
Meridian Administration Tools

Common Services

User Guide

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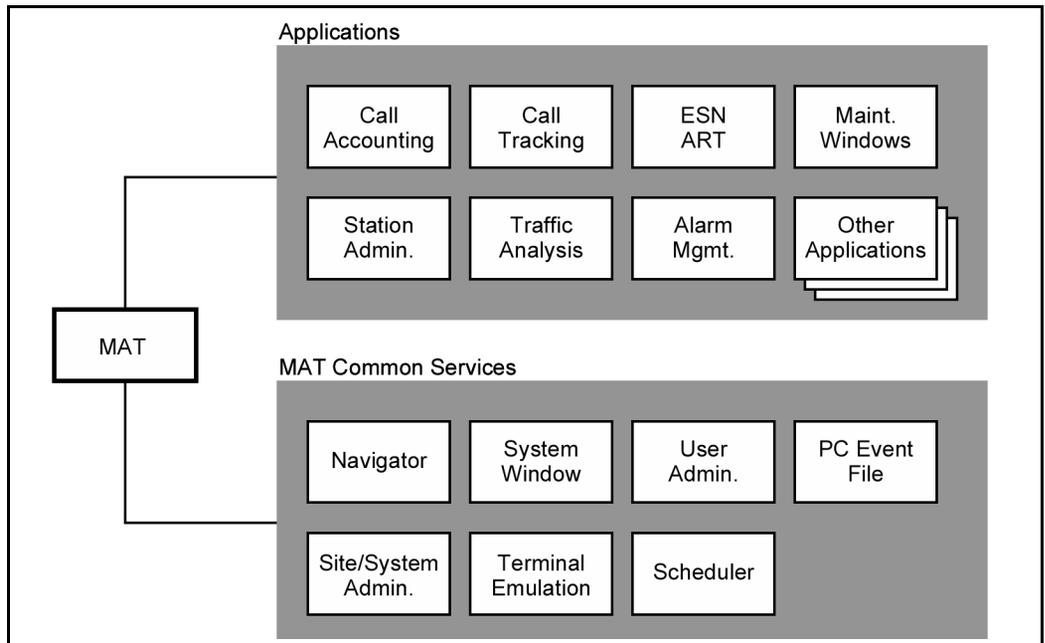
Introduction

This user guide describes how to use the Meridian Administration Tools Common Services.

Note: Even if you have used earlier versions of MAT, you should read this User Guide, as MAT 6 has undergone significant improvement.

Figure 1 shows MAT components.

Figure 1
MAT Components



MAT Common Services provide these applications:

- using the Navigator and System windows
- defining the MAT environment, including Meridian 1 sites and systems
- using the MAT scheduler
- using the system terminal
- using MAT communications services
- communicating between the MAT user and MAT applications with windows displaying system information

MAT users

MAT is designed for telecommunications equipment administrators with a working knowledge of Meridian 1 switches and general telecommunications concepts.

This guide assumes you are familiar with PC systems and the Microsoft Windows 95, Windows 98, and NT 4.0 environment. You should be familiar with the Windows environment before attempting to use MAT.

There are two levels of access to MAT:

- *Administrator* access allows unrestricted use of MAT and its functions. The system administrator configures the MAT system, sets up the connections to the Meridian 1, and defines user access to MAT application modules.
- *User* access allows read only, read/write, or no access to sites, systems, or applications, as defined by the MAT Administrator. The Administrator can create a broad range of access levels for various users.

Conventions used in this guide

This guide uses the following typographical conventions:

- User input—**This font** alerts you to information that you enter on your keyboard; or, using your mouse, this font indicates buttons to click or menu selections to make.
- Multi-lettered keys—Angle brackets denote a single multi-lettered key on your keyboard. For example, **<Esc>** denotes the Escape key, labeled *Esc* on PC keyboards.
- Key sequences—Keys that you press at the same time include at least one multi-lettered key and are not separated by spaces in text. For example, **<Alt>V** instructs you to press the **<Alt>** and **V** keys at the same time.
- Hot keys—You can access menu commands by using the mouse or your keyboard. Menu items show one letter as underlined. To choose a menu item from the keyboard, hold down the **<Alt>** key and press the underlined key. For example, press **<Alt>F** to open the **File** menu.
- Windows—Refers to Microsoft Windows 95, Windows 98, and Windows NT Workstation V4.0.

Configuring Sites, Systems, and Users

This chapter provides instructions for changing the default login password and defining your own MAT sites, systems, and users. Only MAT administrators have authorization to perform these tasks.

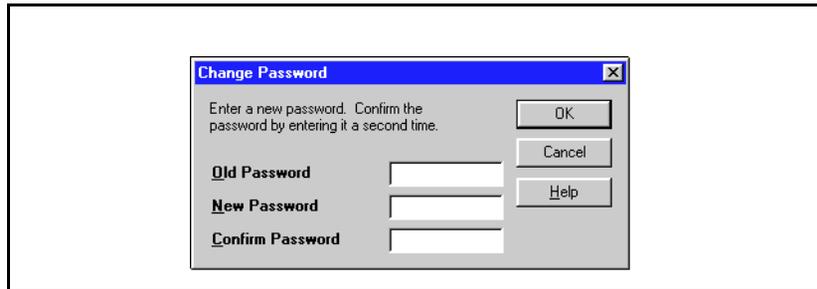
Changing the default login password

The default login password (**Admin**) should be changed immediately after MAT is installed to ensure security. Follow these steps if you have not already changed the password.

- 1 If MAT is not already running, follow these steps to start MAT and login using the default login password:
 - Choose **MAT** from the Programs list in the **Start** menu.
The MAT login dialog box appears.
 - Enter the default system administrator user ID and password:
User ID: **Admin**
Password: **Admin**
Note: For security purposes, the password does not appear as you type it in the Password field.
 - Click **OK**.
After MAT accepts your ID and password, the MAT Navigator window opens.

- 2 In the Navigator window, choose **Change Password** from the **Security** menu to open the Change Password dialog box.

Figure 2
Change Password dialog



- 3 Enter the old password in the Old Password field.
- 4 Type a new password in the New Password field.
- 5 Retype the new password in the Confirm Password field.
- 6 Click **OK**.
- 7 A message box informs you that the password was successfully changed. Click **OK**.

MAT will require the new password the next time you log on.

Site and system administration

The system administrator defines the sites and systems that appear in the Navigator window. Sites and systems must be defined before users can connect to a system and perform maintenance tasks. A site typically represents a physical location containing one or more systems. Systems are defined as Meridian 1 or Other (non-Meridian 1). Other provides access through VT220 Terminal Emulation such as Meridian Mail. Additional system types such as Meridian Passport and MSL-100 are examples of additional systems that can be added (refer to the appropriate user guides for more information). The Navigator **Configuration** menu allows the system administrator to add, change, and delete sites and systems.

Note: For more information about the Navigator and System windows, see “MAT Navigator and System Window” on page 41.

Adding a site

You can add any number of sites to the Navigator window.

- 1 In the Navigator window, choose **Add Site** from the **Configuration** menu. The Site Properties window appears (Figure 3).

Figure 3
New Site Properties sheet

- 2 Fill in the Site Name and Short Name fields (these are required fields). The **Site Name** appears in the Navigator tree. The Short Name is an abbreviated site name that displays in the Alarm Banner.
- 3 In the Site Location box, fill in the site address information.
- 4 In the Contact Information box, fill in the contact name and related information. Click **Apply**.
- 5 To add a new system to this site:
 - Click **Add System**.
 - Follow the instructions for “Adding a system” on page 22.

- 6 When you have finished entering Site information, click one of the following buttons to add the site to the Navigator tree:
 - **OK** adds the site and closes the property sheet
 - **Apply** adds the site and leaves the property sheet open allowing you to add another system to this site (you may repeat step 5 to add another system)
- Cancel** closes the dialog box without adding the site.

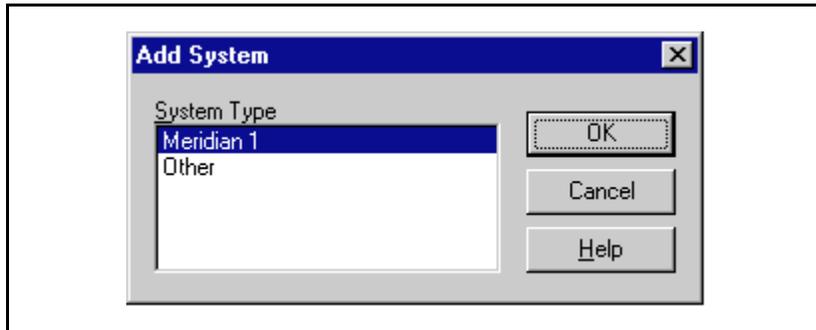
Adding a system

You can add as many systems (including non-Meridian 1 systems) to a site as your license permits. You must have administrator privileges to add a system.

- 1 In the Navigator window, select the desired site.

Note: If you are adding a new system from within the New Site Properties window, skip to step 3 in this procedure.
- 2 Choose **Add System** from the **Configuration** menu or the right mouse button pop-up menu.
- 3 In the Add System dialog box, select the type of system you want to add. Then click **OK**.

Figure 4
Add System dialog box



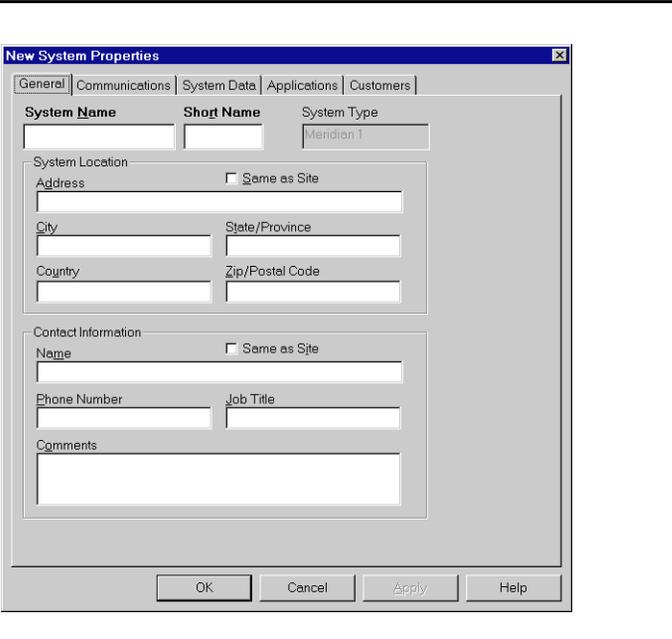
Note: You may need to install additional software to enable other system types not listed here. Follow the installation instructions included with your order.

- Click the **System Properties—General tab** (Figure 5) enter the System Name and **Short Name** (required fields) and other information as needed. Click **Apply**.

You can make system location and contact information the same as site information by clicking the Same as Site checkbox.

Note: Bolded fields indicate required information. To change a value, edit the field. Some fields may have a list of predefined choices. An arrow within a field indicates a drop-down list of choices. Press the arrow to select from the list. For more detailed information, refer to the online help.

Figure 5
System Properties—General tab



The screenshot shows a dialog box titled "New System Properties" with a tabbed interface. The "General" tab is selected. The dialog contains the following fields and controls:

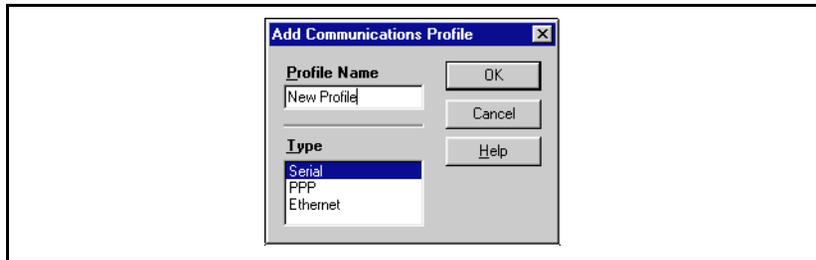
- System Name** (required field): A text input field.
- Short Name** (required field): A text input field.
- System Type**: A dropdown menu with "Meridian 1" selected.
- System Location** section:
 - Same as Site
 - Address**: A text input field.
 - City**: A text input field.
 - State/Province**: A dropdown menu.
 - Country**: A dropdown menu.
 - Zip/Postal Code**: A text input field.
- Contact Information** section:
 - Same as Site
 - Name**: A text input field.
 - Phone Number**: A text input field.
 - Job Title**: A text input field.
 - Comments**: A large text area.

At the bottom of the dialog are four buttons: "OK", "Cancel", "Apply", and "Help".

- 5 To add a new communications profile, the **System Properties—Communications** tab. This tab defines the types of communications profiles that may be applied to system applications (one profile may be used for multiple applications).

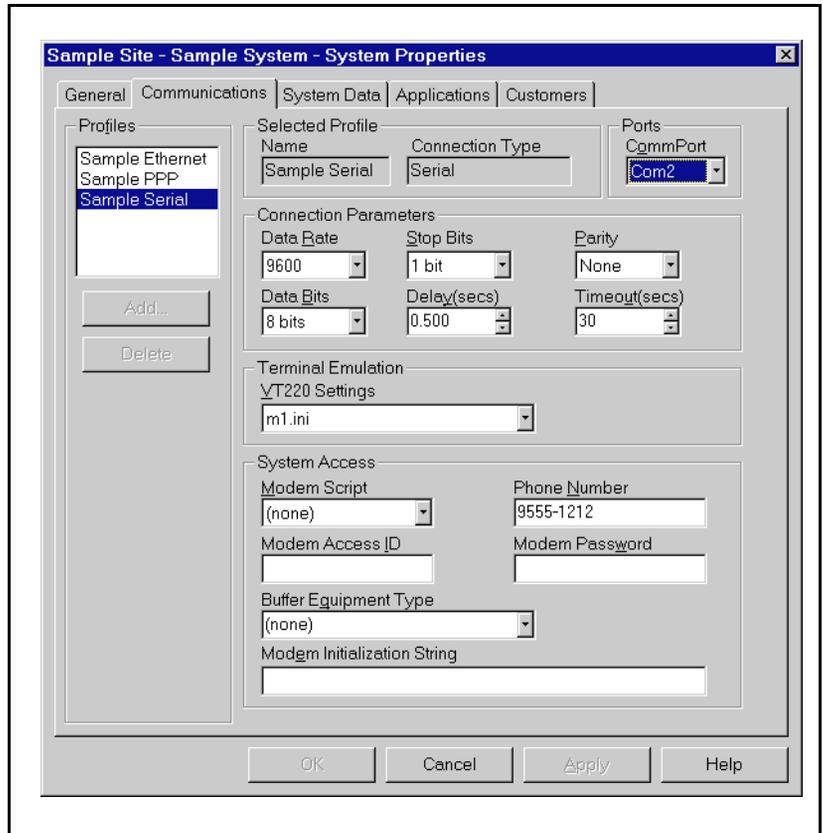
Click **Add**. The Add Communications Profile dialog box appears. See Figure 6.

Figure 6
Add Communications Profile dialog box



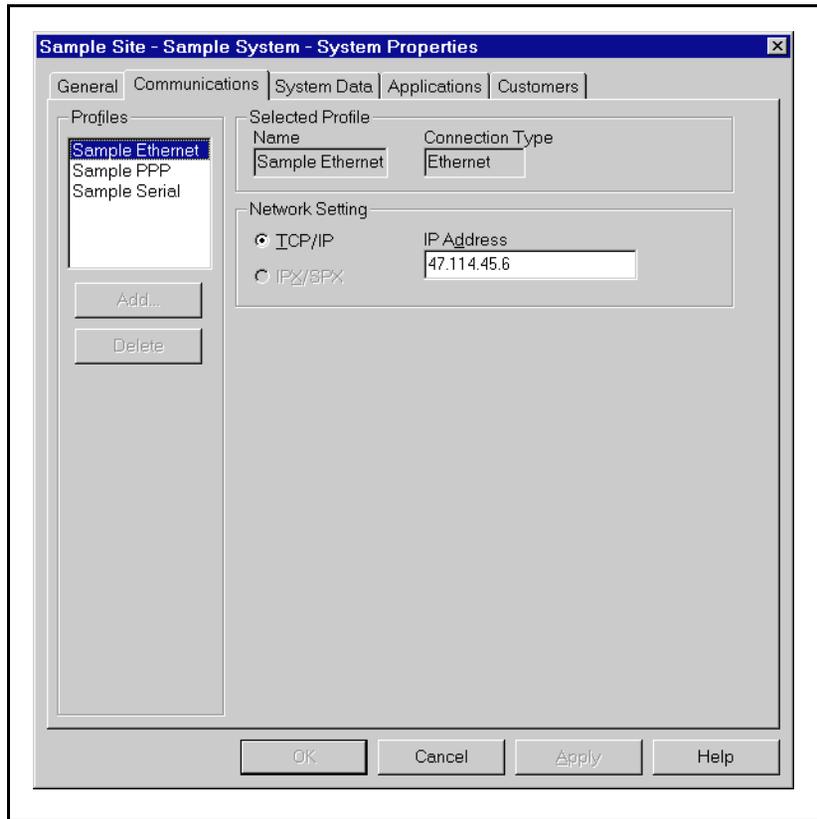
Select a communications type from the Type box and enter a Profile Name, then click **OK** to go back to the Communications tab. See Figure 7.

Figure 7
System Properties—Communications tab



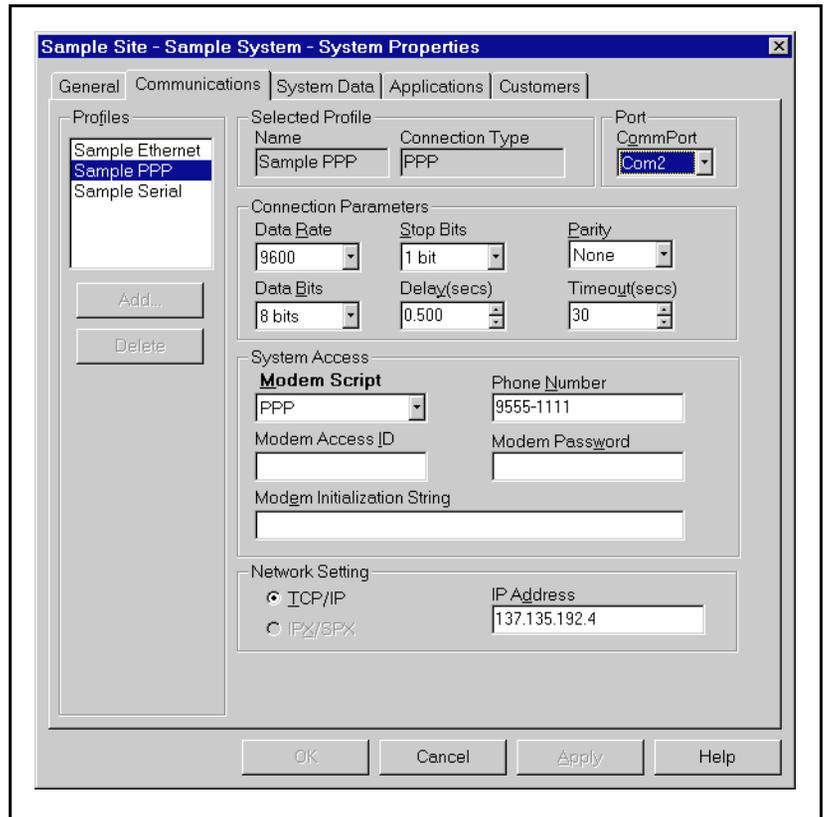
- 6 Fill in the communications information for the new profile:
For Ethernet: Select the appropriate network protocol. Enter the IP address that you configured on the Meridian 1. Click **Apply**.

