agent logged on.
- **Current state.** The current state of the agent: logged off, logged on, ready, not ready, work ready, work not ready, talking, busy other, reserved, calls on hold, unknown.
- **Direction.** The direction of the call: inbound or outbound.
- **Destination.** The type of outbound call: ACD or direct.
- **Last state change.** The date and time that the agent's state last changed.
- **Reason.** The reason for the agent's last state change.
- **Logon duration.** The time that the agent spent logged on.
- **Logout date/time.** The date and time that the agent logged out.
- **Event name.** The event caused by the agent's last state change.
- **Call duration.** Duration of the call in seconds for a private network call. This is the time that the switch is processing the call.
- **ANI.** The ANI value for the call. The ANI provides the billing phone number of the phone from which the call originated. (These data are taken from the Termination_Call_Detail table.)
- **Digits dialed.** The digits dialed on an outbound call. (These data are taken from the Termination_Call_Detail table.)

7.2.3. Agent Activity

The ICR tracks agent activity. To arrive at daily values for agent activity, the ICR sums the Agent_Skill_Group_Half_Hour rows for each day.

- **Agent name.** The first and last name of the agent.
- **Duration.** The total time in seconds that the agent was logged on during the interval.

- **Incoming calls total.** The total number of inbound ACD calls handled by the agent during the interval. This value is incremented when the after-call work associated with the call is completed.
- **Incoming calls avg. length.** The average length in seconds for incoming calls handled by the agent during the interval.
- **Incoming calls percent.** The percentage of all calls handled by the agent for the period that were incoming calls.
- **Outgoing calls total.** The total number of completed outbound ACD calls made by the agent during the interval. The value is incremented when the after-call work associated with the call is completed.
- **Outgoing calls average length.** The average length in seconds for outgoing calls made by the agent for the interval.
- **Outgoing calls percent.** The percentage of all calls handled by the agent for the period that were outgoing calls.
- **Internal calls total.** The total number of internal calls initiated by the agent during the interval. The value is incremented when the after-call work associated with the call is completed.
- **Internal calls average length.** The average length in seconds for completed internal calls made by the agent for the interval.
- **Internal calls percent.** The percentage of all calls handled by the agent for the period that were internal calls.
- **Callback message total.** The total number of callback messages that were processed by the agent during the interval.
- **Callback message average length.** The average length in seconds for callback messages processed by the agent during the interval.
- **Callback message percent.** The percentage of all calls handled by the agent for the period that were callback messages.
- **% Wrapup.** The percentage of time that the agent spent in wrap-up on all calls counted as handled during the interval. An agent performing wrap-up is either in the Work Ready or Work Not Ready state. This value is measured against the total time the agent was logged on during the interval.

7.2.4. Agent Performance

The ICR tracks agent performance. To arrive at daily values, the ICR sums the Agent_Skill_Group_Half_Hour rows for each day.

- **Agent name.** The first and last name of the agent.
- **Abandoned calls ring.** The total number of ACD calls abandoned while ringing at an agent's position. The value is incremented at the time the call disconnects.

- **Abandoned calls hold.** The total number of ACD calls that were abandoned while being held at an agent's position. The value is incremented at the time the call disconnects.
- **Abandoned calls average.** The average ring time in seconds associated with ACD calls that were abandoned while ringing an agent's position.
- **Abandoned calls percent.** The percentage of ring time associated with ACD calls that were abandoned while ringing at an agent's position. This value is measured against the total time the agent was logged on during the interval.
- **Hold calls in.** The total number of completed inbound calls the agent placed on hold. The value is incremented when the after-call work associated with the call is completed.
- **Hold calls in average.** The average on hold time in seconds associated with inbound calls the agent placed on hold.
- **Hold calls in percent.** The percentage of hold time associated with inbound calls the agent placed on hold. This value is measured against the total time the agent was logged on during the interval.
- **Hold calls out.** The total number of completed outbound calls the agent placed on hold at least once. The value is incremented when the after-call work associated with the call is completed.
- **Hold calls out average.** The average on hold time in seconds associated with outbound calls the agent placed on hold.
- **Hold calls out percent.** The percentage of hold time associated with outbound calls the agent placed on hold. This value is measured against the total time the agent was logged on during the interval.
- **Hold calls internal.** The total number of completed internal calls the agent placed on hold for the interval. The value is incremented when the after-call work associated with the call is completed.
- **Hold calls internal average.** The average on hold time associated with internal calls the agent placed on hold.
- **Hold calls internal percent.** The percentage of hold time associated with internal calls the agent placed on hold. This value is measured against the total time the agent was logged on during the interval.
- **Assistance calls total.** The total number of calls for which the agent received supervisor assistance during the interval. The value is incremented when the supervisor assistance call completes.
- **Assistance calls average.** The average time in seconds that the agent received assistance for all supervisor-assisted calls during the interval.

- **Assistance calls percent.** The percentage of time that the agent spent during the interval on supervisor-assisted calls. This value is measured against the total time the agent was logged on during the interval.
- **Conference calls in.** The number of incoming calls on which the agent was in conference. Incoming calls include ACD and non-ACD calls. The value is incremented with the agent drops off the call and the call becomes a simple two-party call.
- **Conference calls average.** The average time in seconds that the agent spent in conference with calls during the interval. This value includes hold time associated with the conference calls.
- **Conference calls percent.** The percentage of time that the agent spent during the interval on conference calls. The percentage includes hold time associated with the conference calls. This value is measured against the total time the agent was logged on during the interval.
- **Conference calls out.** The number conference calls the agent initiated. Initiated calls include ACD and non-ACD calls. The value is incremented with the agent drops off the call and the call becomes a simple two-party call.
- **Conference calls out average.** The average time in seconds that the agent spent in conference on agent-initiated calls during the interval. This value includes hold time associated with the conference calls.
- **Conference calls out percent.** The percentage of time that the agent spent during the half-hour interval on agent-initiated conference calls. This percentage includes hold time associated with the conference calls. This value is measured against the total time the agent was logged on during the interval.

7.3. Agent States and Time Allocations

The ICR tracks agent states and the time spent in these states in both Agent and Skill Group tables. The Agent_Skill_Group tables provide data on an agent-by-agent basis for the agents in a skill group. The Skill_Group tables provide data for the agents as a group.

To display individual agent state and time allocation statistics, use the Agent-Level report templates. To display group agent state and time allocation statistics, use the Skill Group report templates.

See also: See Chapter 8, “Template Reference,” for details on the data displayed in Agent and Skill Group reports.

The following ICR database tables store agent state and time allocation data:

- **Agent_Skill_Group_Real_Time.** Stores real-time data on the current state of each agent in a skill group. For example, the AgentState field provides the current state of the agent: Logged Off, Logged On, Ready, Not Ready, Work Not Ready, Work Ready, Talking In, Talking Out, Talking Other, Conference.
- **Agent_Skill_Group_Half_Hour.** Stores historical data on the time agents spent in any of the call handling states. For example, the TalkInTimeToHalf field records the number of seconds that each agent in the skill group spent talking on inbound ACD calls during the half-hour interval (that is, the time the agent spent in the Talking In state). This table also provides other data such as AbandonHoldCallsToHalf, which details the number of ACD calls that were abandoned while being held at an agent's position.
- **Skill_Group_Real_Time.** Tracks the number of agents for a skill group currently in any of several call handling states. For example, BusyOther provides the number of agents for the skill group who are currently busy on calls assigned to other skill groups. This table also provides current agent time allocations for the skill group as a whole. For example, NotReadyTimeTo5 records the total seconds that agents in the skill group have been in the Not Ready state for the current five-minute interval.
- **Skill_Group_Five_Minute.** Tracks the number of agents for the skill group and their call handling states at the end of each five-minute interval. For example, TalkingIn provides the number of agents in the skill group talking on inbound calls at the end of the five-minute interval. The Skill_Group_Five_Minute table also tracks time allocations for the current five-minute interval. For example, WorkNotReadyTimeTo5 provides the number of seconds agents in the skill group were in the Work Not Ready state for the five-minute interval.
- **Skill_Group_Half_Hour.** Stores historical data on the time agents for the skill group spent in any of several call handling states. For example, TalkingInTimeToHalf provides the number of seconds agents in the skill group spent talking on inbound calls during the half-hour interval. This table also provides other call counts such as InternalCallsToHalf, which is the number of internal calls to the skill group during the half-hour interval.

See also: For more information on these tables, see the *ICR Database Schema Handbook* or the on-line *Schema Help*.

7.3.1. ICR Agent State Terminology

The ICR tracks the following agent states. Tables 11-13, later in this chapter, maps the ICR agent state terms to the terms used by the peripheral vendors.

- **Logged on.** The number of agents who are logged on (that is, agents who are known to the system, but may or may not be ready to receive calls).
- **Ready.** The number of agents who are in the Ready state (that is, logged on and either available to handle a call, currently talking on a call, or involved in after-call work and presumed to be available when done).
- **Not ready.** The number of agents who are in the Not Ready state (that is, logged on, not involved in any call handling activity, but not ready to accept calls).
- **Available.** The number of agents who are in the Available state (that is, not occupied with any call activity and ready to accept calls).
- **Talking in.** The number of agents who are talking on inbound calls.
- **Talking out.** The number of agents who are talking on outbound calls.
- **Talking other.** The number of agents who are talking on internal calls (neither inbound nor outbound).
- **Work ready.** The number of agents who are in the Work Ready state (that is, agents who are performing after-call work, but are presumed to be ready to accept calls when done).
- **Busy other.** The number of agents who are busy working in other skill groups (that is, in skill groups other than the one presently being examined). For example, an agent might be talking on an inbound call in one skill group while simultaneously logged on to and ready to accept calls from other skill groups. The agent can be active (talking on or handling calls) in only one skill group at a time. Therefore, while active in one skill group, the agent is considered by the other skill groups to be in the Busy Other state.
- **Work not ready.** The number of agents who are in the Work Not Ready state (that is, agents who are involved in after-call work and are presumed not to be ready to accept incoming calls when done).
- **Reserved.** The number of agents who are awaiting an interflowed or interqueued call and are unavailable to receive any incoming calls. This state applies to agents on Northern Meridian and Aspect CallCenter ACDs.
- **Hold.** The number of agents who have all active calls on hold.

The ICR tracks the number of agents in each state along with the time agents spend in specific states. Table 10 shows how agent activity and time spent in particular states are tracked by the ICR.

Table 10: Agent States and Time Allocations

Log On State	Ready State	Agent Time Allocation		Specific State	Handle Time
Logged On	Ready	Available Time		Available	
		Reserved Time		Reserved	
		Busy Other Time		Busy Other	
		Talk Time ¹	Talking Other Time	Talking Other	
			Talking Out Time	Talking Out	
			Talking In Time	Talking In	
		Hold Time		Hold	
	Work Ready Time		Work Ready		
	Work Not Ready	Work Not Ready Time		Work Not Ready	
Not Ready (Idle)	Not Ready Time		Not Ready		
Logged Off					

The ICR tracks the **number** of agents in each state in Skill Group real-time database records. To obtain historical counts of the number of agents in particular states, the ICR saves a snapshot of the real-time data and stores the data in skill group five-minute records. These five-minute summary records are stored in the ICR central database.

¹ Talk Time is the sum of Talking In Time, Talking Out Time, and Talking Other Time.

The ICR also tracks the total amount of **time** agents in a skill group spend in specific states. For each specific state, time is recorded to track how long agents are in the particular state. In addition, time spent in certain states is tracked more generally in time allocation categories such as Talk Time and Handle Time.

The following list further explains the agent time allocations shown in Table 10.

- **Available Time.** The time agents spend in the Logged On, Ready, and Available states.
- **Reserved Time.** The time agents spend in the Reserved state.
- **Busy Other Time.** The time agents spend in the Busy Other state.
- **Talk Time.** The time agents spend in the Talking In, Talking Out, and Talking Other states.
- **Talking Other Time.** The time agents spend in the Talking Other state. (Also counted in the general category of Talk Time.)
- **Talking Out Time.** The time agents spend in the Talking Out state. (Also counted in the general category of Talk Time.)
- **Talking In Time.** The time agents spend in the Talking In state. (Also counted in the general categories of Talk Time and Handle Time.)
- **Hold Time.** The time agents spend in the Hold state. (Also rolled into the general category of Handle Time.)
- **Work Ready Time.** The time agents spend in the Work Ready state. (Also rolled into the general category of Handle Time.)
- **Work Not Ready Time.** The time agents spend in the Work Not Ready state. (Also rolled into the general category of Handle Time.)
- **Not Ready Time.** The time agents spend in the Not Ready state.
- **Handle Time.** The time agents spend in the Talking In, Hold, Work Ready, and Work Not Ready states. Handle time **does not** include the time agents spend in the Talking Out or Talking Other states.
- **Logged On Time.** The time that an agent was Logged On.

Note: Not Ready Time and Logged On Time are not explicitly displayed in Monitor ICR reports. However, they are used in calculating other data such as Percent Utilization of agents. See “Percent Utilization,” later in this section, for an example of how Not Ready time and Logged On Time are used to calculate overall agent utilization.

7.3.2. ICR Agent State Mapping To Peripherals

The ICR uses certain terms to describe the work states that agents move in and out of while handling customer calls. Peripheral vendors use slightly different terms to describe these same states.

Table 11 shows the ICR agent state terms and how they correspond to the terms used by Aspect, Lucent, and Nortel.

Table 11: Agent State Terminology—Aspect, Lucent, and Nortel

GEOTEL ICR	Aspect CallCenter	Lucent DEFINITY ECS	Nortel Meridian
Logged On	Signed On	Logged_In ¹	Manned
Logged Off ²	Signed Off	Logged_Out ¹	Spare
Ready	Ready	All other states other than AUX and UNKNOWN	Manned, but not in Walkaway ³
Not Ready	Idle	AUX, UNKNOWN	Walkaway
Available	Avail	AVAIL	Wait DNOHOLD <ACD Ready> ⁴ <ACD Ready> ⁴
Talking In	Talking ACD1 Talking ACD2 Talking ACT1 Talking ACT2	ACD-IN DACD	ACD ACD/DNOH ACD/DNIH ACDHOLD ACDH/DNIH ⁵ ACDH/DNOH ⁵
Talking Out	Talking Out1 Talking Out2	ACD-OUT	N.A.

(continued)

¹ Logged_In and Logged Out are not CMS agent states.

² Logged Off is not an agent state, but rather a necessary condition for being in any state.

³ Agents who are in Walkaway with a call on hold are counted as Ready.

⁴ These states occur only if ACAA is set for the ACD DN in LD 23. (ACAA allows new ACD calls to an agent who has an Individual DN (IDN) call on hold).

⁵ Agents in these states are counted as Talking In if the ACD line was the last line active.

GEOTEL ICR	Aspect CallCenter	Lucent DEFINITY ECS	Nortel Meridian
Talking Other	Talking Inside Supervisor Line MSG ¹ HELP ¹	AUX IN/OUT ACW IN/OUT	DN IN DNOUT DNOHOLD DNIHOLD ACDH/DNO ACDH/DNI NRDY/DNO NRDY/DNI NRDY/DNOH NRDY/DNIH ACDH/DNOH ² ACDH/DNIH ²
Work Ready	Wrap-up	ACW DACW	Not Ready
Work Not Ready	N.A.	N.A.	N.A.
Busy Other	MSG ³	OTHER	Not Avail
Reserved	RSVD	N.A.	RESERVE
Hold	HOLD	N.A.	N.A.

¹ On ACDs using the Aspect Event Link, these additional states map to Talking Other.

² Agents in these states are counted as Talking Other if the DN line was the last line active.

³ On ACDs that are **not** using the Aspect Event Link, the MSG state maps to Busy Other.

Table 12 shows the ICR agent state terms and how they correspond to the terms used by Rockwell and Siemens.

Table 12: Agent State Terminology—Rockwell and Siemens

GEOTEL ICR	Rockwell Galaxy	Rockwell Spectrum	Siemens HICOM 300E	Siemens Rolm 9751 CBX
Logged On	Plugged	N.A.	Logged On	Unavailable Available ACD In Non-ACD Inc Non-ACD Out Non-ACD Int
Logged Off ¹	Unplugged	Signed Off	Logged Off	Logged Off
Ready	(Pugged In-Break)	Any state in which the available console lamp is lit.	Logged On	Available
Not Ready	Break	Any state in which the available console lamp is not lit .	Unavailable	Unavailable
Available	Available	Available	Available	Available
Talking In	Calls currently in progress.	Busy with inbound call on ACD Line 1.	ACD Incoming	ACD Incoming
Talking Out	Out-Call	Busy with inbound call on ACD Line 1.	Non-ACD Outgoing	Non-ACD Outgoing
Talking Other	N.A.	Busy on position call or supervisor assist.	Non-ACD Incoming, Non-ACD Internal	Non-ACD Incoming, Non-ACD Internal
Work Ready	Call work. Overflow call work.	Call work and available console lamp lit.	Work	Available/Work

(continued)

¹ Logged Off is not an agent state, but rather a necessary condition for being in any state.

GEOTEL ICR	Rockwell Galaxy	Rockwell Spectrum	Siemens HICOM 300E	Siemens Rolm 9751 CBX
Work Not Ready	N.A.	Call work and available console lamp not lit .	N.A.	Unavailable/Work
Busy Oher	Overflow calls currently in progress. Overflow call work.	Busy on either an internal call or a call for an agent group other than the agent's primary group.	Other	Other
Reserved	N.A.	N.A.	N.A.	N.A.
Hold	N.A.	N.A.	N.A.	N.A.

Table 13 shows the ICR agent state terms and how they correspond to the terms used by Alcatel, NEC, and Ericsson.

Table 13: Agent State Terminology—Alcatel, NEC, and Ericsson

GEOTEL ICR	Alcatel 4400	NEC NEAX 2400	Ericsson ACP100
Logged On	Agent Logged On	Logon	Agent logged on, jacked-in
Logged Off ¹	Agent Logged Off	Logged Off	Agent logged off, jacked-out
Ready	Agent Ready	Logged on minus not ready	Idle, agent ready
Not Ready	Agent Not Ready	Break	Agent not ready
Available	Idle	Ready	Idle
Talking In	Agent Busy	ACD incoming	Q_CONN
Talking Out	Agent Busy	Non-ACD outgoing	Q_OUTDIAL, A_OUTDIAL
Talking Other	Agent Busy	Non-ACD incoming, Non-ACD internal	A_CONN, Q_CONN

(continued)

¹ Logged Off is not an agent state, but rather a necessary condition for being in any state.

GEOTEL ICR	Alcatel 4400	NEC NEAX 2400	Ericsson ACP100
Work Ready	Agent Working After Call/Wrap- up	Work	Agent not ready
Work Not Ready	Agent Work Not Ready	N.A.	N.A.
Busy Other	N.A.	Supported (no NEC term)	Other
Reserved	N.A.	Alerting	N.A.
Hold	Busy	All on hold	N.A.

7.4. Service Data

The Intelligent CallRouter tracks data for each peripheral service in the call center enterprise. A *service* is a particular type of call processing the caller requires. For example, in a retail sales company's call center, a caller might have a question about an account balance. This caller might be directed to the Customer Accounts service.

A *peripheral service* is a service that is tied to a specific peripheral (ACD) in the call center enterprise. A single peripheral might have several services defined such as Sales, Technical Support, and Customer Accounts.

See also: Chapter 1, "Overview" provides some examples of enterprise and peripheral services.

Peripheral service data are stored in the Service_Real_Time and Service_Half_Hour tables. To arrive at daily values, the ICR sums the Service_Half_Hour rows for each day.

7.4.1. Call Counts

The ICR tracks calls routed to and handled by each peripheral service. Specifically, the ICR records the following data on call counts, both in real-time and for each half-hour interval:

- **Calls in progress.** The total number of calls in progress at the peripheral.
- **Calls routed.** The total number of calls routed to the service by the ICR during an interval.
- **Calls incoming.** The total number of calls coming in to the service from an external carrier. This includes handled, abandoned, and currently queued calls.

- **Calls offered.** The total number of calls offered to the service during an interval. This includes both incoming and internal calls.
- **Calls answered.** The number of calls to the service that were answered during an interval. A call is counted as answered when it reaches an agent or VRU.
- **Calls handled.** The number of calls answered and finished for the service during an interval.
- **Outgoing calls.** The total number of outgoing calls made by agents during an interval.
- **Calls held.** The number of calls to the service currently queued for longer than the service level threshold.

In handling call counts, typically you do not want to count a call as abandoned in queue if the caller hangs up very quickly. Often in these cases, callers hang up for reasons other than excessive queue times. When configuring the peripheral, the System Manager can specify the minimum amount of time a call must be in queue before it can be considered an abandoned call. This is called the *abandoned call wait time*. These “short calls” are subtracted from the count of calls offered.

See also: For more information on configuring peripherals for abandoned call wait time, see the *Intelligent CallRouter System Manager Guide*.

7.4.2. Service Level

When a peripheral service is first configured, a service level threshold is specified in seconds. The *service level threshold* is the number of seconds set as the maximum time a caller should wait before being connected with an agent. Calls answered within the service level threshold are considered to have met the service level, while calls not answered within the service level threshold are considered not to have met the service level.

The service level is expressed as a percentage of calls that have met the service level threshold requirement. For example, if you set a service level threshold of 30 seconds, you want all calls to be answered within 30 seconds. Every call answered within 30 seconds improves the service level. Every call that is not answered within 30 seconds reduces the service level.

As a simple example, if you had 50 calls that were answered in under 30 seconds and 80 calls that took longer than 30 seconds to answer, the ICR would calculate the service level as follows:

$$50/(50+80) \times 100 = \text{Service Level \%}$$

In this example, the service level would be 38 percent.

ICR Service Level

The ICR tracks service level events to determine which calls to consider when making its service level calculation. A service level event occurs when:

- A call is answered within the service level threshold.
- A call is abandoned within the service level threshold.
- A call reaches the service level threshold without being answered or abandoned.

Any call that has a service level event is treated as a *service level call offered*, which means that it will be used in the service level calculation.

The ICR provides a uniform calculation across all peripherals. The *ICR service level* can be calculated in any of three ways:

- **Abandoned calls ignored.** The number of calls answered within the service level threshold divided by the number of calls that had a service level event minus the number of calls that were abandoned before exceeding the service level threshold. Calls abandoned before the service level threshold expired are removed from this calculation.
- **Abandoned calls negatively impact service level.** The number of calls answered within the service level threshold divided by the number of calls that had a service level event. This treats abandoned calls as though they had exceeded the service level threshold.
- **Abandoned calls positively impact service level.** The number of calls answered within the service level threshold plus the number of calls abandoned within the threshold, all divided by the number of calls that had a service level event. This treats abandoned calls as though they were answered within the service level threshold.

The System Manager specifies which service level calculation to use when the peripheral service is configured. Regardless of the ICR service level calculation method being used, the ICR tracks the data needed to calculate the service level using any of the three methods.

Peripheral Service Level

While the ICR calculates its own service level, it also tracks the service level calculated by the peripheral. This service level, called the

peripheral service level, is a proprietary service level as calculated by the peripheral. Some peripherals support more than one type of service level calculation. The method of service level calculation used by the peripheral is set by the System Manager when the peripheral service is configured.

See also: The *Intelligent CallRouter System Manager Guide* provides more detailed information on service level calculation methods and options.

7.4.3. Queues and Delays

The ICR tracks the time calls spend queued for each peripheral service and the number of calls queued in real-time and for each half-hour interval. Specifically, the ICR tracks the following data for queues and delays:

- **Calls in queue.** The number of calls to the service that are in queue at the peripheral.
- **Calls abandoned in queue.** The number of calls queued to the service that were abandoned during an interval. An abandoned call is a call in which the caller hangs up before the call is answered.
- **Average delay in queue.** The average delay time that all calls for the service spent in the queue during an interval.
- **Average delay in queue for abandoned calls.** The average delay time of all calls abandoned in queue for the service.
- **Answer wait time.** The sum of the time in seconds that all calls offered to the service during an interval had to wait before being answered.
- **Average speed of answer.** The average time that all calls offered to the service during an interval waited before being answered.
- **Service level calls queue held.** The number of calls to the service that have been in queue longer than the service level threshold.
- **Longest delay for an abandoned call.** The longest time that a call was in queue for the service before being abandoned.
- **Longest delay queue time.** The longest time that a call was in queue for the service before being answered.
- **Total delay queue time.** The sum of delay time in queue for all calls to the service during an interval.

7.4.4. Agent Time Allocations

The ICR tracks several data categories related to the time a peripheral service's agents spend handling calls. This data include:

- **Handle time.** The total seconds that agents for the service were in the Talking In, Work Ready, and Work Not Ready states.
- **Average handle time per call.** The average handle time for calls handled by agents for the service. Handle time includes time spent in the Talking In, Work Ready, and Work Not Ready states.
- **Talk time.** The total seconds that agents for the service were in the Talking In, Talking Out, or Talking Other states during an interval.
- **Average talk time.** The average talk time for calls handled by agents for the service. Talk time includes time spent in the Talking In, Talking Out, and Talking Other states.
- **Other time.** The sum of the time that agents spend in the Not Ready and Busy Other states.

7.5. Enterprise Data

An *enterprise service* is a collection of peripheral services that can span several call centers. For example, an enterprise service called Technical Support may include peripheral services from several geographically dispersed call centers. All the Technical Support peripheral services are logically combined to make up a Technical Support enterprise service.

An *enterprise skill group* is a collection of skill groups that can span several call centers. Enterprise skill groups can also include peripheral skill groups from geographically dispersed call centers. Each of the peripheral skill groups has a common set of skills, such as the ability to handle sales calls. These skill groups are logically combined to form an enterprise skill group.

Enterprise service and skill group data are stored in the following tables:

- Service_Real_Time
- Service_Half_Hour
- Skill_Group_Real_Time
- Skill_Group_Half_Hour

To compile data for enterprise services and skill groups, the ICR finds the real-time or historical records for each member peripheral service. It then sums or averages values from the individual records to produce a value for the enterprise service or skill group. To arrive at daily values, the ICR sums the half-hour rows for each day.

7.5.1. Enterprise Calculations

The ICR can simply total some statistics to obtain enterprise-wide values. For example, to obtain the number of agents available for an enterprise skill group, the ICR adds the number of agents available for each peripheral skill group that is a member of the enterprise skill group.

If a value is an average or a calculated value, such as the Average Handle Time or Expected Delay for an enterprise service, the ICR cannot simply sum or average the values of the member peripheral services. For example, in order to calculate the Average Handle Time for an enterprise service, the ICR must total the handle time for the member peripheral services and divide it by the total number of calls handled for the member peripheral services.

In addition, because a call is usually routed to the peripheral service that has the minimum expected delay within an enterprise service, the Expected Delay for an enterprise service is equal to the minimum of the expected delays for the member peripheral services.

Figure 14 shows some examples of calculations for an enterprise service:

Calls in progress =	sum(Calls in progress for all members)
Average handle time =	sum(Handle time for all members) / sum(Calls handled for all members)
Expected delay =	min(Expected delay for all members)
Service level =	sum(ServiceLevelCalls for all members) / sum(ServiceLevelCallsOffered for all members)

Figure 14: Enterprise Service Calculation Examples

7.6. Trunk Group Data

The ICR tracks data for each trunk group coming in to a switch. A *trunk group* is a collection of telephone lines that are associated with a single peripheral and used for a common purpose.

Trunk group data are stored in the Trunk_Group_Real_Time and Trunk_Group_Half_Hour tables. Trunk group data include data that are related to trunk usage and availability, such as:

- **Trunks in service.** The number of trunks in the trunk group that are functional.
- **All trunks busy.** The total time in seconds that the trunk group was in a state when all trunks were in use.
- **Trunks idle.** The number of trunks in the trunk group that are non-busy, or idle.

- **Calls Abandoned.** The number of calls to the trunk group that were abandoned during a current or previous half-hour interval.
- **Calls in.** The number of incoming calls received on the trunk group during a current or previous half-hour interval.
- **Calls out.** The number of outbound calls sent on the trunk group during a current or previous half-hour interval.
- **In service time.** The aggregate number of seconds that trunks in the group were in service during a current or previous half-hour interval.
- **In use inbound time.** The aggregate number of seconds that trunks in the group were used for inbound calls during a current or previous half-hour interval.
- **In use outbound time.** The aggregate number of seconds that trunks in the group were used for outbound calls during a current or previous half-hour interval.

7.7. Network Trunk Group Data

A peripheral (ACD, PBX, or VRU) typically divides its trunks into trunk groups differently than the routing client. For example, the ACD might view two T1 circuits coming into the switch as two trunk groups. The routing client (IXC, for example) might view the same T1's as a single pool of 72 trunks. This type of network treatment of trunks is called a *network trunk group*.

Network trunk group data are stored in the `Network_Trunk_Group_Real_Time` and `Network_Trunk_Group_Half_Hour` tables. The types of data you can view for network trunk groups are similar to those you can view for trunk groups (for example, trunks idle, trunks in service, etc.).

See also: See the previous section, “Trunk Group Data,” for more information on the data you can view for Network Trunk Groups. Chapter 1, “Overview,” describes how network trunk groups are used in the call center enterprise.

7.8. Service Array Data

The data the ICR collects for service arrays are identical to the data collected for services. *Service arrays* are defined in instances where you have similar peripheral services on multiple VRUs and the VRUs all share the same network trunk group. By grouping the services of multiple VRUs into a service array, you can send calls to a single target (the service array) and let the network deliver the call to any one of the peripheral services that make up the service array.

The members of a service array are defined in the `Service Array Member` table. Data for service arrays are stored in the

Service_Real_Time and Service_Half_Hour tables. To arrive at daily values, the ICR sums the Service_Half_Hour rows for each day.

The ICR tracks the same types of data for service arrays as it does for services. For service arrays, the ICR tracks the following types of data:

- Call counts
- Service levels
- Queues and delays
- Call handling states
- Time allocations

See also: For descriptions of the specific data tracked for service arrays, see the “Peripheral Services Data” section earlier in this chapter.

7.9. Route Data

The data that the ICR collects for routes are very similar to the data collected for services. A *route* is a value returned by a routing script that maps to a skill target at a peripheral. A *skill target* at a peripheral might be a service, skill group, an agent, or a translation route. A route can be thought of more simply as the final destination to which a call is directed after the ICR has made its routing decisions.

Each skill target (for example, an agent) can have one or more routes. In addition to pointing to a specific skill target, each route is also associated with a service. This allows the ICR to account for each call under a service. In this sense, you can think of a service as being a collection of routes. (This is the reason you can drill down from services to routes in peripheral and enterprise service reports.)

Route data are stored in the Route_Real_Time and Route_Half_Hour tables. To arrive at daily values, Monitor ICR sums the Route_Half_Hour rows for each day.

The ICR tracks the same types of data for routes as it does for services. For routes, the ICR tracks the following types of data:

- Call counts
- Service levels
- Queues and delays
- Agent call handling states
- Agent time allocations

See also: For descriptions of the specific data tracked for routes, see the “Peripheral Services Data” section earlier in this chapter.

7.9.1. Service Level

The ICR tracks the service level for a route based on the calculation method that is in use for the peripheral service associated with the route. There are three types of service level calculation methods, each of which treat abandoned calls differently:

- Abandoned calls ignored
- Abandoned calls negatively impact service level
- Abandoned calls positively impact service level

The ICR collects the data needed to make all three calculations. Service levels that are calculated by the peripheral itself are not available for individual routes.

See also: For more information on service level calculations and the treatment of abandoned calls, see “Service Level,” in the “Peripheral Service Data” section earlier in this chapter.

7.10. Peripheral Data

The peripheral data category is used to report on switch-specific hardware and software status and some types of call count and service level data. A *peripheral* is a switch, such as an ACD, PBX, or VRU, that receives calls that have been routed by the ICR.

Peripheral data are recorded only in the Peripheral_Real_Time table in the Admin Workstation’s local database. Some typical peripheral data categories include:

- **Status.** Indicates the current failure state of the peripheral.
- **Online.** Indicates the current on-line state of the peripheral as determined by the Central Controller.
- **Calls in progress.** The total number of calls currently in progress at the peripheral.
- **Agents logged on.** The number of agents currently logged on to the peripheral.
- **Calls offered.** The total number of calls offered to the peripheral during an interval. This includes both incoming and external calls.
- **Service level.** The percentage of incoming calls that are answered within a specified service level threshold. (See the earlier section, “Service Level,” for more information.)

Other types of peripheral-specific hardware and software data may also be tracked within the Peripheral_Real_Time database tables.

7.11. Application Gateway Data

You can report on several types of data related to application gateways. The GEOTEL•Gateway feature allows the ICR to interface to a host system that is running another call center application. The ICR uses the application gateway to query the host system and application in order to obtain information on which to base further routing decisions.

The Application Gateway is implemented via a node in the Script Editor. For example, you might create a routing script that contains an *Application Gateway node*. For certain types of calls, the script might follow a branch that leads to the Application Gateway node. The ICR then queries the external application specified by the node to obtain additional data on how to route the call. The ICR can then base any subsequent routing decisions on the results obtained from the query.

Network ICR systems (NICRs) typically have scripts that use ICR Gateway nodes. The *ICR Gateway node* is a special type of Application Gateway. The NICR scripts uses the ICR Gateway node to communicate with Customer ICRs (CICRs). For certain calls, the NICR script follows a branch that leads to an ICR Gateway node. The ICR then queries the CICR specified in the node to obtain data on how to route the call. The NICR then bases subsequent routing decisions on the results obtained from the query.

See also: The *Intelligent CallRouter System Manager Guide* describes the Script Editor Application and ICR Gateway nodes in more detail.

Application gateway data, including data on ICR Gateway activity, are stored in the central database `Application_Gateway_Half_Hour` table. The ICR does not track real-time data for application gateways. The statistics you can report on for application gateways include:

- **Requests.** The number of requests sent to the host system during the half-hour interval.
- **Rejects.** The number of query requests that were rejected by the host system during the half-hour interval.
- **Maximum delay.** The longest response time, in milliseconds, for any request to the host system during the half-hour interval.
- **Average delay.** The average response time, in milliseconds, for all requests to the host system during the half-hour interval.
- **Unavailable.** The number of requests attempted while no host system was available during the half-hour interval.
- **Errors.** The number of errors that occurred for requests to the host system during the half-hour interval.
- **Timeouts.** The number of requests to the host system that timed out during the half-hour interval.

7.12. Call Type Data

The ICR allows to report statistics for the call types defined in the system. A *call type* is a category of incoming calls. Calls are categorized based on dialed number (DN), caller-entered digits (CED), and calling line ID (CLID). Each call type has a schedule that determines which routing script or scripts are active for that call type at any time.

In Monitor ICR reports, you might want to display data such as the number of calls of a certain call type that used default routing during a specified interval. The ICR generates a *Call_Type_Real_Time* record for each call type. These records include data such as:

- **Calls routed.** The number of calls of this call type that have been routed.
- **Version.** The version of the script that is currently available for use.
- **Master script.** A name that identifies a routing script. The master script might have several versions. A new master script record is created whenever you save a script with a new name.
- **Default routing.** The number of calls of this type for which the ICR used default routing.
- **Network default routing.** The number of calls of this type for which the IXC used default routing.
- **Return busy.** The number of calls of this type that the ICR routed to the Busy target.
- **Return ring.** The number of calls of this type that the ICR routed to the Ring target.

7.13. Routing Client Data

A *routing client* is an entity that sends routing requests to the ICR. Typically, a routing client corresponds to a subsystem within an interexchange carrier or to a peripheral that is performing *Post-Routing*.

In Monitor ICR, you can report on statistics for the different routing clients defined in the ICR system. For example, you might want to report on the maximum delay of route responses to the routing client for a specified interval. The ICR generates *Routing_Client_Five_Minute* records for each routing client. These data are stored in the central database and include:

- **Routing client responses.** The number of route responses to the routing client during the five-minute interval.
- **Mean routing client responses.** The mean time, in milliseconds, for the route responses to the routing client during the five-minute interval.

- **Receive in error.** The number of routing requests from the routing client that produced errors during the five-minute interval.
- **Timeout calls.** The number of route responses to the routing client that timed out during the five-minute interval.
- **Late calls.** The number of route responses to the routing client that exceeded the late threshold but did not time out.
- **Late threshold.** The time limit imposed by the routing client (for example, IXC) for receipt of a routing response.
- **Maximum delay.** The maximum delay, in milliseconds, of route responses to the routing client during the five-minute interval.
- **Discarded calls.** The number of routing requests from the routing client that were discarded because of an internal constraint such as buffering.

7.14. Schedule Import Data

You can generate reports on staffing schedule data that has been imported from third-party workforce management systems. The GEOTEL Workforce Management Import System allows you to import schedules and store them in `Schedule_Import_Real_Time` tables in the Admin Workstation's local ICR database.

The exact data that appear in Monitor ICR reports depends on the specific workforce management system you are using with the ICR system. In general, the data are for the current time period and appear as imported from the external source.

See also: For more detailed information on the data gathered by the ICR, see the *Intelligent CallRouter Database Schema Handbook*. The on-line *Schema Help* also provides data definitions and reference information on the ICR database tables.

8. Template Reference

The ICR comes with predefined templates that simplify the process of generating reports. The predefined templates allow you to generate a variety of reports without having to spend time developing queries or designing report formats. Each template displays a specific set of real-time or historical data in a chart, graph, or grid format. You can generate reports from single templates or combine several templates to produce a report.

A consistent format is used across all templates to ensure that call center data are presented in a uniform manner. You can use the templates as they are or copy and modify them to suit your particular business needs.

