ShoreTel Enterprise Contact Center Supervisor Guide
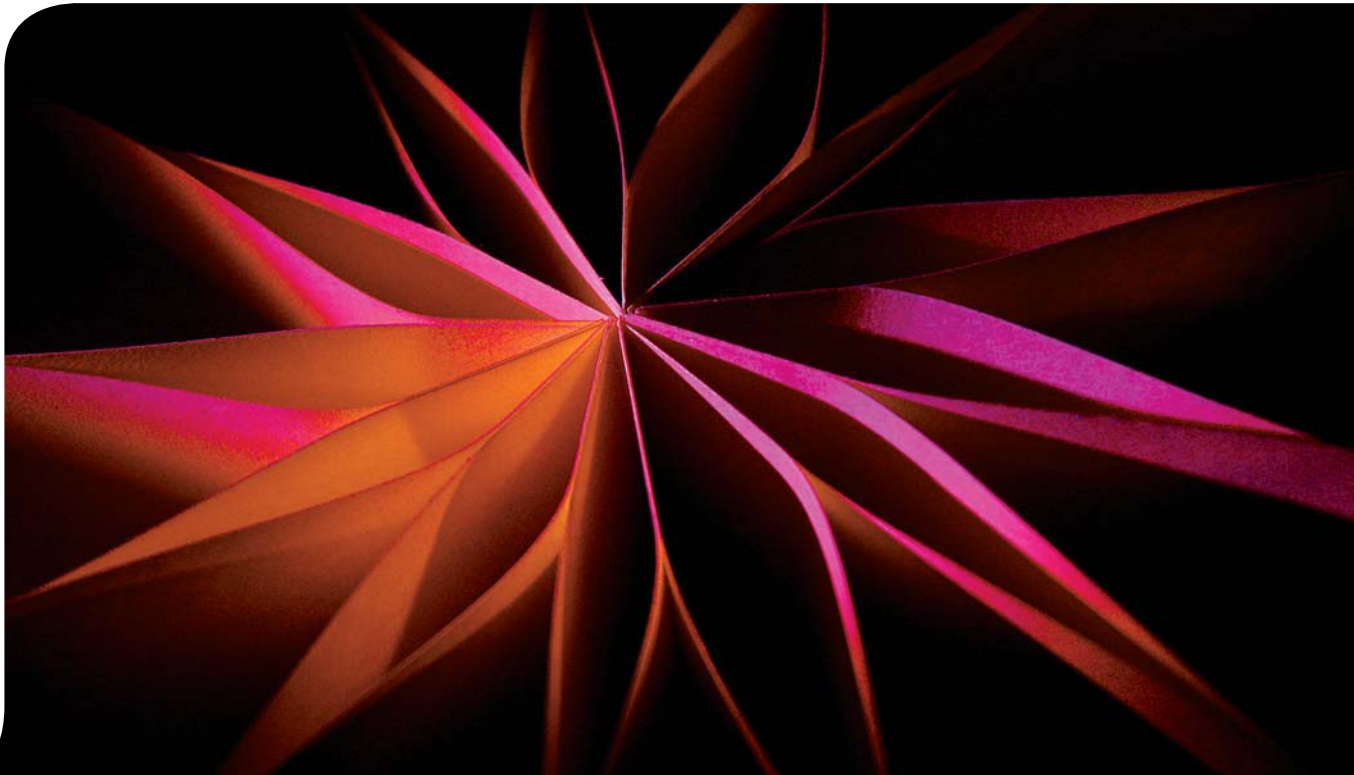
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Preface

Objectives

This guide describes how to use the ShoreTel Contact Center supervisor applications: Agent Manager, Contact Center Reports, and Wallboard Director. It is intended for call center supervisors.

Documentation Overview

The following documents offer additional information about the Contact Center system:

- Release Notes
- Installation Guide
- Administrator Guide
- Applications Interface Guide
- Installing and Implementing Enterprise Contact Center Chat
- Report Data Fields Reference Guide
- Using Agent Toolbar
- Context-Sensitive Online Help

Contact Center documentation can be found in the Documentation folder of the ShoreTel Contact Center Solution Installation CD and on the ShoreTel web site. The context-sensitive online help can be accessed from the Help menu of each Contact Center application.

Document Conventions

The following conventions are used in this guide:

- Data-entry fields, hypertext links, control buttons, keywords, and other items within the system management interface are in a **boldface** font.
- Information that you enter in data fields are in a `data_entry` font.

Overview

ShoreTel Enterprise Contact Center includes three applications for supervisors: Agent Manager, Contact Center Reports, and Wallboard Director. Using these applications you can monitor Automatic Call Distribution (ACD) activities, generate reports on call center performance, and display messages on wallboards. Multiple supervisor workstations can be activated simultaneously, allowing a number of supervisors and managers to work on various tasks at the same time.

Agent Manager

Agent Manager is used by managers and supervisors to obtain real-time statistical information concerning call center activities. The information can be displayed in tables, forms, and graphic formats, providing a clear picture of what is going on in your call center.

Agent Manager also enables supervisors to adjust their resources by adding and removing agents from groups.

Contact Center Reports

Contact Center Reports generates historical statistical reports that you can use in evaluating past activities and planning future actions. The application contains a variety of predefined reports that can be quickly generated. In addition, you can create reports based on an extensive set of easily customizable templates.

Wallboard Director

Wallboard Director is used to control the messages displayed on external and desktop agent boards. Messages can be made up of both free text and statistical parameters. Free sequences can be defined as a scenario or as popup messages and sent automatically.

Terminology

The following are definitions of basic terminology you need to successfully create Contact Center reports:

ACD: Automatic Call Distribution. The method used to distribute calls in Contact Center. ACD calls are routed and monitored by the ShoreTel system.

Agent: An operator who handles calls in a call center.

Agent Group: Agent groups form specialized units that receive and place calls. A group is a destination of the service entity in ShoreTel Contact Center Solution. Calls delivered to the group are presented to the most appropriate agent according to the specified routing policy.

Agent Queue: Contact Center provides each agent with a personal queue, allowing voice calls (only) to be queued for that specific agent. This powerful and useful feature is extremely relevant for sales oriented and direct marketing organizations where individual agents are responsible for accounts. This functionality can also improve customer service in call centers with a small number of agents and fluctuating amounts of traffic, since agents can address higher priority calls while transferring their current interaction into their personal queue. Calls can also be routed to an individual agent first, and then expanded to a larger set of agents if the primary agent is not available. In addition, agent queues can be used as a routing destination by a service, IRN, or call control script.

ANI: Automatic Number Identification. The series of digits that is sent by the PSTN to the PBX containing the Dial Number of the caller.

ANI Domain: A set of 1 or more Telephone number prefixes (part of which may be whole telephone numbers) grouped under a domain name for statistical purposes.

ASA: Average Speed of Answer. The average time it takes for a call to be answered, from the time it is received.

DNIS: Dialed Number Identification Service. A series of digits that precede a phone call with the number the caller dialed.

Entity: Administrative objects in the ShoreTel system, upon which system operations are based. These are agents, groups, trunks, super groups, supervisors, services, IRN, domains, customers, DNIS, dial lists, IVR groups, IVR applications, email accounts, and system.

Group: Several agents or trunks that function as one unit for call handling purposes.

Interval, **Historical Reports:** Also known as an off-line interval. A system-wide parameter that defines the resolution for saving statistical data into the database. For historical reports, the interval may be 15, 30, or 60 minutes.

Overflow: Overflow is a routing technique that can improve customer service and optimize valuable resources. Highly trained or crosstrained agents are reserved as backups for groups experiencing unusually heavy call traffic. When the caller wait time exceeds the specified timeout, backup resources are automatically added to the pool and made available to handle customer calls.

The overflow timeout is the number of seconds a call is in queue, after the mandatory announcement. This value is specified in the Contact Center Director > Services entity > Overflow tab > Overflow Timeout option.

Parameter: Defines the reporting criteria, specifically a report's entities, date range, time range, and interval (where applicable).

STI: Service Time Interval. The time period that serves as a starting point for Contact Center statistical information. This parameter determines the time period within which calls waiting in the queue are measured in historical reports. The STI is defined for each group in the system using ShoreWare Contact Center Director.

Super Group: A collection of agent groups aggregated for statistical and reporting purposes. Super groups may contain several agent groups. They are used mainly to represent the hierarchy of company–division–department. An agent group may belong to more than one super group.

TSF: A measurement that indicates how well the entity (i.e. group, super group, and DNIS number) is providing the Target ASA (Average Speed of Answer). The TSF may be calculated in one of the following three ways: 1. The percentage of calls answered within the Target ASA, out of all the measured entity's calls. Abandoned and overflowed calls are considered answered after the Target ASA; 2. The percentage of calls answered within the Target ASA, out of calls answered by the measured entity; and 3. The percentage of calls answered within the Target ASA, out of calls answered by the measured entity and calls abandoned after the Target ASA.

Trunk: A channel of conversation between the Public Switched Telephone Network (PSTN) and the ShoreTel System. These lines carry all ACD calls, as well as external non-ACD calls, to and from the system.

Wrap-Up Code: A code entered by an agent during the wrap-up time in order to provide additional information for evaluating the actions of the call center. In most cases, wrap-up codes provide information for evaluating calls for reporting purposes, including the type of call (request or complaint); level of required action (urgent, regular, or low); status of the deal (closed, needs recall); and so on.

Starting the Supervisor Applications

Each Contact Center supervisor application is started separately. You must use a password to log into Contact Center applications.

Note: Contact Center supervisor applications should not be used with the following Windows Power Schemes: Turn off hard disks, System standby, and System hibernates. These options should be set to **Never**. This is because the Contact Center Server and the Supervisor applications are synchronized every night at midnight. If your computer is in one of these Power Schemes, the synchronization fails. To change your Windows Power Schemes, from your Desktop right-click and select **Properties** from the resulting menu. In the Display Properties window, select the **Screen Saver** tab. Click **Power**. Change the options to **Never**, and click **OK**.

Starting Agent Manager

Step 1   From the Windows desktop, click **Start > All Programs > ShoreTel > ShoreWare Contact Center Supervisor > ShoreWare Agent Manager**.

If the Agent Manager icon is on your desktop, or in the Windows Start menu, you can click this icon to start Agent Manager.

Step 2   If this is your first time logging into Agent Manager, you are asked to specify your Contact Center server, and then click **OK**.

If you are using a redundant server, a message is displayed indicating that the system is automatically being configured for redundancy. Click **OK** to close the message.

Step 3 In the ShoreTel Contact Center Logon window, specify your login name, password, and server IP address, and then click **OK**.
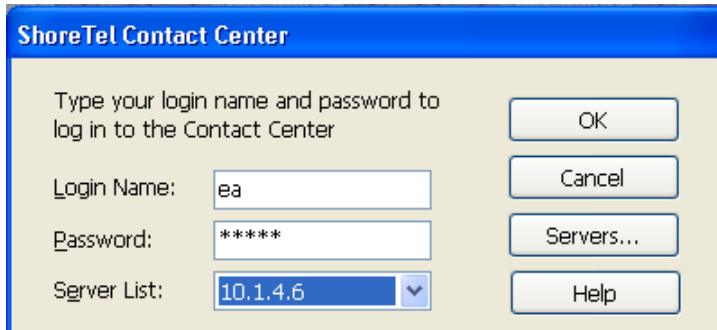
If your server is not listed in the drop-down menu, click **Servers** to add the server to the list. Use the resulting dialog box to add and remove servers from the list and to specify the default server.

Once connected to the server, Agent Manager opens.

Starting Contact Center Reports

Step 1   From the Windows desktop, click **Start > All Programs > ShoreTel > ShoreWare Contact Center Supervisor > ShoreWare Contact Center Reports**.

If the Contact Center Reports icon is on your desktop, or in the Windows Start menu, you can click this icon to start Contact Center Reports.

Step 2   If this is your first time logging into Contact Center Reports, you are asked to specify your Contact Center server, and then click **OK.**
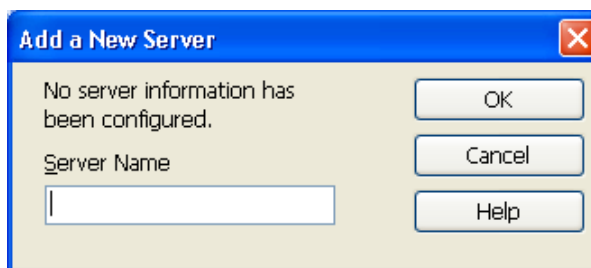
If you are using a redundant server, a message is displayed indicating that the system is automatically being configured for redundancy. Click OK to close the message.

Step 3   In the ShoreTel Contact Center Logon window, specify your login name, password, and server IP address, and then click **OK**.
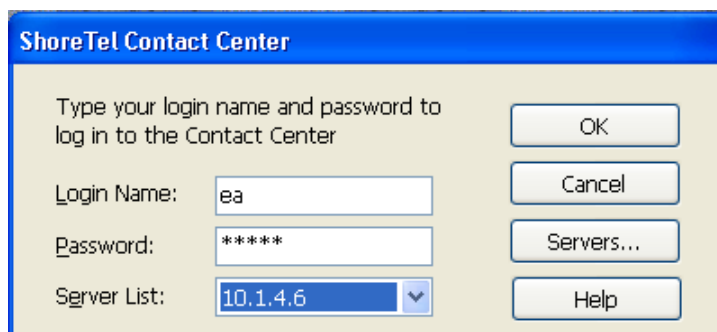
If your server is not listed in the drop-down menu, click **Servers** to add the server to the list. Use the resulting dialog box to add and remove servers from the list and to specify the default server.

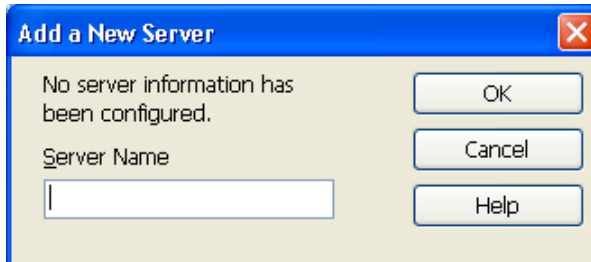Once connected to the server, Contact Center Reports opens.
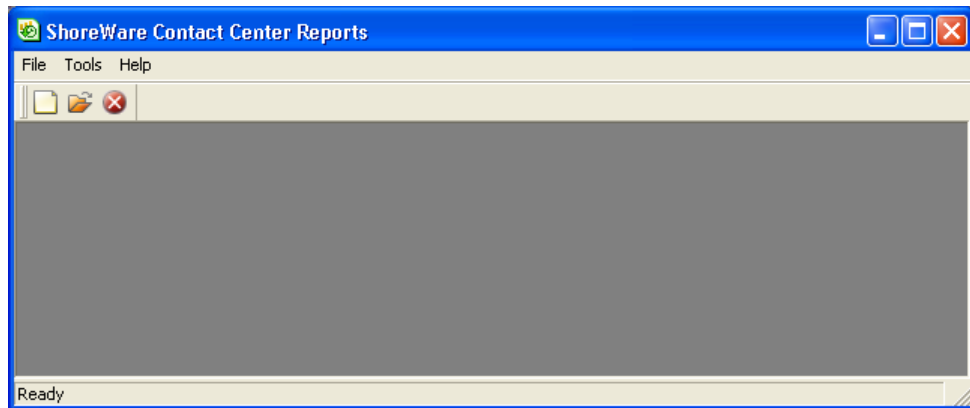
Starting Wallboard Director

Step 1 From the Windows desktop, click **Start > All Programs > ShoreTel > ShoreWare Contact Center Supervisor> ShoreWare Wallboard Director**.

If the Wallboard Director icon is on your desktop, or in the Windows Start menu, you can click this icon to start Wallboard Director.


Step 2 If this is your first time logging into Wallboard Director, you are asked to specify your Contact Center server, and then click **OK**.
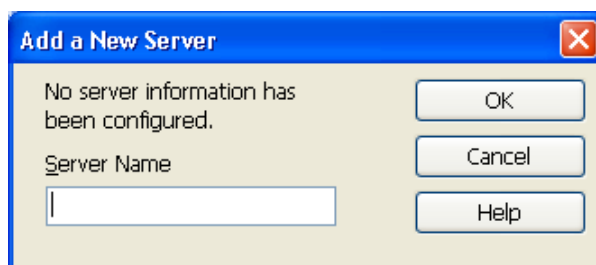
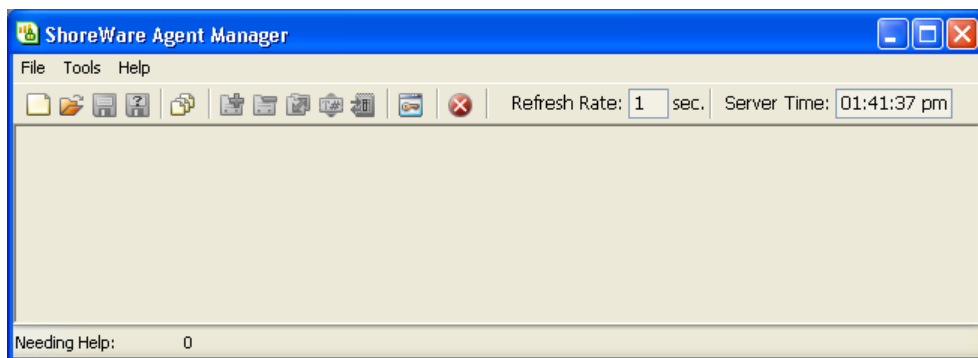If you are using a redundant server, a message is displayed indicating that the system is automatically being configured for redundancy. Click OK to close the message.

Step 3 In the ShoreTel Contact Center Logon window, specify your login name, password, and server IP address, and then click **OK**.

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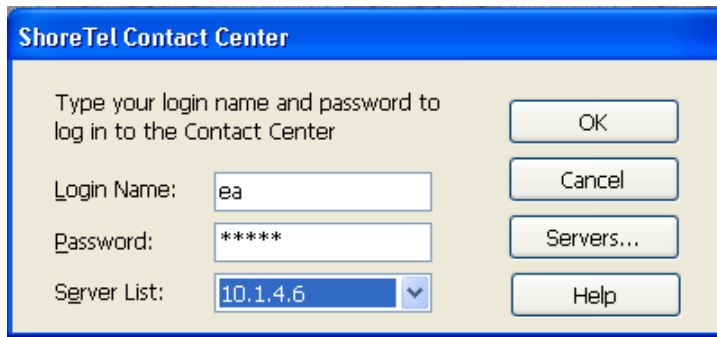
If your server is not listed in the drop-down menu, click **Servers** to add the server to the list. Use the resulting dialog box to add and remove servers from the list and to specify the default server.

Once connected to the server, Wallboard Director opens.
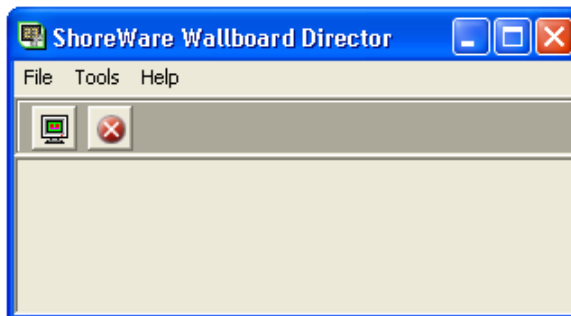
Monitoring Activity

Agent Manager provides tools, and real-time statistical information, to manage your agents and inform you about the current situation in your call center.

This chapter explains how to change agent group assignments, monitor agent interaction with customers, and work with real-time reports. Refer to the Agent Manager online help for details on a specific real-time report.

Changing Agent Group Assignments

Agent Manager's Login Manager enables you to change the group and agent queue assignment of agents currently working in the call center. The Login Manager has two optional views: Agent Login Status and Group Login Status. In the Agent Login Status view, you can see an agent's current group and agent queue assignments. You can then add or remove groups to and from the agent. The Group Login Status view allows you to see the agents currently logged into a specific group and agent queue. You can then add or remove agents to and from the group.

Note that agents can enter wrap-up code on an ACD interaction even if they are logged out of a group.
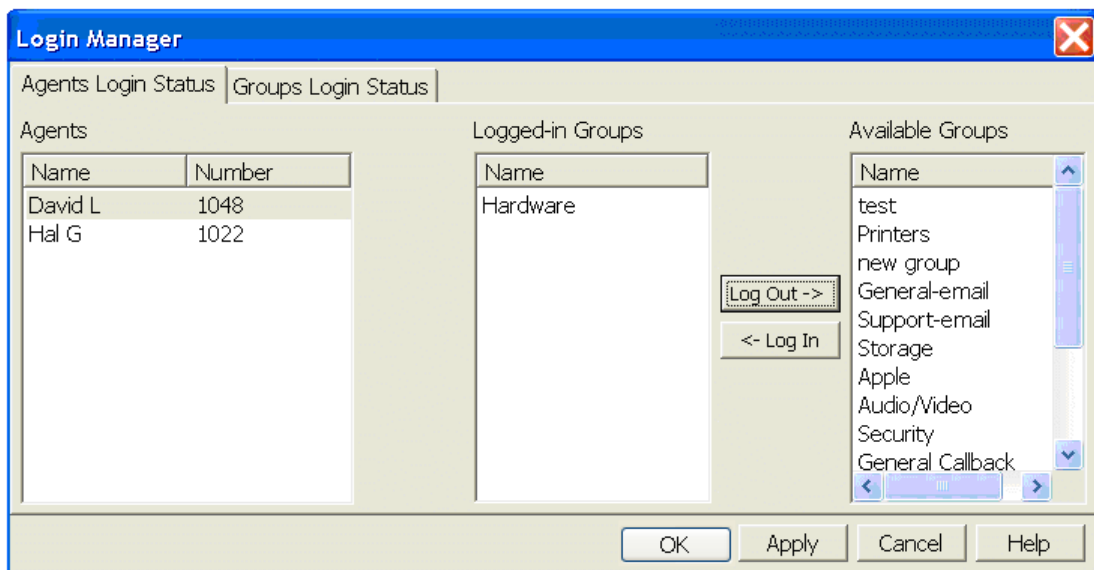
To open the Login Manager, do one of the following:

- Click the Login Manager icon on the Toolbar.

