

# **DEFINITY<sup>®</sup> Monitor 1** Installation Manual



AT&T 585-221-102 Issue 2, December 1992

# **DEFINITY® Monitor 1** Installation Manual

Graphics® AT&T 1988

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1 Introduction

# 1 Introduction

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# Introduction

DEFINITY<sup>®</sup> Monitor I is a system for gathering and analyzing voice and data traffic information on your telecommunications network. Monitor I's menu-driven user interface allows you to gather data about switch resources for the DEFINITY Communications System Generic 2,\* the DEFINITY Communications System Generic 1,\*\* and the G3r and G3i switches, as well as System 85, System 75, and DIMENSION<sup>®</sup>. The G3sv and G3m switches are not specifically referenced throughout this installation guide, but all G3i references include the G3sv and the G3m switches.

## What's in this Manual?

This manual details the installation of the hardware and software needed to operate DEFINITY Monitor I. The manual is divided into the following chapters:

Chapter 1	"Introduction" provides an overview of the DEFINITY Monitor I configuration and supported software release levels, and outlines the steps required for installing Monitor I on either the 3B2/600, 6386E/33 Model S WGS, 6386SX/EL Model WGS or NCR-3315.
Chapter 2	"Installation on a 3B2/600" provides hardware and software installation procedures needed to run the Monitor I standard features on the 3B2/600.
Chapter 3	"Installing on the 6386E/33" provides hardware and software installation procedures needed to run the Monitor I standard features on the 6386E/33 Model S.
Chapter 4	"Installing on the 6386SX/EL" provides hardware and software installation procedures needed to run the Monitor I standard features on the 6386SX/EL Model.
Chapter 5	"Installing on the NCR-3315" provides hardware and software installation procedures needed to run the Monitor I standard features on the NCR-3315.

See: An Introduction to DEFINITY Monitor I, 585-221-010, and the DEFINITY Monitor I Operations Manual, 585-221-703 for a description of the many features of DEFINITY Monitor I.

<sup>\*</sup> Hereafter abbreviated as DEFINITY Generic 2 or Generic 2.

<sup>\*\*</sup> Hereafter abbreviated as DEFINITY Generic 1 or Generic 1.

Appendix A	"Acceptance Testing" contains eight test cases that can be performed after Monitor I is installed.
Appendix B	"Port Configuration Worksheets" contains samples of the worksheets used to keep track of port assignments.
Appendix C	"Monitor I Installation Error Messages" lists the error messages you may encounter while installing Monitor I and the actions required to fix the errors.

## **Conventions Used in this Manual**

Convention	Meaning	
Enter port number pr1 now enabled continue?	This typeface indicates system messages or responses.	
cd /etc/.profile installpkg lpstat -t	This typeface indicates a response or entry the user must type.	
Edit the etc/password. Access usr/tmp/journal.	The bold typeface applies to files, directories, options, and software references.	
(RETURN) (ESC)	Rounded corners on a key indicate a key on your standard keyboard.	
Enter the serial number <i>exactly</i> be sure the power is <i>off</i> .	A bold, italicized typeface indicates emphasized information.	
Load <filename></filename>	Substitute your filename for the file or software identified in brackets.	

#### TABLE 1-1 Table of Conventions

## **Monitor I Customer Service Phone Number**

The Monitor I Hotline is located at the Technical Service Center (TSC). The phone number is 1 800 548-8861.

Note: DO NOT install any hardware or software before calling the TSC.

# **The Monitor I Configuration**

**Note:** Before you begin installing Monitor I, make sure you have received all the hardware, software and documentation required for your configuration.

The hardware and software components for a typical system are outlined below.

## **Hardware Components**

The following is a list of the primary hardware components of a standard system.

- AT&T processor (3B2/600, 6386E/33 Model S, 6386SX/EL or NCR-3315)
- System console
- Additional Random Access Memory (RAM)
- Remote Management Package (RMP)
- Expanded Input/Output (I/O) Capability Feature card(s), consisting of four asynchronous and one parallel port each
- External Hard Disk Unit
- AT&T 615 Business Communications Terminal (BCT) or AT&T 715 Business Communications System (BCS)
- 2224 modems (The number of modems you need depends on your configuration.)
- AT&T 572 Laser printer
- 1 or 3 KVA UPS (Uninterrupted Power Supplies)
- Modular cables and adaptors, as follows.
  - For each printer or terminal accessed through direct-connect or ISN (one EPORT is required for each printer or terminal), you will need the following:
    - One Terminal/Printer modular adaptor (male)
    - One modular RS232C cable (3B2) or 10 conductor modular cable (6386, NCR-3315)

- For each printer or terminal accessing the 3B2 or 6386 through a modem (one modem is required for each printer or terminal), you will need the following:
  - One Terminal/Printer modular adaptor (male)
  - One ACU Modem modular adaptor (male)
  - One modular RS232C cable (3B2) or 10 conductor modular cable (6386, NCR-3315)
- You will need the following for each modem connected to the 3B2, 6386E/33, 6386SX/EL or NCR-3315 used for printer, terminal, or switch access. Multiple printers/modems and terminals/modems can access one modem connected to the 3B2, 6386E/33, 6386SX/EL or NCR-3315. Every two System 85s or every three System 75s can access one modem connected to the 3B2 6386E/33, 6386SX/EL or NCR-3315. (Each modem connected to the 3B2, 6386E/33, 6386SX/EL or NCR-3315 requires one EPORT.)
  - One ACU Modem modular adaptor (male)
  - One modular RS232C cable (3B2) or 10 conductor modular cable (6386)
- You will need the following for the one alarm origination modem connected to the CONTTY port on the 3B2, 6386E/33, 6386SX/EL or NCR-3315:
  - OneA Terminal/Printer modular adaptor (male)
  - One modular RS232C cable (3B2) or 10 conductor modular cable (6386)

You will need two small screwdrivers (one Phillips<sup>®</sup>-head and one flathead) to remove the screws and the cover from the processor and to connect cables.

### Software Components

The following is a list of the primary software components necessary for a standard system.

- UNIX<sup>®</sup> System V Release 3.2.3 Foundation Set and Utilities for the 6386E/33 Model and 6386SX/EL processors or Release 3.2.1 for the 3B2/600.
- AT&T 513 BCT/System 75 Terminal Emulation cartridge for each 615 BCT terminal if accessing G3i, Generic 1 or System 75 maintenance and administration functions. Note that you may receive a 615 Terminal Emulation cartridge in place of a 513 cartridge; the 615 BCT cartridge can be used in the same way as the 513.
- Enhanced Ports (EPORTS) Utilities
- INFORMIX-SQL<sup>®</sup> Release 4.0 (3B2/600, 6386E/33, 6386SX/EL or NCR-3315)
- INFORMIX-SE<sup>®</sup> Release 4.0 (3B2/600, 6386E/33, 6386SX/EL or NCR-3315)
- DEFINITY Monitor I software
- Remote Management Package (RMP) software, if the 3B2, 6386E/33, 6386SX/EL or NCR-3315 are equipped with an RMP card

### Documentation

All software and hardware comes with its own documentation, which includes detailed instructions for installing or loading the product. The following manuals should be available for reference during the installation procedure.

#### 3B2/600 Documents

- The packing list included with the 3B2/600 processor
- AT&T 3B2 Computer Read Me First
- AT&T 3B2 Computer UNIX System V Release 3 Owner Operator Manual
- AT&T 3B2 Computer UNIX System V Release 3.1 System Administrator's Guide
- AT&T 3B2 Computer UNIX System V Release 3.1 System Administrator's Reference Manual
- AT&T 3B2 Computer UNIX System V Release 3.2 Release Notes
- AT&T 3B2 Computer UNIX System V User's Reference Manual
- AT&T 3B2 Computer Expanded Input/Output Capability Manual
- AT&T 3B2 Computer Random Access Memory Expansion Manual
- AT&T 3B2 Computer SCSI Installation Manual
- AT&T 3B2 Computer SCSI Operations Manual
- AT&T 3B2 Computer Remote Management Package Manual

#### 6386E/33 Documents

- The packing list included with the 6386E/33 Model S processor
- AT&T 6386E/33 Computer Read Me First
- AT&T 6386E/33 Work Group System User's Guide
- UNIX System V/386 Release 3.2.3 Operations/System Administration Guide
- UNIX System V/386 System Administrator's Reference Manual
- AT&T 6386E/33 Computer UNIX System V Release 3.2 Release Notes
- AT&T 6386E/33 UNIX System V User's Reference Manual
- AT&T 6386E/33 Computer Expanded Input/Output Capability Manual
- AT&T 6386E/33 Computer Random Access Memory Expansion Manual
- AT&T 6386E/33 Computer SCSI Operations Manual
- AT&T 6386E/33 Computer Remote Management Package Manual

#### NCR-3315 Documents

- NCR-3315 Technical-Service Manual
- NCR-3315 User's Manual

#### **Other Documents**

- DATAPHONE <sup>®</sup> II 2224CEO User's Manual or DATAPHONE II 2224GNN Modem User's Manual
- 615 BCT User's Guide or
  715 BCS User's Guide and Service Manual, or
  630/730 Multi-Tasking Graphics Terminal User's Guide
- AT&T 572/573 Printer User's Guide
- 513 BCT/System 75 Emulation Cartridge User's Guide
- AT&T Intelligent Ports Card Model 900 (IPC-900) User's Guide

## Overview — Installation Sequence — 3B2/600

Table 1-2 lists the steps required to install Monitor I on a 3B2 processor and indicates the chapter containing the appropriate instructions, as well as the approximate time required to complete each step.

Task	Go To	Time Needed
Set up the 3B2/600 computer and the console.	Chapter 2, Step 1, and instructions in the <i>Read</i> <i>Me First</i> document.	30 minutes
Install the External Hard Disk Unit, and optional AIC card and Silent Knight <sup>®</sup> Autodialer.	Chapter 2, Step 2	40 minutes
Boot the 3B2 from the UNIX Essential Utilities tape and run the setup program.	Chapter 2, Step 3, and instructions in the <i>Owner Operator</i> <i>Manual</i> .	45 minutes
Install the additional UNIX utilities (from tape) and the optional RMP software (from floppy disk).	Chapter 2, Step 4	40 minutes
Set up and install the modems and additional 615 BCT, 715 BCS, or 730 MTG terminals.	Chapter 2, Step 5	15 minutes per modem or terminal
Set up and enable the printer.	Chapter 2, Step 6	15 minutes
Rebuild the UNIX kernel.	Chapter 2, Step 7	20 minutes
Install the INFORMIX-SQL and INFORMIX-SE software.	Chapter 2, Step 8, and instructions provided with the INFORMIX tapes.	20 minutes
Add the Monitor I group and users.	Chapter 2, Step 9	10 minutes
Install the Monitor I software.	Chapter 2, Step 10	45 minutes
Enable the system ports, including terminal ports and UUCP ports.	Chapter 2, Step 11	5 minutes per port

#### TABLE 1-2 3B2/600 Installation

Use the Port Configuration Worksheet in Appendix B of this manual to note the port assignments of the hardware components in your configuration and the phone lines to which they are attached. You will need this information to enable the ports in Step 11 of Chapter 2.

## Overview — Installation Sequence — 6386E/33 Model S

Table 1-3 lists the steps required to install Monitor I on a 6386 processor and indicates the chapter containing the appropriate instructions, as well as the approximate time required to complete each step.

Task	Go To	Time Needed
Set up the 6386E/33 Model S computer and install the Video Display Controller (VDC600) card, additional memory, Intelligent Ports Card (IPC), keyboard, monitor, mouse, and cables.	Chapter 3, Step 1	60–90 minutes
Run the Setup program, load the UNIX Foundation Set and partition the hard disk.	Chapter 3, Step 2	45 minutes
Load the additional software, including FACE, FMLI, and drivers for the IPC.	Chapter 3, Step 3	60 minutes
Set up and install the modems and additional 615 BCT, 715 BCS, or 730 MTG terminals.	Chapter 3, Step 4	15 minutes per modem or terminal
Set up and enable the printer.	Chapter 3, Step 5	15 minutes
Rebuild the UNIX Kernel.	Chapter 3, Step 6	20 minutes
Install the INFORMIX-SQL and INFORMIX-SE software.	Chapter 3, Step 7, and instructions provided with the INFORMIX tapes.	20 minutes
Add the Monitor I group and users.	Chapter 3, Step 8	10 minutes
Install the Monitor I software.	Chapter 3, Step 9	45 minutes
Enable the system ports, including terminal ports and UUCP ports.	Chapter 3, Step 10	5 minutes per port

#### TABLE 1-3 6386E/33 Model S Installation

Use the Port Configuration Worksheet in Appendix B of this manual to note the port assignments of the hardware components in your configuration and the phone lines to which they are attached. You will need this information to enable the ports in Step 10 of Chapter 3.

## **Overview** — Installation Sequence — 6386SX/EL

Table 1-4 lists the steps required to install Monitor I on a 6386SX/EL processor and indicates the chapter containing the appropriate instructions, as well as the approximate time required to complete each step.

Task	Go To	Time Needed
Set up the 6386SX/EL computer and install the additional memory, Intelligent Ports Card (IPC), keyboard, monitor, mouse, and cables.	Chapter 4, Step 1	60–90 minutes
Run the Setup program, load the UNIX Foundation Set, and partition the hard disk.	Chapter 4, Step 2	45 minutes
Load the additional software, including FACE, FMLI, and drivers for the IPC.	Chapter 4, Step 3	60 minutes
Set up and install the modems and additional 615 BCT, 715 BCS, or 730 MTG terminals.	Chapter 4, Step 4	15 minutes per modem or terminal
Set up and enable the printer.	Chapter 4, Step 5	15 minutes
Rebuild the UNIX Kernel.	Chapter 4, Step 6	20 minutes
Install the INFORMIX-SQL and INFORMIX-SE software.	Chapter 4, Step 7, and instructions provided with the INFORMIX tapes.	20 minutes
Add the Monitor I group and users.	Chapter 4, Step 8	10 minutes
Install the Monitor I software.	Chapter 4, Step 9	45 minutes
Enable the system ports, including terminal ports and UUCP ports.	Chapter 4, Step 10	5 minutes per port

#### TABLE 1-4 6386SX/EL Installation

Use the Port Configuration Worksheet in Appendix B of this manual to note the port assignments of the hardware components in your configuration and the phone lines to which they are attached. You will need this information to enable the ports in Step 10 of Chapter 4.

## Overview — Installation Sequence — NCR-3315

Table 1-5 lists the steps required to install Monitor I on a NCR-3315 processor and indicates the chapter containing the appropriate instructions, as well as the approximate time required to complete each step.

Task	Go To	Time Needed
Set up the NCR-3315 computer and install the additional memory, Intelligent Ports Card (IPC), Cartridge Tape Drive, keyboard, monitor, and cables.	Chapter 5, Step 1	60–90 minutes
Run the Setup program, load the UNIX Foundation Set, and partition the hard disk.	Chapter 5, Step 2	45 minutes
Load the additional software, including FACE, FMLI, the Cartridge Tape Utilities, and drivers for the IPC.	Chapter 5, Step 3	60 minutes
Set up and install the modems and additional 615 BCT, 715 BCS, or 730 MTG terminals.	Chapter 5, Step 4	15 minutes per modem or terminal
Set up and enable the printer.	Chapter 5, Step 5	15 minutes
Rebuild the UNIX Kernel.	Chapter 5, Step 6	20 minutes
Install the INFORMIX-SQL and INFORMIX-SE software.	Chapter 5, Step 7, and instructions provided with the INFORMIX tapes.	20 minutes
Add the Monitor I group and users.	Chapter 5, Step 8	10 minutes
Install the Monitor I software.	Chapter 5, Step 9	45 minutes
Enable the system ports, including terminal ports and UUCP ports.	Chapter 5, Step 10	5 minutes per port

#### TABLE 1-5 NCR-3315, Installation

Use the Port Configuration Worksheet in Appendix B of this manual to note the port assignments of the hardware components in your configuration and the phone lines to which they are attached. You will need this information to enable the ports in Step 10 of Chapter 5.



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# Installing on a 3B2/600

This section explains how to install the hardware and software required to use DEFINITY Monitor I on the 3B2/600 processor. The entire installation should take approximately five hours; three hours to complete Steps 1 through 4, and two hours to complete Steps 5 through 10.

Figure 2-1 shows a sample DEFINITY Monitor I configuration on the 3B2/600.



FIGURE 2-1 Sample Monitor I Equipment Configuration on the 3B2/600

## Step 1 — Set Up the 3B2/600 and Console

### Prerequisites for this Step

#### Activities

- DO NOT install any hardware or software before calling the Technical Support Center (TSC) (1 800 422-6622).
- Make sure that you have received all the components necessary for the Monitor I system.

#### Documents

- AT&T 3B2 Computer Read Me First (Read Me First)
- AT&T 3B2 UNIX System V Release 3.2.1 Owner/Operator Manual (Owner Manual)
- User's Guide 615 Business Communications Terminal (Terminal Guide) or 715 Business Communications System (BCS) User's Guide and Service Manual Terminal Guide)

#### Hardware/Software Components

- The standard 3B2/600 processor, consisting of:
  - System unit
  - 1 4 MB memory card
  - 2 147 MB hard disk drives
  - 1 720 KB floppy disk drive
  - 60 MB cartridge tape drive
  - 3 Enhanced Ports (EPORTS) cards (installed in slots 2, 3, and 4 of the system unit)
  - SCSI (Small Computer Systems Interface) Host Adaptor Card (installed in slot 1 of the system unit) and cable
  - Eight cables
  - Ten connectors
- The recommended console, consisting of:
  - AT&T 615 Business Communications Terminal (BCT) or AT&T 715 Business Communications System (BCS)
  - Keyboard
  - AT&T 513 BCT/System 75 Emulation Cartridge per 615 BCT for accessing G3r, G3i, Generic 1 or System 75 maintenance and administration functions

### Procedure 1A — Unpack and Set Up the 3B2/600

- 1 Unpack and set up the 3B2.
  - See: *Read Me First* for the appropriate steps to unpack and set up the 3B2. The section called "Getting Started" in the *Owner Manual* contains additional information about setting up the computer, as well as basic administration and troubleshooting strategies for the system administrator.

## Procedure 1B — Unpack and Set Up the Console

"Step 5 — Set Up the Terminals and Modems" explains the installation procedures for terminals other than the console.

1 Unpack and set up the 615 or 715 Console.

See:

- Read Me First, which describes how to set up and prepare the console.
- The *Terminal Guide* to set the console's terminal options to those recommended for the 615 BCT or 715 terminal.
- "Set Up the Console Terminal" in *Read Me First* to connect the console to the 3B2. (The terminal/printer adaptor is connected to the console port labeled MAIN and the other end is connected to the 3B2 port labeled CONSOLE.)
- 2 Install the 513 BCT/System 75 Emulation Cartridge by inserting the 513 BCT/System 75 cartridge into the slot on the side of the 615 BCT. Be sure that the cartridge is right side up, with the cartridge label toward the front.
  - Warning: Check the on/off switch before you install the cartridge to make sure that the power for the 615 terminal is turned *off*. A blank screen is *not* an indicator that the terminal is off, and you will destroy the 513 BCT/System 75 cartridge if you insert or remove it while the terminal is on.
- **3** For the 715 terminal, enter the following settings:
  - Set the emulation mode to: BCS
  - Set the UNIX terminal type (TERM) to: sys75
  - Set the terminal type for cut-through access from Monitor I to G3r, G3i, Generic 1 and System 75 to: 513
  - Set the Swap Delete option of the 715 terminal to: yes (through terminal setup) for BCS.
- 4 For Monitor I operations, change the Cursor Blink option to y for yes.
- 5 Cut-through access to System 75 R1V1 for maintenance or administration requires that the System 75 be equipped with a pooled modem card that allows asynchronous communications.

End of procedures for Step 1

## Step 2 — Install the Additional Hardware

### Prerequisites for this Step

#### Activities

 Make sure that the 3B2/600 processor, keyboard, and console hardware are set up and connected according to the instructions in Step 1 of this section.

#### Documents

- AT&T 3B2 Computer Remote Management Package Manual (RMP Manual)
- AT&T 3B2 Computer SCSI Installation Manual (SCSI Manual)
- AT&T 3B2 Computer Expanded Input/Output Capability Manual (Ports Manual)

#### Hardware/Software Components

- Alarm Interface Card (AIC) and cable
- Expanded Input/Output Capability Ports (EPORTS) card(s)
- 1450 Silent Knight Autodialer
- External Disk Unit, Control cable, and Disk Data cable
- **Notes:** The AIC and cable are part of the Remote Management Package (RMP), which also includes a software diskette. The RMP is a 3B2 feature package that allows administrative and maintenance operations to be performed on a 3B2 computer from a remote location. The RMP also has the ability to output an alarm signal when a machine error is detected. When DEFINITY Monitor I's 3B2 is equipped with an RMP, the processor can forward alarm signals to a designated location (such as AT&T Services or a Trouble Tracker system) through the Silent Knight transmitter. The RMP is required for a 3B2 that will be forwarding its own alarms to the AT&T Technical Support Organization (TSC).

The EPORTS card is a 3B2 feature card that adds four asynchronous ports and one parallel port to the system. The EPORTS card is used for all types of asynchronous communications, including asynchronous alarm reception, alarm routing, UUCP connections, terminal connections, NSD connections and printer connections.

The Silent Knight Autodialer connected to the DEFINITY Monitor I processor is used to send its own hardware alarms to INADS/TSC. Each Silent Knight Autodialer is installed by your AT&T service representative.

### Procedure 2A — Install the AIC

- **Caution:** When you install the hardware, be sure to read and follow the instructions and cautions explained in the supporting hardware documentation.
- 1 Remove the cover on the 3B2/600 and install the AIC card.
  - **See:** The "Installation and Removal in a 12-Slot 3B2 Computer" instructions in the *RMP Manual* to install the AIC in the next available slot of the 3B2/600.

The RMP software that uses the AIC will be installed in "Step 4 — Load the Additional Software."

## Procedure 2B — Install the EPORTS Card(s)

- 1 Install the EPORTS card(s).
  - **See:** The "Installation and Removal in a 12-Slot 3B2 Computer" in the *Ports Manual* to install the Ports card(s). This manual also contains information on numbering and assignment of the ports.
- 2 Replace the cover on the 3B2/600.

Figure 2-2 shows the 3B2 processor with the standard cards installed.



FIGURE 2-2 3B2/600 with Standard Cards

### Procedure 2C — Install the 1450 Silent Knight Autodialer

- 1 Unpack the components of the 1450 Silent Knight Autodialer.
  - **See:** Figures 2-3 and 2-4 in this section to assist you while installing the Silent Knight Autodialer. Note that the Silent Knight Autodialer channel 1 will be associated with *major* alarms and channel 2 will be associated with *minor* alarms.
- 2 Remove the Silent Knight jumpers 4, 6, and 7.
- 3 Connect a strap between the Silent Knight terminals 3 and 4 and a 15K resistor between the Silent Knight terminals 6 and 11.
- 4 Connect the four-wire modular plug (one end of the two-foot cable) to the Silent Knight as shown in Figure 2-3.
- 5 Connect the telephone line to the Silent Knight terminals 14 (TIP) and 13 (RING) and the modem telephone line to the Silent Knight terminals 16 (TIP) and 15 (RING).
- 6 Set the screws on the Silent Knight to dial the desired location and to identify the ID code of the DEFINITY Monitor I system. The AT&T TSC assigns the ID code.
- 7 Connect the Autodialer to the processor.
- 8 Connect the Transient Protector to the Autodialer.
- 9 Connect to the phone line through an RJ11C jack.
  - **Caution:** The connection to the phone line *must* be made through an RJ11C jack. Connection through any other type jack will cause damage to the equipment.

#### Procedure 2D — Connect the External Disk Unit

- 1 Connect the first external disk unit to the 3B2.
  - See: The Task 9 instructions in the SCSI Manual to connect the first external disk unit to the 3B2.

Look for the product id on the label on the inside of the 3B2/600 door. If the number ends in G3 or higher (ED-3T023-30,G3), change the **target id** on the External Disk Controller to 4. Otherwise, leave it at the factory setting.

- 2 Connect the additional external disk units.
  - See: The Task 11 instructions in the SCSI Manual to connect additional external disk units.



FIGURE 2-3 Autodialer Configuration



2. The connection to the UPS applies only to A 1 KVA unit.



End of procedures for Step 2

## Step 3 — Load the UNIX Essential Utilities

## Prerequisites for this Step

#### Activities

- Make sure that the 3B2 processor, keyboard and console are set up and connected according to Step 1 of this section.
- Make sure that the appropriate cards are installed in the 3B2 according to Step 2 of this section.

#### **Documents**

- AT&T 3B2 Computer UNIX System V Release 3.2.1 Owner Operator Manual (Owner Manual)
- AT&T 3B2 Computer UNIX System V Release 3.2.1 Administrator's Guide (Admin Guide)

#### Hardware/Software Components

UNIX Operating System software tape

## Procedure 3A — Load the UNIX Essential Utilities

- 1 Turn on the 3B2.
  - Note: UNIX System V Release 3.2.1 is the operating system supported by Monitor I for the 3B2/600.

Ignore the following messages:

#### Unknown ID Code for device in slot n

These messages indicate that the hardware in the specified 3B2 slots are undefined. Until the appropriate software is loaded in "Step 4 — Load the Additional Software," these messages are displayed every time the system is booted. The screen prompts you to load the first Essential Utilities tape.
The UNIX Operating System Release number appears after the following message is displayed:

Diagnostics Passed

2 Enter *root* at the prompt:

Console Login:

System Response:

Password:

3 Press (RETURN).

- See: "Procedure 3.9 Reload the Operating System, Full System Restore (Default Partition Size)" instructions in the *Admin Manual*.
- Select 1 to specify the SCSI as the load device.
- Select 1 to specify the tape drive as the subdevice.
- Select 1 to specify a full restore.
- Select 1 to specify that the /usr file system should be loaded on disk 0 (the first internal hard disk drive).

Refer to Table 2-1 for the initial disk layout.

Disk Number	File System Name	Partition Designation	Block Size
Disk0	/ (root)		26,624
	/swap		65,536
	/sysdump		65,536
	/usr		149,504
Disk1	/usr2		

#### TABLE 2-1 Initial Hard Disk Layout

## Procedure 3B — Partition Disk 2

- 1 At the root prompt, enter *sysadm harddisk partition* to begin the hard disk partitioning utility.
- Select disk 2 to select disk 2 to be partitioned.
- 3 Select *usr2* as the file system name.
- 4 Select the default file system size, which should be the entire second hard disk.

## Procedure 3C — Run the Setup Program

1 Enter *setup* when the following prompt is displayed:

Console Login

See: The instructions for "Getting Started" in the Owner Manual.

Do not install user logins at this time; you will do this in "Step 9 — Add the Monitor I Group and Users."

- 2 Set the system clock.
- 3 Assign passwords to the administrative and root logins. This is not required, but it is strongly recommended, especially for the root login.
- 4 Set the Node Name. This is the name by which other machines know this one.

#### Procedure 3D — Change the Firmware Password

- 1 Make a floppy key and change your firmware password.
  - See: The instructions in "Getting Started" in the Owner Manual.

# Step 4 — Load the Additional Software

## Prerequisites for this Step

#### Activities

- Make sure that the 3B2 processor, keyboard, console, and additional hardware are installed according to Steps 1 and 2 of this section.
- Make sure that the correct version of the Essential Utilities is loaded and the Setup program has been run according to Step 3 of this section.
- If the system is in multiuser mode, make sure all other users are logged off.

#### Documents

- AT&T 3B2 UNIX System V Release 3.2.1 Owner Operator Manual (Owner Manual)
- AT&T 3B2 UNIX System V User's Reference Manual (User's Manual)

#### Hardware/Software Components

- Although all the UNIX additional utilities can be loaded, the required software packages are (from SCSI tape):
  - EPORTS
  - directory and file management
  - user environment
  - interprocess communications
  - system administration
  - terminal information (parts 1 and 2)
  - editing
  - line printer spooling
  - basic networking
  - SCSI cartridge tape
  - window utilities (for the 630/730 MTG only)
- Security Administration software
- Ports software (already loaded as part of the Essential Utilities package)
- RMP software, if an AIC was installed in "Step 2 Install the Additional Hardware"

## Procedure 4A — Load the Additional UNIX Utilities

1 Log in as *root* at the following prompt:

Console Login:

2 Enter *stty erase "^H" echoe* to set the backspace key to backspace and erase the character.

This sequence must be entered each time the system is booted. After the system is completely installed, this sequence should be added to the **/etc/profile**.

See: The *Owner Manual* for more details.

- 3 Continue the installation.
  - **See:** The "Installation of Utilities" procedures under the "Installation or Removal of Utilities from SCSI Tape" instruction in the "Software Utilities Packages" section in the *Owner Manual*.

The "Software Utilities Packages" section contains additional information about the system administration commands, a description of the packages, and information about dependencies.

- 4 Enter sysadm tapepkg to install the UNIX files from SCSI tape.
  - Enter help for further information about selecting the packages to install.
- 5 When the Terminal Information Utilities (part 2) is being loaded:
  - Select 1 to install terminfo file(s).
  - Enter all when selecting the files to install.
  - Select done to complete the installation of the files.
  - Select *0* to terminate installation of the package.
  - **Note:** When the Line Printer Spooling Utilities are being loaded, you cannot define the printer to the system until the Monitor I software is loaded.

