

**Lucent Technologies**  
Bell Labs Innovations



# Intuity™ CONVERSANT® System

Version 7.0

MAP/5P Maintenance

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## Overview

This book contains information for troubleshooting and diagnosing problems associated with the Intuity CONVERSANT MAP/5P and hardware. It also includes component replacement procedures as well as installation procedures for base system software, Intuity CONVERSANT system software, and optional feature software. Appendices contain a system configuration description, a list of component ordering numbers, a checklist for building a system, and checklists for disaster recovery.

**Note:** To repair or alter the configuration of your system, you must have a copy of this book.

## Intended Audience

This book is intended primarily for the on-site service technician and system administrators. Secondary audiences include the following:

- Field support — Technical Service Organization (TSO)
- Lucent Technologies Helpline personnel

We assume that the primary users of this book have completed the MAP/5P hardware installation training course (see [Training on page xxxix](#)).

## How to Use This Book

This book is designed to help you maintain your Intuity CONVERSANT system. It should be used as a quick-reference to obtain specific information you may need on a particular topic.

### How This Book Is Organized

This book contains the following sections:

- [Chapter 1, Getting Inside the Computer](#) — provides the correct procedures for accessing the internal components of the MAP/5P system.
- [Chapter 2, Installing or Replacing Circuit Cards](#) — contains procedures to ensure that circuit cards are installed correctly and resource options are set correctly.

- [Chapter 3, Replacing a Hard Disk Drive](#) — contains procedures to identify and recover from hard disk drive failures, to add a hard disk drive, to establish disk mirroring, and to clean a hard disk drive.
- [Chapter 4, Replacing Other Components](#) — contains procedures to replace the MAP/5P internal components and information on the correct configuration and settings for individual components.
- [Chapter 5, Installing Base System Software](#) — contains the installation procedures necessary to reload the UnixWare operating system software.
- [Chapter 6, Installing the Intuity CONVERSANT System Software](#) — contains procedures to install the Intuity CONVERSANT system software.
- [Chapter 7, Installing the Optional Feature System Software](#) — contains procedures to install all the software that was not included on the application software cartridge tape.
- [Appendix A, System Configuration](#) — describes the configuration of components in the MAP/5P and the operation of the Hardware Resource Allocator.
- [Appendix B, Component Ordering Numbers](#) — lists the ordering numbers for replacement components used in the MAP/5P.
- [Appendix C, How to Build a System Using This Book](#) — provides the sequence of operations for rebuilding a system starting from the MAP/5P shell.

- [Appendix D, Disaster Recovery Checklists](#) — provides a general task checklist for disaster recovery with references to required procedures.
- [Appendix E, MAP/5P Platform Alarms](#) — describes the platform alarms (not generated by the Intuity CONVERSANT system and not documented in the Intuity CONVERSANT alarm logs).
- [Glossary](#) — Defines the terms, abbreviations, and acronyms used in system documentation.
- [Index](#) — Alphabetically lists the principal subjects covered in the book.

## Conventions Used in This Book

Understanding the typographical and other conventions used in this book is necessary to interpret the information.

### 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 the **ENTER** key on the keyboard. 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 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 system display menus, screens, and windows. Menus allow you to select options or to choose to view another menu, screen, or window ([Figure 1 on page xxx](#)). Screens and windows both show and request system information ([Figure 2 on page xxx](#) through [Figure 5 on page xxxiii](#)).

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

Figure 1. Example of an Intuity CONVERSANT Menu

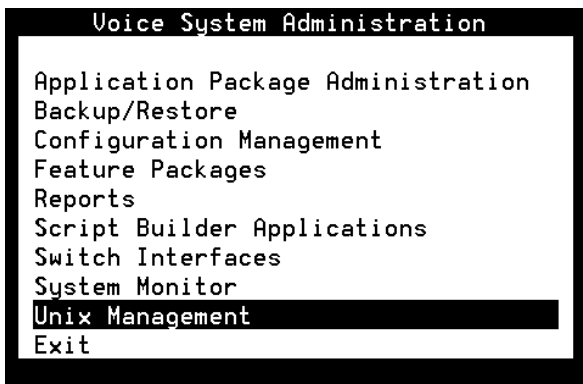
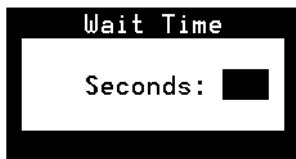


Figure 2. Example of an Intuity CONVERSANT Window Requesting Information



**Figure 3. Example of an Intuity CONVERSANT Screen Requesting Information**

You may use a partition of your secondary hard disk. 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 UNIX System.

Press '1' or '2' followed by 'ENTER'.

**Figure 4. Example of an Intuity CONVERSANT Screen Showing Information**

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.'



Figure 5. Example of an CONVERSANT Window Showing Information

```
3 Shut Down the Machine
Users currently logged on:
root      console    Jul  8 06:39
root      pts000     Jul  8 08:48
```

### Keyboard and Telephone Keypad Representations

- Keys that you press on your terminal or PC are represented as small capitalized **BOLD** text. 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 small capitalized **BOLD** text. For example, an instruction to press and hold the Alt key 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 small capitalized **BOLD** text followed by the function or value of that key enclosed in parentheses. For example, an instruction to press function key 3 is shown as

Press **F3** (Choices).

- Keys that you press on your telephone keypad appear in small capitalized **BOLD** text. For example, an instruction to press the first key on your telephone keypad is shown as

Press **1** to record a message.

## Cross References and Hypertext

Blue underlined type indicates a cross reference or hypertext link that takes you to another location in the document when you click on it with your mouse.

## Screen Displays

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

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

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 Voice System Administration menu and select:

```
> Reports
> Message Log Report
```

In this example, you would access the Voice System Administration menu and select the Reports menu. From the Reports menu, you would then select the Message Log Report option.

### Other Typography

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

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

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 in *blue italic type* when they are referred to, for example:

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

- Command options are shown inside square brackets, for example:

Enter **connect *switchname* [-d] [-b | -w]**

## 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.

 **SECURITY ALERT:**

Indicates the presence of a toll fraud security hazard. Toll fraud is the unauthorized use of a telecommunications system by an unauthorized party.

## Getting Help

The Intuity CONVERSANT system provides online help to assist you during installation, administration, and application development tasks.

To use the online help:

- Press **F1** (Help) when you are in a menu or window.

The first time you press **F1**, the system displays information about the currently active window or menu.

- ~ When you are in a window, the help explains the purpose of the window and describes its fields.
- ~ When you are in a menu, the help explains how to use menus.

If you press **F1** again, the system displays a General Help screen that explains how to use the online help.

- Press **F2** (Choices) when you are in a field.

The system displays valid field choices either in a pop-up window or on the status line directly above the function keys.

- Press **F6** (Cancel) to exit the online help.

## Technical Assistance

### Web Site

The following customer support web site contains resources where you can find solutions for technical problems:

<http://support.lucent.com>

### Contact Numbers

Technical assistance on the Intuity CONVERSANT product is available through the following telephone contacts:

- In the United States, call 1-800-242-2121.
- In Canada, call one of the following numbers, depending on your location:
  - ~ 1-800-363-1882 for assistance in Quebec and eastern Canada
  - ~ 1-800-387-4268 for assistance in Ontario and western Canada

- In any other country, call your local distributor or check with your project manager or systems consultant.

## Related Resources

Additional documentation and training material is available for you to learn more about the Intuity CONVERSANT product.

### Training

To obtain training on the Intuity CONVERSANT product, contact the BCS Education and Training Center at one of the following numbers:

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

You can also view information on Intuity CONVERSANT training at the Global Learning Solutions (GLS) web site at one of the following web links:

- Organizations within Lucent Technologies  
<http://training.gls.lucent.com>
- Lucent Technologies customers and all others  
<http://www.lucenttraining.com>

The courses listed below are recommended. Other courses are available.

- For technicians doing repairs on Intuity CONVERSANT V7.0 systems
  - ~ BTT509H, CONVERSANT Installation and Maintenance Voice Information System
- For technicians and administrators
  - ~ BTC344M, Intuity CONVERSANT V7 Administration Overview (CD-ROM)
- For application developers
  - ~ BTC128H, Introduction to Script Builder
  - ~ BTC166H, Introduction to Voice@Work
  - ~ BTC204H, Intermediate Voice@Work
  - ~ BTC301H, Advanced CONVERSANT Programming

## Documentation

Appendix A, "Documentation Guide," in *Intuity CONVERSANT System Version 7.0 System Description*, 585-313-204, describes in detail all books included in Intuity CONVERSANT documentation library and referenced in this book.

**Note:** Always refer to the appropriate book for specific information on planning, installing, administering, or maintaining an Intuity CONVERSANT system.



### Additional Suggested Documentation

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

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

### For Troubleshooting Information

Basic troubleshooting information is available in “Troubleshooting” in the *Intuity CONVERSANT System Reference*, 585-313-205.

### For Diagnostic Information

Instructions for conducting diagnostics are available in “Diagnostics” in the *Intuity CONVERSANT System Reference*, 585-313-205.

### For Common System Procedures

Instructions for conducting common system procedures are available in “Common System Procedures” in the *Intuity CONVERSANT System Reference*, 585-313-205.

### For Installation Information

Instructions for installing or reinstalling system elements are available in *Intuity CONVERSANT System Version 7.0 New System Installation*, 585-313-106.

### Obtaining Printed Versions of the Documentation

See [Documentation Ordering Information on page ix](#) of [Copyright and Legal Notices](#) for information on how to purchase Intuity CONVERSANT documentation in printed form. You can also print documentation locally from the CD-ROM (see [Printing the Documentation on page xliv](#)).

## Using the CD-ROM Documentation

Lucent Technologies ships the documentation in electronic form. Using the Adobe Acrobat Reader application, you can read these documents on a Windows PC, on a Sun Solaris workstation, or on an HP-UX workstation. Acrobat Reader displays high-quality, print-like graphics on both UNIX and Windows platforms. It provides scrolling, zoom, and extensive search capabilities, along with online help. A copy of Acrobat Reader is included with the documents.

**Note:** If viewing documents online, it is recommended that you use a separate platform and not the Intuity CONVERSANT system.

### Setting the Default Magnification

You can set your default magnification by selecting **File | Preferences | General**. We recommend the **Fit Page** option.

### Adjusting the Window Size

On HP and Sun workstations, you can control the size of the reader window by using the **-geometry** argument. For example, the command string **acread -geometry 900x900 mainmenu.pdf** opens the main menu with a window size of 900 pixels square.

### Hiding and Displaying Bookmarks

By default, the document appears with bookmarks displayed on the left side of the screen. The bookmarks serve as a hypertext table of contents for the chapter you are viewing. You can control the appearance of bookmarks by selecting **View | Page Only** or **View | Bookmarks and Page**.




### Using the Button Bar

The button bar can take you to the book's Index, table of contents, main menu, and glossary. It also lets you update your documents. Click the corresponding button to jump to the section you want to read.

### Using Hypertext Links

Hypertext links appears in [blue underlined](#) text. These links are shortcuts to other sections or books.

### Navigating with Double Arrow Keys

The double right and double left arrows ( and ) at the top of the Acrobat Reader window are the go-back and go-forward functions. The go-back button takes you to the last page you visited prior to the current page. Typically, you use  to jump back to the main text from a cross reference or illustration.

### Searching for Topics

Acrobat has a sophisticated search capability. From the main menu, select **Tools | Search**. Then select **Master Index**.

**Displaying Figures** If lines in figures appear broken or absent, increase the magnification. You might also want to print a paper copy of the figure for better resolution.

### Printing the Documentation

**Note:** For information on purchasing printed copies of the documents, see [Obtaining Printed Versions of the Documentation on page xlii](#).

If you would like to read the documentation in paper form rather than on a computer monitor, you can print all or portions of the online screens.

### Printing an Entire Document

To print an entire document, do the following:

- 1 From the documentation main menu screen, select one of the print-optimized documents. Print-optimized documents print two-screens to a side, both sides of the sheet on 8.5x11-inch or A4 paper.
- 2 Select **File | Print**.
- 3 Enter the page range you want to print, or select **All**. Note that the print page range is different from the page numbers on the documents (they print two to a page).
- 4 The document prints.
- 5 Close the file. Do not leave this file open while viewing the electronic documents.

### Printing Part of a Document

To print a single page or a short section, you can print directly from the online version of the document.

- 1 Select **File | Print**.
- 2 Enter the page range you want to print, or select **Current**.

The document prints, one screen per side, two sides per sheet.

## How To Comment on This Book

While we have tried to make this document fit your needs, we are interested in your suggestions for improving it and urge you to send your comments to us.

### Comment Form

A comment form, available in paper and electronic versions, is available via the documentation CD-ROM. To use the comment form:

- 1 Select **Comments** from the Main Menu of the CD-ROM.
- 2 Follow the instructions provided on the CD-ROM to do one of the following:
  - ~ Print the paper version of the form, complete it, and fax or mail it to us.
  - ~ Access a Lucent Technologies website where you can enter your comments electronically.

**Contact Us Directly** If you prefer not to use the comment form, you can contact us directly at the following address or fax number.

**Note:** Direct your correspondence to the attention of the Lucent Technologies Intuity CONVERSANT writing team. Be sure to mention the title of the book on which you are commenting.

Lucent Technologies  
GLS Information Development Division  
Room 22-2H15  
11900 North Pecos Street  
Denver, CO 80234-2703 US  
Fax 1 303-538-1741

# 1 Getting Inside the Computer

## Overview

This chapter provides the correct procedures for accessing the internal components of the MAP/5P.

Topics covered include:

- [Protecting Against Damage from Electrostatic Discharge on page 2](#)
- Power removal and restoration
  - ~ [Removing Power from the MAP/5P on page 7](#)
  - ~ [Restoring Power to the MAP/5P on page 11](#)
- Computer chassis access
  - ~ [Removing the Dress Cover on page 9](#)
  - ~ [Replacing the Dress Cover on page 11](#)

## Protecting Against Damage from Electrostatic Discharge

### CAUTION:

Read this section before unpacking the MAP/5P. You *must* observe proper grounding techniques to prevent the discharge of static electricity from your body into ESD-sensitive components.

Circuit cards and packaging materials that contain ESD-sensitive components are usually marked with a yellow-and-black warning symbol ([Figure 6 on page 2](#)).

**Figure 6. ESD Warning Symbol**





## CAUTION:

Ensure that your palm is not in contact with the non-component side of the board.

To avoid damaging ESD-sensitive components, follow these rules:

- Handle ESD-sensitive circuit cards only after attaching a wrist strap to your bare wrist. Attach the other end of the wrist strap to a ground that terminates at the system ground, such as any unpainted metallic chassis surface.
- Handle a circuit card by the faceplate or side edges only ([Figure 7 on page 4](#) and [Figure 8 on page 5](#)).

Figure 7. How to Hold a Small Circuit Card

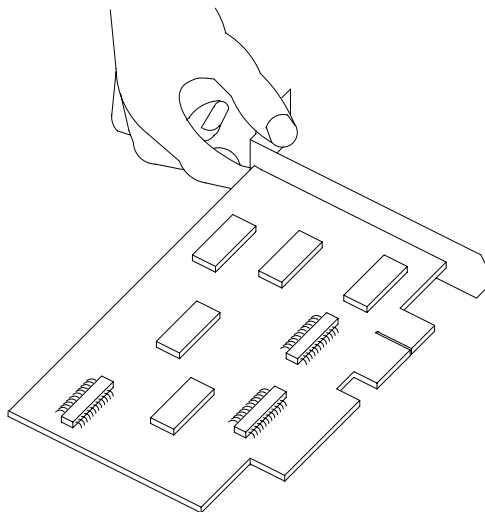
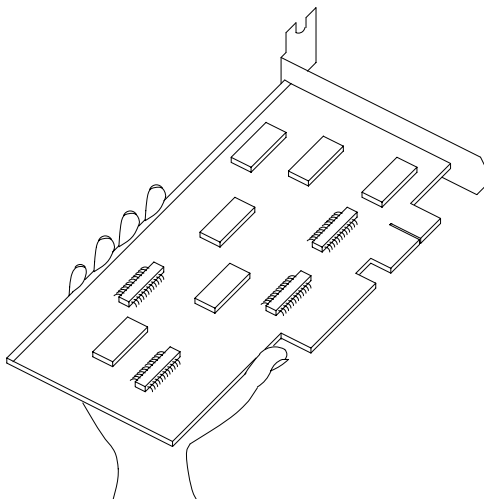


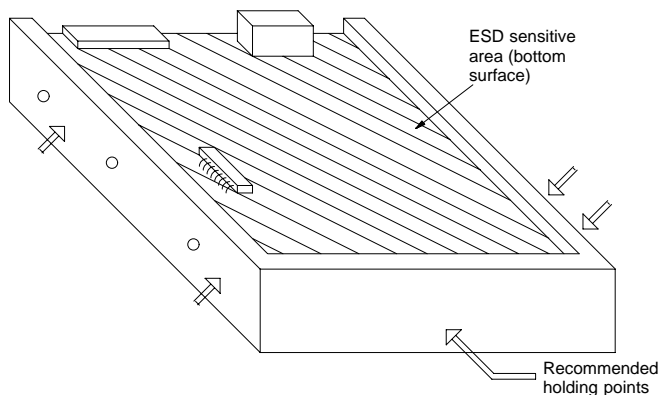
Figure 8. How to Hold a Large Circuit Card



- Keep circuit cards away from plastics and other synthetic materials such as polyester clothing.
- Do not hand circuit cards to another person unless that person is grounded at the same potential level.

- Hold devices such as a hard disk, floppy drive, or streaming tape in the same manner as a large circuit card. The ESD-sensitive area of these components is located on the bottom surface ([Figure 9 on page 6](#)).

**Figure 9. ESD-Sensitive Area of an Electronic Component**



## Removing Power from the MAP/5P

The MAP/5P requires a dedicated circuit with a dedicated circuit breaker. The power cord connects to the rear of the MAP/5P at the point labeled AC power inlet receptacle ([Figure 10 on page 8](#)).

Before you begin any work in the MAP/5P complete the following procedure to remove power from the MAP/5P:

- 1 Shut down the INTUITY CONVERSANT system. See “Administer the Voice System,” in “Common System Procedures,” in the *Intuity CONVERSANT System Reference*, 585-313-205.

- 2 Turn off the monitor’s power switch.

The green or amber lamp on the front bottom of the monitor should be off.

- 3 Turn off the power switch on the front of the MAP/5P.

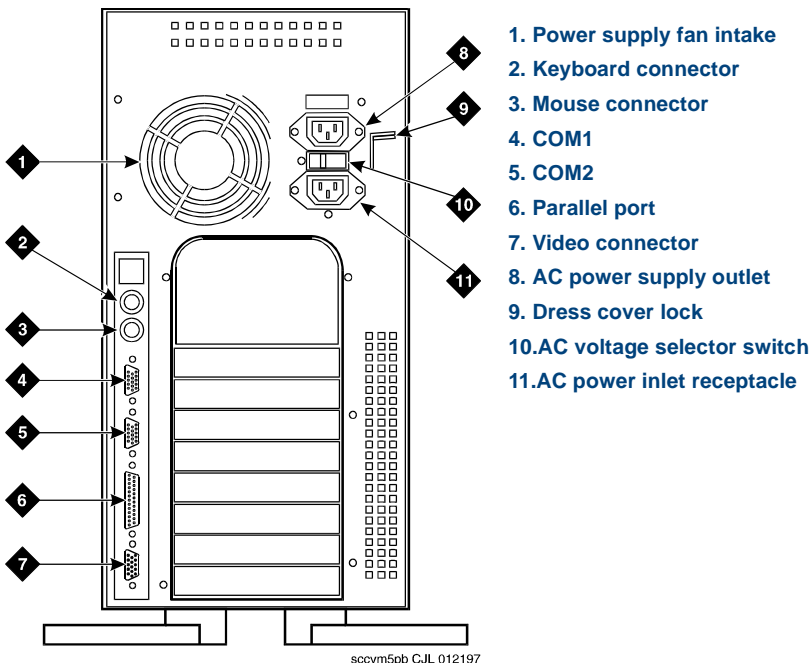
The green lamp labeled POWER ON on the front of the unit should be off.

- 4 Unplug the MAP/5P from the power outlet.

- 5 Remove the MAP/5P power cord from the AC receptacle in the wall.

- 6 Observe the correct lock-out/tag-out precautions for isolating power as outlined in the Lucent lock-out/tag-out procedure.

Figure 10. Back View of the MAP/5P



## Removing the Dress Cover

The dress cover provides protection for the internal components of the MAP/5P. You must remove the dress cover to access these components.



### **WARNING:**

**Shut power off before removing the dress cover. See [Removing Power from the MAP/5P on page 7](#) for the procedure.**

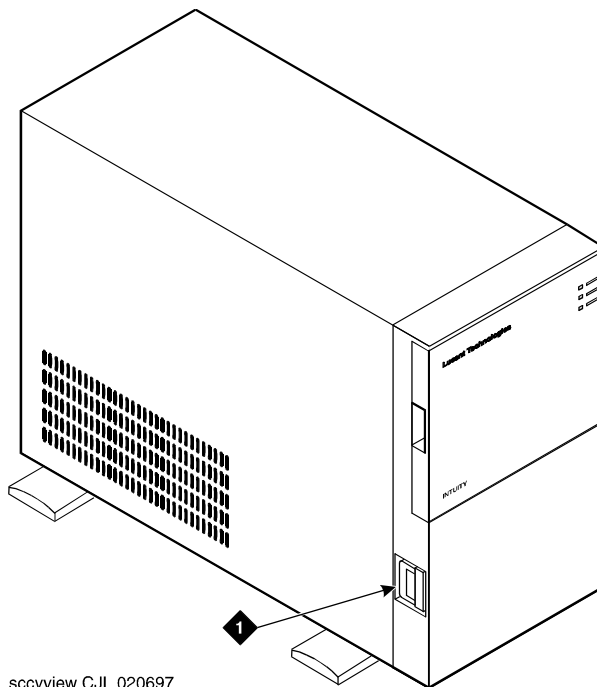
To remove the dress cover, do the following:

- 1 Place the dress cover lock ([Figure 10 on page 8](#)) in the open position.

**Note:** [Figure 10 on page 8](#) shows the dress cover lock in the locked position.

- 2 Simultaneously compress the dress cover latches on either side of the MAP/5P ([Figure 11 on page 10](#)).
- 3 Slide the dress cover away from the MAP/5P.

Figure 11. Removing the Dress Cover



sccvview CJL 020697



## Replacing the Dress Cover

To replace the dress cover, do the following:

- 1 Align the dress cover with the MAP/5P chassis.
- 2 Slide the dress cover back until it locks into place.
- 3 Close the dress cover lock on the back of the MAP/5P chassis.

## Restoring Power to the MAP/5P

To restore power to the MAP/5P, do the following:

- 1 Plug the MAP/5P power cord into the designated power outlet.
- 2 Fasten the power cord to the MAP/5P dress cover lock using a cable tie.

**Note:** Leave some slack in the power cord between the dress cover lock and the back of the MAP/5P.

- 3 Turn on the monitor's power switch.

The green or amber lamp on the front bottom of the monitor should be lit.

- 4 Press on the power switch on the front of the MAP/5P.

The green lamp on the front of the unit should be lit.

# 2 Installing or Replacing Circuit Cards

## Overview

This chapter contains information to ensure that Intuity CONVERSANT circuit cards are installed correctly and resource options are set correctly.

Topics covered include:

- Configuring circuit cards in the MAP/5P
- Types of circuit cards
- General steps for circuit card installation
- Specific procedures for installation of standard and optional MAP/5P circuit cards
- Settings for resource options

## General Procedures

The general procedures include:

- [Removing a Circuit Card on page 13](#)
- [Installing a Circuit Card on page 16](#)

### Removing a Circuit Card

#### CAUTION:

Observe proper electrostatic discharge precautions when you handle computer components. Wear an antistatic wrist strap that touches your bare skin and connect the strap cable to an earth ground. See [Protecting Against Damage from Electrostatic Discharge on page 2](#) in [Chapter 1, Getting Inside the Computer](#).

