SYSTEM ADMINISTRATION

INTRODUCTION

As custodian of the MAP System, the System Administrator has numerous powers and responsibilities. Those responsibilities include initial installation of the system and occasional updating when new versions become available. The System Administrator is also responsible for keeping system data, such as office names, phone numbers, and priority levels current. Maintenance and security of the system are the primary duties of the System Administrator.

Using the System Administration software, the System Administrator can determine who can access the system and how much control each user will have. The administrator can set up a network tie-in using the Network Administration option. The System Administrator can make additional backups and restore a file or a system. The administrator can rebuild the original computer, or restore the system on a backup computer. S/he can set variables such as the time and date, the system name that is displayed with the login prompt and on each alarm and dispatch report, and turn certain functions on and off, or pause them for a period of time. The System Administrator can also initialize the modems attached to the MAP computer, an operation that may cure many of the common system access problems caused by fluctuating power supplies or user error.

The System Administrator can troubleshoot the system if problems occur. In the unlikely event of a major system failure, an additional login and series of passwords has been created to give the System Administrator, with the help of System Studies Technical Support, direct access to the operating system shell. To ensure complete system security, the passwords required by this login change both daily and hourly.

Finally, the System Administrator, or anyone given the proper authorization, can use a special login and password to view output of the Alarm Receivers, the Scheduler, and the System Status. This capability, once available only at the PressureMAP System console, is now possible from a remote computer.

Most of the system administrative functions mentioned above are initiated by accessing the System Administration Menu and selecting the desired option. Each of the menu options is described in detail in the following pages. The process of remotely logging on to a PressureMAP system and viewing the system logs (Alarm Receiver Log, Scheduler, and System Status Log) is described at the end of this section.

SYSTEM ADMINISTRATION PROCEDURES

This section of the *MAP System Administration Manual* provides an easy-to-follow series of procedures for performing specific PressureMAP administrative functions. These procedures describe the System Administration operating methods keystroke-by-keystroke and illustrate all of the pertinent screens and menus. All but two of the options on the System Administration Menu are discussed in this section. Option 15, User Management, is addressed in section 5 of this manual, and Network Administration, option 19, is covered in section 6.

Note:

Because PressureMAP Version 27 is available for systems running either the SCO UNIX 5.0.7 operating system or one of the variations of the Linux operating system (Red Hat Enterprise 4.2 or CentOS 5.2), some System Administration options produce sub-menus with

different capabilities and option selections. Specifically, Printer Administration, Tape Administration and Network Administration differ depending upon operating system. In this section of the manual whenever menu option variations occur, the procedural descriptions for the Linux version will be described first followed by the SCO UNIX variation.

Accessing the System Administration Menu

Before you can begin working with any of the System Administration options, you must bring the System Options Menu to your screen. This procedure explains how to do that. Where you start in this procedure depends upon where you are in the MAP System.

If you log in at the System Options menu, begin at Step #2. Note that if you pause too long during the entry process, the Time Default function may back you out through the menus until you reach the MAP Programs Menu. If you find yourself at the MAP Programs Menu, begin at Step 1. If you have trouble gaining access to the MAP System, refer to the "Multi-User MAP System Installation" section of the MAP System Installation Manual.

```
MAP Programs

MAP Series XX.XX.XX

11/10/2008 12:42

System Studies Incorporated

MAP Programs

1. PressureMAP
2. ReportMAP
3. CableMAP
4. AlarmMAP
5. DryerMAP
6. MAP Diagnostics
7. User Initiated Operations
Q. Quit

Choice?
```

SCREEN 4-1: MAP PROGRAMS MENU

Procedure:

1) From the MAP Programs Menu, select the last option. Press Q < Return >.

Note:

If the Menu Level assigned to your User Account brought you into the PressureMAP System at the MAP Programs Menu, you cannot get into the System Options Menu. If you feel you need access, please contact your System Administrator.

After selecting "Quit," or if you logged into the System Option Menu, you should see:

```
System Options

11/10/2008 12:53

System Studies Incorporated

System Options

1. Select MAP Program
2. Select MAP Data Entry
3. System Administration
4. Language Selection
Q. Quit

Choice?
```

SCREEN 4-2: SYSTEM OPTIONS MENU

2) From the System Option Menu, select "System Administration". Press *3 < Return >*. You should see:

```
System Administration MAP Series XX.XX.XX 11/10/2008 13:31 System Studies Incorporated Password:
```

SCREEN 4-3: SYSTEM ADMINISTRATION PASSWORD PROMPT

3) Type in the System Administration password followed by <*Return>*. The password will not show on the screen.

You should see:

```
System Administration
                                                               MAP Series XX.XX.XX
11/10/2008 13:32
                                                      System Studies Incorporated
System Administration
  1. Set Default Daily Backup Resource 13. Stop Process
  2. Backup MAP System Files 14. Pause Process 3. Restore MAP System Files 15. User Management
  4. Update MAP System
                                           16. Set Idle Logout Time
  5. Shutdown the Computer
                                            17. Set the System Name
  6. Shutdown and Reboot the Computer 18. Tape Administration
  7. Set the Date and Time
                                            19. Network Administration
  7. Set the Date and Time 19. Network Acr 8. List Users Currently Logged In 20. BackupEDGE
  9. Reset File Permissions
                                            21. Restart Web Services
 10. Modem Administration
                                            22. Display System Uptime
 11. Printer Administration
                                            23. Renew System Registration
 12. Start Process
                                             Q. Quit
Choice?
```

SCREEN 4-4: SYSTEM ADMINISTRATION MENU

Automatic Backup Resource Selection

The MAP system stores and continually updates seven days of office data and four weeks of weekly averages. This information, plus any customized files, are automatically backed up each night by the PressureMAP Scheduler. In the event of a system failure, PressureMAP data may be retrieved from the default tape cartridge backup source, which is the traditional method that has been used for years by PressureMAP systems.

With the previous release of PressureMAP (Version 26), a third party application called BackupEDGETM was made available to offer the added capability of backing up system data to other storage resources of sufficient capacity, including DVDs and RAM disks and network backup computers via file transport protocol (ftp). Like the traditional backup method, BackupEDGE can also be used to back up data on tapes. Once the BackupEDGE software has been loaded onto the MAP Engine computer, by following the installation instructions supplied with the product, BackupEDGE can be accessed from the System Administration Menu (option 20) and used to configure one or more of the available backup resources.

Procedure to Select a Default Backup Type

As stated above, PressureMAP is set to back up system data to a tape cartridge automatically. If you intend to use this traditional backup method, there is no need to set the Default Daily Backup Resource as described below. If the BackupEDGE application has been installed on the MAP Engine computer, however, you also have the option of selecting one of the backup media that has been configured for this application to use as the default backup resource.

Procedure:

1) From the System Administration Menu, select "Set Default Daily Backup Resource." Press *1* and *<Return>*. The menu shown below displays. Notice that the menu title line indicates the current setting for the default backup, either *Traditional* or *BackupEDGE*.

```
Select a default Backup type (currently set to TRADITIONAL)

11/10/2008 13:41 *Schedule Off* System Studies Incorporated

Select a default Backup type (currently set to TRADITIONAL)

1. Traditional Backup Method
2. BackupEDGE Backup Method
Q. Quit
```

SCREEN 4-5: DEFAULT BACKUP RESOURCE SELECTION MENU

2) To change the default backup resource from tape to one of the configured BackupEDGE resources, press 2 and <**Return**>. Please note that if BackupEDGE has not yet been installed on your system, the following prompt displays:

```
** BackupEDGE **

BackupEDGE is currently not installed!
```

If you already have BackupEDGE media, please refer to the BackupEDGE incremental update instructions or call tech support for more information.

Hit <Return> to continue..

3) If the application has been installed, however, the program displays the BackupEDGE Resource Menu (SCREEN 4-6) which includes a listing of the backup devices that have been configured in BackupEDGE.

```
Daily backup resource using BackupEDGE MAP Series XX.XX.XX

11/10/2008 13:43 *Schedule Off* System Studies Incorporated

Backup MAP system files using BackupEDGE

1. Backup MAP system files using Device: tape0 (type: tape)

2. Backup MAP system files using Device: dvd0 (type: dvd)

3. Backup MAP system files using Device: url0 (type: url)

4. Set number of backup slots for BackupDEGE type url

Q. Quit
```

SCREEN 4-6: BACKUPEDGE RESOURCE MENU

In the example above, three MAP Engine resources have been configured for use with BackupEDGE: tape, DVD and url. These items are all suitable for backing up PressureMAP system files since they each have the large storage capacity required for a PressureMAP system.

Both tape and DVD are reliable and easy-to-use backup options. The third option listed represents the designation of a backup file located on a network computer or computer system that is accessible using file transport protocol. Many PressureMAP users prefer uploading PressureMAP system files to a remote location using this resource. Notice also that the BackupEDGE Resource Menu makes it possible, using option #4, to set the number of backup slots (consecutive daily backups that will be retained in a test file on the specified backup computer.

Note:

The resource selection options displayed on your screen may vary from those shown above, depending upon your BackupEDGE configuration settings. Option 20 of the System Administration Menu provides an access point through PressureMAP for launching BackupEDGE. From the application's Configuration Menu, you can select any additional backup resources that might pertain to your equipment and/operation. Please refer to the documentation supplied with BackupEDGE for instructions on how to configure the desired resources.

4) Select the menu option that represents the BackupEDGE resource that you would like to use for your default backup. Finish you selection by pressing *Return*>.

Once you have made your BackupEDGE resource selection, the following screen prompt displays:

Successfully replaced BackupEDGE schedule item! Traditional daily backups disabled successfully! BackupEDGE daily backups enabled successfully!

Hit <Return> to continue.

5) If you have selected Device: url as your daily backup method, press the option number opposite "Set number of backup slots for BackupEDGE type url," then hit <*Return>*. If a previous backup slot selection has been made, the program will display this selection and ask how many backups you would like to keep:

BackupEDGE current setting for type url is 3
This means the backup will occur daily and 3 backups will be kept.
How many backups would you like to keep for type url?

6) Type the desired number of backups and press < *Return*>. PressureMAP will display your entry and ask if it is correct.

```
You entered "4. Is this correct (y or n)? y

Successfully modified /var/map/EDGE_BKUP-GEN/TXT with url:4
Hit <Return> to continue.
```

7) Press < *Return* > to go back to the Default Backup Resource Selection Menu (SCREEN 4-6) where you can enter Q and < *Return* > to redisplay the System Administration Menu.

Manual Backup Procedures

The backup procedures described in the following pages allow the system operator to manually perform a MAP system backup, which is especially useful when the MAP system is going to be updated or if hardware needs to be replaced. (Even when a current nightly backup is available, it is a good idea to make a manual backup on such occasions.) When the system operator initiates the backup process, the PressureMAP Scheduler is stopped automatically. The Scheduler controls most MAP operations, such as directing data acquisition, updating device histories, developing daily dispatches and system quality indexes, and distributing reports. It should be noted that while a manual backup is in progress, the PressureMAP operations normally scheduled during that time period will not take place.

The System Administration user-initiated backup process consists of one of the functions described below:

- Creating a backup copy of all customized system files and all office files to tape (traditional backup menu).
- Creating a backup copy of these system and office files to one of the other possible backup resources available through BackupEDGE. This may entail configuring the backup medium using the BackupEDGE application if this procedure was not completed during the installation of the software.

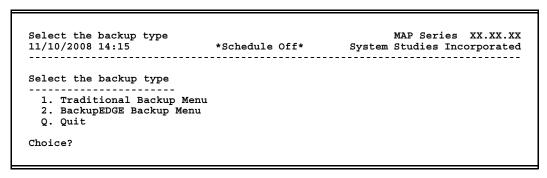
These operations can be controlled from a remote terminal but, in most cases, they will be performed on the drives of the computer on which the MAP System is running.

Accessing the Backup MAP System Files Menu

This procedure begins at the System Administration Menu. If you cannot find this menu, refer to the "Accessing the System Administration Menu Procedure" described on page 4-1.

Procedure:

1) From the System Administration Menu, select "Backup MAP System Files." Press 2 < *Return*>. You should see the Manual Backup Resource Selection Menu shown in SCREEN 4-7.



SCREEN 4-7: MANUAL BACKUP RESOURCE SELECTION MENU

2) Select the desired method by pressing the appropriate option number and hitting <*Return*>.

Please note that the explanations presented below describe the screens and procedures for manually backing up your PressureMAP office and data files using the two methods offered in SCREEN 4-7. The Traditional Backup Method is described first, followed by the BackupEDGE Backup process beginning on page 4-8.

Traditional Backup Menu Function

To access the Backup MAP System Files Menu and perform one of the two procedures displayed in SCREEN 4-8 above, follow the procedures described below.

Backing Up MAP System Files to Tape:

Procedure:

1) From the Manual Backup Resource Selection Menu shown in SCREEN 4-7, press *1* and <*Return>*. This produces the Backup MAP Systems Files Menu (SCREEN 4-8).

```
Backup MAP System Files

1. Backup MAP System Files

2. Create Linux Migration Tape
Q. Quit

Choice?
```

SCREEN 4-8: BACKUP MAP SYSTEM FILES MENU

2) Select "Backup MAP Systems Files to Tape." Press *I < Return >*. You will see the message:

```
Do you wish to back up MAP System files to tape? Y[es], N[o]
```

3) Make sure you have a magnetic tape cartridge in place, and press *Y* <*Return*> to start the backup. If you do not have the tape cartridge installed, this message displays:

```
Insert The Tape In the Tape Drive... C)ontinue Q)uit
```

Place the cartridge in the drive and press *C*. The message:

```
Retensioning the tape, please wait...
```

will appear on the screen. Then after a few minutes you will see:

```
Writing the backup, please wait...
```

The backup may take up to ten minutes. When the backup is complete, the system will automatically verify the accuracy of the backup and print the message:

```
Verifying the backup, please wait...
```

When the verification is complete, the message:

```
Backup Complete
Hit <Return> to continue.
```

will confirm a successful backup. Hit <*Return*> to go back to the Backup MAP System Files Menu.

Creating a Linux Migration Tape:

The next option on the Backup MAP System Files Menu gives individuals who are currently running PressureMAP Version 27 on an SCO UNIX 5.0.7 operating system the ability to create a copy of their system for migration to a Linux operating system.

The following data will be migrated from the PressureMAP Version 27.00:

- Office list
- History files
- Report Centers
- Alarm Centers
- Transfer Offices
- Mimic Access Number mappings
- User logins
- Configuration files

Procedure:

1) From the Backup MAP System Files Menu, select "Create Linux Migration Tape." Press 2 <*Return>*. The screen displays the following prompt:

```
Do You Wish To Create Linux Migration Tape? Y[es], N[o]
```

2) Follow the prompts displayed on screen to create the required migration media.

BackupEDGE Backup Menu Functions

Follow the procedures described below to access the BackupEDGE MAP System Files Menu and perform a manual backup of the PressureMAP system using one of the configured backup resources available. Procedures are also provided for creating a Linux Migration Backup.

Please note that procedures are <u>not</u> provided in this documentation for all of the possible backup Linux migration resources that can be used with the BackupEDGE application. Two of the more commonly used system backup resources, DVD and remote computer backup via file transport protocol (ftp), are explained below for reference. These are followed by an explanation of how to create a Linux Migration Backup on DVD media.

The procedures for using other resources available from the BackupEDGE Resource Selection Menu to manually back up the PressureMAP system are similar. Simply follow the screen prompts provided.

Procedure:

1) At the System Administration Menu, press option 2, "Backup MAP System Files," followed by *Return*>. PressureMAP then displays the Manual Backup Resource Selection Menu shown below.

```
Select the backup type

11/10/2008 14:55 *Schedule Off* System Studies Incorporated

Select the backup type

1. Traditional Backup Menu
2. BackupEDGE Backup Menu
Q. Quit

Choice?
```

SCREEN 4-9: MANUAL BACKUP RESOURCE SELECTION MENU

2) Press 2 and < Return > to access the BackupEDGE Resource Selection Menu. If BackupEDGE has not yet been installed on your system, the following prompt displays:

```
** BackupEDGE **
```

BackupEDGE is currently not installed!

