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User Guide for

# DISCOVERY ACD

MIS Reporting Package

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# DISCOVERY ACD PLUS

User Guide

VODAVI TECHNOLOGY, INC.

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#### Introduction

Your call center is important to your organization. After all, it's where you and your customers meet, where every call is a revenue-generating opportunity. This means that there is a direct relationship between your call center's performance and business success.

Discovery ACD can play a significant role in that relationship, because with Discovery ACD you can measure customer satisfaction, as well as employee productivity. Discovery ACD provides real time, visual feedback on agent/rep activity, queue status and cumulative statistics combined with a flexible reporting package, integrating all the activities of your call center to offer managers the information needed for effective decision making.

Statistical information can be accessed in two ways:

- □ Real Time Displays
- □ Reports

#### **Real Time Screens**

Discovery ACD provides an extensive set of user-configurable real time windows that display key information such as agent status, call queue, longest wait time or calls answered and abandoned on the PC monitor as well as on external (traditional) wallboards. To help you get familiarized with the program and the endless number of real time displays that can be created, Discovery ACD comes with a collection of predefined real-time screen templates. In a typical call center environment, a number of real-time screens are combined to provide a composite view of important parameters to monitor.

With this in mind, Discovery ACD offers five types of real time windows from which to select. Each window type has many options that can be combined and saved as a template. The five types of real time windows are as follows:

- □ Status display lines, extensions, and agents can be monitored
- ☐ Statistics displays lines, DIDs, extensions, agents, and their corresponding groups can be displayed
- □ Calls in queue graph five options available
- □ Wait-time graph five options available
- □ Large character display Discovery ACD<sup>Plus</sup> includes more than 250 different types from which to choose.



Supervisor machine must remain active 24 hours each day; reboot situations cause a temporary loss of real-time display visibility (visibility can be regained by inView client logging-off/-on ACD groups).

### **Color Codes of Displays**

Discovery ACD simplifies visuals using color coding to highlight the current state of a device. The colors are as follows:

- ☐ Green device is free (i.e., agent available, line free)
- □ Blue device is busy (i.e., agent on a call, in wrap-up, unavailable)
- ☐ Yellow device is ringing
- □ Red device alarmed (i.e., waiting time threshold exceeded)
- ☐ Grey device logged off

#### **Real Time Window**

Discovery ACD has extensive flexibility that provides easy customization of real-time window properties with just a click of the mouse. Perform the following steps:

- 1. Use the left mouse button to select the window to be edited by clicking anywhere within that window.
- 2. Click-on the right mouse button to view the window properties. A dialog box is displayed with the current settings for the selected window.
- 3. Edit the properties using drop-down list boxes, radio buttons, and check boxes as appropriate. Click-on **OK** to view the updated window.



If you are creating multiple windows of the same type or size, edit and size them before creating a new one. Using this method, only the device, device name, and parameter need to be changed. When a new window is created, that window defaults to the same properties and size of the last selected window.

#### Creating a composite real time screen

With Discovery ACD, you can create your own real time composite screens. The easiest way to do this, is to start with one of the default templates within the system (refer to Figure 1), copy it and change the copy by adding new windows to match your requirements.

1. Start by selecting the template you wish to copy from the drop-down list box on the toolbar, as shown:

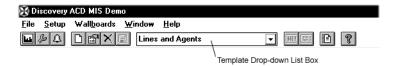


Figure 1: Composite Real-time Screen Template Drop Down Menu

- 2. Use the left mouse button to highlight and select the name of the template, then type a new template name over the current name, then press Enter. This makes a copy of the template that allows you to make changes without affecting the original.
- 3. Edit any windows within the default template as described in the section, Editing a Real Time Window in this chapter.
- 4. Click-on the **New** document icon on the toolbar and select the desired new window from the list displayed in the dialog box.
- 5. Windows can be moved, resized and minimized as needed similar to other Windows application.
- Save the template by clicking-on the down arrow next to the drop-down list box on the toolbar, then selecting the template name you are using. The new template then can be saved if necessary.



Composite screens (refer to Figure 2) can be designed on a per supervisor basis. However, the windows should be laid out logically and should only display relevant information. Too many windows and too much information can be confusing.

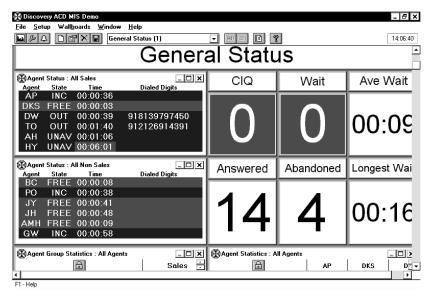


Figure 2: Composite Real Time Screen

# **Graph Windows**

Discovery ACD also allows you the option of displaying certain device clients in a graph-window format. Graph windows use information from super groups — super groups must be set up in the Configurator.

- 1. Open the Configurator. Select the **Edit Super Groups** button for the device to which you wish to add a Super Group.
- 2. Click-on the next number on the list of current Super Groups or edit an existing Super Group.
- 3. Click-on **Create** (unless editing an existing Super Group), then click-on **OK** in the next dialogue box.
- 4. Click-on **Edit Super Group**. Give the Super Group a name and select groups from the bottom right list to Add to the Groups in Super Groups list on the left.
- 5. When complete click-on **OK**, then **OK** again, and **Save Changes**.
- 6. In the real-time display create a new graph window.
- 7. Right-click to change the graph window properties.

- 8. Select the **Device Type** and in Device Name select the new Super Group.
- 9. When complete click-on **OK**, then resize the graph window as appropriate.

# Statistics Windows - Changing Shift/ Interval Time

Advanced Statistics Windows can be used to show real-time displays at designated intervals. The daily/interval times on the real-time statistics can be amended to reflect the current shift and set to an interval time of your choice (refer to Figure 3).

- 1. Add a new statistics window to the real-time display.
- 2. Select Setup then Real-time Statistics from the Setup pull-down menu in the menu bar.
- 3. Set the interval time to the required length. (Between 1 and 1440 minutes).
- 4. Select the required daily shift from the list on the right (Available Shifts) and **Add** to the list on the left (Daily Shifts).



You also can move the desired shift to the left screen by double-clicking on it. If two shifts are selected, the top shift will take priority.

5. When complete select OK.

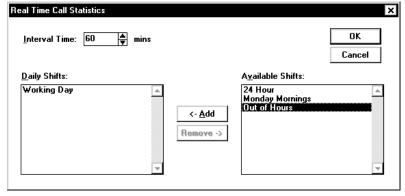


Figure 3: Real Time Call Statistics Dialogue Box. For further information on any part of this dialog box, refer to Help by pressing the F1 key on your keyboard.