The ICR Custom Screen Builder allows you to modify the predefined templates or create new templates. In addition, because the Intelligent CallRouter has an open database architecture, you can use other database query and reporting tools to access the databases.

See also: For information on other database query and access tools, see Chapter 2, “The Admin Workstation.”

This chapter describes each predefined template and provides examples of the reports that can be generated by using the templates. Templates are available for each call center entity in the ICR system:

- Agents
- Application gateways
- Call types
- Peripherals
- Routes
- Routing clients
- Schedules
- Services
- Service arrays
- Skill groups
- Trunk groups

8.1. Real-Time and Historical Templates

The real-time templates generate reports that show the current state of the call center enterprise. Real-time reports help you to keep track of current call center resources and react quickly to any service delays.

The real-time templates draw data from the real-time tables in the local database of the Distributor Admin Workstation. These tables are constantly updated by the ICR real-time client process running on the Distributor AW. Client AWs read the real-time data from the Distributor AW database.

Historical templates are used to produce reports on past enterprise call center performance. You can use the historical templates to generate reports that help you to analyze trends and gauge resources across the call center enterprise.

In contrast to the real-time templates, which display data from the Distributor AW local database, the historical templates draw data from records in the ICR central database. These records are updated every half-hour. As an alternative, AWs might draw data from an Historical Database Server (HDS) rather than directly from the central database. One Distributor AW can be set up at an Admin site to serve as an HDS.

You can run any of the predefined templates by using the Template Launcher within Monitor ICR. You can also combine real-time templates and historical templates in a single report.

The remainder of this chapter lists the predefined templates and describes the kinds of data each template displays.

See also: For **more detailed information** on how the data is calculated, see the template reference in the Monitor ICR on-line help.

agteam01_agent_status_by_position

Description

This template generates a real-time grid report that shows the status of each agent in an agent team by position.

Database Table

Agent_Real_Time

Data

Position. The current extension on which the agent is working.

Agent name. The first and last name of the agent.

Logged on skill group. The name of the skill group to which the agent is currently logged on.

Logon date and time. The date and time that the agent logged on.

Current state. The current state of the agent: Logged Off, Logged On, Ready, Not Ready, Work Ready, Work Not Ready, Talking, Busy Other, Reserved, Unknown, Calls on Hold.

Direction. The direction of the call on which the agent is currently working: In (Inbound), Out (Outbound), or Unknown.

Destination. The type of outbound call: ACD, direct, or Unknown.

Last state change. The date and time that the agent's state last changed.

Reason. A code received from the peripheral that indicates the reason for the agent's last state change.

Example

Position	Agent Name	Logged On Skill Group	Logon Date Time	Current State	Direction	Destination	Last State Change	Reason
192	John Curtis	UNKNOWN	1999-02-03 09:12:02	TALKING	IN	UNKNOWN	1999-02-03 13:53:12	0
193	John Rogers	UNKNOWN	1999-02-03 09:12:02	TALKING	IN	UNKNOWN	1999-02-03 13:53:14	0
194	Robert Harrison	UNKNOWN	1999-02-03 09:12:02	TALKING	IN	UNKNOWN	1999-02-03 13:53:14	0
195	Robert Smith	UNKNOWN	1999-02-03 09:12:02	TALKING	IN	UNKNOWN	1999-02-03 13:53:10	0
196	Alan Walker	UNKNOWN	1999-02-03 09:12:02	TALKING	IN	UNKNOWN	1999-02-03 13:53:16	0
197	Mary Benson	UNKNOWN	1999-02-03 09:12:02	TALKING	IN	UNKNOWN	1999-02-03 13:53:16	0

agteam02_agent_status_by_skillgroup

Description

This template generates a real-time grid report that shows the status of each agent team member. The report also shows which skill group the agent is currently logged on to.

Database Table

Agent_Skill_Group_Real_Time

Data

Agent team. The name of the agent team.

Skill group. The skill group to which the agent is logged on.

Agent name. The first and last name of the agent.

Logon date and time. The date and time that the agent logged on.

Agent state. The current state of the agent: Logged Off, Logged On, Ready, Not Ready, Work Ready, Work Not Ready, Talking, Busy Other, Reserved, Unknown, Calls on Hold.

Last state change. The date and time that the agent's state last changed.

Reason. A code received from the peripheral that indicates the reason for the agent's last state change.

Example

Agent Name	Logon Date Time	Agent State	State Last Change	Reason
Nancy Arnold	1999-02-03 14:10:08	TALKING	1999-02-03 14:20:08	0
Mary Benson	1999-02-03 14:09:56	TALKING	1999-02-03 14:19:56	0
Mark Chase	1999-02-03 14:10:06	TALKING	1999-02-03 14:20:06	0
John Rogers	1999-02-03 14:09:54	TALKING	1999-02-03 14:19:54	0
Ann Fennell	1999-02-03 14:10:02	TALKING	1999-02-03 14:20:02	0
Frank Foss	1999-02-03 14:10:10	TALKING	1999-02-03 14:20:10	0
John Curtis	1999-02-03 14:09:52	TALKING	1999-02-03 14:19:52	0
Harold Lofton	1999-02-03 14:09:58	TALKING	1999-02-03 14:19:58	0
Lawrence McNeil	1999-02-03 14:10:06	TALKING	1999-02-03 14:20:06	0
Robert Harrison	1999-02-03 14:09:54	TALKING	1999-02-03 14:19:54	0
Robert Smith	1999-02-03 14:09:50	TALKING	1999-02-03 14:19:50	0

agteam03_logout_status_by_team

Description

This template generates a historical grid report that shows agent login and logout history for one or more selected agent teams over a specified time period.

Database Table

Agent_Logout

Data

Agent enterprise name. The last name and first initial of the agent and the ICR name of the peripheral with which the agent is associated.

Logon duration. The number of seconds that the agent was logged on.

Logout date and time. The ICR central controller date and time when the agent logged out.

Reason. A code received from the peripheral that indicates the reason for the agent's last state change.

Example

Agent Logout Status By Team 1999-02-03

From: 1999-02-02 00:00:00 To: 1999-02-02 23:59:00

Agent Team: HelpDesk Page 10 of 10

Agent Name: Robert Harrison

Agent Enterprise Name	Logon Duration	Logout Date Time	Reason
Simulator_PG_1.Robert_H	2188	1999-02-02 09:44:09	
Simulator_PG_1.Robert_H	166	1999-02-02 09:47:27	
Simulator_PG_1.Robert_H	20162	1999-02-02 15:24:01	
Simulator_PG_1.Robert_H	9305	1999-02-02 18:08:16	
Summary:	31821		

Agent Name: Robert Smith

Agent Enterprise Name	Logon Duration	Logout Date Time	Reason
Simulator_PG_1.Smith_R	2188	1999-02-02 09:44:09	
Simulator_PG_1.Smith_R	166	1999-02-02 09:47:27	
Simulator_PG_1.Smith_R	20162	1999-02-02 15:24:01	
Simulator_PG_1.Smith_R	9305	1999-02-02 18:08:16	
Summary:	31821		

agteam04_daily_agent_activity

Description

This template generates a historical grid report that shows daily agent call handling activity over a specified time period. To arrive at daily values, the ICR sums the Agent_Skill_Group_Half_Hour rows for each day.

Database Table

Agent_Skill_Group_Half_Hour

Data

Agent team. The name of the agent team.

Agent name. The first and last name of the agent.

Duration. The total time in seconds that the agent was logged on during the interval.

Incoming calls total. The total number of inbound ACD calls handled by the agent during the interval. This value is incremented when the after-call work associated with the call is completed.

Incoming calls avg. length. The average length in seconds for incoming calls handled by the agent during the interval.

Incoming calls percent. The percentage of all calls handled by the agent for the period that were incoming calls.

Outgoing calls total. The total number of completed outbound ACD calls made by the agent during the interval. The value is incremented when the after-call work associated with the call is completed.

Outgoing calls average length. The average length in seconds for outgoing calls made by the agent for the interval.

Outgoing calls percent. The percentage of all calls handled by the agent for the period that were outgoing calls.

Internal calls total. The total number of internal calls initiated by the agent during the interval. The value is incremented when the after-call work associated with the call is completed.

Internal calls average length. The average length in seconds for completed internal calls made by the agent for the interval.

Internal calls percent. The percentage of all calls handled by the agent for the period that were internal calls.

Callback message total. The total number of callback messages that were processed by the agent during the interval.

Callback message average length. The average length in seconds for callback messages that were processed by the agent during the interval.

Callback message percent. The percentage of all calls handled by the agent for the period that were callback messages.

% Wrapup. The percentage of time that the agent spent in wrap-up on all calls counted as handled during the interval. An agent performing wrap-up is either in the Work Ready or Work Not Ready state. This value is measured against the total time the agent was logged on during the interval.

Example

The screenshot shows a window titled "Agent Call Detail Activity Report By Team" with a date of 1999-02-03. It includes a table with columns for Agent Name, Duration, Incoming Calls (Total, Avg. Length, %), Outgoing Calls (Total, Avg. Length, %), Internal Calls (Total, Avg. Length, %), Callback Message (Total, Avg. Length, %), and % WrapUp. The data shows consistent performance across all agents, with a 50% average length and 7.0% wrap-up.

Agent Name	Duration	Incoming Calls			Outgoing Calls			Internal Calls			Callback Message			% WrapUp
		Total	Avg. Length	%	Total	Avg. Length	%	Total	Avg. Length	%	Total	Avg. Length	%	
Nancy Arnold	19073	32	105.0	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0	7.0
May Benson	19073	31	105.0	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0	7.0
Mark Chase	19073	32	105.0	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0	7.0
John Rogers	19073	31	105.0	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0	7.0
Ann Fennell	19073	32	105.0	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0	7.0
Frank Foss	19073	32	105.0	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0	7.0
John Curtis	19073	31	104.0	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0	7.0
Harold Lofton	19073	31	105.0	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0	7.0
Lawrence McNeil	19073	32	105.0	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0	7.0
Robert Harrison	19073	31	105.0	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0	7.0
Robert Smith	19073	31	105.0	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0	7.0

agteam05_agent_daily_perf

Description

This template generates a historical grid report of agent performance over a specified time period. To arrive at daily values, the ICR sums the Agent_Skill_Group_Half_Hour rows for each day.

Database Table

Agent_Skill_Group_Half_Hour

Data

Agent team. The name of the agent team.

Agent name. The first and last name of the agent.

Abandoned calls ring. The total number of ACD calls abandoned while ringing at an agent's position. The value is incremented at the time the call disconnects.

Abandoned calls hold. The total number of ACD calls that were abandoned while being held at an agent's position. The value is incremented at the time the call disconnects.

Abandoned calls average. The average ring time in seconds associated with ACD calls that were abandoned while ringing an agent's position.

Abandoned calls percent. The percentage of ring time associated with ACD calls that were abandoned while ringing at an agent's position. This value is measured against the total time the agent was logged on during the interval.

Hold calls in. The total number of completed inbound calls the agent placed on hold. The value is incremented when the after-call work associated with the call is completed.

Hold calls in average. The average on hold time in seconds associated with inbound calls the agent placed on hold.

Hold calls in percent. The percentage of hold time associated with inbound calls the agent placed on hold. This value is measured against the total time the agent was logged on during the interval.

Hold calls out. The total number of completed outbound calls the agent placed on hold at least once. The value is incremented when the after-call work associated with the call is completed.

Hold calls out average. The average on hold time in seconds associated with outbound calls the agent placed on hold.

- Hold calls out percent.** The percentage of hold time associated with outbound calls the agent placed on hold. This value is measured against the total time the agent was logged on during the interval.
- Hold calls internal.** The total number of completed internal calls the agent placed on hold for the interval. The value is incremented when the after-call work associated with the call is completed.
- Hold calls internal average.** The average on hold time associated with internal calls the agent placed on hold.
- Hold calls internal percent.** The percentage of hold time associated with internal calls the agent placed on hold. This value is measured against the total time the agent was logged on during the interval.
- Assistance calls total.** The total number of calls for which the agent received supervisor assistance during the interval. The value is incremented when the supervisor assistance call completes.
- Assistance calls average.** The average time in seconds that the agent received assistance for all supervisor-assisted calls during the interval.
- Assistance calls percent.** The percentage of time that the agent spent during the interval on supervisor-assisted calls. This value is measured against the total time the agent was logged on during the interval.
- Conference calls in.** The number of incoming calls on which the agent was in conference. Incoming calls include ACD and non-ACD calls. The value is incremented with the agent drops off the call and the call becomes a simple two-party call.
- Conference calls average.** The average time in seconds that the agent spent in conference with calls during the interval. This value includes hold time associated with the conference calls.
- Conference calls percent.** The percentage of time that the agent spent during the interval on conference calls. The percentage includes hold time associated with the conference calls. This value is measured against the total time the agent was logged on during the interval.
- Conference calls out.** The number conference calls the agent initiated. Initiated calls include ACD and non-ACD calls. The value is incremented with the agent drops off the call and the call becomes a simple two-party call.

Conference calls out average. The average time in seconds that the agent spent in conference on agent-initiated calls during the interval. This value includes hold time associated with the conference calls.

Conference calls out percent. The percentage of time that the agent spent during the half-hour interval on agent-initiated conference calls. This percentage includes hold time associated with the conference calls. This value is measured against the total time the agent was logged on during the interval.

Example

The screenshot shows a software window titled "Agent Call Detail Performance Report By Team" with a date of "1999-02-03". The report is for the "HelpDesk" team. The data table is as follows:

Agent Name	Abandon Calls				Hold Calls				Assistance Calls			Conference Calls									
	Ring	Hold	Avg	%	In	Avg	%	Out	In	Avg	%	Total	Avg	%	In	Avg	%	Out	Avg	%	
Nancy Arnold	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
May Benson	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mark Chase	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
John Rogers	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ann Ferrell	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Frank Foss	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
John Curtis	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Harold Lofton	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lawrence McNeil	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Robert Harrison	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Robert Smith	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

agtper01_agent_status_by_position

Description

This template generates a real-time grid report that shows agent status by position for each agent logged on to the peripheral.

Database Table

Agent_Real_Time

Data

Peripheral. The name of the peripheral selected as the scope of the report.

Position. The current extension on which the agent is working.

Agent name. The first and last name of the agent.

Skill group. The name of the skill group to which this is logged on.

Logon date and time. The date and time that the agent logged on.

Current state. The current state of the agent: Logged Off, Logged On, Ready, Not Ready, Work Ready, Work Not Ready, Talking, Busy Other, Reserved, Unknown, Calls on Hold.

Direction. The direction of the call on which the agent is currently working: In (Inbound), Out (Outbound), or Unknown.

Destination. The type of outbound call: ACD, direct, or Unknown.

Last state change. The date and time that the agent's state last changed.

Reason. A code received from the peripheral that indicates the reason for the agent's last state change.

Example

Position	Agent Name	Skill Group	Logon Date Time	Current State	Direction	Destination	Last State Change	Reason
193	John	Cutis	1999-02-03 08:12:02	WORK_READY	UNKNOWN	UNKNOWN	1999-02-03 16:08:04	0
3	Ann	Fennell	1999-02-03 08:12:02	TALKING	IN	UNKNOWN	1999-02-03 16:08:44	0
11	Frank	Frost	1999-02-03 08:12:02	TALKING	IN	UNKNOWN	1999-02-03 16:08:52	0
192	John	Plogers	1999-02-03 08:12:02	WORK_READY	UNKNOWN	UNKNOWN	1999-02-03 16:08:02	0
199	Harold	Lottion	1999-02-03 08:12:02	WORK_READY	UNKNOWN	UNKNOWN	1999-02-03 16:08:08	0
7	Lawrence	McNeil	1999-02-03 08:12:02	TALKING	IN	UNKNOWN	1999-02-03 16:08:46	0
1	Falrick	Movin	1999-02-03 08:12:02	TALKING	IN	UNKNOWN	1999-02-03 16:08:42	0
194	Robert	Harrison	1999-02-03 08:12:02	WORK_READY	UNKNOWN	UNKNOWN	1999-02-03 16:08:08	0
195	Robert	Smith	1999-02-03 08:12:02	WORK_READY	UNKNOWN	UNKNOWN	1999-02-03 16:08:02	0

agtper02_agent_status_by_skillgroup

Description

This template generates a real-time grid report that shows current status of each agent by the skill groups defined for the peripheral.

Database Table

Agent_Skill_Group_Real_Time

Data

Peripheral. The name of the peripheral selected as the scope of the report.

Skill group. The name of the ICR skill group.

Agent name. The first and last name of the agent.

Logon date and time. The date and time that the agent logged on.

Agent state. The current state of the agent: Logged Off, Logged On, Ready, Not Ready, Work Ready, Work Not Ready, Talking, Busy Other, Reserved, Unknown, Calls on Hold.

Last state change. The date and time that the agent's state last changed.

Reason. A code received from the peripheral that indicates the reason for the agent's last state change.

Example

Skill Group	Agent Name	Logon Date Time	Agent State	State Last Change	Reason
Simulator_PG_1.TechExpert	Mary Benson	1999-02-03 16:09:56	TALKING	1999-02-03 16:23:14	0
Simulator_PG_1.TechExpert	Mark Chase	1999-02-03 16:10:10	TALKING	1999-02-03 16:23:28	0
Simulator_PG_1.TechExpert	John Curtis	1999-02-03 16:09:54	TALKING	1999-02-03 16:23:14	0
Simulator_PG_1.TechExpert	Ann Fennell	1999-02-03 16:10:04	TALKING	1999-02-03 16:23:24	0
Simulator_PG_1.TechExpert	Frank Foss	1999-02-03 16:10:12	READY	1999-02-03 16:21:58	0
Simulator_PG_1.TechExpert	John Rogers	1999-02-03 16:09:52	TALKING	1999-02-03 16:23:12	0
Simulator_PG_1.TechExpert	Harold Lotton	1999-02-03 16:09:58	TALKING	1999-02-03 16:23:20	0
Simulator_PG_1.TechExpert	Lawrence McNeil	1999-02-03 16:10:06	TALKING	1999-02-03 16:23:26	0
Simulator_PG_1.TechExpert	Patrick Moir	1999-02-03 16:10:02	TALKING	1999-02-03 16:23:22	0

agtper03_logout_status_by_peripheral

Description

This template generates a historical grid report that details agent login duration and logout activity over a specified period of time.

Database Table

Agent_Logout

Data

Peripheral. The name of the peripheral to which these agents were associated and logged on.

Agent name. The first and last name of the agent.

Agent enterprise name. The last name and first initial of the agent and the ICR name of the peripheral with which the agent is associated.

Logon duration. The time in seconds that the agent spent logged on during the specified period.

Logout date and time. The date and time that the agent logged out.

Reason. A code received from the peripheral that indicates the reason for the agent's last state change.

Example

Agent Logout Status By Peripheral 1999-02-03

From: 1999-02-02 12:00:00 To: 1999-02-03 15:00:00

Peripheral: Simulator_PG_1 Page 133 of 268

Agent Name: John Curtis

Agent Enterprise Name	Logon Duration	Logout Date Time	Reason
Simulator_PG_1.John_C	20162	1999-02-02 15:24:01	
Simulator_PG_1.John_C	9305	1999-02-02 18:08:16	
Summary:	29467		

Agent Name: Harold Lofton

Agent Enterprise Name	Logon Duration	Logout Date Time	Reason
Simulator_PG_1.Lofton_H	20162	1999-02-02 15:24:01	
Simulator_PG_1.Lofton_H	9305	1999-02-02 18:08:16	
Summary:	29467		

Agent Name: Robert Harrison

Agent Enterprise Name	Logon Duration	Logout Date Time	Reason
Simulator_PG_1.Robert_H	20162	1999-02-02 15:24:01	
Simulator_PG_1.Robert_H	9305	1999-02-02 18:08:16	
Summary:	29467		

agtper04_daily_agent_activity

Description

This template generates a historical grid report that details the call handling activity of agents for a peripheral over a specified time period. To arrive at daily values, the ICR sums the Agent_Skill_Group_Half_Hour rows for each day.

Database Table

Agent_Skill_Group_Half_Hour

Data

Peripheral. The name of the peripheral to which these agents were associated and logged on.

Agent name. The first and last name of the agent.

Duration. The total time in seconds that agent was logged on during the interval.

Incoming calls total. The total number of inbound ACD calls handled by the agent during the interval. This value is incremented when the after-call work associated with the call is completed.

Incoming calls avg. length. The average length in seconds for incoming calls handled by the agent during the interval.

Incoming calls percent. The percentage of all calls handled by the agent for the period that were incoming calls.

Outgoing calls total. The total number of completed outbound ACD calls made by the agent during the interval. The value is incremented when the after-call work associated with the call is completed.

Outgoing calls average length. The average length in seconds for outgoing calls made by the agent for the interval.

Outgoing calls percent. The percentage of all calls handled by the agent for the period that were outgoing calls.

Internal calls total. The total number of internal calls initiated by the agent during the interval. The value is incremented when the after-call work associated with the call is completed.

Internal calls average length. The average length in seconds for completed internal calls made by the agent for the interval.

Internal calls percent. The percentage of all calls handled by the agent for the period that were internal calls.

Callback message total. The total number of callback messages that were processed by the agent during the interval.

Callback message average length. The average length in seconds for callback messages that were processed by the agent during the interval.

Callback message percent. The percentage of all calls handled by the agent for the period that were callback messages.

% Wrapup. The percentage of time that the agent spent in wrap-up on all calls counted as handled during the interval. An agent performing wrap-up is either in the Work Ready or Work Not Ready state. This value is measured against the total time the agent was logged on during the interval.

Example

Agent Name		Duration	Incoming Calls			Outgoing Calls			Internal Calls			Callback Message			% Wrapup
			Total	Avg. Length	%	Total	Avg. Length	%	Total	Avg. Length	%	Total	Avg. Length	%	
Frank	Foss	44074	215	104.0	51.0	0	0.0	0	0.0	0	0.0	0	0.0	0	7.0
John	Curtis	44074	213	104.0	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0	7.0
Harold	Lofton	44074	213	104.0	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0	7.0
Lawrence	McNeil	44074	215	104.0	51.0	0	0.0	0	0.0	0	0.0	0	0.0	0	7.0
Patrick	Moir	44074	215	104.0	51.0	0	0.0	0	0.0	0	0.0	0	0.0	0	7.0
Robert	Harrison	44074	213	105.0	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0	7.0
Robert	Smith	44074	213	104.0	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0	7.0

agtper05_agent_daily_perf

Description

This template generates a historical grid report that shows agent performance by peripheral over a specified time period. To arrive at daily values, the ICR sums the Agent_Skill_Group_Half_Hour rows for each day.

Database Table

Agent_Skill_Group_Half_Hour

Data

Peripheral. The name of the peripheral associated with the agents.

Agent name. The first and last name of the agent.

Abandoned calls ring. The total number of ACD calls abandoned while ringing at the agent's position.

Abandoned calls hold. The total number of ACD calls abandoned while being held at the agent's position.

Abandoned calls average. The average ring time in seconds associated with ACD calls that were abandoned while ringing at the agent's position.

Abandoned calls percent. The percentage of time associated with ACD calls that were abandoned while ringing the agent's position. This value is measured against the total time the agent was logged on during the interval.

Hold calls in. The total number of completed inbound calls the agent placed on hold. The value is incremented when the after-call work associated with the call is completed.

Hold calls in average. The average on hold time in seconds associated with inbound calls the agent placed on hold.

Hold calls in percent. The percentage of hold time associated with inbound calls the agent placed on hold. This value is measured against the total time the agent was logged on during the interval.

Hold calls out. The total number of completed outbound calls the agent placed on hold at least once. The value is incremented when the after-call work associated with the call is completed.

Hold calls out average. The average on hold time in seconds associated with outbound calls the agent placed on hold.

Hold calls out percent. The percentage of hold time associated with outbound calls the agent placed on hold. This value is measured against the total time the agent was logged on during the interval.

Hold calls internal. The total number of completed internal calls the agent placed on hold for the interval. The value is incremented when the after-call work associated with the call is completed.

Hold calls internal average. The average on hold time associated with internal calls the agent placed on hold.

Hold calls internal percent. The percentage of hold time associated with internal calls the agent placed on hold. This value is measured against the total time the agent was logged on during the interval.

Assistance calls total. The total number of calls for which the agent received supervisor assistance during the interval. The value is incremented when the supervisor assistance call completes.

Assistance calls average. The average time in seconds that the agent received assistance for all supervisor-assisted calls during the interval.

Assistance calls percent. The percentage of time that the agent spent during the interval on supervisor-assisted calls. This value is measured against the total time the agent was logged on during the interval.

Conference calls in. The number of incoming calls on which the agent was in conference. Incoming calls include ACD and non-ACD calls. The value is incremented with the agent drops off the call and the call becomes a simple two-party call.

Conference calls average. The average time in seconds that the agent spent in conference with calls during the interval. This value includes hold time associated with the conference calls.

Conference calls percent. The percentage of time that the agent spent during the interval on conference calls. The percentage includes hold time associated with the conference calls. This value is measured against the total time the agent was logged on during the interval.

Conference calls out. The number conference calls the agent initiated. Initiated calls include ACD and non-ACD calls. The value is incremented with the agent drops off the call and the call becomes a simple two-party call.

Conference calls out average. The average time in seconds that the agent spent in conference on agent-initiated calls during the interval. This value includes hold time associated with the conference calls.

Conference calls out percent. The percentage of time that the agent spent during the half-hour interval on agent-initiated conference calls. This percentage includes hold time associated with the conference calls. This value is measured against the total time the agent was logged on during the interval.

Example

The screenshot shows a performance report window titled "Agent Call Detail Performance Report By Peripheral" for the date 1999-02-03. The report is for peripheral "Simulator_PG_1" and is page 33 of 70. The data is presented in a table with columns for Agent Name, Abandon Calls, Hold Calls, Assistance Calls, and Conference Calls. Each of these categories is further divided into In and Out metrics, with sub-columns for Ring, Hold, Avg, and %.

Agent Name	Abandon Calls				Hold Calls				Assistance Calls				Conference Calls			
	Ring	Hold	Avg	%	In	Avg	%	Out	Avg	%	In	Avg	%	Out	Avg	%
John Curtis	0	0	0.0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Ann Fensell	0	0	0.0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Frank Fass	0	0	0.0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
John Rogers	0	0	0.0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Harold Lofton	0	0	0.0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Lawrence McNeil	0	0	0.0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Patrick Moren	0	0	0.0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Robert Harrison	0	0	0.0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Robert Smith	0	0	0.0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0

agtskg01_agent_status_by_position

Description

This template generates a real-time grid report that shows agent status in selected skill groups by position.

Database Table

Agent_Real_Time

Data

Skill group. The name of the skill group to which the agents belong.

Position. The current extension on which the agent is working.

Agent name. The first and last name of the agent.

Skill group. The name of the skill group to which this agent is logged on.

Logon date and time. The date and time that the agent logged in.

Current state. The current state of the agent: Logged Off, Logged On, Ready, Not Ready, Work Ready, Work Not Ready, Talking, Busy Other, Reserved, Unknown, Calls on Hold.

Direction. The direction of the call on which the agent is currently working: In (Inbound), Out (Outbound), or Unknown.

Destination. The type of outbound call: ACD, direct, or Unknown.

Last state change. The date and time that the agent's state last changed.

Reason. A code received from the peripheral that indicates the reason for the agent's last state change.

Example

Position	Agent Name	Skill Group	Logon Date Time	Current State	Direction	Destination	Last State Change	Reason
193	John Curtis	UNKNOWDN	1999-02-03 09:12:02	WORK_READY	UNKNOWDN	UNKNOWDN	1999-02-03 16:08:04	0
3	Ann Fennell	UNKNOWDN	1999-02-03 09:12:02	TALKING	IN	UNKNOWDN	1999-02-03 16:06:44	0
11	Frank Foss	UNKNOWDN	1999-02-03 09:12:02	TALKING	IN	UNKNOWDN	1999-02-03 16:06:52	0
1	Patrick Mason	UNKNOWDN	1999-02-03 09:12:02	TALKING	IN	UNKNOWDN	1999-02-03 16:06:42	0
194	Robert Harrison	UNKNOWDN	1999-02-03 09:12:02	WORK_READY	UNKNOWDN	UNKNOWDN	1999-02-03 16:08:08	0
195	Robert Smith	UNKNOWDN	1999-02-03 09:12:02	WORK_READY	UNKNOWDN	UNKNOWDN	1999-02-03 16:08:02	0

agtskg02_agent_status_by_skillgroup

Description

This template generates a real-time grid report that details the current status of each agent in a skill group.

Database Table

Agent_Skill_Group_Real_Time

Data

Skill group. The name of the skill group to which the agents belong.

Agent name. The first and last name of the agent.

Logon date and time. The date and time that the agent logged on.

Current state. The current state of the agent: Logged Off, Logged On, Ready, Not Ready, Work Ready, Work Not Ready, Talking, Busy Other, Reserved, Unknown, Calls on Hold.

Last state change. The date and time that the agent's state last changed.

Reason. A code received from the peripheral that indicates the reason for the agent's last state change.

Example

Agent Name	Logon Date Time	Agent State	Last State Change	Reason
Mark Chase	1999-02-04 09:03:36	TALKING	1999-02-04 09:13:54	0
John Curtis	1999-02-04 09:03:36	TALKING	1999-02-04 09:13:42	0
Ann Fennell	1999-02-04 09:03:36	TALKING	1999-02-04 09:13:52	0
Frank Foss	1999-02-04 09:03:36	TALKING	1999-02-04 09:14:00	0
John Rogers	1999-02-04 09:03:36	TALKING	1999-02-04 09:13:40	0
Harold Lofton	1999-02-04 09:03:36	TALKING	1999-02-04 09:13:48	0
Lawrence McNeil	1999-02-04 09:03:36	TALKING	1999-02-04 09:13:56	0
Patrick Morin	1999-02-04 09:03:36	TALKING	1999-02-04 09:13:50	0
Robert Harrison	1999-02-04 09:03:36	TALKING	1999-02-04 09:13:42	0
Robert Smith	1999-02-04 09:03:36	TALKING	1999-02-04 09:13:44	0

agtskg03_logout_status_by_skillgroup

Description

This template generates a historical grid report that details logon and logout status for the individual agents in a particular skill group.

Database Table

Agent_Logout

Data

Skill group. The name of the skill group to which these agents are associated.

Agent name. The first and last name of the agent.

Agent enterprise name. The last name and first initial of the agent and the peripheral with which the agent is associated.

Logon duration. The time that the agent spent logged on.

Logout date and time. The ICR central controller date and time that the agent logged out.

Reason. A code received from the peripheral that indicates the reason for the agent's last state change.

Example

Agent Logout Status By Skill Group 1999-02-04
 From: 1999-02-03 09:00:00 To: 1999-02-04 09:59:00
 Skill Group: Simulator_PG_1.TechExperts Page 101 of 203

Agent Name	Agent Enterprise Name	Logon Duration	Logout Date Time	Reason
Mary Benson	Simulator_PG_1.Benson_M	30470	1999-02-03 17:39:49	
Summary: 30470				
John Curtis	Simulator_PG_1.Curtis_J	30470	1999-02-03 17:39:49	
Summary: 30470				
John Rogers	Simulator_PG_1.John_C	30470	1999-02-03 17:39:49	
Summary: 30470				
Harold Lofton	Simulator_PG_1.Lofton_H	30470	1999-02-03 17:39:49	
Summary: 30470				

agtskg04_daily_agent_activity

Description

This template generates a historical grid report that shows agent call handling activity over a specified time period for one or more skill groups. To arrive at daily values, the ICR sums the Agent_Skill_Group_Half_Hour rows for each day.

Database Table

Agent_Skill_Group_Half_Hour

Data

Skill group. The name of the skill group with which these agents are associated.

Agent name. The first and last name of the agent.

Duration. The total time in seconds that agent was logged on during the interval.

Incoming calls total. The total number of inbound ACD calls handled by the agent during the interval. This value is incremented when the after-call work associated with the call is completed.

Incoming calls avg. length. The average length in seconds for incoming calls handled by the agent during the interval.

Incoming calls percent. The percentage of all calls handled by the agent for the period that were incoming calls.

Outgoing calls total. The total number of completed outbound ACD calls made by the agent during the interval. The value is incremented when the after-call work associated with the call is completed.

Outgoing calls average length. The average length in seconds for outgoing calls made by the agent for the interval.

Outgoing calls percent. The percentage of all calls handled by the agent for the period that were outgoing calls.

Internal calls total. The total number of internal calls initiated by the agent during the interval. The value is incremented when the after-call work associated with the call is completed.

Internal calls average length. The average length in seconds for completed internal calls made by the agent for the interval.

Internal calls percent. The percentage of all calls handled by the agent for the period that were internal calls.

Callback message total. The total number of callback messages that were processed by the agent during the interval.

Callback message average length. The average length in seconds for callback messages that were processed by the agent during the interval.

Callback message percent. The percentage of all calls handled by the agent for the period that were callback messages.

% Wrapup. The percentage of time that the agent spent in wrap-up on all calls counted as handled during the interval. An agent performing wrap-up is either in the Work Ready or Work Not Ready state. This value is measured against the total time the agent was logged on during the interval.

Example

The screenshot shows a report window titled 'Agent Call Detail Activity Report By Skill Group' for the date 1999-02-04. The report is for Skill Group 'Simulator_PG_1.TechExpert' and is Page 25 of 26. The data is presented in a table with the following structure:

Agent Name	Duration	Incoming Calls			Outgoing Calls			Internal Calls			Callback Message		% WrapUp
		Total	Avg. Length	%	Total	Avg. Length	%	Total	Avg. Length	%	Total	Avg. Length	
Nancy Arnold	29863	146	105.0	51.0	0	0.0	0	0.0	0	0.0	0	0.0	7.0
Mary Benson	29863	145	105.0	50.0	0	0.0	0	0.0	0	0.0	0	0.0	7.0
Mark Chase	29863	146	105.0	51.0	0	0.0	0	0.0	0	0.0	0	0.0	7.0
John Curtis	29863	145	105.0	50.0	0	0.0	0	0.0	0	0.0	0	0.0	7.0
Ann Fennell	29863	146	105.0	51.0	0	0.0	0	0.0	0	0.0	0	0.0	7.0
Frank Foss	29863	146	105.0	51.0	0	0.0	0	0.0	0	0.0	0	0.0	7.0
John Rogers	29863	145	105.0	50.0	0	0.0	0	0.0	0	0.0	0	0.0	7.0
Harold Lofton	29863	145	105.0	50.0	0	0.0	0	0.0	0	0.0	0	0.0	7.0
Lawrence McNeil	29863	146	105.0	51.0	0	0.0	0	0.0	0	0.0	0	0.0	7.0
Patrick Moyn	29863	146	105.0	51.0	0	0.0	0	0.0	0	0.0	0	0.0	7.0

agtskg05_agent_daily_perf

Description

This template generates a historical grid report that shows agent performance over a specified time period. To arrive at daily values, the ICR sums the Agent_Skill_Group_Half_Hour rows for each day.

Database Table

Agent_Skill_Group_Half_Hour

Data

Skill group. The name of the skill group with which these agents are associated.

Agent name. The first and last name of the agent.

Abandoned calls ring. The total number of ACD calls abandoned while ringing at the agent's position.

Abandoned calls hold. The total number of ACD calls abandoned while being held at the agent's position.

Abandoned calls average. The average ring time in seconds associated with ACD calls that were abandoned while ringing at the agent's position.

Abandoned calls percent. The percentage of time associated with ACD calls that were abandoned while ringing the agent's position. This value is measured against the total time the agent was logged on during the interval.

Hold calls in. The total number of completed inbound calls the agent placed on hold. The value is incremented when the after-call work associated with the call is completed.

Hold calls in average. The average on hold time in seconds associated with inbound calls the agent placed on hold.

Hold calls in percent. The percentage of hold time associated with inbound calls the agent placed on hold. This value is measured against the total time the agent was logged on during the interval.

Hold calls out. The total number of completed outbound calls the agent placed on hold at least once. The value is incremented when the after-call work associated with the call is completed.

Hold calls out average. The average on hold time in seconds associated with outbound calls the agent placed on hold.

Hold calls out percent. The percentage of hold time associated with outbound calls the agent placed on hold. This value is measured against the total time the agent was logged on during the interval.

Hold calls internal. The total number of completed internal calls the agent placed on hold for the interval. The value is incremented when the after-call work associated with the call is completed.

Hold calls internal average. The average on hold time associated with internal calls the agent placed on hold.

Hold calls internal percent. The percentage of hold time associated with internal calls the agent placed on hold. This value is measured against the total time the agent was logged on during the interval.

Assistance calls total. The total number of calls for which the agent received supervisor assistance during the interval. The value is incremented when the supervisor assistance call completes.

Assistance calls average. The average time in seconds that the agent received assistance for all supervisor-assisted calls during the interval.

Assistance calls percent. The percentage of time that the agent spent during the interval on supervisor-assisted calls. This value is measured against the total time the agent was logged on during the interval.

Conference calls in. The number of incoming calls on which the agent was in conference. Incoming calls include ACD and non-ACD calls. The value is incremented with the agent drops off the call and the call becomes a simple two-party call.

Conference calls average. The average time in seconds that the agent spent in conference with calls during the interval. This value includes hold time associated with the conference calls.

Conference calls percent. The percentage of time that the agent spent during the interval on conference calls. The percentage includes hold time associated with the conference calls. This value is measured against the total time the agent was logged on during the interval.