Figure 8
System Properties—Communications tab—Ethernet Profile



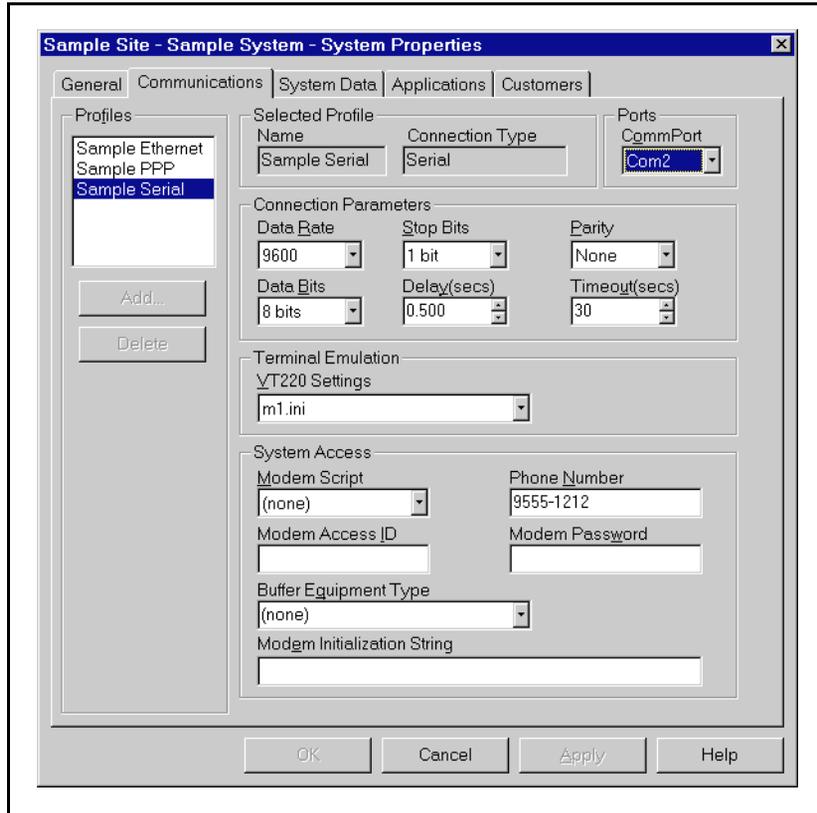
For PPP: Enter all modem parameters and dialup information. Select PPP in the Modem Script text box. Set the IP address to the local IP address, as configured on the Meridian 1. Click **Apply**.

Figure 9
System Properties—Communications tab—PPP Profile



For Serial: Enter all modem parameters and dialup information. Select the appropriate value in the Modem Script text box. This will usually be “None” unless a specific value is defined for your system. Click **Apply**.

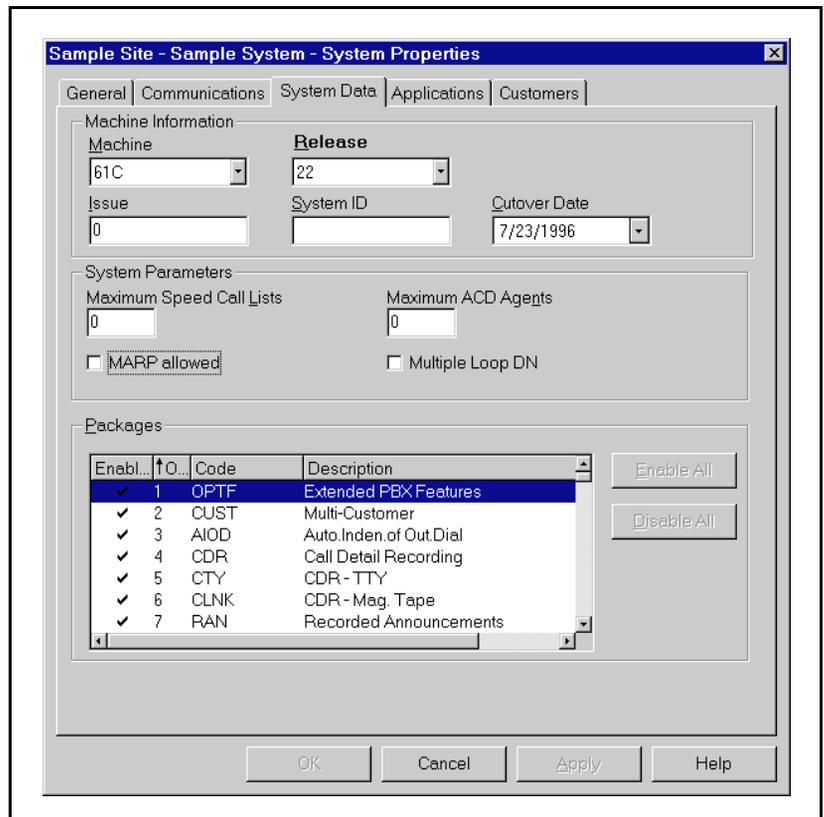
Figure 10
System Properties—Communications tab—Serial Profile



- Click the **System Properties—System Data** tab (Figure 11). Enter the machine/system type and release version for the system and enable or disable M1 packages. For example, if your machine type is the Option 61C, enter **61C** in the Machine field and enter **1** in the Release field.

Note: You can copy this data directly from an installed switch by scheduling an upload with the **File** menu **Update System Data** command in the System window. Update System Data uses the communication profile for Station Administration. However, you should configure the Release number here first to allow available applications to show up properly in the Applications Tab.

Figure 11
System Properties—System Data tab



- 8 Click the **System Properties— Applications** tab (Figure 12).

This tab defines the MAT applications that will appear in the System window and the communications profile to be used with each application. *You must enable an application for it to be available in the System window.*

To enable an application:

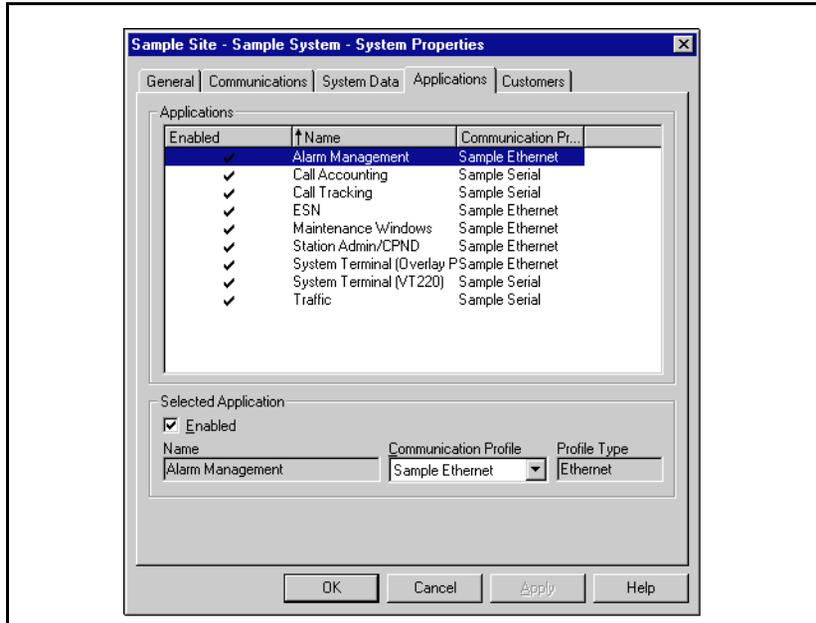
- Select the application in the Applications box.
- Select a Communications Profile from the drop-down list in the Selected Application box.

A checkmark appears next to the application and the Enabled box is also checked.

To disable an application:

- Select the application in the Applications box.
- In the Selected Application box, click the **Enabled** checkbox to remove the checkmark.

Figure 12
System Properties—Applications tab

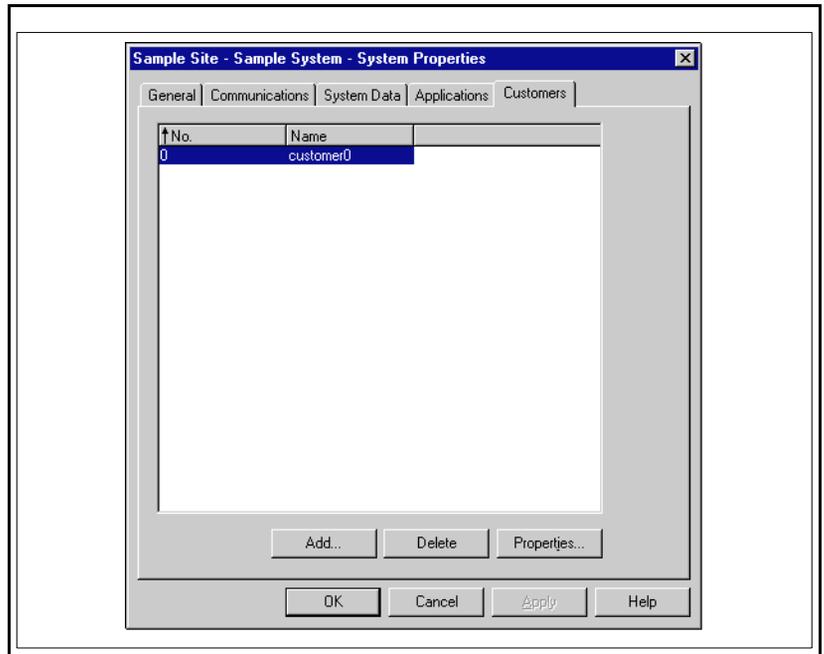


9 Click the **System Properties—Customers** tab (Figure 13).

This tab lists the customers currently defined for this Meridian 1 system. You may add new customers, delete customers, or review the properties of a selected customer. When you add a new customer, you configure the Meridian 1 features and numbering plans that are available to the customer. This information it is not automatically updated on the Meridian 1 and must be updated by using LD15 customer data block.

Note: Customer information is required for System Administration/CPND and ESN applications.

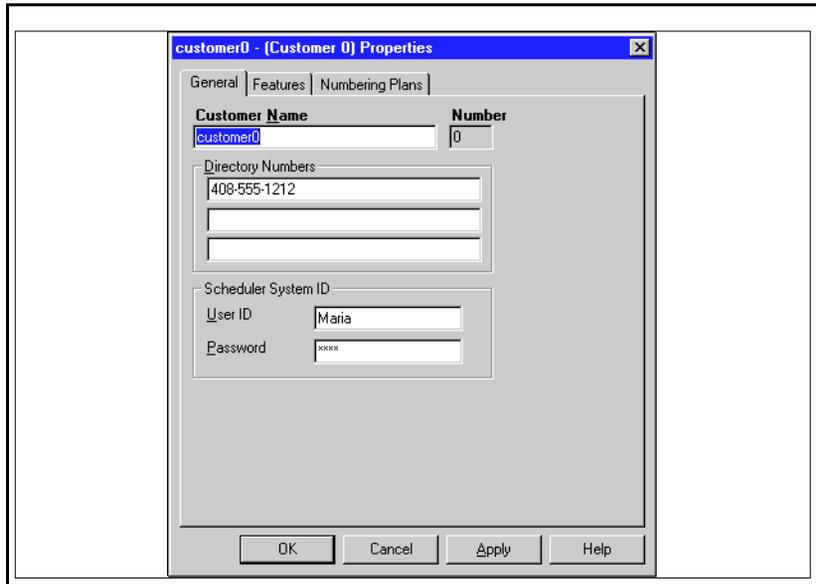
Figure 13
System Properties—Customers tab



- 10 To add a customer:
- Click **Add** in the System Properties—Customers tab.
 - Select a Customer number. Click **OK**.
 - Select the **General** tab, in the Customer Property sheet (Figure 14) and fill in the customer information.

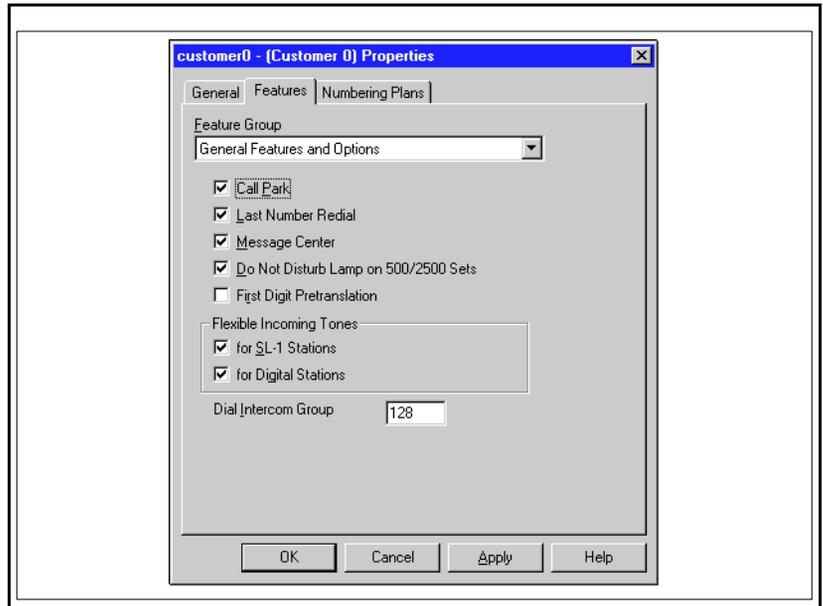
Note: Enter User information in the Scheduler System ID text box if you are using applications with scheduled activities, such as Station Administration/CPND, ESN, Traffic, and Call Accounting.

Figure 14
Customer property sheet, General tab



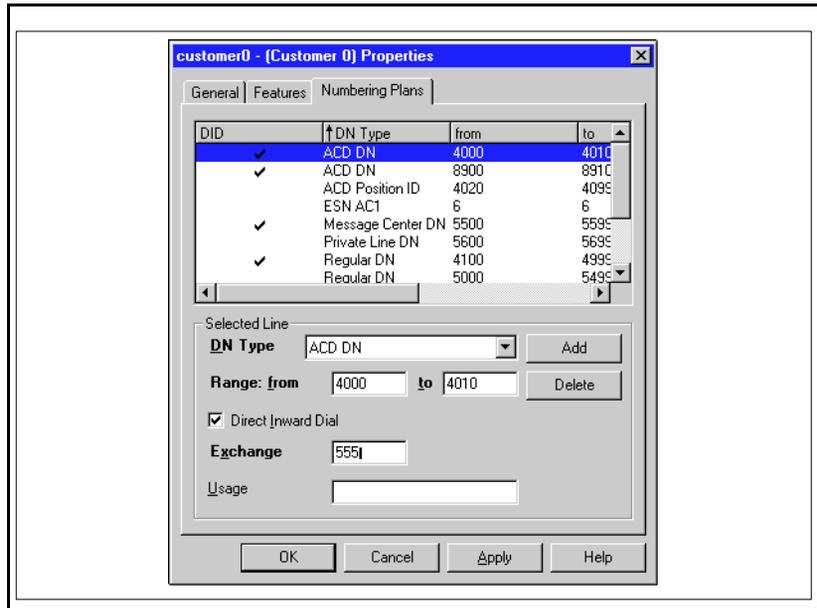
- Select the **Features** tab (Figure 15), and fill in the customer information.

Figure 15
Customer property sheet, Features tab



- Select the **Numbering Plans** tab (Figure 16), and fill in the customer information.

Figure 16
Customer property sheet, Numbering Plans tab



- When you have finished entering customer information, click one of the following buttons to save the information:
 - OK** adds the customer and return to the System properties sheet.
 - Apply** adds the customer and leaves the Customer properties open so that you may add other information for this customer.

Cancel closes the dialog box without adding the customer.

- 11 To delete a customer, click **Delete** in the System Properties—Customers tab. A delete confirmation box opens. Click **OK**.
- 12 To modify customer information, click **Properties** in the System Properties—Customers tab. The Customer property sheet opens. Modify information in the appropriate tabs and click **OK**.

- 13** In the System properties sheet, click one of the following buttons:
- **Apply** adds the system and leaves the dialog box open.
 - **OK** adds the system and closes the dialog box.
 - **Cancel** closes the dialog box without adding the system.
 - **Help** provides online help.

The new system is added to the tree under the selected site.

Changing site information

You can change any information about a site, including the site name, address, and contact. You must have administrator privileges to change site information.

- 1** In the Navigator window, select the desired site.
- 2** Choose **Properties** from the **File** menu or the right mouse button pop-up menu. The Site Properties dialog box opens to the General tab.
- 3** Bolded fields indicate required information. To change a value, edit the field. Consult the online help for details on any field.
- 4** To add a new system to this site, click **Add System**, and fill in information for the new system. See “Adding a system” on page 22.
- 5** Click one of the following buttons:
 - **Apply** saves the information and leaves the dialog box open.
 - **OK** saves the information and closes the dialog box.
 - **Cancel** closes the dialog box without saving.
 - **Help** provides online help.

Changing system information

You can change any information about a system or its communications connection. You must have Administrator privileges to change any system information.

- 1 In the Navigator window, select the desired system.
- 2 Choose **Properties** from the **File** menu or the right mouse button pop-up menu.
 The System Properties window opens.
- 3 Select the tab containing the information you wish to change.

 Bolded fields indicate required information. To change a value, edit the field or select a different item from a field popup menu. An arrow within a field indicates a drop-down list of choices. Press the arrow to select from the list. Consult the online help for details on any field.
- 4 Click one of the following buttons:
 - **Apply** saves the information and leaves the dialog box open.
 - **OK** saves the information and closes the dialog box.
 - **Cancel** closes the dialog box without saving.
 - **Help** provides online help.

