

## **Reference Manual**

## Automatic Call Distribution (ACD) Management Information Systems (MIS)



Section 525 ACD/MIS



The contents of this document are subject to change without notice and do not constitute a commitment on the part of Panasonic Telecommunication Systems Company (PTSC). Every effort has been made to ensure the accuracy of this document. However, due to ongoing product improvements and revisions, PTSC cannot guarantee the accuracy of printed material after the date of publication, nor can it accept responsibility for errors or omissions. PTSC will update and revise this document as needed.

The software and hardware described in this document may be used or copied only in accordance with the terms of the license pertaining to said software or hardware.

© 2001 by Panasonic Telecommunication Systems Company (PTSC)

All rights reserved.

ACD Viewer, Report Manager, Agent View, and MIS Server are trademarks of SMD.

pcAnywhere is a registered trademark of Symantec Corporation

Windows, Windows NT Workstation, Windows NT Server, and Access 97 are trademarks of Microsoft Corporation.

Seagate Crystal Reports is a trademark of Seagate Corporation.

Panasonic is a registered trademark of Matsushita Communications Industrial Corp. of America.

# **Table of Contents**

## Overview

ACD & Management Information System	OV-1
MIS Server Application	OV-3
ACD Viewer	OV-3
Report Manager	OV-3
Agent View	OV-3
Wallboards	OV-4
ACD Configuration Options	OV-4
How ACD Can Benefit Customers	OV-5
Major ACD Functions	OV-6
Agent Features	OV-9
Supervisor Features	OV-11
Reports	OV-16
ACD Standard Specifications	OV-17

## **Chapter 1. System Configuration**

Basic System Layout	1-1
Cabling Considerations	1-1
Stand-alone Configuration	1-2
Network Configuration	1-2
Network Installation Windows NT <sup>TM</sup> Concurrent Connection Licenses	1-3 1-3

## **Chapter 2. System Requirements**

ACD Viewer	2-1
Agent View	2-2

MIS Server	-2
------------	----

## Chapter 3. Installation

Installation Overview	3-1
Before You Begin	3-1
Overview of Steps	3-1
Preparing the Windows NT Host PC	
Verifying Windows NT Network Settings	3-2
Setting Up User Profiles on the Windows NT Host PC	3-3
Installing the MIS Server Software	
Before You Begin	3-3
Step 1: Installing the Microsoft DAO Software	3-3
Step 2: Installing the MIS Server Software	
Installing the ACD Viewer Software	
Before You Begin	3-5
Steps to Take	3-5
Starting ACD Viewer	
Installing the Agent View Software	
Accessing MIS Server Settings After Installation	
Viewing or Changing the MIS Server Configuration	3-7
Verifying that the MIS Server is Running	3-7
Viewing or Changing the MIS Server Configuration	
Accessing Windows NT Service Settings	3-7
Uninstalling the MIS Server Software	
Stopping the MIS Server	
Uninstalling MIS Server	
Uninstalling the ACD Viewer Software	3-9

## Chapter 4. ACD Viewer System Components

Starter Kit	4-1
ACD Viewer	4-1
Report Manager	4-1

Agent View	4-2
Wallboards	4-2

## **Chapter 5. ACD Viewer**

Overview	5-1
Information Displayed	5-1
Main View	5-1
Alarms	5-2
Group Detail View	5-4
Remote Access	5-4

## Chapter 6. Report Manager

Overview	6-1
Agent Call Summary Report	6-2
Agent Time Summary Report	6-3
Queue Average Report	6-4
Queue Count Report	6-5
Queue Count Graph Report	6-6
Incoming Call Duration Spectrum Report	6-7
Lost Call Spectrum Report	6-8
Delayed Call Spectrum Report	6-9
Trunk Report	6-10
Work Unit Report	6-11
Work Unit Agent Report	6-12

## Chapter 7. Agent View

Overview	7-1
Information Displayed	7-1
Button-View (Agent View)	7-2

## Chapter 8. Wallboards

Overview
----------

Information Displayed	8-1
Priority Text Messages	8-2
Delimiter Messages	8-2

## **Chapter 9. Exporting Report Data**

Seagate Crystal Reports	9-	-1
Microsoft Access	9-	-2

## **Chapter 10. Troubleshooting**

ACD Viewer Error Messages 10	)-1	
------------------------------	-----	--

## **Overview**

## **ACD & Management Information System**

Panasonic's Call Center products are focused on cost-effective solutions that grow incrementally to meet the changing needs of a business. Whether ACD Viewer is installed in a stand-alone configuration or in a network configuration, the real time displays provide information about current Call Center workload (incoming calls) and resources (ACD Agents). Historical reports provide essential information used to evaluate trends, performance, and results.

Figure 1 depicts the DBS576/HD Automatic Call Distribution (ACD) & Management Information System (MIS).

#### Figure 1. DBS576/HD ACD & MIS



### **MIS Server Application**

The MIS Sever application has 3 general functions. First, it is responsible for maintaining communications with the phone system. Secondly, it receives and organizes real-time data that is broadcast via TCP\IP to ACD Viewer and Agent View clients. And finally the MIS Server application collects, sorts and stores call center records for historical reporting.

### **ACD Viewer**

ACD Viewer is for Managers and Supervisors that need "real time" information to oversee daily operations. An overview of all ACD Groups, Agents and Alarm statuses are provided in one easy to use display. Another display provides detailed information about one ACD group including individual Agent states (ACD Call, Unavailable...) and duration of the current activity.

### **Report Manager**

Report Manager is a component of ACD Viewer that provides the Supervisor or Administrator of an ACD group(s) access to statistical and historical data from their desktop PC. Report Manager enables the Supervisor to schedule reports that run automatically on a daily, weekly, monthly, or yearly interval.

To make analysis and manipulation of the data easier, reports are exportable to other applications (MS Excel<sup>TM</sup>, MS Word<sup>TM</sup>...). Additionally, the Microsoft DAO<sup>TM</sup> database can be accessed using tools such as Seagate Crystal Reports<sup>TM</sup> or Microsoft's Access<sup>TM</sup>. Dealers or Customers that have qualified personnel on staff can write custom reports or modify the existing Seagate Crystal Reports. (See Chapter 3, <u>Overview</u> for more details on exporting data.)

### **Agent View**

Agent View provides an alternative method to deliver critical Call Center data to front line and management personnel in a small, unobtrusive format that's easy to understand. Agent View functions as a Software-Wallboard application. However, Agent View is also used for lead personnel (sub-Supervisors) and management personnel that wish to monitor ACD activities but don't require all the detail of ACD Viewer.

Agent View addresses three specific areas. First, Agent View provides more Call Center information than an Agent's display telephone. Second, the information is displayed continuously throughout the duration of a call.

Finally, Agent View provides a method to deliver Call Center information where wallboards are ineffective. For instance, personnel are in individual offices, cubical walls are too high, or the customer doesn't want sensitive Call Center information displayed in a public area.

### Wallboards

Wallboards are an effective method to provide Agents and other interested personnel with real-time Call Center information. Items that exceed preset alarm conditions are displayed and may be accompanied by an audible alarm. Text messages can be sent to the wallboard on a periodic basis or as a one-time priority message.

## **ACD Configuration Options**

Panasonic offers several configuration choices depending on your ACD requirements. For example, the Standard ACD package consists of two (2) cards installed directly into the DBS 576 or HD cabinet and provides a host of basic ACD functionality to distribute and report incoming call traffic (Figure 1). However, you can expand and enhance the ACD functionality by adding our MIS (Management Information System) package along with the standard ACD card. The MIS package is software that can be loaded into a stand alone Server on a LAN, or loaded directly into an existing Server.

This expanded MIS package delivers a variety of ACD tools for more sophisticated call center environments.

Figure 2. Standard ACD Package



## **How ACD Can Benefit Customers**

Among the many benefits that ACD can provide to users, nothing compares to the overall increase in *Customer Satisfaction* that can be gained using this tool.

Callers entering into ACD systems have the comfort of knowing that their call is being processed by prompting the caller periodically through various messages. ACD above all else, eliminates terminal holds which can be extremely frustrating to customers, and the business can ultimately lose the customer. This can cost businesses thousands of dollars in lost business that can never be measured.

**Decreasing Costs** always provides a tremendous benefit to organizations, and ACD systems can certainly help accomplish this goal. Efficient call centers can:

- Eliminate multiple handling of calls, reducing staff expenses
- Manage staffing levels by providing report data on call center activity and call flow
- Manage agent efficiency
- Reduce returned calls (Outbound Toll)
- Help determine the correct number of incoming lines

An effective ACD system can also provide *Increased Revenue* opportunities for an organization. By handling more calls at a time than number of Agents, potential customers can wait in Queue for an Agent to become available to assist the customer and/or take an order. This process greatly decreases and minimizes potential customers from abandoning calls.

Finally, the ACD system provides a call center with effective *Management Tools* to ensure that calls are being handled effectively, and that your getting the highest level of productivity from your Agents. In addition, the ACD provides Management with:

- Real time visualization of Call Center Status
- Short & Long term reports for statistical data analysis
- Immediate response to long delays

#### Additional Benefits of Panasonic's ACD

<u>One Vendor Solution</u> - The advantages to utilizing this single vendor solution are many. Most importantly, the support for the system can be obtained through one phone call, as well as maintenance and ongoing changes for your call center.

**Easy Installation** - This ACD solution is an integrated solution in the form of a circuit board that is placed within the cabinet. All of the power resources and processing comes from the main cabinet and central processor. In addition, by utilizing our battery back-up capabilities, you are assured of system performance in the event of a power loss.

<u>Simple Operation Agents</u> - Agents can use virtually any of our telephone models programmed to provide simple key depressions to Log-in, Wrap, and make themselves unavailable. The training required for new agents is extremely efficient, and takes no time to get new users up and running.

# **Major ACD Functions**

#### Advanced Hunting (Standard ACD Package)

The software can be programmed to distribute calls to agents in two different manners, depending on which one is right for you. The system can find the agent who has been "least busy first" or "idle for the longest period of time" depending on your preference.

• Least Busy First Distribution - The software analyzes the percentage of

time each agent has been busy, and routes the call to the agent who has been busy the least amount of time.

• Longest Idle Distribution - *The software analyzes the agent group to determine which agent has been idle for the longest period of time, and routes the call to that agent.* 

#### Agent Wrap Function (Standard ACD Package)

Each agent can be programmed to allow wrap-up time on a conversation with the customer for up to 600 seconds before receiving another incoming call.

#### Overflow (Standard ACD Package)

If a call is not answered in Group 1, the call can be sent to another group, another extension or to voicemail.

#### Standard Reporting (Standard ACD Package)

The standard ACD package comes equipped with several built-in ACD reports that can be used to further analyze your group's performance and activity. These report can be viewed either through a PC connected to an RS-232C connector from the ACD card, or they can be printed by connecting directly to a printer. Activity of agents, groups and the system are tabulated on an hourly, daily or weekly basis, and can be stored for a period of 14 days.

