APPENDIX A. SUPERDOS UTILITIES USED MOST OFTEN

APPENDIX A. SuperDOS Utilities Used Most Often

- BYE
- COPY
- CRUNCH
- DEL
- DIR
- DISKINIT
- DKTEST
- DV
- EDIT
- EXEC
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- OFILES
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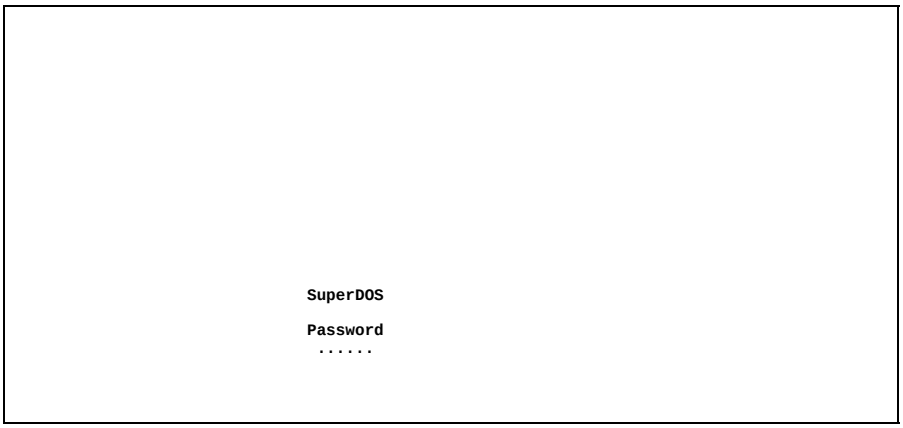
BYE

PURPOSE: The purpose of this command is to terminate a session under any password. This is also called signing off or BYEing off the system. Executing BYE from the SuperDOS prompt will acquire the password screen again.

PROCEDURE:

1. End out of all menus and obtain the SuperDOS prompt (>).
2. Enter **BYE** and press **Enter**. The computer displays the password screen:



NOTES:

COPY

PURPOSE: This utility is used to create a copy of an existing file or files on another part of the hard disk or to/from a floppy disk. The source file, or file used as the origin, remains unchanged even though it has been copied.

FORMAT: **COPY (switches) (destination filespec) (source filespec)**

> ☞ **NOTE:** In the SuperDOS COPY command, the "source" and "destination" are just opposite of the DOS copy command.

Switches

These switches are optional commands, which can further define and control the copy process. Switches can be combined. You can use both the /D and the /P switches in the same copy command. For example:

COPY/D/P=1 5:31 5:1:VM*

There are no spaces between switches, however they are separated by a slash (/).

/D Deletes a pre-existing file by the same name. The file is then recreated to the size and characteristics of the source file.

/F (SuperDOS 5.0.0 or higher) Performs the fast copy operation. It uses all of the task's available memory for buffers to speed up the copy therefore may slow down the performance of other tasks, especially if the copy is to or from a diskette. Of course, if no other users are running, no loss of performance will be detected.

/P Directs output to the system printer. Enter it in the format **COPY/P** for most Dimensions systems. If you have more than 1 system printer and you wish to print it, enter the format **COPY/P=#** where "#" is the number of the desired system printer (1-9). The output information indicates whether or not the copy completed successfully.

Destination Filespec

The destination filespec contains up to 3 parts - the drive, the user group, and the filename. See below for explanations and examples of each part.

Destination Drive:User Group

This is where the copied file(s) will be stored when the copy is finished. The drive can be either **1** for the floppy drive or **5** for the hard drive (**5** or **6** for dual drive systems). The user group can be any valid user group on the selected drive (**0-63**) or an asterisk wildcard (*****) indicating whatever the source user group is. The ***** wildcard cannot be used for the drive. For example:

COPY 5:31 5:1:*filename*
COPY 1:* 5:1:*filename*

If you use the switch /D, (i.e., **COPY/D 5:31 5:1:*filename***), any file in 5:31 which already exists will be deleted from 5:31 before the computer copies the new one over.

In entering the copy command, there is always a space after the switches (if any) and before the destination drive:user group. Separate the drive:user group with a colon (:).

Destination Filename

If the filename is to remain unchanged from the source filename, it is not necessary to enter a destination filename. For example:

COPY 5:31: 5:1:TEST
(makes a copy of 5:1:TEST in 5:31 named TEST)

If it is to be changed, enter the filename of the new file following the drive:user group and a colon. For example:

COPY 5:1:TEST.OLD 5:1:TEST
(makes a copy of 5:1:TEST named TEST.OLD in 5:1)

Source Filespec

The source filespec contains 3 parts - the drive, the user group, and the filename. See below for explanations and examples of each part.

Source Drive:User Group

If the filename is to remain unchanged from the source filename, it is not necessary to enter a destination filename. For example:

COPY 5:31 5:1:VM*
COPY 5:* 1:*:*

When you enter the copy command, always include a space before the source drive:user group. Also, always separate the drive:user group by a colon (:).

Source Filename

The source file can be one file or a group of files listed separately or grouped with a wildcard. A colon precedes the filename. For example:

COPY 5:31 5:1:CM1.D
(copies CM1.D from 5:1 to 5:31)
COPY 5:31 5:1:CM3* 5:1:CM4* 5:1:CM5*
(copies all files beginning with CM3, CM4, and CM5 from 5:1 to 5:31)
COPY 5:31 5:1:CM*
(copies all files beginning with CM from 5:1: to 5:31)
COPY 5:31 5:1:*.XYZ
(copies all files ending with .XYZ from 5:1 to 5:31)

The source filename is the last part of the copy command you need to enter.

PROCEDURE:

1. From the SuperDOS prompt (>), enter **COPY**, any desired switch, and the desired destination and source filespecs. Then press **Enter** to begin the copy process.
2. COPY verifies that the source file exists and then performs the transfer as specified n the switches. For every file successfully copied, the program prints the source filename and the filespec of the destination file to which it was copied. It is printed on the screen unless the switch was entered to print it on the system printer.
3. After completing the copy as instructed, the computer displays: **END OF PROGRAM**. You are returned to the SuperDOS prompt.

NOTES:

CRUNCH

PURPOSE: The purpose of CRUNCH is to eliminate fragmentation of free space. It is used when your free space listing indicates that you have a large total space free compared with your largest free block.

FORMAT: **CRUNCH (switches) (drive number)**

Switches

These are optional commands, which can further define the CRUNCH command:

/P Directs auxiliary information to a system printer. The format is shown below:

CRUNCH/P

/L Lists information required for recovery. This switch is the default switch.

/T Displays the time it took to compress the drive.

PROCEDURE:

1. Make sure everyone is off the system before beginning this procedure.
2. Use the DV utility shown below to make sure that the directory information matches the information in the file header sector. At the SuperDOS prompt enter **DV** and press **Enter**. Enter the following responses:

   Y To use the printer

   1 For system printer 1

   5 For drive 5

   Y To OK directory

   When DV is finished, the cursor will be back at the SuperDOS prompt. If any errors are printed out, call Dimensions support before proceeding any further.
3. Use the DKTEST utility shown below to test for any bad sectors. At the SuperDOS prompt enter **DKTEST** and press **Enter**. Enter the following responses:

   Esc To take you to the action line

   Enter To start test

   When DKTEST is finished, the cursor will be at the SuperDOS prompt and any bad sectors will be listed on the screen. If any bad sectors are listed, call Dimensions support before proceeding any further.
4. Run **FREE/S 5** to find the total sectors free and record the number.

5 Make a tape backup of your entire system. Your filespec will read 5:*:*. You must be sure you have a current backup of 5:0 (operating system), 5:51 (Dimensions programs), 5:1 (your live data), and any other user group you need to restore if CRUNCH is unsuccessful.

6 Make sure that all terminals are not in use and back to the password screen.

7 At the SuperDOS prompt under your level 7 password, enter **CRUNCH**, any desired switches, the drive number, and press **Enter**. For example:

>CRUNCH/P/T 5 (this example shows drive 5)

Enter **Y** to start the program. Let the program run. The size of the disk drive will determine the time it takes to run. Plan on a couple of hours. If you need to terminate the program, press **Ctrl C** one time. The program will finish working with the current file before terminating the utility. If you press **Ctrl C** twice, the program will halt immediately. There is a possibility that some data may be lost or corrupted.

8 When CRUNCH is finished, the total number of files and sectors moved will be displayed and the cursor will be at the SuperDOS prompt. Run **FREE/S 5** again to get the total sectors free and compare against the earlier listing that you recorded. If an error message is displayed on the screen from running CURNCH or your total sectors free after the CRUNCH is incorrect, call Dimensions support.

NOTES:

DEL

PURPOSE: The purpose of the DEL command is to delete files from a disk directory.

FORMAT: **DEL (switches) (filespec)**

Switches

These are optional commands, which can further control the delete process. There is no space following DEL and the switches however they are separated by a slash (/). For example:

DEL/V 5:*:*filename*

/B Batch file. See SuperDOS Utilities Guide.

/V Stops for user verification before deletion. The following is displayed for each file in the filespec:

***filespec* OK TO DELETE? (Y/N):**

/X Exclude. See SuperDOS Utilities Guide.

Filespec

The filespec contains up to 3 parts – the drive, the user group, and the filename. See below for explanations and examples of each part.

Drive:User Group

This is where the file or files you wish to delete are located on the disk. The drive must be specifies (**1** for the floppy drive or **5** for the hard drive). A colon must precede the user group. The wildcard characters ***** and **?** can be used for the user group but not for the drive. It is recommended that the /V switch be used in conjunction with wildcard characters to avoid the inadvertent deletion of files. User groups 01 through 09 can be entered as a single digits (1 vs. 01). Examples:

DEL 5:31:*filename*
Deletes *filename* from 5:31.

DEL/V 5:*:*.OLD
Deletes with verification all files ending with .OLD from all user groups.

DEL/V 5:0?:TEST
Deletes with verification all files names TEST in user groups 01 through 09.

If you do not specify a drive:user group, the delete command assumes the default drive:user group assigned to that password. If the filename exists in other searchlist drive:user groups, it is not deleted. For example:

DEL TEST.D

If the default drive:user group is 5:1, deletes TEST.D from 5:1 but does not delete TEST.D if it is found in another drive:user group.

Filename

The filename can be one file or a group of files listed separately or grouped with a wildcard. A colon precedes the filename. For example:

DEL 5:31:**CM3.OLD**
Deletes CM3.OLD from 5:31.

DEL 5:31:**CM3* 5:31:CM4***
Deletes all files beginning with CM3 and CM4 from 5:31.

DEL 5:31:**CM***
Deletes all files beginning with CM from 5:31.

DEL 5:*:**.OLD**
Deletes all files ending with .OLD from all user groups.

The filename is the last part of the delete command you need to enter.

PROCEDURE:

1 From the SuperDOS prompt enter **DEL**, any desired switches, and the desired filespec. Then press **Enter** to begin the delete process.

> ☞ **NOTE:** If the file is open, it cannot be deleted. The computer displays:
>
> **CAN'T BECAUSE: File opened while trying to delete.**
>
> If the file cannot be found, the computer will display the filespec and "File Not Found." You may have typed in the filespec incorrectly.
>
> If the drive:user group are invalid (not assigned in the searchlist for the password), no files are deleted and you are returned to the SuperDOS prompt.

2 DEL determines if any of the files are opened. If all conditions allow, the computer deletes the specified file(s) and displays the filespec and "DELETED". You are returned to the SuperDOS prompt.

NOTES:

1. Use the DIR utility to verify the files you wish to delete. Then change the command to delete the files. For example:

   DIR 5:1:*.SV
   DEL 5:1:*.SV

2. The safest method is to use the /V switch to verify each file you wish to delete.

DIR

PURPOSE: The purpose of the DIR command is to list files from a disk directory or to create batch files for use with other SuperDOS utilities.

FORMAT: **DIR (switches) (filespec)**

Switches

These are optional commands, which can further define the directory listing. Switches can be combined. For example, you can use both the /L and the /M together:

DIR/L/M 5:1:*

/B Lists files to a batch file. Enter this switch in the format shown below where *filespec* is the filespec of the file to which the directory is to be output and *filespec-1* through *filespec-n* are the filespecs to be listed:

DIR/B=filespec filespec-1 . . . filespec-n

/E Displays individual extents under their respective files. This switch displays the extent number and the sector number of the extent's file header sector. NOTE: The /E switch must be used in conjunction with the /L switch.

/L Lists long version of the directory showing the filename, file types, beginning sector number, number of sectors, extent size, number of extents, date last used, and date created.

/M Lists directory on CRT, one screenful at a time, asking for **MORE?** At the bottom of the screen. Entering **Y** will continue listing the directory, **N** will terminate and return you to the SuperDOS prompt.

/N Used in conjunction with the /B switch to eliminate the drive and user group from filespecs contained in a batch file.

/O Lists directory to a disk test file. The value of this switch is a filespec. In the example shown below *TEST.T* is the filespec of the file in which the listing is to be stored and *filespec-1* through *filespec-n* are the filespecs to be listed:

DIR/=TEST.T filespec-1 . . . filespec-n

/P Directs output to a system printer. Nothing will be printed on the screen. Enter it using the format below:

DIR/P (filespec)

If you wish to print to another system printer, use the format **DIR/P=#** where "#" indicates the system printer number (1-9).

/R Displays a long listing with revision numbers for all applicable programs.

/S Sorts directory before printing. It can be sorted in one of the following formats:

- /S=A by last access date
- /S=C by creation date
- /S=L by file length based on the number of sectors in ascending order
- /S=N by filename alphabetically (default)
- /S=S by sector
- /S=U by user group

/T=X Displays by file type where X=D(ata), I(ndex duplicate keys not allowed), T(ext), R(elocatable), J (index duplicate keys allowed).

/V Sort in reverse order. This function must be used in conjunction with the /S switch which defines the type of sort to be used.

/X Excludes files from a group specified by a wildcard filespec. For example, the filespec 5:*:* might be entered to list all files on drive 5. In the example shown below, *TEST.T* will not be included in the listing:

DIR/X=TEST.T 5:*:*

Filespec

The filespec contains up to 3 parts – the drive, the user group, and the filename. See below for explanations and examples of each part.

Drive:User Group

This is where the file or files you wish to delete are located on the disk. The drive must be specifies (**1** for the floppy drive or **5** for the hard drive). A colon must precede the user group. The wildcard characters ***** and **?** can be used for the user group but not for the drive. User groups 01 through 09 can be entered as a single digits (1 vs. 01). Examples:

DIR 5:*:*filename*
Lists all files named *filename* in all user groups.

DIR 5:1:*
Lists all files in user group 1.

DIR 5:0?:TEST
Lists all files name *TEST* in user groups 1 through 9.

DIR/L/S=U/P 5:*:*
Lists all files for all user group sin the long version, sorted by user group, and printed to the system printer.

If all files in the default drive and user group are to be listed, a filespec of * can be used.

DIR *
Lists all files on the default drive:user group.

If files exist in other searchlist drive:user groups, they are not listed.

Filename

The filename can be one file or a group of files listed separately or grouped with a wildcard. A colon precedes the filename. For example:

DIR/L **5:*:*.OLD**
Lists all files ending in .OLD in all user groups.

DIR/L **5:31:C* 5:31:V***
Lists all files in 5:31 beginning with C and V.

The filename is the last part of the DIR command you need to enter.

PROCEDURE:

1. From the SuperDOS prompt, enter **DIR**, any desired switches, and the desired filespec. Then press **Enter** to begin the listing process.
2. DIR displays the files specified in the format requested. You are returned to the SuperDOS prompt.

NOTES:

DISKINIT

PURPOSE: This utility initializes diskettes used in SuperDOS.

> ☞ **NOTE:** Diskettes must first be formatted under DOS before they can be initialized using DISKINT.

FORMAT: **DISKINIT (switch)**

Switch

This is an optional command which can further the control of DISKINIT.

/P This switch performs a partial initialization, reinitializing sector 0 (which contains the Drive Information Table), but not the Bit Map or the Directory.

PROCEDURE:

1. Insert the diskette to be initialized in the floppy drive.
2. From the SuperDOS prompt, enter **DISKINIT** and press **Enter**.
3. **Enter drive # to be initialized (1-9):**

   Enter **1** for the floppy drive.
4. The computer displays a DISKINIT menu. Select the appropriate disk type. The most common disk type for Dimensions users is PS/2 Floppy 1.44 MD (**25**).
5. **Volume ID # (0-65535)**

   Enter a unique identifier for the disk. This is optional.
6. **Enter maximum # of file names in directory**:

   Enter the maximum number of files you may put on this disk. The greater the number entered, the larger the directory will be created on the disk, taking up more space on the disk.
7. **There are nn sectors required for the directory.**
   This will provide space for nnnn entries.
   Is this okay? (Y/N):

   Enter **Y** if this is OK or **N** if the number of sectors is too large.
8. If the diskette was previously initialized, the program displays:

```
This disk has been previously DISKINITed.
Would you to like to re-initialize the disk (Y/N):
```

   Enter **Y** to continue, **N** to terminate the DISKINIT command.

9 If you pressed **Y** to continue, DISKINIT reinitializes the diskette. When the process is complete, the computer asks:

```
Initialized Another (Y/N) ?
```

If desired, enter **Y** to initialize another. Or enter **N** to end this procedure.

10 If you entered **Y** above to initialize another, the computer asks:

```
Use the same parameters?  (Y/N)
```

Enter **Y** to use the same parameters from the previous disk. Or enter **N** to enter the parameter again.

NOTES:

See *SuperDOS Utilities Guide* for more specific information.

DKTEST

PURPOSE: The purpose of this command is to test for bad sectors on the hard drive.

FORMAT: **DKTEST**

PROCEDURE:

> ☞ **NOTE:** ALL USERS MUST BE SIGNED OFF THE SYSTEM BEFORE BEGINNING THIS PROCEDURE.

1. From the SuperDOS prompt, enter **DKTEST** and press **Enter**.
2. The computer displays the DKTEST menu. Enter the following parameters:

Drive # :	Enter the drive number to be tested (usually 5 for Dimensions users).
Test which sectors :	**All:** Test the entire disk. **File:** Test specific sectors occupied by a file. **Dir:** Test the directory portion of the disk.
Type of test :	**Read:** Reads the data stored in the specified sectors to check for bad sectors but does not modify data on the disk. This is the only option you should run.
Log to :	Indicates where the DKTEST should send the results of the test: **C** = CRT (screen) **P** = Printer **F** = File
Number of passes :	Enter the number of times DKTEST is to run the test.
Map bad sectors :	Enter **Y** to map out any bad sectors that are found (made unavailable for further use). Or enter **N** to not have bad sectors mapped out.

3. After you enter all parameters, press **Esc**. The cursor moves to the **Action** line.
4. Select the desired action:

Start test	Begins DKTEST.
Change	Allows you to change the parameters.
Quit	Terminates the procedure.

NOTES:

See *SuperDOS Utilities Guide* for more specific information.

DV

PURPOSE: The purpose of this command is to verify that the information in the directory matches the information in the file header sector for each file. It also verifies that no files overlap and that all bits in the bit map are ON for each file.

Run this utility before using the CRUNCH command.

PROCEDURE:

> ☞ **NOTE:** ALL USERS MUST BE SIGNED OFF THE SYSTEM BEFORE BEGINNING THIS PROCEDURE.

1 From the SuperDOS prompt, enter **DV** and press **Enter**.

2 **Use the Printer (Y/N):**

Enter **Y** if the output is to go to the printer. Or enter **N** to display on the terminal only.

3 If you entered **Y** to use the printer, the computer also asks:

```
Enter system printer (1-9) or E to END
```

Enter the system printer number to use, usually 1.

4 **Enter the Drive # to Verify (1-9):**

Enter the drive number to verify, usually drive 5.

4 **Directory is in Sectors 1-99 OK? (Y/N)**

Enter **Y**. Contact a Dimensions support analyst before entering any other value.

6 DV then verifies all appropriate information, displays how many files it has looked at and what percentage of the directory it has currently tested. After the first pass, the program makes a second pass and normally there are no errors found. If there are errors, the computer prints or displays them as the program runs. Contact a Dimensions support analyst if errors are found.

NOTES:

See *SuperDOS Utilities Guide* for more specific information.

EDIT

PURPOSE: EDIT provides a way of creating and editing text files. It can be used for simple word processing functions such as typing short letters, memos, and other correspondence. It also provides a way to create and edit "jobs" that are used in projects. Jobs hold the responses normally typed in by the operator when using a Dimensions program. A series of jobs constitute a project. See Section 4, Projects.

To print a text file, use the TYPE utility or the Dimensions program DS08538, Print a Text File, found on the System Functions Menu.

