

MDS - UNIX  
SYSTEM ADMINISTRATOR MANUAL

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INTRODUCTION

THE SYSTEM ADMINISTRATOR HAS ACCESS TO PROGRAMS NOT  
NEEDED FOR THE DAILY

OPERATION OF THE BUSINESS BUT NECESSARY TO MAINTAIN THE INTEGRITY OF THE SYSTEM. THE PROGRAMS ARE ACCESSED THROUGH SPECIAL LOGINS AND PASSWORDS KNOWN ONLY TO THE SYSTEM ADMINISTRATOR. THE MOST IMPORTANT IS THE SUPER USER MENU. IT CONTAINS ALL PROGRAMS NEEDED TO SET UP OR DELETE A USER FROM THE SYSTEM AND CONTROL THAT USERS ACCESS TO PROGRAMS WITHIN THE SYSTEM.

THE BACKUP MENU IS ANOTHER IMPORTANT MENU USED BY THE SYSTEM ADMINISTRATOR. REGULAR BACKUPS INSURE THAT IF A CATASTROPHE OCCURS VERY LITTLE IF ANY INFORMATION IS LOST OR NEEDS TO BE RE-INPUT.

THE SUPER USER AND SYSTEM SHUTDOWN FUNCTIONS ARE RARELY USED. THEY EXIST TO COPE WITH SPECIFIC PROBLEMS WITH THE SYSTEM.

#### SUPER USER MENU

TO ACCESS THIS MENU TYPE IN `root` IN LOWERCASE LETTERS AT THE LOGIN AND PRESS ENTER. TYPE IN THE PASSWORD. (AT INITIAL SETUP THE PASSWORD IS PASSWORD IN LOWERCASE) AND PRESS ENTER. Then type `super10` at the `#` prompt and the SUPER-USER MENU will display.

TO ACCESS ANY OF THE PROGRAMS, PRESS THE NUMBER OR LETTER ON THE MENU.

#### 1 MAKE USER

THIS PROGRAM IS USED TO ADD USERS TO THE SYSTEM. ONCE A USER HAS BEEN

ADDED YOU SHOULD SET PRIVILEGES (OPTION 1) FOR THE USER. NEW USERS HAVE WRITE PRIVILEGE ON A MAJORITY OF PROGRAMS UNTIL EXCLUDED.

THE FIRST QUESTION YOU ARE ASKED IS:

WHAT IS THE USER LOGIN NAME (3 TO 8 DIGITS)?

TO SET UP A NEW USER, TYPE IN THE NAME YOU WISH THE USER TO BE IDENTIFIED BY AND PRESS ENTER. USE OF ALL LOWERCASE LETTERS FOR THE USER LOGIN NAME WILL SIMPLIFY THE LOGIN PROCESS.

THE NEXT QUESTION IS:

SET USERS PASSWORD

ALTHOUGH THE SYSTEM ALLOWS USERS TO BE SET UP WITHOUT PASSWORDS, ALWAYS ANSWER THIS QUESTION Y THEN ENTER. SETTING UP LOGINS WITHOUT PASSWORDS DAMAGES THE SECURITY INTEGRITY OF THE SYSTEM. PASSWORDS DECREASE THE CHANCES OF UNAUTHORIZED USERS ACCESSING SENSITIVE OR CONFIDENTIAL INFORMATION. IF ANY LOGINS HAVE BEEN SET UP FOR CONVENIENCE DURING THE SETUP PROCESS, THEY SHOULD BE REMOVED. (OPTION 3)

ENTER NEW PASSWORD (MINIMUM OF 5 CHARACTERS)

PLEASE USE A COMBINATION OF UPPER AND LOWERCASE LETTERS AND NUMBERS.

NEW PASSWORD:

THE PASSWORD MAY BE A COMBINATION OF UPPER AND LOWERCASE LETTERS AND NUMBERS. FOR INITIAL SETUP OF A USER, THE LOGIN NAME MAY BE USED AS A

PASSWORD. ONE OF THE PRIVILEGES EACH USER HAS IS THE ABILITY TO CHANGE THEIR OWN PASSWORD. WHEN YOU GIVE THE NEW USER THEIR LOGIN AND INITIAL PASSWORD, EXPLAIN THE CHANGE PASSWORD PROCEDURE AND HAVE THEM CHANGE THEIR PASSWORD TO ONE OF THEIR CHOICE. IT IS NOT NECESSARY FOR A SYSTEM ADMINISTRATOR TO KNOW THE PASSWORD OF AN INDIVIDUAL. IF A USER FORGETS THEIR PASSWORD, USE OPTION 9 "CHANGE USER PASSWORD". THIS IS THE ONLY WAY TO HANDLE FORGOTTEN PASSWORDS. BECAUSE THE SYSTEM IS DESIGNED FOR SECURITY, NO ONE CAN VIEW A PASSWORD, NOT EVEN A PROGRAMMER. TO MAINTAIN SYSTEM SECURITY, PASSWORDS SHOULD BE CHANGED ON A REGULAR BASIS.