- Right-click a report based on the Group Agents Report or Brief Agent Report templates, and then select **Login Manager** from the popup menu.

The Agents Login Status tab comprises:

- **Agents -** Lists all agents currently logged into the system.

    — *Name* - The name of the agent
    — *Number* - The ID number of the agent

- **Logged-in Groups -** Lists the groups and agent queues that the selected agent is currently logged into.

- **Available Groups -** Lists the groups and agent queues that the agent is currently not logged into.

The Groups Login Status tab comprises:

- **Groups -** Lists all groups and agent queues defined in the system.

- **Logged-in Agents -** Lists the agents currently logged into the selected group or agent queue.

- **Available Agents -** Lists the agents currently not logged into the selected group or agent queue, but logged into at least one other group or agent queue.

Monitoring Agent Interaction with Customers

Contact Center provides various ways to monitor agent interaction on customer calls and chat sessions.

Monitoring Customer Calls

You can monitor agent calls using the following Agent Toolbar features:

- **Silent Monitor**. Allows you to listen in on a call without either the agent or the customer knowing.

- **Barge-In**. Enables you to participates in a call, with both the agent and customer hearing your conversation.

For specifics on using Agent Toolbar, see the *Using Agent Toolbar* guide.

To monitor calls:

Step 1 Launch Agent Toolbar.

Step 2 To silently monitor a call, click the **Silent Monitor** button .

If the Silent Monitor button is programmed with the number to monitor, the system automatically connects you to that number's current call.

If the button is not programmed with the number to monitor, the Silent Monitor dialog box appears. Use the Silent Monitor dialog box to enter the number to connect to; recently connected numbers can be selected from the drop-down list. Then click **OK**.

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Step 3   To barge-in on a call, click the **Barge-In** button .

If the Barge-In button is programmed with the number to monitor, the system automatically connects you to that number's current call.

If the button is not programmed with the number to monitor, the Barge In dialog box appears. Use the Barge-In dialog box to enter the number to connect to; recently connected numbers can be selected from the drop-down list. Then click OK.

Monitoring Chat Sessions

You can monitor chat sessions between agents and customers using any of these modes:

- **Silent Monitor**. Allows you to watch a chat session without either the agent or the customer knowing.

- **Coach**. You can provide information and directions to the agent through chat messages that only the agent sees. Your chat messages to the agent are **not** included in the chat session transcript.

- **Barge-In**. Enables you to participate in the chat session. Both the agent and customer see your chat messages, which are included in the chat session transcript.

In order to monitor chat sessions, you must have the Contact Center Chat feature installed and configured. You also need to know the IP address of the Tomcat Server used to run the chat Java servlets.
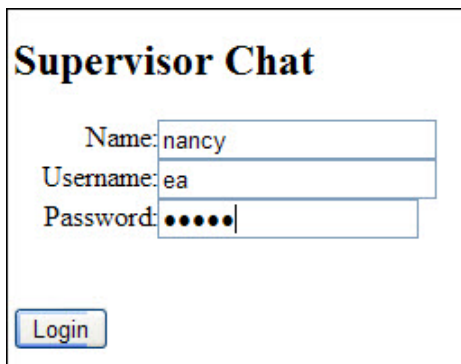
To monitor chat sessions:

Step 1   Point your browser to

http://[Tomcat Server IP address]:8080/ECCChat/supchat.html

The Supervisor Chat window is displayed.

Step 2   In the appropriate fields, type your **Name**, **Username**, and **Password**, and then click **Login**.

The name is used to identify you in a chat session, if you are participating via either the Coach or Barge-In features. The Username and Password are the same as used to log into your Contact Center supervisor applications.

Step 3 In the resulting window, select the specific chat session you want to connect to from the list of all current chat sessions. The chat window for the selected session is displayed.

To log out of the Supervisor Chat application, click **Disconnect All**.

Step 4 In the chat window, select how you want to monitor the chat session by clicking on either **Silent Monitor**, **Coach**, or **Barge-In**.

The specified mode is indicated in the chat window.
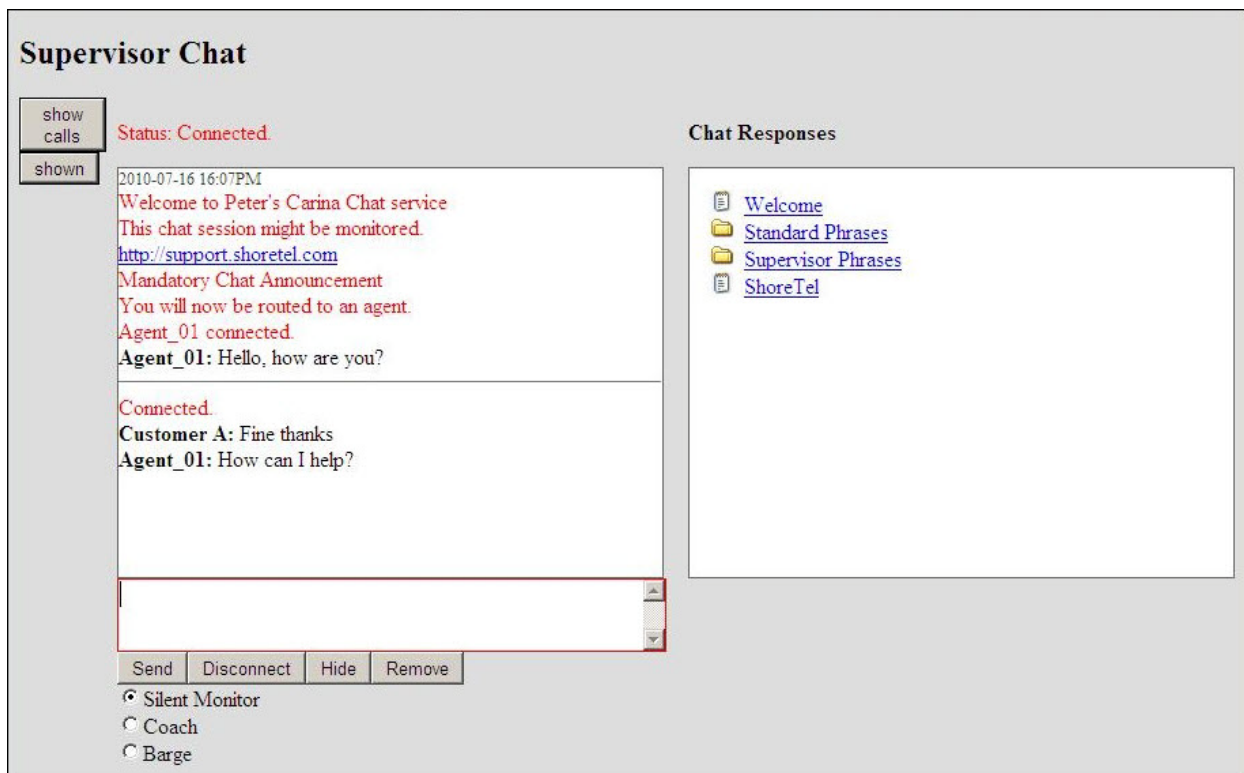
Step 5   If you choose either Coach or Barge-In, type your chat message in the text area and click **Send**. Your message is shown in the chat window using the Name you specified when logging into the application.
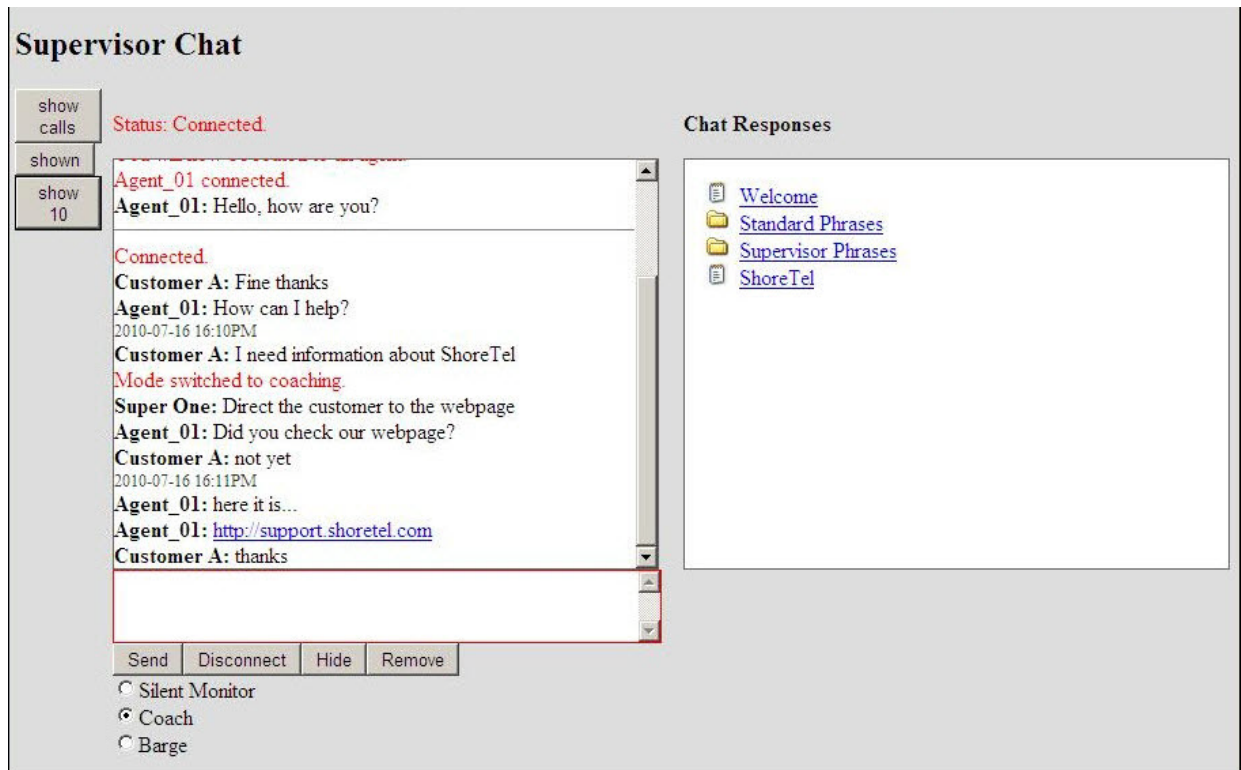
Step 6   If you are using either the Coach or Barge-In feature, you can insert predefined chat responses by locating and selecting the appropriate file in the Chat Reponses window.

The chat response files are identified using the Contact Center Director > System Parameters > Chat > Responses tab. Refer to the *Enterprise Contact Center Administrator Guide* for details.

Step 7   To toggle between multiple chat sessions, click **Hide** to minimize the chat window of the session you are connected to. Then click **Show Calls** to return to the list of all current chat sessions, and select another chat sessionto connect to.
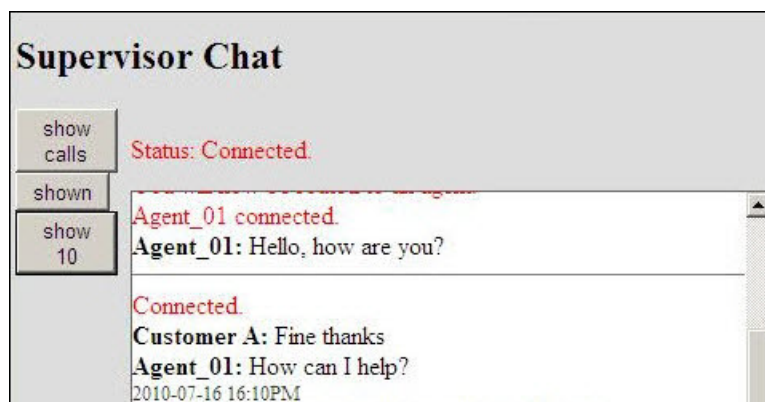
The hidden chat session is represented by a button with the chat session's number. Click on that button to maximize that session's window.

Step 8   To end your participation in a chat session, click **Remove**.

Step 9   To log out of the Supervisor Chat application, click **Disconnect All**.

About Real-Time Reports

The reports generated using Agent Manager provide data on call center activity in real-time. These reports can be used in the management of agents and and to watch the changing conditions in your call center. Alerts indicate when a specific threshold is reached or exceeded.

Real-time reports are based on templates, which you use to set the criteria for the data shown in the report. There are three types of real-time report templates: real-time, hourly summary, and daily summary.

Information in real-time reports are displayed in tabular or graphical formats, or as a form. You can save an arrangement of reports on your workspace (desktop); the display remains consistent each time you start Agent Manager.

Using Thresholds

By default, Agent Manager specifies thresholds for real-time group activity. Information on this activity is displayed by running specific reports. When the activity, such as number of calls in queue, reaches or exceeds a threshold, you receive an alert. The data in the report is usually highlighted in yellow when the threshold is reached, and in red when the threshold is exceeded. Thresholds are defined using the Contact Center Director > Groupings > Groups > Thresholds tab.

Group Name	Group No.	Above T.ASA	Calls In Q	Max in Q	No. Agns	No. Release	No. Idle	No. ACD	Calls ACD	TSF	Calls Abnd	Calls Intfl
Callback	161	0	10	0:00	0	0	0	0	0	100%	0	0
Hardware	5100	0	30	0:30	1	0	0	1	0	100%	0	0

* Untitled<Daily Brief Group Report>

In addition to a color indicator, an audible alert is available. This alert can either be a system beep or a sound from a WAV file; can play once or continuously for a specified period of time. Alerts are configured using Contact Center Director > Supervisor > Alerts.

Agent Manager provides two default files used as the audible alerts, warning.wav and alarm.wav. When data meets or exceeds the "yellow" threshold level, the sound in the warning.wav file is used. The alarm.wav file sounds when the data meets or exceeds the "red" threshold level. You can use custom alerts by recording or using an existing WAV file. Save your custom sounds in the Supervisor\Bin folder of your Contact Center directory with the filename custom_warning.wav and custom_alarm.wav.

Contact your system administrator to implement or change threshold levels for specific group activities. In order to use audible alerts, your system must be configured for this feature. Check with your system administrator if you have questions about using or implementing audible alerts.

White - Value is in the normal zone.

Yellow - Value is in the warning zone.

Red - Value is unacceptably high or low.

The Threshold tab contains the following information:

Name - Name of the event that the threshold is specified.

Yellow - Threshold has been exceeded.

Red - Threshold has been exceeded to an unacceptable level.

Up - If checked, indicates that the parameter counts up to go from White to Yellow to Red. Uncheck means that the parameter counts down.

Real-Time Report Templates

Real-time reports are based on three types of templates: real-time, hourly summary, and daily summary.

Real-time templates show statistical and summary data on agents for the recent time interval. (The real-time interval is specified using the Contact Center Director > Groupings > Groups > General tab.) Using reports generated from a real-time template, you can watch the data change as events occur in your call center.

Hourly summary templates are used to generate reports that display hourly statistics and summary data for selected groups. Each row in the report shows data for the interval starting from the time shown until the start time of the next interval. Data is not displayed until the time interval has completed. For example, data on the 16:15 interval would not be displayed until the time was 16:30.

Daily summary templates shows statistical and summary data for a group of agents. Data is calculated over the entire day starting at midnight and ending at the following midnight.

Template Subjects (Entity)

The subject of a template can be:

- **Agents**. An operator who handles calls in a call center.

- **Groups**. A group of agents. There are different group templates for voice call flows and email flows.

  Hint: Use a group template if you want to see queue statistics, since Contact Center puts calls into queue(s) associated with a group of agents.

- **Agent Queues**. Allow calls to be queued for a specific agent.

- **IVR Applications**. Sections of logic defined in call control scripts.

- **IVR Ports**. A grouping of IVR applications.

- **Dial Lists**. Used for outbound calling campaigns and are sets of telephone numbers that are automatically dialed and routed to agents. From this report, you can end the activity of a currently running dial list by clicking **Terminate**.

- **DNIS**. Assocated with a specific IRN (the first point of entry into Contact Center). There are different DNIS reports for voice call flows and email flows.

- **Trunks**. PBX trunks and trunk groups identified in Contact Center.

Daily Summary Templates

The following daily summary templates are available for generating real-time reports:

- Daily Brief Agent Queue Report
- Daily Brief Email Group Report
- Daily Brief Group Report
- Daily Detailed Email Group Report
- Daily Detailed Group Report
- Daily Detailed Super Group Report

Hourly Summary Template

Contact Center provides the following hourly summary template for generating real-time reports:

- Group Hourly Report

Real-Time Templates

Use one of the following real-time templates to generate a report on the recent time interval:

- Agents Distribution Graph
- Agents Needing Help
- Brief Agents Report
- Brief Agent Queue Report
- Brief Dial List Report
- Brief DNIS Report
- Brief Email DNIS Report
- Brief Email Group Report
- Brief Group Report
- Brief IVR Applications Report
- Brief Mailbox Report
- Calls Distribution Graph
- Detailed Email Group Report
- Detailed Group Report
- Detailed IVR Applications Report
- Detailed Super Group Report
- Email Contacts Distribution Graph
- Email Group Overflow\Interflow Report
- Email Group Queue Contacts Graph
- Email Group STI Graph

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- Graphical Agents Report
- Group Agents Report (1)
- Group Agents Report (2)
- Group OACD STI Graph
- Group Overflow\Interflow Report
- Group Queued Calls Graph
- Group Queued OACD Calls Graph
- Group STI Graph
- IVR Applications ACD Distribution Graph
- IVR Applications Active ACD Graph
- IVR Applications Active OACD Graph
- IVR Applications OACD Distribution Graph
- IVR Group IVR Ports Report
- IVR Ports Distribution Graph
- IVR Ports Report
- Staffing Graph
- Staffing Percent Graph
- Staffing Percent Report
- Staffing Report
- Trunk Group Report (1)
- Trunk Group Report (2)
- Trunk Group Trunks Report (2)
- Trunk Group Trunks Report(3)

Creating Real-Time Reports

You can create a new real-time report for current information on your call center.

If you want to generate reports on call activity in an IVR Application, you first need to specify the associated DNIS. See the section Generating Reports on IVR Applications on page 66 for details.

To create a real-time report:

Step 1 From the **File** menu, choose **New**. You can also click the New icon on the Toolbar.

The New dialog box appears.

Step 2 From the **Report Type** drop-down list, click the report type you want.
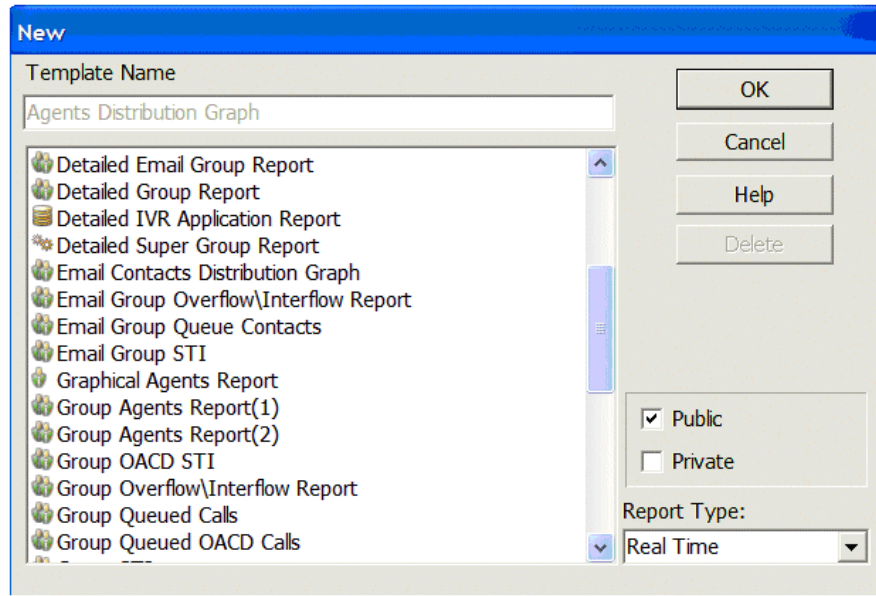
Step 3 Select the template from the **Template Name** list, and click **OK**.

The appropriate New Entity dialog box appears.