To remove a circuit card, the following procedures are required:

- [Removing the Intuity CONVERSANT System from Service on page 14](#)
- [Accessing the Circuit Card on page 14](#)
- [Extracting the Circuit Card on page 14](#)

### Removing the Intuity CONVERSANT System from Service

To remove the Intuity CONVERSANT system from service, do the following:

- 1 Verify that the replacement equipment is on site and appears to be in usable condition, with no obvious shipping damage.
- 2 Stop the voice system. See “Administer the Voice System,” in “Common System Procedures,” in the *Intuity CONVERSANT System Reference*, 585-313-205.
- 3 Shut down the system. See “Shut Down the System,” in “Common System Procedures,” in the *Intuity CONVERSANT System Reference*, 585-313-205.
- 4 Remove the incoming power. See [Removing Power from the MAP/5P on page 7](#) in [Chapter 1, Getting Inside the Computer](#).

### Accessing the Circuit Card

To access the circuit card, remove the dress cover. See [Removing the Dress Cover on page 9](#) in [Chapter 1, Getting Inside the Computer](#).

### Extracting the Circuit Card

To extract the circuit card, do the following:

- 1 Locate the circuit card to be replaced within the card cage.
- 2 Disconnect any attached cables.

**Note:** Pay close attention to the connectivity of each cable to make it easier to connect them to the replacement circuit card.

- 3 If there are cables attached to other circuit cards which would impede the removal of the card, disconnect them and place them to the side.

**Note:** Pay close attention to the connectivity of each cable.

- 4 Remove the retaining screw from the circuit card faceplate and save it.
- 5 Remove the circuit card from the backplane slot by gently pulling on each corner of the card.

**Note:** Note the slot assignment because you must install the replacement card in the same backplane slot. See [Component Assignments on page 354](#) in [Appendix A, System Configuration](#), for circuit card slot assignments.

- 6 Remove the circuit card from the MAP/5P.

 **CAUTION:**

Hold the circuit card carefully by the edges and place it on a grounded mat. See [Protecting Against Damage from Electrostatic Discharge on page 2](#) in [Chapter 1, Getting Inside the Computer](#), for detailed electrostatic discharge precautions.

- 7 If the circuit card being replaced is defective, note all symptoms of failure and include this information with the circuit card when it is returned.

## Installing a Circuit Card

### CAUTION:

Observe proper electrostatic discharge precautions when you handle computer components. Wear an antistatic wrist strap that touches your bare skin and connect the strap cable to an earth ground. See [Protecting Against Damage from Electrostatic Discharge on page 2](#) in [Chapter 1, Getting Inside the Computer](#).

To install a circuit card, the following procedures are required:

- [Inserting the Circuit Card on page 16](#)
- [Reassembling the MAP/5P on page 18](#)
- [Restoring the Intuity CONVERSANT System to Service on page 18](#)

**Note:** If you are adding an additional circuit card to the Intuity CONVERSANT system, complete the procedures in [Removing the Intuity CONVERSANT System from Service on page 14](#) and [Accessing the Circuit Card on page 14](#).

### Inserting the Circuit Card

To insert the circuit card, do the following:

- 1 Remove the new circuit card from its ESD-protective wrapping.

**Note:** Keep the package and all ESD-protective wrapping. You must re-use the material in which the replacement circuit card was packaged to meet the manufacturer's warranty.

- 2 Verify the circuit card switch and jumper settings. Ensure address switches and jumpers are set to match the old card.

**Note:** See the specific instructions listed later in this chapter for each type of circuit card you are installing then continue with [step 3](#).

- 3 If the circuit card is the last circuit card connected to either end of the TDM bus, you must ensure that the TDM bus terminator single in-line packages (SIPs) are in place on the circuit card. See [Replacing a Terminator SIP on page 194](#) in [Chapter 4, Replacing Other Components](#).

If the circuit card is not the last circuit card on the bus, you must remove the SIPs.

**Note:** "Last circuit card connected" means that there are no other cards between the circuit card and the end of the bus. There may, however, be empty connectors.

- 4 If the circuit card you are installing is the last circuit card on the bus, check those circuit cards that were already in place to ensure that the SIPs have been removed.

- 5 Holding the circuit card by its upper corners, slide the card into the backplane connector slot position from which you removed the damaged card. If necessary, see [Appendix A, System Configuration](#), to determine the correct slot in which to place the card.
- 6 Apply even pressure to both corners of the circuit card until it is locked into the backplane.
- 7 Secure the circuit card faceplate into position by replacing the retaining screw.
- 8 Replace all cables on the new card. Make sure these cables are attached to their proper terminations.
- 9 Replace all cables removed from other cards. Make sure these cables are attached to their proper terminations.

### Reassembling the MAP/5P

To reassemble the MAP/5P, replace the dress cover. See [Replacing the Dress Cover on page 11](#) in [Chapter 1, Getting Inside the Computer](#).

### Restoring the Intuity CONVERSANT System to Service

To restore the Intuity CONVERSANT system to service, do the following:

- 1 Restore power to the MAP/5P. See [Restoring Power to the MAP/5P on page 11](#) in [Chapter 1, Getting Inside the Computer](#).
- 2 Verify the Intuity CONVERSANT system operation by placing a call to a user.



## Settings for Optional Circuit Card

### CAUTION:

Observe proper electrostatic discharge precautions when you handle computer components. Wear an antistatic wrist strap that touches your bare skin and connect the strap cable to an earth ground. See [Protecting Against Damage from Electrostatic Discharge on page 2 in Chapter 1, Getting Inside the Computer](#).

This section provides the following information on the optional feature circuit cards:

- Switch and jumper settings
- Other installation requirements that are specific to the particular circuit card you are installing

In general, circuit cards are not preset at the factory. You must set the switches and jumpers (resource options) before you install the cards. When you set the switches according to the instructions in this book, remember that OFF is equivalent to open and ON is equivalent to closed.

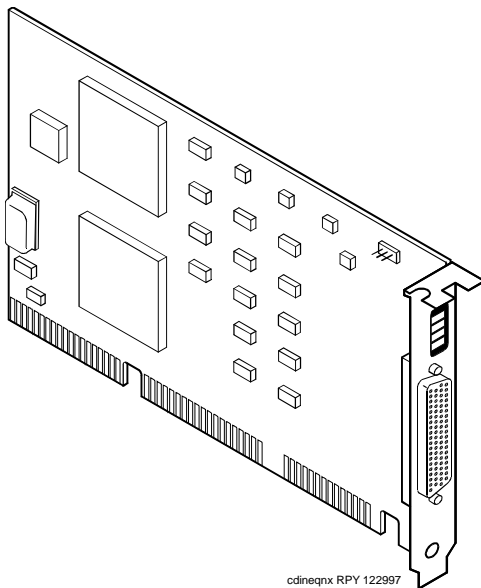
## Asynchronous SuperSerial Circuit Card

The asynchronous circuit card allows you to connect the Intuity CONVERSANT system to external peripheral equipment.

[Figure 12 on page 20](#) shows the asynchronous SuperSerial circuit card.

**Note:** If you are installing the asynchronous SuperSerial circuit card, the system cannot be equipped with the 8-Port Asynchronous Megaport circuit card.

**Figure 12. Asynchronous SuperSerial Circuit Card**



### Installing the Asynchronous SuperSerial Card Driver

To install the asynchronous SuperSerial card driver, do the following:

**1** If you are not already logged in as root, do so now.

**2** Enter **pkgadd -d diskette1**

The system displays the following message:

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

**3** Insert the diskette labeled “Equinox SST Loadable STREAMS Device Driver (EISA/ISA/MCA/PCI) 1 of 1” into the diskette drive.

**4** Press **ENTER**.

The system displays the following message:

```
Installation in progress -- do not remove the diskette.
```

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

```
1. eqn   Equinox SST Loadable STREAMS  
        Device Driver (EISA/ISA/MCA/PCI)  
        (i386)
```

```
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:
Package: Equinox SST Loadable STREAMS Device Driver
(EISA/ISA/MCA/PCI) (eqn) from <diskette1>

Equinox SST Loadable STREAMS Device Driver
(EISA/ISA/MCA/PCI) (i386)
Using </> as the package base directory.
Lucent Technologies Inc.
```

The system displays several status messages and then the following message:

```
This seems to be an ISA system. Is this correct[Y/n]?
```

### 6 Enter y

The system displays the following message:

```
Installing for ISA bus system.
```

```
The following i/o ports appear to be free for use by
Equinox ISA boards:
```

```
220 240 260 280 2a0 2c0 2e0 320 360 3a0 3c0
```

```
Should the driver autoconfigure all Equinox ISA boards
[Y/n]?
```

### 7 Enter n

The system displays the following message:

One 16k block of memory addresses will be used by all Equinox ISA boards. This address must meet the following criteria:

1. In the range of 640 kilobyte to 1 Megabyte or above 2 Gigabytes
2. No other physical memory (RAM/ROM) present
3. Must NOT be cached
4. Must begin on a 16k boundary

An example hexadecimal address is 0xb0000

Enter your address selection in hexadecimal: 0x

- 8** Enter the appropriate address as determined by the Hardware Resource Allocator.

The memory block boundary is determined by the Intuity CONVERSANT Hardware Resource Allocator. See "[Hardware Resource Allocator Operation on page 359](#)" in [Appendix A, System Configuration](#).

The system displays the following message:

You may enable a selection of baud rates above 38400 for all ports by answering "Yes" to the following question.

If you enable baud rates above 38400, speeds below 300 baud will be unavailable. Speeds 300 to 38400 are unaffected.

The high baud rates are selected according to the following table:

57600	B50
76800	B75
115200	B110
238400	B134 (depending on board/module (type

Enable high baud rate selection [y/N]?

### 9 Enter n

The system displays the following message:

```
The unix kernel will be rebuilt to include your configuration
changes during the next system reboot.
```

```
A system rebuild has been requested when the system is
shutdown. System tunables have been modified.
```

```
Please request a reboot using the "init 6" command to use the
driver.
```

```
If you desire the default set of port monitors and port
services to be installed, execute "/etc/equportsetup" after
the system has rebooted.
```

```
Installation of Equinox SST Loadable STREAMS Device Driver
(EISA/ISA/MCA/PCI) (eqn) was successful.
```

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

- 10 Enter **q**
- 11 Remove the diskette labeled “Equinox SST Loadable STREAMS Device Driver (EISA/ISA/MCA/PCI) 1 of 1” from the diskette drive.
- 12 Reboot the system. See “Reboot the System,” in “Common System Procedures,” in the *Intuity CONVERSANT System Reference*, 585-313-205.

## PCI Ethernet LAN Circuit Cards

The system supports two versions of the PCI Ethernet LAN circuit card

- SMC8432
- SMC9332

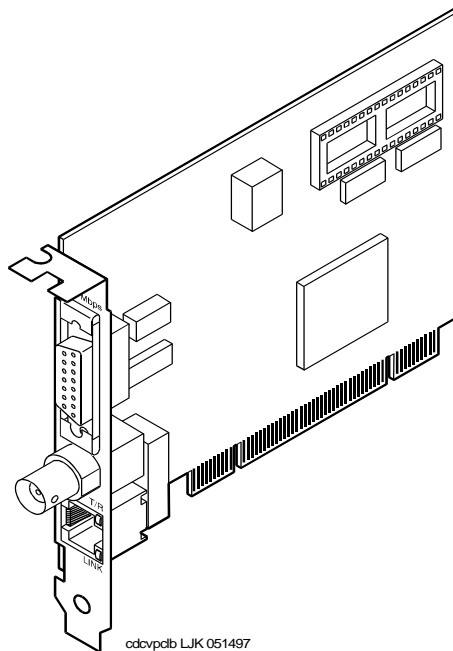
These cards allow you to connect the Intuity CONVERSANT system to your local area network.

### SMC8432 Circuit Card

The SMC8432 Ethernet LAN circuit card is a 10-Mbps circuit card. [Figure 13 on page 26](#) shows the SMC8432 Ethernet LAN circuit card.

**Note:** There are no jumpers on the SMC8432 circuit card.

Figure 13. SMC8432 Ethernet LAN Circuit Card



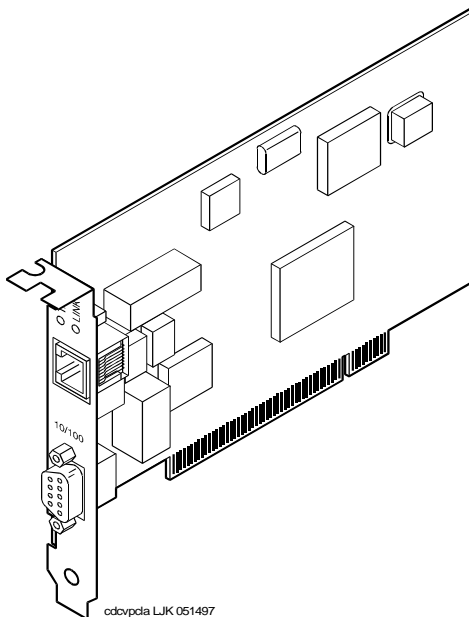


### SMC9332 Circuit Card

The SMC9332 Ethernet LAN circuit card is a 10/100-Mbps circuit card. [Figure 14 on page 27](#) shows the SMC9332 Ethernet LAN circuit card.

**Note:** There are no jumpers on the SMC9332 circuit card.

**Figure 14. SMC9332 Ethernet LAN Circuit Card**



odovpda LJK 051497

### Installing a PCI LAN Circuit Card

Installation of a 10 Mbps or a 10/100 Mbps PCI LAN circuit card, in a system which did not previously have a LAN circuit card, involves

- ~ [Installing a PCI LAN Circuit Card on page 28](#)
- ~ [CMOS Parameter Settings on page 34](#)
- ~ [Installing the PCI Circuit Card Driver on page 30](#)
- ~ [Verifying the PCI LAN Circuit Card Installation on page 33](#)

### Installing the PCI LAN Circuit Card

To install either a 10 Mbps or a 10/100 Mbps PCI LAN circuit card, do the following:

- 1 Shut down the system if it is up and running; otherwise continue with [step 2](#). See “Shut Down the System,” in “Common System Procedures,” in the *Intuity CONVERSANT System Reference*, 585-313-205.
- 2 Install the 10 Mbps or 10/100 Mbps PCI LAN circuit card. See [Installing a Circuit Card on page 16](#).
- 3 Administer the PCI INT/IRQ Binding. See [CMOS Parameter Settings on page 34](#).

### Installing a 100 Mbps PCI LAN Circuit Card

**Note:** Perform the following procedure if the SMC9332 circuit card is required to operate at 100 Mbps. If the SMC9332 circuit card is to operate at 10 Mbps, continue with [Installing the PCI Circuit Card Driver on page 30](#) because no changes are required for 10 Mbps operation.

To ensure the SMC9332 circuit card operates at 100 Mbps, do the following:

- 1 Login as root.
- 2 Enter **vi /etc/inst/nics/drivers/smpw0**
- 3 Change the line  
SMPMEDIA0 SMC\_MEDIA\_AMD  
to  
**SMPMEDIA0 SMC\_MEDIA\_STP100\_UTP100**

**Note:** SMPMEDIA0 is used for the first PCI LAN circuit card. If your system is using more than one PCI LAN circuit card, change SMPMEDIA1 (for card 2), SMPMEDIA2 (for card 3), or SMPMEDIA3 (for card 4) as required, to read the same as that entered for SMPMEDIA0.

- 4 Write and exit the file.

### Installing the PCI Circuit Card Driver

To install the PCI LAN circuit card driver, do the following:

- 1 From the network administrator, determine the following:
  - ~ The machine IP address
  - ~ The machine node name
  - ~ The system name
- 2 If you are not already logged in as root, do so now.
- 3 Enter **niccfg**

The system displays the following message:

```
Setting up the Network Interface Card Support Utility
```

The system then displays the Network Interface Card Support Utility—Summary Screen ([Figure 15 on page 31](#)).

Figure 15. Network Interface Card Support Utility—Summary Screen

SLOT	BUS-NUM	BOARD NAME	IRQ	IO-ADDR	MAN-ADDR	DMA
-----	-----	-----	---	-----	-----	---
6	PCI__0	SMC_EtherPower_9332	IO	f880-f8ff	fedfec00-fedfec7f	

Please Select an Option

- (\*) Accept all Entries
- ( ) Add an entry for a card
- ( ) Delete/restore an Entry for a Card
- ( ) Install Driver from IHV Diskette
- ( ) Cancel this Utility Without Making Changes

Use the up/down arrow keys to select then press ENTER

#### 4 Use the down (▼) arrow to select: **Accept all Entries**

**Note:** If installing from a diskette, select: **Install Driver from IHV Diskette**

#### 5 Press **ENTER**

The system displays the following message:

Installing drivers for Network Card you selected. This will take a few minutes.

When complete, the system displays the system prompt.

- 6 Enter **setuname -n *name*** where *name* is the machine node name.
- 7 Enter **setuname -s *name*** where *name* is the system name.
- 8 Enter **cd /etc/net**
- 9 Use the vi editor and enter the machine node name to the **hosts** file in each of the following directories:
  - ~ ticlts
  - ~ ticots
  - ~ ticotsord

**Note:** The machine node name must be entered two times on the same line, separated by a tab.

- 10 Enter **cd /etc/confnet.d/inet**
- 11 Use the vi editor to edit the **interface** file.
- 12 Change the line

```
smpw0:0:::/dev/smpw0_0:-trailers
```

to:

```
EEe0:0::/dev/ee_0:netmask 0xfffff00 broadcast a.b.c.255 -trailers
```

where *a.b.c* are the first three parts of your machine IP address. For example, IP address 135.7.50.201 would be changed to 135.7.50.255.
- 13 Copy the files you edited in [step 9](#) into the **/etc/inet/** directory.

**14** Enter `cd /etc/inet`

**15** Use the vi editor to edit the `config` file.

**16** Change the line

```
###4c:/usr/sbin/route::n:add default default_router 1  
to:
```

**4c:/usr/sbin/route::y:add default a.b.c.254**

where *a.b.c.* are the first three parts of your IP address. For example, IP address 135.7.50.201 would be changed to 135.7.50.254.

**17** Write and exit the file.

**18** Continue with [Verifying the PCI LAN Circuit Card Installation on page 33](#).

### Verifying the PCI LAN Circuit Card Installation

To set the 10 Mbps or 10/100 Mbps PCI LAN circuit card installation, do the following:

**1** Enter `/etc/inet/rc.restart`

**2** Check the message log report for TCP/IP or LAN adapter errors. See Chapter 7, "Peripheral Administration," *Intuity CONVERSANT System Version 7.0 Administration*, 585-313-501.

- 3 Verify that you have network connectivity using the **ping** command. See Appendix A, “Summary of Commands,” in *Intuity CONVERSANT System Version 7.0 Administration*, 585-313-501.

### CMOS Parameter Settings

To change the CMOS Pnp/PCI System Configuration for either a 10Mbps or a 10/100Mbps PCI LAN circuit card, do the following:

- 1 Perform a hard reboot of the system. See “Reboot the System,” in “Common System Procedures,” in the *Intuity CONVERSANT System Reference*, 585-313-205.

**Note:** You must perform a hard reboot to access the CMOS parameter settings.

- 2 During the POST, press **CONTROL ALT ESC**.

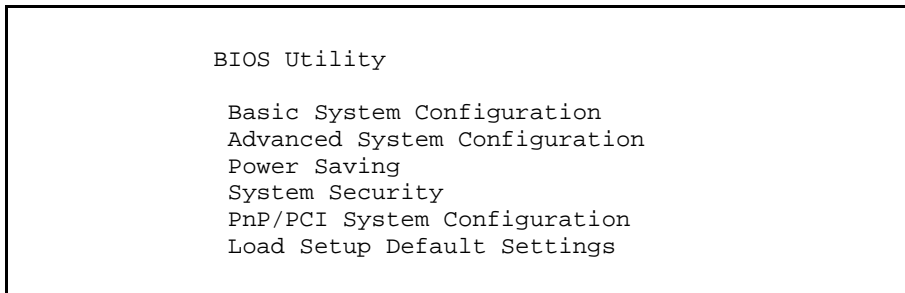
The system displays the following message:

```
Please standby for SETUP Utility...
```

After the system has installed the BIOS it displays the CMOS BIOS Utility screen ([Figure 16 on page 35](#)).



**Figure 16. BIOS Utility Screen**



- 3 Use the up (▲) and down (▼) arrows on your keyboard to move through the field selections.
- 4 Select PnP/PCI System Configuration
- 5 Press **ENTER**
- 6 The system displays the PnP/PCI System Configuration screen ([Figure 17 on page 36](#)).

Figure 17. PnP/PCI System Configuration Screen

```

                                PnP/PCI System Configuration

PCI IRQ Setting - - - - - [manual]

                                INTA  INTB  INTC  INTD

PCI Slot 1                      [14]





PCI Slot 2                      [14]

PCI Slot 3                      [14]

On-Board VGA                    [- -]

PCI IRQ Sharing - - - - - [NO]
VGA Palette Snoop - - - - - [Disabled]
Plug & Play OS - - - - - [NO]
Reset Resources Assignment - - - - [NO]

```

- 7 Use the up  and down  arrows on your keyboard to move through the field selections.
- 8 Select and highlight the field next to the PCI slot number specified in the Hardware Resource Allocator.
- 9 Use the left  and right  arrows on your keyboard to move through the field selections.

**10** Select the IRQ setting specified in the Hardware Resource Allocator.



**11** Press **ESC**

The system redisplay the BIOS Utility screen ([Figure 16 on page 35](#)).

**12** Press **ESC**

The system displays the following:

```
Do you want to save CMOS data?  
[YES]      [NO]
```

**13** Use the left  and right  arrows on your keyboard to move through the field selections.

**14** Select **[YES]**

**15** Press **ENTER**

The system automatically reboots.

## Replacing a PCI LAN Circuit Card

To replace a 10Mbps or a 10/100Mbps PCI LAN circuit card, do the following:

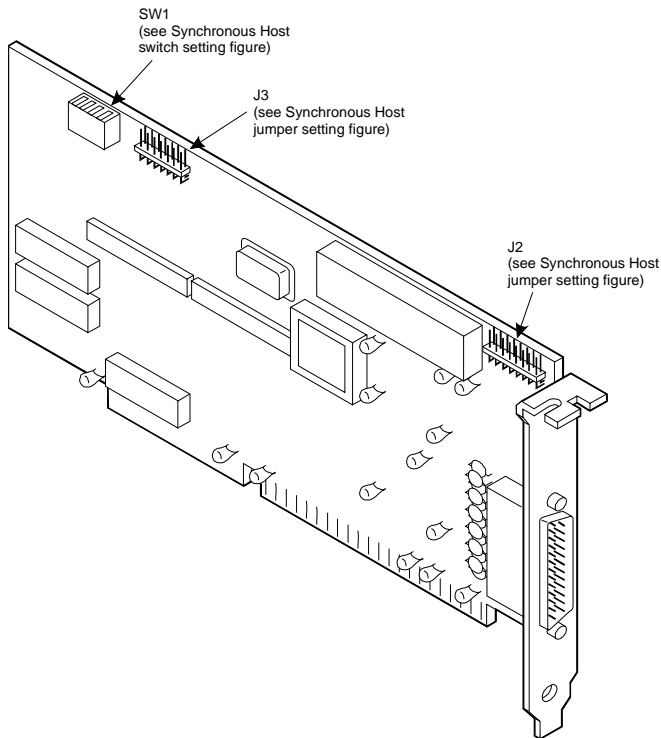
- 1** Run the Hardware Resource Allocator to determine the configuration and slot assignment of the PCI LAN circuit card. See [Adding Hardware to an Existing Configuration on page 359](#) in [Appendix A, System Configuration](#).

