Uniform Chart of Accounts Personnel Utilization System (UCAPERS)/Workload Management System for Nursing – Army (WMSN-A)

System Operations Guide

Version 3.0

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UCAPERS/WMSN-A SYSTEM OPERATIONS GUIDE
REVISION AND HISTORY PAGE

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SYSTEM OPERATIONS GUIDE
TABLE OF CONTENTS

SECTION 1
SCOPE

The *UCAPERS System Operations Guide* describes the procedures and information necessary for the Uniform Chart of Accounts Personnel Utilization System/Workload Management System for Nursing-Army (UCAPERS/WMSN-A). The procedures and information necessary for the Expense Assignment System, Version IV (EAS IV) can be found in the EAS IV System Administration Procedure (SAP).

1.1 MEPRS OVERVIEW

The Medical Expense and Performance Reporting System (MEPRS) was implemented to provide consistent principles, standard policies, definitions, and requirements for accounting and reporting of expense, manpower, and performance by Department of Defense (DoD) fixed military medical facilities. MEPRS is the basis for establishing a uniform reporting methodology that provides consistent financial and operating performance data to assist managers who are responsible for healthcare delivery.

The Pathology, Radiology, and Respiratory Therapy, or ancillary subsystems, are designed to capture workload data. Personnel in the ancillaries use formatted screens to type MEPRS workload data and, in some cases, patient data.

As data is imported, EAS IV compiles the information and stores it. This data is used to produce daily and monthly workload reports for the ancillaries through batch cycles.

UCAPERS is used to capture each Medical Treatment Facility's (MTF's) personnel utilization and expense data. A primary objective of UCAPERS is to help automate the way medical personnel record and report MEPRS personnel data.

To accommodate the efficient recording of MEPRS data, UCAPERS divides personnel into three categories: Clinicians, Non-Clinicians, and Contracted Services.

On a monthly basis, EAS IV accepts the MTF's personnel and expense data utilizing automated interfaces. Comptroller/Resource Management Office (CRMO) operators merge the workload data collected by the ancillaries with other MEPRS data entered. After EAS IV processing is complete, the Medical Expense and Performance Report (MEPR), which summarizes MEPRS statistical and expense data for a specific month and for the fiscal year-to-date, and associated files are transmitted to the Service Agency, Medical Command (MEDCOM), Office of the Surgeon General (OTSG) Army, and DoD Health Affairs.

1.2 SECTION TOPICS

The *UCAPERS System Operations Guide* will cover the following topics:

- MEPRS overview
- General Technical Support information
- MEPRS equipment and terms
- MEPRS office daily routines
- MEPRS independent processes
- MEPRS procedures
- File system backup procedures
- Data file recovery
- MEPRS tools and utilities
- UNIX error messages

SECTION 2
GENERAL TECHNICAL SUPPORT INFORMATION

Upon receiving this guide, please fill in the requested information (about the site) in the sections below, so this information is readily available when the MEPRS Technical Support Center is called.

MEPRS Site Information and Phone Numbers

Site Name: _____

Site POC: _____ System Type: _____

Site DSN: _____ Commercial Phone Number: _____

2.1 TECHNICAL SUPPORT INFORMATION

2.1.1 All CONUS and OCONUS (except Germany)

Technical Support is provided by U.S. Army Medical Command (MEDCOM), 2455 N.E. Loop 410, San Antonio, Texas, and is available from 0600 to 1800 Central Standard Time (CST), Monday through Friday, excluding government holidays. To reach the MEPRS Technical Support center, dial one of the following numbers:

- DSN: 471-9764, ext. 2215
- Commercial: (210) 637-2215

2.1.2 Europe Regional Medical Command Sites (Germany)

Technical Support for Landstuhl Regional Medical Center, Heidelberg Medical Department Activity (MEDDAC), and Wuerzburg MEDDAC is provided by the European Regional Medical Command (ERMC) in Landstuhl, Germany, and is available from 0730 to 1600 local time, Monday through Friday. To reach Technical Support personnel, dial one of the following local numbers:

- 486-6007
- 486-8878

When technical support is unavailable from ERMC or after 1600 local time, Monday through Friday, please address problems to the MEPRS Technical Support Center in San Antonio, Texas.

2.1.3 CONUS and OCONUS (except Germany) Answering Service Numbers

Voice mail will be available for calls placed to the MEPRS Technical Support Center between 1800 and 0600 CST and weekends. Issues will be addressed in order of priority, beginning at 0600 the next business day.

- DSN: 471-9764, ext. 2215
- Commercial: (210) 637-2215

The recommended format for leaving a message is as follows:

- Site Name:
  - "This is Ft Example, Texas"
- Name of Caller, Duty Position and Date/Time Calling:
  - "Mary-Beth Doe, Computer Room Operator, Monday 24 April 2000, 0215 CST."
- DSN or Commercial Phone Number to Return Caller's Call:
  - "DSN 555-1020 or 1021"
- Brief Description of Problem:
  - "The server will not come up. There was a power hit last night, and the server was not functioning when I came in this morning."
- Urgency of the Problem:
  - "UCAPERS is not functioning; no users are able to get on the system. The MEPRS office said we need to get the system up ASAP in order to finish with the monthly processing."

2.2 HOW TO PLACE A SERVICE CALL

The following procedures for placing a service call for Hardware and Software Support were established by MEDCOM in conjunction with the Vendor:

1. MEPRS site personnel requiring Technical Hardware and Software Support for servers running UCAPERS or EAS IV need to contact the MEPRS Technical Support Center.

2. MEPRS Technical Support personnel will analyze the problem with the Site Point Of Contact (POC) and then have the site contact the Vendor for hardware assistance as needed. The site POC confirms or provides the following information to the Vendor:
   - What device (such as tape drive or hard drive) needs service (if obvious to the Site POC)
   - Serial Number of device(s) not working
   - Procedures performed by the Site POC to troubleshoot the problem
   - Any error messages noted
3. If replacement parts are required and a Vendor Technical Representative is required to make a visit, the Site POC will notify MEPRS Technical Support. MEPRS Technical Support will record the information provided by the Site POC and the Vendor Technical Representative.
4. MEPRS Site personnel will contact the MEPRS Technical Support Center upon receipt of the required replacement parts. The Vendor Technical Representative will schedule a time to respond to reports during normal duty hours as follows:
   - CONUS locations within 2 business days to repair equipment
   - OCONUS locations within 3 business days to repair equipment
5. Before the Vendor Technical Representative departs, MEPRS Site personnel need to log the following information:
   - Date of the service call
   - Changes made by the Vendor Technical Representative
   - Name and badge number of the Vendor Technical Representative
   - Vendor Event Number
   - Name of the MEPRS Technical Support Center person assisting
6. MEPRS Site personnel will contact the MEPRS Technical Support Center and provide the above information. MEPRS Site personnel experiencing response time problems from their local Vendor Technical Representative need to notify the MEPRS Technical Support Center to ensure the necessary steps are completed.

SECTION 3
MEPRS EQUIPMENT AND TERMS

This section identifies and describes the equipment available at the sites. The configurations for the workstations and printers are included to help when problems arise with the hardware. Commonly used terms are defined for the user to become familiar with the system.

3.1 EQUIPMENT IDENTIFICATION

The UCAPERS system is designed to run on a server. Every site currently using the UCAPERS system will have at least one server and a variety of workstations and printers connected through a network.

- Server: The UCAPERS server utilizes the SCO UNIX Operating System. The operating system has two functions: it supervises the work of the computer and it provides tools. The server's internal features include firmware, nonvolatile time-of-day clock, floppy disk drive, internal hard disks, and a tape drive.
- Nonvolatile Time-of-Day Clock: If power to the server is interrupted, battery power keeps the nonvolatile time-of-day clock working so that the current time is always correct. The operating system uses the information from the time-of-day clock to mark each file with the time and date that it was last updated.
- Hard Disks: Hard disks store data internally. UCAPERS servers need a minimum of three hard disks at 2 GB each.
- Floppy Disk Drive: The floppy disk drive has the ability to store up to 1.4 megabytes (MB) of data to removable disk media, making it possible for backup files to be copied to a floppy disk. MS-DOS files can be worked on by using the floppy disk drive and a conversion utility.
- Tape Drive: The system administrator can use the tape drive to backup or restore the computer file system. The tape cartridge is removable and can store up to 4 gigabytes (GB) of uncompressed data.
- Compact Disc Read-Only Memory (CD-ROM) Drive: A CD-ROM drive reads CDs. One CD can hold over 650 MB of data.
- Keyboard: The system administrator uses the keyboard to input commands.
- Monitor: The monitor displays the menu of the UCAPERS system.
- Mouse: The mouse is not used with the UCAPERS system.

3.2 WORKSTATION / PRINTER CONFIGURATION

This section of the *System Operations Guide* will provide detailed instructions on configuring the various devices attached to the system through the network.

3.2.1 Workstation Configuration

Workstations are the CPU, monitor, and keyboard combinations that are used to interface with the UCAPERS system. Data entry and cycle initiation are performed at the workstations. System administration functions, as described below, are performed at the console, the workstation directly attached to the server. If there are any questions on these procedures, please contact the MEPRS Technical Support Center.

3.2.2 Printer Setup

MEPRS site personnel will need to contact the MEPRS Technical Support Center in the event that a printer configuration change needs to be made. The Site POC will need to provide the following information:

- IP address of the Printer (xxx.xxx.xxx.xxx)
- Name of the printer (SERIAL00)
- Type of printer (HP LaserJet 5)

NOTE: Any additions or deletions of UCAPERS printers will require the Site Unique Table to be updated in the UCAPERS Local Table Maintenance screen.