TYPE IN THE PASSWORD (THE PASSWORD DOES NOT DISPLAY AS YOU TYPE) AND PRESS ENTER.

THE SCREEN DISPLAYS A NEW LINE.

RE-ENTER NEW PASSWORD:

TYPE IN THE PASSWORD AGAIN AND PRESS ENTER. THIS STEP IS TO CATCH ANY TYPING ERRORS. THE SYSTEM COMPARES THE TWO ENTRIES FOR A MATCH. IF THE TWO ENTRIES DO NOT MATCH THE SYSTEM RETURNS YOU TO THE FIRST STEP. IF THE TWO ENTRIES MATCH THE NEXT SCREEN DISPLAYS.

TYPE IN THE NUMBER OF THE COMPANY YOU WISH THE USER TO HAVE ACCESS TO AND PRESS ENTER. IF A USER IS TO HAVE ACCESS TO MORE THAN ONE COMPANY,

YOU SHOULD SET UP ADDITIONAL USER NAMES AND PASSWORDS FOR EACH COMPANY.

## 2 SET USER PRIVILEGE

THIS PROGRAM IS USED TO DEFINE THE AREAS A PARTICULAR USER IS ALLOWED ACCESS TO AND WHAT LEVEL OF ACCESS THEY HAVE. THE USER MUST FIRST BE SET UP WITH A USER LOGIN NAME (OPTION 2) BEFORE PRIVILEGES CAN BE SET.

PRIVILEGES ARE SET ON TWO LEVELS; MENU OR PROGRAMS WITHIN THE MENU.

READ, WRITE, OR NONE ARE THE TYPES OF USER ACCESS.

THE FIRST QUESTION ASKED IS:

WHAT IS THE USER LOGIN NAME (3 TO 8 DIGITS)?

TYPE IN THE USER LOGIN NAME THAT YOU WISH TO DEFINE OR CHANGE PRIVILEGES (MUST BE TYPED EXACTLY AS SET UP) FOR AND PRESS ENTER.

IF THE USER LOGIN NAME IS VALID THE SYSTEM ASKS:

SET PRIVILEGE FOR (USER NAME) BY MENU OR PROGRAM?

PRIVILEGES ARE USED TO TAILOR ACCESS TO PROGRAMS AND MENUS TO THE NEEDS OF AN INDIVIDUAL USER. MENUS AND PROGRAMS THAT A DATA ENTRY PERSON MUST HAVE WRITE ACCESS TO IN ORDER TO COMPLETE THE TASKS ASSIGNED WOULD NOT BE AREAS THAT YOU WOULD WANT MOST OTHER USERS TO HAVE WRITE ACCESS TO.

SOME OF THE OTHER USERS OF THE SYSTEM MIGHT NEED TO HAVE READ ACCESS TO SOME PROGRAMS FOR RESEARCH BUT SHOULD NOT HAVE WRITE ACCESS IN ORDER TO CONTROL AND STANDARDIZE INFORMATION ENTERED INTO THE SYSTEM.

SET PRIVILEGE BY MENU IF A USER SHOULD HAVE READ, WRITE OR NO ACCESS TO THAT MENU. A MENU THAT ALL USERS SHOULD HAVE WRITE ACCESS TO IS THE "MAIN MENU" OTHERWISE THEY ARE UNABLE TO DO ANYTHING ON THE SYSTEM. A MENU THAT NO USER SHOULD HAVE ACCESS TO BECAUSE IT IS NOT CURRENTLY BEING USED IS THE PAYROLL MENU.

SET PRIVILEGES BY PROGRAM IF A USER HAS DIFFERENT TYPES OF ACCESS TO PROGRAMS WITHIN A MENU.

TYPE IN M OR P AND PRESS ENTER. IF YOU CHOOSE M, THE SYSTEM ASKS:

SET PRIVILEGE TO READ WRITE OR NONE?

TYPE IN R FOR READ, W FOR WRITE, OR N FOR NONE TO SET THE TYPE OF ACCESS YOU WANT THE USER TO HAVE FOR THE MENUS YOU SELECT.

IF YOU ARE SETTING PRIVILEGES BY MENU, PRESS THE NUMBER OR LETTER OF THE MENUS DISPLAYED ON THE SCREEN. NO ACKNOWLEDGEMENT OF SELECTION IS MADE. THE ONLY THING THE SCREEN DOES IS BLINK. CONTINUE PRESSING MENU SELECTIONS UNTIL ALL MENUS HAVE BEEN SELECTED THAT YOU WISH TO HAVE THE TYPE OF ACCESS CHOSEN ON THE PREVIOUS SCREEN. WHEN YOU ARE FINISHED

SELECTING MENUS, PRESS PF2 TO EXIT THE MENU SELECTION SCREEN.

IF YOU ARE SETTING PRIVILEGES BY PROGRAM, PRESS THE NUMBER OR LETTER OF THE MENU THAT THE PROGRAMS ARE IN. A NEW SCREEN DISPLAY SHOWING PROGRAMS CONTAINED IN THAT MENU THAT THE TYPE OF ACCESS CAN BE CHANGED FOR. THE SCREENS DISPLAYED VARIES FOR EACH MENU SELECTION.