The system prompts:

Should the disable and enable commands be available to ALL users?

- 6 Enter *n* at the prompt. The current line printer status is displayed on the screen.
- 7 When the Basic Networking Utilities are being loaded, the prompt displays the current name of the system and asks you if you want to change it.
  - Change the system name if desired.

8 When the Windowing Utilities are loaded the following prompt is displayed:

#### How many windowing terminals?

9 Enter the number of 630/730 MTGs connected to the processor.

The process is complete when the prompt to remove the cartridge tape is displayed.

**Note:** To list the utility names after they have been installed, use the **sysadm listpkg** command.

# Procedure 4B — Load the Security Administration Utility Package

- 1 Enter sysadm installpkg at the prompt.
- 2 Insert the Security Administration diskette when prompted, and press (RETURN).

### Procedure 4C — Continue Loading with the RMP Software

1 If an AIC is installed on the 3B2, insert the RMP diskette and press (RETURN) at the prompt:

continue?

**Note:** Call the Technical Service Center (TSC) at 1 800 548-8861 for your RMP settings. Your TSC engineer will know how to enable the RMP settings.

## Procedure 4D — Reboot the System

- 1 Enter q to exit the sysadm program after all the packages are loaded.
- 2 Enter cd / to be sure you are in the root directory.
- 3 Enter /bin/touch /etc/system to bring the file dates to the current date.
- 4 Enter shutdown -i6 -g0 -y and press RETURN.

# Step 5 — Set Up the Terminals and Modems

## Prerequisites for this Step

#### Activities

 Make sure that the 3B2 processor, keyboard, console, additional cards, and software have been installed according to Steps 1 through 4 of this section.

#### Documents

- User's Guide 615 Business Communications Terminal Guide or, 715 Business Communications System User's Guide and Service Manual or 730 Multi-Tasking Graphics Terminal Guide or User's Guide - 630 Multi-Graphics Terminal (Terminal Guide)
- DATAPHONE II 2224-CEO Modem User's Manual or DATAPHONE II 2224-GNN Modem User's Manual (Modem Manual)

#### Hardware/Software Components

- 615 BCT(s), or 715 BCS(s), or 630 or 730 MTGs (optional)
- One 513 BCT/System 75 Emulation cartridge per 615 BCT for accessing G3r, G3i, Generic 1, or System 75 maintenance and administration functions
- One or more AT&T modems per communication type
  - Bidirectional 1200/300 baud asynchronous communications modems for UUCP and communication with administered switches
- One modular cable for each terminal or modem to 3B2 connection
- One terminal/printer adaptor for each terminal to modular cable connection
- One male ACU/Modem adaptor for each modem to 3B2 connection
- One EIA shielded cable for the 615 or 715 to modem connection

## Procedure 5A — Set Up the Terminals

- 1 Unpack, install and set up the terminal.
  - See: The "Unpack and Install" (615 BCT or 715 BCS) instructions in the *Terminal Guide*. The *Terminal Guide* also contains the options that need to be set for your terminal.
- 2 Install the 513 BCT/System 75 Emulation Cartridge by inserting the 513 BCT/System 75 cartridge into the slot on the side of the 615 BCT. Be sure that the cartridge is right side up, with the cartridge label toward the front.

- **Warning:** Check the on/off switch before you install the cartridge to make sure that the power for the 615 terminal is turned *off*. A blank screen is *not* an indicator that the terminal is off, and you will destroy the 513 BCT/System 75 cartridge if you insert or remove it while the terminal is on.
- 3 For the 715 terminal, enter the following settings:
  - Set the emulation mode to: BCS
  - Set the UNIX terminal type (TERM) to: sys75
  - Set the terminal type for cut-through access from Monitor I to G3r, G3i, Generic 1, and System 75 to: 513
  - Set the Swap Delete option of the 715 terminal to: yes (through terminal setup) for BCS.
- 4 For Monitor I operations, change the Cursor Blink option to y for yes.
- 5 Cut-through access to System 75 R1V1 for maintenance or administration requires that the System 75 be equipped with a pooled modem card that allows asynchronous communications.

## Procedure 5B — Set Up the Modems

Monitor I supports the 2224-CEO, the 2224-GNN and the AT&T 2400 modems. For either modem, you must set up the hardware switches, as follows.

See: The appropriate Modem Manual for complete installation procedures.

Contact the Technical Service Center (TSC) at 1 800 548-8861 to have your modem checked after you have completed the appropriate modem procedures.

#### 2224-CEO Modems

1 Remove the CEO modem cover to access the Internal Option switches.

See Figure 2-5 for a diagram of the CEO modem hardware switches.



FIGURE 2-5 CEO Modem Hardware

- 2 To set your modem switches:
  - For dial-out or bidirectional 1200/300 baud asynchronous, dialer-enabled modems, set the switches according to Table 2-2.

2224-CEO Dial-Out 1200/300 Asynchronous Communication					
Switch	Push	Switch	Push	Switch	Push

TABLE 2-2

Switch	Push	Switch	Push	Switch	Push
1-1	down	1-5	down	int-1	away from number
1-2	down	1-6	up	int-2	away from number
1-3	down	1-7	down		
1-4	down	1-8	down		

- 3 Plug the power cable from the modem into the power outlet.
- 4 Reset the modem by pressing and releasing the RESET switch. This will make your changes effective.

#### 2224-GNN Modems

See Figure 2-6 for a diagram of the GNN modem hardware switches.



FIGURE 2-6 GNN Modem Hardware

 For dial-out or bidirectional 1200/300 baud asynchronous, dialer-enabled 2224-GNN modems, set the switches according to Table 2-3.

Switch	Push
1-1	left
1-2	left
1-3	left
1-4	right
1-5	right
1-6	left
1-7	left
1-8	left
2-1	right
2-2	right
2-3	left
2-4	left
2-5	left
2-6	left
2-7	left
2-8	left
3-1	right or up
3-2	right or up
3-3	right or up
3-4	left or down
3-5	left or down
3-6	left or down
3-7	left or down
3-8	left or down

TABLE 2-3	
2224-GNN Dial-Out 1200/300 Asynchronous Cor	nmunications

2 Reset the modem by removing it from the rack, then putting it back. This will make the changes take effect.

## Set Up An AT&T 2400 Modem

The AT&T 2400 modems can arrive from the factory in an unknown state; they can be in a state that will not allow them to communicate with a UNIX system. Therefore, these modems should be configured using a terminal.

#### Install the AT&T 2400 Modem

Install the AT&T 2400 modem as follows:

- 1 Plug in the modem's power adaptor.
- **2** Connect the modem to the main port of an AT&T 615 Terminal using a straight through male to male RS-232 cable.

- 3 Set the terminal speed to 1200.
- 4 Set the terminal Parity to EVEN.
- 5 Set the terminal Send Parity to NO.

## Set the 2400 Modem Software Options

Set the software options in the 2400 modem using a terminal. The modem can be configured for bidirectional port, asynchronous transmission or product access.

- For a bidirectional or asynchronous transmission, use the sequence of commands provided in Table 2-4, Column 1. AT&T 2400 modems used for bidirectional traffic such as login or UUCP must be locked at one baud rate.
- For a product access configuration, use the sequence of commands provided in Table 2-5, Column 1. AT&T 2400 modems used for product access (various baud rates) must only be used for product access (outgoing only).

Command	Meaning		
AT&F	Factory Default		
AT&MO	Turn speaker off		
AT&QO*	Standard Async		
ATQ2	Result code in originate only		
AT&D2	Enter command mode on DTR dropping		
AT&KO	no flow control		
AT&C2	CD on for cmd mode, track carrier for data transfer		
ATSO=1	Auto Answer		
ATS37=6	Maximum DCE Line Speed**		
AT&WO	Write storable parameters of current configuration in memory as profile 0		
AT&YO	Specify stored user profile 0 as power up configuration		

TABLE 2-4 AT&T 2400 Modem Bidirectional or Asynchronous

\*\* Set to 5, 1200 baud; set to 6, 2400 baud

<sup>\*</sup> Varies across the two configuration tables; all other commands are common for all configurations.

Command	Meaning	
AT&F	Factory Default	
AT&MO	Turn speaker off	
AT&QO*	Standard Async	
ATQ2	Result code in originate only	
AT&D2	Enter command mode on DTR dropping	
AT&KO	no flow control	
AT&C2	CD on for cmd mode, track carrier for data transfer	
ATSO=1	Auto Answer	
ATS37=0*	Maximum DCE Line Speed	
AT&WO	Write storable parameters of current configuration in memory as profile 0	
AT&YO	Specify stored user profile 0 as power up configuration	

TABLE 2-5 Configuration of a Product Access Modem

\* Varies across the two configuration tables; all other commands are common for all configurations.

#### Configure the UNIX System

The Dialers file of UNIX System V Release 3.2.3 contains the following line:

#hayes =,-, "" \M\dAT\r\c OK\r \EATDT\T\r\c CONNECT \m\c

Activate this file by removing the comment symbol, #, at the beginning of the line.

For modems that are to be used for outgoing calls (bidirectional), the procedure for configuring the UNIX System as described in the *Installation Manual* changes as follows:

- In the Connect to Modem form of the FACE Menu, set the Modem Name field to Non-Autodialing.
- The Devices files will contain a line corresponding to each modem configured for outgoing calls. The following is a typical entry in this file:

ACU ttyh06,M - 1200 Non-Autodialing

For each modem, edit the file by entering a set as shown in the following:

ACU ttyh06 - 300 hayes ACU ttyh06 - 1200 hayes ACU ttyh06 - 2400 hayes

End of Procedure

## Procedure 5C — Connect the Terminals

- 1 Connect the appropriate terminal/printer adaptor to the port labeled MAIN on the back of the terminal.
- 2 Insert the modular cable into the adaptor.
- 3 Insert the other end of the modular cable into an asynchronous port on the Ports card. Attach the red ground connector securely to the ground beneath the port.
- 4 Plug the power cable from the terminal into the power outlet.
- 5 Fill in the port number, associated device name, and phone line on the Port Configuration Worksheet in Appendix B of this manual.

## Procedure 5D — Connect the Modems

- 1 For all other asynchronous modem connections, insert one end of a modular cable into any asynchronous port on the 3B2 Ports or EPORTS cards.
- 2 Attach the red ground connectors securely to the ground beneath the port.
- 3 Plug the ACU/Modem adaptor into the RS-232-C port on the back of the modem.
- 4 Insert the other end of the modular cable into the adaptor.
- 5 Connect the modem to the phone line.
- 6 Note the port number, associated device name, and phone line on the Port Configuration Worksheet in Appendix B of this manual.

# Step 6 — Set Up and Enable the Printer

## Prerequisites for this Step

#### Activities

 Make sure the DEFINITY Monitor I system has been installed according to Steps 1 through 5 of this section.

#### Documents

- User's Guide AT&T 572/573 Printer (Printer Guide)
- AT&T 3B2 Computer UNIX System V Release 3.2.1 System Administrator's Guide (Admin Guide)

#### Hardware/Software Components

- AT&T 572 Printer
- AC power cord
- Standard RS232C cable
- Tractor assembly
- Static eliminator

## Procedure 6A — Set Up the Printer

1 Set up the printer.

See: The Printer Guide to set up the printer.

Set the printer setting, 96 BPS to 01 9600 for direct connect or 04 1200 for dial-up according to the "Operation Panel and Operational Procedures in Set-Up Mode" in the *Printer Guide*.

## Procedure 6B — Connect the Printer Cable

1 Use a standard RS232 cable and a TERM/PRINTER adaptor (for a 3B2) to connect the printer to a serial port. Note the port number on the Port Configuration Worksheet.

# Procedure 6C — Enable the Printer

1 Log in as root.

Note: The printer port should not have been enabled.

2 Enter /usr/lib/lpshut and press RETURN. System Response:

#### Line printer scheduler stopped.

- 3 For the 572 printer, enter /usr/lib/lpadmin -ppr1 -m5310 -v/dev/ttyxx and press RETURN.
  - Where: pr1 is the name you are assigning to the first printer. If you are installing more printers, use different names for each printer.

xx is the port number assigned to the printer.

- 4 Enter /usr/lib/lpsched and press RETURN.
- 5 Enter /usr/lib/accept pr1 and press RETURN. System Response:

Destination pr1 now accepting requests.

- 6 Enter /usr/lib/lpadmin -dpr1 and press (RETURN).
- 7 Enter *enable pr1* and press (RETURN). System Response:

pr1 now enabled.

8 Enter *lpstat* -t and press (RETURN).

System Response:

The system responds with the list of printers and their current status; pr1 should be enabled.

# Step 7 — Rebuild the UNIX Kernel

## Prerequisites for this Step

#### Activities

- Make sure that the 3B2 processor, keyboard, console, additional terminals, and modems are installed according to Steps 1, 2, and 5 of this section.
- Make sure that the UNIX Essential Utilities and additional software has been loaded according to Steps 3 and 4 of this section.

#### Documents

AT&T 3B2 UNIX System V Release 3.2.1 Administrator's Guide (Admin Guide)

## Procedure 7A — Change Directories to Where the Kernel Resides

- 1 Log in as root.
- 2 Enter cd /etc/master.d at the UNIX prompt.

## Procedure 7B — Edit the Kernel File

1 Set the **TERM** equal to **615**, **715**, **630**, **730**, or **513** for the 615 BCT, 715 BCS, 630 MT, 730 MT, and 513 BCT, respectively, remembering to export the term type. For example, to set the term type for a 615 BCT, enter:

#### TERM=615;export TERM

- 2 Using vi or ed, edit the file named kernel :
  - Search for NPROC = and set the value to xxx,

Where: xxx equals 30 times the number of MB of RAM in the system.

Change the value for NPROC only if the value in the file is currently less than xxx.

 Search for MAXUP = and set it to 80 (MAXUP=80) if the value in the file is currently less than 80. Search for NINODE = and set the value to xxx ,

Where: xxx equals 100 times the number of MB of RAM in the system.

Change the value for NINODE only if the value in the file is currently less than xxx.

Search for NS5INODE = and set the value to xxx,

Where: xxx equals 100 times the number of MB of RAM in the system.

Change the value for NS5INODE only if the value in the file is currently less than xxx.

Search for NFILE = and set the value to xxx,

Where: xxx equals 100 times the number of MB of RAM in the system.

Change the value for NFILE only if the value in the file is currently less than xxx.

- Search for ULIMIT = and set the value to 8192.
- 3 Save your changes and exit the UNIX text editor.
- **Note:** If you do *not* find an entry for a specified parameter in the form of parameter = xxx, add the necessary information to the **end** of the file.

These are the suggested minimum parameter settings for Monitor I. If you are running Monitor I as a coresident application you may need to adjust the parameters accordingly.

#### Procedure 7C — Remake the Kernel

- 1 Enter cd /boot at the UNIX prompt and press RETURN.
- 2 Carefully enter /etc/mkboot -k KERNEL and press RETURN).

## Procedure 7D — Rebuild the Kernel

- 1 Enter cd / at the UNIX prompt and press RETURN.
- 2 Enter /etc/shutdown -i5 -g0 -y and press RETURN.

System Response:

A series of intermediate messages is displayed. The system shuts down and runs a self-check program. Eventually the following message is displayed:

#### FIRMWARE MODE

3 Enter the firmware password. The default is mcp. If you changed it, enter the correct password.

 If the request is repeated after you have entered the correct password, make sure that your terminal is set for no parity and eight databits.

System Response:

Enter the name of program to execute [ ]:

4 Enter /etc/system and press RETURN.

System Response:

The system prompts you for the device number.

5 Select [ 1(scsi) ]. which is the default device.

System Response:

The system prompts you for the subdevice number.

- 6 Select [ O(disk) ], which is the default subdevice.
  - **Note:** The system rebuilds the kernel after the reconfiguration is complete. The system automatically reboots to the multiuser mode after the kernel is rebuilt.

## Procedure 7E — Check the Tunable Parameters

1 Enter /etc/sysdef to check the tunable parameters.

# Step 8 — Load the INFORMIX Software

## Prerequisites for this Step

#### Activities

 Make sure that the 3B2 processor and software have been installed according to Steps 1 through 7 of this section.

#### Documents

- Instructions included with the INFORMIX-SQL software (INFORMIX Instructions)
- AT&T 3B2 Computer UNIX System V Release 3.2.1 Owner/Operator Manual, System Administration Menus (Owner Manual)

#### Hardware/Software Components

- INFORMIX-SQL Release 4.0 software
- INFORMIX-SE Release 4.0 software

## Procedure 8A — Add the INFORMIX Group

- 1 Log in as root.
- 2 Add the INFORMIX group, using sysadm addgroup.
  - Group Name informix
  - Group ID Number Use the default group ID number
- 3 Install the entry and exit sysadm addgroup.

#### Procedure 8B — Add the INFORMIX User

- 1 Add the user login ID, informix, using sysadm adduser.
  - Login ID informix
  - Full Name INFORMIX-SQL
  - ID Number Use the default ID number
  - Group Name informix
  - User's Login (Home) Directory Use the default directory name, /usr/informix.
- 2 Install the user and select a password. Exit sysadm adduser.

Note: When Monitor I is installed, the informix login is blocked.

## Procedure 8C — Load the INFORMIX-SQL Software

1 Load the INFORMIX-SQL software.

See: The "INFORMIX Instructions" to set the directory and path and to load the software.

## Procedure 8D — Load the INFORMIX-SE Software

1 Load the INFORMIX-SE software.

See: The "INFORMIX Instructions" to set the directory and path and to load the software.

# Step 9 — Add the Monitor I Group and Users

## Prerequisites for this Step

#### Activities

 Make sure that the 3B2 processor and software have been installed according to Steps 1 through 8 of this section.

## Procedure 9A — Add the Monitor I Group

- 1 Log in as root.
- 2 Use sysadm addgroup to add the Monitor I group.
  - Group Name traf
  - Group ID Number Use the default group ID number.

## Procedure 9B — Add the Monitor I Users

Note: All Monitor I users should belong to the group named traf.

- 1 Use sysadm adduser to add the Monitor I users.
  - User's Full Name Monitor I Administrator
  - User's Login ID mtmadm
  - User's ID Number Select the default user ID number.
  - Group Name traf
  - User's Login (Home) Directory Name Enter the directory name as <directory>/login name.

Note: Make sure that <directory> already exists.

- 2 Install the Monitor I Administrator login and create a password.
- 3 Install another user, mtmadm1.

**Note:** This login is primarily used to facilitate the execution of **cron**. When Monitor I is installed, the **mtmadm1** login is blocked.

- User's Full Name Dummy login for cron
- User's Login ID mtmadm1
- User's ID Number Use the default user ID number.

- Group Name traf
- User's Login (Home) Directory Name Enter the directory name as <directory>/login name.

Note: Make sure that <directory> already exists.

- 4 Install the dummy login for cron and create a password.
- 5 Use this procedure to add additional logins for Monitor I users, as necessary.

**Note:** Assign UNIX at and **cron** privileges to users who will be scheduling Monitor I reports. Refer to the *User's Manual* for information on at and **cron**.

#### Procedure 9C — Edit the .profile

- 1 Use vi or ed to edit the .profile for each Monitor I user.
- 2 Add the following entry to the end of the .profile so that each login can use Monitor I:
  - . <directory>/mtm/tools/profile
  - Where: <directory> is the name of the directory under which you will install Monitor I in Step 6 of Procedure 10A.
  - Note: If CAFE is used, do not append the .<directory>/mtm/tools/profile entry to the user's .profile.
- 3 Make sure that the mtmadm login also gets a .profile configured as listed above.

# Step 10 — Load the Monitor I Software

## Prerequisites for this Step

#### Activities

- Make sure that you have added the Monitor I group and users, explained in Step 9 of this section.
- Make sure that you have installed INFORMIX-SQL, according to the directions listed in Step 8.
- If you are installing an upgrade (a warm install), make sure that no one is using the Monitor I files (directories) and that the Poller and Alarm Manager are not running.
- If you are performing a warm install, make sure you do a full backup of Monitor I first. Perform the backup according to the "Back Up Monitor I (3B2/600)" procedure listed in the DEFINITY Monitor I Operations Guide.

#### Documents

DEFINITY Monitor I Operations Guide (Ops Guide)

#### Hardware/Software Components

- DEFINITY Monitor I installation tape
- Disk Configuration Worksheet obtained from your AT&T Representative

## Procedure 10A — Cold Install of Monitor I Software

What? This procedure describes how to do a cold install of Monitor I. A cold install is usually done when you are installing Monitor I for the very first time. A warm install is done when you are updating existing Monitor I software. See "Procedure 10B — Warm Install of Monitor I Software" for information about warm installs.
 In some instances, you may already have Monitor I installed, but you want to remove it and start all over. In this case, you would choose a cold install to completely remove the Monitor I directories and databases and reinstall new ones.
 How Long? This procedure takes about 30 minutes.

- 1 Log in as root.
- 2 Enter *sysadm tapepkg* and press RETURN. System Response:

Do you wish to install or remove packages? [install remove quit i r q ]

3 Enter *i* and press RETURN.

System Response:

Insert the removable medium for the package(s) you want to install into the qtape1 drive. Press <RETURN> when ready. Type q to quit.

4 Insert the tape and press (RETURN) to continue the installation.

System Response:

Packages available: 1 DEFINITY Monitor I Release 2.1

5 Type 1 and press (RETURN).

System Response:

Selection complete ----- installpkg starting. Installing DEFINITY Monitor I Release 2.1 Copyright (c) 1989, 1990, 1991 AT&T All Rights Reserved Enter type of installation you want (w-warm, c-cold, e-exit):

**Note:** If you choose to exit at this point and you want to restart the installation, you must reinsert the tape. Any time after this point, you can exit and restart without reinserting the tape.

6 Type c and press (RETURN).

System Response:

Enter the directory where you want to install Monitor I?:

- 7 Enter the directory name then press (RETURN).
  - **Note:** Monitor I will be installed in the directory you specify, under a subdirectory called **mtm**. If this subdirectory does not exist, the system creates it for you.
  - **Example:** Entering /usr or /usr1/traf will result in Monitor I being installed in the directory /usr/mtm or /usr1/traf/mtm respectively.

System Response:

Monitor I will be installed under <directory name>/mtm, continue (y/n):

Where: <directory name> is the name of the directory you specified in the previous step.

8 Enter y to continue and press (RETURN).

System Response:

WARNING- Cold installation will remove all Monitor I directories and existing database(s), if any. No one should be using Monitor I during installation. Make sure Monitor I polling system and alarm manager are not running.

Cold installation will proceed, continue? (y/n) :

9 Enter y to continue and press (RETURN).

System Response:

Select processor type -Enter 1 for 3B2-600 2 for 6386E/33 model S 3 for 6386SX/EL or NCR-3315

10 Enter 1 and press (RETURN).

System Response:

You are installing on a 3B2-600 processor. Do you want to continue? (y/n) :

11 Enter y and press (RETURN).

System Response:

Pre-installation checks in progress ....

 If pre-installation checks have completed successfully, you will see the following message:

Pre-installation checks have completed successfully.

 If pre-installation checks did not complete successfully, a list of error messages is displayed, followed by this message:

Pre-installation checks did not complete successfully.

**Note:** To continue, fix the errors using error message explanations found in **Appendix C** of this manual. Once the errors have been resolved, try installing Monitor I again using this procedure, starting with the **sysadm tapepkg** command in **Step 2**.

If pre-installation checks completed successfully, the following prompt is displayed next:

Do you want to create database place holder(s)? (y/n):

- **Note:** If you enter *n*, the software will be installed, but no placeholders will be created. You can add placeholders after installation is completed by using the **addmount** procedure discussed in "10C — Create Placeholders Using Addmount."
- 12 Enter y to create database placeholders then press RETURN.

System Response:

Do you want to use the "rotating switch study" feature? (y/n):

**Reference:** Refer to the DOSS Configuration output for the appropriate response.

- If you answer n (no), skip to the system prompt in Step 14.
- If you answer y, (yes) the following prompts are displayed:

Enter the total number of G2, SYSTEM 85 or FP8 switches?: Enter the total number of G3r, G3i, G1 or SYSTEM 75 switches?:

13 If you are using the **Rotating Switch Study** feature, enter the correct response to these questions and press RETURN to get the next prompt.

System Response:

Are the values entered above correct? (y/n):

• If you answer n, (no) the system will again prompt you to enter the total number of switches.

14 Once all values are correct, type y (yes) then press RETURN.

System Response:

Enter the directory to create the database(s), e.g. /usr1 ? :

**Reference:** Refer to the DOSS Configuration output for the appropriate directory.

- 15 Enter the directory name and press (RETURN).
  - **Note:** The next questions refer to the number of placeholders for databases to be created under each mount point (database directory) for each polling option.

System Response:

How many G2, SYS85 or FP8 (EXTENDED) database(s) ? (0-40) : How many G2, SYS85 or FP8 (STANDARD) database(s) ? (0-40) : How many G2, SYS85 or FP8 (DAILY and LIMITED) database(s) ? (0-40) : How many G1.1 or SYSTEM 75 database(s)? (0-40) : How many G3r or G3i (EXTENDED) database(s)? (0-40) : How many G3r or G3i (STANDARD) database(s)? (0-40) : How many G3r or G3i (DAILY and LIMITED) database(s)? (0-40) : How many inactive database(s)?

- Note: The last prompt, How many inactive database(s)?, is only displayed if the Rotating Switch Study feature is used.
- 16 Enter the correct response to each of the questions listed above and press (RETURN) to get the next prompt.

Note:

- You *must* enter the correct number of databases for Monitor I to work properly. This
  information depends on the number of switches being supported and how your disk is
  sliced. See your Disk Configuration Worksheet for more information.
- Monitor I allows you to repeat this procedure for each mount point (database directory) and polling option per switch type that you have.

System Response:

Are the values entered above correct? (y/n):

- If you answer n (no), the system repeats the series of questions listed in Step 15.
- 17 Once all values are correct, type y (yes) then press RETURN.

System Response:

Do you want to create more database place holder(s)? (y/n):

• If you answer y (yes), the system returns to the system response in Step 14 of this procedure.

- **18** Enter n (no) and press **RETURN** to continue with the installation.
  - **Note:** The system begins copying the files from the tape and a lengthy list of these files appears in a scrolling display. The files displayed on your screen will vary from the partial system listing displayed in the next screen example.



The following messages appear when the installation completes:

All Monitor I files have been installed correctly. Installation completed successfully.

If you *do not* see these messages or if you see error messages during the procedure, look for further information on the errors in /usr/tmp/journal. Fix the errors using the error message explanations found in Appendix C of this manual, then try installing Monitor I again, starting with the sysadm tapepkg command in Step 2 of this procedure.

End of Procedure

## Procedure 10B — Warm Install of Monitor I Software

- 1 Back up Monitor I according to the "Back Up Monitor I (3B2/600)" procedure listed in the Monitor I Operations Guide.
- 2 Follow Steps 1 through 5 of "Procedure 10A Cold Install of Monitor I Software." Complete Step 2 of this procedure when you see this prompt:

Enter type of installation you want (w-warm, c-cold, e-exit):

3 Type w and press RETURN.

System Response:

WARNING- No one should be using Monitor I during installation. Make sure Monitor I polling system and alarm manager are not running.

Warm installation will proceed, continue? (y/n) :

4 Enter y to continue and press RETURN.

System Response:

Pre-installation checks in progress ....

• If pre-installation checks have completed successfully, you will see the following message:

Pre-installation checks have completed successfully.

• If pre-installation checks did *not* complete successfully, a list of error messages is displayed, followed by this message:

Pre-installation checks did not complete successfully.

**Note:** To continue, fix the errors using error message explanations found in **Appendix C** of this manual. Once the errors have been resolved, try installing Monitor I again using this procedure, starting with the **sysadm tapepkg** command. (See Step 2 of this procedure.)

A lengthy list of files appears on the screen in a scrolling display. After all these files have been installed and some post-installation checking messages appear, the following message is displayed at the completion of the warm installation:

Warm installation completed successfully.

- **Note:** If you do *not* see this message or if you see error messages during the procedure, look for further information on the errors in /usr/tmp/journal. Fix the errors, using the error message explanations found in Appendix C. Try installing Monitor I again, starting with the sysadm tapepkg command. (See Step 2 of this procedure.)
- 5 As a final post-installation step, restart the poller and alarm manager. For instructions see the headings, "Activate the Polling Control Mechanism" in Chapter 3, "Implementing Monitor I," as well as "Activate Alarm Manager" in Chapter 8, "System Administration," both in the *Monitor I Operations Guide*.

End of Procedure

## Procedure 10C — Create Placeholders Using Addmount

Use this procedure to create database placeholders from the UNIX shell, after you have completed the Monitor I installation.

- **Note:** If you have already added placeholders during installation, you will not be able to add additional placeholders from the shell. Also, if you have used the **addmount** procedure previously to add placeholders, you will not be able to execute this procedure a second time.
- 1 Log in as root.
- 2 Type <directory>/mtm/tools/addmount at the prompt and press (RETURN).
  - Where: <directory> is the name of the directory under which you installed Monitor I in Step 7 of Procedure 10A.

System Response:

Do you want to use the "Rotating Switch Study" feature? (y/n):

Reference: Refer to the DOSS Configuration output for the appropriate response.