# **Using Alternative Labels**

The titles in all statistics windows can be changed to reflect the appropriate information. To change the titles in the darkened area of the Statistics Windows (as displayed in Figure 4), use the alternative label feature, and perform the following steps:

🐼 Discovery ACD MIS Demo - [/	Agent Statistic	s : All Agents]					_ 8
	AP	DKS	D₩	BC	PO	JY	JH
Calls Answered (Daily)	15	14	19	15	15	14	15
Calls Outgoing (Daily)	14	23	15	19	14	0	0
Ave. Answered Time (Daily)	01:32	01:23	01:37	01:14	01:28	01:30	01:13
Ave. Wrapup Time (Daily)	00:05	00:06	00:09	00:17	00:09	00:10	00:07
Ave. Outgoing Time (Daily)	00:57	00:54	00:44	00:49	00:54	00:00	00:00
Number of Short Calls (Daily)	15	14	10	20	19	0	5
G.O.S. (Daily)	31.0	62.2	70.6	41.2	17.2	100.0	66.7
% Incoming Call Time (Daily)	39.7	38.6	60.7	25.5	43.0	47.0	33.1
% Outgoing Call Time (Daily)	28.9	42.1	19.3	32.8	26.4	0.0	0.0
% Total Call Time (Daily)	71.6	80.6	80.0	61.3	69.4	47.0	33.1
% Wrapup Time (Daily)	2.8	3.4	6.0	4.0	4.3	5.8	3.5
% Busy Time (Daily)	1.2	1.7	1.0	1.6	1.1	0.0	0.2
% Free Time (Daily)	16.2	10.8	4.9	26.6	22.1	41.4	58.1
% Held Time (Daily)	0.3	0.0	0.0	0.4	0.0	0.0	0.2
% Unavailable Time (Daily)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Log On Time (Daily)	00:48:27	00:45:57	00:46:12	00:47:27	00:46:17	00:39:39	00:47:22
Calls per Hour Incoming (Daily)	18.6	18.3	24.7	19.0	19.4	21.2	19.0
Calls per Hour Outgoing (Daily)	17.3	30.0	19.5	24.0	18.1	0.0	0.0

Figure 4: Agent Statistics Window. For further information on any part of this window box, refer to Help by pressing the F1 key on your keyboard.

1. Click-on the **Alternative Label** button in the properties box (refer to Figure 5).

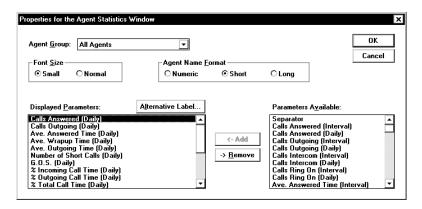


Figure 5: Properties for the Agent Statistics Window. For further information on any part of this dialog box, refer to Help by pressing the F1 key on your keyboard.

- 2. Create a new Real-time Statistics window (or you can change the properties of an existing statistics window).
- 3. Open up the properties for the window by clicking-on the icon or right-clicking the window.
- 4. In the Displayed Parameters box select the parameters you want to show in the window.
- 5. In the same box, select the parameter of which you wish to change the name. With the parameter highlighted, click-on the **Alternative Label** button.
- 6. In the New Label box type the name that you require for that parameter. When done click-on **OK**. The new label will be displayed next to the original label.
- 7. Click-on **OK** and notice the new label displayed in the Statistics window.

#### **Lock Function**

Occasionally, supervisors might encounter the need to monitor and focus on a specific device. The lock function provides you with the ability to lock onto one line, agent, etc., to view only those statistics. This helps to avoid having too much space wasted on a display by having all statistics displayed.

- With a real-time statistics window displayed in restored mode, resize the window to only show titles and the first column of statistics.
- 2. You can now scroll across to the column you wish to view and click-on **lock**. This will remove the scroll bars and lock to that column. To view another column click-on **lock** again and the scroll bar reappears.

# **Large Character Windows**

#### **Parameter Title Bars**

This is another way of creating a title bar for a large character window, without having to manually type in text. By doing titles this way, if a name is changed in the Configurator, it will automatically be updated here.

- 1. Create a new large character window in the real-time display.
- 2. Right-click to open up the properties.

- 3. Select the same device type as the window containing the parameter.
- 4. Select the same device name.
- 5. In the parameter list select the relevant title, i.e. Agent number, Agent name (short), Agent Name (long).



When generating a multiple number of Large Character Windows, the Discovery ACD always reverts to the format of the last created Large Character Window. If you wish to make the Large Character resemble another selection, left-click once on a Large Character Window that you wish to copy, then click-on the New Window icon, and select Large Character from the list. This will create a copy of the window you clicked-on instead of a copy of the last large character window created.

# **Status Windows**

# **Alarms Configuration**

With Discovery ACD, audible and visual thresholds can be configured to help alert managers of particular situations and address immediate issues. The alarm feature can be set up for each type of device in the Alarms Configuration dialog box (refer to Figure 6).

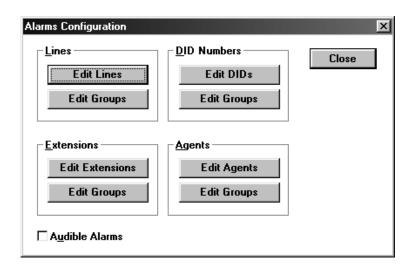


Figure 6: Alarms Configuration Dialog Box. For further information on any part of this dialog box, refer to Help by pressing the F1 key on your keyboard.

- 1. Select **Setup**, then **Alarms** from the pull-down menu.
- 2. From the Alarms Configuration dialog box (refer to Figure 7), click-on Audible Alarms to enable the alarms.

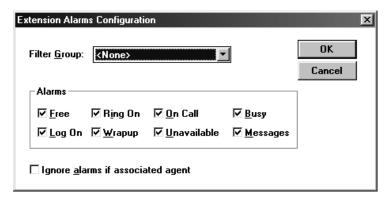


Figure 7: Alarms Configuration Dialogue Box. For further information on any part of this dialog box, refer to Help by pressing the F1 key on your keyboard.

3. You can now apply filters to the alarms so that only certain exceeded thresholds will beep.

- 4. To apply a filter select the device you wish to filter. Now select the filter group and remove the ticks on the alarm thresholds you do not want to be audible.
- 5. When complete click-on **OK**, and then **Close**.

# What is the Reporter?

The convenience and flexibility of Discovery ACD goes beyond an extensive set of user-configurable real time displays, visual feedback, audible and visual alarms, and color-coded windows. The Reporter, Discovery ACD's reporting application, provides a wide variety of fully configurable reports on inbound and outbound call activities to supply you the information needed to improve operational controls. Call volume, handling time, service levels and staff requirements can be analyzed in a variety of ways. Discovery ACD can examine workload trends and compare staff availability to actual needs. Access to unlimited historical data can be used to forecast future trends. Reports can even be scheduled to run automatically, saving you time and effort.

All reports can be viewed on screen or printed, and can be compiled using data originating as far back as the original installation date, even if upgrades are applied.

# **How Does the Reporter Work?**

To enable users to create the appropriate reports, raw data is collected by Discovery ACD from the telephone system, through the Configurator.



The Configurator must mirror the telephone system configuration otherwise the information collated by the Reporter will be inaccurate.

While the Discovery ACD is running, all monitored telephone traffic is logged to hard disk for analysis by the Reporter. To simplify the process of reporting, the Discovery ACD Reporter provides the concept of a "report template" to define the contents of a report. You can create any number of report templates. Once created, the report template handles most of the details concerning the collation of individual reports.

# **Report Concepts and Terminology**

To understand the Discovery ACD Reporter, it is vital to understand some of the key concepts and terminology used in the product. Reference is made to devices, templates, shifts and filters, which are all described in this section.

#### **Devices**

Discovery ACD treats lines, DIDs, extensions and agents as devices. Create "groups" and "super groups" of devices; a group is simply a collection of devices, and a super group is a collection of groups.