#### **MIS Reporting (MIS Package)**

For more robust reporting functions, the Optional MIS package can be utilized to provide customizable and historical reporting of the call center activity. This data can be downloaded into a wide variety of standard software programs such as Microsoft Excel<sup>TM</sup>, for customized formatting of charts and graphs.

#### Supervisor Function (Standard ACD Package)

For the supervisor, the standard ACD card and software also provides valuable information at the touch of a button about the agent group and how effectively your organization is handling customers. This ACD software includes supervisory functions that are accessed through the system's flexible large screen display telephone. The supervisor can change the ACD script, view agents and call information, and generate reports for example.

#### MIS Supervisor Function (MIS Package)

For advanced supervisory functions, the MIS package allows the supervisor to view agent and group activity, in real time, directly on their PC display. This is accomplished through the Local Area Network, where the supervisor is simply a client accessing the MIS functionality over the LAN. In addition, the supervisor can customize this PC application to provide alarm thresholds. If a threshold has been exceeded for example, the color of that data can be changed for a visual indication. If the supervisor desires an audible alarm under these conditions, that can be programmed as well.

#### Agent View (MIS Package)

The MIS package also provides the option for software wallboard functionality. Any client on the LAN can use this software wallboard to visualize the Groups activity.

#### External Wallboard (MIS Package)

You can connect to the system an external Wallboard for Group activity and messaging capability.

#### Multiple On Hold Messaging (Standard ACD Package)

Utilizing an external RAD device connected to analog ports, the ACD system can provide multiple sources of Music/Message on hold. This is a valuable benefit for using customized recording information for different Groups within the ACD system.

#### Multiple Agent Groups (Standard ACD Package)

The built-in standard ACD Package provides the capability of setting up three (3) distinct Agent groups. This is useful in organizations that have separate call center functions, and specific supervisors in charge of those groups.

#### Multiple ACD Systems (Standard ACD Package)

The DBS 576 & HD systems allow for the installation of up to 2 built-in ACD cards. These 2 ACD systems act independently of one another, however, provide for double the capacity of a single ACD system. In other words, by installing 2 ACD systems, you will have a total of 6 different ACD Agent groups.

#### Customer Script Editing (Standard ACD Package)

Once a script is designed for an Agent group to handle incoming calls, the supervisor of that group can edit the script directly from his/her Large Screen Telephone set. This customizable script editing allows the call handling features to be changed on the fly.

## **Agent Features**

For the Agent, the Panasonic ACD system provides simple agent functionality to ensure that external calls are being handled in the most efficient way.

#### Log-in/Log-out

An available Feature Function key on an Agents phone can be programmed as a Log-in/Log-out key. Simply depress the key, enter the Agent ID number, and that particular agent is now logged into the ACD system and is ready to receive incoming calls.

When the Agent is logged-in, that key will be lit solid green for easy visualization of the Agents status. Depressing the key once again automatically logs the Agent out of the ACD system.

#### Available/Unavailable

Another feature key can be programmed that sets a logged-in Agent to available (ready to take calls), or unavailable (system will bypass this agent). In this case, the supervisor will see that the Agent is indeed logged in to the ACD, but has is unavailable for some reason. In addition, the reports will buffer this data to provide information on the lengths of time Agents are available/unavailable.

When an Agent depresses the unavailable key, it will be lit solid Red.

#### Work Unit Count

In certain call center environments, the customer wishes to report work unit codes that can be tagged on calls to indicate what type of call it was. In the Panasonic ACD, these are called Work Units.

A key can be programmed on an Agents phone to provide this capability. During a conversation, the agent can depress the Work Unit key and enter a Work Unit Number. These numbers will be reflected in the ACD reports that can be printed at a later time.

Up to twenty (20) Work Unit codes can be used in the system.

Wrap

An excellent feature of the built-in ACD is the Agents ability to enter into a Wrap mode after a conversation has been concluded. This mode allows the

Agent up to 600 seconds to write notes, enter data, or perform any function that is needed after calls are completed.

Wrap mode is beneficial in that it does not require the Agent to have to log out of the group, or make them unavailable. This feature is programmable by the supervisor on an Agent-by-Agent basis.

#### Zip Mode

If Agents are using headsets (a popular application), then you will find the Zip Mode useful for answering incoming calls.

The Zip Mode essentially provides an automatic means for incoming calls to be answered by the Agent. When an Agent is available to take a call, they will hear a short tone burst indicating that a call is coming. Without any other interaction with the telephone, the call will be delivered.

Figure 2 shows an example of what a typical Agent telephone might look like in a call center group:

Figure 3. Typical Agent Telephone



## **Supervisor Features**

One of the benefits of the built-in ACD is the various supervisory functions that are part of the standard ACD Package. The supervisors of course, are an integral part of maintaining an effective call center.

The Panasonic ACD provides the Supervisor with the following tools for efficient call control and Management.

#### **Silent Monitor**

There may be several instances where a Supervisor might need to enter an Agent's conversation. The Panasonic ACD allows this function to work easily, and without notice to the Agent which is sometimes desired.

Perhaps the Agent is new, and the Supervisor would like to monitor the progress. Maybe the Agent needs help in managing a particular call. These examples are just a few of how this feature can benefit a Supervisor.

The Supervisor can program a special key for Silent Monitoring. By depressing this key, followed by the extension number of an Agent, the supervisor is then in the call. Individual keys can even be assigned to automatically dial the Agents phone for one-touch feature activation.

#### Supervisor System Monitoring

Through the Large Screen Telephone, the Supervisor has a myriad of options to monitor his/her group. Entering the System Information mode on the telephone, the Supervisor can select from the following:

• **Traffic Information** - *This screen will display Total Calls in the group, the Maximum Wait Time, the number of Agents logged-in, and how many Agents are available to take calls. This information gives the Supervisor a quick and easy mechanism to monitor and manage the group. A sample is shown in Figure 3.* 

Figure 4. Typical Traffic Information

C	
	SUPERVISOR MENU
1	
20	• MIS REPORT $\rightarrow$ • $\bigcirc$ 7
30	• CUSTOMIZE $\rightarrow$ • $\bigcirc$ 8
40	•
50	• DISP SYS INFO $\rightarrow$ • 10
l	
ſ	
	SYSTEM INFO MENU
1 🗨	• Agent group 1 $\rightarrow$ • • •
2	• AGENT GROUP 2 $\rightarrow$ • • • 7
3•	• AGENT GROUP 3 $\rightarrow$ • • •
40	• SYSTEM $\rightarrow$ • $\bigcirc$ 9
50	•
Ĺ	
ſ	
	SYSTEM INFO AGENT GROUP 1
10	• TRAFFIC INFO $\rightarrow$ • $\bigcirc$ 6
20	• WAITING CALL $\rightarrow$ • $\bigcirc$ 7
30	• AGENT STATUS $\rightarrow$ • $\bigcirc$ 8
40	• • •
50	• 010
L	
_	
[	
	AGENT GROUP 1
1.	TRAFFIC INFO $\rightarrow \bullet$ • •
20	WAITING CALL $\rightarrow \bullet$ $\bigcirc 7$
30	AGENT STATUS $\rightarrow \bullet$ $\bigcirc 6$
40	• • 3
50	•
Ĺ	
~	
	TRAFFIC INFO
	AGENT GROUP 1
10	TOTAL CALLS XX + C6
20	MAX WAIT XXXS + 7
30	LOGIN AGENT XX • 38
40	AVAILABLE XX  •  O9
40 • 50 •	AVAILABLE XX • 9 • 10

• Waiting Call - This screen gives the Supervisor important information on individual calls that are waiting to be answered in the group. This information will display the Trunk number of the call, and the length of time the call has been in a Queue status. A sample is shown below in Figure 4:





• Agent Status - In this screen, the Supervisor can see the Agent Group at a glance to determine how many Agents are Logged-In, Available, Busy on an ACD call, Busy on a non-ACD call, and how many are Idle.

Further information can be displayed regarding Agent Status such as ID numbers, extension numbers, and Status. The Supervisor can establish his/ her own preferences on how to visualize the Agent activity. The Panasonic Supervisor Monitoring provides this flexibility.

#### **Supervisor Call Handling Scripts**

Designing and changing scripts is very important for a call center group. In the case of the Panasonic ACD, the scripting options are flexible, easy to access, and provide tremendous benefits to the supervisor.

A script is written to determine the best way to handle incoming calls. For example, you may decide to hunt through the Agent group first for a period of time, then follow that period with a message. Once the message is complete, continue hunting playing background music. This type of script can continue for as long as you determine. Here are a few benefits of the scripting options for the built-in ACD system:

• Six Different Commands - The script can utilize six (6) different commands to design the most effective call handling application. These

commands include Playing 1 of 6 different 96 second messages, Forwarding to other ACD groups or to Voice Mail, Searching the Agent groups for availability, Ending the script, Returning to any spot within the script.

• Supervisor Editing - There may be cases where the Supervisor would like to change the script. For example, perhaps inclement weather prevented employees from making it to the work destination. The Supervisor can easily change the script to alert external callers of this important information. Additionally, it may be desirable for the messages playing within a group to change periodically. The Supervisor can easily edit the script to reflect this change. A sample is shown below in Figure 5:

Figure 6. Typical Supervisor Script Editing



• **Report Generation** - *The Supervisor has the ability to generate the internal standard reports to an external PC or Printer. The ACD card itself must be equipped with an RS-232 Cable connected to a PC or Printer.* 

Through the Large Screen Telephone, the Supervisor simply selects the report, and depresses the appropriate key to generate that particular report.

## Reports

As mentioned in the introduction, the ACD provides a variety of reporting options that are useful for managing the call center. The Standard reports Package comes with the ACD card itself, while the MIS Report Package is optional, and provides further enhancements.

#### **Standard Reports Package**

The ACD provides reports for the entire System, Groups, and Agents. You can select these reports hourly, daily, or weekly through the Supervisors Large Screen telephone. The Data is stored in the ACD memory for up to 14 days. Table 1 provides a matrix of available "Reports" features.

Group		TOTAL LOGIN TIME	UNAVAIL ABLE TIME	TALK TIME	IDLE TIME	INCOMING CALLS	ANSWER CALLS	AVERAGE RINGING TIME	ABANDONED CALLS
Agent	HOURLY	0	0	0	0	0	0	Х	Х
(1~64)	DAILY	0	0	0	0	0	0	0	0
	WEEKLY	0	0	0	0	0	0	0	0
Group	HOURLY	0	о	0	0	0	0	Х	Х
(1, 2, or 3)	DAILY	0	0	0	0	0	0	Х	Х
	WEEKLY	0	0	0	0	0	0	Х	Х
System	HOURLY	0	о	0	0	0	0	Х	Х
	DAILY	0	0	0	0	0	0	Х	Х
	WEEKLY	0	0	0	0	0	0	Х	Х
	INCOMING ABANDONED CALLS	x	x	х	х	х	x	Х	0

Table 1.Reporting Features

Each report will provide the appropriate information for Total Log-in Time, Total Unavailable Time, Total Talk Time, Total Idle Time and Percentage, and Total Incoming and Answered Calls.