FORMAT: **EDIT** or **EDIT (filename)**

PROCEDURE:

1 From the SuperDOS prompt, enter **EDIT** and the filename of the text file you wish to edit. It can be an existing file or a new one. Then press **Enter**.

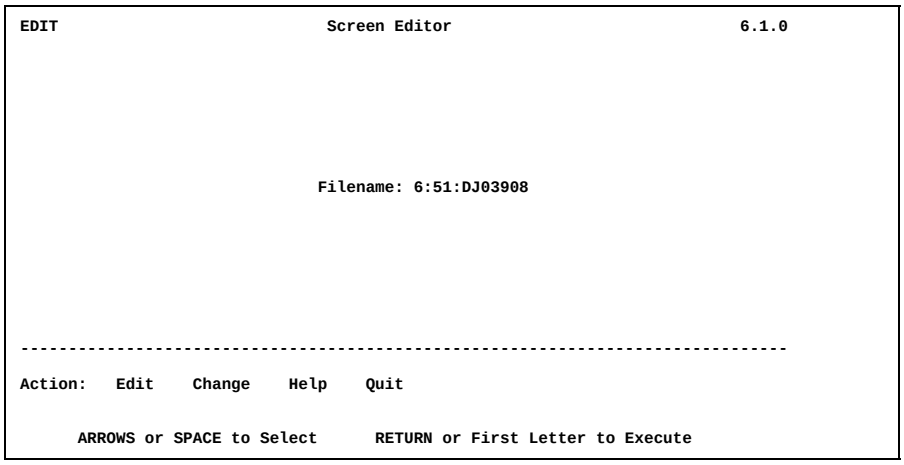
The filename must be a text file in order to edit it. You cannot edit a data file, index file, or other non-text file with this program.

If you wish to use an existing file to create a new file, enter the existing (input) file first followed by the new (output) file. For example:

>EDIT TEST TEST.NEW

The file TEST is used to create TEST.NEW but remains unchanged itself. If you leave the output file blank, it makes all changes to the existing file.

2 The computer displays the filename you entered and the following screen:



The command **Edit** is highlighted. Also the options at the bottom of the screen are highlighted. At this point you can move the highlighted command by using the arrow keys or the space bar to select another command,. Press **Enter** when the command you want is highlighted or enter the first letter of the command to execute it. You have the following options:

Edit Go to Step 3 to edit the selected file.

Change Change the filename to be edited. This command is used in case a mistake was made in entering the filename.

Help Show the Help menu screen, which provides information and instructions on the editing functions.

Quit Return to the SuperDOS prompt without performing any edit functions.

3 Once in the edit function, the computer displays the first 22 lines of the text file. If it is new file, the lines are blank. The screen also contains a status line, a ruler, and a function key line. For example:

```
OVERWRITE                          HELP-ShiftF1  6:51:DJ03908          1:1
L------+-------+-------+-------+-------+-------+-------+-------+-------+-------
:CALCULATE AVE COST TYPE 2
DS03908
 <13>
 <13>
 E
```

Status Line This is the very top line of the screen. It contains information on the current editing sessions:

- Mode—overwrite or insert

- How to obtain the help menu

- Filename being edited

- Cursor position (line:column)

It also serves as the COMMAND LINE where you enter commands. Activate the command line by pressing **F1** or **Ctrl A**. Notice the screen displays the **Command:** prompt at the left side of the status line. See Step 4 for more information on commands.

Ruler The ruler is immediately under the **Status Line** (line 2). It displays the current margins (L & R) and the tab setting (+). For simple editing you will probably not need to change the ruler.

Function Key Line This is the last line displayed on the screen. It shows an abbreviated list of what the first 8 function keys do, both unshifted and shifted. Press **Shift** to display the shifted function keys. On the main monitor, this line displays the first 10 unshifted function keys.

4 With the cursor positioned on the first line of text or the first line of a new file, you can type your letter or whatever you are doing. EDIT defaults to the overwrite mode so whatever you type writes over what was there before. You can do any of the following:

Use arrow keys — The arrow keys move the cursor around on the screen without affecting the displayed text.

Display Help Menu — Press **Shift F1** at any time to display the Help Menu. The screen is redisplayed showing the available help options. Pressing **Q** to Quit Help, when available, brings you back where you left. The Help Menu is described in detail in the *SuperDOS Utilities Guide*.

Perform commands — Commands can be used anytime by pressing **F1** or **Ctrl A**. See Table A for the commands used most frequently.

Use function keys — Function keys are used as short cuts to commands. They are listed at the bottom of the screen. See Table B for the function keys used most frequently in simple word processing.

Del key — The **Delete** key deletes one character to the left of the cursor.

Delete a line — To delete a line, position the cursor anywhere on the line to be deleted and press **Shift LineDEL** (on numeric keypad). The UnDo command is not able to undo this kind of deletion.

TABLE A. COMMANDS

Enter these commands at the **Command:** prompt. Press **F1** to get this prompt.

END or **E**	Ends and saves the current editing session.
HELP or **H**	Acquires the Help Menu and screens.
QUIT	Ends but does not save the current editing session

TABLE B1. FUNCTIONS KEYS - UNSHIFTED

If the function keys have been programmed for other uses on your terminal (as on a Wyse 50 or 60), they may not work properly in EDIT. Use the equivalent keyboard command instead.

Function Key Unshifted	Name	Editing Function	Notes	Equivalent Keyboard Command
F1	Command	Acquires Command: prompt.	If no command is to be entered at **Command**:, press **Enter** to return to editing.	**Ctrl A**
F2	PageUp	Displays previous screen of text.	If there is only one screen of text, this function doesn't do anything.	**Ctrl P**
F3	PageDown	Displays next screen of text.	If there is only one screen of text, this function doesn't do anything.	**Ctrl N**
F4	Insert/ Overwrite	Toggles between insert and overwrite modes	When you enter **EDIT**, the overwrite mode is used by default.	**Ctrl O**
F5	LastWord	Moves cursor to first character of the previous word on the current line. It does not go to the previous line.	This makes it quicker to move the cursor backwards, word by word rather than character by character.	**Ctrl Q**
F6	NextWord	Moves cursor to first character of next word on the current line. It does not go to the next line.	This makes it quicker to move the cursor, word by word rather than character by character.	**Ctrl W**
F7	UnDo	Undoes certain changes to the current line. It will not restore editing changes that involve more than 1 line.	Move the cursor to the previous editing change location then press **F7**. You can undo changes and deletions as long as it only involves one line. Once the cursor is moved to another line, **UnDo** can no longer undo changes to it.	**Ctrl U**
F8	GoTo	*	*	*****

☞ **NOTE:** ***** For the function keys listed here but not explained, refer to the *SuperDOS Utilities Guide*.

TABLE B2. FUNCTIONS KEYS - SHIFTED

Function Key Unshifted	Name	Editing Function	Notes	Equivalent Keyboard Command
F1	Help	Accesses help screen and menus.	HELP can be accessed anytime if the file SUPERDOS.SWP exists and if the task is large enough.	**Command: (F1 HELP)**
F2	TopText or Top of File	Moves cursor to the first line of the file in the same column as in the current line	For large files, it takes a few seconds for the cursor to move from the middle or bottom of the file to the top.	**Ctrl T**
F3	Bottom of Text or Bottom of File	Moves cursor to the last line of the file in the same column as in the current line.	For large files, it takes a few seconds for the cursor to move from the top or middle of the file to the bottom	**Ctrl B**
F4	ChangeSide	*	*	None
F5	Start of Line	Moves cursor to the beginning of the current line.	*	**Ctrl S**
F6	End of Line	Moves cursor to the end of the current line.		**Ctrl E**
F7	Join	*	*	None
F8	Select	*	*	None

☞ **NOTE:** ***** For the function keys listed here but not explained, refer to the *SuperDOS Utilities Guide*.

NOTES:

EXEC

PURPOSE: The purpose of EXEC is to execute a series of programs that have been previously entered in a specially formatted batch file. Many users build special jobs through the EDIT utility that they wish to add to a project such as day end or month end. After building the commands and input parameters in a batch file through EDIT, the batch file can be tested using EXEC to make sure the program will run correctly.

FORMAT: **EXEC (filename)**

PROCEDURE:

1. Create a text file using **EDIT**.
2. From the SuperDOS prompt, enter **EXEC**, the batch filename you wish to execute, and press **Enter**. For example:

```
>EXEC DJ04201
```

   DJ04201 is the name of a text file.

3. EXEC reads the batch file and executes the program found on the command line of the text file. If a program has prompts and prompts have not been answered in the batch file, the prompts are displayed on the screen. When the prompts have been answered, the program continues automatically.
4. After the last program has been executed, you are returned to the SuperDOS prompt.

NOTES:

See *SuperDOS Utilities Guide* for more specific information.

FIL

PURPOSE: FIL performs the following file utilities – create, delete, view, fill, rename, shrunk, modify, and initialize. These instructions will address only delete, view, fill, and rename. Refer to *SuperDOS Utilities Guide* for the others.

FORMAT: **FIL**

These programs can also be run individually from the SuperDOS prompt, if desired, by entering:

F.DELETE
F.VIEW
F.FILL
F.RENAME

PROCEDURE:

1. From the SuperDOS prompt, enter **FIL** and press **Enter**.
2. The computer displays:

```
FIL                              File Utilities                    mm/dd/yy
Rev 6.1.0                                                          10:35:35

** File Utilities **

  C - Create
  D - Delete
  V - View
  F - Fill
  R - Rename
  S - Shrink
  M - Modify Protect Switches
  I - Initialize
  E - End

OPTION:
```

Enter the letter corresponding to the option you wish to perform. You have the following options:

C - Create — Create a new file. This option is usually done through DS08911 found under System Manager, File Management, Create Files.

D - Delete — Delete a specified filename. The computer asks:

Filename (Return to End):

Enter the filename (with drive:user group) you wish to delete and press **Enter**. Or press **Enter** to end this utility.

If you don't know the filename, use DIR to print a directory listing.

If the file is found, the computer displays:

> ***filespec*** **is type 'xx' with nn total sectors.**
> **OK To Delete? (Y/N)**

Enter **Y** if it is correct to delete the file, **N** if not. Then you can delete another file or press **Enter** to return to the FIL menu.

V - View

View all of the file control block information for the specified file. The computer asks:

> **Filename (Return to End):**

Enter the filename (with drive:user group) you wish to view and press **Enter**. Or press **Enter** to end this utility.

If you don't know the filename, use DIR to print a directory listing. The computer displays the appropriate fields in the FCB for the selected file. Then you can view another file or press **Enter** to return to the FIL menu.

F - Fill

Fill a data file with a specified ASCII character. Usually you enter **0** (zero) if you wish to clear out all values in a file. Do not use this option unless directed by a Dimensions support analyst. The computer asks:

> **Filename (Return to End):**

Enter the filename (with drive:user group) you wish to fill and press **Enter**. Or press **Enter** to end this utility.

If you don't know the filename, use DIR to print a directory listing.

If the file is found, the computer displays:

> ***filespec*** **is type 'xx' with nn total sectors. It currently has nnn bytes of text.**
> **Enter ASCII Value (o-255) For Fill Character or E to End**

Enter the value with which to fill this file and press **Enter**.

To fill it with zeroes, enter **0**. The computer then displays:

> **OK To Fill with < >? (Y/N)**

Enter **Y** to fill the file or **N** to end this process without changing the file. Then you can fill another file or press **Enter** to return to the FIL menu.

R - Rename

Allows you to rename a file. You can change the user group or the filename itself. This is similar to a copy command, however the original file does not remain. The computer asks:

> **Filename (Return to End):**

Enter the filename (with drive:user group) you wish to rename and press Enter. Or press **Enter** to end this utility. If you don't know the filename, use DIR to print a directory listing.

Enter Desired Changes: (Press **Enter** to leave unchanged)

nn:nn:*filename*

The cursor is positioned on the user group portion of the filename. Enter the new user group or press **Enter** to leave unchanged. Then the cursor stops on the filename. Enter the new filename or press **Enter** to leave unchanged. If changes are made, the computer displays:

Rename completed.

If no changes are made, the computer displays:

OK Won't change anything.

Then you can rename another file or press **Enter** to return to the FIL menu.

S - Shrink — Allows you to reduce the size of a data file, down to the current highest used record level.

M - Modify — Allows you to modify the protection switches for individual files.. A switch can be set so that the ability to delete, change, or read that file is limited by the user level of the user attempting the action.

I - Initialize — Initializes a newly create type I, J or D file to make it ready for new data. This is normally handled through the regular file management procedures.

E - End — Terminates the FIL utility.

NOTES:

See *SuperDOS Utilities Guide* for more specific information.

FREE

PURPOSE: FREE lists the total sectors on a specified drive, the number of sectors available and the largest block of sectors. Use it in conjunction with the CRUNCH utility.

FORMAT: **FREE (switches) (drive number)**

Switches

These are optional commands, which can further define the FREE command:

/S Summarizes the output. This option does not display the sector information as it is calculated, but only the final totals.

/P Directs output to a system printer. Nothing will be printed on the screen. You may indicate the number of printer using the following format where "#" is "1" for system printer 1 or "2" for system printer 2:

FREE/P=# drive number

Most Dimensions systems have 1 system printer and drive number 5 so the command would be entered:

FREE/P=1 5

PROCEDURE:

1. From the SuperDOS prompt, enter **FREE**, any desired switches, and the drive number (usually 5). Then press **Enter** to begin the process.
2. If the /S switch is not used, the computer begins listing in ascending order the sector number, number of free sectors, and the maximum number of free sectors. If the /S switch is used, the computer calculates the sector information without displaying it.
3. The computer then displays the total of the calculations. For example:

```
Frespace listing as of hh:mm:ss on mm/dd/yy
Drive 5   Vol 5   Type    Sectors 635290




Total sectors                          157035
Largest free block                      67487
```

4. You are returned to the SuperDOS prompt.

NOTES:

MMI

PURPOSE: The purpose of MMI is to display and modify task information. It allows you to BYE off other ports (BY, AB, and IJ), to display the searchlist, and to display or change the system date and time. MMI actually stands for "Man-Machine Interface".

FORMAT: **MMI** or **MMI (command)**

Commands

AB ABORT one or more tasks. This command is used to abort tasks that have not been assigned to ports and to abort tasks whose terminals have locked. The aborted terminals will be returned to the password screen. Enter the command as follows where "x", "y" and "z" are the task numbers to be aborted:

AB=*x,y,z*

This command requires a user level of 6 or greater. The task numbers are listed under the TA command. Make sure you enter the task number and not the port number. NEVER ABORT TASK 2.

BY BYE off one or more tasks. If the task is running a program, all appropriate files are closed before BYEing off. The BYEed off terminals will be returned to the password screen just as if they had entered **BYE** themselves. Enter the command as follows where "x", "y", and "z" are the task numbers to BYE off:

BY=*x,y,z*

This command requires a user level of 6 or greater. The task numbers are listed under the TA command.

DA Display/set current system date. The command is used in one of the formats shown below:

DA	To display the current system date as mm/dd/yy.
DA=*mmddyy*	To set the current system date by month, day year.

EN END the interactive mode of MMI.

FO Force the listed program to run on the listed task.

FO=*task #,program*

Before using this command, make sure the task is not signed on to any other program.

HE Display the HELP list of MMI commands.

IJ Interrupt job to perform an IKEY (INTERRUPT KEY or Ctrl C) to one or more tasks. The interrupted tasks will behave exactly as if the user had pressed the IKEY Ctrl C on the keyboard. The terminal will be returned to a previous menu or to the SuperDOS prompt

depending on where the program was when IJ was executed. Enter the command as follows where "x" and "y" are the task number to be IKEYed:

IJ=*x,y*

This command requires a user level of 6 or greater. The task numbers are listed under the TA command.

SE Display the searchlist for the current signed on task. This can be temporarily changed by entering:

MMI SE=*drive:user group*

Up to six drive:user group entries can be entered at one time.

MMI SE=5:1, 6:51, 5:31, 5:30, 5:0

> ☞ **NOTE:** 5:0 must be included in every searchlist.

Shortcut method:

If you need to change only one user group in the searchlist, you can enter the following:

>XSE 5:01 6:51 5:31 5:30 5:00 0:00

Use the left and right arrow keys to position the cursor to the values you wish to change.

SH Show all information related to the current signed on task. This information is displayed upon entering the interactive mode of MMI (see Step 2).

TA List the following task information of all currently defined tasks. For example:

```
TASK ACCOUNT LEVEL PROGRAM        BASE     SIZE           PORT ACTIVE
-------------------------------------------------------------------------
 1                                05D9C6   20000 (  128K)     1   NO
 2   T5286     7  *TOKEN286      07DF86   10000 (   64K)     0   NO
 3                                08E536   10000 (   64K)     0   NO
 4   SLAN      7  *SUPERLAN      100000   20000 (  128K)     0   NO
 5                                1205C0   79000 (  484K)     2   NO
 6                                199BD8   20000 (  128K)     3   NO
 7                                1BA198   20000 (  128K)    *19  NO
 8                                1DA758   20000 (  128K)    *20  NO
 9                                1FAD18   20000 (  128K)     4   NO
 10                               21B2D8   20000 (  128K)    *21  NO
```

Task number
Account Name (as defined in password file)
Level (as defined in password file)
Program name task is running (if any)
Base
Size
Port number
Active (YES or NO)

TI Display/set current system time. The command is used in one of the formats shown below:

TI	To display the current system time as hh:mm:ss.
TI=*hhmmss*	To set the current system time by hour, minute, and second in a 24-hour format.

PROCEDURE:

1. From the SuperDOS prompt, enter **MMI** and press **Enter** to enter the interactive mode of MMI. Go to Step 2. Or enter **MMI**, the desired command(s), and press **Enter**. This will not use the interactive mode but perform the command and then automatically terminate to the SuperDOS prompt.
2. MMI displays the information related to the current signed on task. For example:

```
TIME NOW 13:19:12  mm/dd/yy   LOGON AT 13:19:00  08/24/98   TIME  ON 00:00:12

TASK  11     PORT  8     LEVEL 7    SuperLAN Node #  8

FLAGS FOR USER GROUP ACCESS
      0   1   2   3   4   5   6   7   8   9   10  11  12  13  14  15
      16  17  18  19  20  21  22  23  24  25  26  27  28  29  30  31
      32  33  34  35  36  37  38  39  40  41  42  43  44  45  46  47
      48  49  50  51  52  53  54  55  56  57  58  59  60  61  62  63

TASK OPTION FLAGS

SEARCH 5:0  SYSTEM=5:0
INFO BLK 000000-0005FF       MEMORY   000600-00FFFF

TASKS IN SYSTEM  60     TASKS SIGNED ON  6     TASKS ACTIVE NOW 1




DFAULT SEARCH SYSDRV IKEY   TERM   KIND   CRAM   DATE   Pn   IJOB   PTIME
SHOW   HELP   TIME   FORCE  TASKS  ALLOC  ABORT  END    BYE  REMOTE DELAY
=
```

3. At the bottom of the screen, the interactive mode prompt (**=**) is displayed. Enter a command from the list above.
4. After performing the command, the **=** prompt is displayed again. Another command can be performed if desired.
5. When done, enter **EN** and press **Enter**. You are returned to the SuperDOS prompt. Or enter **BY** and **Enter** you are returned to the password screen.

NOTES:

See *SuperDOS Utilities Guide* for more specific information.

OFILES

PURPOSE: This utility displays all files that are currently open. It is especially useful when you are locked out of running a program because of a file lock situation or if a program cannot be executed because there are certain files that are still open. This utility lists the tasks that are using each file.

FORMAT: **OFILES**

PROCEDURE:

1. From the SuperDOS prompt, enter **OFILES** and press **Enter**.
2. The computer displays a screen similar to the following:

```
OFILES                  List Open Files                          0mm/dd/yy
Rev 6.1.0                                                        13:24:48


                   S.D.  use
File Name          Mode  Count  Tasks with File Opened
5:0:SUPERDOS.SWP   80(H)  1
6:31:VM0.I1        00(H)  2
5:0:BASIC.COMMON   01(H)  1
6:31:VM0.D         00(H)  2
6:31:CM1.I1        00(H)  1
6:31:CM1.J1        00(H)  1
5:0:BASIC.ERR      00(H)  1
6:31:CM1.D         00(H)  1
6:31:IM1.I1        00(H)  2
6:31:BC1.I2        00(H)  1
6:31:WSM44.I1      80(H)  1
6:31:WSM44.D       80(H)  1
6:31:IM1.I2        00(H)  1
6:31:IM1.I3        00(H)  1
6:31:IM1.J1        00(H)  1
6:31:SM0.I4        00(H)  1
6:31:IM1.D         00(H)  2
Hit C-Continue, E-End (0017 files so far)
```

   To display more, enter **C** and **Enter**. To end, enter **E** and **Enter**.

