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# applicationDEC 433MP Software Installation Roadmap

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This document is a guide to installing software on the applicationDEC 433MP system. The Roadmap addresses the following software products:

- SCO UNIX
- SCO Open Desktop
- SCO MPX
- SCO VP/ix
- Digital PS1XG-AA graphics configuration utilities

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# What Is the Software Installation Roadmap?

The *Software Installation Roadmap* is a guide for those who have configured the applicationDEC 433MP system and are about to install software.

Before you install your software applications, you need to think about and install software from some or all of the following categories:

- Operating system software
- Operating system extensions
- Graphics configuration utilities
- DOS emulation software

Sections 2 through 5 of the *Roadmap* describe the software in each of these four categories. Sections 6 and 7 specify the order of software installation and the steps to take to install the software.

# 1 Getting Ready to Install Software

Before you install any software on your applicationDEC 433MP system, make sure your system is fully assembled and operational.

You may need to refer to a number of books before you install software and while you are installing software. Table 1 shows the hardware and software documentation that is referenced throughout the *Roadmap* and the product kit where you find the documentation. Digital Equipment Corporation sells and supports each of the products shown.

**Table 1 Location of Hardware and Software Documentation**

Product Kit	Documentation
applicationDEC 433MP	<i>Software Installation Roadmap</i> (this document) <i>System Installation Guide</i> <i>System Overview</i> <i>Technical Configuration and Option Installation Guide</i> <i>Using the System</i>
SCO UNIX System V/386 Release 3.2 Version 2.0	<i>SCO UNIX Operating System Release Notes</i> <i>SCO UNIX Operating System Installation Guide</i> <i>SCO UNIX System Administrator's Guide</i> <i>SCO UNIX System Administrator's Reference</i> <i>SCO UNIX Tutorial</i> <i>SCO UNIX User's Guide</i> <i>SCO UNIX User's Reference</i> <i>Important Notes about SCO UNIX on Digital Systems</i>
SCO Open Desktop Release 1.1	<i>Open Desktop Release Notes</i> <i>Open Desktop Installation Guide</i> <i>Open Desktop Administrator's Guide</i> <i>Open Desktop Administrator's Reference</i> <i>Open Desktop User's Guide</i> <i>Open Desktop User's Reference</i> <i>Important Notes about SCO Open Desktop on Digital Systems</i>
SCO VP/ix Release 1.2	<i>VP/ix Release and Installation Notes</i> <i>VP/ix System Administrator's Guide</i> <i>VP/ix Beginner's Guide</i> <i>VP/ix User's Guide</i>
SCO MPX Release 1.1	<i>SCO MPX Release and Installation Notes</i>
PS1XG-AA Adapter	<i>PS1XG-AA Graphics Adapter Manual</i>

You should know how to perform the following tasks:

- Turn the computer on and off
- Insert floppy diskettes into the diskette drives
- Insert cartridge tapes into the tape drive
- Reset the computer

These tasks are described in the *Using the System* document.

If you intend to add options such as tape drives, secondary hard disks, multiport cards, network cards, or memory cards, you may want to add them prior to installing an operating system. See Appendix A of the *SCO UNIX Release Notes* or Appendix A of the *Open Desktop Release Notes* for information about supported hardware, proper connections and jumper settings, and any special conditions that apply to the hardware. Also refer to the installation guide that comes with

an option or, for Digital supported options, refer to the *Technical Configuration and Option Installation Guide*.

## 2 Operating System Software

Digital Equipment Corporation sells and supports two operating systems for the applicationDEC 433MP system:

- SCO UNIX System V/386 Release 3.2 Version 2.0 and higher  
An industry standard UNIX operating system that runs thousands of business applications.
- SCO Open Desktop Release 1.1 and higher  
A graphical user environment for SCO UNIX, for other system services, and for the thousands of business applications that SCO UNIX runs.

If you are familiar with UNIX and command-line interfaces, you may prefer SCO UNIX. If you prefer a graphics interface with icons and a mouse, you should choose Open Desktop. The graphics interface hides many of the details of the operating system, so you may also prefer it if you are unfamiliar with UNIX.

### 2.1 SCO UNIX System V/386 Release 3.2 Version 2.0

SCO UNIX System V/386 is a UNIX System Laboratories, Inc.-licensed implementation of UNIX System V/386 Release 3.2 for 80386- and 80486-based computers. SCO UNIX is a multiuser, multitasking, single-processor operating system. It is available from Digital on diskettes or tape.

The SCO UNIX Operating System contains the UNIX programs and utilities you need, to create multiple user accounts, manage filesystems, create and manage files, and perform system maintenance tasks.

In addition to the Operating System, the SCO UNIX Development System is available as an optional application that is installed just as other applications are installed. The Development System contains the UNIX programs and utilities you need, to create, compile, and debug assembly and high-level language programs.