- 2 Record the output.
- 3 Complete the procedure in [Installing a PCI LAN Circuit Card on page 28](#).
- 4 Complete the procedure in [Verifying the PCI LAN Circuit Card Installation on page 33](#).

### FIFO/SIB Synchronous Host Circuit Card

One FIFO/SIB synchronous host card is supported. [Figure 18 on page 39](#) shows the FIFO/SIB synchronous host card and the location of the switches and interrupt jumpers.

**Figure 18. FIFO/SIB Synchronous Host Circuit Card**



### Jumper Settings

There are two jumper locations on the synchronous host circuit card, J3 and J2.

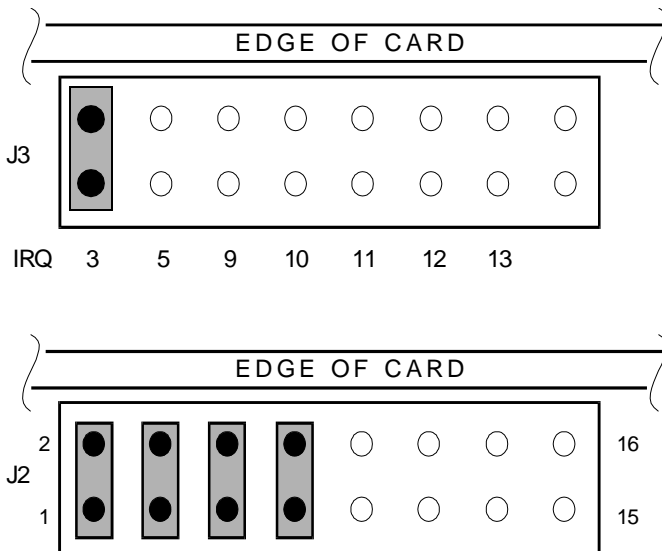
Use J3 to set the interrupt request line (IRQ) to a value of 3, 5, 9, 10, 11, 12, or 13 ([Figure 19 on page 41](#)). The IRQ corresponds to the number below the pins. [Figure 19 on page 41](#) shows the card set with an IRQ of 3. See [Hardware Resource Allocator Operation on page 359](#) in [Appendix A, System Configuration](#), for more information.

**Note:** If you are using IRQ 9, ensure that IRQ 2 is unused on your system.

J2 is preset at the factory. However, before you install the FIFO/SIB synchronous host circuit card, ensure that this jumper is set as shown in [Figure 19 on page 41](#).

**Note:** When operating at 64 kbaud, this setting supports a maximum cable length of 15 ft.

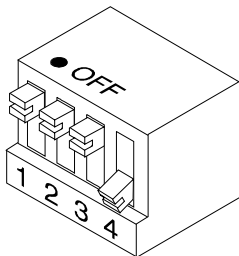
Figure 19. Jumper Settings for the FIFO/SIB Synchronous Host Circuit Card

**Switch Settings**

[Figure 18 on page 39](#) shows the location of the I/O switch block SW1. [Figure 20 on page 42](#) shows the I/O switch settings for an address of 380.

**Figure 20. Switch Settings for the FIFO/SIB Synchronous Host Circuit Card**

Base I/O address = 380 Hex



All switches closed or OFF

**NOTE:** Switch 4 is not used.

[Table 1 on page 43](#) shows the switch settings for other potential I/O addresses.



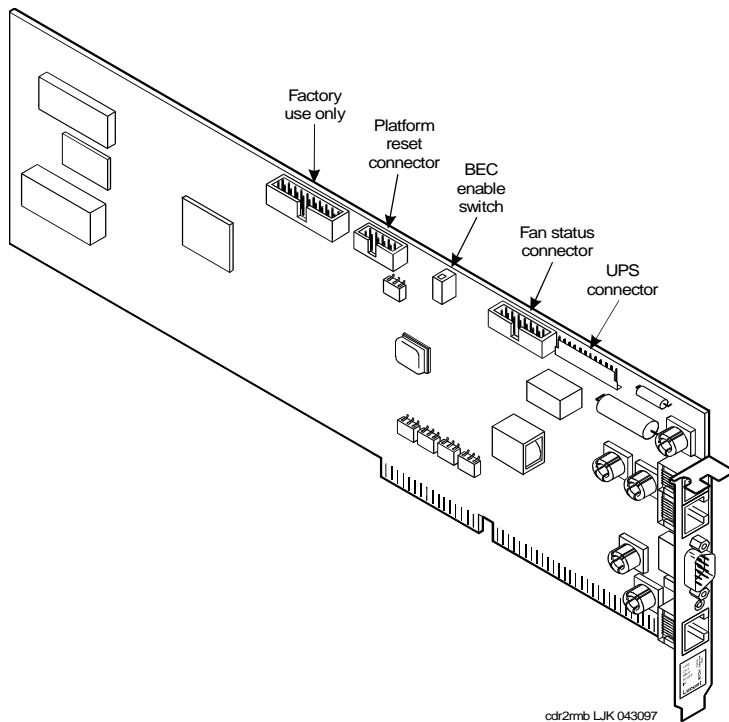
Table 1. FIFO/SIB Switch Settings

I/O Address	Switch		
	1	2	3
250	On	On	Off
260	Off	Off	On
2B0	On	Off	On
2E0	Off	On	On
380 (default)	Off	Off	Off
3A0	On	Off	Off
3E0	Off	On	Off
Disabled	On	On	On

## Remote Maintenance Circuit Card

The remote maintenance circuit card provides remote diagnostics of basic components ([Figure 21 on page 44](#)). There is one remote maintenance circuit card installed on the system.

Figure 21. Remote Maintenance Circuit Card



### Types of Remote Maintenance Circuit Cards

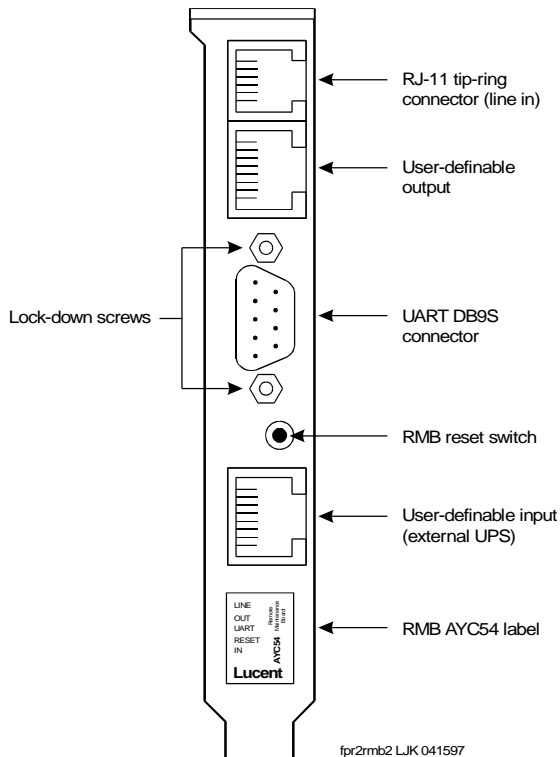
The Lucent Intuity CONVERSANT system supports the AYC54 remote maintenance circuit card:

- With an internal modem (AYC54)
- Without an internal modem (AYC55)

You can determine the type of remote maintenance circuit card installed on your system by viewing the faceplate. [Figure 22 on page 46](#) shows the faceplate of a remote maintenance circuit card with an internal modem (AYC54).

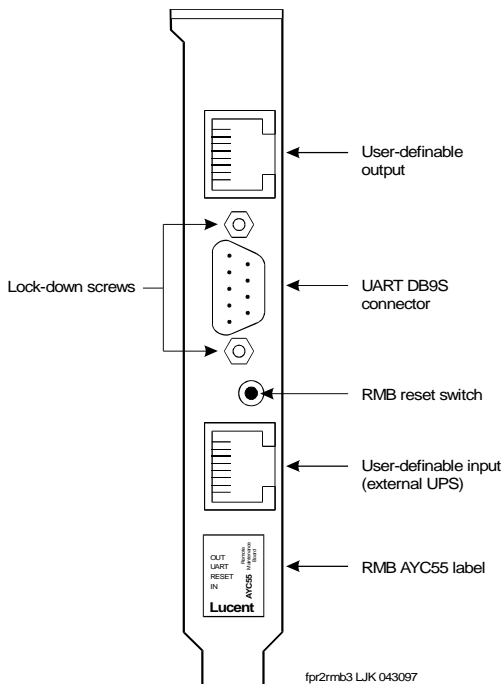
**Note:** The AYC54 and AYC55 remote maintenance circuit cards can be connected to an external modem.

Figure 22. AYC54 Remote Maintenance Circuit Card Faceplate



[Figure 23 on page 47](#) shows the faceplate of a remote maintenance circuit card without an internal modem (AYC55).

**Figure 23. AYC55 Remote Maintenance Circuit Card Faceplate**



### Setting the Resource Options

The remote maintenance circuit card is equipped with a BEC enable switch ([Figure 21 on page 44](#)). Ensure that this switch is set to the ON position ([Figure 24 on page 48](#)).

**Figure 24. BEC Enable Switch**



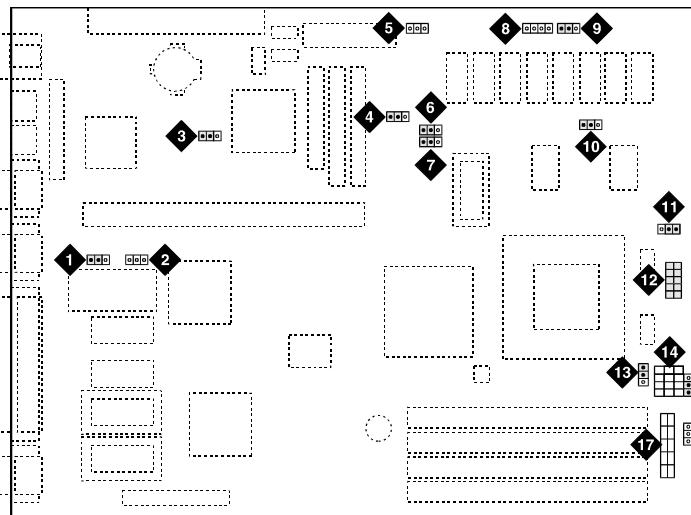
swr2bec LJK 063097

### Inserting the Remote Maintenance Circuit Card

To insert the remote maintenance circuit card, do the following:

- 1 Complete the steps in [Installing a Circuit Card on page 16](#).
- 2 Connect the remote maintenance circuit card reset cable to the bottom two pins of CN30. [Figure 25 on page 49](#) shows the location of CN30 and [Figure 26 on page 50](#) shows which pins the cable should be placed on.

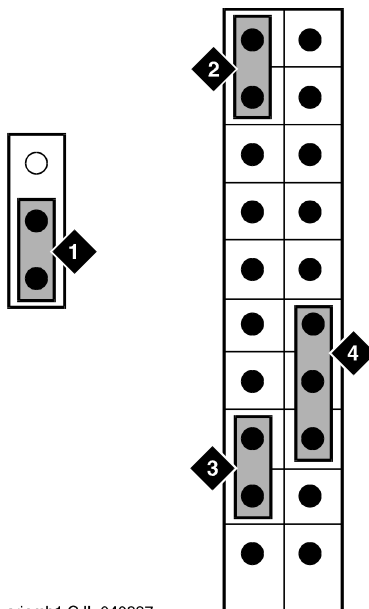
Figure 25. Motherboard Jumper Locations



jpcvmb4 C.J.L 040797

1. JP5 - flash BIOS function
2. JP6 - BIOS ROM type
3. JP1 - BIOS type
4. JP2 - LED function
5. JP15 - standby power connector
6. JP4 - second-level cache
7. JP3 - second-level cache
8. JP30 - external battery connector
9. JP16 - software shutdown
10. JP42 - L2 cache mode
11. JP43 - CPU voltage for I/O
12. JP7 - regulator
13. JP44 - CPU voltage for core
14. JP11 - SMM/reset switch
15. CN19
16. CN30
17. JP14 - power-on switch connector

Figure 26. Motherboard Cable Connections



crinmb1 CJL 040897



### Installing the Remote Maintenance Circuit Card Software Package

To install the remote maintenance circuit card software package, do the following:

- 1 Stop the voice system.
- 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 tape labeled “RMB Software Set” into the tape drive.
- 4 Press **ENTER**.

The system displays the following message:

```
Installation in progress. Do not remove the cartridge tape.  
  
The following sets are available:  
    1      RMBset  INTUITY RMB V2 Set  
          (i486)
```

```
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: RMB Software Set R2.0 (RMBset) from <ctape1>.
```

```
INTUITY RMB Software Set R2.0
```

```
(i486)
```

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

The RMB BEC ADDR has been defaulted to D1000

As is typical, should the RMB use COM1, rather than COM2 (default: y) [y,n,?]:

- 6 If the remote maintenance circuit card should use COM1, press **ENTER**.

If the remote maintenance circuit card should use COM2, enter **n**

The system displays the following message:

```
Please select the country code:
```

```
01 - United States
```

```
02 - International
```

```
Country code [01]:
```

- 7 Enter the appropriate code.

The system displays the following message:

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

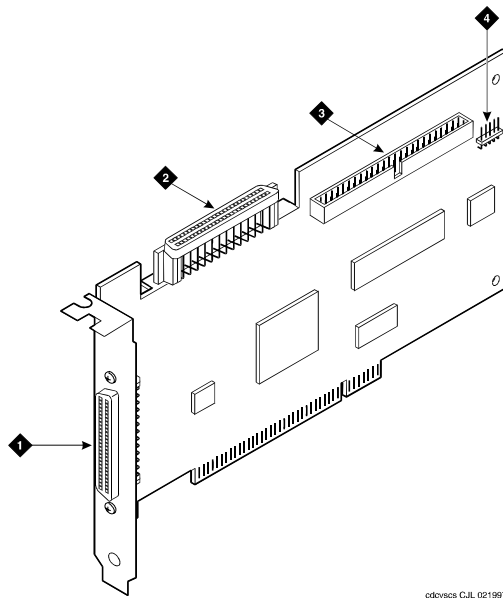
- 8 Enter **q**
- 9 Remove the cartridge tape.

### SCSI Controller Circuit Card

The SCSI controller circuit card provides the ability to interface with internal and external SCSI devices. The MAP/5P accommodates one SCSI controller circuit card ([Figure 27 on page 54](#)).

**Note:** There are no jumpers or switches on the SCSI controller circuit card.

Figure 27. SCSI Controller Circuit Card



cdovscs C.J.L. 021997

1. 68-Pin 16-bit external SCSI connector
2. 68-Pin SCSI cable connector
3. 50-pin cable connector (not used)
4. LED cable connector



To install the SCSI controller circuit card, do the following:

- 1 See [General Procedures on page 13](#) for the SCSI controller circuit card installation procedure.
- 2 Verify the SCSI Utility settings by doing the following:
  - a When prompted during the boot up, press **CONTROL + A**.  
The system displays the Host Adapter Configuration screen ([Figure 28 on page 55](#)).





**Figure 28. Host Adapter Configuration Screen**

```
Would you like to configure the Host Adapter, or run the SCSI
disk utilities? Select the option and press <Enter>. Press
<F5> to switch between color and monochrome modes.
```

```
Options
Configure/View Host Adapter Settings
SCSI Disk Utilities
```

- b Place the cursor on **Configure/View Host Adapter Settings**. Use the up  and down  arrows to move the cursor.
- c Press **ENTER**.

- d Compare the Host Adapter settings with those listed in [Table 2 on page 56](#). Change any that do not match.

Use the up  and down  arrows to move the cursor between fields. Use the left  and right  arrows to change the value of the field. Use the **ESC** key to return to the previous menu.

**Table 2. Host Adapter Settings**

Option	Setting
<b>SCSI Bus Interface Definitions</b>	
Host Adapter SCSI ID	7
SCSI Parity Checking	Enabled
Host Adapter SCSI Termination	Automatic
<b>Boot Device Options</b>	
Boot Target ID	0
Boot Lun Number	0
<b>SCSI Device Configuration</b>	
Initiate Sync Negotiation	Yes (Enabled) for all IDs
Maximum Sync Transfer Rate	20 Mbytes/sec for all IDs
<i>1 of 3</i>	

Table 2. Host Adapter Settings

Option	Setting
Enable Disconnection	Yes (Enabled)for all IDs
Send Start Unit Command	No (Disabled)for all IDs
Initiate Wide Negotiation	Yes (Enabled)for all IDs
<b>Advanced Host Adapter Settings</b>	
Plug and Play SCAM Support	Disabled
Host Adapter BIOS	Enabled
Support Removable Disks Under BIOS as Fixed Disks	Boot only
Extended BIOS Translation for DOS Drives > 1 Gbyte	Enabled
Display <CTRL-A> Message During BIOS Initialization	Enabled
Multiple LUN Support	Disabled

2 of 3

Table 2. Host Adapter Settings

Option	Setting
BIOS Support for Bootable CD-ROM	Enabled
BIOS Support for Int 13 Extensions	Enabled
Support for Ultra SCSI Speed	Disabled

**3 of 3**

- e When you have completed setting the SCSI utility, press **ESC**.

The system displays the following message:

Do you want to save the SCSI Utility changes

YES

NO

- f Place the cursor on **YES**
- g Press **ENTER**.



### Tip/Ring Circuit Cards

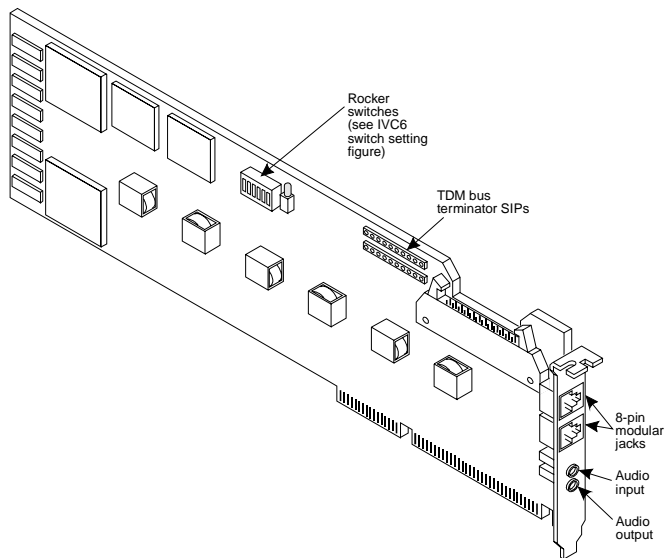
The Tip/Ring circuit cards provide the channels used by the Lucent Intuity system. There are six channels on each Tip/Ring circuit card. The MAP/5P accommodates three Tip/Ring circuit cards. The Intuity CONVERSANT system supports the

- AYC10 Tip/Ring circuit card
- AYC30 Tip/Ring circuit card

#### **AYC10 Tip/Ring Circuit Card**

The AYC10 Tip/Ring circuit card ([Figure 29 on page 60](#)) provides six channels.

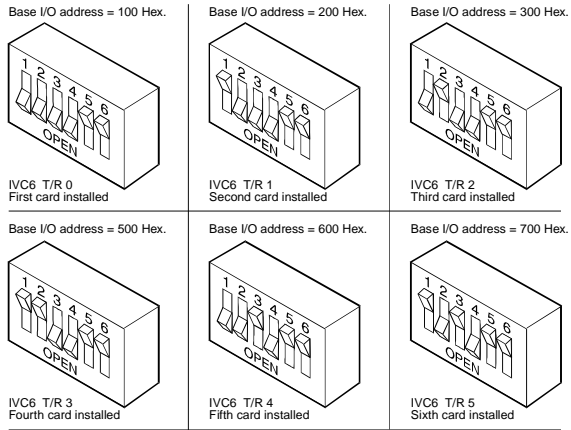
Figure 29. AYC10 Tip/Ring Circuit Card



Each of the possible three Tip/Ring circuit cards in the MAP/5P has a unique address. The addresses are set on the card switch bank ([Figure 30 on page 61](#)).

**Note:** There are no jumpers to set on the AYC10 Tip/Ring circuit card.

Figure 30. AYC10 Tip/Ring Switch Settings

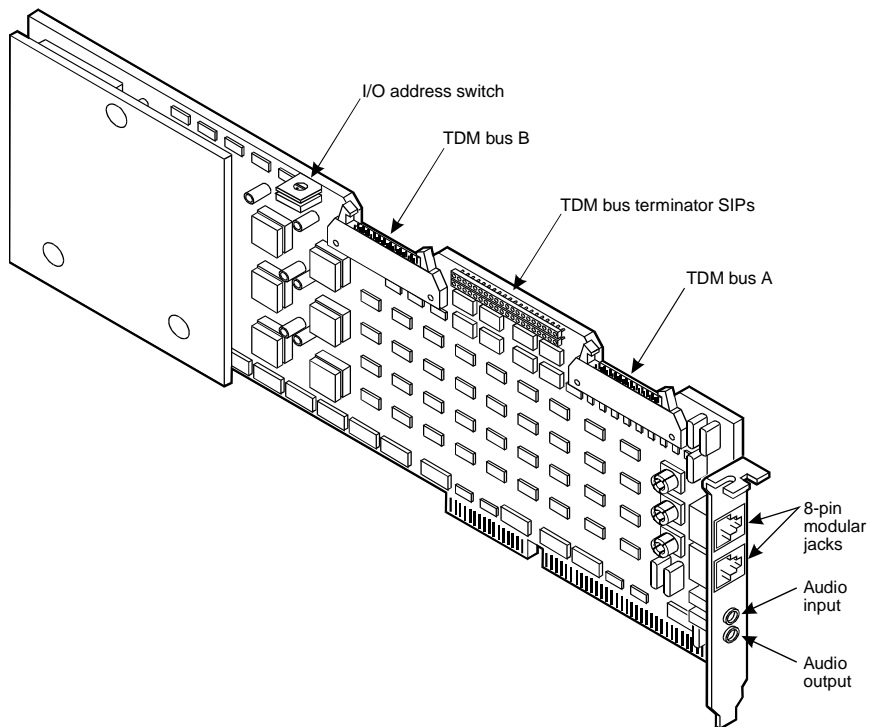


See [General Procedures on page 13](#) for the Tip/Ring circuit card installation procedure.

### AYC30 Tip/Ring Circuit Card

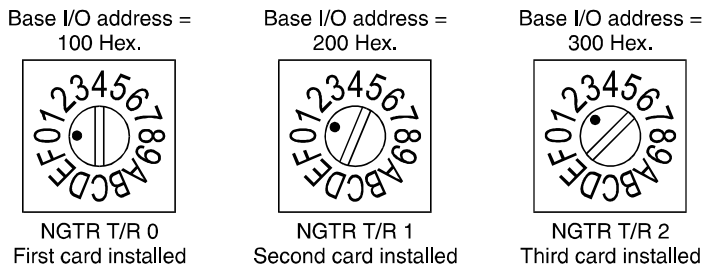
The AYC30 Tip/Ring circuit card ([Figure 31 on page 62](#)) provides six channels.

Figure 31. AYC30 Tip/Ring Circuit Card



Each Tip/Ring circuit card in the system must have a unique address. To set these addresses, the switch must be configured properly. [Figure 32 on page 63](#) shows the switch settings for the AYC30 Tip/Ring circuit card.

**Figure 32. AYC30 Tip/Ring Circuit Card Switch Settings**



### Installing the Tip/Ring Circuit Card Driver

**Note:** If the Tip/Ring circuit cards are not recognized when the voice system is started or if other problems are noticed with the Tip/Ring circuit card driver, it may be necessary to remove and reinstall the Tip/Ring circuit card driver. Occasionally dynamically loadable drivers fail to load into the UnixWare kernel properly.