#### MIS Reports Package

Using the MIS option provides further reporting options such as customizable reports, historical reports, and software conversion to popular applications such as Microsoft Excel.

These MIS report options are described in further detail later in this manual.

## **ACD Standard Specifications**

ITEM	SPECIFICATION
Number of Agent Groups	3
Agent ID's per System	64
Number of Agents per System	32
Supervisor ID's per System	6
Voice Ports per System	4 Shared Ports
<b>Report Monitor Port</b>	One RS-232C 9600 baud
Number of Guidance Messages	Six (96 seconds each)
Reports	14-day Storage

# **Chapter 1. System Configuration**

# **Basic System Layout**

Figure 1.1 shows the ACD MIS system layout using either the DBS 576 or 576HD.

Figure 6.1. ACD MIS System Configuration



## **Cabling Considerations**

Connection between the Phone System and the MIS Server host PC is an RS-232 connection and is subject to limitations. An RS-232 connection is generally limited to a length of 50 feet. For distances greater then 50 feet, short-haul modems are usually required.

Communication between the MIS Server application and the ACD Viewer and Agent View clients is accomplished through a TCP\IP on the Local Area Network (LAN). The distance from the MIS Server Host PC to the client applications (ACD Viewer or Agent View) on an existing LAN is not generally an issue. Consult a network engineer about possible distance considerations.

## **Stand-alone Configuration**

Figure 1.2 shows the stand-alone configuration and layout of the ACD MIS, with either the DBS 576 or 576HD.





While ACD Viewer was designed as a network product, a number of customers have chosen to install ACD Viewer as a stand-alone product. The MIS Server and ACD Viewer can *both* run on the same Host PC. The host PC must be running on Windows NT and configured to run TCP\IP. To start TCP\IP a Network Interface card is generally required. The Host PC doesn't need to be connected to a LAN in this configuration.

One or many Wallboards can be supported and controlled from a single ACD Viewer. One serial communication port is required for connection to the Phone System, and another serial communication port is required if Wallboards are desired.

## **Network Configuration**

Figure 1.3 shows the network configuration and layout of the ACD MIS, with either the DBS 576 or 576HD.





#### **Network Installation**

For customers that have an existing local area network (LAN) there are some cost savings involved for both the installer and the customer. Some products require running a separate RS-232 connection to each Supervisor PC (this may also involve short haul modems at each end of the connection).

Connecting the system to an existing LAN allows the MIS Server software to be installed in the telephone room (or the MIS department), while the clients (ACD Viewer and Agent View) can be installed anywhere on the network with no additional cabling.

In a network installation the MIS Server host PC requires two connections. One RS-232 connection to the DBS 576 or DBS 576HD and one connection to the LAN backbone (through TCP\IP) is required. After these two connections are established, the client applications communicate with the MIS Server application through the LAN.

### Windows NT<sup>™</sup> Concurrent Connection Licenses

An important consideration in a network installation is the number of concurrent connections to the MIS Server Host PC. Microsoft Windows NT Workstation allows ten (10) concurrent connections. (*See the Microsoft Windows NT Workstation license Agreement for more information.*)

For more then ten concurrent connections, a Windows NT server must be used and have the appropriate number of users licensed by Microsoft. Concurrent users as defined here indicates the total number of users, peripheral devices, and ACD Viewers that will connect to the Windows NT Workstation.

# **Chapter 2. System Requirements**

# **ACD** Viewer

ACD Viewer does not require a dedicated personal computer. It runs concurrently with other Windows applications on the Supervisor's PC. This is an important advantage because it enables the working Supervisor to remain aware of Call Center activities, while performing other tasks on the computer.

ACD Viewer normally requires very little processing power from the host PC. However, during the actual processing of reports the majority of the host PC's resources may be used, depending on the power of the PC (processor speed and RAM [Random Access Memory]), the type of report, and the period of time the report is covering.

When running reports that contain large amounts of data, the processing of that data may take several minutes. Increasing the processor speed, and/or increasing RAM, improves the host PC's performance, and therefore the performance of the Report Manager. On slower PCs, reports may be scheduled to run automatically after the Supervisor leaves for the day.

Panasonic recommends installing ACD Viewer on a PC that meets the following minimum requirements:

- IBM-compatible Pentium 166MHz personal computer
- Windows 95 (Windows 98 or Windows NT)
- 32 MB RAM
- CD-ROM (or access to a network CD-ROM)
- 10 MB available hard drive space for the application. When running yearly reports, the PC requires up to 1 GB of free space during the actual report processing period
- 1 available serial port when using Wallboards
- Network Interface Card
- Parallel printer port for activation key and printer
- VGA color monitor
- Keyboard and mouse
- Windows graphic accelerator

**Note:** If the customer plans on running reports throughout the workday, upgrading to a more powerful PC may be required (i.e.: P400 with 128 MB of RAM).

## **Agent View**

Agent View requires very little processing power from the host PC and does not require a dedicated personal computer. It runs concurrently with other Windows applications on the host PC. This is an important advantage because it enables the Agent or Sub-Supervisor to remain aware of Call Center activities, while performing other tasks on the computer.

Panasonic recommends installing Agent View on a PC that meets the following minimum requirements:

- IBM-compatible Pentium 100MHz personal computer
- Windows 95 (Windows 98 or Windows NT)
- 16 MB RAM
- 5 MB available hard drive space for the application
- CD-ROM (or access to a network CD-ROM)
- Network Interface Card
- VGA color monitor
- Keyboard and mouse
- Windows graphic accelerator

## **MIS Server**

The MIS Server application does not require a dedicated personal computer. It runs concurrently with other Windows NT services and applications. On a host PC with an Intel Pentium 166MHz with 32 MB of RAM, during normal operation, the MIS Server application requires about 5% of the host PC's system resources.

The MIS Server application is the interface to the Phone System, and is responsible for collecting, organizing, and storing ACD event data. If the MIS Server Host PC is turned OFF during Call Center operation, all ACD Data is lost during that period.

Panasonic recommends installing the MIS server software on a PC that meets the following minimum requirements:

- IBM-compatible Pentium 166 MHz personal computer
- Windows NT Workstation or Windows NT Server (Version 4.0 with Service Pack 3)
- 32 MB RAM
- 2 GB available hard drive space for the application and data storage
- CD-ROM (or access to a network CD-ROM)
- Network Interface Card
- Parallel printer port for activation key
- VGA color monitor
- Keyboard and mouse
- Windows graphic accelerator

Microsoft Windows NT Workstation software allows ten (10) concurrent client connections. For more then ten concurrent connections, use a properly licensed Windows NT Server. (See Chapter 6, <u>Windows NT Concurrent</u> <u>Connection Licenses</u> in this document for more information.)

#### **Network Settings**

#### Services:

- Computer Browser
- NetBIOS Interface
- RPC Configuration
- Server
- Workstation

#### **Protocols:**

- NetBEUI Protocol
- TCP\IP Protocol

#### Adapter:

• Network Interface Card, MODEM or MS Loopback Adapter (need something to bind TCP\IP)

#### **Bindings:**

- NetBIOS Interface
  - Wins Client (TCP\IP)
  - NetBEUI Protocol
- Server
  - Wins Client (TCP\IP)
  - NetBEUI Protocol
- Workstation
  - Wins Client (TCP\IP)
  - NetBEUI Protocol

# **Chapter 3. Installation**

# **Installation Overview**

## **Before You Begin**

Check the Phone System:

- Verify that the Phone System ACD is functioning.
- Verify that the ACD/MIS port in the phone system is turned on and check the speed of the port.

Gather the following information:

- Windows NT Host PC Administrative Login Name
- Windows NT Host PC Administrative Password
- Windows NT Host PC Network name (alpha name, not IP address)
- Windows NT Host PC Com Port connected to Phone System (1, 2, 3, or 4)
   Note: Phone System MIS Port bps (channel speed): 9,600 bps

### **Overview of Steps**

- 1. Ensure that the minimum network settings are set on the Windows NT Host PC.
- 2. On the Windows NT Host PC, set up a new User Profile for each ACD Viewer/Report Manager client PC.
- 3. Install the Microsoft DAO and the MIS Server application on the Windows NT Host PC.
- 4. Install ACD Viewer (and Agent View if applicable) on the same Windows NT PC.

This eliminates the LAN during the initial setup and test process, and it saves the installer from walking back and forth between the Host PC and the Client PCs.

5. The final phase is to install and test ACD Viewer and Agent View on client PCs.

# **Preparing the Windows NT Host PC**

## **Verifying Windows NT Network Settings**

**Caution**: if you are not familiar with Windows NT, have the Network Administrator make any required changes.

- 1. Go to: Start \ Settings \ Control Panel \Network.
- 2. On each tab listed below, verify that the following information is entered/itemsare installed:

### Identification

- Computer Name (Record for use in ACD Viewer Client Installation)
- Work Group

#### Services

- Computer Browser
- NetBIOS Interface
- RPC Configuration
- Server
- Workstation

#### Protocols

- NetBEUI Protocol
- TCP\IP Protocol

#### Adapter

• Network Interface Card, MODEM or MS Loopback Adapter (need something to bind TCP\IP Protocol)

*Note*: In a stand-alone application with no network clients, it might be possible to use the MS Loopback Adapter included in the Network Adapter list on the Windows NT Work Station CD, to activate TCP\IP. To find MS Loopback Adapter select Add in the Network Dialog \

Adapters TAB, and scroll until you reach MS Loopback Adapter.

#### Bindings

- NetBIOS Interface
  - Wins Client (TCP\IP)
  - NetBEUI Protocol

Server

- Wins Client (TCP\IP)
- NetBEUI Protocol

#### Workstation

- Wins Client (TCP\IP)
- NetBEUI Protocol

### Setting Up User Profiles on the Windows NT Host PC

For each ACD Viewer Client, set up a new user profile on the Windows NT Host PC.

- Use the same Network Login Name and Password as the Client PC.
- No user rights need to be established other then those that are set up automatically during the installation of ACD Viewer \ Report Manager and the MIS Server application.

## Installing the MIS Server Software

### **Before You Begin**

Prepare the Windows NT Host PC as described in the previous section, "Preparing the Windows NT Host PC" on page 3-2.

### Step 1: Installing the Microsoft DAO Software

This software must be installed on the Windows NT Host PC before the MIS Server can be installed.

On the Windows NT Host PC,

- 1. Log-in to the Host PC using an Administrative account (name and password).
- 2. Insert the ACD Viewer CD-ROM in the Host PC. The Panasonic ACD Viewer / Report Manager window opens.
- 3. Click Install Microsoft DAO 3.5.
- 4. Install shield will display a series of dialog boxes.
  - a. Welcome Dialog Urges you to exit any open programs

- b. License Agreement dialog Please read and acknowledge the license agreement
- c. Choose Destination Location dialog the default location for the MIS Server
- d. Application is in the SMD \ Mserver folder.
- 5. For the first few seconds while Microsoft's DAO installer software is running there will be no progress reports. Once the DAO installation is complete (about 30 seconds) the MIS Server installation will continue and provide progress reports as files are loaded and updated.
- MIS Configuration dialog: Note: the default MIS COM port settings are MIS Baud = 9600 bps, MIS Parity = None, and MIS Word Length = 8 bits. Do not change the default settings.
  - a. Enter Serial Communications Port connected to the Phone System.
  - b. Verify that the remaining settings are correct (see Note).
- 7. At the end of the installation process you will be prompted to restart the PC. While restarting the PC is necessary, can install the MIS Server application before rebooting.