If you already have BackupEDGE media, please refer to the BackupEDGE incremental update instructions or call tech support for more information.

Hit <Return> to continue..

3) If BackupEDGE has been installed, however, a screen similar to the one shown below displays.

```
Backup MAP system files using BackupEDGE MAP Series XX.XX.XX

11/10/2008 14:56 *Schedule Off* System Studies Incorporated

Backup MAP system files using BackupEDGE

1. Backup MAP system files using Device: tape0 (type: tape)
2. Backup MAP system files using Device: dvd0 (type: dvd)
3. Backup MAP system files using Device: url0 (type: url)
4. Create Linux Migration Backup using Device: tape0 (type: tape)
5. Create Linux Migration Backup using Device: dvd0 (type: dvd)

Q. Quit
```

SCREEN 4-10: BACKUPEDGE RESOURCE SELECTION MENU

Backing Up MAP System Files to DVD

Procedure:

1) Assuming that you are using a MAP Engine computer with a DVD-ROM drive and this device has been set up using the BackupEDGE software, select the option for this device from the BackupEDGE Resource Selection Menu. In the example above, press 2 and <*Return*>. PressureMAP displays the following prompt:

```
Do You Wish To Backup MAP system files using Device: Dvd0(type:dvdrom)? Y[es], N[o]
```

2) If you wish to proceed with the backup, first make sure that you have a writable DVD in the MAP Engine computer's DVD drive, then type *Y* and *Return*>. (Typing *N* and *Return*> will redisplay the BackupEDGE Resource Selection Menu.)

The software initiates the backup process with the selected BackupEDGE *dvd0* device and displays the first three lines of text shown below. After a successful backup has been made onto the DVD, which may take several minutes depending upon the number of offices and devices in your system, the next two text lines shown below display on the screen. Please note

that a numerical code display of zero (0) indicates that the backup has been performed successfully. (Please consult your BackupEDGE installation document for an explanation of other possible codes.)

```
Begin edge_backup script

Scheduler is off!

Backup is processing, please wait..

File include list completed, starting backup..

End edge_backup script with code = 0

Hit <Return> to continue.
```

3) Press < *Return* > to go back to the BackupEDGE Resource Selection Menu (SCREEN 4-10). From this menu you can select Quit to back through the various menus until you reach the System Administration Menu.

Backing Up MAP System Files to a Remote Computer via FTP

The method of backing up the MAP System files to a remote computer via ftp is essentially identical to the procedure described above. In order for the backup to be accomplished, IP networking requirements for both the MAP Engine computer and the remote computer must be fulfilled. If necessary, consult your company's IT personnel to assist in setting up the IP Addresses, Gateway and Subnet, etc.

Procedure:

1) Choose the desired backup resource option from the BackupEDGE selection menu and press <**Return>**. For example, if you were to select option 3 in the example above to *Back up MAP system files using Device:* [computer name] (type: url), the software would ask for confirmation, displaying a prompt similar to the one below:

```
Do You Wish To Backup MAP system files using Device: [computer name] (type:url)? Y[es], N[o]
```

2) Enter **Y** and **<Return>** to begin the backup process. The software initiates the backup proceedings with the selected BackupEDGE resource and displays the first three lines of text shown below. After a successful backup has been made, which may take several minutes depending upon the number of offices and devices in your system, the last two text lines display. Please note that a numerical code display of zero (0) indicates that the backup has been performed successfully. (Please consult your BackupEDGE installation document for explanations of other possible codes.)

```
Begin edge_backup script
Scheduler is off!
Backup is processing, please wait..
File include list completed, starting backup..
End edge_backup script with code = 0
Hit <Return> to continue.
```

3) Press < *Return* > to go back to the BackupEDGE Resource Selection Menu (SCREEN 4-10).

<u>Creating a Linux Migration Backup to DVD</u>:

The options listed last on the BackupEDGE Resource Selection Menu provide the ability to create a backup of your SCO UNIX PressureMAP Version 27 system for migration to a Linux operating system.

Among the types of data included on the migration medium are configuration files, histories, user logins, Alarm Centers, Report Centers, transducer offices, etc. All of the data required to make a smooth transition from one operating system to another is included in the media.

Procedure:

1) From the BackupEDGE Resource Selection Menu, select "Create Linux Migration Backup using Device: dvd0 (type: dvd)." Press *5* <*Return*>. The screen displays the following prompt:

Do You Wish To Create Linux Migration DVD? Y[es], N[o]

2) Follow the prompts displayed on screen to create the required migration media.

Procedures to Restore MAP System Files

This utility is used to move data from a backup resource onto the MAP Engine computer. You would need to do this if hardware problems caused the system to fail or if a user file was changed or deleted by mistake. Another important restore utility is available for PressureMAP Version 27 systems which are running either of the two supported Linux operating system. Linux systems have a menu option for performing data migration from a backed up SCO UNIX PressureMAP system.

Prior to performing the procedure, you should stop the scheduler as described in the section, "Procedures for the Stop Process," located near the end of this section.

The Restore MAP System Files utilities—both the traditional method and the newer BackupEDGE application—have six functions:

- reinstall the office and customized files onto the system computer
- transfer office files from a backup medium to the system computer
- transfer all office data files from a backup medium to the system computer
- transfer the office list file from a backup medium to the system computer
- transfer any file from a backup medium to the system computer
- transfer PressureMAP data from a SCO UNIX system to a Linux system

All of these operations can be initiated from a remote terminal, but the activity will be performed on the drives of the computer on which the MAP System is running.

Accessing the Restore Utility Selection Menu

This procedure begins at the System Administration Menu (SCREEN 4-11). If you cannot find this menu, follow the Accessing the System Administration Menu Procedure presented on page 4-1 of this section.

```
System Administration
                                                                  MAP Series XX.XX.XX
11/10/2008 13:32
                                                         System Studies Incorporated
System Administration
  1. Set Default Daily Backup Resource 13. Stop Process
  2. Backup MAP System Files
                               14. Pause Process
es 15. User Management
16. Set Idle Logout Time
                                              14. Pause Process
  3. Restore MAP System Files
  4. Update MAP System
  5. Shutdown the Computer 17. Set the System Name 6. Shutdown and Reboot the Computer 18. Tape Administration
  7. Set the Date and Time
                                              19. Network Administration
  7. Set the Date and Time
8. List Users Currently Logged In
                                              20. BackupEDGE
  9. Reset File Permissions
                                              21. Restart Web Services
10. Modem Administration
                                              22. Display System Uptime
 11. Printer Administration
                                              23. Renew System Registration
12. Start Process
                                               Q. Quit
Choice?
```

SCREEN 4-11: SYSTEM ADMINISTRATION MENU

Procedure:

1) From the System Administration Menu, select "Restore MAP System Files". Press *3* <*Return>*. The Restore Utility Selection Menu shown below displays.

```
Select the restore type

10/10/2008 14:14 *Schedule Off* System Studies Incorporated

Select the restore type

1. Traditional Restore Menu
2. BackupEDGE Restore Menu
Q. Quit
```

SCREEN 4-12: RESTORE UTILITY SELECTION MENU

2) Select the desired restore method by pressing the appropriate menu option number followed by *Return>*.

Note: As you can see in the screen sample above, PressureMAP offers two backup and restore utilities: the traditional method, which uses an electronic tape cartridge; and BackupEDGE, which gives you the option of using a tape cartridge or other types of backup and restore media, such as DVD. You should select the restore utility from the menu above based on the what method was used to back up the system files. If you use BackupEDGE for your automatic daily backups or a manual backup, you would select option 2 above.

Once you have selected the restore utility to use, there are six options available to you as described below. The following documentation describes how to use these options from the Traditional Restore Menu. The types of screen prompts and messages displayed for the various traditional restore methods apply also to the BackupEDGE restore functions.

Traditional Restore Menu Functions

The following sections describe the six procedures listed on the Traditional Restore Menu shown in SCREEN 4-13. Please note that PressureMAP Version 27 running SCO UNIX does <u>not</u> include the sixth option, "Restore from Linux Migration Tape."

To access the Traditional Restore Menu and perform the various restore options, follow the simple steps described below:

Procedure:

From the Restore Utility Selection Menu (SCREEN 4-12), select "Traditional Restore Menu" by pressing *I* and *Return*>. The screen below displays.

```
Traditional Restore Menu

10/10/2008 14:10 *Schedule Off* System Studies Incorporated

Traditional Restore Menu

1. Rebuild System
2. Restore an Office
3. Restore All Office Data
4. Restore Office List File
5. Restore a File
6. Restore from Linux Migration Tape
Q. Quit

Choice?
```

SCREEN 4-13: RESTORE MAP SYSTEM FILES MENU

Procedure to Rebuild a System

In the case of major damage to the system, such as a hard disk failure, it is necessary to install the entire MAP System from scratch. The following separate install procedures are required.

Procedure:

- 1) Installation of the Linux Operating System, MAP System and PressureWEB application—refer to the system installation procedures in the *MAP System Installation Manual*.
- 2) Installation of the office and customized files from the backup medium—refer to the Rebuild a System procedure in this section.
- 3) If the system that is being rebuilt is on a network, the LAN connection will need to be reconfigured after the rebuild is complete. Refer to the Network Administration section of this manual for instructions on each part of this process—Disconnect the MAP System from the Network, Connect the MAP System to the Ethernet LAN, and Set the Gateway IP Address.

The procedure for rebuilding a system using the traditional (non-BackupEdge) method involves reinstalling the office files, other data files and the customized files. This process copies the necessary files from the backup tape to the system computer's hard disk.

While this rebuilding procedure will re-enable the system, a timing function will disable all interactive program menu operations after four days. This function protects System Studies Incorporated from unauthorized duplication of the program. While disabling will deny access to many of the program functions, the system will continue to collect and store data. Office histories will be continuous even for the period during which access to the system was disabled. To prevent disabling, or cancel disabling if it has occurred, call System Studies and ask a Technical Support Representative to re-enable the system.

Procedure:

1) From the Restore MAP System Files Menu (SCREEN 4-13), select "Rebuild System". Press *1* <*Return*>. You should see the Rebuild System Menu, which is shown below.

SCREEN 4-14: REBUILD SYSTEM MENU

Originally this intermediate menu was provided because there were two options available: one for rebuilding a system from tape and one for performing the same function from disks. PressureMAP Version 27 no longer supports backing up and restoring from floppy disks.

2) Select the available option, "Rebuild System from Tape". Press *1* <*Return>*. You will see the message:

Do you wish to rebuild the system from tape? Y[es], N[o]

3) Press *Y* < *Return* > (pressing N will return you to the previous menu). You will see the message:

```
Insert the tape in the tape drive... C[ontinue], Q[uit]
```

4) Place the backup tape into the drive on the computer on which the MAP System is running and press *C* <*Return*> (pressing Q will return you to the previous menu). You will see the message:

```
Reading the backup, please wait...
```

This process could take as long as 15 minutes. If the rebuilding was successful, you will see the message:

Hit <Return> to continue.

If your attempt at rebuilding was unsuccessful, you will see an error message indicating the problem.

5) Hit < *Return* > to get back to the Rebuild System Menu.

If the system that is being rebuilt is on a network, you will next need to reconfigure the basic LAN connection to make the system functional. Press Q < Return > repeatedly until you return to the System Administration Menu. Refer to the Network Administration section of this manual for the necessary procedures: first, Disconnect the MAP System from the Network; then Connect the MAP System to the Ethernet LAN; and Set the Gateway IP Address.

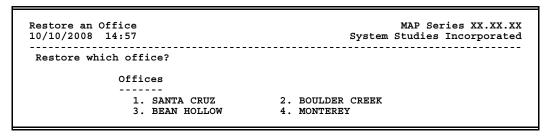
Procedure to Restore an Office

This procedure transfers all of the files associated with an office from backup tapes to the main system computer. It is used if one of the office files becomes corrupted. The utility can be run from a remote terminal, but the backup medium must be loaded into the drives on the system computer.

This procedure begins at the Restore MAP System Files Menu. If you cannot find this menu, refer to the section entitled *Procedures to Restore MAP System Files*.

Procedure:

1) From the Restore MAP System Files Menu, select "Restore an office", press 2 < Return>. You should see a list of all of the offices in your system, similar to the SCREEN 4-15.



SCREEN 4-15: LIST OF OFFICES

2) Select the office to be restored by pressing the office number and *Return>*. You will see the Restore an Office Menu, SCREEN 4-16.

```
Restore an Office

Restore an Office

Restore an Office

1. Restore an Office From Tape
Q. Quit

Choice?
```

SCREEN 4-16: RESTORE AN OFFICE MENU

3) Press item 1 and <**Return>**. You will see the message:

Do you wish to restore an office from tape? Y[es] N[o]

4) Press *Y* < *Return* > (pressing N will return you to the previous menu). You will see the message:

Insert the tape in the tape drive... C[ontinue] Q[uit]

Place the backup tape into the drive on system computer and press C < Return > (pressing Q will return you to the previous menu). You will see the message:

Checking contents of the backup, please wait...

The checking procedure should take less than 5 minutes. If all of the office files are found, you will see the message:

Reading the backup, please wait...

This process should take less than 20 minutes. If your restore procedure is successful, you will see the message:

Hit <Return> to Continue

6) Hit < *Return* > to get back to the Restore an Office Menu. If your attempt at restoring was unsuccessful, you will see an error message indicating the problem.

Procedure to Restore All Office Data

This procedure transfers all of the office data files from a backup tape to the MAP computer. It was developed to enable the System Administrator to easily load the office data from a backup tape into the MAP computer. Unlike the other restore options of the System Administration Menu, only office data files are copied from the tape. The files that are transferred by this option include: all office history, index, dispatch and cable opening files.

Procedure:

1) From the Restore Map System Files Menu, select "Restore all Office Data." Press *3* <*Return>*. You will see the message:

Do you wish to Restore all Office Data? Y[es] N[o]

2) Press *Y* < *Return* > (pressing N will return you to the previous menu). You will see the message:

Insert the tape in the tape drive... C[ontinue] Q[uit]

Place the backup tape into the drive of the MAP computer and press C < Return >. Pressing Q will return you to the previous menu. After entering C, you will see the message:

Checking contents of the backup, please wait...

After about 5 minutes, you will see the following message if the checking was successful:

```
Reading the backup, please wait...
```

If your restore procedure is successful, you will see the message:

```
Hit <Return> to Continue
```

4) Hit < Return > to get back to the Restore Map System Files Menu. If your attempt at restoring was unsuccessful, you will see an error message indicating the problem.

<u>Procedure to Restore an Office List File</u>

This procedure transfers the office list file from a backup tape to the system computer. The office list file contains the list of offices that have been entered into the PressureMAP database. It is used if the office file is lost or damaged. The most common cause of damage is a power outage or surge that occurs when the file is being accessed. The office list file is given its own restore utility because PressureMAP will not run without this file, and because it is called upon so often that it is a likely candidate for damage. The utility can be run from a remote terminal, but the backup medium must be loaded into the drives on the system computer.

This procedure begins at the Restore MAP System Files Menu. If you cannot find this menu, refer to the section entitled Procedures to Restore MAP System Files.

Procedure:

1) From the Restore MAP System Files Menu, select "Restore Office List File", press *4* < *Return*>. You should see the Restore Office List File Menu, shown SCREEN 4-17.

```
Restore Office List File

1. Restore Office List File From Tape
Q. Quit

Choice?
```

SCREEN 4-17: RESTORE OFFICE LIST FILE MENU

2) Select item 1 by pressing *1* <*Return*>. You will see the message:

Do you wish to restore an office list file from tape? Y[es] N[o]

3) Press *Y* < *Return* > (pressing N will return you to the previous menu). You will see the message:

Insert the tape in the tape drive... C[ontinue] Q[uit]

4) Place the backup tape into the drive on system computer and press C < Return > (pressing Q will return you to the previous menu). You will see the message:

```
Checking contents of the backup, please wait...
```

If the office list file is found, you will see the message:

```
Reading the backup, please wait...
```

At this point, the office list file is being copied. If the copying is successful, you will see the message:

```
Hit <Return> to continue
```

5) Hit < *Return* > to get back to the Restore an Office List File Menu. If your attempt at restoring was unsuccessful, you will see an error message indicating the problem.