3. When done listing open files, you are returned to the SuperDOS prompt.

NOTES:

PCDEL

PURPOSE: PCDEL deletes one or more files from a DOS disk or diskette while under Protected Mode SuperDOS. Wildcard characters are allowed. If wildcard characters are used, a log file is created. The log file (default name PCDLOG) summarizes the file deletion process, noting any errors that occur.

FORMAT: **PCDEL (switch) (DOSfilespec)**

Switch

This optional command can further define the PCDEL command:

/L Create a log file that contains a log of the file deletion activity. The default log file name is PDCLOG. The computer automatically creates a log file whenever you specify wildcards in the DOSfilespec on the command line. You may use the /L switch, however, to force creation of a log file, even when only one file is to be deleted. If you use the /L switch, you must provide a log file name. You may use the EDIT or TYPE utility to view the log file. Enter the switch in the format shown below:

/L=log file

DOSfilespec

Specifies a DOS file name. If the disk drive is not specified, the default drive will be C. The file specification must otherwise be a complete file name including directory name. Wildcard characters are allowed.

PROCEDURE:

1. From the SuperDOS prompt, enter **PCDEL**, the switch if desired, the DOSfilespec, and **Enter**.
2. PCDEL then deletes the specified DOS file(s). A message reporting the failure of a single file deletion is displayed on the screen if a log file has not been created.

RETURN CODES

Code	Meaning
0	No errors. PCDEL was successful.
1	Errors occurred which are described in the log file.
>0	An error occurred and it was mapped to a standard SuperDOS error number.
<1	

3 You are returned to the SuperDOS prompt after the process finishes.

NOTES:

PCDIR

PURPOSE: PCDIR displays the contents of a DOS disk or diskette directory while under Protected Mode SuperDOS. The computer displays the directory in standard DOS format.

FORMAT: **PCDIR (switch) (DOSfilespec)**

Switch

This optional command can further define the PCDIR command:

/B This switch outputs the names of the files in the directory to a batch file, one file name per line. The format of the batch file is suitable for use with PCXFER. Only files (not subdirectories) are copied to the batch file. Enter the switch in the format shown below:

/B=batch file

DOSfilespec

Specifies a DOS file name. If no file name is specified, the default is "C:\". If the DOSfilespec is a directory name, all file names in that specified directory are displayed. If the DOSfilespec is a file name, all files matching that full file name (including drive and directory name) are displayed. Wildcard characters are allowed.

PROCEDURE:

1. From the SuperDOS prompt, enter **PCDIR**, the switch if desired, and the DOSfilespec. Press **Enter**.
2. If no batch file is specified using the "/B" switch, PCDIR displays the directory on the screen. If the "/B" switch is used, the directory is written to the batch file but is not displayed on the screen.
3. You are returned to the SuperDOS prompt.

NOTES:

See *SuperDOS Utilities Guide* for more information.

PCFORMAT

PURPOSE: This command formats a blank diskette in DOS format while under Protected Mode SuperDOS. PCFORMAT will not format a fixed disk.

FORMAT: **PCFORMAT (switches)**

Switches

These optional commands can further define the PCFORMAT command:

/D This switch specifies the diskette drive to be used (drive A or drive B). If this switch is omitted, drive A is automatically selected as the default drive. Enter the switch in one of the formats shown below:

/D=A Formats drive A
/D=B Formats drive B

/L This switch is optional and specifies a label or volume name for the diskette. IF this switch is not used, the diskette will not have a label name. The specified label name will be used for every diskette formatted by the current execution of PCFORMAT. Enter the switch in the format shown below:

/L=Label Name

/S This switch specifies the formatted storage capacity of the diskette. If this switch is omitted, 360K 5 1/4" is automatically selected as the default. Enter the switch in one of the formats shown below:

/S=360 For a 5 1/4" 360K diskette
/S=720 For a 3 1/2" 720K diskette
/S=1.2 For a 5 1/4" 1.2 M diskette
/S=1.4 For a 3 1/2" 1.44 M diskette

/1 This switch is optional and specifies that the program should terminate after formatting one diskette. If this switch is not present, the computer prompts you for second and subsequent diskettes for formatting.

PROCEDURE:

1. Insert the diskette to be formatted in the diskette drive.
2. From the SuperDOS prompt, enter **PCFORMAT**, any desired switches, and press **Enter**.
3. PCFORMAT then formats the specified diskette. The computer displays a message reporting the success or failure of the operation on the screen.

NOTES:

See *SuperDOS Utilities Guide* for more information.

PCXFER

PURPOSE: This utility transfers files from SuperDOS to DOS or from DOS to SuperDOS under Protected Mode SuperDOS.

> ☞ **NOTE:** This utility requires a task size of 128K. If the destination is a floppy diskette it must already be formatted. Only one user a t a time may use PCXFER.
>
> Please be aware that on many PCs, problems can occur when a program requires a high capacity drive B to read low density diskettes, after the same program has stated the session using drive B with high density diskettes. This problem can be avoided by starting the program that uses drive B with a formatted 360K DSDD diskette in the drive.

FORMAT: **PCXFER (switches) (source filespec) (destination location)**

> ☞ **NOTE:** The /D, /R, and /T switches are allowed only when copying file(s) from DOS to SuperDOS, and only one of these can be used at a time.

Switches

These switches are optional commands, which can further define and control the transfer process.

/B Use a batch file as a source for a list of source filespecs. There can be one source filespec per line in the batch file only. The /B option replaces the source filespec on the command line. The batch file must be located in a SuperDOS user group. Enter the switch in the format shown below:

/B=batch file

/D Create a new SuperDOS file as a data file when copying from DOS.

/L Create a log file that contains a log of the file transfer activity. The default log file name is PCXLOG. The computer automatically creates a log file whenever you specify wildcards in the source filespec on the command line or when you use the /B switch. You may use the /L switch, however, to force creation of a log file even when only one file is to be transferred. If you use the /L switch, you must provide a log file name. You may use the EDIT or TYPE utility to view the log file. Enter the switch in the format shown below:

/L=log file

/N Do not transfer if the file already exists in the destination location.

/P Transfer file(s) from DOS to SuperDOS (default).

/R Create a new SuperDOS file as a relocatable (or program) file when copying from DOS.

/S Transfer file(s) from SuperDOS to DOS.

/T Create a new SuperDOS file as a text file when copying from DOS (default).

Source Filespec

This file specification identifies one or more files. Wildcard characters of "*" for multiple character matches and "?" for single character match are allowed.

If the source file is on the DOS partition of the hard drive, you must fully specify the path name, including drive, directory, and file name. If you do not specify the drive, the default is the C drive.

If the source file is on the SuperDOS partition, the drive and user group must be specified if the file does not reside in the current searchlist.

Because the parameters for file names differ between DOS and SuperDOS, you should inspect the file names prior to the transfer. DOS limits file names to 8 characters and permits a period (.) and then a three character extension. SuperDOS permits 12 character file names inclusive of what DOS considers the period and the file name extension. In SuperDOS, the filename can be any length and the "extension" can be any length as long as file name plus dot plus extension does not exceed 12 characters.

Destination Location

If the source filespec contains no wildcards and the /B switch was not specified, the destination location can be any of the following:

For SuperDOS Destination

Enter any valid file name, with or without a drive and user group. Note that the file will be placed in the default drive and user group if you do not specify a drive and user group. Separate the drive number from the user group with a colon (**:**).

For DOS Destination

Enter any valid file name, with a drive and path name, with or without a trailing backslash ("\").

If wildcards exist in the source filespec or you use the /B switch, the destination location can only specify drive and user group (for SuperDOS destination) or a directory name (for DOS destination).

PROCEDURE:

1. If you are copying to or from a diskette, place it in the diskette drive.
2. From the SuperDOS prompt, enter **PCXFER**, any desired switches, the source filespec, the destination location, and optionally, a destination filespec. Then press **Enter**.
3. PCXFER then transfers the specified file(s). The computer displays a message reporting the successful completion or failure of a single file transfer on the screen if a log file has <u>not</u> been created.

4 You are returned to the SuperDOS prompt.

NOTES:

See *SuperDOS Utilities Guide* for more information.

REBOOT

PURPOSE: The purpose of REBOOT is to reboot the computer under Protected Mode SuperDOS. This is the only means of rebooting Protected Mode SuperDOS other than turning off the power to the computer.

FORMAT: **REBOOT**

PROCEDURE:

1. Make sure all users are logged off the system before beginning this process.
2. Sign on with a user level 7 password.
3. From the SuperDOS prompt, enter **REBOOT** and press **Enter**.
4. The computer displays the following message:

```
Warning !!

This program cold-boots the machine.

Please make sure all tasks are logged off,  and that this is what you want to do.


Are you sure you want to reboot {Y/N}?
```

You have the following options:

Y REBOOT checks that all tasks are logged off. If a task is found, the computer displays the following message and REBOOT aborts:

```
Program XXXX is active in task number XX !!!!
All tasks must be logged off to run this program.
```

If no tasks are found, REBOOT continues with the process.

N The computer aborts the program without rebooting the computer. You are returned to the SuperDOS prompt.

5. If no tasks are logged on, REBOOT performs automatically and you are returned to the password screen.

NOTES:

REN

PURPOSE: REN allows you to rename a file. This is similar to the rename option in FIL but it allows you to execute it directly from a SuperDOS prompt.

FORMAT: **REN (source filespec) (destination filespec)**

PROCEDURE:

1. From the SuperDOS prompt, enter **REN**, the source filespec, the destination filespec, and press **Enter**.
2. You are returned to the SuperDOS prompt.

NOTES:

REV

PURPOSE: REV displays the current revision of SuperDOS, SuperDOS utility programs, and dimensions programs (DS0#####). Rev number are assigned to programs as they are updated or changed. The higher the rev number the more up-to-date the program.

FORMAT: **REV (filespec)**

Filespec

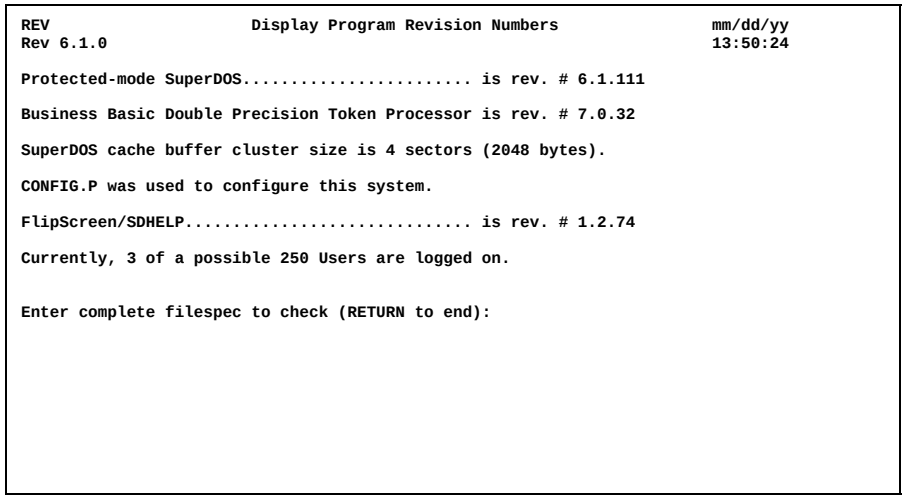
The filespec can contain up to 3 parts – the drive, the user group, and the program name. The program name can be SuperDOS, any of the SuperDOS utilities (such as COPY, FIL, MMI), or any of the Dimensions programs (DS0##### or CS0#####). For example:

5:51:DS04000
5:0:SUPER

However, since the searchlist contains the drive:user group of all programs, it is not necessary to enter the drive:user group as part of the filespec.

PROCEDURE:

1. From the SuperDOS prompt, enter **REV** and press **Enter** to enter the interactive mode of REV. Go to Step 2. Or enter **REV**, the desired filespec, and press **Enter**. This will not use the interactive mode but perform the command and then automatically terminate to the SuperDOS prompt.
2. REV displays the following screen:



Enter the filespec of the program whose revision number you wish to check. Or press **Enter** to end this utility. For example, **5:51:DS04000**.

3 The computer displays the corresponding rev number. For example

```
Enter complete filespec to check (RETURN to end): 5:51:DS04000
5:51:DS04000..... is rev. 5.1.67      runtime is 64K Bus. Basic Double

Enter complete filespec to check (RETURN to end):
```

Enter another filespec to check or press **Enter** to end this process.

4 You are returned to the SuperDOS prompt.

NOTES:

STAPE

PURPOSE: The purpose of this utility is to backup and restore files on magnetic tape from the your computer's hard disk. It can also list files on the tape and rewind (or retension) new tapes. It must be run from the system monitor. STAPE requires two tasks. The primary task must be 64K that has been configured for a terminal. The secondary task must be 64K, usually a background task that is not currently running. All other users must be signed off their terminals and be displaying the password screen.

FORMAT: **STAPE**

PROCEDURE:

1. Sign on with a user level 7 password.
2. From the SuperDOS prompt, enter **STAPE** and press **Enter**.
3. The computer displays the following menu:

```
MAIN MENU

1. Backup Files to Tape
2. Restore Files to Tape
3. Read Tape Directory
4, Verify Integrity of Backup
5. Retension Tape
6. End Tape Program

     Option:
```

Select one of the following options:

1. Backup Files to Tape — Allows you to copy files from the hard disk to a tape. You can back up individual files, groups of files, a certain user group, or the entire hard disk. The files on the hard disk remain unchanged during the backup procedure but the previously stored information on the tape will be replaced with current information, even if you are backing up a different user group. See Steps 4-9.

2. Restore Files to Tape — Allows you to copy files from a previously created tape to the hard disk. Individual files, groups of files, or the entire tape may be restored. The files on the tape remain unchanged during the restore procedure. See Steps 10-16.

3. Read Tape Directory — Allows you to display a list of files on the tape. You enter filespecs (as in backup and restore) for the files you wish to display and also indicate where you wish the list to print (terminal, printer 1, or printer 2). You will most likely print the list to the terminal so press **Enter** when the destination displays **TERMINAL**. The tape rewinds automatically and the computer displays **Rewinding...** The computer prints the list and then displays: **No more Directory Entries... Hit Esc to Continue.** Press **Esc**. You can print another list by entering another filespec or **Esc** again to return to the previous menu.

4. Verify Integrity of Backup	Allows you to check the data on the tape to verify that it is readable by the tape drive. This option begins by retensioning the tape. Then the verify begins while the computer displays: **Tape verify in progress. Please wait...** If any errors are detected, they are recorded in TAPELOG. If no errors are encountered, the computer displays **Wrapping up program. No errors...** You are returned to the previous menu.
5. Retension Tape	Allows you to retension (rewind) new tapes before they are used for backup. You should retension all new tapes before using them.
6. End Tape Program	Allows you to terminate the program. You are returned to the SuperDOS prompt.

Steps 4-9 describe the backup option.

4 Insert the tape in the tape drive now. If you selected **1** above in Step 3, the computer displays the backup screen:

```
STAPE   (F)             STAPE - SuperDOS Tape Utility                 0mm/dd/yy
Rev 6.1.27                                                            16:03:16

        BACKUP

  Filespec      Date      Type(s)           Exclude
1.
2.
3.
4.
5.

             EXCLUSIVE : OFF     PARTIAL : OFF

 ------------------------------------------------------------------------------

       Filespec        Number      Total # files



OPTIONS (B=Backup to Tape, C=Change Global Switches, E=Return to Main Menu):
```

There are 2 sections on this screen, the entry section and the display section. They are separated by a horizontal line. Use the entry section to enter filespecs on 5 separate lines and to set switches. Use the display section to display the filespecs as they are backed up.

☞ **NOTE:** If you have the tape on SAFE, the computer will display:

Write Protected Cartridge

The program will end. Remove the tape and turn the black arrow away from SAFE. "Write protected" indicates that no files can be put on the tape. Re-insert the tape and select backup again.

5 The cursor is positioned at the first filespec entry line. Enter the filespec (drive:user group:filename) you wish to back up. Press **Enter**. For example, if you wish to backup all files on user group 1 on the hard disk, enter **5:1:***. The "*" symbol is a wildcard which allows you to copy all files. Or if you wish to copy all customer files, enter **5:1:CM***. All files beginning with "CM" will be backed up. For a regular, daily backup, you will enter **5:1:***. Or press **Esc** to discontinue the backup.

6 After you enter the first filespec, press **Esc** to bypass entering DATE, TYPE, EXCLUDE, and the four remaining filespec entry lines. **Esc** terminates your input for these fields.

7 Then the computer gives you some more options at the bottom of the screen:

```
OPTIONS (B=Backup to Tape, C=Change Global Switches, E=Return to Main Menu):
```

You have the following options:

B=Backup to Tape	Continue to Step 8.
C=Change Global Switches	Allows you to determine how to handle files that cannot be opened exclusively. Normally you will not need to change this switch as all users will be signed off during your backup anyway.
R=Return to Main Menu	You are returned to Step 3 without continuing with the backup process.

8 After you select **B** above, the computer begins the actual backup. A series of messages is displayed as processing proceeds. For example:

```
Selecting files and building work files


Retensioning...
etc.
```

The computer displays the filespecs as they are backed up to the tape. The red light on the tape drive remains on during this process. Merely wait until it is completed.

9 When the backup process is complete, the computer displays:

```
Rewinding...

Wrapping Up Program.  No errors........
```

If there are no errors, you are returned to the SuperDOS prompt. If there were errors detected during backup (bad file, etc.), an entry is made in the file TAPELOG. When the backup is complete, type the TAPELOG. Use the following command from the SuperDOS prompt:

>TYPE/P TAPELOG

This will show the errors encountered during the backup. It is rare that you will experience backup errors. However, you may receive any of the following errors:

Won't back up a file because it is open

Have all users sign off and begin the backup again. If this doesn't work, sign off and turn the computer off. Let it wind down, then turn it back on. This closes all files. Then turn on the computer and begin the backup again.

Fatal tape error/hardware error

Something has malfunctioned in your tape drive or there is no tape in the tape drive. Write down the error exactly as it appears and then contact a Dimensions support analyst for further instructions.

Steps 10-16 describe the restore option.

10 Insert the tape in the tape drive. Make sure the tape is write protected (arrow points to SAFE). If you selected **2** above in Step 3 to restore files, the computer displays the restore screen:

```
STAPE   (F)             STAPE - SuperDOS Tape Utility                  0mm/dd/yy
Rev 6.1.27                                                             16:03:16

        RESTORE

  Filespec      Date      Type(s)      Drive     UG     Exclude
1.
2.
3.
4.
5.

             DELETE : OFF     USE : OFF

 ------------------------------------------------------------------------------

   Filespec        Number      Total # files         Sectors



OPTIONS (R=Restore from Tape, C=Change Global Switches, E=Return to Main Menu):
```

There are 2 sections on this screen, the entry section and the display section. They are separated by a horizontal line. Use the entry section to enter filespecs on 5 separate lines and to set switches. Use the display section to display the files as they are being restored.

11 The cursor is positioned at the first filespec entry line. Enter the filespec (drive:user group:filename) you wish to restore. Press **Enter**. For example, if you wish to restore all files from the tape to the hard disk, enter **5:*:***. Or if you wish to copy one specific file, enter the drive:user group:filename (i.e., **5:1:CM1.D**). Or press **Esc** to not continue with the restore.

12 After entering the first filespec, press **Esc** to bypass entering **DATE**, **TYPE**, **DRIVE**, **UG**, **EXCLUDE**, and the four remaining filespec entry lines. **Esc** terminates your input for these fields.

13 Then the computer gives you some more options at the bottom of the screen:

```


OPTIONS (R=Restore from Tape, C=Change Global Switches, E=Return to Main Menu):
```

Normally you need to change the global switch DELETE. Enter **C** to change global switches. The cursor moves to **DELETE : OFF**. Press the space bar one time to toggle this option to **ON** (pressing the space bar again toggles the response back to **OFF**). This global switch indicates you wish to delete existing files on the hard disk when the tape restores a file with the same name from the tape. Press **Esc** to return to the options.

The global switch USE is not changed.

14 After you change the global switch, select **R** to restore from tape and press **Enter**.

15 A series of messages is displayed as processing proceeds:

```
Selecting files and building work files


Retensioning...
etc.
```

The computer displays the filespecs as they are restored from the tape. The red light on the tape drive remains on during this process. Merely wait until it is completed.

16 When the restore process is complete, the computer displays:

```
Rewinding...

Wrapping Up Program.  No errors........
```

You are returned to the SuperDOS prompt.