SECTION 4
MEPRS OFFICE DAILY ROUTINES

Several tasks that are performed daily ensure that the UCAPERS system is functioning properly. This section outlines each of these tasks.

4.1 MORNING ROUTINE

1. Logon to Monitgate to verify that the previous night's UCAPERS cycle has completed. See section 5.1.3 for instructions on the Monitgate logon. The Monitgate screen displays the following messages:

```
                                  UCAPERS
                                CYCLE MONITOR

CURRENT DATE :    MM/DD/YY          CURRENT TIME :    HHMM

BATCH CYCLE SCHEDULED FOR
         DATE :   YYMMDD                      TIME :   HHMM

WMSN CYCLE SCHEDULED FOR
         DATE :   YYMMDD                      TIME :   HHMM
                  YYMMDD                               HHMM
                  YYMMDD                               HHMM

SCRIPTS CURRENTLY PROCESSING:                 PROGRAMS CURRENTLY PROCESSING:
         NAC00PS0                                      NONE
         NAC28PS1


                  **** NO CYCLES ARE CURRENTLY PROCESSING ****

                    PRESS CTRL-BREAK TO EXIT MONITOR SCREEN
```

2. If the UCAPERS Batch Cycle has completed, logon to **personln** to ensure the online system is available.

   - If the user cannot logon to **personln**, the UCAPERS Batch Cycle has probably aborted for some reason. Try to determine the cause of the problem by reviewing the BATCH.LOG file. Logon to **nacsys** and type the following at the UNIX prompt <*server_login*>:
   - <server_login> eview /nac/log/BATCH.LOG

     NOTE: The **eview** command can be used to view any UCAPERS cycle log files (/nac/log/WMSN.LOG) or report files (/nacdata/PAC01.PRNT) online. See section 9.2.2 for information on the **eview** utility.

   - Try to locate and determine the cause of the problem. Call the MEPRS Technical Support Center and provide any error messages located in the BATCH.LOG file. MEPRS Technical Support personnel will help resolve the problem. When the problem is resolved, MEPRS Technical Support Center personnel will restart the UCAPERS Batch Cycle.
   - If the logon to **personln** is successful**,** then the UCAPERS Batch Cycle has completed normally.

3. Remove all reports, schedules, and cycle logs from the main printer. Separate the reports and prepare them for distribution. Use the **lpstat** command explained in Section 9.1.6 of this document to confirm that all reports have been printed.

4. Review the BATCH.LOG and the PRINT.LOG files to verify the UCAPERS Batch Cycle ran correctly. Review the WMSN.LOG file to verify the previous day's Daily WMSN Cycle ran correctly. Be sure to file these logs for one week before discarding.

   NOTE: It is the responsibility of the MEPRS Site personnel to review all cycle logs and verify that all UCAPERS and WMSN Batch Cycles complete successfully without errors.

4.2 THROUGHOUT THE DUTY DAY

1. Process all UCAPERS File and Table Maintenance requests as necessary.

2. Record all REPORT/ROSTER/TABLE Listing Requests from UCAPERS users.

3. Perform normal EAS IV functions as required.

4.3 AFTERNOON ROUTINE

1. If automatic backups are not being used, at approximately 1400 hours, perform UCAPERS Daily Backups. This is accomplished by inserting a tape cartridge into the tape drive on the server and logging onto **nacbkup**. See section 5.1.5 for further information on the **nacbkup** logon. Answer the prompts as they appear on the screen. When the backup is complete, label the tape and store it.

2. Logon to **personln** and perform the following:

   - Approve the reports on screens 16, 17, and 18 that were requested during the day. To do so, first select the appropriate screen from the UCAPERS System Menu. Then type **P** next to the desired report and press **F8**.
   - Approve the following processes as required:
     - — Create Prospective Schedules (weekly)
     - — Create Retrospective Schedules (weekly)
     - — Prospective Posting Schedules (weekly)
     - — Payroll Processing (bi-weekly)
     - — Create Clinician Utilization Worksheets (monthly)
     - — Create Clinician Survey Sheets (quarterly)

- Approve the UCAPERS Batch Cycle for processing by typing **P** next to **Batch Processing** on the **Process Control** screen. The start time for the cycle defaults to 2359 hours, but can be scheduled to begin at anytime during the day.

  NOTE: The UCAPERS Batch Cycle cannot be approved until a backup has run. An error message will appear until the backup has run.

3. If automatic backups are run, insert the UCAPERS Backup tape cartridge into the tape drive on the server. The UCAPERS Daily Backup automatically runs immediately after the UCAPERS Batch cycle completes. The tape drive used for the UCAPERS Daily Backup can be determined by referring to the Site Unique Table.

SECTION 5
MEPRS INDEPENDENT PROCESSES

This section describes in detail the processes associated with UCAPERS and the Automated Quality of Care Evaluation Support System (AQCESS)/UCAPERS WMSN Interface. Instructions are given for initiating and terminating each process.

5.1 UCAPERS PROCESSES

Since UCAPERS performs many functions, several processes are initiated to complete these functions. This section will describe each UCAPERS process in detail. Each description will include procedures for initiating, reviewing and terminating each UCAPERS process.

5.1.1 Startgate (startgt)

- Function: Startgate is the process that initiates UCAPERS Batch cycles and WMSN Batch cycles at the time specified. This process must be active for the cycles to begin. Startgate is also used to restart aborted UCAPERS Batch cycles.
- To Initiate: At the UNIX System *login* prompt, type **startgt** and press **<Enter>**. At the *Password* prompt, type the password for startgt. The password does not appear on the screen, but must be typed correctly for the login to succeed.

```
login: startgt
Password: (password)
```

  After the login and password have been entered correctly, the status of the file rebuilds, which occur during UCAPERS Batch Cycles, is checked. If any file could not be successfully rebuilt, the following screen appears. Press **<Enter>** to exit Startgate. Call the MEPRS Technical Support Center for help in resolving this problem.

```
U C A P E R S  B A T C H  C Y C L E  H A S  A B O R T E D

FILE REBUILD FAILURE
CONTACT MEPRS TECHNICAL SUPPORT

PRESS ENTER TO EXIT
```

If all batch cycle file rebuilds were successful, one of three screens appears. Control the disposition of Startgate by responding to the screen prompts. In addition, aborted UCAPERS cycles can be restarted. A description of each of the Startgate screens follows:

5.1.1.1 Initiating Startgate

If the Startgate process is currently not active, the following screen appears:

```
      S T A R T G A T E   I S   N O T   C U R R E N T L Y   A C T I V E

Do You Wish To Initiate STARTGATE?
```

Initiate Startgate by typing **y** or **yes** at this prompt. The following screen appears:

```
                    STARTGATE   HAS   BEEN   INITIATED
```

Typing **n** or **no** at the prompt results in the following message appearing on the screen. Startgate will remain inactive.

```
      S T A R T G A T E   I S   N O T   C U R R E N T L Y   A C T I V E
Do You Wish To Initiate STARTGATE? n

STARTGATE NOT initiated.
```

5.1.1.2 Terminating Startgate

If Startgate is currently active, the following message appears:

```
          S T A R T G A T E   I S   C U R R E N T L Y   A C T I V E

Do You Wish To Terminate STARTGATE?
```

Typing **y** or **yes** at the prompt results in the following message appearing on the screen. Startgate will terminate.

```
                    T E R M I N A T E
                B A C K G R O U N D   S T A R T G A T E

                  DATE:  YYYYMMDD          TIME:  HH:MM

                * * * STARTGATE HAS BEEN TERMINATED * * *
```

Typing **n** or **no** at the prompt results in the following message appearing on the screen. Startgate will remain active.

```
          S T A R T G A T E   I S   C U R R E N T L Y   A C T I V E
Do You Wish To Terminate STARTGATE? n

STARTGATE remaining active.
```

5.1.1.3 Restarting UCAPERS Batch Cycle

If a UCAPERS Batch Cycle has aborted, the following message appears:

```
        U C A P E R S   B A T C H   C Y C L E   H A S   A B O R T E D
Do you wish to restart the cycle?
```

Typing **y** or **yes** at this prompt results in the following message appearing on the screen. The cycle will restart.

```
Batch cycle will restart in 1 minute
```

Typing **n** or **no** at the prompt results in the following message appearing on the screen. The batch cycle will not restart.

```
        U C A P E R S   B A T C H   C Y C L E   H A S   A B O R T E D
Do you wish to restart the cycle? n

Cycle NOT Restarted.
```

5.1.2 UCAPERS Online Screens (personln)

- Function: The personln process has two functions: to type information into the UCAPERS system (such as Personnel Schedules, Patient Acuity, or Master Personnel File data) and to control the scheduling of UCAPERS Batch Cycles.
- To Initiate: At the UNIX System *login* prompt, type **personln** and press **<Enter>**.

```
login: personln
```

- Type the password and press **<Enter>**. The following screen appears:

```
Date: YYYY/MM/DD        UCA - Personnel Utilization System            SNAC001
Time: HH:MM                       System Sign On


                              (YOUR FACILITY'S NAME)

                        Enter Operator Id     :

                        Enter System Password :




[F1] Exit                          [F5] Help                          [F8] Accept
```

At this point, type the UCAPERS ID and Password assigned by the MEPRS office. The process of entering data into UCAPERS is beyond the scope of this manual. Please see the *UCAPERS Data Entry Manual* for more detailed information.

5.1.3 Monitor Startgate (monitgt)

- Function: The Monitgate function monitors the activity of Startgate. Since the Startgate process runs in the background (when initiated, control returns to the user), there is no simple way to monitor its status. The Monitor Startgate process provides a way to check the activity of Startgate.