To install the Tip/Ring circuit card driver, do the following:

- 1 Stop the voice system. See “Administer the Voice System,” in “Common System Procedures,” in the *Intuity CONVERSANT System Reference*, 585-313-205.

2 Run the Hardware Resource Allocator to determine the configuration and placement of the Tip/Ring circuit cards to be installed. See [Adding Hardware to an Existing Configuration on page 359](#) in [Appendix A, System Configuration](#).

3 If you are not already logged in as root, do so now.

4 Enter **pkgadd -d diskette1**

The system displays the following message:

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

5 Insert the diskette labeled “Tip/Ring Board Driver 1 of 1” into the diskette drive.

6 Press **ENTER**.

The system displays the following message:

```
Installation in progress -- do not remove the diskette.  
  
The following packages are available:  
  1. tipring INTUITY Tip/Ring Board Driver  
     (i486)
```

```
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:

```
PROCESSING:
Set: INTUITY Tip/Ring Board Driver (tipring) from
<diskettel>

INTUITY Tip/Ring Board Driver
(i486)
Using </> as the package base directory.
Lucent Technologies Inc.
```

The system displays several status messages and then the following message:

Please enter the IRQ:

- 8 Enter the IRQ provided by the Hardware Resource Allocator.

The system displays several status messages and then the following message:

```
Installation of INTUITY Tip/Ring Board Driver (tipring) was
successful.

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

- 9 Enter **q**

- 10 Remove the diskette labeled “Tip/Ring Board Driver 1 of 1” from the diskette drive.

### Token Ring Circuit Card

The Intuity CONVERSANT Token Ring circuit card allows you to connect the system to your local area network.

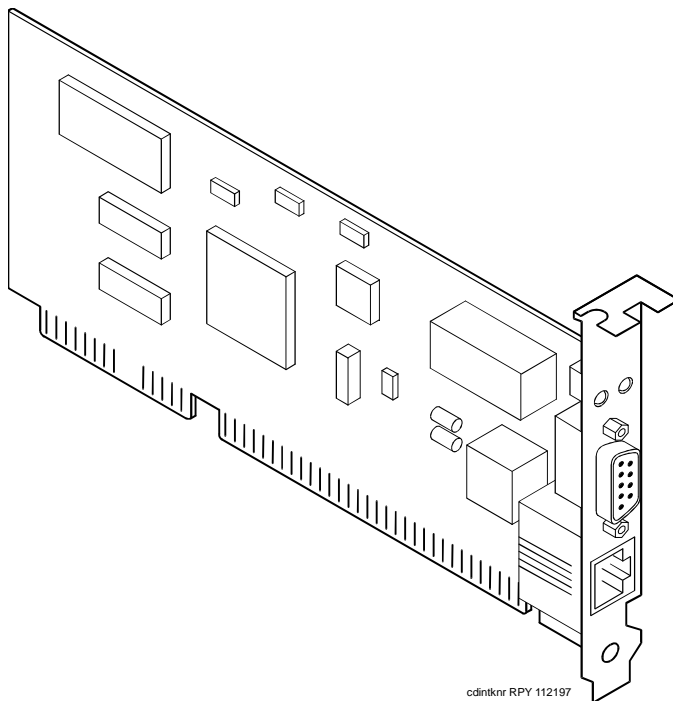
#### IBM Turbo 16/4

IBM Turbo 16/4 of the Token Ring circuit card ([Figure 33 on page 67](#)) is software configured. This is the latest version of the Token Ring circuit card. A diskette, provided with the Token Ring circuit card, is used to set the IRQ, I/O address, ROM address, RAM address, and RAM size.

**Note:** If you are installing the IBM Turbo 16/4 circuit card, the system cannot be equipped with the IBM Auto 16/4 circuit card.



Figure 33. Token Ring Circuit Card - IBM Turbo 16/4



To configure the IBM Turbo 16/4 Token Ring circuit card, do the following:

- 1 Select the appropriate course of action from the following two options:
  - ~ If the Token Ring circuit card is being added to the system, run the Intuity CONVERSANT Hardware Resource Allocator to determine the resource assignments. See [Hardware Resource Allocator Operation on page 359](#) in [Appendix A, System Configuration](#).

Record the parameters listed in [Table 3 on page 68](#).

**Table 3. Token Ring Circuit Card Settings**

Parameter	Setting
IRQ	
ROM address	
RAM address	
I/O address	

- ~ If the Token Ring circuit card is replacing an existing Token Ring circuit card, record and use the existing hardware resource parameters. You can view the existing parameters by entering **cat /etc/conf/sdevice.d/ibmtok**

The system displays a message similar to the following message:

```
ibmtok      Y  16  6  1  3  A20   A23   CC000  CDFFF  -1
ibmtok      Y  16  0  0  0  0     0     D0000  D3FFF  -1
```

Record the parameters listed in [Table 3 on page 68](#).

In the example message, the IRQ is 3, the ROM address range is CC000 - CDFFF, the RAM address range is D0000 - D3FFF, and the I/O address range is A20 - A23.

Verify that IRQ being used by the existing Token Ring circuit card, or designated by the Hardware Resource Allocator, is available.

### 2 Enter **resmgr**

The system displays a table containing available and assigned IRQs. Scan the IRQ column to verify availability.

### 3 Install the new Token Ring circuit card. See [Installing a Circuit Card on page 16](#).

**Note:** Complete all steps in the installation procedure.

### 4 Connect the Token Ring circuit card to the LAN.

### **CAUTION:**

Do not use a 10 Base T (802.3) wire to connect the Token Ring circuit card to the LAN.

**Note:** You must remove the Tip/Ring circuit card that is set as Tip/Ring 1 (I/O address=0x200, OSINDEX=1) before completing this procedure, see [Removing a Circuit Card on page 13](#). If you do not have a Tip/Ring circuit card set as Tip/Ring 1, continue with [step 5](#).

- 5 Insert the diskette labeled "Turbo Token Ring Setup Floppy" into the diskette drive.
- 6 Reboot the system. See "Reboot the System," in "Common System Procedures," in the *Intuity CONVERSANT System Reference*, 585-313-205.

The system displays the following message:

```
Starting PC DOS...
```

```
PC DOS 7.0 Startup Menu
```

1. IBM Auto/Turbo ISA Configuration using LANAIID
2. IBM Auto/Turbo ISA Extended Diagnostics

```
Enter a choice: 1 Time Remaining: 15
```

**Note:** The system will automatically default to 1 when time remaining is 0.

- 7 Press **ENTER**

The system displays the following message:

```
If you have a Tip/Ring card equipped (IVP4, IVP6, IVC6, NGTR)
that is set as Tip/Ring 1 (I/O address=0x200, OSINDEX=1) you
MUST TEMPORARILY REMOVE that Tip/Ring card while running
LANAIDC. If equipped, power down the system NOW and remove
Tip/Ring card 1. Otherwise, continue with LANAIDC.
```

```
Hit any key to continue with LANAIDC...
```

### 8 Press **ENTER**.

The system displays the following message:

```
Please wait while LANAIDC configures your card. To complete
setup, you must assign the INTERRUPT number, RAM address and
ROM address. Don't forget to reinstall Tip/Ring 1 when
complete.
```

```
Enter LANAIDC parameters - reboot your machine when done.
```

```
Examples: /view
          /help
```

```
LANAIDC >
```

### **CAUTION:**

If n is shown to be 2, enter **9** instead. Do not enter 2.

- 9 Enter the following:

***/INT=*n* /ROM=*ROM\_start\_address* /RAM=*RAM\_start\_address****

where *n* is the IRQ recorded in [Table 3 on page 68](#), and *ROM\_start\_address* and *RAM\_start\_address* are addresses recorded in [Table 3 on page 68](#).

The system displays the following message:

Configuration complete:

```
IBM Turbo/16/4 Token-Ring ISA Adapter
  PnP Support:           None Detected
  Adapter Number:       1
  Adapter MAC Address:   <varies card to card>
  MicroCode Level:     <varies card to card>
  Serial Number:        <varies card to card>
  Adapter Mode:         Autol6 Compatible
  Configuration:        LEGACY
  Adapter State:        Active
  I/O Address:          A20-A23
  Interrupt:            <n>*
  RAM Address:          <RAM address>
  ROM Address:          <ROM address>
  Remote IPL:           Disabled
  Token-Ring data rate: 16
  Auto Sense data rate: Enabled
```

```
Adapter bus width:      16
                      * Setting in conflict
```

```
LANAIDC >
```

**Note:** The setting in conflict message may or may not appear and can be ignored.

**10** Enter **/V** to view the turbo token ring settings.

The system displays the following message:

```
...Warning: Interrupt level in conflict.
```

```
Configuration complete:
```

```
IBM Turbo/16/4 Token-Ring ISA Adapter
```

```
PnP Support:           None Detected
Adapter Number:       1
Adapter MAC Address:  <varies card to card>
MicroCode Level:     <varies card to card>
Serial Number:       <varies card to card>
Adapter Mode:        Auto16 Compatible
Configuration:       LEGACY
Adapter State:       Active
I/O Address:         A20-A23
Interrupt:           <n>
RAM Address:         <RAM address>
ROM Address:         <ROM address>
Remote IPL:          Disabled
```

```

Token-Ring data rate: 16
Auto Sense data rate: Enabled
Adapter bus width: 16
LANAIDC >

```

Record the parameters listed in [Table 4 on page 74](#). These settings are used in the procedures in [Installing the Token Ring Driver on page 75](#).

**Table 4. Viewed Token Ring Circuit Card Settings**

Parameter	Setting
I/O address	
Interrupt	
RAM address	

- 11 If the configuration is correct, remove the diskette labeled "Turbo Token Ring Setup Floppy" from the diskette drive.
- 12 Insert the Tip/Ring 1 circuit card if it was removed prior to [step 5](#), see [Installing a Circuit Card on page 16](#). Otherwise, continue with [step 13](#).
- 13 Reboot the system. See "Reboot the System," in "Common System Procedures," in the *Intuity CONVERSANT System Reference*, 585-313-205.



### Installing the Token Ring Driver

To configure the Token Ring driver, do the following:

- 1 If you are not already logged in as root, do so now.
- 2 Enter **niccfg**

The system displays the following message:

```
Setting up the Network Interface Card Support Utility
```

The system then displays the Network Interface Card Support Utility—Summary Screen ([Figure 15 on page 31](#)).

**Note:** If other network cards are installed in your system, the system first displays a message indicating network drives are currently installed. Press **ENTER** to continue.

Figure 34. Network Interface Card Support Utility—Summary Screen

SLOT	BUS-NUM	BOARD NAME	IRQ	IO-ADDR	MAN-ADDR	DMA
6	PCI__0	SMC_EtherPower_9332	IO	f880-f8ff	fedfec00-fedfec7f	

Please Select an Option

- ( ) Accept all Entries
- (\*) Add an entry for a card
- ( ) Delete/restore an Entry for a Card
- ( ) Install Driver from IHV Diskette
- ( ) Cancel this Utility Without Making Changes

Use the up/down arrow keys to select then press ENTER

**3** Use the down (▼) arrow to select: **Add an entry for a card**

**4** Press **ENTER**





The system displays the Selection Screen ([Figure 35 on page 77](#)).

Figure 35. Selection Screen

```
                Please Select 1

( ) 3COM_ETHERLINK_III_PCMCIA      ( ) HP_EtherTwist_LAN_NC/16TP
( ) 3COM_EtherLink_2_3C503        ( *) IBM_16/4_DLPI_TOKEN_RING
( ) 3COM_EtherLink_2_3C509        ( ) IBM_16/4-TokenRing
( ) 3COM_EtherLink_16_3C507       ( ) IBM-TokenRing_16/4_II
( ) AMD_PCnet_ISA                 ( ) Intel_EtherExpress_16
( ) AMP_PCnet_ISA+                ( ) Intel_EtherExpress_PRO/10
( ) AnselCommunicationsNH2100     ( ) InterLan_EtherBlaster
( ) AnselCommunicationsNS2100    ( ) InterLan_NI6510
( ) CNet_Token_Ring_CN2000T      ( ) InterLan_XLerator
( ) Cabletron_E21XX_Family        ( ) Microdyne_NE1000_B/A
( ) Cabletron_E22XX_Family        ( ) Microdyne_NE2000_A
( ) Compaq_Embedded_AMD_PCnet     ( ) Microdyne_NTR1000_G
( ) Compex_ENET16-VP_NE2000      ( ) National_Semi_NE2000
( ) DEC_EtherWORKS3_Turbo        ( ) National_Semi_NE2000Plus
( ) HP_10/100VG_PC_LAN_J2573A    ( ) Novell/Eagle_NE1000
( ) HP_ETwist_PC_LAN_16_PLUS     ( ) Novell/Eagle_NE2000

                (Page Down for more)
```

5 Use the left , right , up , or down  arrows on your keyboard to move through the field selections.

6 Select **IBM\_16/4\_DLPI\_TOKEN\_RING**

7 Press **ENTER**

The system displays the Configuration Screen ([Figure 36 on page 78](#)).

**Figure 36. Configuration Screen**

```
Configuring: IBM_16/4_DLPI_TOKEN_RING

IRQ Value
IO Address
RAM Address

Press F2 (Choices) to select values then press F10 to apply and exit.
```

 **CAUTION:**

If the IRQ is shown to be 2, enter **9** instead. Do not enter 2.

- 8 Use **F2** (Choices) to select the values for each of the following fields using [Table 4 on page 74](#) for reference.

- ~ IRQ Value
- ~ I/O Address
- ~ RAM Address

- 9 Press **F10** to apply the values and exit.

The system displays the Network Interface Support Card Utility-Summary Screen ([Figure 37 on page 79](#)).

Figure 37. Network Interface Card Support Utility—Summary Screen

SLOT	BUS-NUM	BOARD NAME	IRQ	IO-ADDR	MAN-ADDR	DMA
----	-----	-----	---	-----	-----	---
-	ISA___0	IBM_16/4_DLPI_TOKEN_RING	9	A20-A23	D000-D3FFF	
6	PCI___0	SMC_EtherPower_9332	IO	f880-f8ff	fedfec00-fedfec7f	

Please Select an Option

- (\*) Accept all Entries
- ( ) Add an entry for a card
- ( ) Delete/restore an Entry for a Card
- ( ) Install Driver from IHV Diskette
- ( ) Cancel this Utility Without Making Changes

Use the up/down arrow keys to select then press ENTER

**10** Use the down (▼) arrow to select: **Accept All Entries**

The system displays the following message:

Are you sure?

Yes

No

### 11 Select **yes** and press **ENTER**

The system displays the following message:

```
Installing drivers for the Network Card(s) you selected.  
This will take a few minutes.
```

### 12 Reboot the system. See “Reboot the System,” in “Common System Procedures,” in the *Intuity CONVERSANT System Reference*, 585-313-205.

The system displays the system prompt.

# 3 Replacing a Hard Disk Drive

## Overview

This chapter describes the procedures to identify and recover from hard disk drive failures, to add a hard disk drive, and to clean a hard disk drive.

Topics covered include:

- [Identifying a Failed Hard Disk Drive on page 82](#)
- Recovering from hard disk drive failures
  - ~ [Recovering from a Hard Disk Drive 0 Failure on page 86](#)
  - ~ [Recovering from a Hard Disk Drive 1 Failure on page 93](#)
- [Replacing a Hard Disk Drive on page 100](#)
- [Replacing a Hard Disk Drive on page 100](#)
- [Adding a Hard Disk Drive on page 113](#)
- [Cleaning a Hard Disk Drive on page 124](#)
- [Mirroring on page 129](#)
- [Disk Reuse on page 135](#)

## Identifying a Failed Hard Disk Drive

Before a hard disk drive can be replaced you must identify which drive has failed. This section details how to identify a failed hard disk drive in Intuity CONVERSANT systems with two hard disk drives (both mirrored and unmirrored).

**Note:** If your system is configured with only one hard disk drive, see [Recovering from a Hard Disk Drive 0 Failure \(Nonmirrored or Single-Disk System\) on page 86](#).

### Contents of the Hard Disk Drives in a Two-Drive System

To determine which hard disk drive has failed, you must know what type of information is stored on each drive. [Table 5 on page 83](#) shows the information contained on each hard disk drive in a nonmirrored system.



**Table 5. Contents of the Hard Disk Drives in a Nonmirrored System**

Disk Identity	Contents of Disk
Hard Disk Drive 0 SCSI ID 00, Bay 3	UNIX operating system, all Intuity CONVERSANT software, system data, and speech/voice storage
Hard Disk Drive 1 SCSI ID 01, Bay 4	Speech/voice storage

**Note:** The contents for Hard Disk Drive 0 are identical in nonmirrored and single-disk systems.

[Table 6 on page 84](#) shows the information contained on each hard disk drive in a mirrored system.

Table 6. Contents of the Hard Disk Drives in a Mirrored System

Disk Identity	Contents of Disk
Hard Disk Drive 0 SCSI ID 00, Bay 3	UNIX operating system, all Intuity CONVERSANT software, system data, and speech/voice storage
Hard Disk Drive 1 SCSI ID 01, Bay 4	The same information as is contained on Disk 0

## Identifying a Hard Disk Drive 0 Failure in a Nonmirrored or Single-Disk System

Because Hard Disk Drive 0 contains the only copy of the operating software in a nonmirrored or single disk system, a failure of this drive results in a complete failure of the system. If this occurs you can not reboot the system. See [Recovering from a Hard Disk Drive 0 Failure \(Nonmirrored or Single-Disk System\) on page 86](#).

## Identifying a Hard Disk Drive 1 Failure in a Nonmirrored System

Hard Disk Drive 1 contains speech and voice storage. If this hard disk drive fails, speech is lost. If Hard Disk Drive 1 fails, the system displays the following message:

```
WARNING: Disk Driver: HA0 TCX LU0 - Check Condition
```

**Note:** The number after TC is the SCSI ID of the failed hard disk drive.

## Identifying a Hard Disk Drive Failure in a Mirrored System

In a mirrored system both hard disk drives contain the same information. As a result, if either hard disk drive fails, the other drive continues to operate the system. There is no noticeable difference in service. A hard disk drive failure in a mirrored system is identified by the message shown above in [Identifying a Hard Disk Drive 1 Failure in a Nonmirrored System on page 85](#).

The number preceded by TC in the message is the SCSI ID of the failed hard disk drive. If this message appears on the screen, contact your remote maintenance center.

## Recovering from a Hard Disk Drive 0 Failure

The following sections list the procedures for replacing Hard Disk Drive 0 in mirrored, nonmirrored, and single-disk systems.

### Recovering from a Hard Disk Drive 0 Failure (Nonmirrored or Single-Disk System)

Because Hard Disk Drive 0 contains the base system software, after you replace the hard disk drive, you must reinstall the entire Intuity CONVERSANT system if this disk fails on a nonmirrored or single-disk system.



#### **CAUTION:**

After installing a 2-Gbyte hard disk drive into a system as Disk 0, DO NOT ATTEMPT TO INSTALL AN OLDER VERSION OF UnixWare. The version of the operating system tape that should be used contains the phrase "Independent Image." If the operating system tape does not contain this phrase, notify the remote maintenance center immediately.

To reinstall the Intuity CONVERSANT system software, do the following:

- 1 Replace Hard Disk Drive 0. See [Replacing a Hard Disk Drive on page 100](#).

- 2 Restore the system using the CONVERSANT Image Tape created using the **mkimage** command. “Restore the System,” in “Common System Procedures,” in the *Intuity CONVERSANT System Reference*, 585-313-205.
- 3 Restore the speech files using the **spres** command.

## Recovering from a Hard Disk Drive 0 Failure (Mirrored System)

If Hard Disk Drive 0 fails in a mirrored system, the system remains operational with no noticeable degradation of service. The following procedure explains how to replace Hard Disk Drive 0 on a mirrored system.

### CAUTION:

This initial synchronization of data on a mirrored system can degrade service, depending on system load. Therefore, perform this procedure only during off-peak hours.

To restore the Intuity CONVERSANT system, do the following:

- 1 Replace Hard Disk Drive 0. See [Replacing a Hard Disk Drive on page 100](#).
- 2 Log in as root.
- 3 Enter **vxdiskadm**

The system displays the Volume Manager Support Operations screen ([Figure 38 on page 88](#)).

**Figure 38. Volume Manager Support Operations Screen**

```
Volume Manager Support Operations
Menu: VolumeManager/Disk

1      Add or initialize a disk
2      Encapsulate a disk
3      Remove a disk
4      Remove a disk for replacement
5      Replace a failed or removed disk
6      Mirror volumes on a disk
7      Move volumes from a disk
8      Enable access to (import) a disk group
9      Remove access to (deport) a disk group
10     Enable (online) a disk device
11     Disable (offline) a disk device
list   List disk information

?      Display help about menu
??     Display help about menuing system
q      Exit from menus

Select an operation to perform:
```

**4 Enter list**

The system displays the List Disk Information screen ([Figure 39 on page 89](#)).

**Figure 39. List Disk Information Screen**

```
List Disk Information
Menu: VolumeManager/Disk/ListDisk

Use this menu option to display a list of disks. You can
also choose to list detailed information about the disk at
a specific disk device address.

Enter disk device or "all" [<address>,all,q,?] (default:all)
```

**5 Press ENTER.**

The system displays the following message:

DEVICE	DISK	GROUP	STATUS
c0b0t0d0	disk00	rootdg	online
c0b0t1d0	disk01	rootdg	online

**Note:** A disk that has failed will show `error` in the status column.

6 Record the device IDs and disk names in the following table:

Device	Disk

7 Press **ENTER**.

The system displays the Volume Manager Support Operations screen ([Figure 38 on page 88](#)).

8 Enter **4**

The system displays the following message:

```
Enter the name of the disk to remove.
```

9 Enter the disk name for the drive with the device ID *c0b0t0d0*.

**Note:** This should be disk00.

The system displays the Volume Manager Support Operations screen ([Figure 38 on page 88](#)).



**10 Enter 5**

The system displays the following message:

Enter the name of the disk to replace.

**11 Enter the same disk name as in [step 9](#).**

The system displays the following message:

Enter the device ID of the disk to use as a replacement.

**12 Enter **c0b0t0d0****

The system displays the Hard Disk Partitioning – Disk 0 screen ([Figure 40 on page 92](#)).

Figure 40. Hard Disk Partitioning – Disk 0 Screen

```

Total disk size is 2048 cylinders (2048.0MB)

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

SELECT ONE OF THE FOLLOWING



0. Overwrite system master boot code
1. Create a partition
2. Change Active (Boot from) partition
3. Delete a partition
4. Update (Update disk configuration and exit)
5. Exit (Exit without updating disk configuration)

Enter selection:

```

**13** Enter 1

The system responds with a screen where you must supply information for the new partition.

**14** Select **UNIX System**. Use  and  to move through the Partition Type field selections.**15** Press **TAB** to move to the Percentage of Disk field.

**16** Enter **100**

**17** Press **▼** to move to the `Apply` box and press **ENTER**.

The system displays the Hard Disk Partitioning – Disk 1 screen ([Figure 40 on page 92](#)).

**18** Enter **4**

The system displays the Volume Manager Support Operations screen ([Figure 38 on page 88](#)).

**19** Enter **q**

The system starts mirroring the contents of Hard Disk Drive 1 to Hard Disk Drive 0. This does not interrupt normal operation of the Intuity CONVERSANT system.

You have completed the procedure for replacing Hard Disk Drive 0 in a mirrored system.

## Recovering from a Hard Disk Drive 1 Failure

The following procedure explains how to replace a hard disk drive on an existing Intuity CONVERSANT system.

This procedure only applies to Hard Disk Drive 1. If you can log in to the Intuity CONVERSANT system, it is possible that Hard Disk Drive 0 has failed.

See one of the procedures in [Recovering from a Hard Disk Drive 0 Failure on page 86](#) (nonmirrored or mirrored, depending on your configuration) for instructions.