Click here to change the sort order of the list of entities

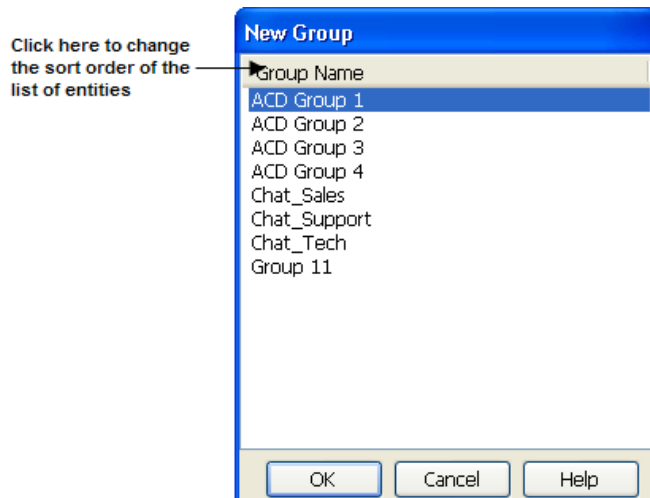**Step 4** You can change the sort order of the entities in the list to more easily find the entity you want. To do so, click the entity title.

Entities listed alphabetically are displayed in reverse alphabetical order; entities listed by number are displayed in reverse numerical order.

Step 5 Select the required entity, and click **OK**.

The selected Report window appears. The window title bar indicates that the report is untitled, and displays the name of the template on which the report is based.

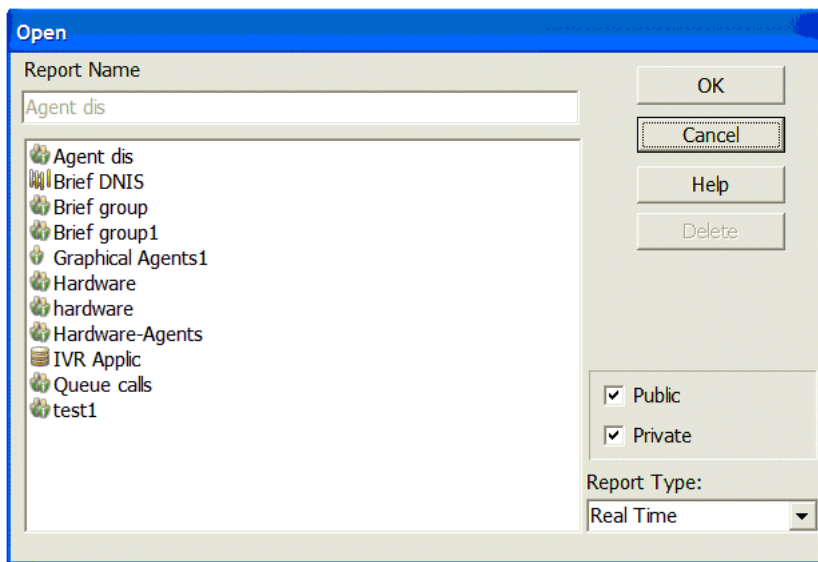Any current activity in the ACD is immediately reflected in the report.

For information on the data displayed in these reports, see the *Report Data Fields Reference Guide*.

Opening Existing Real-Time Reports

To open an existing real-time report:

Step 1 From the **File** menu, choose **Open**. You can also click the Open icon on the Toolbar.

The Open dialog box appears.

Step 2 To narrow the list of reports displayed, select **Public** and/or **Private**, and from the **Report Type** drop-down list, select the report type.

Step 3 Select the report to open, and click **OK**.

Working with Graphical Reports

The Graphic Toolbar is displayed at the top of graphical report windows.

The features on the Toolbar are used to change the way a graphical report is displayed. These are:

- **Palette Selector (1) -** Change the color scheme based on predefined palettes.

- **Points Labels (2) -** Show or hide the labels for the points of the graph.

- **Legend Box (3):** Show or hide the legend.

Not all the features available from the Toolbar are applicable to all graphical reports. Those not available for a specific report are grayed out.

Saving Real-Time Reports

A report can be saved in both the public and private report lists. All authorized supervisors can view public reports, but only you who created them can view private reports.

To save a real-time report:

Step 1 To save a report with its current properties, from the **File** menu, choose **Save**. You can also click the Save icon on the Toolbar.

If the current report has not yet been saved, the Save button is disabled.

Step 2 To save a report under a different name, or to save a private report as public (or the reverse), from the **File** menu, choose **Save As**. You can also click the Save As icon on the Toolbar.

The Save As dialog box opens.

Step 3 Use the Save As dialog box to specify the name and location of the report.

Modifying Real-Time Reports

Once you have create a real-time report, you can modify the report to reflect the data you want to see. Specifically, you can:

- Change the entity a report is based on.
- Add entities to a report.
- Remove entities from a report.
- Reorder items in a tabular report.
- Change the order of fields in a tabular report.
- Add and remove fields in a tabular report.

Changing the Report Entity

For reports based on only one entity, you can change the entity without having to create a new report.
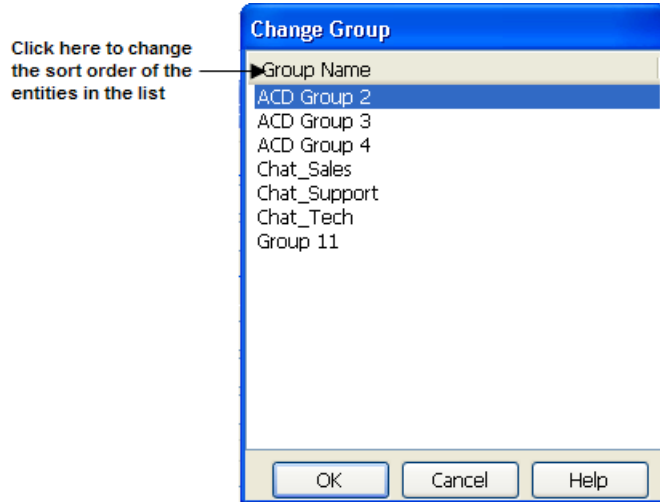
To change the report entity:

Step 1 From an open report, select **Change** from the **Contents** menu. You can also click the Change icon on the Toolbar.

The Change Entity dialog box appears, listing the entities not included in the report.

Step 2 You can change the sort order of the entities in the list to more easily find the entity you want. To do so, click the entity title.

Entities listed alphabetically are displayed in reverse alphabetical order; entities listed by number are displayed in reverse numerical order.

Select the entity that you want the report to now be based on.

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Click here to change the sort order of the entities in the list

Step 3   Click **OK**.

Adding Entities to Reports

For reports based on more than one entity, you can add entities without having to create a new report.

To add an entity to a report:

Step 1   From an open report, select **Add** from the **Contents** menu. You can also click the Add icon on the Toolbar. The Add Entity dialog box appears listing the entities not in the report.
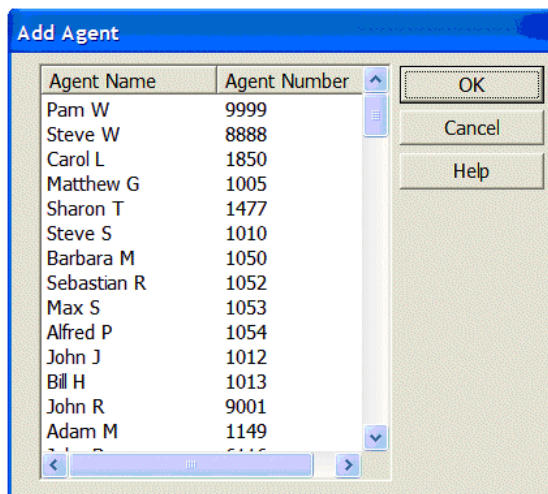
Step 2   You can change the sort order of the entities in the list to more easily find the entity you want. To do so, click the entity title.

Entities listed alphabetically are displayed in reverse alphabetical order; entities listed by number are displayed in reverse numerical order.

Step 3 Select the entity to add to the report.

Step 4 Click **OK**.

# Removing Entities from Reports

For reports based on more than one entity, you can remove entities without having to create a new report.

To remove an entity from a report:

Step 1 From an open report, choose **Remove** from the **Contents** menu. You can also click the Remove icon on the Toolbar.

The Remove Entity dialog box appears, listing the entities in the report.

Step 2 You can change the sort order of the entities in the list to more easily find the entity you want. To do so, click the entity title.
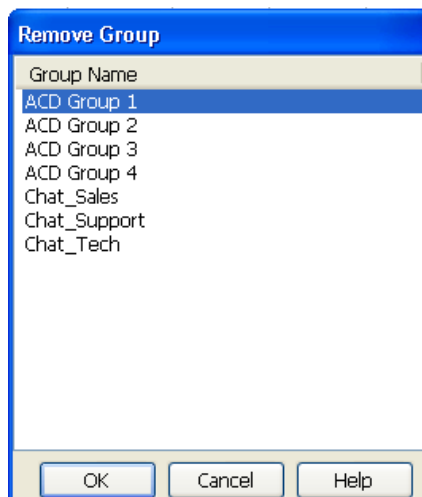
Entities listed alphabetically are displayed in reverse alphabetical order; entities listed by number are displayed in reverse numerical order.

Step 3 Select the entity to removed from the report.

Step 4 Click **OK**.

Reordering the Items in a Report

For tabular reports, you can change the order of the items in the report to be sorted by name, number, or extension number (if applicable).

To reorder the items in a report:

Step 1 From an open report, choose **Reorder** from the **Contents** menu. You can also click the Reorder icon on the Toolbar.

The Reorder dialog box appears.

Step 2 Select the desired sort criteria.
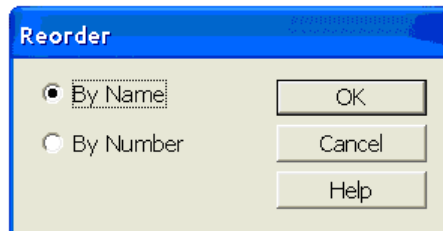
Step 3 Click **OK**.

The report entries are reordered according to your selection.

Changing the Order of Fields in a Report

You can change the order of the fields in a tabular report.

To change the field order:

Step 1 Click the header of the field you want move.

Step 2 Drag the field to its new location in the report.

Adding and Removing Fields in a Report

You can add and remove fields in a tabular report.
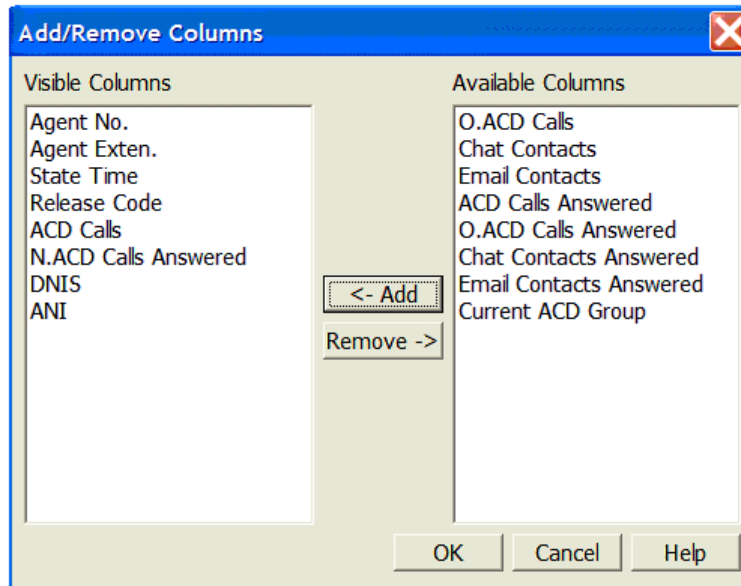
To add or remove fields in a report:

Step 1 From an open report, click the **Add/Remove Columns** icon on the Toolbar.

The Add/Remove Columns dialog box appears.

Step 2 To add a field, select the field(s) in the **Available Columns** list, and click **Add**.

Step 3 To remove a field, select the field(s) in the **Visible Columns** list, and click **Remove**.

Step 4   Click **OK**.

Setting the Refresh Rate

The refresh rate defines how often Agent Manager requests an update from the server. By default, the refresh rate is one second. You can instead set a refresh rate that is automatically determined based on the network load, or set a specific rate.

Note: If an activity begins and ends before the next update of information, this activity is not reported in the report. For example, if the refresh rate is 5 seconds and an agent speaks on a call for 3 seconds, this call is counted as a call but there will be no change in the agent state.

To set the refresh rate:

Step 1   If you want the system to automatically set the refresh rate depending on the load of the network, from the **Tools** menu, choose **Refresh Rate > Automode**.

Step 2   If you want to set a specific refresh rate, from the **Tools** menu, choose **Refresh Rate > Manual Mode**.

The Refresh Rate dialog box opens.

Step 3   Select the refresh rate in seconds, and then click **OK**.
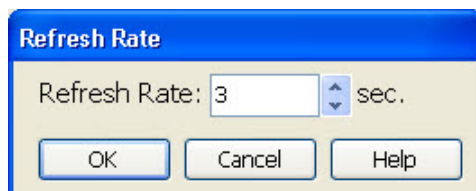
If the manually set refresh rate is determined by the system to be insufficient for the current network load, the system automatically increases the rate to a more efficient number (e.g., 5 seconds to 7 seconds).

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Saving a Workspace

You can save a personal workspace such that, each time you start Agent Manager, the reports you are most interested in are automatically displayed and updated.

To save a workspace:

Step 1 Open, create, modify, and place the reports you want to automatically see each time you start Agent Manager.

You can use the commands from the **Windows** menu to place and order the reports in a layout you want.

Step 2 From the **File** menu, choose **Workspace > Save As Default**.

The layout is saved as your default workspace.

Step 3 You can always revert to your default workspace by choosing **Workspace > Restore Default** from the **File** menu.

C H A P T E R *3*

Analyzing Trends

Historical reports are used to obtain information about past call center activity. The powerful, yet easy to use, Contact Center Historical Reports application provides activity summaries and statistical data that can help you analyze system behavior and aid in the assessment of resources required to meet target service levels.

Additional powerful tools (including sorting by fields, filtering of data by user-defined criteria, and defining of noncontinuous periods) are provided to support a comprehensive and flexible environment for generating sophisticated reports without requiring you to know about database tables, SQL queries, or programming languages.

An integrated scheduler enables automated reports to be printed, emailed, or exported to a variety of external format (such as Excel, HTML, and PDF) at required times.

Historical data on your call center can be retained for 12 or 24 months. This allows you to run historical reports on trends for the current year vs. the previous year. The default retention period is 12 months. Refer to the *Contact Center Administrator Guide* for information on changing the length of time to retain historical data to 24 months.

This chapter explains how to work with historical reports. Refer to the Contact Center Reports online help for details on a specific historical report.

Note: Generating a report may take several minutes. While the report is generating, do not use the Contact Center Reports application. Doing so results in the error message "Error retrieving rows," and the report generation is halted.

About Historical Reports

Historical reports are generated from predefined or blank templates that can be configured to include specific data fields and entities. Templates can also be customized for a unique look. Some reports can be generated to display in either a tabular or graphical format.

Historical Report Templates

Historical reports are based on predefined or blank templates. Predefined templates contain commonly used data elements, which you can change. Using predefined templates can save you time, since the data elements you want may already be defined.

Blank templates do **not** contain data elements; which you must add to the template. Blank templates are useful when trying to match an existing report from another source.

Historical reports are based on a date or range of dates, or on an interval. (The historical interval is specified using Contact Center Director > System Parameters > Reporting Preferences > Reporting Settings). Historical reports based on an interval are commonly used to show averages and summary data based on the time of day. By Interval historical reports provide call center statistics based on time intervals set in the report criteria. By Interval reports that span multiple days display fractional data values in the report.

Template Subjects (Entity)

You can identify the subject of a template by the icon associated with the template in the Open and New dialog box lists.

- Agent. If you generate a historical report on a large number of agents, the report may show the entire list of agents in the Agent Name field, but no data is displayed. In this instance, contact your system administrator. The administrator must add the value reduce_header_size=1 to the [Admin Configuration] section of the wecc.ini file on your PC.

  You can select up to 1,000 agent entities per report.

- ANI Distribution. Calls grouped by ANI (as specified in Contact Center Director > Domains > ANI Prefixes.)

- Dial List. Outbound calls performed by the system. The success and failure of the calls are shown.

- DNIS. The DNIS assocated with a specific IRN (the first point of entry into Contact Center). There are different DNIS reports for voice call flows and email flows. generally used to report on the experience from the service point of view.

  You can select up to 400 DNIS entities per report. However, note that reports with more than 20 DNIS entities will take additional time to generate.

- Group. A group of agents. There are different group templates for voice call and email flows.

  You can select up to 255 group entities per report.

  Hint: Use a group template if you want to see queue statistics, since Contact Center puts calls into queue(s) associated with a group of agents.

- IVR Applications. Sections of logic defined in call control scripts.

- IVR Ports. A grouping of IVR applications.

- Mailbox. Emails for a specified mail account.

- Release Code. Used to label the activity of an agent.

- Super Group. A collection of groups viewed as a single entity. A super group is typically used to display statistics for the entire call center.

  You can select up to 20 super group entities per report.

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- Trunks. PBX trunks and trunk groups identified in Contact Center.

- Wrap-Up Code. Used to label the type of call received by the agent.

Predefined Templates

The following predefined templates are available for generating historical reports:

- BP1.1 WFM- Blue Pumpkin Report
- RA1.1 Agent Performance Report by Interval
- RA1.2 Agent Performance Report by Date
- RA2.1 Group Agents Performance Report
- RA2.2 Super Group Agents Performance Report
- RA3.1 Agent Activity Log Report
- RG1.1 Group Performance Report by Interval
- RG1.2 Group Performance Report by Date
- RG2.1 Group Staffing Report by Interval
- RG2.2 Group Staffing Report by Date
- RG3.1 ACD Calls Distribution by Interval
- RG3.2 ACD Calls Distribution by Date
- RG4.1 Abandoned Calls Analysis by Interval
- RG4.2 Abandoned Calls Analysis by Date
- RG5.1 Detailed Group Wrap-Up Report by Interval
- RG5.2 Detailed Group Wrap-Up Report by Date
- RG6.1 Group Wrap-Up Code Report
- RG7.1 Abandoned Calls Log
- RQ1.1 Agent Queue Report by Interval
- RQ1.2 Agent Queue Report by Date
- RS1.1 Super Group Performance by Interval
- RS1.2 Super Group Performance by Date
- RS2.1 ACD Calls Distribution by Interval
- RS2.2 ACD Calls Distribution by Date
- RS3.1 Abandoned Calls Analysis by Interval
- RS3.2 Abandoned Calls Analysis by Date
- RT1.1 Trunks Usage Report by Interval
- RT1.2 Trunks Usage Report by Date
- RT2.1 Trunking Report by Interval
- RT2.2 Trunking Report by Date

Blank Templates

Contact Center provides the following blank templates for generating historical reports::

- 1.1 Group by Interval
- 1.2 Group by Date
- 2.1 Super Group by Interval
- 2.2 Super Group by Date
- 3.1 Agent by Interval
- 3.2 Agent by Date

- 3.3 Group Agent by Interval
- 3.4 Group Agent by Date
- 3.5 Super Group Agent by Interval
- 3.6 Super Group Agent by Date
- 3.7 Agent Groups by Interval
- 3.8 Agent Groups by Date
- 3.9 Agent Calls Distribution by Agent
- 4.2 Group Agents by Date
- 4.3 Super Group Agents
- 5.1 Trunk Group by Interval
- 5.2 Trunk Group by Date
- 6.1 Detailed Wrap-Up Code Report by Interval
- 6.2 Detailed Wrap-Up Code Report by Date
- 6.3 Wrap-Up Code Report By Interval
- 6.4 Wrap-Up Code Report By Date.
- 6.5 Group Wrap-Up Code Report By Interval.
- 6.6 Group Wrap-Up Code Report By Date.
- 6.7 Agent Wrap-Up Code Report By Interval.
- 6.8 Agent Wrap-Up Code Report By Date.
- 6.9 Agent Group Wrap-Up Code Report By Interval.
- 6.10 Agent Group Wrap-Up Code Report By Date.
- 6.11 Agent Queue Wrap-Up Code Report By Interval.
- 6.12 Agent Queue Wrap-Up Code Report By Date.
- 7.1 Wrap-Up
- 8.1 Agent Queue by Interval
- 8.2 Agent Queue by Date
- 10.2 Super Group Groups
- 11.1 Trunk Exception Log
- 12.1 DNIS by Interval
- 12.2 DNIS by Date
- 13.1 Group DNIS by Interval
- 13.2 Group DNIS by Date
- 13.3 DNIS Call Distribution by ACD Group
- 13.4 DNIS Call Distribution by DNIS
- 14.1 Agent DNIS by Interval
- 14.2 Agent DNIS by Date
- 16.2 ANI Distribution by Date
- 16.5 ANI Distribution by Period
- 17.1 IVR Applications Reports by Interval
- 17.2 IVR Applications Reports by Date
- 18.1 IVR Ports Groups Reports by Interval
- 18.2 IVR Ports Groups Reports by Date
- 19.2 Outbound Calls Report by Date
- 19.3 Dial List by Date
- 19.4 Dial List Calls by Date
- 19.6 Dial List Calls Status by Date
- 20.1 Mailbox by Interval
- 20.2 Mailbox by Date
- 21.1 Release Codes by Interval
- 21.2 Release Codes by Date
- 21.3 Group Release Codes by Interval

- 21.4 Group Release Codes by Date
- 21.5 Agent Release Codes by Interval
- 21.6 Agent Release Codes by Date
- 21.7 Agent Group Release Codes by Interval
- 21.8 Agent Group Release Codes by Date
- 21.10 Agents Release Codes by Date

Creating a Historical Report Using a Predefined Template

Templates are used to create reports. By default, predefined templates contains commonly used data fields. Predefined templates can also be customized to generate other information or to have a unique look. A series of predefined templates are provided in Contact Center Reports.

