Meridian Administration Tools

Call Tracking

User Guide

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Introduction

This user guide provides basic information on setting up and running Call Tracking. It also includes an example to assist you in setting it up for a real time monitoring session. In order to ensure optimum operation of this application, read the material in this user guide before attempting to run Call Tracking.

Overview

Call Tracking is the MAT call monitor and alarm program. Its graphs indicate trends and provide displays of unusual calls enabling you to adjust your equipment and services to maximize your resources. Call Tracking monitors and displays information output from the Meridian 1, accumulates the data and displays the information in different formats in its graphical displays.

Call Tracking consists of several graphical displays which list your monitored call data. Each of these is a separate window or dialog which displays the call information in a unique format.

The main window is the background for these graphical display windows. The commands in its main window provide you with the overall functions of these graphical displays.

Call Tracking also provides alarm generating functions which can be set up to warn you of unusual calling patterns. This is useful in the quick detection of unauthorized telephone calls that occur with toll fraud. You can define multiple alarm templates to detect different calling patterns including: calls exceeding a certain duration; calls made at unusual times; and toll calls. Call Tracking can also be configured to output different types of alarms including: visible and audible alarms on your PC; remote paging; facsimile alarms; and network reported alarms.

About this user guide

This user guide is intended to provide you with an introduction to Call Tracking as well as an overview of its major functions and graphical displays. It includes an example to demonstrate how to initiate a real time connection and start a call monitoring session.

This user guide does not discuss each Call Tracking function and command in detail. It only discusses the major functions and how they are accessed. For detailed information on each Call Tracking function, use on-line Help either directly or via its index and word-search functions. While running Call Tracking, you can obtain context-sensitive help on any topic you require by simply clicking **Help** from a specific dialog or window.

Conventions used in this manual

This manual uses the following terms:

— *Computer system* refers to the hardware and software of an IBM-PC™ or 100% compatible PC.

— Windows—Refers to Microsoft Windows 95, Windows 98, and Windows NT Workstation V4.0.

— *Mouse* refers to any standard PC pointing device. Common mouse actions include *point*, *click* and *double-click*.

— Standard Windows terminology includes: *icon*, *window*, *dialog box* (or *dialog*) and *menu*.

— Angle brackets denote a single keyboard key. For example, <Esc> denotes the Escape key, labeled Esc on PC keyboards. Angle brackets with multiple keys denote keyboard keys to use simultaneously. For example, <Ctrl-Alt-Del> denotes the key sequence for rebooting a PC.

— **This font** is used to designate buttons, menu choices and information you are to enter.

Getting Started

This chapter provides an overview of how to run and set up Call Tracking for a real time and data file monitoring session.

Before using Call Tracking, you must install and configure it as part of MAT. Refer to Getting Started in the *MAT Common Services User guide* for complete details on installing this application.

System access

After you have assigned Call Tracking to a site and system, you can set it up to collect and monitor CDR data and configure its alarms. The following sections highlight the main functions required to use Call Tracking to collect and monitor CDR data in real time mode and from a data file.

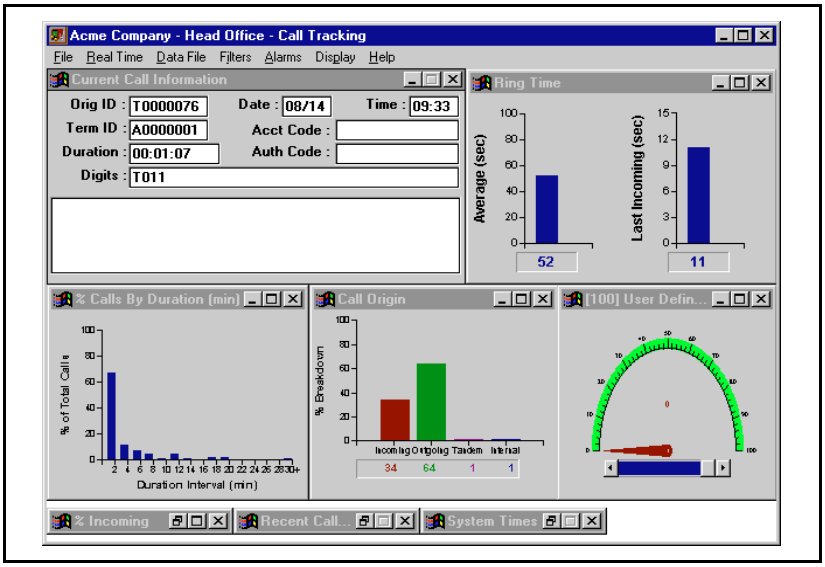
> ***Note:*** If you are using Call Tracking in real time mode (i.e., you are collecting and analyzing the calls as they are completed and recorded on the Meridian 1), then you must first select the communications script used for the connection to the Meridian 1. If you are monitoring calling activity from a data file, then you need to select the formatted data file for monitoring.