- To Initiate: At the UNIX System *login* prompt, type **monitgt** and press <**Enter>**. At the *Password* prompt, type the password for monitgt. The password does not appear on the screen, but must be typed correctly for the login to succeed.

```
login: monitgt
Password: (password)
```

After the login and password have been typed correctly, the following screen appears:

```
********************************************************************************
********************************************************************************
 **********************   Day MMM DD  hh:mm:ss CST YYYY   **********************
  ************      UCAPERS CYCLE MONITOR BEGINNING -  PLEASE WAIT      *********
********************************************************************************
********************************************************************************
```

While this screen is displayed, Monitgate is gathering information. After a short period, the following screen appears:

```
                              U C A P E R S
                          C Y C L E    M O N I T O R

  CURRENT DATE : MM/DD/YY                     CURRENT TIME : hhmm

  BATCH CYCLE SCHEDULED FOR
          DATE : MMDDYY                              TIME : hhmm

  WMSN CYCLE SCHEDULED FOR
          DATE : MMDDYY                              TIME : hhmm
                 MMDDYY                                    hhmm
                 MMDDYY                                    hhmm

 SCRIPTS CURRENTLY PROCESSING:            PROGRAMS CURRENTLY PROCESSING:
           (PROCESS1)                               (PROGRAM1)
           (PROCESS2)                               (PROGRAM2)
           (PROCESS3)                               (PROGRAM3)

  ************************        (USER MESSAGE)        ************************
                           ****  (CYCLE MESSAGE)  ****

                      PRESS CTRL-BREAK TO EXIT MONITOR SCREEN
```

The **UCAPERS Cycle Monitor** screen will be re-displayed approximately every twenty seconds with the information updated. The above message will display up to three processes and programs that are currently processing. The actual process or program name will appear in place of (PROCESS1) or (PROGRAM1). There are two lines reserved on this screen for messages to display. These lines are represented above by (USER MESSAGE) and (CYCLE MESSAGE). One of the following messages will appear in place of (CYCLE MESSAGE):

```
                    THE BATCH CYCLE IS CURRENTLY PROCESSING

                    THE WMSN CYCLE IS CURRENTLY PROCESSING

                      NO CYCLES ARE CURRENTLY PROCESSING
```

If applicable, one of the following messages will appear in place of (USER MESSAGE); otherwise, this line will be blank:

```
************************ DATA FILE BACKUP MUST BE PERFORMED
************************
*************************     STARTGATE IS DISABLED
*************************
************************  A FILE REBUILD ERROR HAS OCCURRED
************************
************************  CONTACT MEPRS TECHNICAL SUPPORT
************************
```

Monitgate will continue to run until the user exits. As shown on the **UCAPERS Cycle Monitor** screen, hold down **Ctrl** while pressing **Break** (or **Ctrl-**\) to exit the monitor screen.

When this key combination is pressed and released, Monitgate will terminate.

5.1.4 Processing UCAPERS Tapes (nactape)

- Function 1: The nactape process is used to read or write magnetic tapes used by the UCAPERS system. Nactape will create the following tapes when requested through the UCAPERS Online Screens:

  — EAS Tape

  — USM Tape

- Function 2: The nactape process is used to initiate the DCPS function when requested.

- To Initiate: At the UNIX System *login* prompt, type **nactape** and press **<Enter>**. At the *Password* prompt, type the password for nactape. The password does not appear on the screen, but must be typed correctly for the login to succeed.

  ```
  login: nactape
  Password: (password)
  ```

  After the login and password have been entered correctly, the UCAPERS Create Tape function begins. Any tape functions requested through the UCAPERS online screens are performed. Users are prompted to insert tapes as needed. For further information on a specific tape process, please see the *UCAPERS System Management Manual*. When all requested tapes are processed, the nactape process terminates.

5.1.5 UCAPERS Daily Backup (nacbkup)

The daily batch processing cycle automatically backs up the Auditor and all permanent data files. Pre-processing and post-processing data files will be automatically backed up daily from disk to tape. UCAPERS cycles cannot be run until the daily data file backups are completed.

1. Go to any workstation that accesses the server.

   NOTE: Try to select a workstation in the proximity of the server (for tape drive access).

2. Initiate UCAPERS daily data file backup by logging on as follows:

   ```
   login: nacbkup
   password: <Password>
   ```

3. The system displays the **UCAPERS Daily Backup Tape Process** screen. Users are prompted to insert the UCAPERS Daily Backup tape and to ensure that the tape drive is online.
   - Insert the tape to be used for the backup on the tape drive; ensure that the tape drive is online.
   - Press **<Enter>**.
4. The system verifies that the tape drive is ready for backup.
   - If the tape drive is not available, an error message appears on the screen. The system then logs the terminal off.
   - If the tape drive is available, the daily backup process begins. The screen displays that the daily files are being backed up to tape. When the last file is backed up to the tape, the screen displays a message requesting that the backup tape be removed from the drive.
5. Press **<Enter>** after removing the backup tape. The system logs the terminal off.
6. Check the printer for a tape backup file listing.

5.2 AQCESS/UCAPERS WMSN INTERFACE PROCESSES

The AQCESS/UCAPERS WMSN Interface was developed by Defense Medical System Support Center (DMSSC) and U.S. Army Medical Information Systems and Services Agency (USAMISSA) to automatically transfer demographic information from the AQCESS Patient Registration Screen to the UCAPERS Workload Management System for Nursing (WMSN).

5.2.1 Start AQCESS/UCAPERS WMSN Interface

To activate the AQCESS/UCAPERS WMSN Interface, follow the instructions below:

1. At the UNIX system *login* prompt, type **nacsys** and press **<Enter>**. At the *Password* prompt, type the password for nacsys. The password does not appear on the screen as it is typed.

```
login: nacsys
Password: (password)
```

2. Make sure that the AQCESS/UCAPERS WMSN Interface is not already started by typing the following command at the UNIX prompt:

```
<server_login> AQCESS_STOP
```

   NOTE: It is very important to always run AQCESS_STOP prior to running AQCESS_START.

3. Start the AQCESS/UCAPERS WMSN Interface by typing the following command at the UNIX prompt:

```
<server_login> AQCESS_START
```

4. After the interface is activated, the message "Sending output to nohup.out" appears on the screen. Press <**Enter>** to return to the UNIX prompt <*server_name*>.

5.2.2 Stop AQCESS/UCAPERS WMSN Interface

To terminate the AQCESS/UCAPERS WMSN Interface, follow these instructions:

1. At the UNIX system *login* prompt, type **nacsys** and press **<Enter>**. At the *Password* prompt, type the password for nacsys. The password does not appear on the screen as it is typed.

```
login: nacsys
Password: (password)
```

2. Stop the AQCESS/UCAPERS WMSN Interface by typing the following command at the UNIX prompt:

```
<server_login> AQCESS_STOP
```

5.2.3 AQCESS/UCAPERS WMSN Interface Status

The contents of this section explain how to check the status of the AQCESS/UCAPERS WMSN Interface. This status check displays the current date and time, the date and time the last good inquiry was received from AQCESS, the date and time the last good record was received from AQCESS, and the status of the interface.

1. At the UNIX system *login* prompt, type **nacsys** and press **<Enter>**. At the *Password* prompt, type the password for nacsys. The password does not appear on the screen as it is typed.

```
login: nacsys
Password: (password)
```

2. View the **AQCESS/UCAPERS WMSN Interface Status** screen by typing the following command at the UNIX prompt:

```
<server_login> AQCSTAT
```

The following screen appears:

```
            A Q C E S S / U C A P E R S     I N T E R F A C E
                              S T A T U S

CURRENT DATE IS:                    YYYY-MM-DD     AT:   HH:MM:SS
RECEIVED LAST GOOD ENQUIRY ON:      YYYY-MM-DD     AT:   HH:MM:SS
RECEIVED LAST GOOD TRANSACTION ON:  YYYY-MM-DD     AT:   HH:MM:SS
THE AQCESS LINK STATUS IS:          xx
```

The link status of the interface is either:

- UP: The interface is functioning.
- DOWN: The AQCESS side of the interface is intentionally down.
- HALT: The UCAPERS side of the interface is intentionally down.
- ERROR: No transmission has been received for over 30 minutes.

SECTION 6
MEPRS PROCEDURES

To ensure proper operation, MEPRS requires a set of duties to be performed that include:

- Inserting and removing daily tapes
- An occasional shutdown/reboot of the equipment
- Table maintenance
- Data entry
- System updates
- System recovery
- Online data file recovery
- Hardware maintenance
- Resolution of problems encountered when the system malfunctions

The procedures for the tape and printer functions are local in scope and are, therefore, under the direction of the site's Chief of Operations. However, file backups, system backups, and management reports are scheduled daily, so be prepared to support these functions.

It may become necessary to power down or reboot the entire system. **It is only safe to do so by following a specified series of procedures. Do NOT attempt to circumvent them—adhere to them in order to maintain the integrity of the entire system.** Each step has been carefully documented; become familiar with them as soon as possible.

6.1 INITIALIZING MEPRS

The first step in bringing up the server and MEPRS is to verify that the server is plugged in and that the power is on.

When it is turned on, the system runs self-checks, system diagnostics, and internal configurations. This process takes fewer than 5 minutes.

The two UCAPERS application programs (Startgate and the AQCESS/UCAPERS WMSN Interface) must be manually activated to initialize MEPRS at the site.

Instructions for initiating these processes can be found in the previous sections of this manual.

- Initiating Startgate — Section 5.1.1
- Initiating the AQCESS/UCAPERS WMSN Interface — Section 5.2.1

These two processes run on the UCAPERS server.

6.2 BRINGING DOWN MEPRS

The following information details the steps that need to be performed to correctly bring down MEPRS on a server.

