

Lucent Technologies
Bell Labs Innovations



INTUITY™ Enterprise Manager

Installation and Maintenance

585-310-193
Comcode 108047499
Issue 1
March 1998

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- Answered by the called station
- Answered by the attendant
- Routed to a recorded announcement that can be administered by the CPE user

This equipment returns answer-supervision signals on all DID calls forwarded back to the public switched telephone network. Permissible exceptions are:

- A call is unanswered
- A busy tone is received
- A reorder tone is received

Canadian Department of Communications (DOC)

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EMC Directive 89/336/EEC
Low-Voltage Directive 73/23/EEC



The "CE" mark affixed to the equipment means that it conforms to the above directives.

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Acknowledgment

This document was prepared by the Product Documentation, Lucent Technologies, Columbus, OH.

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About This Book

Purpose

This book, *INTUITY Enterprise Manager Installation and Maintenance*, 585-310-193, contains instructions for installing and maintaining the Lucent INTUITY™ Enterprise Manager system. The book only contains the information that is specific to maintenance for the INTUITY Enterprise Manager. Refer to *INTUITY™ Messaging Solutions Release 4 MAP/100 Maintenance*, 585-310-174, for additional information.

Intended Audiences

This book is intended primarily for the personnel responsible for installation and maintenance of the INTUITY Enterprise Manager.

Release History

This is the first release of this book.

How to Use This Book

This book is organized into the following sections:

- Chapter 1, "INTUITY Enterprise Manager Maintenance Strategy," describes the maintenance strategy of the INTUITY Enterprise Manager.
- Chapter 2, "System Procedures," includes the procedures to backup and restore the system, as well as low-level format of the hard disk drives.
- Chapter 3, "Installing Base System Software," provides the procedures to install the base system software for the INTUITY Enterprise Manager.
- Chapter 4, "Installing ORACLE Software," provides the procedures to install ORACLE software on the INTUITY Enterprise Manager.
- Chapter 5, "Installing Enterprise Manager Software," provides the procedures to install the specific Enterprise Manager software on the system.
- Chapter 6, "Alarms and Log Messages," provides alarm log and event entries for the INTUITY Enterprise Manager.

Conventions Used in This Book

This section describes the conventions used in this book.

Terminology

- The word "type" means to press the key or sequence of keys specified. For example, an instruction to type the letter "y" is shown as
Type **y** to continue.
- The word "enter" means to type a value and then press `ENTER`. For example, an instruction to type the letter "y" and press `ENTER` is shown as
Enter **y** to continue.
- The word "select" means to move the cursor to the desired menu item and then press `ENTER`. For example, an instruction to move the cursor to the start test option on the Network Loop-Around Test screen and then press `ENTER` is shown as
Select `Start Test`.
- The Lucent INTUITY system displays *windows*, *screens*, and *menus*. "Windows" show and request system information ([Figure 1](#) and [Figure 2](#), respectively). "Screens" request that you enter a command at the `enter` command: prompt ([Figure 3](#)). "Menus" ([Figure 4](#)) present options from which you can choose to view another menu, or a screen or window.

- The words “subscriber” and “user” are interchangeable terms that describe a person administered on the Lucent INTUITY system. The word “user” is the preferred term in the text; however, “subscriber” appears on most of the screens.

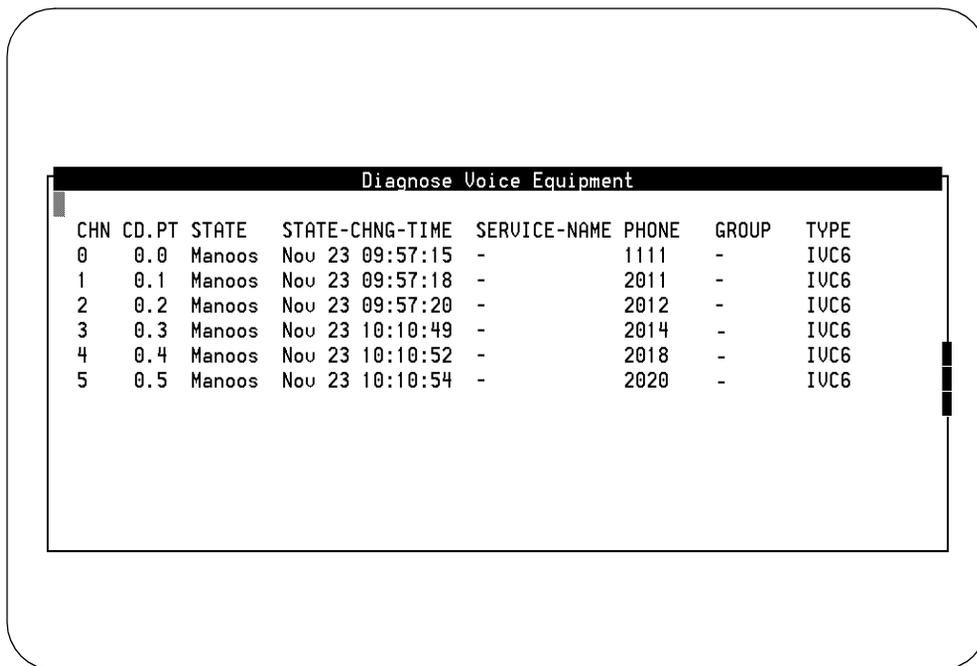


Figure 1. Example of a Lucent INTUITY Window

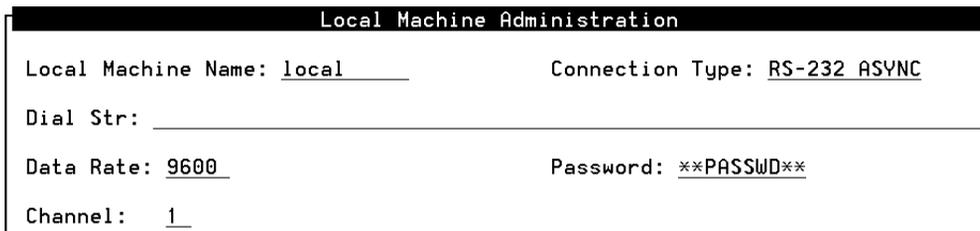


Figure 2. Example of a Lucent INTUITY Window

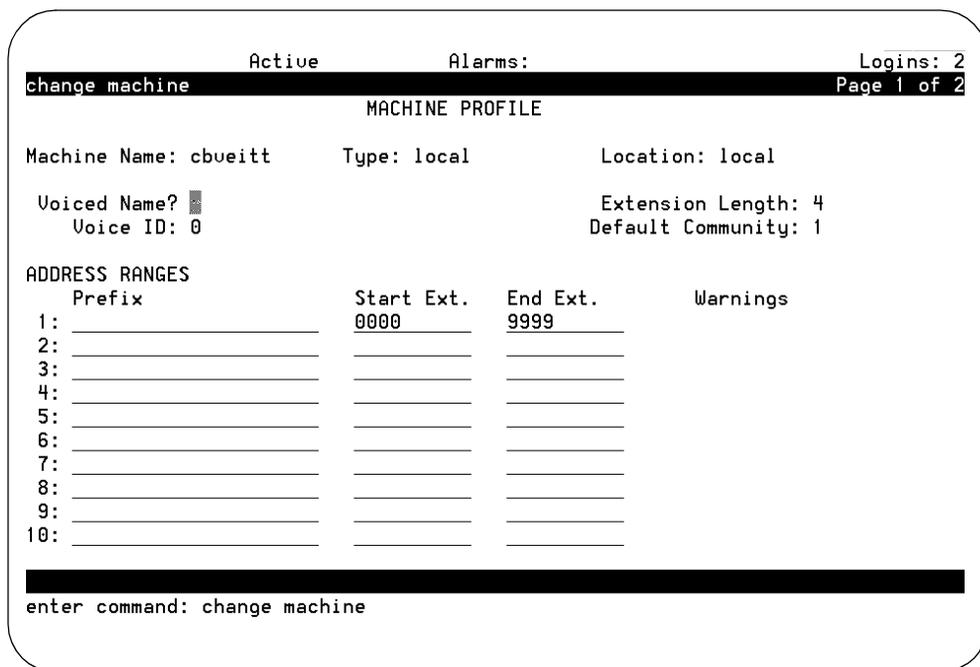


Figure 3. Example of a Lucent INTUITY Screen



Figure 4. Example of a Lucent INTUITY Menu

Terminal Keys

- Keys that you press on your terminal or PC are represented as rounded boxes. For example, an instruction to press the enter key is shown as

Press **ENTER**.

- Two or three keys that you press at the same time on your terminal or PC (that is, you hold down the first key while pressing the second and/or third key) are represented as a series of separate rounded boxes. For example, an instruction to press and hold **ALT** while typing the letter “d” is shown as

Press **ALT** **D**.

- Function keys on your terminal, PC, or system screens, also known as *soft keys*, are represented as round boxes followed by the function or value of that key enclosed in parentheses. For example, an instruction to press function key 2 is shown as

Press **F2** (CHOICES).

- Keys that you press on your telephone keypad are represented as square boxes. For example, an instruction to press the first key on your telephone keypad is shown as

Press **1** to record a message.

Screen Displays

- Values, system messages, field names, and prompts that appear on the screen are shown in typewriter-style `constant-width` type, as shown in the following examples:

Example 1:

```
Enter the number of ports to be dedicated to outbound traffic in the
Maximum Simultaneous Ports field.
```

Example 2:

```
Alarm Form Update was successful.
Press <Enter> to continue.
```

- The sequence of menu options that you must select to display a specific screen or submenu is shown as follows:

Start at the Lucent INTUITY Administration menu and select:

```
> Customer/Services Administration
```

```
> Alarm Management
```

In this example, you would access the Lucent INTUITY Administration menu and select the Customer/Services Administration menu. From the Customer/Services Administration menu, you would then select the Alarm Management screen.

- Screens shown in this book are examples only. The screens you see on your machine will be similar, but not exactly the same.

Other Typography

- Commands and text you type in or enter appear in **bold type**, as in the following examples:

Example 1:

Enter **change-switch-time-zone** at the `enter` command: prompt.

Example 2:

Type **high** or **low** in the `Speed:` field.

- Command variables are shown in ***bold italic*** type when they are part of what you must type in and *regular italic* type when they are not, for example

Enter **ch ma *machine_name***, where *machine_name* is the name of the call delivery machine you just created.

Safety and Security Alert Labels

This book uses the following symbols to call your attention to potential problems that could cause personal injury, damage to equipment, loss of data, service interruptions, or breaches of toll fraud security:

CAUTION:

Indicates the presence of a hazard that if not avoided can or will cause minor personal injury or property damage, including loss of data.



WARNING:

Indicates the presence of a hazard that if not avoided can cause death or severe personal injury.



DANGER:

Indicates the presence of a hazard that if not avoided will cause death or severe personal injury.

Related Resources

This section describes additional documentation and training available for you to learn more about installation of the Lucent INTUITY product.

Documentation

It is suggested that you obtain and use the following books in conjunction with this maintenance book:

- *INTUITY Enterprise Manager Administration, 585-310-576*, for detailed information on Enterprise Manager customer and managed element administration, performance monitoring, data collection, reports, and subscriber provisioning
- *INTUITY Messaging Solutions Release 4 MAP/100 Maintenance, 585-310-174*, for detailed information on installing hardware on the MAP/100
- *Intuity Messaging Solutions Release 4 Alarm and Log Messages, 585-310-566*, for detailed information on all INTUITY Release 4 alarm and log messages, including repair actions
- *INTUITY Messaging Solutions Release 4 Administration, 585-310-564*, for detailed information on INTUITY Release 4 administration

It is suggested that you obtain and use the following book for information on security and toll fraud issues:

- *GBCS Products Security Handbook, 555-025-600*

See the inside front cover for information on how to order Lucent INTUITY documentation.

Training

The following training class is recommended as a prerequisite to installing a Release 4.0 Lucent INTUITY system:

- Course No. MO1616A, INTUITY Messaging Solutions Installation and Maintenance

For more information on Lucent INTUITY training, call the BCS Education and Training Center at one of the following numbers:

- Organizations within Lucent: (904) 636-3261
- Lucent customers and all others: (800) 255-8988

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Maintenance Strategy

1

The INTUITY™ system provides a single point of reference for troubleshooting a problem regardless of the system configuration. The INTUITY Enterprise Manager application does not change this maintenance strategy. All applications use the same alarm log to report errors occurring within an application or in its interaction with other applications. The alarm log receives entries from all areas of the system (including the Enterprise Manager-specific modules), prioritizes the alarms according to severity, and makes them accessible.

The information in this book should be used in conjunction with *INTUITY Messaging Solutions Release 4 MAP/100 Maintenance*, 585-310-174, and *INTUITY Messaging Solutions Release 4 Alarm and Log Messages*, 585-310-566.

System Procedures

2

Overview

This chapter describes procedures for

- Backup
- Restore
- Low-level format of hard disks

Purpose

The purpose of this chapter is to provide the information necessary to perform the common procedures associated with the INTUITY™ Enterprise Manager system.

Backing Up the INTUITY Enterprise Manager System

The following section describes the procedure for backing up your INTUITY Enterprise Manager system.

NOTE:

The backup mechanisms described here should be used for backing up and restoring files on the same machine only.

The backup contains all of the information necessary to bring the system back to an operational state after a service affecting event. However, the backup alone cannot completely restore the system to its previous state. The backup can only bring the system back to an operational state. Employ the disaster recovery procedures outlined in Chapter 3, "Installing Base System Software," to restore a system to the previous state.

Backups do not require supervision and occur automatically. However, for the backup to be successful you must ensure that a cartridge tape is in the tape drive.

Backups occur nightly at 3:00 a.m. and may take up to four hours. Backups do not degrade service.

After verifying that the backup was successful, remove the tape. Label it (with date and backup data type, for example, System Data), and store it. A second tape should then be inserted into the tape drive. See ["Verifying the Backup"](#) for backup verification procedures.

How to Manage Tapes

CAUTION:

Do not leave the same tape in the tape drive day after day. Once the backup begins, the previous day's data is overwritten and unretrievable. Should today's backup fail, neither today's nor yesterday's data will be available.

One tape is required for backing up all the Enterprise Manager data. However, in order to better manage the backed up data, it is recommended that two tapes be available to be alternated daily. Additional tapes may be used to implement a longer cycle (for example, seven tapes labeled with the days of the week).

What Data Are Backed Up

A backup saves:

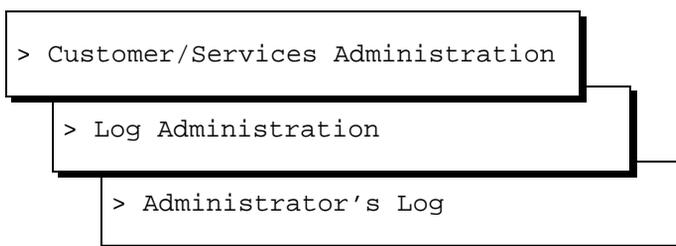
- Detailed system data on shared memory, speech filesystem pointers, etc.
- Alarm management information
- A list of enabled features
- A list of installed software
- Serial port assignments
- Hard disk configuration
- Enterprise Manager configuration files (for example, performance monitoring table)
- Customer definition information (CDT)
- Managed element definition (MET)
- Bulk administration files
- Bulk data collection and report schedules (on-demand and scheduled)
- Provisioning request files and the corresponding log files generated by prior requests.

Verifying the Backup

The system administrator should check the administrator's log daily to ensure that a successful backup occurred.

To verify a successful backup from the Log Administration menu do the following:

1. Start at the Lucent INTUITY Main Menu and select:



The system displays the Administrator's Log Display Selection window ([Figure 2-1](#)).

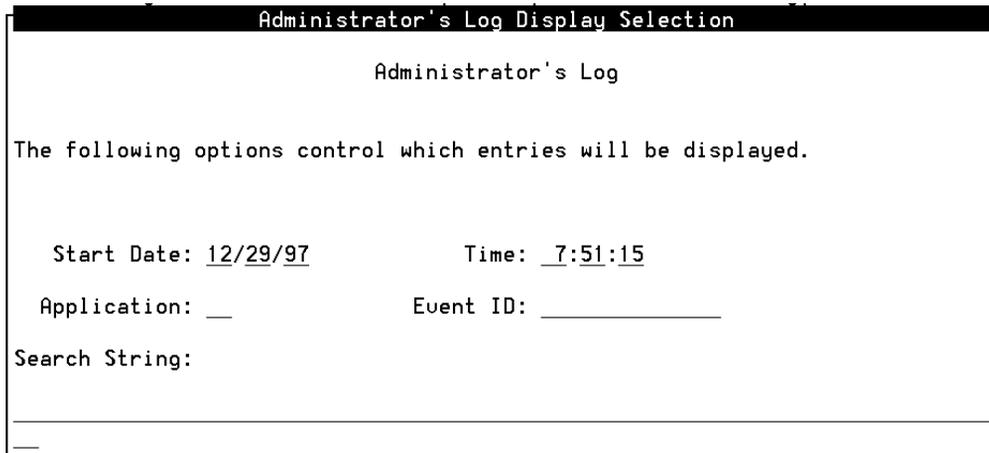


Figure 2-1. Administrator's Log Display Selection Window

2. Place the cursor in the Event ID field.
3. Enter **BKRST001**
4. Press **F3** (Save).

The system displays the Administrator's Log window ([Figure 2-2](#)).