The Discovery ACD Reporter reports on individual devices, groups and super groups. The following devices (refer to Table 1) can be configured using the Configurator:

Table 1: Devices

ice Description	In the context of Discovery ACD, a line represents either one of the external trunks connected to the switch being monitored, or one of your network tie lines connecting the monitored switch to an external switch. Each line can handle one telephone call at a time. Calls are denoted as incoming or outgoing calls depending on whether it was originated outside or inside the monitored switch.	sions Extension is the physical telephone handset or station at which an agent can receive incoming calls, make outgoing calls, or handle other forms of internal telephony traffic.	An agent is the telephone operator who handles calls at an extension to enable call center telephony routing facilities within the switch. The PIN should uniquely identify the agent if the Discovery ACD is to give meaningful statistics concerning the agents' activity.	A Direct Inward Dial (DID) number is a dynamic numeric attribute assigned to a line on an incoming call. A DID call can be routed to a group of extensions/agents or to an individual extension/agent depending on how the call routing software within the switch is programmed. If configured correctly, the Discovery ACD can monitor in real-time and historically the activity of inbound calls associated with DID numbers.	While handling a telephone call it is possible for an extension/agent to enter account codes that describe the nature of the call. Up to nine-digits can be entered per account code, and up to 20 account codes can be entered per call. The Discovery ACD Reporter provides analysis of account code usage.
Device	Lines	Extensions	Agent	DIDs	Account

\* Not Supported Until KSU Feature Package 2.

#### **Shifts**

Before a report can be created, the user must program the appropriate shifts into the Discovery ACD Configurator. In addition to being used to create reports during real working shifts, other shift times can be used to allow the user to better understand what happens outside normal working hours, or perhaps at certain times of the week (for example, on Mondays) or at certain times of the day (such as during break times). In this way it is possible for a report to cover a sixmonth period only looking at the activity on Mondays.

#### **Filters**

The standard items that make up a report template tend to analyze a call center from a singular point of view only. For example, consider the Agent Traffic Report and the Extension Traffic Report. These two reports analyze Agent traffic and the associated Extension traffic in isolation.

If your call center is set up to route calls to a particular group of extensions, the performance of each agent on a per extension basis could be obtained by attaching report filters the report items. For this example you could either create a series of Agent traffic reports, each filtered to a different extension. Or you could create a series of extension traffic reports, each filtered to a different Agent.

#### Filter elements supported

A report filter is made up of a logical combination of filter elements. Each report item within a report template can have a different report filter attached to it if necessary; the following filter elements are supported:

Table 2: Filter Elements Supported

Titer Description	Accepts only calls that were connected to a specific CO line.	Accepts only calls that were associated with a specific DID number.	ilter Accepts only calls that were connected to a specific extension.	Accepts only calls that were connected to a specific agent.	de Filter Accepts only calls related to a specific account code.	Filter Accepts only calls that were connected to CO lines within a specified line group.	Filter Accepts only calls that were associated with DID numbers within a specified extension group.	Broup Filter Accepts only calls that were connected to agents within a specified extension group.	p Filter Accepts only calls that were connected to agents within a specified agent group	Accepts only calls related to a specific account codes within a specified account code group.
Filter	Line Filter	DID Filter	Extension Filter	Agent Filter	Account Code Filter	Line Group Filter	DID Group Filter	Extension Group Filter	Agent Group Filter	Account Code Group Filter

Table 2: Filter Elements Supported

Description	Accepts only inbound calls that were finally queued to a specific extension group.	Agent Queue Group Filter Accepts only inbound calls that were finally queued to a specific agent group.	Accepts only calls whose inbound-/outbound-dialed digits match a specified string; the character * denotes dialed digit string that is identical up to that point but differ afterwards.
Filter	Extension Queue Group Filter	Agent Queue Group Filter	Dialed Digits Filter

#### **Report Templates**

In order to run a report over a given time period there are a number of pieces of information required before the report can be run. In addition to the importance of the accurate configuration of Discovery ACD, and the possible need to create shifts, the user needs to understand the structure of report templates.

Templates are created by the user to provide relevant information for the selected devices being monitored. Templates contain userselected report items that can be configured by the user to include or exclude certain event or traffic types.

Bear in mind that Event Reports are highly detailed and therefore it is unlikely that you would want to run an Event Report over long periods of time. Similarly Profile Reports that are suitable for daily use (on hourly resolution) would not make sense if the report were being compiled over a six-month time frame. In this case, it may be a good idea to create templates that each are designed for specific use and contain appropriate report items.

# What Type of Report?

This section is designed to help users see which types of report to use to display the information they require. Your Discovery ACD product may not have all of the reports listed. Refer to the Product Description to check which reports your Discovery ACD product supports. There are six groups of reports, Table 3 lists these groups and some of the individual reports available within those groups.

Table 3: Available Reports

Report Type	Available on	Shows	Uses	ACD or ACD <sup>Plus</sup>
Event Report	Agents, Extensions, Line Groups	Every event made on a device or a group of devices, throughout the time period of the report	How active each device is, and how each call is broken down	ACD <sup>Plus</sup>
Traffic Report	Agents, Extensions, DIDs	Call statistics for each device in a group	Provides ability to compare call statistics of each device	ACD, ACD <sup>Plus</sup>
Traffic Profile Report	Agents, Extensions, DIDs	Call statistics for a particular device	Shows when a particular device was busy/not busy and average times of each	ACD, ACD <sup>Plus</sup>
Group Traffic Report	Agents, Extensions, Lines	Gives an overview of activity and performance against certain parameters	For comparing groups	ACD, ACD <sup>Plus</sup>
Group Traffic Profile Report	Agents, Extensions, Lines	Call statistics for a group over certain call periods, i.e., hourly	Shows peak and quiet times for a particular group	ACD, ACD <sup>Plus</sup>

Table 3: Available Reports

be	Report Type Available on	Shows	Uses	ACD or ACD <sup>Plus</sup>
All	All Devices	How a resource is being used	The percentage of time a device or device group has been involved in certain types of activity	ACD, ACD <sup>Plus</sup>
Al	All Devices	How much time a resource is unused	Standard or profiled over flexible time periods	ACD, ACD <sup>Plus</sup>
A	All Devices	Statistical information relating to the purpose of the call	Results of the calls (as examples)	${ m ACD}, \ { m ACD}^{ m Plus}$
	Lines	Call ring time over the period of the report	Check that calls are answered in a reasonable time	${ m ACD}, { m ACD}^{ m Plus}$

# **Event Reports**

Discovery ACD has three types of event reports (refer to Table 4):

- □ Agent Event Report
- □ Extension Event Reports
- □ Line Group Event Reports

Each report records all events that occurred on the specified device (agent, extension or line group). Events are caused by the device, such as an agent receiving an incoming call, accepting a call, and dialing an intercom or outgoing call. Depending on which type of report you choose, and how you set it up will determine what information the report shows.

The reports are presented in a call event-per-row format. Pagination of the report will occur if either there are too many call events to fit in the height of a page (rows) or there are too many statistics parameters to fit in the width (columns) of a page.

Table 4: Event Reports

Parameter	Agent Event Report	Extension Event Report	Line Group Event Report
Log-on/off	X	×	
Wrap-up	X	×	
Available or unavailable for calls	X	×	
Receiving calls and internal/intercom calls	X	×	
Receiving rings on calls (calls that ring on the station but answered elsewhere)	X	×	
Agent placing outgoing calls and internal/intercom calls	X	X	
Line Busy on calls - Incoming, Outgoing, Abandoned			X
Number/name of line (extension) call appeared on	X	×	X
Number/name of the associated DID			X
Start time/date of call	X		X
Total duration of call	X	×	X

Table 4: Event Reports

Parameter	Agent Event Report	Extension Event Report	Line Group Event Report
Amount of call ring time	X	X	X
Amount of call handling time (includes ring, talk, and hold time)	X	X	X
Amount of talk time	X	X	X
Amount of hold time	X	X	X
Device number/name from which call was transferred		X	
Device number/name to which call was transferred	X	X	
Device number/name and group name of device connected to	X	X	X
Transfer count (how many times call was transferred)	X	X	X
Transfer position number indicating first/second/ third to receive transferred call	X	X	
Accounts codes used on call	X	X	
Dialed digits for call; in the case of incoming calls the ICLID will be displayed	X	X	X
Amount of wrap up time	X	X	

#### **Traffic Reports**

There are 15 types of traffic reports, including those relating to agents (refer to Table 5), extensions (refer to Table 6), and lines (refer to Table 7).