A series of predefined templates are provided in Contact Center Reports. For a list of thepredefined templates, see the section Predefined Templates on page 35.

If you want to generate reports on call activity in an IVR Application, you first need to specify the associated DNIS. See the section Generating Reports on IVR Applications on page 66 for details.

The process of creating a report using a predefined template is:

1. Launching the Open Window

2. Viewing Only Public and/or Private Templates

3. Opening a Predefined Template

4. Specifying Template Parameters

5. Customizing a Template (Optional)

6. Saving a Template with a New Name (Optional)

7. Generating a Report

Predefined templates that you have created, by saving the template under a new name, can be deleted. For information, refer to the section Deleting a Predefined Template on page 59.

Once generated, a report can be printed, emailed, or exported, as explain in the section Working with Historical Reports on page 62.

For information on the data displayed in these reports, see the *Report Data Fields Reference Guide*.
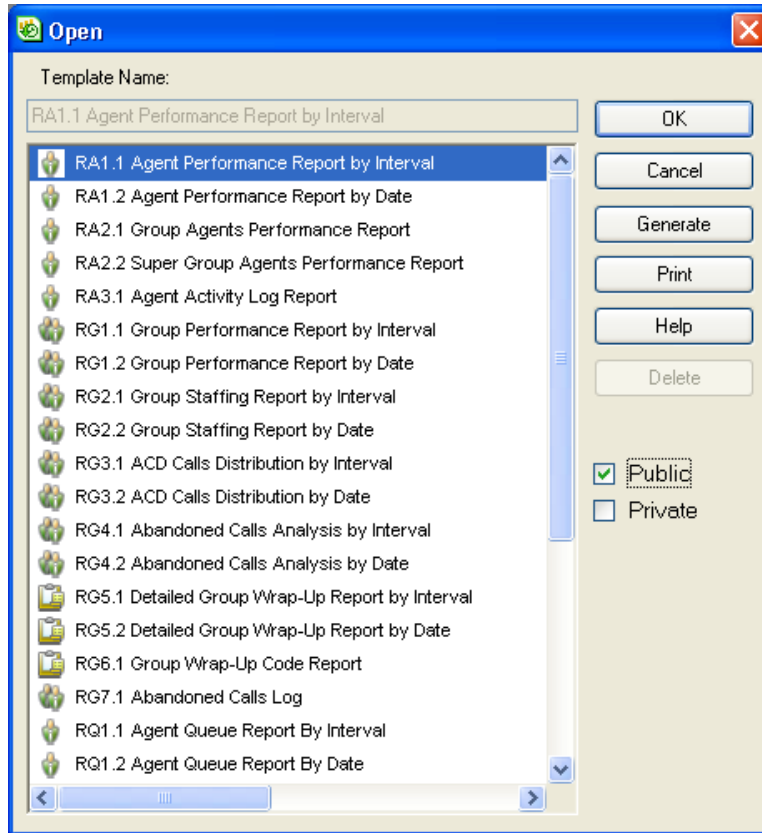
Launching the Open Window

You work with predefined templates from the Open window. The Open window displays a list of predefined templates to choose from, options to view only public and/or private templates in the list, and buttons to customize, generate, print, and delete templates.

To launch the Open window:

Step 1   From the Contact Center Reports File menu, click **Open**. You can also click the **Open Existing Template** icon on the toolbar.

Step 2   The Open window appears.

Viewing Only Public and/or Private Templates

Predefined templates are categorized as public or private. Public templates are available to anyone who uses Contact Center Reports, and can be modified by authorized users. Private templates can only be used and modified by you. Contact your system administrator if you want to modify public templates, but are unable to do so.

By default, the Open window displays the list of all available public templates. You can filter this list to show only your private templates, or all public and private templates.

To view only public and/or private templates:

Step 1   From the Open window, select the **Public** check box, or the **Private** check box, or both to display the desired templates.

The list of available templates changes to reflect the selected option.

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Opening a Predefined Template

You open the predefined template that you want to base your report on.

Predefined templates provided by Contact Center Reports are organized by entity. Entities are administrative objects in the ShoreTel system, upon which system operations are based. For example, agents, groups, super groups, and trunks.

See the section Starting the Supervisor Applications on page 9 for information on the predefined templates provided by Contact Center Reports and for hints on choosing the correct template to base your report on.

To open a predefined template:

Step 1 From the Open window, select the template you want to base your report on. You may need to scroll down to see the entire list of available templates.
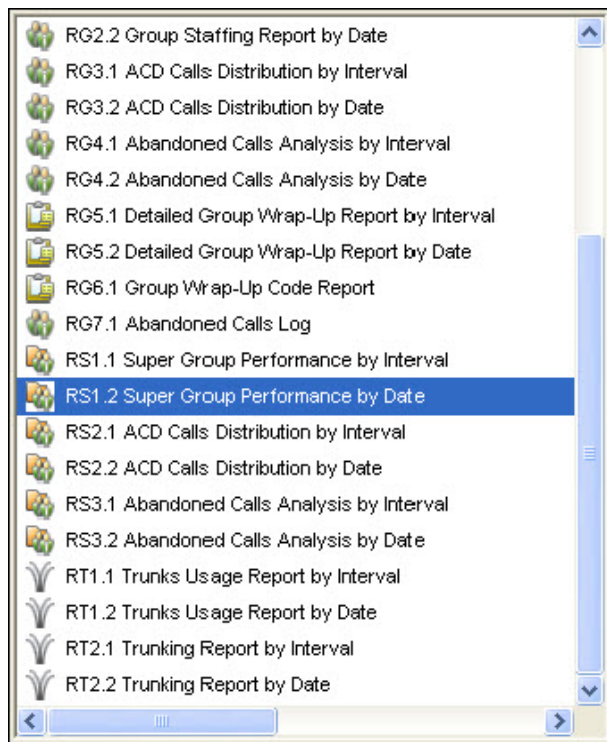
Step 2 If you want to customize the template, click **OK**.

The template opens.

Step 3 To generate the report, click **Generate**.

If you have not previously specified the template's parameters, the Parameters window opens, which you must use to define the parameters, as explained on page 40.

The report is automatically generated and opens in a new window.

Step 4 To print the report, click **Print**.

If you have not previously specified the template's parameters, the Parameters window opens, which you must use to define the parameters, as explained on .

The report is automatically generated and then sent to the default printer. You determine the default printer by choosing **Printer Setup** from the File menu.

Specifying Template Parameters

In addition to data fields, templates contain parameters. A parameter defines the reporting criteria, specifically the report's entities, date range, time range, and interval (where applicable). You must specify a template's parameters before the report can be generated.

To specify a template's parameters:

**Step 1**   In an open template, right-click in the parameters area, and from the menu, choose **Parameters**.

You can also click on the **Report Parameters** icon.

The Parameters window opens.

Step 2   Define the report's entities by clicking on the ... button. In the Choose <Entity> window, add the entities that you want the report to be based on by moving them from the Available field to the **Selected** field. Then click **OK**.

You can click **Quick Search** to find a specific entity. In the resulting field, enter an entity name. Entities with the specified name are shown at the top of the associated list.
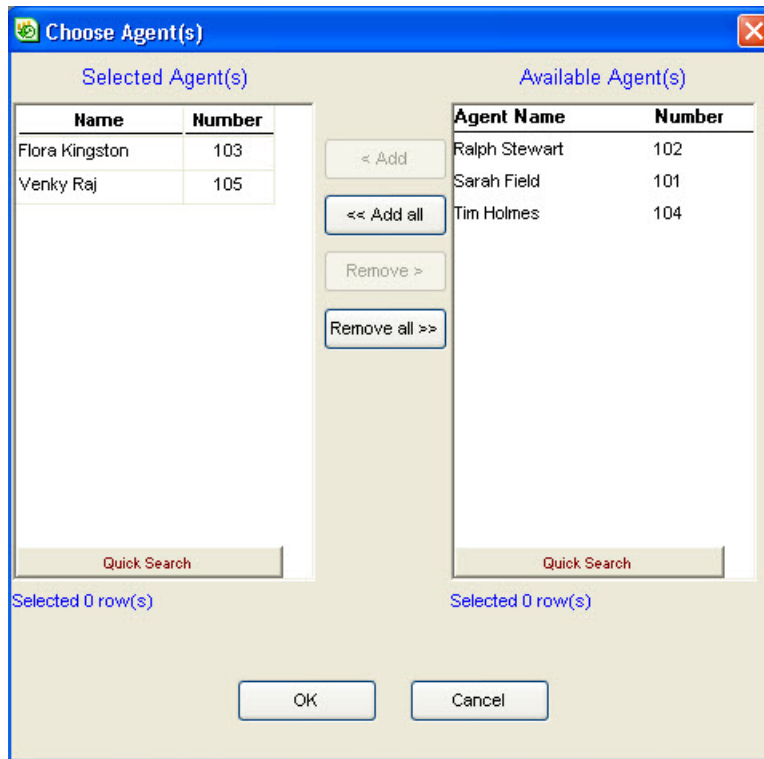
The selected entities appear in the Parameters window.

Step 3 Define the template's date range by clicking on a Date field in the Parameters window. In the Date window, specify the **From** and **To** dates. Then click **OK**.
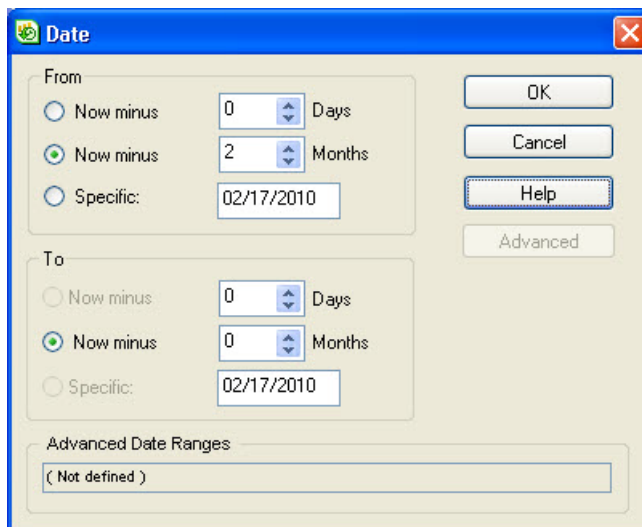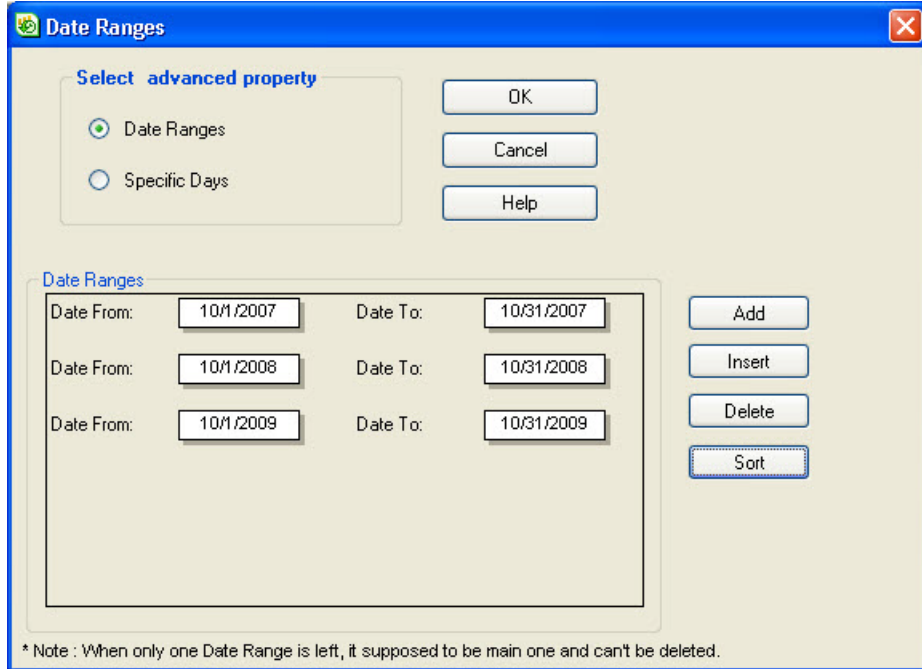

The options on the Date window are:

- **Now Minus Days** - Period of past days relative to the current day.

- **Now Minus Months** - Period of past months relative to the current month.

    See the section Hints on Using a Relative Monthly Date Range on page 44 for help in using this option.

- **Specific** - A specific from and/or to date.

- **Advanced** - If you have defined a **Specific** date range, and want the template to be based on noncontinuous dates within the date range, click this button. In the Date Ranges window, define date ranges for the template, and then click **OK**.
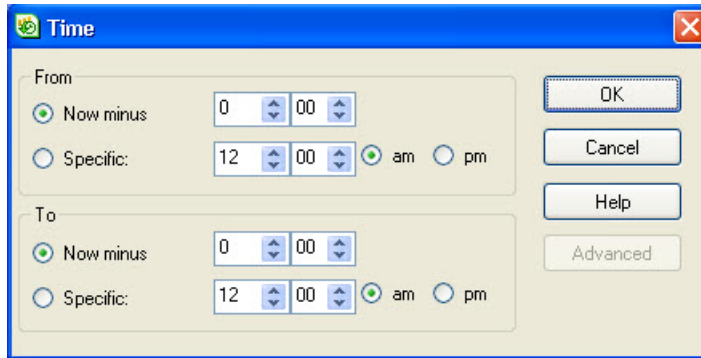

The options on the Date Ranges window are:

✱ **Date Ranges** - Click if you want the date ranges to be specific dates. Use the **Add**, **Insert**, **Delete**, and **Sort** buttons list the various date ranges in the Date Ranges area of the window.

✱ **Specific Days** - Click if you want the date ranges to be based on days of the week. Then select the specific days.
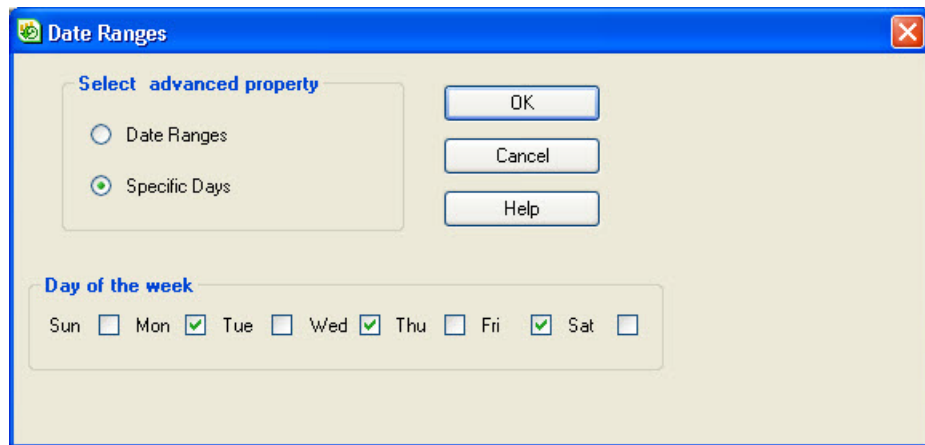
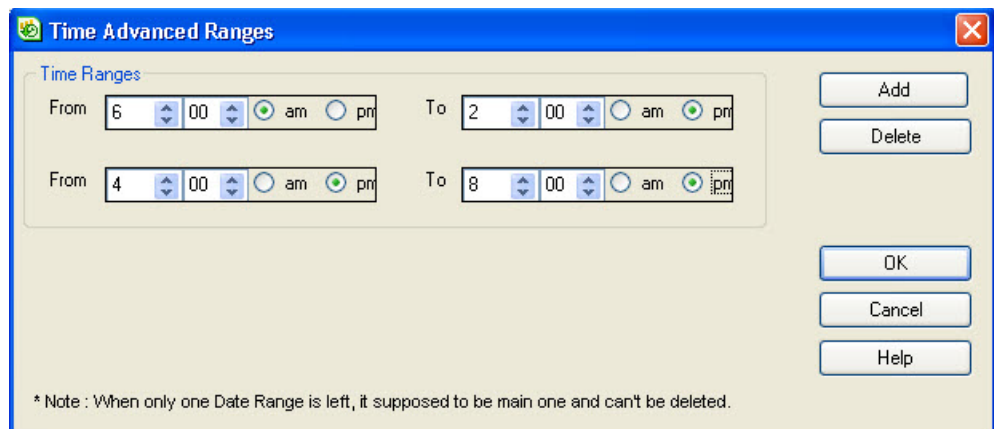

The specified dates appear in the Parameters window.

Step 4 Identify the template's time range by clicking on a Time field in the Parameters window. In the Time window, specify the **From** and **To** time. Then click **OK**.

The options on the Time window are:

- **Now Minus** - Period of past time relative to the current time.

- **Specific** - A specific start and/or end time.

- **Advanced** - If you have defined a **Specific** time range, and want the template to be based a noncontinuous time within the time range, click this button. In the Time Ranges window, define time ranges for the template, and then click **OK**.

The options on the Time Ranges window are:

✳ **Add** - Click to add additional time ranges.

✳ **Delete** - Click to delete the selected time range.

The specified times appear in the Parameters window.

Step 5 If applicable, identify the template's interval by clicking on the **Interval** field in the Parameters window. In the Interval window, specify the interval and then click **OK**.
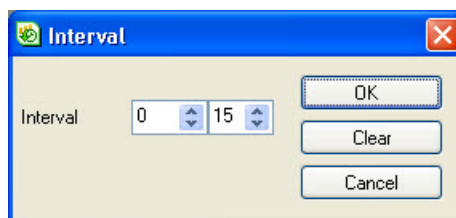
The specified interval appears in the Parameters window.

Step 6   Click **OK** in the Parameters window. The specified parameters are shown in the template.

Date From :	10/01/2009	Date To :	10/31/2009
Time From :	6:00am	Time To :	8:00pm
Agent Name :	Flora Kingston [103] , Venky Raj [105]		
Requested By :	EA		

Hints on Using a Relative Monthly Date Range

A template's date range can be specified relative to the current month. If you want to use a relative monthly date range, here are some hints:

- If you specify a From and To relative monthly date range of 0, the report is generated from the first of the current month to the current day.

- If you specify a From relative monthly date range of 1, and a To range of 0, the report is generated from the first of the previous month to the current day.

- If you specify a From relative monthly date range of 5, and a To range of 5, the report is generated for the entire month that was five months ago. So a report with these parameters, generated on February 17, 2010, displays data for the month of September.

Customizing a Template

Templates can be customized by:

- Adding and Deleting Data Fields
- Creating a Formula Field
- Rearranging Data Fields
- Adjusting the Width of a Field
- Filtering Fields
- Sorting Fields
- Editing Text
- Modifying Text Font
- Specifying Text Color
- Changing the Visual Frame around Parameters
- Identifying the Number of Rows for Field Titles
- Specifying Tabular or Graphic Display

Adding and Deleting Data Fields

Templates can contain commonly used data fields. However, you may want to change the data fields by adding and deleting fields.

Before deleting a field, or adding a field you may not need, check the description of the field. Field descriptions are available from both an open template, and when adding a field from the Add New Column window.

To view field descriptions in an open template, point your cursor on the field title. A tooltip appears with details on the field, including it's formula if applicable. To view field descriptions from the Add New Column window, select a field that you may want to add to the template. A description of the selected field is shown in the Description area of the window.

To delete a data field:

Step 1 In an open template, right-click on the title of the field you want to remove from the template.

Step 2 From the menu, choose **Delete Column**. The field is removed from the template.

To add a data field:

Step 1 In an open template, right-click in the field title area.

Step 2 From the menu, choose **Add Column**.

Step 3 In the Add New Column window, select the field you want to add. You may need to scroll down to see the full list of available fields.