Procedure to Restore a File

Using these procedures, any specified file can be transferred from a backup tape to the main system computer. Since this is one of those utilities that could play havoc with the system if exceptional care is not taken, it is only intended to be used by the System Studies Technical Support Staff. We strongly advise PressureMAP users to call System Studies for help with restoring a file. This procedure can be run from any remote terminal, but the backup medium must be loaded into the drives on the system computer.

Procedure:

1) From the Restore MAP System Files Menu, select "Restore a File." Press *5 < Return >*. You should see the message:

```
Path name (or press <Return> when done):
```

2) Type in the name of the file that you want to restore followed by *Return>*. If you want more than one file restored, type in the path name of each file followed by a *Return>*. When you have typed in all the file names that you want restored, type one final *Return>*.

You should see:

```
Restore a File MAP Series XX.XX.XX

10/10/2008 14:49 System Studies Incorporated

Restore a File

1. Restore a File From Tape
Q. Quit

Choice?
```

SCREEN 4-18: RESTORE A FILE MENU

3) Select "Restore a File from a Tape". Press 1 < Return >. You will see the message:

Do you wish to restore a file from a tape? Y[es] N[o]

4) Press *Y* < *Return* > (pressing N will return you to the previous menu). You will see the message:

Insert the tape in the tape drive... C[ontinue] Q[uit]

Place the backup tape into the drive on the system computer and press C < Return > (pressing Q will return you to the previous menu). You will see the message:

Reading the backup, please wait...

At this point, copies are being made of the file or files that you requested. If the copying is successful, you will see the message:

Hit <Return> to continue

6) Hit < *Return* > to get back to the Restore a File Menu. If your attempt at restoring was unsuccessful, you will see an error message indicating the problem.

Procedure to Restore from Linux Migration Tape

If you are using PressureMAP Version 27 on an Linux operating system, a sixth menu option, "Restore from Linux Migration Tape," appears on the Traditional Restore Menu. This option was created to simplify and automate the process of exporting your PressureMAP System files from an SCO UNIX operating system to Linux.

Utilizing this option assumes that you previously had created a Linux Migration Tape on the UNIX system. Menu options in both PressureMAP Version 26.02 and PressureMAP Version 27.00, located on the Backup MAP System Files Menu, provide this capability. When selected the utility converts data to a portable text format and archives it to backup media. The "Restore from Linux Migration Tape" option in PressureMAP Version 27 extracts the data from the backup media and creates the corresponding data files (listed below) in the native binary format:

- Office list
- History files
- Report Centers
- Alarm Centers
- Transfer Offices
- Mimic Access Number mappings
- User logins
- Configuration files
- Login ttys

Note: Before you can restore your PressureMAP system using the Linux Migration Tape, you will need to contact System Studies' Technical Support Department to obtain a password.

Requesting a migration password provides Technical Support personnel with advance notification of the impending SCO UNIX to Linux migration allows them to enable certain

system capabilities.

Performing the procedure to Restore from a Linux Migration Tape is similar to the other restore options described above. Once the procedure has been completed, you can access system, office and device data via the normal MAP System menus.

Procedure:

1) From the Restore MAP System Files Menu, select "Restore from Linux Migration Tape." Press *6* < *Return* >. You should see the message:

Do You Wish to Restore from Linux Migration Tape?

2) Press *y* <*Return*> to proceed. Entering *n* <*Return*> takes you back to the Traditional Restore Menu. After entering "yes" to the prompt, additional screen data appears as shown in SCREEN 4-19 below.

```
Restore from Linux Migration Tape

MAP Series XX.XX.XX
05/27/2009 11:47 *Schedule Off* System Studies Incorporated

Do You Wish To Restore from Linux Migration Tape? Y[es], N[o] y

Before performing a Linux migration restore, system capabilities
must be set by System Studies Technical Support before continuing.

Call during business hours to obtain the password for migrating
your data to Linux. (800)247-8255 (Mon - Fri 5:00am - 4pm PST)

Would you like to continue (y/n)?
```

SCREEN 4-19: RESTORE FROM LINUX MIGRATION TAPE PROMPTS

3) Once you have obtained a migration password, press *Y* <*Return*>. The program then prompts you for the password:

Password:

- 4) Carefully type your migration password, confirm that it is correct, and then press <*Return*>. A prompt displays asking if you wish to continue.
- 3) Insert the migration tape into the tape drive and press C < Return >. The following messages appear to indicate that the automated restore process is underway.

```
Rewinding the tape...

Done rewinding the tape...

Reading The Backup, Please Wait...
```

At this point several lines of text scroll by identifying the data being read. The information includes specific office files, MAP schedules, call times, etc. Eventually the following messages appear if the restore process is successful:

```
Rewinding the tape...

Done rewinding the tape...
```

```
No restore messages from tar to report...

Looks like a successful restore...

Restore Complete.

Post restore actions (if any):

Post restore actions complete...
```

The Linux migration utility next displays more detailed processing information, including the progress of various classes of data as they are migrated. This information, which takes several minutes to process, includes office data, alarm/dispatch centers, MAP system configuration files, user logins, Digi PortServer configuration, including communication port designations. Depending upon the number of offices on your original system and how many serial resources you use, the processing information could take several minutes to display. At the completion of the process, the following message displays:

```
Resetting file permissions. Please wait... Resetting file permissions \c successful.
```

4) The Tradition Restore Menu (SCREEN 4-13) will display next. Since all of the required files and information from the SCO UNIX Version 26.02 or Version 27.00 PressureMAP system have been restored successfully, simply or press *Q* < *Return*> to exit.

BackupEDGE Restore Menu Functions

The restore procedures for BackupEDGE are very similar to the Traditional Restore functions described in the preceding pages. Once you select the type of restore function to perform from the BackupEDGE Restore Menu and the type BackupEDGE-configured resource to use for the restore process, you will need to simply follow the menu prompts provided by the application.

Please note that the procedures described below begin at the System Administration Menu. An explanation of how to access this menu is provided on page 4-1.

Procedure:

1) From the System Administration Menu, select "Restore MAP System Files". Press *3* <*Return*>. The Restore Utility Selection Menu shown below displays.

```
Select the restore type

1. Traditional Restore Menu
2. BackupEDGE Restore Menu
Q. Quit
```

SCREEN 4-20: RESTORE UTILITY SELECTION MENU

2) Access the BackupEDGE Restore Menu by pressing **2** and **<** *Return*>. If the application has not yet been installed on your system, the following prompt displays:

```
** BackupEDGE **
```

BackupEDGE is currently not installed!

If you already have BackupEDGE media, please refer to the BackupEDGE incremental update instructions or call tech support for more information.

Hit <Return> to continue..

If BackupEDGE has been installed, PressureMAP produces the following menu:

```
BackupEDGE Restore Menu
12/21/2008 14:14 *Schedule Off* System Studies Incorporated

BackupEDGE Restore Menu

1. Rebuild System
2. Restore an Office
3. Restore All Office Data
4. Restore Office List File
5. Restore a File
6. Restore from Linux Migration Backup
Q. Quit

Choice?
```

SCREEN 4-21: BACKUPEDGE RESTORE MENU

3) Select the desired restore option from the selections above. Each of the menu options, with the exception of items 2 and 5, produces a menu similar to the one shown in SCREEN 4-22 below.

```
Rebuild System using BackupEDGE MAP Series 26.00.A3

12/28/2008 10:54 *Schedule Off* System Studies Incorporated

Rebuild System using BackupEDGE

1. Rebuild System using Device: tape0 (type: tape)
2. Rebuild System using Device: dvd0 (type: dvd)
3. Rebuild System using Device: url0 (type: url)
Q. Quit

Choice?
```

SCREEN 4-22: BACKUPEDGE RESTORE MENU

Notice that you will need to choose the BackupEDGE device that you used to back up the system files in order to perform the restore function.

For an explanation of the required procedures and PressureMAP menu prompts produced during the various restore functions, please refer to the explanations in the preceding Traditional Restore Menu Functions.

When you have finished performing the desired BackupEDGE restore function(s), quit out of the various menus by pressing Q repeatedly until you reach the System Administration Menu.

Procedure to Update MAP System

The functions available through this option of the System Administration Menu are as follows:

- System Update—used to update from one Version of PressureMAP to the next released Version.
- Supplemental Update—which includes installing Custom Reports that can be accessed through the User Initiated Operations Menu.

While *Update the MAP System* is a part of the System Administration Menu, these important utilities are documented separately. Please refer to the *MAP System Installation Manual* for System Update, Incremental Update, Report Update and Special Data Update instructions. Instructions for the Office Update procedures are shipped with the prepared office data CDs/DVDs.

Procedure to Shut Down the Computer

This utility implements a controlled shutdown of the system computer. Turning off the power to the computer while the MAP program is running risks losing or damaging files. Using this procedure to exit the MAP program before turning off power to the computer will ensure that no data is lost. This utility is used whenever the computer needs to be turned off, such as during the installation of new hardware or if the computer is to be moved. It is also useful as a troubleshooting procedure when modems need to be reinitialized.

While this utility can be performed from a remote terminal, running the utility will cut off the remote terminal. Then the remote terminal user will have to wait until someone reboots the program from the system computer.

Procedure:

1) From the System Administration Menu, select "Shutdown the Computer". Press *5* < *Return* >. You will see the message:

```
Do you wish to shut down the computer? Y[es], N[o]
```

2) Press *Y* < *Return*>. Which message you see next will depend upon whether or not anyone else is currently logged into the system. If no one else is logged in, the system will immediately shut down. You will see the messages:

```
No other users currently logged in.
* * Normal System Shutdown * *
    * * Safe to Power Off * *

* * Press any Key to Reboot * *
```

(For the reboot procedure, go to Step 3 in this procedure.)

If other users are logged onto the system, both you and they will see the following series of messages:

```
Shutdown started. The system will be shutdown in 60 seconds. Please log off now.
```

And then, 60 seconds later:

```
THE SYSTEM IS BEING SHUT DOWN NOW !!! Log off now or risk your files being damaged.
```

Soon after the last message, the remote terminal users will be logged off if they haven't already done so.

3) The last message will remain on the remote users' screen after they are cut off. To access the system, they will have to call in and log on again after someone reboots the program from the main computer. The user working on the system terminal will see the message:

```
* * Safe to Power Off * *

* * Press any Key to Reboot * *
```

- 4) You may now feel free to turn off the computer.
- 5) After turning the computer on again, you will see a message similar to the following on the system computer's monitor:

```
Phoenix 80486 Rom Bios Version XX.XX
Copyright (c) 1985-1988 Phoenix Technologies Ltd.
All rights reserved
```

This message will vary slightly depending on the type of hardware you are using.

6) As the system reboots, you will see numerous lines of text scrolling across the screen. You will also see a series of prompts after which the curser stops and flashes. Some of these prompts will require your input, some will not, and some are optional. The first prompt is:

```
Hit CTRL ALT ESC for SETUP.
```

Ignore this prompt and the program will soon move on. Next, you will see:

```
Boot:
```

7) Press < *Return* >. Then you will see:

Type CONTROL-d to proceed with normal startup, (or give root password for system maintenance):

8) Type in *Control d>* (no *Return>*). You will see the message and prompt:

```
Current system time is: (date and time)

Enter new time ([yymmdd]hhmm):
```

9) The date and time recorded on the computer's clock are indicated. If the computer clock is wrong, you may enter a new time or date. If the computer clock is right, press <*Return>* or simply ignore the prompt and wait for the program to move on. After a while, you will see the login prompt on the screen:

```
PressureMAP XX.XX.XX Login:
```

10) If some other text appears on the screen after the login prompt, press < *Return* > and the login prompt will appear again below the text. At that point, type in your User ID and password.

Procedure to Shut Down and Reboot the Computer

If you use the proper procedure to quit the operating system, it is called a shutdown. When the computer is shut down correctly, there is no danger of losing files. Whenever the power is unexpectedly shut off to the system computer, there is a danger of losing or damaging files. Such an occurrence is appropriately called a crash. This utility will shut down the computer correctly and immediately reboot it again. It is used during the System Update.

It is also used for trouble shooting when a tape drive seems to be hung up or a modem needs reinitializing. While this utility can be performed from a remote terminal, running the utility will cut off the remote terminal. The remote terminal user will have to wait until the system reboots itself and then log on again.

Procedure:

1) From the System Administration Menu, select "Shutdown and Reboot the Computer". Press *6* < *Return*>.

```
Do you wish to shutdown and reboot the computer? Y[es], N[o]
```

Press *Y* <*Return*>. Which message you see next will depend upon whether or not any other users are currently logged into the system. If no other users are logged on, the system will immediately shut down, begin the rebooting, and display the messages illustrated here after Step 2. If there are other users logged onto the system, both you and the other users will see the following series of messages:

```
Shutdown started. (date)
```

Followed by:

```
The system will be shutdown in 60 seconds. Please log off now.
```

And then, 60 seconds later:

```
THE SYSTEM IS BEING SHUT DOWN NOW !!! Log off now or risk your files being damaged.
```

Soon after the last message, the remote terminal users will be logged off if they haven't already logged off.

2) The last message will remain on the remote users' screen after they are cut off. To access the system, they will have to call in and log on again. If your monitor is attached to the system computer, you should next see:

```
Phoenix 80486 Rom Bios Version XX.XX
Copyright (c) 1985-1988 Phoenix Technologies Ltd.
All rights reserved
```

This message is displayed at the beginning of the rebooting process and will vary depending on the type of hardware you are using.

3) As the system reboots, you will see numerous lines of text scrolling across the screen. You will also see a series of prompts after which the curser stops and flashes. Some of these prompts will require input from you, some will not, and some are optional.

The first prompt will be:

```
Hit CTRL ALT ESC for SETUP.
```

Ignore this prompt and the program will soon move on. Next, you will see:

```
Boot:
```

4) Press < *Return* > or simply ignore this prompt; the booting will continue after a minute or so. Then you will see:

Type CONTROL-d to proceed with normal startup (or give root password for system maintenance):

5) Press the *Ctrl*> and *D*> keys (no *Return*>). You will see the message and prompt:

```
Current system time is: (date and time)

Enter new time ([yymmdd]hhmm):
```

6) The date and time recorded on the computer's clock are indicated. If the computer clock is wrong, you may enter new time or date. If the computer clock is correct, press <*Return*> or simply ignore the prompt and wait for the program to move on. After a while, you will see the login prompt on the screen:

PressureMAP XX.XX.XX Login:

7) If some other text appears on the screen after the login prompt, press <*Return>* and the login prompt will appear again below the text. At that point, type in your User ID and password.

Procedure to Set the Time and Date

There are two time keepers in the system computer: one programmed into the computer hardware, and one that is part of the operating system. This utility will change the time and date on both of these time keepers.

Procedure:

1) From the System Administration Menu, select "Set the Time and Date". Press 7 < *Return*>. You will see the message:

```
Do you wish to set the time and date? Y[es], N[o]
```

Press *Y* < *Return* >. You will see the following message:

```
Enter date (mm/dd/yy) :
```

2) Type in a new date, even if the date shown at the top of the screen (below the screen title) is already correct. Your format must be exactly the same as shown on the screen. You **must** use double digits and slash marks. An example of the format would be:

10/21/08

3) After you type in a new date, press < **Return**>. You will see the message:

```
Enter time (hh:mm):
```

4) Type in a new time. As before, your format must be exactly the same as shown on the screen. The time must be entered as it would be read from a 24-hour clock. For example, 6:00 p.m. would be written as 18:00.

After you type in a new time, press < *Return*>. You will see the message:

Time and date reset.