### Step 2: Installing the MIS Server Software

On the Windows NT Host PC,

- 1. Log-in to the Host PC using an **Administrative** account (name and password).
- 2. Insert the ACD Viewer CD-ROM in the Host PC. The Panasonic ACD Viewer / Report Manager window opens.
- 3. Click **MIS Server.**
- 4. Install shield will display a series of dialog boxes.
  - a. Welcome Dialog Urges you to exit any open programs
  - b. License Agreement dialog Please read and acknowledge the license agreement
  - c. Choose Destination Location dialog the default location for the MIS Server
  - d. Application is in the SMD \ Mserver folder.
- 5. MIS Configuration dialog:

**Note**: the default MIS COM port settings are MIS Baud = 9600 bps, MIS Parity = None, and MIS Word Length = 8 bits. Do not change the default settings.

- a. Enter Serial Communications Port connected to the Phone System.
- b. Verify that the remaining settings are correct (see Note).

6. At the end of the installation process you will be prompted to restart the PC. While restarting the PC is necessary before the MIS Server application can start, you might consider installing ACD Viewer and Agent View on this PC before rebooting.

## **Installing the ACD Viewer Software**

This procedure can be used to install the ACD Viewer software on the Windows NT Host PC or on a client PC.

### Before You Begin

ACD Viewer \ Report Manager Clients require a User Profile on the PC that hosts the MIS Server application. For each ACD Viewer Client, set up a new user profile on the Windows NT Host PC using the same Network Login Name and Password as the Client PC.

No user rights need to be established other then those that are set up automatically during the installation of ACD Viewer \ Report Manager and the MIS Server application.

### **Steps to Take**

- 1. If installing ACD Viewer in the Windows NT Host PC, log in using an Administrative password
- 2. Insert the ACD Viewer CD-ROM in the CD drive. After a few seconds, the Panasonic ACD Viewer / Report Manager window opens.
- 3. Click ACD Viewer.
- 4. Install shield will display a series of dialog boxes.
  - a. Welcome Dialog Urges you to exit any open programs
  - b. License Agreement dialog Please read and acknowledge the license agreement
  - c. Choose Destination Location dialog the default location for ACD Viewer
  - d. application is in C:\ Program Files\SMD\ACD folder.
- 5. If the installation is on a Windows NT host you will be prompted to restart the PC.

## **Starting ACD Viewer**

- 1. Click the Windows Start button, and then click on Programs > ACD Viewer.
- 2. Enter the User Name and Password. The default User Name and Password is **Administrator**.

# **Installing the Agent View Software**

This procedure can be used to install the Agent View software on the Windows NT Host PC or on a client PC.

**Note:** An Administrator must use ACD Viewer to add Agent's names and passwords, before Agents can sign on to Agent View. (ACD Viewer Menu  $\land$  Configure  $\land$  Users)

- 1. If installing Agent View in the Windows NT Host PC, log in using an Administrative password
- 2. Insert the ACD Viewer CD-ROM in the CD drive. After a few seconds, the Panasonic ACD Viewer / Report Manager window opens.
- 3. Click Agent View.
- 4. Install shield will display a series of dialog boxes.
  - a. Welcome Dialog Urges you to exit any open programs.
  - b. License Agreement dialog Please read and acknowledge the license agreement.
  - c. Choose Destination Location dialog the default location for ACD Viewer application is in C:\ Program Files\SMD\ACD folder.
- 5. Agent View installation will provide progress reports.
- 6. The Agent View installer does not usually require you to restart the PC. However, if you are installing on the Windows NT Host PC and have not shut down and restarted the PC since loading the MIS Server application or ACD Viewer, reboot the PC now.

## Accessing MIS Server Settings After Installation

### Viewing or Changing the MIS Server Configuration

• Click the Windows NT Start button, and then select Settings > Control Panel. The MIS Server Configuration dialog box appears.

Click the appropriate tab and make the appropriate changes.

### Verifying that the MIS Server is Running

- 1. Click the Windows NT Start button, and then select Settings > Control Panel. The MIS Server Configuration dialog box appears.
- 2. Click the Version/Trace tab. The Service Status box displays "Running" or "Stopped".

**Note:** The trace function is used to gather diagnostic information when trouble shooting. There is no need to run the Trace function.

### Viewing or Changing the MIS Server Configuration

- 1. Click the Windows NT Start button, and then select Settings > Control Panel.
- 2. Double-click on the MIS Server Configuration icon. The MIS Configuration dialog box appears.

View the settings or make the appropriate changes.

### **Accessing Windows NT Service Settings**

The MIS Server application installs and runs as a Service in the Windows NT environment. A Windows NT Service can be started automatically before a user logs into the Windows NT PC. This allows the MIS Server application to start automatically after a power failure, it also eliminates the need for someone to remember to start the MIS Server application.

- 1. Click the Windows NT Start button, and then select Settings > Control Panel.
- 2. Double-click on the Services icon.

For more information about Windows NT Services, select the Help button.

# **Uninstalling the MIS Server Software**

Before uninstalling the MIS Server application, the MIS Service must be stopped. Additionally, if Control Panel is open the MIS Server Configuration applet is in use. Software modules that are running or in use can not be uninstalled.

## Stopping the MIS Server

- 1. Open the Control Panel Services dialog
- 2. Stop MIS Server service
- 3. Stop MIS Database Analysis service
- 4. Close Services dialog

## **Uninstalling MIS Server**

- 1. Create a short cut on the Desk Top for Control Panel Add/Remove Programs ICON
- 2. Close Control Panel
- 3. Open the Add/Remove Programs short cut
- 4. Select MIS Server and Add/Remove button

### Note:

- To prevent the accidental loss of customer data: removing the MIS Server does not remove C:\SMD\Mserver folder or the customer databases. To remove the customer databases simply delete the C:\SMD folder and all of its contents. The MIS Server Service must be stopped.
- The MIS Server uninstaller does not remove Win NT Registry settings making software upgrades easier. SMD Registry entries can be found in:
  - HKEY\_CURRENT\_USER\SOFTWARE\Software Market Development and
  - HKEY\_LOCAL\_MACHINE\SOFTWARE\ Software Market Development

## **Uninstalling the ACD Viewer Software**

- 1. Shut down ACD Viewer.
- 2. Remove the Report.mdb from X:\Program Files\SMD \ACD\Report.mdb.
- 3. Open Control Panel Add/ Remove Programs.
- 4. Select ACD Viewer and Add/Remove button.

## Chapter 4. ACD Viewer System Components

## **Starter Kit**

The minimum system configuration is the stand-alone configuration. To establish a stand-alone configuration requires one (1) copy of MIS Server software and one (1) copy of ACD Viewer. This combination of the MIS Server Software and ACD Viewer are bundled together and are available as an ACD Viewer *Starter Kit*.

There is no difference in the Starter Kit for a stand-alone configuration and a network configuration. Only one copy of the MIS Server is required per installation no matter how many ACD Viewers, Wallboards, or Agent View applications are involved in the system.

The MIS Server software comes with a software protection device that attaches to the printer port of the host PC. The MIS Server Software verifies the existence of the software protection device during the start-up process, and periodically throughout the operation of the MIS Server.

### **ACD Viewer**

The Starter Kit includes one (1) copy of ACD Viewer. Each additional copy of ACD Viewer is purchased separately as needed. Adding additional ACD Viewers to an existing system can be accomplished incrementally as the business grows.

Each copy of ACD Viewer comes with a software protection device that attaches to the printer port of the host PC. ACD Viewer verifies the existence of the software protection device during the start-up process, and periodically throughout the operation of ACD Viewer.

### **Report Manager**

Report Manager is included in ACD Viewer and does not require a separate license.

## **Agent View**

Agent View is available in a number of different concurrent license packages. Agent View license is available in bundles of 10, 25, or 50 concurrent licenses.

Agent View can be installed on any number of host PCs. However, each instance of Agent View that connects to the MIS Server secures a licensed connection. Once the number of licensed connections equals the number of licenses on the software protection device, no other connections can be established.

Agent View can have multiple instances of Agent View active on the *same* PC. Each instance of Agent View that connects to the MIS Server secures a licensed connection. If, for example, someone opened up 3 instances of Agent View on one PC to monitor three (3) different ACD Groups, three separate license connections are established.

Each license bundle of Agent View comes with a software protection device that attaches to the printer port of the MIS Server host PC (not to individual PC's). Agent View verifies the existence of the software protection device during each Agent View start up process, and periodically throughout the operation of Agent View. The MIS server application limits the number of Agent View connections to the amount available on the Agent View software protection key.

## Wallboards

Wallboard support is a function of ACD Viewer and does not require a separate license. Spectrum Wallboards are available from your Telecommunication's Dealer.

# **Chapter 5. ACD Viewer**

### **Overview**

ACD Viewer organizes and displays ACD events reported by the DBS 576 or 576HD Management Information System port in an easy to use and understand format. The Call Center Supervisor receives real-time information on the status of calls in queue and individual Agents.

ACD Viewer runs in the background on the Supervisor's existing MS Windows 95, 98, or NT PC. This allows the Supervisor to work in other applications (MS Word, MS Excel...), while letting ACD Viewer monitor the alarm thresholds that the Supervisor has selected. Once an alarm threshold is exceeded, ACD Viewer alerts the Supervisor by changing the Alarmed item background color, playing a wave file, or flashing the title bar and application button, depending on the current display mode of ACD Viewer.

### **Information Displayed**

ACD Viewer displays the following information for each ACD group:

- Number of calls in queue (Calls Waiting)
- Longest Call Waiting (LCW)
- Number of Agents: Logged-In, Available, Unavailable, and Busy
- Individual Agent Status and Status duration
- Alarm Conditions
- Phone System Date/Time

### Main View

ACD Viewer provides real time Call Center information that Supervisors need to manage their workload (Incoming Calls) and their resources (ACD Agents). ACD Supervisors receive information for all active ACD groups in an easy to read format that includes either current ACD Queue Status and Agent Status for all ACD Groups or the Queue Status and individual Agent States for a particular group.

Figure 2.4 shows a sample of ACD Main View.