If you answer n (no), the following prompt is displayed:

Enter the directory to create the database(s), e.g /usr1 ? :

Continue by skipping to Step 5 of this procedure.

If you answer y (yes), the following prompts are displayed:

Enter the total number of G2, SYSTEM 85 or FP8 switches?: Enter the total number of G3r, G3i, G1, or SYSTEM 75 switches?: 3 If you are using the **Rotating Switch Study** feature, enter the correct response to these questions and press RETURN to get the next prompt.

System Response:

Are the values entered above correct? (y/n):

- If you answer n (no), the system will again prompt you to enter the total number of switches.
- 4 Once all values are correct, type *y* (yes) then press RETURN. System Response:

Enter the directory to create the database(s), e.g. /usr1 ? :

Reference: Refer to the DOSS Configuration output for the appropriate directory.

- 5 Enter the directory name and press RETURN.
  - **Note:** The next questions refer to the number of placeholders for databases to be created under each mount point for each polling option.

System Response:

How many G2, SYS85 or FP8 (EXTENDED) database(s) ? (0-40) : How many G2, SYS85 or FP8 (STANDARD) database(s) ? (0-40) : How many G2, SYS85 or FP8 (DAILY and LIMITED) database(s) ? (0-40) : How many G1 1.1 or SYSTEM 75 database(s)? (0-40) : How many G3r or G3i (EXTENDED) database(s)? (0-40) : How many G3r or G3i (STANDARD) database(s)? (0-40) : How many G3r or G3i (DAILY and LIMITED) database(s)? (0-40) : How many inactive database(s)?[

- Note: The last prompt, How many inactive database(s)?, is only displayed if the Rotating Switch Study feature is used.
- 6 Enter the correct response to each of the questions listed above and press (RETURN) to get the next prompt.
#### Notes:

- You must enter the correct number of databases for Monitor I to work correctly. This information depends on the number of switches being supported and how your disk is sliced. See your Disk Configuration Worksheet for more information.
- Monitor I allows you to repeat this procedure for each mount point (database directory) and polling option per switch type that you have.

System Response:

Are the values entered above correct? (y/n):

- If you answer n (no), the system returns to the series of questions listed in Step 5 of this procedure.
- 7 Once all values are correct, type y (yes) then press RETURN.

System Response:

Do you want to create more database place holder(s)? (y/n):

- If you answer y, the system returns to the System Response listed in Step 5 of this procedure.
- 8 Enter *n* to continue the addmount procedure.
- **9** Wait for the prompt:

Database place holders successfully created

This message is displayed for each database directory you entered.

**Note:** If you do not see this message, check /usr/tmp/addout for possible errors. Refer to Appendix C for Monitor I installation error messages and corrective actions.

# Step 11 — Enable the System Ports

## Prerequisites for this Step

### Activities

- Make sure that the 3B2 processor, keyboard, console, terminals, and modems are installed according to Steps 1, 2, and 5 of this section.
- Make sure the Essential Utilities and additional software has been loaded according to Steps 3 and 4 of this section.

#### Documents

- Refer to the Port Configuration Worksheet in Appendix B for a list of configured ports.
- AT&T 3B2 Computer UNIX System V Release 3.2.1 System Administrator's Guide (Admin Guide)

## Procedure 11A — Enable Bidirectional UUCP Ports

- 1 Log in as root.
- 2 Enter sysadm devicemgmt at the root prompt.
  - Select 2 to add the entry to the /usr/lib/uucp/Devices file.
  - Enter the port number (name) to be defined.
- 3 Select ATT2224G for all modem types (ATT2224-CEO and/or ATT2224-G).
  - Exit sysadm devicemgmt.
- 4 Enter sysadm portmgmt at the root prompt:
  - Select 2 to modify the port.
  - Select the port to be modified.

System Response:

Do you want the port to be for incoming, outgoing, or bidirectional?

- Select bidirectional.
- Enter 1200 for the baud rate.
- Note: If you have DIMENSION FP8 switches, you will need to edit the /usr/lib/uucp/Devices file by creating an additional, identical entry for each ACU

entry with a baud rate of 1200. Then, change the 1200 in the duplicate entry to 300.

5 Continue modifying ports or exit sysadm portmgmt.

## Procedure 11B — Set the CEO Modem Software Options

- 1 Plug the phone cable into the port labeled Line on the back of the modem.
- 2 Plug the modem into the power supply.
- 3 Log in as root.
- 4 Enter MTMDIR=<directory>;export MTMDIR.

Where: <directory> is the directory under which Monitor I was loaded in "Step 10 — Load the Monitor I Software."

5 Enter \$MTMDIR/tools/ceoconfig.

System Response:

Enter port number (for example, tty31):

- 6 Enter the port number.
  - See: Appendix B for the port number assigned to the 2224-CEO modem.

System Response:

Testing /dev/<portnumber> Please wait... Hardware Switches Set for Dial-Out or Bi-Directional Asynchronous

If the modem software options are set correctly, the following prompt appears:

<portnumber> Software Options Set Correctly

Perform all tests listed in Appendix A, "Acceptance Testing."

If the modem software options are set incorrectly, the following prompts appear:

Software Options Set Incorrectly for Monitor I Enter y to set them to the Monitor I configuration or n to keep current settings (y):

7 Enter y.

System Response:

Setting <portnumber> Software Options to Defaults Options 1-63 set to default

Option 12 is now y Option 34 is now 1 Option 36 is now 0 Option 41 is now 0 <portnumber> Software Options Set Correctly

Where: <portnumber> is the port number assigned to the 2224-CEO modem.

Note: If these messages are *not* displayed or an error message is displayed, run this procedure again from Step 5 of Procedure 11B.

Option Number	Value	Option Number	Value	Option Number	Value	Option Number	Value
1	у	17	10	33	n	49	N/A
2	y	18	n	34	1	50	N/A
3	y	19	n	35	3	51	n
4	y	20	1	36	0	52	f
5	ý	21	0	37	0	53	f
6	N/A	22	:	38	0	54	У
7	y	23	^H	39	5	55	n
8	N/A	24	@	40	N/A	56	y
9	n	25	\$B	41	0	57	N/A
10	n	26	\$:	42	N/A	58	n
11	n	27	n	43	n	59	N/A
12	v	28	n	44	n	60	N/A
13	n	29	0	45	n	61	N/A
14	n	30	n	46	n	62	N/A
15	У	31	у	47	N/A	63	n
16	n	32	Ĭ	48	N/A		

TABLE 2-6 2224-CEO Modem — Software Options

**Notes:** N/A = Not Applicable

Table 2-6 reflects the 2224-CEO modem settings *after* the **ceoconfig** utility is run. This table is for reference purposes only.



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# Installing on the 6386E/33 Model S

This section explains how to install the hardware and software required to use Monitor I on the 6386E/33 Model S processor. The entire installation should take approximately five hours: one hour to complete Step 1 and about four hours to complete Steps 2 through 10.

# Step 1 — Set Up the 6386E/33 Model S WGS

## Prerequisites for this Step

#### Activities

- DO NOT install any hardware or software before calling the Technical Support Center (TSC) (1 800 548-8861.)
- Make sure you received all the components necessary for the Monitor I system.
- Plan the location and determine the I/O address range, controller memory address range, and Interrupt Request (IRQ) levels of add-on cards in the processor. Table 3-1 lists the default locations and IRQ levels of the add-on cards in the processor. However, the default locations and IRQ recommended may need to be changed if Monitor I is coresident with other applications.

Card	Slot	IRQ Level	I/O Address	Memory Address
VDC 600	1			
IPC #1	2	14	290	D0000
IPC #2	3	10	2A0	D2000
RMP	5	5	200	CA000
MEM #1	7			
MEM #2	8			

#### TABLE 3-1 Add-On Cards: Default Location Addresses and IRQ Levels

**Note:** These locations must be unique for each board in the system. Keep a record of the locations and addresses of each board for your reference.

#### Documents

- 6386E/33 WGS Processor User's Guide (6386 Guide)
- 6386, 6386E, 6386E/33 Work Group System Memory Expansion Installation Guide (Memory Guide)
- AT&T Intelligent Ports Card Model 900 (IPC-900) User's Guide (IPC Guide)
- Video Display Controller VDC 600 User's Guide (VDC Guide)
- AT&T Work Group System Remote Maintenance Package User's Guide (RMP Guide)

#### Hardware/Software Components

- System unit
- AT&T 329D VGA Monitor
- Keyboard
- VDC 600 Video Display Driver card
- Intelligent Ports cards (IPC)
- Memory boards
- Memory Expansion kits
- Remote Maintenance Card

# Procedure 1A — Unpack the 6386E/33 and Install the VDC600 Card

- 1 Unpack the processor and remove the cover. Set the jumpers on the memory cards to the default settings and also set the defaults on the dip switches.
  - See: The "Installing Your System" and "Preparing the System Module" instructions in the "Installation and Care Of Your System" section of the 6386 Guide.
- 2 Set the dip switches and jumpers on the VDC card to the default settings. Then install the VDC 600.
  - **See:** The *VDC Guide* for information on dip switch and jumper settings and the "Installing The Video Display Controller" section in the "Installation and Care of Your System" chapter of the *6386 Guide* for installation instructions.
- 3 Leave the cover off the processor and go to Procedure 1B Install the Additional Memory.

## Procedure 1B — Install the Additional Memory

- 1 Install the additional SIMMs.
  - See: The "Installing System Board SIMMs" instructions in the "Expansion Kits" appendix of the 6386 Guide.
- 2 Before installing additional memory boards, fill up the SIMM slots on the mother board (a total of 8 MB).
- 3 Install additional memory board(s), if required.
  - See: The "Memory Expansion Boards" instructions in the Expansion Kits appendix of the 6386 Guide.
  - Note: If other applications coresiding on the 6386 require use of specific slots, make sure those slots are left free.

## Procedure 1C — Install the Additional Cards

Set the I/O Starting Address, the Controller Memory Starting Address, and the Interrupt Request Level (IRQ) shunt according to Table 3-1. Each IPC must have unique settings. You need to know these settings when you load the IPC software in Procedure 3B.

- 2 Install the IPC in a one-port slot as follows.
  - See: The "Installing an Expansion Board" instructions in the "Installing Your System" chapter of the 6386 Guide.
  - Align the IPC-900 board with the selected board slot and insert it into the corresponding connector.
  - Attach the T-adaptor to the IPC-900 board. Make sure it is plugged firmly and completely into the socket.
  - Repeat for additional IPC cards, if supplied. IPC connections must use 10-pin modular cords and 10-pin special adaptors.
- 3 Install the Remote Maintenance Card (RMC).

See: "Setting I/O Addresses" in the RMP Guide.

- Set the dip switches on the card for the correct I/O Starting Address, Controller Memory Starting Address, and Interrupt Request Level (IRQ) according to Table 3-1. Each board must have unique settings. You will need to know the settings when you load the Remote Maintenance Package (RMP) software in **Procedure 3D**.
- Install the RMC in a one-port slot.

See: The "Hardware Installation" and "Hardware Parameter Settings" sections in the IPC Guide.

See: "Installing an Expansion Board" in the "Installing Your System" section of the 6386 Guide.

- Connect the appropriate devices to the ports on the RMC:
  - Connect the Uninterruptible Power Supply to the UPS port.
  - Connect the Alarm Interface to the alarm port.
  - Connect the remote access modem to the COM2 port.
- Test the connections to the RMP.
  - See: "Testing RMP Installation" in the RMP Guide.

# Procedure 1D — Set Up the Console, Keyboard, Cables and Processor

Set up and prepare the console.

See:

- The "Connecting the Video Display" instructions in the "Installation and Care of Your System" section of the 6386 Guide.
- For details on setting up the console terminal, see "Step 4 Set Up the Terminals and Modems" in this chapter.
- 2 Connect the monitor, keyboard, and power cord to the processor.
  - See: The "Connecting the Video Display," "Connecting the Keyboard," "Connecting the Mouse," and "Cable Placement" instructions in the "Installing Your System" and "Connecting Modules" sections of the 6386 Guide.
  - **Note:** The 329D console connects to the VDC 600 card, *not* to the parallel printer. The dip switch, jumper, and mother board for the VDC 600 card must use the default settings.
- 3 Replace the covers and connect the processor to the power outlet.
  - See: The "Connecting the System To a Power Outlet" instructions in the "Installing Your System" section of 6386 Guide.

# Step 2 — Load the UNIX Essential Utilities

## Prerequisites for this Step

#### Activities

 Make sure that the 6386E/33 Model S processor, keyboard, and console are set up and connected according to Step 1 of this section.

#### **Documents**

- 6386E/33 Model S WGS Processor System Setup and User's Guide (6386 Guide)
- UNIX System V/386 Release 3.2.3 Operations/System Administration Guide (Admin Guide)
- UNIX System V/386 Release 3.2.3 Release Notes (Release Notes)

#### Hardware/Software Components

- Base System Package Disk
- UNIX Operating System Foundation Set software, on cartridge tape

## Procedure 2A — Run the Setup Utility

1 Configure the base system.

See: The "Getting Started" and "Starting the System" instructions in the 6386 Guide.

- 2 When running the Setup utility, check to see that the Extended Memory is correct for the amount of memory installed in the system.
  - Press CTL ALT DEL to reboot.
  - Wait for the beep.
  - Press CTL ALT INSERT to see the current settings for your configuration. The memory size(s) should match the data shown in Table 3-2.

Memory Installed (MB)	Extended Memory (KB)	
8	7168	
12	11264	
16	15360	
24	23552	
28	27648	
32	31744	
40	39936	

#### TABLE 3-2 Memory Size

3 Set Console Redirection to the COM2 Port at a speed of 1200 baud.

See: "Setting I/O Redirection" in the 6386 Guide.

## Procedure 2B — Load the UNIX Foundation Set

- 1 Begin loading the UNIX Foundation Set.
  - See: The "Boot System to Single-User Mode" instructions in the "Software Installation" section of the *Admin Guide*. Follow the instructions for a SCSI machine.
- 2 Run the setup and begin partitioning the hard disk as follows.
  - **See:** The "Perform Installation Setup" instructions in the Software Installation section of the *Admin Guide*. Follow the setup procedure for a new installation.
  - Select 1 to create an MS-DOS<sup>®</sup> partition.
  - When prompted, enter the amount of hard disk allocated to DOS as 2 percent (for 300 MB disk).
  - Enter n to indicate that the MS-DOS partition is not the active partition.
- 3 Create the UNIX partition as follows.
  - Select 1 to create a UNIX partition.
  - Select 1 to indicate that a UNIX System partition is to be created.
  - When prompted, enter the amount of hard disk allocated to UNIX as 98 percent (for 300 MB disk).
  - Enter y to indicate that the UNIX partition is to be active every time the machine is booted.
  - Select 4 to update the disk configuration and exit.

- 4 Continue partitioning the hard disk.
  - See: The "Prepare Hard Disk for Surface Analysis" instructions in the Software Installation section of the *Admin Guide*.
- 5 Complete the hard disk partitioning process as follows.
  - See: The "Create UNIX System File Systems" instructions in the Software Installation section of the *Admin Guide*.
  - Enter *n* to indicate that the default partition allocations are not acceptable.
  - Enter y at the partition prompt:

Separate root and usr?

Enter n at the partition prompt:

#### Additional usr2?

Enter n at the partition prompt:

Crash/dump area?

- Enter 36 as the number of cylinders assigned to swap/paging.
- Enter 13 (for the 300 MB disk) as the number of cylinders allocated for the root partition.
- Review the new allocation and make a note of it. Swap/paging and root should have the number of cylinders you assigned, and the balance should be assigned to the /usr area. Enter y to indicate the allocation is acceptable.
- When you are prompted, remove the diskette from the drive and reboot the system from hard disk.
- After rebooting the system, enter c to install the UNIX system from cartridge tape.
- 6 Load the UNIX essential utilities.
  - See: The "Install Base System (From Cartridge Tape)" instructions in the Software Installation section of the *Admin Guide*.
- 7 Assign a root password.

8 Assign an install password.

## Procedure 2C — Load Add-On Packages From Tape

Follow the instructions on the Package Selection menu to install the add-on packages from cartridge tape. Select the following for installation:

- 1 Network Support Utilities Package
- 2 Editing Package
- 3 FMLI
- 4 FACE
- 5 FACE Help

Note: The FACE Help package is totally different than the FACE package.

- 6 Press Esc to execute.
- 7 Enter 4 to install all of the Help files.
- 8 Enter 5 to complete (terminate) the Help file installation.

## Procedure 2D — Installation Wrap-Up

See: "Installation Wrap-Up for SCSI Machines" in the Admin Guide.

- Load the SCSI support package from diskette.
- 2 Follow the instructions on the screen to boot the machine.
- 3 Log in as root.

# Step 3 — Load the Additional Software

## Prerequisites for this Step

#### Activities

- Make sure that the 6386E/33 Model S WGS, keyboard, console, and additional cards are installed according to Step 1 of this section. You need to know the location, memory addresses, and IRQ levels of the boards in the processor.
- Make sure that the correct version of the UNIX Foundation Set is loaded according to Step 2 of this section.

#### Documents

- UNIX System V/386 Release 3.2.3 Operations/System Administration Guide (Admin Guide)
- Intelligent Ports Card Model 900 (IPC-900) User's Guide (IPC Guide)
- AT&T Work Group System Remote Maintenance Package User's Guide (RMP Guide)

#### Hardware/Software Components

- UNIX System V/386 Release 3.2.3 Remote Terminal Package
- AT&T IPC UNIX System V 386 Device Driver
- Security Administration Package

#### When Installing from Diskette

- Use the "Install Optional Add-On Packages (From Diskette)" instructions in the "Software Installation" section of the Admin Guide to load the individual software packages.
- If your processor has two disk drives, specify the drive from which you are loading.
- If asked how many diskettes are in the package, count the number of diskettes for the specific package only. Whenever multiple diskettes exist for a specific package, make sure you load these diskettes in sequential order.
- If asked for the diskette type, either look on the diskette for the applicable type or enter: 1.44.
- If asked to reboot the system, press Esc to skip the reboot process. You do not have to reboot after loading each software package; however, you must reboot the system after the last package is loaded.

## Procedure 3A — Load the Remote Terminal Package

Note: This is not the Remote Maintenance Package, which is loaded at a different time.

- 1 Enter *installpkg* at the prompt to load the Remote Terminal Package.
- 2 Enter 1 to install the terminfo files.
  - **Call:** The TSC Hotline (1 800 548-8861) to obtain the **terminfo** entry needed to use the 730 terminal and the 615 BCT or 715 BCS with the System 75 Emulation cartridge.
- 3 Enter all to load all the terminfo files.
- 4 Enter *done* after the list of files is displayed.
- 5 Enter 0 to complete (terminate) the terminfo file load.

#### Procedure 3B — Load the IPC Device Driver

**Note:** Make sure you are using Version 3.0 for the IPC-900.

- 1 Enter *installpkg* at the prompt to load the IPC software.
- 2 Enter the number of IPC cards installed in the system. For each IPC, do the following.
  - Press RETURN to select the default (IPC-900) for the type of ports card installed in the system.
  - Enter the Interrupt Request Level (IRQ) of the IPC.

See: Table 3-1 in this guide for the IRQ level required.

- Do one of the following.
  - a Press RETURN to select the default starting address of the I/O ports and controller memory.
  - **b** Enter the appropriate addresses as set on the card during the installation.

See: The "Hardware Parameter Settings" section in the IPC Guide.

- 3 Enter y to confirm the settings.
- 4 Reboot as instructed.

## Procedure 3C — Load the Security Administration Software

1 Enter *installpkg* at the prompt to load the Security Administration package.

## Procedure 3D — Install the Remote Maintenance Package (UNIX)

If the processor has an RMP, the software must be installed.

See: "Installing the RMP Software" in the RMP Guide.

- 1 Select the given Interrupt Request (IRQ) level for the card.
- 2 Press RETURN to select the default Starting I/O address and Starting Memory address.
- **Note:** Contact the Technical Service Center (TSC) at 1 800 548-8861 for your RMP settings. Your TSC engineer will know how to enable the RMP settings.

# Procedure 3E — Install the Remote Maintenance Package (DOS)

If the processor has an RMP and if you intend to use the Remote Diagnostics software that runs under MS-DOS, the software must be loaded on the DOS partition.

See: "Installing the RMP Software That Runs Under DOS" in the RMP Guide.

1 Enter *n* at the prompt:

**DOS Partition active?** 

2 Enter y at the prompt:

Run Remote Diagnostics each time DOS is booted?

3 Enter *y* at the prompt:

Upon exit of Remote Diagnostics, reboot system automatically?

## Step 4 — Set Up the Terminals and Modems

## Prerequisites for this Step

#### Activities

 Make sure that the 6386E/33 Model S processor, keyboard, console and software are set up and connected according to Steps 1 through 3 of this section.

#### Documents

- User's Guide 615 Business Communications Terminal Guide or, 715 Business Communications System (BCS) User's Guide and Service Manual or, 730 Multi-Tasking Graphics Terminal Guide (Terminal Guide)
- DATAPHONE II 2224-CEO Modem User's Manual or DATAPHONE II 2224-GNN Modem Manual (Modem Manual)
- Intelligent Ports Card Model 900 (IPC-900) User's Guide (IPC Guide)

#### Hardware/Software Components

- 615 BCT(s), or 715 BCS(s), or 630 or 730 MTG(s) [optional]
- One 513 BCT/System 75 Emulation Cartridge per 615 BCT, for accessing G3r, G3i, Generic 1, and System 75 maintenance and administration functions.
- 2224 modem(s) for use with bidirectional 1200/300 baud asynchronous communications for UUCP and communication with administered switches
- 10-pin modular cables with 10-pin special adaptors

### Procedure 4A — Set Up the Terminals

- 1 Unpack, install, and set up the terminal.
  - See: The "Unpack and Install" (615 BCT or 715 BCS) or "Installation" (730) instructions in the *Terminal Guide*.
  - **Note:** The 630 or 730 MTG is most effectively used at speeds above 2400 baud, therefore it should not be connected through a modem.
- 2 To make the terminal operational for Monitor I:
  - Install the 513 BCT/System 75 Emulation Cartridge by inserting the 513 BCT/System 75 cartridge into the slot on the side of the 615 BCT. Be sure that the cartridge is right side up, with the cartridge label toward the front.

- **Warning:** Check the on/off switch before you install the cartridge to make sure that the power for the 615 terminal is turned *off*. A blank screen is *not* an indicator that the terminal is off, and you will destroy the 513 BCT/System 75 cartridge if you insert or remove it while the terminal is on.
- Follow the instructions in the Terminal Guide to enable the cartridge.
- For the 715 terminal, enter the following settings:
  - Set the emulation mode to: BCS
  - Set the UNIX terminal type (TERM) to: sys75
  - Set the terminal type for cut-through access from Monitor I to G3i, Generic 1, and System 75 to: 513
  - Set the Swap Delete option of the 715 terminal to: yes (through terminal setup) for BCS.
- Change the Cursor Blink option to y for yes.
- Cut-through access to System 75 R1V1 for maintenance or administration requires that the SyBstem 75 be equipped with a pooled modem card that allows asynchronous communications.

#### Procedure 4B — Set Up the Modems

Monitor I supports the 2224-CEO, the 2224-GNN and the AT&T 2400 modems. For either modem, you must set up the hardware switches, as follows.

See: The appropriate Modem Manual for complete installation procedures.

Contact the Technical Service Center (TSC) at 1 800 548-8861 to have your modem checked after you have completed the appropriate modem procedures.

#### AT&T 2400 Modems

Set up an AT&T 2400 modem: The AT&T 2400 modems can arrive from the factory in an unknown state; they can be in a state that will not allow them to communicate with a UNIX system. Therefore, these modems should be configured using a terminal.

#### 2224-CEO Modems

For the 2224-CEO modem:

Remove the CEO modem cover to access the Internal Option switches.
See Figure 3-1 for a diagram of the CEO modem hardware switches.



FIGURE 3-1 CEO Modem Hardware Switches

- 2 To set your modem switches:
  - For dial-out or bidirectional 1200/300 baud asynchronous, dialer-enabled modems, set the switches according to Table 3-3.

TABLE 3-3 2224-CEO Dial-Out 1200/300 Asynchronous Communications

Switch	Push	Switch	Push	Switch	Push
1-1 1-2 1-3 1-4	down down down down	1-5 1-6 1-7 1-8	down up down down	internal-1 internal-2	away from number away from number

- 3 Plug the power cable from the modem into the power outlet.
- 4 Reset the modem by pressing and releasing the **RESET** switch. This will make your changes effective.

#### 2224-GNN Modems

See Figure 3-2 for a diagram of the GNN modem hardware switches.



FIGURE 3-2 GNN Modem Hardware

 For dial-out or bidirectional 1200/300 baud asynchronous, dialer enabled 2224-GNN modems, set the switches according to Table 3-4.

Switch	Push
1-1	left
1-2	left
1-3	left
1-4	right
1-5	right
1-6	left
1-7	left
1-8	left
2-1	right
2-2	right
2-3	left
2-4	left
2-5	left
2-6	left
2-7	left
2-8	left
3-1	right or up
3-2	right or up
3-3	right or up
3-4	left or down
3-5	left or down
3-6	left or down
3-7	left or down
3-8	left or down

TABLE 3-4 2224-GNN Dial-Out 1200/300 Asynchronous Communications

2 Reset the modem by removing it from the rack, then putting it back. This will make the changes take effect.

## Set Up An AT&T 2400 Modem

The AT&T 2400 modems can arrive from the factory in an unknown state; they can be in a state that will not allow them to communicate with a UNIX system. Therefore, these modems should be configured using a terminal.

#### Install the AT&T 2400 Modem

Install the AT&T 2400 modem as follows:

- 1 Plug in the modem's power adaptor.
- 2 Connect the modem to the main port of an AT&T 615 Terminal using a straight through male to male RS-232 cable.
- 3 Set the terminal speed to 1200.
- 4 Set the terminal Parity to EVEN.
- 5 Set the terminal Send Parity to NO.

#### Set the 2400 Modem Software Options

Set the software options in the 2400 modem using a terminal. The modem can be configured for bidirectional port, asynchronous transmission or product access.

- For a bidirectional or asynchronous transmission, use the sequence of commands provided in Table 3-5, Column 1. AT&T 2400 modems used for bi-directional traffic such as login or UUCP must be locked at one baud rate.
- For a product access configuration, use the sequence of commands provided in Table 3-6, Column 1. AT&T 2400 modems used for product access (various baud rates) must only be used for product access (outgoing only).

Command	Meaning		
AT&F	Factory Default		
AT&MO	Turn speaker off		
AT&QO*	Standard Async		
ATQ2	Result code in originate only		
AT&D2	Enter command mode on DTR dropping		
AT&KO	no flow control		
AT&C2	CD on for cmd mode, track carrier for data transfer		
ATSO=1 Auto Answer			
ATS37=6	Maximum DCE Line Speed**		
AT&WO Write storable parameters current configuration in memory as profile 0			
AT&YO	Specify stored user profile 0 as power up configuration		

TABLE 3-5 AT&T 2400 Modem Bidirectional or Asynchronous

<sup>\*</sup> Varies across the two configuration tables; all other commands are common for all configurations.

<sup>\*\*</sup> Set to 5, 1200 baud; set to 6, 2400 baud

Command	Meaning		
AT&F	Factory Default		
AT&MO	Turn speaker off		
AT&QO*	Standard Async		
ATQ2	Result code in originate only		
AT&D2	Enter command mode on DTR dropping		
AT&KO	no flow control		
AT&C2	CD on for cmd mode, track carrier for data transfer		
ATSO=1 Auto Answer			
ATS37=0*	Maximum DCE Line Speed		
AT&WO Write storable parameters current configuration in memory as profile 0			
AT&YO	Specify stored user profile 0 as power up configuration		

TABLE 3-6 Configuration of a Product Access Modem

\* Varies across the two configuration tables; all other commands are common for all configurations.

#### Configure the UNIX System

The Dialers file of UNIX System V Release 3.2.3 contains the following line:

#hayes =,-, "" \M\dAT\r\c OK\r \EATDT\T\r\c CONNECT \m\c

Activate this file by removing the comment symbol, #, at the beginning of the line.

For modems that are to be used for outgoing calls (bidirectional), the procedure for configuring the UNIX System as described in the *Installation Manual* changes as follows:

- In the *Connect to Modem* form of the FACE Menu, set the Modem Name field to *Non-Autodialing*.
- The Devices files will contain a line corresponding to each modem configured for outgoing calls. The following is a typical entry in this file:

ACU ttyh06,M - 1200 Non-Autodialing

For each modem, edit the file by entering a set like the following:

ACU ttyh06 - 300 hayes ACU ttyh06 - 1200 hayes ACU ttyh06 - 2400 hayes

End of Procedure

## Procedure 4C — Connect the Terminals

- 1 Find the red ground lug on one end of the 10-conductor Modular Cable. Insert that end of the cable into a port on the IPC T-connector and connect the ground lug to the ground slot beneath the port.
- 2 Write the port number, associated device name, and phone line on the Port Configuration Worksheet in Appendix B of this manual.
- 3 Connect the other end of the 10-Conductor cable to a terminal/printer adaptor and connect the adapter to the port labeled MAIN on the back of the terminal.
- 4 Plug the power cables from the terminals into the power outlet.