Deleting a site or system

You must have administrator privileges to delete a site or system from the Navigator window. A record of the deletion is stored in the PC event file.

WARNING: Deleting a site also deletes all of its systems.

- 1 In the Navigator window, select the site or system.
 To delete all sites and systems, select the Sites icon at the top of the tree.
- 2 Choose **Delete** from the **Edit** menu.
- 3 Click **OK** to confirm.

Changing your password

You can change your password at any time. If your password has expired, MAT prompts you to enter a new password when you attempt to log on. Turn to “Changing the default login password” on page 19.

Configuring MAT users

MAT allows you to create User Templates to speed the process of adding users. A template is a form that you fill in to define most aspects of a certain kind of user, such as their level of access to sites and systems and automatic connection to particular systems. You can create as many user templates as you need. You will assign a template to individual users when you add users to the MAT database.

Creating a user template

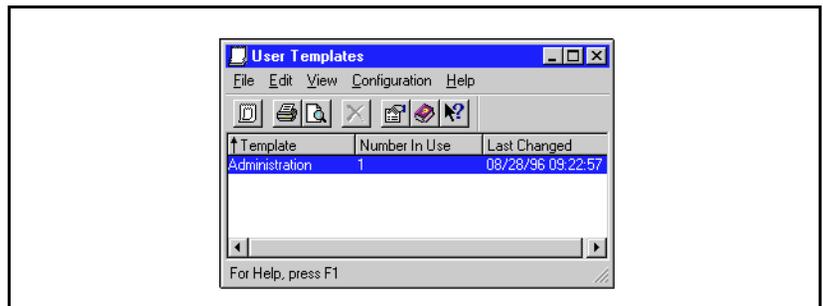
- 1 In the Navigator window, choose **MAT Users** from the **Security** menu to display the MAT Users window (Figure 17).

Figure 17
MAT Users window



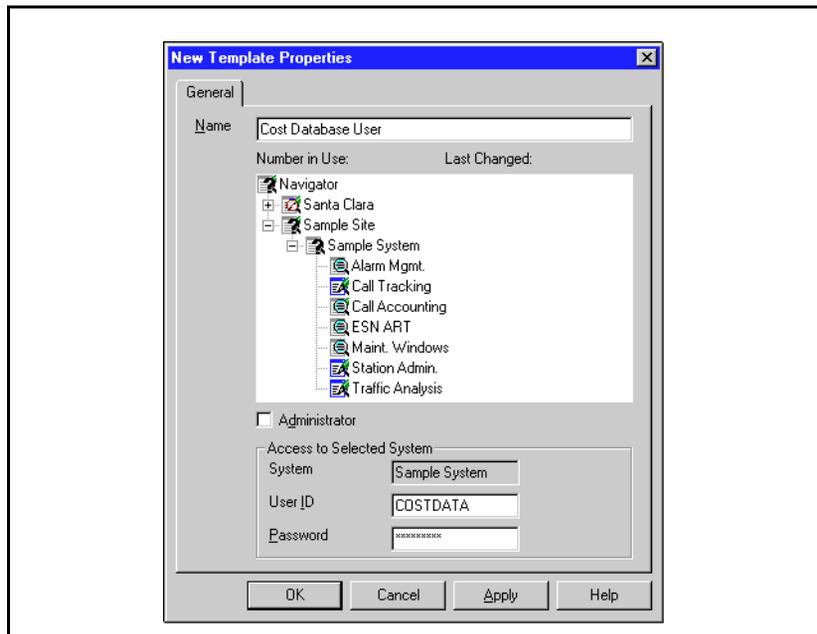
- 2 Choose **Templates** from the **Configuration** menu. The User Templates window appears (Figure 18).

Figure 18
User Templates window



- 3 Choose **Add Template** from the **Configuration** menu. The New Template property sheet appears (Figure 19).

Figure 19
New Template property sheet



- 4 Enter a name for this class of user.

For each site, system, and application in the tree, use the right mouse button popup menu to assign user privileges (Read-write, Read-only, or No Access). Select the Administrator box, if appropriate. The site and system icons change to reflect the access level.

Note: Access privileges defined for sites or systems at higher levels in the tree structure are applied to all subordinate items.
- 5 Enter values in the User ID and Password text boxes to allow this class of user to connect to this system without having to enter a User ID and Password each time you want to connect.
- 6 Click **OK**. Close the User Template window.

Adding a user

- 1 In the MAT Users window, choose **Add User** from the **Configuration** menu.

The New User property sheet appears (Figure 20).

Figure 20
New User property sheet

The screenshot shows a dialog box titled "New User Properties" with a close button (X) in the top right corner. The "General" tab is selected. The form contains the following fields and controls:

- User ID:** Text box containing "CDB1". To its right is a "Change Password" button.
- Name:** Text box containing "LAURA JONES".
- Phone Number:** Text box containing "555-1212".
- Job Title:** Text box containing "Accountant".
- Comment:** Text area with up and down arrow buttons.
- Access Template:** Drop-down menu showing "Cost Database User".
- Status:** Drop-down menu showing "OK".
- Current Status:** Text box containing "OK".
- Last Change:** Label with a blank space for text.
- Last Login:** Label with a blank space for text.

At the bottom of the dialog are four buttons: "OK", "Cancel", "Apply", and "Help".

- 2 Enter a User ID, and from the Access Template drop-down list, select the template that you will use as the basis for this user definition.
- 3 Fill in other data as required. The window prompts you to enter a password and confirm it after clicking **OK** or **Apply**.
- 4 Click the **Change Password** button to change the MAT login password for this user only.
- 5 Click **OK**. The new user appears in the MAT User window. Close the MAT User window.

Deleting a user template

A user template can only be deleted when all associated users of that template are either deleted or re-assigned to another template.

Restricting user access permission levels

A user can be restricted from having access to sites, systems and applications. However, when a user is defined as being restricted from any access to all sites, systems and applications, i.e., the Navigator, the user will, in fact, be able to see all the sites and systems in the Navigator tree and have read-only access to their properties but opening a system will only result in a System Window with no applications visible.

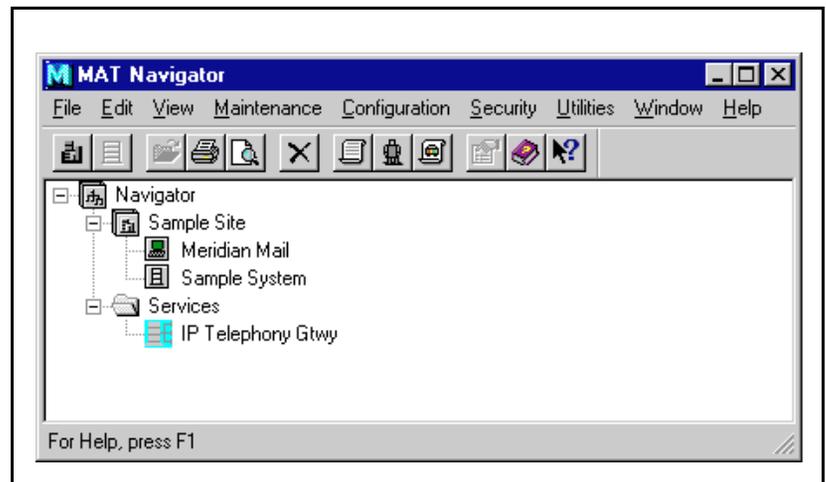
Sites and systems displayed in user templates

When adding or modifying a user template, only systems that have applications enabled are presented. If no applications are enabled for the systems within a given site, the site and system(s) will not appear in the Template Properties.

MAT Navigator and System Window

The Navigator is MAT's main window—it allows access to nearly all MAT systems and services. Navigator shows the names and types of all systems available to the current user, and allows you to group the systems into sites for more convenient access.

Figure 21
Navigator window

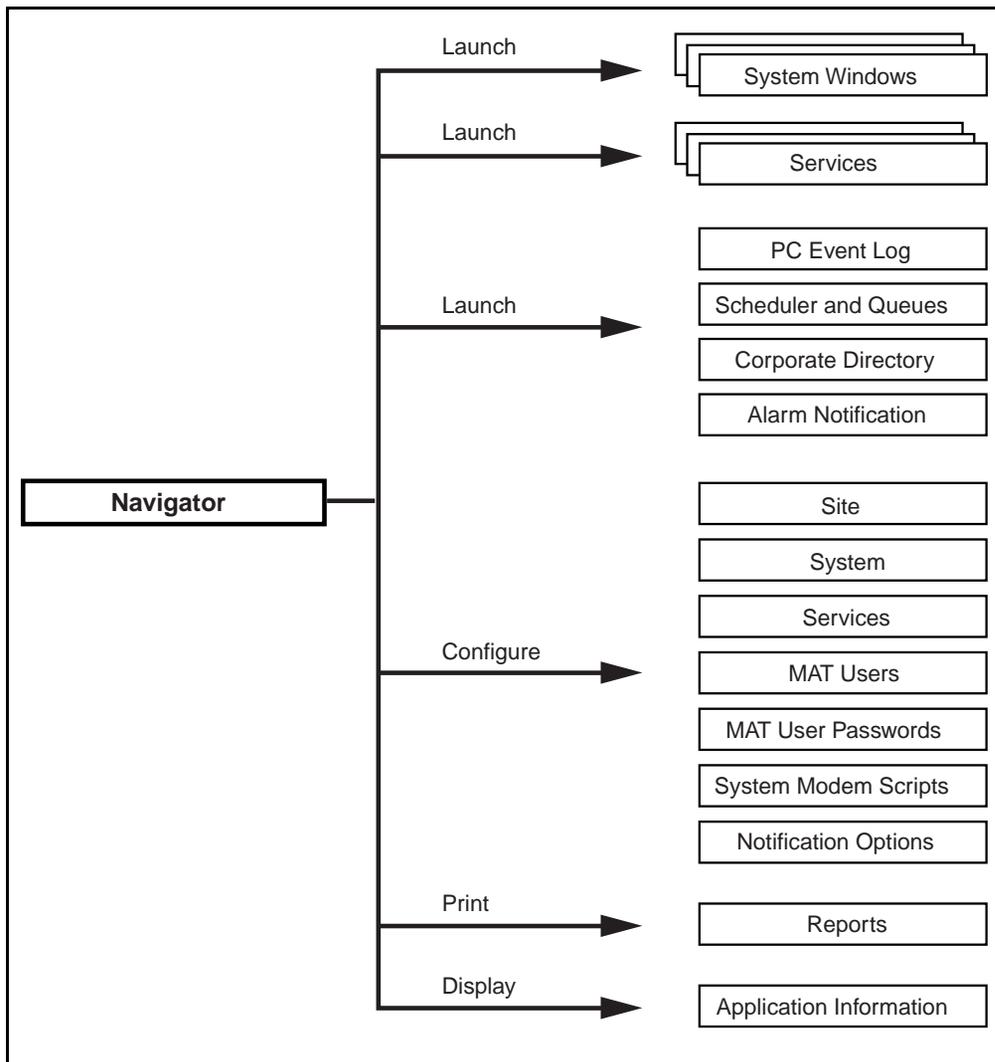


Navigator provides the following functions:

- Displays a “tree” structure for Sites and Systems on the network managed by the current user. Access systems at a site by opening that site.
- Allows you to launch the System Window. See “Working with the System Window” on page 83.
- Allows you to configure and administer MAT data: Sites and Systems, Users, and so on
- Allows you to configure and administer MAT Services, such as Integrated Telephony Gateway
- Allows you to launch utility applications such as the Scheduler, Corporate Directory, and Alarm Notification
- Allows you to display the licensing and release information for all installed MAT applications
- Allows you to print reports

Figure 22 illustrates these functions.

Figure 22
Navigator functions



Using Navigator

Navigator allows you to access any Meridian 1 system or other systems which your user ID privileges allows you to. In Navigator, you open the site of interest to choose a system on which to work. Double-click a system to open its System window and launch any of the MAT 6 applications to work on that system.

Open a site by double-clicking its name or clicking the “+” symbol next to the site. The “+” changes to a “-” when the site opens. An open site displays all systems at that site. Close a site by clicking the “-” symbol.

For Meridian 1 systems, the components that make up the system appear in the system window. MAT 6 displays a terminal emulation window for systems defined as “Other.”

Logging in and launching the Navigator

Select **MAT** in the Windows **Programs** list. The login dialog appears (see Figure 23). Enter your User ID and password. The Navigator window appears as shown in Figure 24.

Figure 23
Login dialog box

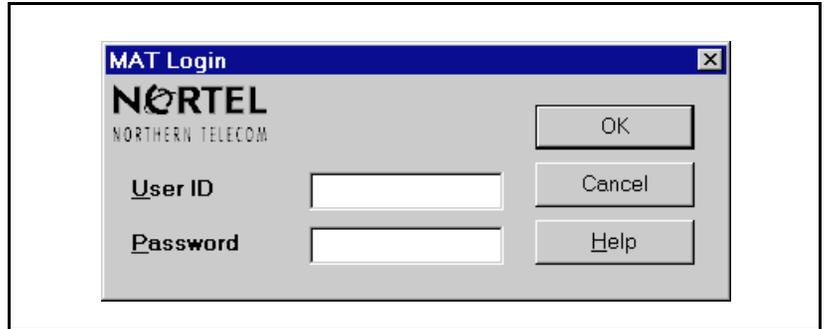
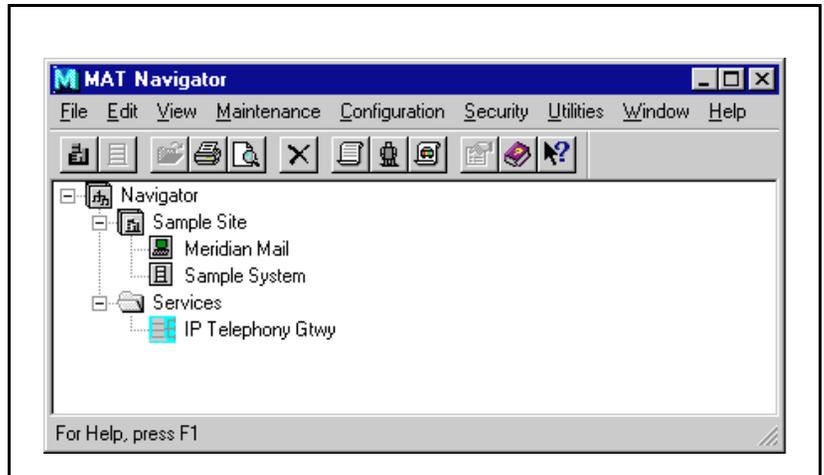


Figure 24
Navigator window



Navigator menus

Detailed descriptions about the functions of each command in the Navigator menus are available by clicking the “Context-sensitive Help” button in the toolbar. Navigator menus consist of:

- File
- Edit
- View
- Maintenance
- Configuration
- Security
- Utilities
- Window
- Help

Services Folder

The services folder contains applications and services available for sites and systems defined and accessible by the MAT PC.

MAT IP Telephony Gateway Applications

The following applications provide configuration and maintenance for the ITG card.

- ITG M1 IP Trunks

This application configures and maintains the 8-port ITG (trunk) card that resides in the IPE shelf of a Meridian (M1) system. The card has a 10/100 baseT connection to carry pocket-sized voice and fax calls over IP data networks, and can serve as a toll bypass to the traditional PSTN. For more information refer to *Meridian Internet Telephony Gateway (ITG) Trunk 1.0/Basic Per-Trunk Signaling (553-3001-116)*.

- ITG ISDN IP Trunks

This application configures and maintains the 24-port ITG (trunk) card that resides in the IPE shelf of the Meridian 1 (M1) or Multi-Media Carrier Switch (MMCS). The card appears to the switch as a 24-port trunk card with ISDN Signaling Link (ISL) and D-channel signaling. The card has a 10/100 baseT connection to carry packetized voice and fax calls over IP data networks. For more information refer to *Meridian Internet Telephony Gateway (ITG) Trunk 2.0/ISDN Signaling Link (ISL)* (553-3001-202).

- ITG IP Telecommuter

This application provides the configuration and maintenance of the ITG line card for IP Telecommuter. This application configures the IP Line gateway and the gatekeeper, but not the H.323 IP terminal or PC-based software client. For more information refer to *Meridian Internet Telephony Gateway (ITG) Line 1.0/IP Telecommuter* (553-3001-119).

- ITG IP Phones

This application provides the configuration and maintenance of the ITG gateway card for the Meridian Internet Telephone, also referred to as the i2004 set. The i2004 set is a true Internet telephone when connected to a Meridian 1 through an IPE-to-ITG gateway card. The configuration of i2004 is through the Station Admin application in MAT. For more information refer to *Meridian Internet Telephony Gateway (ITG) Line 2.0/i2004 Internet Telephone* (553-3001-204).

Toolbar

The Navigator toolbar includes several buttons that act as shortcuts to the commands available in the menus. The function of each button in the toolbar appears when you move the mouse over the button. See Figure 25.

Figure 25
Navigator Toolbar



Status Bar

A Status Bar is located at the bottom of the window. To display or hide the Status Bar, use the **Status Bar** command in the View menu.

The Status Bar describes actions of the menu commands as you use the mouse to navigate through menus. It also describes the actions of the Toolbar buttons as you press them. When you choose a menu command, the Status Bar describes the progress of the command while it executes. For example, the Status Bar shows **Printing text** when you choose **Print** from the File menu.

Using MAT Scheduler

Scheduler allows you to set up predefined tasks and schedule them to run at specific dates and times. Such tasks as system updates or data collection can be set up once for multiple execution.

A task is a specific activity that MAT 6 can perform, such as updating the system, generating a report, or collecting data. Note that only jobs can be scheduled; individual tasks cannot. A job may contain a single task or multiple tasks.

With job scheduling, you can request that one or more activities be performed once or on a recurring basis. When a scheduled job runs, it executes its component tasks in the sequence you specify. The Scheduler then sends these tasks to the Queue Manager at the specified time. If multiple tasks are in the same queue, the Queue Manager attempts to run them in queue sequence. You can access the Queue Manager to review and change the priority of task execution.

Accessing Scheduler

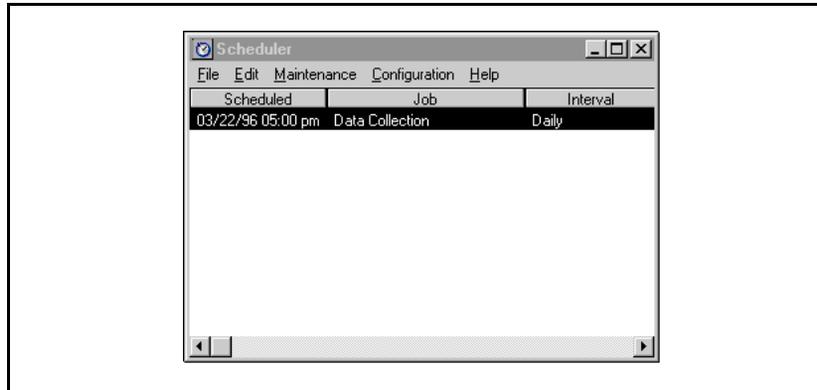
You can either directly access the Scheduler from a supported application, such as Station Administration, or you can access the Scheduler from the MAT Navigator and then create a job and its component tasks.