The reports are presented in a time band-per-row format. Pagination of reports will occur if either there are too many time bands to fit in the height of a page, or there are too many statistics parameters to fit in the width of a page.



On all these report items types there is an opportunity for the user to choose between displayed average or total statistics. When editing the report item the user checks a box to indicate whether to show average or total values. In the case where average and total values are both required, two report items should be created that would be identical except that one is for average values and one is for total values.

#### **Traffic Reports for Agents**

There are four different report templates available in Discovery ACD for traffic reporting on Agents. Available parameters for each report are listed in Table 5.

Agent Group Traffic Report - Provides a breakdown of Traffic information for all agent groups within an agent super group (group of groups), such as "All Agents."

Agent Group Traffic Profile Report - Provides a breakdown of the traffic for individual agents within an agent group.

Agent Traffic Report - Provides a breakdown of the traffic for individual agents within an agent group.

Agent Traffic Profile Report - Provides a profile of traffic information for an individual agent over a number of time periods.

Table 5: Agent Traffic Reports

Parameter	Agent Group Traffic Report	Agent Group TrafficProfile Report	Agent Traffic Report	Agent Traffic Profile Report
Number of Answered incoming calls	×	X	X	×
Internal/intercom calls made/received	X	X	X	X
Outgoing calls	X		X	X
Transferred calls from another extension/agent	X	X	X	X
Transferred calls to another extension/agent	X	X	X	X
Inquiry hold calls	X	X	X	X
Calls unanswered by agent	X		X	
Incoming and outgoing calls with a call time shorter than the short call analysis threshold	X	X	X	×
Incoming and outgoing calls with a call time longer than the long call analysis threshold	X	Х	Х	X

Table 5: Agent Traffic Reports

Parameter	Agent Group Traffic Report	Agent Group Traffic Profile Report	Agent Traffic Report	Agent Traffic Profile Report
Times agent logged-on during analysis period			X	X
Internal/intercom calls/hour; agent logged-on			X	X
Times/percentage agent unavailable at period of analysis			X	X
Answered calls/hour while agent is logged-on			X	
Calls that rang but were answered elsewhere		X	X	X
Outgoing calls per hour while agent logged-on			X	X
Average/Total Answered call time (includes wrap-up time)	X	X	X	X
Talk time on answered calls	X	X	X	X
Wrap-up time on answered calls	X	X	X	X
Call time on internal/intercom calls	X	X	X	X

Table 5: Agent Traffic Reports

Parameter	Agent Group Traffic Report	Agent Group Traffic Profile Report	Agent Traffic Report	Agent Traffic Profile Report
Talk time of outgoing calls	X	X	X	X
Call time of outgoing calls	X	X	X	X
Call ring time	X	X	X	X
Call hold time	X	X	X	
Handling time			X	X
Number of calls			X	X
Outgoing calls/hour; agent logged-on			X	
Longest Call hold time	X	X		
Call ring time	X	X		
Answered call time (includes wrap-up time)	X	X		

Table 5: Agent Traffic Reports

Parameter	Agent Group Traffic Report	Agent Group Traffic Profile Report	Agent Traffic Report	Agent Traffic Profile Report
Call talk time	X	X		
Call wrap-up time	X	X		
Internal/intercom call time	X	X		
Outgoing call time	X			
Outgoing call talk time	X	X		
GOS for agent group	X	X	X	X
Calls per hour for time that agent is logged on			X	
Percentage of Time agent logged-on during period of analysis			X	X
Time agent busy (percentage normalized to shift)			X	X
Call rates/hour logged-on; answered, intercom and outgoing calls			X	X

#### **Traffic Reports for Extensions**

There are four different report templates available in Discovery ACD for traffic reporting on extensions. They give similar information to the traffic reports for agents. Depending on how the call center is operated different reports can be run using different parameters (refer to Table 6).

Extension Group Traffic Report - Provides a breakdown of traffic information for all extension groups within an extension super group (group of groups), such as All Extensions.

Extension Group Traffic Profile Report - Provides a profile of traffic information for an agent group, such as Sales Extensions or Support Extensions, over a number of time periods.

Extension Traffic Report - Provides a breakdown of the traffic for individual extensions within an extension group.

Extension Traffic Profile Report - Provides a profile of traffic information for an individual extension over several time periods.

Table 6: Extension Traffic Reports

Parameter	Extension Group Traffic Report	Extension Group Traffic Profile Report	Extension Traffic Report	Extension Traffic Profile Report
Number of Answered incoming calls	×	X	×	X
Internal/intercom calls made/received by agents	X	X	X	X
Outgoing calls	X	X	X	X
Transferred calls from another extension/agent	X	X	X	X
Transferred calls to another extension/agent	X	X	X	X
Inquiry hold calls	X	X	X	X
Incoming calls on inquiry hold				X
Incoming and outgoing calls with a call time shorter than the short call analysis threshold	X	X	X	X

Table 6: Extension Traffic Reports

Parameter	Extension Group Traffic Report	Extension Group Traffic Profile Report	Extension Traffic Report	Extension Traffic Profile Report
Incoming and outgoing calls with a call time longer than the long call analysis threshold	X	X	X	X
Times agent logged-on during period of analysis			X	X
Internal/intercom calls/hour; agent logged-on			X	
Times/percentage agent unavailable at period of analysis			X	X
Calls that rang but were answered elsewhere	X	X	X	X
Outgoing calls per hour while agent logged-on				×
Average/Total Answered call time (includes wrap-up time)	×	×	×	×
Wrap-up time on answered calls	X	X	X	
Call time on internal/intercom calls	X	X	X	X

Table 6: Extension Traffic Reports

Parameter	Extension Group Traffic Report	Extension Group Traffic Profile Report	Extension Traffic Report	Extension Traffic Profile Report
Talk time of outgoing calls	X			X
Call time of outgoing calls		X	X	X
Call ring time	X	X	X	X
Call hold time on inquiry hold	X	X	X	X
Handling time			X	X
Number of calls	X	X	X	X
Longest Call hold time	×	X		
Call ring time	X	X		
Answered call time (includes wrap-up time)	X	X		
Call wrap-up time	X	X		

Table 6: Extension Traffic Reports

Parameter	Extension Group Traffic Report	Extension Group Traffic Profile Report	Extension Traffic Report	Extension Traffic Profile Report
Internal/intercom call time	X	X		
Outgoing call time	X	X		
Agent GOS	X	X	X	X
Percentage of Time agent logged-on during period of analysis			X	X
Time agent busy (percentage normalized to the shift)			X	X

#### **Traffic Reports for Lines**

There are three different report templates available within the Discovery ACD for traffic reporting on Lines. Parameters available for each report are listed in Table 7.

- ☐ Line Group Traffic Report provides a breakdown of traffic information for all Line groups within a Line super group (group of groups), such as All Lines.
- ☐ Line Group Traffic Profile Report provides a profile of traffic information for a Line group, such as Sales from Service Provider-A, or Lines from Service Provider-B, throughout a number of time periods.
- □ Line Traffic Report provides a breakdown of the traffic for individual Lines within a Line group.