A description of the selected field is shown in the Description area of the window. This description can help you determine if the selected field is the one you want to add to the template.
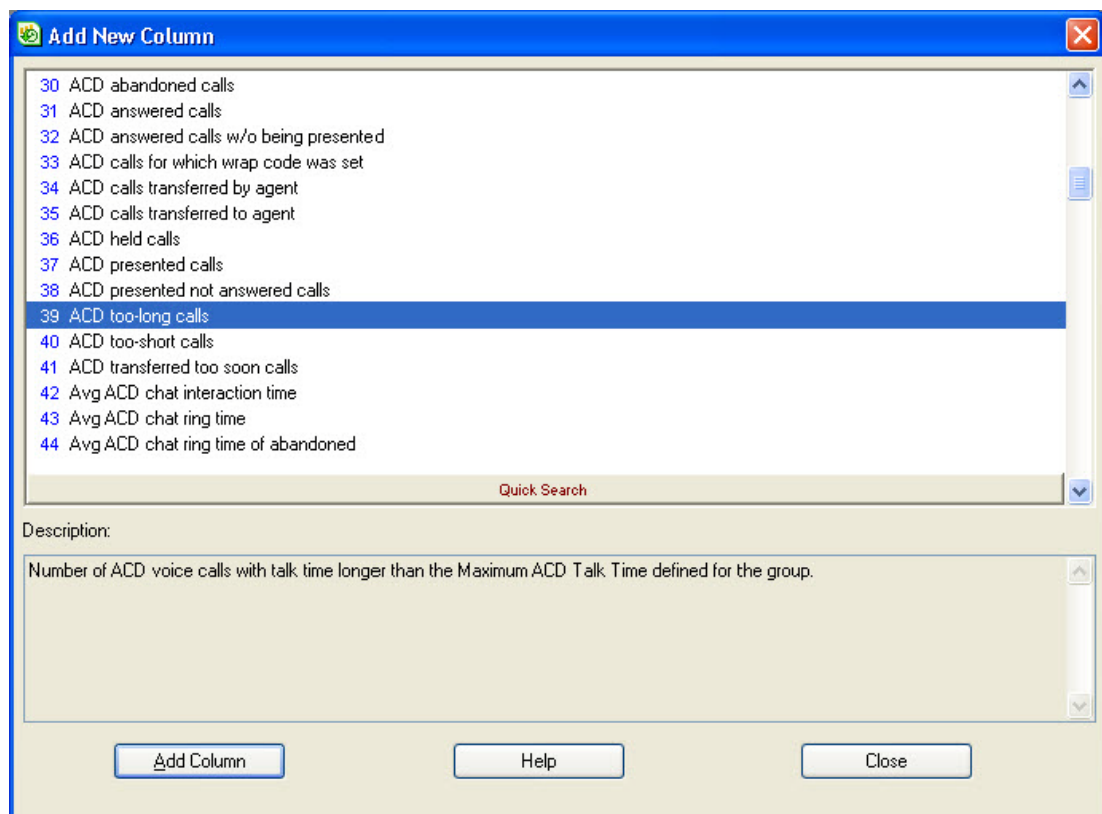
Step 4 If you want to find a specific field, click **Quick Search**. In the resulting field, enter a data field name.
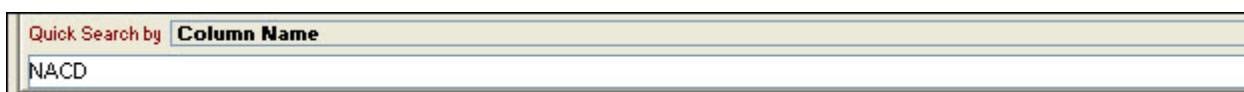
Data fields with the specified name are shown at the top of the list of available fields.

Step 5 Click **Add Column**. The data field is added to the template.

Creating a Formula Field

If the default formula fields available for the template do not provide the information you need, you can create additional formula fields.

To create a formula field:

Step 1 In an open template, choose **Formulas Editor** from the Tools menu.

The Formula Editor window opens. It displays a list of all formula fields you have already created. Using this window you create new formula fields, and can edit or delete formula fields.
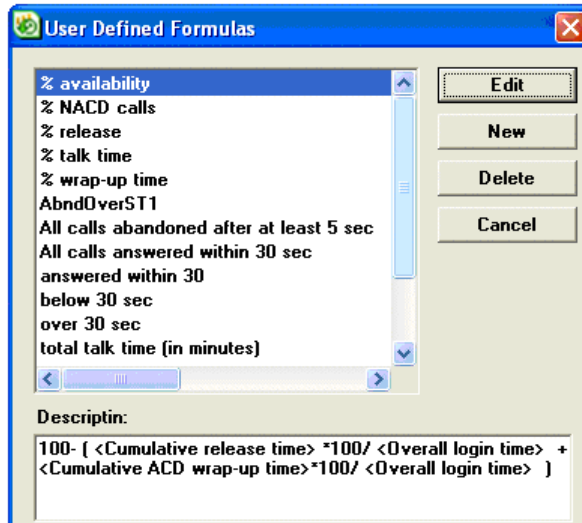
Step 2 Click **New**. The Specify Formula window opens.
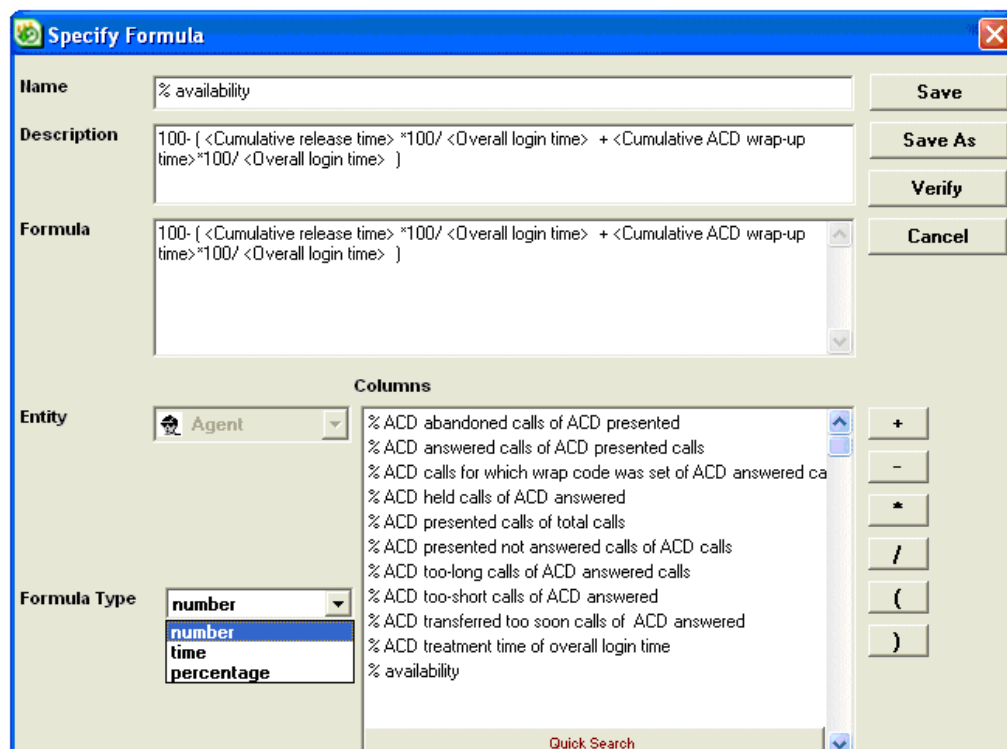
Step 3 In the **Name** field, enter the name of the new field.

The field name appears in the list of available fields when adding a field to a template.

Step 4 In the **Description** field, describe the purpose of the new field.

This description is displayed when you select the field in the Add New Column window, and in the field's tooltip.

Step 5 From the **Entity** drop-down menu, select the entity for the formula.

The list of available fields is based on the selected entity.

Step 6 In the **Formula** field, define the field's formula. A formula is a combination of predefined statistical data that appear in existing fields.

The Specify Formula window provides options to make it easy for you to define a formula. Select the field data for the formula from the Column list, which is categorized by entity. Use the mathematical operators to specify the action to be taken.

Step 7 Specify the formula type from the **Formula Type** drop-down menu.

This ensures that the correct internal operators are used to format the formula, so that you get the expected result.

Step 8 Click **Verify** to test that the formula is valid.

Step 9 Click **Save** to save the formula field under its current name.

If you want to save the formula field under a different name, click **Save As**.

To include the new formula field in the template, you must add the field as explained in the section Adding and Deleting Data Fields on page 45.

Rearranging Data Fields

You can change the arrangement of the fields in a template.

To rearrange data fields:

Step 1 In an open template, select the title of the field you want to move.

Step 2 Drag the field to a new position.

Adjusting the Width of a Field

You can adjust the width of a field in a template.

To adjust the width of a field:

Step 1 In an open template, select the title of the field you want to narrow or widen.

The cross-arrow cursor appears.

**Step 2** Drag the field line to the required width.

Filtering Fields

Sometimes you may need to limit the data displayed in a template or report according to a certain criteria. In order to do so, you can filter the fields that appear in the template or report.

To filter the fields:

Step 1   From the Tools menu, choose **Filter > Change**.

The Filter window appears. You use this window to specify a filter criteria.
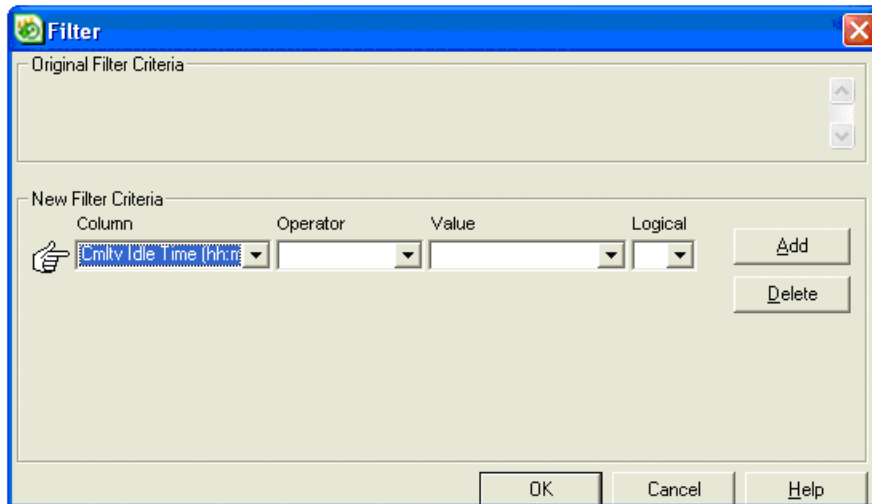
Step 2   From the **Column** drop-down menu, choose the field for the filter criteria.

Step 3   Use the appropriate fields to select the **operator** and **value** to complete the condition.

Step 4   If more conditions are required, add an additional condition line to the filter by clicking **Add**. In this case, a logical operator must be chosen from the first condition's Logical drop-down menu.

Step 5   To delete one of the conditions, click the condition (the finger icon moves to point to the selected condition) and click **Delete**.

Step 6   Click **OK**.

To remove a filter from a template or report, from the Tools menu, select **Filter > Clear**.

Sorting Fields

You can arrange data in a template or report according to a particular criteria. To do so, you sort the fields that appear in the template or report.

To sort fields:

Step 1   From the Tools menu, select **Sort > Change**.

The Sort window appears. You use this window to create the template's sort criteria.

Step 2 Specify the fields to be part of the sort criteria by dragging and dropping the appropriate fields from and to the Columns Available for Sorting and **Sort Columns** lists.

Step 3 If you want the field order to be ascending, select the Ascending check box associated with the field.
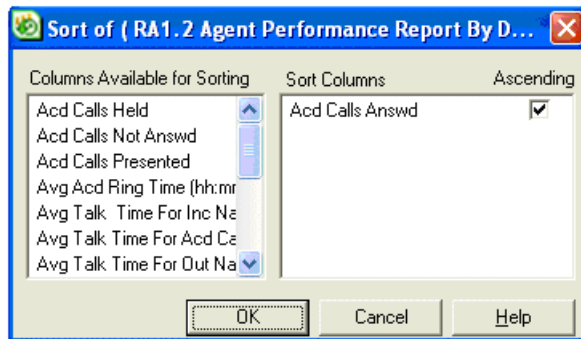
Step 4 Click **OK**.

To remove a sort criteria from a template or report, from the Tools menu, select **Sort > Clear**.

Editing Text

You can edit the text shown in a template. This includes the title of the template, the parameter descriptions, and the data field titles.

To edit the text in a template:

Step 1 In an open template, right-click on the text you want to change.

Step 2 From the menu, choose **Text**.

Step 3 In the Text Modification window, highlight the text shown and type the new text.
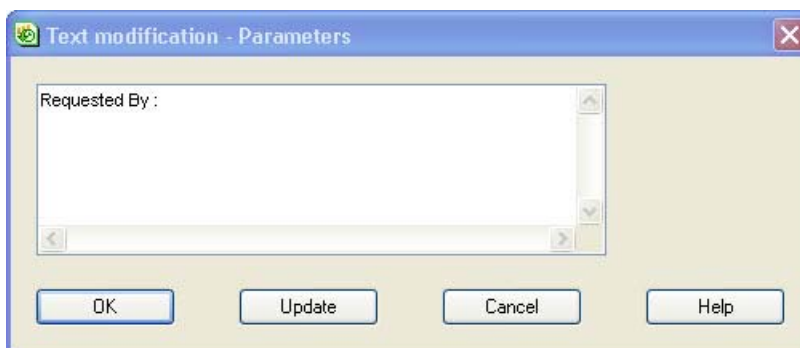
Step 4 Click **OK**.

The text is updated in the template.

Modifying Text Font

The font size and style used for template text can be modified. This text includes the title of the template, the parameter descriptions, and the data field titles.

To modify template text:

Step 1 In an open template, right-click on the text you want to change.

Step 2 From the menu, choose **Font**.

Step 3 In the Font Modification window, specify the font **size** and **style**.

Step 4 Click **OK**.

The font of the template text is modified.

Specifying Text Color

You can specify the color of template text. This text includes the title of the template, the parameter descriptions, and the data field titles.

To specify the color of text:

Step 1 In an open template, right-click on the text you want to change.

Step 2 From the menu, choose **Color**.

Step 3 In the Color Modification window, use the sliders to select the amount of red, green, and blue you want in your color.

The Color Modification window uses the RGB color model. The RGB value for each color is displayed in the associated color box. The X shows the actual color.
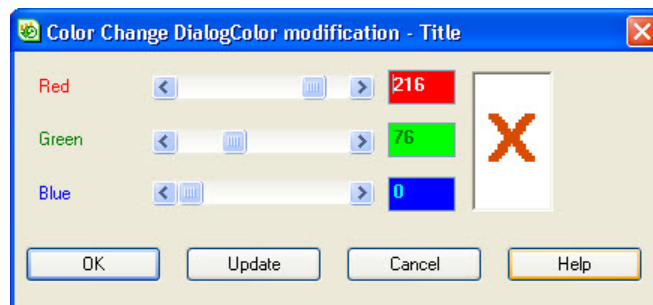
Step 4 Click **OK**.

The text is displayed in the template in the color specified.

Changing the Visual Frame around Parameters

The parameters area of the template can be set off with a visual frame. By default, the frame is raised. You can change the frame to a simple box, or remove it entirely.

To change the visual frame:

Step 1 In an open template, right-click on the Parameters area.

Step 2 From the menu, choose **Frame**, and then choose the type of frame you want. The options are

- **None** - The parameters area is **not** set off.
- **Boxed**- The parameters area is set off by a simple box.
- **Raised**- The parameters area is set off by a raised box.

The visual frame is changed.

Identifying the Number of Rows for Field Titles

By default, data field titles are shown on three rows. You can identify a different number of rows that field titles are displayed across.

To identify the number of rows for field titles:

Step 1 In an open template, right-click on a data field title.

Step 2 From the menu, choose **Number Header Row**.

Step 3 In the Number of Rows window, select the number of rows the data fields titles are to be displayed across.
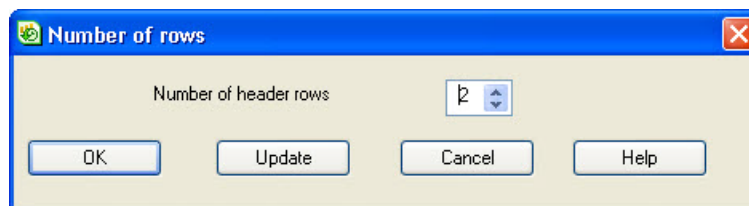
Step 4 Click **OK**.

The data field titles are displayed across the number of rows specified.

Specifying Tabular or Graphic Display

Some templates can display data in either a tabular or graphic form.

Note: If you want the data to be shown as a graph, the template can not have more than six data fields.

To specify a tabular or graphic display:

Step 1 In an open template, select the type of display from the Report Type area.

When generated, the report is displayed in the type specified.

Once the graphical report is displayed, you can view additional details, configure the graph colors, show point labels, and hide the legend. You can point your mouse to a graph sector to see the numeric or percentage value for that sector.

Saving a Template with a New Name

If you have specified the parameters of a template or customized it, and want to use the template again, you can save it under a new name. These templates are then considered to be predefined templates, and are accessed from the File > Open window.

To save a template with a new name:

Step 1 From the File menu, choose **Save As**. You can also click the **Save Template As** icon on the toolbar.

Step 2 In the Save As window, enter the new template name in the Template Name field.

Step 3 Identify the template as either public or private by clicking on the appropriate option.

Step 4 Click **OK**.

The new template appears in the Open window list of available templates.

Once you have created a new template, you can save any additional changes you make by choosing **Save** from the File menu, or clicking on the **Save Template** icon on the toolbar.

Generating a Report

There are three ways to generate a report from a template: from the Open window, manually, or by scheduling the report to be automatically generated at a later time.

Generating a Report from the Open Window

Generating a report from the Open window allows you to generate a report without having to open the template. This method is useful when you have a template in which you have already specified the parameters, and if required, customized it with the data fields and look that you want.

To generate a report from the Open window:

Step 1 From the Contact Center Reports File menu, click **Open**. You can also click the **Open Existing Template** icon on the toolbar.

Step 2 The Open window appears.

.
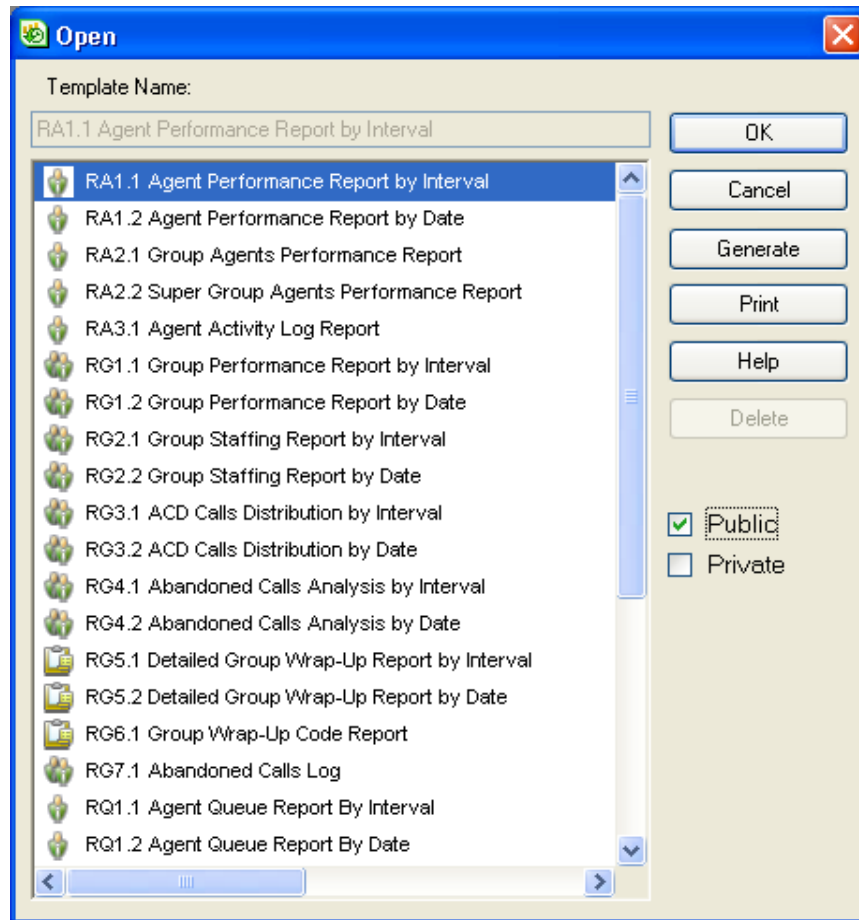
Step 3 Select the template you want to generate a report from.

Step 4 Click **Generate**.

If you have not previously specified the template's parameters, the Parameters window opens, which you must use to define the parameters, as explained on .

The report is automatically generated and opens in a new window.

Step 5 If you generated a graphical report, you can choose how the graphic data is displayed. From the Report menu, choose **Graph Type**, and then the specific graph you want.

You can now print or email the report, or export the data to a file format. Refer to the section for information.

Manually Generating a Report

Manually generate a report if you are interested in seeing and using the data immediately.

To manually generate a report:

Step 1 In an open template, choose **Generate** from the Report menu, or click on the **Generate Report from Template** icon.

Step 2 If the template's parameters are not defined, the Parameters window opens. A template must have parameters before the report can be generated. See the section Specifying Template Parameters on page 40 for details.

The report is generated and opens in a new window.

Step 3 If you generated a graphical report, you can choose how the graphic data is displayed. From the Report menu, choose **Graph Type**, and then the specific graph you want.

You can now print or email the report, or export the data to a file format. Refer to the section Working with Historical Reports on page 62 for information.

Automatically Generating a Report (Scheduling a Report)

Automatically generating a report is useful when you want to generate and print, email, or export the report periodically.