Access the Scheduler from a supported application by selecting the **Schedule** command where it appears. This is the more common method of running a scheduled job since most required tasks are run from a particular application (e.g., data collection in Call Accounting and Traffic Analysis).

Access the Scheduler directly from Navigator by clicking **Scheduler** from the Utilities drop-down menu. This may be necessary if no jobs have been previously scheduled in MAT and you wish to create or edit a scheduled job without running any supported applications.

Once you access the Scheduler, the following window will appear.

Figure 26
Scheduler window



How the Scheduler works

The Scheduler reads job data and builds a list of tasks and their schedule information in memory. Every minute, the Scheduler compares the current time with the scheduled time of each entry in the task list. When the times match, the tasks are executed sequentially, allowing one task to complete before the next task begins. If you close the Scheduler, the task list is lost—the task list is rebuilt the next time you run the Scheduler.

Jobs and tasks

The MAT Scheduler is used to execute activities (jobs) at scheduled dates and times. Each job consists of at least one task (or set of tasks) which can then be scheduled to run at a specific time. A task is a specific activity which the MAT system will execute as part of the job.

Only jobs can be scheduled; tasks cannot be scheduled separately. When the job runs, it executes its component tasks as they are listed in the Task List of the Job Properties dialog. In most cases, each job will only contain one task.

If a job contains multiple tasks, each task will be sent to the queue one after the other once the job starts. The Scheduler will send these tasks to the Queue Manager at the time of execution and run the Queue Manager accordingly.

If multiple tasks are waiting in a queue to run at the same time, the Queue Manager will attempt to execute each task sequentially as it appears in its queue.

Job Summary Display

As each job is configured and added to the Scheduler, it will be displayed in its main window. The main Scheduler window contains this list of jobs in this Job Summary Display grid.

You can use the cursor commands to resize and move each column in this grid as required. This Job Summary Display lists all of the configured jobs and their basic information. From this display grid, you can scan through each job and select it for editing.

The Job Summary Display grid lists the following information for each configured job:

- Scheduled
- Job
- Interval

Configuring and scheduling a job

Once you access the MAT Scheduler, you can begin to schedule its jobs and add tasks to it. Use the Scheduler editor commands to create and update jobs throughout your session.

The first step in setting up a job is to select a job and assign a single task or group of tasks to this job. You can select an existing job to edit or create a new job.

Once you have assigned the tasks to the job, you must specify the date and time at which the job will be run as well as any intervals for subsequent executions of the job.

If you are creating a new job from another MAT application, that is if you are scheduling an activity from that application, then the system will directly access the Job Properties dialog. From this dialog, you can enter the job's general information, its individual tasks and its scheduled date and time.

To create a new job directly from the Scheduler, click **Add Job** from the Configuration drop-down menu. Again, this will access the Job Properties dialog from which you can enter this job's information.

To edit an existing job, click once on the job record line in the Job Summary Display to highlight it and click **Properties** from the File drop-down menu (or simply double-click on the job record line). Again, this will access the Job Properties dialog from which you can edit this job's information.

Once you have accessed the Job Properties dialog, enter the job's information by selecting the following tabs:

- General
- Task
- Schedule

Once you have entered the job's details, tasks and scheduling information, click **OK** to save it and exit to the Scheduler main window.

If you accessed this function from the Scheduler main window, then closing the Job Configuration dialog will return you to the main window.

If you scheduled a job from a task command dialog (from another application), then this will return you to that application. The job will then be executed at its scheduled time.

Example job configuration

The following example highlights the main steps involved in configuring and scheduling a job which is invoked from another MAT application.

Scenario

A user wishes to schedule a data collection from MAT Call Accounting daily at 5:00 p.m. The initial data collection will be run on the current day which is 03/22/96.

Steps to scheduling a job

- 1 Open a system and access Call Accounting. From Call Accounting, click **Communications** and click **Schedule Data Collection** from its drop-down menu. Since you are creating a new task, you must either create a new job to which this task belongs or add the task to an existing job. Remember that an activity such as data collection is a task which is associated with a job. You cannot schedule a task; only a job.
- 2 When you click **Schedule Data Collection** from Call Accounting, the Add Task for Scheduling dialog will appear prompting you to either add this task to an existing job or create a job and add the task to the new job.

Note: For this example, you will create a new job. Therefore, click **Add New Job** from this dialog. This will access the Scheduler Job Properties dialog.

- 3 In the Job Properties General tab fields, enter the following:
Name: **Data Collection** (used for informational purposes)
Queue: **Data Collection** (used by the Queue Manager to create a queue by this name)
- 4 Click the **Task** tab to review the tasks which are added to this job. Notice that the Data Collection command is the only task in this list.
- 5 Click the **Schedule** tab to enter the scheduling criteria for this job. In the Schedule fields, enter the following:
Interval: **Daily**
Start at: Month: **03** Day: **22** Year: **96**
Hour: **5** Minute: **00** am/pm: **pm**
- 6 Click **OK** to save this configuration. Notice that the Job Summary Display grid will appear with this job added to it.

This completes the example job configuration. This job will then be run at the scheduled time. Ensure that the Scheduler is running at the scheduled time so it can run the job.

Device contention

The Queue Manager contains certain restrictions when managing multiple queues for a single device. This applies when multiple jobs are sent by the Scheduler to the Queue Manager for execution and therefore have multiple queues stored in the Queue Manager database. A job is a group of tasks which is sent to the Queue Manager as a queue. If these queues attempt to access the same device (e.g., COM port) at the same time, then only one queue will be able to use it successfully. All other queues will NOT be able to access that device and will therefore not run.

The following example helps demonstrate this contention.

Example for device contention

The following jobs have all been scheduled to run daily at 12:00pm. They will all invoke separate queues which will attempt to use COM 2 on the MAT PC.

- Call Accounting data collection
- Call Tracking real time access
- Traffic Analysis data collection

At 12:00pm, each of these jobs will be sent to its own queue in the Queue Manager which will then attempt to access COM 2. Since they will all attempt to access COM 2 at the same time, COM 2 appears to be available to each of them. Each queue will then run a task. However, COM 2 will ONLY be available to the first task which executes. Since the remaining tasks cannot access COM 2, they will not execute.

Late execution

This device contention issue also applies to queues which have Late Execution enabled. If the MAT system is shut down and starts up again, any jobs which have Late Execution enabled (and their scheduled times have elapsed) will attempt to run immediately. If these jobs attempt to access a single device at this time, then only the first task will be able to access it. All others will fail.

To prevent this contention problem from occurring for jobs with late execution, you should use caution when enabling this option. Ensure that only the required jobs have this option enabled or verify that they will not access the same device during a system shut down and start up.

Solution

To prevent this from occurring during normal system operation, use the following guidelines.

- If you need to schedule multiple jobs for a single device all at the same time, or if you cannot schedule the jobs so that you are sure that the device will be released in time, then schedule the jobs as multiple tasks sent to a single queue. The Queue Manager can then manage these tasks in the single queue and send them to the device as each task is completed. Each task in the queue will wait for the previous task to release the device before attempting to access it. This way, you will ensure that all of the tasks will be able to access the device and execute successfully.
- This is a recommended solution since it allows the Queue Manager to manage the tasks for a single device allowing each task to use the device as it becomes available.

If you need to schedule jobs at different times and they all require a single device, ensure that these jobs are scheduled to run at times far enough apart to allow the device to be released by a queue before the next job is scheduled to run. Also ensure that the Late Execution option is disabled for each job in case of a system shut down and start up.

Scheduler menus

Detailed descriptions about the functions of each command in the Scheduler menus are available by clicking the “Help” button in the Scheduler menu bar. Scheduler menus consist of:

- File
- Edit
- Maintenance
- Configuration
- Help

Queue Manager

The MAT Queue Manager is used to store and execute the scheduled jobs as defined in the MAT Scheduler. Queue Manager ensures that a sequence of tasks are performed in a specific order, allowing each task to run to completion in a designated order before executing the next (e.g., ensuring that a traffic data collection is run before a traffic data parse).

When a job is scheduled, the Scheduler sends all tasks associated with that job to the Queue Manager for assignment to a specific queue for handling.

The Queue Manager is also useful in situations where a non-shareable facility is required, such as a communications port. A communications port may serve a number of communications scripts which cannot all run simultaneously. The Queue Manager allows the system to manage multiple requests through a single queue model.

The Queue Manager contains a number of individual queues. Each queue is responsible for a job, although multiple jobs may share a single queue.

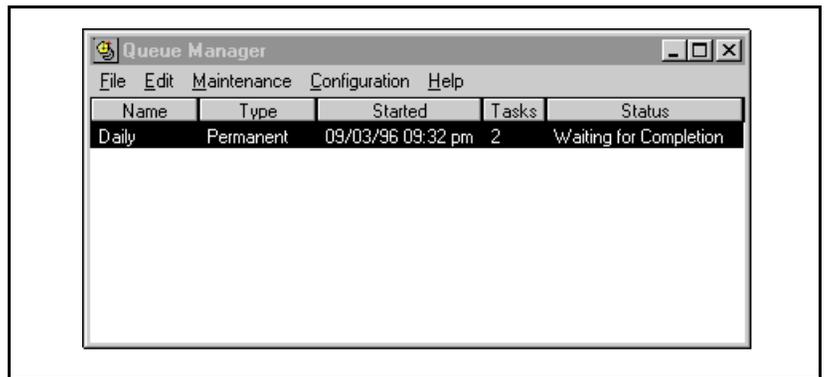
The Queue Manager is responsible for placing jobs and tasks into the correct queue for handling. Although there is only one Queue Manager, there may be a number of active queues. Each queue executes its own tasks sequentially, but all queues operate independently.

Accessing Queue Manager

To access the Queue Manager directly from the MAT Navigator, click **Queue** from the Utilities drop-down menu of the MAT Navigator window. The Queue Manager window will appear with all of the configured queues listed in its main window—the Queue Summary Display. Once you have accessed the Queue Manager, you can use it to create and edit its configured queues.

The Queue Manager window is shown in Figure 27.

Figure 27
Queue Manager window



The Queue Manager window lists all of the configured queues and their basic information. From this display, you can scan through each queue and select it for editing.

Configuring a queue

Once you have created and added a queue to the Queue Manager using the Scheduler, you can access it again to edit its properties or add tasks to it as required.

To edit a queue, either double-click on the queue record in the Queue Summary Display grid or click once on the queue record and click **Properties** from the File drop-down menu. Edit this queue by selecting from the following tabs in this dialog:

- General
- Tasks

Once you have entered the information for each queue, click **OK** to save it and exit to the Queue Manager main window.

Using Corporate Directory

MAT's Corporate Directory is a flexible tool for defining and generating reports of station data associated with terminal number. Report data is provided by MAT Station Administration. Data can include about 100 different data fields, including the name, extension, location, and department associated with each terminal number.

Note: Corporate Directory requires that you have MAT Station Administration and Microsoft Excel 95 or later currently installed.

Defining and generating reports

Select **Corporate Directory** from the **Utilities** menu of the Navigator window. This opens the Corporate Directory window, where you can view and manage reports. You can use predefined reports or define new reports.

To define a report, select **Add Report** from the **Configuration** menu. This displays the New Report property sheet where you can define data fields, column names, column order, and directory location for the report.

To generate a report, select **Generate Report** from the **File** menu. Select **Now** to immediately display the report in a Microsoft Excel window, print the report, or save it to a file. Select **Schedule** to have the report automatically generated to a printer or Excel file at a later time. Select a report by name, then select **Open** to display the most recently generated version of that report.

Note: Before you can generate reports, Station Administration data must be downloaded from the switch and you must have at least one customer configured for each system.

See "Generating Reports" in the *Station Administration User Guide* for more information.

Using Data Buffering and Access

The MAT Data Buffering and Access (DBA) application simplifies the process of collecting buffered Meridian 1 data to a PC. DBA's M1 Database Disaster Recovery feature also allows for simple backup and restoring of Meridian 1 database files.

In case of lost connections or other problems, a Meridian 1 system buffers Call Detail Records (CDR) and Traffic data for retrieval once the connection is restored.

Note: DBA is not supported on Option 11C Compact systems, but may be supported in a later software release.

DBA provides a Windows interface to perform the following:

- Configuration and monitoring of live data buffering sessions
- Retrieval of buffered data from a Meridian 1 system to a PC
- M1 Database Disaster Recovery (backup and restore)

DBA schedules:

- Retrieval of buffered data from a Meridian 1 system to a PC
- M1 Database Disaster Recovery (backup only)

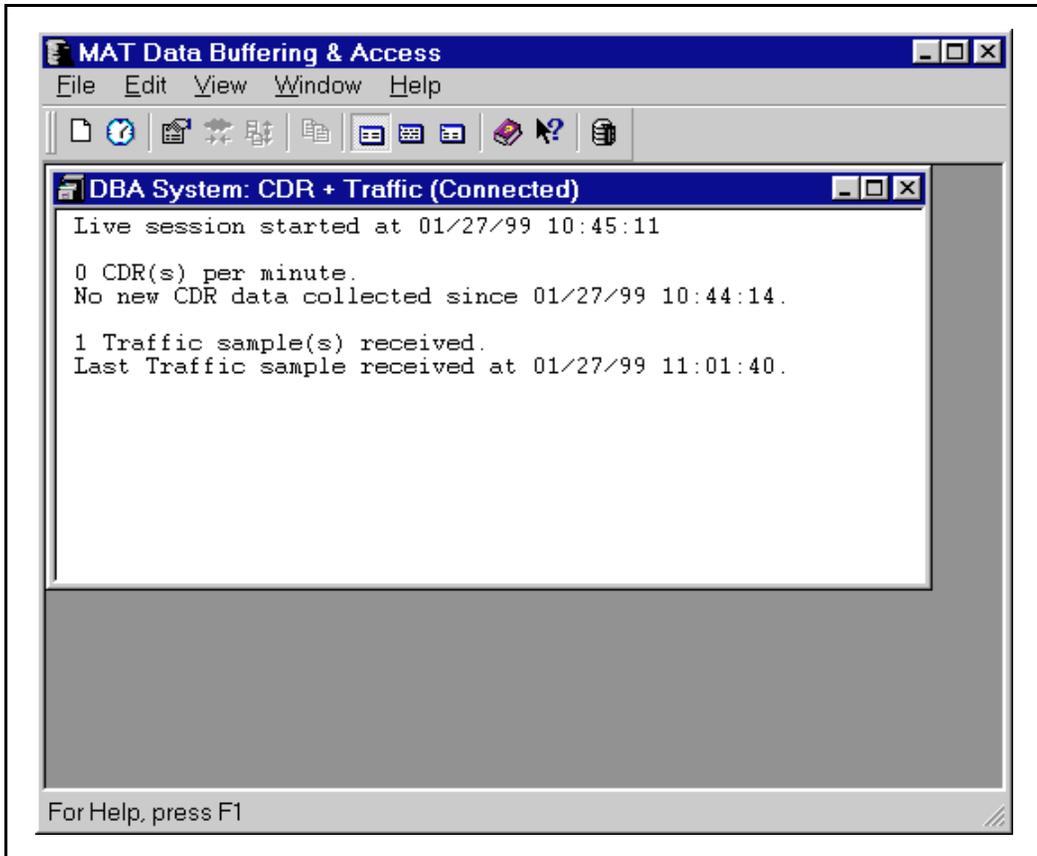
Note: DBA currently supports CDR and Traffic data.

Launching DBA

To launch DBA from MAT, select **Utilities - Data Buffering and Access** in the MAT Navigator window.

The DBA main window will appear. (See Figure 28.)

Figure 28
DBA main window



DBA main window menus

DBA's main window menus consist of the following:

- **File**
 - **New Session...:** Open and configure a new session window for a new live data session with a Meridian 1 system.
 - **Schedule...:** Schedule a Meridian 1 database backup and/or CDR/Traffic data retrieval for Option 11C systems.
 - **Properties...:** Display the configuration for the selected window.
 - **Connect Now:** Establish a live data session with a Meridian 1 system. (Only enabled when not connected to the system.)
 - **M1 Database Disaster Recovery...:** Display the M1 Database Disaster Recovery dialog.
 - **Exit:** Close the DBA main window and all session windows.
- **Edit**
 - **Copy:** Place a copy of the selected item(s) on the Clipboard.
 - **Select All:** Select all text in the window.
 - **Find...:** Find a particular string in the displayed text data.
- **View**
 - **Toolbar:** Display or hide the Toolbar.
 - **Status Bar:** Display or hide the status bar.
 - **Statistics:** Display the average number of CDRs per minute and the time of the last Traffic sample.
 - **CDR Data:** Display a snapshot of the CDR data collected so far, up to the last 15 minutes.
 - **Traffic Data:** Display a snapshot of the Traffic data collected so far, up to the last 15 minutes.
 - **Refresh:** Refresh the CDR/Traffic data display with the latest data.
 - **Tray Icon:** Display or hide the DBA icon on the Windows icon tray.
 - **Hide Application:** Hide the DBA main window.

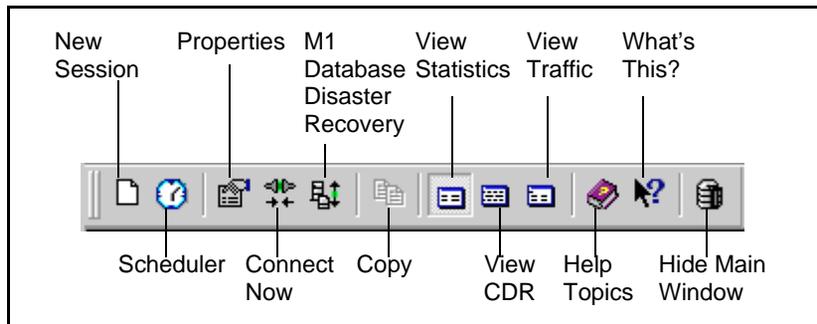
- **Window**
 - **Cascade**: Arrange the session windows in an overlapping pattern.
 - **Tile Vertically**: Arrange the session windows from left to right.
 - **Tile Horizontally**: Arrange the session windows from top to bottom.
 - **Arrange Icons**: Arrange the icons of the minimized session windows.
- **Help**
 - **Help Topics**: Display the online help window.
 - **About Data Buffering and Access...**: Displays release information Data Buffering and Access application.