## Recovering from a Hard Disk Drive 1 Failure (Nonmirrored System)

If Hard Disk Drive 1 fails in a nonmirrored system, the system is still operational. However, speech files are lost. The following procedure explains how to replace Hard Disk Drive 1 on a nonmirrored system.

To restore the Intuity CONVERSANT system, do the following:

- 1 Replace Hard Disk Drive 0. See [Replacing a Hard Disk Drive on page 100](#).

- 2 Log in as root.

- 3 Enter **vxdiskadm**

The system displays the Volume Manager Support Operations screen ([Figure 38 on page 88](#)).

- 4 Enter **list**

The system displays the List Disk Information screen ([Figure 39 on page 89](#)).

- 5 Press **ENTER**.

The system displays the following message:

```
DEVICE          DISK          GROUP         STATUS
c0b0t0d0       disk00       rootdg       online
c0b0t1d0       disk01       rootdg       online
```

6 Record the device IDs and disk names in the following table:

Device	Disk

7 Press **ENTER**.

The system displays the Volume Manager Support Operations screen ([Figure 38 on page 88](#)).

8 Enter **3**

The system displays the following message:

```
Enter the name of the disk to remove.
```

9 Enter the disk name for the drive with the device ID c0b0t1d0.

**Note:** This should be disk01.

The system displays the Volume Manager Support Operations screen ([Figure 38 on page 88](#)).

- 10 Add Hard Disk Drive 1 to the system. See [Adding a Hard Disk Drive to a System for Speech Storage on page 120](#).
- 11 Restore the speech files using the **spres** command. See *Intuity CONVERSANT Version 7.0 Speech Development, Processing, and Recognition*, 585-313-201.

## Recovering from a Hard Disk Drive 1 Failure (Mirrored System)

If Hard Disk Drive 1 fails in a mirrored system, the system is still operational and there is no noticeable degradation of service. The following procedure explains how to replace Hard Disk Drive 1 on a mirrored system.

### CAUTION:

This initial synchronization of data on a mirrored system can degrade service, depending on system load. Therefore, perform this procedure only during off-peak hours.

To restore the Intuity CONVERSANT system, do the following:

- 1 Replace Hard Disk Drive 0. See [Replacing a Hard Disk Drive on page 100](#).
- 2 Log in as root.

**3** Enter **vxdiskadm**

The system displays the Volume Manager Support Operations screen ([Figure 38 on page 88](#)).

**4** Enter **list**

The system displays the List Disk Information screen ([Figure 39 on page 89](#)).

**5** Press **ENTER**.

The system displays the following message:

DEVICE	DISK	GROUP	STATUS
c0b0t0d0	disk00	rootdg	online
c0b0t1d0	disk01	rootdg	online

**6** Record the device IDs and disk names in the following table:

Device	Disk

**7** Press **ENTER**.

The system displays the Volume Manager Support Operations screen ([Figure 38 on page 88](#)).

**8** Enter **4**

The system displays the following message:

```
Enter the name of the disk to remove.
```

**9** Enter the disk name for the drive with the device ID c0b0t1d0.

**Note:** This should be disk01.

The system displays the Volume Manager Support Operations screen ([Figure 38 on page 88](#)).

**10** Enter **5**

The system displays the following message:

```
Enter the name of the disk to replace.
```

**11** Enter the same disk name as in [step 9](#).

The system displays the following message:

```
Enter the device ID of the disk to use as a replacement.
```

**12** Enter **c0b0t1d0**

The system displays the Hard Disk Partitioning – Disk 1 screen ([Figure 41 on page 99](#)).



Figure 41. Hard Disk Partitioning – Disk 1 Screen

```
Total disk size is 2048 cylinders (2048.0MB)

Partition      Status      Type      Start  End      Length      %      Approx MB
1              Active        UNIX
                System

SELECT ONE OF THE FOLLOWING

0. Overwrite system master boot code
1. Create a partition
2. Change Active (Boot from) partition
3. Delete a partition
4. Update (Update disk configuration and exit)
5. Exit (Exit without updating disk configuration)

Enter selection:
```

**13** Enter 1

The system responds with a screen where you must supply information for the new partition.

**14** Select **UNIX System**. Use  and  to move through the `Partition Type` field selections.**15** Press **TAB** to move to the `Percentage of Disk` field.

**16** Enter **100**

**17** Press **▼** to move to the `Apply` box and press **ENTER**.

The system displays the Hard Disk Partitioning – Disk 1 screen ([Figure 41 on page 99](#)).

**18** Enter **4**

The system displays the Volume Manager Support Operations screen ([Figure 38 on page 88](#)).

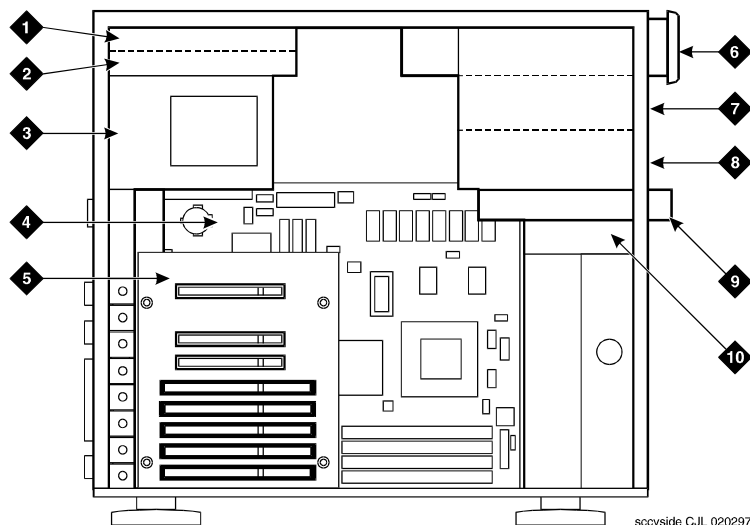
**19** Enter **q**

The system starts mirroring the contents of Hard Disk Drive 0 to Hard Disk Drive 1. This does not interrupt normal operation of the Intuity CONVERSANT system.

## Replacing a Hard Disk Drive

The MAP/5P can contain two hard disk drives. The first hard disk drive, SCSI ID 0, is located in Bay 6 ([Figure 42 on page 101](#)). The second hard disk drive, if provided, is located in Bay 5 ([Figure 42 on page 101](#)).

Figure 42. Internal View of the MAP/5P



1. Bay 6 - Hard Disk Drive 0
2. Bay 7 - Empty
3. Power supply
4. Motherboard
5. Riser card

6. Bay 1 - Cartridge tape drive
7. Bay 2 - Empty
8. Bay 3 - Empty
9. Bay 4 - Diskette drive
10. Bay 5 - Hard Disk Drive 1 (if used)

sccvside C.J.L. 020297

## Replacing Hard Disk Drive 0

### CAUTION:

Observe proper electrostatic discharge precautions when you handle computer components. Wear an antistatic wrist strap that touches your bare skin and connect the strap cable to an earth ground. See [Protecting Against Damage from Electrostatic Discharge on page 2](#) in [Chapter 1, Getting Inside the Computer](#).

### Hard Disk Drive 0 Removal

To remove Hard Disk Drive 0, you must perform the following procedures:

- [Removing the Intuity CONVERSANT System from Service on page 102](#)
- [Accessing Hard Disk Drive 0 on page 103](#)
- [Extracting Hard Disk Drive 0 on page 103](#)

### Removing the Intuity CONVERSANT System from Service

To remove the Intuity CONVERSANT system from service, do the following:

**Note:** This procedure is not necessary if Hard Disk Drive 0 has failed on a single-disk system.

- 1 Verify that the replacement equipment is on site and appears to be in usable condition, with no obvious shipping damage.

- 2 Stop the voice system. See “Administer the Voice System,” in “Common System Procedures,” in the *Intuity CONVERSANT System Reference*, 585-313-205.
- 3 Shut down the system. See “Shut Down the System,” in “Common System Procedures,” in the *Intuity CONVERSANT System Reference*, 585-313-205.
- 4 Remove the incoming power. See [Removing Power from the MAP/5P on page 7](#) in [Chapter 1, Getting Inside the Computer](#).

### Accessing Hard Disk Drive 0

To access Hard Disk Drive 0, remove the dress cover. See [Removing the Dress Cover on page 9](#) in [Chapter 1, Getting Inside the Computer](#).

### Extracting Hard Disk Drive 0

To extract Hard Disk Drive 0, do the following:

- 1 Remove the SCSI cable from the back of the hard disk drive.
- 2 Remove the power cord from the back of the hard disk drive.
- 3 Locate the screws holding Hard Disk Drive 0 to the peripheral bay frame.

**Note:** Pay close attention to the location of the screws in both the peripheral bay chassis and the hard disk drive. If you return the screws to a different position, the hard disk drive may protrude from or be recessed into the chassis.

- 4 Holding the rear of the hard disk drive, remove these screws.
- 5 Place the hard disk drive assembly, with the printed circuit board facing up, on an ESD-protected surface.
- 6 Continue with the procedure in [Hard Disk Drive 0 Installation on page 104](#).

#### Hard Disk Drive 0 Installation

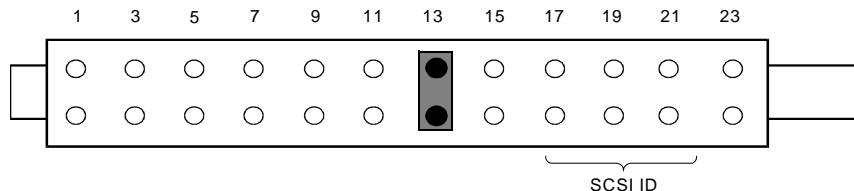
To install Hard Disk Drive 0, you must perform the following procedures:

- [Setting the Hard Disk Drive 0 Jumper Settings on page 104](#)
- [Inserting Hard Disk Drive 0 on page 105](#)

#### Setting the Hard Disk Drive 0 Jumper Settings

Configure the jumpers on Hard Disk Drive 0 as shown in [Figure 43 on page 105](#).

Figure 43. Hard Disk Drive 0 Jumper Settings



### Inserting Hard Disk Drive 0

To insert the hard disk drive, do the following:

- 1 Remove the new hard disk drive from its ESD-protective wrapping.

**Note:** Keep the package and all ESD-protective wrapping. You must reuse the material in which the replacement hard disk drive was packaged to meet the manufacturer's warranty.

- 2 Align Hard Disk Drive 0, with the component side down, with the correct holes in Bay 6.

**Note:** Pay close attention to the location of the screws in both the peripheral bay chassis and the hard disk drive. If you return the screws to a different position, the hard disk drive may protrude from or be recessed into the chassis.

- 3 Attach the hard disk drive to the peripheral bay using the four screws removed in [step 4 of Extracting Hard Disk Drive 0 on page 103](#).
- 4 Attach the power cable to the hard disk drive.
- 5 Attach the SCSI cable to the hard disk drive.

## Replacing Hard Disk Drive 1

### CAUTION:

Observe proper electrostatic discharge precautions when you handle computer components. Wear an antistatic wrist strap that touches your bare skin and connect the strap cable to an earth ground. See [Protecting Against Damage from Electrostatic Discharge on page 2 in Chapter 1, Getting Inside the Computer](#).

### Hard Disk Drive 1 Removal

To remove Hard Disk Drive 1, you must perform the following procedures:

- [Removing the Intuity CONVERSANT System from Service on page 107](#)
- [Accessing Hard Disk Drive 1 on page 107](#)
- [Extracting Hard Disk Drive 1 on page 107](#)



### Removing the Intuity CONVERSANT System from Service

To remove the Intuity CONVERSANT system from service, do the following:

- 1 Verify that the replacement equipment is on site and appears to be in usable condition, with no obvious shipping damage.
- 2 Stop the voice system. See “Administer the Voice System,” in “Common System Procedures,” in the *Intuity CONVERSANT System Reference*, 585-313-205.
- 3 Shut down the system. See “Shut Down the System,” in “Common System Procedures,” in the *Intuity CONVERSANT System Reference*, 585-313-205.
- 4 Remove the incoming power. See [Removing Power from the MAP/5P on page 7](#) in [Chapter 1, Getting Inside the Computer](#).

### Accessing Hard Disk Drive 1

To access Hard Disk Drive 1, remove the dress cover. See [Removing the Dress Cover on page 9](#) in [Chapter 1, Getting Inside the Computer](#).

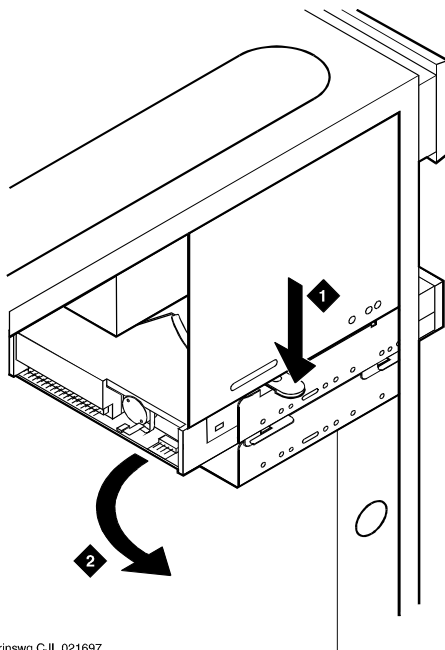
### Extracting Hard Disk Drive 1

To extract Hard Disk Drive 1, do the following:

- 1 Remove the SCSI cable from the back of the hard disk drive.
- 2 Remove the power cord from the back of the hard disk drive.

- 3 Press down on the thumb-tab which locks the peripheral frame in place ([Figure 44 on page 108](#)).

**Figure 44. Removing the Peripheral Frame**



drinswg C.J.L 021697

1. Press down on the thumb tab.
2. Rotate the frame out of the chassis.

- 4 Pull the peripheral frame toward you ([Figure 44 on page 108](#)).

The frame will rotate toward the front of the MAP/5P until the bracing lip clears. You can then pull the frame out of the MAP/5P.

- 5 Locate the screws holding Hard Disk Drive 1 to the peripheral frame.

**Note:** Pay close attention to the location of the screws in both the peripheral bay chassis and the hard disk drive. If you return the screws to a different position, the hard disk drive may protrude from or be recessed into the chassis.

- 6 Holding the rear of the hard disk drive, remove these screws.

- 7 Remove Hard Disk Drive 1 from the peripheral frame.

- 8 Place the hard disk drive assembly, with the printed circuit board facing up, on an ESD-protected surface.

- 9 Continue with the procedure in [Hard Disk Drive 1 Installation on page 109](#).

#### Hard Disk Drive 1 Installation

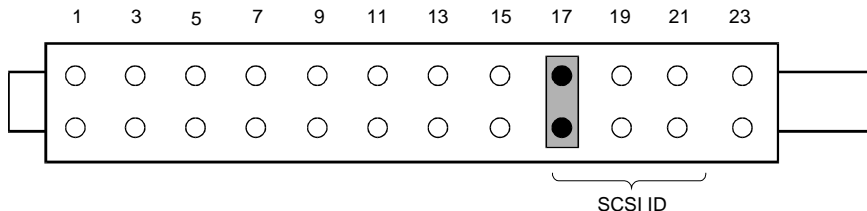
To install Hard Disk Drive 1, you must perform the following procedures:

- [Setting the Hard Disk Drive 1 Jumper Settings on page 110](#)
- [Inserting Hard Disk Drive 1 on page 110](#)

### Setting the Hard Disk Drive 1 Jumper Settings

Configure the jumpers on Hard Disk Drive 1 as shown in [Figure 45 on page 110](#).

**Figure 45. Hard Disk Drive 1 Jumper Settings**



### Inserting Hard Disk Drive 1

To insert the hard disk drive, do the following:

- 1 Remove the new hard disk drive from its ESD-protective wrapping.

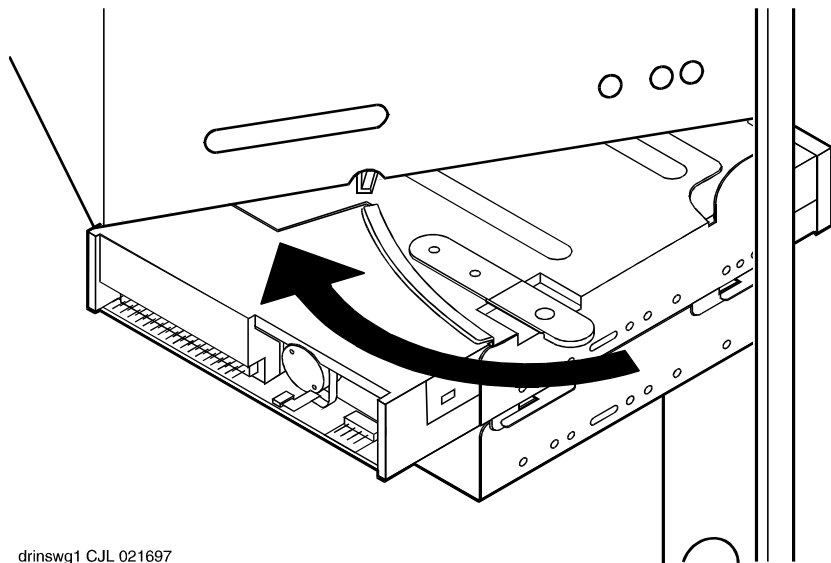
**Note:** Keep the package and all ESD-protective wrapping. You must return the defective hard disk drive in the material in which the replacement hard disk drive was packaged to meet the manufacturer's warranty.

- 2 Attach the hard disk drive, with the component side down, to the peripheral frame using the four screws removed in [step 6 of Extracting Hard Disk Drive 1 on page 107](#).

**Note:** Pay close attention to the location of the screws in both the peripheral bay chassis and the hard disk drive. If you return the screws to a different position, the hard disk drive may protrude from or be recessed into the chassis.

- 3 Attach the power cable to the hard disk drive.
- 4 Attach the SCSI cable to the hard disk drive.
- 5 Place the front of the peripheral frame into the MAP/5P.
- 6 Align the peripheral frame so that the bracing lip on the MAP/5P chassis is below the guide on the peripheral frame ([Figure 46 on page 112](#)).

Figure 46. Installing the Peripheral Frame



drinswg1 C.JL 021697

- 7 Rotate the peripheral frame into the MAP/5P chassis until it is locked in place.
- 8 Check the cable connections to both the diskette drive and Hard Disk Drive 1.

## Adding a Hard Disk Drive

This section details the procedures for adding a second hard disk drive to an Intuity CONVERSANT system with only one hard disk drive. If you are replacing an existing drive, see [Recovering from a Hard Disk Drive 0 Failure on page 86](#) or [Recovering from a Hard Disk Drive 1 Failure on page 93](#).

### Adding a Hard Disk Drive to a System for Mirroring

To add a hard disk drive, do the following:

- 1 Install the new hard disk drive. See [Replacing a Hard Disk Drive on page 100](#).
- 2 Clean the new hard disk drive. See [Cleaning a Hard Disk Drive on page 124](#).
- 3 Log in as root.
- 4 Enter **fdisk /dev/rdisk/c0b0t0d0s0**

The system displays the following message:

```
The recommended default partitioning for your disk is 100%
UNIX system partition.
```

To select this, please type "y". To partition your disk differently, type "n" and the "fdisk" program will let you select other partitions.

**5** Enter **y**

**6** Enter **vxdiskadm**

The system displays the Volume Manager Support Operations screen ([Figure 38 on page 88](#)).

**7** Enter **1**

The system displays the Add or Initialize a Disk screen ([Figure 47 on page 115](#)).



Figure 47. Add or Initialize a Disk Screen

```
Add or initialize a disk
Menu: VolumeManager/Disk/AddDisk
```

Use this operation to add a disk to a disk group. You can select an existing disk group or create a new disk group. You can also initialize a disk without adding it to a disk group, which leaves the disk available for use as a replacement disk. This operation takes, as input, a disk device, for example c0b0t2d0, a disk group (or none to leave the disk available for as a replacement disk). If you are adding the disk to a disk group, you will be asked to give a name to the disk.

More than one disk or pattern may be entered at the prompt. Here are some disk selection examples:

```
all:           all disks
c3 c4b0t2:     all disks on both controller 3 and controller 4, bus 0,
               target 2
c3b0t4d2:     a single disk
```

```
Select disk device to add
[<pattern-list>,all,list,q,?]
```

**8** Enter **list** to show a list of the disk devices recognized by the system.

**Note:** The **list** command will show the newly added disk `online` or `error`, but not as part of any disk group. Choose this disk address for the next prompt.

The system displays a message similar to the following message:

DEVICE	DISK	GROUP	STATUS
c0b0t0d0	disk00	rootdg	online
c0b0t1d0	-	-	online

- 9 Enter the device to add, in the form **c0b0tXd0**, where *X* is the number of the drive that you are adding.

The system displays the following message:

```
Here is the disk selected. Output format: [Device_Name]
c0b0tXd0
Continue operation? [y,n,q,?] (default: y)
```

- 10 Enter **y**

The system displays the following message:

```
Disk device c0b0tXd0 appears to have been initialized
already.
The disk is currently available as a replacement disk.
Do you wish to reinitialize c0b0tXd0?
```

**Note:** If the disk is a brand new disk, the above message is not displayed. Sometimes the newly added disk `STATUS` is shown as `error` instead of `online`. This may happen until the disk is added to the Volume Manager internal configuration files using `vxdiskadm`.

#### 11 Enter **y**

The system displays the following message:

```
You can choose to add this disk to an existing disk group, to
create a new disk group, or you can choose to leave the disk
available for use by future add or replacement operations. To
create a new disk group, select a disk group name that does
not yet exist. To leave the disk available for future use,
specify a disk group name of "none".
```

```
Which disk group [<group>,none,list,q,?] (default: rootdg)
```

#### 12 Press **ENTER**.

The system displays the following message:

```
Use a default disk name for the disk? [y,n,q,?] (default: y)
```

#### 13 Enter **n**

The system displays the following message:

```
Add disk as a hot-spare disk for? [y,n,q,?](default: n)
```

#### 14 Enter **n**

The system displays the following message:

```
The selected disks will be added to the disk group rootdg  
with the disk name that you will specify interactively
```

```
c0b0tXd0
```

```
Continue the operation? [y,n,q,?] (default: y)
```

#### 15 Enter **y**

The system displays the following message:

```
The following disk device appears to have been initialized  
already. The disk is currently available as a replacement  
disk.
```

```
Output format: [Device_name]
```

```
c0b0tXd0
```

```
Use this device? [y,n,q,?] (default: y)
```

**Note:** If the disk is a brand new disk, the above message is not displayed.

#### 16 Enter **y**

The system displays the following message

```
The following disk you selected for use appears to have  
already been initialized for the Volume Manager. If you are
```

certain the disk has already been initialized for the Volume Manager, then you do not need to reinitialize the disk device  
Output format: [Device\_Name]

c0b0tXd0

Reinitialize this device? [y,n,q,?] (default: y)

**Note:** If the disk is a brand new disk, the above message is not displayed.

#### 17 Enter n

The system displays the following message:

Perform surface analysis (highly recommended). [y,n,q,?]  
default:y

#### 18 Enter y

The system displays the following message:

Enter disk name for <c0d0tXd0> [<name>,q,?] (default:  
disk01)

#### 19 Enter the disk name, or press **ENTER** to select disk01.

The system displays the following message:

Adding disk device c0b0tXd0 to disk group rootdg with disk  
name **<diskname>**

Add or initialize other disks? [y,n,q,?] (default: n)

20 Press **ENTER**.

The system displays the Volume Support Manager Operations screen ([Figure 38 on page 88](#)).