If Call Tracking has not been assigned to this system, it will not appear in the **Telemanagement** menu. To assign Call Tracking to this system, access the MAT System Properties function. In the Communications tab, assign a profile for Call Tracking by entering it in the Communications Profile field. In the Applications tab, select the communications profile you just entered in the Communications tab, click **Call Tracking** to highlight it and click the **Enable** check box. Click **OK** from the System Properties dialog to assign Call Tracking to this system.

Run Call Tracking

To access Call Tracking from the MAT Navigator, click the desired site and system and click **Call Tracking** from the Telemanagement menu. The main Call Tracking window will appear.

Figure 1
Call Tracking main window



Set Filters

During the Call Tracking session, you can use the Filters commands to set the filters for the call records as they are being collected. You can for example, set a filter to have Call Tracking only collect call records having a set minimum call duration. You can select up to 10 different filters and have Call Tracking include or exclude the call records matching these filters.

Set Alarms

The Alarms function is used to set an alarm monitor to warn of suspicious calls. These alarms can be sent to your PC as a visual or audible alarm, or to an external device such as a log file, printer, network workstation, pager, modem or fax machine.

Collect CDR data from Meridian 1 in real time mode

Once you have accessed Call Tracking, you can then use the Real Time or Data File commands to initiate a call monitoring session.

Before initiating the real time data collection and monitoring process, you should first access the Communications Database dialog and verify the communications settings for Call Tracking on this system. In this dialog, you can also select the script file which will be used for this session.

Verify communications parameters

To verify the communications parameters for this system, click **Edit Database** from the Real Time drop-down menu. The Communications Database dialog will appear displaying the communications and connection criteria for this system's Meridian 1. These are displayed for informational purposes.

Review the data in these fields to ensure that they correspond to your system's connection parameters. If any of these values are incorrect, then return to the System Configuration function in the MAT Navigator, access the Communications tab and edit them. When you access the Call Tracking Communications Database again, its values will be changed accordingly.

The next step is to select the script file which will be used for this communications session. To select this script file, click on the script file name from the **Script Setup Name** drop-down list box (e.g., **SL1.SCR**). Click **OK** to save this selection and exit to the main window.

Connect

To initiate a connection to the Meridian 1 and start collecting and monitoring the call records, click **Connect** from the Real Time drop-down menu. There will be a brief delay as the communications process is initiated. Call Tracking will then monitor calls as they are recorded by the Meridian 1.

If you wish to pause the monitoring process at any time, click **Pause** from the File drop-down menu. Click **Pause** again to resume the monitoring session. To stop the real time monitoring of the calls, click **Disconnect** from the Real Time drop-down menu. Click **Connect** again to resume the session.

Collect CDR data from data file

The second method of monitoring calls is to view the records from a detail file. To monitor call information from a call detail file rather than in real time mode, click **Start File** from the Data File drop-down menu. At the file prompt, enter the name of the call detail file which you wish to monitor and click **OK**.

For the Data File option, Call Tracking reads and displays normalized detail files (e.g., DETAIL1.DAT). A normalized detail file is an ASCII format text file containing the CDR data records output from the Meridian 1.

Once you select a valid detail filename, Call Tracking will start the monitoring process and display calling information from each call in this normalized detail file.

You can adjust the pace at which the calls are being displayed by clicking **Pacing Factor** from the Data File drop-down menu and clicking the pacing factor scroll bar.

To pause this display, click **Pause** from the File drop-down menu. To start the display again, click the **Pause** toggle again to deselect it. To stop reviewing records from the detail file, click **End File** from the Data File drop-down menu. To start the reviewing process again, click **Start File**. This will not resume the viewing from where you stopped; it will start it from the beginning of the file.

Help

As with the other MAT applications, Call Tracking contains an extensive Help facility which provides you with details on all of its functions and commands. At any time during your Call Tracking session, you can click **Help** and access information on a specific topic.

To obtain help for a topic, click **Help** from the currently selected dialog or window. This will access the Windows Help function and display context sensitive help information on the current topic. Once you have accessed Help, you can then use it to scroll through the other Call Tracking help topics, search for a topic and print the help information.