## Procedure 4D — Connect the Modems

- 1 Connect the 10-Conductor cables from the modems to the IPC serial ports.
- 2 Connect the modems to the phone lines.
- 3 Plug the power cables from the modems into the power outlet.
- 4 Write the port number, associated device name, and phone line on the Port Configuration Worksheet in Appendix B of this manual.

# Step 5 — Set Up and Enable the Printer

## Prerequisites for this Step

#### Activities

Make sure that the Monitor I system was installed according to Steps 1 through 4 of this section.

#### Documents

- User's Guide AT&T 572 Printer or User's Guide AT&T 593 Printer (Printer Guide)
- UNIX System V/386 Release 3.2.3 Operations/System Administration Guide (Admin Guide)

#### Hardware/Software Components

- AT&T 572 or 593 Printer
- AC power cord
- Tractor assembly
- Static eliminator

## Procedure 5A — Set Up the Printer

- 1 Set up the printer connection parameters. Make sure the printer setting for the 96 BPS field is either 01 9600 for direct connect or 04 1200 for dial-up.
  - See: The "Operation Panel and Operational Procedures in Set-Up Mode" instructions in the *Printer Guide*.
- 2 Use FACE to set up the printer parameters.

## Procedure 5B — Connect the Printer Cable

- 1 Find the red **ground lug** on one end of the 10-conductor Modular Cable. Insert that end of the cable into a port on the IPC T-connector and connect the ground lug to the ground slot beneath the port.
- 2 Write the port number, associated device name, and phone line on the Port Configuration Worksheet in Appendix B of this manual.
- 3 Connect the other end of the 10-Conductor cable to a terminal/printer adaptor and connect the adaptor to the port labeled MAIN on the back of the terminal.

## Procedure 5C — Enable the Printer

- 1 Log in as root.
- 2 Enter /usr/lib/lpshut at the prompt and press RETURN. System Response:

#### Line printer scheduler stopped

3 Enter the following for the 572 printer.

/usr/lib/lpadmin -ppr1 -m5310 -v/dev/ttyxx

Where: • xx is the port number assigned to the printer.

- *pr1* is the name you are assigning to the first printer. If you are installing more printers, use different names for each printer.
- 4 Enter /usr/lib/lpsched at the prompt and press RETURN.
- 5 Enter /usr/lib/accept pr1 at the prompt and press RETURN. System Response:

destination pr1 now accepting requests

- 6 Enter /usr/lib/lpadmin -dpr1 at the prompt and press RETURN.
- 7 Enter enable pr1 at the prompt and press RETURN. System Response:

pr1 now enabled

8 Enter *lpstat -t* at the prompt and press RETURN. System Response:

The system responds with the list of printers and their current status; pr1 should be enabled.

# Step 6 — Rebuild the UNIX Kernel

## Prerequisites for this Step

#### Activities

- Make sure that the 6386E/33 Model S WGS, keyboard, console, additional terminals, and modems are installed according to Steps 1, 2, and 4 of this section.
- Make sure that the UNIX Foundation Set and additional software were loaded according to Step 3 of this section.
- Make sure that the terminals and modems have been set up and the ports were enabled according to Steps 4 and 5 of this section.

#### Documents

UNIX System V/386 Release 3.2.3 Operations/System Administration Guide (Admin Guide)

## Procedure 6A — Edit the Kernel File

- 1 Using vi or ed, edit the /etc/conf/cf.d/mtune file as follows. These fields are in the fourth column (which is the MAX field).
  - NUMXT = 8
  - MAXUP = 80
- 2 Using vi or ed, edit the /etc/conf/cf.d/stune file using the following suggested minimum parameter settings for Monitor I.

If Monitor I is running with a coresident application and if the other application recommends a different Kernel parameter, set the parameter to the larger of the recommended settings.

If a parameter is *not* found in the file, you must add the entry to the file using the following format.

parameter TAB XXX

Where: xxx = the value of the parameter.

NINODE = 100 times the number of RAM in the system or 1300, whichever is lower.

Note: This value should be less than or equal to NS5INODE.

 NS5INODE = 100 times the number of MB of RAM in the system or 1300, whichever is lower.

- NFILE = 100 times the number of MB of RAM in the system or 1300, whichever is lower.
- NPROC = 30 times the number of MB of RAM in the system or 400, whichever is lower.
- MAXUP = 80
- ULIMIT = 8192
- NBUF = 100 times the number of MB of RAM in the system or 2750, whichever is lower.
- NCLIST = 60 times the number of MB of RAM in the system or 1180, whichever is lower.
- NREGION = 100 times the number of MB of RAM in the system or 1200, whichever is lower.
- SHLBMAX = 6
- NUMXT = 8

#### Procedure 6B — Rebuild the Kernel

- 1 Enter cd / at the prompt.
- 2 Enter /etc/conf/bin/idbuild at the prompt.

## Procedure 6C — Reboot the System

1 After the following message is displayed:

#### UNIX Kernel has been rebuilt

enter cd /etc/default to change directories.

- 2 Using vi or ed, edit the file named login.
- 3 Search for ULIMIT and change the value to 8192.
- 4 Save the changes and exit the text editor.
- 5 Change to the root directory: cd /.
- 6 Enter shutdown to reboot the system.
- 7 When prompted, enter y when prompted to continue the shutdown.
- 8 Reboot the system when prompted by pressing CTL ALT DEL.

# Step 7 — Load the INFORMIX Software

## Prerequisites for this Step (6386E/33)

#### Activities

- Make sure that the 6386E/33 Model S processor and software have been installed according to Steps 1 through 7 of this section.
- This step can be completed before the terminals and modems are connected.

#### Documents

- UNIX System V/386 Release 3.2.3 Operations/System Administration Guide (Admin Guide)
- INFORMIX installation instructions

#### Hardware/Software Components

- INFORMIX-SQL Release 4.0 software
- INFORMIX-SE Release 4.0 software

## Procedure 7A — Add the INFORMIX Group

- 1 Log in as root.
- 2 Using vi or ed, edit the System Group file, /etc/group.
- 3 Add the following to the end of the file:

informix::nnnn:

Where: nnnn is the group id, which can be any group number not already used.

4 Save the file and exit the UNIX editor.

## Procedure 7B — Add the INFORMIX User

- 1 Use FACE to add the login, informix.
  - Login Name informix
  - Full Name INFORMIX-SQL
  - Login ID number Use the default login ID number

 Home Directory — Enter the directory name as <directory>/login\_name

Example: /usr/informix

Note: Make sure that the <directory> already exists.

- System Administration Privileges no
- 2 Assign a password as instructed.
- 3 Save the login and exit FACE.
- 4 Edit the /etc/passwd file using vi or ed.
  - Search for the string: informix:x:mmmm:1:INFORMIX SQL:/usr/informix:

Change the :1: field to :nnnn:,

Where: • nnnn is the INFORMIX group ID specified in Procedure 7A.

• mmmm is a user ID that is chosen for the INFORMIX user ID.

Example: user login name:x:user id:group id: user full name:user full path:

5 Save and exit the UNIX text editor file.

## Procedure 7C — Load the INFORMIX-SQL Software

- 1 Enter *installpkg* at the prompt to load the INFORMIX software from diskette.
- 2 Follow the instructions, insert the diskettes in sequential order, and press ENTER.
- 3 Enter the 11-character serial number *exactly* as it appears on the diskette or the Customer Registration card.
- 4 Enter the 6-character serial number KEY *exactly* as it appears on the Customer Registration card.

## Procedure 7D — Load the INFORMIX-SE Software

- 1 Enter *installpkg* at the prompt to load the INFORMIX software from diskette.
- 2 Follow the instructions, insert the diskettes in sequential order, and press ENTER.
- 3 Enter the 11-character serial number *exactly* as it appears on the diskette or the Customer Registration card.
- 4 Enter the 6-character serial number KEY *exactly* as it appears on the Customer Registration card.
# Procedure 7E — Display the Installed Packages

- 1 Enter *displaypkg* at the prompt.
- 2 Make sure the list displayed contains the following software loaded during this installation procedure.
  - Editing Package
  - FACE and FACE HELP Packages
  - FMLI Package
  - INFORMIX-SQL and INFORMIX-SE Software
  - Intelligent Ports Card (IPC) Device Driver Package
  - Network Support Utilities Package
  - Remote Terminal Package
  - Security Administration Package

End of procedures for Step 7

# Step 8 — Add the Monitor I Group and Users

# Prerequisites for this Step

#### Activities

 Make sure that the 6386E/33 Model S processor, keyboard, console, additional terminals, and modems are installed according to Steps 1, 2, and 4 of this section.

#### **Documents**

 UNIX System V/386 Release 3.2.3 User's/System Administrator's Reference Manual (Reference Manual)

# Procedure 8A — Add the Monitor I Group

- 1 Log in as root.
- 2 At the UNIX prompt, enter vi /etc/group to edit the System Group file.
- 3 Add *traf::nnnn:* to the end of the file.

Where: nnnn is the group id that is any number not already used.

4 Save the file and exit the UNIX vi editor.

# Procedure 8B — Add the Monitor I Users

- 1 Use FACE to add the login, mtmadm.
  - Login Name mtmadm.
  - Full Name Monitor I Administrator.
  - Login ID number.— Use the default login ID number.
  - Home Directory Enter the directory name as

#### <directory>/login\_name

#### Example: /usr/mtmadm

- **Note:** Make sure that the **<directory>** already exists.
- System Administration Privileges no
- 2 Enter a password for mtmadm, as instructed.
- 3 Remember to save the user login information.
- 4 Create another login, mtmadm1.

Note: This login is primarily used to facilitate the execution of cron.

- Login Name mtmadm1.
- Full Name Monitor I cron login.
- Login ID number Use the default login ID number.
- Home Directory Enter the directory name as

<directory>/login\_name

Example: /usr/mtmadm1

**Note:** *Make sure that the <directory> already exists.* 

- System Administration Privileges no.
- 5 Enter a password for mtmadm1, as instructed.
- 6 Remember to save the user login information.
- 7 Exit FACE and return to the UNIX System.
- 8 Using vi or ed, edit the /etc/passwd file.
  - Search for the string: mtmadm:x:mmmm:1:Monitor I Administrator:<directory> Change 1 to :nnnn:,

 Search for the string: mtmadm1:x:mmmm:1:Monitor I cron login:<directory>

Change 1 to :nnnn:,

Where: nnnn is the Monitor I group id specified in "Procedure 8A — Add the Monitor I Group"

<directory> is the home directory for mtmadm1.

Note: When Monitor I is installed, the mtmadm1 login is blocked.

- 9 Save the file and exit the UNIX text editor.
- 10 Type chgrp traf <directory> at the prompt.

Where: <directory> is the home directory of mtmadm.

- 11 Repeat the previous step for mtmadm1.
- 12 Use this procedure to add additional logins for Monitor I users, as necessary.
  - **Note:** Assign UNIX at and cron privileges to users who will be scheduling Monitor I reports. Refer to the *Reference Manual* for information on at and cron.

Where: nnnn is the Monitor I group id specified in "Procedure 8A — Add the Monitor I Group" and <directory> is the home directory for mtmadm.

# Procedure 8C — Edit the .profile

- 1 Use vi or ed to edit the .profile for each Monitor I user.
- 2 Change the FACEINVOKE field entry so that users do not have to go through the FACE menu to get to Monitor I. Edit the field so that it reads: FACEINVOKE = no.
- 3 Add the following entry to the *end* of the .profile so that each login can use Monitor I:
  - . <directory>/mtm/tools/profile
  - Where: <directory> is the name of the directory under which you will install Monitor I in Procedure 9A of Step 9.
  - Note: If CAFE is used, do not append the . <directory>/mtm/tools/profile entry to the users .profile.
- 4 Make sure that the mtmadm login also gets a .profile configured as listed above.

End of procedures for Step 8

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# Step 9 — Load the Monitor I Software

### Prerequisites for this Step

#### Activitias

- Make sure that you have added the Monitor I group and users, explained in Step 8 of this section.
- Make sure that you have installed the INFORMIX-SQL and INFORMIX-SE software, according to the directions listed in Step 7.
- If you are installing an upgrade (a warm install), make sure that no one is using the Monitor I files (directories), and that the Poller and Alarm Manager are not running.
- If you are performing a warm install, make sure you do a full backup of Monitor I first. Perform the backup according to the "Back Up Monitor I" (6386E/33) procedure listed in the DEFINITY Monitor I Operations Guide.

#### Documents

DEFINITY Monitor I Operations Guide (Ops Guide)

#### Hardware/Software Components

- DEFINITY Monitor I installation tape
- Disk Configuration Worksheet obtained from your AT&T Representative

# Procedure 9A — Cold Install of Monitor I Software

What? This procedure describes how to do a cold install of Monitor I. A cold install is usually done when you are installing Monitor I for the very first time. A warm install is done when you are updating existing Monitor I software. See "Procedure 9B — Warm Install of Monitor I Software" for information about warm installs.
 In some instances, you may already have Monitor I installed, but you want to remove it and start all over. In this case, you would choose a cold install to completely remove the Monitor I directories and databases and reinstall

How Long? This procedure takes about 30 minutes to finish.

new ones.

- 1 Log in as root.
- 2 Enter installpkg and press RETURN.

System Response:

Please indicate the installation medium you intend to use.

Strike "C" to install from CARTRIDGE TAPE or "F" to install from FLOPPY DISKETTE.

3 Enter *c* and press (RETURN).

System Response:

Please insert the cartridge tape into the tape drive.

4 Press RETURN).

It is recommended that you re-tension the tape before attempting the installation, to ensure that the tape is read without any errors.

5 Press RETURN to retension the tape. This will take about three minutes.

System Response:

Packages available for installation:

- 1. DEFINITY Monitor I Release 2.1
- 2. Install ALL packages shown above
- 3. Exit, do not install any packages

6 Enter 1 to install Monitor I, press (RETURN), followed by ESC). System Response:

You have made the following selections:

- 1. DEFINITY Monitor I Release 2.1
- 7 Press RETURN to confirm your selection.

Note: Press Esc if you want to redisplay the package selections.

System Response:

REMINDER!

Depending on the packages you are installing, you may be required to provide some input to the installation utility to configure the software for your system.

8 Press RETURN to continue the installation.

System Response:

Installation in progress -- Do not remove the cartridge tape

This message is followed by a copyright message for Monitor I.

System Response:

Enter type of installation you want (w-warm, c-cold, e-exit):

- **Note:** If you choose to exit at this point, and you want to restart installation, you must reinsert the tape. Any time after this point, you can exit and restart without reinserting the tape.
- 9 Type c and press RETURN.

System Response:

Enter the directory where you want to install Monitor I?:

- 10 Enter the directory name then press (RETURN).
  - **Note:** Monitor I will be installed in the directory you specify, under a subdirectory called **mtm**. If this subdirectory does not exist, the system will now create it for you.
  - **Example:** Entering /usr or /usr1/traf results in Monitor I being installed in the directory /usr/mtm/ or usr1/traf/mtm respectively.

System Response:

Monitor I will be installed under <directory name>/mtm, continue (y/n):

Where: <directory name> is the name of the directory you specified in the previous step.

11 Enter y to continue and press (RETURN).

WARNING- Cold installation will remove all Monitor I directories and existing database(s), if any. No one should be using Monitor I during installation. Make sure Monitor I polling system and alarm manager are not running.

Cold installation will proceed, continue? (y/n) :

12 Enter y and press RETURN.

System Response:

Select processor type -

Enter 1 for 3B2-600 2 for 6386E/33 model S 3 for 6386SX/EL or NCR 3315

13 Type 2 and press (RETURN).

System Response:

You are installing on a 6386E/33 model S processor. Do yo want to continue? (y/n) :

14 Type y and press RETURN to continue.

System Response:

Pre-installation checks in progress ....

• If pre-installation checks have completed successfully, you will see the following message:

Pre-installation checks have completed successfully.

• If pre-installation checks did *not* complete successfully, a list of error messages is displayed, followed by this message:

Pre-installation checks did not complete successfully.

**Note:** To continue, fix the errors using error message explanations found in Appendix C of this manual. Once the errors have been resolved, try installing Monitor I again using this procedure, starting with the **installpkg** command in Step 2.

If pre-installation checks completed successfully, the following prompt is displayed:

Do you want to create database place holder(s)? (y/n):

- **Note:** If you enter n, the software will be installed, but no placeholders will be created. You can add placeholders after installation is completed by using the **addmount** procedure discussed in "9C — Create Placeholders Using Addmount."
- **15** Enter *y* to create database placeholders then press (RETURN). System Response:

Do you want to use the "rotating switch study" feature? (y/n):

**Reference:** Refer to the DOSS Configuration output for the appropriate response.

• If you answer n, for the **Rotating Switch Study** feature, the following prompt is displayed:

Enter the directory to create the database(s) e.g. /usr1 ? :

Continue the software load with Step 18 of this procedure.

• If you answer y, for the Rotating Switch Study feature, the following prompts are displayed:

Enter the total number of G2, SYSTEM 85 or FP8 switches?: Enter the total number of G3r, G3i, G1 or SYSTEM 75 switches?:

16 If you are using the **Rotating Switch Study** feature, enter the correct response to these questions and press RETURN to get the next prompt.

System Response:

Are the values entered above correct? (y/n):

• If you answer n, the system will again prompt you to enter the total number of switches.

17 Once all values are correct, type *y* then press RETURN. System Response:

Enter the directory to create the database(s), e.g. /usr1 ? :

**Reference:** Refer to the DOSS Configuration output for the appropriate directory.

- 18 Enter the directory name and press (RETURN).
  - **Note:** The next questions refer to the number of placeholders for databases to be created under each mount point (database directory) for each polling option.

System Response:

How many G2, SYS85 or FP8 (EXTENDED) database(s) ? (0-40) : How many G2, SYS85 or FP8 (STANDARD) database(s) ? (0-40) : How many G2, SYS85 or FP8 (DAILY and LIMITED) database(s) ? (0-40) : How many G1 1.1 or SYSTEM 75 database(s)? (0-40) : How many G3r or G3i (EXTENDED) database(s)? (0-40) : How many G3r or G3i (STANDARD) database(s)? (0-40) : How many G3r or G3i (DAILY and LIMITED) database(s)? (0-40) : How many inactive database(s)?

- Note: The last prompt, How many inactive database(s)?, is only displayed if the Rotating Switch Study feature is used.
- 19 Enter the correct response to each of the questions listed above and press RETURN to get the next prompt.

Note:

- You must enter the correct number of databases for Monitor I to work properly. This information depends on the number of switches being supported and how your disk is sliced. See your Disk Configuration Worksheet for more information.
- Monitor I allows you to repeat this procedure for each mount point (database directory) and polling option per switch type that you have.

System Response:

Are the values entered above correct? (y/n):

• If you answer n, the system repeats the series of questions listed in Step 19 of this procedure.

20 Once all values are correct, type *y* then press RETURN. System Response:

Do you want to create more database place holder(s)? (y/n):

• If you answer y, the system returns to the response in Step 19 of this procedure.

**21** Enter *n* and press **RETURN** to continue with the installation.

**Note:** The system begins copying the files from the tape and a lengthy list of these files appears in a scrolling display. The files displayed on your screen will vary from the partial system listing displayed in the next screen example.

(	copying files from the tape
1	bg
t	np
v	vork
v	vork/pdump
v	vork/polldir
E	rog
i i i	rog/R2V2
	rog/R2V2/L1 rep
	rog/R2V2/acd rep
	rog/R2V2/covg rep
0	rog/R2V2/iparser
	rog/B2V2/clock
U	pgrade/d1.1.FL3
0	
u	pgrade/d1.2.GL1
100	
U.	pgrade/d2_1_AL1/A06tmdb75
F	e-building system 85 B2V5 menu
Ē	e-building system 85 B2V4 menu
	· · · · · · · · · · · · · · · · · · ·
P	e-building system 75 R1V4 menu
B	e-building system 75 B2V5 menu
	· · · · · · · · · · · · · · · · · · ·

The following messages appear when the installation completes:

All Monitor I files have been installed correctly. Installation completed successfully.

If you do *not* see these messages or if you see error messages during the procedure, look for further information on the errors in /usr/tmp/journal. Fix the errors using the error message explanations found in Appendix C of this manual, then try installing Monitor I again, starting with the installpkg command in Step 2 of Procedure 9A.

End of Cold Install Procedure

### Procedure 9B — Warm Install of Monitor I Software

- Back up Monitor I according to the "Back Up Monitor I (6386E/33)" procedure listed in the Monitor I Operations Guide.
- 2 Follow Steps 1 through 8 of "Procedure 9A Cold Install of Monitor I Software."

Complete Step 2 of this procedure when you see this prompt:

Enter type of installation you want (w-warm, c-cold, e-exit):

3 Type w and press RETURN.

System Response:

WARNING- No one should be using Monitor I during installation. Make sure Monitor I polling system and alarm manager are not running.

Warm installation will proceed, continue? (y/n) :

4 Enter *y* to continue and press RETURN. System Response:

Pre-installation checks in progress ....

• If pre-installation checks have completed successfully, you will see the following message:

Pre-installation checks have completed successfully.

• If pre-installation checks did *not* complete successfully, a list of error messages is displayed, followed by this message:

Pre-installation checks did not complete successfully.

**Note:** To continue, fix the errors using error message explanations found in **Appendix C** of this manual. Once the errors have been resolved, try installing Monitor I again using this procedure, starting with the **installpkg** command in **Step 2** of this procedure.

A lengthy list of files appears on the screen in a scrolling display. After all these files have been installed and some post-installation checking messages appear, the following message is displayed at the completion of the warm installation:

Warm installation completed successfully.

**Note:** If you do *not* see this message or if you see error messages during the procedure, look for further information on the errors in /usr/tmp/journal. Fix the errors, using the error message explanations found in Appendix C. Try installing Monitor I again, starting with the installpkg command in Step 2 of this procedure.

5 As a final post-installation step, restart the poller and alarm manager. For instructions see the headings, "Activate the Polling Control Mechanism" in Chapter 3, "Implementing Monitor I," as well as "Activate Alarm Manager" in Chapter 8, "System Administration," both in the *Monitor I Operations Guide*.

End of Warm Install Procedure

# Procedure 9C — Create Placeholders Using Addmount

Use this procedure to create database placeholders from the UNIX shell, after you have completed the Monitor I installation.

- **Note:** If you have already added placeholders during installation, you will not be able to add additional placeholders from the shell. Also, if you have used the **addmount** procedure previously to add placeholders, you will not be able to execute this procedure a second time.
- 1 Log in as root.
- 2 Type <directory>/mtm/tools/addmount at the prompt and press (RETURN).

Where: <directory> is the name of the directory under which you installed Monitor I in Step 10 of Procedure 9A.

System Response:

Do you want to use the "rotating switch study" feature? (y/n):

**Reference:** Refer to the DOSS Configuration output for the appropriate response.

• If you answer n, for the **Rotating Switch Study** feature, the following prompt is displayed:

Enter the directory to create the database(s), e.g /usr1 ? :

Skip to Step 5 of this procedure.

• If you answer y, for the **Rotating Switch Study** feature, the following prompts are displayed:

Enter the total number of G2, SYSTEM 85 or FP8 switches?: Enter the total number of G3r, G3i, G1 or SYSTEM 75 switches?: 3 If you are using the **Rotating Switch Study** feature, enter the correct response to these questions and press RETURN to get the next prompt.

System Response:

Are the values entered above correct? (y/n):

- If you answer n, the system will again prompt you to enter the total number of switches.
- 4 Once all values are correct, type *y* then press (RETURN). System Response:

Enter the directory to create the database(s), e.g. /usr1 ? :

**Reference:** Refer to the DOSS Configuration output for the appropriate directory.

- 5 Enter the directory name and press RETURN.
  - **Note:** The next questions refer to the number of placeholders for databases to be created under each mount point (database directory) for each polling option.

System Response:

How many G2, SYS85 or FP8 (EXTENDED) database(s) ? (0-40) : How many G2, SYS85 or FP8 (STANDARD) database(s) ? (0-40) : How many G2, SYS85 or FP8 (DAILY and LIMITED) database(s) ? (0-40) : How many G1 1.1 or SYSTEM 75 database(s)? (0-40) : How many G3r or G3i (EXTENDED) database(s)? (0-40) : How many G3r or G3i (STANDARD) database(s)? (0-40) : How many G3r or G3i (DAILY and LIMITED) database(s)? (0-40) : How many inactive database(s)?

Note: The last prompt How many inactive database(s)? is only displayed if the Rotating Switch Study feature is used.

6 Enter the correct response to each of the questions listed above and press RETURN to get the next prompt.

Note:

- You *must* enter the correct number of databases for Monitor I to work correctly. This
  information depends on the number of switches being supported and how your disk is
  sliced. See your Disk Configuration Worksheet for more information.
- Monitor I allows you to repeat this procedure for each mount point (database directory) and polling option per switch type that you have.

System Response:

Are the values entered above correct? (y/n):

- If you answer n, the system returns to the series of questions listed in Step 5 of this procedure.
- 7 Once all values are correct, type y then press RETURN.

System Response:

Do you want to create more database place holder(s)? (y/n):

- If you answer y, the system returns to the System Response listed in Step 4 of this procedure.
- 8 Enter *n* to continue the addmount procedure.
- 9 Wait for the prompt:

Database place holders successfully created

You will see this message for each database directory you entered.

**Note:** If you do not see this message, check /usr/tmp/addout for possible errors. Refer to Appendix C for Monitor I installation error messages and corrective actions.

End of procedures for Step 9

# Step 10 — Enable the System Ports

# Prerequisites for this Step

#### Activities

- Make sure the 6386E/33 Model S processor, keyboard, console, additional terminals, and modems are installed according to Steps 1, 2, and 4 of this section.
- Make sure the UNIX Foundation Set and additional software has been loaded according to Step 3 of this section.
- Make sure the terminals and modems were set up according to Step 4 of this section.

#### **Documents**

- Refer to the Port Configuration Worksheet in Appendix B for a list of configured ports.
- Intelligent Ports Card Model 900 (IPC-900) User's Guide (IPC Guide)

# Procedure 10A — Enable Bidirectional Ports

- 1 Log in as root.
- 2 Enter face at the prompt.
- 3 Enter the following selections:

Administrative Menu → Peripheral Setup

→ Serial Ports Setup

- 4 Use F2, *Choices* to make the next set of selections.
  - An outgoing or bidirectional port to enable.
  - Device Type = MODEM
  - Device Speed = 1200
    - **Note:** If you have DIMENSION FP8 switches, you will need to edit the /usr/lib/uucp/Devices file by creating an additional, identical entry for each ACU entry with a baud rate of 1200. Then, change the 1200 in the duplicate entry to 300.

Flow Control = hardware

5 Press F3 to save the port selections.

- 6 From window 5, use F2, Choices to select the following.
  - Modem Type = AT&T 2224B for all modem types (AT&T 2224-CEO and AT&T 2224-GNN, and also see the AT&T 2400 Modem section)
  - Device Connection = Both incoming and outgoing calls (bidirectional)
- 7 Press F3 to save the options.
- 8 Exit FACE.

#### Procedure 10B — Set the CEO Modem Software Options

- 1 Plug the phone cable into the port labeled Line on the back of the modem.
- 2 Plug the modem into the power supply.
- 3 Log in as root.
- 4 Enter MTMDIR=<directory>;export MTMDIR.

5 Enter \$MTMDIR/tools/ceoconfig.

System Response:

Enter port number (e.g. tty31):

6 Enter the port number.

**Reference:** Appendix B for the port number assigned to the 2224-CEO modem.

System Response:

Testing /dev/<portnumber> Please wait... Hardware Switches Set for Dial-Out or Bi-Directional Asynchronous

• If the modem software options are set correctly, the following prompt is displayed next:

<portnumber> Software Options Set Correctly

Where: <directory> is the directory under which Monitor I was loaded in "Step 9 — Load the Monitor I Software."

Perform all tests listed in Appendix A — Acceptance Testing.

• If the modem software options are set incorrectly, the following prompts are displayed:

Software Options Set Incorrectly for Monitor I

Enter y to set them to the Monitor I configuration or n to keep current settings (y):

7 Enter y.

System Response:

Setting <portnumber> Software Options to Defaults Options 1-63 set to default

Option 12 is now y Option 34 is now 1 Option 36 is now 0 Option 41 is now 0

<portnumber> Software Options Set Correctly

Where: <portnumber> is the port number assigned to the 2224-CEO modem.

**Note:** If these messages are *not* displayed or an error message is displayed, run this procedure again from **Step 5** of **Procedure 10B**.

Option Number	Value	Option Number	Value	Option Number	Value	Option Number	Value
1	у	17	10	33	n	49	N/A
2	y	18	n	34	1	50	N/A
3	y	19	n	35	3	51	n
4	y	20	1	36	0	52	f
5	y	21	0	37	0	53	f
6	N/A	22	:	38	0	54	У
7	y	23	^H	39	5	55	n
8	N/A	24	@	40	N/A	56	v
9	n	25	\$B	41	0	57	N/A
10	n	26	\$:	42	N/A	58	n
11	n	27	n	43	n	59	N/A
12	y	28	n	44	n	60	N/A
13	n	29	0	45	n	61	N/A
14	n	30	n	46	n	62	N/A
15	y	31	у	47	N/A	63	n
16	n	32	Ĩ	48	N/A		

TABLE 3-7 2224-CEO Modem — Software Options

**Notes:** N/A = Not Applicable

Table 3-7 reflects the 2224-CEO modem settings *after* the **ceoconfig** utility is run. This table is for reference purposes only.