Hit <Return> to continue.

5) Hit < *Return* > to get back to the System Administration Menu.

Procedure to List Users Currently Logged In

This utility will display a list of all the users who are logged onto the MAP System at the time that the utility is run. It is a good idea to look at this list before the system is shut down. Shutting down the system will cut off all users, which may result in the loss of data that is being input at the time.

Procedure:

1) From the System Administration Menu, select "List Users Currently Logged In". Press 8 < Return>. You will see the message:

```
Do you wish to list users currently logged in? Y[es], N[o]
```

2) Press *Y* < *Return* >. You will see a list of the users who are currently logged into the MAP program on the screen. The list will look similar to the following one, except that it will list the users on your system.

```
List Users Currently Logged In MAP Series XX.XX.XX 09/25/2008 17:40 System Studies Incorporated

Do You Wish To List Users Currently Logged In? (Y(es, N(o) y Name Line PID Time cpams ttyal 143 Wed Apr 25 16:55:45 2005 madjack ttyA2 246 Wed Apr 25 17:37:22 2005 bostonbiff ttyA3 247 Wed Apr 25 17:33:56 2005

Hit <Return> to Continue
```

SCREEN 4-23: SAMPLE LIST OF CURRENT USERS

The columns describe the following:

Name—lists the User IDs of the users presently logged in.

Line—reveals the modem line on which the current users are logged in.

PID—gives the Process ID number which is used by the system for various internal functions such as the Idle Logout.

Time—shows the time that the user logged in.

Note: The list does not reveal the origin of the call or the location of the user. Hopefully, the User ID will be descriptive enough to suggest where the user is calling from.

After the list, you will see the message:

Hit <Return> to continue.

3) Hit < *Return* > to get back to the System Administration Menu.

Procedure to Reset File Permissions

This is primarily a maintenance utility which can be run when you have difficulty accessing a file. It will run the program which establishes what privileges each Menu Level has.

Procedure:

1) From the System Administration Menu, select "Reset File Permissions". Press *9* < *Return* >. You will see the message:

Do you wish to reset file permissions? Y[es], N[o]

2) Press *Y* < *Return* >. You will then see the message:

Upgrading system permissions, please wait...

When the file permissions have been reset, you will see:

Permissions upgrade successful.

Hit <Return> to continue.

3) Hit < *Return* > to get back to the System Administration Menu.

Procedures to Perform Modem Administration

This utility allows the System Administrator to reprogram any of the modems attached to the system computer. The reprogramming process is called initializing. Initializing involves setting dozens of parameters so that the modems can communicate with PressureMAP as well as the remote modems. Since the initialization process requires the modem to be disabled, this utility also allows the user to disable the modems.

This is primarily a maintenance utility. It is the first thing that you should try if you have difficulty with one of the modems, such as if you cannot dial in. Modems should also be initialized when the system is installed or rebuilt. In addition, modems must be initialized when newly installed, or after they are reconfigured. The last Modem Administration Menu option allows you to view the present modem configuration of the MAP computer.

Modem Functions

There are four different modem functions for each MAP System: Batch, Interactive, Alarm Receiver and User Access. Batch modems are used by the MAP software to call office monitors and collect data, verify alarm conditions, and send alarms and dispatches. Interactive modems are set up to be used by anyone logged into the MAP System to call the monitors for realtime readings, or to manually back up or restore a monitor. The interactive modem is also used when performing CPAMS diagnostics. The Alarm Receiver modems are used by the MAP software to receive alarms sent by the monitors. User Access modems provide the remote user with a means of logging into the MAP System.

Procedure:

1) From the System Administration Menu, select "Modem Administration." Press *10 < Return >*. You will see the Modem Administration Menu illustrated in SCREEN 4-24.

```
Modem Administration
09/02/2008 14:36

Modem Administration

1. Disable a Dial-in Modem Port
2. Enable a Dial-in Modem Port
3. Initialize a Modem
4. Analyze Modem Configuration
Q. Quit

Choice?
```

SCREEN 4-24: MODEM ADMINISTRATION MENU

2) From the Modem Administration Menu, you can choose any of the four functions offered. Because you can initialize callout modems only when no call is in progress, and readalarm modems cannot be initialized when readalarm is running, all modems must be disabled before the initialization process begins.

To disable a modem, choose option #1 from the Modem Administration Menu. You will see the following prompt:

```
Do you wish to disable a Dial-in Modem Port? Y[es], N[o]
```

3) Striking *Y* at the above prompt will bring up the message:

```
Enter the port name to disable:
```

Striking a "?" after the above prompt will display the following message followed by a listing of all the ports that are currently enabled. For example:

```
Ports eligible for disabling: A1, A2, A6
```

After entering the name of the port that you want to disable and pressing *Return*>, the Modem Administration Menu will be redisplayed. Now that you have disabled the port, you can initialize it.

4) From the Modem Administration Menu, select *3*, followed by *Return>*. You will see the following question.

```
Do you wish to initialize a modem? Y[es], N[o]
```

5) Press *Y*, followed by <*Return*> to proceed with the initialization. The following message will be displayed:

Enter the port name to which the modem is attached:

6) Enter a port name and press < *Return*>. (Pressing a "?" will display a message describing what a port name is but will not list the port names.)

After modem initialization you will be returned to the Modem Administration Menu.

7) After the modem has been initialized, it must be re-enabled. From the Modem Administration Menu, press 3, followed by <**Return**>. You will see the question:

Do you wish to enable a Dial-in Modem Port? Y[es], N[o]

8) Striking a **Y** at the above prompt followed by **Return>** will bring up the message:

Enter the port name to enable:

Striking a "?" after the above prompt will display the following message followed by a listing of all the ports that are currently disabled.

Ports eligible for enabling: A1, A2, A6

After entering the port that you want to enable and pressing *Return*>, the Modem Administration Menu will be redisplayed.

Viewing the Modem Configuration

The last option available from the Modem Administration Menu is "Analyze Modem Configuration." This option provides a listing of all the PressureMAP System's modems, designating the assigned port used, configuration (Alarm Receiver, dialout, user login, etc.), baudrate and modem type (manufacturer name and version). Beginning with PressureMAP Version 25.01, Modem Configuration information also includes a second line of information which indicates the modem pool function: batch, interactive or user access.

Procedure:

1) From the Modem Administration Menu, select "Analyze Modem Configuration." Press *4* <*Return>*. You will see the following prompt:

Do You Wish To Analyze Modem Configuration? Y [es], N[o]

2) Type **Y** and **<Return>**. You will see the Modem Configuration Menu illustrated in SCREEN 4-25.

```
Analyze Modem Configuration
                                                           MAP Series XX.XX.XX
09/02/2008 16:11
                                                  System Studies Incorporated
Do You Wish To Analyze Modem Configuration? Y[es], N[o] y
Port Al is a modem, Alarm Receiver 1200 Baud Off, Boca V.34 Modem
Port A2 is a modem, Alarm Receiver 2400 Baud Off, Boca V.34 Modem
Port A3 is a modem, MultiTech 33.6
Port A4 is a modem, MultiTech 33.6
Port A5 is a modem, MultiTech 33.6
Port A6 is a modem, MultiTech 33.6
Port A7 is a modem, MultiTech 33.6
Port A8 is a modem, MultiTech 33.6
Port B1 is a modem, dialout, MultiTech 33.6
        modem pool: interactive
Port B2 is a modem, dialout, MultiTech 33.6
        modem pool: interactive
Port B3 is a modem, dialout, MultiTech 33.6
        modem pool: batch
Port B4 is a modem, dialout, MultiTech 33.6
        modem pool: batch
Port B5 is a modem, dialout, MultiTech 33.6
        modem pool: batch
Port B6 is a modem, dialout, MultiTech 33.6
        modem pool: batch
Port B7 is a modem, dialout, MultiTech 33.6
        modem pool: batch
Port B8 is a modem, dialout, MultiTech 33.6
        modem pool: batch
Hit <Return> to continue
```

SCREEN 4-25: MODEM CONFIGURATION MENU

3) When you are finished viewing the Modem Configuration Menu, press *Quit* to return to the Modem Administration Menu.

Printer Administration Procedures (Linux Operating System)

The information in the following pages describes Printer Administration functions and screen samples that pertain to the Linux operating system. The number of menu options available and some of the program output differ from what is provided for UNIX systems. If your Version 27 MAP System is installed on a MAP Engine that is running UNIX, please refer to page 4-47 for supplemental Printer Administration procedures.

Printer Administration Overview

The MAP System allows multiple printers to be set up as destinations for printed reports. Using the Printer Administration utility, the System Administrator can add and remove printers, set the system default printer, view and manage each printer queue, and restart the printing service for designated printers. Once local and remote printers have been configured in the MAP System, users can specify which printer should receive print jobs from the current login session. The MAP System also has the ability to ensure that the printer actually does print every dispatch report.

All reports to be printed are sent as files and routed through a printer buffer and a printer spooler. The buffer stores the files to be printed, and the spooler schedules the movement of the files from the buffer to the printer. The spooler also has the capability to detect problems in the printer. When the spooler detects a problem that may prevent the printing of the reports, it will shut down. This keeps the reports in the buffer rather than sending them on to the non-functioning printer where they could be lost.

When you detect that the printer attached to the system computer is not working, you should first try to restart the printer spooler with this utility. When the printer problem is corrected, the spooler will continue feeding the stored reports to the printer.

These operations may be performed from a remote terminal, as well as at the console of the computer on which the MAP System is running. From the System Administration Menu, select "Printer Administration". Press 11 < Return >. You should see the Printer Administration Menu, which is shown in SCREEN 4-26.

```
Printer Administration MAP Series XX.XX.XX 09/10/2008 13:01 System Studies Incorporated

Printer Administration

1. View Printer Configuration
2. Add Printer
3. Remove Printer
4. Set Printer Default
5. View Printer Queue
6. Cancel Printer Request
7. Clean Printer Queue
8. Restart Printing Service
Q. Quit

Choice?
```

SCREEN 4-26: PRINTER ADMINISTRATION MENU (LINUX SYSTEM)

The following sections describe the eight procedures listed on the above menu.

View Printer Configuration

This menu item allows the user to see all of the printers, remote and local, that have been specified for the current system. The system-wide default printer is indicated by "*". Local printers are designated with "L", and remote printers with "R". The "local" printer is a printer attached to the PressureMAP computer. All others are "remote." Individual printers in the list may then be selected to view additional information.

Procedure:

1) To view the available printers, select option *I* from the Printer Administration Menu. As shown in the sample output in SCREEN 4-27, a numbered list of the currently configured printers displays. The list is followed by a message prompting you to select one of the printers if you desire to see additional information.

The initial displayed configuration includes each printer's name, type and the comment entered when the printer was set up in the system.

```
View Printer Configuration

12/09/2008 14:35 *Schedule Off* System Studies Incorporated

Printer Name Type Comment

1. printer/copier R Located in room 117A
2. sw-hpjet *R Primary designated printer

Enter printer for more information, or <Return> to quit:
```

SCREEN 4-27: VIEW PRINTER CONFIGURATION DISPLAY (Remote)

- 2) If you wish to view more information about one of the printers, enter its number or the Printer Name at the prompt and press <*Return>*. (Please note that input for the name is case sensitive.)
- 3) After entering your selection you will be asked to confirm your choice. If what you have answered is incorrect, type *N* <*Return*>. The prompt will then be redisplayed for you to enter the correct information.
 - To quit without saving your changes, type Q < Return >. You may then start again or exit the screen.
- 4) When you have verified your choice, the screen will display the additional information for the selected printer.
 - If the printer you chose is remote, the configuration will be similar to what is displayed in SCREEN 4-28. The information listed will include the type designation (remote or local), the device URI (uniform resource identifier), the model designation, and the status of the device (e.g. if it is off line, accepting requests, etc.).

```
View Printer Configuration
                                                       MAP Series XX.XX.XX
12/09/2008 14:35 *Schedule Off*
                                                System Studies Incorporated
   Printer Name Type Comment
 1. printer/copier R
                         Located in room 117A
            *R
sw-hpjet
                       Primary designated printer
Enter printer for more information, or <Return> to quit: 2
You entered [sw-hpjet] is this correct? (y/n/q): y
Printer sw-hpjet features:
   Device URI: ipp://derby.airtalk.com:631/printers/sw-hpjet
   Model: unknown
Status: accepting requests, is idle
Information about another printer? (y/n/q): n
```

SCREEN 4-28: VIEW PRINTER CONFIGURATION DISPLAY (REMOTE)

5) The screen will then prompt you to select another printer. If you wish to view more information about one of the printers, enter *Y* <*Return*> and go back to step 2.

Press N < Return > or Q < Return > to go back to the Printer Administration Menu.

Procedure to Add a Printer

This procedure allows the user to add one or more printers, local or remote, to the system's configuration. A "local" printer is a printer attached to your computer. A remote printer may be either a printer attached to a remote computer (print server) or a stand-alone LAN printer with an IP address. The following procedure demonstrates how to add: first, a local printer and second, a remote printer. The series of question prompts presented by the program may vary, depending on the answers given to the data prompts.

Adding a Local Printer

Procedure:

1) From the Printer Administration Menu, select "Add Printer." Press 2 < Return>. At this point the screen displays a list of any previously configured printers that may exist, followed by a prompt to add a new printer name.

Enter printer name:

- 2) Type the designated name for the new printer followed by *Return*>. Please note that this name must conform to the following requirements:
 - must be 14 characters or less
 - allowable characters are letters, numbers and underscore ()
 - must not match any Printer Name already listed
- 3) After you type the name of the new printer, a prompt confirms your entry and asks if it is correct.

You entered [printer name] is this correct? (y/n/q):

- 4) If the name you have entered is correct, press *y* and *<Return>*. Entering an "n" and *<*Return> redisplays the prompt shown in step 1; entering a "q" and *<*Return> twice places you back at the Printer Administration Menu (SCREEN 4-26).
- 5) The next prompt displayed on the screen asks if the new designated printer is a local printer.

```
Is printer name a local printer? (y/n/q):
```

6) Press *y* < *Return*>, unless you intend to designate a remote printer (see explanation beginning on page 4-39). At this point the information on the screen could be similar to what is shown in SCREEN 4-29 below:

```
Add Printer
                                                            MAP Series XX.XX.XX
09/10/2008 17:43
                                                    System Studies Incorporated
   Printer Name
                   Type
                          Comment
                     R

    printer/copier

                          Located in room 117A.
2. sw-hpjet
                    *R
                          Primary designated printer
Enter printer name: buck
You entered [buck] is this correct? (y/n/q): y
Is buck a local printer? (y/n/q): y
```

SCREEN 4-29: ADD PRINTER DISPLAY (LOCAL PRINTER)

Once you designate the new printer as a local printer, a screen prompt asks you to select a printer model from a list of possible printer types. Screen 4-30 illustrates the type of information provided. Depending upon the version of Linux operating system you are using, there may be only one or several screens of printer models from which to choose.

```
Keystrokes: [Select <Return>] [Abort <Esc>] [Down 'J'] [Up 'K'] [Help 'H']
            [Search Forward 'F'] [Search Back 'B'] [Search Next 'N']
Select Printer Model.
Brother DCP-7025 BR-Script3
Brother DCP-8020 BR-Script3
Brother DCP-8025D BR-Script3
Brother DCP-8040 BR-Script3
Brother DCP-8045D BR-Script3
Brother HL-1450 BR-Script2
Brother HL-1470N BR-Script2
Brother HL-1650/70N BR-Script3
Brother HL-1850/70N BR-Script3
Brother HL-2460 BR-Script3
Brother HL-2600CN BR-Script3
Brother HL-2700CN BR-Script3
Brother HL-3260N BR-Script3
Brother HL-3450CN BR-Script3
Brother HL-5050 BR-Script3
Brother HL-5070DN BR-Script3J
Brother HL-5070N BR-Script3
Brother HL-5150D BR-Script3
 -- More Below ----
```

SCREEN 4-30: LIST OF AVAILABLE PRINTER TYPES

7) Use the navigation keys to scroll down through the list until you locate the type of printer being added to the system. You may then select the appropriate model and press <*Return>* to enter it. If your printer type is not listed, simply select a generic one. The program will display the printer type you have selected and ask if it is correct.

```
You entered [printer type] is this correct? (y/n/q):
```

8) If the selected printer is incorrect, press n < Return >, and the list will redisplay. Tap q < Return > twice if you wish to abort the Add Printer procedure and return to the Printer Administration Menu.