NOTE: Before beginning these procedures, notify all users that the system is coming down, and then wait 15 minutes for the users to logoff.

To bring down MEPRS at the site, manually deactivate the two UCAPERS application programs (Startgate and the AQCESS/UCAPERS WMSN Interface). Instructions for deactivating these processes can be found in the following previous sections of this manual:

- Deactivating Startgate Section 5.1.1.2
- Deactivating the AQCESS/UCAPERS WMSN Interface Section 5.2.2

These two processes run on the UCAPERS server.

Do not press the power switch, located on the front of the server, unless the proper shutdown procedures have been followed. Also, never press the reset button unless requested to do so by MEPRS Technical Support Center personnel.

6.3 SCOADMIN FUNCTIONS FOR THE UCAPERS SERVER

The following sections detail the **SCOadmin** commands used to perform various system administrator functions on the UCAPERS server. This includes bringing the server to various run states so that hardware and file maintenance functions can be performed.

6.3.1 Rebooting the Server

Rebooting the server halts all processes on the computer and resets the operating system. Rebooting also needs to be performed if the system hardware or software is changed. Procedures for rebooting the UCAPERS server are shown below:

NOTES: It is recommended that the server be rebooted on a weekly basis to clean up system files and any processes that may be hung. This allows the computer to run more efficiently.

Bring down MEPRS on the server before rebooting. See section 6.2 for the proper procedures on bringing down MEPRS.

1. At the UNIX system *login* prompt on the console, type **root** and press **<Enter>**. At the *Password* prompt, type the password for root. The password does not appear on the screen as it is typed.

```
Console Login: root
Password: (password)
```

2. To reboot the server, type **shutdown -i6 -g0 -y** at the UNIX prompt:

```
# shutdown -i6 -g0 -y
```

6.3.2 Powering Off the Server

Powering off the server halts all processes on the computer, unmounts the file systems, and removes power from the server. The server needs to be powered off if electricity to the server is being shut off, severe weather is causing power outages, the server is being moved, or the Vendor Representative is replacing equipment on the server. Procedures for powering off the UCAPERS server are shown below:

NOTE: Bring down MEPRS on the server before powering off the computer. See section 6.2 for the proper procedures for bringing down MEPRS.

1. At the UNIX system *login* prompt on the console, type **root** and press **<Enter>**. At the *Password* prompt, type the password for root. The password does not appear on the screen as it is typed.

```
Console Login: root
Password: (password)
```

2. To power off the server, type **shutdown -i0 -g0 -y** at the UNIX prompt:

```
# shutdown -i0 -g0 -y
```

6.3.3 Entering Single User Mode on the UCAPERS Server

When the server is in Single User Mode, only the console is able to access the system. It is used to perform tasks to be done when no other users are on the system. Examples would be installing software, restoring file systems, formatting and partitioning disks, system reconfiguration, or at the request of MEPRS Technical Support Center personnel. Procedures for bringing the server to Single User Mode are shown below:

NOTE: Bring down MEPRS on the server before entering Single User Mode. See section 6.2 for the proper procedures for bringing down MEPRS.

1. At the UNIX system *login* prompt on the console, type **root** and press **<Enter>**. At the *Password* prompt, type the password for root. The password does not appear on the screen as it is typed.

```
Console Login: root
Password: (password)
```

2. To go to single user mode on the server, type **shutdown -is -y -g0** at the UNIX prompt:

```
# shutdown -is -y -g0
```

3. The messages that appear on the console consist of basic setup information, error notices, if any, and logs for the system each time it is rebooted. The user returns to the UNIX prompt.
4. To return to Multi User Mode, reboot the machine by typing **Ctrl D** at the UNIX prompt. See section 6.3.1 in this manual for more information on rebooting the server.
5. After the system has returned to Multi User Mode, the user receives the *Console Login:* prompt at the top left of the console screen.

SECTION 7
FILE SYSTEM BACKUP PROCEDURES

The UNIX operating system is created using a file system structure. A file system is a folder or directory that contains many data files. Each data file is necessary for operation of the UCAPERS system.

To secure the data stored on the server so that it is available in case of data loss, backup the file system on a **monthly** basis. A regularly scheduled series of backups ensure minimal data loss in the event of a hardware failure or other type of data loss. **Thus, backups of specific file systems are necessary.** This section of the *System Operations Guide* provides detailed procedures to backup the data on the server. This section also includes general information about labeling and maintaining backup tapes.

7.1 FILE SYSTEM BACKUPS

The following set of procedures will help users back up the file systems of the server at their site.

NOTE: The UCAPERS server contains six file systems. Completing the entire backup process requires one tape cartridge and at least 2 hours. Use the **ucamenu** menu to perform the full system backup.

7.1.1 UCA System Backup/Restore Procedures

The procedures to backup/restore the file systems are largely automated. The executed script performs the backup/restore with no user intervention.

1. Login at the console as **root**.
2. Insert the tape into the tape drive.
   - For a backup, ensure the tape being used is the correct one.
   - For a restore, insert the correct backup tape into the drive.
3. Type **ucamenu** and press **<Enter>**. The following screen appears:

```
                    FILE SYSTEM BACKUP/RESTORE MENU

              1.  BACKUP OF /ROOT FILE SYSTEM
              2.  BACKUP OF FULL SYSTEM
              3.  RESTORE OF /ROOT FILE SYSTEM
              4.  RESTORE OF /NAC FILE SYSTEM
              5.  RESTORE OF /NACDATA FILE SYSTEM
              6.  RESTORE OF /USR3 FILE SYSTEM
              7.  RESTORE OF /USR2 SYSTEM
              8.  RESTORE OF /FULL SYSTEM.
              9.  RESTORE OF /USR FILE SYSTEM.
              10. RESTORE OF /UCAPERS FILE SYSTEM

                     Enter selection (q to quit) :
```

4. Select the desired process and press **<Enter>**.

7.1.2 Tape Cartridge and Drive Information

7.1.2.1 Having the Correct Tape

To ensure having the correct tape for backup procedures, follow these guidelines:

1. Make sure the backup tape is a TR-4 tape cartridge. These tape cartridges can store up to 4 GB of uncompressed data or 8 GB of compressed data.
2. Depending on site configurations, use either three or six tapes in the backup process. Make sure to insert the correct day's tape into the tape drive.
    - For a three-tape rotation, use one tape for the first Friday full backup, one tape for the Monday-Tuesday-Wednesday-Thursday incremental backup, and one tape for the second Friday full backup.
    - For a six-tape rotation, use one tape for the first Friday backup; one tape each for the Monday, Tuesday, Wednesday, and Thursday incremental backups; and one tape for the second Friday full backup.

7.1.2.2 Tape Labeling

After successfully creating a backup tape, place a self-adhesive label on the tape body. Use pre-printed day-of-the week labels when available. Write the backup date, file system name, server name, and Site POC name onto the label with an ink pen or felt tip marker.

NOTE: Do not use a pencil to mark the labels. The graphite pencil lead does not stick to the label and can easily move to the magnetic tape surface by fingers or moving air. Pencil dust eventually creates tape errors.

7.1.2.3 Tape Storage and Care

To ensure optimal performance from the tape cartridges, observe the following precautions:

- Always remove the tape cartridge from the drive when not in use.
- Store tape cartridges in their protective cases.
- Never remove a tape cartridge when the drive LED is on. Wait until the light turns off before removing the tape.
- Keep tapes away from dirt, dust, moisture, and other contaminants.
- Keep tape cartridges away from sources of electromagnetic fields (such as telephones, televisions, audio speakers, computer monitors).
- Do not open the tape access door on the cartridge or touch the tape itself.
- Do not expose tape cartridges to extremely high or low temperatures.

Sometimes, dropping a tape cartridge can misalign the internal components used to guide the tape. If a tape cartridge is dropped, record the tape contents onto a new tape cartridge to ensure reliable recovery of data. Then physically destroy the dropped tape cartridge.

Finally, follow the life expectancy guidelines specified by the tape cartridge manufacturer. As a general rule, expect about 2 years of service from a tape cartridge that is used once a week.

7.1.2.4 Maintenance of Magnetic Media Tape Drives

Clean the tape drive once a month or after 20 continuous hours of read/write operations. A good time to clean the tape is before performing monthly file system backups.

To clean the tape drive, use a cleaning kit such as the CKDC Travan Cleaning Kit. Purchase this kit through Seagate at 1-800-626-6637 or 3M IMATION at 1-800-328-9438.

If a tape drive cleaning kit is unavailable, simply use a urethane foam-tipped swab (cotton swabs leave fibers) dipped in denatured alcohol.

SECTION 8
DATA FILE RECOVERY

Data file recovery refers to the replacement of a data file that becomes damaged. Damage can occur due to hardware or software errors, or by human error. If systems are backed up regularly, recovery is always possible. This section provides information on recovering UCAPERS data files in case of data loss.

8.1 UCAPERS DATA FILE RECOVERY

NOTE: Call the MEPRS Technical Support Center before performing data file recovery.

In the event of data loss, recovery can be performed by calling the MEPRS Technical Support Center. MEPRS Technical Support personnel will determine if the recovery process will include a partial or full recovery of the data files, and will also determine whether to perform data file recovery from disk or from tape. Recovery can be performed by replacing the files in the production area with the files in the backup directory or by using a backup tape and the Auditor File. The backup tape is created as a part of batch processing and contains all of the UCAPERS files as they existed before and after the prior UCAPERS Batch Cycle was run. The Auditor File is a file that contains a record of each transaction that occurred since the time the backup tape was created. This includes adds, changes, and deletions to any file or table, schedule maintenance, or any other function performed. An up-to-date version of the system as it existed at the time of the loss of data can be recreated by utilizing the Data File Recovery procedures and the Auditor File.