USE THE UP/DOWN ARROW KEYS OR ENTER KEY TO MOVE THE CURSOR TO THE PROGRAMS YOU WISH TO CHANGE ACCESS PRIVILEGES FOR. TYPE IN R FOR READ ACCESS, W FOR WRITE ACCESS, OR N FOR NONE AND PRESS ENTER. CONTINUE UNTIL ALL PROGRAMS ARE SET AS DESIRED. PRESS PF2 TO EXIT THE PROGRAMS SCREEN. CONTINUE SELECTING MENUS AND SETTING PRIVILEGES FOR PROGRAMS UNTIL ALL CHANGES ARE COMPLETE. PRESS PF2 TO EXIT.

TO CHANGE THE COMPANY THE USER HAS ACCESS TO, TYPE IN THE NUMBER DISPLAYED TO THE LEFT OF THE COMPANY AND PRESS ENTER. IF YOU DO NOT WISH TO CHANGE THE COMPANY, PRESS ENTER. YOU ARE RETURNED TO THE "SUPER USER MENU". THIS SELECTION MAY BE CHOSEN AS MANY TIMES AS NEEDED TO SET UP THE VARIOUS TYPES OF ACCESS AT THE LEVEL DESIRED. A CHANGE TO A PRIVILEGE BY MENU OR BY PROGRAM OVERRIDES PREVIOUS SELECTIONS.



#### 4 WHO'S LOGGED ON

THIS PROGRAM DISPLAYS A LISTING OF ALL USERS LOGGED ONTO THE SYSTEM, THE TERMINAL OR TTY THEY ARE USING, DATE AND TIME THEY LOGGED ON, THE PROCESS LAST USED, AND HOW LONG SINCE THEY TOUCHED A KEY. A PERIOD INDICATES LESS THAN A MINUTE HAS PASSED SINCE A KEY WAS TOUCHED.

THIS DISPLAY CAN BE USED TO IDENTIFY THE NUMBER OF A TERMINAL A USER IS LOGGED IN ON IF THE TERMINAL NUMBER IS UNKNOWN. THIS INFORMATION IS SOMETIMES NEEDED IF A TERMINAL IS LOCKED UP AND THE SYSTEM ADMINISTRATOR HAS DETERMINED THAT THE ONLY WAY LEFT TO UNLOCK IT IS TO KILL A PROCESS. (OPTION D)

USE THE ENTER KEY TO MOVE THE DISPLAY DOWN ONE LINE AND THE SHIFT BAR TO MOVE THE DISPLAY DOWN ONE PAGE. PRESS Q TO QUIT THEN ANY KEY TO EXIT.

#### 5 ENABLE A TTY

THE ENABLE FUNCTION IS NORMALLY ONLY USED AT SETUP OR WHEN ADDING ANOTHER TERMINAL TO THE SYSTEM. IT IS ALSO SOMETIMES USED UNDER THE SUPERVISION OF A PROGRAMMER TO CORRECT IDENTIFICATION PROBLEMS. A TTY IS NOT A TERMINAL IS THE OUTLET THAT THE TERMINAL IS CONNECTED TO. YOU MAY SWAP TERMINALS WITHOUT ENABLING OR DISABLING TTY'S. THE ONLY QUESTION ASKED IS:

ENABLE WHICH TTY (EX. 2A,2B,2C,2D,11,12)

TYPE IN THE NUMBER OF THE TTY (TERMINAL POSITION) AND PRESS ENTER. IF THE NUMBER IS TYPED INCORRECTLY, AN ERROR MESSAGE DISPLAYS. IF CORRECT, THE TTY IS ENABLED AND YOU MAY ENABLE ANOTHER TTY OR PRESS PF2 TO EXIT.

#### 6 DISABLE A TTY

THE DISABLE FUNCTION IS USED WHEN REMOVING A TTY (TERMINAL POSITION) FROM THE SYSTEM. THIS IS SOMETIMES USED ALONG WITH THE ENABLE FUNCTION (OPTION 5) WHEN THE SYSTEM NO LONGER RECOGNIZES A TERMINAL AND DOES NOT ACCEPT INPUT FROM THAT TERMINAL. THE TTY IS FIRST DISABLED AND THEN ENABLED TO RECONNECT THE TERMINAL WITH THE SYSTEM.

THE ONLY QUESTION ASKED IS:

DISABLE WHICH TTY (EX. 2A,2B,2C,2D,11,12)

TYPE IN THE NUMBER OF THE TTY (TERMINAL POSITION) AND PRESS ENTER. IF THE NUMBER IS TYPED INCORRECTLY, AN ERROR MESSAGE DISPLAYS. IF CORRECT, THE TTY IS ENABLED AND YOU MAY DISABLE ANOTHER TTY OR PRESS PF2 TO EXIT.