21 Select **q** to quit

22 Enter **vxdisk list**

The system displays a message similar to the following message:

DEVICE	DISK	GROUP	STATUS
c0b0t0d0	disk00	rootdg	online
c0b0t1d0	-	-	online

23 Verify that the `STATUS` column for the disk is online.

## Adding a Hard Disk Drive to a System for Speech Storage

**Note:** If you are using an existing disk, *first* perform the procedure in [Cleaning a Hard Disk Drive on page 124](#).

- 1 Complete the procedure, [Adding a Hard Disk Drive to a System for Mirroring on page 113](#).
- 2 Log in to the system as root.
- 3 Enter **/mtce/bin/dispdisk**

The system displays a message similar to the following:

```
Choose a disk from the following list
```

```
disk00  disk01
```

```
Enter disk:
```

#### 4 Enter **disk01**

The system displays a message similar to the following:

```
Disk Name:  disk01  Status:  online
```

```
Device Name:  c0b0t1d0s0Length:  4187648
```

```
Volumes on disk disk01:
```

```
-----
```

```
home
```

```
home2
```

```
rootvol
```

```
standvol
```

```
swapvol
```

```
usr
```

#### 5 Record the value shown in the `Length` field on the line below.

```
Length: _____
```

#### 6 Enter **/mtce/bin/makevol**

The system displays the following message:

```
Enter Volume Name:
```

#### 7 Enter **home3**

The system displays the following message:

```
Enter Volume Length:
```

#### 8 Enter the number you recorded in [step 5](#).

The system displays the following message:

```
Number of mirrors set to: 0  
Volume layout set to: nocontig  
Logging type set to: NONE  
Disk Group set to: rootdg
```

Choose a disk from the following list:

```
disk00  disk01
```

```
Enter disk:
```

#### 9 Enter the disk name (for example, disk01).

The system displays the following message:

```
Please wait, this will take a couple of minutes.
```

```
Mkfs: make vxfs file system?
```

```
(DEL if wrong)
```



When the system prompt returns, an entry is automatically added **/etc/vfstab** for the home3 volume, and the file system is mounted.

You have completed this procedure.

## Moving the Speech to the Speech Disk

**Note:** Direct calls away from the system during this procedure.

To add a speech disk to an existing system, do the following:

- 1 Log in as root.
- 2 Enter **cd /home2/vfs/talkfiles**
- 3 Enter **find . -name -pring | cpio -pdmuv /home3/vfs/talkfiles**
- 4 Enter **vi /vs/data/irAPI.rc**
- 5 Change the line `SPEECHDIR=/home2/vfs/talkfiles`  
to  
**SPEECHDIR=/home3/vfs/talkfiles**
- 6 Enter **stop\_vs**
- 7 Enter **start\_vs**
- 8 Enter **cd /home2/vfs/talkfiles**

9 Enter **rm -rf - \***

The **/home2** directory is now available for customer files.

## Cleaning a Hard Disk Drive

Cleaning a hard disk drive can be done by:

- Using the **fdisk** command
- Low-level formatting the hard disk drive

### Using the fdisk Command

A hard disk drive that contains data cannot be installed in a Intuity<sup>™</sup> CONVERSANT system. The hard disk drive must be cleaned before use.

To clean a hard disk drive, do the following:

- 1 Log in to the system as root.
- 2 Enter **fdisk /dev/rdisk/c0b0t1d0s0**

#### CAUTION:

The phrase **c0b0t1d0s0** is the name of the disk to be cleaned. The phrase **c0b0t1d0s0** is correct for Hard Disk Drive 1. Hard Disk Drive 0 is named **c0b0t0d0s0**.

The system displays the Disk Cleaning screen ([Figure 48 on page 125](#)).

**Figure 48. Disk Cleaning Screen**

```
Total disk size is 2048 cylinders (2048.0MB)

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

SELECT ONE OF THE FOLLOWING

0. Overwrite system master boot code
1. Create a partition
2. Change Active (Boot from) partition
3. Delete a partition
4. Update (Update disk configuration and exit)
5. Exit (Exit without updating disk configuration)

Enter selection:
```

### 3 Enter 3

The system displays the following message:

```
Enter the number of the partition you want to delete
(or enter x to exit)
```

- 4 Enter the number of the partition.

For the example given in [Figure 48 on page 125](#), you would enter 1

The system displays the following message:

```
Do you want to delete partition X? This will erase all files
and programs in this partition (type "y" or "n").
```

- 5 Enter **y**

The system displays the following message:

```
Partition X has been deleted.
```

The system displays the Disk Cleaning screen ([Figure 48 on page 125](#)).

- 6 Enter **4**

The system displays the following message:

```
If you have created or altered a partition, you must
initialize the partition to reflect the new configuration.
For a UNIX System partition run the disksetup(lm) command.
For a DOS partiton, run the DOS format command. Changes
limited to the "Active" status field require no additional
action.
```

- 7 Reboot the system. See "Reboot the System," in "Common System Procedures," in the *Intuity CONVERSANT System Reference*, 585-313-205.

## Low-Level Formatting the Hard Disk Drive

The procedure for low-level formatting a hard disk drive differs depending on the CPU type installed on your system.

### Low-Level Formatting with a P5 200 MHz CPU Circuit Card

To low-level format a hard disk drive, do the following:

- 1 Reboot the system. See “Common System Procedures,” in the *Intuity CONVERSANT System Reference*, 585-313-205.
- 2 Press **CONTROL + A** when prompted.

The system displays the Host Adapter Configuration screen ([Figure 49 on page 127](#)).

**Figure 49. Host Adapter Configuration Screen**

```
Would you like to configure the host adapter or run the SCSI
disk utilities? Select the option and press <Enter>. Press
<F5> to switch between color or monochrome.
```

```
Options
Configure/View Host Adapter Settings
SCSI Disk Utilities
```

- 3 Place the cursor on **SCSI Disk Utilities**. Use the up  and down  arrows to move the cursor.

**4 Press ENTER.**

The system displays the SCSI Disk Utilities screen ([Figure 50 on page 128](#)).

**Figure 50. SCSI Disk Utilities Screen**

```
Select SCSI Disk and press <Enter>.
```



```
SCSI ID #0   IBM DORS-32160
SCSI ID #1   IBM DORS-32160
SCSI ID #2   No Device
SCSI ID #3   TANDBERG TDC4200
SCSI ID #4   No Device
SCSI ID #5   No Device
SCSI ID #6   No Device
SCSI ID #7   AIC - 7850
```

**5 Place the cursor on the SCSI Disk to be formatted. Use the up (▲) and down (▼) arrows to move the cursor.****6 Press ENTER.**

The system displays the Configure/Format Disk screen ([Figure 51 on page 129](#)).

Figure 51. Configure/Format Disk Screen



- 7 Place the cursor on the **Format Disk**. Use the up  and down  arrows to move the cursor.
- 8 Press **ENTER**.  
The system asks you to confirm that the disk is to be formatted.
- 9 Enter **y**

## Mirroring

This section details procedures for establishing or removing mirroring on a two-disk Intuity CONVERSANT system.

### Establishing Mirroring

Establishing disk mirroring includes copying data from the first disk to the second disk, then enabling mirroring so that the two disks continue to be in sync. When mirroring to another disk, make sure that the second disk is at

least as large as the first one. If the second disk is larger, the additional space remains unused and may be used later if there is a need to grow a file system.

The following procedure shows the system entries and system responses when mirroring disk00 and disk01. If you are mirroring other disks, your responses will be different.

- 1 Set the jumpers on Hard Disk Drive 1. See [Replacing Hard Disk Drive 1 on page 106](#).
- 2 Place Hard Disk Drive 1 in the MAP/5P. See [Replacing Hard Disk Drive 1 on page 106](#).
- 3 Add Hard Disk Drive 1 to the system. See [Adding a Hard Disk Drive to a System for Mirroring on page 113](#).
- 4 At the UNIX prompt, enter **vxdiskadm**  
The system displays the Volume Manager Support Operations screen ([Figure 38 on page 88](#)).
- 5 Enter **6**  
The system displays the Mirror Volumes on a Disk screen ([Figure 52 on page 131](#)).



Figure 52. Mirror Volumes on a Disk Screen

```
Mirror volumes on a disk
Menu: VolumeManager/Disk/Mirror
```

```
This operation can be used to mirror volumes on a disk.
These volumes can be mirrored onto another disk or onto any
available disk space. Volumes will not be mirrored if they
are already mirrored. Also, volumes that are comprised of
more than one subdisk will not be mirrored.
Mirroring volumes from the boot disk will produce a disk that
can be used as an alternate boot disk.
At the prompt below, supply the name of the disk containing
the volumes to be mirrored.
```

```
Enter disk name
```

#### 6 Enter list

The system displays the Disk Group screen ([Figure 53](#)).

Figure 53. Disk Group Screen

```
Disk group: rootdg
```

DM	NAME	DEVICE	TYPE	PRIVLEN	PUBLEN	PUBPATH
dm	disk00	c0b0t0d0s0	sliced	512	2422237	/dev/rdisk/c0b0t0d0se
dm	disk00	c0b0t1d0s0	sliced	512	3448320	/dev/rdisk/c0b0t1d0se

```
Enter disk name
```

### 7 Enter **disk00**

The system displays the following message:

```
You can choose to mirror volumes from disk disk00 onto any
available disk space, or you can choose to mirror onto a
specific disk. To mirror to a specific disk, select the name
of that disk. To mirror to any available disk space, select
"any".
```

```
Enter destination disk [<disk>,list,q,?] (default: any)
```

### 8 Enter **disk01**

The system displays the following message:

```
The requested operation is to mirror all volumes on disk
disk00 in disk group rootdg onto available disk space on disk
disk01.
```

```
NOTE: This operation takes a long time to complete.
```

```
Continue with the operation?
```

### **9 Enter y**

The system displays the following message:

```
Mirror volume standvol
Mirror volume swapvol
Mirror volume rootvol
Mirror volume disk006vol
Mirror volume home3
Mirror volume mtce
Mirror volume oracle
Mirror volume tmp
Mirror volume voice1
Mirror volume voxem
Mirror volume vs
```

```
Mirroring of disk disk01 is complete.
```

```
Mirror volumes on another disk? [y,n,q,?] (default:n)
```

### **10 Enter n**

The system displays the Volume Manager Support Operations screen ([Figure 38 on page 88](#)).

- 11 Enter **q**

## Removing Mirroring

To remove mirroring, do the following:

- 1 At the UNIX prompt, enter **/mtce/bin/rmvolmirr**
- 2 The system displays the following message:

```
Choose a VolumeName from the following list:  
ALL standvol swapvol rootvol mtce oracle tmp vs  
Enter VolumeName or ALL:
```

- 3 Enter **ALL**

The system displays the following message for each volume:

```
Mirroring for xxx volume has been turned off.  
Volume mirror xxx has been removed.
```

where **xxx** is the volume name.

## Disk Reuse

### Reusing for Mirroring

To reuse an existing speech disk for mirroring, do the following:

- 1 Log in as root.

**Note:** In the following steps, **home3** is the volume where the speech files are stored.

- 2 Enter **umount /home3**
- 3 Enter **voledit -rf rm home3**
- 4 Establish mirroring. See [Establishing Mirroring on page 129](#) for the procedure, and begin with [step 4](#).

### Reusing for Speech

To reuse an existing mirrored disk for speech, do the following:

- 1 Log in as root.
- 2 Remove mirroring. See [Removing Mirroring on page 134](#).

- 3 Add a disk for speech storage. See, [Adding a Hard Disk Drive to a System for Speech Storage on page 120](#) for the procedure, and begin with [step 3](#).
- 4 Move the speech to the speech disk. See [Moving the Speech to the Speech Disk on page 123](#).

# 4 Replacing Other Components

## Overview

This chapter contains procedures to replace the internal components of the MAP/5P in the proper manner. This chapter also provides information on the correct configuration and settings for the individual components.

Topics covered include:

- [Replacing the Cartridge Tape Drive on page 138](#)
- [Replacing a CMOS Battery on page 145](#)
- [Replacing the Diskette Drive on page 148](#)
- [Replacing Fans on page 154](#)
- [Replacing Memory Modules on page 160](#)
- [Replacing the Motherboard on page 166](#)
- [Replacing the Power Supply on page 182](#)
- [Replacing the Riser Card on page 191](#)
- [Replacing a Terminator SIP on page 194](#)

## Replacing the Cartridge Tape Drive

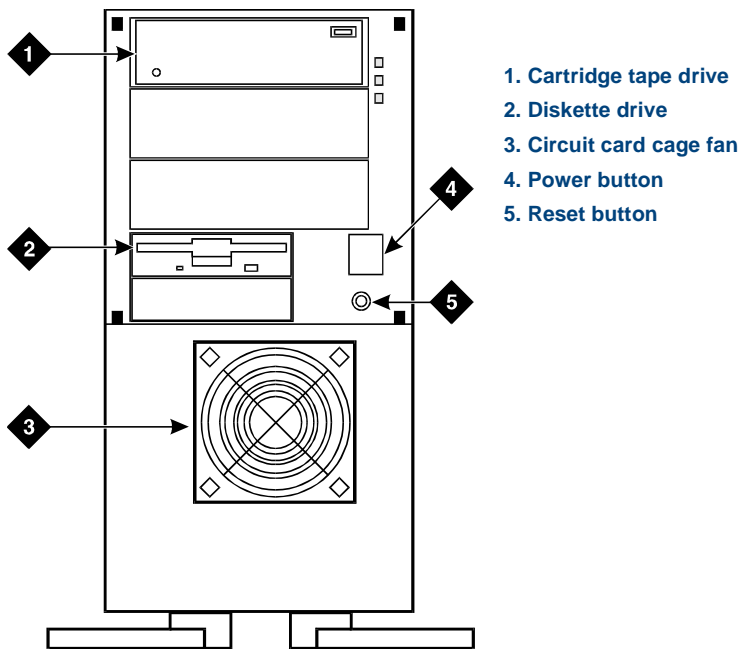
### CAUTION:

Observe proper electrostatic discharge precautions when you handle computer components. Wear an antistatic wrist strap that touches your bare skin and connect the strap cable to an earth ground. See [Protecting Against Damage from Electrostatic Discharge on page 2](#) in [Chapter 1, Getting Inside the Computer](#).

The cartridge tape drive is located in Bay 1 of the MAP/5P ([Figure 54 on page 139](#)).



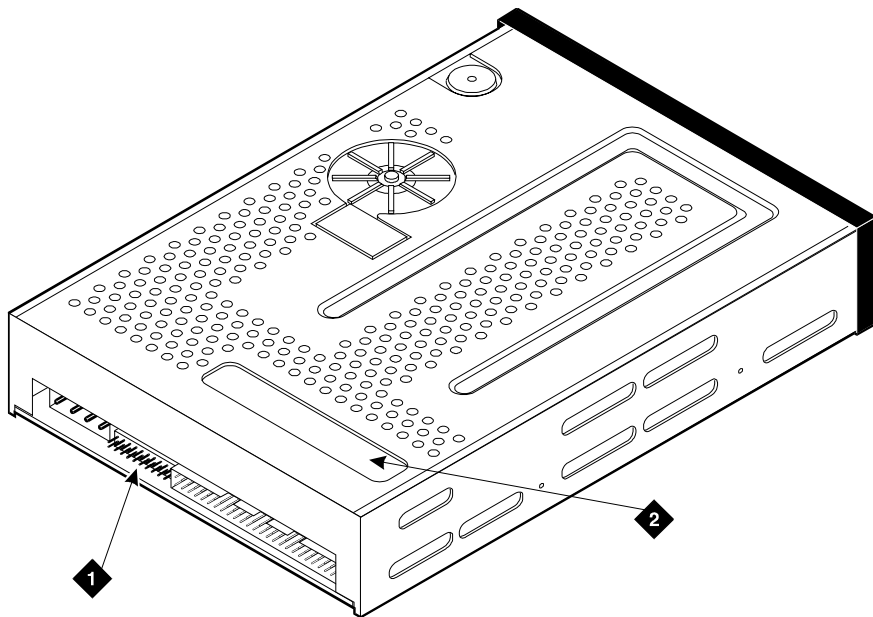
Figure 54. Front View of the MAP/5P



sccvf1 CjL 012197

[Figure 55 on page 140](#) shows the cartridge tape.

**Figure 55. Cartridge Tape Drive**



**1. Jumpers**

**2. Terminating resistors**

drcvtpe1 CJL 020597

## Removing a Cartridge Tape Drive

To remove a cartridge tape drive, perform the following procedures:

- [Removing the Intuity CONVERSANT System from Service on page 141](#)
- [Accessing the Cartridge Tape Drive on page 141](#)
- [Extracting the Cartridge Tape Drive on page 142](#)

### Removing the Intuity CONVERSANT System from Service

To remove the Intuity CONVERSANT system from service, do the following:

- 1 Verify that the replacement equipment is on site and appears to be in usable condition, with no obvious shipping damage.
- 2 Stop the voice system. See “Administer the Voice System,” in “Common System Procedures,” in the *Intuity CONVERSANT System Reference*, 585-313-205.
- 3 Shut down the voice system. See “Shut Down the System,” in “Common System Procedures,” in the *Intuity CONVERSANT System Reference*, 585-313-205.
- 4 Remove the incoming power. See [Removing Power from the MAP/5P on page 7](#) in [Chapter 1, Getting Inside the Computer](#).

### Accessing the Cartridge Tape Drive

To access the cartridge tape drive, remove the dress cover. See [Removing the Dress Cover on page 9](#) in [Chapter 1, Getting Inside the Computer](#).

**Extracting the Cartridge Tape Drive**

To extract the cartridge tape drive, do the following:

- 1 Remove the SCSI cable from the cartridge tape drive.

**Note:** Make sure the SCSI cable pin adapter remains attached to the SCSI cable.

- 2 Remove the power cord from the cartridge tape drive.

- 3 Locate the four screws on the peripheral bay chassis that secure the drive in Position 1 of the peripheral bay.

**Note:** Pay close attention to the location of the screws in both the peripheral bay chassis and the cartridge tape drive. If you return the screws to a different position, the cartridge tape drive may protrude from or be recessed into the chassis.

- 4 Holding the rear of the drive, loosen and remove these mounting screws.
- 5 Slide the drive forward within the peripheral bay and remove through the front opening of the chassis.

 **CAUTION:**

The drive fits tightly in the peripheral bay. Do not scrape wiring or components on the underside of the drive.

- 6 Continue with the procedure in [Installing a Cartridge Tape Drive on page 143](#).

## Installing a Cartridge Tape Drive

To install a cartridge tape drive, perform the following procedures:

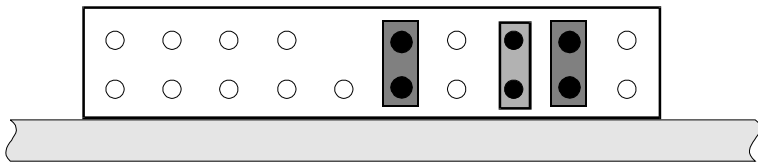
- [Verifying the Resource Options on page 143](#)
- [Inserting the Cartridge Tape Drive on page 143](#)
- [Reassembling the MAP/5P on page 144](#)
- [Restoring the Intuity CONVERSANT System to Service on page 145](#)

### Verifying the Resource Options

To verify the resource options, do the following:

- 1 Remove the three terminating resistors on the cartridge tape drive ([Figure 55 on page 140](#)).
- 2 Verify that the settings are correct as shown in [Figure 56 on page 143](#).

**Figure 56. Jumper Settings for the Cartridge Tape Drive, SCSI ID = 3**



### Inserting the Cartridge Tape Drive

To insert the cartridge tape drive, do the following:

- 1 Remove the new cartridge tape unit from its ESD-protective wrapping.

**Note:** Keep the package and all ESD-protective wrapping. You must re-use the material in which the replacement tape drive was packaged to meet the manufacturer's warranty.

2 Place the new drive in the Position 1 of the peripheral bay chassis with the printed circuit board side down.

3 Position the unit so that the cartridge tape drive screw holes line up with the appropriate holes in the peripheral bay.

**Note:** Pay close attention to the location of the screws in both the peripheral bay chassis and the cartridge tape drive. If you return the screws to a different position, the cartridge tape drive may protrude from or be recessed into the chassis.

4 Secure the drive in the peripheral bay using the four screws removed in [step 4](#) of the procedure, [Extracting the Cartridge Tape Drive on page 142](#).

5 Attach the power cable to the cartridge tape drive.

6 Attach the SCSI cable to the cartridge tape drive.

**Note:** Make sure the SCSI cable pin adapter is attached to the SCSI cable.

#### Reassembling the MAP/5P

To reassemble the MAP/5P, replace the dress cover. See [Replacing the Dress Cover on page 11](#) in [Chapter 1, Getting Inside the Computer](#).

### Restoring the Intuity CONVERSANT System to Service

To restore the Intuity CONVERSANT system, do the following:

- 1 Restore power to the MAP/5P. See [Restoring Power to the MAP/5P on page 11](#) in [Chapter 1, Getting Inside the Computer](#).
- 2 Verify the Intuity CONVERSANT system operation by placing a call to the system.

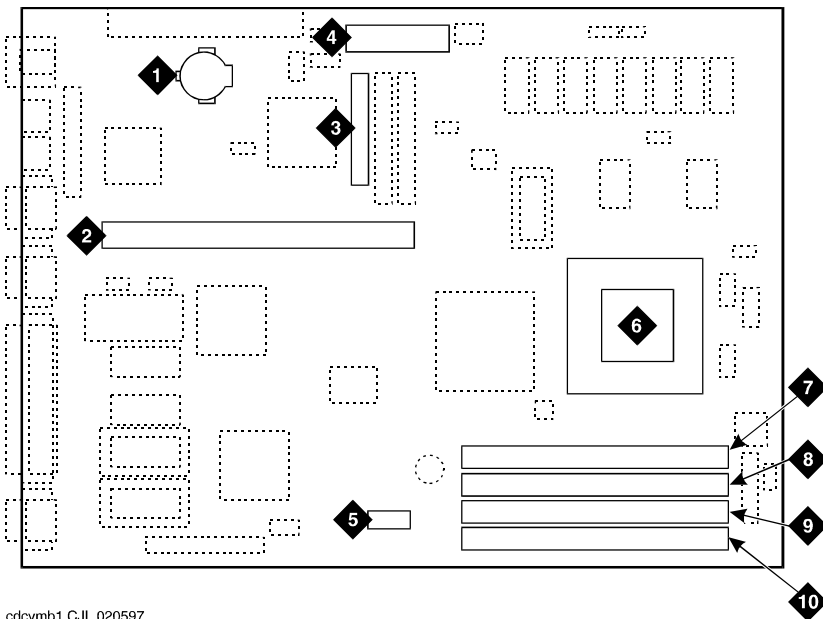
## Replacing a CMOS Battery

### CAUTION:

Observe proper electrostatic discharge precautions when you handle computer components. Wear an antistatic wrist strap that touches your bare skin and connect the strap cable to an earth ground. See [Protecting Against Damage from Electrostatic Discharge on page 2](#) in [Chapter 1, Getting Inside the Computer](#).

The CMOS battery is located on the motherboard ([Figure 57 on page 146](#)).

Figure 57.MAP/5P Motherboard



1. CMOS battery
2. Riser card connector
3. Diskette cable connector
4. Power supply connectors
5. Switches
6. CPU fan
7. SIMM4 socket (empty)
8. SIMM3 socket (empty)
9. SIMM2 socket
10. SIMM1 socket

cdcvmb1 C.JL 020597



### Removing a CMOS Battery

To remove the CMOS battery, perform the following procedures:

- [Removing the Intuity CONVERSANT System from Service on page 141](#)
- [Accessing the CMOS Battery on page 147](#)
- [Extracting the CMOS Battery on page 147](#)

#### Accessing the CMOS Battery

To access the CMOS battery, remove the dress cover. See [Removing the Dress Cover on page 9](#) in [Chapter 1, Getting Inside the Computer](#).