NOTES:

TYPE

PURPOSE: The purpose of TYPE is to print or display the contents of a text file. It can only be printed on a system printer. To print a text file on other printers, you can use the Dimensions program Print a Text File found in System Manager, System Functions, System Utilities, SuperDOS Utilities (or DS08538 from the SuperDOS prompt). You can specify the output device (P, T, S, PORT#) and the compressed print option. If you print to the terminal, one screen is displayed at a time and your can press **Enter** to view the next screen or # to end the display.

FORMAT: **TYPE (switches) (filespec)**

Switches

These optional commands can further define the TYPE command:

/B Lists all files contained in a batch file. Enter the switch in the format shown below:

/B=*filespec*

/C This switch species the number of copies to make where "#" indicates the number of copies. Enter it in the format shown below:

/C=# **(**/C=3 will print 3 copies)

/F Specifies the number of lines per page. The default is 61 lines per page. If you wish to display a different number of lines, enter the following format where "#" is the number of lines to display per page:

/F=# (/F=25 will print 25 lines per page)

/H Suppresses page headings. Used in conjunction with the /P switch.

/M Stops the screen display after 22 line and asks for more:

More? (Enter "N" to abort)

Enter **N** to terminate the program or any other key to display the next 22 lines.

/N Suppresses form feeds. Used in conjunction with the /P switch.

/O Lists text to an output file. Enter it in the format shown below:

/O=*filespec*

/O=MYFILE puts the text in a file called **MYFILE**.

/P Directs the output to a system printer. You may indicate the number of printer using the following format where "#" is "1" system printer 1 and "2" is system printer 2:

TYPE/P=1 *filespec*

Most Dimensions systems have 1 system printer so use the following format:

TYPE/P *filespec*

Filespec

The filespec must be a text file. Common text files you may wish to print are DSTEXT, jobs used in projects, and any files created EDIT used in a word processing capacity.

PROCEDURE:

1. From the SuperDOS prompt, enter **TYPE**, any desired switches, and the filespec you wish to type. Then press **Enter** to begin.
2. TYPE displays or prints the file you have specified according to the switches.
3. You are returned to the SuperDOS prompt.

NOTES:

DS09003 (Change Port Characteristics)

PURPOSE: The purpose of this program is to change port characteristics such as baud rate, data bits, stop bits, and parity of a specified port other than the port you are currently running. This is a temporary change. When the computer is rebooted, the port returns to its original set up as found in the config file.

This program can also be found in **System Manager**, **System Functions**, **System Utilities**, **SuperDOS Utilities**.

FORMAT: **DS09003**

PROCEDURE:

1. Obtain the port number requiring a change. You can run MMI TA from the prompt to see what ports are running.
2. From the SuperDOS prompt, enter **DS09003** and press **Enter**.
3. The computer displays:

```
PORTSET                    CHANGE PORT PARAMETERS                    mm/dd/yy
                                                                     15:39:43
                                                                     PORT: 8
ENTER THE PORT # (0 TO END):
```

The cursor is positioned at **ENTER THE PORT # (0 TO END):** . Enter the desired port number and press **Enter**. Or enter **0** (zero) to end this program and return to the SuperDOS prompt.

4. Then the computer displays:

```
ENTER THE BAUD RATE:
(110,300,600,1200,2400,4800,9600,19200,38400)
```

Enter the desired baud rate for the selected port. You must make an entry. You cannot press **Esc** to go back a field. The most common baud rate is 19200.

5. Then the computer asks:

```
ENTER THE NUMBER OF DATA BITS:  (7 OR 8):
```

Enter the number of data bits to be used by the selected port. You must make an entry. The standard Dimensions port setup is 8 data bits.

6 Then the computer asks:

```
ENTER THE NUMBER OF STOP BITS:  (1 OR 2):
```

Enter the number of stop bits to be used by the selected port. You must make an entry. The standard Dimensions port setup is 1 stop bit.

7 The computer then asks:

```
ENTER THE PARITY:
(E)ven, (O)dd, (N)one, (M)ark, (S)pace
```

Enter the letter corresponding to the type of parity to be used by the selected port. You must make an entry. The standard Dimensions port setup is (N)o parity.

8 The computer makes the changes immediately and displays:

```
DONE !!

PRESS RETURN TO CONTINEU, 'E' TO END:
```

Press **Enter** to go back to Step 3 to change another port. Or enter **E** to end this program. You are returned to the SuperDOS prompt.

NOTES:

APPENDIX B. UNIX UTILITIES USED MOST OFTEN

APPENDIX B. Unix Utilities Used Most Often

- cat
- cd
- chgrp
- chmod
- chown
- cp
- cron
- df
- disable (SCO)
- enable (SCO)
- find
- kill
- ls
- man
- mkdir
- mv
- pg
- pipe
- ps
- mv
- pwd
- redirection
- rm
- rmdir
- shutdown
- shutdown
- stty
- what

cat

PURPOSE: The purpose of this utility is to display the contents of a text file. This utility simply dumps the entire contents of the file to the current standard output device without pausing or stopping until the file has been completed. If a large file is in the process of displaying and you wish to terminate it, use **Ctrl-**. This utility is very similar to the SuperDOS utility "TYPE" and the PC-DOS utility "type".

FORMAT: **cat (switches) (filename)**

Switches

With no command line switches, the file will print as a simple text file with only standard printable ASCII characters displayed. These switches are commands, which can further define and control the cat process.

-v Causes non-printable control characters to be displayed. A control character is displayed with the "^" symbol in front of the letter that corresponds to a particular character. For instance, "^M" is equal to a carriage return character.

-t Works in conjunction with the **-v** switch to cause tabs to be displayed as "^I" and form feeds to be displayed as "^L". This option is ignored if the **-v** option is not used.

PROCEDURE:

1. From the system prompt, enter **cat**, any desired switches, and the filename to be displayed. The computer displays the selected file and you are returned to the system prompt.
2. This command can also be executed with input redirected in from another file, which would contain a list of filenames to be displayed. For example:

   # cat < filename

   In this case, **filename** must be a text file containing only the list of files that you wish to display.

NOTES:

You can redirect the output from this file into other utilities through the use of the "pipe" command. It is commonly used when a batch type operation needs to be performed on lots of files. It is important to remember that this utility simple dumps the file and has no way to display one page at a time. If a long file needs to be read, it is generally better to use the "pg" command.

cd

PURPOSE: The purpose of this command is to allow a user to change from the current working directory to another directory. The move can be "up" or "down" the directory structure.

You can create a sub-directory using the "mkdir" utility or remove a sub-directory using the "rmdir" utility.

FORMAT: **cd directory**

PROCEDURE:

1 From the UNIX prompt, enter **cd**, and the new directory name to move to.

You can move through the directory structure one level at a time. For example, if you current working directory is /u/myfiles/letters and you want to move back one directory, you can do this with the following format:

cd /u/myfiles

Or you could use the following format:

cd ..

To change directories from the current working directory of /u/myfiles to /u/myfiles/letters/old, use the following format:

cd ./letters/old

Using the ./ tells the cd command to start at the current working directory and go down the directory structure as specified.

NOTES:

chgrp

PURPOSE: This utility is used to change the group affiliation of a file. It is used to maintain the Discretionary Access Control (DAC) system of file permissions in UNIX.

FORMAT: **chgrp (groupname) (filespec)**

This utility does not have any switches but it is possible to use wildcards as part of the filespec. The filespec can be one file or a group of files listed separately or grouped with a wildcard. Available wildcards are:

***** The * (asterisk) stands for any number of characters. To change all files that have start with an S, use the following format:

chgrp (groupname) S*

Or to change all files that end in .D, use this format:

chgrp (groupname) *.D

? Each ? stands for one character – no more, no less. To change all files that have 3-letter names, use this format:

chgrp (groupname) ???

Or to change all filenames that start with test and have 2 characters following, use this format:

chgrp (groupname) test??

Or you can store a list of files in a file to be used as redirected input for the utility. For example, a file called filelist was created using "ls" and all files within it are to be changed:

chgrp billw < filelist

PROCEDURE:

1 From the system prompt, enter **chgrp**, the new group's name, and the filespec. The files are changed and you are returned to the system prompt.

NOTES:

Since this utility is part of the DAC system, it is important to be aware of the security related issues. The significance of the group of the file comes from the relationship of the group and the file permissions for the group. When listing a long directory of a file, the second three permission fields are those that control file permissions for the group of the file. Any user who is not the owner of the file but is identified as belonging to the same group as the file will have those permissions for that file.

chmod

PURPOSE: This utility change file permissions. It is used to maintain the Discretionary Access Control (DAC) system. Use it set permission flags for files.

FORMAT: **chmod (permission) (filespec)**

This command can be used in two different ways depending upon the preference of the user. File permissions can be referenced as a numeric representation or as a character representation.

Using the numeric representation, you must assign a numeric value to each permission, "r"ead = 4, "w"rite = 2, and "x"ecutable = 1. The values are then totaled to get the permission level for owner, group and rest of the world (other user). For example, to change the permissions on the file *myfile* so the owner has read, write and executable permission, the group has only read and execute permission and the rest of the world has only execute permission, the command would be:

chmod 751 myfile

This would then show on a directory listing as:

-rwxr-x--x myfile

Using the character representation, the user refers to each individual permission using the same character represented in the directory listing, "r" for read permission, "w" for write permission and "x" for execute permission. Using the same file as above, in character representation, the command would be:

chmod u+rwx g+rx o+x myfile

This command does not have any switches but it is possible to use wildcards as part of the filespec. The filespec can be one file or a group of files listed separately or grouped with a wildcard. Available wildcards are:

***** The * (asterisk) stands for any number of characters. To change all files that have start with an S, use the following format:

chmod (permissions) S*

Or to change all files that end in .D, use this format:

chmod (permissions) *.D

? Each ? stands for one character – no more, no less. To change all files that have 3-letter names, use this format:

chmod (permissions) ???

Or to change all filenames that start with *test* and have 2 characters following, use this format:

chmod (permissions) test??

Or you can store a list of files in a file to be used as redirected input for the command. For example, a file called *filelist* was created using "ls" and all files within it are to be changed:

chmod (permissions) < filelist

PROCEDURE:

1 From the UNIX prompt, enter **chmod**, the permissions, and the filespec. The computer changes the permissions and you are returned to the system prompt.

NOTES:

Since this command is part of the DAC system, it is important to be aware of the security related issues. Only the current owner of the file or the superuser can change the permissions of a file. Bill cannot change a file that is currently owned by Pete to allow access by Bill. But Pete can change a file that he owns so that it becomes accessible by Bill.

chown

PURPOSE: This utility changes the owner of a file. Use it to maintain the Discretionary Access Control (DAC) system of file permissions in UNIX. Generally, a file is "owned" by the user who initially create the file. This utility is used when it is necessary to change the owner to some other user.

FORMAT: **chown (username) (filespec)**

This utility does not have any switches but it is possible to use wildcards as part of the filespec. The filespec can be one file or a group of files listed separately or grouped with a wildcard. Available wildcards are:

***** The * (asterisk) stands for any number of characters. To change all files that have start with an *S*, use the following format:

chown (username) S*

Or to change all files that end in .D, use this format:

chown (username) *.D

? Each ? stands for one character – no more, no less. To change all files that have 3-letter names, use this format:

chown (username) ???

Or to change all filenames that start with *test* and have 2 characters following, use this format:

chown (username) test??

Or you can store a list of files in a file to be used as redirected input for the utility. For example, a file called filelist was created using "ls" and all files within it are to be changed:

chown billw < filelist

PROCEDURE:

1. From the system prompt, enter **chown**, the new user's name, and the filespec. The computer changes the files and you are returned to the system prompt.

NOTES:

Since this utility is part of the DAC system, it is important to be aware of the security related issues. Only the current owner of the file or the superuser can change the owner of a file. Bill cannot change a file that is currently owned by Pete to be owned by Bill. But Pete can change a file that he owns so that it becomes owned by Bill. The significance of the owner of the file comes from the relationship of the owner and the file permissions for the owner. When listing a long directory of a file, the first three permission fields are those that control file permissions for the owner of the file.

cp

PURPOSE: This command copies files from one location to another. This command can be used with individual files or groups of files but not with directories. This command will replace an existing file with the new file and will not inform you that the file will be overwritten.

FORMAT: **cp (source filespec) (destination filespec)**

Filespec

The filespec can be one file or a group of files listed separately or grouped with a wildcard. Available wildcards are:

***** The * (asterisk) stands for any number of characters. To cp all files that start with an S to the /tmp directory, use the following format:

cp S* /tmp

Or to cp all files to /tmp that end in .D, use this format:

cp *.D /tmp

? Each ? stands for one character – no more, no less. To cp all files that have 3-letter names, use this format:

cp ??? /tmp

To copy cm1.d to cm1.save, use this format

cp cm1.d cm1.save

PROCEDURE:

1 From the UNIX prompt, enter **cp**, the source filespec, and the destination filespec. The files are copied and you are returned to the UNIX prompt.

NOTES:

cron

PURPOSE: This utility is used to run the day end process at a pre-determined time each business day. The day end reports are printed as a file to the hard drive and then printed out at a later time, usually the next day. There are 3 reasons for processing the day end this way as opposed to the standard day end:

1. **Prevention**. If a printer fails during the printing phase of a day end report, the reports are lost. "Cron" allows the reports to be printed any time before the next day end.
2. **Convenience**. You can set up "cron" once to have it run daily. You don't have to start it up daily.
3. **Speed**. The day end project runs faster because UBB is opened only twice, not for every job.

System Requirements

This procedure runs in both AIX 3.1 and SCO 5.0. The Dimensions programs must be 5.1 or higher and you must have the appropriate print to file scripts and Dimensions job files. See the Script File Descriptions and Job Lists at the end of this procedure.

Files Used in "cron"

There are 3 script files used during this process. They are located in /u/progs.

dayend
de
print_de

The job files are also located in /u/progs. The report files are located in the "live" directory.

How this Procedure is Organized

This procedure is divided into 3 sections:

Installation	Used only once to install the day end jobs and scripts and to set up "cron".
Maintenance	Used to maintain day end jobs, adding, removing, and changing the dayend report list by store. Also used to add stores and set up output to printers.
Trouble Shooting	Used to diagnose and fix problems with the procedure.

See below for detailed instructions for each section.

PROCEDURE - INSTALLATION:

1 SET UP

Log into **root**. Insert the installation diskette into the floppy drive. Turn off **Caps Lock** so everything you type will be in lower case.

2 INSTALL THE FILES

From the system prompt, enter one of the following commands (be sure to type the periods -- they are crucial for correct syntax):

AIX users: **tar -xvf/dev/fd0 /u/progs**

SCO users: **ctar -xv8 /u/progs .**

Or type: **tar -xvf/dev/rfd0ds18 /u/progs/ .**

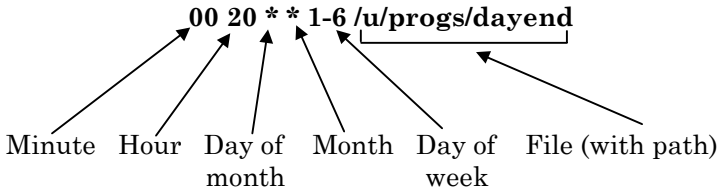
If none of these commands work properly, contact a Dimensions support analyst before continuing.

3 SET UP THE "CRON" JOB

a) From the system prompt, enter: **crontab -e**. Press **Enter**.
b) Press the down arrow to go to the bottom of the file.
c) Hold down the **Shift** key and press **a**. This should place the cursor at the end of the line.
d) Enter the next 6 parameters for the time, day, and file you want "cron" to run. Enter a number, a range of numbers, delimit multiple numbers by using a comma, or use an asterisk to select all. They are entered all on one line, separated by a space between each parameter. Enter them in the following order and format:

Minute
Hour (military time, 24-hour clock)
Day of month (1-31). * for all days of the month.
Month of year (1-12). * for all months.
Day of week (0-6, 0=Sunday)
File to run (with path)

For example:



This example will run /u/progs/dayend for all months, all days of the month, Monday through Saturday, beginning at 8:00 pm.

e) Press **Esc**.
f) Type: **:wq**. Press **Enter**. (Be sure to enter the colon, then **w** and **q**.). The job is saved and scheduled to be executed as a project in "cron".

PROCEDURE - MAINTENANCE:

> ☞ **NOTE:** You should have some basic knowledge of the UNIX editor "vi." See SECTION 4, Projects, for brief instructions on using "vi." Also, you will need to know the store numbers and default printer numbers (plain paper) for the store(s).

1 SET UP THE STORE INFORMATION

a) At the system prompt, type: **cd /u/progs** and press **Enter**.
b) Use the utility "copy_de" to add stores. For example, to create store 3, you can copy the information from store 2. NOTE: Store 1 usually has too many print jobs for a satellite store so it is not normally used to create a new store. Use the following format:

copy_de 2 3

This command copies "print2.list" to "print3.list".

c) Using "vi", edit the file "store.list" to add the new store, printer, and store name. See the following example of "store.list":

```
:
:  Store Descriptions For Print To File Dayend
:  Created 12/3/97 by Steve Dean
:
:Store#   Printer#  Store Name
:-----       -------      ----------
1             90            One
2             90            Two
3             90            Three
~
~
~
~
~
~
~
~
~
~
"store.list" 9 lines, 220 characters
```

2 MAINTAIN THE JOB LISTS

The following table shows examples of jobs that can be added to the job lists (prep.list, job.list, and wrap.list).

Job Examples

dayend.lock	df04201b	df04801	df09025	djunlock	dn09017b
df02390t	df04202	df04803c	df09115d	dn03000k	dn09028
df02390x	df04202a	df04803me	df09115s	dn03392	dn09115
df03301t	df04203	df04803p	dfctar	dn03397	dn09119
df03520	df04203m	df04803q	dftar	dn03712	dn09119c
df03531	df04204	df07010	djcpstm	dn03904	dnsh0
df03806	df04204ch	df07310	djdel	dn03907	dnsm0
df03807	df04204r	df07315aj	djlock	dn03908	dntd0
df04201a	df04207	df07315au	djprint	dn09014h	dnth0
df04201ab	df04211	df07315id	djtemp	dn09016	
df04201all	df04319	df09019	djth0	dn09017	

a) Using "vi", edit the file "prep.list" to set up the jobs you want to run. See the following example of "prep.list":

```
\:
:  Prepare System For Dayend - Job List
:
: insert a colon in front of line to remove a job
:-----------------------------------------------
:Job            Description
:------------  --------------------------------
:  djlock places lock_msg in /u/tmp
: To remove lock run djunlock in wrap.list
djlock          Lock User Access To UBB
dfbye           Kill_All
:dftar           Backup Data Files AIX
:dfctar          Backup Data Files SCO
djdel           Delete /u/live/live01/*z@*
df09115d        Print/Purge SM0 - No Header
:dnsm0           Reindex SM0
df09115s        Print/Purge SH0 - No Header
:dnsh0           Reindex SH0
df09025         File Status Report
df04201all      Sales Analysis - All Stores Ave/Mkt
:df04201ab       Sales Analysis - All Stores Ave Cost
df04202a        Daily Report - All Stores
~
"prep.list" 22 lines, 816 characters
```

Existing jobs can be added by removing the leading colon. Or they can be removed by inserting a colon at the beginning of the line (also called "commenting out"). "Prep.list" is run for all stores and the file it produces begins with a "0" (for example, 0z@9025).

b) Using "vi", edit the file "job.list" to set up the jobs you want to run. The jobs in this file are store specific. See the following example of "job.list":

```
:
:  Store Reports For Dayend - Job List
:
: insert a colon in front of line to remove a job
:-------------------------------------------------
:Job            Description
:-------------------------------------------------
:df04201b           Sales Analysis
:df04202            Daily Report
:df04203            Transaction Register
:df04204r           Transaction Dump
:df04207            GL/T2 Reconciliation
:df03806            Fab Items Sold
:df03807            Fab Components Sold
:dn04801            Transaction Dayend Update
:df04801p           Transaction Dayend Gpost
:df09019            Delete Quotes/Orders
:df04803p           Daily Sales By Item - Price Overrides
:df04803q           Daily Sales By Item - Qty < 0
:df04803me          Daily Sales By Item - Margin Exceptions
:df07310            PO & Receipt Register
:df07315au          PO & Receipt Dump
:df07010            PO & Receipt Update
"job.list" 25 lines, 936 characters
```

"Job.list" is run for each store and the files it produces have a leading store number (for example, 2z@4202 for store 2, 3z@4202 for store 3).