Conference calls out. The number conference calls the agent initiated. Initiated calls include ACD and non-ACD calls. The value is incremented with the agent drops off the call and the call becomes a simple two-party call.

Conference calls out average. The average time in seconds that the agent spent in conference on agent-initiated calls during the interval. This value includes hold time associated with the conference calls.

Conference calls out percent. The percentage of time that the agent spent during the half-hour interval on agent-initiated conference calls. This percentage includes hold time associated with the conference calls. This value is measured against the total time the agent was logged on during the interval.

Example

Agent Call Detail Performance Report By Skill Group
 From: 1999-02-03 00:00:00 To: 1999-02-03 23:59:00
 Skill Group: Simulator_PG_1_TechExpert Page 31 of 32

Agent Name	Abandon Calls				Hold Calls				Assistance Calls		Conference Calls				
	In	Avg	%	Out	In	Avg	%	Out	In	Avg	%	In	Avg	%	Out
May Benson	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mark Chase	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
John Curtis	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ann Fennell	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Frank Foss	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
John Rogers	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Harold Lofton	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lawrence McNeil	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Patrick Moran	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

apgate11_status_by_half_hour

Description

This template generates a historical, tabular report that shows the number of requests made through an application gateway to a host system for particular half-hour intervals. Data is also provided on rejected requests, maximum and average request delays, and any errors involved with application gateway requests to host systems.

Database Table

Application_Gateway_Half_Hour

Data

Requests. The number of query requests the *CallRouter* has sent to the host system during the half-hour interval.

Rejects. The number of query requests that were rejected by the host system during the half-hour interval.

Max Delay. The longest response time, in milliseconds, for any request to the host system during the half-hour interval.

Avg Delay. The average response time, in milliseconds, for all requests to the host system during the half-hour interval.

Unavailable. The number of requests attempted while no host system was available during the half-hour interval.

Errors. The number of errors that occurred for requests to the host system during the half-hour interval.

Timeouts. The number of requests to the host system that timed out during the half-hour interval.

Example

Application Gateway	Datetime	Requests	Rejects	Max Delay	Avg Delay	Unavailable	Errors	Timeouts
AspEvSim.Ap001	1/4/97	11	0	0		11	0	0
AspEvSim.Ap001	1/4/97	13	0	0		13	0	0
		24	0			24	0	0

caltyp01_status_grid

Description

This template generates a real-time grid that shows data on call types in the ICR system. Data shown includes the master script in effect for the call type and the number of calls routed for the call type.

Database Table

Call_Type_Real_Time

Data

Call type. The name of the call type. A *call type* is a category of incoming calls. Calls are categorized based on dialed number (DN), caller-entered digits (CED), and calling line ID (CLID).

Master script. A name that identifies the routing script in effect for this call type. The master script might have several versions. A new master script record is created whenever you save a script with a new name.

Version. The version of the script that is currently available for use.

Calls routed. The number of calls of this call type that have been routed (either during the current half-hour interval (Since Half) or since midnight (Today)).

Error count. The number of errors for calls of this type during the current half-hour interval (either during the current half-hour interval (Since Half) or since midnight (Today)).

Example

Call Type Status						
Call Type	Master Script	Version	Calls Routed		Error Count	
			Today	Since Half	Today	Since Half
HelpDesk	DEMOHELPEDESKDISTRIBUTE	23	34623	624	0	0
MidTier	DEMO MIDTIERNETACD	21	72548	1306	0	0
NatlAcctServ	DEMONTLACCTNETACD	1	53559	964	0	0
PremiumSales	DEMOPREMIUMSALESNETACD	1	43205	778	0	0
Proactive	DEMOPROACTIVENETACD	1	60258	1085	0	0
QuickResponse	DEMOQUICKRESPCED	3	44972	809	0	0
Total			309165	5666	0	0

caltyp02_count_graph

Description

This template generates a real-time, stacked bar graph that keeps a running total of call routing statistics for call types for the current day (since midnight).

Database Table

Call_Type_Real_Time

Data

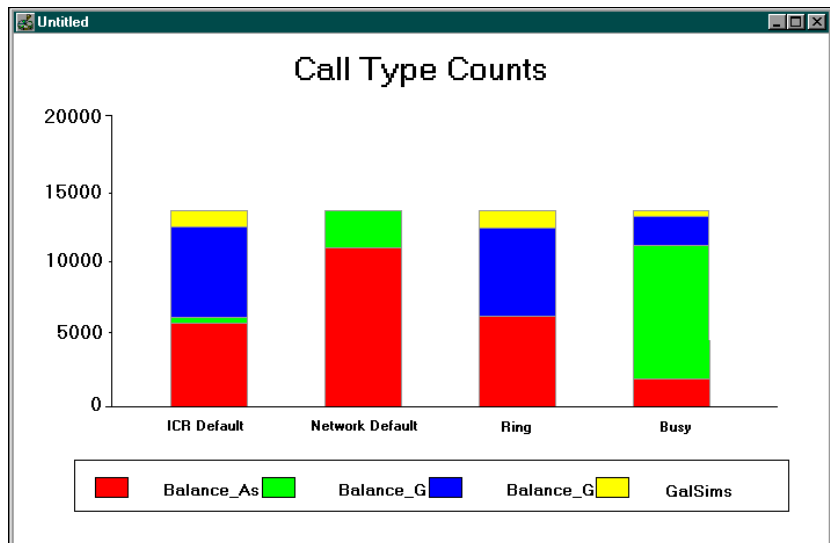
Call Types Default Routed (Today). The number of calls of this type for which the ICR used default routing. Measured since midnight.

Call Types Network Default Routed (Today). The number of calls of this type for which the IXC used network default routing. Measured since midnight.

Call Types Returning Busy (Today). The number of calls of this type that the ICR routed to the Busy target (since midnight).

Call Types Returning Ring (Today). The number of calls of this type that the ICR routed to the Ring target (since midnight).

Example



entskg01_status_#_graph

Description

This template generates a real-time, stacked bar graph that shows the number of active agents from selected enterprise skill groups who are currently in any of four agent states.

Database Table

Skill_Group_Real_Time

Data

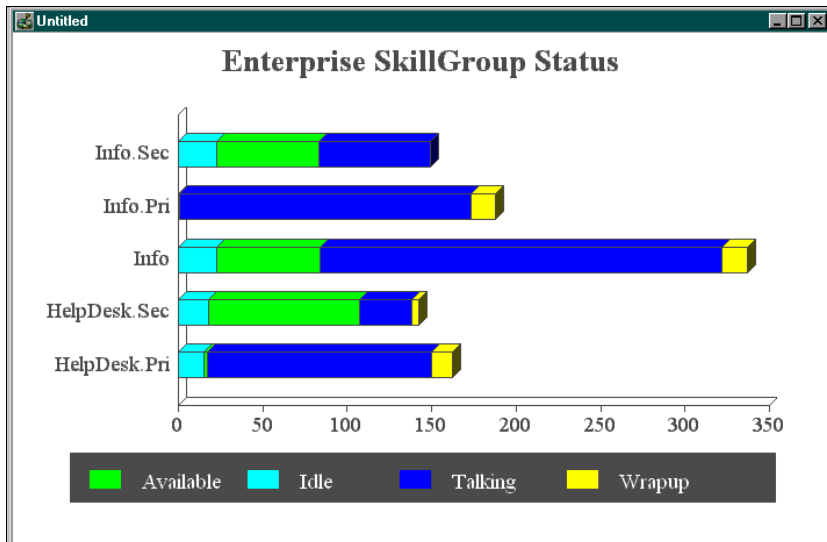
Agents available. The number of agents who are in the Available state (that is, not occupied with any call activity and ready to accept calls).

Agents idle. The number of agents who are logged on, not involved in a call or after-call work, and are not available to receive a call.

Agents talking. The number of agents who are involved in a call (inbound, outbound, or internal).

Agents in wrap-up. The number of agents who are involved in after-call work. After-call work includes activities such as completing necessary paperwork or consulting work.

Example



The total number of all agents in these four states is the number of agents Logged On.

entskg02_status_grid

Description

This template generates a real-time grid that shows the number of agents from selected enterprise skill groups who are signed on, how these agents break down numerically into nine states, and how they break down on a percentage basis into five states. A total row at the bottom of the grid totals or averages the data for all the enterprise skill groups listed.

Database Table

Skill_Group_Real_Time

Data

Agents signed on. The number of agents who are currently signed on to the enterprise skill group (that is, agents who are known to the system but may or may not be ready to accept calls).

Agents idle. The number of agents who are logged on, not involved in a call or after-call work, and are not available to receive a call.

Agents available. The number of agents who are in the Available state (that is, not occupied with any call activity and ready to accept calls).

Agents ready. The number of agents who are logged on and are either talking on a call or performing after-call work, but are presumed to be ready to accept calls when done.

Agents talking in. The number of agents talking on inbound calls.

Agents talking out. The number of agents talking on outbound calls.

Agents talking other. The number of agents who are talking on calls other than inbound and outbound calls (for example, internal calls).

Agents in wrap-up. The number of agents involved in after-call work. After-call work includes activities such as completing necessary paperwork or consulting work.

Calls on hold. Number of calls to the skill group that are currently on hold.

Agents in reserve. The number of agents currently in the reserve state. A reserved agent is awaiting an interflowed call and is unavailable to receive any incoming calls. This state applies to agents on Northern Telecom Meridian and Aspect CallCenter ACDs only.

Agents in busy other. The number of agents who are in the Busy Other state (that is, busy in skill groups other than the one presently being examined). An agent can be active in only one skill group at a time.

Therefore, while active in one skill group, the agent is considered by the other skill groups to be in the Busy Other state.

Percent agents idle. The percentage of all agents in the enterprise skill group who are in the Not Ready state.

Percent agents available. The percentage of all agents in the enterprise skill group who are in the Available state.

Percent agents talking. The percentage of all agents in the enterprise skill group who are talking on inbound, outbound, or internal calls.

Percent agents in wrap-up. The percentage of all agents in the enterprise skill group who are involved in after-call work.

Percent agents in busy other. The percentage of all agents in the enterprise skill group who are in the Busy Other state.

Example

Current Status of Enterprise Skill Groups																
Enterprise Skill Group	Signed On	Idle	Avail	Ready	Talking In	Talking Out	Talking Other	Wrapup	Hold	Reserve	Other	% Idle	% Avail	% Talking	% Wrapup	% Other
HelpDesk	304	33	90	271	165	0	0	16	0	0	0	10.9%	29.6%	54.3%	5.3%	0.0%
HelpDesk.Pri	162	15	1	147	134	0	0	12	0	0	0	9.3%	0.6%	82.7%	7.4%	0.0%
HelpDesk.Sec	142	18	89	124	31	0	0	4	0	0	0	12.7%	62.7%	21.8%	2.8%	0.0%
Info	337	23	60	314	241	0	0	13	0	0	0	6.8%	17.8%	71.5%	3.9%	0.0%
Info.Pri	188	0	1	188	179	0	0	8	0	0	0	0.0%	0.5%	95.2%	4.3%	0.0%
Info.Sec	149	23	59	126	62	0	0	5	0	0	0	15.4%	39.6%	41.6%	3.4%	0.0%
MassMarket	289	50	121	239	105	0	0	13	0	0	0	17.3%	41.9%	36.3%	4.5%	0.0%
Total	1571	162	421	1409	917	0	0	71	0	0	0	10.31%	26.80%	58.37%	4.52%	0.00%

entskg03_status_%_graph

Description

This template generates a real-time graph that shows the percentage of agents from selected enterprise skill groups who are in any of four call handling states.

Database Table

Skill_Group_Real_Time

Data

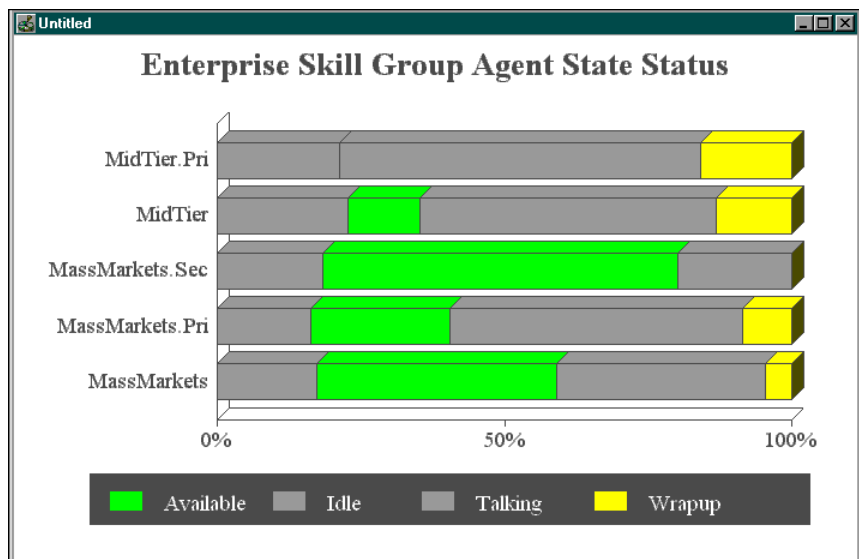
Agents available. The percentage of all agents in the enterprise skill group who are not occupied with any call activity and are ready to accept calls.

Agents idle. The percentage of all agents in the enterprise skill group who are idle (that is, logged on, not involved in a call or after-call work, and not available to receive a call). Idle is also referred to as Not Ready.

Agents talking. The percentage of all agents in the enterprise skill group who are involved in a call (inbound, outbound, or internal).

Agents in wrap-up. The percentage of all agents in the enterprise skill group who are involved in after-call work.

Example



entskg04_status_grid_to5

Description

This template generates a rolling five-minute grid that shows the full-time equivalent (FTE) values for agents in the enterprise skill group. FTE is the number of full-time agents that would be required during a period to perform the work done in that period. To calculate the FTE, divide the number of seconds of work performed by the number of seconds in the period. For example, if agents spent a total of 1200 seconds handling calls during a five-minute (300-second) period, the FTE for call handling would be as follows:

$$1200 \text{ person seconds} / 300 \text{ seconds} = 4 \text{ persons}$$

This template uses cumulative, or rolling, five-minute data derived from the real-time data to arrive at an FTE value. Data in the grid is continuously updated. This template also provides the percentage of agents who are currently in any of four call handling states. A total row totals or averages the data for all the enterprise skill groups listed.

Database Table

Skill_Group_Real_Time

Data

Full-time equivalent (FTE) logged on. The FTE value for the time agents are logged on to the enterprise skill group. (Logged on is not an agent state, but a necessary pre-condition for being in any state.)

FTE idle. The FTE value for the time agents are idle (Not Ready) in the enterprise skill group (that is, agents who are logged on, not involved in a call or after-call work, and are not available to receive a call).

FTE available. The FTE value for the time agents are in the Available state (that is, not occupied with any call activity and ready to accept calls).

FTE talking. The FTE value for the time agents are involved in a call (inbound, outbound, or internal).

FTE in wrap-up. The FTE value for the time agents are involved in after-call work.

FTE hold. The FTE value for the time agents spent on hold during the current five-minute interval.

FTE reserve. The FTE value for the time agents are in the Reserved state. The Reserved state is a state in which the agent is awaiting an interflowed call and is unavailable to receive any incoming calls. This state applies to agents on Northern Telecom Meridian and Aspect CallCenter ACDs only.

FTE in busy other. The FTE value for the time agents are in the Busy Other state (that is, busy in skill groups other than the one presently being examined). An agent can be active in only one skill group at a time. Therefore, while active in one skill group, the agent is considered by the other skill groups to be in the Busy Other state.

Percent agents idle. The percentage of time that all agents in the enterprise skill group were idle (that is, logged on, not involved in a call or after-call work, and not available to receive a call). Idle is also called Not Ready.

Percent agents available. The percentage of time that all agents in the enterprise skill group were not occupied with any call activity and were ready to accept calls.

Percent agents talking. The percentage of time that all agents in the enterprise skill group were involved in a call (inbound, outbound, or internal).

Percent agents in wrap-up. The percentage of time that all agents in the enterprise skill group were involved in after-call work.

Percent agents in busy other. The percentage of time that all agents in the enterprise skill group were in the Busy Other state.

Example

Rolling 5-minute Enterprise Skill Group Status													
Enterprise Skill Group	Fte LoggedIn	Fte Idle	Fte Avail	Fte Talking	Fte Wrapup	Fte Hold	Fte Reserve	Fte Other	% Idle	% Available	% Talking	% Wrapup	% Other
MidTier	267.00	60.99	35.29	136.47	34.26	0	0	0.00	22.8%	13.2%	51.1%	12.8%	0.0%
MidTier.Pri	145.00	30.99	1.75	89.61	22.65	0	0	0.00	21.4%	1.2%	61.8%	15.6%	0.0%
MidTier.Sec	122.00	30.00	33.54	46.86	11.61	0	0	0.00	24.6%	27.5%	38.4%	9.5%	0.0%
NatAcctServ	689.00	69.00	376.03	188.44	25.52	0	0	0.00	10.5%	57.1%	28.6%	3.9%	0.0%
NatAcctServ.Pri	327.00	23.00	135.03	143.44	25.52	0	0	0.00	7.0%	41.3%	43.9%	7.8%	0.0%
Total	1520.00	213.98	581.63	604.83	119.57	0	0	0.00	14.06%	38.27%	39.79%	7.87%	0.00%

entskg05_utilization_graph

Description

This template generates a real-time bar graph that shows a percentage utilization of agents in the selected enterprise skill groups. Percentage utilization is the ratio between the time agents spend handling calls and the time agents were ready to accept calls.

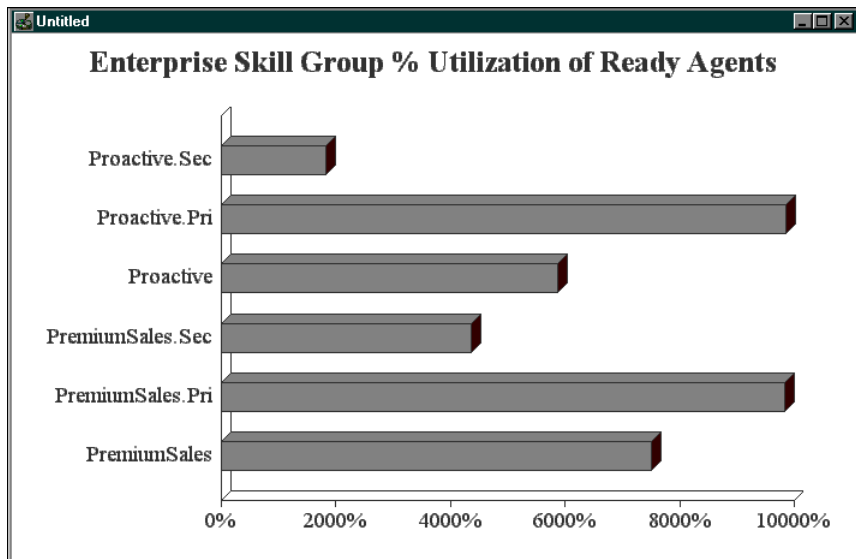
Database Table

Skill_Group_Real_Time

Data

Percent utilization. The percent utilization is computed by dividing the total time agents spent handling calls by the total time agents were Ready. (The Ready time is calculated by subtracting the Not Ready time from the total time that agents were Logged On.)

Example



entskg06_halfhour_aht_grid

Description

This template generates a historical grid that shows call count and handle time data per half-hour for selected enterprise skill groups. This template also includes a summary row for each day of data, which provides daily averages and totals; and a summary row for each skill group, which provides averages and totals for individual skill groups.

Database Table

Skill_Group_Half_Hour

Data

Calls handled. The total number of calls handled to completion for the enterprise skill group.

Agent calls out. The total number of outbound calls made by agents in the enterprise skill group.

Average handle time. The average handle time for calls handled by agents in the enterprise skill group. Handle time includes time that agents spend in the Talking In, Work Ready, and Work Not Ready states.

Average talk time. The average talk time for calls to the enterprise skill group. Talk time includes time spent in the Talking In, Talking Out, and Talking Other states.

Average wrap-up time. The average time that agents in the enterprise skill group spent in after-call work.

FTE number of agents. The FTE number of logged on agents for the enterprise skill group. FTE (full-time equivalent) is the number of full-time agents that would be required during a period to perform the work done in that period. To calculate the FTE, divide the number of seconds of work performed by the number of seconds in the period. In this case, the work performed is the time agents spent logged on.

See also: For information on how FTE values are calculated, see “entskg04_status_grid_to5,” earlier in this chapter.

Example

Enterprise SkillGroup Performance (By Half Hour)							
Enterprise SkillGroup		Info:Sec					
Date	Time	Calls Handled	Calls Out	Average Handle Time	Average Talk Time	Average Wrapup Time	FTE # Agents
02/04/97	02:30	96	0	445.7	415.2	30.5	149
	03:00	95	0	445.8	415.4	30.3	149
	03:30	95	0	445.7	415.3	30.3	149
	04:00	96	0	445.7	415.4	30.3	149
	04:30	97	0	445.7	415.4	30.4	149
	05:00	94	0	445.7	415.3	30.4	149
	05:30	95	0	445.7	415.4	30.3	149
	06:00	96	0	445.7	415.4	30.3	149
	06:30	96	0	445.8	415.3	30.4	149
	07:00	96	0	445.8	415.4	30.4	149
	07:30	95	0	445.7	415.3	30.4	149
	08:00	96	0	445.7	415.3	30.4	149
	08:30	95	0	445.7	415.4	30.3	149
	09:00	97	0	445.8	415.3	30.3	149
	09:30	96	0	445.8	415.4	30.2	149
	10:00	96	0	445.7	415.4	30.3	149
	10:30	97	0	445.9	415.4	30.4	149
Daily Summary		2109	0	445.72	415.36	30.36	
Skill Group Summary		2109	0	445.72	415.36	30.36	

entskg07_daily_aht_grid

Description

This template generates a historical grid that displays call count and handle time data on a per-day basis for selected enterprise skill groups. This template also includes a summary row that totals or averages the data for all skill groups listed.

Database Table

Skill_Group_Half_Hour

Data

Calls handled. The total number of calls handled to completion for all agents in the enterprise skill group.

Agent calls out. The total number of outbound calls made by agents in the enterprise skill group.

Average handle time. The average handle time for calls handled by agents in the enterprise skill group. Handle time includes time spent in the Talking In, Work Ready, and Work Not Ready states.

Average talk time. The average talk time for calls to the enterprise skill group. Talk time includes time spent in any of the Talking states.

Average wrap-up time. The average time agents in the enterprise skill group spent in after-call work. Agents performing after-call work are in either the Work Ready or Work Not Ready state.

FTE number of agents. The FTE value for the number of logged on agents for the enterprise skill group. FTE (full-time equivalent) is the number of full-time agents that would be required during a period to perform the work done in that period. To calculate the FTE, divide the number of seconds of work performed by the number of seconds in the period. In this case, the work performed is the time agents spent logged on.

See also: For information on how FTE values are calculated, see “entskg04_status_grid_to5,” earlier in this chapter.

Example

Enterprise SkillGroup Performance (By Day)							
From		02/01/97 00:00	To		03/01/97 23:59		
Enterprise SkillGroup	Date	Calls Handled	Calls Out	Average Handle Time	Average Talk Time	Average Wrapup Time	# Agents
Proactive	02/01/97	79756	0	276.0	246.0	30.0	430
Proactive	03/01/97	37192	0	240.0	210.0	30.0	201
Skill Group Summary		115948	0	265.25	235.02	30.23	
Proactive.Pri	02/01/97	66246	0	240.0	209.0	30.0	221
Proactive.Pri	03/01/97	31469	0	240.0	210.0	30.0	104
Skill Group Summary		97715	0	240.28	210.03	30.25	
Proactive.Sec	02/01/97	12510	0	471.0	441.0	29.0	209
Proactive.Sec	03/01/97	5723	0	240.0	210.0	30.0	98
Skill Group Summary		18233	0	399.07	368.95	30.12	
QuickResponse	02/01/97	58640	0	220.0	189.0	30.0	261
QuickResponse	03/01/97	27757	0	220.0	190.0	30.0	122
Skill Group Summary		86397	0	220.24	189.93	30.30	
QuickResponse.Pri	02/01/97	41024	0	220.0	189.0	30.0	137
QuickResponse.Pri	03/01/97	19467	0	220.0	190.0	30.0	64
Skill Group Summary		60491	0	220.36	190.02	30.34	
QuickResponse.Sec	02/01/97	17616	0	219.0	189.0	30.0	124
QuickResponse.Sec	03/01/97	8290	0	220.0	190.0	30.0	58
Skill Group Summary		25906	0	219.94	189.73	30.21	

entskg08_halfhour_perform_grid

Description

This template generates a historical grid that shows half-hour, full-time equivalent (FTE) values for agents in selected enterprise skill groups. FTE is the number of full-time agents that would be required during a period to perform the work done in that period. FTE values are derived by taking the time that agents are in a particular state during an interval and dividing that time by the number of seconds in the interval.

See also: For more information on how FTE values are calculated, see “entskg04_status_grid_to5” earlier in this chapter.

This template has a date summary row, which totals the data for the day; and a skill group summary row, which totals the data for individual skill groups in the grid.

Database Table

Skill_Group_Half_Hour

Data

Full-time equivalent (FTE) sign-on. The FTE number of agents logged on to the enterprise skill group.

FTE idle. The FTE number of idle agents (that is, agents who were logged on, not involved in a call or after-call work, and were not available to receive a call). Idle is also referred to as Not Ready.

FTE available. The FTE number of agents in the Available state (that is, not occupied with any call activity and ready to accept calls).

FTE talking. The FTE number of agents involved in calls (inbound, outbound, or internal).

FTE wrap-up. The FTE number of agents involved in after-call work.

FTE busy other. The FTE number of agents in the Busy Other state (that is, busy in skill groups other than the one presently being examined). An agent can be active in only one skill group at a time. Therefore, while active in one skill group, the agent is considered by the other skill groups to be in the Busy Other state.

Example

FTE for Enterprise Skill Groups (By Half-Hour)								
		From:	03/01/97 00:00		To:	03/01/97 23:59		
Enterprise Skill Group	Date	Time	FTE Signon	FTE Idle	FTE Avail	FTE Talking	FTE Wrapup	FTE Other
MidTier.Sec	03/01/97	06:00	122.0	30.0	34.0	46.3	11.7	0.0
		06:30	122.0	30.0	33.9	46.4	11.7	0.0
		07:00	122.0	30.0	33.9	46.5	11.6	0.0
		07:30	122.0	30.0	34.1	46.2	11.7	0.0
		08:00	122.0	30.0	33.8	46.5	11.7	0.0
		08:30	122.0	30.0	33.8	46.5	11.7	0.0
		09:00	122.0	30.0	33.8	46.4	11.8	0.0
		09:30	122.0	30.0	33.9	46.5	11.7	0.0
		10:00	122.0	30.0	34.0	46.3	11.7	0.0
		10:30	122.0	30.0	34.0	46.3	11.7	0.0
		Half Hour Summary:			2684.00	749.20	712.02	976.77
Skill Group Summary:			2684.00	749.20	712.02	976.77	246.00	0.00

entskg09_normalized_agt_state

Description

This template generates a stacked bar graph that shows the percentage of time that all agents in the enterprise skill group were in specific states during an interval. The normalized value is derived from the total time that all agents were logged on during the interval.

Database Table

Skill_Group_Half_Hour

Data

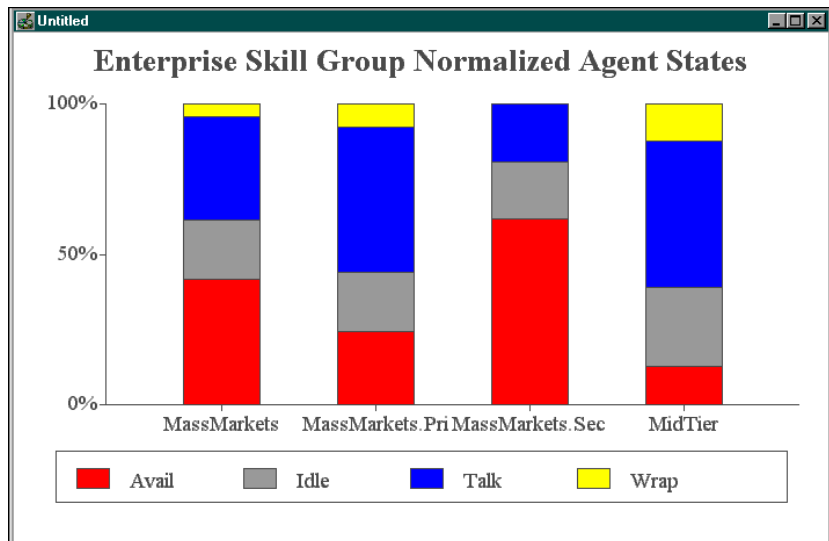
% Available. The percentage of time that all agents were in the Available state during the interval.

% Idle. The percentage of time that all agents were in the Idle state (that is, Not Ready), during the interval.

% Talking. The percentage of time that all agents were in the Talking In, Talking Out, or Talking Other states during the interval.

% Wrap-up. The percentage of time that all agents were in call wrap-up (that is, performing after-call work) during the interval.

Example



entsvc01_queue_delay_status

Description

This template generates a real-time bar graph that displays data on the current status of call queues for selected enterprise services.

Database Table

Service_Real_Time

Data

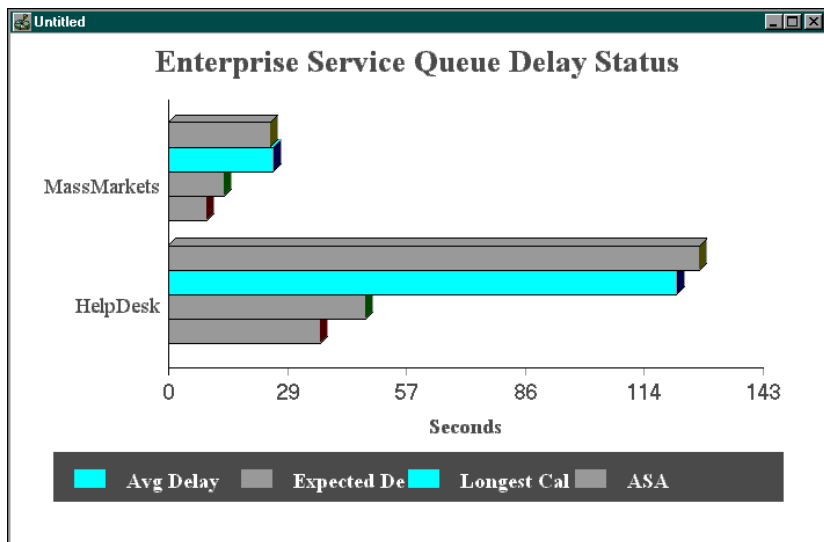
Average delay in queue. The average delay for calls currently in queue for the enterprise service.

Expected delay in queue. The predicted delay for any new call added to the queue for the enterprise service. This is valid only if no agents are available for the service.

Longest call in queue. The time that the longest call in queue for the enterprise service has spent in the queue.

Average speed of answer (ASA). The average time that all calls offered to the enterprise service during the current five-minute interval waited before being answered.

Example



entsvc02_calls_status

Description

This template generates a real-time, stacked bar graph that displays the number of calls on which agents are talking and the number of calls in queue for selected enterprise services.

Database Table

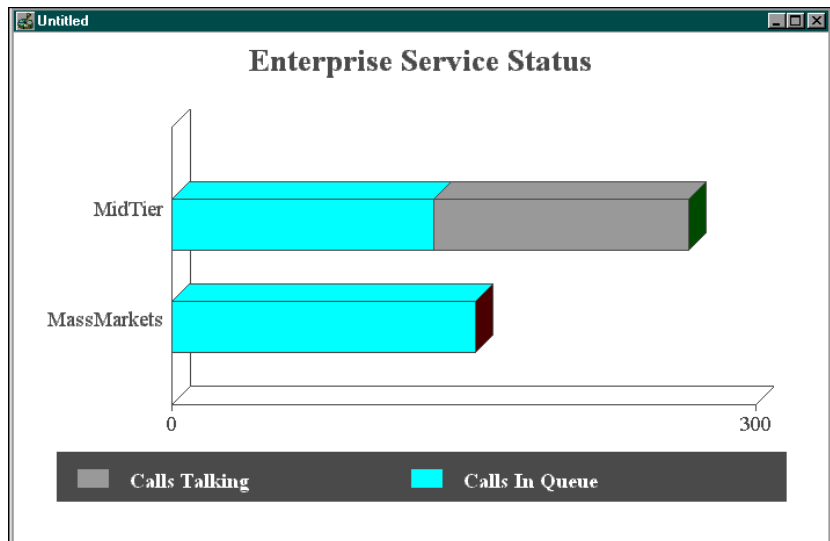
Service_Real_Time

Data

Calls talking. The number of calls to the enterprise service on which agents are currently talking.

Calls in queue. The number of calls to the enterprise service that are in queue at each peripheral now.

Example



entsvc03_effect_of_aban_on_servicelevel

Description

This template generates a real-time grid that shows the effect of abandoned calls on the service levels of selected enterprise services. This grid also provides a summary row that totals or averages the data for all peripheral services listed.

Database Table

Service_Real_Time

Data

Calls offered. The total number of incoming calls and internal calls sent to the enterprise service. Calls are counted as offered as soon as they are sent to the enterprise service.

Calls handled. The number of calls answered and finished for the enterprise service.

Calls abandoned. The number of calls in which the caller hung up before being connected with an agent.

Calls abandoned within service level. The number of calls to the enterprise service that were abandoned within the ICR service level threshold.

Service level without abandoned calls. The ICR service level for the enterprise service without including abandoned calls in the calculation.

See also: For more information on service level calculations, see Chapter 7, “Available Data.”

Service level with abandoned calls. The ICR service level for the enterprise service including abandoned calls in the calculation.

Example

Enterprise Service	Calls Offered	Calls Handled	Calls Abandoned	Aband within SVL	Service Level	
					Without Abandoned	With Abandoned
HelpDesk	136	136	3	3	96.3%	96.3%
Info	128	128	2	2	94.5%	94.5%
MassMarkets	113	113	1	1	96.5%	96.5%
MidTier	354	354	5	5	35.0%	35.0%
NatAcctServ	228	228	2	2	95.6%	95.6%
NewMarkets	173	173	7	7	94.8%	94.8%
PremiumSales	187	187	8	8	94.7%	94.7%
Proactive	265	265	6	6	92.1%	92.1%
QuickResponse	310	310	1	1	100.0%	100.0%
Registration	136	136	3	3	93.4%	93.4%
Service	131	131	3	3	95.4%	95.4%
Summary	2161	2161	41	41	85.61%	85.61%

entsvc04_calls_trend_analysis

Description

This template generates a real-time grid that shows call counts and service levels for enterprise services since the end of the last five-minute interval, for the current half-hour interval, and since midnight. This grid also provides a summary row that totals the call count data for all services in the grid.

Database Table

Service_Real_Time

Data

Calls offered. The total number of incoming calls and internal calls sent to the enterprise service during the interval. Calls are counted as offered as soon as they are sent to the enterprise service.

Calls answered. The total number of calls to the enterprise service that were answered during the interval. A call is counted as answered when it reaches an agent.

Calls abandoned. The total number of calls during the interval in which the caller hung up before being connected with an agent.

Service level. The percentage of incoming calls to the service during the interval that were answered within a specified threshold.

Example

Enterprise Service	Over Last 5 minutes				For Current Half Hour				For the Day			
	Offer	Answer	Aband	ServLev	Offer	Answer	Aband	ServLev	Offer	Answer	Aband	ServLev
MidTier	218	214	0	99.1%	218	214	0	95.4%	11610	11331	4	47.0%
NewMarkets	119	119	0	100.0%	119	119	0	96.6%	6259	6493	0	98.5%
Registration	94	94	0	100.0%	94	94	0	96.8%	4753	5172	0	94.0%
Service	91	91	0	100.0%	91	91	0	96.7%	4618	4995	0	98.5%
Summary	522	518	0		522	518	0		27240	28591	4	

entsvc05_calls_offered_half_pie

Description

This template generates a real-time pie chart that shows the distribution of calls offered to selected enterprise services for the current half-hour interval. The Calls Offered value (for example 18.01%) is a percentage of the total calls offered to the enterprise services listed in the chart legend.

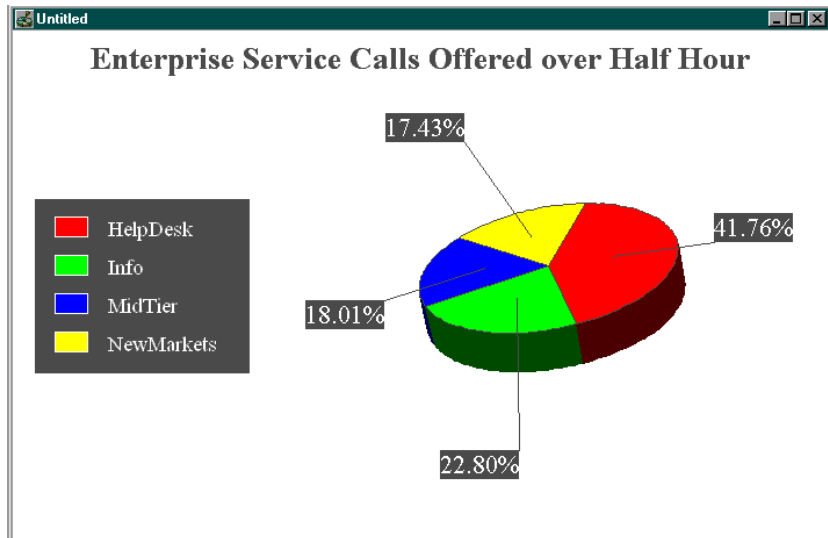
Database Table

Service_Real_Time

Data

Calls offered. The percentage of the total of incoming and internal calls sent to the enterprise services for the current half-hour interval. Calls are counted as offered as soon as they are sent to the enterprise service.