Note: Some menus and commands will not be visible or accessible unless a live data session is in progress. See “Starting a new live data session” on page 65.

Toolbar

The DBA Toolbar provides easy access to many of the menu commands.

Figure 29
DBA Toolbar



A popup menu containing a subset of the menu items is also available by right-clicking the mouse in the session window.

Starting a new live data session

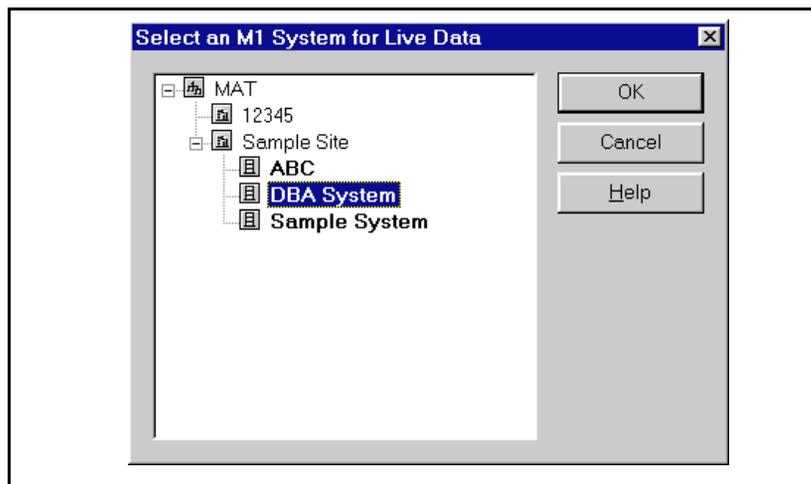
To collect live data, you must start and configure a live data session, an active connection to a Meridian 1 system. The DBA application runs continuously during the session, providing access for session configuration and a window for monitoring session information. Special operations, such as Meridian 1 database backup, can be run immediately or scheduled to occur within a session.

Note: The Meridian 1 system must be configured from your MAT Navigator. (See “Adding a system” on page 22.)

- 1 Select **File - New Session** in the DBA main window.

The Select an M1 System for Live Data dialog box opens. (See Figure 30.)

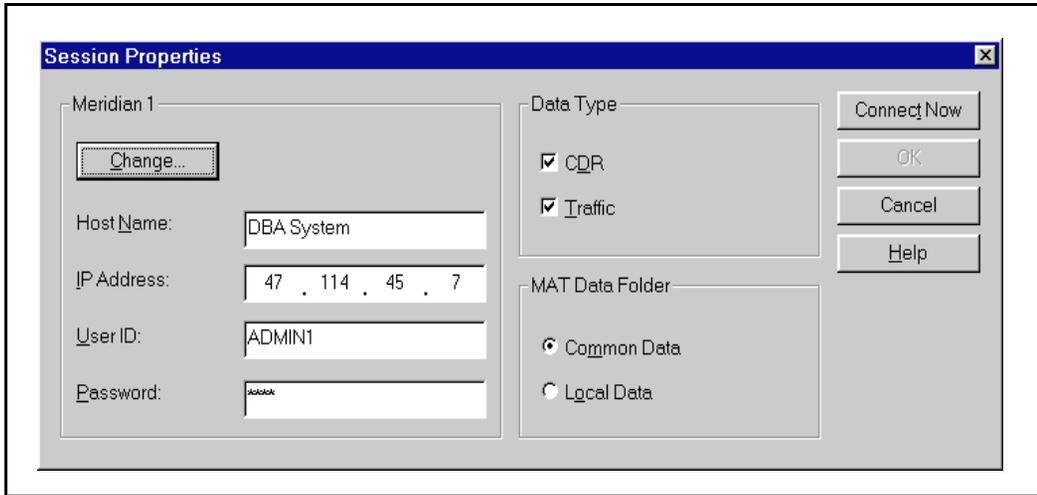
Figure 30
Select an M1 System for Live Data dialog box



- 2 Use the dialog box tree to select the M1 system for the session.
- 3 Click **OK**, or double-click on the selected system, to confirm your selection.

The Session Properties dialog box opens. (See Figure 31.)

Figure 31
Session Properties dialog box



- 4 If you wish to change your system selection, click on **Change** to return to the last dialog box.
- 5 (Optional) Enter the **Host Name** and **IP Address** of the system and your **User ID** and **Password** in the indicated fields.

Note: The **Host Name**, **IP Address**, **User ID**, and **Password** fields are configured for the Meridian 1 system in MAT Navigator. (See “Adding a system” on page 22.) Any changes made from this dialog box are temporary and will be lost when the session window closes.

- 6 Check the **Data Type** boxes to select which types of data (**CDR** and/or **Traffic**) DBA will buffer.

WARNING: Data types selected will be configured on the Meridian 1 system. If a data type is not selected for buffering, collection of that data type on the Meridian 1 system will be turned off.

7 (Optional) Select the MAT data folder in which buffered data will be stored:

- **Common Data** - Data will be stored in the Common Data folder.
- **Local Data** - Data will be stored in the Local Data folder.

The recommended default setting is the **Common Data** folder, where other MAT data is stored. If you select **Local Data** a dialog box will appear, asking you to confirm this. Click **Yes** to confirm.

8 Select **Connect Now** to connect with the selected M1 system and begin your live data session.

Note: If you do not choose to buffer either or both data types, dialog boxes will appear asking you to confirm this.

A new child window opens in your DBA main window. The host name of the connected M1 system appears on the title bar. DBA uses this session window to provide information on the live data session. (See “Viewing data” on page 71.)

Leave the session window open to maintain your live data session. Closing the window terminates the live data session. If the session is terminated, the Meridian 1 system will begin buffering data to:

- Hard drive (large systems)

Note: This is not recommended for large systems.

- Flash ROM (Option 11C)

Configuring an existing live data session

A live data session can be reconfigured as needed.

- 1 Select the window corresponding to the live data session to be reconfigured.
- 2 Select **File - Schedule**.
The Session Properties dialog box opens. (See Figure 31.)
- 3 If you wish to change your system selection, click on **C**hange to return to the last dialog box.
- 4 (Optional) Enter the **H**ost **N**ame and **I**P **A**ddress of the system and your **U**ser **I**D and **P**assword in the indicated fields.

Note: The **Host Name**, **IP Address**, **User ID**, and **Password** fields are configured for the Meridian 1 system in MAT Navigator. (See “Adding a system” on page 22.) Any changes made from this dialog box are temporary and will be lost when the session window closes.

- 5 Check the **D**ata **T**ype boxes to select which types of data (**C**DR and/or **T**raffic) DBA will buffer.

WARNING: Data types selected will be configured on the Meridian 1 system. If a data type is not selected for buffering, collection of that data type on the Meridian 1 system will be turned off.

- 6 (Optional) Select the MAT data folder in which buffered data will be stored:
 - **C**ommon **D**ata - Data will be stored in the Common Data folder.
 - **L**ocal **D**ata - Data will be stored in your Local Data folder.

The recommended default setting is the **C**ommon **D**ata folder, where other MAT data is stored. If you select **L**ocal **D**ata a dialog box will appear, asking you to confirm this. Click **Y**es to confirm.

- 7 Select **C**onnect **N**ow to reconfigure the live data session with the new settings.

Note: If you choose not to buffer either or both data types, dialog boxes will appear asking you to confirm this. Click **Y**es to confirm.

Scheduling operations.

DBA allows you to schedule single or routine backups of your Meridian 1 database files. On an Option 11C system, you can also schedule the retrieval of buffered CDR and Traffic data from the Meridian 1 system to the PC.

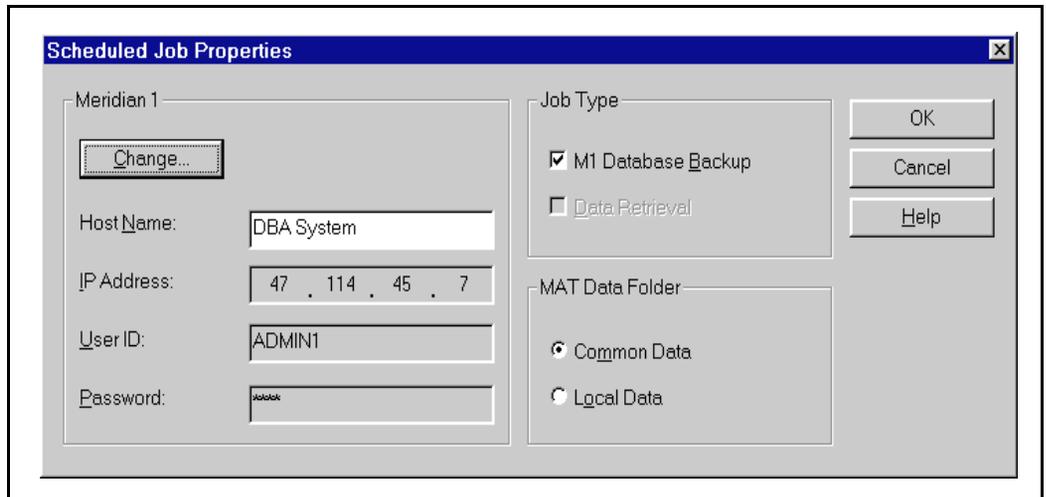
The following procedure details how to schedule either operation in DBA.

Note: A scheduled job does not configure the M1. The correct LD 117 settings (DBK and BUF) must be set on the M1.

- 1 Select **File - Properties...** in the DBA main window.
The Select an M1 System for Scheduling dialog box opens. (Similar to Figure 30)
- 2 Use the dialog box tree to select the M1 system to be scheduled.
- 3 Click **OK**, or double-click on the selected system, to confirm your selection.

The Scheduled Job Properties dialog box opens. (See Figure 32.)

Figure 32
Scheduled Job Properties dialog box



- 4 If you wish to change your system selection, click on **Change** to return to the last dialog box.

5 (Optional) Enter the **Host Name** of the System in the indicated field.

Note: The **Host Name**, **IP Address**, **User ID**, and **Password** fields are configured for the Meridian 1 system in MAT Navigator. (See “Adding a system” on page 22.) You can only change the **Host Name** from this dialog box. Any changes made to the **Host Name** are temporary and will be lost when the session window closes.

6 Click on the checkbox of the operation you want to schedule:

- **M1 Database Backup** - backup Meridian 1 database files.
- **Data Retrieval** - retrieve buffered CDR and Traffic data from the Meridian 1 system.

Note: The Data Retrieval checkbox will only function on an Option 11C system.

7 (Optional) Select the MAT Data Folder in which buffered data is stored:

- **Common Data** - Data will be stored in the Common Data folder.
- **Local Data** - Data will be stored in the Local Data folder.

The recommended default setting is the **Common Data** folder, where other MAT data is stored. If you select **Local Data** a dialog box will appear, asking you to confirm this. Click **Yes** to confirm.

8 Click **OK** to confirm your settings and proceed.

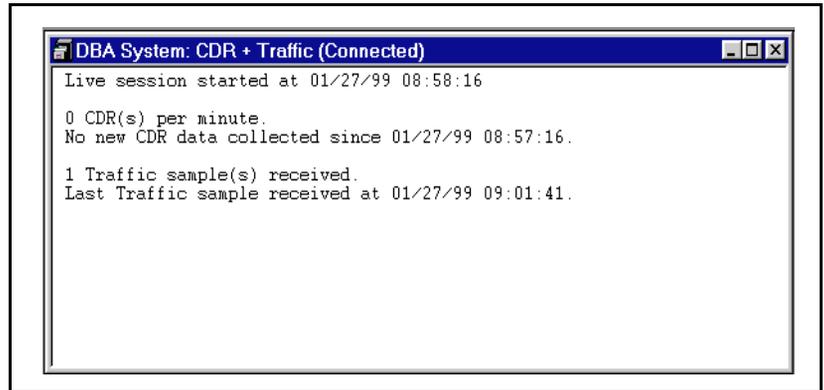
The MAT Scheduling dialog box opens.

9 Use the MAT Scheduling dialog box to schedule the operation.
(See “Using MAT Scheduler” on page 49.)

Viewing data

In a live session, you can view the CDR and Traffic data being collected, as well as session data collection statistics. (See Figure 33.)

Figure 33
Sample session window displaying Statistics



Select **View - CDR Data** to have the session window display a snapshot of CDR data collected by DBA, up to the last fifteen minutes.

Select **View - TRF Data** to have the session window display a snapshot of Traffic data collected by DBA, up to the last fifteen minutes.

Select **View - Statistics** to have the session window display the average number of CDRs per minute and the time of the last Traffic Sample.

Select **View - Refresh** to update CDR and Traffic data with the latest collected data.

You can use the following menu commands to manipulate text in the session window.

Use **Edit - Copy** to copy text from the session window.

Use **Edit - Select All** to select all text in the session window.

Use **Edit - Find** to locate selected text in the session window.

M1 Database Disaster Recovery

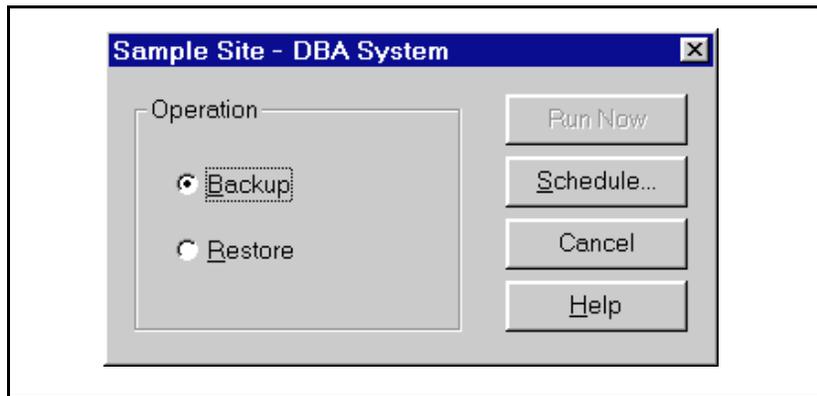
M1 Database Disaster Recovery provides a quick way to perform Meridian 1 database backups and restores, or to schedule database backups. You can schedule or manually start a backup operation, and the application connects to the switch and retrieves the database files. An administrator can also manually start a restore operation to restore the database file to the PBX.

Note: M1 Database Disaster Recovery supplements the regular Meridian 1 database backup feature: Electronic Data Dump (EDD).

- 1 Open and select a session window.
- 2 Select **File - M1 Database Disaster Recovery**.

The M1 Database Disaster Recovery dialog box opens. (See Figure 34.)

Figure 34
M1 Database Disaster Recovery dialog box



3 Click on one of the two radio buttons to select an operation:

- **B**ackup - backup Meridian 1 database files to the PC.

Note: Backups can be performed on a PC other than the one used for collecting live CDR and/or Traffic data.

- **R**estore - transfer previously backed up Meridian 1 database files from the PC to the Meridian 1 system.

WARNING: The **Restore** operation will overwrite the existing database files on the Meridian 1 system. Before using **Restore**:

- Make sure that your backup files are valid.
- Make sure that no other PC is performing a **Backup** or **Restore**.

4 Select one of the following buttons to proceed:

- **R**un **N**ow to begin selected operation
- **S**chedule to specify a time for routine database backup (Restore cannot be scheduled.) The MAT Scheduling dialog box will open. Use the dialog box to schedule your database backup.

(See "Using MAT Scheduler" on page 49.)

Hiding and restoring your DBA main window

Since maintaining a live data session requires keeping the DBA main window continuously open for long periods of time, you can minimize screen clutter by hiding the DBA main window, making it vanish from the Windows Desktop, whenever you do not need it. While the main window is hidden, DBA will still be active and the DBA tray icon will continue to appear on the Windows Toolbar.

To hide your DBA main window, either:

- Select **V**iew - **H**ide Application.
- Click on the toolbar **Hide Main Window** button.
- Or double-click on the DBA tray icon.

To restore your DBA main window, double-click on the tray icon.

You can also right-click on the tray icon to display a popup menu. Depending on whether the DBA main window is hidden or not, you will see either the menu item **Hide Window** or **Restore Window**. You can use these commands to hide or restore your DBA main window. You can also select **Exit** to end the program.

Using Backup and Restore

MAT's Backup and Restore utilities provide convenient options for safeguarding, cloning, and restoring MAT data on a PC. The Backup utility lets you create a MAT 6 backup file of PC-based system property and application data for any or all sites and systems. The Restore utility lets you restore a backup file to the same or different sites and systems on the same or other PCs.

Note: The Backup and Restore utilities have no effect on Meridian 1 data. To secure MAT data that has been uploaded to the switch, you must use MAT's Electronic Data Dump feature described on page 87.

Media, files, and data types

You can create a MAT backup file on the PC's hard drive, a network drive, diskettes and other removable disks, or any other available media that meets your requirements for convenience and file space.

All backup data is written to a single folder for each backup operation. This folder includes the following files:

- Zip file (*.ZIP), the backup file in compressed format
- Log file (*.LOG), providing the backup file's date; type; MAT version; and sites, systems, and applications by name

You can back up and restore data for all or any combination of the following MAT applications:

- Call Accounting
- Call Tracking
- ESN

- Station Administration
- Traffic Analysis

You can back up and restore data for these MAT applications across multiple sites and systems at the same time.

Applications are associated with specific sites and systems. All backups of application data include the system property data associated with the selected site or system.

When you restore data from a backup file, you have the option *not* to restore system property data. This option is useful in cases where the destination site or system is pre-configured and you do not want to overwrite its system property data. For example, system property data such as communication ports, modem configuration, and user ID and password, may be different from one PC to the next.

Benefits

The Backup and Restore utilities provide several key benefits:

- cloning
- moving data offsite
- disaster recovery

Cloning

The process of copying system property and application data associated with one site or system to another site or system is called *cloning*. Copying data to another site or system can be a great timesaver. It can save you from having to enter a large amount of similar data one item at a time.

After cloning selected data, you can simply focus on making whatever changes are necessary to the cloned data. This operation is very flexible. The destination site or system can be new or already exist, and it can be on the same PC or on another PC.

Note: If you back up data from one PC and restore it to another, you must perform this operation under the same version of MAT. You cannot back up data from a PC with an older version of MAT and then restore the data to a PC with MAT 6. Upgrade the older version of MAT before performing this type of *cloning* operation.

Moving data offsite

If you want to maintain or occasionally modify MAT data offsite, a MAT backup file provides the solution. You can restore the backup file on any PC that has the same version of MAT installed.