If the printer type you have selected is correct, press y < Return > to approve your printer selection. The screen then displays to following menu:

```
Local Printer Type
-----
1. USB
2. Parallel
Q. Quit
```

- 9) Select one of the two options that represents the type of printer-to-MAP computer connection that will be used. The program then indicates your selection and asks you to choose a printer device. Please note that if there is no valid hardware device present, you can type *q* <*Return*> to return to the Printer Administration Menu.
- Enter the number or designation which represents the printer device (port) that will be used, followed by *Return>*. You can also just press *Return>* to accept the default (lpt0).

11) Next you will be prompted to enter a comment that will display in the Printer Configuration list. If desired, type a short comment and press <*Return*>.

When you have confirmed your input, the system will enable the new printer to accept print jobs and display a message that the printer has been added.

12) You will now see a prompt asking whether you want to add another printer. To add another printer, press *Y* <*Return*> and go back to step 3.

Pressing *N* <*Return*> or *Q* <*Return*> will return you to the Printer Administration Menu.

Adding a Remote Printer

In Printer Administration, a remote printer can be either a stand-alone printer installed anywhere on your company's network, or one of several "local" printers connected directly to a print server. Because the procedures required to add a remote printer for your PressureMAP System are very similar to those described above for a new local printer, only the specific steps that differ from those above are explained below.

For reference, the sequence of prompts and responses required to add a remote printer are displayed in SCREEN 4-31 below.

```
MAP Series XX.XX.XX
Add Printer
09/10/2008 17:43
                                                              System Studies Incorporated
Add another printer? (y/n/q): y
     Printer Name
                       Type Comment
                       *R Host: lanps.
 1. pokey
 2. buck
                        L
                               Okidata, room A40
Enter printer name: speedy
You entered [speedy] is this correct? (y/n/q): y
Is speedy a local printer? (y/n/q): n
Select Printer Model.
Raw Queue
DYMO Label Printer
EPSON 9-Pin Series
EPSON 24-Pin Series
EPSON 24-Fin Series
EPSON New Stylus Color Series
EPSON New Stylus Photo Series
EPSON Stylus Color Series
EPSON Stylus Photo Series
Generic text-only printer
HP DeskJet Series
HP LaserJet Series
HP New DeskJet Series
OKIDATA 9-Pin Series
OKIDATA 24-Pin Series
Generic postscript printer
Zebra ZPL Label Printer
You entered [HP LaserJet Series] is this correct? (y/n/q): y
Enter host or ip address of remote printer: 10.1.0.100
You entered [10.1.0.100] is this correct? (y/n/q): y
Successful ping for 10.1.0.100!
Enter device uri (? for help) : socket://address:9100
You entered [socket://address:9100] is this correct? (y/n/q): y
Enter printer comment, (default=Host): primary remote printer
You entered [primary remote printer] is this correct? (y/n/q): y
Printer speedy was successfully added.
Add another printer? (y/n/q):
```

SCREEN 4-31: ADD PRINTER DISPLAY (REMOTE PRINTER)

Procedure:

The steps that follow pertain to the input required after you have selected the type of printer from the list of printer types and confirmed your entry.

1) At the designated prompt, enter a host name or IP address for the remote printer. If necessary, consult your Network Administrator to obtain this information. Another prompt displays your entry and asks if it is correct.

You entered [10.1.0.110] is this correct? (y/n/q):

2) If the host name or IP address entered is correct, press *y* <*Return*>. PressureMAP will then attempt to contact (ping) the address. If successful, the following message displays:

Successful ping for 10.1.0.100!

If the host name or IP address you entered is incorrect, press n < Return >. The program will indicate that it is unable to ping the host or IP address and provide the prompt shown below.

Continue configuring remote printer? (y/n/q):

Pressing q < Return > twice if you wish to abort the Add Printer procedure and return to the Printer Administration Menu.

Notes on Host Name Designation:

The importance of the remote printer host name depends upon whether the new remote printer is a stand-alone network printer or a remote network printer connected to a printer server. If it is a stand-alone network printer, the host name is arbitrary. You can designate any 14 character (or less) remote printer host name.

If you are entering data for the first remote printer connected to a print server computer, you can designate a name of your choice. The program will then prompt you to enter the IP address of the server. However, if the host name already exists in the system, no IP address prompt will appear since the system will use the IP address already assigned to that host name. Make sure that the host name you enter does not duplicate an existing host name if the printer you are adding is not intended to use that host's IP address.

The MAP software does not support sending print jobs to a Windows host computer.

3) Next, the program asks you to indicate the Uniform Resource Identifier (URI) for the manufacturer and model of the selected printer. Type a ? and a list of common device URIs will be provided. Identify the URI that most closely matches your printer type and enter it after the prompt, as shown below.

Enter device uri (? for help) : socket://address:9100

The program will display your URI entry and ask you to confirm that it is correct.

You entered [socket://address:9100] is this correct? (y/n/q):

4) If the URI you enter is correct, press y < Return >. If it is incorrect, press n < Return > and make the necessary corrections.

Next, you have the opportunity to enter a comment of 36 characters or less which will appear in the printer configuration information.

Enter printer comment, (default=Host):

5) Press < *Return* > to designate Host as the default comment, or enter another more pertinent comment for the printer. The program will then ask you to confirm your comment.

```
You entered [primary remote printer] is this correct? (y/n/q):
```

6) Press *y* < *Return* > to confirm you comment.

7) To add another printer, press Y < Return > and repeat the procedures described above.

Pressing N < Return > or Q < Return > will return you to the Printer Administration Menu.

Procedure to Remove a Printer

This menu option allows the user to remove one or more local or remote printers from the system's configuration. A "local" printer is a printer attached to your computer; all others are "remote." Remember to notify other users that these printers are being removed.

If a printer has jobs in its queue, it cannot be removed. It is advisable to check the printer queue for pending print jobs and contact the user who sent the job (if applicable). If the default printer is removed, the user should assign another printer as the default.

Procedure:

1) From the Printer Administration Menu, select "Remove Printer". Press *3 < Return >*. A screen similar to the following will be displayed:

SCREEN 4-32: REMOVE PRINTER DISPLAY

2) As shown in the above sample, the screen will first display the existing printers in the system, and then prompt you to enter a printer. To remove a printer, you may enter either the printer's

number or the Printer Name at the prompt and press <*Return*>. (Please note that input for the name is case sensitive.)

If the printer has print jobs in the queue, you will see an error message and the printer will not be removed. As print jobs cannot be redirected, you will either need to wait until they have printed or remove them from the queue. (Refer to the segments describing options 7, 8 and 9 of the Printer Administration Menu.)

After the prompt for data, you will be asked to confirm your choice. If what you have answered is incorrect, type N < Return >. The data prompt will then be redisplayed for you to enter the correct information.

To quit without saving your changes, type Q < Return >. You may then start again or exit the screen.

- 3) When you have confirmed the deletion, the screen will display a message that the printer has been removed from the system's configuration.
- 4) You will see a prompt asking whether you want to remove another printer. To delete another printer, press *Y* <*Return*> and go back to step 2.

Pressing *N* < *Return* > or *O* < *Return* > will return you to the Printer Administration Menu.

Procedure to Set the Printer Default

This procedure allows the user to set either a local or remote printer as the default printer for the MAP system. Users may select a printer for screen capture or Browser printing during their current login session at the time they log in, but it will not affect the systemwide default. If there is only one printer set up in the MAP system, it is automatically set to be the default printer.

Procedure:

1) From the Printer Administration Menu, select "Set Printer Default". Press *4* < *Return*>. A screen similar to the following will be displayed:

SCREEN 4-33: SET PRINTER DEFAULT DISPLAY

ADMINISTRATION

- 2) As shown in SCREEN 4-33, the screen will first display the existing printers in the system, and then prompt you to choose a default printer. To designate the default printer, you may enter either the printer's number or the Printer Name at the prompt and press <*Return*>. (Please note that input for the name is case sensitive.)
- 3) After the prompt for data, you will be asked to confirm your choice. If what you have answered is incorrect, type *N* <*Return*>. The data prompt will then be redisplayed for you to enter the correct information.
 - To quit without saving your changes, type Q < Return >. You may then start again or exit the screen.
- 4) When you have verified your choice for default, the screen will display a message confirming the new default printer.
- 5) Press < *Return* > to go back to the Printer Administration Menu.
- 6) As shown in the above sample, the screen will first display the existing printers in the system, and then prompt you to enter a local printer. To select a printer, you may enter either the printer's number or the Printer Name at the prompt and press <*Return>*. (Please note that input for the name is case sensitive.)
- 7) After each prompt for data, you will be asked to confirm your choice. If what you have answered is incorrect, type *N* <*Return*>. The data prompt will then be redisplayed for you to enter the correct information.

View Printer Queue

The printer spooler schedules the printing of files. All files to be printed are initially stored in the printer buffer. When the printer is clear, the printer spooler pulls them from the buffer in the order in which they were received and feeds them to the printer. The spooler also has an error detection function that ensures that no files sent to the printer are lost. If a problem develops in the printer, the spooler will discontinue sending files. The files sent to be printed will remain in the buffer, where they are saved until the printer problem is resolved. This menu item allows the user to observe the spooler queue (print jobs currently lined up) for a selected printer.

Procedure:

1) From the Printer Administration Menu, select "View Printer Queue". Press 7 < *Return*>. A screen similar to the following will be displayed:

```
View Printer Queue
                                                               MAP Series XX.XX.XX
09/10/2008 13:44
                                                      System Studies Incorporated
    Printer Name
                     Type
                             Comment
                             ------
                      R
                             Host: lanps.

    pokey

 2. buck
                       *L
                             Okidata, room A40
 speedy
                             Oki on raven, rm X65
Select printer: 2
You entered [buck] is this correct? (y/n/q): y
      Job Id
                            Owner
                                                     Date
                                              444 Fri 20 Mar 2009
498 Fri 20 Mar 2009
211 Fri 20 Mar 2009
   1. buck-282
   2. buck-283
                            map
   3. buck-284
                            map
                            pmap
                                                     Fri 20 Mar 2009
   4. buck-285
Hit <Return> to continue.
```

SCREEN 4-34: VIEW PRINTER QUEUE DISPLAY

- 2) As shown in the above sample, the screen will first display the existing printers in the system, and then prompt you to enter a printer. To select a printer, you may enter either the printer's number or the Printer Name at the prompt and press <*Return>*. (Please note that input for the name is case sensitive.)
- 3) After the prompt for data, you will be asked to confirm your choice. If what you have answered is incorrect, type *N* <*Return*>. The data prompt will then be redisplayed for you to enter the correct information.
 - To quit without saving your changes, type Q < Return >. You may then start again or exit the screen.
- 4) The print jobs currently lined up for that printer will be listed, with the login that sent the job, the size of the job (in bytes) and the date it was sent.
- 5) Press < *Return* > to go back to the Printer Administration Menu.

Procedure to Cancel Printer Request

This menu option allows the user to cancel some of the saved print requests for a specified printer. If the printer has other users' requests in its queue, remember to notify them if these print jobs are being canceled.

To remove all print requests from a printer's queue, use "Clean Printer Queue" (option 7 on the Printer Administration Menu).

Procedure:

1) From the Printer Administration Menu, select "Cancel Printer Request". Press *6* < *Return*>. A screen similar to the following will be displayed:

```
Cancel Printer Request
                                                                  MAP Series XX.XX.XX
09/10/2008 13:55
                             *Schedule Off*
                                                        System Studies Incorporated
    Printer Name
                      Type Comment
1. pokey R
2. buck *L
3. speedy R
                              Host: lanps.
                              Okidata, room A40
                            Oki on raven, rm X65
Select printer: 2
You entered [buck] is this correct? (y/n/q): y
      Job Id
                             Owner
                                                        Date
   1. buck-282
2. buck-283
3. buck-284
                                                 444 Fri 20 Mar 2009
                                                 444 Fri 20 Mar 2009
444 Fri 20 Mar 2009
444 Fri 20 Mar 2009
444 Fri 20 Mar 2009
                             map
map
   4. buck-285
Select Job Id to cancel: 2
You entered [buck-283] is this correct? (y/n/q): y
request "buck-283" canceled
Cancel another? (y/n/q): n
Hit <Return> to continue.
```

SCREEN 4-35: CANCEL PRINTER REQUEST DISPLAY

- 2) As shown in the above sample, the screen will first display the existing printers in the system, and then prompt you to enter a printer. To select a printer, you may enter either the printer's number or the Printer Name at the prompt and press <*Return*>. (Please note that input for the name is case sensitive.)
- 3) After each prompt for data, you will be asked to confirm your choice. If what you have answered is incorrect, type N < Return >. The data prompt will then be redisplayed for you to enter the correct information.
 - To quit without saving your changes, type Q < Return >. You may then start again or exit the screen.
- 4) The print jobs currently lined up for that printer will be listed, including the ID of the user who requested the print job, the size of the job (in bytes), and the time it was requested.
- 5) The screen will then display a prompt to select the print job that you wish to cancel. You may enter either the print job's number or name at the prompt and press <*Return*>.
- 6) When you have verified your choice, the screen will display a message that the print job request has been canceled.
- 7) You will see a prompt asking whether you want to cancel another request. To continue canceling print requests, press *Y* <*Return*> and go back to step 2.
 - Pressing N < Return > or Q < Return > will return you to the Printer Administration Menu.

8) Press < *Return* > to go back to the Printer Administration Menu.

Procedure to Clean Printer Queue

This procedure allows you to cancel all of the saved print requests for a specified printer. If the printer has other users' requests in its queue, remember to notify them that these print jobs are being canceled.

To remove only selected print requests from a printer's queue, use "Cancel Printer Request" (option 6 on the Printer Administration Menu).

Procedure:

1) From the Printer Administration Menu, select "Clean Printer Queue". Press 7 < *Return*>. A screen similar to the following will be displayed:

```
Clean Printer Oueue
                                                            MAP Series xx.xx.xx
09/10/2008 14:04
                                                    System Studies Incorporated
    Printer Name
                    Type Comment
                     R

    pokey

                           Host: lanps.
2. buck
                      *T.
                            Okidata, room A40
speedy
                           Oki on raven, rm X65
Select printer: 3
You entered [buck] is this correct? (y/n/q): y
                                           Size Date
      Job Id
                           Owner
   1. buck-282
                                            444 Fri 20 Mar 2009
   2. buck-284
                                            444
                                                  Fri 20 Mar 2009
                           map
                                            444 Fri 20 Mar 2009
   3. buck-285
                          map
Do you want to remove all entries in this queue? (y/n/q): y
request "buck-282" canceled request "buck-284" canceled
request "buck-285" canceled
Hit <Return> to continue.
```

SCREEN 4-36: CLEAN PRINTER QUEUE DISPLAY

- 2) As shown in the above sample, the screen will first display the existing printers in the system, and then prompt you to enter a printer. To select a printer, you may enter either the printer's number or the Printer Name at the prompt and press <*Return>*. (Please note that input for the name is case sensitive.)
- 3) The print jobs currently lined up for that printer will be listed, including the ID of the user who requested the print job, the size of the job (in bytes), and the time it was requested.
- 4) After the listing, you will be asked to confirm your choice. If what you have answered is incorrect, type *N* <*Return*>. The data prompt will then be redisplayed for you to enter the correct information.

To quit without saving your changes, type Q < Return >. You may then start again or exit the screen.