To view a list of Help topics for Call Tracking, click **Contents** from the Help drop-down menu. Choose from one of the items in this list to load the Help file and display its information.

User's Reference

This chapter describes the Call Tracking main menus, their functions and the graphical displays.

Call Tracking menus

The main Call Tracking window is the background for the graphical display windows. Use these commands to configure the appearance of your graphical displays, connect to the Meridian 1 and define your alarms.

File menu

The File menu contains commands used to affect the main action of the call records as they are collected. Use these functions to pause the data collection, print graphical displays of data, reset the call collection and display Employee Database information.

The following is a list of the functions and commands in this menu:

— Call Tracking ID Code

— Schedule

— Print

— Print Setup

— Reset

— Reset Longest Call

— Employee Database Options

— Detail File

— Pause

— Exit

Real Time menu

The Real Time menu contains functions and commands used to view communications parameters, select connection scripts and connect to the Meridian 1 to start and end a real time monitoring session.

The following is a list of the functions and commands in this menu:

— Edit Database

— Connect

— Disconnect

Data File menu

The Data File menu contains commands used to monitor a specific file which contains a group of processed call records already collected from the Meridian 1. This provides a different method of monitoring your calls.

For the Data File option, Call Tracking reads and displays normalized detail files (e.g., DETAIL1.DAT). A normalized detail file is an ASCII format text file containing the CDR data records output from the Meridian 1. The CDR records must be converted to this normalized format during a data collection procedure (either as it is collected from a supported buffer unit or using a script function).

You can, for example, collect information from the Meridian 1 over a period of time and save it to a file (e.g., DETAIL1.DAT). When you click **Data File** and click **Start File** from its drop-down menu, you can simulate the real time call collection and monitoring process. This is useful if a Meridian 1 is at a distant site (long distance charges would apply) and you do not wish to poll data from this Meridian 1 over several hours in real time mode.

The following is a list of the commands in this menu:

— Start File

— End File

— Pacing Factor

Filters menu

Use the Filters commands to set the filters for the call records as they are being monitored. You can for example, set a filter to have Call Tracking only collect call records having a set minimum call duration. You can select up to 10 different filters and have Call Tracking include or exclude only the call records matching these filters.

The following is a list of the functions and commands in this menu:

— Filter Definitions

— Include

— Exclude

Alarms menu

The Alarms menu contains functions used to configure the Call Tracking alarm monitor. These alarms can be sent to your PC as a visual or audible alarm, or to an external device such as a log file, printer, network workstation, pager, modem or fax machine.

The Alarm Definitions function is used to define the alarm criteria. The Alarm Setup function is used to define the alarm parameters used by the Alarm Definitions. These parameters are global and can therefore be used by any alarm definitions. This includes such information as: pager and modem alarm parameters; audible alarm time-outs; and inactivity alarm monitoring.

The Alarm Log displays a listing of all of the alarm calls that have been logged using the Log File alarm mode. This will display the last 200 call records that signaled the alarms having the Log File mode turned on. Each alarm definition accompanies the call record which it signaled. This way you can scan through the call records based on specific alarm definitions.

The following is a list of the functions and commands in this menu:

— Alarm Definition

— Alarm Setup

— Alarm Log

Display menu

The Display menu contains functions used to manipulate the graphical display windows in the Call Tracking main window. As well, it lists the names of the graphical displays allowing you to select them by name.

The following is a summary of the graphical display commands:

— Display Detail Digits

— Auto Save Positions

— Arrange Icons

— All Icons

— Tile

— Refresh

Graphical Displays

The individual graphical displays are the main graphical components of Call Tracking. Each graphical display highlights call records in a different statistical format. These windows will continuously display your call record information. To edit the parameters and features of each graphical display, use their control-menu commands.

The following sections provide a brief description of these graphical displays.

System Times

The System Times graphical display lists the current time (as recorded by the PC's internal clock). It also displays the date and time when you started collecting the call record information.

Note: The time in this dialog is the PC time; not the Meridian 1 time.

Recent Call History

The Recent Call History dialog lists the details of the last 20 call records. Refer to this dialog to review the most recent call records. Each call record consists of the originating and terminating ID's (extensions or trunks), the date and time, duration, the digits dialed and any authorization codes.