Figure 2.4. ACD Viewer - Main View

1	ACD Viewer						_	
E	<u>File View C</u> onfigure	<u>H</u> elp						
	Name	Calls	LCW	Logged	Avail	Unavail	Busy	
	Tech Support	2	0:05:58	35	0	15	20	
	Sales Support	1	0:01:28	2	0	1	1	
Ш	Market Support	2	0:02:08	3	0	0	3	
	Internal Support	5	0:14:26	3	0	1	2	
	Customer Support West	0	0:00:00	2	1	0	1	
	Customer Support East	1	0:03:43	2	0	1	1	
	Customer Support Central	0	0:00:00	2	0	0	2	
E F	or Help, press F1		PBX:	Mar 09, 199	9	PBX: 05:57:	46 PM	

ACD Viewer is password protected. The ACD Viewer Administrator establishes passwords and user rights. The Administrative password has access to all ACD Groups; other passwords are established for access to all groups, a number of groups, or a single group.

## Alarms

Alarms are set individually for each ACD Group and on each instance of ACD Viewer. This enables Managers and Supervisors to implement different alarm thresholds on their respective copies of ACD Viewer.

Figure 2.5 shows a typical ACD Groups and Alarm Configuration window.

Figure 2.5. ACD Groups/Alarm Configuration Window

ACD Groups	Alarm Configuration
ACD Group Alarm Calls In Queue 10 Color Longest Call Waiting (Seconds) 300 Color Unavailable Agents 10 Color	Audible Alarm
OK Can	<ul> <li>✓ Audible Alarm</li> <li>✓ Default Group Only</li> <li>OK</li> <li>Cancel</li> </ul>

Visual and audible alarms alert the Supervisor when predetermined thresholds are exceeded, enabling the Supervisor to take appropriate action. Visual alarms in the Main View are displayed in colors selected by the Supervisor. While in Title-Bar View, the ACD Viewer Title-Bar and Application Button flash when an alarm condition occurs. Audible alarms sound over the standard PC speaker or plays a sound wave (.wav) file through the PC's sound card and speakers.

### **Title-Bar View**

ACD Viewer's Title-Bar View (Figure 2.6) can run unobtrusively in the background, and Always-On-Top. This enables the Supervisor to work in other applications (MS Word, MS Excel...) while letting ACD Viewer monitor the alarm thresholds that the Supervisor has selected. Once an alarm threshold is exceeded, ACD Viewer alerts the Supervisor by flashing the title bar and / or playing a sound wave, depending on the current Alarm settings.

#### Figure 2.6. Title-Bar View

CW: 6 LCW: 0:09:30 LOG: 8 Avail: 0 Unavail: 3 Busy: 5 - Tech Support

- CW Number of Calls Waiting (Work Load)
- LCW Longest Call waiting (Work Load)
- LOG Number of Logged-In Agents (Resources)
- Avail Number of Available Agents (Resources)
- Unavail Number of Unavailable Agents (Resources)
- Busy Number of Busy Agents (Resources)
- Alarm Indications
- The ACD Group Name

### **Button View**

Button View is the most condensed display format. Button View displays as an open application that is minimized on the Windows Task-Bar at the bottom of the screen (like the Windows Start button). Alarms that exceed preset thresholds will cause the Button to flash, and a sound wave to play if sound is enabled. Placing the mouse pointer over the Button will display a Help Bubble that displays the same information as the Title-Bar View as shown here in Figure 2.7.

#### Figure 2.7. Button View

$\square \bigcirc \blacksquare \checkmark \bigcirc \bigcirc \blacksquare \land \checkmark \land \land$	Help Bubble
Page 8 Sec 3 CW: 2 LCW: 0:01:39 LOG: 3 Avail: 0	Jnavail: 0 Busy: 3 - Market Support
Start Wicrosoft Word - General CW: 2 LCW: 0:01:39 L	

## **Group Detail View**

Queue status and group statuses are displayed at the top of the window, while individual Agents in the group are displayed in the remainder of the window. The possible Agent States are ACD Call, PBX Call, Available, Unavailable, and Logged-Out.

Figure 2.8 shows a typical ACD Viewer Group Detail window.

Figure 2.8. ACD Viewer Group Detail Window

ACD Viewer				- 🗆 ×
<u>F</u> ile ⊻iew <u>C</u> onfigu	re <u>H</u> elp			
CW:2 LCW: 0:05:17	LOG : 35	Avail: 0 Unavail:	15 Busy : 20	- Tech Support
Name	ID	State	State Time	<b>▲</b>
Will Smith	0121	PBX Call	0:03:07	
Tina Tang	0130	Unavailable	0:41:06	
Tim McDonnell	0117	ACD Call	0:00:47	
Tim Laguna	0105	PBX Call	0:04:13	
Steve Lifetree	0128	Unavailable	0:44:02	
Sonya Del Camp	0127	ACD Call	0:02:26	
Simon Marquee	0110	ACD Call	0:02:18	
Samuel Bauble	0106	Unavailable	0:47:19	
Sally Blue	0107	PBX Call	0:00:38	
Robert Scott	0115	Unavailable	0:42:59	
Ramon Loupes	0134	PBX Call	0:05:27	<b>_</b>
For Help, press F1		PBX: Mar 10, 1	999 PB	X: 09:13:50 AM

The window can be sized to fit more Agents. However, the number of Agents displayed on the screen depends on the resolution settings of the screen and the size of the monitor. Names that are changed in one instance of ACD Viewer are reflected on <u>all</u> instances of ACD Viewer on the network.

### **Remote Access**

Remote Access of ACD Viewer displays and reports, can be accomplished using pcAnywhere<sup>TM</sup> and modems.

# **Chapter 6. Report Manager**

### Overview

A number of reports are available which provide information and statistics on individual Agents, ACD Groups, Work Units, and Trunks. All reports can be scheduled to run periodically, and are then automatically sent to the Windows print manager. Reports can also be run manually whenever desired for whatever time period that is required.

There are four templates for each report type: daily, weekly, monthly, and yearly. Any report template can be run for any duration of time. For example, if daily information is required for a twelve (12)-day period that occurred last month, simply select the report type and the dates required and run the report.

Reports can be run for any combination of ACD Groups and Agents. Reports can be run for a single Agent, a subset of Agents within a group or many groups, an entire ACD Group, or all ACD Groups.

You can export your finished reports to a number of popular spreadsheet and word processor formats, HTML format, ODBC format, and a number of common data interchange formats as well. This makes the distribution of information easier. For example, you may want to use report data to project trends in a spreadsheet package or enhance the presentation of data in a desktop publishing package.



## Reports have been formatted specifically to export to MS Excel 97™.

Both the MIS Server master databases and the temporary report databases created by ACD Viewer Report Manager can be opened and manipulated with Microsoft's Access 97<sup>TM</sup>.

Each report type has the following information:

- **Report Name** On the daily templates just the report name appears; on weekly, monthly, and yearly report templates the report period also appears as part of the report name (i.e.; Agent Call Summary Monthly).
- **Report Period Start, Date and Time** States the beginning of the report period.
- **Report Period End, Date and Time** States the end of the report period. If a future date/time is requested the present date/time is inserted.
- Report Print Date The date the report was run/printed.

• **Page Number** - The page number is presented in the "Page X of Y" format.

The descriptions that follow are Daily report formats. Generally the same data appears as totals, averages, and summaries on the Weekly, Monthly, and Yearly reports. For example, in many of the daily reports hourly intervals are shown for each day, while on the Weekly report daily totals are shown.

### **Agent Call Summary Report**

The Agent Call Summary report provides a comprehensive view of Agent hours and call handling activities. The report is used to establish base line measurements in the Call Center and enables the Supervisor to evaluate Agent performance, relative to other Agents within the group.

Figure 6.1 shows a typical Agent Call Summary report.

Figure 6.1. Agent Call Summary Report

				Age	nt Call	Summa	ry
Tech Support					ACD Gro	oup ID: 1	
5/2/2000		Log-In Time Hours	Unavailable Time Hours	Product -ivity %	Number Of ACD Calls	Average ACD Talk Minutes	Average After Call Seconds
Aaron	1313	7.83	2.08	73	36	8.1	15
Henry	1314	8.56	0.58	93	38	8.4	0
Jason	1316	5.68	2.41	57	22	7.9	3
Joe	1340	7.49	1.40	81	23	13.2	0
joeseph	1344	8.51	3.26	61	19	14.1	0
Julie	1326	7.94	1.41	82	30	12.0	2
Martha	1315	5.66	4.31	23	4	9.8	0
Mike	1343	15.34	1.33	91	34	8.8	1
R.L.	1342	7.78	1.29	83	30	11.3	1
Rey	1317	3.46	0.91	73	19	6.4	0
Tony	1341	8.64	5.07	41	15	5.4	4
Total		86.9	24.0	758.0	270	105.4	26.0
Average		7.9	2.2	68.9	25	9.6	2.4

## **Agent Time Summary Report**

Agent Time Summary is an uncluttered method to review the time an Agent started work (Logged-In), ended work (Logged Out), and when breaks were taken (Unavailable). The Agent Time Summary includes the Agents activities by time of day, state, and duration. Four Agent states are shown: Login, Logout, Unavailable, and Working. The Working State includes Available, ACD Call, and PBX Call.

Figure 6.2 shows a typical Agent Time Summary report.

		Agent	t Time Summ	nary						
Customer Service		1	ACD Group ID: 2							
Al	I	Agent ID: 2300				Totals In Hours				
Tue, May 02, 2000 Al	Customer Service Time	State	Duration (Minutes)	Log-In 5.48	Working 5.24	Unavailable 0.25	Logou 10.51			
	08:00 AM	Login								
	MA 00:80	Working	01:02:38							
	09:03 AM	Logout	00:16:43							
	09:19 AM	Login								
	09:19 AM	Working	00:07:29							
	09:27 AM	Logout	00:11:20							
	09:38 AM	Login								
	09:38 AM	Working	01:04:06							
	10:42 AM	Unavailable	00:02:39							
	10:45 AM	Working	02:14:17							
	12:59 PM	Logout	01:06:16							
	02:06 PM	Login								
	02:06 PM	Working	00:39:26							
	02:45 PM	Unavailable	00:12:08							
	02:57 PM	Logout	00:57:33							
	03:55 PM	Login								
	03:55 PM	Working	00:06:15							
	04:01 PM	Logout	07:58:28							

Figure 6.2. Agent Time Summary Report

## **Queue Average Report**

The Queue Average report gives a side-by-side view of Call Center workload (Calls Waiting and Longest Call Waiting) and Call Center Resources (Agents) throughout the day, in 15 minute, 30 minute, or one hour intervals.

Figure 6.3 shows a typical Queue Average report.