You must specify the template's parameters before you can automatically email a report. If you have scheduled a generated report to be automatically emailed, and the report is not sent, contact your administrator. The administrator must create a printer account with local administrative privileges on the Contact Center server to ensure that scheduled reports are emailed successfully.

Once you have scheduled a report to be automatically generated, you can view and manage the schedule on the Schedule List. See the section Managing Scheduled Reports on page 65 for details.

You can schedule up to 30 reports at a time.

To automatically generate a report:

Step 1 In an open template, choose **Schedule** from the Report menu, or click on the **Define an Automatic Report** icon.

The Automatic Reports window opens. The Source Report Name field indicates that template that the report is based on.

Step 2 In the Schedule tab, specify the schedule name and options.

The schedule name appears in the Schedule List.

To keep the new schedule up-to-date with any changes made to the template on which it is based, select the **Synchronize with the source template** (**parameters**, **design**) check box. This option is only available for templates you have previously saved.

Step 3 Use the options in the Date and Time areas to identify when the report is to be generated.

The Date options are:

- **Every Day** - Run the report every day of the week, unless the **Generate the report on working days** only option is checked.

- **Every Week** - Run the report once a week, on the day specified in the associated field.

- **Every Month** - Run the once a month, on the date specified in the associated field.

- **Specific** - Generate the report on this specific day only.

The Time options are:

- **Every Hour** - Generate the report every number of specified hours.

- **Specific** - Generate the report at this specific hour only.

Step 4 If you want to generate the report to a printer, from the Destination tab check **Printer**. Then select the appropriate printer options.

The report is sent to your default printer. To select a different printer from the list defined in the Contact Center server, click **Browse**. You can choose the report page orientation from the Orientation area. The Default option uses the specified printer's default orientation.
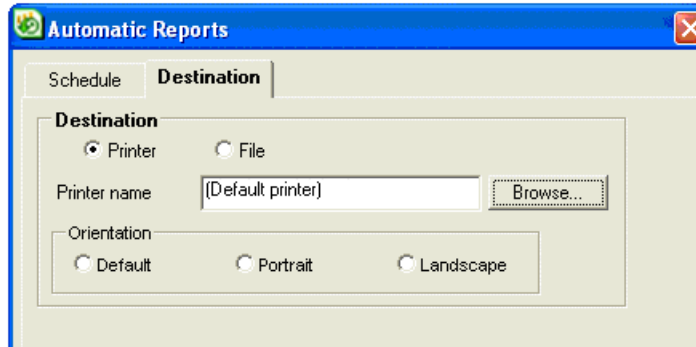
Note: Make sure the printer does not require that you specify a filename before printing (for example the Microsoft Office Document Image Writer). Devices that require you to specify a filename before printing will cause the Contact Center Scheduler to hang, since user input is required.
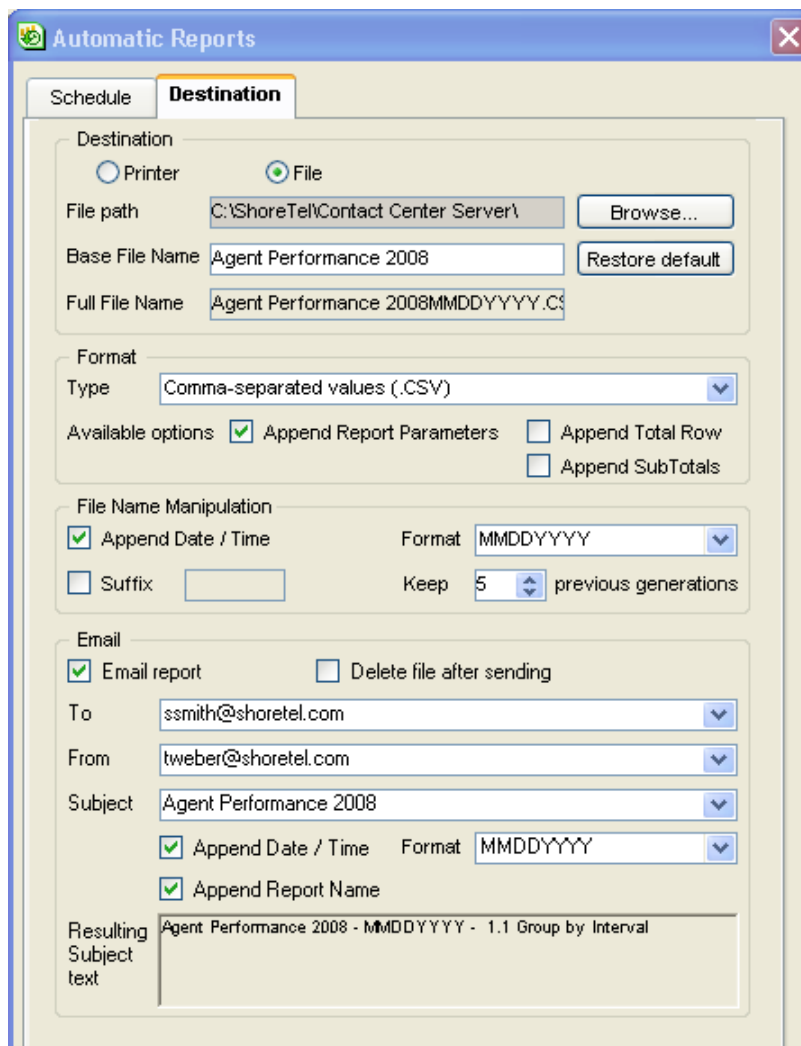
Step 5 If you want to generate the report to a file, from the Destination tab check **File**. Then select the appropriate file options. These options are:

Destination Area

- **File Path** - The location the file is to be saved on the Contact Center server. Click Browse to navigate to and select a location.

- **Base File Name** - By default, the report is saved with the name of the schedule. You can change the report name or restore the default name.

- **Full File Name** - Include here the file extension.

Format Area

- **Type** - The file format type of the report. Note that if you want to export the report to PDF, your administrator has to first installed a required component on your machine. If you are unable to export reports to PDF, contact your administrator.

- **Available Options** - Depending on the type of file format you selected, three type options may become available: Append Report Parameters, Append Total Rows, and Append Subtotals.

File Name Manipulation Area

- **Append Date/Time** - Adds the date and/or time to the file name.

- **Format** - If the Append Date/Time option is checked, select the date and time format you want to use.

- **Suffix** - If Suffix is selected, the system adds the suffix entered in the edit box at the end of the file name.

- **Keep** - Defines how many copies of the same file are kept. If a file with the same name is generated (for example, if Suffix was selected but Append Date/Time was not selected), the system renames the previous file by adding the generation number to the name. If the generation number is exceeded, the system removes the oldest copy.

Email Area

- **Email Report** - Checking Email Report sends the report as an email attachment.

- **Delete File After Sending** - If checked, after the email is sent the report file is automatically deleted from your machine.

- **To** - The address(es) the report is to be sent to.

- **From** - The address the report will be sent from.

- **Subject** -The subject of the email.

- **Append Date/Time** - Appends the date and time of the email to the subject line.

- **Format** - If the Append Date/Time option is checked, select the date and time format you want to use.

- **Append Report Name** - Appends the report name to the email subject line.

- **Resulting Subject Text** - Displays the subject line of the email based on the specified options.

Step 6 Click **OK**.

The report will be automatically generated with the options you specified.

Deleting a Predefined Template

Predefined templates that you have created, by saving the template under a new name, can be deleted.

To delete a predefined template:

Step 1 From the Contact Center Reports File menu, click **Open**. You can also click the **Open Existing Template** icon on the toolbar.

Step 2 In the Open window, select the template you want to delete.

Step 3 Click **Delete**. Then click **Yes** in the resulting confirmation message.

   If the Delete button is inactive, you can not delete that template.

Creating a Historical Report Using a Blank Template

Templates are used to create reports. Generally, you want to base your historical reports on predefined templates, since they contain commonly used data fields. However, if your data needs are not met by a predefined template, Contact Center Reports provides a series of blank templates to use instead. For a list of the blank templates, see the section Starting the Supervisor Applications on page 9.

The process of creating a report using a blank template is:

1. Opening a Blank Template
2. Adding Fields to the Template
3. Specifying Blank Template Parameters
4. Customizing a Blank Template (Optional)
5. Saving a Blank Template with a New Name
6. Generating a Report from a Blank Template

Once generated, a report can be printed, emailed, or exported, as explain in the section Working with Historical Reports on page 62.
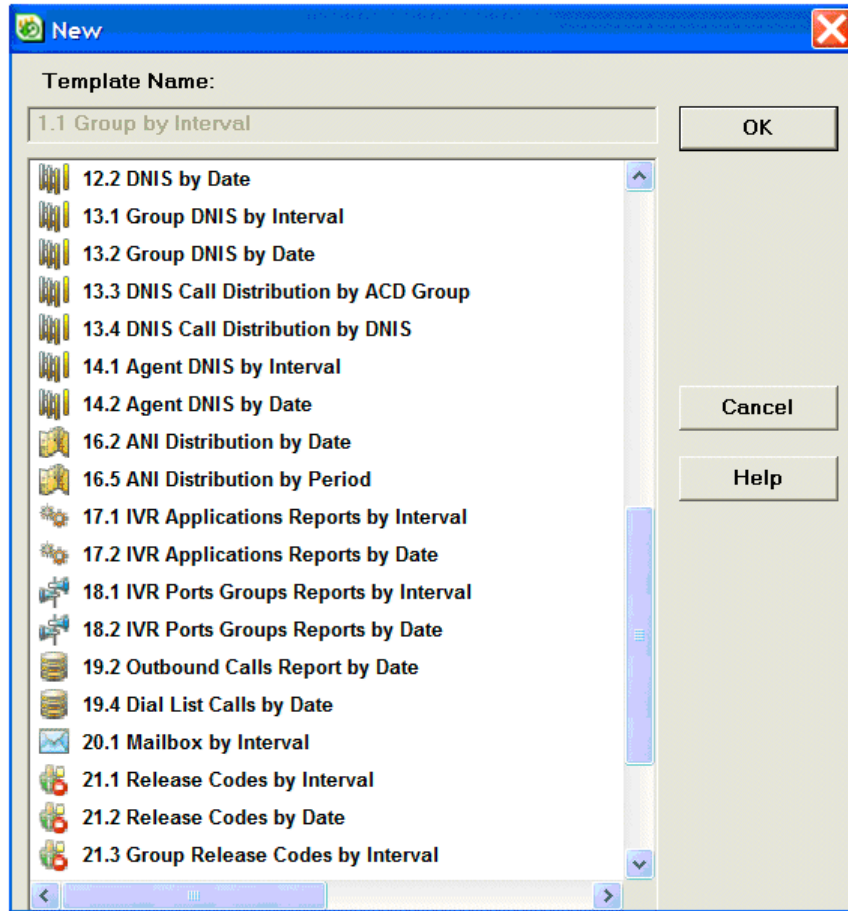
Opening a Blank Template

The blank templates provided by Contact Center Reports are organized by entity. Entities are administrative objects in the ShoreTel system, upon which system operations are based. For example, agents, groups, super groups, and trunks.

To open a blank template:

Step 1 From the Contact Center Reports File menu, click **New**. You can also click the **Create New Template** icon on the toolbar.

Step 2 From the New window, select the template you want to base your report on. You may need to scroll down to see the entire list of available templates.

Step 3   Click **OK**.

The template opens.

Adding Fields to the Template

Blank templates do not contain data fields; you must add the specific fields you need.

To add a data field:

Step 1   In an open template, right-click in the data field title area.
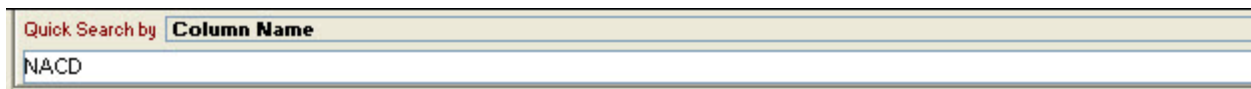
Step 2   From the menu, choose **Add Column**.

Step 3   In the Add New Column window, select the field you want to add. You may need to scroll down to see the full list of available fields.

A description of the selected field is shown in the Description area of the window. This description can help you determine if the selected field is the one you want to add to the template.

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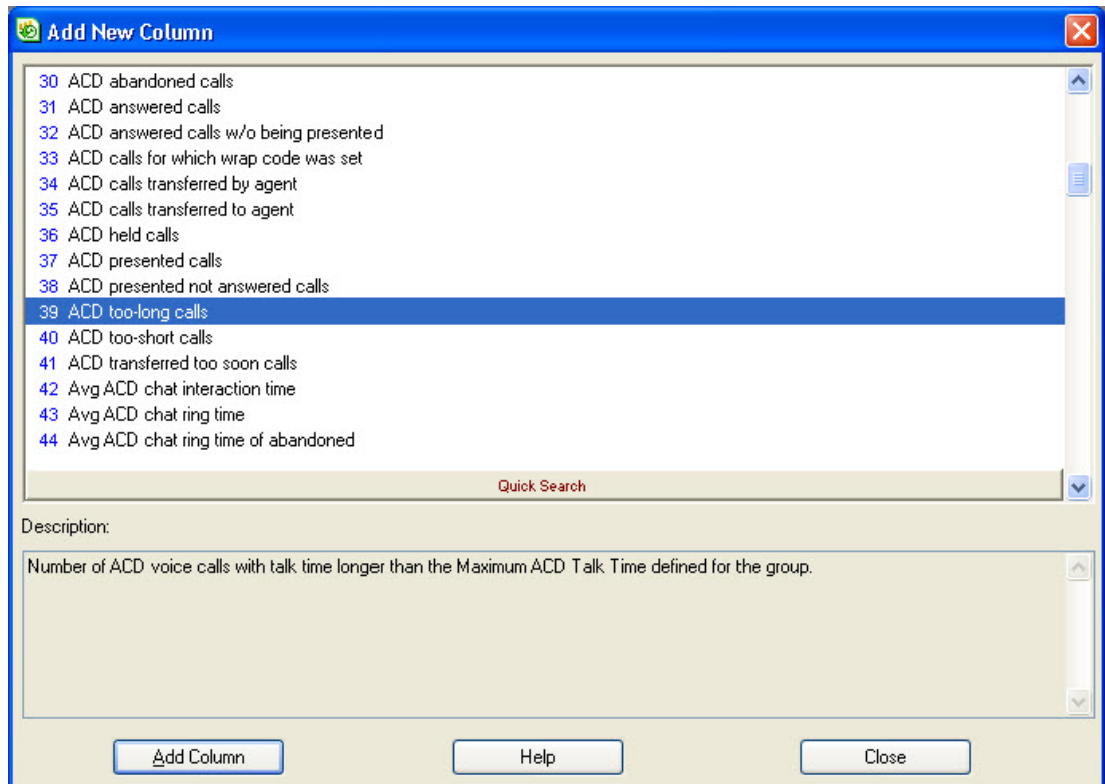
Step 4 If you want to find a specific field, click **Quick Search**. In the resulting field, enter a data field name.

Data fields with the specified name are shown at the top of the list of available fields.

Step 5 Click **Add Column**.

The data field is added to the template.

Specifying Blank Template Parameters

In addition to data fields, templates contain parameters. A parameter defines the reporting criteria, specifically the report's entities, date range, time range, and interval (where applicable). You must specify a template's parameters before the report can be generated.

The section Specifying Template Parameters on page 40 provides information.

Customizing a Blank Template

Blank templates can be customized in the same ways as predefined templates. See the section Customizing a Template on page 45 for details.

Saving a Blank Template with a New Name

After you have added the data fields you need to a blank template, specified the parameters, and possibly customized the template, and you want to use the template again, you can save it under a new name. Refer to the section Saving a Template with a New Name on page 53 for details.

Saved templates are considered to be predefined templates, and are accessed from the Open window.

Generating a Report from a Blank Template

There are two ways to generate a report, either manually or by scheduling the report to be automatically generated at a later time.

See to the sections Manually Generating a Report on page 55 and Automatically Generating a Report (Scheduling a Report) on page 55 for specifics.

Working with Historical Reports

Once a report has been generated, you can work with the it by:

- Filtering Fields in a Report
- Sorting Fields in a Report
- Magnifying a Report
- Printing Reports
- Automatically Emailing Reports
- Exporting Report Data
- Managing Scheduled Reports

Filtering Fields in a Report

Sometimes you may need to omit data in a report according to a certain criteria. In order to do so, you can filter the fields that appear in the report, as explained in the section Filtering Fields on page 49.

Filters defined for reports can not be saved. In filtered reports, although some records are filtered out, the "total" line calculates the totals as if those filtered records were part of the report.

Sorting Fields in a Report

You can arrange data in a report according to a particular criteria. To do so, you sort the fields that appear in the report, as explained in the section Sorting Fields on page 49.

Sort criteria can not be saved with a report.

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Magnifying a Report

Generated reports can contain a lot of data that may be difficult to see on screen. You can change the magnification of a report to display more or less information without scrolling.

To magnify a report:

Step 1 In an open report, from the Tool menu choose **Zoom**.

Step 2 In the Zoom window, select the level of magnification you want.

Step 3 Click **OK**.

The report is refreshed at the level of magnification selected.

Printing Reports

There are three ways to print a report from a template: from the Open window, manually, or by scheduling the report to be automatically generated and printed at a later time.

Before printing a report, identify your printer by choosing **Printer Setup** from the File menu.

If your report, in the PDF format, prints with an extra blank page for each page printed, you need to change the scaling of the report. To do so:

1. From the Windows Control Panel, select **Printers and Faxes**.

2. Right-click on **Sybase Datawindow PS**, and choose **Properties** from the resulting menu.

3. From the General tab, click **Printing Prefernces**.

4. From the Layout tab, click **Advanced**.

5. In the Graphic area, set the scaling to **85%**.

6. Click **OK** until you exit the printer setup.

Printing a Report from the Open Window

Printing a report from the Open window allows you to print a report without having to open the template. This method is useful when you have a template in which you have already specified the parameters, and if required, customized it with the data fields and look that you want.

To print a report from the Open window:

Step 1 From the Contact Center Reports File menu, choose **Open**. You can also click the **Open Existing Template** icon on the toolbar.

The Open window appears.

Step 2 In the Open window, select the appropriate template.

Step 3 Click **Print**.

Step 4 If you have not previously specified the template's parameters, the Parameters window opens, which you must use to define the parameters, as explained on page 40.

The report is automatically generated and then sent to the default printer.

Manually Printing a Report

Manually print a report if you are interested in seeing and using the data immediately.

To manually print a report:

Step 1 In an open report, choose **Print** from the **File** menu, or click on the Print Report icon.

The report is automatically generated and then sent to the default printer.

Automatically Printing a Report

Automatically printing a report is useful when you want to generate and print a report periodically. Refer to the section Automatically Generating a Report (Scheduling a Report) on page 55 for information.

Automatically Emailing Reports

You can automatically generate and email a report periodically, as detailed in the section Automatically Generating a Report (Scheduling a Report) on page 55.

Exporting Report Data

Report data can be exported to various file formats. There are two ways to export report data: manually or by scheduling the report to be automatically generated and exported at a later time.

The supported export file formats for historical reports are:

- Comma-Separated Values (.CSV)

- Enhanced Metafile Format (.EMF)

- Microsoft Excel (.XLS)

  To export a report to the XLS format, before beginning the export process make sure to widen the first field in the report template. This ensures that the subtotals in that field are displayed.

- Portable Document Format (.PDF)

  To export a report to PDF, your administrator has to first installed a required component on your machine. If you are unable to export reports to PDF, contact your administrator.

- SQL Syntax (.SQL)

- Text with HTML Formatting (.HTM)

Manually Exporting Report Data

Manually export report data if you are interested in seeing and using the data immediately.

To manually export a report:

Step 1 In an open report, choose **Export** from the **File** menu, or click on the Export Report Content icon.

Step 2 In the resulting window, specify the filename, file type, and location for the export file. The click **Save**.

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Information on the export file is displayed in the Report Export Parameters window.

Step 3 If you want to change the filename, file type, or location for the export file, click **Browse** to specify the new information.
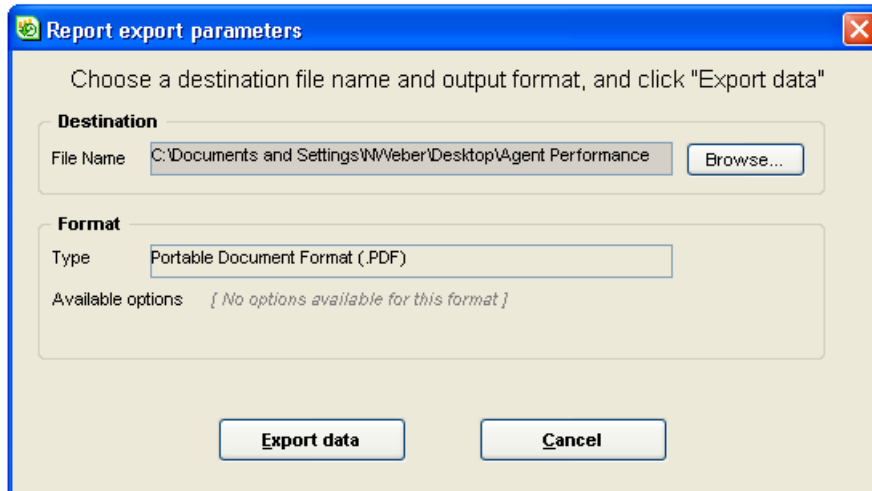
Step 4 Depending on the type of file format you selected, three type options may become available: Append Report Parameters, Append Total Rows, and Append Subtotals. Select the appropriate option.