Administrator's Log					
Date	Time	App	Event ID	Cnt	Message
01/04/98	12:15:28	MT	BKRST001	1	Backup process has been completed successfully
01/04/98	12:26:27	MT	BKRST001	1	Backup process has been completed successfully
01/04/98	14:06:19	MT	BKRST001	1	Backup process has been completed successfully
01/04/98	14:16:37	MT	BKRST001	1	Backup process has been completed successfully
01/05/98	03:06:14	MT	BKRST001	1	Backup process has been completed successfully

Figure 2-2. Administrator's Log Window

5. Verify that there is an entry with today's date and the following text:

Backup process has been completed successfully.

If an entry with today's date does not exist the backup was not successful.

Restoring Backups

The information stored on cartridge tapes during the backup procedures is used to restore the system to an operational state.

When to Do a Restore

If a system problem or failure occurs, backups can be invaluable in returning the system to an operational state. You will likely only restore backups when directed to do so by an alarm repair action.

When to Reinstall Software

Depending on the severity of the situation, Lucent INTUITY software may have to be reinstalled before restoring any backups. See [Chapter 5, "Installing Enterprise Manager Software"](#), for these procedures.

How to Do a Restore

⇒ NOTE:

It takes approximately 2 hours to restore one tape.

1. Stop the voice system.
2. Starting at the Lucent INTUITY Main Menu select:

```
> Customer/Services Administration
```

```
> Backup/Restore
```

```
> Restore
```

The system displays the following message.

```
please insert a tape into the tape drive to restore  
press <Enter> when tape is inserted  
press <Esc> key to terminate the restore
```

3. Insert the cartridge tape that contains the data to be restored into the tape drive.
4. Press **ENTER** to continue.

The system displays the header information for the tape. That information includes:

- Tape label
- Date
- List of packages (with release and version) installed on the machine when the tape was made
- Data types

The following is an example of tape header information:

```
PRODUCT_ID=2299999999
```

```
DATE=03/11/98 09:51
```

```
PKG=VM:0:R1.1
```

```
PKG=mtce:1.0:1.0-4
```

```
PKG=netw:0:1.0-4.3
```

```
PKG=vs:1.0:1.0-4
```

```
TYPE=System Data:
```

```
Press <Enter> to select data type.
```

```
Press <Esc> to terminate the restore.
```

5. Check the data types listed under `TYPE=System Data` to verify that this tape contains the appropriate data.

If it does not:

- a. Press **ESC**.
- b. Return to Step 3.
- c. Try another tape.

If it does, continue with Step 6.

6. Press **ENTER** to continue.

The system displays the Restore window.

7. Enter **y** in the fields that display the data types you want to restore.

⇒ NOTE:

The fields displayed on the Restore window are based on the data stored on the tape.

8. Enter **n** in all of the other fields.
9. Press **F3** (Save) to restore the data types selected.

10. Insert subsequent tapes if prompted.
11. Press **ENTER** when the restore is complete and the system displays the following message:

```
restore process has been completed successfully  
press any key to continue
```

If the restore fails, the system displays the following message:

```
Restore Failed.
```

Do the following:

 - a. Rewind the tape by removing it from the tape drive and then reinserting it.
 - b. Return to Step 4 and attempt the restore again.
 - c. If the restore fails a second time, access the alarm log. See Chapter 1, "Getting Started" in *Lucent INTUITY Alarms and Log Messages* and follow associated repair actions for any active alarms in the log.
12. Reboot the system.

Performing a Low Level Format

Whether installing the Enterprise Manager system for the first time or restoring the system from a backup, you must first perform a low-level format of the hard disk drives.

CAUTION:

If you fail to perform the low-level format of the hard disks drives before installation or restoration, the Enterprise Manager system may be unusable.

To low-level format the hard disk drives, do the following.

1. Power off the platform.
2. Power on the platform.

After the memory test, the system displays the following message:

```
Press <Ctrl><A> for SCSI Select Utility.
```

NOTE:

This message appears quickly. If you miss the prompt, begin this procedure again.

3. Press **Ctrl** **A**.

The Adaptec AIC7850 SCSISelect(TM) Utility V1.11 menu is displayed.

4. Select **SCSI Disk Utilities**

5. Make sure that the system recognizes SCSI IDs 0,1, 2, 4, 5, and 6 as hard disk drives. If these drives are not recognized, check the hardware connections. Refer to *INTUITY Messaging Solutions Release 4 MAP/100 Maintenance*, 585-310-174.

6. For each drive 0, 1, 2, 4, 5, and 6, do the following:

- a. Select the drive and press **ENTER**.

- b. Select **Format Disk** and press **ENTER**.

The system displays the SCSI ID for the drive, and the following

Format Disk?

- c. Select **Yes** and press **ENTER**.

The system displays the following message:

Are you sure?

- d. Select **Yes**.

The low-level format procedure takes approximately 20 minutes per disk. When the low-level format is complete, the system displays:

Press Enter to continue.

- e. Press **ENTER** to return to the SCSISelect Utility menu.

7. When all 6 disks have been low-level formatted, press **ESC** twice.

The system displays the following message:

Exit Utility?

8. Select **Yes** and press **ENTER**.

The system displays the following message:

Please press any key to reboot.

9. Press any key.

Installing Base System Software

3

Overview

This chapter describes

- Installation procedures for the UnixWare software
- Installation procedures for the platform software
- Configuration procedures for:
 - Creating the VERITAS file systems
 - Setting up TCP/IP parameters
 - Setting up kernel parameters

Purpose

This purpose of this chapter is to provide the information necessary to reload the operating system to a computer which has experienced a disk failure.



NOTE:

The installer must have the root password to complete these procedures.

Installing UnixWare

Installing the UnixWare operating system unmounts file systems. The maintenance module in the Lucent INTUITY™ software has been designed to detect unmounted file systems and attempt to recover them. If the MTCE module does not detect any unmounted file systems, all of the software will load.

If this software is being loaded onto a system that has clean hard disks that have not been previously loaded, the system will not detect file systems.

If this is a recovery installation, the system will detect previously loaded file systems.

CAUTION:

*If you use the **DELETE** key to stop the UnixWare installation at any time during this process, you will have to restart the software installation process at Step 1.*

Starting the Unixware Installation

To start the Unixware installation, do the following:

NOTE:

You must perform a low-level format of the hard disk drives on the Enterprise Manager before starting installation. Refer to [“Performing a Low Level Format”](#) in [Chapter 2, “System Procedures”](#).

1. Insert the diskette labeled “Lucent INTUITY UNIX Boot Floppy 1 of 3” into the floppy disk drive.
2. If the system is off, turn it on using the power switch on the front of the MAP/100 ([Figure 3-1](#)).

If the system is on, reboot the system. See “Rebooting the System” in Chapter 3, “Common System Procedures”, in *INTUITY Messaging Solutions Release 4 MAP/100 Maintenance*, 585-310-174, for the procedure.

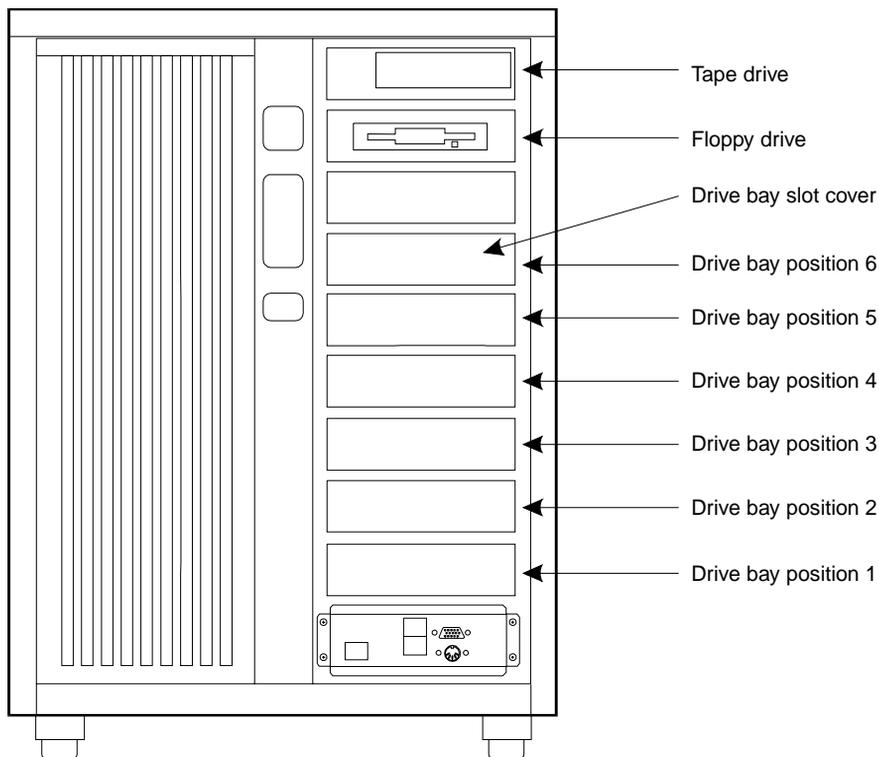


Figure 3-1. Front View of the MAP/100

The system displays the UnixWare introduction screen as it begins to load the base system software. When the system is done with the first boot floppy it displays the following message:

```
Remove the diskette labeled 'Boot Floppy 1 of 3'.
```

```
If you have a diskette labeled 'Host Bus Adapter  
Drivers', insert that diskette now.
```

```
For more information on Host Bus Adapter diskettes, see  
the UnixWare Installation Handbook.
```

```
Otherwise, if you do not have (or do not need to use) a  
Host Bus Adapter diskette, insert the diskette labeled  
"Boot Floppy 2 of 3".
```

```
Press 'ENTER' to continue.
```

3. Remove Lucent INTUITY UNIX Boot Floppy 1 of 3 from the floppy disk drive.
4. Continue with the next procedure, "[Loading the Host Bus Adapter.](#)"

Loading the Host Bus Adapter

To load the host bus adapter, do the following:

1. Insert the diskette labeled "Pentium HBA Floppy" into the floppy disk drive.
2. Press **ENTER**.

The system displays the following message:

```
The Host Bus Adapter driver(s) on the Host Bus Adapter
diskette have been loaded and you can now remove the
diskette.
```

If you have another Host Bus Adapter diskette (for different adapters), insert that diskette now.

For more information, see the UnixWare Installation Handbook.

Otherwise, if you do not have (or do not need to use) another Host Bus Adapter diskette, insert the diskette labeled "Boot Floppy 2 of 3" now.

Press 'ENTER' to continue.

3. Remove the diskette labeled "Pentium HBA Floppy" from the floppy disk drive.
4. Continue with the next procedure, "[Continuing the UnixWare Installation](#)."

Continuing the UnixWare Installation

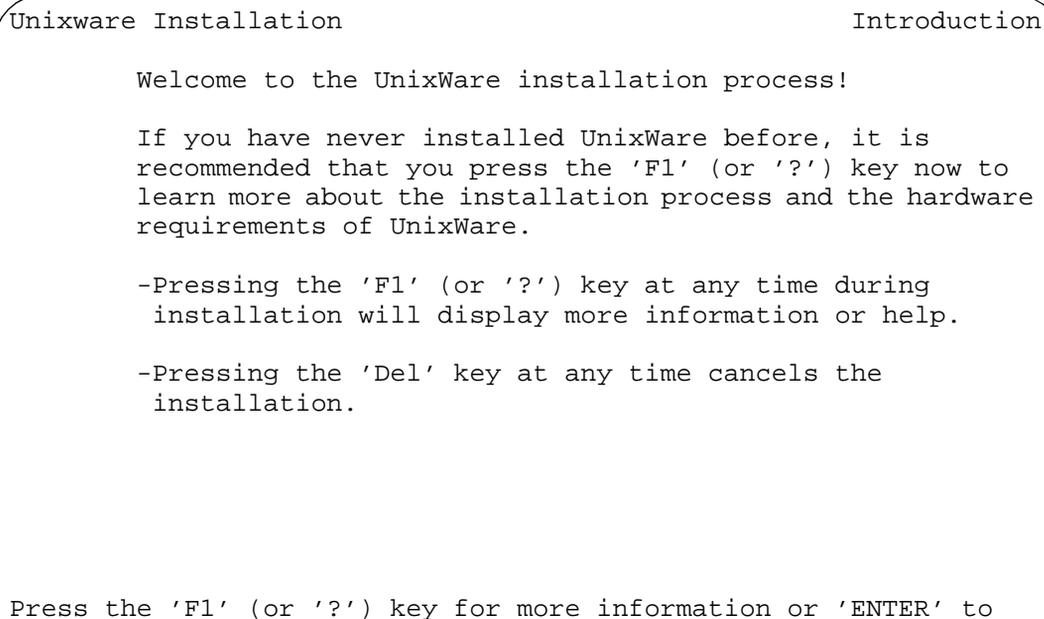
To continue the UnixWare installation, do the following:

1. Insert the diskette labeled "Unixware for INTUITY Boot Floppy 2 of 3" into the floppy disk drive.
2. Press **ENTER**.

The system displays the Introduction screen ([Figure 3-2](#)).

NOTE:

If the system displays a message that the system must have at least 60 MBytes of space in the hard disk drive to install UNIX, the hard disk drive is experiencing problems. The cable may not be connected, or the hard disk drive may be damaged. Power down the system and check the hard disk drive cables. See "Removing Power from the MAP/100" in Chapter 4, "Getting Inside the Computer", of *INTUITY Messaging Solutions Release 4 MAP/100 Maintenance*, 585-310-174, for the procedure.



```
Unixware Installation                                     Introduction

Welcome to the UnixWare installation process!

If you have never installed UnixWare before, it is
recommended that you press the 'F1' (or '?') key now to
learn more about the installation process and the hardware
requirements of UnixWare.

-Pressing the 'F1' (or '?') key at any time during
  installation will display more information or help.

-Pressing the 'Del' key at any time cancels the
  installation.

Press the 'F1' (or '?') key for more information or 'ENTER' to
```

Figure 3-2. Introduction Screen

3. Press **ENTER**.

If Disk 0 has been replaced with a new hard disk drive, the system displays the UnixWare Installation Files Deleted Warning screen ([Figure 3-3](#)).

If the system does not display the UnixWare Installation Files Deleted Warning, continue with the next procedure, "[Setting Up the Keyboard](#)."

WARNING: Files have been detected in the active partition(s) of your hard disk(s).

In order to install the operating system, you must have an active UNIX partition occupying 100% of your hard disk. No other partitions may share the disk.

You have the option of removing the existing partitions at this point and creating a new UNIX partition. You should only remove the existing partitions if you don't want to save any files on your disk.

If you elect to abort the installation, the existing partitions will not be removed and installation will be halted.

1. Destroy existing partitions and create a new UNIX partition.
2. Abort the installation, leaving existing partitions untouched.

Type '1' or '2' followed by 'ENTER':1

Figure 3-3. UnixWare Installation Files Deleted Warning Screen

Setting Up the Keyboard

To setup the keyboard, do the following:

1. Starting at the UnixWare Installation Files Deleted Warning screen ([Figure 3-3](#)), press `(ENTER)`.

The system displays the Keyboard Setup screen ([Figure 3-4](#)).