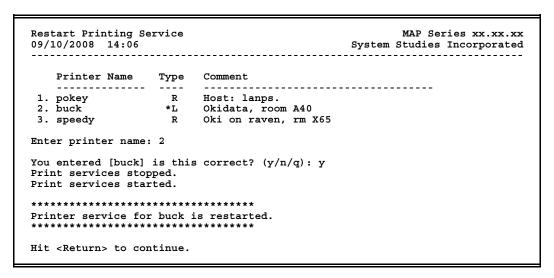
- 5) When you have verified your choice, the screen will display a message listing the print job requests that have been canceled.
- 6) Press < Return > to go back to the Printer Administration Menu.

Procedure to Restart Printing Service

When you detect that the local installed printer is not working, you should first try to restart the printer spooler with this utility. When the printer problem is corrected, the spooler will continue feeding the stored reports to the printer.

Procedure:

1) From the Printer Administration Menu, select "Restart Printer Queue". Press **8**<**Return**>. A screen similar to the following will be displayed:



SCREEN 4-37: RESTART PRINTER QUEUE DISPLAY

- 2) As shown in the above sample, the screen will first display the existing printers in the system, and then prompt you to enter a printer. To select a printer, you may enter either the printer's number or the Printer Name at the prompt and press <*Return*>. (Please note that input for the name is case sensitive.)
- 3) After the prompt for data, you will be asked to confirm your choice. If what you have answered is incorrect, type *N* <*Return*>. The data prompt will then be redisplayed for you to enter the correct information.
 - To quit without saving your changes, type Q < Return >. You may then start again or exit the screen.
- 4) When you have verified your choice, the screen will display a message confirming that the printer queue has been stopped and restarted.
- 5) Press < *Return* > to go back to the Printer Administration Menu.

Although you have restarted the Printer Spooler, it may shut down again if the printer problem that caused the original shutdown has not been fixed. It will not shut down until the next time that a dispatch report is sent. Since there is no way to determine if the Printer Spooler is running, you will have to repeat the restart process until the printer problem is fixed.

Printer Administration Procedures (SCO UNIX Operating System)

In most respects, the Printer Administration options and program output described above for the Linux operating system apply to the SCO UNIX operating system as well. However, the SCO UNIX system's Printer Administration Menu contains three more options than does the Linux menu. These options pertain specifically to remote printer services.

This subsection provides the specific procedures that pertain to these menu options: Receive Remote Printing, Stop Receiving Remote Printing, Restart Remote Printing Service. Additionally, since there are Printer Configuration display differences as well, the procedures and output for option 1 are provided also. Please refer to the explanations in the preceding subsection for specific information about the other Printer Administration options.

From the System Administration Menu, press 11 < Return >. You should see the Printer Administration Menu, which is shown in SCREEN 4-38.

```
Printer Administration
                                                              MAP Series XX.XX.XX
09/10/2008 13:01
                                                     System Studies Incorporated
Printer Administration
  1. View Printer Configuration
  2. Add Printer
  3. Remove Printer
  4. Set Printer Default
  5. Receive Remote Printing
  6. Stop Receiving Remote Printing
  7. View Printer Queue
  8. Cancel Printer Request
 9. Clean Printer Queue
10. Restart Printing Service
 11. Restart Remote Printing Service
  Q. Quit
Choice?
```

SCREEN 4-38: PRINTER ADMINISTRATION MENU (UNIX SYSTEM)

View Printer Configuration

This menu item allows you to see all of the printers, remote and local, that have been specified for the current system. The system-wide default printer is indicated by "*". Local printers are designated with "L", and remote printers with "R". The "local" printer is a printer attached to the PressureMAP computer. All others are "remote." Individual printers in the list may then be selected to view additional information.

Procedure:

1) To view the available printers, select option *I* from the Printer Administration Menu. As shown in the sample output in SCREEN 4-39, a numbered list of the currently configured

printers displays. The list is followed by a message prompting you to select one of the printers if you desire to see additional information.

The initial displayed configuration includes each printer's name, type and the comment entered when the printer was set up in the system.

```
View Printer Configuration

12/09/2008 14:35 *Schedule Off* System Studies Incorporated

Printer Name Type Comment

1. printer/copier R Located in room 117A
2. swhpjet *R Primary designated printer

Enter printer for more information, or <Return> to quit:
```

SCREEN 4-39: VIEW PRINTER CONFIGURATION DISPLAY (Remote)

- 2) If you wish to view more information about one of the printers, enter its number or the Printer Name at the prompt and press <*Return>*. (Please note that input for the name is case sensitive.)
- 3) After entering your selection you will be asked to confirm your choice. If what you have answered is incorrect, type *N* <*Return>*. The prompt will then be redisplayed for you to enter the correct information.
 - To quit without saving your changes, type Q < Return >. You may then start again or exit the screen.
- 4) When you have verified your choice, the screen will display the additional information for the selected printer.

If the printer you chose is remote, the configuration will be similar to what is displayed in SCREEN 4-40. The information listed will include the type designation (remote or local), the name of the printer's host computer, the IP address, the remote printer name, and whether the host operating system is SCO Openserver Release 5 (or newer).

```
View Printer Configuration
                                                     MAP Series XX.XX.XX
12/09/2008 14:35 *Schedule Off*
                                             System Studies Incorporated
   Printer Name Type Comment
1. printer/copier R
                        Located in room 117A
             *R
swhpjet
                       Primary designated printer
Enter printer for more information, or <Return> to quit: 2
You entered [swhpjet] is this correct? (y/n/q): y
Printer swhpjet features:
   Type:
                Remote
   Remote Host: map2
   IP Address: 10.1.0.100
   Printer Name: swhpjet
   SCO OS R5: Yes
Information about another printer? (y/n/q):
```

SCREEN 4-40: VIEW PRINTER CONFIGURATION DISPLAY (REMOTE)

More detailed configuration information for a local printer on a UNIX operating system would be similar to what is shown below.

```
View Printer Configuration
                                                  MAP Series XX.XX.XX
12/09/2008 14:35 *Schedule Off* System Studies Incorporated
   Printer Name Type Comment
   -----
                       -----
1. map
                      Primary designated printer
                     Located in room 124A
swhpiet
Enter printer for more information, or <Return> to quit: 1
You entered [map] is this correct? (y/n/q): y
Printer map features:
               Local
   Type:
   Device URI: /dev/lp0
   Model:
               map
Printer map receives print jobs from the these hosts:
   <no hosts>
Information about another printer? (y/n/q):
```

SCREEN 4-41: VIEW PRINTER CONFIGURATION DISPLAY (REMOTE)

Receive Remote Printing

This menu option makes it possible to enable a local printer (lp0) to receive print jobs from other PressureMAP systems (Version 22 or higher). Each remote system must also be configured to send print jobs to the printer.

Procedure:

1) From the Printer Administration Menu, select "Receive Remote Printing". Press *5* < *Return*>. A screen similar to the following will be displayed:

```
Receive Remote Printing
                                                         MAP Series XX.XX.XX
12/09/2008 13:23
                                                 System Studies Incorporated
   Printer Name
                   Type Comment
                    *L Primary designated printer
 1. map
 swhpiet
                   R
                         Located in room 124A
Enter local printer name to receive printing: 1
You entered [map] is this correct? (y/n/q): y
Enter host name to receive printing from: westgate
You entered [westgate] is this correct? (y/n/q): y
Enter IP address: xxx.xxx.x.xx
You entered [xxx.xxx.x.xx] is this correct? (y/n/q): y
Printer map is now receiving printing jobs from westgate.
Receive remote printing from another host? (y/n/q): n
Hit <Return> to continue.
```

SCREEN 4-42: RECEIVE REMOTE PRINTING DISPLAY

- 2) As shown in the above sample, the screen will first display the existing printers in the system, and then prompt you to enter a local printer. To select a printer, you may enter either the printer's number or the Printer Name at the prompt and press <*Return>*. (Please note that input for the name is case sensitive.)
- 3) After each prompt for data, you will be asked to confirm your choice. If what you have answered is incorrect, type N < Return >. The data prompt will then be redisplayed for you to enter the correct information.
 - To quit without saving your changes, type Q < Return >. You may then start again or exit the screen.
- 4) You will then be prompted for the host name of the system that will send print jobs to this printer. Enter the name and press <*Return*>.

If your PressureMAP system does not recognize the host name, it will prompt you to enter the host's IP address, as shown in SCREEN 4-38. Enter the IP address and press <**Return>**.

- 5) When you have verified the host name (and address), the screen will display a message that the printer is set up to receive print jobs from that host.
- 6) You will see a prompt asking whether you want to receive remote printing from another host. To configure remote printing from another host, press *Y* <*Return*> and go back to step 2.

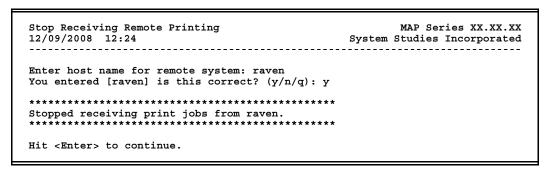
Pressing N < Return > or Q < Return > will return you to the Printer Administration Menu.

Procedure to Stop Receiving Remote Printing

This menu option allows the user to stop other systems from sending their print jobs to a local printer on the current system. Remember to notify other users that printing from the specified host is being stopped.

Procedure:

1) From the Printer Administration Menu, select "Stop Receiving Remote Printing". Press 6 < *Return*>. A screen similar to the following will be displayed:



SCREEN 4-43: STOP RECEIVING REMOTE PRINTING DISPLAY

- 2) At the prompt enter the name of the host to be disabled from printing on the local printer and press <*Return*>.
- 3) After the prompt for data, you will be asked to confirm your input. If what you have answered is incorrect, type *N* <*Return*>. The data prompt will then be redisplayed for you to enter the correct information.

To quit without saving your changes, type Q < Return >. You may then start again or exit the screen.

- 4) When you have verified the host to be stopped, the screen will display a message confirming that the current system is no longer receiving print jobs from that host.
- 5) Press < *Return* > to go back to the Printer Administration Menu.

Procedure to Restart Remote Printing Service

There are times when it becomes necessary to restart the Remote Printer Service. For example, when a remote printer queue hangs, the printer queue keeps getting bigger and bigger, but nothing prints. The procedure to restart the remote printing service enables you to stop and start *lpd* remotely. Generally, this procedure will correct the problem.

Procedure:

1) From the Printer Administration Menu, select "Restart Remote Printing Service". Press 11 < Return>. The screen will then display a message confirming that the printer queue has been stopped and restarted as shown in the screen below:

```
Restart Printing Service

MAP Series XX.XX.XX 12/09/2008 14:06

System Studies Incorporated

Stopping Remote Printing Service...

Starting Remote Printing Service...

Hit <Return> to continue.
```

SCREEN 4-44: RESTART REMOTE PRINTING SERVICE

If a problem occurs during the process of shutting down the printer, the following error messages will display:

```
Error shutting down lpd.
```

Correspondingly, if lpd fails to restart, you will receive the following message:

```
Error starting up lpd.
```

If one of these error messages occurs, it will be necessary to visit the remote printer location and manually restart the printer. If this fails to correct the problems, please contact System Studies Technical Support.

2) Press < *Return* > to go back to the Printer Administration Menu.

Procedures for the Start Processes

The MAP System offers several utilities that can be turned on and off by the operator. The Scheduler, the Alarm Receiver, and the Idle Logout are turned on using this procedure. If you are using a DTMF modem or a Brooktrout Fax/Modem card to access a Dial-a-Ducer office, either or both of these utilities may also be listed on the menu. In addition, if the Data Export Protocol capability has been enabled in your system and it is configured with Listener Mode, the Listener process will appear on the menu.

All of these operations can be controlled from a remote terminal.

Procedure to Find the Start Process Menu

This procedure begins at the System Administration Menu. If you cannot find this menu, follow the Procedures to Find the System Administration Menu presented earlier in this Section.

Procedure:

From the System Administration Menu, select "Start Process." Press 12 < Return >. You should see the following:

```
Start Process

09/10/2008 10:28

Start Process

1. Start Scheduler (Stopped)
2. Start Alarm Receiver (Stopped)
3. Start Idle Logout (Stopped)
Q. Quit

Choice?
```

SCREEN 4-45: START PROCESS MENU

The following sections describe the three procedures listed on the menu above.

Restarting the Scheduler

The Scheduler is the software routine that controls the time and sequence of each operation in the MAP System. Although the Scheduler must be running for the MAP System to operate, there are three instances when you might want to turn the Scheduler off. One would be when you are updating the system. If the Scheduler tried to run a program while updating was taking place, it would interfere with the updating procedure. The second would be before you perform a restore procedure. The third instance would be if the Scheduler was not operating correctly. Stopping and starting the Scheduler will reinitialize the system and sometimes correct the problem.

Procedure:

1) From the Start Processes Menu, select "Start Scheduler". Press *1* <*Return>*. You will see the message:

```
Do you wish to start the Scheduler? Y[es], N[o]
```

2) Press *Y* < *Return* > (pressing N will return you to the previous menu). If the Scheduler was not running, you will see the message:

```
Attempting to start the Scheduler.

The Scheduler is now running.

Hit <Return> to continue.
```

If the Scheduler was already running, you will see the message:

The Scheduler is already running.

Hit <Return> to continue.

In either case, the Scheduler will now be running, and hitting <*Return>* will take you back to the Start Process Menu.

Restarting the Alarm Receiver

Alarm Receiver is the part of the program that analyzes the alarms that come in from CPAMS monitors and determines whether or not they are valid alarms. Like Scheduler, Alarm Receiver would be turned off only when updating the system, or if there seemed to be a problem with the Alarm Receiver function.

Procedure:

1) From the Start Processes Menu, select "Start Alarm Receiver". Press 2 < Return >. You will see the message:

Do you wish to start the Alarm Receiver? Y[es], N[o]

2) Press *Y* < *Return* > (pressing N will return you to the previous menu). If the Alarm Receiver was not running, you will see the message:

Attempting to start the Alarm Receiver.

The Alarm Receiver is now running.

Hit <Return> to continue.

If the Alarm Receiver was already running, you will see the message:

The Alarm Receiver is already running.

Hit <Return> to continue.

In either case, the Alarm Receiver will now be turned on, and hitting <*Return>* will take you back to the Start Process Menu.

Restarting the Idle Logout

The Idle Logout feature will drop a user from the system after a specified period of time passes without any input from the user's keyboard. This prevents the system from getting clogged up with inactive users who have forgotten to log out. The operator can also set the time specified for the Idle Logout using the Set Idle Logout Time procedure in System Administration.

Procedure:

1) From the Start Processes Menu, select "Start Idle Logout". Press *3 < Return >*. You will see the message:

Do you wish to start the Idle Logout? Y[es], N[o]

2) Press *Y* < *Return* > (pressing N will return you to the previous menu). If the Idle Logout was not running, you will see the messages:

```
Attempting to start the Idle Logout
```

The Idle Logout is now running.

Hit <Return> to continue.

If the Idle Logout was running, you will see the message:

```
The Idle Logout is already running.
```

Hit <Return> to continue.

In either case, the Idle Logout will now be running, and hitting *Return*> will take you back to the Start Process Menu.

Procedures for the Stop Processes

The MAP System offers several utilities that can be turned on and off by the operator. The Scheduler, the Alarm Receiver and the Idle Logout are turned off using this procedure. All of these operations can be controlled from a remote terminal.

Procedures to Find the Stop Process Menu

This program begins at the System Administration Menu. If you cannot find this menu, follow the Procedures to Find the System Administration Menu presented earlier in this Section.

Procedure:

From the System Administration Menu, select "Stop Process". Press 13 < Return>. You should see:

```
Stop Process MAP Series XX.XX.XX
09/10/2008 10:32 System Studies Incorporated

Stop Process
-----

1. Stop Scheduler (Running)
2. Stop Alarm Receiver (Running)
3. Stop Idle Logout (Running)
Q. Quit

Choice?
```

SCREEN 4-46: STOP PROCESS MENU

The following sections describe the three procedures listed on the menu above.