Table 7: Line Traffic Reports

Parameter	Line Group Traffic Report	Line Group Traffic Profile Report	Line Traffic Report
Number of Answered incoming calls	X	X	X
Outgoing calls	X	X	X
Transferred calls to another extension/agent	X	X	
Inquiry hold calls	X	X	X
Calls abandoned before answer	X	X	X
Call time more than long wait analysis threshold	X	X	
Call wait time more than long call analysis threshold, not including abandoned calls	X	X	
Calls transferred (maximum)	X	X	
Average/Total Answered call time (includes wrap-up time)	X	X	X

Table 7: Line Traffic Reports

Parameter	Line Group Traffic Report	Line Group Traffic Profile Report	Line Traffic Report
Talk time on answered calls	×	X	X
Talk time of outgoing calls	×	×	×
Call time of outgoing calls	×	×	×
Call hold time on inquiry hold	×	×	X
Handling time			×
Number of calls	×	×	×
Number of transferred calls	×	X	
Wait time	×	X	×
Wait time on abandoned calls	×	×	×
Longest Call hold time	X	X	
Answered call time (includes wrap-up time)	X	X	

Table 7: Line Traffic Reports

Parameter	Line Group Traffic Report	Line Group Traffic Profile Report	Line Traffic Report
Call talk time	X	X	
Outgoing call time	X	X	
Outgoing call talk time	X	X	
Answered call wait time	X	X	
Abandoned call wait time	X	X	
GOS for Line group (abandoned calls included)	X	X	
Line group (abandoned calls excluded)	X	X	
<b>Percentage of</b> Abandoned incoming calls	X	X	
Line allocation time (normalized to shift collected in report)			X
Target answer time	X	X	

## Traffic Reports for DIDs\*

There are four different report templates available within the Discovery ACD for traffic reporting on DIDs. Parameters available for each report are listed in Table 8.

- □ DID Group Traffic Report provides a breakdown of traffic information for all DID groups within a DID super group (group of groups), such as All DIDs.
- □ DID Group Traffic Profile Report provides a profile of traffic information for a DID group, such as Sales DIDs or Support DIDs, throughout a number of time periods.
- □ DID Traffic Report provides a breakdown of the traffic for individual DIDs within a DID group.
- □ DID Traffic Profile Report provides a profile of traffic information for an individual DID over a number of time periods.

<sup>\*</sup> Not Supported Until KSU Feature Package 2.

Table 8: DID Traffic Reports

Parameter	DID Group Traffic Report	DID Group Traffic Profile Report	DID Traffic Report	DID Traffic Profile Report
Number of Answered incoming calls	X	X	×	X
Transferred calls to another extension/agent	X	X	X	X
Inquiry hold calls	X	X	X	X
Calls abandoned before answer		X	X	X
Call time more than long wait analysis threshold	X	X		X
Call wait time fore than long call analysis threshold, not including abandoned calls	X	X	X	X
Abandoned call wait time was more than long wait analysis threshold			X	
Abandoned calls	X			

Table 8: DID Traffic Reports

Parameter	DID Group Traffic Report	DID Group Traffic Profile Report	DID Traffic Report	DID Traffic Profile Report
Erlangs or traffic on each DID group	X	X	X	X
Calls transferred (maximum)	X	X	X	X
Average/Total Answered call time (includes wrap-up time)	×	X	X	×
Talk time on answered calls	X	X	X	X
Call hold time on inquiry hold	X	X	X	X
Number of calls	X	X	X	X
Number of transferred calls	X	X	X	X
Wait time	X	X	X	X
Wait time on abandoned calls	X	X	X	X
<b>Longest</b> Call hold time	X	×	X	X

Table 8: DID Traffic Reports

Parameter	DID Group Traffic Report	DID Group Traffic Profile Report	DID Traffic Report	DID Traffic Profile Report
Answered call time (includes wrap-up time)	X	X	×	X
Call talk time	X	X	X	X
Answered call wait time	X	X	X	X
Abandoned call wait time	X	X	X	X
GOS for DID group (abandoned calls included)	X	X	X	X
DID group (abandoned calls excluded)	X	X	X	X
Percentage of Abandoned incoming calls		X	X	X
Target answer time	X	X	X	X

## **Utilization Reports**

Utilization reports apply to agents and extensions only. This type of report is available in two formats: standard and profile. There are four utilization reports in all; available parameters are listed in Table 9.

The reports are presented in a time band-per-column format. Pagination of the reports will occur if either there are too many time bands to fit in the height of a page or there are too many statistics parameters to fit in the width of a page. Times can be shown as percentage of absolute time (hrs:mins).

- □ Agent Utilization Report Provides historical time utilization data for each agent within a selected agent group. Note that times are shown as a percentage normalized to the shift collected within the report.
- □ Agent Utilization Profile Report Provides historical time utilization data for a selected agent presented in a series of uniform time bands. The interval time governing the time bands can be anything from one minute up to 999 weeks. Note that times are shown as a percentage normalized to the shift collected within the report.
- □ Extension Utilization Report Provides historical time utilization data for each extension within a selected extension group. Note that times are shown as a percentage normalized to the shift collected within the report.
- □ Extension Utilization Profile Report Provides historical time utilization data for selected extension presented in a series of uniform time bands. The interval time governing the time bands can be anything from one minute up to 999 weeks. Times are shown as a percentage normalized to the shift collected within the report.

Table 9: Utilization Reports

Parameter	Agent Utilization Report	Agent Utilization Profile Report	Extension Utilization Report	Extension Utilization Profile Report
Time Spent Handling incoming calls; includes talk time plus any time spent on hold	X	×	×	×
Handling outgoing calls; includes talk time plus any time spent on hold	X	X	X	X
Handling internal/intercom calls, includes talk time plus any time spent on hold	X	X	X	X
With incoming/outgoing calls on hold	X	X	X	X
With internal/intercom calls on hold	X	X	X	X
In wrap-up	X	X	X	X
Unavailable	X	X	X	X

Table 9: Utilization Reports

Parameter	Agent Utilization Report	Agent Utilization Profile Report	Extension Utilization Report	Extension Utilization Profile Report
Busy; usually caused by setting up an outgoing call or leaving the handset off the hook	X	X	X	X
Free		X	X	X
With external calls ringing at the agent station (% ring on, Inc)	X	X	X	X
With internal calls ringing at the agent station (% ring on, Int)	X	X	X	X
Logged-on/-off	X	X	X	X

### **Contention Reports**

Contention reports are available as standard or profiled over flexible time periods.

#### **Contention Report (standard)**

A contention report provides the percentage of time a variable number of members in a group were simultaneously free/busy; statistics are presented either as non-cumulative or cumulative.

- □ Non-cumulative Each line of the report gives the percentage that all members were free.
- □ Cumulative The first line of the report gives the percentage of time zero members were free. The second line gives the percentage that up-to-one member was free. The third line gives the percentage that up-to-two members were free, and so on until the number of members in the group or Max Items has been reached.

A series of either line groups, extension groups, or agent groups can be analyzed within a single report. The report is presented in a group member-per-row format. Pagination of the report will occur if either there are too many group members to fit in the height of a page or there are too many groups to fit in the width of a page.

#### **Contention Profile Report**

A contention profile report provides historical time data for the percentage of time a variable number of members in a group were simultaneously free/busy; statistics are presented either as non-cumulative or cumulative.

- □ Non-cumulative Each line of the report gives the percentage that all members were free.
- □ Cumulative The first line of the report gives the percentage of time zero members were free. The second line gives the percentage that up-to-one member was free. The third line gives the percentage that up-to-two members were free, and so on until the number of members in the group or Max Items has been reached.

A single report can analyze either a line group, an extension group, or an agent group. The report is presented in a time band-per-column format. Pagination of the report will occur if either there are too many time bands to fit in the height of a page or there are too many statistics parameters to fit in the width of a page.