IMPORTANT: To test this job list, you should comment out the following lines – df04801 and df07010. These jobs perform updates for POS and Purchasing & Receiving.

c) Again using "vi", edit the file "wrap.list" to set up the jobs you want to run. See the following example of "wrap.list":

```
:
:  Wrap Up List For Dayend - Job List
:
: insert a colon in front of line to remove a job
:-------------------------------------------------
:Job                    Description
:-------------------------------------------------
dn00010190          Change System Printer to 90
dn0001051           Change VM5 To Store 1
dn03712             Spiff Activate/Deactivate
df02390t            Customer Aging
dn09119             Manage Sales History Size
dn03000k            Rebuild Keyword Index
df03531             Delete By Batch If Stock Code = D
~
~
~
~
"wrap.list" 14 lines, 477 characters
```

"Wrap.list" is run for all stores and the files it produces have a leading "0" (for example, 0z@2390t).

3 SET UP THE PRINT JOBS

a) Using "vi", edit the print lists for each store. The print list for store 1 is called "print1.list". It contains the most print jobs because it is the main store. The print lists for other stores are "print2.list", print3.list" and so on. See the following examples of "print1.list" and "print2.list":

"print1.list"

```
:
:  Print List For Dayend - Store_1
:
: insert a colon in front of line to remove a job
:-------------------------------------------------
:Job            Description
:-------------  --------------------------------
:
: Multi-Store Reports
../../tapelog    Print Tapelog( do_backup )
0z@9025          Print File Status Report
0z@4201all       Sales Analysis - All Stores Ave/Mkt
:0z@4201ab        Sales Analysis - All Stores Ave Cost
0z@4202a         Daily Report - All Stores
0z@3520          Update Change Items By Batch
0z@3531          Delete By Batch If Stock Code = D
0z@9115d         Print/Purge SM0 - No Header
0z@9115s         Print/Purge SH0 - No Header
0z@2390t         Aging - Totals Only
:
: Store Reports
:1z@4201a         Sales Analysis - Average Cost Only
1z@4201b         Sales Analysis - Ave & Mkt Cost
"print1.list" 44 lines, 1877 characters
```

"print2.list"

```
:
:  Print List For Dayend - Store_2
:
: insert a colon in front of line to remove a job
:-------------------------------------------------
:Job            Description
:-------------  --------------------------------
:
: Multi-Store Reports
../../tapelog    Print Tapelog( do_backup )
:LAST_Backup      Print Dayend Status SCO/AIX
0z@9025          Print File Status Report
0z@4201all       Sales Analysis - All Stores Ave/Mkt
:0z@4201ab        Sales Analysis - All Stores Ave Cost
:0z@4202a         Daily Report - All Stores
:0z@3520          Update Change Items By Batch
:0z@3531          Delete By Batch If Stock Code = D
:0z@9115d         Print/Purge SM0 - No Header
:0z@9115s         Print/Purge SH0 - No Header
:
: Store Reports
:2z@4201a         Sales Analysis - Average Cost Only
:2z@4201b         Sales Analysis - Ave & Mkt Cost
"print2.list" 45 lines, 1943 characters
```

Existing jobs can be added by removing the leading colon. Or they can be removed by inserting a colon at the beginning of the line (also called "commenting out"). "

b) Using "vi", edit the "de" script. Make sure the correct terminal is entered in BBTERM. See the following example of the first page of "de":

```
#       Last date modified 6/5/97
#       @(#) File name is de  Rev. 1.0.0
#
ln="****************************************"
date | read dy mn dt tm tz yr junk
live="/u/live/live01"
moend="/u/live/moend1"
progs="/u/progs"
temp="/u/tmp"
log_file="$temp/"$mn"_"$dt".log"
fil=$temp/dayend.status
tmp=0
#
#       Now we'll do a line into the status file to show we ran this
#
echo "`date` <-- Beginning script $live/de" > $fil
#
#       Here we're going to set ourselves setup as a UBB user
#
BBENV=/u/ubb/BBENV
BBTERM=/u/ubb/tdf/wyse50.tdf  #/u/ubb/wyse.tdf
BBUSER=MGR
BBSLEVEL=6
```

wyse50.tdf

PROCEDURE - TROUBLE SHOOTING:

1. File locations in the dayend scripts assume a certain location. The wyse50.tdf file is used to set up a terminal type. If the screen looks odd when the dayend in running or the script aborts with wyse50.tdf is not found, then you will need to find and change the tdf file in "de" and "print_de". To find tdf files, type: **find / -name wy*tdf -print** and press **Enter**.
2. If a job stop or errors occur during dayend, bye off the dayend. Then make changes to the job and test it from the ubb prompt. Type: **run "exec df04201**.
3. If the dayend stops, you can find out where it left off and other information in the following files:

   /u/tmp/dayend.status
   /u/tmp/print.status
   /u/tmp/tapelog
   /u/tmp/djbye.error
   /u/progs/djdayend

4. If the dayend is interrupted and the computer won't let you log in, log into root and type the following: **rm /u/tmp/lock_msg**. Then try logging in again.

File Descriptions

Script Files	**Description**
dayend	Main script executed by “cron”
de	Print to file script
print_de	Print out files script
copy_de	Copies print lists to add another store
Job Lists	
prep.list	Dayend preparation job list
job.list	Main job list (run for each store)
wrap.list	Dayend wrap-up job list
store.list	Store information list
Print Lists	
print1.list	Print list for store 1
print2.list	Print list for store 2
Status Files	
dayend.status	Completed job list for the “de” script
print.status	Completed print list for the “print_de” script
Other Files	
djdayend	Compiled dayend job made by “de”
djprint	Temporary file made by “print_de”
tapelog	Tape backup report from “do_backup”

NOTES:

df

PURPOSE: This command displays a usage synopsis of all mounted filesystems or a specified file system.

FORMAT: **df (switches) (file system)**

If you enter the command without a file system name, then all currently mounted file systems will be listed.

df

Will list all mounted file systems.

df /dev/root

Will list only the root file system.

Switches

These switches are commands, which can further define and control the df command.

-v Displays all information for the specified file system (AIX) and percentages (SCO).

-L Displays information on total K-bytes, used space, free space, percentage of used space, and the mount point for the file system. This is for AIX only and is the default view if no options are entered.

PROCEDURE:

1 From the UNIX prompt, enter **df** and any desired switches. The computer lists the file systems and you are returned to the system prompt.

NOTES:

disable

PURPOSE: This utility disables a port from logging in. Disabling a port shuts off the program "getty" so that users cannot log in to that port. It is also possible to use this utility to disable printers that are defined in the spooler.

To enable a port, see "enable". This is the SCO UNIX format. For AIX, see "pdisable".

Options

The only options available for this utility are those related to disabling a printer that has been set up in the spooler. When disabling a spooler printer, you must disable the device as it is named in the spooler.

-c	Cancels any spooler requests that are currently printing.
-W	Disables the printer when the current print requests have completed.
-r reason	Allows you to enter a reason why the printer is being disabled.

PROCEDURE:

1. From the UNIX prompt, type **disable**, any desired options, followed by the device to be disabled. For example, to disable /dev/tty10, enter the following:

   disable /dev/tty10

   If the device was already disabled, the computer displays a message and terminates the command with no further action taken.

NOTES:

When attaching a printer to a port, it is best to disable the actual device name (/dev/tty10) not the printer name in the spooler (prn10) so that a login prompt does not print on the printer each time the system is rebooted.

enable

PURPOSE: This utility makes a port ready for log on. Enabling a port forces the program "getty" to run which is responsible for placing a login prompt on the terminal screen and getting the login id and password from the user. It would be used for a port that has been disabled. (See "disable".)

There are no switches or options for this utility. This is the SCO UNIX format. For AIX, see "penable".

PROCEDURE:

1 From the UNIX prompt, type **enable** followed by the device to be enabled. For example, to enable /dev/tty10, enter one of the following:

enable /dev/tty10

enable tty10

If the device was already enabled, the computer displays a message terminates the command with no further action taken.

NOTES:

When enabling a port that has been previously disabled, you should see a new login prompt displayed on the terminal (if all communications are working properly). This is true even if the device has a printer attached to it. If you enable a printer port, the login prompt will be printed.

find

PURPOSE: This command allows you to search for a file or all occurrences of a file on a hard drive.

FORMAT: **find (starting directory) (switches) (filespec) (switches)**

This command can not be run without any switches. A basic find command must include information as to where to start searching, what to search for, and what to do with the file names that it finds.

Switches

-name This switch tells the find command to search for the file by name. The file name must follow the –name switch.

-user This switch tells the find command to search for files of a specific owner. The owner name must follow the –user switch.

-group This switch tells the find command to search for files of a specific group . The group name must follow the –group switch.

-print This switch tells the find command to print the file name once it has been found. If you run the find command and do not specify to print the filenames, then UNIX will find the files and you will never know.

PROCEDURE:

1 From the UNIX prompt, enter **find,** the starting directory name, the switch defining how to find the file name, the file name, owner name, or group name and then the action to be performed once the file has been found. The file (or files) is listed and you are returned to the system prompt.

NOTES:

To see if the file ds04000 is in the /u file system, the command is as follows:

find /u –name ds04000 –print

To see if any files that start with ds04* are in the /u file system, the command is as follows:

find /u –name ds04* -print

To find all files that are owned by ubbuser, the command is as follows:

find / -group ubbuser –print

| "Pipe" to another command. This can be used to display the listing one page at a time. For example:

find / -name ds04000 | pg

kill

PURPOSE: This utility terminates a process that is currently running on the system. It should only be used as a last resort when a terminal appears to be "hung up". You should run the "ps" utility to list the process id numbers before attempting to use the "kill" utility. Run a full listing (-f). You must know the proper process id # before beginning.

FORMAT: **kill (level) (process id #)**

Level

The default kill level (-15) forces the program that is running to attempt a normal shutdown. Enter the following:

kill (process id #)

If the process does not respond to the default kill level, use a kill level -9, which will force an unconditional and immediate termination. Enter the following format:

kill -9 (process id #)

PROCEDURE:

1. From the UNIX prompt, enter **kill**, the desired level, and process id #. The selected process is terminated and you are returned to the system prompt.

NOTES:

When running a full listing of the "ps" utility, the process id number is displayed along with the Parent Process id (PPID). Always kill the child processes before killing the parent process. Killing a parent process that still has child processes running results in an "orphan" process that then may become a "zombie" process that is stuck in the system.

ls

PURPOSE: The purpose of this utility is to display a directory listing of filenames on any hard drive storage device. It can be used in several different modes, to display a short or long description of each file, and can also be used with wildcards to allow the user to select only certain files to be displayed. This utility is similar to the SuperDOS utility "DIR" and the PC-DOS utility "dir".

FORMAT: **ls (switches) (filespec)**

Switches

These switches are commands, which can further define and control the ls process. The most common options are those that control the type of output the utility can generate. The default output of the utility with no command options included is to display filenames only, in a continuous scrolling list. Switches can be grouped together behind one "-" character.

-l Displays the long listing of each file including file permissions, owner name, group name, and file size.

-a Displays all files including files that are normally hidden. Files that begin with "." are not normally displayed.

-R Displays the contents of all sub-directories as they are encountered (recursively).

-x Displays output in columns with filenames sorted across the columns.

Filespec

The filespec can be one file or a group of files listed separately or grouped with a wildcard. Available wildcards are:

***** The * (asterisk) stands for any number of characters. To list all files that have start with an S, use the following format:

ls S*

Or to list all files that end in .D, use this format:

ls *.D

? Each ? stands for one character – no more, no less. To list all files that have 3-letter names, use this format:

ls ???

Or to list all filenames that start with test and have 2 characters following, use this format:

ls test??

PROCEDURE:

1 From the UNIX prompt, enter **ls**, any desired switches, and the filespec to be listed. The list is displayed and you are returned to the UNIX prompt.

2 This command can also be executed with output directed to another destination – another output device using the ">" character or "piped" to another valid command using the "|" character.

> Redirect to another file. For example, the following format puts the long listing into a file called *myfiles*:

ls -l > *myfiles*

| "Pipe" to another command. This can be used to print the listing to a printer. For example, the following format prints the long listing on the system printer:

ls -l | lp

NOTES:

More Examples

ls -l ds04* Displays a long listing of every file that begins with "ds04" regardless of the length of the filename.

ls -l filea? Displays a long listing of files beginning with "filea" with one additional character.

You can redirect the output from this command to a file or another output device (such as a printer) or "piped" to any other valid command. It is important to note that this utility will load all arguments or filenames into a buffer as it works so when working with large numbers of files it is possible to get the error "Argument List Too Long". In this case, you must limit the output of the utility by limiting the filespec. If you are preparing a batch file and writing the output to text file for use as redirected input to another utility, "ls" must be run without the long directory option so that the data written to the text file contains only the filename.

man

PURPOSE: The purpose of this command is to display or print pages from the on-line help manual for any UNIX command. It is useful when you can't remember the options for a command or what to type where on the command line or for more detailed information on the command.

FORMAT: **man (unixcommand) (options)**

Options

These options help present the manual pages in different formats:

| more	Shows you to manual page a screen at a time.
| lpr	Prints the manual pages on the system printer.
> filename	Redirects the manual pages to a text file. For example, to make a text file called lsmanual containing all the information about ls, use the following format: **man ls > lsmanual**

PROCEDURE:

1. From the UNIX prompt, enter **man**, the UNIX command you wish to see, and any options. Press **Enter**. The computer prints or displays the manual and you are returned to the system prompt.

NOTES:

mkdir

PURPOSE: This utility creates a new directory. Directories divide your disk into manageable chunks. UNIX directories are often referred to as a tree structure. Naming directories in a logical manner helps you organize files on your system.

FORMAT: **mkdir (directory name)**

PROCEDURE:

1. From the UNIX prompt, type **pwd** and press **Enter**. This tells you the present working directory name. If you are in the directory where you wish to make a new sub-directory, continue to Step 2. If not, change to the proper directory (cd).
2. To make a new directory, type **mkdir** and the new directory name and press **Enter**. You are returned to the system prompt.

NOTES:

mv

PURPOSE: This utility moves files without making a new copy, either from one name to another or from one directory to another. In essence, it changes the name of the file or the absolute pathname of the file but does not change the file's actual location on the hard disk.

FORMAT: **mv (switch) (source filename) (destination filename)**

Switch

There is only one switch available for this utility.

-f Suppresses any prompts that would normally be sent if a filename already exists at the destination.

PROCEDURE:

1 From the system prompt, enter **mv**, the switch if desired, the source filename, and the destination filename. The computer moves the file and you are returned to the system prompt. This moves the file within the current working directory. If a move is taking place from one directory to another, it is preferable to include the full absolute pathnames.

NOTES:

In some cases, using this utility can be somewhat hazardous. Occasionally a file collision may occur. In other words, if an attempt is made to move a file to a directory where a file already exists with the same name, it is possible that the original file may be lost as a result of the collision. Generally it is safer to cp the file to where it needs to go and then delete the original file.

pg

PURPOSE: This utility allows you to display a text file with user controls. It allows you to control the flow of information to a terminal screen. It displays the text file one screen page at a time, allowing you to scroll through file forward or backward one page at a time. This utility can be used as a direct command to view the contents of a text file or as a "pipe" destination, allowing the output from any other command to be displayed one screen at a time. This utility is similar to the SuperDOS utility "TYPE/M" and the PC-DOS utility "more".

It is not used to redirect output to any other device besides a terminal screen.

FORMAT: **pg (filename)**

PROCEDURE:

1. From the system prompt, enter **pg**, and the filename to be displayed.
2. The system displays one screen of information and then stop at a "**:**" symbol There are additional commands that can be used at this point:

Enter	Displays the next screen.
-	Dash (-) displays the previous screen.
q	Stops output to the screen and terminates the process. You are returned to the system prompt. If pg is being used as a "pipe" from another utility, the other utility is also terminated.

NOTES:

You can use this utility as a "pipe" destination for any other command. For example, you can use a utility such as "ls" to print a listing "piped" through the "pg" utility so that it is displayed one screen at a time. Enter the following format:

ls -l ds0* | pg

This example runs the "ls" utility with its switch to display the long version of each file, using "ds0*" as the filespec. The computer displays the output of this command through the "pg" utility one screen at a time.

pipe

PURPOSE: It can be useful to redirect the output of one program so that it becomes the input of another program. This process is called “piping”. The symbol for a pipe is a vertical bar (|). It is usually found on the same key as the back slash (\). If you type two commands separated by a |, you tell UNIX to use the output of the first command as input for the second command.

You can use the pipe command with the following utilities, among others:

cat
find
ls
pg
rm

See these utilities for examples on how to use the “pipe” command.

NOTES:

ps

PURPOSE: This command displays information on the processes (jobs) that are currently running on the system. This is used to find the process id of a port terminal that is "hung up" so it can be killed.

FORMAT: **ps (switches)**

Switches

-e This switch returns information on every process that is currently running.

-f This switch returns a full listing of all processes.

-n This will cause the listing to display only those processes associated with the specified user. The user name must follow the switch.

-t This causes the listing to display only those processes associated with the specified terminal. The terminal device name must follow the switch.

PROCEDURE:

1. From the UNIX prompt, enter **ps** and any switches.
2. The system displays the information requested based upon the switches used and returns to the UNIX prompt. If you entered no switches, then the computer displays processes associated with the current login only.

NOTES:

pwd

PURPOSE: This command allows you to display the present working directory name.

FORMAT: **pwd**

PROCEDURE:

1. From the UNIX prompt, enter **pwd**.
2. The system displays the absolute pathname of the current working directory

NOTES:

redirection

PURPOSE: When you use a UNIX command like ls, the result (or output) of the command is displayed on the screen. This is the standard place for the output of most UNIX commands. Likewise, there is a standard source of input – typing on the keyboard. You can change these standards by redirecting the input or output of a command or program by any of these sources:

A file. For example, you can store the output of ls (a directory listing) in a file rather than display it on the screen.

A printer. This is useful only for output.

Another program or command. You can take the output of one command and use it as the input for another command. This uses the pipe command. See "pipe".

Use the characters **<** and **>** for redirecting input and output. To redirect the output of a command, use **>**. Think of it as an arrow pointing to a particular destination.

You can use the redirection command with the following utilities, among others:

cat
chgrp
chmod
chown
ls
man
rm

See these utilities for examples on how to use the "redirection" command.

NOTES:

rm

PURPOSE: The purpose of this command is to delete or remove a file from a hard drive storage device. It can be used in several different modes to display a short or long description of each file. It can also be used with wildcards to allow you to select only certain files to be displayed. This command is similar to the SuperDOS command "DEL" and the PC-DOS command "del".

FORMAT: **rm (switches) (filespec)**

Switches

These switches are commands, which can further define and control the rm command.

-i Prompts you for confirmation of each file deletion that is about to take place.

-r Removes or deletes all files recursively through the directory structure beneath the starting point. For example, using this switch from the / directory will cause all files that match the filespec to be deleted not only in the / directory, but all sub directories under /. Exercise care when using this option.

Filespec

The filespec can be one file or a group of files removed separately or grouped with a wildcard. Available wildcards are:

***** The * (asterisk) stands for any number of characters. To remove all your files that start with an S, use the following format:

rm S*

Or to remove all files that end in .D, use this format:

rm *.D

? Each ? stands for one character – no more, no less. To remove all files that have 3-letter names, use this format:

rm ???

Or to remove all filenames that start with test and have 2 characters following, use this format:

rm test??

PROCEDURE:

1 From the UNIX prompt, enter **rm**, any desired switches, and the filespec to be listed. The computer removes (or deletes) the files and you are returned to the system prompt.

2 You can also execute this command with output directed to another destination – another output device using the ">" character or "piped" to another valid command using the "|" character.

> Redirect to another file. For example, the following format puts the file names removed into a file called *myfiles*:

rm *.tmp > *myfiles*

< Redirect from another file. For example, the following format reads the file *myfiles* to get the list of files to be removed:

rm < *myfiles*

| "Pipe" to another command. This can be used to print a listing of the files being removed. For example:

rm *.tmp | lp

NOTES:

rmdir

PURPOSE: This utility removes or deletes a directory. It also removes all files in the directory so be sure to move any file you wish to keep to another directory before doing this procedure.

FORMAT: **rmdir (directory name)**

PROCEDURE:

1. From the UNIX prompt, type **pwd** and press **Enter**. This tells you the present working directory name. UNIX doesn't allow you to remove the current working directory. If you are in a directory other than the one you wish to delete, continue to Step 2. If not, change to the proper directory (cd).
2. To remove a directory, type **rmdir** and the directory name and press **Enter**. You are returned to the system prompt.

NOTES:

shutdown

PURPOSE: Since UNIX constantly maintains a large amount of system information in RAM memory at all times, it must have a change to flush this information to disk prior to shutting the system down. This utility performs an orderly safe shutdown of the operating system to insure the integrity of this information.

Options

It is possible to run this utility to bring the system to various "run levels" without performing a full shutdown of the system. Or the system can be brought to a full stop. It is also possible to set the shutdown to happen at a future time, allowing users some time to finish their work and sign off normally before the system is halted.