Figure	6-3.	Oueue	Average	Report
1 15 11 1 0		2 mene	11,01,050	nepone

		Queue	werage Repo	11
	A verage #Calls Waiting	Average Minitues Calls Waited	A verage S econds C alls Waitied	Number of Agents Working
'uesday, May 02, 2000	Group: 1		Tech Support	
08:00 AM	0	0.0	0	4
08:30 AM	0	0.0	0	7
09:00 AM	0	0.0	0	7
09:30 AM	0	0.0	0	8
10:00 AM	7	73.3	4,398	10
10:30 AM	7	41.8	2,505	10
11:00 AM	0	0.0	0	10
11:30 AM	0	0.0	0	8
12:00 PM	0	0.0	0	8
12:30 PM	3	20.2	1,209	8
01:00 PM	7	45.7	2,739	7
01:30 PM	3	55.8	3,349	9
02:00 PM	6	27.2	1,631	7
02:30 PM	5	49.9	2,993	7
03:00 PM	0	0.0	. 0	8
03:30 PM	0	0.0	0	9
04:00 PM	0	0.0	0	10
04:30 PM	0	0.0	0	9
05:00 PM	0	0.0	0	7
05:30 PM	0	0.0	0	3
07:00 PM	0	0.0	0	1
Average	1.8	14.9	896.4	7.5
Minimum	0	 N	0	
Maximum	7	73	4.398	10

## **Queue Count Report**

The Queue Count report provides an at a glance view of an ACD Group's call flow. Call flow is presented both incrementally and as totals, maximums, and averages in each category for each day.

Figure 6.4 shows a typical Queue Count Report.

Figure 6.4. Queue Count Report

				Queu	e Count				
Report Period Start: Report Period End:	: Tue, May 02, Tue, May 02, 2	2000, 12:00 A M :000, 11:59 P M	I						
	Number	Number	Average	Percent	Number	Average	Percent	Number	Percent
	of	of	Speed of	of	of	Speed of	of	of	of
	Calls	Calls	Answer	Calls	Calls	Abandon	Calls	Calls	Calls
	Offered	Answered	In Seconds	Answered	Abandon	In Seconds	Abandon	Overflow	Overflow
Tue, May 02, 2000		Group Number	:1		Tech Support				
08:00 AM	2	2	6	100	0	0	0	0	0
08:30 AM	13	6	76	46	1	747	7	0	0
09:00 AM	9	15	583	166	0	0	0	0	0
09:30 AM	19	14	147	73	1	315	5	1	5
10:00 AM	15	14	374	93	2	376	13	2	13
10:30 AM	13	11	48	84	0	0	0	1	7
11:00 AM	17	15	94	88	1	18	5	2	11
11:30 AM	24	17	130	70	3	133	12	1	4
12:00 PM	12	15	249	125	0	0	0	0	0
12:30 PM	19	14	213	73	2	259	10	0	0
01:00 PM	25	21	314	84	1	303	4	0	0
01:30 PM	13	14	294	107	2	298	15	3	23
02:00 PM	14	14	109	100	0	0	0	0	0
02:30 PM	16	15	200	93	1	470	6	0	0
03:00 PM	22	14	199	63	4	113	18	0	0
03:30 PM	13	10	228	76	3	205	23	0	0
04:00 PM	14	18	73	128	0	0	0	0	0
04:30 PM	20	17	30	85	0	0	0	0	0
05:00 PM	25	20	168	80	2	107	8	2	8
05:30 PM	1	4	481	400	1	628	100	0	0
Total:	306	270	N/A	N/A	24	N/A	N/A	12	N/A
Average:	15.3	13.5	201.0	88.2	1.2	199	8.0	0.6	0.0
Maximum:	25	21	583	400	4	747	100	3	23

## **Queue Count Graph Report**

The Queue Count Graph report provides a visual view of an ACD Group's call flow. Call flow is presented in a stacked bar graph of Calls Answered, Calls Lost, and Calls that overflowed which adds up to the number of Calls Offered.

Figure 6.5 shows a typical Queue Count Graph report.

Figure 6.5. Queue Count Graph Report



## **Incoming Call Duration Spectrum Report**

Incoming Call Duration Spectrum report provides Call Duration (talk time) details. Once an ACD Group's average call duration is established, this report is used to identify trends. A rise in call duration adversely effects Queue holding time (see Delayed Call Spectrum report) and lost calls (see Lost Call Spectrum report).

Figure 6.6 shows a typical Incoming Call Duration Spectrum Report.

					Inc	coming	Call	Durat	ion									
Report Period	Leport Period Start: Tue, May 02, 2000 12:00 AM																	
Report Period	d End: Tue,	May 02, 20	00-11:59 PM	[														
			Percent	Average	Max	2.5	econd Inte	rvals			10 Secor	nd Interval	s		30.5	Second In	ntervals	
	Calls	Calls	of Calls	Talk	Talk	20.		11010			10 0 00001				200			
	Offered	Answered	Answered	Duration	Duration	2	4	6	8	18	28	38	48	58	88	118	148	178+
Tue, May 02,	, 2000		Grou	ıp: 1			Te	ch Suppor	rt									
MA 00:80	2	: 2	100	1,105	2,144	0	0	0	0	0	0	0	0	0	1	0	0	1
08:30 AM	13	6	46	1,353	2,136	0	0	0	0	0	0	0	0	0	0	1	0	5
09:00 AM	9	15	166	627	3,554	0	0	0	0	0	0	0	0	0	0	2	0	13
09:30 AM	19	14	73	758	4,049	0	0	0	0	0	0	0	0	0	2	0	0	12
10:00 AM	15	5 14	93	499	1,290	0	0	0	0	1	1	0	0	0	0	0	1	11
10:30 AM	13	11	84	943	3,636	1	0	0	0	0	0	0	0	0	1	0	1	8
11:00 AM	17	15	88	639	1,956	0	0	0	0	0	0	0	0	0	1	3	0	11
11:30 AM	24	17	70	497	1,662	0	0	0	0	0	1	0	0	0	1	0	1	14
12:00 PM	12	! 15	125	440	1,265	0	0	0	0	0	0	0	0	0	0	1	1	13
12:30 PM	19	14	73	635	1,647	0	0	0	0	0	0	0	1	1	1	0	0	11
01:00 PM	25	5 21	84	610	3,144	0	0	0	0	0	0	0	0	0	2	0	3	16
01:30 PM	13	14	107	613	1,285	0	0	0	0	0	0	0	0	0	0	1	1	12
02:00 PM	14	14	100	382	1,054	0	0	0	0	0	0	0	0	0	1	3	1	9
02:30 PM	16	i 15	93	375	1,620	1	0	0	0	0	1	1	0	0	0	1	1	10
03:00 PM	22	! 14	63	639	2,790	0	0	0	0	2	0	0	0	0	0	2	1	9
03:30 PM	13	: 10	76	583	2,057	0	0	0	0	0	0	0	0	0	0	1	1	8
04:00 PM	14	18	128	418	1,352	0	0	0	0	0	0	0	0	0	1	0	2	15
04:30 PM	20	17	85	511	2,284	0	0	0	1	0	1	0	0	o	2	0	3	10
05:00 PM	25	5 20	80	473	1,666	0	0	0	1	0	0	0	0	1	1	1	1	15
05:30 PM	1	4	400	416	622	U	U	U	U	U	U	U	U	U	0	U	<u> </u>	4
Totals:	306	1 270	N/A	N/A	N/A	2	U	U	2	3	4	1	1	2	14	16	18	207
Avg Hour:	15	ij 14	107	626	2,061	0	0	0	0	0	0	0	0	0	1	1	1	10
Max Hour:	25	21	400	1,353	4,049	1	0	0	1	2	1	1	1	1	2	3	3	16

Figure 6.6. Incoming Call Duration Spectrum Report

٦

## Lost Call Spectrum Report

Lost Call Spectrum report provides detailed information regarding when callers disconnected before being answered. Knowing when the bulk of disconnects occur enables goals to be set for average speed of answer by reducing Queue Time.

Figure 6.7 shows a typical Lost Call Spectrum Report.

Figure 6.7. Lost Call Spectrum Report

							Lost (	Call S	pectr	um								
Report Perio Report Perioc	d Start: Tue, M I Stop: Tue, Ma	ay 02, 2000 y 02, 2000	12:00 AN 11:59 PM	A					•									
						Calls are	considered	Lost afte:	r O Seco:	nds								
				Average	Max	2	Second In	tervals			10 Seco:	nd Interv	als		30	Second I	intervals	
	Calls Offered	Number Lost	Percent Lost	Lost (Seconds)	Lost (Seconds)	2	4	6	8	18	28	38	48	58	88	118	148	178 -
Tue, May O	2, 2000	G	roup: 1						Tech St	ipport								
08:00 AM	2	0	0		) 0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	13	1	7	74	7 747	0	0	0	0	0	0	0	0	0	0	0	0	1
09:00 AM	9	0	0	I I	) ס	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM	19	1	5	31.	5 315	0	0	0	0	0	0	0	0	0	0	0	0	1
10:00 AM	15	2	13	37	5 569	0	0	0	0	0	0	0	0	0	0	0	0	2
10:30 AM	13	0	0	I I	) (	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	17	1	5	1	3 18	0	0	0	0	1	0	0	0	0	0	0	0	0
11:30 AM	24	3	12	13.	3 167	0	0	0	0	0	0	0	0	0	0	1	1	1
2:00 PM	12	0	0	I I	) (	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	19	2	10	25!	9 283	0	0	0	0	0	0	0	0	0	0	0	0	2
01:00 PM	25	1	2	30:	3 303	0	0	0	0	0	0	0	0	0	0	0	0	1
01:30 PM	13	2	15	29	3 334	0	0	0	0	0	0	0	0	0	0	0	0	2
02:00 PM	14	0	0	I I	) o	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	16	1	6	471	) 470	0	0	0	0	0	0	0	0	0	0	0	0	1
03:00 PM	22	4	18	111	3 167	0	1	0	0	0	0	0	0	0	0	1	0	2
03:30 PM	13	3	23	20.	5 418	0	0	0	0	1	0	0	0	0	0	0	0	2
04:00 PM	14	0	0	I I	) o	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	20	0	C	I I	) 0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	25	2	8	10	7 134	0	0	0	0	0	0	0	0	0	1	0	1	0
05:30 PM	1	1	100	62	3 628	0	0	0	0	0	0	0	0	0	0	0	0	1
Totals:	306	24	N/A	N/2	A N/A	0	1	0	O	2	0	0	0	0	1	2	2	16
Avg Hour:	15	1	11	199	228	0	0	0	0	0	0	0	0	0	0	0	0	1
Max Hour:	25	4	100	747	747	0	1	0	0	1	0	0	0	0	1	1	1	2

## **Delayed Call Spectrum Report**

Delayed Call Spectrum report provides a detailed view of hold times (Queue time). The Supervisor establishes a delayed call threshold in the Report Manager. Only calls that exceed the established Delayed Call threshold appear as delayed calls on the report.

Figure 6.8 shows a typical Delayed Call Spectrum Report.