Current Call Information

The Current Call Information graphical display lists the information of the most recent call. It includes such items as the start date and time, the originating and terminating ID, the call duration and the digits dialed. If you enabled the **Additional Info** command from the Employee Database Options drop-down menu, then this window will also include the information of the employee sending or receiving this call.

User Defined Speedometer

The User Defined Speedometer is a speedometer-like analogue gauge (call meter) which displays user definable calling activity as a percentage value. This call meter represents the percentage of calls which meet the criteria specified for a sample size. It also contains an alarm function which will activate a predefined alarm when an alarm threshold is exceeded.

Percent Calls by Duration Graph

The Percent Calls by Duration Graph displays a percentage of the total calls separated into distinct time periods. Each item in the graph represents the percentage of total calls which have a duration within each time period and lists the total for each period as a percentage of the total calls. Use this graph to spot trends in call duration and gain an overview of your telephone system's usage. Select the intervals for this graph by selecting the total range from its control-menu.

Call Origin Graph

The Call Origin Graph displays the total percentage of incoming, outgoing, tandem and internal calls. The horizontal axis contains each type of call and the vertical axis lists their percentage values based on total calls.

Call Origin Pie Chart

The Call Origin Pie Chart displays the percentage of incoming, outgoing, tandem and internal call records. This represents a different way of displaying a specific call type as shown in the Call Origin Graph.

Ring Time Meter

The Ring Time Meter window contains two graphs which display ring time information (time taken for an extension to ring before it is answered or disconnected). If your release of Meridian 1 supports ring time output, then this dialog will display this information.

Sample Setup for Real Time Monitoring

The following sample setup provides information on setting up Call Tracking to connect to the Meridian 1 and collect CDR data in real time mode.

Sample scenario

A user requires a connection between Call Tracking and the Meridian 1. CDR data is output through the CDR port and is routed via a y-cable to a CDR buffer unit and to a modem (connected to Call Tracking). This y-cable allows the CDR data to be output in two identical data streams: one for storage in the buffer unit (optional); and the other for real time monitoring by Call Tracking.

The following details apply.

— The company's Meridian 1 is located in the switch room of the Head Office and is configured to output CDR information from its CDR port.

— A y-cable is connected to the CDR port with one connection to a CDR buffer unit (optional) and the second to a modem.

— The modem at the Meridian 1 is configured to communicate with another modem at the Head Office in the PC room. This second modem is attached to the PC (on COM1) on which Call Tracking is installed.

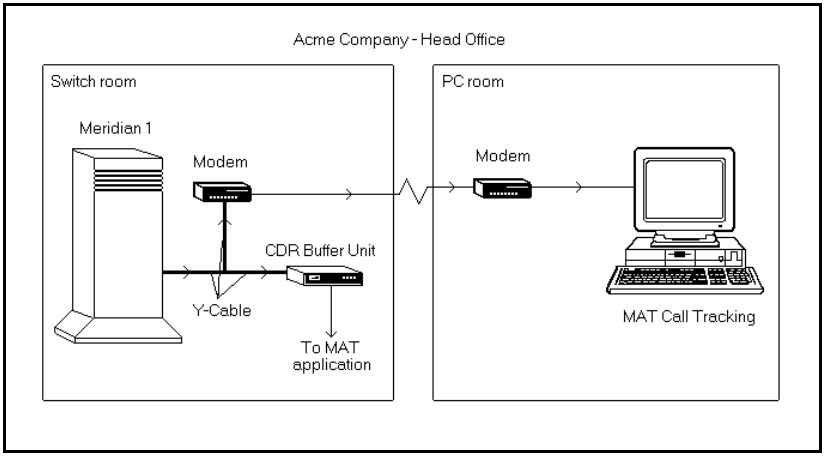
— Call Tracking requires a script file (**SL1.SCR**) to collect the CDR records from the Meridian 1 through these modems in real time. This script is provided with the MAT kit.

Since this scenario outlines the steps required to set up Call Tracking, it assumes that you have already entered the following information.

— Call Tracking was installed as part of the Meridian Administration Tools installation on a PC in the Head Office.

— A site and system have been created and configured for this connection to the Meridian 1. The site is entitled: **Acme Company** and the system is entitled: **Head Office**. Its communications parameters for the CDR port have already been entered in the Communications tab of the MAT System Configuration function.