If you are new to UNIX operating systems, you should become familiar with the concepts and tasks covered in the *SCO UNIX System V/386 Tutorial*.

### 2.2 SCO Open Desktop Release 1.1

SCO Open Desktop (ODT) is a complete graphical operating environment built on the SCO UNIX System V/386 platform. The user interface is based on the OSF/Motif and X Window System standards. SCO Open Desktop is available from Digital on tape.

The services offered by Open Desktop can be divided into five categories, shown in Table 2.

**Table 2 Open Desktop Services**

Open Desktop Service	Function	Product or Standard
ODT-OS	Operating system	SCO UNIX System V/386
ODT-VIEW	Graphical user interface	OSF/Motif-based, X Window System interface
ODT-NET	Networking and filesharing	TCP/IP, SCO NFS, SCO LAN Manager, UUCP
ODT-DOS	Operating system	MS-DOS operating system and Locus Merge for DOS-UNIX system integration
ODT-DATA	Relational database management system	Distributed SQL database management services

Open Desktop is SCO UNIX — but ODT-DOS brings SCO UNIX and DOS together in a single, coherent environment. Open Desktop appears as a single operating system on which you can use applications written for either DOS or UNIX systems. When you enter a command, the system checks to see whether it is a UNIX or a DOS command. If it is a UNIX command, it is executed as any standard UNIX command. If it is a DOS command, the system, in effect, creates a virtual machine on which DOS applications can run, without affecting the simultaneous operation of the UNIX system or UNIX processes.

If you are new to UNIX operating systems, you should become familiar with the concepts and tasks covered in *Using ODT-OS*, a tutorial for new users, in the *Open Desktop User's Guide*.

### 3 SCO MPX Multiprocessor Extension

Multiprocessor computers, such as the applicationDEC 433MP, use multiple microprocessors (CPUs) to independently execute system or user processes simultaneously, within a single computer. Since the CPUs execute processes simultaneously, system performance increases.

SCO MPX is a multiprocessor extension for SCO UNIX System V/386 or for SCO Open Desktop. SCO MPX replaces some components of the standard UNIX kernel with multiprocessing components. These replacements enable the UNIX operating system to recognize and use any additional processors automatically.

The applicationDEC 433MP system can have up to four processors. You must install a new copy of MPX and a new license for each processor beyond the base processor of your applicationDEC 433MP system.

For the single-processor applicationDEC 433MP system, you need a multiuser SCO UNIX license or you need Open Desktop with the Server Upgrade. Then, for each additional processor on your system, you perform a new SCO MPX installation. If you add another CPU later, you must install a new copy of SCO MPX to use the additional processor.

## 4 Graphics Configuration Utilities Software

If you want to use a graphics monitor, you must install a high resolution graphics adapter. Digital sells and supports the PS1XG-AA Graphics Adapter.

The adapter is installed on the ISA option bus of the applicationDEC 433MP system. The graphics monitor and mouse are connected to the adapter. The adapter enables the display of high resolution graphics for all standard VGA modes and for various screen refresh rates.

The adapter uses automatic monitor detection to configure itself for the type of monitor connected. The adapter is preconfigured for various video modes and resolutions. If the adapter is unable to detect the mode and resolution of the connected monitor, then you must configure the adapter for the resolution and refresh rate of your monitor by using the software utility diskette supplied with the PS1XG-AA adapter.

If the adapter detects a monitor that matches its preconfiguration, the utility diskette is not needed.

## 5 Using DOS Applications on the applicationDEC 433MP System

The SCO UNIX and SCO Open Desktop environments have different ways of providing DOS emulation. Both SCO UNIX and Open Desktop, however, let you use DOS applications from within the UNIX environment.

### 5.1 What Is VP/ix?

VP/ix is a SCO product that enables you to run MS-DOS applications from within your SCO UNIX environment. A DOS partition is not required for VP/ix because VP/ix includes DOS.

To learn the basic steps for starting VP/ix, how to run an MS-DOS application directly from UNIX or from within VP/ix, and how to end a VP/ix session, refer to the *SCO VP/ix Beginner's Guide*. Then, refer to the other VP/ix documentation listed in Table 1.

### 5.2 What Is a Disk Partition?

A partition is an area on a disk dedicated to a certain operating system. SCO UNIX includes a utility, **fdisk**, that allows you to set up partitions, on the hard disk.

If an entire disk is used for the UNIX system, there is a single partition on the disk. A disk could have a DOS partition and a UNIX partition. The hard disk can have at most four partitions.

The **fdisk** utility also allows you to specify a disk partition as *active*. When a partition is made active, that partition is the boot partition. The operating system resident in that partition boots automatically once the current operating system is halted or when you power up the machine. Only one partition is active at any given time.