-g time_in_mintues	This is the SCO UNIX format.
-y	This option bypasses the "Okay to proceed" prompt. This is an SCO UNIX format only.
+ time_in_minutes	This is the AIX UNIX format.

PROCEDURE:

1. From the UNIX prompt, enter **shutdown** followed by any options. Then press **Enter**.

   SCO UNIX - If you enter the command without any options, shutdown assumes a 1 minute delay before the beginning and asks the user if it should proceed.

   AIX UNIX - If you enter the command without any options, shutdown assumes a 1 minute delay before beginning but does not ask the user if it should proceed.

2. Before shutdown begins to prepare for a reboot, it broadcasts a message to all users warning them of the impending shutdown. If the command was entered with a delay, shutdown will re-broadcast the warnings at regular intervals, with the intervals becoming more frequent as the deadline gets closer.

NOTES:

It is extremely important that this utility be run each time a system is going to be shut down. If it is not run, it will be necessary to "clean" all filesystems that were mounted when the system was improperly shut off when the system comes back up.

stty

PURPOSE: The purpose of this utility is to view and/or change the current serial communication parameters for any serial device. It is used to adjust baud rates, data bits, handshaking protocols, and so forth.

FORMAT: **stty (options) (device name)**

Options

These are a few of the most basic options available for stty:

baudrate	Selects the appropriate baud rate for the port.
cs7 / cs8	Selects the character size (data bits) to either 7 or 8 characters.
-a	Output the entire configuration for the device.
ctsflow / -ctsflow	Either enables or disable CTS protocol.

PROCEDURE:

1. The first function of this utility is to report the current settings for any given port. In order to see how the device /dev/tty10 is currently configured, use the following format:

   stty -a < /dev/tty10

2. The second function is to change or reset the configuration for a device. For example, the following format will set the device /dev/tty10 to 19200 bps and force it to begin using CTS flow control:

   stty 19200 ctsflow > /dev/tty10

NOTES:

You can use this utility to change a port "on the fly" but it is often easier to edit the file /etc/inittab to put the correct entry on that device for the proper configuration. After this file has been changed, disable the port then enable it to force it to use the new inittab file. This will cause a permanent change to the port setting.

what

PURPOSE: This command displays the revision of a Dimensions program file.

FORMAT: **what (path) (filespec)**

If you are using the command from the directory where the program files resides (/u/progs), then the path is not required and the format would be:

what ds04000

If you are not in the /u/progs directory, then the command would be:

what /u/progs/ds04000

There are no switches to use with this command.

PROCEDURE:

1. From the UNIX prompt, enter **what**, the path if needed, and the filename. The computer lists the revision of the program (and any include files) and you are returned to the system prompt. If there is no revision set within the program, then you are immediately returned to the system prompt without any revision displayed.

NOTES:

APPENDIX C. KEY VALUES

APPENDIX C. Key Values

These are some key values that are either calculated for reports or set up in data files. They are arranged alphabetically.

Available for Sale — Units for an item available for sale. **Net to sell + on order**

Average Cost — **Dollar value / units on hand**

Average Cost Dollars — **Units x average cost**

Average Dollar Value of Inventory — Average dollar value is used in turnover and GMROI calculations. The more accurate the average dollar value, the more accurate the turnover and GMROI.

Average Margin Dollars — **Sales dollars - average cost dollars**

Average Margin Percent — **Average cost dollars / sales dollars x 100**

Average Monthly Usage — The average monthly usage (sales) of a selected item from the 13-Month History File (units month 1 + units month 2, etc. going up to units month 13 / 13). If **MONTHS ON SYSTEM** is less than 13, the computer uses that number to determine an accurate average usage so far.

Business Conditions — This is a factor used in calculating the Projected Monthly Usage. The business conditions factor is a means of adjusting the average units sold (IM3.D, 13-Month History File) to reflect current business conditions. If you believe business will be 10% better than last year, then the business conditions factor would be set at 1.10. If business will be down 10%, then the business conditions factor would be set at .90. The system defaults to 1.00.

Dollar Value — Dollar value of inventory at cost. For perpetual items this would be the average cost x units on hand. For non-perpetual items, this would be the dollar value accumulation.

Dollars Open to Buy — The dollar value of the units open to buy are computed as follows:

Units open to buy x Average cost

Economic Order — The economic order quantity determined by the purchasing agent and entered manually. This can be compared to the computer-generated suggested order to determine the best quantity to order.

Excess inventory — Based on the projected turnover rate year-to-date. The amount of excess inventory is computed based on the following formula:

$$\frac{\text{Dollar value - (Average cost YTD x 12/Months so far this year)}}{\text{Turnover Goal}}$$

GMROI

Gross Margin Return on Inventory. Gross margin, inventory investment, and rate of turnover combine to determine product profitability.

Turnover rate x Markup %

A product with a high turnover rate with a low markup % can be as profitable as a product with a low turnover rate and a high markup %.

EXAMPLE 1.

Turnover Rate	=	5 times per year
Markup %	=	30%
GMROI	=	5 x 30 = **150**

EXAMPLE 2.

Turnover Rate	=	10 times per year
Markup %	=	15%
GMROI	=	10 x 15 = **150**

Lead Time

The total time that elapses from the time purchasing realizes an order must be placed until the item arrives and the receiving has been done on the computer. Lead time is stated as percentage of a month.

1.00	=	one month
.50	=	approx. two weeks

Market Cost

Value set manually. Can be last cost, list/base, true market, etc.

Market Cost Dollars

Units x Market cost

Market Margin Dollars

Sales dollars - Market cost dollars

Market Margin Percent

Market cost dollars / Sales dollars x 100

Maximum

An estimate of the maximum stock keeping level based on the following formula:

Projected monthly usage + (Lead time x Projected monthly usage)

This is used to determine such things as suggested order and open to buy figures.

Minimum

An estimate of a minimum stock keeping level based on the following formula:

Projected monthly usage x Lead time x Safety factor

Also referred to as the order point. This is used to determine such things as suggested order and open to buy figures. When the stock level falls below minimum, you should order.

Net to Sell

Quantity available to sell - On hand - On reserve

On Hand

Quantity of an item that is physically on hand.

On Order

Accumulated quantity of an item that has been placed on order using the P.O. system and not yet received.

On Reserve

Accumulated quantity of an item that has been entered as a customer order using POS and not yet invoiced.

Projected Monthly Usage

Value in units computed from the following formula:

Ave Monthly Usage x Business Conditions x Seasonality

Safety Factor

The percentage which is used to calculate the amount of extra stock you want to maintain as a safety cushion in order to avoid costly stockouts – especially on key products. This value is expressed as a percentage of a month:

1.00 = one month
.50 = approx. two weeks

Recommended to be .50

Sales Dollars

Units sold x Price

Sales to Inventory Ratio (S/I)

$$\frac{\text{Sales}}{\text{Average dollar value}} \times 12$$ (if monthly; or 12 / months so far)

Seasonality

Economic value which considers high or low demand depending on the time of year.

Suggested Order

The quantity needed to bring the current available units to sell to the maximum level using the following formula:

Maximum - Available for sale

Turnover

$$\frac{\text{Cost (average)}}{\text{Average dollar value}} \times 12$$ (if monthly; or 12 / months so far)

Turnover Rate

Annualized inventory turnover rate:

$$\frac{\text{Inventory Cost of Sales}}{\text{Average Inventory Value}}$$

Units Open

The units of inventory open to buy based on the following formula:

Maximum - On order - Net to Sell

Units Sold

Units of inventory sold for the period.

APPENDIX D. SuperDOS PASSWORDS

APPENDIX D. SuperDOS Passwords

- Password List
- PASSWORDFM
- MG500
- Print a Password List
- Expand Password File

Password List

LIVE COMPANY #1 (user group 1)

PASSWORD	ACCOUNT / SIGNON NAME	USER NAME	USER LEVEL	SEARCH LIST	PRIORITY	MENU	FUNCTION
ROCK	INSTAL	INITIAL INSTALL	6	5:1, 5:51, 5:0	999	DM00010	Installation
PLANE	ISTSIC	INITIAL INSTALL	6	5:1, 5:51, 5:0	800	DM00010	Installation-2nd level
MARS	MGR1	MANAGER	6	5:1, 5:51, 5:0	999	DM00000	System Manager
SNOW	SIC	SECOND	6	5:1, 5:51, 5:0	800	DM00000	System Manager-2nd level
FLY	INVCON	INV. CNTRL	5	5:1, 5:51, 5:0	700	DM00000	Operations
DRINK	CNTR	COUNTER	3	5:1, 5:51, 5:0	300	DM10000	Transaction Entry
MOEND	ME	MONTH END FILES	6	5:31, 5:51, 5:1, 5:0	999	DM18900	Month End-System Manager

PLAY COMPANY (user group 54)

PASSWORD	ACCOUNT / SIGNON NAME	USER NAME	USER LEVEL	SEARCH LIST	PRIORITY	MENU	FUNCTION
XROCK	INSTAL	INITIAL INSTALL	6	5:54, 5:51, 5:0	999	DM00010	Installation
XPLANE	ISTSIC	INITIAL INSTALL	6	5:54, 5:51, 5:0	800	DM00010	Installation-2nd level
XMARS	MGR1	MANAGER	6	5:54, 5:51, 5:0	999	DM00000	System Manager
XSNOW	SIC	SECOND	6	5:54, 5:51, 5:0	800	DM00000	System Manager-2nd level
XFLY	INVCON	INV. CNTRL	5	5:54, 5:51, 5:0	700	DM00000	Operations
XDRINK	CNTR	COUNTER	3	5:54, 5:51, 5:0	300	DM10000	Transaction Entry

SYSTEM MANAGER - USER LEVEL 7

Use for release installation, password changes, booting up, operating system functions, and other system manager tasks. Use extreme caution whenever logged into this password.

PASSWORD	ACCOUNT / SIGNON NAME	USER NAME	USER LEVEL	SEARCH LIST	PRIORITY	MENU	FUNCTION
BEGIN	BEGIN	BEGIN	7	5:0	999	GEN1	Operating system access

OPERATING SYSTEM

NEVER use these passwords unless directed by a Dimensions support analyst. Never change or delete them.

PASSWORD	ACCOUNT / SIGNON NAME	USER NAME	USER LEVEL	SEARCH LIST	MENU	INITIAL PROGRAM COMMAND LINE
/DLOAD	FEPOS		7	5:0	GEN1	
/FAX	FAX	FAX	6	5:1, 5:51, 5:0		FAX1
/FLIP	FLIPSC	FLIP SCREEN	7	5:0		FLIPSCRN
/LDRAM	LODRAM	LOAD RAM DISK	7	5:0		EXEC LOAD.RAMDISK
/LOGON	LOGON	MODEM LOGON	6	5:0		LOGON/M
/T1286	/T1286		7	1:0		------
/T5286	/T5286	TOKEN286	7	5:0		------
/REL	INSTAL	DIMENSIONS	7	5:0, 5:51	DM00010	INSTALL

PASSWORDFM – How to Create a New Password

1 Log on to the user level 7 password.

2 At the SuperDOS prompt (**>**), enter **PASSWORDFM** and press **Enter**. The computer displays the following screen:

```
PASSWORDFM                  Maintain PASSWORD File                  mm/dd/yy
Rev 6.1                     5:0:PASSWORD   Rec#                     9:34:52

Password..:                   ----------  USER GROUP ACCESS FLAGS  ----------
Account...:                    1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16
User Name.:
User Level:                   17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
Minutes Signed On:
Last Date........:            33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48

---- OPTION FLAGS ----        49 50 51 52 53 54 55 56 57 58 59 60 61 62 63
1  2  3  4  5  6  7  8

9 10 11 12 13 14 15 16        Searchlist:   :     :     :     :     :     :

Initial Program
Command Line:

--------------------   SPOOLER FIELDS  ----------------------
Printer#.:     # Copies...:     Auto Print?:   Trailer?...:
Form Type:     Page Length:     Alignment? :
Priority.:     Retention?.:     Banner?....:

Action (Add, Find, Change, Next, Prev, Delete, Sort,  End):
```

Enter **A** for Add and press **Enter**. Enter the first character of any maintenance option only.

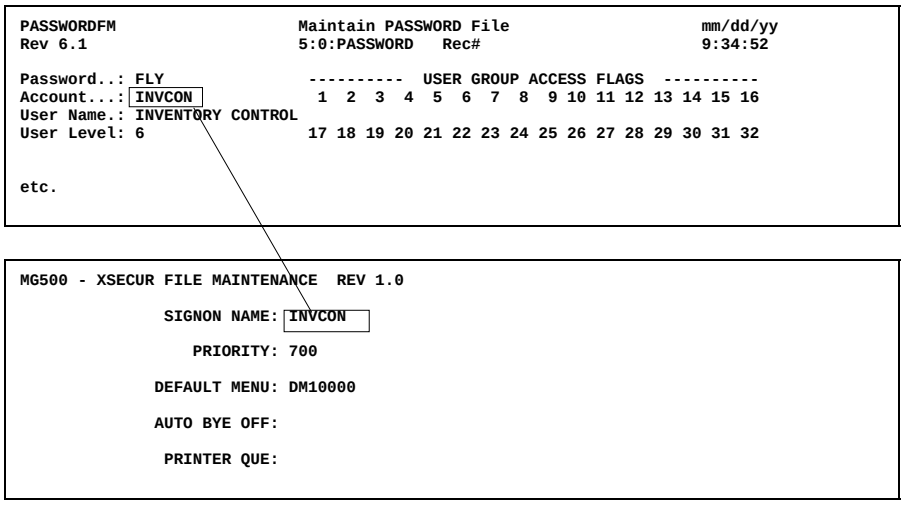
3 The cursor moves to the top of the screen at **Password:**. Enter up to 6 alpha-numeric characters (no spaces) for this new password and press **Enter**. This is what you will type at the password screen.

> ☞ **NOTE:** If the first character is "/", the system does not allow the user signed on with that password to gain access to the SuperDOS prompt.

> ☞ **NOTE:** Cursor movement on this screen includes the arrow keys and the **Enter** key. Pressing **Enter** does not erase the field as it does in the Dimensions programs.

4 **Account:**

Enter a different word not related to the password, up to 6 characters. It could be a descriptive word or name or initials of the person or department using that password. This is what shows up when doing an MMI TA. It is recommended that the account name be different from the password. The ACCOUNT in PASSWORDFM is the same as the SIGNON NAME in the SIGNON (XMENU) record in the menu generator (MG500). See the illustration below.



5 **User Name:**

Enter a user name that defines the function of this password up to 15 characters, like **POS** for Point of Sale. This field is not used by the system nor is it displayed at any time other than here in password maintenance and on the password report.

6 **User Level:**

This field determines the relative level of the user signed on to this password. The highest level is 7 which should only be used for actual system passwords and the password used to maintain the password file. Dimensions software contains some security features tied to the user level. They are:

a. Level 6 — Can change customer's credit data and can see costs at POS. This should be the user level of the system manager's password.

b. Levels 4 & 5 — Can see costs at POS but cannot change customer's credit data.

c. Less than level 4 — Cannot see costs at POS and cannot change customer's credit data. The lowest level should be 3.

7 **Allow access to ALL user groups? (Y/N):**

Y Allows availability to all user groups (0-64) from this password. This option automatically enters an "X" under each user group number in **USER GROUP ACCESS FLAGS**.

N Allows you to mark the user groups you want this password to access. The cursor moves to the **USER GROUP ACCESS FLAGS** area under number 1. Type an "X" under the desired user group numbers. Use the arrow keys to move around. For most installations, enter an "X" under **1** (data files), **51** (Dimensions programs and jobs), and **31** (month end files).

If the password does not have an access flag in a specific user group, the user will not be able to see any files in that user group with a directory listing nor will they be able to access files in that user group in any way.

> ☞ **NOTE:** To take out an "X", use the arrow keys to position the cursor on the one you wish to delete and press the **Space Bar**.

8 **Searchlist:**

Use this field to define the search "path" the system to use when searching for a file. Duplicate the information entered under **USER GROUP ACCESS FLAGS**. Enter **5** and press **Enter**. Then enter **1** and press **Enter**. The entry looks like this: **5:1**

The **5** on the left side of the colon signifies the hard disk drive. The **1** on the right side of the colon signifies the user group. Continue entering the other user groups indicated by X's as well as the operating system (5:0) so you end up with a configuration like this in the searchlist: **5:1 5:51 5:0 0:0 0:0**

> ☞ **NOTE:** Do not include 5:31 in the searchlist. An 'X' under USER GROUP ACCESS FLAGS allows the month end files to be copied to 5:31 during month end processing. To gain access later to the month end data, you would need to sign on with the month end password.

9 **Set ALL Option Flags to Off? (Y/N):**

Enter **Y** and press **Enter**.

10 **Initial Program Command Line:** _____

If you wish this password to go to a menu immediately after signing in with it, enter **MG200** and press **Enter**. If you wish it to go to the SuperDOS prompt, leave blank.

11 The cursor moves to the **SPOOLER FIELDS** area at **Printer#**. Press the down arrow through all these fields to take the default set ups. It is usually not necessary to change these entries.

12 The computer displays **Record Added**. The computer adds the new password and you may view it (enter **V** at the **Action** line). You can also view other passwords, and change or delete existing passwords.

> ☞ **CAUTION**: DO NOT DELETE THE SYSTEM MANAGER AND OPERATING SYSTEM PASSWORDS AS SHOWN ON THE PASSWORD LIST!

13 After you add a new password containing MG200 in the **Initial Program Command Line**, you must log the password to a menu using MG500. See the next part.

NOTES:

MG500 - How to Assign a Menu to a Password

1. Using PASSWORDFM, build a password with **MG200** in the **Initial Program Command Line**.
2. Sign on to the password just created.
3. The computer displays:

```
SIGNON RECORD NOT FOUND - CR TO ACKNOWLEDGE
```

   Press **Enter**.

4. At the SuperDOS prompt (>), enter **MG500** and press **Enter**.
5. The computer displays:

```
MG500 - XSECUR FILE MAINTENANCE  REV 1.0
               SIGNON NAME:
                  PRIORITY:
              DEFAULT MENU:
              AUTO BYE OFF:
               PRINTER QUE:
```

   At **SIGNON NAME**, enter the account (not password) just created in PASSWORDFM.

6. The computer asks:

```
THIS SIGNON RECORD DOES NOT EXIST – DO YOU WISH TO CREATE IT?
```

   Enter **Y** and press **Enter**.

7. **PRIORITY:**

   Enter **100** and press **Enter**. This is the standard. If you require more sophisticated security for passwords, refer to your SuperDOS user manual.

8. **DEFAULT MENU:**

   Enter the desired menu number. See SECTION 2 (System Functions), Menu Maintenance.

9. **AUTO BYE OFF:**

   Press **Enter**.

10. **PRINTER QUE:**

    Press **Enter**.

11. The cursor moves to **FUNCTION (C,D,E,?)**. If you would like this password to Auto Bye Off, enter **C** for Change.
12. Press **Enter** at **PRIORITY** and **DEFAULT MENU** (this does not erase your entries).

13 **AUTO BYE OFF:**

Enter **Y** and press **Enter**.