### **Distribution Reports**

Distribution reports provide the number of calls and percentage of calls where the wait, call, or wrap time fell within a series of user-configurable time bands. The report can analyze the distribution of either answered or abandoned calls, or both if required. A series of either line groups, DID numbers, or DID groups can be analyzed within a single report.

The report is presented in a time band-per-row format. Pagination of the report will occur if either there are too many time bands to fit in the height of a page or there are too many groups/DID numbers to fit in the width of a page.

### **Account Code Report**

An account code traffic report provides historical call statistics data for each account code within a selected account code group. The available call statistics parameters are as follows:

- □ Total number of calls (summation of selected call categories within the report)
   □ Average call handling time
   □ Number of answered incoming calls on each account code
   □ Average call time (including wrap-up time)
   □ Number of transferred incoming calls from another extension/agent for each account code
   □ Number of transferred incoming calls to another extension/agent for each account code
   □ Number of incoming calls placed on inquiry hold for each account code
   □ Average/total hold time of calls placed on inquiry hold
   □ Number of internal/intercom calls for each account code
   □ Average call time of internal/intercom calls
- The report is presented in an account code per row format with a "totals" entry for the whole group being presented at the bottom of the report. Pagination of the report will occur if either there are too many account codes to fit in the height of a page or there are too many statistics parameters to fit in the width of a page.

□ Number of outgoing calls for each account code

□ Average outgoing call time

# **Working with Report Templates**

Discovery ACD provides 30 different report templates to start you in the right direction and presents the information typical formats.

## **Customizing Report Templates**

Each report template consists of a number of pre-determined report items. Any number of reports can be tailored to your requirements, and run at any time, or for any period, without the need to reconfigure the template.



Figure 10: Reporter Toolbar

Clicking-on the **Report Template** button brings up the **Configure Report Template** dialog box, as displayed in Figure 11.

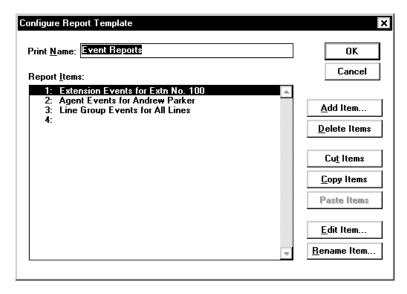


Figure 11: Configure Report Template Dialog Box. For further information on any part of this dialog box, refer to Help by pressing the F1 key on your keyboard.

Following is an example of setting up a new report template for agent data. Perform the following steps:

- 1. Select the **Report Template** button from the toolbar.
- 2. Highlight the template text and type a new name, then click-on **Add**. You can also Change, Delete or Rename an existing template.
- 3. The Configure Report Template dialog box will appear. In the print name box type the title. This will appear on the printed report (usually the same as the template name).
- 4. Highlight the existing items and click-on **Delete Items**.
- 5. To add new items first highlight the blank space at the top of the list and click-on **Add Item**.
- 6. Select an item from the pull-down menu and click-on **OK**.
- 7. The item then has to be edited Click-on **Edit Item** and follow the instructions as detailed in the relevant sections below.

### **Event Reports**

To Configure an Agent Event Report Template, perform the following steps:

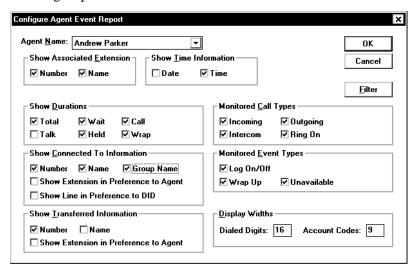


Figure 12: Configure Agent Event Report Dialog Box. For further information on any part of this dialog box, refer to Help by pressing the F1 key on your keyboard.

- 1. From the Configure Report Templates dialog box select a template to change or add a new template.
- 2. Add an Agent Event Report to the report items and click-on **Edit Item**.
- 3. The Configure Agent Event Report dialog box will be displayed.
- Select an agent name that you wish to report-on from the pulldown menu.
- 5. Select what else is needed shown in the report by clicking-on the relevant boxes (the following diagram should help with the meaning of these).
- 6. When complete click-on **OK**, then either add more reports to the template, or run the report.

## **Traffic and Traffic Profile Reports**

#### **Traffic Reports**

Traffic reports give information regarding such things as number of calls answered, offered abandoned. as well as percentages of busy time, and average call times.

Traffic reports can be run using the following devices:

- ☐ Agents and Agent Groups
- □ Extensions and Extension Groups
- □ DIDs and DID groups
- □ Lines and Line groups
- First choose the type of Traffic report that you wish to configure. Figure 13 is an example of an Agent Group Traffic Report.

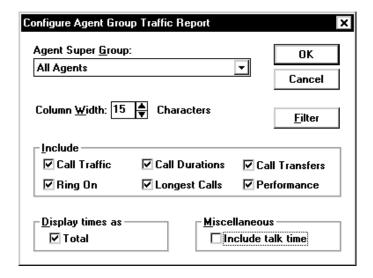


Figure 13: Configure Agent Group Traffic Report Dialog Box. For further information on any part of this dialog box, refer to Help by pressing the F1 key on your keyboard.

- 2. From the Configure Report Templates dialog box, either select a template you wish to change or add a new template.
- 3. Change the print name and click-on **Add Item.** Select Agent Group Traffic Report and click-on **OK**.
- 4. Select **Edit Item** and the Configure Agent Group traffic report dialog box should display.
- From the pull-down menu select the agent supergroup to report on.
- 6. Specify a column width; determines how many groups are shown on one page. Next select which categories are included in the report by placing check marks in the appropriate boxes.
- 7. The bottom box is where items are selected for inclusion in the report. When items have been selected click-on **OK**.
- 8. Now either add more reports to the template, or run the report.

#### **Agent Traffic Report**

Figure 14, and the following steps detail how to configure an Agent Traffic Report.

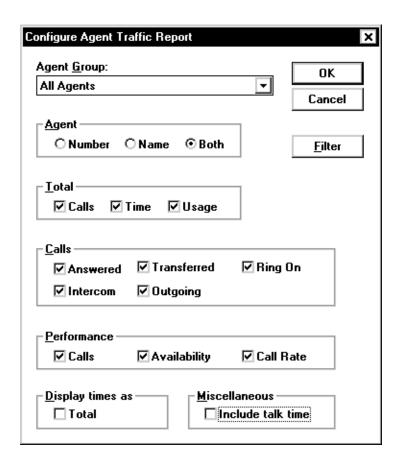


Figure 14: Configure Agent Traffic Report Dialog Box. For further information on any part of this dialog box, refer to Help by pressing the F1 key on your keyboard.

- 1. Follow the instructions for creating a **Group Traffic Report**, up to Step 4, where Agent Group should be selected instead of Super Group.
- 2. Select the information you wish to appear on the report by selecting the check boxes. When complete click-on **OK**.
- 3. Now you can either add more reports, or run the report.

#### **Traffic Profile Reports**

A Traffic Profile Report provides historical call statistics data for a selected agent group, presented in a series of uniform time bands. The interval time governing the time bands can be anything from one minute to 999 weeks.

#### **Group Traffic Profile Report**

Figure 15, and the following steps detail how to configure Group Traffic Profile Report.

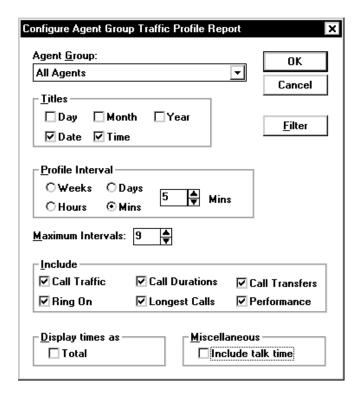


Figure 15: Configure Agent Group Traffic Profile Report Dialog Box. For further information on any part of this dialog box, refer to Help by pressing the F1 key on your keyboard.