When it appears that data or files have been lost, or when the integrity of the system's files are in question, **call the MEPRS Technical Support Center**. See Standard Appendix K of the *Standard Appendices* for procedures on recovering data and files.

SECTION 9
MEPRS TOOLS AND UTILITIES

This section illustrates several useful tools and utilities. These utilities are to be used only when at a UNIX shell prompt (prompts may vary from machine to machine). The user receives a prompt when logging onto the system with **nacsys**.

To logon with **nacsys**, type the appropriate information at the following UNIX prompts:

```
login: nacsys
Password: (password)
```

Some of the following commands require superuser access. To obtain superuser access, logon at the console of the server with the appropriate information at the following prompts:

```
Console login: root
Password: (password)
```

NOTE: If problems exist when attempting to logon, see section 10.2 for assistance with resolving the problems.

9.1 UNIX COMMANDS

The following commands are SCO UNIX commands. Consult the "man" pages to obtain more information about these or any other UNIX commands.

To access "man" pages in SCO UNIX, type **man** at the prompt followed by the command to find more information about. For example, to learn more about the List Structure (ls) command, type:

```
man ls
```

The general command format for a UNIX command is:

UNIX command (Command options) [Arguments]

A UNIX command may be followed by one or more options and one or more arguments. For some UNIX commands, neither the option nor argument is required. For others, the options, arguments, or both are required. The options of a UNIX command usually control the format of the command's output or how the command will execute. The arguments usually control the contents of the input used by the command and output generated by the command.

The arguments for UNIX commands are often files. The UNIX system provides a way of operating on multiple files with one command if that is required. This is done using UNIX metacharacters. These metacharacters [the asterisk (*) and the question mark (?)] allow for matching on several files at once based on the format of the argument. The asterisk allows matching on any character or characters in the file name at the place where it occurs. The

question mark performs the same function, but for only one character in the file name. The best way to demonstrate the functionality of the metacharacters is with a series of examples. The **ls** command is used for the examples below:

<server_login> ls	List all files (since all characters would match the *)
<server_login> ls a*	List all files beginning with the letter **a**
<server_login> ls a*.REPT	List all files beginning with the letter **a** and ending with the characters **.REPT**
<server_login> ls a?.REPT	List all two character file names beginning with an **a**, with any character in the second position and ending with **.REPT**
<server_login> ls ??.*	List any one or two character file names (the first and/or second characters can be anything) followed by a period **.** and anything after the period

NOTES: Type all of the following commands in lower case or an error message will appear.

The following examples are shown being executed from the prompt <*server_login*>, but can also be executed from the superuser prompt #.

9.1.1 cd (Change Directory)

9.1.1.1 Function

This command allows users to change from their current working directory to another directory. The current working directory is **/nac** when logged onto the system with **nacsys**. Sometimes it is necessary to change directories to obtain access to other files more easily.

9.1.1.2 Syntax

```
<server_login> cd [directory]
```

9.1.1.3 Options

None

9.1.1.4 Examples

1. To change to the **nacdata** directory, type:

```
<server_login> cd /nacdata
```

2. To return to the home working directory (where the user first logged onto the system), type:

```
<server_login> cd
```

9.1.2 pwd (Print Working Directory)

9.1.2.1 Function

This command prints the path name of the working (current) directory.

9.1.2.2 Syntax

```
<server_login> pwd
```

9.1.2.3 Options

None

9.1.2.4 Examples

1. Logging on with **nacsys** and type **pwd** results in the following:

```
<server_login> pwd
/nac
```

2. Using the **cd** command to change to the **nacdata** directory and typing **pwd** results in the following:

```
<server_login> pwd
/nacdata
```

9.1.3 ls (List Structure)

9.1.3.1 Function

This command lists files and directories in alphabetically sorted order.

9.1.3.2 Syntax

```
<server_login> ls [options] [directory | file… ]
```

9.1.3.3 Options

- -l Lists files and directories in **l**ong format giving mode, number of links, owner, group, size in characters, and time of last modification for each file and directory.
- -C Lists files and directories in multiple **C**olumns.

9.1.3.4 Examples

To list files in the **nac** directory (signing on with **nacsys** will list **/nac** as the home directory) type the following command:

```
<server_login> ls
```

This produces a list of files similar to the following:

```
<server_login> ls
backup
btcmd
dscan
eformdir
log
nactape
olcmd
shell
```

9.1.4 lp (Line Printer)

9.1.4.1 Function

This command outputs the contents of a file to a printer.

NOTE: Do not use this command to reprint UCAPERS reports. Use the **NAC00PS2** command documented in section 9.2.1 to perform the **Reprint UCAPERS Reports** function.

9.1.4.2 Syntax

```
<server_login> lp [options] file…
```

9.1.4.3 Options

- -d Determine which printer will be used. If this option is not specified, then the output will be sent to the default printer.
- -m Mail a message to inform the user that the file has finished printing. This is especially useful when printing large numbers of large files. If no option is specified, then the user is not informed when the job is completed.
- -w Write a message to the users' terminals informing them the file has finished printing. If the user is not logged on, mail will be sent instead.
- -c Make a temporary copy of the files to be printed. Any subsequent changes to the files are not printed. If -c is not specified, any changes to the file can appear in the printed output.

9.1.4.4 Examples

To list the contents of a text file named sample.txt on the default printer and have the computer mail a message when it has finished printing the file, type the following command:

```
<server_login> lp -m sample.txt
```

A message similar to the following appears:

```
request id is SERIAL01-1024  (1 file)
```

9.1.5 cancel (Cancel Print Request)

9.1.5.1 Function

This command cancels printer requests made by the **lp** command.

9.1.5.2 Syntax

```
<server_login> cancel [request-id…] printer…
```

9.1.5.3 Options

9.1.5.4 Examples

1. To cancel request ID SERIAL01-1024, whether it is currently printing or queued to print, type the following command:

```
<server_login> cancel SERIAL01-1024
request "SERIAL01-1024" canceled
```

2. To cancel the request currently printing on SERIAL01 without knowing the request ID, type the following command:

```
<server_login> cancel SERIAL01
request "SERIAL01-1025" canceled
```

9.1.6 lpstat (Line Printer Status)

9.1.6.1 Function

This command provides status information about the line printer services. The information can include print jobs currently running or pending, as well as a list of available printers and their current status.

9.1.6.2 Syntax

```
<server_login> lpstat options [request-id | printer |
class…]
```

9.1.6.3 Options

- -s Display a status summary including the system default destination and a list of available printers.
- -u List the status of output requests for specific users.
- -o List the status of all queued or printing output requests.
- -t Display all status information.

9.1.6.4 Examples

While logged on as **nacsys**, to get a list of all output that is currently printing or awaiting print, type the following command:

```
<server_login> lpstat -u nacsys
SERIAL00-4301  nacsys  957  Jan 1 16:28 on SERIAL00
```

9.1.7 exit

9.1.7.1 Function

The **exit** command logs the user off of the current session.

9.1.7.2 Syntax

```
<server_login> exit
```

9.1.7.3 Options

None

9.1.7.4 Examples

To log off of the system, type **exit** at the shell prompt. The login request appears, indicating that the user is logged off of the system.

```
<server_login> exit
login:
```

9.1.8 pg (Page)

9.1.8.1 Function

This command displays the contents of a file on the screen one page at a time. At the end of each page, press **<Enter>** at the colon (:) to see the next page. Type **q** at the colon to quit viewing the document.

9.1.8.2 Syntax

```
<server_login> pg [options] [filespec]
```

9.1.8.3 Options

-c Clear screen before displaying each new page.

9.1.8.4 Examples

To view a document called sample.txt, type the following command:

```
<server_login> pg sample.txt
```

Additional commands to use at the colon (:) prompt when perusing file contents are:

- :-n Skip n pages backward (**-** goes back one page).
- :+n Skip n pages forward. (+ goes forward one page).
- :/x Search for x (/ will find next occurrence of x).

9.1.9 ps (Process Status)

9.1.9.1 Function

The **ps** command displays information about active processes. When no options are typed, information about the processes associated with the user running the command appears. If indicated, arguments include names or lists to get more information on.

9.1.9.2 Syntax

```
<server_login> ps [options [arguments]…]
```

9.1.9.3 Options

- -e Display information about every process running.
- -f Generate a full listing.

9.1.9.4 Examples

To print a list of the processes associated with the login session, type the following command:

```
<server_login> ps
```

9.1.10 grep (Search a file for a pattern)

9.1.10.1 Function

The **grep** command searches files for a pattern and displays all lines that contain that pattern.

9.1.10.2 Syntax

```
<server_login> grep [options] [expression] [file...]
```

9.1.10.3 Options

- -c Display count of lines that contain the pattern.
- -i Ignore upper/lower case distinction during comparisons.
- -n Precede each line with its line number in the file.
- -v Display all lines except those that contain the pattern.

9.1.10.4 Examples

To search the Batch Log for an abort message, type the following command (while in the **/nac/log** directory):

```
<server_login> grep ABORT BATCH.LOG
```

9.1.11 | (Pipe Symbol)

9.1.11.1 Function

The pipe symbol directs the output of one command to the input of another command.

9.1.11.2 Syntax

```
<server_login> command | command
```

9.1.11.3 Options

None

9.1.11.4 Examples

1. To check the processes running for a particular port, type the following command:

```
<server_login> ps -ef | grep 'tty33'
```

2. To display a list of all the processes running on the server one screen at a time, type the following command:

```
<server_login> ps -ef | pg
```

9.1.12 su (Switch User)

9.1.12.1 Function

The **su** command allows authorized users to become another user without logging off. The default user name is **root**.