If you need a DOS partition on the hard disk, the DOS partition must be within the first 1024 cylinders on the disk. **If you want to have a DOS partition on the hard disk, you should create the DOS partition before you install SCO UNIX or SCO Open Desktop. If you do not, your UNIX partition may not be bootable.**

For up-to-date information about the coexistence of MS-DOS and SCO UNIX on the same hard disk, see the *SCO UNIX System V/386 Operating System Release Notes*. Only MS-DOS Version 3.3 or earlier is supported, and other versions of DOS have certain restrictions.

### 5.3 Running Your DOS Applications

To run your DOS applications from *within* the SCO UNIX environment, you need SCO VP/ix. (You could also boot DOS in its own partition, but you would no longer be *within* the SCO UNIX environment.)

To run your DOS applications from *within* the Open Desktop environment, you need the ODT-DOS service. Since ODT-DOS includes Locus Merge, another DOS emulator, you do not need VP/ix. Locus Merge provides all the needed UNIX/DOS compatibility.

You can install your DOS applications in two ways:

- Install your DOS applications in a DOS partition  
The partition has to be created before SCO UNIX or Open Desktop is installed.
- Install DOS applications within the UNIX filesystem  
These installations can be done at any time.

DOS emulators only support 8086 mode. Most DOS applications run in this mode. However, if you have to run a DOS application that only uses native 286 or 386 mode, then you have to run it from your bootable DOS partition.

## 6 Order of Software Installation

Table 3 shows the order of software installation for the software discussed in the *Roadmap*. The table assumes you have a graphics monitor and are making the following choices:

- DOS partition or no DOS partition
- SCO UNIX or SCO Open Desktop

Use the graphics utilities if you need to configure the graphics adapter for your specific monitor. If you need to configure the adapter, configure it first. No configuration is necessary for Digital monitors such as the Digital VRC16, because the default modes on the PS1XG-AA Graphics Adapter match those of the monitor.

**Table 3 Software Installation Order**

Operating System	Without a DOS Partition	With a DOS Partition
SCO UNIX	<ol style="list-style-type: none"> <li>1. Graphics utilities<sup>1</sup> and any other hardware configuration utilities</li> <li>2. SCO UNIX</li> <li>3. Other applications, such as the UNIX Development System and VP/ix<sup>2</sup></li> <li>4. SCO MPX<sup>3</sup></li> </ol>	<ol style="list-style-type: none"> <li>1. Graphics utilities<sup>1</sup> and any other hardware configuration utilities</li> <li>2. DOS<sup>4</sup></li> <li>3. SCO UNIX</li> <li>4. Other applications, such as the UNIX Development System and VP/ix<sup>2</sup></li> <li>5. SCO MPX<sup>3</sup></li> </ol>
SCO ODT	<ol style="list-style-type: none"> <li>1. Graphics utilities<sup>1</sup> and any other hardware configuration utilities</li> <li>2. SCO ODT</li> <li>3. Other applications, such as the UNIX Development System</li> <li>4. SCO MPX<sup>3</sup></li> </ol>	<ol style="list-style-type: none"> <li>1. Graphics utilities<sup>1</sup> and any other hardware configuration utilities</li> <li>2. DOS<sup>4</sup></li> <li>3. SCO ODT</li> <li>4. Other applications, such as the UNIX Development System</li> <li>5. SCO MPX<sup>3</sup></li> </ol>

<sup>1</sup>The PS1XG-AA utility diskette is used to configure the graphics adapter for some non-Digital graphics monitors.

<sup>2</sup>VP/ix is needed if you want to run DOS applications.

<sup>3</sup>You need one copy of MPX per CPU/SIO or CPU/SCSI beyond the base processor. You do not need MPX for a single processor system. MPX is installed last.

<sup>4</sup>Some DOS applications require a DOS partition. If so, create the DOS partition before you install SCO UNIX or SCO ODT. DOS can be installed now or later.

## 7 Steps to Follow for Software Installation

To install software on the applicationDEC 433MP system, follow these steps:

1. Power up the system.
2. Change the setup parameters, if necessary, with the RAM-based setup utility.
3. Configure the graphics adapter for your graphics monitor, if necessary.
4. Create a DOS partition now, if you want to have one; install DOS now or later.
5. Install SCO UNIX or SCO Open Desktop.
6. Install your applications.
7. Install a new copy of MPX and a new license for each processor beyond the base processor of your applicationDEC 433MP system.

Each of these steps is described in the following sections.

## 7.1 Power Up the applicationDEC 433MP System

Connect the power cords as shown in the *System Installation Guide* for the applicationDEC 433MP system.

To power up the system, power up the console monitor first, and then power up the system unit. To power up the monitor or the system unit, set the on/off switch to 1 (on).