When you finish modifying MAT data, create a new backup file. Then you can restore the modified data to the original or primary PC where MAT is installed.

Note: This operation works particularly well for modifying application data. Remember *not* to restore system property data from one PC to another if the PCs need to have different configurations for the corresponding sites and systems.

Disaster recovery

An important part of safeguarding your MAT data is having a disaster recovery plan. This plan should consider who makes the backups, what is backed up, how often, on what media, and where the backups are stored.

The Backup utility includes a more comprehensive backup option that is designed for disaster recovery. This option automatically backs up all sites, systems, and applications, and additionally saves user-created files such as scripts and customized reports. Consider performing this type of backup at least once a month and storing the backup file in a safe place.

In the event of unrecoverable data loss, restore your disaster-recovery backup file first. All file contents are restored to the PC. Then, if you have backups for selected sites, systems, and applications that are more recent, restore them next.

Note: MAT executables and files that can be reinstalled from the MAT CD are *excluded* in a disaster recovery backup. If MAT executables have been damaged or lost due to a hard-disk crash, for example, you will need to reinstall MAT on your repaired or replaced PC before restoring your disaster recovery backup.

Running the Backup utility

Select **Backup** from the **Utilities** menu of the Navigator window. This invokes a wizard to help you define the following parameters:

- Type of backup (single site, single system, all sites and systems, or disaster recovery)
- Applications (Call Accounting, Call Tracking, ESN, Station, and/or Traffic)
- Destination directory for backup files
- Temporary directory for working files created during the operation

Note: The destination and temporary directory screens display a computed space requirement for the files. You can back up and restore data for these MAT applications across multiple sites and systems at the same time.

The next screen to appear is a dialog box (Figure 35) that summarizes your choices. Click **OK** to start the backup operation, or **Cancel** to return to the wizard and change your options.

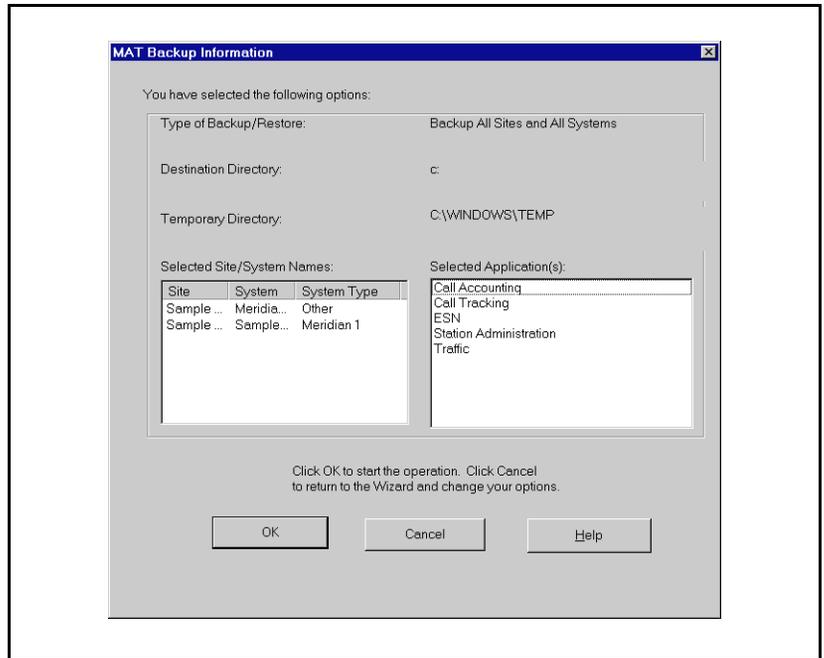
Running the Restore utility

Select **Restore** from the **Utilities** menu of the Navigator window. This invokes a wizard to help you define the following parameters:

- Type of restore (single site, single system, all sites and systems, or disaster recovery)
- Specific backup file and destination directory
- Temporary directory for working files created during the operation

The next screen to appear is a dialog box that summarizes your choices. Click **OK** to start the restore operation, or **Cancel** to return to the wizard and change your options.

Figure 35
MAT Backup Information dialog box



Using Alarm Notification

MAT's Alarm Notification application is an advanced alert system to help you monitor specified events. This application lets users familiar with programming logic and scripting principles define alarm-triggering Simple Network Management Protocol (SNMP) events.

MAT can filter events that originate from the Meridian 1 and a variety of defined network devices. MAT complements and supplements existing external alarm management systems with added flexibility, features, and capacity.

When Alarm Notification is running, all received SNMP events are displayed in the Alarm Notification window and compared with programmed rules. You define the rules in a scripts file according to your phone-system requirements.

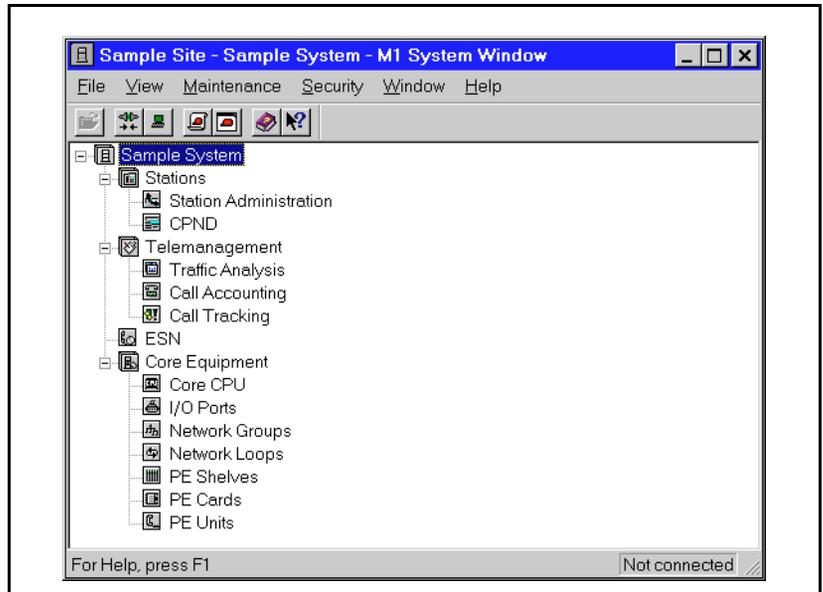
When specified events trigger alarms, these notifications are displayed in a small Console window within the Alarm Notification window. These notifications are retained in memory as well. Also, you can set up the application for remote alerts, for example, by email or pager.

You can launch this application by selecting **Alarm Notification** from the **Utilities** menu of the Navigator window. See the *Alarm and Event Management with Alarm Notification User Guide* for more information.

Working with the System Window

From the Navigator, double-click the system on which you wish to work and the System window for that system appears. See Figure 36.

Figure 36
System window



System window allows you to launch the following applications (some of these applications are purchased separately):

- Alarm Banner
- Events
- System Terminal (Ethernet or PPP)
- System Terminal VT220 (serial)
- Station Administration
- Traffic Analysis
- Call Accounting
- Call Tracking
- ESN Analysis and Reporting Tool
- Maintenance Windows
 - Core CPU window
 - I/O Ports window
 - Network Groups window (not applicable for Option 11C)
 - Network Loops window (includes B and D-channels window)
 - PE Shelves window (not applicable for Option 11C)
 - PE Cards window
 - PE Units window

System Window menus

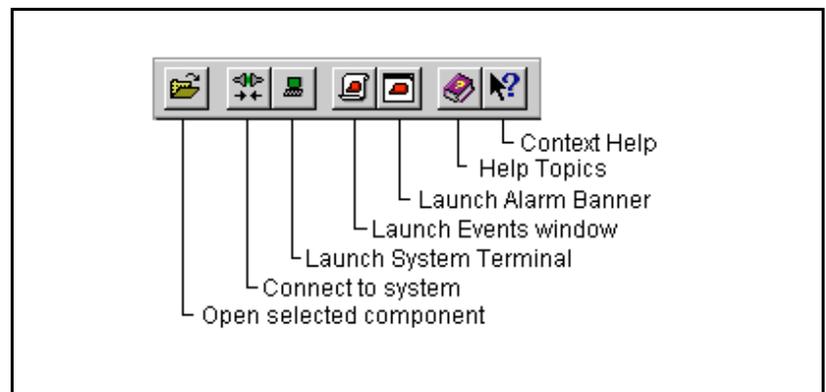
Detailed descriptions about the functions of each command in the System window menus are available by clicking the “Context-sensitive Help” button in the toolbar. System window menus consist of:

- File
- View
- Maintenance
- Security
- Window
- Help

Toolbar

The System Window toolbar includes several useful buttons. The function of each button in the toolbar appears when you move the mouse over the button. See Figure 37.

Figure 37
System window Toolbar



Using Electronic Data Dump

MAT's Electronic Data Dump (EDD) is a critical database-update operation on the Meridian 1 switch. This operation dumps (saves) modified data from the switch's resident memory to database files on the switch's hard disk. These database files contain the active configuration information for phone-system terminals and users.

Synchronizing and securing data

Using MAT's Station Administration and ESN applications, you can modify station data, Call Party Name Display (CPND) data, and Electronic Switched Network (ESN) data. MAT stores these changes in its PC database files. The phone system cannot recognize these changes, however, until you upload the modified data to the Meridian switch. This operation synchronizes switch data with current MAT data on the PC.

Updating the switch's data is a two-step process. The first step is to transmit modified MAT data from the PC to the switch's resident memory. MAT's Station Administration and ESN applications include a **Synchronize** menu for this purpose. The second step is to use MAT's EDD feature to dump modified data from the switch's resident memory to the switch's hard disk.

To secure modified data at the switch, you must dump it to the switch's hard disk. Optionally, your distributor technician can set up the switch so that you also dump data to a diskette that you insert in the switch's floppy drive. Power interruptions erase all data in resident memory. When power is restored, switch data is automatically restored from its database files on the hard disk. Modified data that was *not* previously dumped to these database files is lost at the switch. Further, this data may be difficult to isolate in the PC's MAT applications, since *all* previously uploaded data shares the same TRN (transmitted) status. For these reasons, *always* perform or schedule data dumps after uploading data to the switch.

Accessing EDD

You can access EDD from the **File** menu of the System window. The EDD selection is called **Data Dump**. This selection has its own submenu with the options **Now**, **Schedule**, and **View Log**.

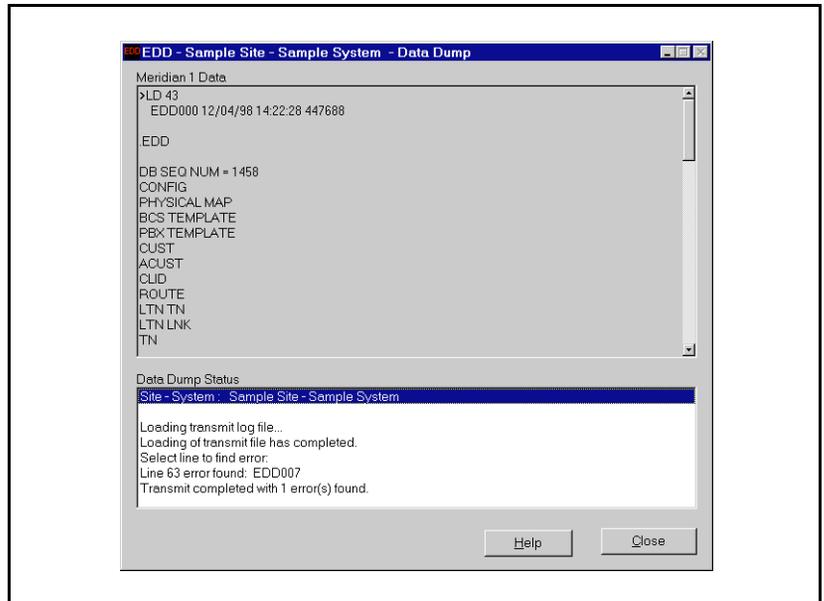
You can select **Now** to perform the data dump immediately, **Schedule** to set up the operation to run automatically, or **View Log** to review status and error information from the most recent data dump.

The data-dump operation takes just a few minutes. While modified MAT data is being dumped at the switch, status and error information about the data dump is actively logged to the PC. Both **Now** and **View Log** open the EDD Data Dump dialog box for viewing or reviewing, respectively, this status and error information. This log is saved to the PC's hard disk and each data dump overwrites the existing log file.

Note: To access error information, open the Events window after the data dump and double-click each error event of interest. This invokes help that is specific to each error.

The **Schedule** option opens the Scheduling dialog box. Here you can select when and how often you want to dump data at the switch. It is best to schedule this operation for a time soon after uploading MAT data to the switch. The MAT Scheduler sends the job to the Queue Manager at the designated time.

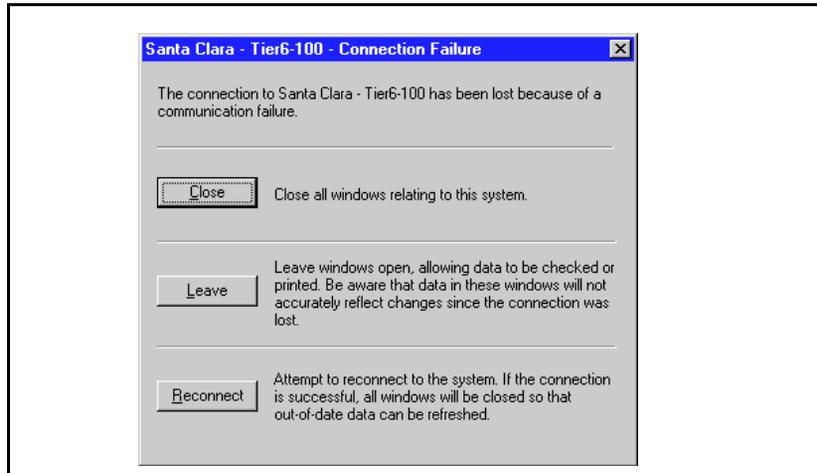
Figure 38
EDD Data Dump dialog box



Responding to a connection failure

If you are connected to M1 system and that connection fails, a warning message appears. See Figure 39. You are given the following options:

Figure 39
Connection Failure dialog



- Close all system windows and reconnect to the system
 - Leave the system windows open so that you can copy or print any or all of the following information:
 - Command results in the System Terminal window or any open Maintenance window.
 - Alarms or events in the System Event Log.
 - Maintenance window objects, such as network loops within the Network Loops window.
- Note:** When you have finished printing the desired information, close the system window and reconnect to the system.
- Attempt to reconnect to the system.

Using System Terminal

System Terminal helps you perform overlay-based tasks directly through the Meridian 1 TTY interface. System Terminal provides online, context sensitive help for overlays, prompts, and error messages. System Terminal also provides a terminal emulation capability.

There are two versions of System Terminal to support two different connection types—Ethernet or PPP and Serial—as follows:

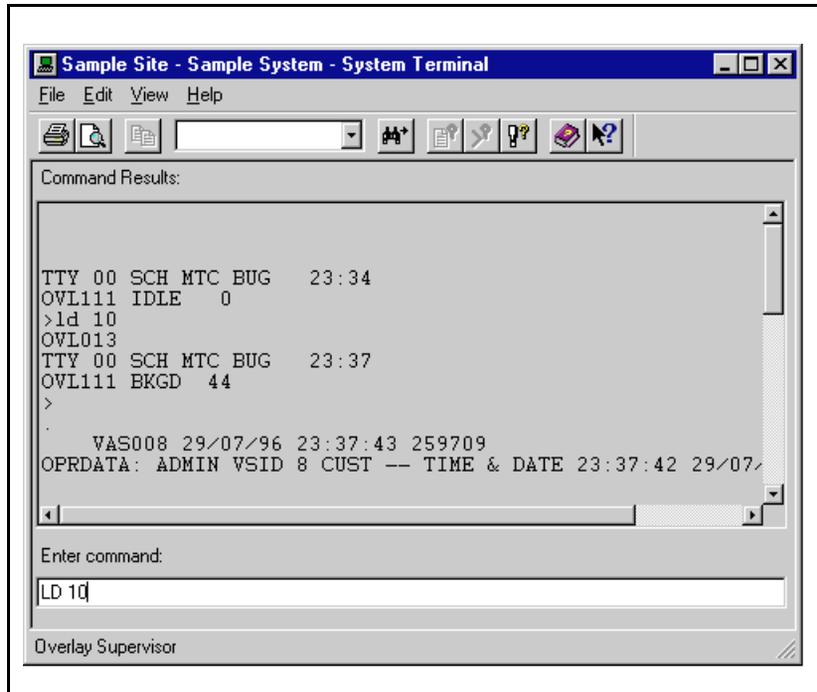
- Overlay Passthru is available on X11 release 22 and later systems connected to MAT using Ethernet or PPP. Overlay Passthru only supports access to the overlays.
- VT220 provides similar functions for any Meridian 1 system using serial connections, as well as terminal emulation for all application modules (such as Meridian Mail). VT220 is discussed in “VT220” on page 101.

In release 22 and later switches, you access the overlays using the System Terminal (Ethernet or PPP required) and access the application modules via VT220. In pre-release 22 switches, you access both the overlays and application modules via VT220.

Launching System Terminal (Ethernet or PPP required)

Once you connect to the system of interest, launch System Terminal by selecting **System Terminal** from the **Maintenance** menu or toolbar in the System window. Enter your system user ID and password in the System Login dialog. Figure 40 shows the System Terminal window.

Figure 40
System Terminal window



The System Terminal window displays all system events as they occur. It also gives you direct access to any overlay.

Note 1: For Ethernet or PPP connections, each active System Terminal connection requires a pseudo-TTY (PTY) port. PTYs are software-only I/O ports. The System Terminal and Maintenance Windows applications use these ports to access the overlays.

Note 2: Ethernet and PPP are available only for X11 Software Release 22 and above with packages 296 and 243 equipped.

System Terminal window

The System Terminal window includes the following:

- An **Enter Command** edit box in which you type overlay commands
- A **Command Results** list box that displays your interaction with the overlays and the results
- Links to online help are available for the following:
 - Help on the current overlay
 - Help on the current prompt
 - Help on the last or selected error message
 - One-line description of prompts in the status bar

You use overlays just as you did before MAT 6 was available. The one minor difference is that you type into an edit box rather than the last line of the screen as with TTY and Terminal Emulation applications. You still use the **<Enter>** key to send the typed-in data (an overlay command or response to a prompt).