#### 7 SYSTEM STATUS

THE SYSTEM STATUS DISPLAYS A REPORT OF WHAT FUNCTIONS ARE BEING USED BY THE SYSTEM. THIS IS USUALLY ONLY ACCESSED AT THE REQUEST OF A SUPPORT PERSON.

DEFINITION OF THE FIELDS FOLLOWS:

UID - WHAT SUBSYSTEM THE COMPUTER IS USING  
PID - PROCESS IDENTIFICATION NUMBER  
PPID - PREVIOUS PROCESS IDENTIFICATION NUMBER  
C - NUMBER OF SYSTEM CALLS THAT THE PROGRAM MAKES  
STIME - DATE OR TIME PROCESS STARTED  
TTY - TERMINAL POSITION PROCESS REQUESTED AT  
TIME - TIME COMPUTER TOOK TO COMPLETE LAST PROCESS  
COMMAND - SHORT DESCRIPTION OR NAME OF PROCESS

USE THE ENTER KEY TO MOVE THE DISPLAY DOWN ONE LINE AND  
THE SHIFT BAR TO  
MOVE THE DISPLAY DOWN ONE PAGE. PRESS Q TO QUIT THEN ANY  
KEY TO EXIT.

## 9 CHANGE USER PASSWORD

THE CHANGE PASSWORD PROGRAM IS USED TO CHANGE AN  
OPERATOR'S PASSWORD.  
REMEMBER, AS WITH ALL PASSWORDS THIS PASSWORD IS NOT BE  
DISPLAYED ON THE  
SCREEN AS YOU TYPE. IF YOU MAKE AN ERROR IN ENTERING THE  
PASSWORD,  
BACKSPACE AND THEN RETYPE THE PASSWORD.

YOU ARE ASKED FOR THE NEW PASSWORD. TYPE IT IN AND PRESS  
ENTER. NEXT  
THE COMPUTER ASKS YOU TO RETYPE THE NEW PASSWORD.

NOTICE THAT THE COMPUTER MADE YOU TYPE THE PASSWORD  
TWICE. THE REASON  
FOR THIS IS THAT THE PASSWORD IS NOT DISPLAYED ON THE  
SCREEN AND THE  
COMPUTER WANTS TO GUARD AGAINST TYPING ERRORS. IF THE  
TWO COPIES OF THE  
PASSWORD DO NOT MATCH, YOU ARE INFORMED THAT THERE IS A  
MISMATCH AND  
RETURNED TO THE SYSTEM MENU.

THIS OPTION IS AVAILABLE TO ALL USERS IN THE MDS SYSTEM MENU. (9.3), BUT WILL ONLY ALLOW THE CURRENT LOGIN USER TO CHANGE THEIR PASSWORD. ACCESS TO OTHER USERS PASSWORDS IS NOT ALLOWED.

#### A SET SUPERVISOR PASSWORD

THIS PROGRAM ALLOWS YOU TO CHANGE THE SYSTEM ADMINISTRATOR PASSWORD AND THE SUPERVISORY PASSWORD. THIS SHOULD BE DONE ON A REGULAR BASIS TO MAINTAIN SECURITY IN THE SYSTEM.

THE SCREEN DISPLAYS:

#### SYSTEM ADMINISTRATORS PASSWORD

TYPE IN THE NEW SYSTEM ADMINISTRATORS PASSWORD AND PRESS ENTER. TYPE IN THE SYSTEM ADMINISTRATOR PASSWORD AGAIN AND PRESS ENTER. IF THE TWO ENTRIES MATCH THE SYSTEM ADMINISTRATOR PASSWORD IS CHANGED. IF THE TWO ENTRIES DO NOT MATCH YOU HAVE TO START AGAIN.

IF YOU DO NOT WISH TO CHANGE THE SYSTEM ADMINISTRATOR PASSWORD, PRESS ENTER.

#### SUPERVISORY PASSWORD

TYPE IN THE NEW SUPERVISORY PASSWORD AND PRESS ENTER. TYPE IN THE SUPERVISORY PASSWORD AGAIN AND PRESS ENTER. IF THE TWO ENTRIES MATCH THE SUPERVISORY PASSWORD IS CHANGED. IF THE TWO ENTRIES DO NOT MATCH YOU WILL HAVE TO START AGAIN.

IF YOU DO NOT WISH TO CHANGE THE SUPERVISORY PASSWORD,  
PRESS ENTER.

#### D KILL A PROCESS

THE KILL A PROCESS PROGRAM DISPLAYS THE SAME INFORMATION  
AS THE SYSTEM  
STATUS PROGRAM(OPTION 7 )BUT GIVES YOU THE OPPORTUNITY TO  
KILL A PROCESS  
DISPLAYED. THIS IS THE LAST RESORT WHEN A TERMINAL IS  
LOCKED UP AND ALL  
OTHER OPTIONS HAVE FAILED. YOU MUST KNOW THE TTY NUMBER  
OF THE TERMINAL  
THAT IS LOCKED UP AND THE FIRST PROCESS EXECUTED AFTER  
LOGON IN ORDER TO  
SUCCESSFULLY EXECUTE THE KILL A PROCESS FUNCTION. IF YOU  
KILL THE WRONG  
PROCESS, DAMAGE TO THE SYSTEM CAN OCCUR. MAKE SURE YOU  
THOROUGHLY  
UNDERSTAND THE PROCEDURE BEFORE ATTEMPTING THIS FUNCTION.