As the system powers up, the following is displayed on the monitor screen:

```
Quadtel Enhanced 486 BIOS Version 3.05.05  
Copyright 1987-1990 Quadtel Corp. All Rights Reserved.
```

If any error messages are displayed now, there are hardware problems. Contact your service provider.

If you have a VGA adapter installed, the following information is now displayed:

```
ATI VGAWONDER+, BIOS VIM-1.04/DEC
```

Next you see the following messages:

```
00640K System RAM Passed  
14336K Extended RAM Passed
```

```
Adaptec AT/SCSI BIOS  
Version 3.10  
Copyright 1988 Adaptec, Inc.  
All Rights Reserved
```

```
Checking for SCSI Target 0 LUN 0  
SCSI Target 0 LUN 0 Installed as Drive C:  
Checking for SCSI Target 1 LUN 0
```

If you have additional options installed (such as more than one hard drive on the system), other information may be displayed. Finally, you see the following displayed:

```
NO OS
```

To get to the setup menu, press the keys as shown in Table 4:

**Table 4 Getting to the Setup Menu**

Console Type	Key Sequence
Graphics monitor (VGA)	Press CTRL/ALT/S
Terminal (COM1)	Press CTRL/3; then press SHIFT/S

## 7.2 Change the Setup Parameters

The system stores many system parameters in battery backed-up RAM. These parameters are available to the system each time it starts up.

After you have used one of the key sequences shown in Table 4, the default setup menu and current options are displayed. An applicationDEC 433MP system with one diskette drive has the following default setup options:

```
BIOS Setup Version 3.05
Copyright 1990 Quadtel Corporation. All rights reserved.

1> Current Date.....: 09/13/1991
2> Current Time.....: 16:42:05
3> Diskette Drive A.....: 3.50-inch (1.44 MB)
4> Diskette Drive B.....: Not Installed
5> Fixed Disk Drive 0 Type.....: None
6> Fixed Disk Drive 1 Type.....: None
7> Base Memory Size (KB).....: 640
8> ISA Extended Memory Size (KB): 7168
9> Video Adapter.....: EGA/VGA/Super VGA
10> Base Processor Cache.....: On
11> RRD Menu Status.....: Off
12> Memory Refresh.....: Off
13> Boot Device.....: AT Bus
14> Save Current Options

Select option to change [0 to Exit]: 1
```

To change the value of an option, enter the number (1 to 14) in parentheses at the left of the option you want to change. Then enter either the new value or a number specifying the new value.

For example, to change the time, enter 1, press Return, and enter the new time. To exit the setup program, enter 0 and press Return.

Each time you change the value of an option, the setup utility menu is redisplayed with the current values.

You can change the following parameters:

### 1> Current Date

This option sets the system date. The date is normally kept accurate by the battery system, but you may need to adjust it occasionally.

```
Select option to change [0 to Exit]: 1 
```

Enter correct date as MM-DD-YY :

Enter the date in the format MM/DD/YY where MM is the month, 01 to 12, DD is the day, 01 to 31, and YY is the year.

```
Enter correct date as MM-DD-YY : 09-13-90 
```

You do not have to enter leading zeros for single-digit months and days. For example, you can enter 2/1/91.

### 2> Current Time

This option sets the system time. The time is normally kept accurate by the battery system, but you may need to adjust it occasionally.

```
Select option to change [0 to Exit]: 2 
```

Enter 24 hour time as HH:MM:SS :

Enter the desired time in the format HH:MM:SS, where HH is hours, 01 to 23, MM is minutes, 01 to 59, and SS is seconds, 01 to 59.

Enter 24 hour time as HH:MM:SS : 18:35:10

You do not have to enter leading zeros for single-digit hours, minutes, and seconds. For example, you can enter 2:9:7.

### 3> Diskette Drive A

This option prompts you for the type (size) of diskettes in Drive A, the RX23 diskette drive. Specify the size of diskettes in the drive so that UNIX can read from and write to the diskettes.

Select option to change [0 to Exit]: 3

The floppy diskette options are:

- 0> Not Installed
- 1> 5.25-inch (360 KB)
- 2> 5.25-inch (1.2 MB)
- 3> 3.50-inch (720 KB)
- 4> 3.50-inch (1.44 MB)

Enter Diskette Drive A type [0..4]:

The default size for diskettes in Drive A is 3.5-inch, 1.44 MB. The RX23, 3.5-inch, 1.44 MB diskette drive, is standard on all applicationDEC 433MP systems.

Enter Diskette Drive A type [0..4]: 4

By default, the RX23, 3.5-inch, 1.44 MB diskette drive is Drive A, the boot drive. The setting of the jumpers on the bridge module can be changed to designate which drive is Drive A. For more information, see the *Technical Configuration and Option Installation Guide*.