9.1.12.2 Syntax

```
<server_login> su [-] [name [argument…]]
```

9.1.12.3 Options

None

9.1.12.4 Examples

To switch user to root, type the following:

```
<server_login> su
Password: (password)
```

9.1.13 rm (Remove)

9.1.13.1 Function

The **rm** command removes files and directories from the server.

NOTE: After the file is removed, it cannot be recovered. Therefore, take great care when executing this command, since it could lead to an inadvertent loss of data. Users cannot remove files they do not own and whose permissions are restricted.

9.1.13.2 Syntax

```
<server_login> rm [option] file…
```

9.1.13.3 Options

- -f Remove files without confirmation prompt
- -i Give prompt before removing files
- -r Recursively delete entire contents of specified directories
- -R Same as -r

9.1.13.4 Examples

To remove a file named sample.txt from the **/usr/nac** directory, type the following command:

```
<server_login> rm /usr/nac/sample.txt
```

9.1.14 cp (Copy)

9.1.14.1 Function

The **cp** command copies a file from its source to another destination, such as another file or a different directory. However, directories cannot be copied to files.

9.1.14.2 Syntax

```
<server_login> cp [options] source_file target_file
```

9.1.14.3 Options

- -f Overwrite existing files

- -i Provide confirmation prompt before copying to existing file
- -p Transfer characteristics (such as time of last modification/access and user/group ID) from source file to destination file

9.1.14.4 Examples

To copy the file /usr/nacsys/sample.txt to /usr/nacdata/hold.text, type the following command:

```
<server_login> cp /usr/nacsys/sample.txt
/usr/nacdata/hold.text
```

9.1.15 mv (Move)

9.1.15.1 Function

The **mv** command has two functions: it renames files within the same directory and moves files to another directory.

9.1.15.2 Syntax

```
<server_login> mv [option] source_file target_file
```

9.1.15.3 Options

- -f Do not provide confirmation prompt before carrying out command
- -i Display destination pathname and confirmation prompt

9.1.15.4 Examples

1. To rename the file sample.txt to sample.text, type the following command:

```
<server_login> mv sample.txt  sample.text
```

2. To move the file sample.txt to the **nac** directory (keeping the same name), type the following command:

```
<server_login> mv sample.txt  /nac
```

3. To move the file sample.txt to the **nac** directory and also rename it to sample1.text, type the following command:

```
<server_login> mv sample.txt  /nac/sample1.text
```

9.1.16 who

9.1.16.1 Function

The **who** command displays a list of the users currently logged on to the server system. The list contains the name of the user, the tty address, and the time the user logged on the system.

9.1.16.2 Syntax

```
<server_login> who [options] [-n count] [file…]
```

9.1.16.3 Options

- -H Display column headings above the list of users.
- -u Display length of time since last activity and Process-ID (PID) of the user's shell.
- -q Display only name and number of users currently logged on. All other options are ignored.
- -n count Number of columns for –q option to use when displaying user names

9.1.16.4 Examples

To get a list of the users currently logged in and to display a heading above that list, type the following command:

```
<server_login> who -uH
```

9.1.17 who am i

9.1.17.1 Function

The **who am i** command allows users to view the information displayed by the who command, but only for the user typing the command. Users can view only their own information.

9.1.17.2 Syntax

```
<server_login> who am i
```

9.1.17.3 Options

None

9.1.17.4 Examples

Typing **who am i** while logged on as **nacsys** produces the following results. Actual dates and times appear:

```
<server_login> who am i
nacsys      tty??       MMM DD HH:MM
```

9.1.18 date

9.1.18.1 Function

The **date** command allows users to view the current system date. In addition, superusers can set the date and time if they so choose. For information on how to obtain superuser access, see the beginning of this section (logging on as **root**) or section 9.1.12 (switching user to root). Depending on how it is defined, the date can be displayed in various formats.

9.1.18.2 Syntax

```
<server_login> date [-u] [+format]
```

9.1.18.3 Options

- -u Set time to Greenwich Mean Time
- +format A sample date format is MMDDhhmm[YY]

9.1.18.4 Examples

1. To view the current date, type **date** and press **<Enter>**. For example, if the current date is 24 April 2000 at 1200, the system displays:

```
<server_login> date
Mon Apr 24 12:00:35 CST 2000
```

2. To change the date to September 3, 2000, 1245 hours, log on as **root** at the console and type the following command. Follow the format MMDDhhmmYY:

```
# date 0903124500
```

9.1.19 wall (Write to All Users)

9.1.19.1 Function

The **wall** command allows a superuser to send a message that will appear on the terminal of everyone currently logged on the system.

9.1.19.2 Syntax

```
<server_login> /etc/wall [-g group] [file]
```

9.1.19.3 Options

-g Specify group to whom superuser will send message.

9.1.19.4 Examples

To send a message warning all users that the system will be shut down, type the following:

```
# wall
Please log off the system.  The system is coming down
in 60 seconds.
<Ctrl>-D (Press <Ctrl>-D to send the message and
return to the # prompt.
```

9.2 UCAPERS COMMANDS AND UTILITIES

The following commands were created to support common UCAPERS functions:

NOTES: These commands are case sensitive. Type them exactly as indicated.

Log on to the system using the **nacsys** login ID before executing the following UCAPERS commands.

9.2.1 NAC00PS2 (Reprint UCAPERS Reports)

9.2.1.1 Function

This utility, a print formatter and spooler, is used to reprint UCAPERS reports.

NOTES: Use the **NAC00PS2** command to reprint UCAPERS reports. Do not use the **lp** command.

Sections 9.2.4 and 9.2.5 detail how to reprint and view UCAPERS reports and historical reports by using an online screen.

9.2.1.2 Syntax

```
<server_login> NAC00PS2 <filespec> <dest>
```

9.2.1.3 Options

None

9.2.1.4 Examples

To send the report contained in the print file /nacdata/PAC03.PRNT to printer SERIAL03, type the following command:

```
<server_login> NAC00PS2 /nacdata/PAC03.PRNT 03
```

NOTE: The full printer designation SERIAL03 is not used here. Only the numeric part of the designation (03) is used.

9.2.2 eview (View UCAPERS Reports)

9.2.2.1 Function

This command allows users to examine print files with lines greater than 80 characters. Access online help by typing **?** when a file is already displayed.

NOTE: Sections 9.2.4 and 9.2.5 detail how to reprint and view UCAPERS reports and historical reports by using an online screen.

9.2.2.2 Syntax

```
<server_login> eview <filespec>
```

9.2.2.3 Options

- B Backward search set
- C Columns display
- D Highlight specified columns
- F Forward search set

- G Go to specified record number
- H Set horizontal scrolling speed (for <- or ->)
- I Information about file
- J Justify columns (go to specified column)
- N Next search, search using previous search string
- R Redraw screen
- S Search buffer for string
- V Set vertical scrolling speed (for page down/up)
- Page Up Page up buffer
- Page Down Page down buffer
- Esc Quit out of eview, also can use **Q** or **F1** keys
- F2 Go to the bottom of the buffer
- F3 Go to the top of the buffer

9.2.2.4 Examples

To view the report file /nacdata/PAC03.PRNT, type the following commands:

```
<server_login> eview /nacdata/PAC03.PRNT
```

9.2.3 Historical Download Screen

9.2.3.1 Function

The **Historical Download** option will copy the historical file for the requested dates to the DATASCAN working directory. DATASCAN can then be used to query the file.

1. Select **Historical Download** (option 24) from the UCAPERS System Menu. The following **Historical Download** screen appears:

```
Date: YYYY/MM/DD        UCA - Personnel Utilization System            SNAC291
Time: HH:MM                  Historical Download

  Use the up and down arrow keys to select a UCAPERS Historical File to load
  into Datascan from the files below.  Use the F8 key to accept the selection.

                      UCAPERS HISTORICAL FILE DESCRIPTION
-> APC Nursing Unit Table                                          FNAC41AUM
    APC-AMS-UCA Code Table                                        FNAC40AUM
    Clinician Survey File                                           FNAC12AUM
    Clinician Utilization File                                      FNAC11AUM
    EAS Accumulator File                                            FNAC53BUM
    EAS-USM File                                                   FNAC53APM
    Master Personnel File                                           FNAC30APM
    Patient Acuity File                                             FNAC36AUM
    SDC Monthly File                                                FNAC68AUM
    Schedule Summary File                                           FNAC14AUM
    TDA File                                                        FNAC32APM


 [F1] Exit                   [F2] System Menu                     [F8] Accept
```

2. Use the **up** and **down** arrow keys to position the cursor next to the file to download.
3. Press **F8** to accept the file. The following **Historical Download** screen appears:

```
Date: YYYY/MM/DD        UCA - Personnel Utilization System            SNAC292
Time: HH:MM                  Historical Download

  Enter the Type of Selection from the valid choices then press F8 to accept
  the response.  Use the up and down arrow keys to select the dates for the
  selected file from the dates below.  Use the F8 key to accept the selection.

       Type of Selection R(ange), S(ingle), or T(wo) months:

             Month and Fiscal Year:

                   File Name: APC-AMS-UCA Code Table
   Dates Available



 [F1] Exit          [F2] System Menu           [F5] Help          [F8] Accept
```