Stopping the Scheduler

Scheduler is the software routine that controls the time and sequence of each operation in the MAP System. There are three instances when you might want to turn off Scheduler. One would be when you

are updating the system. If Scheduler tried to run a program while the updating was taking place, it would interfere with the updating procedure. The second instance would be if Scheduler was not operating correctly. Stopping and starting Scheduler will reinitialize the system and sometimes corrects the problem. The third instance would be when you are going to perform a restore procedure.

Procedure:

1) From the Stop Process Menu, select "Stop Scheduler". Press *1* <*Return>*. You will see the message:

```
Do you wish to stop the Scheduler? Y[es], N[o]
```

2) Press *Y* < *Return* > (pressing N will return you to the previous menu). If the Scheduler was running, you will see the messages:

```
Attempting to stop the Scheduler.
```

The Scheduler is no longer running.

Hit <Return> to continue.

If the Scheduler was not running, you will see the message:

```
The Scheduler is not running.
```

Hit <Return> to continue.

In either case, the Scheduler will now be stopped, and hitting *Return*> will take you back to the Stop Process Menu.

Stopping the Alarm Receiver

Alarm Receiver is the part of the program that analyzes the alarms that come in and determines whether or not they are valid alarms. Like Scheduler, Alarm Receiver would be turned off only when updating the system, or if there seemed to be a problem with the Alarm Receiver function.

Procedure:

1) From the Stop Process Menu, select "Stop Alarm Receiver". Press **2** <**Return**>. You will see the message:

```
Do you wish to stop the Alarm Receiver? Y[es], N[o]
```

2) Press *Y* < *Return* > (pressing N will return you to the previous menu). If the Alarm Receiver was running, you will see the message:

Attempting to stop the Alarm Receiver.

The Alarm Receiver is now stopped.

Hit <Return> to continue.

If the Alarm Receiver was not running, you will see the message:

The Alarm Receiver is not running.

Hit <Return> to continue.

In either case, the Alarm Receiver will now be stopped, and hitting *Return* will take you back to the Stop Process Menu.

Stopping the Idle Logout

The Idle Logout feature will drop users from the system after a specified period of time passes without any input from their keyboard. This prevents the system from getting clogged up with inactive users who have forgotten to log out. This function would normally be turned off only if you preferred not to use the function. You can also set the time specified for the Idle Logout using the Set Idle Logout Time procedure in System Administration.

Procedure:

1) From the Stop Processes Menu, select "Stop Idle Logout". Press *3 < Return >*. You will see the message:

Do you wish to stop the Idle Logout? Y[es], N[o]

2) Press *Y* < *Return* > (pressing N will return you to the previous menu). If the Idle Logout was running, you will see the message:

Attempting to stop the Idle Logout.

The Idle Logout is no longer running.

Hit <Return> to continue.

If the Idle Logout was not running, you will see the message:

The Idle Logout is not running.

Hit <Return> to continue.

In either case, the Idle Logout will now be stopped and hitting <*Return>* will take you back to the Stop Process Menu.

Procedures for the Pause Processes

The MAP System offers several utilities that can be paused or disabled for a period of time by the operator. The Scheduler, the Alarm Receiver and the Idle Logout are paused for 120 minutes using this procedure. All of these operations can be controlled from a remote terminal.

This procedure begins at the System Administration Menu. If you cannot find this menu, follow the Procedures to Find the System Administration Menu presented earlier in this Section.

Procedure:

From the System Administration Menu, select "Pause Process". Press 14 < Return >. You should see:

```
Pause Process

09/10/2008 10:32

Pause Process

1. Pause Scheduler (Running)
2. Pause Alarm Receiver (Running)
3. Pause Idle Logout (Running)
Q. Quit

Choice?
```

SCREEN 4-47: PAUSE PROCESS MENU

The following sections describe the three procedures listed on the menu above.

Pausing the Scheduler

Scheduler is the software routine that controls the time and sequence of each operation in the MAP System. There are many instances when you might want to pause the Scheduler for a short period of time. It is important to note that after the pause time period is over, the schedule will automatically start, even if you selected pause while the schedule was turned off.

Procedure:

1) From the Pause Process Menu, select "Pause Scheduler". Press *1* <*Return*>. You will see the message:

```
Do you wish to pause the Scheduler? Y[es], N[o]
```

2) Press *Y* < *Return* > (pressing N will return you to the previous menu). You will see the messages:

```
Attempting to pause the Scheduler.

The Scheduler is paused for 120 minutes.

Hit <Return> to continue.
```

The Scheduler will now be paused, and hitting *Return>* will take you back to the Pause Process Menu.

Pausing the Alarm Receiver

Alarm Receiver is the part of the program that analyzes the alarms that come in and determines whether or not they are valid alarms. Alarm Receiver could be paused if there seemed to be a problem with the Alarm Receiver function. It is important to note that after the pause time period is over, the Alarm Receiver will automatically start, even if you selected pause while the Alarm Receiver was turned off.

Procedure:

1) From the Pause Process Menu, select "Pause Alarm Receiver". Press 2 < Return >. You will see the message:

```
Do you wish to pause the Alarm Receiver? Y[es], N[o]
```

2) Press *Y* < *Return* > (pressing N will return you to the previous menu). You will see the message:

Attempting to pause the Alarm Receiver.

The Alarm Receiver is paused for 120 minutes.

Hit <Return> to continue.

The Alarm Receiver will now be paused, and hitting <*Return>* will take you back to the Pause Process Menu.

Pausing the Idle Logout

The Idle Logout feature will drop users from the system after a specified period of time passes without any input from their keyboard. This prevents the system from getting clogged up with inactive users who have forgotten to log out.

It is important to note that after the pause time period is over, the Idle Logout will automatically start, even if you selected pause while the this function was turned off. The Idle Logout can be turned off if you prefer not to use the function. You can also set the time specified for the Idle Logout using the Set Idle Logout Time procedure in System Administration.

Procedure:

1) From the Pause Processes Menu, select "Pause Idle Logout". Press *3 < Return >*. You will see the message:

Do you wish to pause the Idle Logout? Y[es], N[o]

2) Press *Y* < *Return* >. You will see the message:

Attempting to pause the Idle Logout.

The Idle Logout is paused for 120 minutes.

Hit <Return> to continue.

Idle Logout will now be paused and hitting <*Return>* will take you back to the Pause Process Menu.

User Management Procedures

While User Management is part of the System Administration Menu, these important utilities are given a section of their own. See Section 5, User Management for information on how to access and modify this utility.

Procedure to Set Idle Logout Time

PressureMAP has a function called Idle Logout that will automatically log you out of the system after there has been no input from your keyboard for a set period of time. This function was included because certain files cannot be accessed while someone has called them up in a data input mode. Likewise, only one user at a time can work in the System Administration portion of the program. This utility will keep those files and sections from being tied up by a user who has forgotten to log off.

This procedure begins at the System Administration Menu. If you cannot find this menu, follow the Procedures to Find the System Administration Menu presented earlier in this section.

Procedure:

1) From the System Administration Menu, select "Set Idle Logout Time". Press *16* < *Return*>. You will see the message:

Do you wish to set idle logout time? Y[es], N[o]

2) Press *Y* < *Return* >. You will see the following screen:

```
Set Idle Logout Time

09/10/2008 10:46

Do You Wish To Set Idle Logout Time? (Y(es, N(o) y Idle Logout will logout users who have been idle a certain period of time. Please enter the number of minutes to wait on idle users. You may choose any number between 1 and 1439.

Enter minutes [60]:
```

SCREEN 4-48: SET IDLE LOGOUT TIME PROMPT

3) Type in the number of minutes you want to wait before logging out idle users and press <*Return*>. To accept the default value displayed in brackets, simply press <*Return*>. You will see the message:

```
The Idle Logout is now running.
```

Setting a time for Idle Logout will automatically turn the Idle Logout function on if it was turned off. The Idle Logout function can be turned off and on using the Pause and Start processes in System Administration.

Hit <Return> to continue.

4) Hit < *Return* > to get back to the System Administration Menu.

Procedure to Set the System Name

This utility allows the System Administrator to customize the system name that appears on each login prompt and Dispatch Alarm report. The system name can be any alphanumeric string, up to 20 characters in length. Please note that the new system name will not take effect until the system is rebooted. To reboot the system, please refer to option 5, "Shutdown and Reboot the Computer."

Procedure:

1) From the System Administration Menu, select "Set System Name." Press *17* <*Return>*. You will see the message:

Changing the system name will affect your system login prompt

Do You Wish To Set the System Name? (Y(es, N(o)

2) Press *Y* < *Return* >. You will now see SCREEN 4-49.

SCREEN 4-49: SET SYSTEM NAME

3) Notice that the old system name is displayed for reference and convenience. Type in the new name for the system and press <*Return*>. As indicated on the screen, the following characters may NOT be included in the System Name because they are reserved especially for use by the operating system:

To accept the default (existing) name, simply press < *Return*>.

You will see the message:

Your system login prompt will change eventually to reflect the new system name. For the change to take effect immediately you can reboot the computer by choosing option 5, Shutdown and Reboot Computer, from the System Administration Menu.

Hit <Return> to continue.

4) Hit < *Return* > to get back to the System Administration Menu.

Tape Administration Procedures (Linux Operating System)

The Tape Administration utility was created to provide users with the ability to analyze and address tape drive issues. Depending on the type of operating system installed on your MAP Engine computer (Linux or SCO UNIX), you will see either three or six menu options. Both systems provide options to retention and rewind a tape, plus analyze the tape configuration, but SCO UNIX systems have additional options that pertain more specifically to the tape driver. All of the available operations can be controlled from a remote terminal via the Tape Administration Menu.

The information in the following pages represents what will be seen on a PressureMAP Version 27 system which is running one of the Linux operating system versions. Another subsection, immediately following this one, shows the Tape Administration Menu for the SCO UNIX system and describes how to use its three additional options.

Procedure:

From the System Administration Menu, select "Tape Administration". Press 18 < Return >. The menu shown in SCREEN 4-50 will display.

```
Tape Administration MAP Series XX.XX.XX
09/4/2008 12:49 System Studies Incorporated

Tape Administration

1. Analyze Tape Configuration
2. Retention Tape
3. Rewind Tape
Q. Quit

Choice:
```

SCREEN 4-50: TAPE ADMINISTRATION MENU (LINUX SYSTEM)

The following sections describe the three procedures listed on the menu above. Please note that these options and the corresponding screen output are essentially identical for the PressureMAP systems running the UNIX operating system .

Analyzing Tape Configuration

The Tape Configuration option provides important information about the status of the MAP Engine tape drive and tape cartridge. For example, it can indicate if a tape cartridge is not installed (no medium), whether the cartridge is write protected, if it is rewound, etc. The configuration information also includes any soft errors, hard errors or underruns that have occurred during the tape drive operation.

A *soft error* is a type of recoverable error that occurred during the last tape operation. A recoverable error is one which is correctable by the drive or controller. If the number of soft errors greatly exceeds the manufacturer's specifications, the drive may require service or replacement, or you may be using a defective tape.

A *hard error* is a non-recoverable error that occurred during an attempted tape operation. For example, a hard error occurs when you try to back up MAP System files to a tape cartridge that is write protected.

Underruns is a designation of the number of times the tape drive had to stop and restart due to tape buffer underflows. Underruns are not an error condition; they indicate that the data transfer did not occur at the drive's maximum data transfer rate. The number of underruns can be affected by system load.

Procedure:

1) From the Tape Administration Menu, select "Analyze Tape Configuration." Press *1* < *Return*>. You will see the message:

Do You Wish To Analyze Tape Configuration? Y[es], N[o]

2) Press *Y* < *Return* >. The system will now produce configuration information, similar to what is shown below, for your MAP computer's tape drive.

```
Tape Drive is INSTALLED.

Tape Device=/dev/tape

Tape Status

SCSI 2 tape drive:
File number=0, block number=23260, partition=0.

Tape block size 512 bytes. Density code 0x0 (default).

Soft error count since last status=0

General status bits on (1010000):
ONLINE IM_REP_EN

Hit <Return> to continue.
```

A variety of output information will display in the format shown above, depending upon the status of your drive and the type of tape administration function(s) you may have performed previously.

3) Press < *Return* > to access the Tape Administration Menu.

Retention Tape

This menu option should be used periodically to correct slack tape problems. If there is excessive slack in the tape, a large number of tape errors could occur. It is recommended that you check the tape configuration information on a regular basis to identify the occurrence of soft errors that could be corrected by retentioning the tape.

Procedure:

1) From the Tape Administration Menu, select option 2 followed by <*Return>*. You will see the message:

```
Do You Wish To Retention Tape? Y[es], N[o]
```

2) To tighten the spooled electromagnetic tape, press *Y* <*Return*>; otherwise, press *N* <*Return*>. A "yes" (*Y*) response produces the following prompt:

```
Retentioning tape.
```

At this point the tape drive will advance the tape all the way to the end, then rewind and retention it. This process takes several minutes to complete. During the interim no additional information is displayed on-screen. Once the retentioning process has been completed, the program displays the following prompt.

Hit <Return> to continue.

Note:

If a tape cartridge is not inserted in the tape drive or if a retentioning problem occurs, the following message displays:

tape: unable to do 'reten' command on '/dev/xStp0' : I/O error

This error message identifies a problems with the tape device, not the tape driver.

3) To perform other Tape Administration Menu functions, press < *Return*>.

Rewind Tape

This menu option allows you to rewind a tape remotely. The procedure should be performed anytime a used tape cartridge is being added to the backup rotation and installed in the tape drive. It is also an important and simple precautionary function to perform if an excessive number of soft errors are detected.

Procedure:

1) From the Tape Administration Menu, select option 3, "Rewind Tape," followed by **Return**>. You will see the message:

Do You Wish To Rewind Tape? Y[es], N[o]

2) Press Y to proceed; otherwise press N. A "yes" (Y) response produces the following prompt:

Rewinding tape.

Hit <Return> to continue.

Note:

If a tape cartridge is not inserted in the tape drive or if a rewinding problem occurs, the following message displays:

tape: unable to do 'rewind' command on '/dev/xStp0' : I/O error

This error message identifies a problems with the tape device, not the tape driver.

- 3) To perform other Tape Administration Menu functions, press < *Return* > . The Tape Administration Menu will redisplay.
- 4) To exit this menu and return to the System Administration Menu, press Q and $\langle Return \rangle$.

Tape Administration Procedures (SCO UNIX Operating System)

In addition to the three options described above, the Tape Administration Menu for UNIX operating system also includes these three options: Remove Tape Drive, Install Tape Drive, and Reset Tape Controller and Drive. An explanation of how to perform these functions is provided below. If necessary, refer to the explanations above for analyzing tape configuration, retentioning a tape, and rewinding a tape.

Procedure:

From the System Administration Menu, select "Tape Administration." Press *18* <*Return>*. The menu shown in SCREEN 4-51 will display.

```
Tape Administration

09/4/2008 12:49

Tape Administration

Tape Administration

1. Analyze Tape Configuration
2. Remove Tape Drive
3. Install Tape Drive
4. Reset Tape Controller and Drive
5. Retention Tape
6. Rewind Tape
Q. Quitç

Choice:
```

SCREEN 4-51: TAPE ADMINISTRATION MENU (UNIX SYSTEM)

Removing Tape Drive

This menu option enables you to remove the driver for the existing tape drive mechanism. It is a requirement prior to changing out the MAP computer's tape drive unit.

Procedure:

1) From the Tape Administration Menu, select option 2, "Remove Tape Drive," followed by *Return>*. You will see the message:

```
Do You Wish To Remove the Tape Drive? Y[es], N[o]
```

2) If you are certain that you want to remove the tape drive unit, press Y; otherwise, press N. A "yes" (Y) response produces the following prompt:

```
Removing Tape Drive.
```

Hit <Return> to continue.

3) Press < Return > to access the Tape Administration Menu.

Installing Tape Drive

One of the most important capabilities of the Tape Administration utility, is the option to install the software driver remotely for any new or replacement tape drive unit that needs to be installed in the MAP Engine computer. This simple menu function is described below.