Step 5 Click **Export Data**.

The report is exported in the format, and with the name and in the location, you specified.

Automatically Exporting Report Data

Automatically exporting report data is useful when you want to generate and export a report periodically. Refer to the section Automatically Generating a Report (Scheduling a Report) on page 55 for specifics.

Managing Scheduled Reports

Once you have scheduled a report to be automatically generated, you can view and manage the schedule on the Schedule List.

To manage scheduled reports:

Step 1 From the File menu, choose **Schedule List**.

The Schedule List window opens.

**Step 2** To change the schedule parameters, select the schedule to change from the list, and click **Edit**.

The Automatic Reports window opens. For information on using this window to change the schedule parameters, see the section Automatically Generating a Report (Scheduling a Report) on page 55.

Step 3 Click **Delete** to remove a selected schedule from the list.

This action does not remove the template on which the schedule is based.
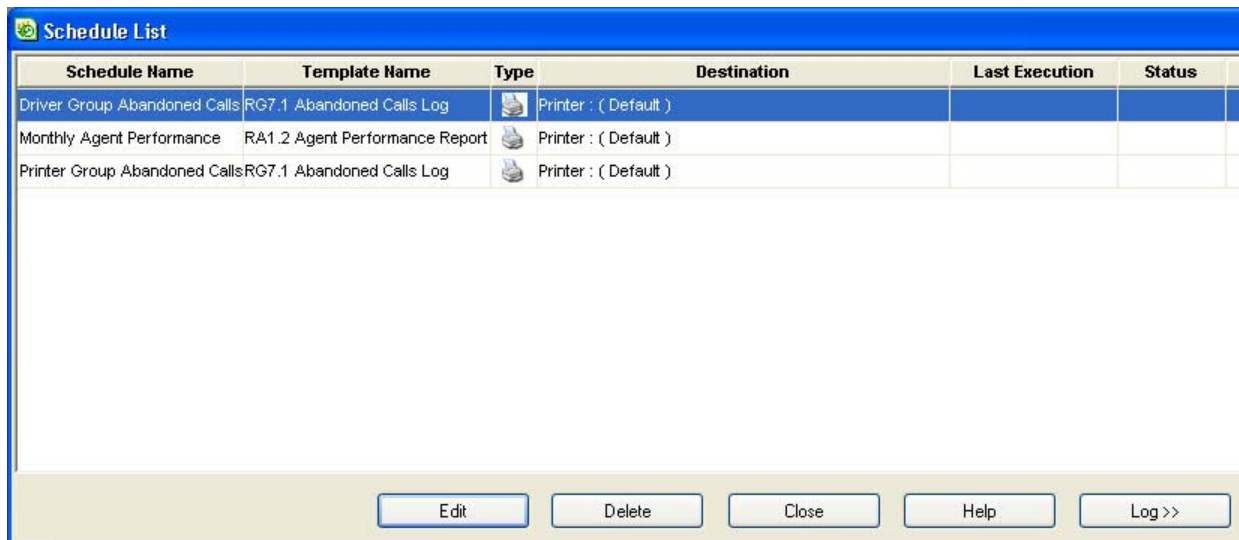
Step 4 Click **Log** to get information on the outcome of the schedule.
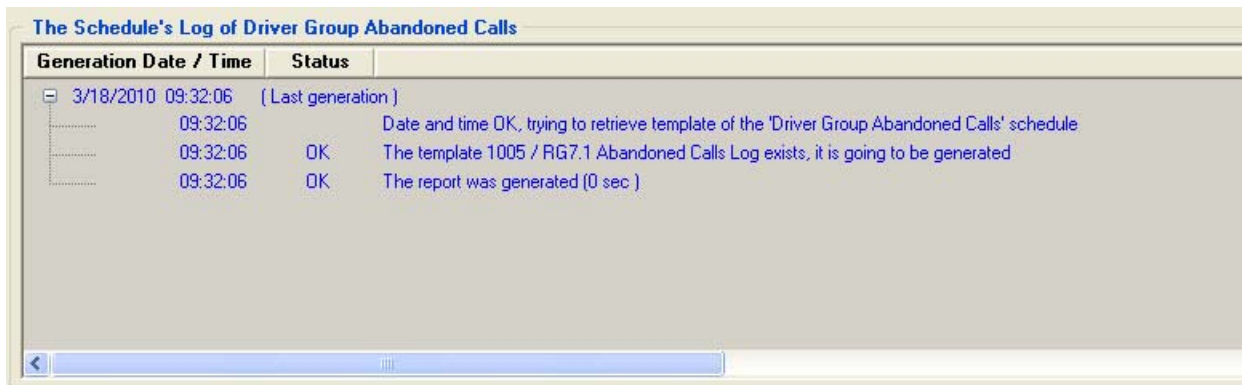
Generating Reports on IVR Applications

If you want to generate reports on voice call or email activity in an IVR Application, you first need to specify the associated DNIS.

A DNIS number is a series of digits that identifies to Contact Center the number that was dialed by the caller. The DNIS number is used to collect statistics on the Contact Center activity that is routed through specific entry points that a customer dials.

For voice calls, **to specify a DNIS for an IVR application:**

Step 1 From Contact Center Director, select **Routing > DNIS**.

Step 2 To create a new DNIS, click **New** and enter the required options (as described below). Then click **Create**.

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Step 3   To edit an existing DNIS, from the List View select the DNIS and enter the required options (as described below). Then click **Save**.

The DNIS options are:

- **Name**. A unique name for the DNIS.

- **Number.** The IRN number represented by the DNIS as an entry point for voice or chat contacts.

- **Target ASA**. Target Average Speed of Answer. The amount of time during which the call should be answered from the time it is received. This parameter is used to calculate the DNIS Target Service Factor (TSF).

- **Short Calls Threshold**. The amount of time (in seconds) in which a call must end to be counted as a too short call in the historical reports.

- **Max ACD Talk Time**. The amount of time (in seconds, in case of a Voice or Chat DNIS, or in hh:mm in case of an email DNIS) that a call must exceed to be counted as a too long call in the historical reports.

- **Interval Time**. Determines the time period that will be monitored in the real-time reports for the DNIS. If this field is set to ten minutes, for example, the real-time report for that DNIS will show statistical information relevant to the last ten minutes.

- **Service Time Intervals**. This parameter determines the time intervals in which calls are monitored. The calls can be viewed in STI histogram reports that show the number of calls answered, abandoned, and waiting in each given interval.

For emails, to specify a DNIS for an IVR application:

Step 1   From Contact Center Director, select **Email > Email DNIS**.

Step 2   To create a new email DNIS, click **New** and enter the required options (as described below). Then click **Create**.

Step 3   To edit an existing email DNIS, from the List View select the email DNIS and enter the required options (as described below). Then click **Save**.

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The email DNIS options are:

- **Name.** A unique name for the DNIS.

- **Email Account.** The email account represented by the DNIS.

- **Target ASA.** The amount of time in which the email should be answered from the time it is received, and is used to calculate the DNIS Target Service Factor (TSF).

- **Short Calls Threshold.** The amount of time in which interaction with an email must end to be counted as "too short" in historical reports.

- **Max ACD Talk Time.** The amount of time that interaction with an email must exceed to be counted as "too long" in historical reports.

- **Interval Time.** The time period that will be monitored for realtime reports for the email DNIS

- **Service Time Intervals.** The time intervals in which emails are monitored. Statistics on the emails can be viewed in STI histogram reports that show the number of emails waiting in each given interval.

Understanding Historical Report Results

This section provides hints, tips, and explanations of the data displayed in historical report.

Data on Deleted Agents

You can retrieve historical data on agents that have been deleted from Contact Center Director using the Group report templates (such as the 3.4 Group Agent by Date Report). If the parameters of the report (i.e. group and date) are appropriate for the removed agent, the agent is listed in the report with an asterisk.

Note that Agent historical reports and real-time reports do not display data on deleted agents.

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How Agent Actions Affect Dial List Data

The Agent Toolbar Callback buttons, used by agents to work with callbacks, do not directly trigger the success or failure of outputs of an outbound dial list. Callback button usage is recorded on a per dial list, per period, basis. Refer to the *Using Agent Toolbar* guide for information on how agents should use these buttons.

The **Set Callback – Reinsert Busy** and **Set Callback – Reinsert No Answer** buttons simply reinsert the number back into the list. These numbers are called back at a later time based on the Retry on Busy and Retry on No Answer options specified in Contact Center Director > System Parameters > Outbound > General Preferences.

The **Set Callback – Reinsert Terminate** button removes the number from the dial list. These entries are only retained for each instance of a dial list. For example, if for the dial list the Start Periodically option is set to weekly, the number will not be called back for that period. If however the same record is imported again, during the next period it will be called.

Updates to Your External Database Records

The following table lists the updates made to your external database call records as the result of agent activity.

Update	Reason
Record is marked as Final Failure.	The system was unable to dial the number; or
	The number was successfully dialed by the system, but marked Callback Terminate by the agent.
Recored is marked as First Failure.	One or more numbers (but not all) could not be dialed by the system; or
	One or more numbers (but not all) were successfully dialed by the system, but marked Callback Terminate by the agent.
Record is marked as Successful	One number was routed to the agent, and was successfully answered and disconnected without being reinserted into the list.

How Inbound ACD Call Numbers are Calculated

When viewing the data for the number of inbound ACD calls, keep in mind that if a call is transferred to the IRN of Group A from Group B, the call is considered a new call, and is therefore counted twice in the inbound ACD call fields.

Measuring Email Queue Time

Email queue time measures **only** the length of time an email is queued in a service. It does **not** measure the time taken to download an email from the main email server or the amount of time the email was in the cache.

Unexpected Results when using Park

Parking a call places a call on hold on another extension. This allows agents to park a call on one extension and pick it up from a different extension. Unparking a call is retrieving a call that an agent previously parked on another extension. Calls can be unparked only by the person that parked it.

Park and unpark is not supported in Contact Center. So if you implement this feature in your call center, note that the data recorded when a call is parked is not completely accurate and you may get unexpected results in your reports. In addition, using park can cause agent states to get stuck or be incorrect.

Communicating with Agents

Wallboard Director enables you to communicate with entire groups of agents simultaneously, while providing you with important information instantaneously.

Using Wallboard Director, you can create and store new wallboard messages, modify existing messages, and customize messages for individual groups. You also can create customized scenarios, which may include messages and pop-ups. Pop-ups display a message at a specific time for predefined periods.

Contact Center supports single and two line LED Wallboards from Spectrum Corporation (www.specorp.com.)

The Wallboard Director Main Screen

The Wallboard Director main screen is displayed after you have successfully logged onto the application. The main screen comprises a menu bar with menu options, and a toolbar with two tool icons that provide you with quick access to the most frequently performed procedures.

The toolbar provides the following functions:

- **Wallboard (1) -** Opens the Wallboard window.

- **Logout (2):** Exits Wallboard Director and any other currently open Contact Center supervisor applications.

Message Editor Window

The Message Editor window is used to create and edit messages to be displayed on the wallboard.

A new message can be created, or an existing one can be edited, using the following fields and buttons in the Message Editor:

- **Message Library -** Displays the messages available for use in the wallboard. Each time a new message is created, it is placed in the Message Library. The Message Library is displayed both in the Message Editor window and the Wallboard window in the same format. A message is not removed from the list after being added to a scenario, thereby enabling you to use any message an unlimited number of times.
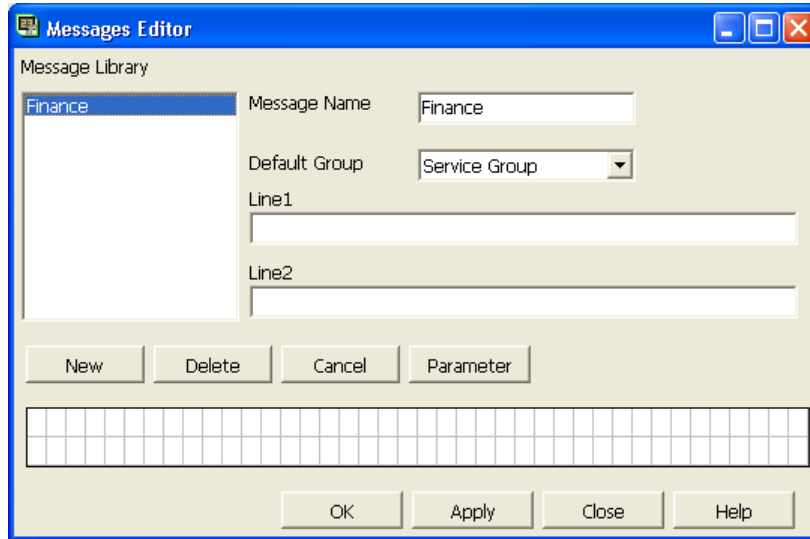
- **Message Name -** Shows the name of the selected message. When creating a new message, you must fill in this field. When modifying an existing message, you have the option to change the message name. The message name can contain a maximum of 32 characters.

- **Default Group -** For parameters in a message, a group must be assigned to be displayed. The parameter's group may be defined in various stages during the process of inserting a message into a scenario or a pop-up.

- **Line 1 -** Displays the first line of the selected message. This read-only area displays modifications made to the message in the work area of the Message Editor window. Each set of parentheses represents a parameter that has been included in the message.

- **Line 2 -** Displays the second line of the selected message. This read-only area displays modifications made to the message in the work area of the Message Editor window. Each set of parentheses represents a parameter included in the message.

- **New -** Click to create a new message. All the fields in the Message Editor are cleared, except for the Message Library. All the fields in the Message Editor must be filled in for a new message to be complete.

- **Delete -** Click to erase a selected message. A warning appears. Click Yes to delete the message or No to cancel the process.

- **Cancel -** Click to undo any changes you have made and return to the original message.

- **Parameter -** Click to open the parameter dialog box, in which you can select preset parameters from the Parameters list. Parameters selected from this list are included in the message.

- **Message Area -** Area to enter and edit messages.

  Each box represents one character, and the paragraph marks represent parameters included in the messages. You can change the color of individual characters by right-clicking their boxes. Each line has 40 characters, for a total of 80 characters. The two lines of the message area are not continuous. Therefore, a message that begins on Line 1 and extends longer than 40 characters does not automatically continue on the next line. You must either press ENTER or click where you want the message to continue.

- **Help -** Click to open Wallboard Director Help.

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To create a new message:

Step 1 In the Messages Editor window, click **New**.

All the fields become blank except for the Message Library.

Step 2 In the Message Name field, enter the name of the new message.

Step 3 In the Default Group field, from the drop down list, select the default group for the message (see the Parameter Group Assignment Rules section for details).

Step 4 In the work are, type the new message.

Step 5 If you need to add a parameter to the new message, place the cursor where you want the parameter to appear within the message, and click **Parameter**.

Step 6 When you have finished editing the message, in the Message Editor window, click **OK** to save the new message. The new message's name appears in the Message Library.

When using the Message Area in the Message Editor, keep the following few rules in mind:

- To begin typing, position the cursor where you want to begin the message, and click the mouse.

- Clicking the spacebar on the keyboard inserts a small rectangle in the box (representing a space in the message). You cannot type another character in a box with a space rectangle until you delete the space.

- You can highlight a block of text and press either DELETE or BACKSPACE on the keyboard to erase the selected text.

- Parameters cannot be modified in any way, but you can remove them from, or add them to, existing messages.

To edit a preprogrammed message:

Step 1 In the Message Editor window, select the message that you want to edit from the Message Library.

Step 2 Make any corrections within the Message Editor or the Parameters window.

Step 3 When you have finished making the corrections, click **OK**. The changes are saved in the system.

To delete a message:

Step 1 In the Message Editor, click the message that you want to delete.

Step 2 Click **Delete**.

A warning message appears.

Step 3 Click **Yes** to delete the message.

The message is erased, along with all the information related to it.

Click **No** to cancel. Deleting a message removes it from any scenario in which it appeared.

Adding Parameters to a Message

The messages displayed on the wallboard often contain important information that supervisors may want to convey to agents. This information can be taken from real-time reports by specifying a predefined parameter. Each message can have its own combination of parameters, which represent information in a group.

To add message parameters:

Step 1 Place the cursor where you want the parameter to appear within the message, and click **Parameter**.

The Parameters dialog box opens.
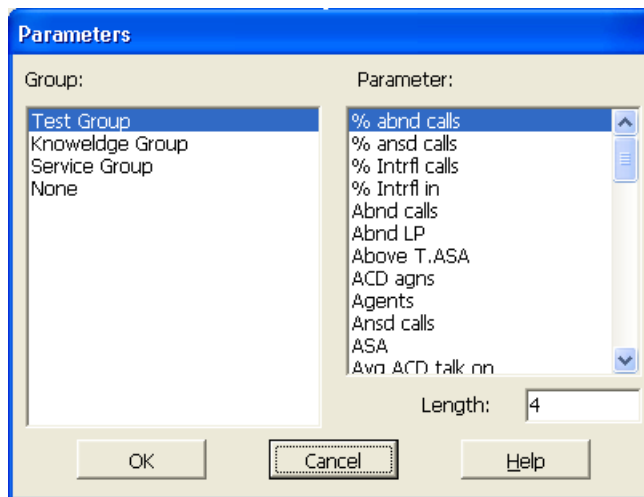
Step 2 From the Group list, select one of the groups to which the selected parameter will refer (see the section Parameter Group Assignment Rules for details).

Step 3 The Parameter list displays all the various parameters that can be added to a message. The Length field below the Parameter list indicates the maximum number of characters used to present the parameter's value. To modify the displayed length, click the field and enter the required number.

Step 4 For example, you may have a message that informs the agents in the Sales group of their progress in answering calls. Click **Sales** in the Group field, and then select **ASA** from the list of parameters. This parameter indicates the Average Speed of Answer by the agents. Thus, when this parameter is included, a number indicating the ASA follows the message.

Step 5 To add the parameter to the message, click **OK**.

The Parameters dialog box closes. The new or modified parameter is added to the message and displayed in the work area of the Message Editor in the form of paragraph marks. The number of paragraph marks reflects the number of characters the parameter will take on the wallboard (as defined in the Length field in the Parameters window).

If a message is assigned to a scenario or popup message, you can not add or delete parameters.

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From the Parameters List, you can select any of the following parameters to be included in your message.

- **General Parameters**

  — *Grp name -* Use to display the name of the group.

- **Currently in Queue**

  — *Queue calls -* Number of Incoming ACD calls waiting in the groups queue.
  — *Above T.ASA -* Number of Incoming ACD calls waiting in the groups queue more than T.ASA seconds.
  — *Avg queue time -* Average wait time of Incoming ACD calls waiting in the groups queue.
  — *Max queue time -* Longest wait time of Incoming ACD calls waiting in the groups queue.
  — *STI 1 - STI 6 -* One more step in the STI will be the target ASA, to see how many calls wait more than the target ASA.

- **Information For Now**

  — *Agents -* Number of logged in agents.
  — *Rls agns -* Number of agents in release state.
  — *Wr-Up agns -* Number of agents in wrap-up state.
  — *Idle agns -* Number of agents in idle state.
  — *ACD agns -* Number of agents on an ACD call.
  — *Non-ACD agns -* Number of agents on a non-ACD call.
  — *Too long talk -* Number of agents who have been on a call for too long.
  — *Max talk time -* Longest ACD call talk time (min:sec)

- **On The Current Time-Interval**

  — *TSF -* The TSF for the current time-interval
  — *Inc calls -* Number of Incoming ACD Calls
  — *Ansd calls -* Number Of Answered ACD Calls
  — *% ansd calls -* Percentage Of Answered ACD Calls out of all incoming ACD calls
  — *Abnd calls -* Number Of Abandoned Calls
  — *% abnd calls -* Percentage Of Abandoned Calls out of all incoming ACD calls
  — *Avg time abnd -* Average Wait Time Of Abandoned Calls (sec)
  — *Max time abnd -* Longest Wait Time Of Abandoned Calls (sec)
  — *Intrfl out -* Number Of Calls Interflowed From Group
  — *% Intrfl calls -* Percentage Of Calls Interflowed From Group out of all incoming ACD calls
  — *Avg calls in que -* Average Number of Calls in Queue
  — *Avg time Intrfl -* Average Wait Time Of Calls Interflowed From Group (sec)
  — *Max time Intrfl -* Longest Wait Time Of Calls Interflowed From Group (sec)
  — *Intrfl in -* Number Of Calls Interflowed To Group
  — *% Intrfl in -* Percentage Of Calls Interflowed To Group out of all incoming ACD calls
  — *RPH -* The Groups RPH. Calculated as the number of answered calls divided by the average number of agents, thus giving the average number of calls answered by an agent of the group
  — *Avg que time on -* Average Wait Time In Queue (sec)
  — *Max que time on -* Longest Wait Time In Queue (sec)
  — *Avg ACD talk on -* Average ACD Talk Time (min:sec)
  — *Max ACD talk on -* Longest ACD Talk Time (min:sec)

> — *ASA -* Average Answer Time (sec)
> — *RQD agns -* Required Number of Agents In Order To Meet The Target-ASA
> — *T ASA -* Not a statistical parameter but displays the target ASA for the group as defined by the administrator

- **On The Previous Time-Interval**

  > — *Intrfl LP -* Number of Calls Interflowed Last Period
  > — *TSF LP -* The TSF for the Last Period
  > — *RQD agns LP -* Required Number of Agents in Order to Meet the Target-ASA in Last Period
  > — *Abnd LP -* Number of Abandoned Calls in Last Period

Changing the Message Colors

Wallboard Director supports multiple background and foreground colors (foreground color is the text color). The Message Editor window enables you to change these colors.