4. Select the type of selection for the download. The type of selection is **R**, **S**, or **T**.
   - R - Download a range of months including the selected months
   - S - Download a single month
   - T - Download two months
5. Press **F8** to accept the type of selection. The following screen appears. The months displayed on the screen are the months the file is available to download.

```
Date: YYYY/MM/DD        UCA - Personnel Utilization System            SNAC292
Time: HH:MM                  Historical Download

  Enter the Type of Selection from the valid choices then press F8 to accept
  the response.  Use the up and down arrow keys to select the dates for the
  selected file from the dates below.  Use the F8 key to accept the selection.

       Type of Selection R(ange), S(ingle), or T(wo) months:  R

             Month and Fiscal Year:

                   File Name: APC-AMS-UCA Code Table
   Dates Available
-> MMM FYYY
    MMM FYYY
    MMM FYYY
    MMM FYYY
    MMM FYYY
    MMM FYYY
    MMM FYYY
    MMM FYYY
    MMM FYYY
 [F1] Exit          [F2] System Menu           [F5] Help          [F8] Accept
```

6. Use the up and down arrow keys to place the cursor next to the requested month.

7. Press **F8** to accept the selection. The following screen is displayed:

   NOTE: The month then appears on the screen. If the type of selection was an **R** or **T**, then perform steps 6 and 7 again.

```
Date: YYYY/MM/DD        UCA - Personnel Utilization System            SNAC292
Time: HH:MM                   Historical Download

  Enter the Type of Selection from the valid choices then press F8 to accept
  the response.  Use the up and down arrow keys to select the dates for the
  selected file from the dates below.  Use the F8 key to accept the selection.

       Type of Selection R(ange), S(ingle), or T(wo) months:  R

             Month and Fiscal Year:   MMM FYYY  thru  MMM FYYY

                   File Name: APC-AMS-UCA Code Table
   Dates Available




 [F1] Exit          [F2] System Menu           [F5] Help          [F8] Accept
                Press <F8> to confirm selection, <F1> otherwise >
```

8. Press **F8** to download the file. The file(s) is now available for DATASCAN access.

9.2.4 Reprint and View Current UCAPERS Reports

This screen can be used to reprint and/or view any UCAPERS reports that are currently available. It can also be used to print and/or view any UCAPERS Historical reports that are available. The following sections detail how to use this screen.

1. Select the **Reprint/View Request** screen (Option 18) from the UCAPERS main menu.

   - The following screen appears with the message "Retrieving Report Information" at the bottom. The retrieval process may take a few moments to complete.

```
Date: YYYY/MM/DD          UCA - Personnel Utilization System          SNAC2A1
Time: HH:MM                     Reprint/View Reports

  Use the up and down arrow keys to select a UCAPERS Report to reprint or view
  from the reports below.  Press F6 to View or F7 to Reprint the report.

         CURRENT UCAPERS REPORT DESCRIPTION          FILENAME









[F1] Go Back 1  [F2] Main Menu  [F3] Refresh    [F6] View       [F7] Reprint
                          Retrieving report information
```

   - The following screen then appears:

```
Date: YYYY/MM/DD          UCA - Personnel Utilization System          SNAC2A1
Time: HH:MM                    Reprint/View Reports

  Use the up and down arrow keys to select a UCAPERS Report to reprint or view
  from the reports below.  Press F6 to View or F7 to Reprint the report.

         CURRENT UCAPERS REPORT DESCRIPTION           FILENAME
         UCAPERS Historical Data
→        AQCESS Successful Transfer Report            AQCS01
         AQCESS Transfer Error Report                 AQCE01
         CSGPO-78 Feeder (Civilian)                   FNAC65AUP
         CSGPO-78 Feeder (Military)                   FNAC67AUP
         Contracted Services                          FNAC63AUP
         Daily WMSN Facility Report                   CN01
         Daily WMSN Section Report                    SCT01
         Daily WMSN Ward Report                       PAC02
         Daily WMSN Ward Report                       PAC03
         Daily WMSN Ward Report                       PAC04
         Daily WMSN Ward Report                       PAC05
         Daily WMSN Ward Report                       PAC06
         Monthly Hours Lost to Maternity Leave        FNAC6CAUP
         Monthly WMSN Summary File                    FNAC6TAUP
[F1] Go Back 1  [F2] Main Menu  [F3] Refresh    [F6] View       [F7] Reprint
```

3. Position the cursor on the report to be reprinted/viewed from the scrolling list. Use the up and down arrow keys or the **Page Up** and **Page Down** keys to position the cursor.

4. Press **F6** to view the report using **eview** (See section 9.2.2 for details on using that utility). Exit **eview** to return to the **Reprint/View Reports** screen.

   Press **F7** to print the report. The following screen appears:

```
Date: YYYY/MM/DD        UCA - Personnel Utilization System            SNAC2A3
Time: HH:MM                  Printers Selection Screen


  Number of copies: 1

  Enter the number of copies to reprint and press F8 to accept.  Select a
  destination printer for the reprint job from the list below.  Press F8 to
  accept the selection.

         NAME     LOC DESCRIPTION




[F1] GO BACK 1  [F2] Main Menu  [F3] Refresh                    [F8] Accept
```

5. Type the number of copies of the report to be reprinted (the default number of copies is 1). The number of copies is between 1 and 9. Press **F8** to accept the number of copies indicated.

   The following screen appears:

```
Date: YYYY/MM/DD          UCA - Personnel Utilization System          SNAC2A3
Time: HH:MM                    Printers Selection Screen


  Number of copies: 1

  Enter the number of copies to reprint and press F8 to accept.  Select a
  destination printer for the reprint job from the list below.  Press F8 to
  accept the selection.

         NAME     LOC DESCRIPTION
->       SERIAL00 00  OTC High Speed Printer in Computer Room
         SERIAL01 01  Chief Nurse's Printer
         SERIAL02 02  OTC High Speed Printer in MEPRS Office
         SERIAL03 03  Okidata Printer on Pediatric Ward
         SERIAL04 04  Okidata Printer in ICU
         SERIAL0  05  Okidata Printer on Med/Surg Ward



[F1] GO BACK 1  [F2] Main Menu  [F3] Refresh                    [F8] Accept
```

6. Position the cursor on the printer that will reprint the report. Press **F8** to accept the selection. The message "Processing Reprint Request, Please Wait...." appears at the bottom of the screen for a few moments. If the reprint request was successful, the message "Reprint Request Submitted" appears at the bottom of the screen, and the user returns to the scrolling list of available reports.

7. If the reprint request was unsuccessful, the message "Error Submitting Reprint Request, Select another Printer or Press F1" appears at the bottom of the screen. Select another printer to reprint the report. Either follow the directions in Step 6 or press **F1** to return to the scrolling list of available reports.

9.2.5 Reprint and View Historical UCAPERS Reports

1. Select the **Reprint/View Request** screen (Option 18) from the UCAPERS main menu.

   The following screen appears with the message "Retrieving Report Information" at the bottom. The retrieval process may take a few moments to complete.

```
Date: YYYY/MM/DD         UCA - Personnel Utilization System            SNAC2A1
Time: HH:MM                      Reprint/View Reports

  Use the up and down arrow keys to select a UCAPERS Report to reprint or view
  from the reports below.  Press F6 to View or F7 to Reprint the report.

         CURRENT UCAPERS REPORT DESCRIPTION           FILENAME









[F1] Go Back 1  [F2] Main Menu  [F3] Refresh    [F6] View       [F7] Reprint
                          Retrieving report information
```

2. The following screen appears:

```
Date: YYYY/MM/DD         UCA - Personnel Utilization System            SNAC2A1
Time: HH:MM                      Reprint/View Reports

  Use the up and down arrow keys to select a UCAPERS Report to reprint or view
  from the reports below.  Press F6 to View or F7 to Reprint the report.

         CURRENT UCAPERS REPORT DESCRIPTION           FILENAME
->       UCAPERS Historical Data
         AQCESS Successful Transfer Report            AQCS01
         AQCESS Transfer Error Report                 AQCE01
         CSGPO-78 Feeder (Civilian)                   FNAC65AUP
         CSGPO-78 Feeder (Military)                   FNAC67AUP
         Contracted Services                          FNAC63AUP
         Daily WMSN Facility Report                   CN01
         Daily WMSN Section Report                    SCT01
         Daily WMSN Ward Report                       PAC02
         Daily WMSN Ward Report                       PAC03
         Daily WMSN Ward Report                       PAC04
         Daily WMSN Ward Report                       PAC05
         Daily WMSN Ward Report                       PAC06
         Monthly Hours Lost to Maternity Leave        FNAC6CAUP
         Monthly WMSN Summary File                    FNAC6TAUP
 [F1] Go Back 1     [F2] Main Menu    [F3] Refresh     [F6] View     [F7]
Reprint
```

3. Position the cursor on **UCAPERS Historical Data** (the first option from the scrolling list).

4. Press **F6** to view a historical report using **eview** (See Section 9.2.2 for details on using that utility) or press **F7** to reprint a historical report.

   The following screen appears. This screen provides a scrolling list of all available historical reports.

```
Date: YYYY/MM/DD        UCA - Personnel Utilization System          SNAC2A1
Time: HH:MM                   Reprint/View Reports

  Use the up and down arrow keys to select a UCAPERS Report to reprint or view
  from the reports below.  Press F6 to View or F7 to Reprint the report.

    HISTORICAL UCAPERS REPORT DESCRIPTION                          FILENAME
->  AQCESS Successful Transfer Report                              AQCS01
    AQCESS Transfer Error Report                                   AQCE01
    CSGPO-78 Feeder (Civilian)                                    FNAC65AUP
    CSGPO-78 Feeder (Military)                                    FNAC67AUP
    Contracted Services                                           FNAC63AUP
    Daily WMSN Facility Report                                        CN01
    Daily WMSN Section Report                                       SCT01
    Daily WMSN Ward Report                                          PAC02
    Daily WMSN Ward Report                                          PAC03
    Daily WMSN Ward Report                                          PAC04
    Daily WMSN Ward Report                                          PAC05
    Daily WMSN Ward Report                                          PAC06
    Monthly Hours Lost to Maternity Leave                         FNAC6CAUP
    Monthly WMSN Summary File                                     FNAC6TAUP
[F1] Go Back 1    [F2] Main Menu    [F3] Refresh     [F6] View     [F7] Reprint
```

5. Position the cursor at the historical report to be reprinted or viewed. Press **F6** to view the report or **F7** to reprint the report. Change from reprint to view or vice versa by going from step 4 to step 5.