- 1. From the Configure Report Template dialog box select and Add the traffic profile report and click-on **Edit Item**.
- 2. Select the appropriate Agent Group from the pull-down menu.

- 3. Set the required titles, that you want shown on the report.
- 4. Set the profile intervals i.e., weeks, days, etc. and how many each interval should be (for example, 2 days or 3 hours)
- 5. Choose a maximum value for the number of intervals (i.e., 4 weeks, 31 days, 24 hours, 60 minutes. This determines how long the report will be.
- 6. Click-on **OK** when done.
- 7. Now either add more reports to the template or run the report.

#### **Agent Traffic Profile Report**

A Traffic Profile report can also be done for an individual agent. It is set up in the same way as a group traffic report but using an agent name instead of a group name (refer to Figure 16).

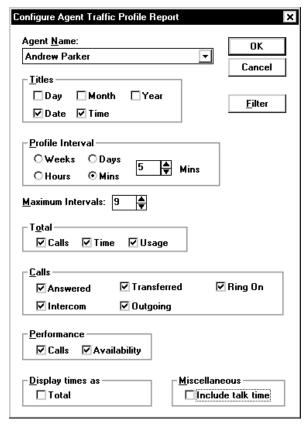


Figure 16: Configure Agent Traffic Profile Report Dialog Box. For further information on any part of this dialog box, refer to Help by pressing the F1 key on your keyboard.

## **Distribution Reports**

The Wait Time Distribution report displays information regarding how many calls were answered within time intervals set by the user. The report can be configured in the Configure Wait Time Distribution Report dialog box (refer to Figure 17), using the following steps.

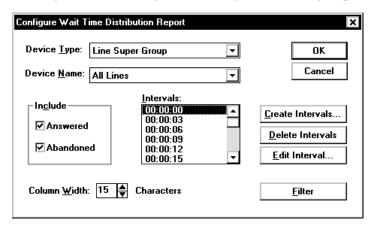


Figure 17: Configure Wait Time Distribution Report. For further information on any part of this dialog box, refer to Help by pressing the F1 key on your keyboard.

- 1. From the Configure Report Template dialog box select and Add the Wait Time Distribution Report and click-on **Edit Item**.
- 2. Select the Device Type and Device and either **Add** more reports to the template, or **Run** the report.

Call or Wrap Time Distribution reports can be created in a similar manner, using the configuration screens for those reports.

# **Utilization Reports**

Utilization Reports provide a breakdown overview on the events for agents or extensions during a pre-determined period of time. This type of template is available for agents and extensions only and can be accessed in standard or profile format.

To configure a Standard Agent Utilization Report (refer to Figure 18), perform the following steps:

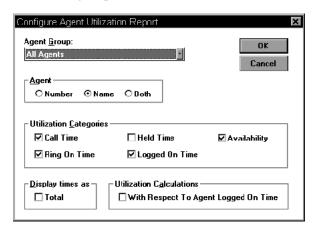


Figure 18: Agent Utilization Report Template Dialog Box

- 1. Click-on the **Report Template** button from the toolbar.
- 2. Select **Utilization Reports** from the drop-down template selection box and click-on **Change**.
- 3. Select **Agent Utilization Report** under the report items., then click-on **Edit Item**. You can also change, delete, or rename an existing template.
- 4. The Configure Agent Utilization Report Template dialog box displays. From the Agent Group pull-down menu, select the agent group that you wish to report on.
- 5. Select all options you would like to show in the report by clicking-on the relevant boxes.
- 6. When completed click-on **OK**, then either add more reports to the template or run the report.

#### **Extension Utilization Profile Report**

To configure an Extension Utilization Profile Report (refer to Figure 19), perform the following steps:

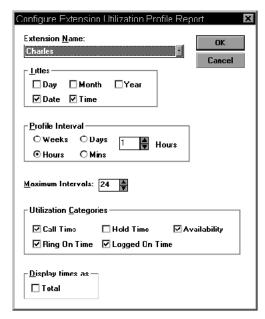


Figure 19: Extension Utilization Profile Report Dialog Box

- 1. Click-on the **Report Template** button from the toolbar.
- 2. Select **Utilization Reports** from the drop down template selection box and click-on **Change**.
- 3. Select **Extension Utilization Profile Report** under the report items, then click-on **Edit Item**. You can also change, delete, or rename an existing template.
- 4. The Configure Extension Utilization Profile Report Template dialog box displays. From the Extension Name pull-down box, select the extension that you wish to report on.
- 5. Select the titles you would like to show in the report by clicking-on the relevant boxes.
- 6. Determine the Profile Interval. Profile reports are suitable for daily use (on hourly resolution). Define the maximum amount of intervals.
- 7. Select all other options you would like to show in the report by clicking-on the relevant boxes.

8. When completed click-on **OK**, then either add more reports to the template or run the report.

### **Account Code Report**

An Account Code Report provides historical call statistics data for each account code within a selected account code group. This type of report can be used to measure success rates on sales promotions and advertising strategies.

To configure an Account Code Report (refer to Figure 20), perform the following steps:

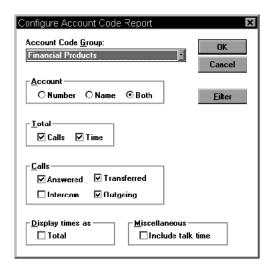


Figure 20: Account Code Report Dialog Box

- 1. Click-on the **Report Template** button from the toolbar.
- 2. Select **Standard Reports** from the drop-down template selection box and click-on **Change**.
- 3. Select Highlight Account Code Report under the report items, then click-on **Edit Item**. You can also change, delete, or rename an existing template.
- 4. The Configure Account Code Report Template dialog box displays. From the Account Code Group pull-down box, select the group that you wish to report on. Define the way you want the report to identify the account code.
- 5. Select all other options you would like to show in the report by clicking-on the relevant boxes.

6. When completed click-on **OK**, then either add more reports to the template or run the report.

### **Contention Reports**

Contention Reports are utilized to show how much time specific resources (line or agent/individual or group) are unused during prespecified periods of time. Discovery ACD presents this information in two ways: Standard and Profile.

#### **Standard Contention Report**

A Standard Contention Report provides the percentage of time a variable number of members in a group were simultaneously free or busy. This report can be requested to compare performance among several groups or within a single group. To configure this report (refer to Figure 21), perform the following steps:

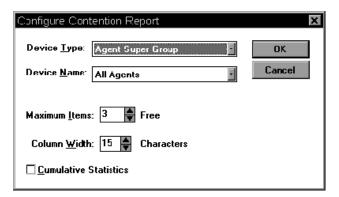


Figure 21: Configure Contention Report Template Dialog Box

- 1. Click-on the **Report Template** button from the toolbar.
- 2. Select Contention Reports from the drop-down template selection box and click-on **Change**.
- 3. Select Contention Report under the report items, then click-on **Edit Item**. You can also change, delete, or rename an existing template.
- 4. The Configure Contention Report Template dialog box displays. Make your selection from the Device Type pull-down box. Define the Device Name.
- 5. Specify maximum amount of items and column width, and indicate if you would like to see cumulative statistics.