### 4> Diskette Drive B

This option prompts you for the type (size) of diskettes in Drive B, the RX33 diskette drive. Specify the size of diskettes in the drive so that UNIX can read from and write to the diskettes.

Select option to change [0 to Exit]: 4

The floppy diskette options are:

- 0> Not Installed
- 1> 5.25-inch (360 KB)
- 2> 5.25-inch (1.2 MB)
- 3> 3.50-inch (720 KB)
- 4> 3.50-inch (1.44 MB)

Enter Diskette Drive B type [0..4]:

The default size for diskettes in Drive B is 5.25-inch, 1.2 MB. The RX33, 5.25-inch, 1.2 MB diskette drive, is optional on all applicationDEC 433MP systems. Therefore, enter 0 to indicate that Drive B is not installed, or enter 1, 2, 3, or 4 to specify the size of your diskette drive.

Enter Diskette Drive B type [0..4]: 2

See the *applicationDEC 433MP Technical Configuration and Option Installation Guide* for information about changing the default values.

### 5> Fixed Disk Drive 0 Type

This option prompts you for the type of disk Drive 0. If the disk were a non-SCSI disk, you would have to provide certain information. Since the applicationDEC 433MP system has only SCSI disks, enter 0 to specify None (not a non-SCSI disk).

Select option to change [0 to Exit]: 5

Type	Cyl	H	WP	S	Type	Cyl	H	WP	S	Type	Cyl	H	WP	S
1	306	4	128	17	17	977	5	300	17	33	830	7	None	17
2	615	4	300	17	18	977	7	None	17	34	830	10	None	17
3	615	6	300	17	19	1024	7	512	17	35	1024	5	None	17
4	940	8	512	17	20	733	5	300	17	36	1024	8	None	17
5	940	6	512	17	21	733	7	300	17	37	615	8	128	17
6	615	4	None	17	22	733	5	300	17	38	1024	8	None	26
7	462	8	256	17	23	306	4	0	17	39	925	9	None	17
8	733	5	None	17	24	612	4	305	17	40	1024	9	None	17
9	900	15	None	17	25	612	2	300	17	41	918	15	None	17
10	820	3	None	17	26	614	4	None	17	42	1024	15	None	17
11	855	5	None	17	27	820	6	None	17	43	823	10	None	34
12	855	7	None	17	28	977	5	None	17	44	969	5	None	34
13	306	8	128	17	29	1218	15	None	36	45	969	7	None	34
14	733	7	None	17	30	1224	15	None	17	46	969	9	None	34
15	Reserved				31	823	10	512	17	47	User Defined Type			
16	612	4	0	17	32	809	6	128	17					

Fixed Disk Drive 0 Type...: None

Enter Fixed Disk Drive 0 type [0..46, 47: User Type]: 0

### 6> Fixed Disk Drive 1 Type

This option prompts you for the type of disk Drive 1. If the disk were a non-SCSI disk, you would have to provide certain information. Since the applicationDEC 433MP system has only SCSI disks, enter 0 to specify None (not a non-SCSI disk).

Select option to change [0 to Exit]: 6

Type	Cyl	H	WP	S	Type	Cyl	H	WP	S	Type	Cyl	H	WP	S
1	306	4	128	17	17	977	5	300	17	33	830	7	None	17
2	615	4	300	17	18	977	7	None	17	34	830	10	None	17
3	615	6	300	17	19	1024	7	512	17	35	1024	5	None	17
4	940	8	512	17	20	733	5	300	17	36	1024	8	None	17
5	940	6	512	17	21	733	7	300	17	37	615	8	128	17
6	615	4	None	17	22	733	5	300	17	38	1024	8	None	26
7	462	8	256	17	23	306	4	0	17	39	925	9	None	17
8	733	5	None	17	24	612	4	305	17	40	1024	9	None	17
9	900	15	None	17	25	612	2	300	17	41	918	15	None	17
10	820	3	None	17	26	614	4	None	17	42	1024	15	None	17
11	855	5	None	17	27	820	6	None	17	43	823	10	None	34
12	855	7	None	17	28	977	5	None	17	44	969	5	None	34
13	306	8	128	17	29	1218	15	None	36	45	969	7	None	34
14	733	7	None	17	30	1224	15	None	17	46	969	9	None	34
15	Reserved				31	823	10	512	17	47	User Defined Type			
16	612	4	0	17	32	809	6	128	17					

Fixed Disk Drive 1 Type...: None

Enter Fixed Disk Drive 1 type [0..46, 47: User Type]: 0

### 7> Base Memory Size (KB)

This option prompts you for the base memory size.

Select option to change [0 to Exit]: 7

The base memory options are:

- 0> 256 KB
- 1> 512 KB
- 2> 640 KB

Enter Base Memory option [0..2]:

For an applicationDEC 433MP system, the base memory size is always 640 KB. Enter 2.