SCAN THE LIST TO FIND THE LAST LINE OF INFORMATION FOR  
THE TTY AND WORK  
BACKWARDS UP THE LIST UNTIL YOU FIND THE PPID(PREVIOUS  
PROCESS ID) FOR  
THAT TTY THAT IS 1(ONE) WITH A PID(PROCESS ID) GREATER  
THAN 1(ONE) NOT  
IN THE ROOT SYSTEM.

TYPE IN THE PID NUMBER AND PRESS ENTER. IF YOU HAVE  
SUCCESSFULLY  
EXECUTED THE KILL A PROCESS FUNCTION, THE LOCKED UP  
TERMINAL SHOULD  
UNLOCK AND GO TO LOGIN.

#### E DISPLAY DISK SPACE

THIS PROGRAM SHOWS HOW MANY BLOCKS OF MEMORY ARE  
AVAILABLE, HOW MANY

HAVE BEEN USED, HOW MANY ARE FREE, AND THE PERCENTAGE OF THE TOTAL USED.

THIS IS USED TO DETERMINE IF YOU ARE GETTING CLOSE TO MEMORY CAPACITY.

THE EFFICIENCY OF THE SYSTEM IS DRASTICALLY REDUCED WHEN THE PERCENTAGE USED GOES BEYOND 75%. CONTACT YOUR SUPPORT PERSON WHEN THIS OCCURS AND REQUEST A REVIEW OF FILE SYSTEM.

#### F DISPLAY TERMINAL TYPES

THIS PROGRAM SHOWS ALL TERMINAL TYPES CURRENTLY SUPPORTED BY MDS. IF YOU ACCIDENTALLY GO INTO THIS PROGRAM YOU WILL HAVE TO ENTER THROUGH ALL THE PAGES TO GET OUT.

#### H SET TERMINAL TYPES

SET TERMINAL TYPES ALLOWS YOU TO SET OR CHANGE THE TYPE OF TERMINALS RECOGNIZED BY THE SYSTEM. SET AT INSTALLATION. PRESS PF2 TO EXIT. IF YOU NEED TO CONNECT A DIFFERENT TYPE OF TERMINAL TO THE SYSTEM, CONTACT YOUR SUPPORT PERSON FOR HELP.

#### I SHOW LOGON NAMES

DISPLAYS ALL USER NAMES THAT HAVE ACCESS TO THE SYSTEM. PRESS ANY KEY TO EXIT.

#### J USER ACCOUNTING

GENERATES A LISTING OF USERS THAT LOGGED INTO THE COMPUTER SYSTEM AS

WELL AS DATE, TIME OF LOGIN AND LOGOFF.

PRESS 1 THEN ENTER TO DISPLAY THE USERS OF THE SYSTEM SINCE THE LAST TIME THE DATA WAS REMOVED. THE DISPLAY SHOWS THE USER NAME, DATE AND TIME LOGGED ON, AND DATE AND TIME LOGGED OFF.

PRESS 2 THEN ENTER TO PRINT THE LISTING. THE REPORT WILL PRINT AS SOON AS IT IS FINISHED PROCESSING.

PRES 3 TO PURGE THE ACCOUNTING DATA IN THE SYSTEM.

THE ACCOUNTING DATA INFORMATION SHOULD BE PRINTED OUT AND REMOVED A MINIMUM OF EVERY THREE MONTHS.

PRESS PF2 TO EXIT.

K MAIL TO ALL USERS

THIS PROGRAM IS VERY SIMILAR TO THE MAIL PROGRAM IN THE SYSTEM MENU(9.5)EXCEPT THAT IT PLACES MAIL IN THE MAILBOXES OF ALL USERS OF THE SYSTEM INSTEAD OF A SINGLE USER.

PRESS 1 TO SHOW THE USER LOGIN NAMES IN THE SYSTEM.

PRESS 2 TO SEND MAIL TO A USER. THE COMPUTER DISPLAYS THE VALID USER LOGIN'S ACROSS THE TOP OF THE SCREEN AND:

ENTER THE MESSAGE

TYPE IN THE MESSAGE YOU WISH TO SEND AND PRESS ENTER THE COMPUTER RETURNS TO THE "SUPER USER MENU".

## L COPY COMPANY DATA

THIS PROGRAM SHOULD ONLY BE ENTERED WITH THE SUPERVISION OF YOUR SUPPORT PERSON.

THIS UTILITY SHELL COPIES MDS COMPANY DATA FILES FROM ONE COMPANY TO ANOTHER COMPANY. THIS PROCESS RENAMES THE DATA FILES AS NECESSARY, AS WELL AS CHANGING DIRECTORIES IF NEEDED. THE FILES BEING COPIED DISPLAY ON THE SCREEN.