Example



entsvc06_serv_level_monitor_graph

Description

This template generates a real-time bar graph that shows service levels for selected enterprise services since the end of the last five-minute interval, for the current half-hour interval, and since midnight.

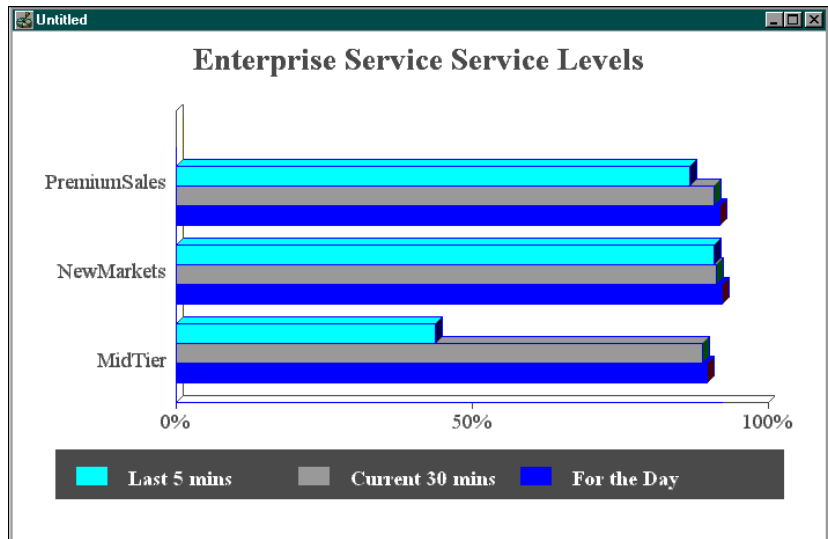
Database Table

Service_Real_Time

Data

Service level. The percentage of incoming calls to the enterprise service during the interval that were answered within a specified threshold.

Example



entsvc07_now_to5_grid

Description

This template generates a grid that provides call counts, queue status, and service level data in real-time and for the last five minutes for selected enterprise services. A summary row totals the values in each column for all the enterprise services listed.

Database Table

Service_Real_Time

Data

Calls talking. The number of calls on which agents for the enterprise service are currently talking.

Calls in queue. The number of calls to the enterprise service that are in queue at each peripheral now.

Average delay in queue. The average delay for calls currently in queue for the enterprise service.

Longest call in queue. The time that the longest call in queue for the enterprise service has spent in the queue.

Calls offered. The total number of incoming calls and internal calls sent to the enterprise service since the end of the last five-minute interval. Calls are counted as offered as soon as they are sent to the enterprise service.

Calls handled. The number of calls answered and finished for the enterprise service since the end of the last five-minute interval.

Calls abandoned. The number of calls in which the caller hung up before being connected with an agent. Measured since the end of the last five-minute interval.

Average speed of answer (ASA). The average time that all calls offered to the enterprise service waited before being answered. Measured since the end of the last five-minute interval.

Average handle time (AHT). The average handle time for calls handled by agents in the enterprise service since the end of the last five-minute interval. Handle time includes time that agents spend in the Talking In, Work Ready, and Work Not Ready states.

Average talk time. The average time agents for the enterprise service spent talking on calls handled by the enterprise service since the end of the last five-minute interval. Talk time includes time spent in the Talking In, Talking Out, and Talking Other states.

Service level. The percentage of incoming calls to the enterprise service that were answered within a specified threshold. (Shown since the end of the last five-minute interval, for the current half-hour interval, and since midnight.)

Example

Enterprise Service Calls, Averages and Service Levels															
Enterprise Service	Status Now				Status over last 5 minutes					Average			Service Level		
	Calls Talking	Calls Queued	Avg Delay	Longest in Queue	Offered	Handled	Aband	ASA	AHT	Talk	5 min	30 min	today		
	HelpDesk	157	4	12	24	145	131	100%	0	0%	3.2	348.9	320.0	99%	98%
Info	195	0		0	199	139	100%	0	0%	0.0	445.0	414.8	100%	100%	100%
MassMarkets	77	0		0	124	123	100%	0	0%	0.0	215.2	184.8	100%	100%	100%
MidTier	137	133	60	133	336	334	100%	1	0%	118.4	148.7	120.1	0%	0%	0%
NatlAcctServ	142	1	1	1	248	250	100%	0	0%	0.5	199.7	169.9	100%	100%	100%
NewMarkets	98	0		0	183	183	100%	0	0%	0.0	190.1	159.9	100%	100%	100%
PremiumSales	121	0		0	199	199	100%	0	0%	0.2	210.0	179.8	100%	100%	100%
Proactive	197	1	1	1	279	280	100%	0	0%	0.5	239.5	210.1	100%	100%	100%
Summary	1124	139	57.4	133	1653	1639	100%	1	0%	24.4	230.2	200.6	80%	80%	79%

entsvc08_gate_realtime_status_grid

Description

This template generates a grid report that provides real-time, half-hour, and daily status information for an enterprise service. In this report, an enterprise service is considered to be a collection of gates. A *gate* is the Rockwell Galaxy term for a peripheral service.

Database Table

Service_Real_Time

Data

Calls Offered – Real-Time, Half-Hour, Today (Nco). The number of incoming calls or internal calls sent to a specific enterprise service (collection of gates). In real-time data, a call is counted as offered as soon as it is sent to a gate.

Calls in Queue (Que). The number of calls to the enterprise service that are in queue now.

Calls Held (Hld). The number of calls to the enterprise service that are currently queued for longer than the service level threshold.

Primary Position Manned (Ppm). The number of agents for the enterprise service who are logged on to their primary assignment gate (also referred to as the agent's primary position).

Available Agents (Aav). The number of agents for the enterprise service who are ready to accept calls and are not currently involved in call work.

Incoming Calls (In). The number of agents who are talking on incoming calls.

Outgoing Calls (Out). The number of agents who are talking on outgoing calls.

After-Call Work (Cw). The number of agents who are involved in after-call work. After-call work includes post-call activities such as completing paperwork or consulting with associates. Agents performing after-call work are either in the Work Ready or Work Not Ready state.

Other Time (Othr). The sum of the time that agents spend in the Not Ready and Busy Other states.

Average Speed of Answer (Asa). The average time that all calls offered to the enterprise service during the current five-minute interval waited before being answered.

Calls Handled – Half-Hour and Today (Nch). The total number of calls handled to completion by an enterprise service’s agents.

Calls Abandoned – Half-Hour and Today (Nca). The number of calls in which the caller hung up before being connected with an agent.

% Abandoned – Half-Hour and Today (%Abn). The percentage of calls in which the caller hung up before being connected with an agent.

Cumulative Service Level – Half-Hour and Today (Csl). The percentage of incoming calls to the enterprise service during the interval that were answered within a specified threshold.

% ICR Routed Calls – Half-Hour and Today (%ICR). The number or percentage of calls that were routed by the GEOTEL Intelligent CallRouter. The ICR tracks the number of ICR-routed calls in the CallsRoutedHalf fields of the central and local databases.

Example

Enterprise Service	Now			Agents					5 Min	Current Half				Since Midnight								
	Nco	Que	Hld	Ppm	Aav	In	Out	Cw		Othr	Asa	Nco	Nch	Nca	%Abn	Csl	%ICR	Nco	Nch	Nca	%Abn	Csl
HCServices	0	0	0	22	22	0	0	0	0	0	0	0	0	0	0	0	126	126	0	0	100	0
BOSTON_Spanish	0	0	0	48	20	0	0	0	28	0	0	0	0	0	0	0	563	563	0	0	100	0
HelpDesk1	0	0	0	12	12	0	0	0	0	0	0	0	0	0	0	0	467	467	0	0	100	0

entsvc09_svc_array_now_to5_grid

Description

This template generates a grid that provides call counts, queue status, and service level data in real-time and for the last five minutes for selected service arrays. A summary row totals the values in each column for all the service arrays listed.

Database Table

Service_Real_Time

Data

Calls talking. The number of calls on which resources for the service array are currently talking.

Calls in queue. The number of calls to the service array that are in queue at each peripheral now.

Average delay in queue. The average delay for calls currently in queue for the service array.

Longest call in queue. The time that the longest call in queue for the service array has spent in the queue.

Calls offered. The total number of incoming calls and internal calls sent to the service array since the end of the last five-minute interval. Calls are counted as offered as soon as they are sent to the service array.

Calls handled. The number of calls answered and finished for the service array since the end of the last five-minute interval.

Calls abandoned. The number of calls in which the caller hung up before being connected. Measured since the end of the last five-minute interval.

Average speed of answer (ASA). The average time that all calls offered to the service array waited before being answered. Measured since the end of the last five-minute interval.

Average handle time (AHT). The average handle time for calls handled by resources in the service array since the end of the last five-minute interval. Handle time includes time that resources spend in the Talking In, Work Ready, and Work Not Ready states.

Average talk time. The average time resources for the service array spent talking on calls handled by the service array since the end of the last five-minute interval. Talk time includes time spent in the Talking In, Talking Out, and Talking Other states.

Service level. The percentage of incoming calls to the service array that were answered within a specified threshold. (Shown since the end of the last five-minute interval, for the current half-hour interval, and since midnight.)

Example

Service Array Calls, Averages and Service Levels															
Service Array	Status Now				Status over last 5 minutes					Service Level					
	Calls Talking	Calls Queued	Avg Delay	Longest in Queue	Offered	Handled	Aband	ASA	Average AHT	Talk	5 min	30 min	today		
Boston_VRU Proactive	40	0		232	40	45	100%	0	0%	0.0	240.9	210.0	100%	100%	100%
Boston_VRU Registration	23	0		26	34	44	100%	0	0%	0.0	220.7	189.9	100%	100%	100%
Boston_VRU Sales	42	0		52	39	39	100%	0	0%	0.0	425.3	394.6	100%	100%	100%
Boston_VRU Service	41	0		65	41	56	100%	0	0%	0.0	395.4	364.8	100%	100%	100%
Boston_VRU Support	0	0		92	0	0		0							
Summary	193	0		527	209	243	100%	0	0%	0.0	292.2	261.6	100%	100%	100%

entsvc11_calls_analysis_daywise

Description

This template generates a historical grid that provides daily totals on calls and service levels for the selected enterprise services. This grid also provides a service summary row that averages and totals the data for the individual enterprise services in the grid.

Database Table

Service_Half_Hour

Data

Service level. The percentage of incoming calls to the enterprise service that were answered within a specified threshold (for the day).

Average speed of answer (ASA). The average time that all calls offered to the enterprise service waited before being answered (for the day).

Average handle time (AHT). The average handle time for calls handled by resources in the enterprise service for the day. Handle time includes time that resources spend in the Talking In, Work Ready, and Work Not Ready states.

Average delay in queue. The average delay for all calls that were in queue for the enterprise service for the day.

Calls offered. The total number of incoming calls and internal calls sent to the enterprise service for the day. Calls are counted as offered as soon as they are sent to the enterprise service.

Calls handled. The number of calls answered and finished for the enterprise service for the day. (Also provided as a percentage of the total calls offered to the enterprise service during the half-hour interval.)

Calls abandoned. The number of calls for the day in which the caller hung up before being connected with an agent. (Also provided as a percentage of the total calls offered to the enterprise service during the half-hour interval.)

Example

Enterprise Service		Date	Service Level	ASA	AHT	Delay	Calls			
Offer	Handle	Aband								
HelpDesk	16 Jan 97	100.0%	0	333		44972	44974	100%	0	0%
HelpDesk	17 Jan 97	100.0%	0	334		22906	22907	100%	0	0%
Service Summary			100.00%	0	333	67878	67881		0	
Info	16 Jan 97	99.3%	1	444	137	39294	39295	100%	0	0%
Info	17 Jan 97	100.0%	0	445		20006	20005	100%	0	0%
Service Summary			99.51%	1	444	137	59300	59300		0

entsvc12_calls_analysis_half_hour

Description

This template generates a historical grid that provides half-hour call counts, time in seconds for ASA, AHT, and average delay in queue, and service levels for selected enterprise services. This grid also provides a service summary row that averages or totals the data for the individual enterprise services listed.

Database Table

Service_Half_Hour

Data

Service level. The percentage of incoming calls to the enterprise service that were answered within a specified threshold during a half-hour interval.

Average speed of answer (ASA). The average time that all calls offered to the enterprise service waited before being answered during a half-hour interval.

Average handle time (AHT). The average handle time for calls handled by agents in the enterprise service for a half-hour interval. Handle time includes time that agents spend in the Talking In, Work Ready, and Work Not Ready states.

Average delay in queue. The average delay for all calls that were in queue for the enterprise service for the half-hour interval.

Calls offered. The total number of incoming calls and internal calls sent to the enterprise service for the half-hour interval. Calls are counted as offered as soon as they are sent to the enterprise service.

Calls handled. The number of calls answered and finished for the enterprise service during the half-hour interval. (Also provided as a percentage of the total calls offered to the enterprise service during the half-hour interval.)

Calls abandoned. The number of calls during the half-hour interval in which the caller hung up before being connected with an agent. (Also provided as a percentage of the total calls offered to the enterprise service during the half-hour interval.)

Example

Calls Analysis of Enterprise Services (By Half Hour)											
		From 17 Jan 97 08:00		To 17 Jan 97 12:00							
Enterprise Service	Date	Time	Service Level	ASA	AHT	Delay	Calls			Aband	
							Offer	Handle			
HelpDesk	17 Jan 97	08:00	100.0%	0	334		973	971	100%	0	0%
HelpDesk	17 Jan 97	08:30	100.0%	0	334		970	973	100%	0	0%
HelpDesk	17 Jan 97	09:00	100.0%	0	334		973	971	100%	0	0%
HelpDesk	17 Jan 97	09:30	100.0%	0	334		970	971	100%	0	0%
HelpDesk	17 Jan 97	10:00	100.0%	0	334		973	971	100%	0	0%
HelpDesk	17 Jan 97	10:30	100.0%	0	334		969	971	100%	0	0%
HelpDesk	17 Jan 97	11:00	100.0%	0	334		973	971	100%	0	0%
HelpDesk	17 Jan 97	11:30	100.0%	0	334		563	565	100%	0	0%
Service Summary			100.00%	0	334		7364	7364		0	

entsvc13_calls_offered_daywise_graph

Description

This template generates a historical, overlapped bar graph that shows the number of calls offered per day for selected enterprise services.

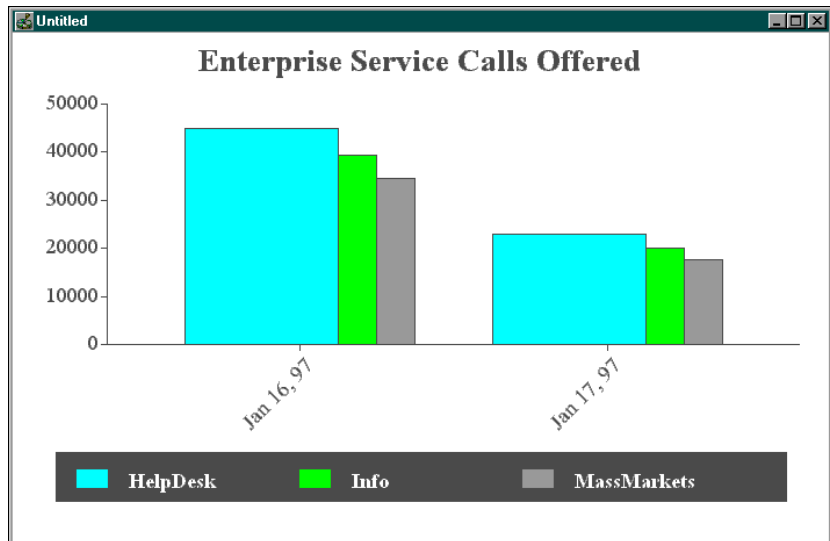
Database Table

Service_Half_Hour

Data

Calls offered. The total number of incoming calls and internal calls sent to the enterprise service for the day. Calls are counted as offered as soon as they are sent to the enterprise service.

Example



entsvc14_calls_handled_daywise_graph

Description

This template generates a historical, overlapped bar graph that shows the number of calls handled per day for selected enterprise services.

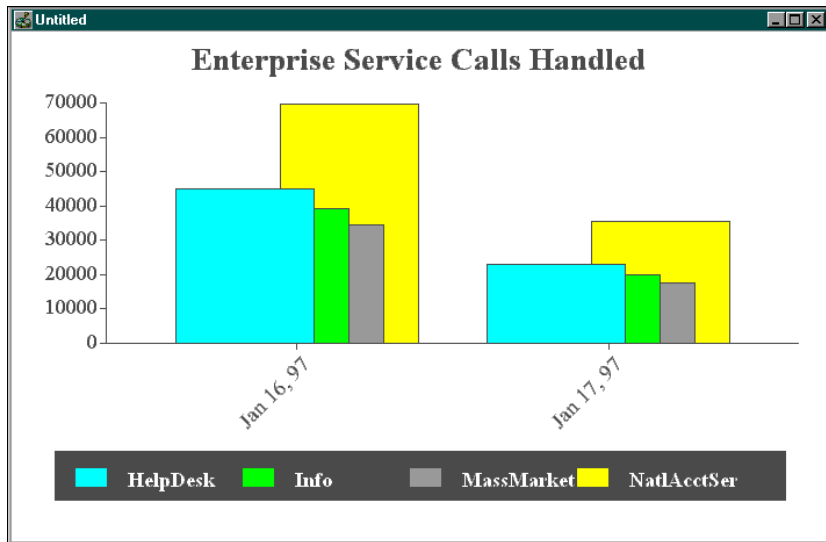
Database Table

Service_Half_Hour

Data

Calls handled. The total number of calls handled to completion for all agents in the enterprise service for the day.

Example



entsvc15_calls_abandoned_daywise_graph

Description

This template generates a historical, overlapped bar graph that shows the number of calls abandoned per day for selected enterprise services.

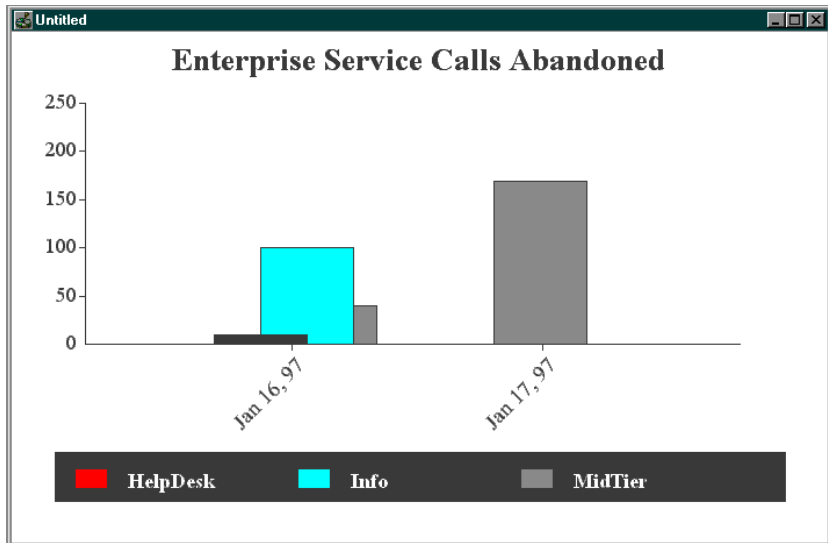
Database Table

Service_Half_Hour

Data

Calls abandoned. The number of calls for the day in which callers hung up before being connected with an agent.

Example



entsvc16_calls_history_daywise_graph

Description

This template generates a historical line graph that shows the daily history of calls for a **single** selected enterprise service. This template is meant to be used with a single enterprise service only.

Database Table

Service_Half_Hour

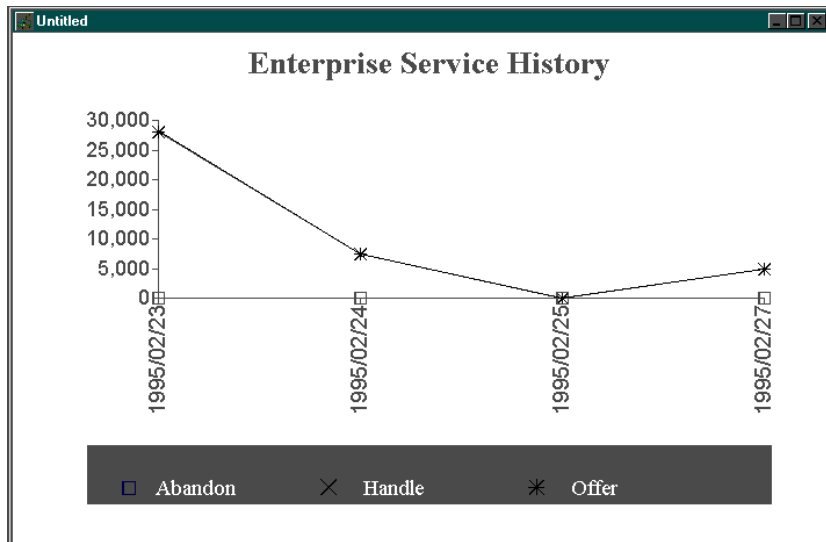
Data

Calls abandoned. The number of calls for the day in which the caller hung up before being connected with an agent.

Calls handled. The number of calls for the day that were answered and finished for the enterprise service.

Calls offered. The total number of incoming calls and internal calls sent to the enterprise service for the day. Calls are counted as offered as soon as they are sent to the enterprise service.

Example



entsvc17_calls_offered_half_hour

Description

This template generates a historical, overlapped bar graph that shows the half-hour distribution of calls offered for selected enterprise services.

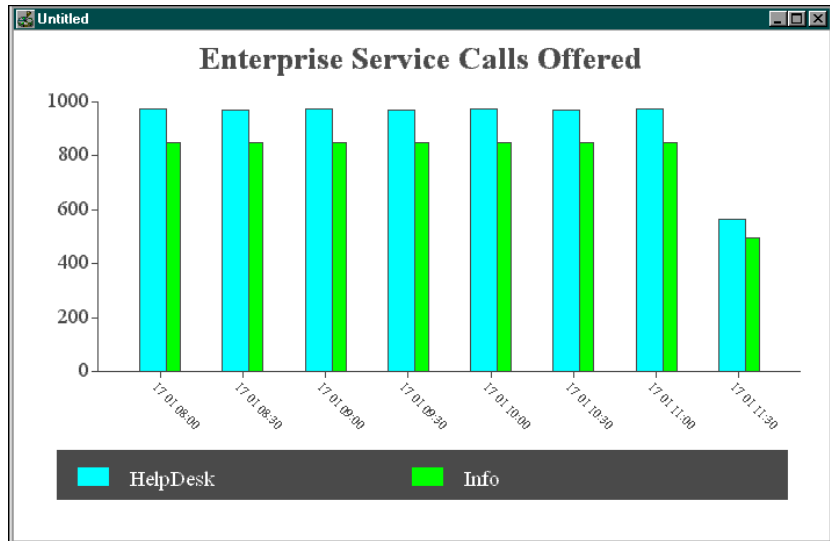
Database Table

Service_Half_Hour

Data

Calls offered. The total number of incoming calls and internal calls sent to the enterprise service for each half-hour interval. Calls are counted as offered as soon as they are sent to the enterprise service.

Example



entsvc18_gate_half_hourly_status_grid

Description

This template generates a grid report that provides half-hour status information for an enterprise service. In this report, an enterprise service is considered to be a collection of gates. A *gate* is the Rockwell Galaxy term for a peripheral service.

Database Table

Service_Half_Hour

Skill_Group_Half_Hour

Data

Calls Offered – Half-Hour, for All Calls (NCO). The number of incoming calls or internal calls sent to a specific enterprise service (collection of gates). A call is counted as offered as soon as it is sent to a gate.

Cumulative Service Level – Half-Hour, for All Calls (CSL). The percentage of incoming calls to the enterprise service during the interval that were answered within a specified threshold.

% ICR Routed Calls – Half-Hour for All Calls (ICR%). The number or percentage of calls that were routed by the GEOTEL Intelligent CallRouter. The ICR tracks the number of ICR-routed calls in the CallsRoutedHalf fields of the central and local databases.

Calls Handled – Half-Hour (NCH). The total number of calls handled to completion by an enterprise service's agents. (Also shown as a percentage.)

Average Speed of Answer (ASA). The average time that all calls offered to the enterprise service waited before being answered during the half-hour interval.

Average Talk Time (ATT). The average talk time for calls handled by the enterprise service during the half-hour interval.

Answer Wait Time (AWT). Sum of answer wait time for all calls offered to the enterprise service during the half-hour interval.

Average Handle Time (AHT). Average handle time for the enterprise service for the half-hour interval. Handle time includes time agent spend in the Talking In, Hold, Work Ready, and Work Not Ready states.

Calls Abandoned – Half-Hour and Today (Nca). The number and percentage of calls in which the caller hung up before being connected with an agent.

Average Seconds for Abandoned Calls (ASB). The average seconds of delay time for all calls to the enterprise service that were abandoned in queue during the half-hour interval.

Primary Position Manned (PPM). The number of agents for the enterprise service who were logged on to their primary assignment gate during the interval (also referred to as the agent’s primary position).

Occupancy (OCC). Total time, in seconds, that agents for the enterprise service were logged on during the half-hour interval.

Percentage (%) of available agents (AVI). The percentage of agents for the enterprise service who were in the Available state at the end of the half-hour interval.

Percentage (%) agents talking (TLK). The percentage of agents for the enterprise service who were in the Talking In state at the end of the half-hour interval.

After-Call Work (CW). The number of agents who were involved in after-call work during the interval. After-call work includes post-call activities such as completing paperwork or consulting with associates. Agents performing after-call work are either in the Work Ready or Work Not Ready state.

Other Time (OTH). The sum of the time that agents spent in the Not Ready and Busy Other states for the interval.

Example

The screenshot shows a window titled "Half-Hourly Enterprise Gate Analysis" with a table of data for "HelpDesk". The window includes a title bar, a menu bar, and a toolbar. The data table is as follows:

	- ALL CALLS -			----- HANDLED -----				- ABANDONED -			----- GATE PRIMARY AGENTS -----						
	HCO	CSL	ICR %	HCH	% ASA	ATT	AWT	AHT	NCA	% ASB	PPM	OCC	AVI %	TLK %	CW %	OTH %	
1/1/97 6:0	973	100	100	971	100	0	303	30	334	0	0	162	99	1	82	8	9
1/1/97 6:3	969	100	100	971	100	0	303	30	334	0	0	162	99	1	82	8	9
1/1/97 7:0	973	100	100	972	100	0	304	30	334	0	0	162	99	1	82	8	9
1/1/97 7:3	970	100	100	972	100	0	303	30	334	0	0	162	99	1	82	8	9
1/1/97 8:0	973	100	100	971	100	0	304	30	334	0	0	162	99	1	82	8	9
1/1/97 8:3	970	100	100	973	100	0	303	30	334	0	0	162	99	1	82	8	9
1/1/97 9:0	973	100	100	971	100	0	304	30	334	0	0	162	99	1	82	8	9
1/1/97 9:3	970	100	100	971	100	0	304	30	334	0	0	162	99	1	82	8	9
1/1/97 10:	973	100	100	971	100	0	304	30	334	0	0	162	99	1	82	8	9
1/1/97 10:	969	100	100	971	100	0	303	30	334	0	0	162	99	1	82	8	9
TOTAL	9713	100	100	9714	100	0	303	30	334	0	0	162	99	1	82	8	9

nettrk01_status_grid

Description

This template generates a real-time grid that shows the status of trunks in selected network trunk groups.

Database Table

Network_Trunk_Group_Real_Time

Data

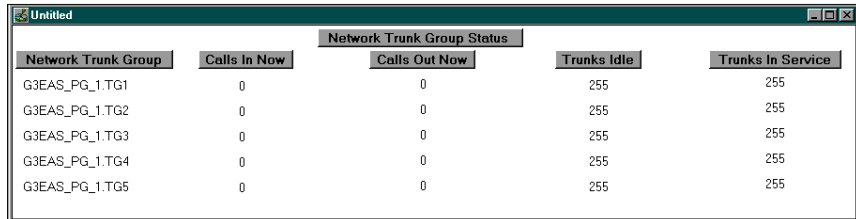
Calls In Now. The number of inbound calls in progress on the network trunk group (in real-time).

Calls Out Now. The number of outbound calls in progress on the network trunk group (in real-time).

Trunks idle. The number of trunks in the network trunk group that are non-busy, or idle.

Trunks in service. The number of trunks in the network trunk group that are in service.

Example



Network Trunk Group Status				
Network Trunk Group	Calls In Now	Calls Out Now	Trunks Idle	Trunks In Service
G3EAS_PG_1.TG1	0	0	255	255
G3EAS_PG_1.TG2	0	0	255	255
G3EAS_PG_1.TG3	0	0	255	255
G3EAS_PG_1.TG4	0	0	255	255
G3EAS_PG_1.TG5	0	0	255	255

nettrk02_grid_last_half_hour

Description

This template generates a real-time grid that shows the status of trunks in selected network trunk groups for the current half-hour interval.

Database Table

Network_Trunk_Group_Real_Time

Data

All Trunks Busy. The total time that all trunks in the network trunk group were busy for the current half-hour interval.

Calls Abandoned. The number of calls to trunks in the network trunk group that were abandoned during the current half-hour interval. An abandoned call is a call in which the caller hangs up before the call is answered.

Calls In. The number of inbound calls in progress on the network trunk group during the current half-hour interval.

Calls Out. The number of outbound calls in progress on the network trunk group during the current half-hour interval.

In Service Time. The aggregate time that trunks in the network trunk group have been in service during the current half-hour interval.

Calls In Now. The number of inbound calls in progress on the network trunk group (in real-time).

Calls Out Now. The number of outbound calls in progress on the network trunk group (in real-time).

Example

Network Trunk Group	Current Half Hour					Calls In Now	Calls Out Now
	All Trunks Busy	Calls Abandoned	Calls In	Calls Out	In Service Time		
G3EAS_PG_1 TG4	0	0	0	0	273105	0	0
G3EAS_PG_1 TG5	0	0	0	0	273105	0	0
G3EAS_PG_1 TG50	0	0	0	0	273105	0	0
G3SimAcid.MonTid.Grp6	0	0	0	0	277950	0	0

nettrk12_grid_half_hour

Description

This template generates a historical grid that shows half-hour data on the status of trunks in selected network trunk groups.

Database Table

Network_Trunk_Group_Half_Hour

Data

All Trunks Busy. The total time that all trunks in the network trunk group were busy for the half-hour interval.

Calls Abandoned. The number of calls to trunks in the network trunk group that were abandoned during a half-hour interval. An abandoned call is a call in which the caller hangs up before the call is answered.

Calls In. The number of inbound calls in progress on the network trunk group during a half-hour interval.

Calls Out. The number of outbound calls in progress on the network trunk group during a half-hour interval.

Example

Network Trunk Group	DateTime	All Trunks Busy	Calls Abandoned	Calls In	Calls Out
Cincinnati.CincinnatiTrunks	1/20/97 09:30:00		0	2239	0
Cincinnati.CincinnatiTrunks	1/20/97 10:00:00		0	2200	0
Cincinnati.CincinnatiTrunks	1/20/97 10:30:00		0	2184	0
Cincinnati.CincinnatiTrunks	1/20/97 11:00:00		0	2241	0
Cincinnati.CincinnatiTrunks	1/20/97 11:30:00		0	2163	0
Cincinnati.CincinnatiTrunks	1/20/97 12:00:00		0	2213	0
Cincinnati.CincinnatiTrunks	1/20/97 12:30:00		0	2249	0
Cincinnati.CincinnatiTrunks	1/20/97 13:00:00		0	2185	0
Cincinnati.CincinnatiTrunks	1/20/97 13:30:00		0	2226	0
Cincinnati.CincinnatiTrunks	1/20/97 14:00:00		0	2211	0
Cincinnati.CincinnatiTrunks	1/20/97 14:30:00		0	2226	0
Cincinnati.CincinnatiTrunks	1/20/97 15:00:00		0	2239	0
Denver.DenverTrunks	1/20/97 09:30:00		0	2299	0
Denver.DenverTrunks	1/20/97 10:00:00		0	2338	0
Denver.DenverTrunks	1/20/97 10:30:00		0	2306	0
Denver.DenverTrunks	1/20/97 11:00:00		0	2300	0
Denver.DenverTrunks	1/20/97 11:30:00		0	2366	0
Denver.DenverTrunks	1/20/97 12:00:00		0	2302	0
Denver.DenverTrunks	1/20/97 12:30:00		0	2357	0
Denver.DenverTrunks	1/20/97 13:00:00		0	2292	0
Denver.DenverTrunks	1/20/97 13:30:00		0	2328	0

peragt01_agent_status_by_position

Description

This template generates a real-time grid report that shows the status of selected agents by position.

Database Table

Agent_Real_time

Data

Position. The current extension on which the agent is working.

Agent name. The first and last name of the agent.

Skill group. The name of the skill group to which this agent is logged on.

Logon date and time. The date and time that the agent logged on.

Current state. The current state of the agent: Logged Off, Logged On, Ready, Not Ready, Work Ready, Work Not Ready, Talking, Busy Other, Reserved, Unknown, Calls on Hold.

Direction. The direction of the call on which the agent is currently working: In (Inbound), Out (Outbound), or Unknown.

Destination. The type of outbound call: ACD, direct, or Unknown.

Last state change. The date and time that the agent's state last changed.

Reason. A code received from the peripheral that indicates the reason for the agent's last state change.

Example

The screenshot shows a report window titled "Agent Status By Position" with a table containing the following data:

Position	Agent Name	Skill Group	Logon Date Time	Current State	Direction	Destination	Last State Change	Reason
9	Nancy Arnold	UNKNOWN	1999-02-04 09:03:34	READY	UNKNOWN	UNKNOWN	1999-02-04 11:48:04	0
197	May Benson	UNKNOWN	1999-02-04 09:03:34	READY	UNKNOWN	UNKNOWN	1999-02-04 11:48:50	0
5	Mark Chase	UNKNOWN	1999-02-04 09:03:34	READY	UNKNOWN	UNKNOWN	1999-02-04 11:48:00	0
193	John Curtis	UNKNOWN	1999-02-04 09:03:34	READY	UNKNOWN	UNKNOWN	1999-02-04 11:48:48	0
9	Ann Fennell	UNKNOWN	1999-02-04 09:03:34	READY	UNKNOWN	UNKNOWN	1999-02-04 11:48:56	0
199	Harold Luton	UNKNOWN	1999-02-04 09:03:34	READY	UNKNOWN	UNKNOWN	1999-02-04 11:48:54	0
7	Lawrence McNeil	UNKNOWN	1999-02-04 09:03:34	READY	UNKNOWN	UNKNOWN	1999-02-04 11:48:02	0
1	Patrick Morn	UNKNOWN	1999-02-04 09:03:34	READY	UNKNOWN	UNKNOWN	1999-02-04 11:48:56	0

peragt02_agent_status_by_skillgroup

Description

This template generates a real-time grid report that details the current status of selected agents.

Database Table

Agent_Skill_Group_Real_Time

Data

Agent name. The first and last name of the agent.

Skill group. The name of the ICR skill group to which the agent belongs.

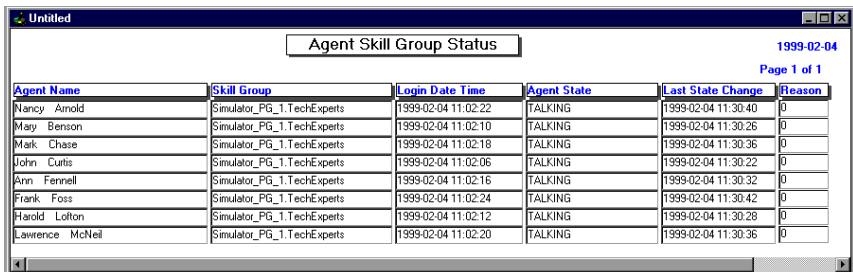
Logon date and time. The date and time that the agent logged on.

Current state. The current state of the agent: Logged Off, Logged On, Ready, Not Ready, Work Ready, Work Not Ready, Talking, Busy Other, Reserved, Unknown, Calls on Hold.

Last state change. The date and time that the agent's state last changed.

Reason. A code received from the peripheral that indicates the reason for the agent's last state change.

Example



The screenshot shows a report window titled "Agent Skill Group Status" with a table of agent data. The table has six columns: Agent Name, Skill Group, Login Date Time, Agent State, Last State Change, and Reason. The data is as follows:

Agent Name	Skill Group	Login Date Time	Agent State	Last State Change	Reason
Nancy Arnold	Simulator_PG_1.TechExperts	1999-02-04 11:02:22	TALKING	1999-02-04 11:30:40	0
May Benson	Simulator_PG_1.TechExperts	1999-02-04 11:02:10	TALKING	1999-02-04 11:30:26	0
Mark Chase	Simulator_PG_1.TechExperts	1999-02-04 11:02:18	TALKING	1999-02-04 11:30:36	0
John Curtis	Simulator_PG_1.TechExperts	1999-02-04 11:02:06	TALKING	1999-02-04 11:30:22	0
Ann Fennell	Simulator_PG_1.TechExperts	1999-02-04 11:02:16	TALKING	1999-02-04 11:30:32	0
Frank Foss	Simulator_PG_1.TechExperts	1999-02-04 11:02:24	TALKING	1999-02-04 11:30:42	0
Harold Lofton	Simulator_PG_1.TechExperts	1999-02-04 11:02:12	TALKING	1999-02-04 11:30:28	0
Lawrence McNeil	Simulator_PG_1.TechExperts	1999-02-04 11:02:20	TALKING	1999-02-04 11:30:36	0

peragt03_logout_status_by_agent

Description

This template generates a historical grid report that shows logon and logout status on an agent-by-agent basis.