Enter Base Memory option [0..2]: 2

### 8> ISA Extended Memory Size (KB)

This option prompts you for the size of the ISA extended memory. The maximum ISA extended memory is 14 MB.

Select option to change [0 to Exit]: 8

Enter ISA Memory size in multiples of 64 KB [0..16384]:

The ISA extended memory sizes for various total system memory sizes are shown in Table 5.

**Table 5 ISA Extended Memory Size**

Total System Memory	ISA Extended Memory Size
8 MB	7168 KB
12 MB	11264 KB
16 MB or greater	14336 KB

Enter one of the sizes shown in Table 5. For example, for 8 MB of total system memory, enter 7168.

Enter Extended Memory size in multiples of 64KB [0..16384]: 7168

### 9> Video Adapter

This option prompts you for the type of video adapter attached to the video port on the backplane.

Select option to change [0 to Exit]: 9

The video adapter options are:

- 0> EGA/VGA/Super VGA
- 1> CGA 40 X 25
- 2> CGA 80 X 25
- 3> Monochrome

Enter Video Adapter type [0..3]:

Enter 0, 1, 2, or 3 to specify the type of video adapter on your system. For example, if a VGA adapter is installed on your system, enter 0.

Enter Video Adapter type [0..3]: 0

If no video adapter is installed, the video adapter option can be 0, 1, 2, or 3.

### 10> Base Processor Cache

This option prompts you to turn on or off the internal cache of the Intel 486 chip.

Select option to change [0 to Exit]: 10

The base processor cache options are:

- 0> Off
- 1> On

Base Processor Cache.....:

Set the 486 internal cache to On. Enter 1.

System Memory Cache.....: 1

### 11> RRD Menu Status

This option prompts you to turn on or off the RRD menu.

Select option to change [0 to Exit]: 11

The RRD menu status options are:

- 0> Off
- 1> On

RRD Menu Status.....:

If you set the RRD Menu Status to On, and you power up or reboot the system, the boot path goes to RRD and you get the RRD prompt (\*). From the RRD prompt, you can enter commands to run diagnostic tests.

RRD Menu Status.....: 1

If the RRD Menu Status is set to Off, the boot path does not take you to the RRD prompt.

### 12> Memory Refresh

This option prompts you to set memory refresh to on or off on the ISA bus.

Select option to change [0 to Exit]: 12

The memory refresh options are:

- 0> Off
- 1> On

Memory Refresh.....:

For the applicationDEC 433MP system, set memory refresh to Off. Enter 0.

Memory Refresh.....: 0

### 13> Boot Device

This option specifies the location of the boot hard disk drive, the drive from which the operating system is booted. The boot drive can be located on the SCSI bus whose adapter is on the ISA bus (PS1XR-AA), or on the SCSI bus whose adapter is the CPU/SCSI on the system bus. The location of the boot drive is set by specifying the adapter's bus.

Select option to change [0 to Exit]: 13

The boot device options are:

- 0> ISA Bus
- 1> System Bus

Boot Device .....

If the boot drive is a device on the ISA-based SCSI bus, enter 0. If the boot drive is a device on the system bus, enter 1.

Boot Device .....: 0

#### 14> Save Current Options

If you want to make the new parameters available to the system, you must save the current options.

Select option to change [0 to Exit]: 14

The options that you have specified are now saved.

If you change any option and then enter 0 to exit, you are prompted to save current options before you exit.

Select option to change [0 to Exit]: 0

Configuration has been modified. Save options before you exit. [Y/N]?

Enter Y to save your options before you exit.

### 7.3 Configure the PS1XG-AA Graphics Adapter

The PS1XG-AA Adapter is preconfigured for various video modes and resolutions. It can automatically detect a monitor that matches its own preconfiguration. In this case, you do not have to configure the adapter.

If the adapter is unable to determine the resolution and mode of the connected monitor, then you must configure the adapter with the utility diskette.

To configure the adapter, follow the instructions in the *PS1XG-AA Graphics Adapter Manual*.

### 7.4 Install Your Operating System

After configuring the graphics adapter (and any other configurable hardware that you have), install either SCO UNIX or SCO Open Desktop. If you are installing SCO Open Desktop, skip Sections 7.4.1 through 7.4.3 and go to Section 7.4.4.

#### 7.4.1 Before Installing SCO UNIX

**Before** you install SCO UNIX, make decisions about the following:

- DOS partitions
- New installation information
- Hard disk setup
- Required information needed during installation

#### Do I Need a DOS Partition?

A DOS partition is not required to run most DOS applications from *within* SCO UNIX. (VP/ix is required.) However, to run a DOS application that supports only native 286 or 386 mode, you must run it from a bootable DOS partition.