## M SET PRINTER TYPE

AT INSTALLATION THE PRINTER DEFINITION "EPS100N" IS SET UP. THIS HANDLES ANY EPSON PRINTER, THE TOSHIBA 2600, AND OTHER PRINTERS INSTALLED AT SETUP. IF YOU NEED ANY ADDITIONAL PRINTER DEFINED FOR USE WITH THE SYSTEM, CONTACT YOUR SUPPORT PERSON. THE OPTION CONTROLS COMPRESSED PRINTING TO ALLOW WIDE REPORTS TO PRINT ON NARROW (80 COLUMN) PAPER. THE TRAILING "N" IN EPS1000N INDICATES COMPRESSED PRINTING ENABLED. THIS OPTION WILL ALSO ALLOW COMPLETELY DIFFERENT PRINTERS TO BE USED BY ANY COMBINATION OF TERMINALS.

## O PRINTER UTILITIES

THE SUPER USER PRINTER UTILITIES MENU CONTAINS ALL PROGRAMS NECESSARY FOR MASTER CONTROL OF PRINTER FUNCTIONS.

PRESS PF2 TO EXIT THE MENU.



## O.1 PRINTER STATUS INFORMATION

THIS PROGRAM SHOWS A LISTING OF THE STATUS OF ALL PRINTERS IN THE SYSTEM. THIS PROGRAM IS USED BY THE SYSTEM ADMINISTRATOR WHEN PROBLEMS OCCUR WITH PRINTERS TO FIND OUT IF PRINTERS ARE ENABLED AND ACCEPTING PRINT REQUESTS.

PRESS ANY KEY TO EXIT.

## O.2 ENABLE A PRINTER

THIS PROGRAM DISPLAYS A LIST OF PRINTER NAMES AND ALLOWS YOU TO ENABLE A PRINTER BY ENTERING THE NAME OF THE PRINTER OR YOU CAN ENTER Q TO EXIT.

## O.3 DISABLE A PRINTER

THIS PROGRAM IS USED BY THE SYSTEM ADMINISTRATOR TO DISABLE A PRINTER. THIS MAY BE NECESSARY IF A PRINTER BREAKS DOWN AND YOU DO NOT WANT REPORTS TO BE SENT TO THE PRINTER. IT ALSO IS USED WITH THE ENABLE SOMETIMES IF THERE IS PRINTER PROBLEMS. DISABLING AND THEN ENABLING A PRINTER SOMETIMES CLEARS UP PRINTER PROBLEMS.

## O.4 CANCEL SPOOLED PRINT

THIS PROGRAM IS USED BY THE SYSTEM ADMINISTRATOR TO CANCEL A PRINT JOB THAT HAS BEEN SENT TO A PRINTER. THIS PROGRAM COMES IN HANDY WHEN

SOMEONE HAS ACCIDENTALLY (OR INTENTIONALLY) REQUESTED A LARGE REPORT THAT WILL TIE THE PRINTER UP FOR AN UNACCEPTABLE AMOUNT OF TIME. LARGE REPORTS SHOULD BE PRINTED AT NIGHT. A LISTING OF ALL REQUESTED JOBS APPEARS.

IF THE PRINT JOB YOU WISH TO CANCEL IS THE ONE LISTED AS CURRENTLY PRINTING, ALL YOU HAVE TO DO TO CANCEL IT IS PRESS ENTER. IF THE JOB YOU WISH TO CANCEL IS NOT THE ONE CURRENTLY PRINTING, TYPE IN THE JOB NUMBER AND PRESS ENTER. IF THE JOB YOU WISH TO CANCEL IS FOR A PRINTER THAT IS NOT YOUR DEFAULT PRINTER, YOU MUST CHANGE THE DEFAULT DESTINATION PRINTER TO THAT PRINTER. (0.5) BEFORE CANCELLING THE PRINT JOB.

THE CANCEL OPTION IS ALSO AVAILABLE IN THE MDS SYSTEM MENU. (9.B.4)

#### 0.5 CHANGE SYSTEM DEFAULT DESTINATION SPOOL PRINTER

THIS OPTION IS SIMILAR TO THE OPTION IN THE MDS PRINTER UTILITIES MENU (9.B.5) THAT LETS YOU CHANGE THE DEFAULT DESTINATION PRINTER FOR A SINGLE TERMINAL. THE ONLY DIFFERENCE IS THAT THIS PROGRAM ALLOWS YOU TO CHANGE THE DEFAULT PRINTER FOR ALL TERMINALS NOT PREVIOUSLY DEFINED WITH A DEFAULT PRINTER. A LIST OF THE AVAILABLE PRINTERS IS SHOWN AT THE TOP LEFT. TO CHANGE THE DEFAULT PRINTER, TYPE IN A PRINTER NAME FROM THE LIST EXACTLY AS IT IS SHOWN ON THE LIST AND PRESS ENTER. YOU ARE

RETURNED TO THE "SUPER USER PRINTER UTILITIES MENU". CHECK THE INVERSE VIDEO DISPLAY TO THE RIGHT OF THE CHANGE SYSTEM DEFAULT DESTINATION SPOOL PRINTER OPTION TO MAKE SURE THE SYSTEM ACCEPTED THE NEW PRINTER. THE NAME OF THE PRINTER SELECTED SHOULD BE DISPLAYED AS THE DEFAULT DESTINATION PRINTER. IF THE PRINTER DISPLAYED IS NOT THE ONE YOU SELECTED, TRY THE PROCEDURE AGAIN.