#### Extracting the CMOS Battery

To extract the CMOS battery, do the following:

- 1 Gently push the battery to the side, away from the rear of the MAP/5P, until it has cleared the retaining bracket.
- 2 Pull the battery from the motherboard.

### Installing a CMOS Battery

To install the CMOS battery, perform the following procedures:

- [Inserting the CMOS Battery on page 148](#)
- [Reassembling the MAP/5P on page 144](#)

- [Restoring the Intuity CONVERSANT System to Service on page 145](#)
- [Verifying the CMOS Settings on page 148](#)

#### Inserting the CMOS Battery

To insert the CMOS battery, do the following:

- 1 Gently push the battery to the side, away from the rear of the MAP/5P, until it has cleared the retaining bracket.
- 2 Push the battery into the motherboard.

#### Verifying the CMOS Settings

To verify the CMOS settings, see [Inserting the Motherboard on page 173](#).

## Replacing the Diskette Drive

### CAUTION:

Observe proper electrostatic discharge precautions when you handle computer components. Wear an antistatic wrist strap that touches your bare skin and connect the strap cable to an earth ground. See [Protecting Against Damage from Electrostatic Discharge on page 2](#) in [Chapter 1, Getting Inside the Computer](#).

The 1.44-Mbyte, 3.5-inch diskette drive is located in Bay 4 of the peripheral bay, as shown in [Figure 54 on page 139](#). There are no jumpers associated with the diskette drive used in the MAP/5P.

**Note:** If you are replacing the diskette cable, you must remove the riser card. See [Replacing the Riser Card on page 191](#).

## Removing the Diskette Drive

To remove the diskette drive, perform the following procedures:

- [Removing the Intuity CONVERSANT System from Service on page 141](#)
- [Accessing the Diskette Drive on page 149](#)
- [Extracting the Diskette Drive on page 149](#)

### Accessing the Diskette Drive

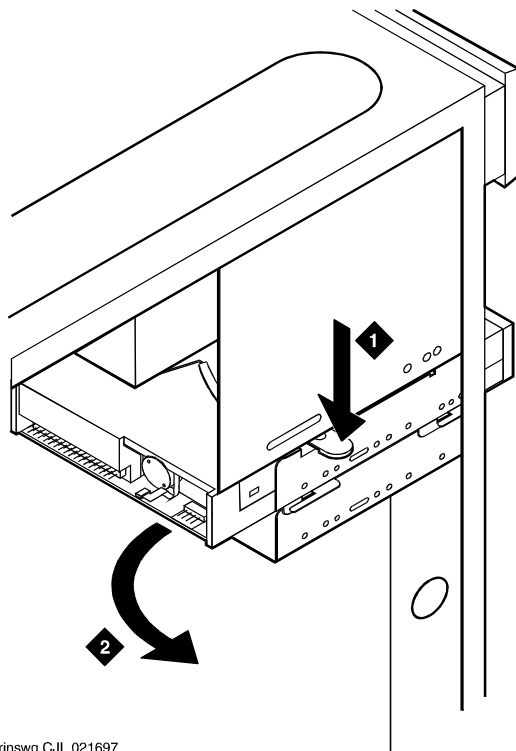
To access the diskette drive, remove the dress cover. See [Removing the Dress Cover on page 9](#) in [Chapter 1, Getting Inside the Computer](#).

### Extracting the Diskette Drive

To extract the diskette drive, do the following:

- 1 Remove the diskette cable from the back of the diskette drive.
- 2 Remove the power cord from the back of the diskette drive.
- 3 Press down on the thumb-tab that locks the peripheral frame in place ([Figure 58 on page 150](#)).

Figure 58. Removing the Peripheral Frame



1. Press down on thumb tab
2. Rotate frame out of chassis

drinswg C.J.L. 021697

- 4 Pull the peripheral frame toward you ([Figure 58 on page 150](#)).

The frame will rotate toward the front of the MAP/5P until the bracing lip clears. You can then pull the frame out of the MAP/5P.

- 5 Locate the screws holding the diskette drive to the peripheral frame

**Note:** Pay close attention to the location of the screws in both the peripheral frame and the diskette drive. If the screws are returned to a different position, the diskette drive may protrude from or be recessed into the chassis.

- 6 Holding the rear of the diskette drive, remove these screws.

- 7 Remove the diskette drive from the peripheral frame.

 **CAUTION:**

Handle the diskette drive with care. The spindle motor, stepping motor, and printed circuit board are located on the bottom of the diskette drive. Do not place any force or strain on these components and do not touch the surface of the diskette drive printed circuit board.

- 8 Place the diskette drive assembly, with the printed circuit board facing up, on an ESD-protected surface.
- 9 Continue with the procedure in [Installing the Diskette Drive on page 152](#).

## Installing the Diskette Drive

To install the diskette drive, perform the following procedures:

- [Inserting the Diskette Drive on page 152](#)
- [Reassembling the MAP/5P on page 144](#)
- [Restoring the Intuity CONVERSANT System to Service on page 145](#)

### Inserting the Diskette Drive

To insert the diskette drive, do the following:

- 1 Remove the new diskette drive from its ESD-protective wrapping.

**Note:** Keep the package and all ESD-protective wrapping. You must reuse the material in which the replacement diskette drive was packaged to meet the manufacturer's warranty.

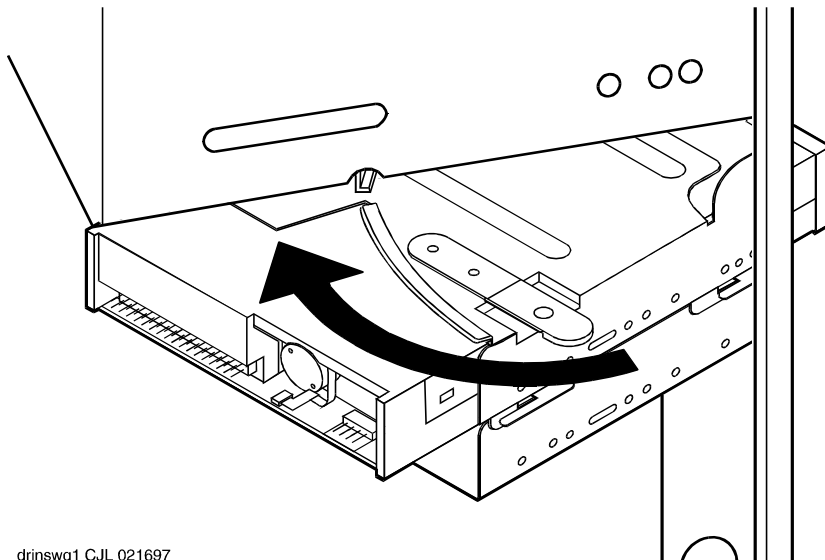
- 2 Attach the diskette drive to the peripheral frame using the four screws removed in [step 6 of Extracting the Diskette Drive on page 149](#).

**Note:** Pay close attention to the location of the screws in both the peripheral frame and the diskette drive. If the screws are returned to a different position, the diskette drive may protrude from or be recessed into the chassis.

- 3 Attach the power cable to the diskette drive.
- 4 Attach the diskette cable to the diskette drive.
- 5 Place the front of the peripheral frame into the MAP/5P.

- 6 Align the peripheral frame so that the bracing lip on the MAP/5P chassis is below the guide on the peripheral frame ([Figure 59 on page 153](#)).

**Figure 59. Installing the Peripheral Frame**



drinswg1 CJL 021697

- 7 Rotate the peripheral frame into the MAP/5P chassis until it is locked in place ([Figure 59 on page 153](#)).

- 8 Check the cable connections to both the diskette drive and Hard Disk Drive 1 (if installed).

## Replacing Fans

### CAUTION:

Observe proper electrostatic discharge precautions when you handle computer components. Wear an antistatic wrist strap that touches your bare skin and connect the strap cable to an earth ground. See [Protecting Against Damage from Electrostatic Discharge on page 2](#) in [Chapter 1, Getting Inside the Computer](#).

The MAP/5P contains the following fans that provide cooling inside the unit:

- Power supply fan.
- Circuit card cage fan.
- CPU fan.

The power supply fan is located inside the power supply and is *not* serviceable. Never attempt repairs to this fan. If it fails, you must replace the entire power supply. See [Replacing the Power Supply on page 182](#) for more information.



## Replacing the Circuit Card Cage Fan

The circuit card cage fan is located in front of the card cage, behind the dress cover ([Figure 54 on page 139](#)). The circuit card cage fan forces air flow through the MAP/5P chassis, across the circuit cards.

### Removing a Circuit Card Cage Fan

To remove the circuit card cage fan, perform the following procedures:

- [Removing the Intuity CONVERSANT System from Service on page 141](#)
- [Accessing the Circuit Card Cage Fan on page 155](#)
- [Extracting the Circuit Card Cage Fan on page 155](#)

### Accessing the Circuit Card Cage Fan

To access the circuit card cage fan, do the following:

- 1 Remove the dress cover. See [Removing the Dress Cover on page 9 in Chapter 1, Getting Inside the Computer](#).
- 2 Remove the protective aluminum screen that holds the circuit card cage fan in the chassis.

### Extracting the Circuit Card Cage Fan

To extract the circuit card cage fan, do the following:

- 1 Lift the circuit card cage fan out of the chassis.

- 2 Unplug the 12-VDC power lead connector.

 **CAUTION:**

Do not operate the MAP/5P for any length of time without the circuit card cage fan installed and operational.

- 3 Continue with the procedure in [Installing a Circuit Card Cage Fan on page 156](#).

### Installing a Circuit Card Cage Fan

To install the circuit card cage fan, perform the following procedures:

- [Inserting the Circuit Card Cage Fan on page 156](#)
- [Reassembling the MAP/5P on page 157](#)
- [Restoring the Intuity CONVERSANT System to Service on page 157](#)

### Inserting the Circuit Card Cage Fan

To insert the circuit card cage fan, do the following:

- 1 Attach the 12-VDC connector to the circuit card cage fan.
- 2 Place the circuit card cage fan in the MAP/5P chassis.

**Note:** Make sure the air flow is directed into the MAP/5P chassis. There is an air flow direction arrow on the fan.

### Reassembling the MAP/5P

To reassemble the MAP/5P, do the following:

- 1 Replace the aluminum screen.
- 2 Replace the dress cover. See [Replacing the Dress Cover on page 11](#) in [Chapter 1, Getting Inside the Computer](#).

### Restoring the Intuity CONVERSANT System to Service

To restore the Intuity CONVERSANT system, do the following:

- 1 Restore power to the MAP/5P. See [Restoring Power to the MAP/5P on page 11](#) in [Chapter 1, Getting Inside the Computer](#).
- 2 Verify that the replacement fan is operating by placing a small sheet of paper across the grill on the intake side of the fan. The paper should adhere to the grill.

If the fan is not operating or is spinning very slowly, check all wiring connections and voltages to ensure that the replacement unit is receiving power.

### CAUTION:

Do not leave the MAP/5P powered up for any length of time until the circuit card cage fan is fully operational.

- 3 Verify the CONVERSANT system operation by placing a call to a user.

## Replacing a CPU Fan

The CPU fan is located on the motherboard, on top of the CPU ([Figure 57 on page 146](#)).

### Removing a CPU Fan

To remove the circuit card cage fan, perform the following procedurest:

- [Removing the Intuity CONVERSANT System from Service on page 141](#)
- [Accessing the CPU Fan on page 158](#)
- [Extracting the CPU Fan on page 159](#)

### Accessing the CPU Fan

To access the CPU fan, do the following:

- 1 Remove the dress cover. See [Removing the Dress Cover on page 9](#) in [Chapter 1, Getting Inside the Computer](#).
- 2 Remove all of the circuit cards. See [Removing a Circuit Card on page 13](#) in [Chapter 2, Installing or Replacing Circuit Cards](#).

**Note:** Pay close attention to the riser card connector slots from which each circuit card is removed. The circuit cards will need to be replaced in the same slots in the new riser card. See [Component Assignments on page 354](#) in [Appendix A, System Configuration](#), for circuit card placement.

### Extracting the CPU Fan

To extract the CPU fan, do the following:

- 1 Remove the two screws that hold the CPU fan to the motherboard.
- 2 Lift the CPU out of the chassis.
- 3 Unplug the 12-VDC power lead connector.
- 4 Continue with the procedure in [Installing a CPU Fan on page 159](#).

### Installing a CPU Fan

To install the CPU fan, perform the following procedures:

- [Inserting the CPU Fan on page 159](#)
- [Reassembling the MAP/5P on page 160](#)
- [Restoring the Intuity CONVERSANT System to Service on page 145](#)

### Inserting the CPU Fan

To insert the CPU fan, do the following:

- 1 Attach the 12-VDC connector to the CPU fan.
- 2 Place the CPU fan on the motherboard.
- 3 Replace the two screws that hold the CPU fan to the motherboard.

### Reassembling the MAP/5P

To reassemble the MAP/5P, do the following:

- 1 Replace the circuit cards. See [Installing a Circuit Card on page 16 in Chapter 2, Installing or Replacing Circuit Cards](#).
- 2 Replace the dress cover. See [Replacing the Dress Cover on page 11 in Chapter 1, Getting Inside the Computer](#).

## Replacing Memory Modules

Single in-line memory modules (SIMMs) are located in the lower right hand portion of the motherboard ([Figure 57 on page 146](#)). The following situations could indicate a missing or defective SIMM:

- The system will not boot.
- The power-on memory test fails.
- A parity error on the motherboard occurs.

In the case of a defective SIMM, you should replace both SIMMs.

### CAUTION:

Observe proper electrostatic discharge precautions when you handle computer components. Wear an antistatic wrist strap that touches your bare skin and connect the strap cable to an earth ground. See [Protecting Against](#)

[Damage from Electrostatic Discharge on page 2](#) in [Chapter 1, Getting Inside the Computer](#).

## Removing SIMMs

To remove the SIMMs, perform the following procedures:

- [Removing the Intuity CONVERSANT System from Service on page 141](#)
- [Accessing the SIMMs on page 161](#)
- [Verifying the SIMM Seating on page 161](#)
- [Extracting the SIMMs on page 163](#)

### Accessing the SIMMs

To access the SIMMs, do the following:

- 1 Remove the dress cover. See [Removing the Dress Cover on page 9](#) in [Chapter 1, Getting Inside the Computer](#).
- 2 Remove the circuit cards in the bottom three slots. See [Removing a Circuit Card on page 13](#) in [Chapter 2, Installing or Replacing Circuit Cards](#).

### Verifying the SIMM Seating

To verify the SIMM seating, do the following:

- 1 Apply pressure to both SIMMs to ensure they are properly seated.
- 2 If both are properly seated then both should be replaced.

Continue with the procedure in [Extracting the SIMMs on page 163](#).

If one or more of the SIMMs are not properly installed or seated, do the following:

- a Properly seat the SIMM.
- b Replace the dress cover. See [Replacing the Dress Cover on page 11](#) in [Chapter 1, Getting Inside the Computer](#).
- c Restore the incoming power. See [Restoring Power to the MAP/5P on page 11](#) in [Chapter 1, Getting Inside the Computer](#).
- d Reboot the system. See “Reboot the System,” in “Common System Procedures,” in the *Intuity CONVERSANT System Reference*, 585-313-205.

If the system shows an amount of memory equal to that installed, the problem has been corrected. Complete the following [step 1](#) through [step 7](#):

- [1] Shut down the system. See “Shut Down the System,” in “Common System Procedures,” in the *Intuity CONVERSANT System Reference*, 585-313-205.
- [2] Remove the incoming power. See [Removing Power from the MAP/5P on page 7](#) in [Chapter 1, Getting Inside the Computer](#).
- [3] Remove the dress cover. See [Removing the Dress Cover on page 9](#) in [Chapter 1, Getting Inside the Computer](#).



- [4] Replace the circuit cards in the bottom three slots. See [Installing a Circuit Card on page 16](#) in [Chapter 2, Installing or Replacing Circuit Cards](#).
- [5] Replace the dress cover. See [Replacing the Dress Cover on page 11](#) in [Chapter 1, Getting Inside the Computer](#).
- [6] Restore the incoming power. See [Restoring Power to the MAP/5P on page 11](#) in [Chapter 1, Getting Inside the Computer](#).
- [7] Reboot the system. See “Reboot the System,” in “Common System Procedures,” in the *Intuity CONVERSANT System Reference, 585-313-205*.

If the system shows an amount of memory less than that installed on the card both of the SIMMs should be replaced, continue with the procedure in [Extracting the SIMMs on page 163](#).

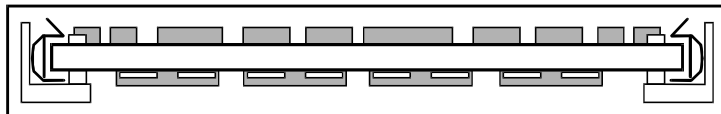
### Extracting the SIMMs

To extract the SIMMs, do the following:

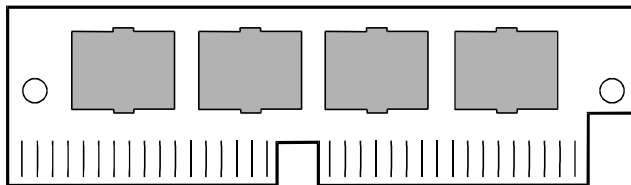
- 1 Release the metal snap locks at the edge of the SIMM2 socket by gently pushing them to the outside ([Figure 60 on page 164](#)).

Figure 60. SIMM Socket

1



2



1. SIMM in socket - top view

2. SIMM - side view

- 2 Rotate the SIMM downward to approximately a 45-degree angle.
- 3 Remove the SIMM.
- 4 Repeat [step 1](#) through [step 3](#) for the SIMM located in the SIMM1 socket.
- 5 Continue with the procedure in [Installing SIMMs on page 165](#).

## Installing SIMMs

To install the SIMMs, perform the following procedures:

- [Inserting the SIMMs on page 165](#)
- [Reassembling the MAP/5P on page 166](#)
- [Restoring the Intuity CONVERSANT System to Service on page 145](#)

**Inserting the SIMMs** To insert the SIMMs, do the following:

- 1 Install a SIMM in the SIMM1 socket by positioning it at approximately a 45-degree angle with respect to the motherboard.

**Note:** All SIMMs are keyed to prevent them from being inserted incorrectly.

- 2 Push down at that angle until the SIMM is reseated into the SIMM carrier.
- 3 Snap the SIMM into place by rotating it to an upright position.

The metal snap lock on the ends of the connector for the SIMM will be forced open and then lock when in the upright position.

- 4 Ensure the connector guide pins are seated into the clearance holes provided at each end of the SIMM.

When properly seated, the guides should be fully extended into the circuit card clearance holes.

- 5 Repeat [step 1](#) through [step 4](#) to install a SIMM in the SIMM2 socket.

### Reassembling the MAP/5P

To reassemble the MAP/5P, do the following:

- 1 Replace the circuit cards in the bottom three slots. See [Installing a Circuit Card](#) in [Chapter 2, Installing or Replacing Circuit Cards](#).
- 2 Replace the dress cover. See [Replacing the Dress Cover](#) in [Chapter 1, Getting Inside the Computer](#).

## Replacing the Motherboard

### CAUTION:

Observe proper electrostatic discharge precautions when you handle computer components. Wear an antistatic wrist strap that touches your bare skin and connect the strap cable to an earth ground. See [Protecting Against Damage from Electrostatic Discharge on page 2](#) in [Chapter 1, Getting Inside the Computer](#).

## Removing the Motherboard

To remove the motherboard, perform the following procedures:

- [Removing the Intuity CONVERSANT System from Service on page 141](#)

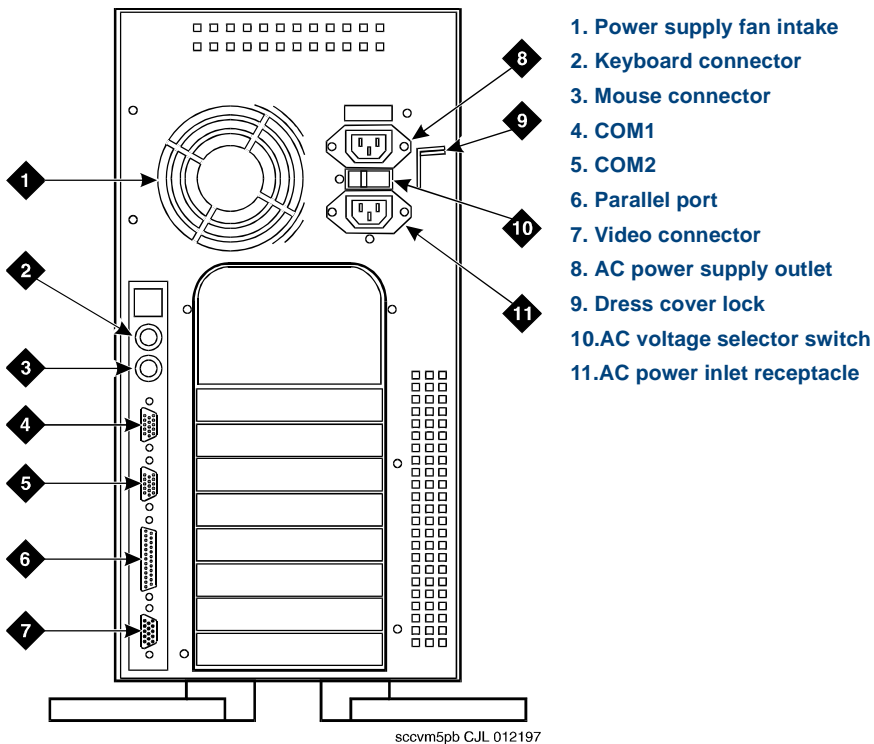
- [Accessing the Motherboard on page 167](#)
- [Extracting the Motherboard on page 169](#)

### Accessing the Motherboard

To access the motherboard, do the following:

- 1 Disconnect any cables attached to the ports in the back of the MAP/5P ([Figure 61 on page 168](#)).
- 2 Remove the dress cover. See [Removing the Dress Cover on page 9](#) in [Chapter 1, Getting Inside the Computer](#).

Figure 61. Rear View of the MAP/5P



- 3 Remove all of the circuit cards. See [Removing a Circuit Card on page 13](#) in [Chapter 2, Installing or Replacing Circuit Cards](#).
- 4 Remove the riser card. See [Removing the Riser Card on page 191](#).

### Extracting the Motherboard

To extract the motherboard, do the following:

- 1 Disconnect the diskette cable from the motherboard ([Figure 57 on page 146](#)).
- 2 Disconnect the power supply connections from the motherboard ([Figure 57 on page 146](#)).
- 3 Push up on the motherboard retaining bracket.
- 4 Gently pull the motherboard forward until it has cleared the alignment pegs.
- 5 Slide the motherboard toward the front of the MAP/5P to allow the cable connectors, in the rear of the MAP/5P, to clear the chassis.
- 6 Remove the motherboard from the MAP/5P chassis.
- 7 Remove the memory from the motherboard. See [Removing SIMMs on page 161](#).

**Note:** The new motherboard contains no memory. Use the memory from the defective motherboard to populate the replacement.

- 8 Continue with the procedure in [Installing the Motherboard on page 170](#).