If you are planning to partition the hard disk to use DOS, you should partition the hard disk (with a DOS utility) before you install SCO UNIX.

### **Is There New UNIX Installation Information I Should Know About?**

**Before you install SCO UNIX, read the release notes.** They contain the latest information about the operating system software, including things you need to know before you install SCO UNIX.

The release notes are in the following books:

- *SCO UNIX System V/386 Operating System Release Notes*
- *Important Notes about SCO UNIX on Digital Systems*

Refer to the Before Installing Your Software section in the *SCO UNIX Release Notes* for new installation notes before you read the *SCO UNIX Installation Guide*.

### **How Do I Set Up My Disk?**

It is important that you plan the layout of your hard disk. You need to do the following:

- Determine your swap space allocation
- Decide whether you need separate filesystems

Planning the layout of your disk is especially important if you are going to have a DOS partition, because you have to reinstall the operating system to change the layout of your hard disk.

See the Planning Your Disk Layout section in the *SCO UNIX Installation Guide* and use the Disk Layout Worksheets provided in that section.

### **What Information Do I Need Before Installing UNIX?**

You should gather certain information and make certain decisions before you install SCO UNIX. When you install SCO UNIX, you need the following information:

- Automatic or Fully Configurable Initialization

The Automatic Initialization initializes the hard disk without prompting for disk parameters and filesystem sizes. Choose the configurable procedure if you have planned a non-standard hard disk layout or you need special swap space allocation.

- Serial number

The serial number (an alphanumeric code) appears on the Serialization Card that come in the SCO UNIX kit. During the installation procedure, you need to enter this code exactly as it appears on the card.

- Activation key

The activation key (an alphabetic code) also appears on the Serialization Card. During the installation procedure, you need to enter this code exactly as it appears on the card.

- Security level: trusted or relaxed system  
Unless you have special security requirements, choose relaxed system security.
- Terminal type  
If you do not have a graphics adapter installed, you need to enter your terminal type. Check the *SCO UNIX User's Reference* for the correct terminal type.
- System name for local or network mail
- Root password for the superuser account

For more information about what you need to know before you install SCO UNIX, see the section Before You Start in the *SCO UNIX Installation Guide*. Also, review the installation procedure before you begin.

#### 7.4.2 Installing SCO UNIX

To install SCO UNIX, follow the instructions in the *SCO UNIX System V/386 Operating System Installation Guide*. The installation guide takes you through the complete software installation and initial configuration of your system.

In addition, refer to the *Important Notes about SCO UNIX System V/386 Release 3.2 Version 2.0 on Digital Systems* for any new installation notes for SCO UNIX on the applicationDEC 433MP system.

#### 7.4.3 Using DOS with SCO UNIX

SCO UNIX includes utilities that allow you to access DOS files and directories while you work on your UNIX system. If you do not have VP/ix, these files must reside on a bootable DOS partition on the hard disk or on a DOS diskette.

In addition to using the DOS utilities to manipulate DOS files, it is possible to mount a DOS filesystem and access its files directly, while still operating from the UNIX partition. This means that you can edit or examine the DOS files in place, without first copying them into the UNIX filesystem space.

If you have the Development System, you can cross-compile programs for DOS. However, you cannot execute DOS programs and applications under SCO UNIX alone. You also need to use VP/ix (if operating from the UNIX partition) or you need to boot DOS.

For detailed information, see the sections Using DOS and OS/2 in the *SCO UNIX System Administrator's Guide* and Using DOS Accessing Utilities in the *SCO UNIX User's Guide*.

#### 7.4.4 Before Installing SCO Open Desktop

**Before** you install Open Desktop, make decisions about the following:

- DOS partitions
- New installation information
- Hard disk setup
- Required information needed during installation

### Do I Need A DOS Partition?

A DOS partition is not required to run most DOS applications from *within* Open Desktop. However, to run a DOS application that supports only native 286 or 386 mode, you must run it from a bootable DOS partition.

If you are planning to partition the hard disk to use DOS, you should partition the hard disk (with a DOS utility) before you install Open Desktop.

### Is There New ODT Installation Information I Should Know About?

**Before you install SCO Open Desktop, read the release notes.** They contain the latest information about the operating system software, including things you need to know before you install SCO Open Desktop.

The release notes are in the following books:

- *Open Desktop Release Notes*
- *Important Notes about SCO Open Desktop on Digital Systems*

Refer to the Before Installing Your Software section in the *Open Desktop Release Notes* for new installation notes before you read the installation process described.

### How Do I Set Up My Disk?

It is important that you plan the layout of your hard disk. You need to do the following:

- Determine your swap space allocation
- Decide whether you need separate filesystems

Planning the layout of your disk is especially important if you are going to have a DOS partition, because you have to reinstall the operating system to change the layout of your hard disk.