Database Table

Agent_Logout

Data

Agent name. The first and last name of the agent.

Agent enterprise name. The last name and first initial of the agent and the peripheral with which the agent is associated.

Logon duration. The number of seconds that the agent was logged on for the specified interval of the report.

Logout date and time. ICR central controller date and time when the agent logged out.

Reason. A code received from the peripheral that indicates the reason for the agent's last state change.

Example

Agent Logout Status		1999-02-04	
From:	1999-02-03 00:00:00	To:	1999-02-03 23:59:00
		Page 395 of 800	
Agent Name:	Mary Benson		
Agent Enterprise Name	Logon Duration	Reason	Logout Date Time
Simulator_PG_1.Benson_M	30470		1999-02-03 17:39:49
Summary:	30470		

peragt04_daily_agent_activity

Description

This template generates a historical grid that shows the daily activity of selected agents over a specified time period. To arrive at daily values, the ICR sums the Agent_Skill_Group_Half_Hour rows for each day.

Database Table

Agent_Skill_Group_Half_Hour

Data

Agent name. The first and last name of the agent.

Duration. The total time in seconds that the agent was logged on.

Incoming calls total. The total number of inbound ACD calls handled by the agent during the interval. This value is incremented when the after-call work associated with the call is completed.

Incoming calls avg. length. The average length in seconds for incoming calls handled by the agent during the interval.

Incoming calls percent. The percentage of all calls handled by the agent for the period that were incoming calls.

Outgoing calls total. The total number of completed outbound ACD calls made by the agent during the interval. The value is incremented when the after-call work associated with the call is completed.

Outgoing calls average length. The average length in seconds for outgoing calls made by the agent for the interval.

Outgoing calls percent. The percentage of all calls handled by the agent for the period that were outgoing calls.

Internal calls total. The total number of internal calls initiated by the agent during the interval. The value is incremented when the after-call work associated with the call is completed.

Internal calls average length. The average length in seconds for completed internal calls made by the agent for the interval.

Internal calls percent. The percentage of all calls handled by the agent for the period that were internal calls.

Callback message total. The total number of callback messages that were processed by the agent during the interval.

Callback message average length. The average length in seconds for callback messages that were processed by the agent during the interval.

Callback message percent. The percentage of all calls handled by the agent for the period that were callback messages.

% Wrapup. The percentage of time that the agent spent in wrap-up on all calls counted as handled during the interval. An agent performing wrap-up is either in the Work Ready or Work Not Ready state. This value is measured against the total time the agent was logged on during the interval.

Example

The screenshot shows a window titled "Agent Activity Report" with a date range from 1999-02-04 00:00:00 to 1999-02-04 23:59:00. The report displays a table with columns for Agent Name, Duration, Incoming Calls (Total, Avg. Length, %), Outgoing Calls (Total, Avg. Length, %), Internal Calls (Total, Avg. Length, %), Callback Message (Total, Avg. Length, %), and % WrapUp. All agents listed have 0.0% for all percentage-based metrics.

Agent Name	Duration	Incoming Calls			Outgoing Calls			Internal Calls			Callback Message			% WrapUp
		Total	Avg. Length	%	Total	Avg. Length	%	Total	Avg. Length	%	Total	Avg. Length	%	
Nancy Arnold	17782	87	104.0	51.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	7.0
Mary Benson	17782	86	104.0	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	7.0
Mark Chase	17782	87	104.0	51.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	7.0
John Curtis	17782	86	104.0	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	7.0
Ann Fennell	17782	87	104.0	51.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	7.0
Frank Foss	17782	87	104.0	51.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	7.0
Harold Lofton	17782	86	104.0	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	7.0
Lawrence McNeil	17782	87	104.0	51.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	7.0
Patrick Moirn	17782	87	104.0	51.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	7.0
Robert Smith	17782	86	104.0	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	7.0

peragt05_agent_daily_perf

Description

This template generates a historical grid report of individual agent performance over one or more days. To arrive at daily values, the ICR sums the Agent_Skill_Group_Half_Hour rows for each day.

Database Table

Agent_Skill_Group_Half_Hour

Data

Agent name. The first and last name of the agent.

Abandoned calls ring. The total number of ACD calls abandoned while ringing at the agent's position.

Abandoned calls hold. The total number of ACD calls abandoned while being held at the agent's position.

Abandoned calls average. The average ring time in seconds associated with ACD calls that were abandoned while ringing at the agent's position.

Abandoned calls percent. The percentage of time associated with ACD calls that were abandoned while ringing the agent's position. This value is measured against the total time the agent was logged on during the interval.

Hold calls in. The total number of completed inbound calls the agent placed on hold. The value is incremented when the after-call work associated with the call is completed.

Hold calls in average. The average on hold time in seconds associated with inbound calls the agent placed on hold.

Hold calls in percent. The percentage of hold time associated with inbound calls the agent placed on hold. This value is measured against the total time the agent was logged on during the interval.

Hold calls out. The total number of completed outbound calls the agent placed on hold at least once. The value is incremented when the after-call work associated with the call is completed.

Hold calls out average. The average on hold time in seconds associated with outbound calls the agent placed on hold.

Hold calls out percent. The percentage of hold time associated with outbound calls the agent placed on hold. This value is measured against the total time the agent was logged on during the interval.

Hold calls internal. The total number of completed internal calls the agent placed on hold for the interval. The value is incremented when the after-call work associated with the call is completed.

Hold calls internal average. The average on hold time associated with internal calls the agent placed on hold.

Hold calls internal percent. The percentage of hold time associated with internal calls the agent placed on hold. This value is measured against the total time the agent was logged on during the interval.

Assistance calls total. The total number of calls for which the agent received supervisor assistance during the interval. The value is incremented when the supervisor assistance call completes.

Assistance calls average. The average time in seconds that the agent received assistance for all supervisor-assisted calls during the interval.

Assistance calls percent. The percentage of time that the agent spent during the interval on supervisor-assisted calls. This value is measured against the total time the agent was logged on during the interval.

Conference calls in. The number of incoming calls on which the agent was in conference. Incoming calls include ACD and non-ACD calls. The value is incremented with the agent drops off the call and the call becomes a simple two-party call.

Conference calls average. The average time in seconds that the agent spent in conference with calls during the interval. This value includes hold time associated with the conference calls.

Conference calls percent. The percentage of time that the agent spent during the interval on conference calls. The percentage includes hold time associated with the conference calls. This value is measured against the total time the agent was logged on during the interval.

Conference calls out. The number conference calls the agent initiated. Initiated calls include ACD and non-ACD calls. The value is incremented with the agent drops off the call and the call becomes a simple two-party call.

Conference calls out average. The average time in seconds that the agent spent in conference on agent-initiated calls during the interval. This value includes hold time associated with the conference calls.

Conference calls out percent. The percentage of time that the agent spent during the half-hour interval on agent-initiated conference calls. This percentage includes hold time associated with the conference calls. This value is measured against the total time the agent was logged on during the interval.

Example

The screenshot shows a window titled 'Agent Performance Report' for the date '1999-02-04'. The report is on 'Page 1 of 1'. The data is presented in a table with the following structure:

Agent Name	Abandon Calls				Hold Calls				Assistance Calls				Conference Calls			
	Ring	Hold	Avg	%	In	Avg	%	Out	Avg	%	In	Avg	%	Out	Avg	%
Nancy Arnold	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
May Benson	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Mark Chase	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
John Curtis	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Ann Fennell	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Frank Foss	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Harold Lofton	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Lawrence McNeil	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Patrick Moen	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Robert Smith	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0

peragt06_daily_agent_detail

Description

This template generates a historical grid that shows detailed agent state and call detail data for peripheral agents.

Note: To generate this report, you need to have Agent State Trace enabled for agent. See the *Intelligent CallRouter System Manager Guide* for guidelines on using the Agent State Trace option.

Database Tables

Agent_State_Trace

Termination_Call_Detail

Data

Agent name. The first and last name of the agent.

Event name. The event that caused the agent's last state change.

Date time. The date and time at which the state change occurred.

Duration. Duration of the call in seconds for a private network call.

This is the time that the switch is processing the call.

Skill group. The skill groups on which the agent has been active.

Agent state. The current state of the agent: Logged Off, Logged On, Ready, Not Ready, Work Ready, Work Not Ready, Talking, Busy Other, Reserved, Unknown, Calls on Hold.

Direction. The direction of the call on which the agent is currently working: In (Inbound), Out (Outbound), or Unknown.

Reason. Code received from the peripheral indicating the reason for the state change.

ANI. The ANI value for the call. The ANI is a feature that provides the billing phone number of the phone from which the call originated.

Digits dialed. Digits dialed on an outbound call.

Example

The screenshot shows a window titled "Agent Detail Report By Events" for the date 1999-02-03. The report is for Agent Name: Robert Smith, covering the time range from 1999-02-02 00:00:00 to 1999-02-02 23:59:00. The report displays a table with columns: Event Name, Date Time, Duration, Skill Group, Agent State, Direction, Reason, ANI, and Digits Dialed. A summary row at the bottom shows a total duration of 731 seconds.

Event Name	Date Time	Duration	Skill Group	Agent State	Direction	Reason	ANI	Digits Dialed
	1999-02-03 09:00:12	188	Boston.TechExperts	TALKING	IN	0	9782639481	
	1999-02-03 09:03:02	166	Boston.TechExperts	WORK_READY	IN	0	9786923691	
	1999-02-03 09:10:05	162	Boston.TechExperts	READY	IN	0	9784525034	
	1999-02-03 09:22:08	105	Boston.TechExperts	TALKING	IN	0	6172408921	
	1999-02-03 09:32:10	110	Boston.TechExperts	WORK_READY	IN	0	5084533921	
Summary:		731						

periph01_peripheral_status_report

Description

This template generates a real-time grid that shows switch status, call and agent status, and service levels. You can use this template with any peripheral supported by the ICR.

Database Table

Peripheral_Real_Time

Data

Status. The current failure state of the peripheral: 0 = normal operation; 1 - 31 = failures that do not affect functionality; 32 - 63 = degraded operation (call routing still possible); 64 - 127 = failures that prevent call routing.

Online. The current on-line state of the peripheral as determined by the Central Controller: 0 = off-line; 1 = on-line.

Calls in progress. The total number of calls to the peripheral that are currently in queue or being handled at the peripheral now.

Agents logged on. The number of agents who are logged on at the end of the five-minute interval. Logged On is a state in which agents are known to the system, but may or may not be ready to receive calls. Logged On is also referred to as Signed On.

Mode. The current mode of the peripheral as reported by the Peripheral Gateway (PG): 0 = off-line; 1 = on-line.

Service level – Last Half-Hour and Today. The percentage of incoming calls to services related to this peripheral during the interval that were answered within a specified threshold.

Example

Peripheral Real-Time Report								
Name	Datetime	Status	Online	Calls In Progress	Agents Logged On	Mode	Service Level	
							Last Half	Today
Bellevue	1/2/97 09:49:32	0	1	416	792	1	100%	100%
Boston	1/2/97 09:49:32	0	1	422	753	1	100%	100%
Cincinnati	1/2/97 09:49:32	0	1	213	664	1	100%	100%
Denver	1/2/97 09:49:32	0	1	227	673	1	100%	100%
Omaha	1/2/97 09:49:32	0	1	354	741	1	100%	100%

periph02_galaxy_software_status

Description

This template generates a real-time grid that shows all trunks busy, calls in progress, SWT TRMS, and DI Groups status. This template is for use with Rockwell Galaxy ACDs only.

Database Table

Peripheral_Real_Time

Data

ATB (All Trunks Busy). The state of a trunk group when all trunks are in use. The trunk group cannot accept any new inbound or outbound calls in this state. The ICR tracks the amount of time during which all trunks in a trunk group are busy.

Calls in progress. The total number of calls to the peripheral that are currently in queue or being handled at the peripheral now.

SWT TRMS Inactive (Terminations out of sync). Galaxy-specific data.

SWT TRMS (Terminations implemented). Galaxy-specific data.

DI Groups Inactive (Switch level out of sync). Galaxy-specific data.

DI Groups Active (Switch level implemented). Galaxy-specific data.

Example

The screenshot shows a window titled 'Real-Time Switch Node Software Status Display' with a timestamp of 09:59:56. The window contains a table with the following data:

Node Name	Node Time	ATB	Calls in Progress	SWT TRMS		DI Groups	
				Inactive	Active	Inactive	Active
LOUISVILLE	11:59:52	0	23	0	1153	0	26
			23	0	1153	0	26
WENTWORTH	11:59:52	0	45	0	1325	0	6
			45	0	1325	0	6

periph03_galaxy_hardware_status

Description

This template generates a real-time grid that shows processor, data receive, control, and switch clock status. This template is for use with Rockwell Galaxy ACDs only.

Database Table

Peripheral_Real_Time

Data

Processor A Fncst Status. Galaxy-specific data.

Processor B Fncst Status. Galaxy-specific data.

Inter-Prscr Link Status. Galaxy-specific data.

Data Rcv Status. Galaxy-specific data.

Control Status. Galaxy-specific data.

Switch Clock Status. Galaxy-specific data.

Example

Node Name	Processor A Fncst Status	Processor B Fncst Status	Inter-Prscr Link Status	Recovery Status	Control Status	Switch Clock Status
LOUISVILLE	Call Procssr	Rpirt Procssr	Operational	Inactive	Local	Up Up
WENTWORTH	Call Procssr	Rpirt Procssr	Operational	Inactive	Local	Up Up

perskg01_status_#_graph

Description

This template generates a real-time, stacked bar graph that shows the number of active agents from the selected peripheral skill groups who are currently in any of four call handling states.

Database Table

Skill_Group_Real_Time

Data

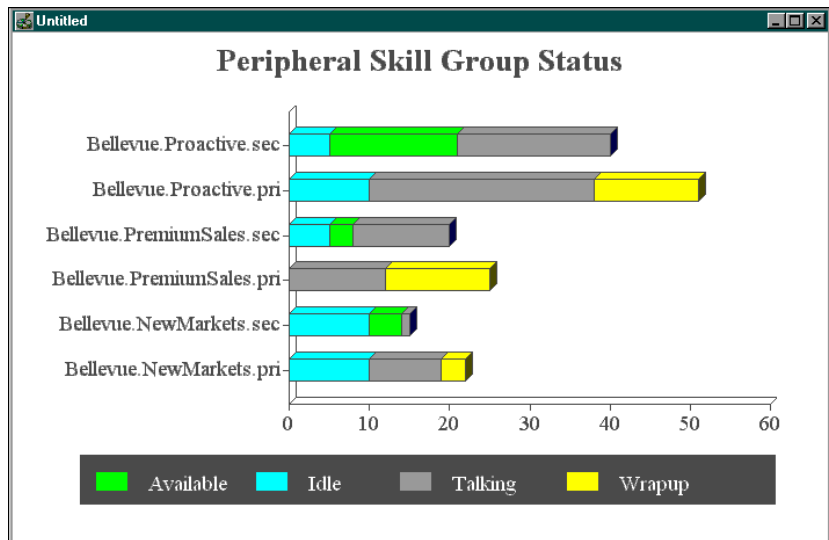
Agents available. The number of agents who are in the Available state (that is, not occupied with any call activity and ready to accept calls).

Agents idle. The number of agents who are in the Not Ready state (that is, logged on, not involved in a call or after-call work, and not available to receive a call).

Agents talking. The number of agents involved in inbound, outbound, or internal calls (that is, Talking In, Talking Out, or Talking Other).

Agents in wrap-up. The number of agents who are involved in after-call work. Agents performing wrap-up are either in the Work Ready or Work Not Ready state.

Example



The total count of agents in any of these four states is the number of agents Logged On.

perskg02_status_grid

Description

This template generates a real-time grid that shows the number of agents from selected peripheral skill groups who are signed on (logged on), how these agents break down numerically into nine states, and how they break down on a percentage basis into five states. A total row at the bottom of the grid totals or averages the data for all the peripheral skill groups listed.

Database Table

Skill_Group_Real_Time

Data

Agents signed on. The number of agents who are currently signed on to the peripheral skill group (that is, agents who are known to the system, but may or may not be ready to accept calls).

Agents idle. The number of agents who are in the Not Ready state (that is, logged on, not involved in a call or after-call work, and not available to receive a call).

Agents available. The number of agents who are in the Available state (that is, not occupied with any call activity and ready to accept calls).

Agents ready. The number of agents who are logged on and are either talking on a call or performing after-call work, but are presumed to be ready to accept calls when done.

Agents talking in. The number of agents talking on inbound calls.

Agents talking out. The number of agents talking on outbound calls.

Agents talking other. The number of agents who are talking on calls other than inbound and outbound calls (for example, internal calls).

Agents in wrap-up. The number of agents who are involved in after-call work. After-call work includes activities such as completing paperwork or consultation work. An agent performing after-call work is in either the Work Ready or Work Not Ready state.

Agents in hold. The number of agents in the skill group who are in the Hold state (that is, agents who have all active calls on hold and are performing no other activity).

Agents reserved. The number of agents currently in the reserved state.

A reserved agent is awaiting an interflowed call and is unavailable to receive any incoming calls. This state applies to agents on Northern Telecom Meridian and Aspect CallCenter ACDs only.

Agents in busy other. The number of agents who are in the Busy Other state (that is, busy in skill groups other than the one presently being examined). An agent can be active in only one skill group at a time. Therefore, while active in one skill group, the agent is considered by the other skill groups to be in the Busy Other state.

Percent agents idle. The percentage of all agents in the peripheral skill group who are in the Not Ready state.

Percent agents available. The percentage of all agents in the peripheral skill group who are in the Available state.

Percent agents talking. The percentage of all agents in the peripheral skill group who are talking on inbound, outbound, or internal calls.

Percent agents in wrap-up. The percentage of all agents in the peripheral skill group who are involved in after-call work.

Percent agents in busy other. The percentage of all agents in the skill group who are in the Busy Other state.

Example

Current Status of Peripheral Skill Groups																	
Peripheral Skill Group	Signed On	Idle	Avail	Ready	Talking				Wrapup	Hold	Reserve	Other	% Idle	% Avail	% Talking	% Wrapup	% Other
					In	Out	Other										
Relievus.HelpDesk.prn	50	0	3	50	42	0	0	5	0	0	0	0	0.0%	6.0%	84.0%	10.0%	0.0%
Relievus.HelpDesk.sec	40	3	24	37	13	0	0	0	0	0	0	0	7.5%	60.0%	32.5%	0.0%	0.0%
Relievus.Intro.prn	45	0	0	45	45	0	0	0	0	0	0	0	0.0%	0.0%	100.0%	0.0%	0.0%
Relievus.Intro.sec	30	5	22	25	2	0	0	1	0	0	0	0	16.7%	73.3%	6.7%	3.3%	0.0%
Relievus.MassMarkets.prn	38	5	11	33	10	0	0	12	0	0	0	0	13.2%	28.9%	26.3%	31.6%	0.0%
Relievus.MassMarkets.sec	25	5	21	21	0	0	0	0	0	0	0	0	19.2%	80.8%	0.0%	0.0%	0.0%
Relievus.MidTier.prn	35	5	0	31	31	0	0	0	0	0	0	0	13.9%	0.0%	86.1%	0.0%	0.0%
Total	265	23	81	242	143	0	0	18	0	0	0	0	8.68%	30.57%	53.96%	6.79%	0.00%

perskg03_status_%_graph

Description

This template generates a real-time bar graph that shows the percentage of agents from selected peripheral skill groups who are in any of four call handling states.

Database Table

Skill_Group_Real_Time

Data

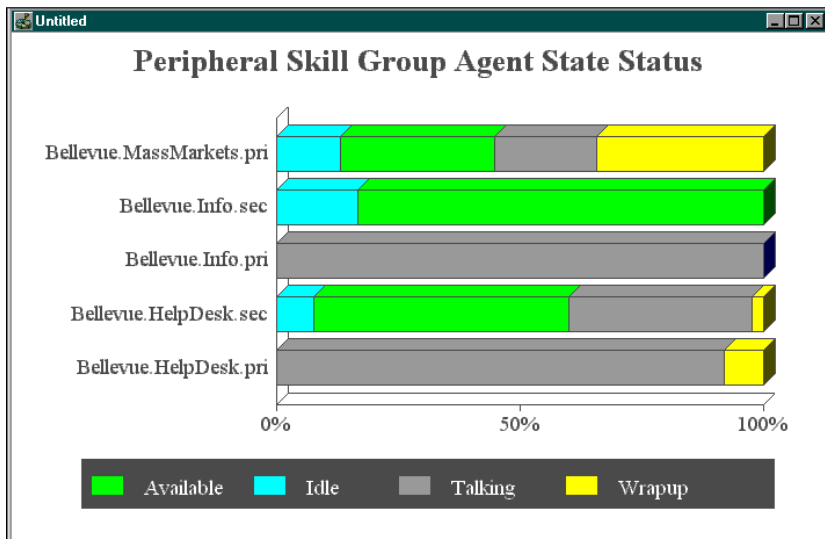
Agents available. The percentage of all agents in the peripheral skill group who are not occupied with any call activity and are ready to accept calls.

Agents idle. The percentage of all agents in the peripheral skill group who are idle (that is, logged on, not involved in a call or after-call work, and not available to receive a call). Idle is also referred to as Not Ready.

Agents talking. The percentage of all agents in the peripheral skill group who are talking on a call (inbound, outbound, or internal).

Agents in wrap-up. The percentage of all agents in the peripheral skill group who are involved in after-call work. An agent performing after-call work is in either the Work Ready or Work Not Ready state.

Example



perskg04_status_grid_to5

Description

This template generates a rolling five-minute grid that shows full-time equivalent (FTE) values for agents in selected peripheral skill groups. FTE is the number of full-time agents that would be required during a period to perform the work done in that period. To calculate the FTE, divide the number of seconds of work performed by the number of seconds in the period. For example, if agents spent a total of 1200 seconds handling calls during a five-minute (300-second) period, the FTE for call handling would be as follows:

$$1200 \text{ person seconds} / 300 \text{ seconds} = 4 \text{ persons}$$

This template uses cumulative, or rolling, five-minute data derived from the real-time data to arrive at an FTE value. Data in the grid is continuously updated. This template also provides the percentage of agents currently in any of four call handling states. A total row totals or averages the data for all the peripheral skill groups listed.

Database Table

Skill_Group_Real_Time

Data

Full-time equivalent (FTE) logged on. The FTE number of currently logged on agents in the peripheral skill group. Logged on is not an agent state, but rather a necessary condition to being in any state.

FTE idle. The FTE number of currently idle agents in the peripheral skill group (that is, agents who are logged on, not involved in a call or after-call work, and are not available to receive a call.) Idle is also called Not Ready.

FTE available. The FTE number of agents currently in the Available state (that is, not occupied with any call activity and ready to accept calls).

FTE talking. The FTE number of agents currently talking on a call (inbound, outbound, or internal).

FTE in wrap-up. The FTE number of agents currently involved in after-call work (that is, agents in the Work Ready or Work Not Ready states).

FTE hold. The FTE value for the number of agents in the Hold state during an interval. The Hold state is a state in which an agent has all active calls on hold and is performing no other activity.

FTE reserved. The FTE value for the number of agents in the Reserved state during an interval. The Reserved state is a state in which the

agent is awaiting an interflowed call and is unavailable to receive any incoming calls. This state applies to agents on Northern Telecom Meridian and Aspect CallCenter ACDs only.

FTE busy other. The FTE number of agents who are in the Busy Other state (that is, busy in skill groups other than the one presently being examined). An agent can be active in only one skill group at a time. Therefore, while active in one skill group, the agent is considered by the other skill groups to be in the Busy Other state.

Percent agents idle. The percentage of time that all agents in the peripheral skill group were in the idle state (that is, logged on, not involved in a call or after-call work, and not available to receive a call). Idle is also called Not Ready.

Percent agents available. The percentage of time that all agents in the peripheral skill group were not occupied with any call activity and were ready to accept calls.

Percent agents talking. The percentage of time that all agents in the peripheral skill group were talking on a call (inbound, outbound, or internal).

Percent agents in wrap-up. The percentage of time that all agents in the peripheral skill group were involved in after-call work (that is, time spent in the Work Ready or Work Not Ready states).

Percent agents in busy other. The percentage of time that all agents in the skill group spent in the Busy Other state.

Example

Rolling 5-minute Peripheral Skill Group Status													
Peripheral Skill Group	FTE LoggedOn	FTE Idle	FTE Avail	FTE Talking	FTE Wrapup	FTE Hold	FTE Reserved	FTE Other	% Idle	% Available	% Talking	% Wrapup	% Other
Bellevue.MidTier.pi	36.00	5.00	0.53	24.31	6.16	0	0	0.00	13.9%	1.5%	67.5%	17.1%	0.0%
Bellevue.MidTier.sec	22.00	5.00	6.64	8.19	2.17	0	0	0.00	22.7%	30.2%	37.2%	9.9%	0.0%
Bellevue.NatAccotServ.pi	75.00	2.00	39.64	27.85	5.51	0	0	0.00	2.7%	52.8%	37.1%	7.4%	0.0%
Bellevue.NatAccotServ.sec	55.00	10.00	45.00	0.00	0.00	0	0	0.00	18.2%	81.8%	0.0%	0.0%	0.0%
Bellevue.NewMarkets.pi	22.00	10.00	0.22	9.88	1.90	0	0	0.00	45.5%	1.0%	44.9%	8.7%	0.0%
Bellevue.NewMarkets.sec	15.00	10.00	2.06	2.43	0.51	0	0	0.00	66.7%	13.7%	16.2%	3.4%	0.0%
Total	225.00	42.00	94.08	72.65	16.26	0	0	0.00	18.67%	41.81%	32.29%	7.23%	0.00%

perskg05_utilization_graph

Description

This template generates a real-time bar graph that shows a percentage utilization of agents in the selected peripheral skill groups. Percentage utilization is the ratio between the time agents spend handling calls and the time agents were logged on.

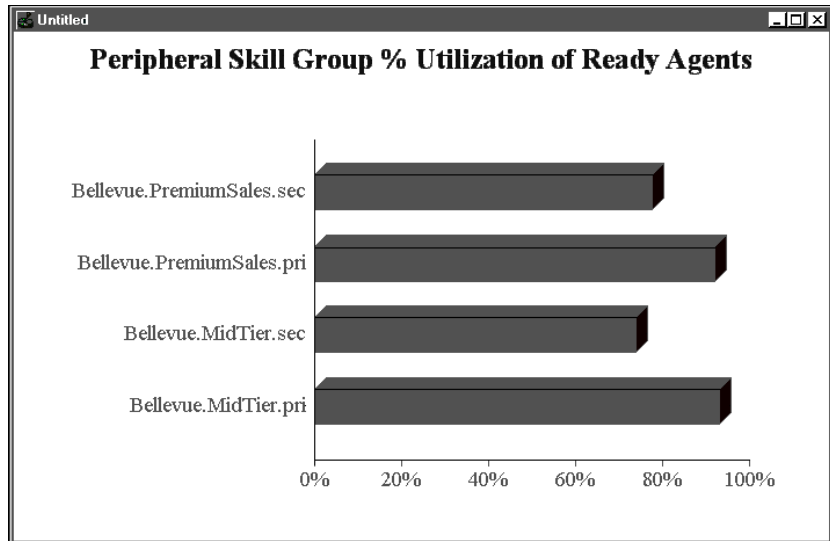
Database Table

Skill_Group_Real_Time

Data

Percent utilization. The percent utilization is computed by dividing the total time agents spent handling calls by the total time agents were ready. (The Ready Time is calculated by subtracting the Not Ready Time from the total time that agents were Logged On.)

Example



perskg06_halfhour_aht_grid

Description

This template generates a historical grid that displays call counts and handle time data by the half-hour for selected peripheral skill groups. This template also includes a summary row for each day of data, which provides daily averages and totals; and a summary row for each skill group, which provides averages and totals for the particular skill group.

Database Table

Skill_Group_Half_Hour

Data

Calls handled. The total number of calls handled to completion for the peripheral skill group.

Agent calls out. The total number of outbound calls made by agents in the peripheral skill group.

Average handle time. The average handle time for calls handled by agents in the peripheral skill group. Handle time includes time that agents spend in the Talking In, Work Ready, and Work Not Ready states.

Average talk time. The average talk time for calls to the peripheral skill group. Talk time includes time spent in the Talking In, Talking Out, and Talking Other states.

Average wrap-up time. The average time agents in the peripheral skill group spent in after-call work (that is, in the Work Ready or Work Not Ready states).

Full-time equivalent (FTE) number of agents. The FTE number of logged on agents for the peripheral skill group. This value is the total time agents were logged on during the interval divided by the total number of seconds in the interval.

See also: For more information on FTE, see “perskg04_status_grid_to5,” earlier in this chapter.

Example

Untitled

Peripheral SkillGroup Performance (By Half Hour)

From 02/01/97 00:00 To 02/01/97 23:59

Peripheral SkillGroup Bellevue.Info.pri

Date	Time	Calls Handled	Calls Out	Average Handle Time	Average Talk Time	Average Wrapup Time	FTE # Agents
02/01/97	00:30	140	0	446.5	416.5	30.1	40.0
	01:00	140	0	446.5	416.1	30.1	40.0
	01:30	140	0	446.5	416.4	30.2	40.0
	02:00	140	0	446.4	416.2	30.0	40.0
	02:30	140	0	446.5	416.4	30.1	40.0
	03:00	140	0	446.6	416.4	30.1	40.0
	03:30	140	0	446.4	416.4	30.2	40.0
	04:00	140	0	446.5	416.4	30.3	40.0
	04:30	141	0	446.5	416.3	30.1	40.0
	05:00	141	0	446.4	416.3	30.2	40.0
	05:30	142	0	446.4	416.3	29.9	40.0
	06:00	141	0	446.4	416.2	30.1	40.0
	06:30	140	0	446.4	416.3	30.3	40.0
	07:00	142	0	446.4	416.4	29.9	40.0
	07:30	141	0	446.4	416.1	29.9	40.0
	08:00	140	0	446.7	416.5	30.2	40.0
	08:30	140	0	446.5	416.3	30.1	40.0
	09:00	140	0	446.5	416.4	30.0	40.0
	09:30	140	0	446.5	416.4	30.1	40.0
	10:00	140	0	446.5	416.4	30.2	40.0
	10:30	140	0	446.5	416.4	30.1	40.0
Day Summary		2948	0	446.47	416.33	30.10	
Skill Group Summary		2948	0	446.47	416.33	30.10	

perskg07_daily_aht_grid

Description

This template generates a historical grid that displays call counts and handle time data on a per-day basis for selected peripheral skill groups. This template also includes a summary row that totals or averages the data for all skill groups listed.

Database Table

Skill_Group_Half_Hour

Data

Calls handled. The total number of calls handled to completion for all agents in the peripheral skill group.

Agent calls out. The total number of outbound calls made by agents in the peripheral skill group.

Average handle time. The average handle time for calls handled by agents in the peripheral skill group. Handle time includes time that agents spend in the Talking In, Work Ready, and Work Not Ready states.

Average talk time. The average talk time for calls to the peripheral skill group. Talk time includes time spent in the Talking In, Talking Out, and Talking Other states.

Average wrap-up time. The average time that agents in the peripheral skill group spent in after-call work. Agents performing after-call work are in either the Work Ready or Work Not Ready state.

Full-time equivalent (FTE) number of agents. The FTE number of logged on agents for the peripheral skill group. This value is the total time that agents were logged on during the interval divided by the number of seconds in the interval. This provides the number of full-time agents logged on for the interval.

See also: For more information on FTE, see “perskg04_status_grid_to5,” earlier in this chapter.

Example

The screenshot shows a window titled "Peripheral SkillGroup Performance (By Day)" with a date range from 02/01/97 00:00 to 02/01/97 23:59. The table below represents the data shown in the window.

Peripheral SkillGroup	Date	Calls Handled	Calls Out	Average Handle Time	Average Talk Time	Average Wrapup Time	FTE # Agents
BelleVue.HelpDesk.pri	02/01/97	1135	0	335.0	305.0	30.0	5
Skill Group Summary		1135	0	335.40	305.30	30.10	
BelleVue.HelpDesk.sec	02/01/97	330	0	331.0	301.0	30.0	4
Skill Group Summary		330	0	331.61	301.52	30.08	
BelleVue.Info.pri	02/01/97	797	0	445.0	415.0	30.0	4
Skill Group Summary		797	0	445.60	415.47	30.33	
BelleVue.Info.sec	02/01/97	75	0	445.0	415.0	30.0	3
Skill Group Summary		75	0	445.83	415.59	30.24	
BelleVue.MassMarkets.pri	02/01/97	860	0	215.0	185.0	30.0	4
Skill Group Summary		860	0	215.80	185.53	30.28	
BelleVue.MassMarkets.sec	02/01/97	0	0				3
Skill Group Summary		0	0				
BelleVue.MidTier.pri	02/01/97	1674	0	150.0	120.0	30.0	4
Skill Group Summary		1674	0	150.77	120.54	30.23	
BelleVue.MidTier.sec	02/01/97	581	0	150.0	120.0	30.0	2
Skill Group Summary		581	0	150.65	120.46	30.19	

perskg08_halfhour_perform_grid

Description

This template generates a historical grid that shows half-hour, full-time equivalent (FTE) values for agents in selected peripheral skill groups. FTE is the number of full-time agents that would be required during a period to perform the work done in that period. FTE values are derived by taking the time that agents are in a particular state during an interval and dividing that time by the number of seconds in the interval.

See also: For more information on FTE, see “perskg04_status_grid_to5,” earlier in this chapter.

This grid has date and skill group summary rows that total the data for the day and the individual skill group respectively.

Database Table

Skill_Group_Half_Hour

Data

Full-time equivalent (FTE) sign-on. The FTE number agents logged on to the peripheral skill group.

FTE idle. The FTE number of idle agents (that is, agents who were logged on, not involved in a call or after-call work, and were not available to receive a call). Idle is also referred to as Not Ready.

FTE available. The FTE number of agents in the Available state (that is, not occupied with any call activity and ready to accept calls).

FTE talking. The FTE number of agents involved in calls (inbound, outbound, or internal).

FTE wrap-up. The FTE number of agents involved in after-call work. An agent performing after-call (wrap-up) work is in either the Work Ready or the Work Not Ready state.

FTE hold. The FTE value for the number of agents in the Hold state during an interval. The Hold state is a state in which an agent has all active calls on hold and is performing no other activity.

FTE reserved. The FTE value for the number of agents in the Reserved state during an interval. The Reserved state is state in which the agent is awaiting an interflowed call and is unavailable to receive any incoming calls. This state applies to agents on Northern Telecom Meridian and Aspect CallCenter ACDs only.

FTE busy other. The FTE number of agents who are in the Busy Other state (that is, busy in skill groups other than the one presently being examined). An agent can be active in only one skill group at a time. Therefore, while active in one skill group, the agent is considered by the other skill groups to be in the Busy Other state.

Example

FTE for Peripheral Skill Groups (By Half-Hour)										
From: 02/01/97 00:00 To: 02/01/97 23:59										
Peripheral Skill Group	Date	Time	FTE Signon	FTE Idle	FTE Avail	FTE Talking	FTE Wrapup	FTE Hold	FTE Reserved	FTE Other
Bellevue NewMarkets.pri	02/01/97	09:30	22.0	10.0	0.2	10.0	1.8	0	0	0.0
Bellevue NewMarkets.pri	02/01/97	10:00	22.0	10.0	0.2	9.8	1.9	0	0	0.0
Bellevue NewMarkets.pri	02/01/97	10:30	22.0	10.0	0.2	10.0	1.8	0	0	0.0
Bellevue NewMarkets.pri	02/01/97	11:00	22.0	10.0	0.2	9.9	1.9	0	0	0.0
Bellevue NewMarkets.pri	02/01/97	11:30	22.0	10.0	0.2	9.9	1.9	0	0	0.0
Date Summary:			126.74	57.61	2.23	56.38	10.52	0	0	0.00
Skill Group Summary:			126.74	57.61	2.23	56.38	10.52	0	0	0.00

perskg09_normalized_agt_state

Description

This template generates a stacked bar graph that shows the percentage of the time that all agents in the peripheral skill group were in specific states during an interval. The normalized value is derived from the total time that all agents were logged on during the interval.