End of procedures for Step 10





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# Installing on the 6386SX/EL

This section explains how to install the hardware and software required to use Monitor I on the 6386SX/EL processor. The entire installation should take approximately five hours: one hour to complete Step 1 and about four hours to complete Steps 2 through 10.

# Step 1 — Set Up the 6386SX/EL WGS

### Prerequisites for this Step

#### Activities

- DO NOT install any hardware or software before calling the TSC (1 800 548-8861).
- Make sure you received all the components necessary for the Monitor I system.
- Plan the location and determine the I/O address range, controller memory address range, and Interrupt Request (IRQ) levels of add-on cards in the processor. Table 4-1 lists the default locations and IRQ levels of the add-on cards in the processor. However, the default locations and IRQ recommended may need to be changed if Monitor I is coresident with other applications.
  - **Note:** These locations must be unique for each board in the system. Keep a record of the locations and addresses of each board for your reference.

Card	Slot	IRQ Level	I/O Address	Memory Address
IPC #1	1	10	290	D0000
TAPE	2	5	288	

TABLE 4-1 Add-On Cards: Default Location Addresses and IRQ Levels

#### Documents

- 6386SX/EL WGS Processor User's Guide (6386SX/EL Guide)
- 6386SX/EL WGS Service Manual (Service Manual)

- 6386SX/EL WGS Hardware Reference Manual (Reference Manual)
- AT&T Intelligent Ports Card Model 900 (IPC-900) User's Guide (IPC Guide)
- AT&T Work Group System Remote Maintenance Package User's Guide (RMP Guide)

#### Hardware/Software Components

- AT&T 329D VGA Monitor
- AT&T 101-key Keyboard
- AT&T three-button mouse
- Intelligent Ports cards (IPC)
- Memory boards
- Memory Expansion kits
- Remote Maintenance Card

### Procedure 1A — Install the Additional Memory

1 Install the additional SIMMs.

See: The "Installing Expansion Board" instructions in Chapter 4, "Installing System Options" of the 6386SX/EL Guide.

- 2 Before installing additional memory boards, fill up the SIMM slots on the mother board (a total of 8 MB).
- 3 Install additional memory board(s), if required.
  - See: The "Memory Expansion Boards" instructions in the Expansion Kits appendix of the 6386SX/EL Guide.
  - **Note:** If other applications coresiding on the 6386SX/EL require use of specific slots, make sure those slots are left free.

### Procedure 1B — Install the Additional Cards

- Set the I/O Starting Address, the Controller Memory Starting Address, and the Interrupt Request Level (IRQ) shunt according to Table 4-1. Each IPC must have unique settings. You need to know these settings when you load the IPC software in Procedure 3B of this chapter.
  - See: The "Hardware Installation" and "Hardware Parameter Settings" sections in the *IPC Guide*.

2 Install the IPC in a one-port slot as follows.

See: The "Installing an Expansion Board" instructions in the *Installing Your System* chapter of the 6386SX/EL Guide.

- Align the IPC-900 board with the selected board slot and insert it into the corresponding connector.
- Attach the T-adaptor to the IPC-900 board. Make sure it is plugged firmly and completely into the socket.
- Repeat for additional IPC cards, if supplied. IPC connections must use 10-pin modular cords and 10-pin special adaptors.

# Procedure 1C — Set Up the Console, Keyboard, Cables and Processor

Set up and prepare the console.

See:

- The "Connect the System Components" instructions in Chapter 1, "Getting Started" of the 6386SX/EL Guide.
- For details on setting up the console terminal, see "Step 4 Set Up the Terminals and Modems" in this chapter.
- 2 Connect the monitor, keyboard, and power cord to the processor.
  - **Reference:** The "Connect the Keyboard and Video Display" and "Connect Other Peripherals" instructions in Chapter 1, "Getting Started" of the 6386SX/EL Guide.
- 3 Replace the covers and connect the processor to the power outlet.

**Reference:** "Connect the System to a Power Outlet" instructions in Chapter 1, "Getting Started" of the 6386SX/EL Guide.

End of procedures for Step 1

# Step 2 — Load the UNIX Essential Utilities

# Prerequisites for this Step

#### Activities

 Make sure that the 6386SX/EL processor, keyboard, and console are set up and connected according to Step 1 of this section.

#### **Documents**

- 6386SX/EL WGS Processor User's Guide (6386SX/EL Guide)
- UNIX System V/386 Release 3.2.3 Operations/System Administration Guide (Admin Guide)
- UNIX System V/386 Release 3.2.3 Release Notes (Release Notes)

#### Hardware/Software Components

- Base System Package Disk
- UNIX Operating System Foundation Set software, on cartridge tape

# Procedure 2A — Run the Setup Utility

1 Configure the base system.

**Reference:** The "Getting Started" and "Operating Your System" instructions in the 6386SX/EL Guide.

- 2 When running the Setup utility, check to see that the Extended Memory is correct for the amount of memory installed in the system.
  - Press CTL ALT DEL to reboot.
  - Wait for the beep.
  - Press CTL ALT INSERT to see the current settings for your configuration. The memory size(s) should match the data shown in Table 4-2.

TABLE 4-2 Memory size, 6386SX/EL

Memory	Extended	
Installed (MB)	Memory (KB)	
8	7552	

- 3 Set Console Redirection to the COM2 Port at a speed of 1200 baud.
- See: "Setting I/O Redirection" in the 6386SX/EL Guide.

# Procedure 2B — Load the UNIX Foundation Set

- Begin loading the UNIX Foundation Set.
  - See: The "Boot System to Single-User Mode" instructions in the "Software Installation" section of the *Admin Guide*.
- 2 Run the setup and begin partitioning the hard disk as follows.
  - See: The "Perform Installation Setup" instructions in the Software Installation section of the *Admin Guide*. Follow the setup procedure for a new installation.
  - Select 1 to create an MS-DOS partition.
  - When prompted, enter the amount of hard disk allocated to DOS as 5 percent (for 100 MB disk).
  - Enter *n* to indicate that the MS-DOS partition is not the active partition.
- 3 Create the UNIX partition as follows.
  - Select 1 to create a UNIX partition.
  - Select 1 to indicate that a UNIX System partition is to be created.
  - When prompted, enter the amount of hard disk allocated to UNIX as 95 percent (for 100 MB disk).
  - Enter y to indicate that the UNIX partition is to be active every time the machine is booted.
  - Select 4 to update the disk configuration and exit.
- 4 Continue partitioning the hard disk.
  - See: The "Prepare Hard Disk for Surface Analysis" instructions in the Software Installation section of the *Admin Guide*.

- 5 Complete the hard disk partitioning process as follows.
  - See: The "Create UNIX System File Systems" instructions in the Software Installation section of the Admin Guide.
  - Enter n to indicate that the default partition allocations are not acceptable.
  - Enter *y* at the partition prompt:

#### Separate root and usr?

Enter n at the next partition prompt:

Additional usr2?

Enter *n* at the next partition prompt:

Crash/dump area?

- Enter 61 as the number of cylinders assigned to swap/paging.
- Enter 76 (for the 100 MB disk) as the number of cylinders allocated for the root partition.
- Review the new allocation and make a note of it. Swap/paging and root should have the number of cylinders you assigned, and the balance should be assigned to the /usr area. Enter y to indicate the allocation is acceptable.
- When you are prompted, remove the diskette from the drive and reboot the system from hard disk.
- After rebooting the system, enter *c* to install the UNIX system from cartridge tape.
- 6 Load the UNIX essential utilities.
  - See: The "Install Base System (From Cartridge Tape)" instructions in the Software Installation section of the *Admin Guide*.
- 7 Assign a root password.
- 8 Assign an install password.

# Procedure 2C — Load Add-On Packages From Tape

Follow the instructions on the Package Selection menu to install the add-on packages from cartridge tape. Select the following for installation:

- 1 Editing Package
- 2 FMLI
- 3 FACE
- 4 FACE Help

**Note:** The FACE Help package is totally different than the FACE package.

- 5 Press ESC to execute.
- 6 Press RETURN to continue.
- 7 Enter 4 to install all of the Help files.
- 8 Enter 5 to complete (terminate) the Help file installation.
- 9 Continue the installation with the cartridge tape utilities.

See: Table 4-1 for the appropriate IRQ load.

10 Reboot the system.

End of procedures for Step 2

# Step 3 — Load the Additional Software

# Prerequisites for this Step

#### Activities

- Make sure that the 6386SX/EL WGS, keyboard, console, and additional cards are installed according to Step 1 of this section. You need to know the location, memory addresses, and IRQ levels of the boards in the processor.
- Make sure that the correct version of the UNIX Foundation Set is loaded according to Step 2 of this section.

#### Documents

- UNIX System V/386 Release 3.2.3 Operations/System Administration Guide (Admin Guide)
- Intelligent Ports Card Model 900 (IPC-900) User's Guide (IPC Guide)
- AT&T Work Group System Remote Maintenance Package User's Guide (RMP Guide)

#### Hardware/Software Components

- UNIX System V/386 Release 3.2.3 Remote Terminal Package
- AT&T IPC UNIX System V 386 Device Driver
- Security Administration Package

#### When Installing from Diskette

- Use the "Install Optional Add-On Packages (From Diskette)" instructions in the "Software Installation" section of the Admin Guide to load the individual software packages.
- If your processor has two disk drives, specify the drive from which you are loading.
- If asked how many diskettes are in the package, count the number of diskettes for the specific package only. Whenever multiple diskettes exist for a specific package, make sure you load these diskettes in sequential order.
- If asked for the diskette type, either look on the diskette for the applicable type or enter 1.44.
- If asked to reboot the system, press Esc to skip the reboot process. You do not have to reboot after loading each software package; however, you must reboot the system after the last package is loaded.

### Procedure 3A — Load the Remote Terminal Package

Note: This is not the Remote Maintenance Package, which is loaded at a different time.

- 1 Enter *installpkg* at the prompt to load the Remote Terminal Package.
- 2 Enter 1 to install the terminfo files.
  - **Call:** The TSC Hotline (1 800 548-8861) to obtain the **terminfo** entry needed to use the 730 terminal and the 615 BCT with the System 75 Emulation cartridge. (For the 715 BCS, use "BCS" as the emulation mode and "513" for the terminal type when cutting through from G3i, Generic 1, or System 75 to AUDIX.)
- 3 Enter all to load all the terminfo files.
- 4 Enter done after the list of files is displayed.
- 5 Enter 0 to complete (terminate) the terminfo file load.

#### Procedure 3B — Load the IPC Device Driver

**Note:** Make sure you are using Version 3.0 for the IPC-900.

- Enter installpkg at the prompt to load the IPC software.
- 2 Enter the number of IPC cards installed in the system. For each IPC, do the following.
  - Press RETURN to select the default (IPC-900) for the type of ports card installed in the system.
  - Enter the Interrupt Request Level (IRQ) of the IPC.

See: Table 4-1 in this guide for the IRQ level required.

- Do one of the following:
  - Press RETURN to select the default starting address of the I/O ports and controller memory.
  - b Enter the appropriate addresses as set on the card during the installation.

See: The "Hardware Parameter Settings" section in the IPC Guide.

- 3 Enter y to confirm the settings.
- 4 Reboot as instructed.

End of procedures for Step 3

# Step 4 — Set Up the Terminals and Modems

### Prerequisites for this Step

#### Activities

 Make sure that the 6386SX/EL processor, keyboard, console and software are set up and connected according to Steps 1 through 3 of this section.

#### **Documents**

- User's Guide 615 Business Communications Terminal Guide, or 715 Business Communications System (BCS) User's Guide and Service Manual, or 730 Multi-Tasking Graphics Terminal Guide (Terminal Guide)
- DATAPHONE II 2224-CEO Modem User's Manual or DATAPHONE II 2224-GNN Modem Manual (Modem Manual)
- Intelligent Ports Card Model 900 (IPC-900) User's Guide (IPC Guide)

#### Hardware/Software Components

- 615 BCT(s), 715 BCS(s), or 630 or 730 MTG(s) [optional]
- One 513 BCT/System 75 Emulation Cartridge per 615 BCT for accessing G3i, Generic 1, or System 75 maintenance and administration functions
- 2224 modem(s) for use with bidirectional 1200/300 baud asynchronous communications for UUCP and communication with administered switches
- 10-pin modular cables with 10-pin special adaptors

# Procedure 4A — Set Up the Terminals

- 1 Unpack, install, and set up the terminal.
  - See: The "Unpack and Install" (615 BCT or 715 BCS) or "Installation" (730) instructions in the *Terminal Guide*.
  - **Note:** The 630 or 730 MTG is most effectively used at speeds above 2400 baud, therefore it should not be connected through a modem.
- 2 To make the terminal operational for Monitor I:
  - Install the 513 BCT/System 75 Emulation Cartridge by inserting the 513 BCT/System 75 cartridge into the slot on the side of the 615 BCT. Be sure that the cartridge is right side up, with the cartridge label toward the front.

- **Warning:** Check the on/off switch before you install the cartridge to make sure that the power for the 615 terminal is turned *off*. A blank screen is *not* an indicator that the terminal is off, and you will destroy the 513 BCT/System 75 cartridge if you insert or remove it while the terminal is on.
- Follow the instructions in the *Terminal Guide* to enable the cartridge.
- For the 715 terminal, enter the following settings:
  - Set the emulation mode to: BCS
  - Set the UNIX terminal type (TERM) to: sys75
  - Set the terminal type for cut-through access from Monitor I to G3i, Generic 1, and System 75 to: 513
  - Set the Swap Delete option of the 715 terminal to: yes (through terminal setup) for BCS.
- Change the Cursor Blink option to y for yes.
- Cut-through access to System 75 R1V1 for maintenance or administration requires that the System 75 be equipped with a pooled modem card that allows asynchronous communications.

### Procedure 4B — Set Up the Modems

Monitor I supports the 2224-CEO, 2224-GNN and AT&T 2400 modems. For either modem, you must set up the hardware switches, as follows.

See: The appropriate *Modem Manual* for complete installation procedures.

Contact the Technical Service Center (TSC) at 1 800 548-8861 to have your modem checked after you have completed the appropriate modem procedures.
#### 2224-CEO Modems

For the 2224-CEO modem:

Remove the CEO modem cover to access the Internal Option switches.
See Figure 4-1 for a diagram of the CEO modem hardware switches.



FIGURE 4-1 CEO Modem Hardware Switches

- 2 To set your modem switches:
  - For dial-out or bidirectional 1200/300 baud asynchronous, dialer-enabled modems, set the switches according to Table 4-3.

TABLE 4-3 2224-CEO Dial-Out 1200/300 Asynchronous Communications

Switch	Push	Switch	Push	Switch	Push
1-1 1-2 1-3 1-4	down down down down	1-5 1-6 1-7 1-8	down up down down	internal-1 internal-2	away from number away from number

- 3 Plug the power cable from the modem into the power outlet.
- 4 Reset the modem by pressing and releasing the RESET switch. This makes your changes effective.

#### 2224-GNN Modems

See Figure 4-2 for a diagram of the GNN modem hardware switches.



FIGURE 4-2 GNN Modem Hardware

 For dial-out or bidirectional 1200/300 baud asynchronous, dialer-enabled 2224-GNN modems, set the switches according to Table 4-4.

Switch	Push	
1-1	left	
1-2	left	
1-3	left	
1-4	right	
1-5	right	
1-6	left	
1-7	left	
1-8	left	
2-1	right	
2-2	right	
2-3	left	
2-4	1eft	
2-5	left	
2-6	left	
2-7	left	
2-8	left	
3-1	right or up	
3-2	right or up	
3-3	right or up	
3-4	left or down	
3-5	left or down	
3-6	left or down	
3-7	left or down	
3-8	left or down	

TABLE 4-4 2224-GNN Dial-Out 1200/300 Asynchronous Communications

2 Reset the modem by removing it from the rack, then putting it back. This makes the changes take effect.

## Set Up An AT&T 2400 Modem

The AT&T 2400 modems can arrive from the factory in an unknown state; they can be in a state that will not allow them to communicate with a UNIX system. Therefore, these modems should be configured using a terminal.

#### Install the AT&T 2400 Modem

Install the AT&T 2400 modem as follows:

- 1 Plug in the modem's power adaptor.
- 2 Connect the modem to the main port of an AT&T 615 Terminal using a straight through male to male RS-232 cable.
- 3 Set the terminal speed to 1200.
- 4 Set the terminal Parity to EVEN.
- 5 Set the terminal Send Parity to NO.

#### Set the 2400 Modem Software Options

Set the software options in the 2400 modem using a terminal. The modem can be configured for bidirectional port, asynchronous transmission or product access.

- For a bidirectional or asynchronous transmission, use the sequence of commands provided in Table 4-5, Column 1. AT&T 2400 modems used for bi-directional traffic such as login or UUCP must be locked at one baud rate.
- For a product access configuration, use the sequence of commands provided in Table 4-6, Column 1. AT&T 2400 modems used for product access (various baud rates) must only be used for product access (outgoing only).

Command	Meaning
AT&F	Factory Default
AT&MO	Turn speaker off
AT&QO*	Standard Async
ATQ2	Result code in originate only
AT&D2	Enter command mode on DTR dropping
AT&KO	no flow control
AT&C2	CD on for cmd mode, track carrier for data transfer
ATSO=1	Auto Answer
ATS37=6	Maximum DCE Line Speed**
AT&WO	Write storable parameters of current configuration in memory as profile 0
AT&YO	Specify stored user profile 0 as power up configuration

TABLE 4-5 AT&T 2400 Modem Bidirectional or Asynchronous

\* Varies across the two configuration tables; all other commands are common for all configurations.

<sup>\*\*</sup> Set to 5, 1200 baud; set to 6, 2400 baud

Command	Meaning
AT&F	Factory Default
AT&MO	Turn speaker off
AT&QO*	Standard Async
ATQ2	Result code in originate only
AT&D2	Enter command mode on DTR dropping
AT&KO	no flow control
AT&C2	CD on for cmd mode, track carrier for data transfer
ATSO=1	Auto Answer
ATS37=0*	Maximum DCE Line Speed
AT&WO	Write storable parameters of current configuration in memory as profile 0
AT&YO	Specify stored user profile 0 as power up configuration

TABLE 4-6 Configuration of a Product Access Modem

<sup>\*</sup> Varies across the two configuration tables; all other commands are common for all configurations.

#### Configure the UNIX System

The Dialers file of UNIX System V Release 3.2.3 contains the following line:

hayes =,-, "" \M\dAT\r\c OK\r \EATDT\T\r\c CONNECT \m\c

Activate this file by removing the comment symbol, #, at the beginning of the line.

For modems that are to be used for outgoing calls (bidirectional), the procedure for configuring the UNIX System as described in the *Installation Manual* changes as follows:

- In the Connect to Modem form of the FACE Menu, set the Modem Name field to Non-Autodialing.
- The Devices files will contain a line corresponding to each modem configured for outgoing calls. The following is a typical entry in this file:

ACU ttyh06,M - 1200 Non-Autodialing

For each modem, edit the file by entering a set like the following:

ACU ttyh06 - 300 hayes ACU ttyh06 - 1200 hayes ACU ttyh06 - 2400 hayes

End of Procedure

# Procedure 4C — Connect the Terminals

- 1 Find the red ground lug on one end of the 10-conductor Modular Cable. Insert that end of the cable into a port on the IPC T-connector and connect the ground lug to the ground slot beneath the port.
- 2 Write the port number, associated device name, and phone line on the Port Configuration Worksheet in Appendix B of this manual.
- 3 Connect the other end of the 10-conductor cable to a terminal/printer adaptor and connect the adapter to the port labeled MAIN on the back of the terminal.
- 4 Plug the power cables from the terminals into the power outlet.

# Procedure 4D — Connect the Modems

- 1 Connect the 10-conductor cables from the modems to the IPC serial ports.
- 2 Connect the modems to the phone lines.
- 3 Plug the power cables from the modems into the power outlet.
- 4 Write the port number, associated device name, and phone line on the Port Configuration Worksheet in Appendix B of this manual.

End of procedures for Step 4

# Step 5 — Set Up and Enable the Printer

### Prerequisites for this Step

#### Activities

Make sure that the Monitor I system was installed according to Steps 1 through 4 of this section.

#### Documents

- User's Guide AT&T 570 Printer or User's Guide AT&T 593 Printer (Printer Guide)
- UNIX System V/386 Release 3.2.3 Operations/System Administration Guide (Admin Guide)

#### Hardware/Software Components

- AT&T 570 or 593 Printer
- AC power cord
- Tractor assembly
- Static eliminator

### Procedure 5A — Set Up the Printer

- 1 Set up the printer connection parameters.
  - See: The "Operation Panel and Operational Procedures in Set-Up Mode" instructions in the *Printer Guide*.
- 2 Use FACE to set up the printer parameters.

# Procedure 5B — Connect the Printer Cable

- Connect one end of the parallel printer cable to the printer and the other end to the parallel port on the processor.
- 2 Write the port number and associated device name on the Port Configuration Worksheet in Appendix B of this manual.

# Procedure 5C — Enable the Printer

- 1 Log in as root.
- 2 At the prompt, enter face and press RETURN.
- 3 Enter the following menu selections:

System Administration → Peripheral Setup → Printer Setup → Parallel Printer Port Setup

System Response:

Printer type:

4 Enter the appropriate printer type, either *AT&T570* or *AT&T593* and press (RETURN). System Response:

Printer Name:

5 Enter the name of the printer and press (RETURN).

Example: pr1

System Response:

Should filter be used?

- 6 Select the default, yes.
- 7 Press F3 to save the values.
- 8 Press F3 to continue with this procedure.
- 9 Press F6 three times to return to the FACE main menu.
- 10 Select exit then press F3 to exit from the FACE main menu.

11 At the next prompt, enter: *lpstat -t* 

System Response:

Information about the printer you enabled (for example, pr1) is displayed.

End of procedures for Step 5

# Step 6 — Rebuild the UNIX Kernel

## Prerequisites for this Step

#### Activities

- Make sure that the 6386SX/EL WGS, keyboard, console, additional terminals, and modems are installed according to Steps 1, 2, and 4 of this section.
- Make sure that the UNIX Foundation Set and additional software were loaded according to Step 3 of this section.
- Make sure that the terminals and modems have been set up and the ports were enabled according to Steps 4 and 5 of this section.

#### Documents

UNIX System V/386 Release 3.2.3 Operations/System Administration Guide (Admin Guide)

# Procedure 6A — Edit the Kernel File

- 1 Using vi or ed, edit the /etc/conf/cf.d/mtune file with the information listed below. These fields are in the fourth column (which is the MAX field).
  - NUMXT = 8
  - MAXUP = 80
- 2 Using vi or ed, edit the /etc/conf/cf.d/stune file using the following suggested minimum parameter settings for Monitor I.

If Monitor I is running with a coresident application and if the other application recommends a different Kernel parameter, set the parameter to the larger of the recommended settings. If a parameter is *not* found in the file, you must add the entry to the file using the following format.

parameter TAB XXX

Where: xxx = the value of the parameter.

■ NINODE = 100 times the number of MB of RAM in the system or 1300, whichever is lower.

Note: This value should be less than or equal to NS5INODE.

- NS5INODE = 100 times the number of MB of RAM in the system or 1300, whichever is lower.
- NFILE = 100 times the number of MB of RAM in the system or 1300, whichever is lower.
- NPROC = 30 times the number of MB of RAM in the system or 400, whichever is lower.
- MAXUP = 80

- ULIMIT = 8192
- NBUF = 100 times the number of MB of RAM in the system or 2750, whichever is lower.
- NCLIST = 60 times the number of MB of RAM in the system or 1180, whichever is lower.
- NREGION = 100 times the number of MB of RAM in the system or 1200, whichever is lower.
- SHLBMAX = 6
- NUMXT = 8

### Procedure 6B — Rebuild the Kernel

- 1 Enter *cd* / at the prompt.
- 2 Enter /etc/conf/bin/idbuild at the prompt.

# Procedure 6C — Reboot the System

1 When you see the following message:

#### UNIX Kernel has been rebuilt

enter the following to change directories: cd /etc/default.

- 2 Using vi or ed, edit the file named login.
- 3 Search for ULIMIT and change the value to 8192.
- 4 Save the changes and exit the text editor.
- 5 Change to the root directory: cd /.
- 6 Enter *shutdown* to reboot the system.
- 7 When prompted, enter y to continue the shutdown.
- 8 Reboot the system when prompted by pressing <u>CTL</u>-<u>ALT</u>-<u>DEL</u>.

End of procedures for Step 6

# Step 7 — Load the INFORMIX Software

### Prerequisites for this Step

#### Activities

- Make sure that the 6386SX/EL processor and software have been installed according to Steps 1 through 7 of this section.
- This step can be completed before the terminals and modems are connected.

#### Documents

- UNIX System V/386 Release 3.2.3 Operations/System Administration Guide (Admin Guide)
- INFORMIX installation instructions

#### Hardware/Software Components

- INFORMIX-SQL Release 4.0 software
- INFORMIX-SE Release 4.0 software

# Procedure 7A — Add the INFORMIX Group

- 1 Log in as root.
- 2 Using vi or ed, edit the System Group file, /etc/group.
- 3 Add the following to the end of the file:

informix::nnnn:

Where: nnnn is the group id, which can be any group number not already used.

4 Save the file and exit the UNIX editor.

# Procedure 7B — Add the INFORMIX User

- 1 Use FACE to add the login, informix.
  - Login Name informix
  - Full Name INFORMIX-SQL
  - Login ID number Use the default login ID number.
  - Home Directory Enter the directory name as:

<directory>/login\_name

#### Example: /usr/informix

Note: Make sure that the <directory> already exists.

- System Administration Privileges no.
- 2 Assign a password as instructed.
- 3 Save the login and exit FACE.
- 4 Edit the /etc/passwd file using vi or ed.
  - Search for the string: informix:x:mmmm:1:INFORMIX SQL:/usr/informix: Change the :1: field to :nnnn:

Where: nnnn is the INFORMIX group ID specified in Procedure 7A and mmmm is a user ID that is chosen for the INFORMIX user ID.

#### Example:

user login name:x:user id:group id: user full name:user full path:

5 Save and exit the UNIX text editor file.

# Procedure 7C — Load the INFORMIX-SQL Software

- 1 Enter installpkg at the prompt to load the INFORMIX software from diskette.
- 2 Follow the instructions, insert the diskettes in sequential order, and press ENTER.
- 3 Enter the 11-character serial number *exactly* as it appears on the diskette or the Customer Registration card.
- 4 Enter the 6-character serial number KEY *exactly* as it appears on the Customer Registration card.

### Procedure 7D — Load the INFORMIX-SE Software

- 1 Enter installpkg at the prompt to load the INFORMIX software from diskette.
- 2 Follow the instructions, insert the diskettes in sequential order, and press ENTER.
- 3 Enter the 11-character serial number *exactly* as it appears on the diskette or the Customer Registration card.
- 4 Enter the 6-character serial number KEY *exactly* as it appears on the Customer Registration card.

# Procedure 7E — Display the Installed Packages

- 1 Enter displaypkg at the prompt.
- 2 Make sure the list displayed contains the following software loaded during this installation procedure.
  - Cartridge Tape Utilities
  - Editing Package
  - FACE and FACE HELP Packages
  - FMLI Package
  - INFORMIX-SE Software
  - INFORMIX-SQL Software
  - Intelligent Ports Card (IPC) Device Driver Package
  - Remote Terminal Package

End of procedures for Step 7

# Step 8 — Add the Monitor I Group and Users

### Prerequisites for this Step

#### Activities

 Make sure that the 6386SX/EL processor, keyboard, console, additional terminals, and modems are installed according to Steps 1, 2, and 4 of this section.

#### Documents

 UNIX System V/386 Release 3.2.3 User's/System Administrator's Reference Manual (Reference Manual)

### Procedure 8A — Add the Monitor I Group

- 1 Log in as root.
- 2 At the UNIX prompt, enter vi /etc/group, 6386SX/EL to edit the System Group file.
- 3 Add traf::nnnn: to the end of the file.

Where: nnnn is the group id that is any number not already used.

4 Save the file and exit the UNIX vi editor.

### Procedure 8B — Add the Monitor I Users

- 1 Use FACE to add the login, mtmadm.
  - Login Name *mtmadm*
  - Full Name Monitor I Administrator
  - Login ID number Use the default login ID number.
  - Home Directory Enter the directory name as: <directory>/login\_name

Example: /usr/mtmadm

Note: Make sure that the <directory> already exists.

- System Administration Privileges no.
- 2 Enter a password for mtmadm, as instructed.
- 3 Remember to save the user login information.
- 4 Create another login, mtmadm1.

Note: This login is primarily used to facilitate the execution of cron.