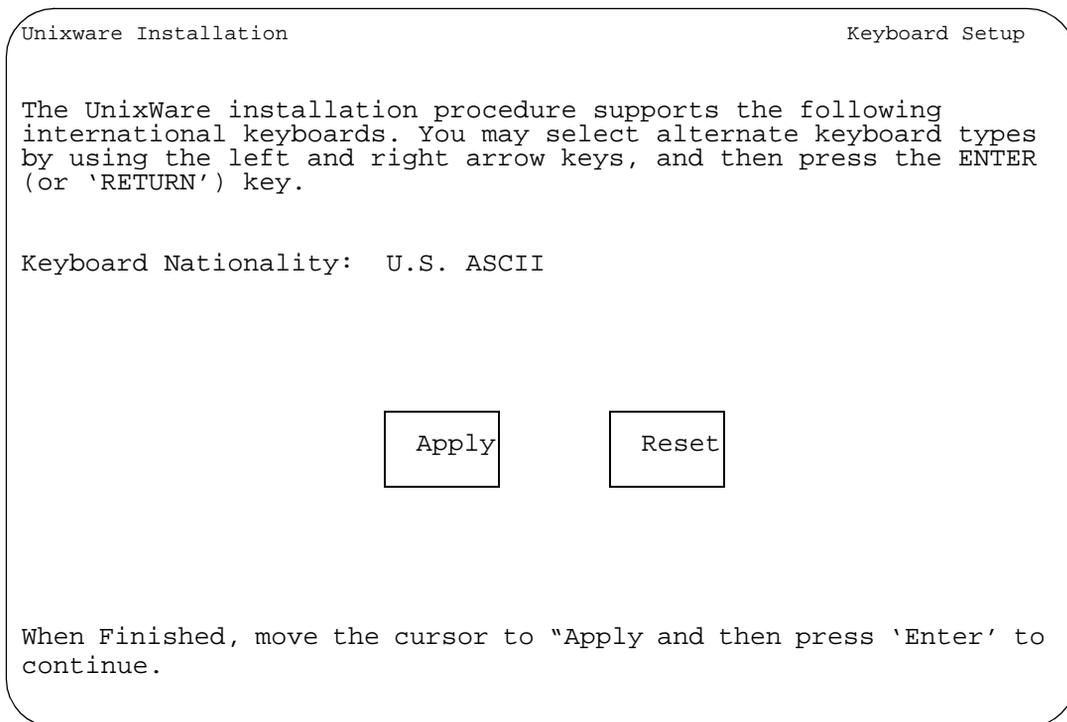


Figure 3-4. Keyboard Setup Screen

2. Use the left  and right  arrows on your keyboard to move through the field selections.
3. Select U.S. ASCII.
4. Press the down  arrow to move to the Apply field and press .
5. Continue with the next procedure, "[Configuring the System Date and Time.](#)"

Unixware Installation Configure Date and Time
On this screen, you will check the current date and time that is set on your computer, and change them if necessary. You also select what timezone configuration you require. Either set a continent(s) which will lead you onto a further screen with locations or Manual Entry for a custom timezone.

```
The current date:  
The current Time:  
Enter the current year:  
Enter the month of the year:  
Enter the day of the month:  
Enter the hour of the day:  
Enter the minute of the hour:  
Timezone configuration:
```

Apply

Reset

Press 'TAB' to move the cursor between fields. When finished, move the cursor to 'Apply' and then press 'ENTER' to continue.

Figure 3-5. Configure Date and Time Screen

Configuring the System Date and Time

To configure the system date and time, do the following:

1. Starting at the Configure Date and Time screen ([Figure 3-5](#)), use the left  and right  arrows on your keyboard to move through the field selections. Use the down  arrow to move to the next field.
2. Select the appropriate data for each field.
3. Press the down  arrow to move to the `Apply` field and press `ENTER`.
The system displays the Continent Location Choice screen ([Figure 3-6](#)).
4. Continue with the next procedure, "[Choosing the Continent Location.](#)"

UnixWare Installation Continent Location Choice Screen

On this screen you choose the country/location you are in, having already selected the continent. To go back to the continent screen select 'Back One Screen'. Use Left and Right Arrow Keys.

Location:

Apply

Reset

Press 'TAB' to move the cursor between fields. When finished, move the cursor to 'Apply' and then press 'ENTER' to continue.

Figure 3-6. Continent Location Choice Screen

Choosing the Continent Location

To choose the continent location, do the following:

1. Starting at the Continent Location Choice screen ([Figure 3-6](#)), use the left ◀ and right ▶ arrows on your keyboard to move through the field selections.
2. Select the appropriate data for the field.
3. Press the down ▼ arrow to move to the Apply field and press **ENTER**.
The system displays the Primary Hard Disk Partitioning screen ([Figure 3-7](#)).
4. Continue with the next procedure, "[Partitioning Hard Disk Drive 0.](#)"

Unixware Installation Primary Hard Disk Partitioning

In order to install UnixWare, you must reserve a partition (a portion of your hard disk's space) on your primary hard disk for the UNIX System. After you press 'ENTER', you will be shown a screen that will allow you to create new partitions, delete existing partitions or change the active partition of your primary hard disk (the partition that your computer will boot from).

WARNING: All files in any partition(s) you delete will be destroyed. If you wish to attempt to preserve any files from an existing UNIX System, do not delete its partition(s).

The UNIX System partition that you intend to use on the primary hard disk must be at least 120 MBs, and labeled 'Active.'

Press 'ENTER' to continue.

Figure 3-7. Primary Hard Disk Partitioning Screen

Partitioning Hard Disk Drive 0

To partition Hard Disk Drive 0, do the following:

1. Starting at the Primary Hard Disk Partitioning screen ([Figure 3-7](#)), press .

The system displays the Partition Creation screen ([Figure 3-8](#)).

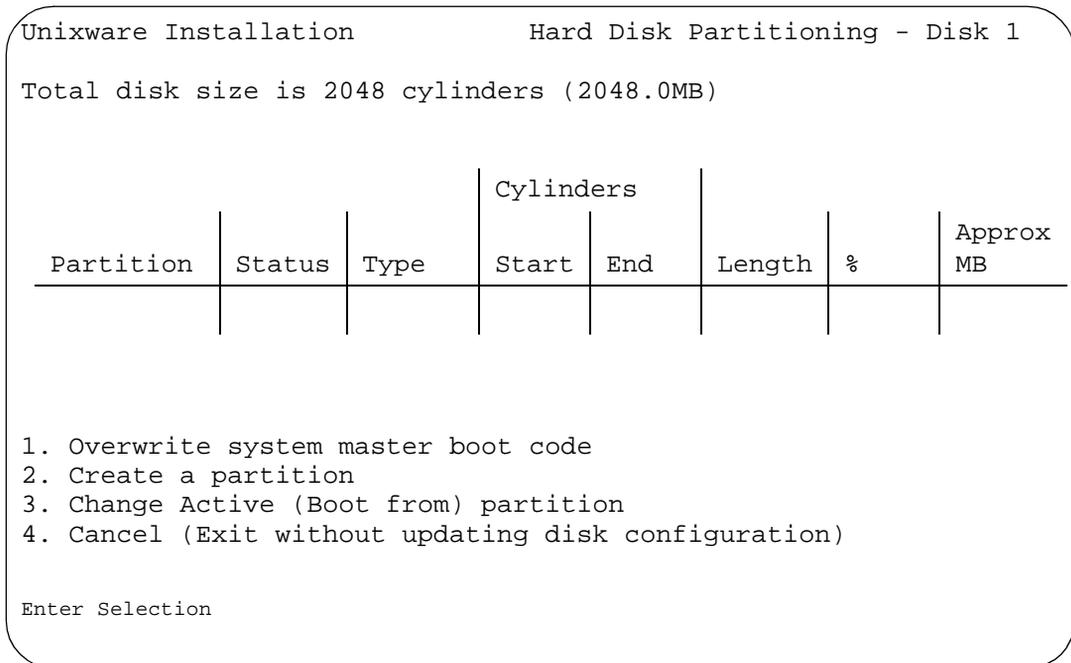


Figure 3-8. Partition Creation Screen

2. Enter 2

The system displays the Partition Configuration screen ([Figure 3-9](#)).

Unixware Installation

Create A Partition

Total disk size is 2048 cylinders (2048.0MB)

Partition	Status	Type	Cylinders		Length	%	Approx MB
			Start	End			
Partition Type Percentage of disk							

Apply
Reset

Figure 3-9. Partition Configuration Screen

3. Use the left and right arrows on your keyboard to move through the field selections.
4. Select UNIX System for the Partition Type field.
5. Select 100 for the Percentage of disk field.
6. Press the down arrow to move to the Apply field and press **ENTER**.
 The system displays the Partition Confirmation screen ([Figure 3-10](#)).

UnixWare Installation Hard Disk Partitioning - Disk 1
Total disk size is 2048 cylinders (2048.0MB)

Partition	Status	Type	Start	End	Length	%	Approx MB
1	Active	UNIX System	0	2047	2048	100	2048.0

1. Overwrite system master boot code
2. Delete a partition
3. Exit (Update disk configuration and exit)
4. Cancel (Exit without updating disk configuration)

Figure 3-10. Partition Confirmation Screen

7. Enter **3**

The system displays the Secondary Hard Drive Partitioning screen ([Figure 3-11](#)).

8. Continue with the next procedure, "[Non-Partitioning of Hard Disk Drive 1.](#)"

UnixWare Installation Secondary Hard Disk Partitioning

You may use a partition of your secondary hard disk for the UNIX System. If you choose to use a partition of your secondary hard disk, you will be shown a screen that will allow you to partition your secondary hard disk.

WARNING: All files in any partition(s) you delete will be destroyed.

If you choose to create a UNIX System partition on your secondary hard disk, it must be at least 40 MBs.

Your Options are:

1. Do not use a partition of the secondary hard disk for the UNIX System.
2. Use a partition of the secondary hard disk for the

Figure 3-11. Secondary Hard Disk Partitioning Screen

Non-Partitioning of Hard Disk Drive 1

To *not* partition Hard Disk Drive 1, do the following:

1. Starting at the Secondary Hard Disk Partitioning screen ([Figure 3-11](#)), select "1".
2. Press .

The system displays the Installation Type Selection screen ([Figure 3-12](#)).

3. Continue with the next procedure, "[Choosing the Installation Type.](#)"

Unix System Installation Installation Type Selection

You must choose a system type. The system type you choose will determine the default file system sizes you will specify on the next screen.

Press the 'F1' or '?' key to see more information about these different system types.

Platform Type: MAP/100
CPU Type: Pentium-120
Offer Type: INTUITY AUDIX

Apply

Reset

Press 'TAB' to move between fields.

Figure 3-12. Installation Type Selection Screen

Choosing the Installation Type

To choose the installation type, do the following:

1. Starting at the Installation Type Selection screen ([Figure 3-12](#)), use the left  and right  arrows on your keyboard to move through the field selections. Use the down  arrow to move to the next field.
2. Select MAP/100 for the Platform Type field.
3. Select Pentium-120 for the CPU Type field.
4. Select INTUITY AUDIX for the Offer Type field.
5. Press the down  arrow to move to the Apply field.
6. Press **ENTER**.

The system displays the UnixWare Installation Set Slice Sizes screen ([Figure 3-13](#)).

7. Continue with the next procedure, "[Setting the Slice Sizes](#)."

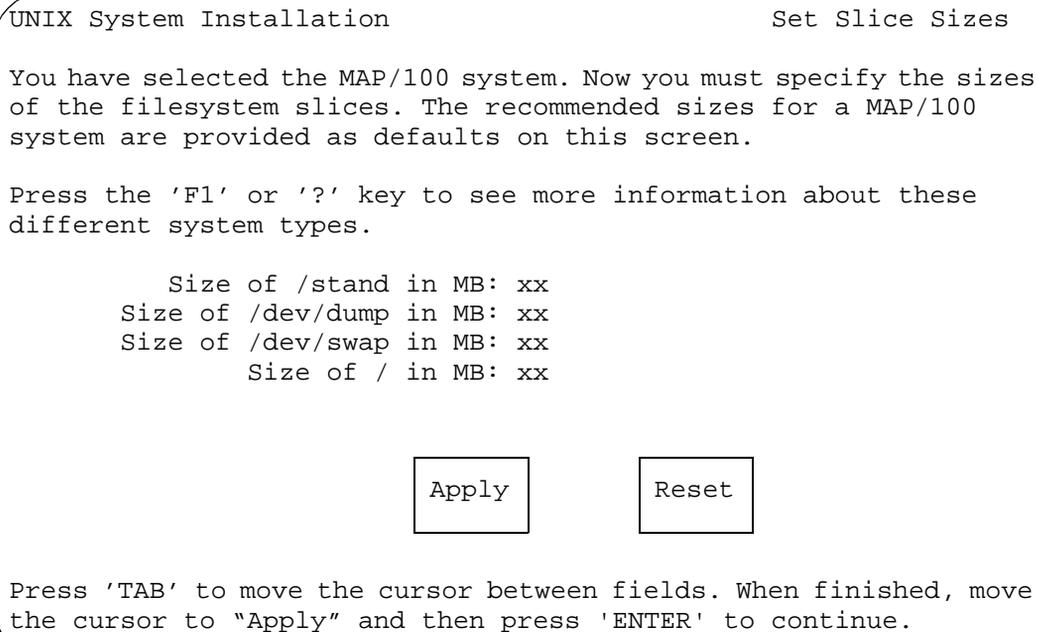


Figure 3-13. UnixWare Installation Set Slice Sizes Screen

Setting the Slice Sizes

To set the slice sizes, do the following:

1. Starting at the UnixWare Installation Set Slice Sizes screen ([Figure 3-13](#)), use the left ◀ and right ▶ arrows on your keyboard to move through the field selections. Use the down ▼ arrow to move to the next field.
2. Enter the appropriate number of megabytes of space needed for each slice as specified in [Table 3-1](#).

Table 3-1. Space Requirements for the MAP/100

Slice	Space Requirements (MBytes)
/stand	10
/dev/dump	97
/dev/swap	193
/	200

3. Press the down (▼) arrow to move to the Apply field.
4. Press (ENTER).

The system displays the Hard Disk Surface Analysis screen ([Figure 3-14](#)).

5. Continue with the next procedure, "[Performing a Hard Disk Drive Surface Analysis](#)."

UNIX System Installation

Hard Disk Surface Analysis

Surface analysis for the first disk is recommended but not required. Here you must choose to skip or perform surface analysis.

Press the 'F1' or '?' key to see more information about these different system types.

Your choices are:

1. Perform surface analysis
2. Skip surface analysis

Figure 3-14. Hard Disk Surface Analysis Screen

Performing a Hard Disk Drive Surface Analysis

CAUTION:

Surface analysis is required for all systems because it makes a configuration change to the disk. Failure to perform surface analysis may cause the Lucent INTUITY system to fail.

To perform a hard disk drive surface analysis, do the following:

1. Starting at the Hard Disk Surface Analysis screen ([Figure 3-14](#)), press (ENTER).

This will accept the default of 1 and perform the surface analysis. The system displays the following message:

Checking the hard disk for defects and creating file systems. This will take a few minutes. Please wait.

Then [Figure 3-15](#) appears.

```
UnixWare Installation                               Exchange Diskette

Remove the diskette from the drive and insert the diskette labeled
"Boot Floppy 2 of 3".

Press 'ENTER' to continue.
```

Figure 3-15. Hard Disk Surface Analysis Screen

2. Remove the Lucent INTUITY UNIX Boot Floppy 2 of 3 from the floppy disk drive.
3. Continue with the next procedure, "[Copying the Unix System Files](#)."

Copying the Unix System Files

To copy the Unix system files, do the following:

1. Insert the diskette labeled "Lucent INTUITY UNIX Boot Floppy 3 of 3" into the floppy disk drive.
2. Press `(ENTER)`.

The system displays the following message:

```
Copying Unix System files from the diskette onto you
hard drive. This will take a few minutes. Please wait.
```

The system then displays the following message:

```
Making file systems on your hard disk. This will take a
few minutes. Please wait
```

The system displays the Remove Diskette screen ([Figure 3-16](#)).

UnixWare Installation Remove Diskette 3

Remove Boot floppy 3 of 3 from the drive now.

Press 'ENTER' to continue.

Figure 3-16. Remove Diskette Screen

3. Remove the "Lucent INTUITY UNIX Boot Floppy 3 of 3" from the floppy disk drive.
4. Press **ENTER**.
The system displays the Application Server Media Type screen ([Figure 3-17](#)).
5. Continue with the next procedure, "[Loading the Application Server Software](#)."


```
UnixWare Installation                Insert Intuity Image Tape
```

```
Please insert the Intuity Image  
cartridge tape into the tape drive and press 'ENTER'.
```

```
Your choices are:
```

1. The tape has been inserted in the tape drive.
2. Go back to previous menu.

Figure 3-18. Insert Lucent INTUITY Tape Screen

3. Press **ENTER**.

This action accepts the default of 1 to indicate the tape has been inserted and is ready for access.

The system displays the following message:

```
Installation in progress. This will take several  
minutes. Please do not remove the tape.
```

The system displays a series of informational messages.

When all files are loaded, the system displays the following message:

```
The system is ready.
```

```
The system's name is Intuity.
```

```
Welcome to USL UnixWare System V Release 4.2 Version 1  
Console Login:
```

⇒ NOTE:

Ignore the following message, if it is displayed:

```
Error: IRQ chosen for driver does not match adapter  
configuration XXXXXX Equinox Megaport STREAMS  
Device Driver.
```

4. Remove the cartridge tape labeled "Lucent INTUITY UnixWare Image" from the tape drive. See "Inserting and Removing Cartridge Tapes" in Chapter 3, "Common System Procedures", in *INTUITY Messaging Solutions Release 4 MAP/100 Maintenance*, 585-310-174, for the procedure.
5. Continue with the next procedure, "[Installing the INTUNIX+e Software](#)."