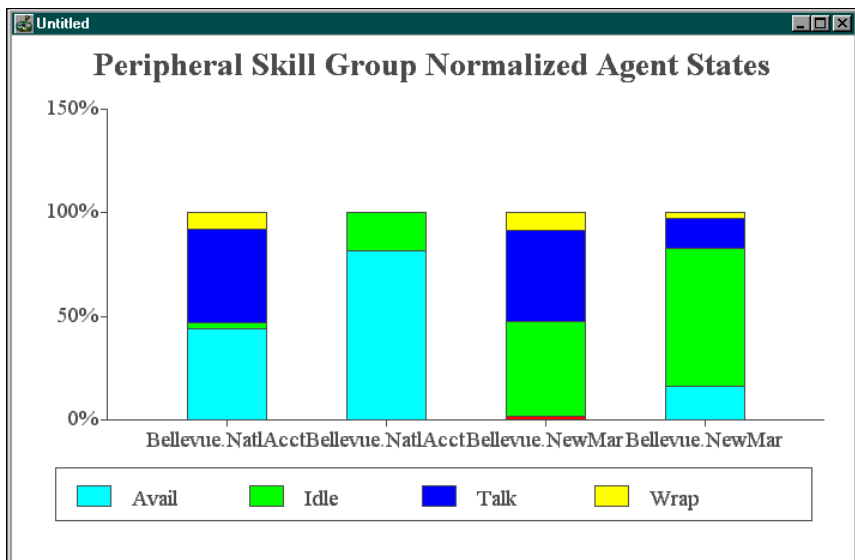
Database Table

Skill_Group_Half_Hour

Data

- % Available.** The percentage of time that all agents were in the Available state during the interval.
- % Idle.** The percentage of time that all agents were in the Idle state (that is, Not Ready), during the interval.
- % Talking.** The percentage of time that all agents were in the Talking In, Talking Out, or Talking Other states during the interval.
- % Wrap-up.** The percentage of time that all agents were in call wrap-up (that is, performing after-call work) during the interval.

Example



perskg10_forecast_agents_status_grid

Description

This template generates a real-time grid that shows the actual agents signed on versus those forecasted. For the schedule import portion of this report (scheduled and required agents), you need the optional GEOTEL•*Schedule Import* feature.

Database Table

Skill_Group_Real_Time

Schedule_Import_Real_Time

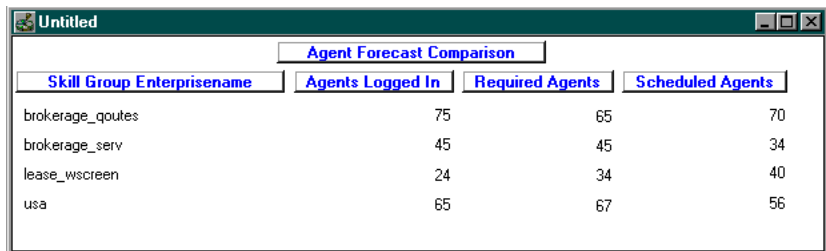
Data

Agents logged in. The number of agents currently logged in to the peripheral skill group.

Required agents. The forecasted value for the number of agents needed for this peripheral skill group (value is imported from a third-party workforce management system).

Scheduled agents. The number of agents scheduled (value is imported from a third-party workforce management system).

Example



Skill Group	Enterprisename	Agents Logged In	Required Agents	Scheduled Agents
brokerage_goutes		75	65	70
brokerage_serv		45	45	34
lease_wscreen		24	34	40
usa		65	67	56

persvc01_queue_delay_status

Description

This template generates a real-time bar graph that shows the current status of call queues for selected peripheral services.

Database Table

Service_Real_Time

Data

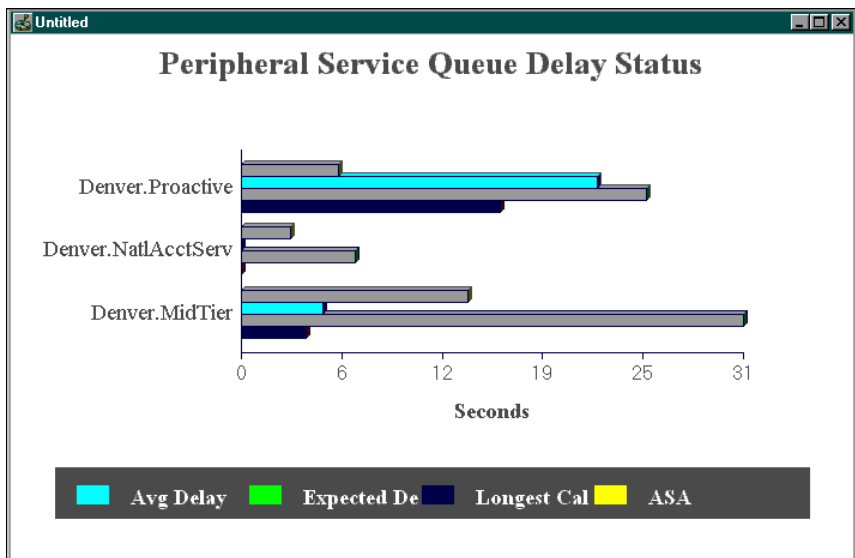
Average delay in queue. The average delay for calls currently in queue for the peripheral service.

Expected delay in queue. The predicted delay for any new call added to the queue for the peripheral service. This is valid only if no agents are available for the peripheral service.

Longest call in queue. The time that the longest call in queue for the peripheral service has spent in the queue.

Average speed of answer (ASA). The average time that all calls offered to the peripheral service during the current five-minute interval waited before being answered.

Example



persvc02_calls_status

Description

This template generates a real-time, stacked bar graph that displays the number of calls on which agents are talking and the number of calls in queue for selected peripheral services.

Database Table

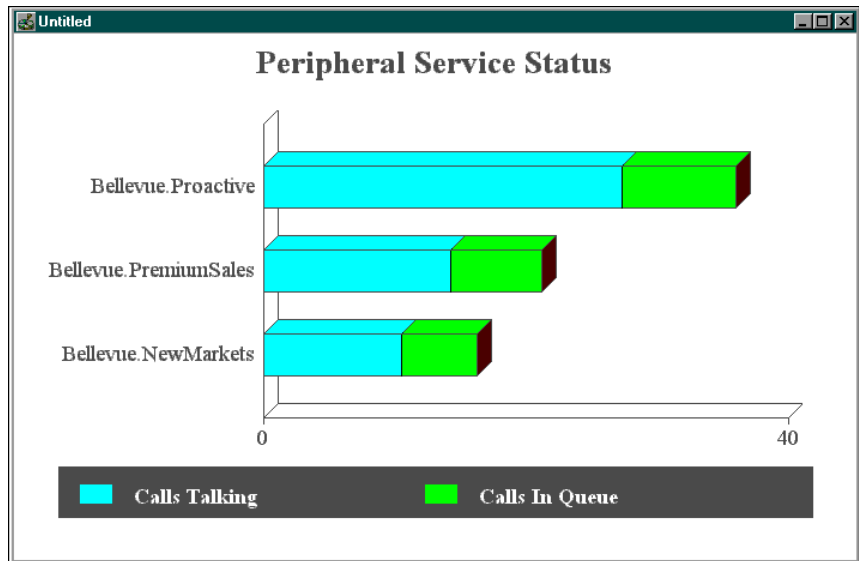
Service_Real_Time

Data

Calls talking. The number of calls to the peripheral service on which agents are currently talking.

Calls in queue. The number of calls to the peripheral service that are in queue at the peripheral now.

Example



persvc03_effect_of_aban_on_servicelevel

Description

This template generates a real-time grid that shows the effect of abandoned calls on the service levels of selected peripheral services. This grid also provides a summary row that totals or averages the data in each column for all services listed in the grid.

Database Table

Service_Real_Time

Data

Calls offered. The total number of incoming calls and internal calls sent to the peripheral service. Calls are counted as offered as soon as they are sent to the peripheral service.

Calls handled. The number of calls answered and finished for the peripheral service.

Calls abandoned. The number of calls in which the caller hung up before being connected with an agent.

Calls abandoned within service level. The number of calls to the peripheral service that were abandoned within the ICR service level threshold.

Service level without abandoned calls. The ICR service level for the peripheral service without including abandoned calls in the calculation.

See also: For more information on service level calculations, see Chapter 7, “Available Data.”

Service level with abandoned calls. The ICR service level for the peripheral service including abandoned calls in the calculation.

Example

Peripheral Service	Calls Offered	Calls Handled	Calls Abandoned	Aband within SVL	Service Level	
					Without Abandoned	With Abandoned
Bellevue.MassMarkets	9	22	2	2	95.6%	95.6%
Bellevue.MidTier	27	64	7	7	94.8%	94.8%
Bellevue.NatlAcctServ	21	55	8	8	94.7%	94.7%
Bellevue.NewMarkets	12	28	6	6	92.1%	92.1%
Bellevue.PremiumSales	15	40	1	1	100.0%	100.0%
Bellevue.Proactive	24	74	3	3	93.4%	93.4%
Bellevue.QuickResponse	14	40	3	3	95.4%	95.4%
Summary	122	323	41	41	85.61%	85.61%

persvc04_calls_trend_analysis

Description

This template generates a real-time grid that shows call counts and service levels for selected peripheral services since the end of the last five-minute interval, for the current half-hour interval, and since midnight. A summary row totals the call count data for all services in the grid.

Database Table

Service_Real_Time

Data

Calls offered. The total number of incoming calls and internal calls sent to the peripheral service during the interval. Calls are counted as offered as soon as they are sent to the peripheral service.

Calls answered. The total number of calls to the peripheral service that were answered during the interval. A call is counted as answered when it reaches an agent.

Calls abandoned. The total number of calls during the interval in which the caller hung up before being connected with an agent.

Service level. The percentage of incoming calls to the service during the interval that were answered within a specified threshold.

Example

Peripheral Service	Over Last 5 minutes				For Current Half Hour				For the Day			
	Offer	Answer	Aband	ServLev	Offer	Answer	Aband	ServLev	Offer	Answer	Aband	ServLev
Belleuve QuickResponse	52	52	0	100.0%	138	138	0	100.0%	2616	2616	0	100.0%
Belleuve Registration	17	17	0	100.0%	99	99	0	100.0%	1652	1652	0	100.0%
Belleuve Service	18	18	0	100.0%	104	104	0	100.0%	1606	1606	0	100.0%
Boston.HelpDesk	28	28	0	100.0%	70	70	0	100.0%	1176	1176	0	99.3%
Boston.Info	45	45	0	100.0%	100	100	0	100.0%	1707	1707	0	100.0%
Summary:	160	160	0		509	509	0		8757	8757	0	

persvc05_calls_offered_half_pie

Description

This template generates a real-time pie chart that shows the distribution of calls offered to selected peripheral services for the current half-hour interval. The calls offered value (for example 34.09%) is a percentage of the total calls offered to the peripheral services listed in the chart legend.

Database Table

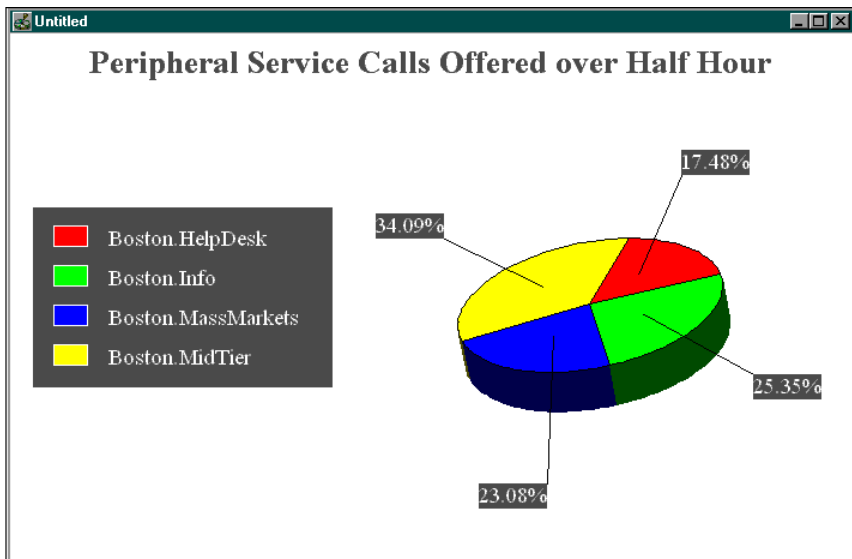
Service_Real_Time

Data

Calls offered. The percentage of the total of incoming and internal calls sent to the peripheral services for the current half-hour interval.

Calls are counted as offered as soon as they are sent to the peripheral service.

Example



persvc06_serv_level_monitor_graph

Description

This template generates a real-time bar graph that shows service levels for selected peripheral services since the end of the last five-minute interval, for the current half-hour interval, and since midnight.

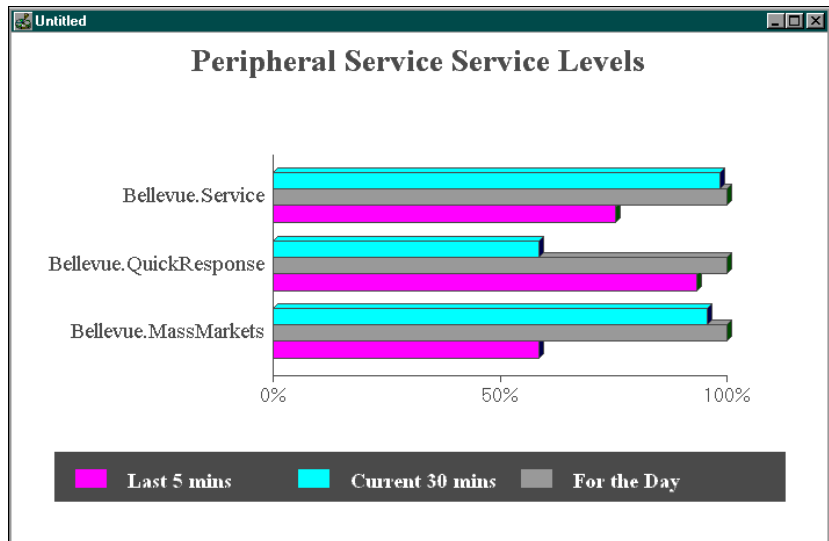
Database Table

Service_Real_Time

Data

Service level. The percentage of incoming calls to the peripheral service during the interval that were answered within a specified threshold.

Example



persvc07_now_to5_grid

Description

This template generates a grid that provides call counts, queue status, and service level data in real-time and since the end of the last five-minute interval for selected peripheral services. A summary row totals the values in each column for all the peripheral services listed.

Database Table

Service_Real_Time

Data

Calls talking. The number of calls on which agents for the peripheral service are currently talking.

Calls in queue. The number of calls to the peripheral service that are in queue at each peripheral now.

Average delay in queue. The average delay for calls currently in queue for the peripheral service.

Longest call in queue. The time that the longest call in queue for the peripheral service has spent in the queue.

Calls offered. The total number of incoming calls and internal calls sent to the peripheral service since the end of the last five-minute interval. Calls are counted as offered as soon as they are sent to the peripheral service.

Calls handled. The number of calls answered and finished for the peripheral service since the end of the last five-minute interval.

Calls abandoned. The number of calls since the end of the last five-minute interval in which the caller hung up before being connected with an agent.

Average speed of answer (ASA). The average time that all calls offered to the peripheral service waited before being answered. Measured since the end of the last five-minute interval

Average handle time (AHT). The average handle time for calls handled by agents in the peripheral service since the end of the last five-minute interval. Handle time includes time that agents spend talking on inbound calls (Talking In) and performing after-call work (Work Ready and Work Not Ready).

Average talk time. The average time that agents for the peripheral service spent talking on calls since the end of the last five-minute interval. Talk time includes time spent in the Talking In, Talking Out, and Talking Other states.

Service level. The percentage of incoming calls to the peripheral service that were answered within a specified threshold (shown since the end of the last five-minute interval, for the current half-hour interval, and since midnight).

Example

Peripheral Service	Status Now			Status over last 5 minutes					Average			Service Level			
	Calls Talking	Calls Queued	Avg Delay	Longest in Queue	Offered	Handled	Aband	ASA	AHT	Talk	5 min	30 min	today		
Boston.NewMarkets	20	0		265:292	31	33	100%	0	0%	0.0	190.5	199.8	100%	100%	100%
Boston.PremiumSales	21	0		265:292	24	28	100%	0	0%	0.0	210.1	179.5	100%	100%	100%
Boston.Proactive	40	0		265:292	40	45	100%	0	0%	0.0	240.5	210.0	100%	100%	100%
Boston.QuickResponse	29	0		265:292	34	44	100%	0	0%	0.0	220.7	189.8	100%	100%	100%
Boston.Registration	42	0		265:292	39	39	100%	0	0%	0.0	425.3	394.6	100%	100%	100%
Boston.Service	41	0		265:292	41	56	100%	0	0%	0.0	395.4	364.8	100%	100%	100%
Boston.test	0	0		265:292	0	0									
Summary	193	0		265:292	209	243	100%	0	0%	0.0	292.2	261.6	100%	100%	100%

persvc08_gate_realtime_status_grid

Description

This template generates a grid report that provides real-time, half-hour, and daily status information for gates. A gate is the Rockwell Galaxy term for a service.

Database Table

Service_Real_Time

Data

Calls Offered – Real-Time, Half-Hour, Today (Nco). The number of incoming calls or internal calls that are sent to a specific gate. In real-time data, a call is counted as offered as soon as it is sent to the gate.

Calls in Queue (Que). The number of calls to the gate that are in queue now.

Calls Held (Hld). The number of calls to the gate that are currently queued for longer than the service level threshold.

Primary Position Manned (Ppm). The number of agents for the gate who are logged on to their primary assignment gate (also referred to as the agent's primary position).

Available Agents (Aav). The number of agents for the gate who are ready to accept calls and are not currently involved in call work.

Incoming Calls (In). The number of agents who are talking on incoming calls.

Outgoing Calls (Out). The number of agents who are talking on outgoing calls.

After-Call Work (Cw). The number of agents who are involved in after-call work. After-call work includes post-call activities such as completing paperwork or consulting with associates. Agents performing after-call work are either in the Work Ready or Work Not Ready state.

Other Time (Othr). The sum of the time that agents spend in the Not Ready and Busy Other states.

Average Speed of Answer (Asa). The average time that all calls offered to the gate during the current five-minute interval waited before being answered.

Calls Handled – Half-Hour and Today (Nch). The total number of calls handled to completion by a gate's agents.

Calls Abandoned – Half-Hour and Today (Nca). The number and percentage of calls in which the caller hung up before being connected with an agent.

Cumulative Service Level – Half-Hour and Today (Csl). The percentage of incoming calls to the gate during the interval that were answered within a specified threshold.

% ICR Routed Calls – Hour and Today (%ICR). The number or percentage of calls that were routed by the GEOTEL Intelligent CallRouter. The ICR tracks the number of ICR-routed calls in the CallsRoutedHalf fields of the central and local databases.

Example

Peripheral Service	Now			Agents						5 Min	Current Half					Since Midnight							
	Nco	Que	Hld	Pym	Avv	In	Dut	Cw	Oth		Ass	Nco	Nch	Nca	Abn	Cl	ICR	Nco	Nch	Nca	Abn	Cl	ICR
Omaha.MassMarkets	20	0	0	25	0	20	0	0	5	0.0	40	40	0	0%	100%	100%	1060	1040	0	0	0%	100%	100%
Omaha.MidTier	28	0	0	41	1	20	0	10	10	0.0	129	128	0	0%	100%	101%	4443	4402	0	0	0%	100%	100%
Omaha.NatlAcctServ	2	0	0	72	53	2	0	13	4	0.0	70	115	0	0%	100%	101%	2994	2979	0	0	0%	100%	100%
Omaha.NewMarkets	29	0	0	43	0	27	0	11	5	0.0	91	90	0	0%	100%	101%	3392	3351	0	0	0%	100%	100%
Omaha.PremiumSales	41	0	0	40	0	40	0	0	0	0.0	86	92	0	0%	100%	100%	3344	3303	0	0	0%	100%	100%
Omaha.Proactive	36	0	0	55	0	37	0	8	10	0.0	84	91	0	0%	100%	100%	3326	3281	0	0	0%	100%	100%
Omaha.QuickResponse	17	0	0	22	1	12	0	4	5	0.0	59	60	0	0%	100%	102%	2034	2011	0	0	0%	100%	100%
Omaha.Registration	52	0	0	36	0	36	0	0	0	0.0	54	45	0	0%	100%	100%	1732	1679	0	0	0%	100%	100%
Omaha.Service	39	0	0	31	0	31	0	0	0	0.0	50	41	0	0%	100%	100%	1571	1528	0	0	0%	100%	100%

persvc09_forecast_aht_offer_grid

Description

This template generates a grid report that compares data on actual and forecasted calls offered and average handle times. For the schedule import portion of this report (the forecasted values), you need the optional GEOTEL•*Schedule Import* feature.

Database Table

Service_Real_Time

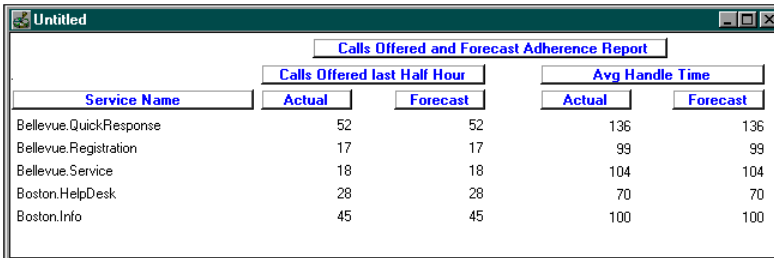
Schedule_Import_Real_Time

Data

Calls offered last half hour. The number of incoming calls or internal calls sent to the service during the current five-minute interval. The actual number values are compared to the forecasted values.

Average handle time. The average handle time for calls to the service during the current five-minute interval. Handle time includes time agents spend in the Talking In, Hold, Work Ready, and Work Not Ready states. The actual values are compared to the forecasted values.

Example



Calls Offered and Forecast Adherence Report				
Service Name	Calls Offered last Half Hour		Avg Handle Time	
	Actual	Forecast	Actual	Forecast
Bellevue.QuickResponse	52	52	136	136
Bellevue.Registration	17	17	99	99
Bellevue.Service	18	18	104	104
Boston.HelpDesk	28	28	70	70
Boston.Info	45	45	100	100

persvc11_calls_analysis_daywise

Description

This template generates a historical grid that shows daily call totals and service levels for selected peripheral services. This grid also provides service summary rows that total or average the data for the individual peripheral services in the grid.

Database Table

Service_Half_Hour

Data

Service level. The percentage of incoming calls to the peripheral service that were answered within a specified threshold (for the day).

Average speed of answer (ASA). The average time that all calls offered to the peripheral service waited before being answered (for the day).

Average handle time (AHT). The average handle time for calls handled by agents in the peripheral service for the day. Handle time includes time that agents spend talking on inbound calls (Talking In) and performing after-call work (Work Ready and Work Not Ready).

Average delay in queue. The average delay for all calls that were in queue for the peripheral service for the day.

Calls offered. The total number of incoming calls and internal calls sent to the peripheral service for the day. Calls are counted as offered as soon as they are sent to the peripheral service.

Calls handled. The number of calls answered and finished for the peripheral service for the day. (Also provided as a percentage of the total calls offered to the service during the half-hour interval.)

Calls abandoned. The number of calls to the peripheral service for the day in which the caller hung up before being connected with an agent. (Also provided as a percentage of the total calls offered to the service during the half-hour interval.)

Example

Calls Analysis of Peripheral Services (By Day)									
		From 19 Jan 97 00:00		To 20 Jan 97 23:59					
Peripheral Service	Date	Service Level	ASA	AHT	Delay	Calls			
						Offer	Handle	Aband	
Cincinnati.HelpDesk	19 Jan 97					0	0		
	20 Jan 97	99.9%	0	336	16	1566	1524	100.0%	0 0.0%
Service Summary:		99.87%	0	336	16	1566	1524		0
Cincinnati.Info	19 Jan 97					0	0		
	20 Jan 97	100.0%	0	445		1197	1157	100.0%	0 0.0%
Service Summary:		100.00%	0	445		1197	1157		0
Cincinnati.MassMarkets	19 Jan 97					0	0		
	20 Jan 97	100.0%	0	215		1071	1050	100.0%	0 0.0%
Service Summary:		100.00%	0	215		1071	1050		0
Cincinnati.MidTier	19 Jan 97					0	0		
	20 Jan 97	100.0%	0	151		3246	3210	100.0%	0 0.0%
Service Summary:		100.00%	0	151		3246	3210		0
Cincinnati.NatlAcctServ	19 Jan 97					0	0		
	20 Jan 97	100.0%	0	201		2150	2138	100.0%	0 0.0%
Service Summary:		100.00%	0	201		2150	2138		0

persvc12_calls_analysis_half_hour

Description

This template generates a historical grid that provides half-hour call counts, time in seconds for ASA, AHT, and average delay in queue, and service levels for selected peripheral services. This grid also provides a service summary row that averages or totals the data for the individual peripheral services listed.

Database Table

Service_Half_Hour

Data

Service level. The percentage of incoming calls to the peripheral service that were answered within a specified threshold during the half-hour interval.

Average speed of answer (ASA). The average time that all calls offered to the peripheral service waited before being answered during the half-hour interval.

Average handle time (AHT). The average handle time for calls handled by agents in the peripheral service for the half-hour interval. Handle time includes time that agents spend talking on inbound calls (Talking In) and performing after-call work (Work Ready and Work Not Ready).

Average delay in queue. The average delay for all calls that were in queue for the peripheral service for the half-hour interval.

Calls offered. The total number of incoming calls and internal calls sent to the peripheral service during the half-hour interval. Calls are counted as offered as soon as they are sent to the peripheral service.

Calls handled. The number of calls answered and finished for the peripheral service during the half-hour interval. (Also provided as a percentage of the total calls offered to the peripheral service during the interval.)

Calls abandoned. The number of calls during the half-hour interval in which the caller hung up before being connected with an agent. (Also provided as a percentage of the total calls offered to the peripheral service during the interval.)

Example

Calls Analysis of Peripheral Services (By Half Hour)											
From 20 Jan 97 09:00 To 20 Jan 97 14:00											
Peripheral Service	Date	Time	Service Level	ASA	AHT	Delay	Calls				
							Offer	Handle	Aband		
Bellevue.HelpDesk	20 Jan 97	09:00	100%	0	331		191	139	100%	0	0%
	20 Jan 97	09:30	100%	0	337		314	304	100%	0	0%
	20 Jan 97	10:00	100%	0	332		348	349	100%	0	0%
	20 Jan 97	10:30	100%	0	335		325	329	100%	0	0%
	20 Jan 97	11:00	100%	0	333		349	344	100%	0	0%
	20 Jan 97	11:30	100%	0	334		334	345	100%	0	0%
	20 Jan 97	12:00	100%	0	336		323	320	100%	0	0%
	20 Jan 97	12:30	100%	0	338		335	336	100%	0	0%
	20 Jan 97	13:00	100%	0	333		327	315	100%	0	0%
		Service Summary:		100%	0	334		2846	2781		0
Bellevue.Intro	20 Jan 97	09:00	100%	0	445		121	77	100%	0	0%
	20 Jan 97	09:30	100%	0	445		205	202	100%	0	0%
	20 Jan 97	10:00	100%	0	445		196	185	100%	0	0%
	20 Jan 97	10:30	100%	0	445		190	202	100%	0	0%
	20 Jan 97	11:00	100%	0	445		204	206	100%	0	0%
	20 Jan 97	11:30	100%	0	445		203	203	100%	0	0%
	20 Jan 97	12:00	100%	0	445		203	190	100%	0	0%
	20 Jan 97	12:30	100%	0	445		188	197	100%	0	0%
	20 Jan 97	13:00	100%	0	445		201	204	100%	0	0%
		Service Summary:		100%	0	445		1711	1666		0

persvc13_calls_offered_daywise_graph

Description

This template generates a historical, overlapped bar graph that shows the number of calls offered per day for the selected peripheral services.

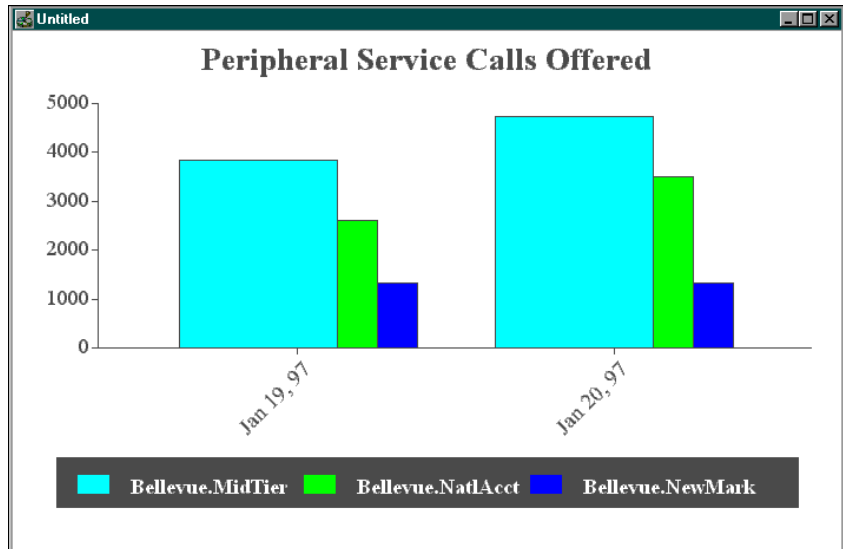
Database Table

Service_Half_Hour

Data

Calls offered. The total number of incoming calls and internal calls sent to the peripheral service for the day. Calls are counted as offered as soon as they are sent to the peripheral service.

Example



persvc14_calls_handled_daywise_graph

Description

This template generates a historical, overlapped bar graph that shows the number of calls handled per day for the selected peripheral services.

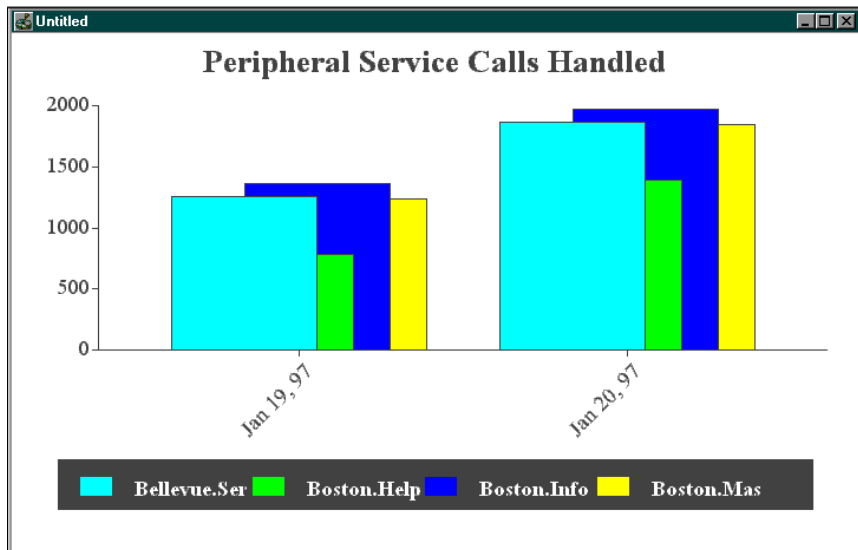
Database Table

Service_Half_Hour

Data

Calls handled. The total number of calls handled to completion for all agents in the peripheral service for the day.

Example



persvc15_calls_abandoned_daywise_graph

Description

This template generates a historical, overlapped bar graph that shows the number of calls abandoned per day for the selected peripheral services.

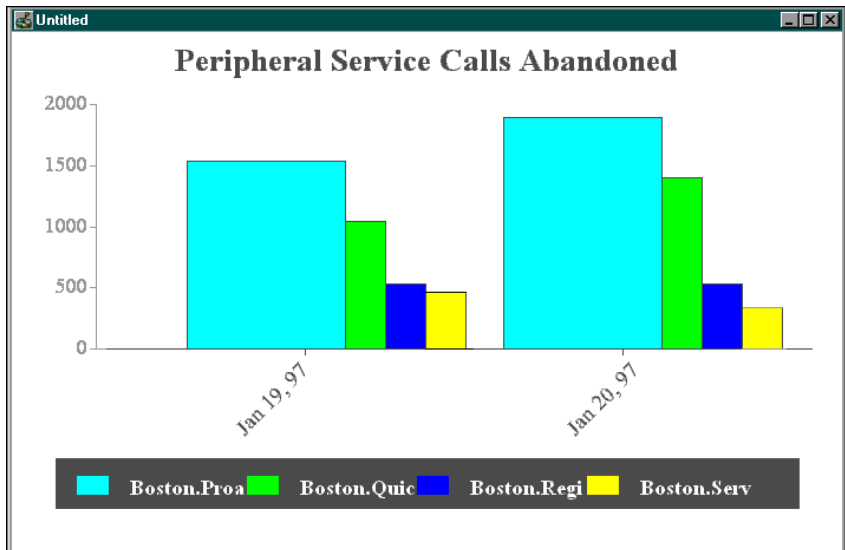
Database Table

Service_Half_Hour

Data

Calls abandoned. The number of calls for the day in which callers hung up before being connected with an agent.

Example



persvc16_calls_history_daywise_graph

Description

This template generates a historical line graph that shows the history of calls for a **single** selected peripheral service. This template is meant to be used with a single peripheral service only.

Database Table

Service_Half_Hour

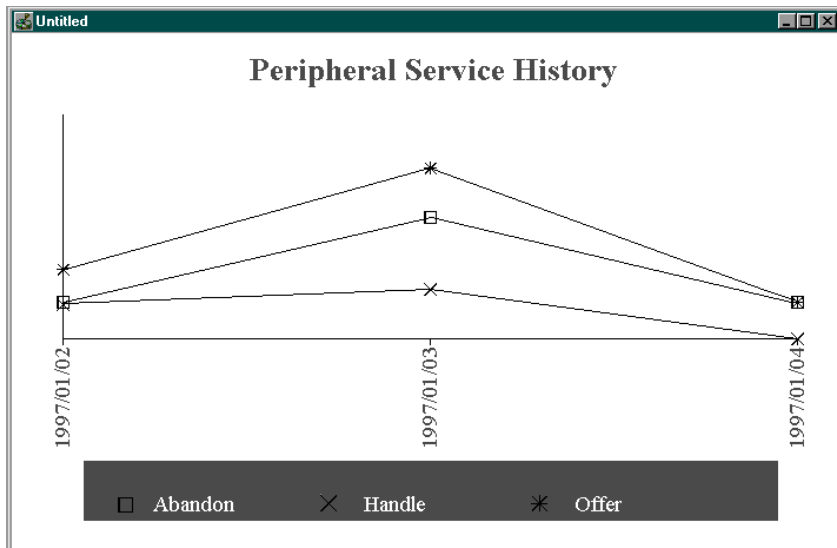
Data

Calls abandoned. The number of calls for the day in which callers hung up before being connected with an agent.

Calls handled. The number of calls for the day that were answered and finished for the peripheral service.

Calls offered. The total number of incoming calls and internal calls sent to the peripheral service for the day. Calls are counted as offered as soon as they are sent to the peripheral service.

Example



persvc17_calls_offered_half_hour

Description

This template generates a historical, overlapped bar graph that shows the number of calls offered across selected peripheral services in half-hour samples.

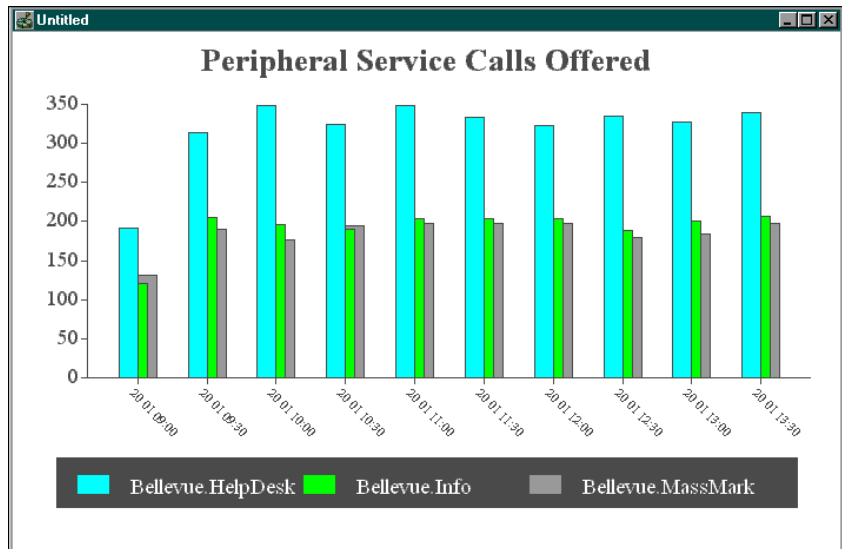
Database Table

Service_Half_Hour

Data

Calls offered. The total number of incoming calls and internal calls sent to the peripheral service for each half-hour interval. Calls are counted as offered as soon as they are sent to the peripheral service.

Example



persvc18_gate_half_hourly_status_grid

Description

This template generates a grid report that provides half-hour status information for an peripheral service. In this report, a peripheral service is considered to be a gate. A *gate* is the Rockwell Galaxy term for a service.

Database Table

Service_Half_Hour
Skill_Group_Half_Hour

Data

Calls Offered – Half-Hour, for All Calls (NCO). The number of incoming calls or internal calls sent to a specific service (collection of gates). A call is counted as offered as soon as it is sent to a gate.

Cumulative Service Level – Half-Hour, for All Calls (CSL). The percentage of incoming calls to the service during the interval that were answered within a specified threshold.

% ICR Routed Calls – Half-Hour for All Calls (ICR%). The number or percentage of calls that were routed by the GEOTEL Intelligent CallRouter. The ICR tracks the number of ICR-routed calls in the CallsRoutedHalf fields of the central and local databases.