Using System Terminal

You can do the following from System Terminal:

- Load an overlay as you normally would on a TTY or Terminal Emulation application
- Cut or copy system events or overlay command results to the clipboard
- Save or capture the command results to a file
- Get help on a Meridian 1 error message
- Get help on an overlay
- Get help on a prompt
- Monitor system events

Advantages over a TTY

You now have the following advantages over the old TTY:

- You can type in lower case and use the backspace key
- **Copy** and **Paste** in the **Enter** Command box (useful for repeated commands with only a TN change)
- Scroll back in the command results
- **Copy** and **Print** the command results
- Capture output to a file as well as to the screen
- **Save** the command results to a file

Getting help on the current overlay

You can get more help on the currently loaded overlay using the **Current Overlay** command in the **Help** menu. The help file is organized in a similar fashion to the *I/O Guide*.

Note: The **Current Overlay** button or menu item is disabled when you are not in an overlay.

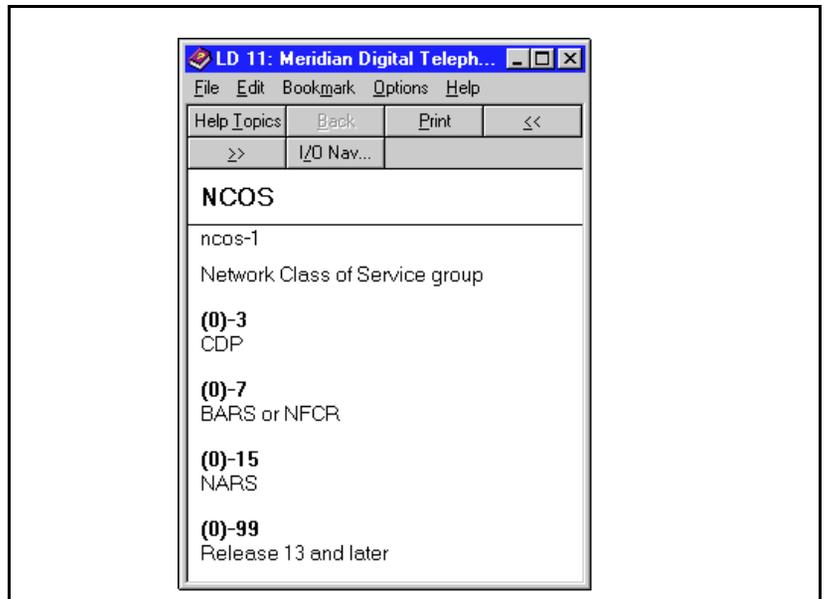
Example

If you are in overlay 10, you can select **Current Overlay** from the **Help** menu, and then navigate within help to the **CPND** prompt sequence. You can click on any prompt in the sequence. This displays the help window for that prompt—the same as help on **Current Prompt**.

Getting help on the current prompt

Figure 41 shows an example of the help you can get on an administration overlay. You load the overlay and respond to the prompts, one at a time. This help guides you as you load the overlay and respond to the prompts.

Figure 41
Current prompt help example



If an overlay is currently loaded, the Status Bar at the bottom of the window provides a short description of the current prompt.

If the one-line description is not enough, you can read a full description of the prompt in Windows Help. Choose **Current Prompt** from the Help menu.

Note: Help on the current prompt is disabled if you are not in an administration overlay.

To get help on any other prompt choose **I/O Navigator** from the Help menu.

Getting help on an error message

System Terminal can distinguish error messages from the other text in the **Command Results** list box. The **Error Message** command in the **Help** menu provides the error description in Windows Help.

You can get help on an error message in the following ways:

- Double-click an error message anywhere in the Command Results.
- Select the **Error message** command in the **Help** menu to get help on the last error message (even if it is scrolled off the screen).
- Select an error message anywhere in the Command Results, then select the **Error message** command in the **Help** menu.
- Select the **I/O Navigator** from the **Help** menu.

The error message help window appears when you select the **Error message** command in the **Help** menu.

Note: You can also get help on Meridian Mail System Error and Event Reporting (SEER) messages using the I/O Navigator.

System Terminal menus

Detailed descriptions about the functions of each command in the System Terminal menus are available by clicking the “Context-sensitive Help” button in the toolbar. System Terminal menus consist of:

- File
- Edit
- View
- Help

Toolbar

The System Terminal toolbar offers several useful shortcuts to the menu commands. See Figure 42.

Figure 42
System Terminal toolbar



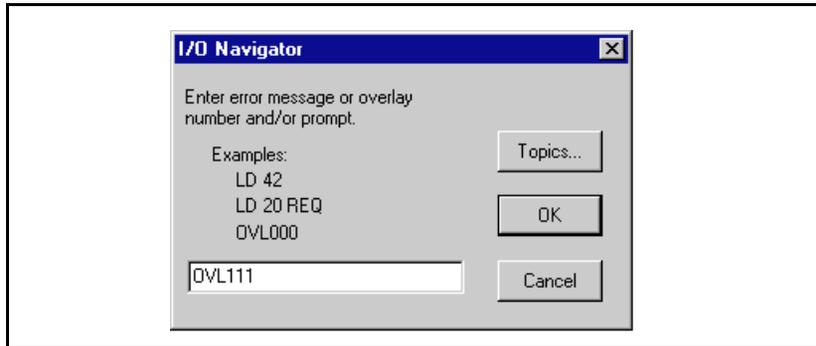
Note: The **Find** and **Find Next** icons in the toolbar allow you to search the Command Results for the text string that you enter in the **Find box**. **Find** is case-sensitive. The search begins at the current location.

Using the I/O Navigator

The I/O Navigator displays a dialog box that allows you to quickly jump to help on any overlay, prompt, command, or error message. Select **I/O Navigator** from the overlay’s **Help** menu or from the **I/O Navigator** buttons in the appropriate Help files.

The I/O Navigator allows you to navigate through I/O reference help independent of your current context within the overlays. For example, you do not need to be logged into a system to look up an error message using the I/O Navigator. See Figure 43.

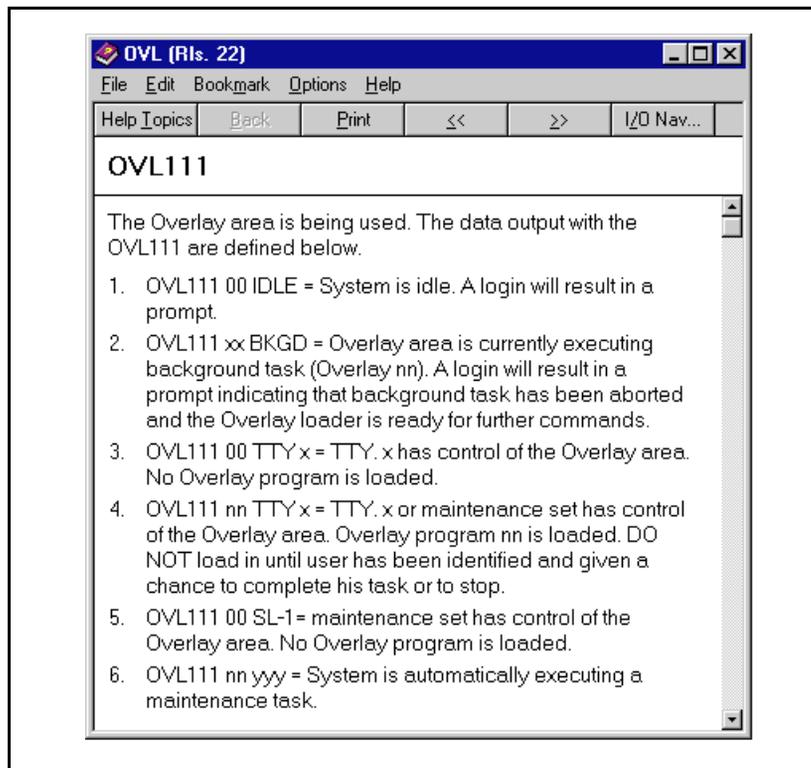
Figure 43
I/O Navigator dialog



Type the overlay number, error message number, or prompt in the text entry field and click **OK**. Help information for the specified overlay, prompt, or error message appears.

The **Topics** button displays the general reference Help index. See Figure 44.

Figure 44
Example Help Index for an error message



The **Cancel** button cancels a search.

Entering an overlay (LD XX) or error code mnemonic (ERR, BUG) takes you to the contents page of the appropriate help file. Entering the error code (BUG3001) or an LD number and a prompt takes you to the Help topic page.

- If the prompt or error message you specify does not exist, the help search dialog appears with the nearest match selected.
- If the overlay number or error message type do not exist, a “Help file not found” information dialog appears.
- The **I/O Navigator** command can be used from within Help. You do not need to be connected to a switch.
- There are some combination overlays (for example, one help file describes two overlays). You can enter either of the overlay numbers. These cases are:
 - LD 36 and LD 41
 - LD 40 and LD 42
 - LD 20, LD 21, and LD 22
 - LD 84 and LD 85
- Leading zeros are not required in error messages. For example, entering SCH22 or SCH022 will find the description for SCH0022.
- To look up Meridian Mail System Error and Event Reporting (SEER) messages, enter XXXYY (where XXX is the message class, and YY is the message number—no mnemonic is required). For example, enter 11102.

VT220

The VT220 application models the VT100/220/320 series of terminals to set up communications between your PC and the Meridian 1. With VT220, you can connect to the Meridian 1 using a serial, PPP (point to point protocol), or Ethernet connection. It supports the transfer of ASCII data during a communications session and provides normal TTY and VT220 access to overlays that are not supported by the MAT applications

Features

VT220 supports the following features:

- Double-height, double-width, blinking, bold and underlined characters
- Complete graphic character set, including a special font for representing control characters
- Scrolling regions
- 80 and 132 column modes
- Echo, no echo, local mode and autowrap on/off
- Reverse video characters and reverse video screen
- Cursor types—block, underline, vertical line, or none
- Selectable cursor blink rate
- User-definable Tab stops
- Programmable function keys
- Display control mode
- National character sets

Accessing VT220

Before accessing VT220, you must first select the type of terminal emulation session you require. To do so, perform the following steps:

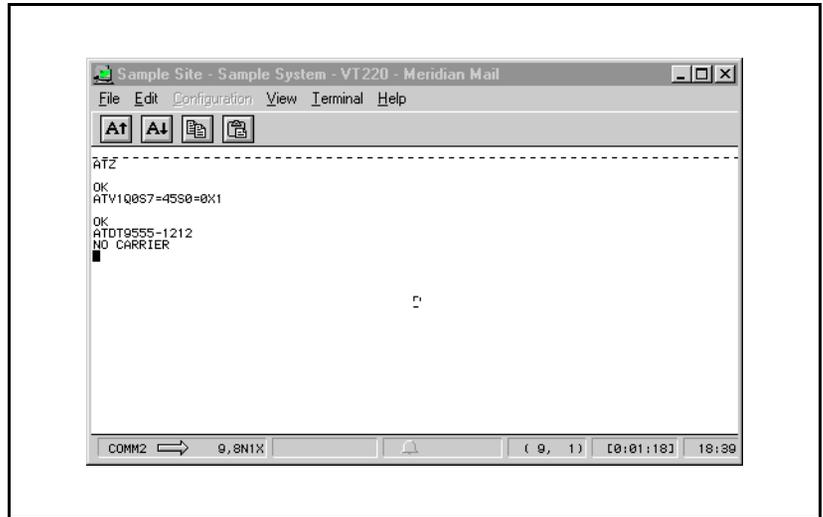
- 1 Click once on the system name in the MAT Navigator to highlight it and click **Properties** from the File drop-down menu (or simply right-click on the system name and click **Properties**).
- 2 From the System Properties window, click the **Communications** tab and select the desired settings file from the Terminal Emulation VT220 Settings drop-down list box (e.g., MMAIL.INI).
- 3 Click the **Applications** tab and click once on **System Terminal (VT220)** in the Applications list box to highlight it.
- 4 Select a communications profile for System Terminal (VT220) by clicking on the desired profile name in the Communications Profile drop-down list box.
- 5 Click OK to select these settings and return to the MAT Navigator.

To access VT220, perform the following steps:

- 1 From the MAT Navigator, select the desired site and system and click **System Terminal** from the Maintenance drop-down menu.
- 2 From the System Terminal Selection dialog which appears, click **Serial (VT220)** and click **OK**.

VT220 will attempt to connect to the terminal based on the communications criteria entered in the System Properties Serial Communications Profile for this system. Once it establishes this connection, the VT220 main window will appear listing the commands and graphical tools required for the emulation session. See Figure 45.

Figure 45
VT220 window



The following sections will briefly list the main functions of VT220.

File menu

The File menu contains functions used to save the VT220 configuration, print the contents of the terminal window, record and replay VT220 terminal emulation sessions and close the system.

The following is a summary of these functions:

- Save Configuration
- Save Configuration As
- Print
- Print Setup
- Printer Fonts
- Capture
- Playback
- Close

The **Save Configuration** and **Save Configuration As** menu items are only available if you have selected a user defined terminal type (as defined as the 'Other' VT220 type from the MAT System Properties Communications tab). Otherwise, they will appear grayed.

Edit menu

The Edit menu contains editing commands used to manipulate the text appearing in the main window.

The following is a summary of these functions:

- Copy
- Paste
- Select All

Configuration menu

Once you start VT220 from the system window of the MAT Navigator with a user defined type of terminal (as defined as the **Other** VT220 type from the MAT System Properties Communications tab), then you can use the Configuration functions to customize the VT220 settings to suit your needs. The purpose of having the ‘Other’ type is to allow you to create multiple types of settings based on generic settings.

If you do not select ‘Other’ or a user defined type, then you will not require these functions to run VT220. The Configuration command will therefore appear grayed.

Before you can customize the VT220 settings, you must first select the custom VT220 settings file OTHER.INI using the Communications tab from the MAT Navigator System Properties application. Refer to “Accessing VT220” on page 102 for more details on selecting this option. This file appears in the VT220 settings drop-down list box. When you launch VT220 from this customizable terminal, you can then use the commands which appear in the Configuration drop-down menu to change the settings for VT220.

Once you have edited the VT220 settings using these functions, you must then save the customized configuration file using the **Save Configuration As** command. Using this command, you can enter the name of this configuration file for use in later sessions.

VT220 includes a number of setting files which are predefined depending on the system to which you are connected. For example, M1.INI is a predefined setting file used for a VT220 terminal emulation session with the Meridian 1, and MMAIL.INI is a predefined setting file for Meridian Mail. These setting files provide the required VT220 settings and cannot be edited.

The following is a summary of the Configuration functions:

- Terminal Setup
- National Replacement Character Set
- Map Keyboard
- Program Keys
- Tab Setup
- Options
- Status Bar

View menu

The View menu contains toggles to adjust the display of the VT220 window as well as hide and display the Tool Bar, Status Bar and Keys Window.

The following is a summary of these toggles:

- Terminal
- Hide/Show Tool Bar
- Hide/Show Status Bar
- Hide/Show Keys Window

Terminal menu

The **Terminal** menu contains commands used to connect and disconnect VT220 for a temporary communications setup. The **Connect** and **Disconnect** commands start and stop the terminal emulation. The **Temporary Communication Setup** function temporarily creates a terminal emulation session based on customizable connection criteria. This setup is only temporary for the current session. When you access VT220 again, it will use the criteria defined for this system in the MAT **System Configuration** function.

The following is a summary of these commands:

- Connect
- Disconnect
- Temporary Communication Setup

Help menu

In addition to the standard online help features for VT220, this **Help** menu contains topics which provide help with the Overlay Enhancer and I/O error messages.

The following is a summary of these Help items:

- Help Topics
- Current Overlay
- Current Prompt
- Error Message
- I/O Navigator
- About VT220

The **Help Topics** menu item will display the help topics for VT220 only if you have selected a user defined terminal type (as defined as the 'Other' VT220 type from the MAT system Properties Communications tab). Otherwise, it will display the help topics for the Meridian 1 system.

The **Current Overlay**, **Current Prompt** and **Error Message** menu items are only enabled if you are running a VT220 terminal emulation for the M1.INI terminal type and the system is in overlay mode.

The I/O Navigator **Help** function allows you to obtain information on specific error messages.

The **Overlay Enhancer** is an online context sensitive help function which allows you to obtain quick and direct access to overlay information while in an active terminal session with the Meridian 1.

The following Overlay Enhancer Help commands appear in the Help drop-down menu:

- Current Overlay
- Current Prompt
- Error Message

The **Current Overlay** and **Current Prompt** commands are only available if an overlay program is loaded and the terminal session is of type 'Meridian 1', 'PPP', or 'Ethernet'. Otherwise, they will be disabled and will appear grayed. The **Error Message** command will be available if the terminal session is of type 'Meridian 1', 'PPP', or 'Ethernet'. Otherwise, it will be disabled and will appear grayed.

Note: Selecting an error message in the VT220 window is not sufficient to access the Overlay Enhancer help. Unlike the Overlay Passthru application which displays online help when you double-click the error message, the VT220 help requires that you first double-click the error message and then click **Error Message** from the Help drop-down menu. This will then display help for the selected error message

Keyboard mappings

VT220 uses standard keyboard mappings which, when incorporated into a terminal session, will match the appropriate VT keys and actions. These default mappings, as shown in the following tables, allow you to run a terminal emulation session using the appropriate keys on a standard 101 or 102-key keyboard.

For example, if you are using VT220 to run Meridian Mail, the Meridian Mail softkeys (which appear at the bottom of the menus and screens) will correspond to the appropriate function keys on your keyboard. The Meridian Mail softkeys correspond to the function keys F6 through F10 on a standard 101 or 102-key keyboard. Therefore, in a Meridian 1 session, you would press F6 to select Softkey 1, F7 to select Softkey 2, etc. For more information on the Meridian Mail softkeys, refer to the *Meridian Mail System Administration Guide*

The following tables list the keyboard mappings for VT220 on standard 101 and 102-key keyboards.