Installing the INTUNIX+e Software

To install the INTUNIX+e software, do the following:

1. Verify that the floppy disk drive is empty.



CAUTION:

*If the floppy disk drive contains a diskette, the system reboot will fail. If this happens, remove the floppy from the floppy disk drive and press **Ctrl-Alt-Del**.*



NOTE:

If you are installing the operating system onto a machine that is not equipped with a LAN circuit card, the system may display a message that states that an invalid check sum occurred. Ignore this message.

2. Log in to the system as root.
3. Press **ENTER** at the password prompt.



NOTE:

If the current password has expired, enter **Intuity1** for the password. Use this password instead of pressing **ENTER** for the remainder of the procedure. As soon as the Lucent INTUITY system tape is reloaded, you will change this password.

The system displays with the UNIX prompt (#).

4. Enter **pkgadd -d ctape1**

The system displays the following message:

```
Insert a cartridge into Tape Drive 1.  
Type [go] when ready  
or [q] to quit: (default: go)
```

5. Insert the Lucent INTUITY INTUNIX+e cartridge tape into the tape drive. See "Inserting and Removing Cartridge Tapes" in Chapter 3, "Common System Procedures", in *INTUITY Messaging Solutions Release 4 MAP/100 Maintenance*, 585-310-174, for the procedure.

6. Press **ENTER**.

The system displays the following message:

The following sets are available:

1. INTUNIX+e INTUITY UnixWare 1.1.2 Enhancement Set
- Update E
(486) i.1.3

Select package(s) you wish to process (or 'all' to process all packages). (default: all) [?,??,q]:

7. Press **ENTER**.

The system displays the following message:

The following packages are available:

1. year2000 Year 2000 updates for Unixware for Intuity
2. ezsetup SMC LAN Adapter Setup Program
3. smcUW11 SMC Ethernet Device Driver ISA
4. audfs AUDIX File System
5. rpcfix Remote Procedure Calls fix

Select package(s) you wish to process (or 'all' to process all packages). (default: all) [?,??,q]:

8. Press **ENTER**.

The system displays a series of messages and then the following message:

A version of the LAN driver is already installed.
Do you want to overlay that driver and re-use the kernel options for the driver? The overlay option, which is often used during field upgrades, will preserve the network environment.

y) to overlay

q) to quit (default: quit)

Do you want to overlay the driver:

9. Enter **y**

The system displays the following message:

The board currently installed in the system is the 8416 LAN adapter.

1) 8216 LAN adapter

2) 8416 LAN adapter

q) to abort installation

Please enter the board type you wish to use:

10. Enter **2**

 **NOTE:**

Ignore any warning messages displayed by the system.

The system displays the following message:

```
Insert a cartridge into Tape Drive 1.  
Type [go] when ready,  
      or [q] to quit: (default: go)
```

11. Enter **q**
12. Ignore the message displayed recommending a system reboot. This reboot will take place during the “Running *installit*” procedure
13. Remove the Lucent INTUITY INTUNIX+e cartridge tape from the tape drive.
14. Continue with the next procedure, “[Running *installit*](#)”.

Running *installit*

To run *installit*, do the following:

1. At the Unix system prompt, enter **installit**



CAUTION:

*Make sure the **installit** command and the associated reboots have been completed prior to continuing with any other procedure.*

The system displays the following message:

```
Installit execution started: <date>  
  
The system will attempt to perform a new installation  
Press <ENTER> to continue the Volume Manager  
installation...
```

2. Press **(ENTER)**.

The system is rebooted and then displays the following message:

```
The UNIX Operating system kernel will be rebuilt now.  
  
The system must now be rebooted to continue the  
reconfiguration  
  
Hit RETURN to continue.
```

3. Press **(ENTER)**.

The system is rebooted and then displays the following message:

```
The system must now be rebooted.  
  
Hit RETURN to continue.
```

4. Press **(ENTER)**.

The system is rebooted and then displays the following message:

```
Console Login:
```

5. Continue with the next procedure, "[Installing the Platform Software.](#)"

Installing the Platform Software

To install the platform software, do the following:

1. Log in to the system as root.
2. Enter **pkgadd -d ctape1**

The system displays the following message:

```
Insert a cartridge into Tape Drive 1.  
Type [go] when ready  
or [q] to quit: (default: go)
```

3. Insert the Lucent INTUITY Platform AUDIX Set cartridge tape into the tape drive.
4. Press **(ENTER)**.

The system displays the following message:

```
Installation in progress. Do not remove the cartridge.
```

```
The following sets are available:
```

```
1      AUDIXset      INTUITY Platform AUDIX Set  
                (i486) i.2.1
```

```
Select package(s) you wish to process (or 'all' to  
process all packages). (default: all) [?,??,q]
```

5. Press **(ENTER)**.

The system displays the following message:

```
Processing:
```

```
Set: Lucent Intuity Platform AUDIX Set (AUDIXset) from  
<ctape1>.
```

```
Lucent Intuity Platform AUDIX Set  
(i486)
```

```
Using </> as the package base directory.
```

```
Do you want to run default set installation? (default:  
y)
```

6. Press **(ENTER)**.

The system displays prompts for the craft and tsc passwords.

7. Enter the passwords you want to use for these logins.

The system displays the following message:

```
Please enter the Memory Address for RMB (default:dc00)
[?]
```

8. Press **ENTER**.

The system displays the following message:

```
Insert a cartridge into Tape Drive 1.
Type [go] when ready
    or [q] to quit: (default: go)
```

9. Enter **q**

The system displays the following message:

```
IMPORTANT NOTICE
If installation of all desired packages is complete,
the machine should be rebooted in order to ensure sane
operation. Execute the shutdown command with the
appropriate options and wait for the "Console Login"
prompt.
```

10. Remove the Platform Software cartridge tape from the tape drive.
11. Continue with the next procedure, "[Installing Enterprise Manager Setup Script](#)".

Installing Enterprise Manager Setup Script

To install the Enterprise Manager setup script, do the following:

1. Enter **pkgadd -d diskette1**

The system displays the following message:

```
Insert a diskette into Floppy Drive 1.  
Type [go] when ready  
    or [q] to quit: (default: go)
```

2. Insert the INTUITY Enterprise Manager Setup floppy into the floppy drive.
3. Press **(ENTER)**.

The system displays the following message:

```
Installation in progress. Do not remove the diskette.
```

```
The following packages are available:
```

```
    1      EMsetup      Intuity Enterprise Manager Setup  
                        (586) <release number>
```

```
Select package(s) you wish to process (or 'all' to  
process all packages). (default: all) [?,??,q]
```

4. Press **(ENTER)**.

The system displays the following message:

```
Processing:
```

```
Package: Intuity Enterprise Manager Setup (EMsetup)  
from <diskette1>.
```

```
Intuity Enterprise Manager Setup  
(586) <release number>
```

```
Using </> as the package base directory.
```

The system displays other status messages, then the following:

```
Installation of Intuity Enterprise Manager Setup  
(EMsetup) was successful
```

```
Insert a diskette into Floppy Drive 1.  
Type [go] when ready,  
    or [q] to quit: (default: go)
```

5. Enter **q**

Setting Up TCP/IP Parameters

To set up TCP/IP parameters, do the following:

1. Get the following information from your LAN administrator
 - IP address of the Enterprise Manager
 - The system name (for example, EM1)
 - The broadcast address for this network
 - The default router address for this Enterprise Manager
2. Enter **/EMsetup/emsetup**

EMsetup removes several packages from the system, which are displayed on the screen. Then the system displays the following messages:

```
Intuity Enterprise Manager System (De-)Installation
Utilities
```

- ```
0. Read Me First (Recommended)
1. Set up TCP/IP Parameters
2. Create Veritas File System
3. Set up Kernel Parameters
4. Add Oracle 7.0.16 package
5. Delete Veritas File Systems (De-installation)
6. Clear Disk Partition(De-installation)
7. Exit
```

Enter Choice:

3. Enter **1**
4. Enter the Enterprise Manager system name (for example, intuity1).
5. Enter the IP address of Enterprise Manager.
6. Enter the broadcast IP address.
7. Enter the router IP address.

The system displays the following message

```
The UNIX Operating System kernel will be rebuilt now.
This will take some time. Please wait.
```

```
The UNIX Operating System kernel has been rebuilt.
```

```
To return to the main menu, press <Enter> ..
```

8. Press **(ENTER)**.
9. Continue with the next procedure, ["Setting Up the Veritas File System"](#).

## Setting Up the Veritas File System

---

To set up the Veritas file system, do the following:

1. From the INTUITY Enterprise Manager System (De-)Installation Utilities menu, select **2**

The system displays the following message:

IMPORTANT

Veritas File System can be created to support both mirrored as well as non-mirrored SCSI disks. A non-mirrored configuration can accommodate more Managed Elements than a mirrored system.

You need to choose now between the mirrored and non-mirrored configuration. Please note that once you decide to have a particular configuration, changing over to the other configuration would necessarily mean de-installing the system and THEN changing the configuration during the next installation. Therefore you should be certain about the way this system is to be configured.

Note: Enterprise Manager Rel 1.0 does not support SCSI disk mirroring. Therefore, you should select the non-mirrored configuration only.

Do you want to turn on SCSI mirroring? (default: No).

2. Press **(ENTER)**.

The system displays messages as the file system is created on each disk 01 through 05. Then, the system displays the following message:

To return to the main menu, press <Enter>..

3. Press **(ENTER)**.
4. Continue with the next procedure, "[Setting Up Kernel Parameters](#)".

## Setting Up Kernel Parameters

---

To set up kernel parameters, do the following:

1. From the INTUITY Enterprise Manager System (De-)Installation Utilities menu, select **3**

The system displays status messages as the UNIX Operating System kernel parameters as being set. Then, the system displays the following message:

```
Reboot now? (default: Yes)
```

2. Press **(ENTER)**.

The system displays:

```
Ready to re-boot. Press <Enter> when ready ..
```

3. Press **(ENTER)**.

The system is rebooted and you are returned to the Console Login prompt.

4. Continue with [Chapter 4, "Installing ORACLE Software"](#).

# Installing ORACLE Software

# 4

---

## Overview

---

This chapter details installation procedures for the ORACLE software for the INTUITY™ Enterprise Manager.

## Purpose

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The purpose of this chapter is to provide the information necessary to reload the ORACLE software on the INTUITY Enterprise Manager platform.



**NOTE:**

Installing ORACLE software takes approximately 15 minutes.

## Installing ORACLE Software

---

To install the ORACLE 7.0.16 software, do the following:

1. From the Intuity Enterprise Manager System (De-)Installation Utilities menu, select **4**.

The system displays the following message:

```
Adding user 'oracle' ..
You must supply the password for this user as 'oracle'
(without the single quotes!) now.
New password:
```

2. Enter the password.
3. Enter the same password again.

The system displays the following message:

```
About to transfer the EMoracle package from the
cartridge to a temporary area. You need to insert the
EMoracle package cartridge into the drive now.
```

```
Insert a cartridge into Tape Drive 1
Type [go] when ready,
or [q] to quit: (default: go)
```

4. Insert the Oracle 7.0.16 cartridge tape in the cartridge tape drive and press **(ENTER)**.

The system displays the following message

### IMPORTANT NOTICE

```
Oracle 7.0.16 is in the process of getting installed.
Please make sure that this installation has a valid
license negotiated through Lucent Technologies.
```

```
By press Enter, you acknowledge that this site has a
valid Oracle license and that you agree to abide by the
licensing agreement from Oracle Corporation.
```

```
Press Enter to continue ..
```

5. Press **(ENTER)**.

The system moves the files from temporary storage, then system displays:

```
Installation of Intuity Enterprise Manager Oracle
7.0.16 (EMoracle) was successful.
Oracle 7.0.16 installation is complete now.
Cleaning up, one moment .. done!
```

```
To return to the main menu, press <Enter> ..
```

6. Enter **7**
7. Continue with [Chapter 5, "Installing Enterprise Manager Software"](#).

# Installing Enterprise Manager Software

# 5

---

## Overview

This chapter details installation procedures for the INTUITY™ Enterprise Manager system software.

---

## Purpose

This purpose of this chapter is to provide the information necessary to install or reload the INTUITY Enterprise Manager system.



**NOTE:**

Installing Enterprise Manager software takes approximately 2 and 1/2 hours. Specifically, the reports package takes a significant amount of this time.

## Installing JAM Run-Time Environment Software

---

To install the JAM run-time environment software, do the following:

1. Log in as **root**.
2. Insert the cartridge tape labeled "JAM Run-Time Environment" into the cartridge tape drive.
3. Enter **pkgadd -d ctape1**

The system displays the following message:

```
Insert a cartridge into Tape Drive 1.
Type [go] when ready,
 or [q] to quit: (default: go)
```

4. Press **(ENTER)**.

The system displays the following message:

```
Installation in progress. Do not remove the cartridge.
```

```
The following packages are available:
```

1. jamrt Intuity JAM Run-Time Environment  
 (i486) 1.0-3

```
Select package(s) you wish to process (or 'all' to
process all packages). (default: all) [?,??,q]:
```

5. Press **(ENTER)**.

The system displays the following message:

```
Installation of Intuity JAM Run Time Environment
(jamrt) was successful
```

```
Insert a cartridge into Tape Drive 1.
Type [go] when ready,
 or [q] to quit: (default: go)
```

6. Enter **q**

The system displays the Console Login prompt.

7. Continue with the procedure ["Installing Enterprise Manager Software"](#).

## Installing Enterprise Manager Software

---

To install the INTUITY Enterprise Manager software set, do the following:

1. Log in as **root**.
2. Insert the cartridge tape labeled "INTUITY Enterprise Manager" into the cartridge tape drive.
3. Enter **pkgadd -d ctape1**

The system displays the following message:

```
Insert a cartridge into Tape Drive 1.
Type [go] when ready,
 or [q] to quit: (default: go)
```

4. Press **(ENTER)**.

The system displays the following message:

```
Installation in progress. Do not remove the cartridge.

The following packages are available:
```

- ```
  1. EMset           Intuity Enterprise Manager Set  
                        (i586) <release number>
```

```
Select the package(s) you wish to process (or 'all' to  
process all packages). (default: all) [?,??,q]:
```

5. Press **(ENTER)**.

The system displays the following message:

```
ATTENTION:  
Installation of Enterprise Manager package requires the  
system to be on run level 3. Do you wish to continue and  
change the run level to 3 (y/n) ?:
```

6. Enter **y**

The system displays the following message:

```
ATTENTION :  
Data files of Enterprise Manager will be created with  
this installation  
Please save any data files or tables required before  
continuing with installation.  
Do you wish to continue ? (y/n/q):
```

7. Enter **y**

The system displays the following message:

```
Starting the Oracle server instance  
Do you wish to startup Oracle server (y/n/q)
```

8. Enter **y**

The system displays several status messages. Then, the following is displayed:

Please enter a password when prompted, and note it down in the log book.

Enter a password for emmgr:

9. Enter a password for emmgr (Enterprise Manager).

10. Enter the password for emmgr again.

The system displays the following message:

PROCESSING of <Intuity Enterprise Manager> is completed.

Insert a cartridge into Tape Drive 1.

Type [go] when ready,

or [q] to quit: (default: go)

11. Enter **q**

The system displays the following message:

*** IMPORTANT NOTICE ***

If installation of all desired packages is complete, the machine should be rebooted in order to ensure sane operation. Execute the shutdown command with the appropriate options and wait for the "Console Login:" prompt.

12. At the Console Login prompt, enter **shutdown -g0 -y -i6**

 **NOTE:**

Once you have completed installation of all software, you may begin administration. You must first use the Feature Options screen to verify that the correct number of managed elements that will be in this Enterprise Manager network have been added.

Alarm and Log Messages

6

Overview

This chapter provides the alarm and administrator log entries for the INTUITY Enterprise Manager. The information in this chapter should be used in conjunction with the following books:

- *INTUITY Interchange Maintenance*, 585-310-574
- *INTUITY Messaging Solutions Release 4.0 Alarm and Log Messages*, 585-310-566

Purpose

The purpose of this chapter is to provide detailed information about the alarm and administrator entries and any necessary resolution procedures.

Alarm Format

⇒ NOTE:

For complete information on how to access each type of log and how the log displays its information, refer to Chapter 1, "Getting Started," of *INTUITY Messaging Solutions Release 4 Alarm and Log Messages*, 585-310-566.

The alarm log entries are displayed under the following application type or identifier:

- CT — Cut-thru access
- DC — Data collection
- DP — Data provisioning

⇒ NOTE:

If you require specific information about errors that may occur during subscriber provisioning, refer to Chapter 10, "Subscriber Administration," of *INTUITY Enterprise Manager Administration*, 585-310-576.