Calls Handled – Half-Hour (NCH). The total number of calls handled to completion by a service's agents. (Also shown as a percentage.)

Average Speed of Answer (ASA). The average time that all calls offered to the service waited before being answered during the half-hour interval.

Average Talk Time (ATT). The average talk time for calls handled by the service during the half-hour interval.

Answer Wait Time (AWT). Sum of answer wait time for all calls offered to the service during the half-hour interval.

Average Handle Time (AHT). Average handle time for the service for the half-hour interval. Handle time includes time agent spend in the Talking In, Hold, Work Ready, and Work Not Ready states.

Calls Abandoned – Half-Hour and Today (Nca). The number and percentage of calls in which the caller hung up before being connected with an agent.

Average Seconds for Abandoned Calls (ASB). The average seconds of delay time for all calls to the service that were abandoned in queue during the half-hour interval.

Primary Position Manned (PPM). The number of agents for the service who were logged on to their primary assignment gate during the interval (also referred to as the agent’s primary position).

Occupancy (OCC). Total time, in seconds, that agents for the service were logged on during the half-hour interval.

Percentage (%) of available agents (AVI). The percentage of agents for the service who were in the Available state at the end of the half-hour interval.

Percentage (%) agents talking (TLK). The percentage of agents for the service who were in the Talking In state at the end of the half-hour interval.

After-Call Work (CW). The number of agents who were involved in after-call work during the interval. After-call work includes post-call activities such as completing paperwork or consulting with associates. Agents performing after-call work are either in the Work Ready or Work Not Ready state.

Other Time (OTH). The sum of the time that agents spent in the Not Ready and Busy Other states for the interval.

Example

	- ALL CALLS -			----- HANDLED -----					- ABANDONED -			----- GATE PRIMARY AGENTS -----					
	IHC	CSL	ICR %	IHC	% ASA	ATT	AWT	AHT	IHC	%	ASB	PPM	OCC	AVI %	TLK %	CW %	OTH %
09:00	333	100	100	285	86	0	120	30	150	0	0	27	86	14	59	13	14
09:30	498	100	100	508	102	0	120	30	150	0	0	36	98	2	67	17	14
10:00	478	100	100	473	99	0	120	30	150	0	0	36	98	2	67	17	14
10:30	491	100	100	492	100	0	120	30	150	0	0	36	98	2	68	16	14
11:00	497	100	100	497	100	0	120	30	150	0	0	36	99	1	67	17	14
11:30	489	100	100	489	100	0	120	30	150	0	0	36	99	1	67	17	14
12:00	478	100	100	478	100	0	120	30	150	0	0	36	98	2	68	17	14
12:30	495	100	100	495	100	0	120	30	150	0	0	36	98	2	68	17	14
13:00	499	100	100	500	100	0	120	30	150	0	0	36	98	2	67	17	14
13:30	482	100	101	482	100	0	120	30	150	0	0	36	99	1	68	17	14
TOTAL	4740	100	100	4699	99	0	120	30	150	0	0	35	97	3	67	17	14

routes01_queue_delay_status

Description

This template generates a real-time bar graph that shows data on the current status of call queues for the selected routes.

Database Table

Route_Real_Time

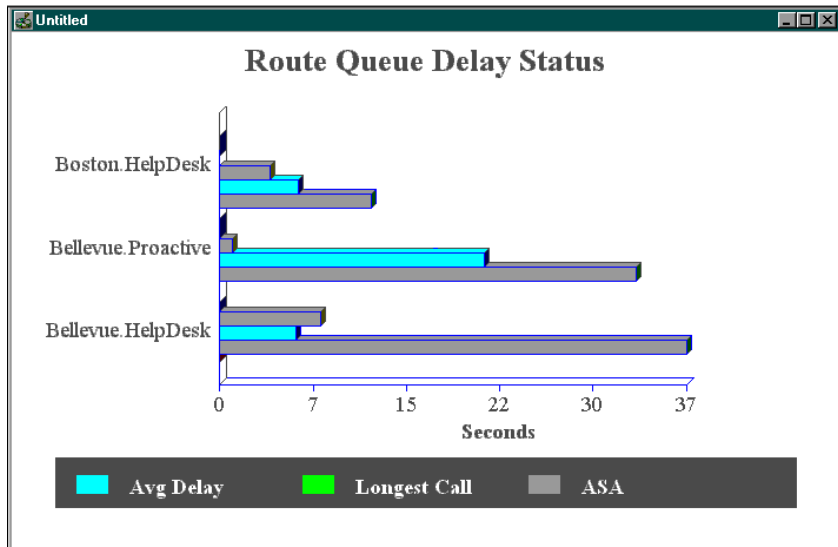
Data

Average delay in queue. The average delay for calls currently in queue for the route.

Longest call in queue. The time that the longest call in queue for the route has spent in the queue.

Average speed of answer (ASA). The average time that all calls offered to the route during the current five-minute interval waited before being answered.

Example



routes02_calls_status

Description

This template generates a real-time bar graph that shows the number of calls in progress versus the number of calls in queue for the selected routes.

Database Table

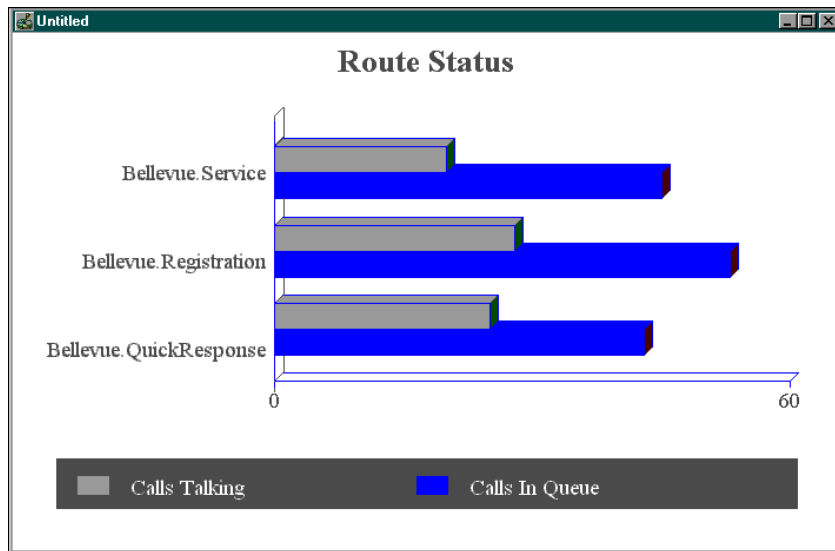
Route_Real_Time

Data

Calls talking. The number of calls to the route on which agents are currently talking.

Calls in queue. The number of calls to the route that are in queue now.

Example



routes03_effect_of_aban_on_servicelevel

Description

This template generates a real-time grid that shows the effect of abandoned calls on the service levels of selected routes. A summary row totals or averages the data for all routes listed in the grid.

Database Table

Route_Real_Time

Data

Calls offered. The total number of incoming calls and internal calls sent to the route. Calls are counted as offered as soon as they are sent to the route.

Calls handled. The number of calls answered and finished for the route.

Calls abandoned. The number of calls in which the caller hung up before being connected with an agent.

Calls abandoned within service level. The number of calls to the route that were abandoned within the ICR service level threshold.

Service level without abandoned calls. The ICR service level for the route without including abandoned calls in the calculation.

See also: For more information on service level calculations, see Chapter 7, “Available Data.”

Service level with abandoned calls. The ICR service level for the route including abandoned calls in the calculation.

Example

Route	Calls Offered	Calls Handled	Calls Abandoned	Aband within SVL	Service Level	
					Without Abandoned	With Abandoned
BelleVue.HelpDesk	128	120	0	0	84.00%	84.00%
BelleVue.Info	96	96	0	0	100.00%	100.00%
BelleVue.MassMarkets	90	86	0	0	100.00%	100.00%
BelleVue.MidTier	205	203	12	0	0.00%	0.00%
BelleVue.NatlAcctServ	130	129	0	0	100.00%	100.00%
BelleVue.NewMarkets	70	69	0	0	100.00%	100.00%
BelleVue.PremiumSales	92	92	0	0	100.00%	100.00%
BelleVue.Proactive	164	163	0	0	100.00%	100.00%
BelleVue.QuickResponse	141	141	0	0	100.00%	100.00%
Summary:	1116	1099	12	0	79.51%	79.51%

routes04_calls_trend_analysis

Description

This template generates a real-time grid that shows call counts and service levels for routes since the end of the last five-minute interval, for the current half-hour interval, and since midnight. This grid also provides a summary row that totals the call count data for all services in the grid.

Database Table

Route_Real_Time

Data

Calls offered. The total number of incoming calls and internal calls sent to the route during the interval. Calls are counted as offered as soon as they are sent to the route.

Calls answered. The total number of calls to the route that were answered during the interval. A call is counted as answered when it reaches an agent.

Calls abandoned. The total number of calls during the interval in which the caller hung up before being connected with an agent.

Service level. The percentage of incoming calls to the route during the interval that were answered within a specified threshold.

Example

Route	Over Last 5 minutes				For Current Half Hour				For the Day			
	Offer	Answer	Aband	ServLev	Offer	Answer	Aband	ServLev	Offer	Answer	Aband	ServLev
Bellevue Proactive	74	74	0	100.0%	159	159	0	100.0%	4534	4534	0	100.0%
Bellevue QuickResponse	59	59	0	100.0%	142	142	0	100.0%	4225	4225	0	100.0%
Bellevue Registration	35	35	0	100.0%	81	81	0	100.0%	2663	2663	0	100.0%
Bellevue Service	39	39	0	100.0%	95	95	0	100.0%	2607	2607	0	100.0%
Boston HelpDesk	21	21	0	100.0%	53	53	0	100.0%	1895	1895	0	99.6%
Boston Info	53	53	0	100.0%	119	119	0	100.0%	2754	2754	0	100.0%
Boston MassMarkets	33	33	0	100.0%	99	99	0	100.0%	2541	2541	0	100.0%
Summary	314	314	0		748	748	0		21279	21279	0	

routes05_calls_offered_half_pie

Description

This template generates a real-time pie chart that shows the distribution of calls offered to selected routes for the current half-hour interval. The calls offered value (for example 4.07%) is a percentage of the total calls offered to the routes listed in the chart legend.

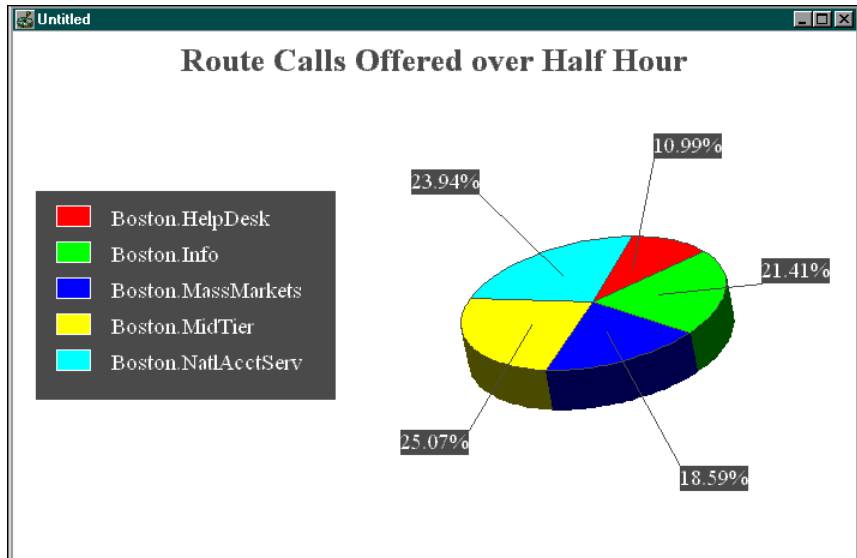
Database Table

Route_Real_Time

Data

Calls offered. The percentage of the total of incoming and internal calls sent to the route for the current half-hour interval. Calls are counted as offered as soon as they are sent to the route.

Example



routes06_serv_level_monitor_graph

Description

This template generates a real-time bar graph that shows service levels for the selected routes since the end of the last five-minute interval, for the current half-hour interval, and since midnight.

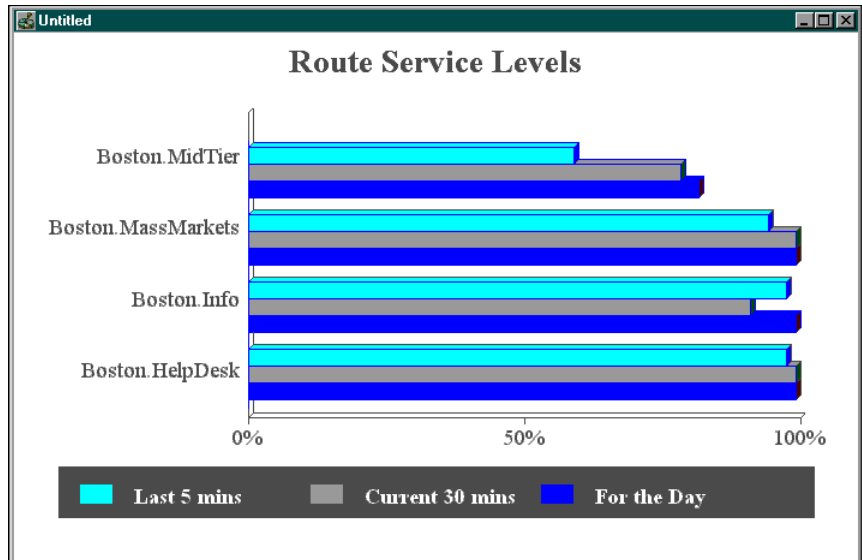
Database Table

Route_Real_Time

Data

Service level. The percentage of incoming calls to the route during the interval that were answered within a specified threshold.

Example



routes07_now_to5_grid

Description

This template generates a grid that provides call counts, queue status, and service level data in real-time and for the last five minutes for selected routes. A summary row totals the values in each column for all the routes listed.

Database Table

Route_Real_Time

Data

Calls talking. The number of calls on which agents for the route are currently talking.

Calls in queue. The number of calls to the route that are in queue at each peripheral now.

Average delay in queue. The average delay for calls currently in queue for the route.

Longest call in queue. The time that the longest call in queue for the route has spent in the queue.

Calls offered. The total number of incoming calls and internal calls sent to the route since the end of the last five-minute interval. Calls are counted as offered as soon as they are sent to the route.

Calls handled. The number of calls answered and finished for the route since the end of the last five-minute interval. (Also provided as a percentage of the total calls offered to the route during the half-hour interval.)

Calls abandoned. The number of calls in which the caller hung up before being connected with an agent. Measured since the end of the last five-minute interval. (Also provided as a percentage of the total calls offered to the route during the half-hour interval.)

Average speed of answer (ASA). The average time that all calls offered to the route waited before being answered. Measured since the end of the last five-minute interval.

Average handle time (AHT). The average handle time for calls handled by agents for the route since the end of the last five-minute interval. Handle time includes time that agents spend talking on inbound calls (Talking In) and performing after call work (Work Ready and Work Not Ready).

Average talk time. The average time that agents for this route spent talking on calls handled on the route since the end of the last five-minute interval. Talk time includes time spent in the Talking In, Talking Out, and Talking Other states.

Service level. The percentage of incoming calls to the route that were answered within a specified threshold during the interval (shown since the end of the last five-minute interval, for the current half-hour interval, and since midnight).

Example

Routes	Status Now				Status over last 5 minutes						Service Level				
	Calls Talking	Calls Queued	Avg Delay	Longest in Queue	Offered	Handled	Aband		Average			5 min	30 min	today	
									ASA	AHT	Talk				
Bellevue.MassMarkets	19	0		0	33	30	100%	0	0%	0.0	215.1	184.8	100%	100%	100%
Bellevue.MidTier	24	30	77	130	76	74	100%	0	0%	123.5	148.2	120.1	0%	0%	0%
Bellevue.NatlAcctServ	30	1	9	9	55	53	100%	0	0%	0.2	199.4	163.9	100%	100%	100%
Bellevue.NewMarkets	16	0		0	28	28	100%	0	0%	0.0	169.9	160.0	100%	100%	100%
Bellevue.PremiumSales	22	0		0	33	33	100%	0	0%	0.2	209.9	179.9	100%	100%	100%
Bellevue.Proactive	45	0		0	60	61	100%	0	0%	0.5	239.5	210.0	100%	100%	100%
Summary:	156	31	75.0	130	285	279	100%	0	0%	32.5	196.6	167.3	73%	73%	73%

routes11_calls_analysis_daywise

Description

This template generates a historical grid that provides daily totals on service levels, queue status, and call counts for selected routes. A summary row totals or averages the data for individual routes.

Database Table

Route_Half_Hour

Data

Service level. The percentage of incoming calls to the route that were answered within a specified threshold (for the day).

Average speed of answer (ASA). The average time that all calls offered to the route waited before being answered (for the day).

Average handle time (AHT). The average handle time for calls handled by agents for the route (for the day). Handle time includes time that agents spend talking on inbound calls (Talking In) and performing after-call work (Work Ready and Work Not Ready).

Average delay in queue. The average delay for all calls that were in queue for the route for the day.

Calls offered. The total number of incoming calls and internal calls sent to the route for the day. Calls are counted as offered as soon as they are sent to the route.

Calls handled. The number of calls answered and finished for the route during the current five-minute interval. (Also provided as a percentage of the total calls offered to the route during the half-hour interval.)

Calls abandoned. The number of calls during the day in which the caller hung up before being connected with an agent. (Also provided as a percentage of the total calls offered to the route during the half-hour interval.)

Example

Calls Analysis of Routes (By Day)										
From 02/01/97 00:00 To 04/01/97 23:59										
Route	Date	Service Level	ASA	AHT	Delay	Calls				
						Offer	Handle	Aband		
Bellevue.MassMarkets	02/01/97	100.0%	0	214		3096	3096	100%	0	0%
	03/01/97	100.0%	0	215		9652	9652	100%	0	0%
	04/01/97	100.0%	0	215		9662	9662	100%	0	0%
	Route Summary	100.00%	0	26	0	22410	22410		0	
Bellevue.MidTier	02/01/97	24.4%	62	148	65	7001	7000	100%	1	0%
	03/01/97	8.7%	100	148	102	21770	21723	100%	47	0%
	04/01/97	0.0%	133	148	133	21772	21764	100%	8	0%
	Route Summary	7.17%	29	40	85	50543	50487		56	
Bellevue.NatAcctServ	02/01/97	99.4%	1	199	6	4520	4520	100%	0	0%
	03/01/97	100.0%	1	199	4	14004	14004	100%	0	0%
	04/01/97	100.0%	1	199	4	14019	14019	100%	0	0%
	Route Summary	99.92%	0	35	0	32543	32543		0	
Bellevue.NewMarkets	02/01/97	100.0%	0	189	5	2422	2422	100%	0	0%
	03/01/97	100.0%	0	190	6	7508	7508	100%	0	0%
	04/01/97	100.0%	0	190	8	7522	7522	100%	0	0%
	Route Summary	100.00%	0	18	0	17452	17452		0	

routes12_calls_analysis_half_hour

Description

This template generates a historical grid that provides half-hour call counts, time in seconds for ASA, AHT, and average delay in queue, and service levels for selected routes. This grid also provides a route summary row that averages or totals the data for individual routes listed.

Database Table

Route_Half_Hour

Data

Service level. The percentage of incoming calls to the route that were answered within a specified threshold during the half-hour interval.

Average speed of answer (ASA). The average time that all calls offered to the route waited before being answered during the half-hour interval.

Average handle time (AHT). The average handle time for calls handled by agents for the route for the half-hour interval. Handle time includes time that agents spend talking on inbound calls (Talking In) and performing after-call work (Work Ready and Work Not Ready).

Average delay in queue. The average delay for all calls that were in queue for the route for the half-hour interval.

Calls offered. The total number of incoming calls and internal calls sent to the route during the half-hour interval. Calls are counted as offered as soon as they are sent to the route.

Calls handled. The number of calls answered and finished for the route during the half-hour interval. (Also provided as a percentage of the total calls offered to the route during the half-hour interval.)

Calls abandoned. The number of calls during the half-hour interval in which the caller hung up before being connected with an agent. (Also provided as a percentage of the total calls offered to the route during the half-hour interval.)

Example

Calls Analysis of Routes (By Half Hour)												
		From 02/01/97 09:00		To 02/01/97 15:00								
Route	Date	Time	Service Level	ASA	AHT	Delay	Calls					
							Offer	Handle	Aband			
Bellevue Service	02/01/97	09:00	100.0%	0	395		131	72	100.0%	0	0.0%	
	02/01/97	09:30	100.0%	0	395		174	199	100.0%	0	0.0%	
	02/01/97	10:00	100.0%	0	395		219	215	100.0%	0	0.0%	
	02/01/97	10:30	100.0%	0	395		185	175	100.0%	0	0.0%	
	02/01/97	11:00	100.0%	0	395		208	220	100.0%	0	0.0%	
	02/01/97	11:30	100.0%	0	395		193	177	100.0%	0	0.0%	
	02/01/97	12:00	100.0%	0	395		209	216	100.0%	0	0.0%	
	02/01/97	12:30	100.0%	0	395		183	192	100.0%	0	0.0%	
	02/01/97	13:00	100.0%	0	395		224	202	100.0%	0	0.0%	
	02/01/97	13:30	100.0%	0	395		174	192	100.0%	0	0.0%	
	02/01/97	14:00	100.0%	0	395		219	217	100.0%	0	0.0%	
	02/01/97	14:30	100.0%	0	395		189	177	100.0%	0	0.0%	
	Route Summary			100.00%	0	141	0	2308	2254		0	

rtecli11_status_by_five_minutes

Description

This template generates a historical grid that shows data on routing client requests and responses during the current five minute interval.

Database Table

Routing_Client_Five_Minute

Data

Responses. The number of route responses to the routing client during the five-minute interval.

Mean responses. The mean time, in milliseconds, for the route responses to the routing client during the five-minute interval.

Rcv in error. The number of routing requests from the routing client that produced errors during the five-minute interval.

Timeout calls. The number of route responses to the routing client that timed out during the five-minute interval.

Max delay. The maximum delay, in milliseconds, of route responses to the routing client during the five-minute interval.

Late calls. The number of route responses to the routing client that exceeded the late threshold but did not time out.

Discarded calls. The number of routing requests from the routing client that were discarded because of an internal constraint such as buffering.

Example

Routing Client Performance Report								
Physical Controller	Datetime	Responses	Mean Response	Rcv In Error	Timeout Calls	Max Delay	Late Calls	Discarded Calls
ICRP_NIC_1	03/04/97 00:05:00	0	0	0	0	0	0	0
ICRP_NIC_2	03/04/97 00:05:00	0	0	0	0	0	0	0
ICRP_NIC_1	03/04/97 00:10:00	0	0	0	0	0	0	0
ICRP_NIC_2	03/04/97 00:10:00	0	0	0	0	0	0	0
ICRP_NIC_1	03/04/97 00:15:00	0	0	0	0	0	0	0
ICRP_NIC_2	03/04/97 00:15:00	0	0	0	0	0	0	0
ICRP_NIC_1	03/04/97 00:20:00	0	0	0	0	0	0	0
ICRP_NIC_2	03/04/97 00:20:00	0	0	0	0	0	0	0
ICRP_NIC_1	03/04/97 00:25:00	0	0	0	0	0	0	0
ICRP_NIC_2	03/04/97 00:25:00	0	0	0	0	0	0	0

schimp01_name_time_numbers

This template is used mainly by GEOTEL support engineers to test the data import functions of the Workforce Management Integration System. The exact data that appear in this Monitor ICR report depend on the specific workforce management system you are using with the ICR system. In general, the data are for the current time period and appear as imported from the external source.

Note: To use this report, you need the GEOTEL•*Schedule Link* option.

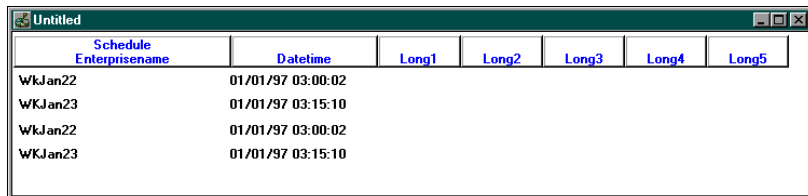
Database Table

Schedule_Import_Real_Time

Data

Data shown depend on the data imported through the ICR Workforce Management Integration System.

Example



Schedule	Enterprisename	Datetime	Long1	Long2	Long3	Long4	Long5
WkJan22		01/01/97 03:00:02					
WkJan23		01/01/97 03:15:10					
WkJan22		01/01/97 03:00:02					
WkJan23		01/01/97 03:15:10					

trkgrp01_alltrunkbusy_graph

Description

This template generates a real-time bar graph that shows the number of seconds that all trunks in the selected trunk groups have been fully busy for the current half-hour interval.

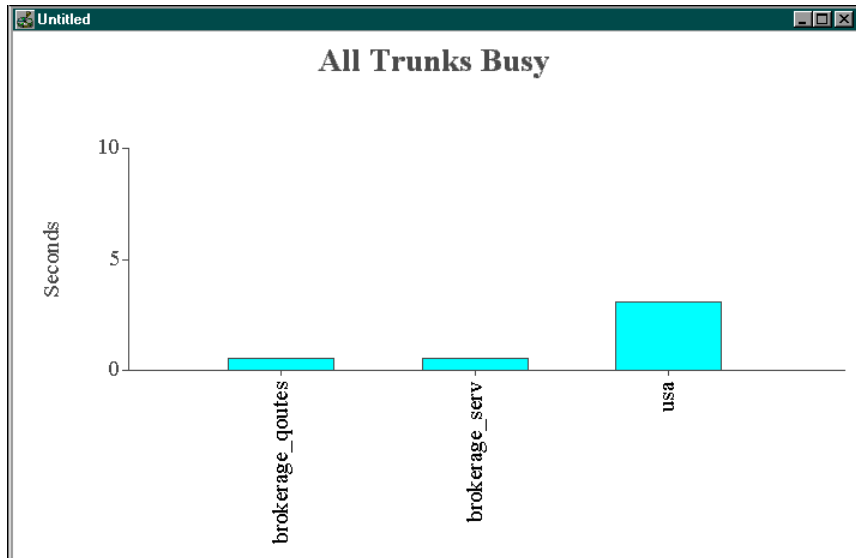
Database Table

Trunk_Group_Real_Time

Data

All trunks busy. The total time that all trunks in the selected trunk group were busy for the current half-hour interval.

Example



trkgrp02_idle_inservice_status

Description

This template generates a real-time bar graph that shows the number of trunks in selected trunk groups that are idle and the number of trunks that are in service.

Database Table

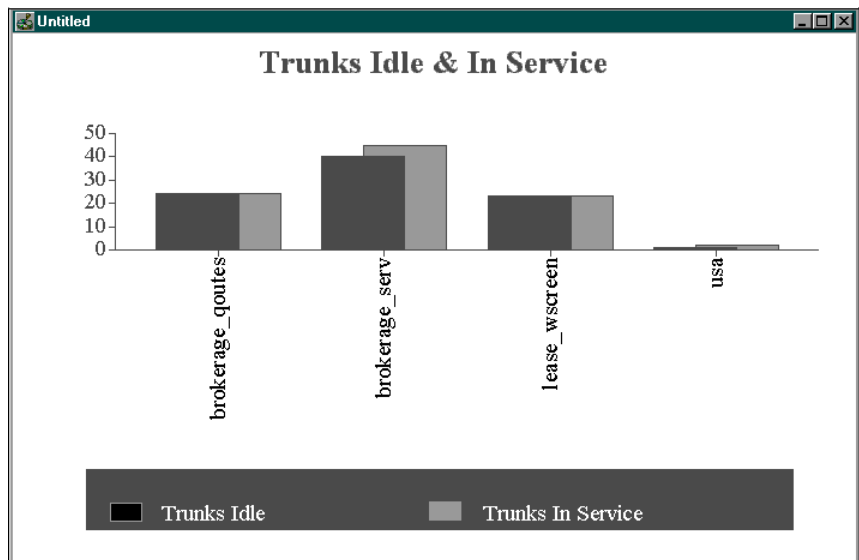
Trunk_Group_Real_Time

Data

Trunks idle. The number of trunks in the trunk group that are non-busy, or idle.

Trunks in service. The number of trunks in the trunk group that are in service.

Example



trkgrp03_trunkgroup_status_grid

Description

This template generates a real-time grid that shows the status of trunks in selected trunk groups.

Database Table

Trunk_Group_Real_Time

Data

Trunks idle. The number of trunks in the trunk group that are non-busy, or idle.

Trunks in service. The number of trunks in the trunk group that are in service.

All trunks busy. The total time that all trunks in the selected trunk group were busy for the current half-hour interval.

Example

Trunk Group	Trunks In Service	Trunks Idle	All Trunks Busy
brokerage_quotes	24	24	0
brokerage_serv	45	43	0
lease_wscreen	23	23	0
usa	2	1	15
Total:	94	91	15

trkgrp11_trunkgroup_performance_grid

Description

This template generates a historical grid that shows half-hour trunk performance data for selected trunk groups.

Database Table

Trunk_Group_Half_Hour

Data

Trunks idle. The number of trunks in the trunk group that were non-busy, or idle, during the half-hour interval.

Trunks in service. The number of trunks in the trunk group that were in service during the half-hour interval.

All trunks busy. The total time that all trunks in the selected trunk group were busy during the half-hour interval.

Example

Trunk Group	Date/Time	Trunks In Service	Trunks Idle	All Trunks Busy
Bellevue.BellevueTrunks	02/01/97 10:00	24	24	0
Bellevue.BellevueTrunks	02/01/97 10:30	24	24	0
Bellevue.BellevueTrunks	02/01/97 11:00	24	24	0
Bellevue.BellevueTrunks	02/01/97 11:30	24	24	0
Bellevue.BellevueTrunks	02/01/97 12:00	24	24	0
Bellevue.BellevueTrunks	02/01/97 12:30	24	24	0
Bellevue.BellevueTrunks	02/01/97 13:00	24	24	0
Bellevue.BellevueTrunks	02/01/97 13:30	24	24	0
Bellevue.BellevueTrunks	02/01/97 14:00	24	24	0
Bellevue.BellevueTrunks	02/01/97 14:30	24	24	0
Group Summary:		240	240	0

Glossary

Abandoned call

A call in which the caller hangs up before the call is answered. Calls in which the caller hangs up almost immediately do not have to be counted as abandoned. When configuring each peripheral, you can specify the minimum length of an abandoned call.

About box

A dialog box that displays general information about an application. The About box usually contains copyright and version information. In most applications, you can invoke it from the Help menu.

ABS. *See* Application Bridge Server.

ACD. *See* Automatic Call Distributor.

ACD Simulator

A GEOTEL software module that allows you to test applications within the ICR by simulating ACDs. The ACD Simulator runs on a PC and can simulate up to five ACDs.

Active script

A script that is scheduled for the current date and time. At any time, zero or one routing script is active for each call type. If more than one routing script is scheduled for a call type during a period of time, the ICR choose the script with the most specific schedule. When the ICR receives a call routing request, it invokes the active script for that call type. If that script terminates without routing the call, the ICR uses the default route associated with the dialed number.

Admin Workstation (AW)

A personal computer used to monitor the handling of calls in the ICR system. The Admin Workstation can also be used to modify the system configuration or scripts.

Administrative Script

A script that the ICR executes to perform background processing. For example, an administrative script might set persistent variables or invoke an application gateway. Use the Script Editor to create, modify, and schedule administrative scripts.

Agent

Anyone who can answer incoming phone calls. A *peripheral agent* is an agent who is associated with a particular peripheral (ACD, PBX) in the call center enterprise. A peripheral agent can be a member of one or more skill groups. (Some peripheral types limit each agent to one skill group assignment.) Optionally, you can group peripheral agents into agent teams.

Agent distribution

The flow of agent data from a specific peripheral to a specific Distributor. You can separately enable and disable each agent distribution.

Agent out call

An outbound call made by an agent.

Agent Reporting. *See* GEOTEL•Agent Reporting.

Agent team

A group of peripheral agents configured on the same peripheral to meet a business need. You can have an agent team that includes agents at the call center and agents who work at home. Although these agents are at different locations, they are associated with a particular ACD at the call center. Members of an agent team can also be members of one or more skill groups.

AHT. *See* Average Handle Time.

All Trunks Busy (ATB)

The state of a trunk group when all trunks are in use. The trunk group cannot accept any new inbound or outbound calls in this state. The ICR tracks the amount of time during which all trunks in a trunk group are busy. You can view this information in real-time or historical reports.

ANI. *See* Automatic Number Identification.

Announcement

A recorded verbal message played to a caller.

Answer wait time

The elapsed time from when a call is offered at the peripheral to when it is answered. Answer wait time is the sum of delay time, queue time, and ring time.

Answered call

A call is counted as answered when it reaches an agent or VRU. For example, the CallsAnsweredTo5 field in the Service_Five_Minute table counts the number of calls that reached agents or VRUs during the five-minute interval. The calls might still be in progress when the interval ends.

By contrast, a call is not counted as handled until it is finished. Therefore, the number of answered calls and handled calls during an interval is not necessarily the same, but eventually each answered call is counted in both categories.

Application Bridge Server (ABS)

A GEOTEL software module that allows the ICR to share the Application Bridge interface from an Aspect ACD with other applications.

Application Gateway

A construct that allows an ICR routing script to invoke an external application. You can configure a gateway in Configure ICR and reference it through the Gateway node in a script. Application Gateways are available only if you purchase the GEOTEL•Gateway product.

Area code

A three-digit prefix used to indicate the destination area for long distance calls. Also known as Numbering Plan Area (NPA). You can use the area code to classify calls into call types. You can also define a region as a collection of area codes.

ASA. *See* Average Speed of Answer.

ATB. *See* All Trunks Busy.

Automatic Call Distributor (ACD)

A programmable device at a call center that routes incoming calls to targets within that call center. After the Intelligent CallRouter determines the target for a call, the call is sent to the ACD associated with that target. The ACD must then complete the routing as determined by the ICR.

Automatic Number Identification (ANI)

A feature that provides the billing phone number of the phone from which a call originated or the phone number itself. When qualifying calls, the ICR compares the ANI to the calling line ID value specified for a call type. *See also* Calling Line ID (CLID).

Available state

The state where the agent is ready to accept calls, but is not currently involved in call work.

Average Handle Time (AHT)

The average time it took for calls to a service or skill group to be handled. Handle time includes talk time plus after-call work time.

Average Speed of Answer (ASA)

The average answer wait time for calls to a service or route.

AW. *See* Admin Workstation.

Basic Rate Interface (BRI)

One of two levels of ISDN service. The BRI provides two bearer channels for voice and data and one channel for signaling (commonly expressed as 2B+D). *See also* Primary Rate Interface (PRI).

Boolean expression

An expression that evaluates to TRUE or FALSE; for example:

*.ExpectedDelay < 50

BRI. *See* Basic Rate Interface.

Business entity

A subset of the ICR enterprise that contains its own scripts, enterprise services, enterprise skill groups, enterprise agent groups, and schedules. A business entity may, for example, represent a division within a large corporation or a single customer within a service bureau. You can limit the access of individual users and user groups to specific business entities.

By default, the ICR enterprise consists of only one business entity. If you enable partitioning, you can define multiple business entities.

Busy label

A routing label that causes the routing client to play a busy signal to the caller.

Call-by-call routing

A strategy by which each incoming call is processed separately to determine the optimum destination. The decision for each call can be based on real-time information about the state of each call center as well as historical data. By contrast, simple allocation routing statistically distributes calls among call centers based on historical patterns.

Call center

A single site at which incoming phone calls are received and answered. Typically, each call center can provide several services and is staffed by agents from one or more skill groups.

Call control variables

A set of variables used by a peripheral to hold information related to a call. For example, an Aspect ACD defines variables A through E. When you define a routing client you can establish how the client's call control variables map to ICR variables such as dialed number, caller-entered digits, and calling line ID.

Call details

Data saved by the ICR about every call it routes and calls that terminate at each peripheral. Route call detail describes how the ICR processed the

call. Termination call detail describes how a call was handled at a peripheral. *See also* Route Details and Termination Call Details.

Call type

A category of incoming calls. Calls are categorized based on dialed number (DN), caller-entered digits (CED), and calling line ID (CLID). Each call type has a schedule that determines which routing script or scripts are active for that call type at any time. Optionally, you can define a default call type for each routing client.

Caller-Entered Digits (CED)

Digits entered by a caller on a touch-tone phone in response to prompts. Either a peripheral (ACD, PBX, or VRU) or the carrier network can prompt for CEDs.

Calling Line ID (CLID)

Information about the billing telephone number from which a call originated. The CLID value might be the entire phone number, the area code, or the area code plus local exchange.

CallRouter

The main part of the ICR system. The *CallRouter* receives call routing requests and determines the best destination for each call. It also collects information about the entire system.

Carrier

A company that provides telecommunications circuits. Carriers include the local telephone company and companies like AT&T, MCI, and Sprint.

CCSS7

Common Channel Signaling System 7. The protocol used by the AT&T signaling network. The ICR's NIC receives routing requests from the CCSS7 network and returns a routing label to the CCSS7 network.

CED. *See* Caller-Entered Digits.

Central Controller

The computer or computers running the *CallRouter* and the ICR Database Manager. In addition to routing calls, the Central Controller maintains a database of data collected by the Peripheral Gateways (PGs) and data that the Central Controller has accumulated about the calls it has routed.