- Login Name mtmadm1
- Full Name Monitor I cron login
- Login ID number Use the default login ID number.
- Home Directory Enter the directory name as <directory>/login\_name

Example: /usr/mtmadm1

**Note:** Make sure that the **<directory>** already exists.

- System Administration Privileges no.
- 5 Enter a password for mtmadm1, as instructed.
- 6 Remember to save the user login information.
- 7 Exit FACE and return to the UNIX System.
- 8 Using vi or ed, edit the /etc/passwd file.
  - Search for the string:

#### mtmadm:x:mmmm:1:Monitor I Administrator:<directory>

Change :1: to :nnnn:

Where: nnnn is the Monitor I group id specified in "Procedure 8A — Add the Monitor I Group" and <directory> is the home directory for mtmadm.

Search for the string:

mtmadm1:x:mmmm:1:Monitor I cron login:<directory>

Change :1: to :nnnn:

**Where:** nnnn is the Monitor I group id specified in "Procedure 8A — Add the Monitor I Group" and <directory> is the home directory for mtmadm1.

**Note:** When Monitor I is installed, the **mtmadm1** login is blocked.

- 9 Save the file and exit the UNIX text editor.
- 10 Type *chgrp traf <directory>* at the prompt.

Where: <directory> is the home directory of mtmadm.

- 11 Repeat the previous step for mtmadm1.
- 12 Use this procedure to add additional logins for Monitor I users, as necessary.
  - **Note:** Assign UNIX at and **cron** privileges to users who will be scheduling Monitor I reports. Refer to the *Reference Manual* for information on **at** and **cron**.

# Procedure 8C — Edit the .profile

- 1 Use vi or ed to edit the .profile for each Monitor I user.
- 2 Change the FACEINVOKE field entry so that users do not have to go through the FACE menu to get to Monitor I. Edit the field so that it reads: FACEINVOKE = no.
- 3 Add the following entry to the *end* of the .profile so that each login can use Monitor I:
  - . <directory>/mtm/tools/profile
  - Where: <directory> is the name of the directory under which you will be installing Monitor I in Step 11 of Procedure 9A.
  - Note: If CAFE is used, do not append the .<directory>/mtm/tools/profile entry to the users . profile.
- 4 Make sure that the mtmadm login also gets a . profile configured as listed above.

End of procedures for Step 8

# Step 9 — Load the Monitor I Software

## Prerequisites for this Step

#### Activities

- Make sure that you have added the Monitor I group and users, explained in Step 8 of this chapter.
- Make sure that you have installed INFORMIX, according to the directions listed in Step 7.
- If you are installing an upgrade (a warm install), make sure that no one is using the Monitor I files (directories), and that the Poller and Alarm Manager are not running.
- If you are performing a warm install, make sure you do a full backup of Monitor I first. Perform the backup according to the "Back Up Monitor I" (6386SX/EL) procedure listed in the DEFINITY Monitor I Operations Guide.

#### Documents

DEFINITY Monitor I Operations Guide (Ops Guide)

#### Hardware/Software Components

- DEFINITY Monitor I installation tape
- Disk Configuration Worksheet obtained from your AT&T Representative

### Procedure 9A — Cold Install of Monitor I Software

What?

This procedure describes how to do a **cold install** of Monitor I. A cold install is usually done when you are installing Monitor I for the very first time. A **warm install** is done when you are updating existing Monitor I software. See **Procedure 9B** — **Warm Install of Monitor I Software** for information about warm installs.

In some instances, you may already have Monitor I installed, but you want to remove it and start all over. In this case, you would choose a **cold install** to completely remove the Monitor I directories and databases and reinstall new ones.

How Long? This procedure takes about 30 minutes to finish.

- 1 Log in as root.
- 2 Enter *installpkg* and press RETURN.

System Response:

Please indicate the installation medium you intend to use. Strike "C" to install from CARTRIDGE TAPE or "F" to install from FLOPPY DISKETTE.

3 Enter C and press (RETURN).

System Response:

Please insert the cartridge tape into the tape drive.

4 Press (RETURN).

It is recommended that you re-tension the tape before attempting the installation, to ensure that the tape is read without any errors.

5 Press (RETURN) to retension the tape. This takes about three minutes.

System Response:

Packages available for installation:

- 1. DEFINITY Monitor I Release 2.1
- 2. Install ALL packages shown above
- 3. Exit, do not install any packages

6 Enter 1 to install Monitor I, press (RETURN), followed by ESC.

System Response:

You have made the following selections:

- 1. DEFINITY Monitor I Release 2.1
- 7 Press (RETURN) to confirm your selection.

Note: Press Esc if you want to redisplay the package selections.

System Response:

**REMINDER!** 

Depending on the packages you are installing, you may be required to provide some input to the installation utility to configure the software for your system.

8 Press RETURN to continue the installation.

System Response:

Installation in progress -- Do not remove the cartridge tape

This message is followed by a copyright message for Monitor I. System Response:

Enter type of installation you want (w-warm, c-cold, e-exit):

- **Note:** If you choose to exit at this point and you want to restart installation, you must reinsert the tape. Any time after this point, you can exit and restart without reinserting the tape.
- 9 Type *c* and press RETURN.

System Response:

Enter the directory where you want to install Monitor I? (/usr) :

- 10 Enter the default, /usr, or the the directory of your choice, then press (RETURN).
  - **Note:** Monitor I will be installed in the directory you specify, under a subdirectory called **mtm**. If this subdirectory does not exist, the system will now create it for you.
  - **Example:** Entering /usr or /usr1/traf results in Monitor I being installed in the directory /usr/mtm or /usr1/traf/mtm respectively.

System Response:

Monitor I will be installed under <directory name>/mtm, continue ? (y/n):

Where: <directory name> is the name of the directory you specified in the previous step.

11 Enter y to continue and press (RETURN).

System Response:

WARNING- Cold installation will remove all Monitor I directories and existing database(s), if any. No one should be using Monitor I during installation. Make sure Monitor I polling system and alarm manager are not running.

Cold installation will proceed, continue? (y/n) :

12 Enter y to continue and press (RETURN).

System Response:

Select processor type -Enter 1 for 3B2-600 2 for 6386E/33 model S 3 for 6386SX/EL or NCR 3315

13 Enter 3 and press RETURN. System Response:

You are installing on a 6386SX/EL or NCR 3315 processor. Do you want to continue? (y/n) :

14 Enter y and press RETURN.

System Response:

Enter switch type(s) separated by ',' (G3r, G3i, G2, G1, SYS85, SYS75, FP8, or ALL) :

If you select *ALL* the system response screen shown in Step 15 is displayed. If you select individual switches, the system also prompts you to select the releases you want for each switch selection.

G3r:

Enter issue(s) for G3r switch separated by ',' (1):

■ G3i:

Enter issue(s) for G3i switch separated by ',' (1):

G2:

Enter release(s) for G2 switch separated by ',' (2.1, 2.2):

G1:

Enter release(s) for G1 switch separated by ',' (1.1):

SYS85:

Enter release(s) for SYS 85 switch separated by ',' (R2V4, R2V3, R2V2):

SYS75:

Enter release(s) for SYS75 switch separated by ',' (R1V3, R1V2, R1V1):

FP8:

Enter release(s) for FP8 switch separated by ',' (3.8, 1.16):

15 Enter the switch type(s) and releases you want to install then press RETURN. System Response:

Pre-installation checks in progress ....

• If pre-installation checks have completed successfully, the following message is displayed:

Pre-installation checks have completed successfully.

• If pre-installation checks did *not* complete successfully, a list of error messages is displayed, followed by this message:

Pre-installation checks did not complete successfully.

**Note:** To continue, fix the errors using error message explanations found in **Appendix C** of this manual. Once the errors have been resolved, try installing Monitor I again using this procedure, starting with the **installpkg** command in **Step 2**.

If pre-installation checks completed successfully, the following prompt is displayed:

Do you want to create database place holder(s)? (y/n):

- **Note:** If you enter *n*, the software is installed, but no placeholders are created. You can add placeholders after installation is completed by using the **addmount** procedure discussed in "9C Create Placeholders Using Addmount."
- 16 Enter y to create database placeholders then press RETURN.

System Response:

Do you want to use the "Rotating Switch Study" feature? (y/n):

Reference: Refer to the DOSS Configuration output for the appropriate response.

• If you answer *n*, the following prompt is displayed:

Enter the directory to create the database(s) e.g. /usr1 ? :

Continue the software load with Step 19 of this procedure.

• If you answer y, the following prompts are displayed:

Enter the total number of G2, SYSTEM 85 or FP8 switches?:

Enter the total number of G3r, G3i, G1 or SYSTEM 75 switches?:

17 If you are using the Rotating Switch Study feature, enter the correct response to these questions and press RETURN to get the next prompt.

System Response:

Are the values entered above correct? (y/n):

- If you answer *n*, the system again prompts you to enter the total number of switches.
- 18 Once all values are correct, type y then press RETURN.

System Response:

Enter the directory to create the database(s), e.g. /usr1 ? :

**Reference:** Refer to the DOSS Configuration output for the appropriate directory.

- 19 Enter the directory name and press (RETURN).
  - **Note:** The next questions refer to the number of placeholders for databases to be created under each mount point (database directory) for each polling option.

System Response:

How many G2, SYS85 or FP8 (EXTENDED) database(s) ? (0-40) : How many G2, SYS85 or FP8 (STANDARD) database(s) ? (0-40) : How many G2, SYS85 or FP8 (DAILY and LIMITED) database(s) ? (0-40) : How many G1 1.1 or SYSTEM 75 database(s)? (0-40) : How many G3r or G3i (EXTENDED) database(s)? (0-40) : How many G3r or G3i (STANDARD) database(s)? (0-40) : How many G3r or G3i (DAILY and LIMITED) database(s)? (0-40) : How many inactive database(s)?

Note: The last prompt, How many inactive database(s)?, is only displayed if the Rotating Switch Study feature is used.

20 Enter the correct response to each of the questions listed above and press RETURN to get the next prompt.

Note:

- You *must* enter the correct number of databases for Monitor I to work properly. This information depends on the number of switches being supported and how your disk is sliced. See your Disk Configuration Worksheet for more information.
- Monitor I allows you to repeat this procedure for each mount point (database directory) and polling option per switch type that you have.

System Response:

Are the values entered above correct? (y/n):

• If you answer n, the system repeats the series of questions listed in Step 19 of this procedure.

21 Once all values are correct, type *y* then press RETURN.

System Response:

Do you want to create more database place holder(s)? (y/n):

• If you answer y, the system returns to the response in Step 18 of this procedure.

- 22 Enter n and press RETURN to continue with the installation.
  - **Note:** The system begins copying the files from the tape and a lengthy list of these files appears in a scrolling display. The files displayed on your screen may vary from the partial system listing displayed in the next screen example.

	the second se	
· · ·		
······································		
Copying files from the tape		
log		
tmp		
work		
work/pdump		
work/polldir		
prog		
prog/R2V2		
prog/R2V2/L1_rep		
prog/R2V2/acd_rep		
prog/R2V2/covg_rep		
prog/R2V2/iparser		
prog/R2V2/clock		

The following messages appear when the installation completes:

All Monitor I files have been installed correctly. Installation completed successfully.

If you *do not* see these messages or if you see error messages during the procedure, look for further information on the errors in /usr/tmp/journal. Fix the errors using the error message explanations found in Appendix C of this manual, then try installing Monitor I again, starting with the installpkg command in Step 2 of this procedure.

End of Cold Install Procedure

# Procedure 9B — Warm Install of Monitor I Software

- 1 Backup Monitor I according to the "Backing Up Monitor I" procedure listed in the *Monitor I Operations Guide*.
- 2 Follow Steps 1 through 8 of "Procedure 9A Cold Install of Monitor I Software." Complete Step 2 of this procedure when you see this prompt:

Enter type of installation you want (w-warm, c-cold, e-exit):

3 Type w at the prompt and press (RETURN).

System Response:

WARNING- No one should be using Monitor I during installation. Make sure Monitor I polling system and alarm manager are not running.

Warm installation will proceed, continue? (y/n) :

4 Enter *y* to continue and press (RETURN). System Response:

Pre-installation checks in progress ....

• If pre-installation checks have completed successfully, the following message is displayed:

Pre-installation checks have completed successfully.

• If pre-installation checks did *not* complete successfully, a list of error messages is displayed, followed by this message:

Pre-installation checks did not complete successfully.

**Note:** To continue, fix the errors using error message explanations found in **Appendix C** of this manual. Once the errors have been resolved, try installing Monitor I again using this procedure, starting with the **installpkg** command in **Step 2** of this procedure.

A lengthy list of files appears on the screen in a scrolling display. After all these files have been installed and some post-installation checking messages appear, the following message is displayed at the completion of the warm installation:

Warm installation completed successfully.

- **Note:** If you do *not* see this message or if you see error messages during the procedure, look for further information on the errors in /usr/tmp/journal. Fix the errors, using the error message explanations found in Appendix C. Try installing Monitor I again, starting with the installpkg command in Step 2 of this procedure.
- 5 As a final post-installation step, restart the poller and alarm manager. For instructions see the headings, "Activate the Polling Control Mechanism" in Chapter 3, "Implementing Monitor I," as well as "Activating the Alarm Manager" in Chapter 8, "System Administration," both in the *Monitor I Operations Guide*.

End of Warm Install Procedure

### Procedure 9C — Create Placeholders Using Addmount

Use this procedure to create database placeholders from the UNIX shell, after you have completed the Monitor I installation.

- **Note:** If you have already added placeholders during installation, you will not be able to add additional placeholders from the shell. Also, if you have used the **addmount** procedure previously to add placeholders, you will not be able to execute this procedure a second time.
- 1 Log in as root.
- 2 Type <directory>/mtm/tools/addmount at the prompt and press RETURN.
  - Where: <directory> is the name of the directory under which you installed Monitor I in Step 9 of Procedure 9A.

System Response:

Do you want to use the "Rotating Switch Study" feature? (y/n):

Reference: Refer to the DOSS Configuration output for the appropriate response.

• If you answer *n*, the following prompt is displayed:

Enter the directory to create the database(s), e.g /usr1 ? :

Continue the software load with Step 5 of this procedure.

• If you answer y, the following prompts are displayed:

Enter the total number of G2, SYSTEM 85 or FP8 switches?:

Enter the total number of G3r, G3i, G1 or SYSTEM 75 switches?:

3 If you are using the **Rotating Switch Study** feature, enter the correct response to these questions and press RETURN to get the next prompt.

System Response:

Are the values entered above correct? (y/n):

• If you answer *n*, the system again prompts you to enter the total number of switches.

4 Once all values are correct, type *y* then press RETURN. System Response:

Enter the directory to create the database(s), e.g. /usr1 ? :

**Reference:** Refer to the DOSS Configuration output for the appropriate directory.

- 5 Enter the directory name and press RETURN.
  - **Note:** The next questions refer to the number of placeholders for databases to be created under each mount point for each polling option.

System Response:

How many G2, SYS85 or FP8 (EXTENDED) database(s) ? (0-40) : How many G2, SYS85 or FP8 (STANDARD) database(s) ? (0-40) : How many G2, SYS85 or FP8 (DAILY and LIMITED) database(s) ? (0-40) : How many G1 1.1 or SYSTEM 75 database(s)? (0-40) : How many G3r or G3i (EXTENDED) database(s)? (0-40) : How many G3r or G3i (STANDARD) database(s)? (0-40) : How many G3r or G3i (DAILY and LIMITED) database(s)? (0-40) : How many inactive database(s)?

Note: The last prompt How many inactive database(s)? is only displayed if the Rotating Switch Study feature is used.

6 Enter the correct response to each of the questions listed above and press RETURN to get the next prompt.

Note:

- You must enter the correct number of databases for Monitor I to work correctly. This information depends on the number of switches being supported and how your disk is sliced. See your Disk Configuration Worksheet for more information.
- Monitor I allows you to repeat this procedure for each mount point (database directory) and polling option per switch type that you have.

System Response:

Are the values entered above correct? (y/n):

• If you answer n, the system returns to the series of questions listed in Step 5 of this procedure.

7 Once all values are correct, type *y* then press RETURN.

System Response:

Do you want to create more database place holder(s)? (y/n):

- If you answer *y*, the system returns to the **System Response** listed in **Step 4** of this procedure.
- 8 Enter *n* to continue the addmount procedure.
- 9 The following message is displayed for each database directory you entered:

Database place holders successfully created

Note: If you do not see this message, check /usr/tmp/addout for possible errors. Refer to Appendix C for Monitor I installation error messages and corrective actions.

End of procedures for Step 9

# Step 10 — Enable the System Ports

# Prerequisites for this Step

#### Activities

- Make sure the 6386SX/EL processor, keyboard, console, additional terminals, and modems are installed according to Steps 1, 2, and 4 of this section.
- Make sure the UNIX Foundation Set and additional software has been loaded according to Step 3 of this section.
- Make sure the terminals and modems were set up according to Step 4 of this section.

#### Documents

- Refer to the Port Configuration Worksheet in Appendix B for a list of configured ports.
- Intelligent Ports Card Model 900 (IPC-900) User's Guide (IPC Guide)

# Procedure 10A — Enable Bidirectional Ports

- 1 Log in as root.
- 2 Enter face at the prompt.
- 3 Enter the following selections:

Administrative Menu → Peripheral Setup → Serial Ports Setup

- 4 Use F2, Choices to select the following.
  - An outgoing or bidirectional port to enable.
  - Device Type = MODEM
  - Device Speed = 1200
    - **Note:** If you have DIMENSION FP8 switches, you need to edit the /usr/lib/uucp/Devices file by creating an additional, identical entry for each ACU entry with a baud rate of 1200. Then, change the 1200 in the duplicate entry to 300.
  - Flow Control = hardware
- 5 Press F3 to save the port selections.
- 6 From window 5, use F2, Choices to select the following:
  - Modem Type = AT&T 2224B for all modem types (AT&T 2400, AT&T 2224-CEO and AT&T 2224-GNN)
- Device Connection = Both incoming and outgoing calls (bidirectional)
- 7 Press F3 to save the options.
- 8 Exit FACE.

# Procedure 10B — Set the CEO Modem Software Options

- 1 Plug the phone cable into the port labeled Line on the back of the modem.
- 2 Plug the modem into the power supply.
- 3 Log in as root.
- 4 Enter MTMDIR=<directory>;export MTMDIR.

Where: <directory> is the directory under which Monitor I was loaded in "Step 9 — Load the Monitor I Software."

5 Enter *\$MTMDIR/tools/ceoconfig* System Response:

Enter port number (e.g. tty31):

6 Enter the port number.

Reference: Appendix B for the port number assigned to the 2224-CEO modem.

System Response:

Testing /dev/<portnumber> Please wait... Hardware Switches Set for Dial-Out or Bi-Directional Asynchronous

• If the modem software options are set correctly, the following prompt is displayed:

<portnumber> Software Options Set Correctly

Perform all tests listed in Appendix A, "Acceptance Testing."

• If the modem software options are set incorrectly, the following prompts are displayed:

Software Options Set Incorrectly for Monitor I

Enter y to set them to the Monitor I configuration or n to keep current settings (y):

7 Enter y.

System Response:

Setting <portnumber> Software Options to Defaults Options 1-63 set to default

Option 12 is now y Option 34 is now 1 Option 36 is now 0 Option 41 is now 0

<portnumber> Software Options Set Correctly

Where: <portnumber> is the port number assigned to the 2224-CEO modem.

**Note:** If these messages are *not* displayed or an error message is displayed, run this procedure again from **Step 5** of **Procedure 10B**.

Option Number	Value	Option Number	Value	Option Number	Value	Option Number	Value
1	v	17	10	33	n	49	N/A
2	v	18	n	34	1	50	N/A
3	v	19	n	35	3	51	n
4	v	20	1	36	0	52	f
5	v	21	0	37	0	53	f
6	N/A	22	:	38	0	54	y
7	v	23	^H	39	5	55	n
8	N/A	24	@	40	N/A	56	y
9	n	25	\$B	41	0	57	N/A
10	n	26	\$:	42	N/A	58	n
11	n	27	n	43	n	59	N/A
12	v	28	n	44	n	60	N/A
13	n	29	0	45	n	61	N/A
14	n	30	n	46	n	62	N/A
15	v	31	v	47	N/A	63	n
16	n	32	Í	48	N/A		

TABLE 4-7 2224-CEO Modem — Software Options

**Notes:** N/A = Not Applicable

Table 4-7 reflects the 2224-CEO modem settings *after* the **ceoconfig** utility is run. This table is for reference purposes only.

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5 Installing on the NCR-3315

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# Installing on the NCR-3315

This section explains how to install the hardware and software required to use Monitor I on the NCR-3315 processor. The entire installation should take approximately five hours: one hour to complete Step 1 and about four hours to complete Steps 2 through 10.

# Step 1 — Set Up the NCR-3315 WGS

### Prerequisites for this Step

#### Activities

- DO NOT install any hardware or software before calling the TSC (1 800 548-8861).
- Make sure you received all the components necessary for the Monitor I system.
- Plan the location and determine the I/O address range, controller memory address range, and Interrupt Request (IRQ) levels of add-on cards in the processor. Table 5-1 lists the default locations and IRQ levels of the add-on cards in the processor. However, the default locations and IRQ recommended may need to be changed if Monitor I is coresident with other applications.
  - Note: These locations must be unique for each board in the system. Keep a record of the locations and addresses of each board for your reference.

Card	Slot	IRQ Level	I/O Address	Memory Address
IPC #1	1	11	290	D0000
TAPE	2	5	288	

TABLE 5-1 Add-On Cards: Default Location Addresses and IRQ Levels

### **Documents**

- NCR-3315 Technical-Service Manual
- NCR-3315 User's Manual

- AT&T Intelligent Ports Card Model 900 (IPC-900) User's Guide (IPC Guide)
- AT&T Work Group System Remote Maintenance Package User's Guide (RMP Guide)

### Hardware/Software Components

- System Unit
- VGA Color Monitor and keyboard for the NCR-3315
- Memory Expansion Unit
  (1) 4 MB Kit
  (2) 1 MB Kit
- Intelligent Ports Card (IPC)
- Streaming Tape Drive

# Procedure 1A — Install the Additional Memory

- 1 Install the additional SIMMs.
  - See: The appropriate section in the NCR-3315 User's Manual.
- 2 Before installing additional memory boards, fill up the SIMM slots on the mother board (a total of 12 MB).
- 3 Install additional memory board(s), if required.
  - See: The appropriate section in the NCR-3315 User's Manual.
  - **Note:** If other applications coresiding on the NCR-3315 require use of specific slots, make sure those slots are left free.

# Procedure 1B — Install the Additional Cards

- Set the I/O Starting Address, the Controller Memory Starting Address, and the Interrupt Request Level (IRQ) shunt according to Table 5-1. Each IPC must have unique settings. You need to know these settings when you load the IPC software in Procedure 3B of this chapter.
  - See: The "Hardware Installation" and "Hardware Parameter Settings" sections in the *IPC Guide*.

2 Install the IPC in a one-port slot as follows.

See: The appropriate sections in the NCR-3315 User's Manual.

- Follow the "Installing an Expansion Board" instructions in the "Installation and Care of Your System" chapter of the appropriate System Guide to install the IPC in a one-port slot. On the IPC, set the IRQ "SHUNT" to IRQ11. This is the interrupt of the IPC; it is necessary to know this when loading the IPC software.
- Align the IPC-900 board with the selected board slot and insert it into the corresponding connector.
- Attach the T-adaptor to the IPC-900 board. Make sure it is plugged firmly and completely into the socket.
- Repeat for additional IPC cards, if supplied. IPC connections must use 10-pin modular cords and 10-pin special adaptors.
- Follow the "Installing a Streaming Tape Controller Board" and "Installing a Streaming Tape Unit" instructions in the Expansion Kits appendix of the appropriate System Guide to install the Streaming Tape Controller card and drive (use holes "D" and "K" to attach the rails to the tape drive). On the Tape Drive Controller card, set the IRQ jumper to 5 (default). This is the interrupt of the Tape Drive Controller; it is necessary to know this when loading the Cartridge Utility software.

# Procedure 1C — Set Up the Console, Keyboard, Cables and Processor

1 Set up and prepare the console.

See:

- The appropriate section in the NCR-3315 User's Manual.
- For details on setting up the console terminal, see "Step 4 Set Up the Terminals and Modems" in this chapter.
- 2 Connect the monitor, keyboard, and power cord to the processor.

**See:** The appropriate section in the *NCR-3315 User's Manual*.

- **3** Replace the covers and connect the processor to the power outlet.
  - **See:** The appropriate section in the *NCR-3315 User's Manual*.

# Step 2 — Load the UNIX Essential Utilities

### Prerequisites for this Step

### Activities

 Make sure that the NCR-3315 processor, keyboard, and console are set up and connected according to Step 1 of this section.

### Documents

- NCR-3315 User's Manual
- UNIX System V/386 Release 3.2.3 Operations/System Administration Guide (Admin Guide)
- UNIX System V/386 Release 3.2.3 Release Notes (Release Notes)

### Hardware/Software Components

- Base System Package Disk
- UNIX Operating System Foundation Set software, on cartridge tape.

### Procedure 2A — Run the Setup Utility

1 Configure the base system.

Reference: The appropriate section of the NCR-3315 User's Manual.

- 2 When running the Setup utility, check to see that the Extended Memory is correct for the amount of memory installed in the system.
  - Press CTL ALT DEL to reboot.
  - Wait for the beep.
  - Press CTL ALT INSERT to see the current settings for your configuration. The memory size(s) should match the data shown in Table 5-2.

TABLE 5-2 Memory size, NCR-3315

Memory	Extended	
Installed (MB)	Memory (KB)	
8	7552	

- 3 Set Console Redirection to the COM2 Port at a speed of 1200 baud.
- See: The appropriate section in the NCR-3315 User's Manual.

# Procedure 2B — Load the UNIX Foundation Set

- 1 Begin loading the UNIX Foundation Set.
  - See: The "Boot System to Single-User Mode" instructions in the "Software Installation" section of the Admin Guide.
- 2 Run the setup and begin partitioning the hard disk as follows.
  - See: The "Perform Installation Setup" instructions in the Software Installation section of the *Admin Guide*. Follow the setup procedure for a new installation.
  - Select 1 to create an MS-DOS partition.
  - When prompted, enter the amount of hard disk allocated to DOS as 5 percent (for 100 MB disk).
  - Enter n to indicate that the MS-DOS partition is not the active partition.
- 3 Create the UNIX partition as follows.
  - Select 1 to create a UNIX partition.
  - Select 1 to indicate that a UNIX System partition is to be created.
  - When prompted, enter the amount of hard disk allocated to UNIX as 95 percent (for 100 MB disk).
  - Enter y to indicate that the UNIX partition is to be active every time the machine is booted.
  - Select 4 to update the disk configuration and exit.
- 4 Continue partitioning the hard disk.
  - See: The "Prepare Hard Disk for Surface Analysis" instructions in the Software Installation section of the *Admin Guide*.
- 5 Complete the hard disk partitioning process as follows.

- See: The "Create UNIX System File Systems" instructions in the Software Installation section of the *Admin Guide*.
- Enter n to indicate that the default partition allocations are not acceptable.
- Enter y at the partition prompt:

#### Separate root and usr?

Enter *n* at the next partition prompt:

Additional usr2?

Enter n at the next partition prompt:

Crash/dump area?

- Enter 61 as the number of cylinders assigned to swap/paging.
- Enter 76 (for the 100 MB disk) as the number of cylinders allocated for the root partition.
- Review the new allocation and make a note of it. Swap/paging and root should have the number of cylinders you assigned, and the balance should be assigned to the /usr area.
   Enter y to indicate the allocation is acceptable.
- When you are prompted, remove the diskette from the drive and reboot the system from hard disk.
- After rebooting the system, enter c to install the UNIX system from cartridge tape.
- 6 Load the UNIX essential utilities.
  - See: The "Install Base System (From Cartridge Tape)" instructions in the Software Installation section of the *Admin Guide*.
- 7 Assign a root password.
- 8 Assign an install password.

### Procedure 2C — Load Add-On Packages From Tape

Follow the instructions on the Package Selection menu to install the add-on packages from cartridge tape. Select the following for installation:

- 1 Editing Package
- 2 FMLI
- 3 FACE
- 4 FACE Help

Note: The FACE Help package is totally different than the FACE package.

- 5 Press ESC to execute.
- 6 Press RETURN to continue.
- 7 Enter 4 to install all of the Help files.
- 8 Enter 5 to complete (terminate) the Help file installation.
- 9 Continue the installation with the cartridge tape utilities.

See: Table 5-1 for the appropriate IRQ load.

10 Reboot the system.

# Step 3 — Load the Additional Software

# Prerequisites for this Step

### Activities

- Make sure that the NCR-3315 WGS, keyboard, console, and additional cards are installed according to Step 1 of this section. You need to know the location, memory addresses, and IRQ levels of the boards in the processor.
- Make sure that the correct version of the UNIX Foundation Set is loaded according to Step 2 of this section.

### Documents

- UNIX System V/386 Release 3.2.3 Operations/System Administration Guide (Admin Guide)
- Intelligent Ports Card Model 900 (IPC-900) User's Guide (IPC Guide)
- AT&T Work Group System Remote Maintenance Package User's Guide (RMP Guide)

### Hardware/Software Components

- UNIX System V/386 Release 3.2.3 Remote Terminal Package
- AT&T IPC UNIX System V 386 Device Driver
- Security Administration Package

### When Installing from Diskette

- Use the "Install Optional Add-On Packages (From Diskette)" instructions in the "Software Installation" section of the *Admin Guide* to load the individual software packages.
- If your processor has two disk drives, specify the drive from which you are loading.
- If asked how many diskettes are in the package, count the number of diskettes for the specific package only. Whenever multiple diskettes exist for a specific package, make sure you load these diskettes in sequential order.
- If asked for the diskette type, either look on the diskette for the applicable type or enter 1.44.
- If asked to reboot the system, press Esc to skip the reboot process. You do not have to reboot after loading each software package; however, you must reboot the system after the last package is loaded.