Figure 6.8. Delayed Call Spectrum Report

Report Period	Start: Tue, I	Vary 02, 200	00 12:00	AM		Г	)elave	d Cal	ll Sne	etrum								
Report Period	End: Tue, I	vlay 02, 200	00 11:59	PM		-	, ena j e	u cu	n ope	ea ann								
					c	alls are co	nsidered D	elavæd af	ter O Seco	nds								
-	Number	Number	Percent	Average	Max	2	Second In	tervals			10 Se	ond Interva	als		30	Second In	te rvals	
	of Calls	of Calls	of Calls	Delay	Delay	-												
	Offered	Delayed	Delayed	Seconds	Seconds	2	4	6	8	18	28	38	48	58	88	118	148	178+
Tue, May 02,	2000		1	I.	Group:	1		Tech	Support									
08:00 AM	2	0	0	0		0	Ο	Ο	0	Ο	Ο	Ο	Ο	0	0	0	0	0
08:30 AM	13	2	15	6	6	ň	ň	2	ñ	ñ	ň	ñ	ň	ň	ň	ñ	ň	ň
09:00 AM	9	16	177	456	1.255	ō	1	2	1	2	õ	õ	ō	1	ō	ō	õ	9
09:30 AM	19	13	68	145	512	0	1	0	0	2	0	0	1	0	1	0	1	7
10:00 AM	15	16	106	407	1,099	0	0	0	0	0	1	0	0	0	1	1	1	12
10:30 AM	13	10	76	98	569	0	1	2	1	2	0	0	0	0	2	0	0	2
11:00 AM	17	13	76	50	203	0	2	0	0	7	0	0	1	0	0	0	1	2
11:30 AM	24	20	83	133	423	1	1	0	0	2	0	1	0	0	1	3	3	8
12:00 PM	12	15	125	227	569	0	2	0	0	1	0	0	1	0	0	1	0	10
12:30 PM	19	13	68	199	318	0	1	0	0	0	0	0	1	0	1	0	1	9
01:00 PM	25	19	76	350	525	0	0	0	0	0	0	0	0	0	0	0	0	19
01:30 PM	13	16	123	264	496	0	0	0	0	0	0	0	0	2	0	0	2	12
02:00 PM	14	16	114	151	409	0	0	0	0	2	0	0	3	0	0	0	3	8 -
02:30 PM	16	15	93	191	436	0	1	1	0	0	0	1	1	0	1	2	1	7
03:00 PM	22	13	59	186	417	0	0	0	0	1	0	1	1	0	0	1	0	9
03:30 PM	13	11	84	255	548	0	0	0	0	0	0	0	0	0	1	1	0	9
04:00 PM	14	19	135	83	363	0	1	1	2	4	1	1	2	0	1	1	1	4
04:30 PM	20	15	75	22	124	0	0	1	3	8	1	0	1	0	0	0	1	0
05:00 PM	25	20	80	162	443	2	2	0	0	1	0	0	0	0	1	3	0	11
05:30 PM	1	8	800	283	635	1	1	0	0	0	0	0	0	0	1	0	0	5
Totals:	306	270	N/A	N/A	N/A	4	14	9	7	32	3	4	12	3	11	13	15	143
Avg. Hour:	15	14	122	183	468	0	1	0	0	2	0	0	1	0	1	1	1	7
Max Hour:	25	20	800	456	1,255	2	2	2	3	8	1	1	3	2	2	3	3	19

## **Trunk Report**

Trunk Report provides a clean and simple method to review activity of all ACD Trunks. Trunks may be assigned text names for easy identification. When running the Trunk Report, a temporary database for the report period is created in the ACD Viewer\Report Manager host PC. Additional information such as Group numbers and Agent ID's are available to those that wish to modify the report template.

Figure 6.9 shows a typical Trunk Report.

Report Period Start: T Report Period End: Tu	Report Period Start: Tue, May 02, 2000 - 12:00 AM Report Period End: Tue, May 02, 2000 - 11:59 PM							
	n, mily 02, 2000 11.37 11		Trunk					
5/2/2000								
Trunk(0)	Trunk ID:	0	Number of Calls:	37	Minutes In Use:	223.00	Hours in Use:	3.72
Trunk(1)	Trunk ID:	1	Number of Calls:	23	Minutes In Use:	178.57	Hours in Use:	2.98
Trunk(2)	Trunk ID:	2	Number of Calls:	38	Minutes In Use:	139.72	Hours in Use:	2.33
Trunk(3)	Trunk ID:	3	Number of Calls:	32	Minutes In Use:	183.20	Hours in Use:	3.05
Trunk(4)	Trunk ID:	4	Number of Calls:	46	Minutes In Use:	212.10	Hours in Use:	3.54
Trunk(5)	Trunk ID:	5	Number of Calls:	27	Minutes In Use:	111.18	Hours in Use:	1.85
Trunk(6)	Trunk ID:	6	Number of Calls:	28	Minutes In Use:	103.37	Hours in Use:	1.72
Trunk(7)	Trunk ID:	7	Number of Calls:	22	Minutes In Use:	79.97	Hours in Use:	1.33
Trunk(8)	Trunk ID:	8	Number of Calls:	28	Minutes In Use:	107.35	Hours in Use:	1.79
Trunk(9)	Trunk ID:	9	Number of Calls:	18	Minutes In Use:	63.53	Hours in Use:	1.06
Trunk(10)	Trunk ID:	10	Number of Calls:	22	Minutes In Use:	103.03	Hours in Use:	1.72
Trunk(11)	Trunk ID:	11	Number of Calls:	18	Minutes In Use:	58.70	Hours in Use:	0.98
Trunk(12)	Trunk ID:	12	Number of Calls:	7	Minutes In Use:	40.18	Hours in Use:	0.67
Trunk(13)	Trunk ID:	13	Number of Calls:	14	Minutes In Use:	65.85	Hours in Use:	1.10
Trunk(14)	Trunk ID:	14	Number of Calls:	11	Minutes In Use:	32.40	Hours in Use:	0.54
Trunk(15)	Trunk ID:	15	Number of Calls:	10	Minutes In Use:	36.82	Hours in Use:	0.61
Trunk(16)	Trunk ID:	16	Number of Calls:	5	Minutes In Use:	17.28	Hours in Use:	0.29
Trunk(17)	Trunk ID:	17	Number of Calls:	3	Minutes In Use:	4.28	Hours in Use:	0.07
Trunk(18)	Trunk ID:	18	Number of Calls:	2	Minutes In Use:	2.43	Hours in Use:	0.04
Trunk(19)	Trunk ID:	19	Number of Calls:	1	Minutes In Use:	0.23	Hours in Use:	0.00

Figure 6.9. Trunk Report

## Work Unit Report

A Work Unit (stroke counts) is a 2-digit code that is entered into the phone by the agent during the call. Work Units are a method to categorize the type of calls the Agent is processing. The Work Unit Report is sorted by work unit.

Figure 6.10 shows a typical Work Unit Report.

Figure 6.10. Work Unit Report

00				Time in Seconds	
ACD Group I	<b>D: 1</b> Demo Group	Count of Work Units	Sum Of Queue Time	Sum Of Talk Time	Queue Plus Talk Time
Work Unit: 32	Status of B/O / Void Pick	2	1	1,422	1,423
Work Unit: 33	Status of Order	2	3	374	377
Work Unit: 39	Change Order	1	66	958	1,024
Work Unit: 44	Price Match	1	210	1,094	1,304
Work Unit: 62	Cancel Order	1	0	400	400
Work Unit: 65	Referred to Boaters World	2	289	44	333
Sub To	otal ACDGroup : 1	9	569	4,292	4,861
 Total for	. 9/1 /00	9	569	4,292	4,861

## Work Unit Agent Report

A Work Unit (stroke counts) is a 2-digit code that is entered into the phone by the agent during the call. Work Units are a method to categorize the type of calls the Agent is processing. The Work Unit Agent Report is sorted by Agent and then work unit.

Figure 6.11 shows a typical Work Unit Agent Report.

Figure 6.11. Work Unit Agent Report

9/1/00			In Sec	onds
ACD Group ID 4	Demo Group	Number Of Work Units	Average Queue Time	Average Talk Time
Agent ID: 1213 Pauline				
Work Unit: 33	Status of Order	1	3	248
	Sub Total For : Pauline	1	3	248
Agent ID: 1214 Spare				
Work Unit: 65	Referred to Boaters World	2	145	22
	Sub Total For : Spare	2	145	22
Agent ID: 1217 Roger	-			
Work Unit: 32	Status of B/O / Void Pick	2	1	711
Work Unit: 33	Status of Order	1	0	126
Work Unit: 44	Price Match	1	210	1,094
Work Unit: 62	Cancel Order	1	0	400
	Sub Total For : Roger	5	42	608
Agent ID: 1218 Matthe	w			
Work Unit: 39	Change Order	1	66	958
	Sub Total For : Matthew	1	66	958
	Total For ACD Group: 1	9	63	477

# **Chapter 7. Agent View**

### **Overview**

Agent View provides an alternative method of delivering critical Call Center data to front line and management personnel in a small unobtrusive format that's easy to understand. Agent View is similar to a "Software Wallboard" on each Agent's PC. The Agent View's Title-Bar View (see Figure 4.1) and button view have small footprints that allow an Agent to work in other applications without constantly moving the Agent View dialog box out of the way.

Agent View addresses three specific areas. First, Agent View provides more information then an Agent display telephone. Second, the information is displayed continuously through out the duration of the call. Finally, Agent View provides a method to deliver information where wallboards are ineffective. For instance, agents are in individual offices, cubical walls are too high, or the customer doesn't want to display Call Center information in a public area.

Agents are presented ACD information for one ACD group as assigned by the system administrator. Multiple instances of Agent View can be active on the same PC; each instance of Agent View that connects to the MIS Server secures a licensed connection. Opening multiple instances of Agent View enables someone to monitor two (2) or more different ACD Groups and act as a Sub-Supervisor.

Figure 4.1. Agent View Title-Bar Display

CW: 6 LCW: 0:09:30 LOG: 8 Avail: 0 Unavail: 3 Busy: 5 - Tech Support

## **Information Displayed**

Agent View provides the following information for one ACD Group:

- Number of Calls Waiting (CW)
- The Duration the oldest call in queue has been waiting (LCW)
- Number of Logged in Agents (Log)
- Number of Available Agents (Avail)
- Number of Unavailable Agents (Unavail)
- Number of Agents Busy (Busy)

## **Button-View (Agent View)**

Button-View is the most condensed display format. Button-View displays as an open application that is minimized on the Windows Task-Bar at the bottom of the screen (like the Windows Start button). Placing the mouse pointer over the Button will display a Help Bubble that displays the same information as the Title-Bar View.

Figure 4.2 shows a typical Button-View window.

Figure 4.2. Button-View Window



Usually Button-View displays the number of Calls Waiting (CW) and the duration of the Longest Call Waiting (LCW). However, what is actually displayed on the button depends on the number of applications open, size of the monitor, and the resolution settings of the monitor.

Agent View license packs are available in bundles of 10, 25, or 50. Agent View can be installed on any number of host PCs. However, each instance of Agent View that connects to the MIS Server secures a licensed connection. Once the number of licensed connections equals the number of licenses on the software protection device, no other connections can be established.

# **Chapter 8. Wallboards**

### Overview

Wallboards are a cost-effective method to provide Agents and other interested personnel with real-time Call Center information. Items that exceed preset alarm conditions are displayed in a different color and may be accompanied by an audible alarm (from the wallboard). Text messages can be sent to the wallboard on a periodic basis or as a one-time priority message.