#### O.6 RESTART REPORTS CURRENTLY PRINTING

THIS OPTION STOPS THE SCHEDULER AND SENDS A TOP OF FORM TO THE PRINTER. IT THEN RESTARTS THE REPORT PRINTING IF THE REPORT PRINTING WAS FOR THE DEFAULT PRINTER. IF THE REPORT PRINTING WAS NOT ON THE DEFAULT PRINTER, YOU MUST CHANGE THE DEFAULT DESTINATION PRINTER(O.5) TO THAT PRINTER IN ORDER TO RESTART THAT REPORT.

#### O.7 SET DEFAULT DESTINATION FOR INDIVIDUAL TERMINALS

THIS PROGRAM ALLOWS YOU TO CHANGE THE PRINTER THAT AN INDIVIDUAL TERMINAL SENDS ITS PRINT JOBS TO.

#### O.8 NEW PRINTER SETUP

New printers should be first setup in SCO UNIX ADMINISTRATION. After the Printer is working (type: `lp -d(printername) /etc/hosts`) it should be Setup in MDS. First put an entry into the Printer type definition file, Which will tell MDS what control codes to send the printer. Then optionally, You can set this printer as a default destination by login name or tty.

## SYSTEM BACKUP

SYSTEM BACKUPS ARE DONE DAILY AND KEPT FOR A WEEK. A FULL SYSTEM BACKUP SHOULD BE DONE AT LEAST ONCE A MONTH. SIERRA USES TAPES (CARTRIDGES) FOR IT'S BACKUP MEDIA. YOU SHOULD HAVE BACKUP TAPES LABELED FOR A MINIMUM OF EACH DAY PLUS A BACKUP TAPE LABELED FOR THE LAST MONTH CLOSED. EXTRA BACKUP TAPES ARE LABELLED AS REQUIRED.

BACKUPS CAN BE RUN WHILE USERS ARE ON THE SYSTEM. THE SYSTEM RUNS THE BACKUP UNTIL IT ENCOUNTERS A FILE THAT A USER IS ACCESSING THAT IT NEEDS TO BACKUP. IT WAITS UNTIL THE USER RELEASES THE FILE THEN CONTINUES THE BACKUP. IF A USER TRIES TO ACCESS A FILE THAT THE SYSTEM IS CURRENTLY BACKING UP, THEY ARE DENIED ACCESS UNTIL THE SYSTEM FINISHES WITH AND RELEASES THAT FILE.

TO ENTER THE BACKUP PROGRAM, TYPE IN BACKUP IN LOWERCASE LETTERS AND PRESS ENTER.

THE COMPUTER DISPLAYS A MENU THAT ALLOWS YOU TO SELECT THE MEDIA YOU WANT TO USE FOR BACKUP.

SELECT IF YOU WANT TO USE DISK OR CARTRIDGE (TAPE) BACKUP MEDIA. PRESS THE DESIRED SELECTION THEN ENTER TO SELECT CARTRIDGE MEDIA.

IF YOU HAVE ENTERED THE BACKUP PROGRAM IN ERROR OR DO NOT WANT TO A

BACKUP, PRESS 3 THEN ENTER TO ABORT THE BACKUP.

THE NEXT SCREEN DISPLAYED IS THE FILE SYSTEM MAINTENANCE MENU.

IF YOU PRESS 1 OR 2 THEN ENTER, THE SYSTEM ASKS YOU TO INSERT THE MEDIA INTO THE DRIVE AND PRESS ENTER . THE BACKUP BEGINS IMMEDIATELY. THE DAILY BACKUP COPIES ALL TRANSACTIONS FOR THE DAY INPUT ON THE SYSTEM TO THE BACKUP MEDIA. THE FULL SYSTEM BACKUP COPIES ALL THE TRANSACTIONS PLUS ALL THE SYSTEM PROGRAMS.

IF YOU PRESS 3 THEN ENTER, THE SYSTEM ASKS FOR THE FILE PATHNAME. THE PATHNAME MUST BE TYPED IN COMPLETELY. WHEN YOU PRESS ENTER, THE SYSTEM ASKS FOR ANOTHER PATHNAME. CONTINUE ENTERING PATHNAME UNTIL FINISHED. PRESS ENTER AT A BLANK PATHNAME TO START THE BACKUP. THE SYSTEM TAKES THE PATHNAMES ENTERED, FINDS THEM ON THE MEDIA, FINDS THEM ON THE SYSTEM AND REPLACES THE SYSTEM FILES WITH THE MEDIA FILES. THIS SHOULD ONLY BE DONE WITH THE SUPERVISION OF YOUR SUPPORT PERSON.