14 Press **Enter** at **PRINTER QUE**.

15 At **FUNCTION**, enter **E** and press **Enter**.

16 At **SIGNON NAME**, enter **E** and press **Enter**. You are returned to the SuperDOS prompt.

NOTES:

Print a Password List

1. Log on to any password with a user level 6.
2. At the SuperDOS prompt (**>**), enter **DS09006** and press **Enter**.
3. The computer displays the Print Passwords/Accounts screen:

```
DS09006     Print Passwords/Accts      DIM10 DATA                Date mm/dd/yy
Rev8.0.0                                                         Port  42
                                                                 Store 01

    1. Input Parameters

          Print 1) Password Order (Password File)      1
                2) Account  Order (Password File)
                3) Account  Order (XSecur   File)
          Number of Copies                            1
          Report Date                              mmddyy









<Ent>=Print Report    (E)=End    (1)=Input Parameters
```

Press **Enter** to begin the standard print routine. Or enter **1** and **Enter** to change the input parameters. This report includes a list of all passwords and their corresponding MG500 information:

FIELD ON REPORT	FIELD FROM PASSWORD SETUP	COMMENTS
PSWORD	Password	From PASSWORDFM
ACCT	Account	From PASSWORDFM (same as SIGNON NAME in XSECUR)
PRI	Priority	From XSECUR
MENU	Default Menu	From XSECUR
ABO	Auto Bye Off	From XSECUR
PRINT Q	Printer Que	From XSECUR
LVL	User Level	From PASSWORDFM
SEARCH LIST	Search List	From PASSWORDFM

4. After you print the report, you are returned to the SuperDOS prompt.

NOTES:

Expand Password File

1. Insert the SYSTEM FILES diskette into the diskette drive.
2. Sign on with a user level 7 password. At the SuperDOS prompt, enter:
3. At the SuperDOS prompt, enter **EXEC SAVE.ALL** and press Enter. This backs up the password file, config file, and flipscreen information prior to making any changes.
4. At the prompt, enter **FIL** and press **Enter**.
5. Select option **V** to view. At **Filename**, enter **5:0:PASSWORD**. Write down the following information:

   MAX REC IN FILE _____
   REC LENGTH _____
6. Press **Enter** to go back to the FIL menu.
7. Select option **C** to create a new file. Make the following entries to create the file:

   Filename: 5:1:PASSWORD
   File Type: D
   Rec Length: (same as record length in Step 3 above)
   Max # Recs: (2 times the Max Rec in File in Step 3 above)

   Press **Enter** to go back to the FIL menu.
8. Select option **F** to fill the file. Make the following entries to accomplish this:

   Filename: 5:1:PASSWORD
   ASCII Value: 0 (zero)
   OK: Y
9. Press **Enter** to go back to the FIL menu.
10. Then select **E** to end the FIL utility.
11. Copy the password file from 5:0 to 5:1. To do this, enter the following from the SuperDOS prompt: **COPY/U 5:1 5:0:PASSWORD**
12. From the SuperDOS prompt, enter **F.RENAME**. Rename 5:0:PASSWORD to an unused user group. Make the following entries:

    Filename: 5:0:PASSWORD
    Enter Desired Changes (Return to leave unchanged)...
    5:00:PASSWORD

    The cursor is positioned on the first character of the user group. Enter another user group that has no current data in it (i.e., 10). Do not change the filename (PASSWORD). Merely press **Enter**.
13. While still in the rename utility, rename 5:1:PASSWORD to 5:0:PASSWORD using the same method as in Step 11.

NOTES:

APPENDIX E. SET UP A USER - UNIX

- AIX
- SCO

APPENDIX E: Set Up a User - Unix

Depending on which kind of UNIX you are using – AIX or SCO, the following procedures describe how to set up a new user.

SET UP A NEW USER - AIX

When developing a security scheme for any UNIX/AIX system, the system administrator must assess the corporate security concerns and guidelines and respond appropriately to determine the methods used to establish access accounts for system users. For the sake of documentation clarity, it is assumed that the system be established using separate login accounts for each individual user and that the login id be generated using the user's first name combined with the first letter of the last name. Further, the example shows setting up the initial login password the same as the login id.

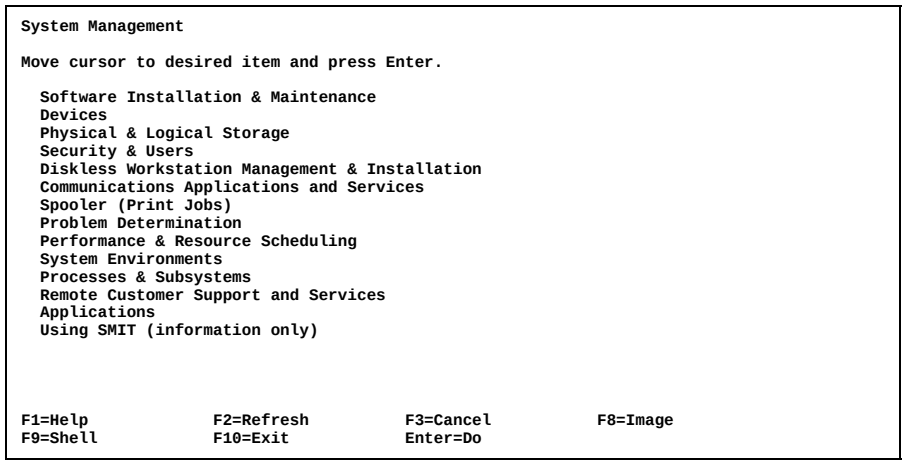
Steps 1-10 – Create a User

1 Sign on as the "root" user. This gains access to the super user functions.

2 From the system prompt (**#**), enter the following command and press **Enter**:

smit

3 The computer displays the following screen:



Using the down arrow key, move to **Security & Users**. Then press **Enter**.

4 Then the computer displays:

```
Security & Users

Move cursor to desired item and press Enter.

  Users
  Groups
  Passwords









F1=Help             F2=Refresh          F3=Cancel           F8=Image
F9=Shell            F10=Exit            Enter=Do
```

The computer highlights the **Users** option. Press **Enter**.

5 The computer displays the Users screen:

```
Users

Move cursor to desired item and press Enter.

          List All Users
          Add a User
          Change / Show Characteristics of a User
          Change / Show Initial Interface
          Remove a User









F1=Help     F2=Refresh       F3=Cancel        F8=Image
F9=Shell    F10=Exit         Enter=Do
```

Using the down arrow, select **Add a User**. Then press **Enter**.

6 The computer displays:

```
Create User

Type or select values in entry fields.
Press Enter AFTER making all desired changes.

[TOP]                                                [Entry Fields]
* User NAME                                         []
  ADMINISTRATIVE User?                               false                  +
  User ID                                           []                      #
  LOGIN user?                                        true                   +
  PRIMARY group                                     []                      +
  Group SET                                         []                      +
  ADMINISTRATIVE groups                             []                      +
  SU groups                                         [ALL]                   +
  HOME directory                                    []
  Initial PROGRAM                                   []
  User INFORMATION                                  []
  Another user can SU to user?                       true                   +
  User can RLOGIN?                                   true                   +
[MORE...13]

F1=Help             F2=Refresh          F3=Cancel           F4=List
F5=Reset            F6=Command          F7=Edit             F8=Image
F9=Shell            F10=Exit            Enter=Do
```

Using the down arrow key, move to the following fields and make the appropriate entries. Press the down arrow key at the end of an entry to move to the next field. Do not press **Enter** until all changes are made.

User NAME	Enter the new login name in lower case letters.
PRIMARY GROUP	Enter **ubbuser**.
Group SET	Enter **ubbuser**.
HOME directory	Enter the directory where this user's personal files are to be stored. Generally, the home directory is **/home/{loginid}**.
Initial PROGRAM	Enter **/bin/ksh**.
User INFORMATION	Enter a user comment, generally the full first and last name of the user. This is simply a comment field but it does print on the Dimensions user account list report.

7 You have now filled in all of the "critical" fields for this user. Press **Enter** to create the account. Here is a sample screen for the user John Public:

```
Create User

Type or select values in entry fields.
Press Enter AFTER making all desired changes.

[TOP]                                              [Entry Fields]
* User NAME                                       [johnp]
  ADMINISTRATIVE User?                             false                  +
  User ID                                          []                      #
  LOGIN user?                                      true                   +
  PRIMARY group                                    [ubbuser]              +
  Group SET                                        [ubbuser]              +
  ADMINISTRATIVE groups                            []                     +
  SU groups                                        [ALL]                  +
  HOME directory                                   [/home/johnp]
  Initial PROGRAM                                  [/bin/ksh]
  User INFORMATION                                 [john public]
  Another user can SU to user?                     true                   +
  User can RLOGIN?                                 true                   +
[MORE...13]

F1=Help            F2=Refresh         F3=Cancel          F4=List
F5=Reset           F6=Command         F7=Edit            F8=Image
F9=Shell           F10=Exit           Enter=Do
```

8 Then the computer displays the command status screen, showing that the user was added:

```
COMMAND STATUS

Command: OK            stdout: no            stderr: no

Before command completion, additional instructions may appear below.









F1=Help            F2=Refresh         F3=Cancel          F6=Command
F8=Image           F9=Shell           F10=Exit
```

Press **F3** to acknowledge this message and return to the previous screen (Step 6).

9 You can enter more users if desired. Or press **F3** to return to the Users screen (Step 5).

10 Press **F3** one more time to return to the Security & Users screen (Step 4).

Steps 11-15 – Change Password

11 To assign the password for the new account, select **Passwords** from the displayed menu (down arrow and **Enter**).

12 The computer displays the change user password screen:

```
Change User Password

Type or select values in entry fields.
Press Enter AFTER making all desired changes.

                                                     [Entry Fields]
  User NAME                                      []                    +










F1=Help             F2=Refresh          F3=Cancel           F4=List
F5=Reset            F6=Command          F7=Edit             F8=Image
F9=Shell            F10=Exit            Enter=Do
```

Enter the user name, same as in Step 6.

13 Then the computer displays:

```
Changing password for "johnp"
johnp's New password:
```

The cursor is positioned at **john's New password**. Enter the new password for this login in lower case letters. For security purposes, the system does not display as you type.

14 The computer continues:

```
Changing password for "johnp"
johnp's New password:
Re-enter johnp's new password:
```

Enter the password a second time to verify the accuracy of the password. If both passwords are entered the same, the password is assigned to the new account. NOTE: Whenever you set a new password for another user, the system will force them to change their password the next time that user logs in.

15 You are returned to the change user password screen (Step 12). Press **F3** then **F10** to exit the smit process. You are returned to the system prompt.

Steps 16-21 – Copy & Edit .profile

16 You now need to establish the .profile file for the new user. Change to the new login directory. Enter the following from the system prompt (**#**), and press **Enter**:

cd /u/johnp

17 Copy a current working .profile to the new login directory. Enter the following and press **Enter**:

cp /u/manager/.profile .

CAUTION: Be sure to enter the periods (.). They are important for correct syntax.

18 Use the "vi" editor to change the new .profile. Enter the following and press **Enter**:

vi .profile

19 The computer displays:

```
:
#       @(#) sh.prof.src 1.3 88/05/10
#
#       Copyright (C) The Santa Cruz Operation, 1985.
#       This Module contains Proprietary Information of
#       The Santa Cruz Operation, Microsoft Corporation
#       and AT&T, and should be treated as Confidential.
#
#
# User $HOME/.profile - commands executed at login time
#
SHELL=/bin/ksh
PATH=u/ubb:/bin:/usr/bin:/u/bin
bin:/rusr/local/bin:.
MAIL=/usr/spool/mail/`logname`
umask 000
BBENV=/u/ubb/BBENV
BBTERM=/u/ubb/wyse50.tdf
TERM=wyse50
BBUSER=MGR
BBSLEVEL=7
BBBYE=N
export PATH MAIL TERM BBENV BBTERM BBUSER
".profile" 53 lines, 1349 characters
```

Using the down arrow key, move to the following fields and make the appropriate entries. The caps lock should be off.

BBUSER Enter the new account in upper case letters. Do the following steps:

a. Delete MGR from the field by positioning the cursor on the "M" of MGR. Press **x** three times. The **x** key deletes one character at a time.

b. Enter **A** to go into Append mode. The cursor moves one character to the right of the = sign.

c. Enter the new account in upper case letters. For example: **JOHNP**

d. End the Append mode by pressing **Esc**.

BBSLEVEL Enter the user account level. Do the following steps:

a. Use the down arrow to move to "7" on the BBSLEVEL line.

b. Delete the "7" by pressing **x** once.

c. Enter **A** to go into Append mode. The cursor moves one character to the right of the = sign.

d. Enter one of the following numbers:

6 Can change customer's credit data and can see costs at POS. This should be the user level of the system manager's password.

4 & **5** Can see costs at POS but cannot change customer's credit data.

3 or less Cannot see costs at POS and cannot change customer's credit data. The lowest level should be 3.

e. End the Append mode by pressing **Esc**.

BBBYE Change this setting to **Y**. Do the following steps:

a. Use the down arrow to move to "Y" on the BBBYE line.

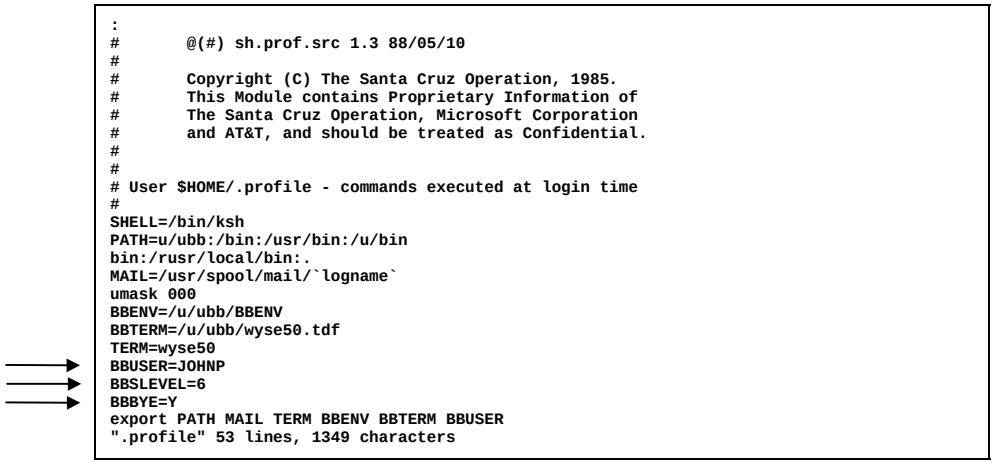
b. Delete the "Y" by pressing **x** once.

c. Enter **A** to go into Append mode. The cursor moves one character to the right of the = sign.

d. Enter **Y**. This will trigger the system to leave UBL when exiting the system.

e. End the Append mode by pressing **Esc**.

20 You have now modified all of the "critical" fields for this user. Here is a sample screen for the user John Public:



```
:
#       @(#) sh.prof.src 1.3 88/05/10
#
#       Copyright (C) The Santa Cruz Operation, 1985.
#       This Module contains Proprietary Information of
#       The Santa Cruz Operation, Microsoft Corporation
#       and AT&T, and should be treated as Confidential.
#
#
# User $HOME/.profile - commands executed at login time
#
SHELL=/bin/ksh
PATH=u/ubb:/bin:/usr/bin:/u/bin
bin:/rusr/local/bin:.
MAIL=/usr/spool/mail/`logname`
umask 000
BBENV=/u/ubb/BBENV
BBTERM=/u/ubb/wyse50.tdf
TERM=wyse50
BBUSER=JOHNP
BBSLEVEL=6
BBBYE=Y
export PATH MAIL TERM BBENV BBTERM BBUSER
".profile" 53 lines, 1349 characters
```

To end this editing session, enter **:** (colon) and press **Enter**. The cursor is positioned at "**:**" at the bottom of the screen. Enter **wq** to save the changes and exit this screen. If you need to exit but not save changes, enter **q!**. You are returned to the system prompt.

21 Log off the system by typing **exit**. Press **Enter**. This should return you to **login:**.

Steps 22-29 – Make a New Dimensions Account

22 Obtain the ubl prompt (*****) by doing the following steps:

a. At login, sign on with your manager login id and password.

b. The computer displays:

```
            Dimensions Operating System Main Menu


       Select a menu option by typing the number


         1)  Access Dimensions Software
         2)  Change Your Personal Password
         3)  Read Your Personal Email Messages
         4)  Log Off The System


       Enter you option now and press [ENTER] -->
```

Enter **1** for Access Dimensions Software and press **Enter**.

c. Press **Enter** again.

d. The computer displays the **Dimensions Main Menu**. Enter **E** and press **Enter** to end this menu. Make sure you enter an upper case E.

e. The computer displays ***** in the upper left hand corner of the screen. This is the ubl prompt.

23 Enter **run "dsmg500** and press **Enter**.

24 The computer displays:

```
DSMG500 - XSECUR FILE MAINTENANCE
          SIGN-ON NAME:
          PRIORITY:
          DEFAULT MENU:
```

The cursor is positioned at **SIGN-ON NAME**. Enter the account name – same as the BBUSER in Step 19. Use all upper case letters and press **Enter**.

25 If the account name is not found, which is most likely the case since you are creating a new account, the computer asks if you wish to create it. Enter **Y** and press **Enter**.

26 Then the computer asks for 2 more fields:

PRIORITY Enter **100** and press **Enter**. This is the standard for your POS logins. If you require more sophisticated security, contact a Dimensions support analyst.

DEFAULT MENU Enter **DM00000** to obtain the Dimensions Main Menu when logging on with this account. Or if you wish to use a different menu, print a menu listing and pick another menu. See Section 5, System Functions, Menu Maintenance, Print Menus.

27 Then the computer displays at the bottom of the screen:

```
FUNCTION (C D E):
```

Enter **E** for End and press **Enter**.

28 At **SIGNON NAME**, enter **E** and press **Enter**. You are returned to the ubl prompt.

29 Press **Esc** to exit this screen. You are returned to the system prompt.

NOTES:

SET UP A NEW USER - SCO

Steps 1-30 – Add a User and Create a Password

1 Sign on as the "root" user. This gains access to the super user functions.

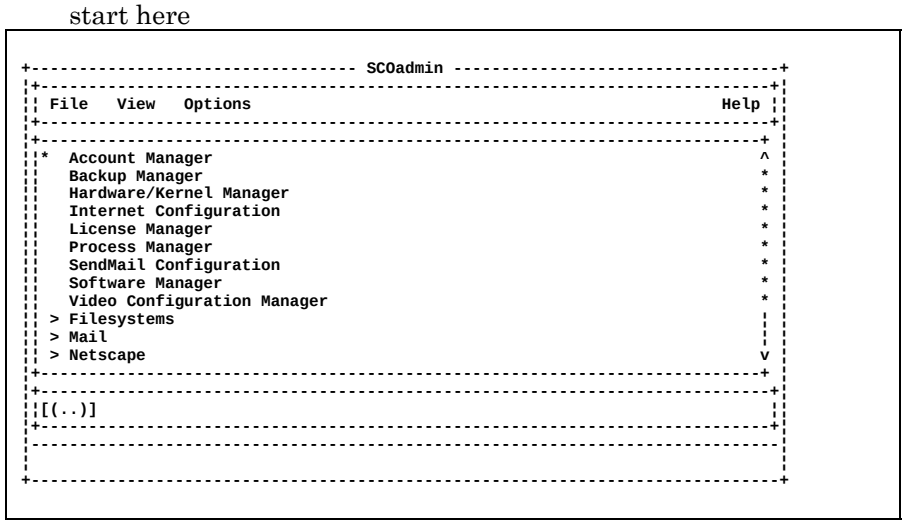
2 From the system prompt (**#**), enter the following command and press **Enter**:

scoadmin

3 If the computer displays **TERM = (wy50)**, press **Enter** to bypass.

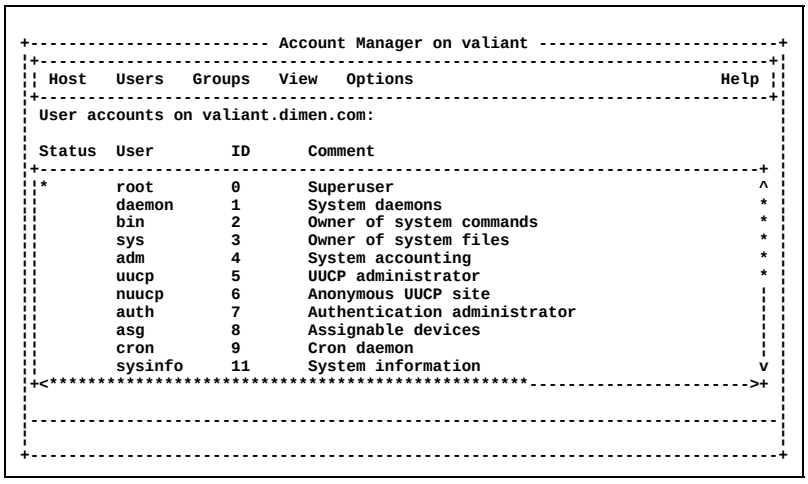
4 Then the computer displays the following screen:

start here



The computer highlights the Account Manager option. Press **Enter**.

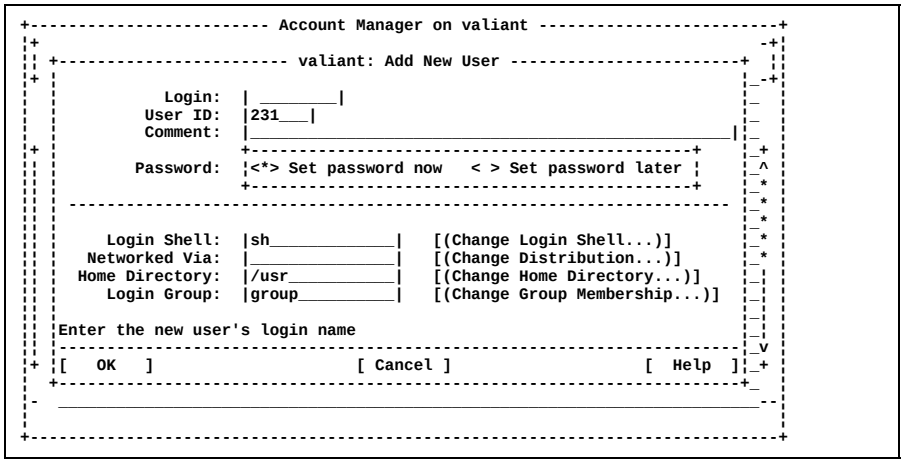
5 The computer displays:



The computer highlights the Host option. Press the right arrow to move to Users and press **Enter**.