- PM — Performance monitoring
- RP — Reports
- SP — Service provider interface

Each alarm contains the following information:

- Resource type — The resource provided by the part of the system that is affected by the alarm
- Alarm code — The identifier for this alarm in under the Resource type
- Event ID — A unique identifier for that entry (for example, CTQK001)
- Alarm level — The severity of the alarm (major, minor, or warning)
- Message text — The text that appears in the Maintenance log
- Description — The detailed text that indicates specifics about the alarm
- Repair action — The procedure to follow to correct the alarm

CT — Cut-Through Access

The following alarms are associated with the Enterprise Manager cut-through access module.

CTQKEY Resource Type

Alarm Code: 0

Event ID: CTQK001

Alarm Level: Minor

Message Text: Error in getting queue key

Description: This alarm indicates the cut-through access module encountered an error when getting a queue key.

Repair Action: Escalate this problem to the next level of support.

TSC Only:

Procedure 1:

1. From the UNIX system prompt, enter **init 3**
2. Enter **who -r** to verify the run level of the system has changed to 3.
3. Repeat Step 2 at regular intervals until the output indicates the change in run level.
4. Once the run level has changed to 3, enter **init 4**
5. Enter **who -r** to verify the run level of the system has changed to 4.
6. Repeat Step 5 at regular intervals until the output indicates the change in run level.

Procedure 2:

Reboot the system by entering **shutdown -y -g0 -i6**

Alarm Code: 1

Event ID:	CTQK002
Alarm Level:	Minor
Message Text:	Error in receiving message from performance module
Description:	This alarm indicates the cut-through access module encountered an error when receiving a message from the performance module.

Repair Action:

1. Enter **bbs | pg**
2. Check for the queue name `throttle_queue` and note the number under the `QKY` column.
3. Find the equivalent hexadecimal number.
4. Enter **ipcs -qob | pg**
5. Search in the 3rd column the hexnumber as determined in Step 3.
6. In the same row, note the value as displayed in the 7th column ('ID' column name) and escalate the problem to the next level of support.

TSC Only:

1. From the UNIX system prompt, enter **init 3**
2. Enter **who -r** to verify the run level of the system has changed to 3.
3. Repeat Step 2 at regular intervals until the output indicates the change in run level.
4. Once the run level has changed to 3, enter **init 4**
5. Enter **who -r** to verify the run level of the system has changed to 4.
6. Repeat Step 5 at regular intervals until the output indicates the change in run level.

Alarm Code: 2

Event ID:	CTQK003
Alarm Level:	Minor
Message Text:	Error in sending messages to performance module

Description: This alarm indicates the cut-through access module encountered an error when sending a message to the performance module.

Repair Action:

1. Enter **bbs | pg**
2. Check for the queue name `throttle_queue` and note the number under the `QKY` column.
3. Find the equivalent hexadecimal number.
4. Enter **ipcs -qob | pg**
5. Search in the 3rd column the hexnumber as determined in Step 3.
6. In the same row, note the value as displayed in the `ID` column and escalate the problem to the next level of support.

TSC Only:

1. Log into the system as root or tsc.
2. From the UNIX system prompt, enter **init 3**
3. Enter **who -r** to verify the run level of the system has changed to 3.
4. Repeat Step 3 at regular intervals until the output indicates the change in run level.
5. Once the run level has changed to 3, enter **init 4**
6. Enter **who -r** to verify the run level of the system has changed to 4.
7. Repeat Step 6 at regular intervals until the output indicates the change in run level.

CTORA Resource Type

Alarm Code: 0

Event ID: CTORA001

Alarm Level: Minor

Message Text: Oracle error reported.

Description: This alarm indicates the cut-through access module is reporting an ORACLE error.

Repair Action:

1. Determine if the Enterprise Manager ORACLE processes are running.

- a. Enter **ps -ef | grep ora**
- b. Look for the following processes in the output:
 - ora_smon_icdb
 - ora_pmon_icdb
 - ora_d000_icdb
 - ora_s000_icdb
 - ora_dbwr_icdb
2. If all the above processes are not running:
 - a. Enter **init 3** to change the run level of the system to 3.
 - b. Enter **who -r** until the output indicates the run level of the system is 3.
 - c. Enter **su oracle -c dbshut -i** to shutdown the database.
 - d. Enter **su oracle -c dbstart** to start the database.
 - e. Enter **init 4** to change the run level of the system to 4.
 - f. Enter **who -r** until the output indicates the run level of the system is 4.
 - g. If the problem persists, escalate the problem to the next level of support.

TSC Only:

1. Note the type of error reported by ORACLE from the Maintenance log. The ORACLE error message indicates an ORA error code.
2. Enter **\$(ORACLE_HOME)/bin/oerr <facility> <error no.>**
 where **\$(ORACLE_HOME)** is the home directory of ORACLE and if ORA-01017 is the error number ORA-01017, then ORA is the **<facility>**, 01017 is the **<error no.>**.

 To determine the home directory of ORACLE, enter **echo \$(ORACLE_HOME)**
3. If the output indicates an Action statement, perform the steps as indicated or escalate the problem to next level of support.

CTSYS Resource Type

Alarm Code: 0

Event ID:	CTSYS001
Alarm Level:	Minor
Message Text:	Error reported by the Service Provider Interface library.
Description:	This alarm indicates the error is reported by the Service Provider Interface library.
Repair Action:	Escalate this problem to the next level of support.

Alarm Code: 1

Event ID:	CTSYS002
Alarm Level:	Minor
Message Text:	Error in executing the system command for telnet session
Description:	This alarm indicates an error when executing a telnet session from the Enterprise Manager to a managed element.
Repair Action:	Escalate this problem to the next level of support.

TSC Only: .

1. Enter **sar -v 1**
2. If the `proc-s` column indicates a value within 5% of the maximum value reboot the system. For example, reboot the system if `proc-sz` indicates a value 990/1000 where 990 is the current value and 1000 is the maximum value.
3. If the problem persists, escalate to the next level of support.

Alarm Code: 2

Event ID:	CTSYS003
Alarm Level:	Minor

Message Text: Error in opening a temporary file for storing the cut-through access output of ME connectivity with EM.

Description: This alarm indicates the error was encountered when the cut through access module tried to open a temporary file. This file is to store output connectivity information for a managed element to the Enterprise Manager.

Repair Action: Escalate this problem to the next level of support.

TSC Only: .

1. Enter **sar -v 1**
2. If the `proc-s` column indicates a value within 5% of the maximum value reboot the system. For example, reboot the system if `proc-sz` indicates a value 990/1000 where 990 is the current value and 1000 is the maximum value.
3. If the problem persists, escalate to the next level of support.

Alarm Code: 3

Event ID: CTSYS004

Alarm Level: Minor

Message Text: Error in reading the output from the temporary file for created by cut-through access.

Description: This alarm indicates an error was encountered when the cut through access module tried to read the temporary file. This file stores output connectivity information for a managed element to the Enterprise Manager.

Repair Action: Escalate this problem to the next level of support.

DC — Data Collection

The following are data collection alarm messages and the associated repair actions:

DCFILE Resource Type

Alarm Code: 0

Event ID:	DCFILE001
Alarm Level:	Minor
Message Text:	Error in opening internal temporary file.
Description:	This alarm indicates the error was encountered when the data collection module tried to open temporary file.
Repair Action:	Escalate this problem to the next level of support.

Alarm Code: 1

Event ID:	DCFILE002
Alarm Level:	Minor
Message Text:	Error in reading internal temporary file.
Description:	This alarm indicates the error was encountered when the data collection module tried to read temporary file.
Repair Action:	Escalate this problem to the next level of support.

Alarm Code: 2

Event ID:	DCFILE002
Alarm Level:	Minor
Message Text:	Error in writing internal temporary file.

- Description:** This alarm indicates the error was encountered when the data collection module tried to write to a temporary file.
- Repair Action:** Escalate this problem to the next level of support.

Alarm Code: 0

- Event ID:** DCFIFO001
- Alarm Level:** Minor
- Message Text:** Error in opening temporary pipe/fifo file.
- Description:** This alarm indicates the error was encountered when the data collection module tried to open a temporary pipe or fifo file.
- Repair Action:** Escalate this problem to the next level of support.

Alarm Code: 1

- Event ID:** DCFIFO002
- Alarm Level:** Minor
- Message Text:** Error in duplicating temporary pipe/fifo file.
- Description:** This alarm indicates the error was encountered when the data collection module tried to duplicate a temporary pipe or fifo file.
- Repair Action:** Escalate this problem to the next level of support.

Alarm Code: 2

- Event ID:** DCFIFO003
- Alarm Level:** Minor
- Message Text:** Error in reading temporary pipe/fifo file.

Description: This alarm indicates the error was encountered when the data collection module tried to read a temporary pipe or fifo file.

Repair Action: Escalate this problem to the next level of support.

Alarm Code: 3

Event ID: DCFIFO004

Alarm Level: Minor

Message Text: Error in writing temporary pipe/fifo file.

Description: This alarm indicates the error was encountered when the data collection module tried to write a temporary pipe or fifo file.

Repair Action: Escalate this problem to the next level of support.

DCDGQKY Resource Type

Alarm Code: 0

Event ID: DCDGQKY

Alarm Level: Minor

Message Text: Error in getting queue key of DataGather process.

Description: This alarm indicates the error was encountered when the data collection module obtain a queue key from the DataGather process.

Repair Action: Escalate this problem to the next level of support.

TSC Only:

1. Enter **ps -ael | grep emdatagather**
2. If the process is not running, perform the following procedures.
 - a. From the UNIX system prompt, enter **init 3**
 - b. Enter **who -r** to verify the run level of the system has changed to 3.
 - c. Repeat Step b at regular intervals until the output indicates the change in run level.

- d. Once the run level has changed to 3, enter **init 4**
 - e. Enter **who -r** to verify the run level of the system has changed to 4.
 - f. Repeat Step e at regular intervals until the output indicates the change in run level.
3. If the problem persists, reboot the system.

DCDGMSG Resource Type

Alarm Code: 0

Event ID:	DCDG002
Alarm Level:	Minor
Message Text:	Error in sending messages to emdatagather process.
Description:	This alarm indicates the error was encountered when the data collection module tried to send a message to the emdatagather process.

Repair Action:

1. Enter **bbs | pg**
2. Check for the queue name `DataGather` and note the number under the `QRY` column.
3. Find the equivalent hexadecimal number.
4. Enter **ipcs -qob | pg**
5. Search in the 3rd column of the output for the hexnumber as determined in the Step 3.
6. Note the output and escalate to the next level of support.

TSC Only:

1. Log into the system as root or tsc.
2. From the UNIX system prompt, enter **init 3**
3. Enter **who -r** to verify the run level of the system has changed to 3.
4. Repeat Step 3 at regular intervals until the output indicates the change in run level.
5. Once the run level has changed to 3, enter **init 4**
6. Enter **who -r** to verify the run level of the system has changed to 4.

7. Repeat Step 6 at regular intervals until the output indicates the change in run level.
8. If the problem persists, reboot the system.

Alarm Code: 0

Event ID:	DCDG003
Alarm Level:	Minor
Message Text:	Error in receiving messages from emdatagather process.
Description:	This alarm indicates the error was encountered when the data collection module tried to receive a message from the emdatagather process.

Repair Action:

1. Enter **bbs | pg**
2. Check for the queue name `DataGather` and note the number under the `QKY` column.
3. Find the equivalent hexadecimal number.
4. Enter **ipcs -qob | pg**
5. Search in the 3rd column of the output for the hexnumber as determined in the Step 3.
6. Note the output and escalate to the next level of support.

TSC Only:

1. From the UNIX system prompt, enter **init 3**
2. Enter **who -r** to verify the run level of the system has changed to 3.
3. Repeat Step 2 at regular intervals until the output indicates the change in run level.
4. Once the run level has changed to 3, enter **init 4**
5. Enter **who -r** to verify the run level of the system has changed to 4.
6. Repeat Step 5 at regular intervals until the output indicates the change in run level.
7. If the problem persists, reboot the system.

DCTHRQKY Resource Type

Alarm Code: 0

Event ID:	DCTHR001
Alarm Level:	Minor
Message Text:	Error in getting queue key of Throttling process.
Description:	This alarm indicates the error was encountered when the data collection module tried to obtain a queue key from the Throttling process.
Repair Action:	Escalate this problem to the next level of support.

TSC Only:

1. Enter **ps -ael | grep throttle**
2. If the process is not running, perform the following procedures.
 - a. From the UNIX system prompt, enter **init 3**
 - b. Enter **who -r** to verify the run level of the system has changed to 3.
 - c. Repeat Step b at regular intervals until the output indicates the change in run level.
 - d. Once the run level has changed to 3, enter **init 4**
 - e. Enter **who -r** to verify the run level of the system has changed to 4.
 - f. Repeat Step e at regular intervals until the output indicates the change in run level.
3. If the problem persists, reboot the system.

Alarm Code: 1

Event ID:	DCTHR002
Alarm Level:	Minor
Message Text:	Error in sending messages to throttle process.
Description:	This alarm indicates the error was encountered when the data collection module tried to send a message to the throttle process.

Repair Action:

1. Enter **bbs | pg**
2. Check for the queue name `throttle_queue` and note the number under the `QKY` column.
3. Find the equivalent hexadecimal number.
4. Enter **ipcs -qob | pg**
5. Search in the 3rd column of the output for the hexnumber as determined in the Step 3.
6. Note the output and escalate to the next level of support.

TSC Only:

1. Log into the system as root or tsc.
2. From the UNIX system prompt, enter **init 3**
3. Enter **who -r** to verify the run level of the system has changed to 3.
4. Repeat Step 3 at regular intervals until the output indicates the change in run level.
5. Once the run level has changed to 3, enter **init 4**
6. Enter **who -r** to verify the run level of the system has changed to 4.
7. Repeat Step 6 at regular intervals until the output indicates the change in run level.
8. If the problem persists, reboot the system.

Alarm Code: 2

Event ID:	DCTHR003
Alarm Level:	Minor
Message Text:	Error in receiving message from throttle process.
Description:	This alarm indicates the error was encountered when the data collection module received a message from the throttle process.

Repair Action:

1. Enter **bbs | pg**
2. Check for the queue name `throttle_queue` and note the number under the `QKY` column.

3. Find the equivalent hexadecimal number.
4. Enter **ipcs -qob | pg**
5. Search in the 3rd column of the output for the hexnumber as determined in the Step 3.
6. Note the output and escalate to the next level of support.

TSC Only:

1. Log into the system as root or tsc.
2. From the UNIX system prompt, enter **init 3**
3. Enter **who -r** to verify the run level of the system has changed to 3.
4. Repeat Step 3 at regular intervals until the output indicates the change in run level.
5. Once the run level has changed to 3, enter **init 4**
6. Enter **who -r** to verify the run level of the system has changed to 4.
7. Repeat Step 6 at regular intervals until the output indicates the change in run level.

DCPLQKY Resource Type

Alarm Code: 0

Event ID:	DCPL001
Alarm Level:	Minor
Message Text:	Error in getting queue key of Poll-Log process.
Description:	This alarm indicates the error was encountered when the data collection module tried to obtain a queue key from the Throttling process.
Repair Action:	Escalate this problem to the next level of support.

TSC Only:

1. Enter **ps -ael | grep dc_poll_log**
2. If the process is not running, perform the following procedures.
 - a. Log into the system as root or tsc.
 - b. Enter **init 3**
 - c. Enter **who -r** to verify the run level of the system has changed to 3.

- d. Repeat Step d at regular intervals until the output indicates the change in run level.
 - e. Once the run level has changed to 3, enter **init 4**
 - f. Enter **who -r** to verify the run level of the system has changed to 4.
 - g. Repeat Step f at regular intervals until the output indicates the change in run level.
3. If the problem persists, reboot the system.

Alarm Code: 1

Event ID: DCPL002

Alarm Level: Minor

Message Text: Error in sending messages to poll-log process.

Description: This alarm indicates the error was encountered when the data collection module sent a message to the poll log process.

Repair Action:

1. Enter **bbs | pg**
2. Check for the queue name `dc_poll_log` and note the number under the `QKY` column.
3. Find the equivalent hexadecimal number.
4. Enter **ipcs -qob | pg**
5. Search in the 3rd column of the output for the hexnumber as determined in the Step 3.
6. Note the output and escalate to the next level of support.

TSC Only:

1. Log into the system as root or tsc.
2. From the UNIX system prompt, enter **init 3**
3. Enter **who -r** to verify the run level of the system has changed to 3.
4. Repeat Step 3 at regular intervals until the output indicates the change in run level.
5. Once the run level has changed to 3, enter **init 4**
6. Enter **who -r** to verify the run level of the system has changed to 4.

7. Repeat Step 6 at regular intervals until the output indicates the change in run level.
8. If the problem persists, reboot the system.

DCORA Resource Type

Alarm Code: 0

Event ID: DCORA001

Alarm Level: Minor

Message Text: Oracle error reported

Description: This alarm indicates that an ORACLE error occurred.