IF YOU PRESS 4 THEN ENTER, THE SYSTEM ASKS YOU TO INSERT THE MEDIA AND PRESS ENTER. THE SYSTEM COPIES FILES FROM THE MEDIA AND WRITES THEM OVER THE FILES IN THE SYSTEM. THIS SHOULD ONLY BE DONE WITH THE SUPERVISION OF YOUR SUPPORT PERSON.

IF YOU DO NOT WISH TO CONTINUE THE BACKUP PRESS Q TO ABORT THE BACKUP. YOU ARE RETURNED TO THE LOGIN.

IF YOU ARE IN THE PROCESS OF DOING A BACKUP OR RESTORE AND YOU NEED TO ABORT, THE ONLY WAY YOU CAN ABORT IS THE PRESS THE DELETE KEY. THIS IS THE ONLY WAY YOU CAN BREAK OUT OF A BACKUP ONCE IT IS IN PROGRESS. THIS IS VERY DANGEROUS IF YOU ARE DOING A RESTORE. IT IS ADVISED THAT YOU DO NOT BREAK OUT OF A RESTORE UNLESS ADVISED TO DO SO BY YOUR SUPPORT PERSON.  
SYSTEM SHUTDOWN

IT IS NOT REQUIRED OR ADVISED THAT YOU SHUT THE SYSTEM DOWN EACH NIGHT. SYSTEM SHUTDOWNS ARE USUALLY DONE IF THERE IS A POSSIBILITY OF THE POWER GOING OFF OR BEING SHUT OFF FOR AN EXTENDED PERIOD. BATTERY BACKUPS ARE PROVIDED AT EACH LOCATION TO HANDLE TEMPORARY POWER LOSSES. IF POWER IS LOST AND THE SYSTEM SWITCHES TO THE BACKUP BATTERIES A DETERMINATION MUST BE MADE BY THE SYSTEM ADMINISTRATOR AS TO THE PROBABLE LENGTH OF THE POWER LOSS. IF THE SYSTEM ADMINISTRATOR FEELS THE POWER LOSS WILL EXTEND PAST THE BATTERY BACKUP RESERVES THE SYSTEM SHOULD BE SHUT DOWN.

TO SHUTDOWN THE SYSTEM, TYPE DOWN IN LOWERCASE LETTERS AT THE SYSTEM LOGIN.

THE COMPUTER ASKS HOW MANY MINUTES TO SHUTDOWN. THIS MAY BE FROM 0 (ZERO) TO 15 (FIFTEEN). TYPE IN THE NUMBER OF MINUTES TO SHUTDOWN AND PRESS ENTER. A MESSAGE IS BROADCAST EACH MINUTE TO ANY USERS STILL ON THE SYSTEM. THE MESSAGE ADVISES THEM THAT THE SYSTEM IS SHUTTING DOWN

IN X MINUTES AND TO LOG OFF TO PREVENT FILE DAMAGE.

WHEN THE COUNTDOWN IS COMPLETE THE COMPUTER EXECUTES  
INTERNAL KILL  
COMMANDS TO CLOSE FILES. WHEN THE PROCESS IS COMPLETE A  
SAFE TO POWER  
OFF OR PRESS ANY KEY TO REBOOT MESSAGE DISPLAYS. AT THIS  
POINT AND ONLY  
AT THIS POINT IS IT SAFE TO TURN OFF THE SYSTEM.

#### SYSTEM STARTUP

IT IS SOMETIMES NECESSARY TO TURN OFF THE SYSTEM DUE TO  
POWER LOSS OR  
SYSTEM PROBLEMS. TO RESTART THE SYSTEM, TURN THE POWER  
ON. THE SYSTEM  
AUTOMATICALLY DOES A SERIES OF INTERNAL CHECKS. ONCE THE  
SERIES IS  
COMPLETE A REBOOT MESSAGE DISPLAYS. PRESS ENTER. THE  
SYSTEM DISPLAYS  
A DATE AND TIME AND ASKS YOU TO ENTER A CORRECT DATE AND  
TIME. IF THE  
DATE AND TIME DISPLAYED IS CORRECT, PRESS  
ENTER. OTHERWISE ENTER THE  
DATE AND TIME IN THE FORMAT DISPLAYED AND PRESS  
ENTER. AFTER THE SYSTEM  
CHECKS AND ENABLES ALL PERIPHERY EQUIPMENT A MESSAGE  
DISPLAYS GIVING THE  
OPTION OF PRESSING ALT D TO CONTINUE WITH NORMAL REBOOT  
OR ENTERING A  
COMMAND TO ACCESS OTHER SYSTEM CHECKS. THE NORMAL  
PROCEDURE IS ALT-D  
UNLESS INSTRUCTED OTHERWISE BY YOUR SUPPORT PERSON.