   The following screen appears. This screen lists all dates that are available for the historical report. If the report was generated as part of a Daily WMSN cycle, then the cycle number for each day will also appear.

```
Date: YYYY/MM/DD          UCA - Personnel Utilization System          SNAC2A2
Time: HH:MM                        Reprint Reports

      Use the up and down arrow keys to select the date for the UCAPERS
      Historical Report to reprint from the available dates below.  Use
      the F8 key to accept the selection.

   Report Name: AQCESS Successful Transfer Report
  Dates Available
   Cycle number:
-> MMM DD 1
    MMM DD 2
    MMM DD 3
    MMM DD 1
    MMM DD 2
    MMM DD 3
    MMM DD 1
    MMM DD 2
    MMM DD 3
    MMM DD 1
    MMM DD 2
    MMM DD 1
    MMM DD 1
  [F1] Go Back 1    [F2] Main Menu   [F3] Refresh     [F6] View    [F7] Reprint
```

6. Position the cursor on the date required.

7. Press **F6** to view the report using **eview** (See Section 9.2.2 for details on using that utility). The message "Retrieving Report" appears at the bottom of the screen and then the report will be displayed using **eview**. Exit **eview** to return to the **Reprint Reports** screen. Change from reprint to view or vice versa by going from step 5 to step 7.

   Press **F7** to print the report. The message "Retrieving Report" appears at the bottom of the screen. The following screen appears:

```
Date: YYYY/MM/DD         UCA - Personnel Utilization System          SNAC2A3
Time: HH:MM                   Printers Selection Screen


Number of copies: 1

Enter the number of copies to reprint and press F8 to accept.  Select a
destination printer for the reprint job from the list below.  Press F8 to
accept the selection.

    NAME     LOC DESCRIPTION




[F1] GO BACK 1      [F2] Main Menu            [F3] Refresh        [F8] Accept
```

8. Type the number of copies of the report to be reprinted (the default number of copies is 1). The number of copies is between 1 and 9. Press **F8** to accept the number of copies indicated.

   The following screen appears:

```
Date: YYYY/MM/DD         UCA - Personnel Utilization System          SNAC2A3
Time: HH:MM                   Printers Selection Screen

Number of copies: 1

Enter the number of copies to reprint and press F8 to accept.  Select a
destination printer for the reprint job from the list below.  Press F8 to
accept the selection.

    NAME     LOC DESCRIPTION
-> SERIAL00  00 OTC High Speed Printer in Computer Room
    SERIAL01  01 Chief Nurse's Printer
    SERIAL02  02 OTC High Speed Printer in MEPRS Office
    SERIAL03  03 Okidata Printer on Pediatric Ward
    SERIAL04  04 Okidata Printer in ICU
    SERIAL05  05 Okidata Printer on Med/Surg Ward



[F1] GO BACK 1      [F2] Main Menu            [F3] Refresh        [F8] Accept
```

9. Position the cursor on the printer where to reprint the report. Press **F8** to accept the selection. The message Processing Reprint Request, Please Wait....” appears at the bottom of the screen for a few moments. If the reprint request was successful, the message “Reprint Request Submitted” appears at the bottom of the screen, and the user returns to the scrolling list of available historical report dates.

10. If the reprint request was unsuccessful, the message “Error Submitting Reprint Request, Select another Printer or Press F1” appears at the bottom of the screen. Select another printer where to reprint the report. Either follow the directions in Step 9 or press **F1** to return to the scrolling list of available historical report dates.

9.2.6 Transfer the EAS Data File to the EAS System

9.2.6.1 Function

This function automatically transfers the EAS Data file from UCAPERS to the EAS database.

NOTE: For information on the syntax and execution of this function, see section 4.12 of the *UCAPERS User's Manual for System Management*.

SECTION 10
UNIX ERROR MESSAGES

10.1 UNIX LOGIN ERRORS

This section contains common UNIX Login Errors which may be encountered while attempting to login to the server as well as guidelines for completing the login after errors have occurred.

If the login was typed incorrectly after pressing **<Enter>**, restart the login process. After pressing **<Enter>**, the system gives a prompt to type a password. Since the login was incorrectly typed, press **<Enter>** at the password prompt to receive the login prompt again. Then type the correct login as shown in the example below.

```
login: nacsys
Password: (<Enter>)
Login incorrect

login: nacsys
Password: (password)
SCO OpenServer ™ Release 5 (xxxx.amedd.army.mil)
(ttyxx)
```

10.2 UNIX LEVEL ERROR MESSAGES

This section contains common UNIX level error messages. These UNIX level messages can occur during UCAPERS batch processing or UCAPERS online processing. UNIX level errors usually warrant a call to the MEPRS Technical Support Center. Those that can be fixed at the MTF level by the user are noted and additional help information is supplied. If in doubt or if there are any questions, call the MEPRS Technical Support Center.

ERROR: login incorrect
CAUSE: The user entered the login ID or password incorrectly.
ACTION: Contact the MEPRS Technical Support Center for instructions on dealing with login problems.

ERROR: shell_name: execute permission denied
CAUSE: Program/User attempted to execute a script without permission. This error will occur if a non-executable filename is typed without a UNIX command.
ACTION: Verify command line. If no errors are found, contact the MEPRS Technical Support Center.

ERROR: /XXX/XXX: does not exist
CAUSE: Program/User tried to change directories using the UNIX command **cd** on a non-existing directory.
ACTION: Verify the full path name of the directory. If user typed the command, try it again. If the directory still is not found or if error occurred during the execution of a UCAPERS program, contact the MEPRS Technical Support Center.

ERROR: file_name: No such file or directory
CAUSE: Program/User attempted to use the UNIX command **ls** to list a file or directory that did not exist.
ACTION: Verify the full pathname of the file or directory. If user typed the command, try it again. If the file or directory still is not found or if error encountered during execution of a UCAPERS program, contact the MEPRS Technical Support Center.

ERROR: file_name: not found
CAUSE: Program/User entered a non-executable filename without a UNIX command at a command line.
ACTION: Verify the command typed.

ERROR: cp: cannot create /directory/file_name
cp: Permission denied
CAUSE: Program/User attempted to copy a file to a directory for which they did not have write permission.
ACTION: If a user typed the command, verify the full pathname of the file. If the error occurred during the execution of a UCAPERS program, contact the MEPRS Technical Support Center.

APPENDIX A
MEPRS AND DATA PROCESSING TERMS

MEPRS AND DATA PROCESSING TERMS

The following terms are the most commonly used in the MEPRS environment:

Application: A system, problem, or task to which a computer has been assigned or the program designed to solve a problem.

Boot: The actions performed by a computer system when starting. On the server, these steps include loading the UNIX system from the hard disk into main memory, configuring the system, and starting the system administrator.

CPU (Central Processing Unit): The main component of a computer. The CPU consists of a chip that performs all of the logical and numerical calculations. The CPU actually processes data by controlling the storage, movement, and manipulation of that data.

Component: A distinguishable portion of a computer system. Any piece of equipment that is attached to or installed in a computer that expands the functionality of the computer system.

Computer: A machine capable of accepting and processing data to produce a desired result.

Console terminal: The terminal from which the server is controlled. The system administrator uses this terminal.

Diagnostics: A series of tests the server performs to check its operations for malfunctions.

EAS IV (Expense Assignment System Version IV): A standard automated data processing capability utilized by the military departments for the calculations required to produce the Medical Expense and Performance Reports (MEPR). EAS IV distributes expenses to departments or medical specialties based on the amount of service or workload performed by one work center for another. EAS IV reports the Uniform Chart of Accounts (UCA) workload data collection procedures for radiology and pathology departments.

File system: A logical collection of files on a segment of a hard disk. File systems are considered separate units by the UNIX operating system and can be mounted or unmounted. (Mounting a file system makes it available to the user).

MEPRS (Medical Expense and Performance Reporting System): MEPRS deals with the workload performed and expenses incurred and reports the entire cost of health care. MEPRS also deals with the manpower as well as reports the number and type of personnel required to provide the health care needed. A report is generated monthly for Major Command Headquarters.

MTF: A Medical Treatment Facility (hospital). Specifically, the various sites at which EAS IV and UCAPERS are installed.

Operating state: An environment in which the computer is running for specified functions to be performed. The server has seven operating states (0-6):

- power down state (0)
- single-user-state (1)
- multiuser state (2)
- two unassigned states (3 and 4)
- firmware state (5), and
- reboot state (6)

Partitioning: Dividing a large storage range into more manageable pieces to facilitate structuring of a device. Partitioning is usually used on hard disk drives and is not applicable to main memory.

Queue: A first in, first out list of processes that are awaiting execution.

Root directory: The highest level file system in the hierarchy of UNIX file systems. The root is the file system in which all other file systems are created.

Root login or super user login: The login IDs which can access any file regardless of permissions and perform certain restricted system calls. The root login is currently configured to be used only on the console. The super user login can be used from any terminal.

System: An assembly of input, processing, and output components.

UCAPERS (Uniform Chart of Accounts Personnel Utilization System): UCAPERS collects and reports Uniform Chart of Accounts (UCA) personnel utilization and expense data as well as Uniform Staffing Methodologies (USM) manpower utilization data.

UNIX operating system: A multi-user, multi-tasking operating system developed by The Santa Cruz Operation (SCO), Inc.