Repair Action:

1. Determine if the Enterprise Manager ORACLE processes are running.
 - a. Enter **ps -ef | grep ora**
 - b. Look for the following processes in the output:
 - ora_smon_*\$ORACLE_SID*
 - ora_pmon_*\$ORACLE_SID*
 - ora_lgwr_*\$ORACLE_SID*
 - ora_dbwr_*\$ORACLE_SID*where *\$ORACLE_SID* is an ORACLE environment variable.
2. If all the above processes are not running:
 - a. Enter **init 3** to change the run level of the system to 3.
 - b. Enter **who -r** until the output indicates the run level of the system is 3.
 - c. Enter **su oracle -c dbshut -i** to shutdown the database.
 - d. Enter **su oracle -c dbstart** to start the database.
 - e. Enter **init 4** to change the run level of the system to 4.
 - f. Enter **who -r** until the output indicates the run level of the system is 4.
 - g. If the problem persists, escalate the problem to the next level of support.

TSC Only:

1. Note the type of error reported by ORACLE from the Maintenance log. The ORACLE error message indicates an ORA error code.
2. Enter **\$(ORACLE_HOME)/bin/oerr <facility> <error no.>**
 where **\$(ORACLE_HOME)** is the home directory of ORACLE and if ORA-01017 is the error number ORA-01017, then ORA is the **<facility>**, 01017 is the **<error no.>**.

 To determine the home directory of ORACLE, enter **echo \$(ORACLE_HOME)**
3. If the output indicates an Action statement, perform the steps as indicated or escalate the problem to next level of support.

Alarm Code: 1

Event ID: DCORA001

Alarm Level: Minor

Message Text: Oracle error reported - Oracle login failed in dc_delete_poll_log process

Description: This alarm indicates that ORACLE failed to perform a request to delete a poll log.

Repair Action: Escalate this problem to the next level of support.

Alarm Code: 2

Event ID: DCORA005

Alarm Level: Minor

Message Text: Oracle error reported - Oracle login failed in dc_modify_poll_log process

Description: This alarm indicates that ORACLE failed to perform a request to modify a poll log.

Repair Action: Escalate this problem to the next level of support.

Alarm Code: 3

Event ID:	DCORA003
Alarm Level:	Minor
Message Text:	Oracle error reported - Oracle login failed in dc_poll_log process
Description:	This alarm indicates that ORACLE failed to perform a poll log request.
Repair Action:	Escalate this problem to the next level of support.

DCIRR Resource Type

Alarm Code: 4

Event ID:	DCIRR001
Alarm Level:	Minor
Message Text:	IR register command failed
Description:	This alarm indicates that the IR register command failed.
Repair Action:	Escalate this problem to the next level of support.

DCIRW Resource Type

Alarm Code: 5

Event ID:	DCIRW001
Alarm Level:	Minor
Message Text:	IR W Check returned Error
Description:	This alarm indicates that IR check process returned an error.
Repair Action:	Escalate this problem to the next level of support.

DCMEM Resource Type

Alarm Code: 0

Event ID:	DCMEM001
Alarm Level:	Minor
Message Text:	System Low on memory
Description:	This alarm indicates the Enterprise Manager is low on memory.
Repair Action:	Escalate this problem to the next level of support.
TSC Only:	Reboot the system.

DCPROC Resource Type

Alarm Code: 0

Event ID:	DCFK001
Alarm Level:	Minor
Message Text:	Too many processes on the system. Cannot start new processes on the system.
Description:	This alarm indicates the data collection module is unable to start any new processes on the system at this time. The system is currently overloaded with process requests.
Repair Action:	Escalate this problem to the next level of support.

TSC Only:

1. Enter **`/etc/conf/bin/itune -g NPROC`**
2. Note the values for NPROC in the output.
3. If the value is less than 650, perform the following procedure:
 - a. Enter **`/etc/conf/bin/itune NPROC`**
 - b. Enter the new value as 650
 - c. Reboot the system.
4. If the problem persists or any errors are encountered, escalate to the next level of support.

DCAKSRV Resource Type

Alarm Code: 0

Event ID: DCAKSRV01

Alarm Level: Minor

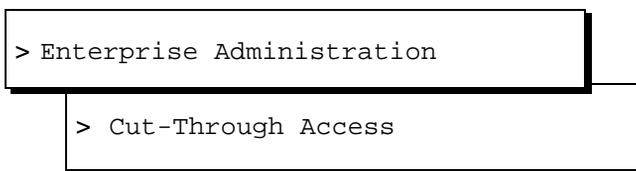
Message Text: AKSrv process not gracefully exited on the Managed Element.

Description: This alarm indicates the AKSrv process did not exit gracefully on the managed element.

Repair Action: Escalate this problem to the next level of support.

TSC Only:

1. Start at the INTUITY Administration menu and select



The Cut-Through Access screen ([Figure 6-1](#)) is displayed.

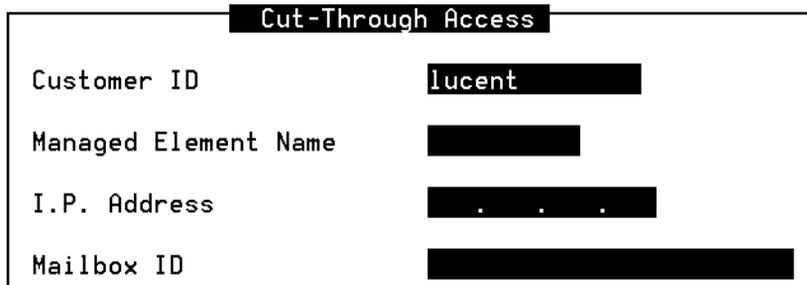


Figure 6-1. Cut-Through Access Screen

2. Enter the name of the managed element in the Managed Element Name field or press **F2** (Choices) to select from a list of available systems.

3. Press **F3** (Continue) to initiate the access to the selected system.

The system provides a login prompt to the appropriate system. If an error occurs, refer to “Troubles Accessing a Managed Element” in *INTUITY Enterprise Manager Administration*, 585-310-576.

4. Enter **tsc**
5. Enter the tsc password for the system.
6. Enter **ps -aef | grep AKSrv**
7. If there is more than one AKSrv process running, enter **truss -p <pid>**, where *<pid>* is the process ID of the AKSrv processes.
8. Remove the stuck AKSrv processes by entering **kill -9 <pid>** where *<pid>* is the process ID of the AKSrv processes.

DCSYSCOMM Resource Type

Alarm Code: 0

Event ID:	DCSYSCM01
Alarm Level:	Minor
Message Text:	Too many processes on the system. Cannot start new processes on the system.
Description:	This alarm indicates the data collection module is unable to start any new processes on the system at this time. The system is currently overloaded with process requests.
Repair Action:	This alarm requires remote maintenance center intervention.

TSC Only:

1. Enter **/etc/conf/bin/idtune -g NPROC**
2. Note the values for NPROC in the output.
3. If the value is less than 650, perform the following procedure:
 - a. Enter **/etc/conf/bin/idtune NPROC**
 - b. Enter the new value as 650
 - c. Reboot the system.
4. If the problem persists or any errors are encountered, escalate to the next level of support.

DCSYS Resource Type

Alarm Code: 0

Event ID:	DCSYS039
Alarm Level:	Major
Message Text:	Disk Full
Description:	This alarm indicates the Enterprise Manager disk is full.
Repair Action:	Perform a data cleanup. Refer to Chapter 7, "Data Collection," of <i>INTUITY Enterprise Manager Administration</i> , 585-310-576, for information. To avoid this alarm, determine if data cleanup is scheduled properly. Data should be removed as soon as it is no longer required.

DCSYSERR Resource Type

Alarm Code: 0

Event ID:	DCSYS009
Alarm Level:	Minor
Message Text:	Internal process failure
Description:	This alarm indicates an internal process error occurred.
Repair Action:	Escalate the problem to the next level of support.

Alarm Code: 0

Event ID:	DCSYS018
Alarm Level:	Minor
Message Text:	Internal process failure.
Description:	This alarm indicates an internal process error occurred.
Repair Action:	Escalate the problem to the next level of support.

DCCLN Resource Type

Alarm Code: 0

Event ID:	DCCLN001
Alarm Level:	Minor
Message Text:	Data cleanup failure. This can lead to a disk full alarm.
Description:	This alarm indicates the data cleanup process failed.
Repair Action:	Perform an on-demand data cleanup. See Chapter 8, "Data Collection," of <i>INTUITY Enterprise Manager Administration</i> , 585-310-576, for information.

DCIRAPI Resource Type

Alarm Code: 0

Event ID:	DCIRAPI001
Alarm Level:	Minor
Message Text:	Process registration failure by IRAPI.
Description:	This alarm indicates the IRAPI failed to register a process.
Repair Action:	Escalate this problem to the next level of support.

TSC Only:

1. Enter **ps -aef | grep procfile**
2. If the process is not running, perform the following procedures.
 - a. Log into the system as root or tsc.
 - b. From the UNIX system prompt, enter **init 3**
 - c. Enter **who -r** to verify the run level of the system has changed to 3.
 - d. Repeat Step c at regular intervals until the output indicates the change in run level.
 - e. Once the run level has changed to 3, enter **init 4**
 - f. Enter **who -r** to verify the run level of the system has changed to 4.

Description: This alarm indicates the error was encountered when the data collection module received a message from the `procfile` process.

Repair Action:

1. Enter **bbs | pg**
2. Check for the queue name `procfile` and note the number under the `QKY` column.
3. Find the equivalent hexadecimal number.
4. Enter **ipcs -qob | pg**
5. Search in the 3rd column of the output for the hexnumber as determined in the Step 3.
6. Note the output and escalate to the next level of support.

TSC Only:

1. Log into the system as `root` or `tsc`.
2. From the UNIX system prompt, enter **init 3**
3. Enter **who -r** to verify the run level of the system has changed to 3.
4. Repeat Step 3 at regular intervals until the output indicates the change in run level.
5. Once the run level has changed to 3, enter **init 4**
6. Enter **who -r** to verify the run level of the system has changed to 4.
7. Repeat Step 6 at regular intervals until the output indicates the change in run level.

DP - Data Provisioning Module

The following are data (subscriber) provisioning module alarm messages and the associated repair actions:



NOTE:

If you require specific information about errors that may occur during subscriber provisioning, refer to Chapter 10, "Subscriber Administration," of *INTUITY Enterprise Manager Administration*, 585-310-576.

DPFILE Resource Type

Alarm Code: 0

Event ID:	DPFILE001
Alarm Level:	Minor
Message Text:	Error in opening file
Description:	This alarm indicates the data provisioning module encountered an error when opening a file.
Repair Action:	Escalate this problem to the next level of support.

Alarm Code: 1

Event ID:	DPFILE002
Alarm Level:	Minor
Message Text:	Error in reading file
Description:	This alarm indicates the data provisioning module encountered an error when reading a file.
Repair Action:	Escalate this problem to the next level of support.

Alarm Code: 2

Event ID:	DPFILE003
Alarm Level:	Minor
Message Text:	Error in writing file
Description:	This alarm indicates the data provisioning module encountered an error when writing to a file.
Repair Action:	Escalate this problem to the next level of support.

DPNUMREQ Resource Type

Alarm Code: 0

Event ID:	DPNUMREQ01
Alarm Level:	Minor
Message Text:	More than 100 requests in the schedule file. File request more than permissible.
Description:	This alarm indicates the data provisioning module received scheduled file that contained more than 100 requests. A file may have a maximum of 100 provisioning requests. All requests beyond the 100th are not performed by the data provisioning module.
Repair Action:	Modify the scheduled file to contain no more than 100 requests.

DPCONN Resource Type

Alarm Code: 0

Event ID:	DPIMAPI001
Alarm Level:	Minor
Message Text:	IMAPI connection error.

Description: This alarm indicates the data provisioning module encountered an error when connecting to IMAPI on the managed element.

Repair Action: Escalate this problem to the next level of support.

TSC Only:

1. Check the network connection from the Enterprise Manager to the managed element
2. Enter **/etc/hosts** to verify the IP address.

DPADMIN Resource Type

Alarm Code: 0

Event ID: DPIMAPI002

Alarm Level: Minor

Message Text: IMAPI administrative login failure

Description: This alarm indicates a IMAPI administrative login failure.

Repair Action:

1. Verify that the admin login and password is correct.
2. Verify that the external password is correct.

DPTRS Resource Type

Alarm Code: 0

Event ID: DPIMAPI003

Alarm Level: Minor

Message Text: IMAPI trusted server login failure

Description: This alarm indicates the IMAPI trusted server login failed.

Repair Action: 1. Verify the trusted server name, service identifier, and password.

DPADD Resource Type

Alarm Code: 0

Event ID:	DPIMAPI005
Alarm Level:	Minor
Message Text:	IMAPI subscriber addition failure
Description:	This alarm indicates the IMAPI encountered an error when adding a subscriber. The Enterprise Manager is unable to access the managed element.

Repair Action:

1. Check the connection to the managed element.
2. Verify the following on the managed element:
 - Subscriber range
 - Password
 - Class of service

DPDEL Resource Type

Alarm Code: 0

Event ID:	DPIMAPI006
Alarm Level:	Minor
Message Text:	IMAPI subscriber deletion failure
Description:	This alarm indicates the IMAPI encountered an error when deleting a subscriber. The Enterprise Manager is unable to access the managed element.

Repair Action:

1. Check the connection to the managed element.

DPTHR Resource Type

Alarm Code: 0

Event ID:	DPTHR001
Alarm Level:	Minor
Message Text:	Error in getting queue key of Throttling process
Description:	This alarm indicates the data provisioning module encountered an error when getting a queue key from the throttling process.
Repair Action:	Escalate to the next level of support.

TSC Only:

1. Enter **ps -aef | grep throttle** to determine if the process is running.
2. Log into the system as root or tsc.
3. Enter **init 3**
4. Enter **who -r** to verify the run level of the system has changed to 3.
5. Repeat Step 3 at regular intervals until the output indicates the change in run level.
6. Once the run level has changed to 3, enter **init 4**
7. Enter **who -r** to verify the run level of the system has changed to 4.
8. Repeat Step 6 at regular intervals until the output indicates the change in run level.
9. If the problem persists, reboot the system by entering **shutdown -y -g0 -i6**

Alarm Code: 1

Event ID:	DPTHR002
Alarm Level:	Minor
Message Text:	Error in sending messages to throttle process
Description:	This alarm indicates the data provisioning module encountered an error when sending a message to the throttling process.

Repair Action:

1. Enter **bbs | pg**
2. Check for the queue name `throttle_queue`. and note the number under the `QKY` column.
3. Find the equivalent hexadecimal number.
4. Enter **ipcs -qob | pg**
5. Search in the 3rd column the hexnumber as determined in Step 3.
6. Note the value as displayed in the `ID` column and escalate the problem to the next level of support.

TSC Only:

1. Log into the system as root or tsc.
2. Enter **init 3**
3. Enter **who -r** to verify the run level of the system has changed to 3.
4. Repeat Step 3 at regular intervals until the output indicates the change in run level.
5. Once the run level has changed to 3, enter **init 4**
6. Enter **who -r** to verify the run level of the system has changed to 4.
7. Repeat Step 6 at regular intervals until the output indicates the change in run level.
8. If the problem persists, reboot the system by entering **shutdown -y -g0 -i6**

Alarm Code: 2

Event ID:	DPTHR004
Alarm Level:	Minor
Message Text:	Error in receiving messages from throttle process
Description:	This alarm indicates the data provisioning module encountered an error when receiving messages from the throttling process.

Repair Action:

1. Enter **bbs | pg**
2. Check for the queue name `throttle_queue.` and note the number under the `QKY` column.
3. Find the equivalent hexadecimal number.
4. Enter **ipcs -qob | pg**
5. Search in the 3rd column the hexnumber as determined in Step 3.
6. Note the value as displayed in the `ID` column and escalate the problem to the next level of support.

TSC Only:

1. Log into the system as root or tsc.
2. Enter **init 3**
3. Enter **who -r** to verify the run level of the system has changed to 3.
4. Repeat Step 3 at regular intervals until the output indicates the change in run level.
5. Once the run level has changed to 3, enter **init 4**
6. Enter **who -r** to verify the run level of the system has changed to 4.
7. Repeat Step 6 at regular intervals until the output indicates the change in run level.
8. If the problem persists, reboot the system by entering **shutdown -y -g0 -i6**

DPORA Resource Type

Alarm Code: 0

Event ID:	DPORA001
Alarm Level:	Minor
Message Text:	Oracle error reported
Description:	An Oracle error occurred. The Oracle error number is provided in the Maintenance log.