To change the colors:

Step 1 In the work area of the Message Editor, highlight the area on which to apply the color changes.

Step 2 In the work area, right-click the mouse. The Select Colors window opens.
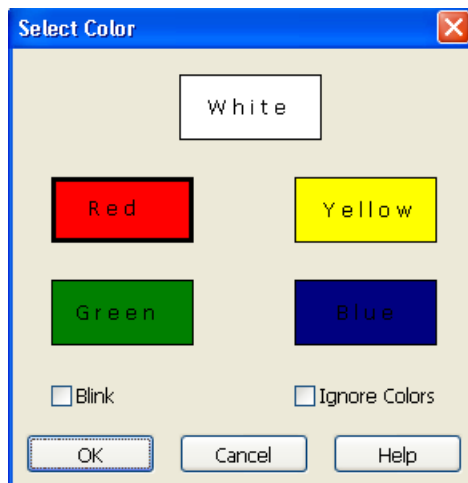
**Step 3** Select a color from the color boxes. The options are:

- **Blue -** Background is blue; text is yellow
- **Yellow -** Background is yellow; text is blue
- **White -** Background is white; text is black
- **Red -** Background is red; text is black
- **Green -** Background is green; text is black

To set the blink option (that is, the text will blink on the wallboard), select the Blink check box.

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Parameter Group Assignment Rules

For any parameter in any message, a group must be assigned to be displayed. The parameter's group may be defined in various stages during the process of inserting a message into a scenario or pop-up:

- In the Add/Edit message to scenario/pop-up dialog box, there is an option to assign the parameter to a specific group, for each parameter in the message.

- In the Add/Edit message to scenario/pop-up dialog box, there is also an option to define a default group that, if defined, is used for every parameter that has no group assigned in the previous stage.

- In the Message Editor, in the Select Parameter dialog box, there is an option to assign the parameter to a specific group. This assignment is used if no assignment was made in one of the previous options.

- In the Message Editor, there is an option to define a default group for the message. This group is used for every parameter that was not assigned to a group in any of the previous stages.

The Wallboard Window

The Wallboard window enables you to add and remove wallboards and to "run" the scenario or pop-up when the message changes. The Wallboard window contains three tabs: Config, Scenario, and Pop-Up.

Config Tab

The Config tab is used to define the communication parameters of the selected wallboard. You can create a single wallboard for all your agents, or individual wallboards targeted to specific agents (up to 256 separate wallboards).

Some Spectrum wallboards support narrow fonts. You can use narrow fonts with these wallboard by adding the following statement to the wecc.ini file (located in the ShoreTel\Contact Center\Supervisor directory):

```
[RBE]
Narrow_mode = 1
```

Wallboards are created and edited using the following fields and buttons in the Wallboard window Config Tab.

- **Name -** Displays the name (up to 32 characters) of the selected wallboard.

- **Lines -** The number of lines in the wallboard.

- **Type -** Drop-down list containing the following options to select the type of wallboard currently being used:
  - *AgentBoard: -* No actual wallboard. The messages appear on the agent's computer using the Agent Board application.
  - *Comfuture -* This wallboard conforms to the comfuture wallboard protocol.
  - *Spectrum / Alpha -* This wallboard conforms to the Spectrum wallboard protocol.

- **Address-** Contains the address of the wallboard connected to the COM port. When using chained wallboards, each wallboard must use a different address.
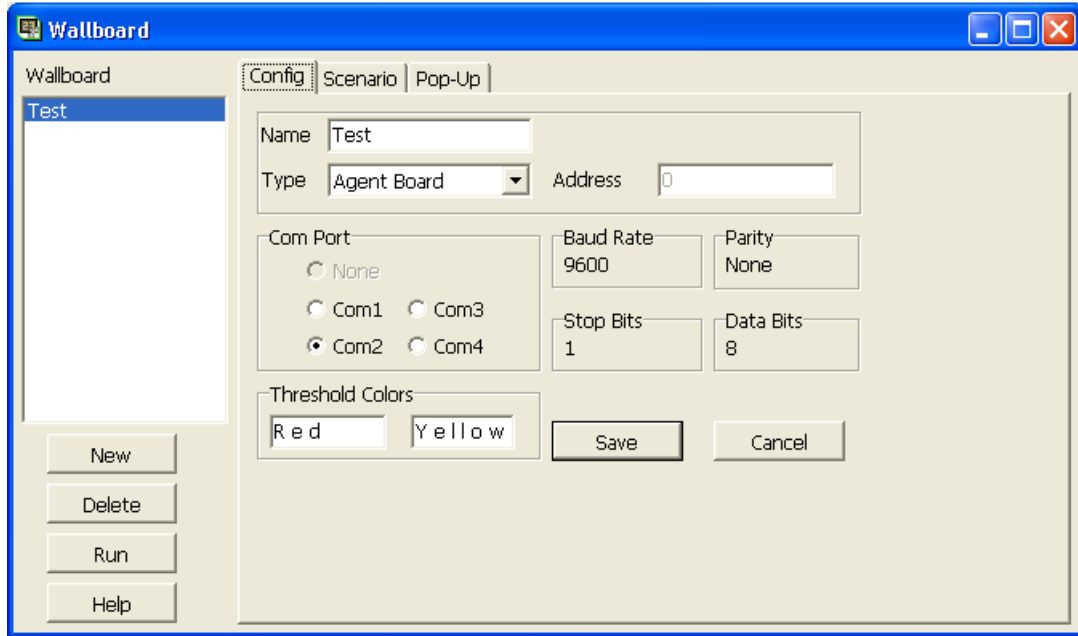
- **Com Port -** Click one of the option buttons in this area to define the com port to which the wallboard is connected.

- **Threshold Colors -** Thresholds are specific event values that, if exceeded, are marked by special colors. These colors are used in the wallboard to show values that have exceeded the threshold values. The color on the right indicates that the threshold of calls is almost reached and could become a problem. The color on the left indicates that the threshold has been surpassed and a major problem is at hand. You can change the colors by double-clicking the mouse button and using the Select Colors window.

- **Save -** Saves the data choices that have been entered and return to the wallboard main window.

- **Cancel**: Undo any actions you performed or any new data you have entered. You will return to the previous window without saving any changes.

To create a new wallboard:

Step 1 Click **New**.

Step 2 In the Name field, enter the name of the new wallboard.

Step 3 Enter the information in the other configuration fields (see above).

Step 4 From the Scenario and Pop-Up windows, create the new wallboard message scenario.

Step 5 Click **Save**.

Changing Threshold Colors

Thresholds are specific event values that, if exceeded, are marked by special colors. These colors are used to show values that have exceeded the threshold values. Two colors are used to signify that a parameter has exceeded its threshold. The default colors are yellow and red.

To change the threshold colors on the wallboard:

Step 1 In the Wallboard window, click the **Config** tab.

Step 2 In the Threshold Colors field, double-click the color you want to change.

Step 3 Select a color from the color boxes. The options are

- **Blue -** Background is Blue; text is Yellow
- **Yellow -** Background is Yellow; text is Blue
- **White -** Background is White; text is Black
- **Red -** Background is Red; text is Black
- **Green -** Background is Green; text is Black

Step 4 Select the Blink check box to set the blink option (that is, the text will blink on the wallboard).

Scenario Tab

The Scenario tab is used to define the message scenario for the selected wallboard. A message scenario is a sequence of messages. Each message within the scenario is displayed on the wallboard for a specific amount of time. The Scenario tab is used to build or modify message scenarios for the wallboards.
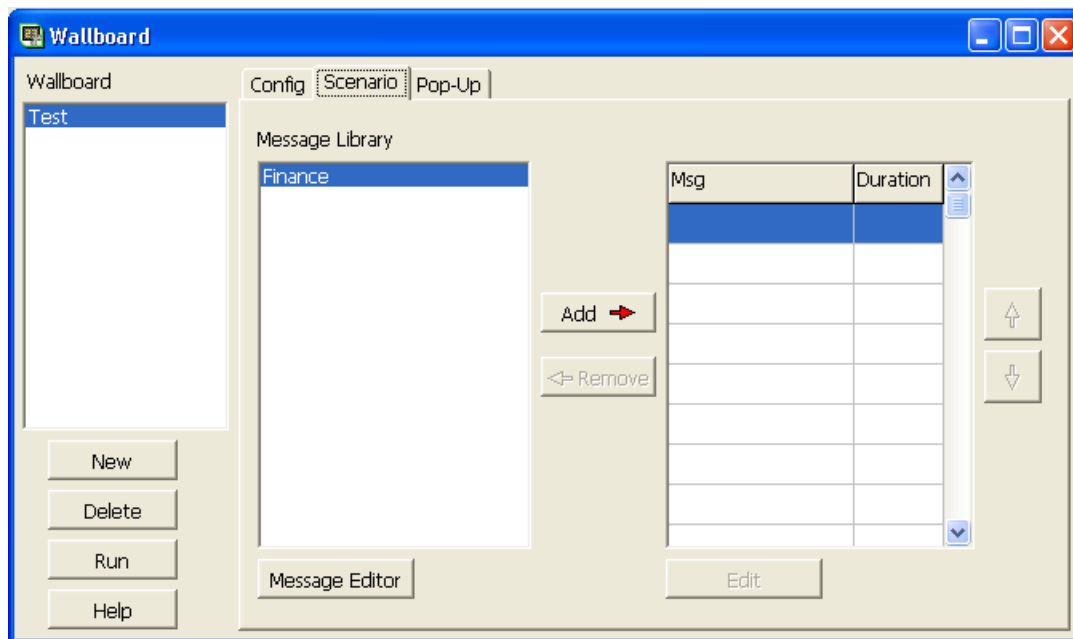
The Message Library lists all the messages created in the Message Editor. The Scenario Table, on the right-hand side of the window, contains the names of the messages (in order of appearance) and the display time (in seconds).

The six buttons on the tab allow you to edit the scenario as follows:

- **Up arrow -** Moves the selected message up within the message scenario.

- **Down arrow -** Moves the selected message down within the message scenario.

- **Add -** Opens the Add Messages to the Scenario window and add a message to the message scenario.

- **Edit -** Edits the selected message within the scenario; for example, to change the amount of time the message will be displayed or to change the group to which the message is directed. The Edit Message window opens.

- **Remove -** Removes a selected message from the Scenario Table. Note: The message is not removed from the Library.

- **Message Editor -** Opens the Message Editor and edit the selected message.

To create a message scenario:

Step 1   Click the wallboard for which you want to create a scenario from the list in the Wallboard window, and click the **Scenario** tab.

Step 2   In the Message Library, select a message to be added to the message scenario, and click **Add**.

   The Add Message window opens.

Step 3   In the Time field, enter the amount of time, in seconds, that you want the message to appear on the wallboard.

Step 4   In the Default Group field, enter the appropriate group.

   This group will be used for any parameter not specifically assigned a group in the next step.

Step 5   Using the up and down arrows, select a parameter in the Param # field.

   Note that the selected parameter is highlighted in the message area, and the parameter's name appears in the Name field.

Step 6   Change the Group assignment for this field. Continue to do this until you are satisfied with the parameters and their respective groups.

   If you have decided to skip one field and not to assign a group for it, this parameter will display values related to the default group selected in Step 4 of this procedure.

Step 7   After all the information has been entered, click **OK** to include the message in the scenario.

   Repeat Steps 2–7 until all the required messages are included in the scenario. A message can be used more than one time in a scenario.

To change the position of a message within the scenario, Click the message in the scenario, and use the Up/Down arrow buttons to either promote or demote the selected message.

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Add/Edit Message in a Scenario Dialog Box

The Add/Edit Message dialog box is displayed when you click the Add/Edit buttons in the Wallboard window in the Scenario tab.

The Add/Edit Message in a scenario dialog box comprises:

- **Time -** The time, in seconds, that the message appears on the wallboard.

- **Default Group -** The default group is automatically assigned to every parameter in the message not assigned to a specific group.

- **Param # -** Use this section to assign a parameter to a group other than the default group. Use the up and down arrows to select a parameter, and then change its assignment to a group using the Group list box.

- **Name -** Displays the selected parameter name.

- **Group -** Changes the assignment of the selected parameter to a different group.

Pop-Up Tab

The Pop-Up tab is used to define the pop-up for the selected wallboard. A pop-up is a message that appears at a specific date and time or at specific time intervals. The Pop-Up tab enables you to define when and how these messages are shown on the wallboard.

The Messages Library lists all the messages created in the Message Editor. The Pop-Up table, on the right-hand side of the window, contains the message names and the date and time of their appearance.

Four buttons enable you to edit the Pop-Up window, as follows:

- **Add -** Adds a selected message to the pop-up list on the right-hand side of the window. The Add Message window opens.

- **Remove -** Removes a selected message from the pop-up list.

- **Message Editor -** Opens the Message Editor and edit the selected message.

- **Edit -** Edits the selected pop up message within the scenario (for example, to change the amount of time or the intervals that the message will be displayed).
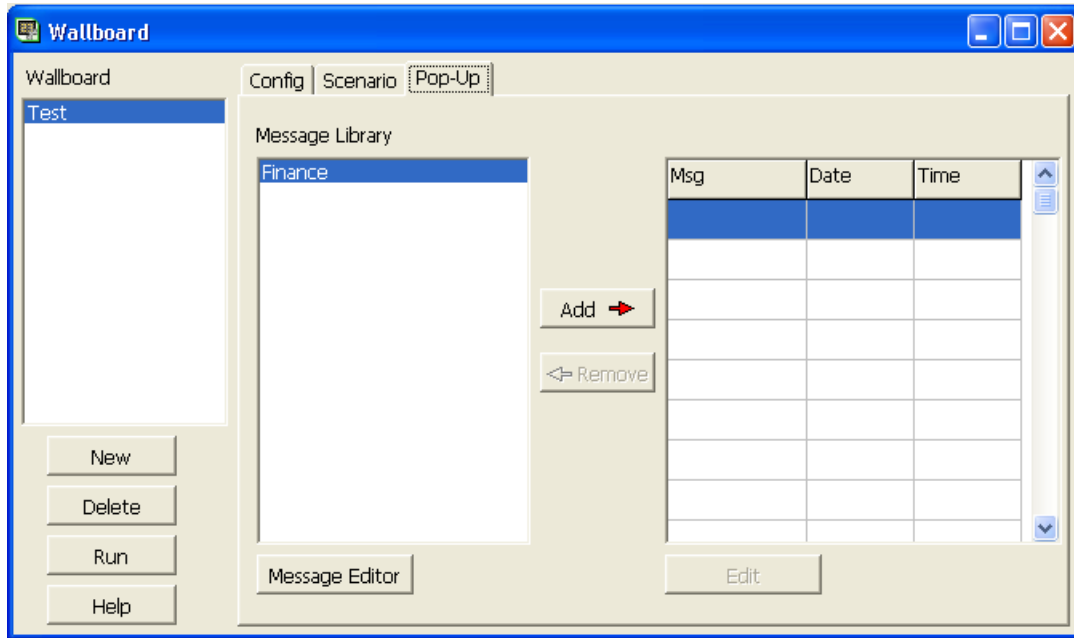
To insert a pop-up message to a scenario:

Step 1 In the Pop-Up tab, select a message to add to the Pop-Up scenario from the Message Library.

Step 2 Click **Add**.

The Add Pop-Up Message window opens. (This window is identical to the Edit Pop-Up Message window, except that the latter displays the parameters of the message you want to edit.)

Step 3 In the From Date field, enter the date when the message is to start appearing on the wallboard.

The date must be entered in the MM/DD/YY format.

Step 4 In the To Date field, enter the date when the message is to stop appearing on the wallboard.

The date must be entered in the MM/DD/YY format.

Step 5 In the From Time field, enter the time when the message is to start appearing on the wallboard.

The time must be entered in the 12 hour format (AM/PM).

Step 6 In the To Time field, enter the time when the message is to stop appearing on the wallboard.

The time must be entered in the 12 hour format (AM/PM).

Step 7 In the Day of the Week area, click the days of the week when you want the pop-up message to appear.

Step 8 There are two ways to add a pop-up message: Concatenate to Scenario or Wipe Out. In the Concatenate to Scenario mode, the message is incorporated into the message scenario for the indicated amount of time. In the *Time* field, enter the

exact length of time that the message should appear in the scenario. In the Wipe Out mode, the pop-up message overrides the scenario for the length of time that the message should appear. This type of pop-up message appears for the specific amount of time defined in the Time field and according to every time that was predefined in the every field. If two pop-up messages, defined by the Wipe Out method, are configured to appear at the same time, the message with the higher priority (as defined in the Priority field) will display.

Step 9 In the Default Group field, enter the appropriate group.

This group will be used for any parameter not specifically assigned a group in the next step.

Step 10 Using the up and down arrows, select a parameter in the Param # field.

Note that the selected parameter is highlighted in the message area, and the parameter's name appears in the Name field.

Step 11 You can now change the Group assignment for this field. Continue to do this until you are satisfied with the parameters and their respective groups.

If you have decided to skip one field and not to assign a group for it, this parameter will display values that are related to the default group selected in Step 4 of this procedure.

Add/Edit Pop-Up Message Dialog Box

The Add/Edit Pop-Up Message dialog box is displayed when you click the Add/Edit buttons in the Wallboard window in the Pop-Up Tab.
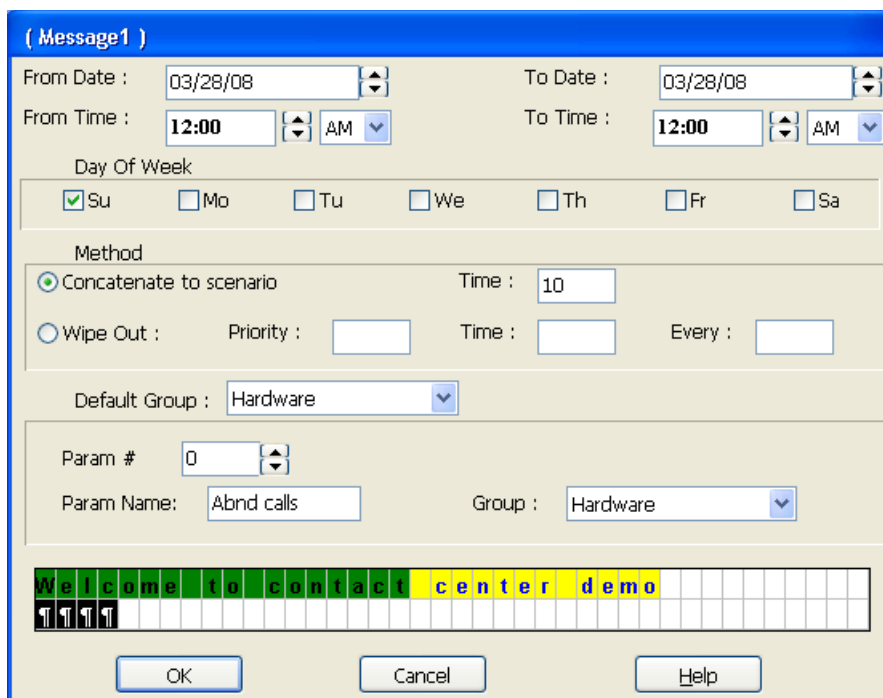
The Add/Edit pop-up Message dialog box comprises:

- **From Date/To Date -** Select the date range in which the pop-up will be activated.

- **From Time/To Time -** Select the time range in which the pop-up will be activated.

- **Day of Week -** Select the Days Of Week in which, within the date range, the pop-up will be activated.

- **Method -** Use this area to select between two possible modes for the pop-up:

  — *Concatenate to scenario -* In this mode the pop-up message is added to the scenario as if it were part of the scenario. It does not replace the scenario messages but is added in between.

  — *Wipe Out -* In this mode, the pop-up message is displayed cyclically (the cycle time is defined by the Every parameter) for the duration defined by the Time parameter. When the pop-up message is displayed, it replaces the currently "supposed to be displayed" message. If two pop-up messages should be displayed simultaneously, the one with the highest priority will be actually displayed.

- **Default Group -** The default group is automatically assigned to every parameter in the message not assigned to a specific group.

- **Param # -** Use this section to assign a parameter to a group other then the default group. Use the up and down arrows to select a parameter, then change its assignment to a group using the Group list box.

- **Name -** Displays the selected parameter name.

- **Group -** Changes the assignment of the selected parameter to a different group.

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