Figure 2
Schematic for sample scenario



Steps to connecting Call Tracking to Meridian 1

The following is a summary of the tasks required to start Call Tracking and connect to the Meridian 1 in real time mode:

— Run MAT and open a site and system

— Run Call Tracking

— Verify communications parameters and select script file

— Ensure hardware connections

— Collect CDR data from Meridian 1 in real time mode

Note: The instructions in this example assume that you have already installed the MAT software and completed the MAT configuration tasks described in the *MAT Common Services User Guide*. It also assumes that you have created a site and system on which you can assign Call Tracking.

Step 1: Run MAT & open site/system

Before you run Call Tracking, you must first run the MAT Navigator and open this site and system. You can then select Call Tracking from the Telemanagement menu in this system's window.

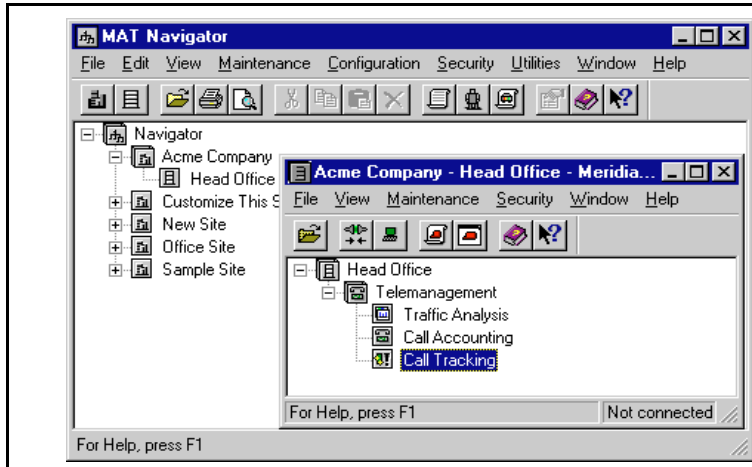
Perform the following steps to open the site and system.

1 Run the MAT Navigator by clicking the **MAT Navigator** icon. At the Login dialog which appears, enter your user ID and password and click **OK** to continue.

2 To open the site and system for this example (e.g., site name is Acme Company and system name is Head Office), click **Acme Company** in the MAT Navigator window and double-click **Head Office** from this site.

This will access the system window for Head Office.

Figure 3
MAT Navigator



Step 2: Run Call Tracking

Perform the following steps to run Call Tracking.

1. From the system window, click the **Telemanagement** menu item. This will display the MAT applications which have been assigned to the system Head Office under **Telemanagement** (e.g., Call Accounting, Call Tracking and Traffic Analysis).
2. To run Call Tracking, double-click **Call Tracking** from this menu. The Call Tracking main window will appear. You can then use its commands to connect to the Meridian 1 and start the call monitoring session.

Step 3: Verify communications parameters & select script file

To verify the communications parameters for Call Tracking in this system, click **Edit Database** from the Real Time drop-down menu. The Communications Database dialog will appear displaying the communications and connection criteria for this system's Meridian 1. These are displayed for informational purposes.

Review the data in these fields to ensure that they correspond to your system's connection parameters. If any of these values are incorrect, then return to the System Configuration function in the MAT Navigator, access the Communications tab and edit them. When you access the Call Tracking Communications Database again, its values will be changed accordingly.

The next step is to select the script file which will be used for this communications session. Select **SL1.SCR** from the **Script Setup Name** drop-down list box. Click **OK** to save this selection and exit to the main window.

Step 4: Ensure hardware connections

Since this system requires a modem connection between the PC and the Meridian 1, you must ensure that the equipment used in this connection is turned on and running properly.

Check the following equipment:

— Y-Cable attached to Meridian 1 (switch room)

— Modem attached to y-cable (switch room)

— Modem attached to PC (PC room)

Refer to the documentation provided with this equipment to ensure that they are properly connected and configured.

Step 5: Collect CDR data from Meridian 1 in real time mode

To start collecting and monitoring the call records using the defined communications criteria, click **Connect** from the Real Time drop-down menu. There will be a brief delay as the communications process is initiated. Call Tracking will then monitor calls as they are recorded by the Meridian 1.

If you wish to pause the monitoring process at any time, click **Pause** from the File drop-down menu. Click **Pause** again to resume the monitoring session. To stop the real time monitoring of the calls, click **Disconnect** from the Real Time drop-down menu. Click **Connect** again to resume the session.

This completes the steps required to establish a real time connection for Call Tracking. Use the Call Tracking Filter Definition and Graphical Display commands to control the display of the call records as they are collected from the Meridian 1. As well, you can use the Alarm Setup function to define any required alarms for this session.

Meridian Administration Tools

Call Tracking

User Guide

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