6 The computer displays a drop down menu showing Add New User first on the list. Press **Enter** to accept it.

7 The computer displays the following screen:



The cursor is at **Login**. Enter the new login id in lower case letters. Do not press **Enter** at the end of the entry. Press **Tab**.

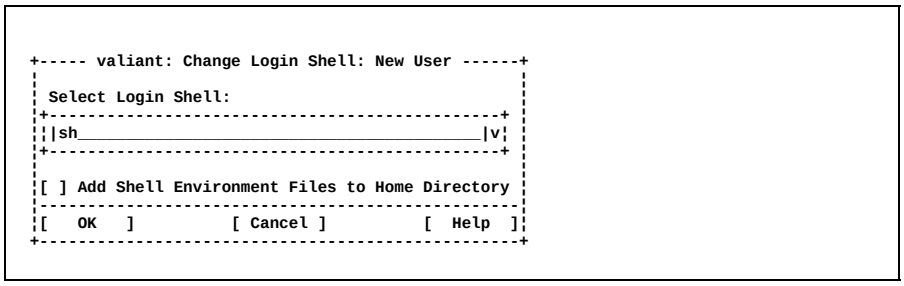
8 At **User ID**, press **Tab** again.

9 At **Comment**, enter the user's full name.

10 At **Password**, press **Tab** twice to accept **Set Password Now**.

11 At **Change Login Shell**, press **Enter**.

12 The computer changes the display:



You are in insert mode automatically. Enter **/k** and press **Tab**. The resulting entry will be /ksh.

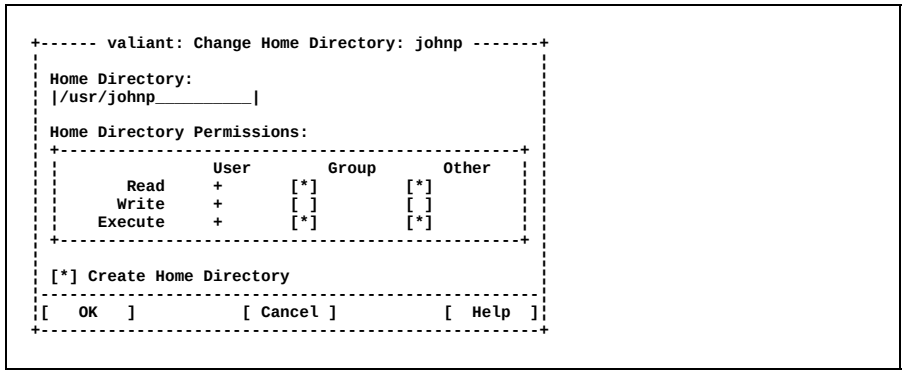
13 Press **Tab** again to bypass Add Shell Environment Files to Home Directory.

14 If the entry is correct, press **Enter** at **OK** to accept it.

15 You are returned to the previous screen (Step 7). The computer now asks for the Home Directory. Press **Tab** to move the selection to Change Home Directory.

16 Press **Enter** to change it.

17 The computer changes the screen:



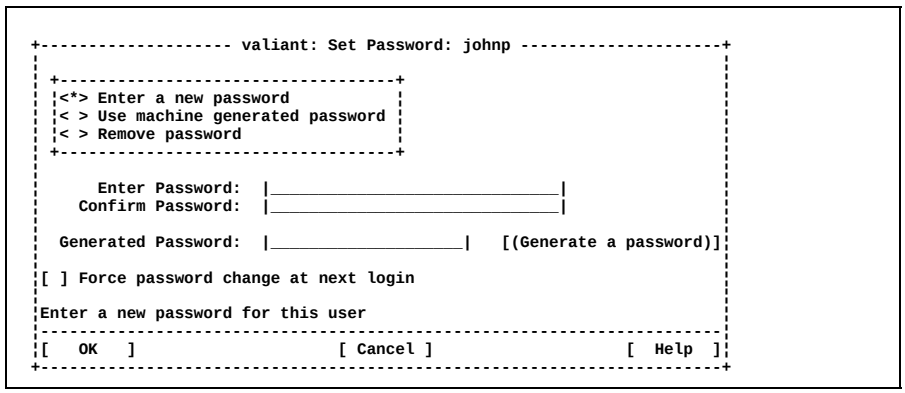
You are in insert mode automatically. Press the delete key to delete one character at a time from the displayed entry. Then enter **/u/** and the login entered in Step 7. Press **Tab**.

18 Press **Tab** until the computer highlight the OK option. If the entry is OK, press **Enter** to accept it.

19 You are returned to the previous screen (Step 7). Press **Tab** at **Login Group** and **Change Group Membership**.

20 The computer highlights the OK option. If the entry is OK, press **Enter** to accept it.

21 Then the computer displays the set password screen:



The computer highlights the option **Enter a new password**. Press **Tab** to accept it.

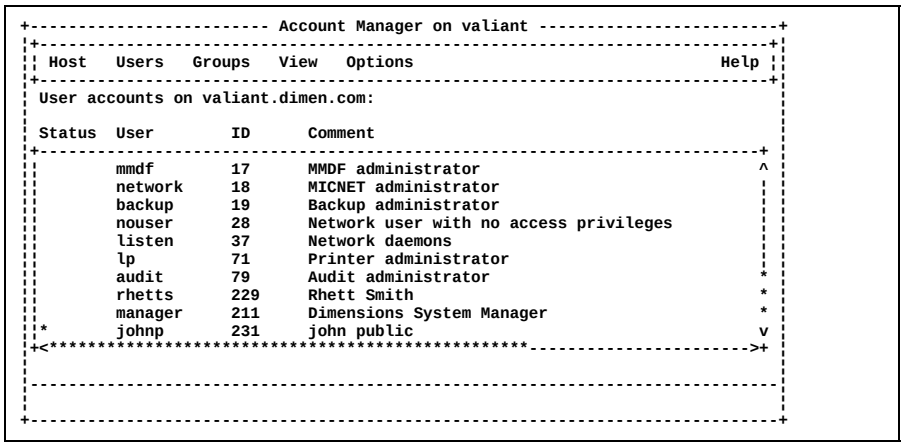
22 At **Enter Password**, enter a temporary password for this login. For example: **mynew1**. The characters do not appear as you type for security purposes. Press **Tab** at the end of your entry.

23 At **Confirm Password**, enter the exact same password as in Step 22 to confirm your entry. Press **Tab** at the end of your entry.

24 At **Force password change at next login**, press the space bar one time to mark this option. This will force the new user to change their password the next time they log in. Press **Tab**.

25 At **OK**, press **Enter** to accept the entry.

26 The computer then processes the entry, adding the login to the list of available logins. Wait until this process finishes and the following screen is displayed:



Press **Tab** twice to go to the **Host** option.

27 Press **Enter**, move down to **Exit** with the down arrow, and press **Enter** again.

28 Press **Tab** once to go to the **File** option.

29 Press **Enter**, move down, to **Exit** with the down arrow, and press **Enter** again.

30 You are returned to the system prompt (#).

Steps 31-36 – Copy & Edit .profile

31 You now need to establish the .profile file for the new user. Change to the new login directory. Enter the following from the system prompt (**#**) and press **Enter**:

cd /u/johnp

32 Copy a current working .profile to the new login directory. Enter the following and press **Enter**:

cp /u/manager/.profile .

CAUTION: Be sure to enter the periods (.). They are important for correct syntax.

33 Use the "vi" editor to change the new .profile. Enter the following and press **Enter**:

vi .profile

34 The computer displays:

```
:
#       @(#) sh.prof.src 1.3 88/05/10

#       Copyright (C) The Santa Cruz Operation, 1985.
#       This Module contains Proprietary Information of
#       The Santa Cruz Operation, Microsoft Corporation
#       and AT&T, and should be treated as Confidential.
#
#
# User $HOME/.profile - commands executed at login time
#
SHELL=/bin/ksh
PATH=u/ubb:/bin:/usr/bin:/u/bin
bin:/rusr/local/bin:.
MAIL=/usr/spool/mail/`logname`
umask 000
BBENV=/u/ubb/BBENV
BBTERM=/u/ubb/wyse50.tdf
TERM=wyse50
BBUSER=MGR
BBSLEVEL=7
BBBYE=N
export PATH MAIL TERM BBENV BBTERM BBUSER
".profile" 53 lines, 1349 characters
```

Using the arrow keys, move to the following fields and make the appropriate entries. The caps lock should be off.

BBUSER Enter the new account in upper case letters. Do the following steps:

a. Delete MGR from the field by positioning the cursor on the "M" of MGR. Press **x** three times. The **x** key deletes one character at a time.

b. Enter **A** to go into Append mode. The cursor moves one character to the right of the = sign.

c. Enter the new account in upper case letters. For example: **JOHNP**

d. End the Append mode by pressing **Esc**.

BBSLEVEL Enter the user account level. Do the following steps:

a. Use the down arrow to move to "7" on the BBSLEVEL line.

b. Delete the "7" by pressing **x** once.

c. Enter **A** to go into Append mode. The cursor moves one character to the right of the = sign.

d. Enter one of the following numbers:

6 Can change customer's credit data and can see costs at POS. This should be the user level of the system manager's password.

4 & **5** Can see costs at POS but cannot change customer's credit data.

3 or less Cannot see costs at POS and cannot change customer's credit data. The lowest level should be 3.

e. End the Append mode by pressing **Esc**.

BBBYE Change this setting to **Y**. Do the following steps:

a. Use the down arrow to move to "Y" on the BBBYE line.

b. Delete the "Y" by pressing **x** once.

c. Enter **A** to go into Append mode. The cursor moves one character to the right of the = sign.

d. Enter **Y**. This will trigger the system to leave UBL when exiting the system.

e. End the Append mode by pressing **Esc**.

35 You have now modified all of the "critical" fields for this user. Here is a sample screen for the user John Public:

```
:
#       @(#) sh.prof.src 1.3 88/05/10
#
#       Copyright (C) The Santa Cruz Operation, 1985.
#       This Module contains Proprietary Information of
#       The Santa Cruz Operation, Microsoft Corporation
#       and AT&T, and should be treated as Confidential.
#
#
# User $HOME/.profile - commands executed at login time
#
SHELL=/bin/ksh
PATH=u/ubb:/bin:/usr/bin:/u/bin
bin:/rusr/local/bin:.
MAIL=/usr/spool/mail/`logname`
umask 000
BBENV=/u/ubb/BBENV
BBTERM=/u/ubb/wyse50.tdf
TERM=wyse50
BBUSER=JOHNP
BBSLEVEL=6
BBBYE=Y
export PATH MAIL TERM BBENV BBTERM BBUSER
".profile" 53 lines, 1349 characters
```

To end this editing session, enter **:** (colon) and press **Enter**. The cursor is positioned at "**:**". Enter **wq** to save the changes and exit this screen. If you need to exit but not save changes, enter **q!**. You are returned to the system prompt.

36 Log off the system by typing **exit**. Press **Enter**. This should return you to **login:**.

Steps 37-44 – Make a New Dimensions Account

37 Obtain the ubl prompt (*****) by doing the following steps:

a. At login, sign on with your manager login id and password.

b. The computer displays:

```
            Dimensions Operating System Main Menu


       Select a menu option by typing the number


         1)  Access Dimensions Software
         2)  Change Your Personal Password
         3)  Read Your Personal Email Messages
         4)  Log Off The System


      Enter you option now and press [ENTER] -->
```

Enter **1** for Access Dimensions Software and press **Enter**.

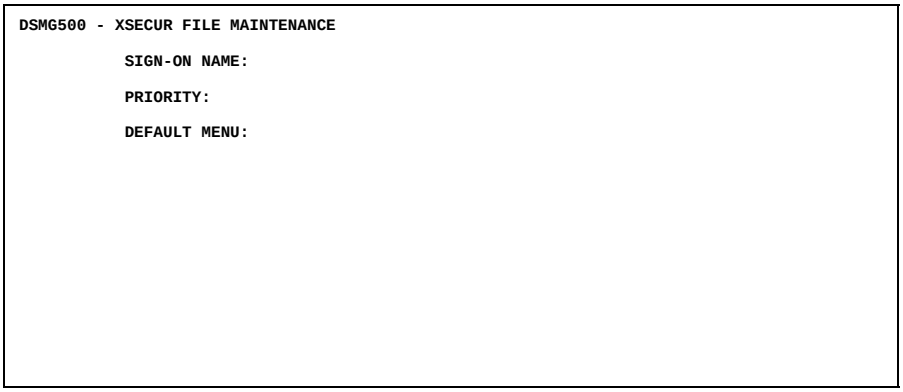
c. Press **Enter** again.

d. The Dimensions Main Menu is displayed. Enter **E** and press **Enter** to end this menu. Make sure you enter an upper case E.

e. The computer displays ***** in the upper left hand corner of the screen. This is the ubl prompt.

38 Enter **run "dsmg500** and press **Enter**.

39 The computer displays:



The cursor is positioned at **SIGN-ON NAME**. Enter the account name – same as the BBUSER in Step 34. Use all upper case letters and press **Enter**.

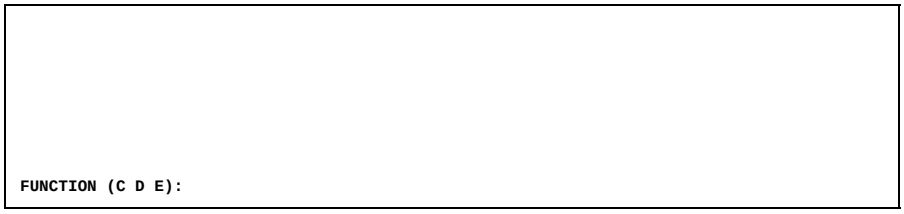
40 If the computer does not find the account name, which is most likely the case since you are creating a new account, the computer asks if you wish to create it. Enter **Y** and press **Enter**.

41 Then the computer asks for 2 more fields:

PRIORITY — Enter **100** and press **Enter**. This is the standard for POS logins. If you require more sophisticated security, contact a Dimensions support analyst.

DEFAULT MENU — Enter **DM00000** to obtain the **Dimensions Main Menu** when logging on with this account. Or if you wish to use a different menu, print a menu listing and pick another menu. See Section 5, System Functions, Menu Maintenance, Print Menus.

42 Then the computer displays at the bottom of the screen:



Enter **E** for End and press **Enter**.

43 At **SIGNON NAME**, enter **E** and press **Enter**. You are returned to the ubl prompt.

44 Press **Esc** to exit this screen. You are returned to the system prompt.

NOTES:

APPENDIX F. ERROR MESSAGES

APPENDIX F. Error Messages

SYSTEM FAILURES

System failure messages typically occur when bringing the system up and there is some type of hardware or security discrepancy.

SYSTEM FAILURE #	CAUSE	COMMENTS
SYSTEM FAILURE 02	System printer not on	Turn printer on & on-line.
	Supercoder not connected	Make sure that the Supercoder Is connected tightly on first parallel port.
SYSTEM FAILURE 03-18	Security missing in CONFIG file	Call Dimensions support.

EXCEPTION ERRORS

Exception errors occur when software attempts to overwrite its allocated memory. Exception errors stop the task that caused the exception and displays an error message on the terminal of that task. Exception errors occur very rarely but if they start occurring frequently it can denote a system problem.

EXCEPTION ERROR #	CAUSE	COMMENTS
EXCEPTION ERROR 02	Power, memory	Reboot system. Call Dimensions support if getting frequent exception errors.
EXCEPTION ERROR 06	Power, memory	Reboot system. Call Dimensions support if getting frequent exception errors.
EXCEPTION ERROR 13	Power, memory	Reboot system. Call Dimensions support if getting frequent exception errors.

BASIC & SuperDOS ERRORS

BASIC and SuperDOS errors occur when the information used by the program cannot be processed by the operating system. These errors typically occur in reading and writing to a disk drive.

ERR BASIC SD #	CAUSE	COMMENTS
ERR BASIC –23 SD 3	Not enough disk space	Delete any .SV* files. Run CRUNCH if necessary.
ERR BASIC -48 SD 5	File being used exclusively	Wait to run your program or job later.
ERR BASIC -135 SD 8	Bad “deleted” record	Rebuild indexes of file. This error is usually seen if system was shut down while users were in programs.
ERR BASIC -137 SD 10	Attempt to access sector beyond file	The indexes of the file need to be deleted and then rebuilt.
ERR BASIC -142 SD 15	No available records	File needs to be expanded.
ERR BASIC –149 SD 22	Read error file data record	This message can indicate a possible hardware problem. Call Dimensions support.
ERR BASIC -150 SD 23	File not found	Call Dimensions support.
ERR BASIC -163 SD 36	Bad FCB validation code	Indicates an error in a file. Call Dimensions support.
ERR BASIC -165 SD 38	Invalid user group	Signed on under the wrong password.
ERR BASIC –167 SD 40	Error in absolute sector I/O	Dirty floppy drive, bad floppy diskette, or possible hard drive problem.
ERR BASIC -78 SD 52	Not an executable program	Bad version of a program.
ERR BASIC -78 SD 58	Disk CRC error	Bad sectors on disk drive.
ERR BASIC -31 SD 10	Invalid subscript	File contains bad information. Indexes need to be rebuilt.
ERR BASIC 23	No more data memory left	Task size too small to run program.
ERR BASIC 16 SD 10	Divide by zero	A transaction or item has a bad cost so margins can’t be calculated.

For additional BASIC and SuperDOS errors, refer to *SuperDOS Guide to Operations*.

PROGRAM ERRORS

These errors occur while in the Dimensions programs if there is invalid input or information missing in a file.

ERROR	CAUSE	COMMENTS
nn:nn:nn NOT FOUND VM0	Missing information in the Variable File	The first two digits stand for the record type in the Variable File, the second two digits stand for the store, and the last two digits stand for the relative number. For example: 7:1:1 7 = Terms Information 1 = Store 1 1 = Terms Code 1 It means that a customer was coded with terms code 1 but no terms code 1 was defined in the Variable File.
1:######## NOT FOUND IM2	An item exists in IM1 but not in IM2	The number before the colon represents the store number. The number after the colon represent the item number.

APPENDIX G. WHAT TO DO IN CASE OF …

APPENDIX G. What to Do in Case of ...

POWER FAILURE

All systems come equipped with an uninterruptible power source (UPS) which serves as a battery backup and power conditioner for the CPU. If the power to your system were to fail all of a sudden, the CPU would draw its power from the UPS. Depending on the model of UPS, it could supply power from 10-20 minutes. However, the power to all peripherals would be lost.

1. After power goes off, wait 5-10 minutes to see if it will come on again momentarily. Most power failures are corrected in a matter of minutes. If it looks as if you are in for a long-term wait, **BYE** or log off all terminals (from the system monitor on SuperDOS systems, use **MMI** -- see Appendix A, SuperDOS Utilities Used Most Often, **MMI**). **BYE** or log off the system monitor too.
2. Turn off the computer (CPU) and wait until the power is restored. If desired, you can write sales tickets by hand and enter them into the computer once the power is restored.
3. When the power comes on, turn on the computer (CPU). The system monitor will be at the **Password** or login screen but the other terminal ports will probably return to the screen or previous menu where they were working when the power failed. Any terminals which had been working in Transaction Entry (POS) or Purchasing and Receiving may receive the option of recovering the previous transaction when they go back in to start processing. They can answer **Y** and finish the transaction or **N** to cancel the previous transaction and not work on it.
4. Enter any hand-written sales tickets to record the transactions, which occurred during the power failure. You can return to normal processing.

NOTES:

ELECTRICAL STORM

The UPS (uninterruptible power source) and surge protectors, which come with your system, are adequate for mild fluctuations of power. They cannot, however, prevent damage from electrical storms or direct lightning hits. If a storm is threatening, you should take a few precautions to avoid extensive damage.

1. Finish all transactions on every terminal and the system monitor as fast as possible. **BYE** or log off every terminal.
2. Turn the power off to the computer, terminals, and printers.
3. Pull the plugs on the computer, terminals, and printers.
4. Wait until the storm passes. If desired, you can write sales tickets by hand and enter them later when you bring the system up.
5. When it is safe to bring the system up, plug in everything you unplugged earlier and turn the peripherals on. Turn on the computer (CPU) and resume processing. Enter any hand-written sales tickets.

NOTES:

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