Repair Action:

1. Determine if the Enterprise Manager ORACLE processes are running.
 - a. Enter **ps -ef | grep ora**
 - b. Look for the following processes in the output:
 - ora_smon_*\$ORACLE_SID*
 - ora_pmon_*\$ORACLE_SID*
 - ora_dbwr_*\$ORACLE_SID*
 - ora_lgwr_*\$ORACLE_SID*where *\$ORACLE_SID* is an ORACLE environment variable.
2. If all the above processes are not running:
 - a. Enter **init 3** to change the run level of the system to 3.
 - b. Enter **who -r** until the output indicates the run level of the system is 3.
 - c. Enter **su oracle -c dbshut -i** to shutdown the database.
 - d. Enter **su oracle -c dbstart** to start the database.
 - e. Enter **init 4** to change the run level of the system to 4.
 - f. Enter **who -r** until the output indicates the run level of the system is 4.
 - g. If the problem persists, escalate the problem to the next level of support.

TSC Only:

1. Note the type of error reported by ORACLE from the Maintenance log. The ORACLE error message indicates an ORA error code.
2. Enter **\$(ORACLE_HOME)/bin/oerr <facility> <error no.>**

where *\$(ORACLE_HOME)* is the home directory of ORACLE and if ORA-01017 is the error number ORA-01017, then ORA is the *<facility>*, 01017 is the *<error no.>*.

To determine the home directory of ORACLE, enter **echo \$(ORACLE_HOME)**
3. If the output indicates an Action statement, perform the steps as indicated or escalate the problem to next level of support.

DPMEM Resource Type

Alarm Code: 0

Event ID:	DPMEM001
Alarm Level:	Minor
Message Text:	System Low on memory
Description:	This alarm indicates the system memory is low.
Repair Action:	Escalate this problem to the next level of support.

DPSYSSC Resource Type

Alarm Code: 0

Event ID:	DPSYSSC01
Alarm Level:	Minor
Message Text:	Too many processes on the system. Cannot start new processes on the system.
Description:	This alarm indicates the data provisioning module encountered an error when trying to start a new process on the system. The system is unable to start any new processes on the system at this time.
Repair Action:	Escalate this problem to the next level of support.

TSC Only:

1. Enter **`/etc/conf/bin/idtune -g NPROC`**
2. Note the value for NPROC. If this value is less than 650, do the following:
 - a. Enter **`/etc/conf/bin/idtune NPROC`**
 - b. Enter the new value as 650
 - c. Reboot the system.
3. If any errors are encountered, escalate the problem to next level of support.

PM — Performance Module (Throttling)

The following are performance module alarm messages and the associated repair actions:

PMQKEY Resource Type

Alarm Code: 0

Event ID:	PMQK001
Alarm Level:	Minor
Message Text:	Error in getting queue key
Description:	This alarm indicates the performance module encountered an error when getting a queue key.
Repair Action:	Escalate this problem to the next level of support.

TSC Only:

1. Log into the system as root or tsc.
2. From the UNIX system prompt, enter **init 3**
3. Enter **who -r** to verify the run level of the system has changed to 3.
4. Repeat Step 3 at regular intervals until the output indicates the change in run level.
5. Once the run level has changed to 3, enter **init 4**
6. Enter **who -r** to verify the run level of the system has changed to 4.
7. Repeat Step 6 at regular intervals until the output indicates the change in run level.
8. If the problem persists, reboot the system by entering **shutdown -y -g0 -i6**

Alarm Code: 1

Event ID:	PMQK002
Alarm Level:	Minor
Message Text:	Error in receiving message from throttle_queue

Description: This alarm indicates the performance module encountered an error when receiving a message from the throttle queue.

Repair Action:

1. Enter **bbs | pg**
2. Check for the queue name `throttle_queue`, and note the number under the `QKY` column.
3. Find the equivalent hexadecimal number.
4. Enter **ipcs -qob | pg**
5. Search in the 3rd column the hexnumber as determined in Step 3.
6. Note the value as displayed in the `ID` column and escalate the problem to the next level of support.

TSC Only:

1. Log into the system as root or tsc.
2. From the UNIX system prompt, enter **init 3**
3. Enter **who -r** to verify the run level of the system has changed to 3.
4. Repeat Step 3 at regular intervals until the output indicates the change in run level.
5. Once the run level has changed to 3, enter **init 4**
6. Enter **who -r** to verify the run level of the system has changed to 4.
7. Repeat Step 6 at regular intervals until the output indicates the change in run level.

Alarm Code: 2

Event ID: PMQK003

Alarm Level: Minor

Message Text: Error in sending messages from performance module

Description: This alarm indicates the performance module encountered an error when sending a message.

Repair Action:

1. Enter **bbs | pg**
2. Check for the queue name `throttle_queue` and note the number under the `QKY` column.

3. Find the equivalent hexadecimal number.
4. Enter **ipcs -qob | pg**
5. Search in the 3rd column of the output the hexnumber as Step 3.
6. In the same row, note the value as displayed in the ID column and escalate the problem to the next level of support.

TSC Only:

1. Log into the system as root or tsc.
2. From the UNIX system prompt, enter **init 3**
3. Enter **who -r** to verify the run level of the system has changed to 3.
4. Repeat Step 3 at regular intervals until the output indicates the change in run level.
5. Once the run level has changed to 3, enter **init 4**
6. Enter **who -r** to verify the run level of the system has changed to 4.
7. Repeat Step 6 at regular intervals until the output indicates the change in run level.

PMSM Resource Type

Alarm Code: 0

Event ID:	PMSM001
Alarm Level:	Minor
Message Text:	Error in creating shared memory
Repair Action:	Escalate this problem to the next level of support.

TSC Only:

1. Enter **ipcs -mob | pg**
2. Verify if any row displays a value 0x000aefbc or 0x000cbfea under the KEY column

If yes, then report problem to the next higher level of support.

If no, then do the following:

- a. Enter **/etc/conf/bin/ldtune -g SHMMAX**
- b. Verify if the shared memory size indicated in the first column is 4194304. If not, then do the following

1. Enter **/etc/conf/bin/ldtune -m SHMMAX 4194304**

2. Enter `/etc/conf/bin/idbuild`
3. Reboot the system.
3. If any errors are encountered, escalate the problem to the next level of support.

Alarm Code: 1

Event ID: PMSM002

Alarm Level: Minor

Message Text: Error in attaching the shared memory to the process

Repair Action: Escalate this problem to the next level of support.

TSC Only:

1. Enter `ipcs -mob | pg`
2. Note the values for `KEY = '0x000aefbc'` and `'0x000cbfea'` under the column `NATTCH`.
3. Escalate the problem to the next level of support.

Alarm Code: 2

Event ID: PMSM003

Alarm Level: Minor

Message Text: Detaching the shared memory address from the module.

Repair Action: Escalate this problem to the next level of support. The system can continue to function.

Alarm Code: 3

Event ID: PMSM004

Alarm Level: Minor

Message Text: Error in opening the shared memory

Repair Action: Escalate this problem to the next level of support.

TSC Only:

1. Enter **ipcs -mob | pg**
2. Note if any row displays the following values for **KEY**: 0x000aefbc and 0x000cbfea.
3. Escalate the problem to the next level of support

PMSOP Resource Type

Alarm Code: 0

Event ID: PMSOP001

Alarm Level: Minor

Message Text: Error in creating semaphores

Description: An error occurred while the performance module tried to create semaphores.

Repair Action:

1. Enter **ipcs -sob | pg**
2. Note the number of semaphore keys displayed under the **KEY** column values
 - 0x00000200
 - 0x00000201
 - 0x00000202
 - 0x00000203
3. Escalate the problem to the next level of support.

TSC Only:

1. Report the problem to the next level of support.
2. Reboot the system.

PMSYS Resource Type

Alarm Code: 1

Event ID: PMSYS002

Alarm Level: Minor

Message Text: Error in opening output file of 'ps' command for in telnetd and cut-through access PIDs (process id).

Description: An error occurred when the performance module opened the **ps** command output file. The **ps** command is used for telnet and cut-through access process identifiers (PIDs).

Repair Action: Escalate this problem to the next level of support.

TSC only: ·

1. Enter **sar -v 1**
2. If the `proc-s` column indicates a value within 5% of the maximum value reboot the system. For example, reboot the system if `proc-sz` indicates a value 990/1000 where 990 is the current value and 1000 is the maximum value.
3. If the problem persists, escalate to the next level of support.

Alarm Code: 2

Event ID: PMSYS003

Alarm Level: Minor

Message Text: Error in reading the file

Description: An error occurred when the performance module tried to read a file. The name of the file is provided in the Maintenance log.

Repair Action: Escalate this problem to the next level of support.

Alarm Code: 3

Event ID: PMSYS004

Alarm Level: Minor

Message Text: Error in writing the file

Description: An error occurred when the performance module tried to write to a file. The name of the file is provided in the Maintenance log.

Repair Action: Escalate this problem to the next level of support.

PMORA Resource Type

Alarm Code: 0

Event ID:	PMORA001
Alarm Level:	Minor
Message Text:	Oracle error reported
Description:	An Oracle error occurred. The Oracle error number is provided in the Maintenance log.

Repair Action:

1. Determine if the Enterprise Manager ORACLE processes are running.
 - a. Enter **ps -ef | grep ora**
 - b. Look for the following processes in the output:
 - ora_smon_icdb
 - ora_pmon_icdb
 - ora_d000_icdb
 - ora_s000_icdb
 - ora_dbwr_icdb
2. If all the above processes are not running:
 - a. Enter **init 3** to change the run level of the system to 3.
 - b. Enter **who -r** until the output indicates the run level of the system is 3.
 - c. Enter **su oracle -c dbshut -i** to shutdown the database.
 - d. Enter **su oracle -c dbstart** to start the database.
 - e. Enter **init 4** to change the run level of the system to 4.
 - f. Enter **who -r** until the output indicates the run level of the system is 4.
 - g. If the problem persists, escalate the problem to the next level of support.

TSC Only:

1. Note the type of error reported by ORACLE from the Maintenance log. The ORACLE error message indicates an ORA error code.
2. Enter **\$(ORACLE_HOME)/bin/oerr <facility> <error no.>**

where `$(ORACLE_HOME)` is the home directory of ORACLE and if ORA-01017 is the error number ORA-01017, then ORA is the *<facility>*, 01017 is the *<error no.>*.

To determine the home directory of ORACLE, **enter echo \$(ORACLE_HOME)**

3. If the output indicates an Action statement, perform the steps as indicated or escalate the problem to next level of support.

Alarm Code: 4

Event ID:	PMSYS005
Alarm Level:	Minor
Message Text:	Error reported by one of the Service Provider library.
Description:	An error occurred when reading performance module tried to read a file. The name of the file is provided in the Maintenance log.
Repair Action:	Escalate this problem to the next level of support.

Alarm Code: 12

Event ID:	PMSYS013
Alarm Level:	Minor
Message Text:	Error in executing 'ps' system command
Description:	An error occurred when the performance module executed the ps command.
Repair Action:	Escalate this problem to the next level of support.

Alarm Code: 13

Event ID:	PMSYS014
Alarm Level:	Minor
Message Text:	Error in opening output file of 'ps' command for in.telnetd process.
Description:	An error occurred when opening the output file of the 'ps' command for in.telnetd process.

Repair Action: Escalate this problem to the next level of support.

TSC Only:

1. Enter **sar -v 1**
2. If the `proc-s` column indicates a value within 5% of the maximum value reboot the system. For example, reboot the system if `proc-sz` indicates a value 990/1000 where 990 is the current value and 1000 is the maximum value.
3. If the problem persists, escalate to the next level of support.

Alarm Code: 14

Event ID: PMSYS015

Alarm Level: Minor

Message Text: Error in reading the output file of 'ps' command. Contains the pids of in.telnetd daemons

Description: An error occurred when reading the output file of the **ps** command. The output of this command contains the pids of in.telnetd daemons.

Repair Action: Escalate this problem to the next level of support.

PMBLK Resource Type

Alarm Code: 0

Event ID: PMBLK001

Alarm Level: Minor

Message Text: Memory block allocation failed in performance monitor module

Description: An error occurred when the performance module failed to allocate a block of memory.

Repair Action: Escalate this problem to the next level of support.

TSC Only:

1. At the UNIX system prompt, enter **sqlplus system/manager** to connect to the ORACLE database.
2. Enter **select count(*) from managed_elements;**
3. If the output indicates a number greater than 75 managed elements, delete all records after 75th row by doing the following:
 - a. Identify the ME name to be deleted by executing **select "dcMeName" from managed_elements;**
 - b. Enter **delete from managed_elements where "dcMeName" in ('mename1', 'mename2',);**
 - c. Repeat steps a and b until all required managed elements are deleted.
 - d. Enter **commit;**
4. If the output does not indicate a number greater than 75 managed element, escalate the problem to the next level of support.

RP — Report Module

The following are the report module alarm messages and the associated repair actions:

RPORA Resource Type

Alarm Code: 0

Event ID: RPORA001

Alarm Level: Minor

Message Text: ORACLE error encountered

Description: The reports module encountered an ORACLE error.

Repair Action:

1. Determine if the Enterprise Manager ORACLE processes are running.
 - a. Enter **ps -ef | grep ora**
 - b. Look for the following processes in the output:
 - ora_pmon_*\$ORACLE_SID*
 - ora_dbwr_*\$ORACLE_SID*
 - ora_lgwr_*\$ORACLE_SID*
 - ora_smon_*\$ORACLE_SID*where *\$ORACLE_SID* is an ORACLE environment variable.
2. If all the above processes are not running:
 - a. Enter **init 3** to change the run level of the system to 3.
 - b. Enter **who -r** until the output indicates the run level of the system is 3.
 - c. Enter **su oracle -c dbshut -i** to shutdown the database.
 - d. Enter **su oracle -c dbstart** to start the database.
 - e. Enter **init 4** to change the run level of the system to 4.
 - f. Enter **who -r** until the output indicates the run level of the system is 4.
 - g. If the problem persists, escalate the problem to the next level of support.

TSC Only:

1. Note the type of error reported by ORACLE from the Maintenance log. The ORACLE error message indicates an ORA error code.
2. Enter **\$(ORACLE_HOME)/bin/oerr <facility> <error no.>**
 where **\$(ORACLE_HOME)** is the home directory of ORACLE and if ORA-01017 is the error number ORA-01017, then ORA is the **<facility>**, 01017 is the **<error no.>**.
 To determine the home directory of ORACLE, **enter echo \$(ORACLE_HOME)**
3. If the output indicates an Action statement, perform the steps as indicated or escalate the problem to next level of support.

RPSYS Resource Type

Alarm Code: 0

Event ID:	RPSYS001
Alarm Level:	Minor
Message Text:	Error in sending messages through the message queue
Description:	The reports module encountered an error when sending messages through the message queue.

Repair Action:

For first time errors execute the following steps:

1. Enter **bbs | pg**
2. Check for the queue name 'repfile' and note the number under the QKY column.
3. Find the equivalent hexadecimal number.
4. Enter **ipcs -qob | pg**
5. Search in the 3rd column of the output for the hexnumber as determined in the previous step.
6. In the same row, note the value as displayed in the 7th column ('ID' column name) and escalate the problem to the next level of support.

TSC Only:

1. Log into the system as root or tsc.
2. From the UNIX system prompt, enter **init 3**
3. Enter **who -r** to verify the run level of the system has changed to 3.

4. Repeat Step 3 at regular intervals until the output indicates the change in run level.
5. Once the run level has changed to 3, enter **init 4**
6. Enter **who -r** to verify the run level of the system has changed to 4.
7. Repeat Step 6 at regular intervals until the output indicates the change in run level.

Alarm Code: 1

Event ID: RPSYS002

Alarm Level: Minor

Message Text: "emmgr" login for Schedule reports missing

Description: The reports module cannot locate the Enterprise Manager (emmgr) login for scheduling reports.

Repair Action:

1. Use **sysadm** to create a login for emmgr.
2. Set the default password to asd123.

RPIRAPI Resource Type

Alarm Code: 0

Event ID: RPIRAPI001

Alarm Level: Minor

Message Text: IRAPI registration failure

Description: The INTUITY Response Application Programming Interface (IRAPI) was unable to register with the reports module.

Repair Action:

For first time errors execute the following steps:

1. Enter **bbs | pg**
2. Check for the queue name `repfile` and note the number under the `QKY` column.
3. Find the equivalent hexadecimal number.
4. Enter **ipcs -qob | pg**

5. Search in the 3rd column of the output for the hexnumber as determined in Step 3.
6. In the same row, note the value as displayed in the 7th column (ID column name) and escalate the problem to the next level of support.

TSC Only:

1. Log into the system as root or tsc.
2. From the UNIX system prompt, enter **init 3**
3. Enter **who -r** to verify the run level of the system has changed to 3.
4. Repeat Step 3 at regular intervals until the output indicates the change in run level.
5. Once the run level has changed to 3, enter **init 4**
6. Enter **who -r** to verify the run level of the system has changed to 4.
7. Repeat Step 6 at regular intervals until the output indicates the change in run level.

Alarm Code: 1

Event ID: RPIRAPI002

Alarm Level: Minor

Message Text: Error in getting queue key

Description: The reports module encountered an error when attempting to get a queue key.