Note: The NCR-3315 machine will not work with the GPSC-AT card.

# Procedure 3A — Load the Remote Terminal Package

Note: This is not the Remote Maintenance Package, which is loaded at a different time.

- 1 Enter *installpkg* at the prompt to load the Remote Terminal Package.
- 2 Enter 1 to install the terminfo files.
  - **Call:** The TSC Hotline (1 800 548-8861) to obtain the **terminfo** entry needed to use the 730 terminal and the 615 BCT with the System 75 Emulation cartridge. (For the 715 BCS, use "BCS" as the emulation mode and "513" for the terminal type when cutting through from G3r, G3i, Generic 1, or System 75 to AUDIX<sup>TM</sup>.)
- 3 Enter all to load all the terminfo files.
- 4 Enter *done* after the list of files is displayed.
- 5 Enter 0 to complete (terminate) the terminfo file load.

## Procedure 3B — Load the IPC Device Driver

Note: Make sure you are using Version 3.0 (or higher) for the IPC-900.

- 1 Enter *installpkg* at the prompt to load the IPC software.
- 2 Enter the number of IPC cards installed in the system. For each IPC, do the following.
  - Press RETURN to select the default (IPC-900) for the type of ports card installed in the system.
  - Enter the Interrupt Request Level (IRQ) of the IPC.
    - **See:** Table 5-1 in this guide for the IRQ level required. (The IRQ for the NCR-3315 is 11).
  - Do one of the following:
    - a Press RETURN to select the default starting address of the I/O ports and controller memory.
    - **b** Enter the appropriate addresses as set on the card during the installation.

See: The "Hardware Parameter Settings" section in the IPC Guide.

- 3 Enter *y* to confirm the settings.
- 4 Reboot as instructed.

# Step 4 — Set Up the Terminals and Modems

# Prerequisites for this Step

### Activities

 Make sure that the NCR-3315 processor, keyboard, console and software are set up and connected according to Steps 1 through 3 of this section.

### **Documents**

- User's Guide 615 Business Communications Terminal Guide, or 715 Business Communications System (BCS) User's Guide and Service Manual, or 730 Multi-Tasking Graphics Terminal Guide (*Terminal Guide*)
- DATAPHONE II 2224-CEO Modem User's Manual or DATAPHONE II 2224-GNN Modem Manual (*Modem Manual*)
- Intelligent Ports Card Model 900 (IPC-900) User's Guide (IPC Guide)

### Hardware/Software Components

- 615 BCT(s), 715 BCS(s), or 630 or 730 MTG(s) [optional]
- One 513 BCT/System 75 Emulation Cartridge per 615 BCT for accessing G3r, G3i, Generic 1, or System 75 maintenance and administration functions
- 2224 modem(s) for use with bidirectional 1200/300 baud asynchronous communications for UUCP and communication with administered switches
- 10-pin modular cables with 10-pin special adaptors

# Procedure 4A — Set Up the Terminals

- 1 Unpack, install, and set up the terminal.
  - See: The "Unpack and Install" (615 BCT or 715 BCS) or "Installation" (730) instructions in the *Terminal Guide*.
  - **Note:** The 630 or 730 MTG is most effectively used at speeds above 2400 baud, therefore it should not be connected through a modem.
- 2 To make the terminal operational for Monitor I:
  - Install the 513 BCT/System 75 Emulation Cartridge by inserting the 513 BCT/System 75 cartridge into the slot on the side of the 615 BCT. Be sure that the cartridge is right side up, with the cartridge label toward the front.

- **Warning:** Check the on/off switch before you install the cartridge to make sure that the power for the 615 terminal is turned *off*. A blank screen is *not* an indicator that the terminal is off, and you will destroy the 513 BCT/System 75 cartridge if you insert or remove it while the terminal is on.
- Follow the instructions in the *Terminal Guide* to enable the cartridge.
- For the 715 terminal, enter the following settings:
  - Set the emulation mode to: BCS
  - Set the UNIX terminal type (TERM) to: sys75
  - Set the terminal type for cut-through access from Monitor I to G3r, G3i, Generic 1, and System 75 to: 513
  - Set the Swap Delete option of the 715 terminal to: yes (through terminal setup) for BCS.
- Change the Cursor Blink option to y for yes.
- Cut-through access to System 75 R1V1 for maintenance or administration requires that the System 75 be equipped with a pooled modem card that allows asynchronous communications.

### Procedure 4B — Set Up the Modems

Monitor I supports the 2224-CEO, 2224-GNN modems and AT&T 2400. For either modem, you must set up the hardware switches, as follows.

See: The appropriate Modem Manual for complete installation procedures.

Contact the Technical Service Center (TSC) at 1 800 548-8861 to have your modem checked after you have completed the appropriate modem procedures.

### 2224-CEO Modems

For the 2224-CEO modem:

Remove the CEO modem cover to access the Internal Option switches.
 See Figure 5-1 for a diagram of the CEO modem hardware switches.



FIGURE 5-1 CEO Modem Hardware Switches

- 2 To set your modem switches:
  - For dial-out or bidirectional 1200/300 baud asynchronous, dialer-enabled modems, set the switches according to Table 5-3.

TABLE 5-3 2224-CEO Dial-Out 1200/300 Asynchronous Communications

Switch	Push	Switch	Push	Switch	Push
1-1 1-2 1-3 1-4	down down down down	1-5 1-6 1-7 1-8	down up down down	internal-1 internal-2	away from number away from number

- 3 Plug the power cable from the modem into the power outlet.
- 4 Reset the modem by pressing and releasing the **RESET** switch. This makes your changes effective.

### 2224-GNN Modems

See Figure 5-2 for a diagram of the GNN modem hardware switches.



FIGURE 5-2 GNN Modem Hardware

1 For dial-out or bidirectional 1200/300 baud asynchronous, dialer-enabled 2224-GNN modems, set the switches according to Table 5-4.

Switch	Push
1-1	left
1-2	left
1-3	left
1-4	right
1-5	right
1-6	left
1-7	left
1-8	left
2-1	right
2-2	right
2-3	left
2-4	left
2-5	left
2-6	left
2-7	left
2-8	left
3-1	right or up
3-2	right or up
3-3	right or up
3-4	left or down
3-5	left or down
3-6	left or down
3-7	left or down
3-8	left or down

TABLE 5-4 2224-GNN Dial-Out 1200/300 Asynchronous Communications

2 Reset the modem by removing it from the rack, then putting it back. This makes the changes take effect.

# Set Up An AT&T 2400 Modem

The AT&T 2400 modems can arrive from the factory in an unknown state; they can be in a state that will not allow them to communicate with a UNIX system. Therefore, these modems should be configured using a terminal.

### Install the AT&T 2400 Modem

Install the AT&T 2400 modem as follows:

- 1 Plug in the modem's power adaptor.
- 2 Connect the modem to the main port of an AT&T 615 Terminal using a straight through male to male RS-232 cable.
- 3 Set the terminal speed to 1200.
- 4 Set the terminal Parity to EVEN.
- 5 Set the terminal Send Parity to NO.

### Set the 2400 Modem Software Options

Set the software options in the 2400 modem using a terminal. The modem can be configured for bidirectional port, asynchronous transmission or product access.

- For a bidirectional or asynchronous transmission, use the sequence of commands provided in Table 5-5, Column 1. AT&T 2400 modems used for bi-directional traffic such as login or UUCP must be locked at one baud rate.
- For a product access configuration, use the sequence of commands provided in Table 5-6, Column 1. AT&T 2400 modems used for product access (various baud rates) must only be used for product access (outgoing only).

Command	Meaning		
AT&F	Factory Default		
AT&MO	Turn speaker off		
AT&QO*	Standard Async		
ATQ2	Result code in originate only		
AT&D2	Enter command mode on DTR dropping		
AT&KO	no flow control		
AT&C2	CD on for cmd mode, track carrier for data transfer		
ATSO=1	Auto Answer		
ATS37=6	Maximum DCE Line Speed**		
AT&WO	WO Write storable parameters of current configuration in memory as profile 0		
AT&YO	Specify stored user profile 0 as power up configuration		

TABLE 5-5 AT&T 2400 Modem Bidirectional or Asynchronous

\* Varies across the two configuration tables; all other commands are common for all configurations.

\*\* Set to 5, 1200 baud; set to 6, 2400 baud

Command	Meaning		
AT&F	Factory Default		
AT&MO	Turn speaker off		
AT&QO*	Standard Async		
ATQ2	Result code in originate only		
AT&D2	Enter command mode on DTR dropping		
AT&KO	no flow control		
AT&C2	CD on for cmd mode, track carrier for data transfer		
ATSO=1 Auto Answer			
ATS37=0*	Maximum DCE Line Speed		
AT&WO	Write storable parameters of current configuration in memory as profile 0		
AT&YO	Specify stored user profile 0 as power up configuration		

TABLE 5-6 Configuration of a Product Access Modem

\* Varies across the two configuration tables; all other commands are common for all configurations.

### Configure the UNIX System

The Dialers file of UNIX System V Release 3.2.3 contains the following line:

#hayes =,-, "" \M\dAT\r\c OK\r \EATDT\T\r\c CONNECT \m\c

Activate this file by removing the comment symbol, #, at the beginning of the line.

For modems that are to be used for outgoing calls (bidirectional), change the procedure for configuring the UNIX System as described in the *Installation Manual* as follows:

- In the Connect to Modem form of the FACE Menu, set the Modem Name field to Non-Autodialing.
- The Devices files will contain a line corresponding to each modem configured for outgoing calls. The following is a typical entry in this file:

ACU ttyh06,M - 1200 Non-Autodialing

For each modem, edit the file by entering a set like the following:

ACU ttyh06 - 300 hayes ACU ttyh06 - 1200 hayes ACU ttyh06 - 2400 hayes

End of Procedure

### Procedure 4C — Connect the Terminals

- 1 Find the red ground lug on one end of the 10-conductor Modular Cable. Insert that end of the cable into a port on the IPC T-connector and connect the ground lug to the ground slot beneath the port.
- 2 Write the port number, associated device name, and phone line on the Port Configuration Worksheet in Appendix B of this manual.
- 3 Connect the other end of the 10-conductor cable to a terminal/printer adaptor and connect the adapter to the port labeled MAIN on the back of the terminal.
- 4 Plug the power cables from the terminals into the power outlet.

# Procedure 4D — Connect the Modems

- 1 Connect the 10-conductor cables from the modems to the IPC serial ports.
- 2 Connect the modems to the phone lines.
- 3 Plug the power cables from the modems into the power outlet.
- 4 Write the port number, associated device name, and phone line on the Port Configuration Worksheet in Appendix B of this manual.

# Step 5 — Set Up and Enable the Printer

# Prerequisites for this Step

### Activities

Make sure that the Monitor I system was installed according to Steps 1 through 4 of this section.

### Documents

- User's Guide AT&T 570 Printer or User's Guide AT&T 593 Printer (Printer Guide)
- UNIX System V/386 Release 3.2.3 Operations/System Administration Guide (Admin Guide)

### Hardware/Software Components

- AT&T 570 or 593 Printer
- AC power cord
- Tractor assembly
- Static eliminator

# Procedure 5A — Set Up the Printer

- 1 Set up the printer connection parameters.
  - See: The "Operation Panel and Operational Procedures in Set-Up Mode" instructions in the *Printer Guide*.
- 2 Use FACE to set up the printer parameters.

# Procedure 5B — Connect the Printer Cable

- 1 Connect one end of the parallel printer cable to the printer and the other end to the parallel port on the processor.
- 2 Write the port number and associated device name on the Port Configuration Worksheet in Appendix B of this manual.

# Procedure 5C — Enable the Printer

- 1 Log in as root.
- 2 At the prompt, enter face and press RETURN.
- 3 Enter the following menu selections:

System Administration → Peripheral Setup → Printer Setup → Parallel Printer Port Setup

System Response:

Printer type:

4 Enter the appropriate printer type, either *AT&T570* or *AT&T593* and press RETURN. System Response:

Printer Name:

5 Enter the name of the printer and press (RETURN).

Example: pr1

System Response:

#### Should filter be used?

- 6 Select the default, yes.
- 7 Press F3 to save the values.
- 8 Press F3 to continue with this procedure.
- 9 Press **F6** three times to return to the **FACE** main menu.
- 10 Select *exit* then press F3 to exit from the FACE main menu.

11 At the next prompt, enter: *lpstat -t* System Response:

Information about the printer you enabled (for example, pr1) is displayed.

# Step 6 — Rebuild the UNIX Kernel

## Prerequisites for this Step

### Activities

- Make sure that the NCR-3315 WGS, keyboard, console, additional terminals, and modems are installed according to Steps 1, 2, and 4 of this section.
- Make sure that the UNIX Foundation Set and additional software were loaded according to Step 3 of this section.
- Make sure that the terminals and modems have been set up and the ports were enabled according to Steps 4 and 5 of this section.

### **Documents**

UNIX System V/386 Release 3.2.3 Operations/System Administration Guide (Admin Guide)

# Procedure 6A — Edit the Kernel File

- 1 Using vi or ed, edit the /etc/conf/cf.d/mtune file with the information listed below. These fields are in the fourth column (which is the MAX field).
  - NUMXT = 8
  - MAXUP = 80
- 2 Using vi or ed, edit the /etc/conf/cf.d/stune file using the following suggested minimum parameter settings for Monitor I.

If Monitor I is running with a coresident application and if the other application recommends a different Kernel parameter, set the parameter to the larger of the recommended settings. If a parameter is *not* found in the file, you must add the entry to the file using the following format.

parameter TAB XXX

Where: xxx = the value of the parameter.

NINODE = 100 times the number of MB of RAM in the system or 1300, whichever is lower.

Note: This value should be less than or equal to NS5INODE.

- NS5INODE = 100 times the number of MB of RAM in the system or 1300, whichever is lower.
- NFILE = 100 times the number of MB of RAM in the system or 1300, whichever is lower.
- NPROC = 30 times the number of MB of RAM in the system or 400, whichever is lower.
- MAXUP = 80

- ULIMIT = 8192
- NBUF = 100 times the number of MB of RAM in the system or 2750, whichever is lower.
- NCLIST = 60 times the number of MB of RAM in the system or 1180, whichever is lower.
- NREGION = 100 times the number of MB of RAM in the system or 1200, whichever is lower.
- SHLBMAX = 6
- NUMXT = 8

# Procedure 6B — Rebuild the Kernel

- 1 Enter cd / at the prompt.
- 2 Enter /etc/conf/bin/idbuild at the prompt.

### Procedure 6C — Reboot the System

1 When you see the following message:

### UNIX Kernel has been rebuilt

enter the following to change directories: cd /etc/default.

- 2 Using vi or ed, edit the file named login.
- 3 Search for ULIMIT and change the value to 8192.
- 4 Save the changes and exit the text editor.
- 5 Change to the root directory: cd /.
- 6 Enter *shutdown* to reboot the system.
- 7 When prompted, enter *y* to continue the shutdown.
- 8 Reboot the system when prompted by pressing CTL ALT DEL.

# Step 7 — Load the INFORMIX Software

# Prerequisites for this Step

### Activities

- Make sure that the NCR-3315 processor and software have been installed according to Steps 1 through 7 of this section.
- This step can be completed before the terminals and modems are connected.

### Documents

- UNIX System V/386 Release 3.2.3 Operations/System Administration Guide (Admin Guide)
- INFORMIX installation instructions

### Hardware/Software Components

- INFORMIX-SQL Release 4.0 software
- INFORMIX-SE Release 4.0 software

# Procedure 7A — Add the INFORMIX Group

- 1 Log in as root.
- 2 Using vi or ed, edit the System Group file, /etc/group.
- 3 Add the following to the end of the file:

informix::nnnn:

Where: nnnn is the group id, which can be any group number not already used.

4 Save the file and exit the UNIX editor.

# Procedure 7B — Add the INFORMIX User

- 1 Use FACE to add the login, informix.
  - Login Name informix
  - Full Name INFORMIX-SQL
  - Login ID number Use the default login ID number.

 Home Directory — Enter the directory name as: <directory>/login\_name

Example: /usr/informix

Note: Make sure that the <directory> already exists.

- System Administration Privileges no.
- 2 Assign a password as instructed.
- 3 Save the login and exit FACE.
- 4 Edit the /etc/passwd file using vi or ed.
  - Search for the string: informix:x:mmmm:1:INFORMIX SQL:/usr/informix: Change the :1: field to :nnnn:
    - Where: nnnn is the INFORMIX group ID specified in Procedure 7A and mmmm is a user ID that is chosen for the INFORMIX user ID.

#### Example:

user login name:x:user id:group id: user full name:user full path:

5 Save and exit the UNIX text editor file.

# Procedure 7C — Load the INFORMIX-SQL Software

- 1 Enter installpkg at the prompt to load the INFORMIX software from diskette.
- 2 Follow the instructions, insert the diskettes in sequential order, and press ENTER.
- 3 Enter the 11-character serial number *exactly* as it appears on the diskette or the Customer Registration card.
- 4 Enter the 6-character serial number KEY *exactly* as it appears on the Customer Registration card.

# Procedure 7D — Load the INFORMIX-SE Software

- 1 Enter *installpkg* at the prompt to load the INFORMIX software from diskette.
- 2 Follow the instructions, insert the diskettes in sequential order, and press ENTER.
- 3 Enter the 11-character serial number *exactly* as it appears on the diskette or the Customer Registration card.
- 4 Enter the 6-character serial number KEY *exactly* as it appears on the Customer Registration card.

# Procedure 7E — Display the Installed Packages

- 1 Enter *displaypkg* at the prompt.
- 2 Make sure the list displayed contains the following software loaded during this installation procedure.
  - Cartridge Tape Utilities
  - Editing Package
  - FACE and FACE HELP Packages
  - FMLI Package
  - INFORMIX-SE Software
  - INFORMIX-SQL Software
  - Intelligent Ports Card (IPC) Device Driver Package
  - Remote Terminal Package

# Step 8 — Add the Monitor I Group and Users

### Prerequisites for this Step

### Activities

 Make sure that the 6386SX/EL processor, keyboard, console, additional terminals, and modems are installed according to Steps 1, 2, and 4 of this section.

### Documents

 UNIX System V/386 Release 3.2.3 User's/System Administrator's Reference Manual (Reference Manual)

# Procedure 8A — Add the Monitor I Group

- 1 Log in as root.
- 2 At the UNIX prompt, enter vi /etc/group, 6386SX/EL to edit the System Group file.
- 3 Add *traf::nnnn:* to the end of the file.

Where: nnnn is the group id that is any number not already used.

4 Save the file and exit the UNIX vi editor.

### Procedure 8B — Add the Monitor I Users

- 1 Use FACE to add the login, mtmadm.
  - Login Name *mtmadm*
  - Full Name Monitor I Administrator
  - Login ID number Use the default login ID number.
  - Home Directory Enter the directory name as: <directory>/login\_name

Example: /usr/mtmadm.

Note: Make sure that the <directory> already exists.

- System Administration Privileges no.
- 2 Enter a password for mtmadm, as instructed.
- 3 Remember to save the user login information.
- 4 Create another login, mtmadm1.

**Note:** This login is primarily used to facilitate the execution of **cron**.

- Login Name mtmadm1
- Full Name Monitor I cron login
- Login ID number Use the default login ID number.
- Home Directory Enter the directory name as

<directory>/login\_name

Example: /usr/mtmadm1

Note: Make sure that the <directory> already exists.

- System Administration Privileges no.
- 5 Enter a password for mtmadm1, as instructed.
- 6 Remember to save the user login information.
- 7 Exit FACE and return to the UNIX System.
- 8 Using vi or ed, edit the /etc/passwd file.
  - Search for the string:

#### mtmadm:x:mmmm:1:Monitor I Administrator:<directory>

Change :1: to :nnnn:

Where: nnnn is the Monitor I group id specified in "Procedure 8A — Add the Monitor I Group" and <directory> is the home directory for mtmadm.

Search for the string:

#### mtmadm1:x:mmm:1:Monitor I cron login:<directory>

Change :1: to :nnnn:

Where: nnnn is the Monitor I group id specified in "Procedure 8A — Add the Monitor I Group" and <directory> is the home directory for mtmadm1.

Note: When Monitor I is installed, the mtmadm1 login is blocked.

- 9 Save the file and exit the UNIX text editor.
- **10** Type *chgrp traf <directory>* at the prompt.

Where: <directory> is the home directory of mtmadm.

- 11 Repeat the previous step for mtmadm1.
- 12 Use this procedure to add additional logins for Monitor I users, as necessary.
  - **Note:** Assign UNIX at and cron privileges to users who will be scheduling Monitor I reports. Refer to the *Reference Manual* for information on at and cron.
### Procedure 8C — Edit the .profile

- 1 Use vi or ed to edit the .profile for each Monitor I user.
- 2 Change the FACEINVOKE field entry so that users do not have to go through the FACE menu to get to Monitor I. Edit the field so that it reads: FACEINVOKE = no.
- 3 Add the following entry to the *end* of the .profile so that each login can use Monitor I:
  - . <directory>/mtm/tools/profile
  - Where: <directory> is the name of the directory under which you will be installing Monitor I in Step 11 of Procedure 9A.
  - Note: If CAFE is used, do not append the .<directory>/mtm/tools/profile entry to the users . profile.
- 4 Make sure that the mtmadm login also gets a . profile configured as listed above.

End of procedures for Step 8

### Step 9 — Load the Monitor I Software

### Prerequisites for this Step

#### Activities

- Make sure that you have added the Monitor I group and users, explained in Step 8 of this chapter.
- Make sure that you have installed INFORMIX, according to the directions listed in Step 7.
- If you are installing an upgrade (a warm install), make sure that no one is using the Monitor I files (directories), and that the Poller and Alarm Manager are not running.
- If you are performing a warm install, make sure you do a full backup of Monitor I first. Perform the backup according to the "Back Up Monitor I" (6386SX/EL) procedure listed in the DEFINITY Monitor I Operations Guide.

#### Documents

DEFINITY Monitor I Operations Guide (Ops Guide)

#### Hardware/Software Components

- DEFINITY Monitor I installation tape
- Disk Configuration Worksheet obtained from your AT&T Representative

### Procedure 9A — Cold Install of Monitor I Software

What? This procedure describes how to do a cold install of Monitor I. A cold install is usually done when you are installing Monitor I for the very first time. A warm install is done when you are updating existing Monitor I software. See Procedure 9B — Warm Install of Monitor I Software for information about warm installs.
 In some instances, you may already have Monitor I installed, but you want to remove it and start all over. In this case, you would choose a cold install to completely remove the Monitor I directories and databases and reinstall

new ones. How Long? This procedure takes about 30 minutes to finish.

- 1 Log in as root.
- 2 Enter installpkg and press RETURN.

System Response:

Please indicate the installation medium you intend to use. Strike "C" to install from CARTRIDGE TAPE

or "F" to install from FLOPPY DISKETTE.

3 Enter C and press RETURN.

System Response:

Please insert the cartridge tape into the tape drive.

4 Press (RETURN).

It is recommended that you re-tension the tape before attempting the installation, to ensure that the tape is read without any errors.

5 Press RETURN to retension the tape. This takes about three minutes.

System Response:

Packages available for installation:

- 1. DEFINITY Monitor I Release 2.1
- 2. Install ALL packages shown above
- 3. Exit, do not install any packages

6 Enter 1 to install Monitor I, press (RETURN), followed by (ESC). System Response:

You have made the following selections:

- 1. DEFINITY Monitor I Release 2.1
- 7 Press RETURN to confirm your selection.

Note: Press Esc if you want to redisplay the package selections.

System Response:

**REMINDER!** 

Depending on the packages you are installing, you may be required to provide some input to the installation utility to configure the software for your system.

8 Press RETURN to continue the installation.

System Response:

Installation in progress -- Do not remove the cartridge tape

This message is followed by a copyright message for Monitor I. System Response:

Enter type of installation you want (w-warm, c-cold, e-exit):

**Note:** If you choose to exit at this point and you want to restart installation, you must reinsert the tape. Any time after this point, you can exit and restart without reinserting the tape.

9 Type C and press RETURN.

System Response:

Enter the directory where you want to install Monitor I? (/usr) :

- 10 Enter the default, /usr, or the the directory of your choice, then press RETURN.
  - Note: Monitor I will be installed in the directory you specify, under a subdirectory called mtm. If this subdirectory does not exist, the system will now create it for you.
  - **Example:** Entering /usr or /usr1/traf results in Monitor I being installed in the directory /usr/mtm or /usr1/traf/mtm respectively.

System Response:

Monitor I will be installed under <directory name>/mtm, continue ? (y/n):

Where: <directory name> is the name of the directory you specified in the previous step.

11 Enter *y* to continue and press RETURN.

System Response:

WARNING- Cold installation will remove all Monitor I directories and existing database(s), if any. No one should be using Monitor I during installation. Make sure Monitor I polling system and alarm manager are not running.

Cold installation will proceed, continue? (y/n) :

12 Enter y to continue and press (RETURN).

System Response:

Select processor type -Enter 1 for 3B2-600 2 for 6386E/33 model S 3 for 6386SX/EL or NCR 3315

13 Enter 3 and press RETURN.

System Response:

You are installing on a 6386SX/EL or NCR 3315 processor. Do you want to continue? (y/n) :

14 Enter y and press (RETURN).

System Response:

Enter switch type(s) separated by ',' (G3r, G3i, G2, G1, SYS85, SYS75, FP8, or ALL) :

If you select *ALL* the system response screen shown in Step 15 is displayed. If you select individual switches, the system also prompts you to select the releases you want for each switch selection.

G3r:

Enter issue(s) for G3r switch separated by ',' (1):

G3i:

Enter issue(s) for G3i switch separated by ',' (1):

G2:

Enter release(s) for G2 switch separated by ',' (2.1, 2.2):

**G**1:

Enter release(s) for G1 switch separated by ',' (1.1):

SYS85:

Enter release(s) for SYS 85 switch separated by ',' (R2V4, R2V3, R2V2):

SYS75:

Enter release(s) for SYS75 switch separated by ',' (R1V3, R1V2, R1V1):

■ FP8:

Enter release(s) for FP8 switch separated by ',' (3.8, 1.16):

15 Enter the switch type(s) and releases you want to install then press (RETURN).

System Response:

Pre-installation checks in progress ....

If pre-installation checks have completed successfully, the following message is displayed:

Pre-installation checks have completed successfully.

• If pre-installation checks did *not* complete successfully, a list of error messages is displayed, followed by this message:

Pre-installation checks did not complete successfully.

**Note:** To continue, fix the errors using error message explanations found in **Appendix C** of this manual. Once the errors have been resolved, try installing Monitor I again using this procedure, starting with the **installpkg** command in **Step 2**.

If pre-installation checks completed successfully, the following prompt is displayed:

Do you want to create database place holder(s)? (y/n):

- **Note:** If you enter *n*, the software is installed, but no placeholders are created. You can add placeholders after installation is completed by using the **addmount** procedure discussed in "9C Create Placeholders Using Addmount."
- **16** Enter *y* to create database placeholders then press **RETURN**. System Response:

Do you want to use the "Rotating Switch Study" feature? (y/n):

Reference: Refer to the DOSS Configuration output for the appropriate response.

• If you answer *n*, the following prompt is displayed:

Enter the directory to create the database(s) e.g. /usr1 ? :

Continue the software load with Step 19 of this procedure.

• If you answer y, the following prompts are displayed:

Enter the total number of G2, SYSTEM 85 or FP8 switches?:

Enter the total number of G3r, G3i, G1 or SYSTEM 75 switches?:

17 If you are using the **Rotating Switch Study** feature, enter the correct response to these questions and press RETURN to get the next prompt.

System Response:

Are the values entered above correct? (y/n):

• If you answer *n*, the system again prompts you to enter the total number of switches.

18 Once all values are correct, type y then press RETURN.

System Response:

Enter the directory to create the database(s), e.g. /usr1 ? :

Reference: Refer to the DOSS Configuration output for the appropriate directory.

- 19 Enter the directory name and press (RETURN).
  - **Note:** The next questions refer to the number of placeholders for databases to be created under each mount point (database directory) for each polling option.

System Response:

How many G2, SYS85 or FP8 (EXTENDED) database(s) ? (0-40) : How many G2, SYS85 or FP8 (STANDARD) database(s) ? (0-40) : How many G2, SYS85 or FP8 (DAILY and LIMITED) database(s) ? (0-40) : How many G1 1.1 or SYSTEM 75 database(s)? (0-40) : How many G3r or G3i (EXTENDED) database(s)? (0-40) : How many G3r or G3i (STANDARD) database(s)? (0-40) : How many G3r or G3i (DAILY and LIMITED) database(s)? (0-40) : How many inactive database(s)?

- Note: The last prompt, How many inactive database(s)?, is only displayed if the Rotating Switch Study feature is used.
- 20 Enter the correct response to each of the questions listed above and press (RETURN) to get the next prompt.