See the Planning Your Disk Layout section in the *Open Desktop Installation Guide* and use the Disk Layout Worksheets provided in that section.

### What Information Do I Need Before Installing Open Desktop?

In the *Open Desktop Installation Guide*, there is an Installation Checklist that you should complete **before** you begin the installation. Fill in the blanks with the required information so you will have the information when you need it. Also, review the installation procedure before you begin.

When you install Open Desktop, you need the following information:

- Automatic or Fully Configurable Initialization  
The Automatic Initialization initializes the hard disk without prompting for disk parameters and filesystem sizes. Choose the configurable procedure if you have planned a non-standard hard disk layout or you need special swap space allocation.
- Serial number  
The serial number (an alphanumeric code) appears on the Serialization Card that comes in the Open Desktop kit. During the installation procedure, you need to enter this code exactly as it appears on the card.
- Activation key  
The activation key (an alphabetic code) also appears on the Serialization Card. During the installation procedure, you need to enter this code exactly as it appears on the card.

- Cartridge tape  
You should complete the Cartridge Tape Drive section of the checklist. See the Compatible Hardware section of Appendix A in the *Open Desktop Release Notes* for information on how to fill out this part of the checklist.
- Security level: trusted or relaxed system  
Unless you have special security requirements, choose relaxed system security.
- Installation Option: Open Desktop services to install  
If you are performing the configurable installation procedure, you need to decide which services to install. Some components are mandatory and are installed automatically.
- System name  
You need to choose a name that your system will use for local or network mail. See the Network Installation section of Appendix A in the *Open Desktop Release Notes* for information about choosing a system name.
- Root password for the superuser account
- Mouse  
You need the brand of mouse that you have installed on your system. See the Compatible Hardware section of Appendix A in the *Open Desktop Release Notes* to verify that Open Desktop supports your mouse.  
Specify a Logitech mouse if you are using the PS1XG-AA mouse.
- Video adapter type and mode  
You need the type of adapter installed on your system and the mode (resolution) it is using. See the Compatible Hardware section of Appendix A in the *Open Desktop Release Notes* to verify that Open Desktop supports your adapter.

There is additional information that you need to know if your system is part of a network. For example, if you have a network card installed, it needs to be a supported card. In addition, you need the network station number, the network station name, network protocol information (how the network card sends its data), and other network parameters.

Check the documentation that comes with your network card for some of this information. In addition, read the Network Installation section of Appendix A in the *Open Desktop Release Notes*.

#### 7.4.5 Installing SCO Open Desktop

If you are installing SCO Open Desktop, certain services are mandatory, and others can be installed if you need them. All the Open Desktop services can be installed if you have enough disk space.

To install Open Desktop, follow the instructions in the *Open Desktop Installation Guide*. The installation guide takes you through the complete software installation and initial configuration of your system.

In addition, refer to the *Important Notes about SCO Open Desktop Release 1.1 on Digital Systems* for any new installation notes for Open Desktop on the applicationDEC 433MP system.

#### 7.4.6 Using DOS with Open Desktop

One of the Open Desktop services, the ODT-DOS Compatibility Service, provides the MS-DOS operating system and Locus Merge, which provides all the necessary UNIX-DOS compatibility. It is not necessary to have VP/ix running under Open Desktop, but VP/ix can run on an Open Desktop system.

A DOS partition is not required to use ODT-DOS. But some DOS applications only install within a DOS partition rather than within a shared UNIX partition. (DOS is on the UNIX partition with Open Desktop.)

For detailed information, see the sections Using DOS and OS/2 in the *SCO UNIX System Administrator's Guide* or Administering ODT-OS in the *Open Desktop Administrator's Guide*.

#### 7.5 Install Your Applications

Your applicationDEC 433MP system is now ready for the installation of your applications. For details, refer to the installation guide or the owner's manual supplied with each application.

The SCO UNIX Development System is installed just as any other application is installed. Despite its name, the Development System is a set of applications that are installed when other applications are installed.

#### 7.6 Install SCO MPX

If you have a multiprocessor system, you must now install a new copy of SCO MPX and a new license for each processor beyond the the base processor. Therefore, for a system with three CPUs, you must install two copies of MPX.

The *SCO MPX Release and Installation Notes* manual contains information you should read before you install SCO MPX. It also contains the instructions for installing SCO MPX.

MPX is installed last.

### 8 After Your Software Is Installed

The installation of your software on the applicationDEC 433MP system is now complete.

If you want to add additional applications later, it is recommended that you install these applications in this way:

1. Remove MPX.
2. Install your applications.
3. Reinstall all needed copies of MPX.

Because MPX replaces elements of the SCO UNIX kernel, MPX should be installed last to ensure successful installation of your applications.