6. When completed click-on **OK**, then either add more reports to the template or run the report.

#### **Contention Profile Report**

A Contention Profile Report provides historical time data for the percentage of time a variable number of members in a group were simultaneously free/busy. The interval time governing the time parameters can be configured from 1 minute up to 999 weeks. Profile Reports are suitable for daily use (on hourly resolution). A single report can analyze a line group, an extension group or an agent group. To configure a Contention Profile Report (refer to Figure 22), and perform the following steps:

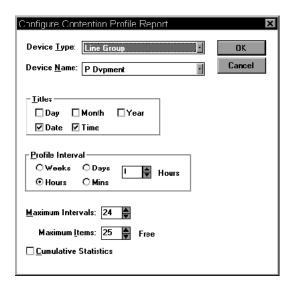


Figure 22: Configure Contention Profile Report Template Dialog Box

- 1. **Click-on** the Report Template button from the toolbar.
- 2. Select Contention Reports from the drop-down template selection box and click-on **Change**.
- 3. Highlight Contention Profile Report under the report items, then click-on **Edit Item**. You can also change, delete, or rename an existing template.
- 4. The Configure Contention Profile Report Template dialog box displays. From the Device Type and Device Name pull-down boxes, make your selections.

- 5. Select the titles you would like to show in the report by clicking on the relevant boxes, and determine the Profile Interval.
- 6. Define the maximum amount of intervals.
- 7. Select all other options you would like to show in the report by clicking-on the relevant boxes.
- 8. Indicate if you would like cumulative statistics included in the report.
- 9. When completed click-on **OK**, then either add more reports to the template or run the report.

### **Creating a New Report Template**

In order to create a new report template, perform the following steps:

 Access the Discovery ACD Reporter by clicking-on the Reporter icon on the toolbar, or by selecting File>Discovery ACD Reporter from the menu bar. The first time Discovery ACD Reporter is selected, it will take a few seconds to open, thereafter the toggle between the two modules is immediate by clicking-on the Reporter and MIS icons (refer to Figure 23).

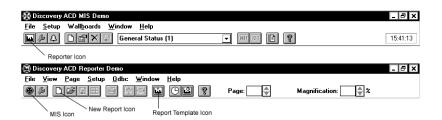


Figure 23: Discovery ACD MIS and Reporter Toolbars

- 2. To create a new report template, select the Report Template icon on the toolbar (refer to Figure 23), or select **Set-up>Report Templates** from the menu bar.
- 3. Enter a new template name in the Report Template dialog box by typing over the existing name. Note that the Change button becomes an Add button when a new name is entered. Click-on the **Add** button to register the new template name.
- 4. The template name may not be the text you want on the printed report. Enter the report title you want at the top of the printed report in the Print Name box.

- 5. Each of the report items default to those of the last selected report template. You may choose to delete these items and add some of your own. To delete an item, select it by clicking-on it with the left mouse button, then click on the **Delete Items** button. To add an item, click-on the **Add Item** button and select an item from the drop-down list that is displayed.
- 6. Note that when a new item is added to the **Report Items** list, it appears on the line above the one that is highlighted. Use the **Cut**, **Copy**, and **Paste Item** buttons to change the order of the report items so they will be printed in the order you desire.
- 7. Once an item has been selected to appear in the report, you may edit it to ensure it is going to show relevant information. To edit a selected item, click-on the **Edit Item** button, then use the drop-down lists and check boxes to define the parameters of the report item.
- 8. Once you are happy with your report items, click-on **OK** and close the Report Templates window. You are now ready to compile your report.



If you have to create a number of Report Items that need to be identical except for the device name, it is best to create the first one and edit it. Next, use the Copy Items and Paste Items buttons to create multiple copies of the report item, then edit each one in turn to change the device name.

# Compiling a New Report

Discovery ACD compiles new reports based on user-defined parameters. You select all the parameters, including the desired period. With Discovery ACD, \* your reports can include information from the very first day it was installed if needed. Before creating a new report, prepare a suitable report template as described above, then perform the following steps:

1. To compile the report, click-on the New Report icon (refer to Figure 24) on the toolbar or select **File**, **New** from the dropdown menu.

<sup>\*</sup> Discovery ACD will compile reports in 31-day increments leading back to the first day of installation. Discovery ACD<sup>Plus</sup> will compile any time parameter.

- 2. Define the period, range, over which you want to run the report. Enter the shift that the report is monitoring, then select the applicable report template.
- 3. When all details have been entered, click-on **OK**, then wait a few moments for your report to be compiled.

On your newly compiled report, notice that the header contains information such as the shift name, the start and stop time and date, the creation date, the site name, and the template name. Also displayed is the number of pages in the report (useful to know before you print it).

The toolbar provides the means by which you scroll through the pages of the report, and zoom-in for the details of the report using the magnification buttons.



Figure 24: Reporter Toolbar

On your report, notice that parameters which exceed your alarm threshold appear in red. If you are not using a color printer, these are printed in bold type for clarity.

# **Printing Reports**

Discovery ACD provides the ability to print generated reports as needed. Reports can be printed either page-by-page, or all pages at once. To print a report, perform the following step:

While viewing the report you want to print, click-on the **Print** icon on the Reporter toolbar, or select **File>Print** from the drop-down menu.

# **Filtering Data Using Shifts**

With Discovery ACD, you can select one or all of the parameters for your reports, including the time periods. Reports can reflect predefined shifts that represent working hours of different groups or specific time periods which there are recurring problems, such as Monday mornings and Friday afternoons.

Once a shift has been created, you can compile a report (on a previously-created report template that defines the information

required for the specified period) using data collected only during that shift. This is particularly useful for a manager who may need to find out what happened during a particular shift when a manager may not have been present.

### **Adding Filters to Report Items**

To add a filter to a report item within a report template click the Filter button within the configuration dialog box for the report item. A Report Filter dialog box will now appear in which you should do the following:

- 1. Select an insertion point in the Filter Elements list box and click-on the **Add Element** button. In the dialog box that appears, choose the type of filter element required and click-on the **OK** button.
- 2. Next, double-click the newly-added filter element in the list box and in the dialog box that appears; configure the filter as required. Press **F1** if you need help specific to the report element.
- 3. Repeat stages 1 and 2 if a combinational filter is needed. For example all calls associated with a specific DID number in addition to having a specific account code attached to them.
- 4. By default, the logical combination of the filter elements is the AND operator. This can be changed to an OR operator by selecting a filter element and checking the OR with previous box to insert an OR operator before the filter element.
- 5. Checking the NOT box can reverse the meaning of any selected filter element. For example all calls connected to a specific agent, becomes all calls not connected to a specific agent.
- 6. Click-on the **OK** button when finished assembling the report filter.

When assembling combinational filters, note the order of precedence of the logical operators is NOT followed by AND, followed by OR.

For example the logical expression:

A AND B OR NOT C OR D AND NOT E actually means

(A AND B) OR (NOT C) OR (D AND (NOT E)).

### **Exporting and Importing Data**

Discovery ACD<sup>Plus</sup> allows you to conveniently export reports in text format for use in popular spreadsheet software programs such as Microsoft Excel<sup>®</sup>. To export data, perform the following steps:

- 1. First, create a folder on your computer to hold the exported file. Then, click-on the Export icon and save the file in that folder (you will be prompted to rename the file).
- 2. To import the file into a spreadsheet (into MS Excel, for example), select File, Open, then select Files of Type, to be Text Files. Locate the file to be imported, highlight it, then click-on **OK**.
- 3. Ensure that the data type is delimited, select comma as the delimiter, click-on Finish. The data should now appear in the spreadsheet.

### **Saving Generated Reports**

Discovery ACD provides the ability to save and later recall any report generated. To save a report, perform the following steps:

- 1. Select File>Save from the drop-down menu.
- 2. Define the drive and folder where the report should be saved.
- 3. Name the report and click-on **OK**.

#### **Recalling a Saved Report**

To recall a previously saved report, perform the following steps:

- 1. Select **File>Open** from the drop-down menu.
- 2. Define the correct drive and folder where the report was saved, then select the report and click-on **OK**.



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