Note:

- You *must* enter the correct number of databases for Monitor I to work properly. This
  information depends on the number of switches being supported and how your disk is
  sliced. See your Disk Configuration Worksheet for more information.
- Monitor I allows you to repeat this procedure for each mount point (database directory) and polling option per switch type that you have.

System Response:

Are the values entered above correct? (y/n):

• If you answer n, the system repeats the series of questions listed in Step 19 of this procedure.

21 Once all values are correct, type y then press RETURN.

System Response:

Do you want to create more database place holder(s)? (y/n):

• If you answer y, the system returns to the response in Step 18 of this procedure.

- 22 Enter *n* and press RETURN to continue with the installation.
  - **Note:** The system begins copying the files from the tape and a lengthy list of these files appears in a scrolling display. The files displayed on your screen may vary from the partial system listing displayed in the next screen example.

Copying files from the tape	
log	
tmp	
work	
work/pdump	
work/polldir	
prog	
prog/R2V2	
prog/R2V2/L1_rep	
prog/R2V2/acd_rep	
prog/R2V2/covg_rep	
•	
prog/R2v2/iparser	
prog/H2V2/clock	

The following messages appear when the installation completes:

All Monitor I files have been installed correctly. Installation completed successfully.

If you *do not* see these messages or if you see error messages during the procedure, look for further information on the errors in /usr/tmp/journal. Fix the errors using the error message explanations found in Appendix C of this manual, then try installing Monitor I again, starting with the installpkg command in Step 2 of this procedure.

End of Cold Install Procedure

#### Procedure 9B — Warm Install of Monitor I Software

- Backup Monitor I according to the "Backing Up Monitor I" procedure listed in the Monitor I Operations Guide.
- 2 Follow Steps 1 through 8 of "Procedure 9A Cold Install of Monitor I Software." Complete Step 2 of this procedure when you see this prompt:

Enter type of installation you want (w-warm, c-cold, e-exit):

3 Type *w* at the prompt and press RETURN.

System Response:

WARNING- No one should be using Monitor I during installation. Make sure Monitor I polling system and alarm manager are not running.

Warm installation will proceed, continue? (y/n) :

4 Enter *y* to continue and press RETURN.

System Response:

Pre-installation checks in progress ....

• If pre-installation checks have completed successfully, the following message is displayed:

Pre-installation checks have completed successfully.

• If pre-installation checks did *not* complete successfully, a list of error messages is displayed, followed by this message:

Pre-installation checks did not complete successfully.

**Note:** To continue, fix the errors using error message explanations found in **Appendix C** of this manual. Once the errors have been resolved, try installing Monitor I again using this procedure, starting with the **installpkg** command in **Step 2** of this procedure.

A lengthy list of files appears on the screen in a scrolling display. After all these files have been installed and some post-installation checking messages appear, the following message is displayed at the completion of the warm installation:

Warm installation completed successfully.

- **Note:** If you do *not* see this message or if you see error messages during the procedure, look for further information on the errors in /usr/tmp/journal. Fix the errors, using the error message explanations found in Appendix C. Try installing Monitor I again, starting with the installpkg command in Step 2 of this procedure.
- 5 As a final post-installation step, restart the poller and alarm manager. For instructions see the headings, "Activate the Polling Control Mechanism" in Chapter 3, "Implementing Monitor I," as well as "Activating the Alarm Manager" in Chapter 8, "System Administration," both in the *Monitor I Operations Guide*.

End of Warm Install Procedure

### Procedure 9C — Create Placeholders Using Addmount

Use this procedure to create database placeholders from the UNIX shell, after you have completed the Monitor I installation.

- **Note:** If you have already added placeholders during installation, you will not be able to add additional placeholders from the shell. Also, if you have used the **addmount** procedure previously to add placeholders, you will not be able to execute this procedure a second time.
- 1 Log in as root.
- 2 Type <directory>/mtm/tools/addmount at the prompt and press RETURN.
  - Where: <directory> is the name of the directory under which you installed Monitor I in Step 9 of Procedure 9A.

System Response:

Do you want to use the "Rotating Switch Study" feature? (y/n):

Reference: Refer to the DOSS Configuration output for the appropriate response.

• If you answer *n*, the following prompt is displayed:

Enter the directory to create the database(s), e.g /usr1 ? :

Continue the software load with Step 5 of this procedure.

• If you answer y, the following prompts are displayed:

Enter the total number of G2, SYSTEM 85 or FP8 switches?:

Enter the total number of G3r, G3i, G1 or SYSTEM 75 switches?:

3 If you are using the **Rotating Switch Study** feature, enter the correct response to these questions and press (RETURN) to get the next prompt.

System Response:

Are the values entered above correct? (y/n):

- If you answer *n*, the system again prompts you to enter the total number of switches.
- 4 Once all values are correct, type *y* then press (RETURN). System Response:

Enter the directory to create the database(s), e.g. /usr1 ? :

Reference: Refer to the DOSS Configuration output for the appropriate directory.

- 5 Enter the directory name and press (RETURN).
  - **Note:** The next questions refer to the number of placeholders for databases to be created under each mount point for each polling option.

System Response:

How many G2, SYS85 or FP8 (EXTENDED) database(s) ? (0-40) : How many G2, SYS85 or FP8 (STANDARD) database(s) ? (0-40) : How many G2, SYS85 or FP8 (DAILY and LIMITED) database(s) ? (0-40) : How many G1 1.1 or SYSTEM 75 database(s)? (0-40) : How many G3r or G3i (EXTENDED) database(s)? (0-40) : How many G3r or G3i (STANDARD) database(s)? (0-40) : How many G3r or G3i (DAILY and LIMITED) database(s)? (0-40) : How many inactive database(s)?

Note: The last prompt How many inactive database(s)? is only displayed if the Rotating Switch Study feature is used. 6 Enter the correct response to each of the questions listed above and press RETURN to get the next prompt.

Note:

- You must enter the correct number of databases for Monitor I to work correctly. This information depends on the number of switches being supported and how your disk is sliced. See your Disk Configuration Worksheet for more information.
- Monitor I allows you to repeat this procedure for each mount point (database directory) and polling option per switch type that you have.

System Response:

Are the values entered above correct? (y/n):

- If you answer n, the system returns to the series of questions listed in Step 5 of this procedure.
- 7 Once all values are correct, type y then press RETURN.

System Response:

Do you want to create more database place holder(s)? (y/n):

- If you answer y, the system returns to the System Response listed in Step 4 of this procedure.
- 8 Enter n to continue the addmount procedure.
- 9 The following message is displayed for each database directory you entered:

Database place holders successfully created

Note: If you do not see this message, check /usr/tmp/addout for possible errors. Refer to Appendix C for Monitor I installation error messages and corrective actions.

End of procedures for Step 9

### Step 10 — Enable the System Ports

### Prerequisites for this Step

#### Activities

- Make sure the 6386SX/EL processor, keyboard, console, additional terminals, and modems are installed according to Steps 1, 2, and 4 of this section.
- Make sure the UNIX Foundation Set and additional software has been loaded according to Step 3 of this section.
- Make sure the terminals and modems were set up according to Step 4 of this section.

#### Documents

- Refer to the Port Configuration Worksheet in Appendix B for a list of configured ports.
- Intelligent Ports Card Model 900 (IPC-900) User's Guide (IPC Guide)

### Procedure 10A — Enable Bidirectional Ports

- 1 Log in as root.
- 2 Enter face at the prompt.
- 3 Enter the following selections:

Administrative Menu → Peripheral Setup → Serial Ports Setup

- 4 Use F2, Choices to select the following.
  - An outgoing or bidirectional port to enable.
  - Device Type = MODEM
  - Device Speed = 1200
    - **Note:** If you have DIMENSION FP8 switches, you need to edit the /usr/lib/uucp/Devices file by creating an additional, identical entry for each ACU entry with a baud rate of 1200. Then, change the 1200 in the duplicate entry to 300.
  - Flow Control = hardware
- 5 Press F3 to save the port selections.
- 6 From window 5, use F2, *Choices* to select the following:
  - Modem Type = AT&T 2224B for all modem types (AT&T 2400, AT&T 2224-CEO and AT&T 2224-GNN)

- Device Connection = Both incoming and outgoing calls (bidirectional)
- 7 Press F3 to save the options.
- 8 Exit FACE.

### Procedure 10B — Set the CEO Modem Software Options

- 1 Plug the phone cable into the port labeled Line on the back of the modem.
- 2 Plug the modem into the power supply.
- 3 Log in as root.
- 4 Enter MTMDIR=<directory>;export MTMDIR.

Where: <directory> is the directory under which Monitor I was loaded in "Step 9 — Load the Monitor I Software."

5 Enter \$MTMDIR/tools/ceoconfig

System Response:

Enter port number (e.g. tty31):

6 Enter the port number.

Reference: Appendix B for the port number assigned to the 2224-CEO modem.

System Response:

Testing /dev/<portnumber> Please wait... Hardware Switches Set for Dial-Out or Bi-Directional Asynchronous

If the modem software options are set correctly, the following prompt is displayed:

<portnumber> Software Options Set Correctly

Perform all tests listed in Appendix A, "Acceptance Testing."

• If the modem software options are set incorrectly, the following prompts are displayed:

Software Options Set Incorrectly for Monitor I

Enter y to set them to the Monitor I configuration or n to keep current settings (y):

7 Enter y.

System Response:

Setting <portnumber> Software Options to Defaults Options 1-63 set to default

Option 12 is now y Option 34 is now 1 Option 36 is now 0 Option 41 is now 0

ortnumber> Software Options Set Correctly

Where: <portnumber> is the port number assigned to the 2224-CEO modem.

Note: If these messages are *not* displayed or an error message is displayed, run this procedure again from Step 5 of Procedure 10B.

Option Number	Value	Option Number	Value	Option Number	Value	Option Number	Value
1	v	17	10	33	n	49	N/A
2	v	18	n	34	1	50	N/A
3	v	19	n	35	3	51	n
4	v	20	1	36	0	52	f
5	v	21	0	37	0	53	f
6	N/A	22	1	38	0	54	у
7	v	23	^H	39	5	55	n
8	N/A	24	@	40	N/A	56	у
9	n	25	\$B	41	0	57	N/A
10	n	26	\$:	42	N/A	58	n
11	n	27	n	43	n	59	N/A
12	v	28	n	44	n	60	N/A
13	n	29	0	45	n	61	N/A
14	n	30	n	46	n	62	N/A
15	v	31	v	47	N/A	63	n
16	n	32	Ĩ	48	N/A		

TABLE 5-7 2224-CEO Modem — Software Options

Notes: N/A = Not Applicable

Table 5-7 reflects the 2224-CEO modem settings *after* the **ceoconfig** utility is run. This table is for reference purposes only.

End of procedures for Step 10



# A Acceptance Testing

Acceptance Testing	A-1	
Monitor I Acceptance Test Cases	A-1	
Test Case 1	A-1	
Test Case 2	A-2	
Test Case 3	A-3	
Test Case 4	A-3	
Test Case 5	A-4	
Test Case 6	A-4	
Test Case 7	A-5	
Test Case 8	A-5	
Test Case 9	A-6	
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Test Case 11	A-7	

## Acceptance Testing

### Monitor I Acceptance Test Cases

The following test cases should be executed for Monitor I acceptance testing and only after cold installation of Monitor I is complete. The placeholders for the databases should already be created, either during installation or by running the **addmount** command before executing these test cases. The test cases are designed to ensure that:

- 1 All Monitor I files are installed correctly.
- 2 The uucp files are set up correctly for Monitor I and switch communication.
- 3 The link to INADS is set up correctly for the Monitor I alarming feature to work.

Two tools are provided for automated testing of Monitor I installation and alarming features. The total time to execute all eleven test cases should be around two hours. The test cases should be executed in the order presented and under the **mtmadm** login.

### Test Case 1

This test is executed as part of the post-installation check. The script checks size, permissions and ownerships of all Monitor I files and directories.

#### **Test Outline**

- 1 Enter the type of installation.
  - For a cold installation, type:

su root -c "<directory>/mtm/tools/sanchk -c"

and press (RETURN).

For a warm installation, type:

su root -c "<directory>/mtm/tools/sanchk -w"

and press (RETURN).

Where: <directory> is the directory under which Monitor I was installed.

System Response:

#### Enter password for root

- 2 Enter this password.
- 3 To check for errors, type: /usr/tmp/sanout

#### Expected Results

Wait for this message:

All Monitor I files have been installed correctly.

### **Test Case 2**

This test verifies if the correct number of placeholders for the databases have been created under each database directory (for example: /usr/mtm/db1). The number of databases for each database directory depends on the disk configuration.

#### **Test Outline**

1 Type cat \$MTMDIR/tools/dbmap and press RETURN.

Note: Execute the following steps for each directory listed in the dbmap file.

2 Type cd <directory>

Where: <directory> is the directory listed in the dbmap file.

- 3 Type Is -d tmdb\*.elwc -I and press RETURN.
- 4 Type Is -d tmdb\*.s/wc -l and press RETURN.
- 5 Type Is -d tmdb\*. Ilwc -I and press (RETURN).
- 6 Type Is -d tmdb\*.75e/wc -l and press RETURN.
- 7 Type Is -d tmdb\*.75s/wc -I and press (RETURN).
- 8 Type Is -d tmdb\*.75I/wc -I and press RETURN.
- 9 If the Rotating Switch Study is being used, type Is -d tmdb\*.ilwc -l and press (RETURN).

#### **Expected Results**

The output of the **ls** command should be equal to the number of databases to be created (input during cold installation or during execution of the **addmount** program) for the following databases (respectively):

- G2 or SYSTEM 85 or FP8 extended
- G2 or SYSTEM 85 or FP8 standard
- G2 or SYSTEM 85 or FP8 limited or daily
- G3r or G3i extended

- G3r or G3i standard
- G3r or G3i limited or daily and G1 1.1 and System 75
- Inactive

See: Your DOSS configuration output.

### **Test Case 3**

This test case should only be run if the Rotating Switch Study feature is being used.

#### **Test Outline**

- 1 Type cd \$MTMDIR/prog/common and press RETURN.
- 2 Type: cat rotenvlistlegrep "TMROTATE/^TMMAXDB/^TMMAXDB75" and press (RETURN).

#### **Expected Results**

TMROTATE should be set to *y*. The values for TMMAXDB and TMMAXDB75 should be equal to the values entered for *total G2 or SYSTEM 85 or FP8* switches, and *total G3r, G3i, G1*, or *SYSTEM 75* switches respectively. The above values are entered during installation or during execution of the **addmount** program.

#### Test Case 4

#### **Test Outline**

1 Type ps -eaflgrep cron and press RETURN.

#### Expected Results

The /etc/cron should be running and owned by root.

### Test Case 5

This test verifies that mail for mtmadm1 is being forwarded to mtmadm.

#### **Test Outline**

- 1 Type mail mtmadm1 and press RETURN.
- 2 Type a message, for example, Mail test and press RETURN.
- 3 Press CTRL D.
- 4 Type mail and press (RETURN).
- 5 Type d and press (RETURN).

#### Expected Results

Mail for mtmadm shows up in the message for mtmadm1.

### Test Case 6

This test verifies that KERNEL parameters are reconfigured correctly for Monitor I.

#### **Test Outline**

- 1 Type /etc/sysdeflegrep "NPROCIMAXUPININODEINS5INODEINFILE" and press (RETURN).
- 2 Type ulimit and press (RETURN).

#### Expected Results

The output of the sysdef command should be checked against the values entered previously. The output of the ulimit command should be 8192.

See: Chapter 2 for the 3B2 installation, Chapter 3 for 6386E/33 Model S installation, and Chapter 4 for 6386SX/EL installation in this manual.

### Test Case 7

This test should be executed if System 85 and/or DIMENSION switches are to be supported. This test verifies that **uucp** files are set up correctly for Monitor I and switch (System 85 and DIMENSION) communication. You need a live System 85 and/or a DIMENSION switch not held up in ADMIN or MAINTENANCE mode for testing this script.

#### **Test Outline**

- 1 Add a System 85 (any release) and a DIMENSION (any release) switch (refer to the Security Information for Monitor I).
- 2 Type *mtm* and press **RETURN** to access the Monitor I main menu.
- 3 Enter the System 85 target name.
- 4 Type 6 and press RETURN to access the Utilities Menu.
- 5 Type 2 and press RETURN to select Display Switch Time option.
- 6 Type y and press RETURN to continue.
- 7 Repeat steps 1-4 for your DIMENSION target.

#### **Expected Results**

The current switch and machine time, date, day, and time zone are displayed.

### Test Case 8

This test should be executed if a System 75 switch is to be supported. This test verifies that uucp files are set up correctly for Monitor I and switch (System 75) communication.

#### **Test Outline**

- 1 Add a System 75 switch (refer to the Security Information for Monitor I).
- 2 Type mtm and press RETURN to access the Monitor I Main Menu.
- 3 Enter the System 75 target name.
- 4 Type 4 and press RETURN to access the Utilities Menu.

- 5 Type 2 and press RETURN to select the System 75 Cut-through option.
- 6 Enter login name and password. Select the default terminal type.
- 7 To log off the System 75 switch, type: *logoff* at the prompt:

enter command

#### **Expected Results**

You should be successfully logged on to the System 75 switch.

### Test Case 9

This test verifies that Monitor I polling and alarm manager can be brought up successfully.

#### **Test Outline**

- 1 Type cd /etc/init.d and press (RETURN).
- 2 Type sh monitorl start and press (RETURN).
- 3 Type ps -eaflgrep mtm and press (RETURN).

#### Expected Results

The ps command shows two processes-mtmguard and mtmalarm-running.

### Test Case 10

This test verifies that Monitor I polling and alarm manager can be brought down successfully.

#### Test Outline

- 1 Type cd /etc/init.d and press RETURN.
- 2 Type sh monitorl stop and press (RETURN).
- 3 Type ps -eaflgrep mtm and press RETURN.

#### Expected Results

The ps command does not show the above two processes.

### Test Case 11

This test should be executed if the INADS system is available and with **cold** Monitor I installations only. This test verifies that the Monitor I alarms can be sent successfully to INADS. This test should be executed between 20 minutes after the hour and 10 minutes before the hour.

#### **Test Outline**

- Enter INADS destination name and telephone number (refer to the Security Information for Monitor I).
- 2 Register Monitor I product ID in INADS system. The product ID should be 10 digits long, beginning with the numeral 8.
- 3 Type *mtm* and press **RETURN** to access the Monitor I main menu.
- 4 Enter the System 75, System 85, or DIMENSION target name.
- 5 If your target name is a System 85 or DIMENSION switch, type 5 and press RETURN. For anything else, type 3 and press RETURN to access the Administrative Menu.
- 6 Type 5 and press RETURN to access the Administrative Menu.
- 7 Type 2 and press (RETURN) to access the Alarm Destination screen.
- 8 Enter Monitor I Alarm ID, which has been registered as the Monitor I product ID in the INADS system.
- 9 Enter Switch Target Alarm ID, which is the Switch (PBX) ID.
- 10 Type !sh to get the UNIX System prompt.
- 11 At the UNIX prompt, type \$MTMDIR/tools/in\_alarms and press (RETURN).
- 12 Wait for 10 minutes.
- 13 Log in to INADS and check if you have received alarms.

#### **Expected Results**

There should be one alarm for the Monitor I product ID in the INADS System.

B Port Configuration Worksheets

# **B** Port Configuration Worksheets

Port Configuration Worksheets	B-1
Port Configuration Worksheet for 3B2/600	B-1
Port Configuration Worksheet for 6386E/33	B-2
Port Configuration Worksheet for 6386SX/EL	B-3
Port Configuration Worksheet for NCR-3315	B-4
.

# **Port Configuration Worksheets**

# Port Configuration Worksheet for 3B2/600

Slot:Board	Port	Port Name	Device Connected	Phone Line
	CONSOLE1	console		
	CONSOLE2	contty		
1: SCSI Tape				
2: EPorts	Serial 1	tty21		
	Serial 2	tty22		
	Serial 3	tty23		
	Serial 4	tty24		
	Serial 5	tty25		
	Serial 6	tty26		
	Serial 7	tty27		
	Serial 8	tty28		
3: EPorts	Serial 1	tty31		
	Serial 2	tty32		
	Serial 3	tty33		
	Serial 4	tty34		
	Serial 5	tty35		
	Serial 6	tty36		
	Serial 7	tty37		
	Serial 8	tty38		
4: EPorts	Serial 1	tty41		
	Serial 2	tty42		
	Serial 3	tty43		
	Serial 4	tty44		
	Serial 5	tty45		
	Serial 6	tty46		
	Serial 7	tty47		
	Serial 8	tty48		
5: RMP Card				
	3B2 Console	tty51		
	Remote Terminal	tty52		
	Remote Terminal	tty53		
	Alarm Output	tty54		
	UPS Input	tty55		
	Remote Alarm	tty56		
	Remote Alarm	tty57		

# Port Configuration Worksheet for 6386E/33

Slot:Board	Port	Port Name	<b>Device Connected</b>	Phone Line
	COM1	tty00		
	COM2	tty01		
	LPT1	lp		
1: SCSI Tape				
2: IPC BOARD I	Serial 1	ttyh01		
	Serial 2	ttyh02		
	Serial 3	ttyh03		
	Serial 4	ttyh04		
	Serial 5	ttyh05		
	Serial 6	ttyh06		
	Serial 7	ttyh07		
	Serial 8	ttyh08		

# Port Configuration Worksheet for 6386SX/EL

Slot:Board	Port	Port Name	<b>Device Connected</b>	Phone Line
	COM1	tty00		
	COM2	tty01		
	LPT1	lp		
1: IPC BOARD I	Serial 1	ttyh01		
	Serial 2	ttyh02		
	Serial 3	ttyh03		
	Serial 4	ttyh04		
	Serial 5	ttyh05		
	Serial 6	ttyh06		
	Serial 7	ttyh07		
	Serial 8	ttyh08		

# Port Configuration Worksheet for NCR-3315

COM1	111.00		
	l lly00		
COM2	tty01		
LPT1	lp		
Serial 1	ttyh01		
Serial 2	ttyh02		
Serial 3	ttyh03		
Serial 4	ttyh04		
Serial 5	ttyh05		
Serial 6	ttyh06		
Serial 7	ttyh07		
Serial 8	ttyh08		
	COM2 LPT1 Serial 1 Serial 2 Serial 3 Serial 4 Serial 5 Serial 6 Serial 7 Serial 8	COM2tty01LPT1lpSerial 1ttyh01Serial 2ttyh02Serial 3ttyh03Serial 4ttyh04Serial 5ttyh05Serial 6ttyh06Serial 7ttyh07Serial 8ttyh08	COM2tty01LPT1lpSerial 1ttyh01Serial 2ttyh02Serial 3ttyh03Serial 4ttyh04Serial 5ttyh05Serial 6ttyh06Serial 7ttyh07Serial 8ttyh08

# C Monitor I Error Messages

Monitor I	Error	Messages	
Monitor I	Error	Messages	

Installation Error Messages

C-1 C-1

# **Monitor I Error Messages**

## Installation Error Messages

The DEFINITY Monitor I installation error messages are listed below, along with the recommended action for each message.

Error Message	Recommended Action	
All database place holders could not be created successfully.	Call customer support.	
Can not block mtmadm1 and informix login.	<b>/etc/passwd</b> and/or <b>/etc/shadow</b> files should have at least read permission for the owner.	
Compilation may not have completed successfully.	Check <b>/usr/tmp/journal</b> to find the names of the database(s) and the forms that could not be compiled. Call customer support.	
DEFINITY Monitor I software not installed.	You must do cold installation first before warm installation can be done.	
/etc/init.d directory does not exist.	Check with your system administrator.	
/etc/rc0.d directory does not exist.	Check with your system administrator.	
/etc/rc2.d directory does not exist.	Check with your system administrator.	
INFORMIX DBMS should be installed before installing monitor I.	Refer to the step that describes how to install INFORMIX.	
informix is not a valid group id	Refer to the procedure that describes how to add the <b>informix</b> group.	
informix is not a valid user id.	Refer to the procedure that describes how to add the <b>informix</b> user.	
informix login does not belong to group 'informix'.	Modify <i>informix</i> login to belong to group <i>informix</i> .	

Error Message	Recommended Action	
Installation may not have completed successfully.	All Monitor I files and directories are not installed correctly or placeholders for directories could not be created successfully. Check /usr/tmp/journal to find the errors.	
Insufficient space in <directory>.</directory>	At least xxxxx free blocks required in directory where Monitor I is installed before Monitor I installation can continue.	
Monitor I files/databases are in use.	No one should be in Monitor I directories or using Monitor I databases. Ask all Monitor I users to log off. Check the output of <b>ps -eaf</b> to see that no Monitor I process is running. Wait for the Monitor I processes to finish.	
mtmadm is not a valid user id.	Refer to the step that describes how to add Monitor I users.	
mtmadm1 is not a valid user id.	Refer to the step that describes how to add Monitor I users.	
mtmadm login does not belong to group traf.	Modify <b>mtmadm</b> login to belong to group <b>traf</b> .	
mtmadm1 login does not belong to group traf.	Modify mtmadm1 login to belong to group traf.	
Must be root to install Monitor I software.	Log in as <i>root</i> before starting installation.	
Not enough free space in root file system.	At least 500 free blocks required in root file system before Monitor I installation can continue.	
Not enough free space in usr file system.	At least 500 free blocks required in usr file system before Monitor I installation can continue.	
termcap file not found.	Termcap file is missing from /etc and /usr/informix/etc. INFORMIX software may not have been installed correctly.	

Error Message	Recommended Action
The release currently installed in your machine is more recent than the one in the tape.	You are trying to install an old release over a newer release.
This program can be executed only once.	Addmount can be executed only once after cold installation.
Unable to bring down the Monitor I alarm manager.	Log in as <i>mtmadm</i> and type alarmend.
Unable to bring down the Monitor I polling system.	Log in as mtmadm and type pollend.
Unable to copy Monitor I software from tape.	Clean the tape drive and restart installation. If the error persists, then the tape is bad. You have to reorder a new one.
Unable to create directory x under y. Execute addmount after fixing the problem.	Check to see if there is a file called x under directory y. Remove file x if it exists. Execute <b>addmount</b> again as <b>root</b> .
/usr/lib/cron/cron.allow file is missing.	Check with your system administrator.
/usr/mail directory does not exist.	Check with your system administrator.
/usr/options directory missing.	Check with your system administrator.
/usr/spool/cron/crontabs directory does not exist.	Check with your system administrator.
/usr/tmp directory does not exist.	Create a directory called <i>tmp</i> under /usr.
Warm Installation aborted. Fatal error during upgrade. Check <b>/usr/tmp/journal</b> .	Upgrade scripts cannot be executed successfully for some of the databases. Check /usr/tmp/journal to find out the database(s) and nature of errors. Call customer support if need be.
Warm installation may not have completed successfully.	All Monitor I files and directories are not installed correctly or compilation did not complete successfully. Check /usr/tmp/journal to find the errors.

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# DEFINITY<sup>®</sup> Monitor I R2.0 Software Update Summary

Monitor I Release 1, Version 2.0 (R2.0) software includes several feature enhancements and fixes for problems reported to field services.

New Monitor I documents have been issued with this release of Monitor I:

DEFINITY® Monitor I Installation Manual, Select No. 585-221-102, Issue 1 COMCODE 106643299

DEFINITY® Monitor I Operations Guide, Select No. 585-221-703, Issue 1 COMCODE 106642812

DEFINITY® Monitor I Planning Manual Addendum, Select No. 585-221-610ADD, Issue 1 COMCODE 106741101

#### **Upgrade Procedures**

Refer to the Release Letter that accompanies the Release 2.0 software for instructions to upgrade Monitor I Release 1.2 software. You will also need the *DEFINITY®* Monitor I Installation Manual, Issue 1, that accompanies the Release 2.0 software.

### **Hardware Support**

Monitor I is now supported on the 6386SX/EL WGS processor.

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The 715 Business Communication System (BCS) terminal is now supported by Monitor I.

# Software Support

- INFORMIX-SQL<sup>®</sup> Release 4.0 and INFORMIX-SE<sup>®</sup> Release 4.0 are supported on the 6386E/33, 6386SX/EL and 3B2/600 processors.
- UNIX Release 3.2.3 is needed to support Monitor I R2.0 on the 6386E/33 and 6386SX/EL processors.
- UNIX Release 3.2.1 is needed to support Monitor I R2.0 on the 3B2/600 processor.

# Miscellaneous Changes

- See Chapter 3, "Implementing Monitor I" for updated background polling information, including disk storage option, polling capacity and switch rotation for polling.
- Monitor I supports a new polling option called Daily that stores 13 weeks of the daily polled records. Daily polling uses the same amount of space as the Limited polling option.
- The installation of the 6386SX/EL processor has been changed; refer to the appropriate section in the Monitor I Installation Manual.
- Backup and file recovery procedures are provided for the new processor, 6386SX/EL.
- An additional prompt has been added for the 3B2/600 file recovery procedure if a high capacity tape drive is being used (in other words, x-tape).
- The PBX CPU Congestion threshold field has been added to the the "Administer Alarm Characteristics" screen.
- Updated mail and error messages have been added to the Monitor 1 R2.0 database.