Procedure:

1) From the Tape Administration Menu, select option 3, "Install Tape Drive," followed by <*Return>*. You will see the message:

```
Do You Wish To Install the Tape Drive? Y[es], N[o]
```

2) If you are certain that you want to install the tape drive controller, press *Y*; otherwise, press *N*. A "yes" (*Y*) response produces the following prompt:

Installing Tape Drive.

Hit <Return> to continue.

3) Press < *Return* > to access the Tape Administration Menu.

Reset Tape Controller and Drive

Selecting this reset option clears any error conditions that may have occurred and returns the tape subsystem to the power-up state. The screen output displayed when performing this process is shown in the example below.

Procedure:

1) From the Tape Administration Menu, select option 4, "Reset Tape Controller and Drive," followed by <*Return>*. The message below displays:

```
Do You Wish To Reset Tape Controller and Drive? Y[es], N[o]
```

2) First make sure that a tape backup is not in progress and that the drive is an idle state. If you are certain that you want to reset the controller and drive, press *Y*; otherwise, press *N*. A "yes" (*Y*) response produces the following prompt:

```
Resetting tape controller and drive.
```

3) When the process has been completed, a message displays requesting that you press <*Return>* to finish the process.

```
Hit <Return> to continue.
```

4) Press < *Return* > to redisplay the Tape Administration Menu.

Please note that if you were to again select the Tape Configuration Menu, as described above, it would indicate that the tape controller and drive had been reset. The displayed output would be similar to the following:

```
Tape Status

status: ready beginning-of-tape write-protected reset soft errors: 0
hard errors: 0
underruns: 0
```

Network Administration

While Network Administration is part of the System Administration Menu, these important utilities are given a section of their own. See Section 6, Network Administration. The Data Export Protocol procedures are located in Appendix 3 of this book.

Procedure to Launch BackupEDGE

BackupEDGE is a software application that provides you with the means of backing up and restoring important PressureMAP system office and device data onto a variety of media, including electronic tape, CD/DVD-ROM, RAM disk or to a remote computer via file transport protocol (ftp). The application

extends, but does not replace, the traditional tape backup capabilities that have been provided by PressureMAP over the years. Individuals wishing to use the old backup method may continue to do so.

The System Administration Menu's BackupEDGE option provides direct access to the application, from which you can configure and manage backup resources for your PressureMAP system. The actual processes of backing up and restoring system and office files using BackupEDGE, however, are initiated from the System Administration Menu's Backup and Restore selections. (Please refer to the explanations of these functions located near the beginning of this section.)

Note:

PressureMAP users who are upgrading to Version 27, but using an older version of the MAP Engine will first have to perform a required incremental update in PressureMAP and then install and configure BackupEDGE according to the documentation supplied with the media. In situations where BackupEDGE is purchased in addition to PressureMAP Version 27 and a new MAP Engine VIII computer, the equipment is generally shipped with the BackupEDGE software pre-installed and configured for the MAP Engine's hardware.

Also, please make note of the following precautionary information when using BackupEDGE on a PressureMAP computer that is running Linux. If you wish to set or change the MAP System Host Name (for configuration of the mail delivery system under Linux), you will need to do so BEFORE installing, configuring and registering BackupEDGE. If you change the host name after BackupEDGE is installed, the licensing keys for BackupEDGE will become invalid. (Please refer to Section 6, page 6-24 of this manual for instructions on setting or changing the MAP System Host Name.)

Once the software is operational, you can use the System Administration Menu's BackupEDGE option to access the application and modify or reconfigure backup resources. The following information describes how to do so.

Procedure:

1) From the System Administration Menu, select "BackupEDGE". Press **20** < **Return** >. PressureMAP displays the following screen.

```
BackupEDGE MAP Series XX.XX.XX
09/17/2008 15:29 *Schedule Off* System Studies Incorporated

BackupEDGE
-----
1. Launch EdgeMenu
Q. Quit
```

SCREEN 4-52: BACKUPEDGE LAUNCH MENU

If you do not have BackupEDGE installed on your system, PressureMAP provides the following prompt:

** BackupEDGE **

BackupEDGE is currently not installed!

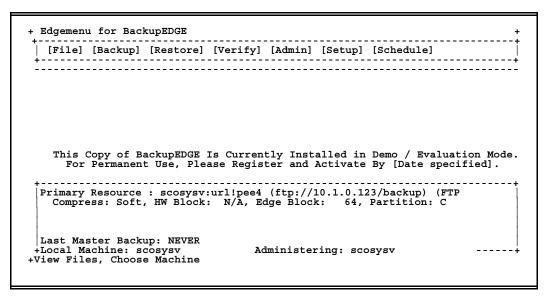
If you already have BackupEDGE media, please refer to the BackupEDGE incremental update instructions or call tech support for more information.

Hit <Return> to continue...

2) If BackupEDGE is installed and you would like to launch the application, press *I* and <*Return>*. PressureMAP then displays the following:

Do You Wish To Launch EdgeMenu? Y[es], N[o]

3) Type y and press < Return>. This response produces the Main Edgemenu Screen (SCREEN 4-53), from which you can perform the Edgemenu functions documented in the product's PDF file.



SCREEN 4-53: MAIN EDGEMENU SCREEN

4) To exit the Main Edgemenu Screen and return to the PressureMAP system, use the keyboard's up and down arrow keys to highlight [File] located on the command line (near top of screen). Pressure the down arrow key four times to select [eXit], and press <Return>. PressureMAP displays:

Hit <Return> to continue.

5) Press < *Return* > one more time to return to the BackupEDGE Launch Menu where you can select *Q* and < *Return* > to go back to the System Administration Menu.

Procedure to Restart Web Services

One of the most important PressureMAP utilities, available beginning with Version 26, is PressureWEB. This application, which requires the use of an Apache web server, makes it possible to view PressureMAP information and initiate specific action requests using a standard web browser. The Apache server makes PressureWEB html and javascript output available via TCP/IP connection.

In order to run PressureWEB, the Apache web server is installed on the MAP Engine computer along with PressureMAP. Just as it is possible to start and stop key PressureMAP processes remotely from the System Administration Menu, it is also possible to Restart Web Services if necessary. If a situation were to occur where PressureWEB failed to provide updated readings and operate correctly, for example, the first course of action would be to restart the web services as described below.

Procedure:

1) From the System Administration Menu, select "Restart Web Services" by pressing option Press *21 < Return >*. The program displays the following information.

```
...Stopping Web Services...
...Starting Web Services...
Hit <Return> to continue.
```

2) Press < *Return* > to go back to the System Administration. One the MAP Engine computer's web services have been restarted, you should be able to resume using the PressureWEB application.

Procedure to Display System Uptime

This System Administration Menu option gives you the ability to view system usage statistics. More specifically, it includes the current time, how long the system has been running, the number of users currently logged on, and system load averages for the past 1, 5 and 15 minutes. The load averages provide a basic indication of how busy the system is during the time of the request. This information is displayed on a single line on the System Statistics Screen (SCREEN 4-54).

Procedure:

1) Select option 22, "Display System Uptime," from the System Administration Menu. Press 22 and <**Return**>. The following information displays:

```
System Statistics MAP Series XX.XX.XX 11/10/2008 14:38 *Schedule Off* System Studies Incorporated
Time of day: 14:38:59 up 4:20, 2 users, load average: 0.01, 0.03, 0.00
Hit <Return> to continue.
```

SCREEN 4-54: SYSTEM STATISTICS SCREEN

2) After you have viewed this information, press < *Return* > to go back to the system Administration Menu where you can select other options or chose to exit this part of the program.

Procedure to Renew System Registration

Beginning with PressureMAP Version 27.00.08, a four star System Alarm is generated if any of three events invalidates the PressureMAP system registration file: 1) installation of a new system, 2) initial update to Version 27.00.08 or higher, or 3) restoring the system registration from backup media. Once any of these three events triggers an alarm, all PressureMAP capabilities will expire three days from the last change time (time and date of the event).

A new System Administration menu option has been added in PressureMAP Version 27.00.08 to simplify the process of actively renewing system registration. Please note that you will need to contact System Studies Technical Support personnel prior to performing the procedure described below in order to obtain an activation key for the system registration renewal.

Procedure:

1) Select option 23, "Renew System Registration," from the System Administration Menu. Press 23 and <*Return>*. Information similar to the following displays:

```
System registration expired (access ends 09/16/10 \ 10:25), Renew? Y[es], N[o]
```

2) Press *Y* < *Return* >. PressureMAP then prompts your for a password or activation key:

Password:

3) Carefully enter the activation key provided by System Studies, then press < **Return**>. Once the software recognizes and accepts the correct activation key, it displays the following information:

System registration successfully renewed

Hit <Return> to continue.

4) Press < *Return* > to complete the renewal process and re-display the System Administration Menu.

The procedure above creates a valid registration file. Registration will become invalid if the file is updated in any manner, in which case the following System Error will be generated and distributed:

ERROR 343: System registration has expired. Contact SSI

REMOTE VIEWING OF ALTERNATE CONSOLE OUTPUT

Prior to PressureMAP Version 25, if a System Administrator wished to view the output of a PressureMAP System's Alternate Console TTYs, it was necessary to enter an <Alt> key followed by <F10>, <F11> or <F12> at the console keyboard. With the proper login and password, it is now possible to view the output of the various system logs remotely.

Procedure to Access the View Logs Menu

In order to access the View Logs Menu remotely and view the Alarm Receiver Log, the Scheduler Log, and the System Status Log, you will first need to contact the System Studies Technical Support Department and obtain the necessary login and password for the desired PressureMAP System. This user identification information will enable you to log in directly to the View Logs Menu as shown in SCREEN 4-55 below. Please note that access to this menu is outside the menu structure of the MAP Programs.

Procedure:

1) Identify the IP address or dial-up modem phone number of the PressureMAP System whose logs you wish to view. Log onto the MAP System using one of the commercially available communications software programs, such as Telnet or NetTerm. (For information on logging onto a PressureMAP System from a remote computer, refer to Appendix 1.)

- 2) Once you have entered the assigned login and password, select the Terminal Type from the Terminal Type Menu followed by a *Return>*. If you are unsure of which selection to choose, select item one, Generic vt100).
- 3) Next select a printer from the list of printers provided. Type the desired number followed by *Return>*. The following menu displays.

```
View Logs
09/10/2008 10:50
System Studies Incorporated

View Logs
-----
1. View Alarm Receiver Log
2. View Scheduler Log
3. View System Status Log
Q. Quit

Choice?
```

SCREEN 4-55: VIEW LOGS MENU

View Alarm Receiver Log

4) To view the Alarm Receiver Log, press *I* and hit <*Return*>. The Alarm Receiver Log information displays in a View Alarm Receiver Log screen. If no Alarm Receivers are running, the message shown in Screen 4-56 is displayed.

SCREEN 4-56: VIEW ALARM RECEIVER LOG

5) The output of the Alarm Receiver Log, or the message shown above, displays until you decide to exit the screen. To return to the View Logs Menu, press the *Esc*> key. Note that it is not necessary to hit the *Return*> key to backup one menu.

View Scheduler Log

6) Select item 2 from the View Logs Menu and hit <**Return**>. The output of the Scheduler Log displays, as shown below. Notice that it will continue to display until you decide to exit the screen.

```
< Hit Escape to Quit >
View Scheduler Log
                                                                     XX.XX.XX
09/10/2008 10:50
                          *Schedule Off*
                                                 System Studies Incorporated
MAP scheduler startup ( /usr1/map ) at Sun Apr 25 03:00:03 2005
Building Schedule
Developing Dispatch Priorities for <OFFICE NAME>.
Developing Dispatch Priorities for <OFFICE NAME>.
Developing Dispatch Priorities for <OFFICE NAME>.
Developing System Index for <OFFICE NAME>...
Developing System Index for <OFFICE NAME>...
Distributing Reports to HP PRINTER (PRINTER).
NOT Calling <OFFICE NAME> (NONE phone number).
Calling <OFFICE NAME> (2400 baud).CONNECT 2400.
  Acquiring Data [03:23].[03:23]
Developing Dispatch Alarms for <OFFICE NAME>.
Checking alarms...
Delivering Alarms to HP (PRINTER).
  [03:27].SYSTEM Alarms:Acknowledged.Tasks.[03:27]
Developing Dispatch Priorities for <OFFICE NAME>.
NOT Calling <OFFICE NAME> (NONE phone number).
Calling <OFFICE NAME> (2400 baud).CONNECT 2400.
  Acquiring Data [03:30].[03:30]
Developing Dispatch Alarms for <OFFICE NAME>.
Checking alarms...
Delivering Alarms to HP (PRINTER).
  [03:33].SYSTEM Alarms: Acknowledged. Tasks. [03:33]
Developing Dispatch Priorities for <OFFICE NAME>.
```

SCREEN 4-57: VIEW SCHEDULER LOG

7) When you have finished viewing the Scheduler Log, press the *<Esc>* key to return to the View Logs Menu.

View the System Status Log

The System Status Display provides system and office status information screens that are updated every 60 seconds. The two menu options, Process Status and Office Status, are displayed on the top of the screen, and the current date and time are displayed in the lower right corner of the window bar.

The Process Status screen has two columns of data: one displays the MAP Program process, and the other shows the date or time that the process started. The screen is designed to report only on the unseen workings of the MAP system. The Office Status report screen is generated from PressureMAP's office history information and the list of System Dispatches. It is a listing of each PressureMAP office along with its current status. For additional information about the contents of the two screens, refer to Appendix 2 of this manual.

8) To access and view the System Status Log, select item 3 from the View Logs Menu and hit <*Return>*. The first log produced is the Process Status Log as shown in the screen sample below.

```
System Status: P[rocess Status], O[ffice status], Q[uit]
Choose an option:
PROCESS ACTION
Running Print Spooler
                                                                         01/05
Running Schedule
                                                                         01/05
Running Idle Logout
                                                                         01/05
Running UPS Power Check
                                                                         01/05
Waiting to Receive Alarms
                                                                         12:35
Polling <OFFICE NAME>
                                                                         13:00
                                                                         13:00
Polling <OFFICE NAME>
Polling <OFFICE NAME>
                                                                         13:34
Generating Priorities for <OFFICE NAME>
                                                                         14:22
Generating Alarms for <OFFICE NAME>
                                                                         14:23
Generating Indexes for <OFFICE NAME>
                                                                         14:23
Receiving Alarm from <OFFICE NAME>
                                                                         14:24
Sending Alarm from <OFFICE NAME> to <CENTER NAME>
                                                                         14:25
```

SCREEN 4-58: PROCESS STATUS SCREEN

9) To acquire Office Status information, type O. (Note that it is not necessary to type O(uit) until you would like to return to the View Logs Menu.) A screen similar to the one below displays.

System Status: P[rocess Status], O[ffice status], Q[uit] Choose an option:			
1. <office name=""></office>	Current	17. <office name=""></office>	Current
2. <office name=""></office>	Scheduled		Current
3. <office name=""></office>	NO PHONE	19. <office name=""></office>	Current
4. <office name=""></office>	BAD PHONE		Current
5. <office name=""></office>	Current		Current
6. <office name=""></office>	Busy	22. <office name=""></office>	Current
7. <office name=""></office>	NO ANSWER	23. <office name=""></office>	Current
8. <office name=""></office>	Current	24. <office name=""></office>	Current
9. <office name=""></office>	Disabled	25. <office name=""></office>	Current
10. <office name=""></office>	Current	26. <office name=""></office>	Current
11. <office name=""></office>	Current	27. <office name=""></office>	Current
12. <office name=""></office>	Current	28. <office name=""></office>	Current
13. <office name=""></office>	Current	<pre>29. <office name=""></office></pre>	Current

SCREEN 4-59: OFFICE STATUS SCREEN

10) When you have finished viewing the System Status lists, press **Q** to return to the View Logs Menu. To stop viewing Alternate Console information and log off of the system entirely, type **Q** followed by **<Return>**.