Repair Action: Escalate this problem to the next level of support.

TSC Only:

1. Log into the system as root or tsc.
2. From the UNIX system prompt, enter **init 3**
3. Enter **who -r** to verify the run level of the system has changed to 3.
4. Repeat Step 3 at regular intervals until the output indicates the change in run level.
5. Once the run level has changed to 3, enter **init 4**
6. Enter **who -r** to verify the run level of the system has changed to 4.
7. Repeat Step 6 at regular intervals until the output indicates the change in run level.
8. If the problem persists, reboot the system.

SP - Service Provider Interface Module

The following are service provider interface (SPI) module alarm messages and the associated repair actions:

SPORA Resource Type

Alarm Code: 0

Event ID: SPORA001

Alarm Level: Minor

Message Text: ORACLE error encountered

Description: The SPI module encountered an ORACLE error.

Repair Action:

1. Determine if the Enterprise Manager ORACLE processes are running.
 - a. Enter **ps -ef | grep ora**
 - b. Look for the following processes in the output:
 - ora_pmon_ \$ORACLE_SID
 - ora_dbwr_ \$ORACLE_SID
 - ora_lgwr_ \$ORACLE_SID
 - ora_smon_ \$ORACLE_SID
 where \$ORACLE_SID is an ORACLE environment variable.
2. If all the above processes are not running:
 - a. Enter **init 3** to change the run level of the system to 3.
 - b. Enter **who -r** until the output indicates the run level of the system is 3.
 - c. Enter **su oracle -c dbshut -i** to shutdown the database.
 - d. Enter **su oracle -c dbstart** to start the database.
 - e. Enter **init 4** to change the run level of the system to 4.
 - f. Enter **who -r** until the output indicates the run level of the system is 4.
 - g. If the problem persists, escalate the problem to the next level of support.

TSC Only:

1. Note the type of error reported by ORACLE from the Maintenance log. The ORACLE error message indicates an ORA error code.
2. Enter **`$(ORACLE_HOME)/bin/oerr <facility> <error no.>`**
 where `$(ORACLE_HOME)` is the home directory of ORACLE and if ORA-01017 is the error number ORA-01017, then ORA is the `<facility>`, 01017 is the `<error no.>`.

 To determine the home directory of ORACLE, **enter `echo $(ORACLE_HOME)`**
3. If the output indicates an Action statement, perform the steps as indicated or escalate the problem to next level of support.

SPSYS Resource Type

Alarm Code: 0

Event ID:	SPSYS001
Alarm Level:	Minor
Message Text:	File open error <code><filename></code>
Description:	The SPI module encountered an error when opening a file. The file is specified in the message as <code><filename></code> .
Repair Action:	Escalate this problem to the next level of support.

TSC Only: ·

1. Enter **`sar -v 1`**
2. If the `proc-s` column indicates a value within 5% of the maximum value reboot the system. For example, reboot the system if `proc-sz` indicates a value 990/1000 where 990 is the current value and 1000 is the maximum value.
3. If the problem persists, escalate to the next level of support.

Alarm Code: 1

Event ID:	SPSYS002
Alarm Level:	Minor
Message Text:	File Read Error <code><filename></code>

Description: The SPI module encountered an error when reading a file. The file is specified in the message as *<filename>*.

Repair Action: Escalate this problem to the next level of support.

Alarm Code: 2

Event ID: SPSYS003

Alarm Level: Minor

Message Text: File write error *<filename>*

Description: The SPI module encountered an error when writing to a file. The file is specified in the message as *<filename>*.

Repair Action: Escalate this problem to the next level of support.

Alarm Code: 3

Event ID: SPSYS004

Alarm Level: Minor

Message Text: Audit file open error

Description: The SPI module encountered an error when opening an audit file.

Repair Action: Escalate this problem to the next level of support.

TSC Only: ·

1. Enter **sar -v 1**
2. If the `proc-s` column indicates a value within 5% of the maximum value reboot the system. For example, reboot the system if `proc-sz` indicates a value 990/1000 where 990 is the current value and 1000 is the maximum value.
3. If the problem persists, escalate to the next level of support.

Alarm Code: 4

Event ID: SPSYS005

Alarm Level: Minor

Message Text: System command copy (cp) failed

Description: The SPI module encountered an error when using the cp command.

Repair Action:

1. Enter **cd /bin**
2. Enter **ls**
3. Check for the **cp** command.
4. Note the output and escalate the problem to the next level of support.

Events

The following are events associated with the Enterprise Manager software and appear in the Maintenance log.

CT — Cut Through Access

Event ID: CTSYS005

Description: This message indicates the time at which a CTA session was run. It displays the IP address and managed element name with which the session was performed.

Repair Action: This message is provided for information purposes.

DC — Data Collection

Event ID: DCORA002

Description: Oracle Event Reported by Delete_poll_log process

Repair Action: Using the ORACLE error code returned, escalate the problem to the next level of support

Event ID: DCORA006

Description: Oracle Event Reported by Modify_poll_log process

Repair Action: Using the ORACLE error code returned, escalate the problem to the next level of support

Event ID: DCORA004

Description: Oracle Event Reported by poll_log process

Repair Action: Using the ORACLE error code returned, escalate the problem to the next level of support

Event ID: DCORA007

Description: Invalid input reported by poll log process when invalid inputs are obtained from the message queue of the poll log

Repair Action: Escalate the problem to the next level of support.

Event ID: DCORA008

Description: Poll log table not updated due to invalid parameters passed by poll log module to the update/insert into ORACLE table. Invalid input reported by poll log process when invalid inputs are obtained from the message queue of the poll log

Repair Action: Escalate the problem to the next level of support.

Event ID: DCRET001

Description: Initialization of retry parameters for scheduled data collection jobs failed. The system will assume default retry parameters.

Repair Action: Escalate the problem to the next level of support.

Event ID: DCSYS012

Description: A ping for machine healthiness failed.

Repair Action: Escalate the problem to the next level of support.

Event ID: DCSYS019

Description: An error occurred when decrementing the throttling counter for data collection processes.

Repair Action: Escalate the problem to the next level of support.

Event ID: DCSYS020

Description: A data collection initialization failure occurred.

Repair Action: Escalate the problem to the next level of support.

Event ID: DCSYS021

Description: No records were found in the ORACLE database for data collection jobs. For example, a managed element is selected for data collection, but that managed element does not exist in the managed element table (MET).

Repair Action: This message is provided for information purposes.

Event ID: DCSYS023

Description: FIFO not found by the emdatagather process.

Repair Action: Escalate the problem to the next level of support.

Event ID: DCSYS024

Description: FIFO name not sent correctly by the data collection module to the emdatagather process.

Repair Action: Escalate the problem to the next level of support.

Event ID: DCSYS025

Description: FIFO could not be opened by the emdatagather process.

Repair Action: Escalate the problem to the next level of support.

Event ID: DCSYS026

Description: FIFO write error by the emdatagather process.

Repair Action: Escalate the problem to the next level of support.

Event ID: DCSYS027

Description: A request to delete records for a particular datatype for a managed element failed.

Repair Action: Escalate the problem to the next level of support.

Event ID: DCSYS028

Description: A pipe could not be opened by the emdatagather process.

Repair Action: Escalate the problem to the next level of support.

Event ID: DCSYS029

Description: A data file sent by the data collection module could not be found.

Repair Action: Escalate the problem to the next level of support.

Event ID: DCSYS030

Description: A loader file for uploading a data file into the database could not be found.

Repair Action: Escalate the problem to the next level of support.

Event ID: DCSYS031

Description: An error occurred when trying to upload a data file into the database. The data is in the wrong format.

Repair Action: Escalate the problem to the next level of support.

Event ID: DCSYS032

Description: A waitpid error occurred.

Repair Action: Escalate the problem to the next level of support.

Event ID: DCSYS033

Description: WHEN clauses in the SQL statement failed when uploading the data into the database.

Repair Action: Escalate the problem to the next level of support.

Event ID: DCSYS034

Description: Field values in the data file are NULL when uploading the data into the ORACLE tables.

Repair Action: Escalate the problem to the next level of support.

Event ID: DCSYS035

Description: Invalid arguments were passed to the loader script.

Repair Action: Escalate the problem to the next level of support.

Event ID: DCSYS036

Description: The loader is unable to lock the table for data loading.

Repair Action: Escalate the problem to the next level of support.

Event ID: DCSYS037

Description: ORACLE environment variables are not set.

Repair Action: Escalate the problem to the next level of support.

Event ID: DCSYS038

Description: The loader log file was not found.

Repair Action: Escalate the problem to the next level of support.

Event ID: DCSYS040

Description: A general ORACLE error occurred when uploading data into the database.

Repair Action: Escalate the problem to the next level of support.

DP — Data Provisioning

Event ID: DPIMAPI003

Description: IMAPI get admin data error

Repair Action: One or more subscriber parameters were invalid. Administration data was not added. The subscriber does not have permission to access the data. Check whether the IMAPI access for the subscriber is "y".

Event ID: DPIMAPI004

Description: IMAPI put admin data error

Repair Action: One of the subscriber parameters is invalid or inconsistent. Check all inputs to the screen/command line. The subscriber does not have permission to access the data. Check whether the IMAPI access for the subscriber is "y".

Event ID: DPIMAPI007

Description: IMAPI get greeting map error

Repair Action: One of the subscriber parameters is invalid or inconsistent. Check all inputs to the screen/command line. The subscriber does not have permission to access the data. Check whether the IMAPI access for the subscriber is "y".

Event ID: DPIMAPI008

Description: IMAPi retrieve greeting error

Repair Action: The greeting is not in the range of accessible greetings in the database. The subscriber does not have permission to access the data. Check whether the IMAPI access for the subscriber is "y".

Event ID: DPIMAPI008

Description: IMAPI get message component error

Repair Action: The subscriber does not have permission to access the data. Check whether the IMAPI access for the subscriber is "y". One of the following may be occurring:

- Record in progress on the audio component
- Insufficient space on the client for the message component.
- The managed element cannot communicate with the Enterprise Manager after the connection was established.

Event ID: DPIMAPI010

Description: IMAPI get outcalling data error

Repair Action: The subscriber does not have permission to access the data. Check whether the IMAPI access for the subscriber is "y". One of the following may be occurring:

- The subscriber does not have outcalling permission
- The managed element cannot communicate with the Enterprise Manager after the connection was established.

Event ID: DPIMAPI011

Description: IMAPI put greeting map error

Repair Action: The subscriber does not have permission to access the data. Check whether the IMAPI access for the subscriber is "y". One of the following may be occurring:

- The subscriber is not administered to set the greeting map with the number of entries specified
- The managed element cannot communicate with the Enterprise Manager after the connection was established.

Event ID: DPIMAPI012

Description: IMAPI put message component error

Repair Action: The subscriber does not have permission to access the data. AUDIX administration does not allow voice file transfer across the LAN or the subscriber or system does not have authorization to receive a FAX component over the LAN.

One or more arguments are invalid. The specified file was not found or is invalid. However the file may be open or NULL without error

Event ID: DPIMAPI013

Description: IMAPI install greeting message component error

Repair Action: The managed element does not have permission to access the data. The specified greeting is not in the range of accessible greetings in the database (1-9). The managed element cannot communicate with the Enterprise Manager after the connection was established. Try the request again later.

Event ID: DPIMAPI014

Description: IMAPI install outcalling data error

Repair Action: One of the following may be occurring:

- A parameter is invalid, or out of range
- An outcall to the specified number is not allowed
- The subscriber does not have permission to access the data.

The managed element cannot communicate with the Enterprise Manager after the connection was established. Try the request again later.

Event ID: DPIMAPI014

Description: IMAPI install name error

Repair Action: One of the following could be occurring:

- The name record by the subscriber was not enabled.
- The subscriber does not have announcement permissions.
- The subscriber does not have name installation permissions.
- The name is longer than 12 seconds.
- Subscriber identifier specified does not allow name recorded.
- There is no system space available.

Event ID: DPIMAPI016

Description: IMAPI get subscriber ID by number error

Repair Action: The subscriber with the specified number was not found in AUDIX subscriber database.

Event ID: DPIMAPI017

Description: IMAPI no trusted server authorization

Repair Action: The trusted server authorization field should be set to “y” for the subscriber in order to move the subscriber.

Event ID: DPIMAPI018

Description: IMAPI retrieve name error

Repair Action: The subscriber does not have permission for this access. IMAPI access to be set to “y” and the trusted server access to be set to “y”. Record in progress, try again.

Event ID: DPIMAPI019

Description: IMAPI get list lds error

Repair Action: The subscriber does not have permission to access the data. Check whether the IMAPI access and trusted server access for the subscriber is “y”. The managed element cannot communicate with the Enterprise Manager after the connection was established. Try the request again later.

Event ID: DPIMAPI020

Description: IMAPI get subscriber directory entry error

Repair Action: The subscriber directory entry not found (for non-verified subscribers). You must administer the subscriber manually in order to have a directory entry of it in the local managed element database.

Event ID: DPIMAPI021

Description: IMAPI get list error

Repair Action: The subscriber does not have permission to access the data. Check whether the IMAPI access and trusted server access for the subscriber is “y”. The managed element cannot communicate with the Enterprise Manager after the connection was established. Try the request again later.

The specified list for the subscriber may be owned by another subscriber and designated as private.

Event ID: DPIMAPI022

Description: IMAPI create list error

Repair Action: The subscriber does not have permission to access the data. Check whether the IMAPI access and trusted server access for the subscriber is “y”. The maximum number of lists permitted for this subscriber may have already been reached. The managed element cannot communicate with the Enterprise Manager after the connection was established. Try the request again later.

Event ID: DPIMAPI023

Description: IMAPI get subscriber id error

Repair Action: The managed element cannot communicate with the Enterprise Manager after the connection was established. Try the request again later.

Event ID: DPIMAPI022

Description: IMAPI add list error

Repair Action: One of the following may have occurred:

- The maximum list size was exceeded.
- The maximum number of elements on all subscriber lists was exceeded. The subscriber has exceeded the maximum system limits for the lists.

Event ID: DPIMAPI025

Description: IMAPI get message header error

Repair Action: The managed element cannot communicate with the Enterprise Manager after the connection was established. Try the request again later.

Event ID: DPIMAPI026

Description: IMAPI get message component error

Repair Action: One of the following may have occurred:

- The subscriber does not have AUDIX permission to get the audio components.
- The message component specified does not exist.
- A Broadcast Message may expire or be deleted between the time a message header is retrieved and an attempt to get or play component.

Event ID: DPTHR003

Description: Current provisioning process has been throttled.

Repair Action: The process is not allowed to run anticipating an excess system load. Try the request again later.

RP — Reports

Event ID: RPARG001

Description: Invalid argument passed

Repair Action: This message is provided for informational purposes.

Event ID: RPARG002

Description: The mandatory report number was not passed as an argument to the executable **/EMrpts/bin/nmreports**

Repair Action: This message is provided for informational purposes.

Event ID: RPARG003

Description: The mandatory customer ID was not passed as an argument to the executable **/EMrpts/bin/nmreports**

Repair Action: This message is provided for informational purposes.

Event ID: RPARG004

Description: The mandatory managed element name was not passed as an argument to the executable **/EMrpts/bin/nmreports**

Repair Action: This message is provided for informational purposes.

Event ID: RPARG005

Description: The data collection process failed while generating an on-demand report

Repair Action: This message is provided for informational purposes.

Event ID: RPARG006

Description: File read error on **<filename>**

Repair Action: Check the permissions of **<filename>** to make sure read permissions are available.

Event ID: RPARG007

Description: File write error on **<filename>**

Repair Action: Check the permissions of **<filename>** to make sure write permissions are available.

Event ID: RPARG008

Description: Malloc error: Memory not available for allocation

Repair Action: This message is provided for informational purposes.

Event ID: RPARG009

Description: SYSTEM command failure

Repair Action: This message is provided for informational purposes.

Event ID: RPARG010

Description: File open error

Repair Action: This message is provided for informational purposes.

Event ID: RPARG011

Description: system Loaded: Fork failure

Repair Action: This message is provided for informational purposes.

SP — Service Provider

Event ID: SPDIS001

Description: An audit reported discrepancies.

Repair Action: Compare the **/EMspi/audit/audit** and the **/etc/host** files for discrepancies for the IP addresses and host names. The host name in the **/etc/hosts** file is in the form **CUSTID_MENAME**. For example, if the customer ID is lucent, and the managed element name is audix1, the host name is lucent_audix1.

Event ID: SPTIM001

Description: Command PID *<process ID>*, start time *<time>*.

Repair Action: This message is provided for information purposes.

Event ID: SPTIM002

Description: Command PID *<process ID>*, end time *<time>*.

Repair Action: This message is provided for information purposes.

Event ID: SPTIM003

Description: Command status <exit code>.

Repair Action: This message is provided for information purposes.

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