Table 1
Keyboard mappings - VT key

| VT Key | PC Key |
|---------------|---------------|
| PF1 | Num Lock |
| PF2 | Numpad Slash |
| PF3 | Numpad Start |
| PF4 | Numpad Minus |
| Find | Insert |
| Insert | Home |
| Select | Delete |
| Up Arrow | Up Arrow |
| Down Arrow | Down Arrow |
| Left Arrow | Left Arrow |
| Right Arrow | Right Arrow |
| F6 | F6 |
| F7 | F7 |
| F8 | F8 |
| F9 | F9 |
| F10 | F10 |
| F11 | F11 |
| F12 | F12 |
| F13 | Sys Rq |
| F14 | Scroll Lock |
| Help | F2 |
| Do | F3 |

Table 1 (Continued)
Keyboard mappings - VT key

| VT Key | PC Key |
|---------------|---------------|
| F17 | Ctrl-F7 |
| F18 | Ctrl-F8 |
| F19 | Ctrl-F9 |
| F20 | Ctrl-F10 |

Table 2
Keyboard mappings - VT action

| VT Key | PC Key |
|----------------|---------------|
| Remove | Page Up |
| Next Screen | Page Down |
| Prev Screen | End |
| Hold Screen | F1 |
| Compose | Unmapped |
| Delete | Backspace |
| Keypad Command | Numpad Plus |
| Keypad Enter | Numpad Enter |
| Break | F5 |
| Long Break | Shift-F5 |
| Control Break | Ctrl-F5 |
| Print Screen | Unmapped |
| Keypad 0 | Numpad 0 |
| Keypad 1 | Numpad 1 |

Table 2 (Continued)
Keyboard mappings - VT action

| VT Key | PC Key |
|---------------|-------------------|
| Keypad 2 | Numpad 2 |
| Keypad 3 | Numpad 3 |
| Keypad 4 | Numpad 4 |
| Keypad 5 | Numpad 5 |
| Keypad 6 | Numpad 6 |
| Keypad 7 | Numpad 7 |
| Keypad 8 | Numpad 8 |
| Keypad 9 | Numpad 9 |
| Keypad Minus | Ctrl-Numpad Minus |
| Keypad Period | Numpad Del |

Table 3
Keyboard mappings - VT action scroll

| VT Key | PC Key |
|---------------|------------------|
| Scroll Left | Ctrl-Left Arrow |
| Scroll Right | Ctrl-Right Arrow |
| Scroll Up | Ctrl-Up Arrow |
| Scroll Down | Ctrl-Down Arrow |

Using PC Event Log

The PC Event log displays recent MAT activities and events generated on the PC. The PC Event log displays active events in a way that lets you quickly view the most important events.

Using the PC Event window

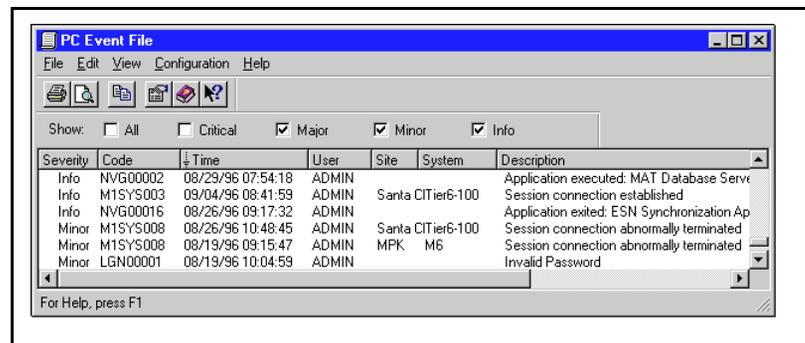
Once you open the PC Event window, you can perform the following tasks:

- Locate an alarm in the Event file to identify the cause of the problem
- Learn more detail about an alarm

Launching and using the PC Event window

From the **Maintenance** menu of the Navigator window, select **PC Events**. The PC Event window provides a list of events and a menu bar from which you can learn more about the events.

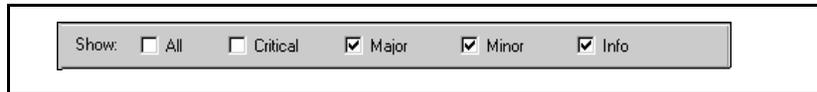
Figure 46
PC Event window



Filter toolbar checkboxes

Use the Filter toolbar to select the types of events that you wish to display in the list. Figure 47 shows the Filter toolbar. Click to check (or uncheck) an item. For example, you would check “Critical” to restrict the list to events that are critical. The Filter Toolbar may be dragged to the top or bottom of the window.

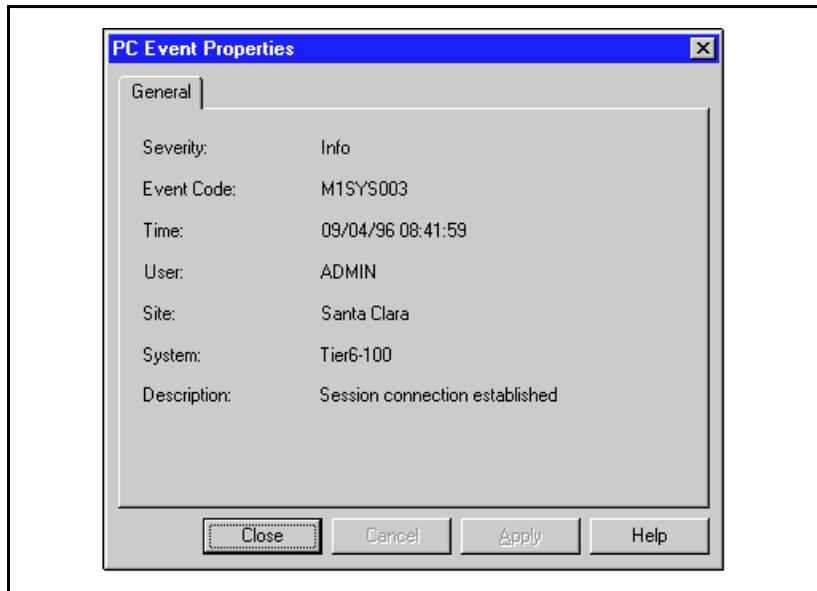
Figure 47
Filter toolbar



Learning more detail about an event

You can learn more about a selected event by choosing **Properties** in the **File** menu or clicking the **Properties** button in the popup menu.

Figure 48
PC Event Properties sheet



Appendix A: Script File Summary

This appendix contains a list of all of the script files used for the MAT applications. A script is a pre-written program which contains a set of commands and functions required to perform specific activities. Some scripts are defined for specific PC and Meridian 1 configurations and are therefore selected based on each user's configuration. Most MAT scripts, however, are defined for the general operation of the MAT applications and are therefore automatically selected to perform specific functions within MAT.

Common Services scripts

The following script files are used by the MAT Common Services applications. They are automatically selected whenever you run MAT and apply to all of the MAT applications as a whole. You do not need to select these script files to perform a required function.

| | |
|--------------|---|
| HAYESMDM.SCR | Functional script used by Common Services applications (except for Call Accounting and Call Tracking) for connection with Hayes compatible modems |
| CUSTMDM.SCR | Functional script used by Common Services applications (except for Call Accounting and Call Tracking) for connection with customized modems |
| DSMODEM.SCR | Functional script used by Call Accounting for connection with customized modems |
| M1MODEM.SCR | Functional support script used to access far-end equipment (e.g., dispatcher modems) |
| ERROR.SCR | Functional script required for error handling |

Traffic Analysis scripts

The script files used by MAT Traffic Analysis provide the main functions required for traffic data collection and report generation. The data collection script files are selected when you enter your Meridian 1 and communications parameters. The report generation script files are automatically selected when you generate reports.

Real time traffic data collection

The following script files are used for real time traffic data collection (no buffer unit). They will be automatically selected when you set up this site for real time traffic data collection (from the MAT Site Configuration application).

| | |
|------------|---|
| LD2.SCR | Main traffic data collection scripts |
| LD2INI.SCR | Functional script used by LD2.SCR (used to initialize Meridian 1 to have collection performed hourly) |
| LOGSL1.SCR | Functional script used by LD2.SCR |

Traffic data collection from MDR-2000

The following script files are used for traffic data collection from an MDR-2000 buffer unit. They will be automatically selected when you set up this site for traffic data collection through the MDR-2000 buffer unit (from the MAT Site Configuration application).

| | |
|------------|--|
| M2K.SCR | Main traffic data collection script |
| M2KINI.SCR | Functional script used by M2K.SCR (used to initialize Meridian 1 to have collection performed hourly in pass-through mode) |

Traffic data collection from PollCat II/III

The following script file is used for traffic data collection from the PollCat II/III buffer units. It will be automatically selected when you set up this site for traffic data collection using the PollCat II/III buffer units (from the MAT Site Configuration application).

| | |
|----------|-------------------------------------|
| POLL.SCR | Main traffic data collection script |
|----------|-------------------------------------|

Traffic data collection from AT1/AT2

The following script files are used for traffic data collection from the AT1 and AT2 buffer units. They will be automatically selected when you set up this site for traffic data collection using the AT1 or AT2 buffer units (from the MAT Site Configuration application).

| | |
|----------|---|
| TSB1.SCR | Main traffic data collection script for AT1 buffer unit |
| TSB2.SCR | Main traffic data collection script for AT2 buffer unit |

Traffic data collection from SEB II

The following script file is used for traffic data collection from the SEB II buffer unit. It will be automatically selected when you set up this site for traffic data collection using the SEB II buffer unit (From the MAT Site Configuration application).

| | |
|-------------|-------------------------------------|
| SEBTRAF.SCR | Main traffic data collection script |
|-------------|-------------------------------------|

Traffic data collection from Sentinel 2000

The following script file is used for traffic data collection from the Sentinel 2000 buffer unit. It will be automatically selected when you set up this site for traffic data collection using the Sentinel 2000 buffer unit (from the MAT Site Configuration application).

| | |
|-------------|-------------------------------------|
| SNLTRAF.SCR | Main traffic data collection script |
|-------------|-------------------------------------|

Traffic Analysis report generation

The following script files are used for report generation. They are automatically selected when you generate Traffic Analysis reports.

| | | | |
|------------|------------|-------------|------------|
| AUXPLK.SCR | AVGSOA.SCR | CALPRK.SCR | CBKQUE.SCR |
| CONSOL.SCR | CSAML1.SCR | CSAML2.SCR | CSAML3.SCR |
| CSAML4.SCR | CSAML5.SCR | CSAML6.SCR | CSAML1.SCR |
| CSAMLK.SCR | CUSCON.SCR | DCHANL.SCR | DTDLAY.SCR |
| DTNSPD.SCR | FEAKEY.SCR | GLOBAL.SCR | GLPTRF.SCR |
| GMSGAP.SCR | GNTLPS.SCR | GOHQUE.SCR | GPCLTB.SCR |
| GPROCL.SCR | GROUTL.SCR | GSUTRF.SCR | GTRNKS.SCR |
| ICONSL.SCR | IMTCHL.SCR | INPMMSG.SCR | INTRKG.SCR |

| | | | |
|------------|------------|------------|------------|
| ISDNPD.SCR | ISDNPM.SCR | ISDNPT.SCR | JCTRAF.SCR |
| JTRGP.SCR | LPTRAF.SCR | MICRO.SCR | MSGATQ.SCR |
| MUSBRD.SCR | NCOSVC.SCR | NETLPS.SCR | NETWKS.SCR |
| NTATSV.SCR | OHKOVT.SCR | OHKQUE.SCR | OMTCHL.SCR |
| OUTMSG.SCR | PCTLTB.SCR | PRADIO.SCR | PROCLD.SCR |
| RADPAG.SCR | RANBRD.SCR | RTLREQ.SCR | SELTRM.SCR |
| SLTRAF.SCR | SRADIO.SCR | SUMCCO.SCR | SUMICO.SCR |
| SUMSYS.SCR | SUMTRK.SCR | SVCLPS.SCR | TMESG.SCR |
| TRUNKS.SCR | TSETST.SCR | WATCON.SCR | WPRCLD.SCR |
| WTRNKS.SCR | | | |

The following script files are used for the Data Parser as part of the report generation process. They are automatically selected when processing data for Traffic Analysis reports.

| | | | |
|------------|------------|-------------|------------|
| TFC000.SCR | TFC001.SCR | TFC002.SCR | TFC003.SCR |
| TFC004.SCR | TFC005.SCR | TFC006.SCR | TFC007.SCR |
| TFC008.SCR | TFC009.SCR | TFC10X.SCR | TFC101.SCR |
| TFC105.SCR | TFN001.SCR | TFN002.SCR | TFN101.SCR |
| TFS000.SCR | TFS001.SCR | TFS002.SCR | TFS003.SCR |
| TFS004.SCR | TFS005.SCR | TFS007.SCR | TFS008.SCR |
| TFS009.SCR | TFS010.SCR | TFS011.SCR | TFS012.SCR |
| TFS013.SCR | TFS50X.SCR | TFS101.SCR | TFS102.SCR |
| TFS105.SCR | TFS41X.SCR | TRAFFIC.SCR | TRFAXS.SCR |
| TRFCDR.SCR | TRFCUS.SCR | TRFNET.SCR | TRFSYS.SCR |

Call Accounting and Call Tracking scripts

The following script files are used by Call Accounting and Call Tracking to perform data collection and real time monitoring. Certain script files are automatically selected when you enter your configuration parameters in the MAT Site Configuration application. These represent the common scripts for data collection. As you define the SDI values in MAT Site Configuration, the appropriate script will be selected to match that option. When you then select an SDI value from the Call Accounting or Call Tracking Communications Database function, each defined script will be selected accordingly.

For example, if you define SDI1 to have real time CDR data collection performed from it, then SDI1 will be configured to run the real time CDR data collection scripts SL1.SCR and SL1LOGIN.SCR.

Call Accounting may require CDR data which is output from the Meridian 1 in different formats. In these cases, you must select **None** as the SDI value in the MAT Site Configuration function and then select the desired script file from the Communications Database function of Call Accounting.

Note: If you are collecting New format CDR data, then this option must be activated on the Meridian 1.

If you collect CDR data from a data file (e.g., if you select the File option from the Call Accounting or Call Tracking Communications Database), then you can select the filename from which you will collect the CDR data and then select a script filename for that particular format of CDR data. For example, if you select a file for data collection which contains normalized CDR data, then you would select the script file COLLECT.SCR.

Real time CDR data collection

The following script files are used for real time CDR data collection from the Meridian 1; no buffer unit is required.

| | |
|--------------|---|
| SL1.SCR | Real time data collection script for Old format CDR |
| SL1NEW.SCR | Real time data collection script for New format CDR |
| SL1NEWX.SCR | Real time data collection script for New format CDR; supports X11 Release 23 |
| SL1EURO.SCR | Real time data collection script for New format CDR with Periodic Pulse Metering |
| SL1EUROX.SCR | Real time data collection script for “New” format CDR with Periodic Pulse Metering; supports X11 Release 23 |
| SL1LOGIN.SCR | Functional script used by above-mentioned data collection scripts |

CDR data collection from MDR-2000

The following script files are used for data collection from an MDR-2000 buffer unit.

| | |
|--------------|--|
| COLLECT.SCR | Data collection script which collects Old format CDR from MDR-2000 to produce normalized CDR (erases contents of buffer) |
| COLLECTX.SCR | Data collection script which collects New format CDR from MDR-2000 to produce normalized CDR (erases contents of buffer); MDR-2000 requires a chip which is compatible with X11 Release 23 |
| 2000FD.SCR | Data collection script which monitors in real time Old format CDR from an MDR-2000 |
| 2000FDX.SCR | Data collection script which monitors in real time New format CDR from an MDR-2000; MDR-2000 requires a chip which is compatible with X11 Release 23 |

CDR data collection from PollCat II/III

The following script files are used for data collection from the PollCat II/III buffer units.

| | |
|--------------|---|
| POLLCDR.SCR | CDR data collection script for PollCat II/III buffer units |
| PARSESL1.SCR | Functional script used by POLLCDR.SCR |
| POLLNEWX.SCR | CDR data collection script for PollCat II/III buffer units; supports X11 Release 23 |
| NEWCDRX.SCR | Functional script used by POLLNEWX.SCR |

CDR data collection from AT1/AT2

The following script files are used for data collection from the AT1 and AT2 buffer units.

| | |
|--------------|--|
| AT1CDR.SCR | CDR data collection script for AT1 buffer unit |
| AT2CDR.SCR | CDR data collection script for AT2 buffer unit |
| PARSESL1.SCR | Functional script used by AT1CDR.SCR and AT2CDR.SCR script files |
| AT1NEWX.SCR | New format CDR data collection script for AT1 buffer unit; supports X11 Release 23 |
| AT2NEWX.SCR | New format CDR data collection script for AT2 buffer unit; supports X11 Release 23 |
| NEWCDRX.SCR | Functional script used by AT1NEWX.SCR and AT2NEWX.SCR script files |

CDR data collection from SEB II

The following script files are used for data collection from the SEB II buffer unit.

| | |
|--------------|---|
| SEB.SCR | CDR data collection script for SEB II buffer unit |
| PARSESL1.SCR | Functional script used by SEB.SCR script file |
| SEBNEWX.SCR | New format CDR data collection script for SEB II buffer unit; supports X11 Release 23 |
| NEWCDRX.SCR | Functional script used by SEBNEWX.SCR script file |

CDR data collection from Sentinel 2000

The following script files are used for data collection from a Sentinel 2000 buffer unit.

| | |
|-------------|---|
| SNLCDR.SCR | CDR data collection script for Sentinel 2000 buffer unit |
| SNLCDRX.SCR | CDR data collection script for Sentinel 2000 buffer unit; supports X11 Release 23 |

Call Tracking alarm scripts

The following script files are used for Call Tracking alarms. They will be automatically selected when you define the Call Tracking alarms.

| | |
|-------------|----------------------------------|
| CMALARM.SCR | Call Tracking alarm script |
| CMPAGER.SCR | Call Tracking alarm pager script |

CDR data collection modem scripts

The following script files are supporting function scripts used by all CDR data collection scripts for Call Accounting and Call Tracking. The appropriate script will be automatically used when you select Hayes or Custom as the format for the modem for CDR data collection from the MAT Site Configuration application.

If you enter custom modem information when setting up a site, then the custom modem script file will be updated with the appropriate parameters.

| | |
|------------|--|
| HAYES.SCR | Functional script used by all CDR data collection scripts in Call Accounting and Call Tracking for connection with Hayes compatible modems |
| CUSTOM.SCR | Functional script used by all CDR data collection scripts in Call Accounting and Call Tracking for connection with customized modems (updated with correct parameters) |

Script usage table

The following table lists the types of scripts which would be selected for different scenarios for Call Accounting and Call Tracking. These represent the main scripts which can be selected to suit a particular scenario. All other scripts will automatically selected depending on these script selections.

Table A-1
Script usage table

| To | Use |
|---|-------------|
| Perform real time CDR data collection from Meridian 1 | SL1.SCR |
| Collect CDR from MDR-2000 buffer unit | COLLECT.SCR |
| Collect CDR from PollCat II/III buffer units | POLLCDR.SCR |
| Collect CDR from AT1 buffer unit | AT1CDR.SCR |
| Collect CDR from AT2 buffer unit | AT2CDR.SCR |
| Collect CDR from SEB II buffer unit | SEB.SCR |
| Collect Traffic data from SEB II buffer unit | SEBTRAF.SCR |
| Collect CDR from Sentinel 2000 buffer unit | SNLCDR.SCR |

Meridian Administration Tools
Common Services
User Guide

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