Central database

The relational database stored on the ICR Central Controller, which stores historical five-minute and half-hour data, call detail records, ICR configuration data, and call routing scripts.

Central Office (CO)

The switching office of the local telephone company. The local central office receives calls from within the local area and either routes them locally or passes them to an interexchange carrier (IXC). On the receiving end, the local central office receives calls that originated in other areas from the IXC.

A Local CO trunk connects a call center directly with the local phone company's central office.

Classes

A security class is a subset of the ICR configuration data. Some classes support only Read access for all users. For other classes, you can assign specific access levels (Read, Reference, or Maintenance) to individual users or user groups.

The ICR supports the following classes: Call, Global, Network Interface, Peripheral, and System.

CLID. *See* Calling Line ID.

Clipboard

A Windows NT system resource that holds text and graphics that have been cut or copied from within an application. You can paste the contents of the Clipboard into an application.

CMS

Call Management System. A reporting package used on ACDs and PBXs made by Lucent.

CO. *See* Central Office.

Comment

An element within a script that documents the script or some part of it. Comments are not executable.

Configuration data

The description of your enterprise call center system. This includes, for example, the peripherals, agents, skill groups, services, call types, and regions that you use. The ICR must have complete and up-to-date configuration data in order to route calls properly.

Configuration registry

A repository of configuration data maintained by the Windows NT operating system. All applications on a computer can access the registry to store and retrieve configuration information. You can use the Windows NT Registry Editor (regedt32.exe) to view or modify data in the registry.

Connection

The link between two nodes in a script or between a node and a routing target set. Connections show the flow of control between objects in the script. Within the Script Editor, a connection is represented as a line segment.

Control menu

A standard menu that allows you to manipulate a window or dialog box. You can invoke the control menu by clicking on the control menu box located to the left of the title bar. You can also invoke the control menu for the application or the current dialog box by pressing ALT+SPACEBAR. You can invoke the control menu for a document window by pressing ALT+HYPHEN.

CRP. *See* Customer Routing Point.

CSFS. *See* Customer Support Forwarding Service.

CTI Gateway

The ICR process that acts a server for CTI clients to communicate with the ICR. The CTI Gateway process may run on the same computer as the Peripheral Gateway process or on a separate computer.

Current call

The call that the ICR (or a specific script) is currently processing. The ICR receives a routing request for a call and locates a target to which the call can be routed.

Custom function

A function that you can define in the Script Editor. A custom function is a shorthand for an expression. Optionally, the expression can reference parameters that are passed to the function.

Custom Screen Builder

A client database access application that is part of the GEOTEL Admin Workstation group of applications. The Custom Screen Builder is based on Powersoft™ InfoMaker. You use the Custom Screen Builder to change Monitor ICR predefined templates to suit a particular business need. You can also develop your own report templates for use in Monitor ICR.

Customer

The organization whose calls the ICR routes. A customer may have several semi-autonomous units or business entities. Optionally, the ICR can be partitioned so that business entities can operate independently.

In the standard configuration, the ICR routes calls for a single customer. In a service bureau configuration, a single ICR system may service multiple customers.

Customer Routing Point (CRP)

AT&T's terminology for third-party processors that accept routing requests from the CCSS7 network. Within the Intelligent CallRouter, the Network Interface Controller (NIC) acts as a CRP.

Customer Support Forwarding Service (CSFS)

The facility within the ICR Logger that receives events from all parts of the ICR, filters them, and saves appropriate messages. The Data Transfer Process (DTP) sends these messages to GeoTel Customer Support.

Database Manager

The part of the ICR system that stores information about the entire system in the central database. The Database Manager maintains the data that is used in reporting and making routing decisions.

Database schema

The organization of information within a database. The schema consists of table, field, and index definitions.

DDSN. *See* Distributed Diagnostics and Service Network.

DDSN Transfer Protocol (DTP)

The process on the ICR Logger that connects to GeoTel Customer Support and delivers any messages saved by the Customer Support Forwarding Service (CSFS). The DTP is part of the Distributed Diagnostics and Service Network (DDSN) which ensures that GeoTel Customer Support is informed promptly of any unexpected behavior within the ICR.

Default call type

The call type the ICR uses if a call's qualifiers do not map to any specific call type definition. You can specify a default call type for each routing client and a general default.

Delay in queue

The sum of time calls spent in the queue for a route or service. Delay in queue can also take into consideration abandoned calls. For example, the DelayQAbandTimeToHalf is the sum of time spent in queue for all calls to a route or service abandoned in queue during a half-hour interval.

Delay time

The time spent processing a call after it arrives at a peripheral, but before it is either queued or presented to an agent.

Deleted field

Many tables include a Deleted field. This field marks rows that have been deleted but that still have active dependencies. For example, if a script references Agent X and you delete Agent X, the ICR does not

actually delete that Agent record; it marks the agent as deleted. The record is actually deleted when the dependency is removed.

Device Management Protocol (DMP)

The session-layer communications protocol used within the Intelligent CallRouter. Different application level protocols might be running beneath DMP.

Dialed Number (DN)

The number that a caller dialed to initiate a call; for example, 800-555-1212.

Dialed Number Identification Service (DNIS)TM

A string (usually four, seven, or ten characters long) indicating the number dialed by a caller and how the call should be handled by the ACD, PBX, or VRU. The ICR uses the DNIS and trunk group to indicate the destination for a call.

DID. *See* Direct Inward Dialing/Dialed Number Identification Service.

Direct Inward Dialing/Dialed Number Identification Service (DID/DNIS)

When a call arrives at an ACD or PBX, the carrier sends a digital code on the trunk line. The switch can read this code to determine how it should dispatch the call. Typically, this value is the specific number dialed by the user. By mapping each possible code with an internal extension, the switch can provide direct inward dialing (DID).

The ICR uses the DID/DNIS value to specify the service, skill group, or specific agent to whom the switch should route the call. The switch reads the value from the trunk line when the call arrives and dispatches the call appropriately.

Distribute

To divide calls among a series of targets based on a numerical formula. You can use a Distribute node to do this within a script. To distribute calls on a strict percentage basis (rather than a formula basis), you can use a Percent Allocation node.

Distributed Diagnostics and Service Network (DDSN)

The facilities that gather events within the ICR and automatically report any unexpected behavior to GeoTel Customer Support. The DDSN includes the Customer Support Forwarding Service (CSFS) and DDSN Transfer Process (DTP).

Distributor. *See* Real-time distributor.

DMP. *See* Device Management Protocol.

DN. *See* Dialed Number.

DNIS. *See* Dialed Number Identification Service.

DNIS Override label

A routing label that is sent to the routing client along with a DNIS value. The routing client passes that DNIS value with the call to the destination indicated by the label.

DTP. *See* DDSN Transfer Protocol.

Duplexed

An arrangement in which two duplicate physical devices act as a single logical device. If one of the physical devices fails, the system continues to run normally by using the remaining physical device. *See also* Simplexed.

EAS. *See* Expert Agent Selection.

EMS. *See* Event Management Service.

Enterprise

An entire company or agency, possibly spanning many call centers. Enterprise refers to the set of call centers served by an ICR.

Enterprise Agent. *See* GEOTEL•*Enterprise Agent.*

Enterprise name

A character-string name commonly used to identify an object in the ICR database. An enterprise name must be unique among all objects of a specific type. For example, each service must have an enterprise name that is unique among all services.

An enterprise name can be up to 32 characters. The valid characters are upper-case and lower-case letters, digits, periods (.) and underlines (_). The first character of the name must be a letter or digit.

Enterprise service

A collection of services, typically from several call centers. While each individual service is tied to a specific peripheral, an enterprise service can span peripherals.

Enterprise skill group

A collection of skill groups, typically from several call centers. While each individual skill group is tied to a specific peripheral, an enterprise skill group can span peripherals.

Enterprise-wide call distribution

A strategy for allocating calls among several call centers or other answering locations based on real-time information about activity at

each location. The ICR implements enterprise-wide call distribution and allows calls to be sent to any network-addressable location within, or outside of, an enterprise.

Entity. *See* Business entity.

Event Management Service (EMS)

A software module within the Intelligent CallRouter that processes use to report events to other processes within the system.

Event Viewer

A feature of Monitor ICR that lets you view messages (events) generated by processes within the ICR system.

Expected delay

The ICR's predicted delay for any new call added to a service or route queue. The expected delay value is valid only if no agents are available for the route or service.

Expert Agent Selection (EAS)

A mode for the Lucent Definity ECS ACD. In this mode, agents are automatically added to pre-assigned skill groups at login. Calls can be routed either to the agent's physical extension or to the agent's login ID. In non-EAS mode, agents must manually add themselves to hunt groups and calls can be routed only to physical extensions.

Fault-tolerant architecture

A design that allows a system to continue running after a component of the system has failed. The ICR includes several levels of fault tolerance that minimize time when the system is non-responsive to call routing requests. The ICR fault-tolerant architecture eliminates single points of failure and provides disaster protection by allowing system components to be geographically separated.

Five-minute interval

Certain statistics within the ICR database are updated at five-minute intervals. The first such interval for each day begins at 12:00 midnight and ends at 12:05 A.M. The date and time at the start of the five-minute interval is saved with the data. This allows you to look back at data from previous five-minute intervals.

During a five-minute interval, statistics accumulate in real-time tables (for example, `Service_Real_Time`). At the end of the interval, the statistics are written to five-minute tables (for example, `Service_Five_Minute`).

Foreign exchange (FX)

A trunk type that connects a call center with a central office in a remote exchange. This allows callers in that remote exchange to directly access the call center without using an interexchange carrier.

Gateway. *See* Application Gateway and ICR Gateway.

Geographical region. *See* Region.

GEOTEL•Agent Reporting

An optional ICR feature that allows you to monitor real-time and historical data about individual agents, rather than groups of agents.

GEOTEL•Enterprise Agent

An optional ICR feature that provides CTI, call distribution, and reporting capabilities for agents that are not connected to an ACD.

GEOTEL•Enterprise CTI

An optional ICR feature that allows a Computer Telephone Interface (CTI) connection to an external device.

GEOTEL•Gateway

An optional ICR feature that allows a routing script to invoke an external application. The script can pass arguments to the application and receive data in return.

GEOTEL•Gateway SQL

An optional ICR feature that allows a routing script to query data from an external database. The script can then use the data to determine the target for a call.

GEOTEL•Monitor ICR

A GeoTel product that allows read-only access to ICR data.

GEOTEL•Network ICR

An optional feature that allows a carrier to set up two levels of ICRs. The first (network) level ICR receives routing requests from the carrier network. It then either makes a simple routing decision or passes the request on to a second (customer) level ICR for further processing.

GEOTEL•Partition

An optional ICR feature that allows you to restrict access to specific ICR data to selected users or user groups within the enterprise. For example, the ICR database may contain data from several different divisions within a corporation. You can define each division as a business entity. You may then prevent users within each division from accessing data associated with other divisions.

GEOTEL•Schedule Link

An optional ICR feature that allows you to import and export data between the ICR and an external force management system. You can use imported information in routing scripts and reports.

GEOTEL•Web View

An optional ICR feature that allows you to use a Web browser for monitor-only access to real-time and historical ICR reports and ICR script monitoring.

GMT. *See* Greenwich Mean Time.

Greenwich Mean Time (GMT)

The time zone at the meridian at Greenwich, England. This time zone is used as an international standard.

Grid

A feature of the Script Editor that establishes a series of vertical and horizontal lines at fixed intervals. You can use the Placement Grid command from the View menu to view or hide the grid for a window and adjust the grid spacing.

Grid point

Within the Script Editor, a grid point is the intersection of a vertical and horizontal line in a grid. You can force objects to position to grid points by choosing the Snap To Grid option from the Layout Grid command of the View menu.

Half-hour interval

Half-hour statistics within the ICR database are updated at 30-minute intervals. The first such interval for each day begins at 12:00 midnight and ends at 12:30 A.M. The date and time at the start of the 30-minute interval is saved with the data. This allows you to look back at data from previous 30-minute intervals.

During a 30-minute interval, statistics accumulate in real-time tables (for example, `Service_Real_Time`). At the end of the interval, the statistics are written to half-hour tables (for example, `Service_Half_Hour`).

Handle time

The time an agent spends talking on an inbound call and performing after-call work.

Handled calls

A call is counted as handled when the call is finished. For example, the `CallsHandledTo5` field in the `Service_Five_Minute` table counts the number of calls that finished during the five-minute interval. The calls might have been answered before the interval began.

By contrast, a call is counted as answered as soon as it reaches an agent or VRU. Therefore, the number of handled calls and answered calls during an interval is not necessarily the same, but eventually each answered call is counted in both categories.

HDS. *See* Historical Data Server.

Historical data

Data collected at five-minute and half-hour intervals and stored in the ICR central database or an HDS database.

Historical Data Server (HDS)

An Admin Workstation with a special database that holds ICR historical data. In a normal configuration, historical data is stored only in the central database. When you use the HDS option, the historical data is also stored on the HDS machine (which must be a real-time distributor). Other Admin Workstations at the site can read historical data from the HDS rather than accessing the central database.

ICP. *See* Intelligent Call Processing.

ICR. *See* Intelligent CallRouter.

ICR gateway

A construct that allows one ICR system to forward a request to another ICR. You can configure an ICR gateway in Configure ICR and reference in the ICR Gateway node in a routing script. Service bureaus may use ICR gateways to implement a multi-tier architecture.

ICR Protocol (ICRP)

The communication protocol used by ICR gateways to pass a routing request and response between two ICRs. The ICR sending the request must be set up for remote network routing and the ICR receiving the request must be running an ICRP Network Interface Controller.

Idle

Another name for the Not Ready state. *See* Not Ready state.

Incoming call

A call offered to a route or service from an external carrier. *See also* Offered calls.

Index

A database construct that allows for quick access to data, sorting of rows, and can be used to prevent the creation of duplicate data. An index is associated with a table and contains an entry, or key, for each row in the table. The key is composed of one or more column values from the row. The database manager can quickly locate data by searching the index rather than the actual rows. Similarly, the database manager can sort the index faster than it can sort the rows. If the index is defined as unique, no two key values can be identical.

Initialize Local Database

A tool on the Admin Workstation that copies the latest configuration data and scripts from the central database to the local database.

Instance

A single installation of the ICR. An instance consists of several components (*CallRouter*, *Logger*, *Peripheral Gateways*, *Admin Workstations*), some of which might be duplexed. An instance can be dedicated to a single customer or, in some environments, shared among several customers.

Integrated Services Digital Network (ISDN)

An international standard for telephone transmission. ISDN provides an end-to-end digital network and provides a standard for out-of-band signaling. It also provides greater bandwidth than older telephone services. The two standard levels of ISDN are the Basic Rate Interface (BRI) and the Primary Rate Interface (PRI).

Intelligent Call Processing (ICP)

AT&T's name for the facility that allows third-party products such as the *Intelligent CallRouter* to pre-route calls.

Intelligent CallRouter (ICR)

The GEOTEL system that implements enterprise-wide call distribution across call centers. The ICR provides *Pre-Routing*[®], *Post-Routing*[®], and performance monitoring capabilities.

Interactive Voice Response. *See* Voice Response Unit.

Interexchange Carrier (IXC)

A long-distance telephone company such as AT&T, MCI, or Sprint.

Interflow

The ability of a switch to forward calls to another location within the switch or to another switch. Interflow between switches requires a dedicated trunk line.

Internet Protocol (IP)

The connectionless-mode network service protocol of TCP/IP. IP enables the entities in a network to communicate by providing IP addresses and by numbering and sending TCP data packets over the network. NICs, PGs, and Admin Workstations in the ICR system use IP to communicate over a wide area network. *See also* Transmission Control Protocol (TCP).

IP router. *See* Router (IP).

ISDN. *See* Integrated Services Digital Network.

IVR. *See* Voice Response Unit.

IXC. *See* Interexchange Carrier.

Job Scheduler

A tool that allows you to set up specific commands to be executed automatically at given dates and times. You can schedule a command to execute once, on several specific days, or regularly on a weekly or monthly schedule.

Key

An entry in a database index. Each key in the index corresponds to a table row and is composed of specific column values from that row.

LAA. *See* Longest Available Agent.

Label

A value that the ICR returns to a routing client. The routing client maps the label to either an announcement or a trunk group and DNIS value. The routing client then either plays the announcement or delivers the call to the specified trunk group along with the DNIS value.

LAN. *See* Local Area Network.

LEC. *See* Local Exchange Carrier.

Local Area Network (LAN)

The connection of several computers within a building, usually using dedicated lines.

Local Central Office

The switching office of the local telephone company. The local central office receives calls from within the local area and either routes them locally or passes them to an interexchange carrier (IXC). On the receiving end, the local central office receives calls that originated in other areas from the IXC.

A Local CO trunk type connects a call center directly with the local phone company's central office.

Local database

A database on the Admin Workstation that contains information copied from the central database. The local database also contains real-time data on the status of the call center enterprise.

Local Exchange Carrier (LEC)

The local phone company responsible for delivering calls within a local area.

Log file

A file used to store messages from processes within the ICR system. The ICR process-related log files are stored in the logfiles subdirectory under the component directory.

Logged On

A state in which agents have made their presence known to the system, but may or may not be ready to receive calls.

Logger

The process within the ICR that manages the central database. Each side of a duplexed Central Controller includes a Logger. The Logger may run on the same machine as the *CallRouter* process or on a separate machine.

Logical deletion

If a table includes a Deleted field, then records deleted from the table are not removed from the database. Instead, the Deleted field is set to Y (yes) to indicate that the record is logically deleted. The ICR tools treat the record as though it were deleted. After an object is logically deleted, you can choose to physically delete it (destroy permanently).

Logical interface controller

An entity that represents a single simplexed or a pair of duplexed physical interface controllers. A physical interface controller is either a Network Interface Controller (NIC) or a Peripheral Gateway (PG).

Longest Available Agent™ (LAA)

The agent that has been continuously in the Available state for the longest time. The ICR can examine services or skill groups from different peripherals and route a call to the service or group with the longest available agent. (This feature is not supported on Rockwell ACDs.)

Message Delivery Service (MDS)

The facilities used by ICR nodes to communicate with each other. The MDS plays a key role in keeping duplexed components synchronized.

Mirroring

An arrangement by which changes to one storage device are automatically written to a similar device. For example, you can set up a disk as a mirror of another disk so that all writes to one disk are also automatically written to the other. This allows for recovery from media failure. Mirrored disks are an alternative to a RAID configuration.

Monitor ICR

A tool that allows you to monitor real-time and historical activity within your enterprise. Monitor ICR allows you to build reports from templates or view reports you have saved previously. You can also view events generated by ICR processes.

Monitor mode

A Script Editor mode in which the number of routing requests that pass through each connection of a script is shown on the screen. You can use this mode to determine whether a script is behaving as expected.

NAA. *See* Next Available Agent.

Name. *See* Enterprise name.

NCP. *See* Network Control Point.

Network Control Point (NCP)

The process within the AT&T signaling network that sends routing requests to a Customer Routing Point (CRP) such as the network interface controller (NIC) within the Intelligent CallRouter.

Network ICR (NICR)

In a two-tier service bureau architecture, the ICR that receives route requests from the carrier network and forward them to a Customer ICR (CICR). A NICR usually contains only a small configuration that allows it to directly route a subset of calls and dispatch the other requests to the appropriate CICR. The NICR receives route responses from the CICRs and forward them to the carrier network.

Network Interface Controller (NIC)

The computer and process within the ICR system that communicates directly with the IXC's signaling network. The NIC reads call routing requests from the network and transfers them to the ICR's Central Controller. Subsequently, the NIC passes a routing label from the Central Controller to the IXC signaling network.

Network trunk group

A group of trunks to which a routing client can direct calls. A peripheral may divide its trunks into trunk groups differently than the routing client does. Simple trunk groups describe the peripheral's view of the trunks; network trunk groups describe the routing client's view of the trunks.

A network trunk group maps to one or more peripheral trunk groups.

Next Available Agent

A strategy for selecting an agent to handle a call. The strategy seeks to maintain an equal load across skill groups or services.

NIC. *See* Network Interface Controller.

Node

An executable element within a script. A script consists of nodes, connections, routing targets, and comments.

Also, a single computer within a network.

Node Manager

A process that runs on each physical node (computer) in the ICR system and manages other ICR processes on that system. The Node Manager is responsible for initializing nodes and for restarting failed processes. The Node Manager is guided by a configuration file that is stored on each node. The file describes, among other things, which processes must be started, and if necessary, restarted on the node.

Not Ready state

A state in which agents are logged on but are neither involved in any call handling activity nor available to handle a call.

Numbering Plan Area (NPA). *See* Area code.

Object palette

A Script Editor subwindow that contains template nodes and targets. You can drag a copy of an object from the palette into your script. You can use the Palette command on the View menu to toggle between viewing and hiding the object palette.

Offered call

An incoming call or internal call sent to a specific route or service. In real-time data, a call is counted as offered as soon as it is sent to the route or service. However, if the caller hangs up before the abandoned call wait time has elapsed, that call is not counted as offered in the historical (five-minute and half-hour) data. This ensures that the number of calls offered is the same as the number answered plus the number abandoned.

Open Database Connectivity (ODBC)

A standard application programming interface (API) that allows a single client application to access any of several databases. Because the ICR's databases support ODBC, you can query them from any third-party client tool that also supports ODBC.

Open Peripheral Interface (OPI)

The GEOTEL proprietary interface between Peripheral Gateways (PGs) and the ICR's Central Controller.

Partitioning. *See* GEOTEL•Partition.

PBX. *See* Private Branch Exchange.

Percent utilization

The percent utilization is computed by dividing the total time agents spent handling calls by the total time agents were ready. (The ready time is calculated by subtracting the Not Ready time from the total time that agents were logged on.) The value is expressed as a percentage.

Peripheral

A switch, such as an ACD, PBX, or VRU, that receives calls that have been routed by the ICR.

Peripheral Gateway (PG)

The computer and process within the ICR system that communicates directly with the ACD, PBX, or VRU at the call center. The Peripheral Gateway reads status information from the peripheral and sends it to the Central Controller. In a private network configuration, the Peripheral Gateway sends routing requests to the Central Controller and receives routing information in return.

Peripheral Interface Manager (PIM)

The GEOTEL proprietary interface between a peripheral and the Peripheral Gateway (PG).

Peripheral service

A service that is tied to a specific peripheral (ACD, PBX, or VRU) in the call center enterprise. Peripheral services typically identify a type of processing that the caller requires. For example, a peripheral might have services defined for Sales, Technical Support, or New Accounts. *See also* Service.

Peripheral skill group

A skill group that is associated with a specific peripheral (ACD, PBX, or VRU) in the call center enterprise. For example, a single peripheral might have skill groups defined for agents who can handle technical questions or who can speak Spanish. *See also* Skill group.

Peripheral target

A combination of a trunk group and a DNIS value. A peripheral target is associated with a service, skill group, or agent at a peripheral. Each peripheral target is also associated with a route that can be returned by a routing script.

Note that **peripheral target** refers to a trunk group and DNIS value.

Skill target refers to the entity at the peripheral to which the call is dispatched.

PG. *See* Peripheral Gateway.

Physical interface controller

A single Network Interface Controller (NIC) or Peripheral Gateway (PG). A logical interface controller represents either a single physical interface controller or a pair of duplexed physical interface controllers.

PIM. *See* Peripheral Interface Manager.

Post-query label

A routing label that causes the routing client to re-enter its call routing plan at a specific point.

Post-Routing[®]

The GEOTEL routing concept that allows the ICR to make secondary routing decisions after a call has been initially processed at a call center. *Post-Routing* enables the ICR to process calls when an ACD, VRU, or PBX generates a route request. The ICR executes scripts to process the route request and return a destination address. This directs the ACD to send the call to an agent, skill group, or service in the same call center or at a different call center. In making a *Post-Routing* decision, the ICR can use all the same information and scripts used in *Pre-Routing*.

Pre-Routing[®]

The GEOTEL routing concept that enables the ICR to execute routing decisions before a call terminates at a call center. With *Pre-Routing*, the Network Interface Controller (NIC) receives the route request from the IXC and passes the call information along to the ICR. The ICR is then able to process the IXC route request through a call routing script, which defines how calls should be routed. In making its *Pre-Routing* decisions, the ICR uses real-time data on the status of call centers. This data is gathered by Peripheral Gateways at different call center sites and passed back to the ICR.

Prefix

The leading digits of a telephone number. When defining a call type, you can specify a prefix of any length to match calling line ID values. You can also define a region that is a collection of prefixes. If a calling line ID value matches multiple prefixes, the longest matching prefix prevails.

PRI. *See* Primary Rate Interface.

Primary Rate Interface (PRI)

One of two levels of ISDN service. In the United States, the PRI typically provides 23 bearer channels for voice and data and one channel for signaling information (commonly expressed as 23B+D). In Europe, PRI typically provides 30 bearer lines (30B+D).

Private Branch Exchange (PBX)

A device located at a customer's site that switches incoming calls to extensions within that site. A PBX can be used to implement direct inward dialing.

Private network

A network made up of circuits for the exclusive use of one customer. Private networks can be nationwide in scope. They typically serve large corporations or government agencies.

Private network routing

A configuration in which the ACD sends routing requests to the ICR through the Peripheral Gateway. This is a type of *Post-Routing*.

PSN. *See* Public Switched Network.

Public Switched Network (PSN)

The public telephone network. The PSN provides the capability of interconnecting any home or office in the country with any other.

Query

The act of requesting information from a database, or the statement used to request that information. *See* also Structured Query Language (SQL).

Queue time

The time a call spends queued at a peripheral waiting for an agent to become available. Queue time occurs after delay time and before ring time.

Queued call

A call that has arrived at a peripheral, but that is being held until an agent or other resource becomes available to handle the call.

RAID. *See* Redundant Array of Inexpensive Disks.

Ready state

A state in which an agent is logged on to the system and is currently available to handle a call, is talking on a call, or is involved in after-call work and presumed to be available to handle another call when done.

Real-time data

Real-time information about certain entities within the ICR system is updated continuously. Real-time data includes data accumulated since the end of the last five-minute interval (*ServiceLevelTo5*, for example) and since the last half-hour interval (*ServiceLevelHalf*). Real-time records themselves do not accumulate in the database as historical records do; each update overwrites the existing record. Real-time records are stored in the local database on the Admin Workstation.

Real-time distributor

An Admin Workstation that receives real-time monitoring data directly from the Central Controller. The real-time distributor then passes those data on to other Admin Workstations at the same site. For each site, typically two Admin Workstations are set up as distributors, but only one is active at any time.

Redundant Array of Inexpensive Disks (RAID)

A storage device that provides fault-tolerance through redundant physical disks. A RAID system is an alternative to mirrored disks.

Region

A collection of prefixes for incoming telephone calls. If the leading digits of a calling line ID value match any of the prefixes, the call is from the region. You use a region in defining call types or branch within a script based on the call's region.

Registry. *See* Configuration registry.

Relational database

The database model used in the ICR central and local databases. The relational database model portrays data as being stored in tables (or relations). The associations between pieces of data are implicit in the data themselves rather than being stored externally.

Report

The final presentation of data, titles, dates and times, and graphic elements either printed or displayed in a Monitor ICR window. A single report can include components generated by one or more templates. For example, one report can contain a real-time pie chart and a historical grid, each generated with a different template. Report definition files are saved in the custom subdirectories under the aw directory. *See also* Report definition.

Reserved field

A reserved database field contains information that might be used internally by GEOTEL. You must **not** modify the contents of a reserved field.

Reserved state

A state in which an agent is awaiting an interflowed call and is unavailable to receive any incoming calls. This state applies to agents on Northern Meridian ACDs only.

Ring label

A routing label that causes the routing client to play an unanswered ring to the caller.

Ring time

The time elapsed from when a call is presented to an agent until the agent answers it. This occurs after any delay time and queue time. This value is stored in the Termination Call Detail table in the ICR central database.

Some peripherals do not track ring time. For those peripherals, ring time is included within the queue time or delay time.

Route

A value returned by a routing script that maps to a service and a specific target at a peripheral; that is, a service, skill group, agent, or translation route. The ICR converts the route to a label that is returned to the routing client. The routing client then delivers the call to a specific trunk group with a specific DNIS. The peripheral is responsible for recognizing the trunk group and DNIS and delivering the call to the appropriate target.

Route call details

Data about routing requests received by the ICR and how calls were routed (that is, the route chosen for each call). This data is stored in the Route Call Detail table in the ICR central database.

Router (IP)

A device that dispatches messages to their appropriate destinations within or between IP networks. *See also* Internet Protocol (IP).

Routing client

An entity that sends routing requests to the ICR. Each logical interface controller can be mapped to one or more routing clients. A routing client typically corresponds to a subsystem within an interexchange carrier or to a peripheral performing *Post-Routing*.

Routing script

A script that the ICR executes to find the destination for a call. A routing script might examine information about several possible targets before choosing the best destination. You can schedule different scripts to execute for different types of calls and at different times and dates. Use the Script Editor to create, modify, and schedule routing scripts.

Routing server

The ICR acts as the routing server. For example, when a caller dials your 800 number, the IXC subsystem (routing client) passes a route request to the ICR. As the routing server, the ICR processes the route request, determines where to route the call, and passes a routing label back to the IXC.

Routing target

An entity to which the ICR can route a call. A routing target can be an agent, skill group, service, enterprise skill group, or enterprise service.

Schema Help

A Windows NT help file that provides information about the organization of data within the ICR databases.

SCP. *See* Service Control Point.

Script

A defined procedure that the ICR can execute. The ICR supports two types of scripts: *routing scripts* to determine where to route a call and *administrative scripts* that perform background processing. A script consists of executable nodes, connections, routing targets, and comments.

Script Editor

A tool that lets you create, modify, view, or monitor routing scripts and administrative scripts. A routing script is a defined procedure that is executed by the ICR to determine how a call is routed. An administrative script is a defined procedure that is executed as specific times to perform background processing.

Security classes. *See* Classes.

Service

A particular type of processing that the caller requires. For example, in a software company's call center, a caller might have a question about installing software. This caller would be directed to the Technical Support service. A service is associated with a peripheral (and is therefore sometimes called a peripheral service). *See also* Enterprise service.

Service array

A collection of service which might be associated with different VRUs, but are all associated with the same Peripheral Gateway (PG). You can route calls to a service array and let the PG choose among the member services.

Service Control Point (SCP)

A node (computer) in the IXC signaling network. The ICR connects to an SCP within the IXC's network.

Service level

The percentage of incoming calls that are answered within a specified threshold. Several slightly different calculations can be used for the service level; specifically, abandoned calls can be accounted in different ways. The ICR keeps track of two different service levels: the **peripheral service level** is the service level as calculated by the peripheral; the **ICR service level** is the service level as calculated by the ICR.

Service level event

A service level event for a call occurs when the service level time expires while the call is in queue or the call is either answered or abandoned before the service level time expires. When performing

service level calculations for a time period, the ICR considers only calls that had a service level event during that period. This ensures that each call is counted only once and during the appropriate time period.

Service level threshold

The number of seconds you set as the maximum time a caller should wait before being connected with an agent for a specific service. When you set up a peripheral, you specify a default service level threshold for all services associated with that peripheral. For example, if you set a service level threshold of 30 seconds, you want calls to be answered within 30 seconds. Every call answered within 30 seconds improves the service level. Calls not answered within the 30 seconds reduce the service level. *See also* Service level event.

Simplexed

An arrangement in which a physical device does not have a duplicate, paired device. If a simplexed device fails, a part of the system might stop functioning. *See also* Duplexed.

Simulator. *See* ACD Simulator.

Skill group

A collection of agents that share a common set of skills, such as being able to handle customer complaints. A skill group is associated with a peripheral. An agent can be a member of zero, one, or more skill groups (depending on the peripheral). *See also* Enterprise skill group.

Skill target

A target at a peripheral to which a call can be routed. A skill target can be a service, skill group, agent, or translation route.

Note that **peripheral target** refers to a trunk group and DNIS value.

Skill target refers to the entity at the peripheral to which the call is dispatched.

Skills-based routing

A concept whereby calls are routed to agents based on the skills those agents have. You can construct skill groups that contain agents who share a common set of skills. You can also assign priorities to the skills in each agent profile. For example, an agent might have a priority 1 assignment for handling calls from Spanish-speaking callers; however, that same agent might have a priority 3 assignment for handling Sales calls. Calls can then be routed to the skill group that has the appropriate level of expertise to handle the call. The ICR implements skills-based routing at the network level rather than just within a peripheral. This allows the ICR to examine skill groups on all peripherals before deciding where to route the call.

SQL. *See* Structured Query Language.

SQL Server

The Microsoft® relational database product used for the ICR's local and central databases.

Status bar

The set of fields that appear, by default, at the bottom of an application's main window.

Structured Query Language (SQL)

A standard database query language in which you can formulate statements that will manipulate data in a database. The statements include SELECT, for data retrieval; UPDATE, for data modification; DELETE, for data deletion; and INSERT, for data insertion. You can access the ICR databases using SQL and any client tool that supports ODBC.

System time

The time as used consistently throughout an ICR system. Although parts of the ICR system can be in different time zones, they all use the same clock time. The system time is typically the local time for Side A of the ICR Central Controller.

Talk time

The total seconds that agents in a skill group are in the Talking In, Talking Out, and Talking Other states.

Talking In state

A state in which an agent is talking on an inbound call.

Talking Other state

A state in which an agent is talking on an internal (neither inbound nor outbound) call.

Talking Out state

A state in which an agent is talking on an outbound call.

Talking state

A state in which an agent is talking on a call. This includes the Talking In, Talking Out, and Talking Other states.

TCP/IP. *See* Transmission Control Protocol/Internet Protocol.

Termination call detail

Data that contains information about how each call was handled at a peripheral. This data includes items such as the identifiers for the agent and the peripheral that handled the call, ring time, after-call work time, and the identifier for the route where the call was sent. Termination call details are stored in the central database.

Tie line

A private trunk line that connects two ACDs or PBXs across a wide area.

Toolbar

The row of buttons that appears, by default, at the top of a tool's main window. You can execute specific commands quickly by clicking a button on the toolbar.

Translation route

A target at a Peripheral Gateway that does not map to a specific service, skill group, or agent. When a call arrives at a translation route, the Peripheral Gateway (PG) is responsible for determining the ultimate target. When the ICR routes a call to a translation route, it sends a message to the PG. This message contains the ultimate target and further instructions for the PG. For example, the PG might be instructed to coordinate with a host computer so that the caller's account number is displayed on the teleset of the agent who picks up the call.

Translation Route Wizard

An ICR tool that makes it easier to configure translation routes and their associated targets. You can also use the Translation Route Wizard to report on or delete translation routes.

Transmission Control Protocol (TCP)

A connection-based Internet protocol that is responsible for packaging data into packets for transmission over the network by the IP protocol. TCP provides a reliable flow control mechanism for data in a network.

Transmission Control Protocol/Internet Protocol (TCP/IP)

The Internet suite of protocols used to connect a world-wide internetwork of universities, organizations, and corporations. TCP/IP is the protocol used to communicate between the Central Controller and devices in the Intelligent CallRouter system. TCP/IP is based primarily on a connection-oriented transport service, the Transmission Control Protocol (TCP); and a connectionless-mode network service, the Internet Protocol (IP). TCP/IP provides standards for how computers and networks with different technologies communicate with each other. *See also* Transmission Control Protocol and Internet Protocol.

Trunk

A telephone line connected to a call center and used for incoming or outgoing calls.

Trunk Group

A collection of trunks associated with a single peripheral and usually used for a common purpose.

See also Network trunk group.

Variable

A named object that can hold a value.

Virtual call center

An approach to enterprise-wide call center management that treats several geographically dispersed call centers as if they were a single call center. The virtual call center expands skills-based routing from the ACD to the network level. *See also* Skills-based routing.

Voice Response Unit (VRU)

A telecommunications computer, also called an Interactive Voice Response unit (IVR), that responds to caller entered touch-tone digits. The VRU responds to caller entered digits in much the same way that a conventional computer responds to keystrokes or a click of the mouse. The VRU uses a digitized voice to read menu selections to the caller. The caller then enters the touch-tone digits that correspond to the desired menu selection. The caller entered digits can invoke options as varied as looking up account balances, moving the call within or to another ACD, or playing a pre-recorded announcement for the caller.

WAN. *See* Wide Area Network.

WATS. *See* Wide Area Telecommunications Service.

Web View. *See* GEOTEL•Web View.

Wide Area Network (WAN)

The connection of several computers across a wide area, normally using telephone lines.

Wide Area Telecommunications Service (WATS)

A special service provided by an interexchange carrier that allows a customer to use a specific trunk to make calls to specific geographic zones or to receive calls at a specified number at a discounted price.

Work Not Ready state

A state in which an agent is involved in after-call work and is assumed not to be ready to accept incoming calls when done.

Work Ready state

A state in which an agent is involved in after-call work and is assumed to be ready to accept incoming calls when done.

Workspace

The state of a tool at a given time. Some tools let you save your workspace either automatically when you exit or manually at any time.

For example, when you save workspace, the Script Editor saves the following information:

State, size, and position of the Script Editor main window.

Names and versions of scripts that are currently open.

Mode of each open script.

State, size, and position of each script window or icon.

Current use of grids.

State of the object palette, toolbar, and status bar.

The next time you start the Script Editor, it restores the saved state.

Wrap-up

Call-related work performed by an agent after the call is over. An agent performing wrap-up is in either the Work Ready or Work Not Ready state.

Zoom

To shrink or enlarge the appearance of objects on the screen.

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