ACD Viewer supports Spectrum Electronic Wallboards which are sold separately (*Series 200 and 300 work best*). Wallboard support requires no additional software or activation key and can be connected to any PC with an available serial communications port running ACD Viewer. One copy of ACD Viewer can support a network of one (1) to 128 wallboards.

### **Information Displayed**

By default all items are displayed on the Wallboard. However, each display item can be turned off separately for each Wallboard. Wallboards display the following information for selected ACD Groups:

- Date
- Time
- ACD Group Name
- Number of Calls Waiting
- Duration of the Longest Call Waiting.
- Number of Agents Logged-In
- Number of Agents Available
- Number of Agents Unavailable
- Number of Agents Busy (ACD Call, PBX Call, or After Call Work Time [Wrap-Up Time])
- Delimiter Message (displays between ACD Groups or for a single group once per cycle)

Only the PC connected to the Wallboard by way of the serial communications port can change the settings of a Wallboard, or send messages to a Wallboard. If there are two (2) ACD Groups and two (2) Wallboards, consider connecting one Wallboard to each Supervisor's PC. This allows each Supervisor to send messages to their group from their desktop PC. Another way to handle this is to centrally locate the PC so both Supervisors have access to the PC. Each wallboard can have its own address so a message can be sent to a specific Wallboard and not to others on the Wallboard network.

## **Priority Text Messages**

You can use Priority Messaging for motivational messages (i.e., "Congratulations, we made the numbers!") or for informing the Group of current priorities (i.e., "Meeting at 2:00"). When a Priority Message displays, all other messages (including ACD information) are suspended for the duration of the Priority Message.

Priority Messages may be sent to one (1) Wallboard, or several connected Wallboards. Priority Messages are sent to the Wallboards one time and are displayed for a user-defined amount of time.

### **Delimiter Messages**

Delimiter Messages are displayed either between different ACD Group segments, or in the case of a single group, once per cycle. Delimiter Messages can also be used for motivational messages (i.e., "Happy Birthday") or for informing the Group of current priorities (i.e., "Promotional Sale on washing machines").

Delimiter Messages continue until the message is turned off in ACD Viewer.

## **Chapter 9. Exporting Report Data**

PANASONIC has verified the export function from the reports to Microsoft Excel 97. Due to the large number of different export formats that Seagate Crystal Reports and Microsoft Access support, PANASONIC has not attempted to verify all export format types. To verify export capabilities to a specific program, please contact either Seagate Software or Microsoft Corporation.

## **Seagate Crystal Reports**

When you export a report to a different file format other than Seagate Crystal Reports format, you may lose some, or all of the formatting that appears in your report. The Seagate Crystal Report program attempts to preserve as much formatting as the export format allows.

In a number of tests exporting report data to different formats, the data typically exported correctly, but the headings came out scrambled. For example, when exporting to MS Word the headings tend to be scrambled while the body of the data is intact.

The majority of PANASONIC customers express a desire to export to MS Excel, so the report templates are set up to export specifically to MS Excel 97. If you need to export to both MS Word and MS Excel, the Seagate Crystal Report templates can be copied, renamed, and modified as needed, and then saved.

The report templates are written in Seagate Crystal Reports version 6.0. The export feature is a function of Seagate Crystal Reports. If you wish to modify the report templates so that the data and headings export to a specific application you will need to purchase a copy of Seagate Crystal Reports.

## **Microsoft Access**

The MIS Server master databases and the temporary report databases created by ACD Viewer Report Manager are Microsoft DAO and can be opened and manipulated with Microsoft's Access 97.

The following are data formats Microsoft Access can export to:

- Application/Version or format supported
- Microsoft FoxPro 2.x, and 3.0
- DBASE III, III+, IV, and 5
- Paradox 3.x, 4.x, and 5.0
- Microsoft Excel 3.0, 4.0, 5.0, 7.0/95, and 8.0/97
- Lotus 1-2-3 .wk1 and .wk3 formats
- Delimited text files Windows (ANSI) and DOS (PC-8)
- Fixed-width text files Windows (ANSI) and DOS (PC-8)
- HTML and IDC/HTX 1.1 (if a list) 2.0, 3.x (if a table or list)
- Programs and databases that support the ODBC protocol

For a list of supported ODBC drivers, search the Microsoft Knowledge Base for article number Q140548, "*List of ODBC Drivers Installed by Product.*" For the Microsoft Access Knowledge Base or other online technical resources, search on the World Wide Web, under Microsoft.

**Note:** The Lotus 1-2-3 and Paradox drivers are not included in Microsoft Access Setup, but are available through the Office 97 Value Pack.

# Chapter 10. Troubleshooting

## ACD Viewer Error Messages

Error Message	Possible Causes
Disconnected From	MIS Server is no longer running
Server	On the Windows NT Host PC for the MIS Server application ver- ify that the MIS Server application is Running.
	1. Start \ Settings \Control Panel \ Services
	2. MIS Server Status should be Started
Disconnected From	Software Protection Key was added to the ACD Viewer Host PC without
Server	rebooting
	Symptom: After the ACD Viewer password is entered, the appli- cation fails to connect to the MIS Server. After several seconds an error message appears "Disconnected From the Server."
	After installing ACD Viewer and the Software protection device on the parallel port, the Host PC must be restarted.
Failed to Connect to	Client PC not configured as a Client for Microsoft Networks
Server XXXXX (11001)	Add Client for Microsoft Networks to Configuration:
	Start \Settings \ Control Panel \Network ICON \Configuration TAB \ADD \Client \Microsoft \ Client for Microsoft Networks
Failed to Connect to	Incorrect Server Name:
Server XXXXX (11001)	Verify that the Server Name matches in both the ACD Viewer Client and the MIS Server Host PC.
	Verify ACD Viewer Client:
	<ol> <li>Check in ACD Viewer \ Configuration \ MIS \ Server (tab) \ Server Name</li> </ol>
	<ol><li>Verify the Computer Name on the Windows NT Host PC that contains the MIS Server application.</li></ol>
	3. Start \ Settings \ Control Panel \ Network ICON \ Identification TAB \ Computer Name
Failed to Connect to Server	Net Down (Windows Sockets definitions of regular Berkeley error constants)
XXXXX (10050) Contact Panasonic	Note that this error occurs rarely since a WinSock implementa- tion cannot reliably detect hardware problems. This error is used as a the catch-all. When it occurs, it could indicate a serious fail- ure of your network system (i.e. the protocol stack that the Win- Sock DLL runs over).
	Check your WinSock, protocol stack, network driver and network interface card configuration.

Error Message	Possible Causes
Failed to Connect to Server XXXXX (10061)	<i>Mismatched Port Number:</i> Verify that the Port Number matches in both the ACD Viewer Cli- ent and the MIS Server Host PC. Default Port Number for both ACD Viewer and the MIS Server application is 1775.
	Verify ACD Viewer Client:
	<ol> <li>Check in ACD Viewer \ Configuration \ MIS \ Server (tab) \ Port Number</li> </ol>
	<ol><li>Verify the Port Number on the Windows NT Host PC that contains the MIS Server application.</li></ol>
	<ol> <li>Start \ Settings \ Control Panel \ MIS Server ICON \ MIS TAB \ Port Number</li> </ol>
Failed to Connect to	MIS Server application is not running on Windows NT Host PC.
Server XXXXXX (10061)	On the Windows NT Host PC for the MIS Server application ver- ify that the MIS Server application is Running:
	Start \ Settings \Control Panel \ Services
	MIS Server Status should be Started
Failed to Connect to Server XXXXXX (11001) followed by a (10061) on the second attempt	<i>MIS Server application is not Ready on Windows NT Host PC.</i> If you recently restarted the Windows NT Host PC on a slow PC you may have to wait a few minutes until all the devices and ser- vices are started on the Host.
Group Database Error (3024)	Windows NT Host PC Name Is an invalid Internet name. The name too long or has spaces.
	i.e.: ACD MIS Server change computer name to ACDMIS
Group Database Error (3051)	ACD Viewer Client PC did not log into the network?
Group Database… Error (3055)	Windows NT Host PC Name Is an invalid Internet name. The name too long or has spaces.
	i.e.: ACD MIS Server change computer name to ACDMIS

Error Message	Possible Causes
Group Database Error (3044)	Windows NT MIS Server Host PC, Mserver Folder is not shared or has the wrong share name.
	1. On the Windows NT Host, use Windows NT Explorer to find:
	2. Program Files \ SMD \ Mserver folder
	3. Right Click the Mserver Folder
	4. Select Properties
	5. Select the Sharing Tab
	6. Select Shared As
	7. Enter Share Name as: MIS_server_DB
Group Database Error	Client PC not configured as a Client for Microsoft Networks
3044	Network Client is configured for Microsoft Family Logon
	Add Client for Microsoft Networks to Configuration:
	Start \Settings \ Control Panel \Network ICON \Configuration TAB \ADD \Client \ Microsoft \ Client for Microsoft Networks
Group Database… Error 3051	ACD Viewer Client PC's Network Login Name and Password must be added as a User on the Windows NT host that contains the MIS Server application. The user need not be a member of any group (Users, Administrators) and does not require any other User Rights.
Invalid Password	Password does not match any User Name \ Password combina- tion configured in ACD Viewer. Login Names and passwords are Upper and Lower case sensitive.
	Login in to ACD Viewer with User Name: <i>Administrator</i> and User Password: <i>Administrator</i> . Reenter the password that caused the error.
	(ACD Viewer Menu \ Configure \ Users \ Edit)
Invalid User Name	User Name does not match any User Names configured in ACD Viewer.
	Login Names and passwords are Upper and Lower case sensi- tive.
	Login in to ACD Viewer with User Name: <i>Administrator</i> and User Password: <i>Administrator</i> . Verify the spelling of the User name that caused the error.
	(ACD Viewer Menu \ Configure \ Users \ Edit)
Max Clients Connected	Agent View Software Protection Key is missing from Windows NT MIS Server application Host PC.
	Install optional Agent View software protection key.
Report Manager is Grayed out on the ACD	Windows NT Host PC Name has an invalid Internet name. The name too long or it has spaces in the name.
Viewer File Menu	i.e.: ACD MIS Server change computer name to ACDMIS

Error Message	Possible Causes
Report Manager is Grayed out on the ACD Viewer File Menu	ACD Viewer Client PC's Network Name and Password must be added as a User on the Windows NT host that contains the MIS Server application. The user need not be a member of any group (Users, Administrators) and does not require any other User Rights.
Report Manager is Grayed out on the ACD	Windows NT MIS Server Host PC, Mserver Folder is not shared or has the wrong share name.
Viewer File Menu	<ol> <li>On the Windows NT Host, use Windows NT Explorer to find: Program Files \ SMD \ Mserver folder</li> </ol>
	2. Right Click the Mserver Folder
	3. Select Properties
	4. Select the Sharing Tab
	5. Select Shared As
	<ol><li>Enter Share Name as: MIS_server_DB</li></ol>