## Installing the Motherboard

To install the motherboard, perform the following procedures:

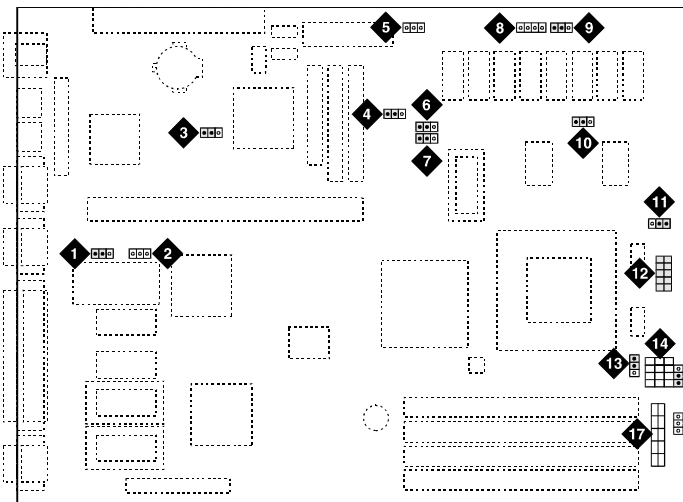
- [Verifying the Resource Options on page 170](#)
- [Inserting the Motherboard on page 173](#)
- [Reassembling the MAP/5P on page 175](#)
- [Restoring the Intuity CONVERSANT System to Service on page 176](#)

### Verifying the Resource Options

The motherboard contains switches and jumpers that you must verify. [Figure 57 on page 146](#) shows the location of the switches. [Figure 62 on page 171](#) shows the location of the jumpers on the motherboard.



Figure 62. Motherboard Jumper Locations



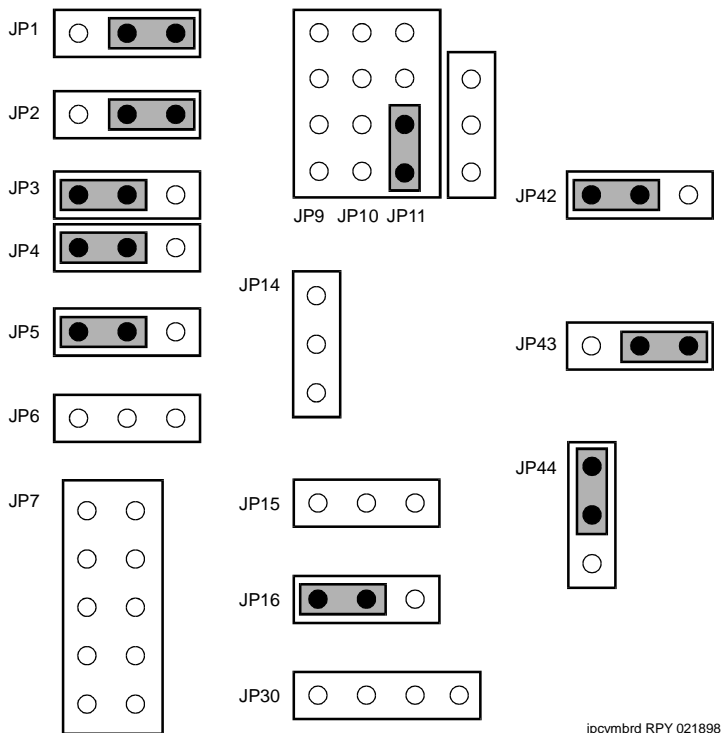
jpcvmb4 CJL 040797

1. JP5 - flash BIOS function
2. JP6 - BIOS ROM type
3. JP1 - BIOS type
4. JP2 - LED function
5. JP15 - standby power connector
6. JP4 - second-level cache
7. JP3 - second-level cache
8. JP30 - external battery connector
9. JP16 - software shutdown
10. JP42 - L2 cache mode
11. JP43 - CPU voltage for I/O
12. JP7 - regulator
13. JP44 - CPU voltage for core
14. JP11 - SMM/reset switch
15. CN19
16. CN30
17. JP14 - power-on switch connector

To verify the resource options, do the following:

- 1 Verify the jumper settings on the motherboard ([Figure 63 on page 172](#)).

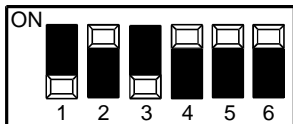
Figure 63. Motherboard Jumper Settings



jpcvbrd RPY 021898

- 2 Verify the switch settings on the motherboard ([Figure 64 on page 173](#)).

**Figure 64. Motherboard Switch Settings**



swcvmbird RPY 021898

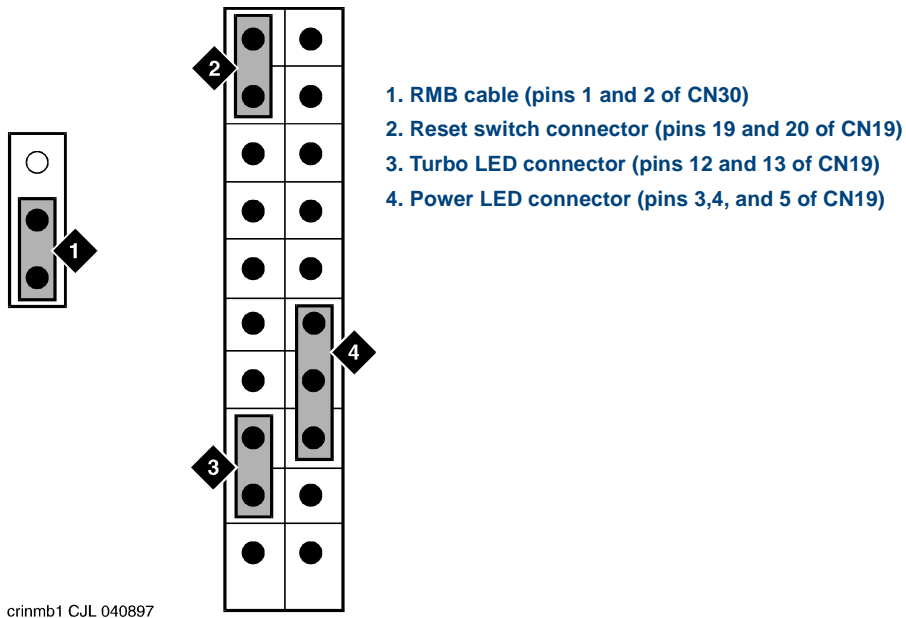
### Inserting the Motherboard

To insert the motherboard, do the following:

- 1 Place the SIMMs from the defective motherboard on to the replacement motherboard. See [Installing SIMMs on page 165](#).
- 2 Place the motherboard in the MAP/5P.
- 3 Align the external cable connectors on the motherboard with the corresponding holes in the MAP/5P chassis.
- 4 Slide the motherboard to the rear of the MAP/5P so that the external cable connectors protrude through the rear of the unit.
- 5 Align the holes in the motherboard with the alignment pegs in the MAP/5P ([Figure 57 on page 146](#)).
- 6 Gently push the motherboard into the MAP/5P until the retaining bracket has snapped into place ([Figure 57 on page 146](#)).
- 7 Attach the diskette cable to the motherboard ([Figure 57 on page 146](#)).

- 8 Attach the power supply connections to the motherboard ([Figure 57 on page 146](#)).
- 9 Attach the reset switch connector to CN19 ([Figure 65 on page 174](#)).

**Figure 65. Motherboard Cable Connections**



- 10 Attach the turbo LED connector to CN19 ([Figure 65 on page 174](#)).
- 11 Attach the power LED connector to CN19 ([Figure 65 on page 174](#)).
- 12 Attach the remote maintenance circuit card reset cable to CN30 ([Figure 65 on page 174](#)).

### Reassembling the MAP/5P

To reassemble the MAP/5P, do the following:

- 1 Replace the riser card. See [Installing the Riser Card on page 193](#).
- 2 Replace the circuit cards. See [Installing a Circuit Card on page 16](#) in [Chapter 2, Installing or Replacing Circuit Cards](#).
- 3 Replace the dress cover. See [Replacing the Dress Cover on page 11](#) in [Chapter 1, Getting Inside the Computer](#).
- 4 Attach any cables that were connected to the following ports in the back of the MAP/5P ([Figure 61 on page 168](#)):
  - ~ Video port
  - ~ Keyboard port
  - ~ COM1
  - ~ COM2
  - ~ Parallel port
  - ~ I/O port

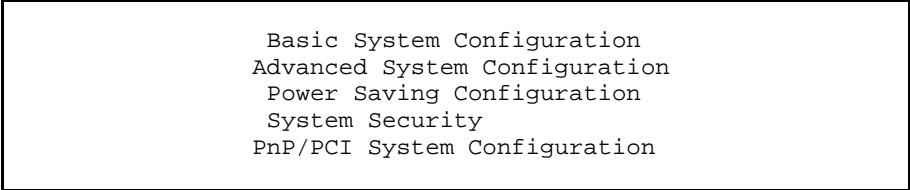
### Restoring the Intuity CONVERSANT System to Service

To restore the Intuity CONVERSANT system , do the following:

- 1 Restore power to the MAP/5P. See [Restoring Power to the MAP/5P on page 11](#) in [Chapter 1, Getting Inside the Computer](#).
- 2 Verify the CMOS settings by completing the following [step a](#) through [step e](#):
  - a When prompted, press **CONTROL + ALT + ESC**.

The system displays the CMOS Configuration screen ([Figure 66 on page 176](#)).

**Figure 66. CMOS Configuration Screen**



```
Basic System Configuration
Advanced System Configuration
Power Saving Configuration
System Security
PnP/PCI System Configuration
```

- b Compare the CMOS settings with those listed in [Table 7 on page 177](#).





Use the up  and down  arrows to move the cursor between fields. Use the left  and right  arrows to change the value of the field. Use the **ESC** key to return to the previous menu.

Table 7. CMOS Settings

Option	Setting
<b>Basic System Configuration</b>	
IDE0	AUTO
IDE1	AUTO
IDE2	AUTO
IDE3	AUTO
On-board IDE Controller	Disabled
Hard Disk Block Mode	Disabled
Advanced PIO Mode	Disabled
Hard Disk Size >504 MB	Disabled
Hard Disk 32 Bit Access	Disabled
Large Memory Support Mode	Normal
Number Lock After Boot	Enabled
Memory Test	Enabled
Quiet Boot	Enabled
<i>1 of 5</i>	

Table 7. CMOS Settings

Option	Setting
Configuration Table	Disabled
<b>Advanced System Configuration</b>	
Internal Cache (CPU Cache)	Enabled
External Cache	Enabled
Cache Scheme	Write Back
ECC/Parity Mode Selection	Parity
Memory @ 15MB-16MB Reserved for	[System] use
<b>Power Saving Configuration</b>	
Power Management Mode	Disabled
Power Saving Operation Mode	[Traditional]
IDE Hard Disk Standby Timer	Off
Monitor Power Saving Timer	Off
System Standby Timer	Off
System Suspend Timer	Off

2 of 5



Table 7. CMOS Settings

Option	Setting
IRQ2, IRQ9	Disabled
IRQ3	Disabled
IRQ4	Disabled
IRQ5	Disabled
IRQ7	Disabled
IRQ10	Disabled
IRQ11	Disabled
IRQ12	Disabled
IRQ15	Disabled
Quick Start Timer	Off
Point Device Location	[None]
<b>System Security</b>	
Diskette Drive	Normal
Hard Disk Drive	Normal
<b>3 of 5</b>	

Table 7. CMOS Settings

Option	Setting
System Boot Drive	Drive A then Drive C
Boot from CD-Rom	Disabled
Serial Port 1 Base Address	[3F8h]
Serial Port 2 Base Address	[2F8h]
Parallel Port Address	[378(IRQ7)]
Operation Mode	[Standard Parallel Port SPP] Mode
On-board PS/2 Mouse (IRQ12)	Disabled
Set-up Password	[None]
Power on Password	[None]
<b>PnP/PCI System Configuration</b>	
PCI IRQ Setting	Manual
PCI Slot 1	INTA 14
PCI Slot 2	INTD 14
PCI Slot 3	INTC 14

4 of 5

Table 7. CMOS Settings

Option	Setting
On-Board VGA	-
PCI IRQ Sharing	[No]
VGA Palette Snoop	[Disabled]
Plug & Play OS	[No]
Reset Resources Assignment	[No]

*5 of 5*

- c** When you have completed setting the CMOS, press **ESC**.

The system displays the following message:

Do you want to save the CMOS settings?

YES

NO

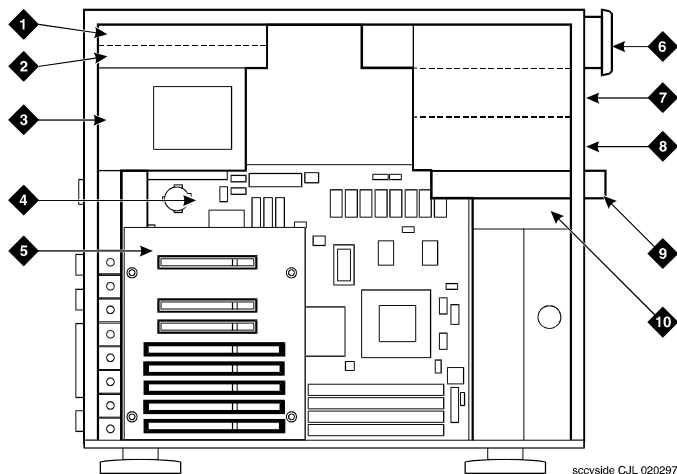
- d** Select **YES**
- e** Press **ENTER**.

- 3** Verify the Intuity CONVERSANT system operation by placing a call.

# Replacing the Power Supply

The 110/220-VAC power supply is located in the upper left corner of the MAP/5P ([Figure 67 on page 183](#)).

Figure 67. MAP/5P Internal Layout



sccvside C.J.L. 020297

- |                              |   |
|------------------------------|---|
| 1. Bay 6 - Hard Disk Drive 0 | 6. Bay 1 - Cartridge tape drive         |
| 2. Bay 7 - Empty             | 7. Bay 2 - Empty                        |
| 3. Power supply              | 8. Bay 3 - Empty                        |
| 4. Motherboard               | 9. Bay 4 - Diskette drive               |
| 5. Riser card                | 10. Bay 5 - Hard Disk Drive 1 (if used) |

## Removing the Power Supply

To remove the power supply, perform the following procedures:

- [Removing the Intuity CONVERSANT System from Service on page 141](#)
- [Accessing the Power Supply on page 184](#)
- [Extracting the Power Supply on page 184](#)

### Accessing the Power Supply

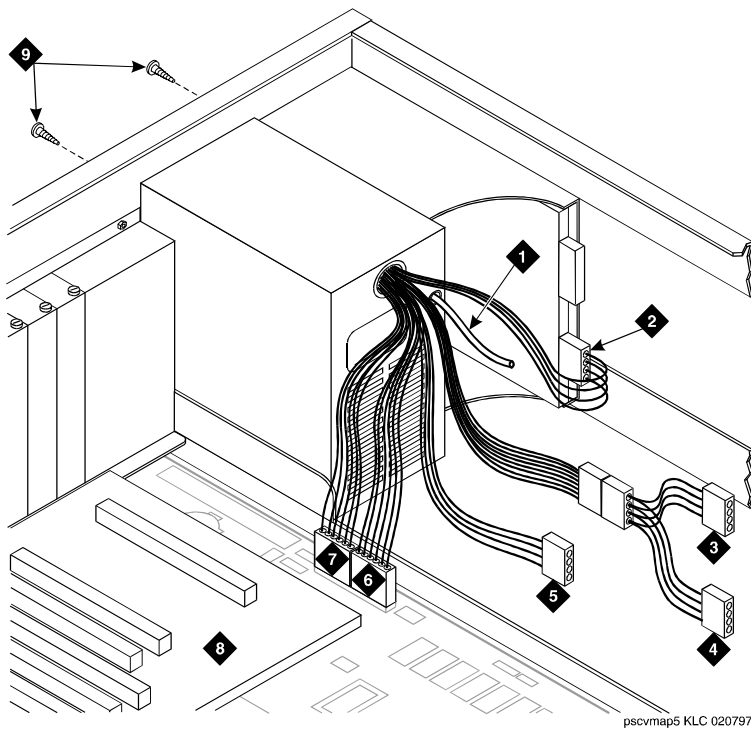
To access the power supply, remove the dress cover. See [Removing the Dress Cover on page 9](#) in [Chapter 1, Getting Inside the Computer](#).

### Extracting the Power Supply

To extract the power supply, do the following:

- 1 Unplug the connector to the cartridge tape drive ([Figure 68 on page 185](#)).
- 2 Unplug the connector to the diskette drive ([Figure 68 on page 185](#)).
- 3 Unplug the connector to Hard Disk Drive 1, if provided ([Figure 68 on page 185](#)).
- 4 Unplug the connector to Hard Disk Drive 0 ([Figure 68 on page 185](#)).
- 5 Unplug both connectors to the motherboard ([Figure 68 on page 185](#)).

Figure 68. MAP/5P Power Supply



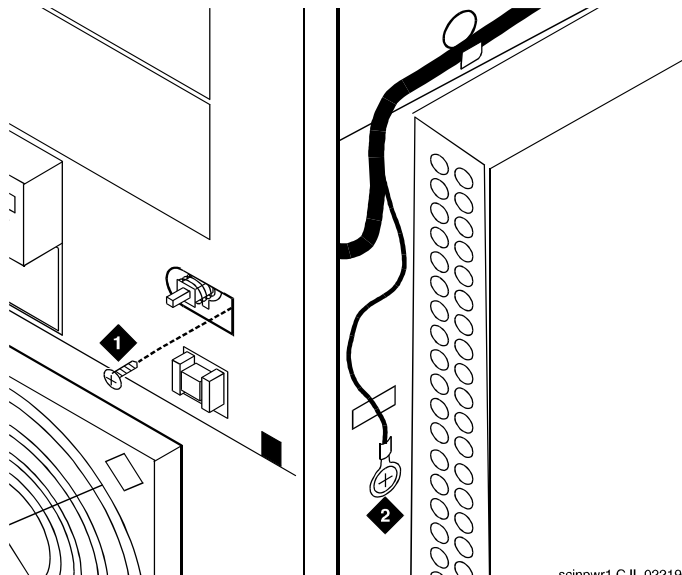
pscvmapi5 KLC 020797

1. Power-on switch cable
2. Hard Disk Drive 0 connector
3. Diskette drive connector
4. Hard Disk Drive 1 connector
5. Cartridge tape drive connector
6. Motherboard connector
7. Motherboard connector
8. Riser card
9. Power supply retaining screws

- 6 Locate the power supply switch cable, which is mounted to the front of the chassis by a single screw.
- 7 Remove the screw holding the power supply switch ([Figure 69 on page 187](#)).



Figure 69. Power Supply Switch



scinpwr1 CJL 022197

1. Power supply switch retaining screw
2. Power supply grounding wire and screw
- 8 Remove the screw that holds the grounding wire to the chassis ([Figure 69 on page 187](#)).

- 9 Slide the power supply switch out of the retaining slot.
- 10 Remove the four screws on the chassis rear area that secure the power supply unit ([Figure 68 on page 185](#)).
- 11 Slide the unit slightly forward towards the front of the MAP/5P and tilt towards the riser card.
- 12 Lift and remove the power supply.

### Installing the Power Supply

To install the power supply, perform the following procedures:

- [Inserting a Power Supply on page 188](#)
- [Reassembling the MAP/5P on page 144](#)
- [Restoring the Intuity CONVERSANT System to Service on page 145](#)

#### Inserting a Power Supply

To insert the power supply, do the following:

- 1 Remove the spare power supply unit from the shipping carton.

**Note:** Keep the package and all ESD-protective wrapping. You must re-use the material in which the replacement tape drive was packaged to meet the manufacturer's warranty.

- 2 Verify the input AC voltage selection switch, located on the chassis side close to the button edge, is in the correct position.

The switch is a slide type. Printed text on the surface indicates the input voltage requirements, either 115 or 230 Volts. The correct position for systems installed in the United States is 115 volts.

- 3 Install the power supply unit into the chassis and align the screw holes.
- 4 Install the four screws on the chassis rear area that secure the power supply unit ([Figure 68 on page 185](#)).
- 5 Attach the power supply DC output connectors to the motherboard ([Figure 68 on page 185](#)).

**Note:** The connectors are keyed to prevent them from being inserted incorrectly.

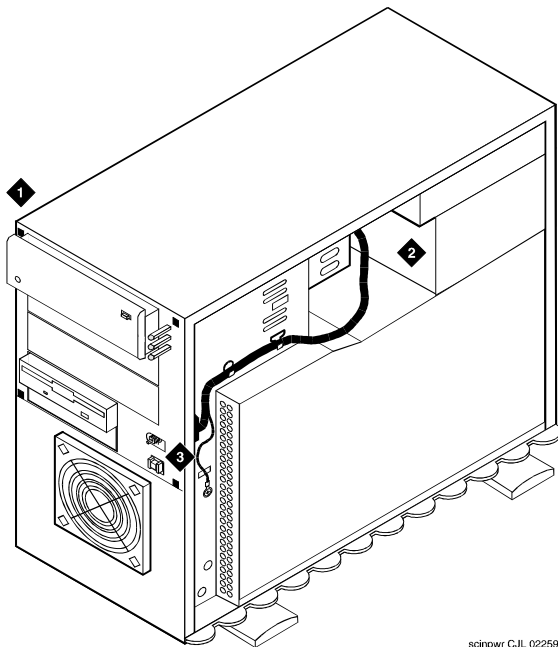
- 6 Attach the connector to the cartridge tape drive ([Figure 68 on page 185](#)).
- 7 Attach the connector to the diskette drive ([Figure 68 on page 185](#)).
- 8 Attach the connector to the Hard Disk Drive 1, if provided ([Figure 68 on page 185](#)).

If Hard Disk Drive 1 is not installed, dress this lead back out of the way to reduce cable congestion.

- 9 Attach the connector to Hard Disk Drive 0 ([Figure 68 on page 185](#)).

- 10 Dress the power switch cable around to the front of the MAP/5P ([Figure 70 on page 190](#)).

**Figure 70. Power Switch Cable**



scinpw C.J.L. 022597

- 11 Slide the power switch into the slot provided ([Figure 69 on page 187](#)).
- 12 Replace the screw you removed in [step 7 of Removing the Power Supply on page 184](#).

## Replacing the Riser Card

### CAUTION:

Observe proper electrostatic discharge precautions when you handle computer components. Wear an antistatic wrist strap that touches your bare skin and connect the strap cable to an earth ground. See [Protecting Against Damage from Electrostatic Discharge on page 2 in Chapter 1, Getting Inside the Computer](#).

The following procedures detail the 6-slot riser card installation and removal. All of the circuit cards are connected to the riser card. The riser card is located in the back of the MAP/5P card cage area ([Figure 67 on page 183](#)). The riser card is connected to the motherboard.

## Removing the Riser Card

To remove the riser card, perform the following procedures:

- [Removing the Intuity CONVERSANT System from Service on page 141](#)

- [Accessing the Riser Card on page 192](#)
- [Extracting the Riser Card on page 192](#)

#### Accessing the Riser Card

To access the riser card, do the following:

- 1 Remove the dress cover. See [Removing the Dress Cover on page 9](#) in [Chapter 1, Getting Inside the Computer](#).
- 2 Remove all of the circuit cards. See [Removing a Circuit Card on page 13](#) in [Chapter 2, Installing or Replacing Circuit Cards](#).

**Note:** Pay close attention to the riser card connector slots from which each circuit card is removed. You must replace the circuit cards in the same slots in the new riser card. See [Component Assignments on page 354](#) in [Appendix A, System Configuration](#), for circuit card placement.

#### Extracting the Riser Card

To extract the riser card, do the following:

- 1 Remove the screw in the lower left corner of the riser card.
- 2 Gently pull the riser card away from the motherboard until the riser card connector is removed from the slot on the motherboard.
- 3 Continue with the procedure in [Installing the Riser Card on page 193](#).

## Installing the Riser Card

To install the riser card, perform the following procedures:

- [Installing the Riser Card on page 193](#)
- [Reassembling the MAP/5P on page 193](#)
- [Restoring the Intuity CONVERSANT System to Service on page 194](#)

### Inserting the Riser Card

To insert the riser card, do the following:

- 1 Remove the new riser card from its ESD protective wrapping.

**Note:** Keep the package and all ESD-protective wrapping. You must re-use the material in which the replacement tape drive was packaged to meet the manufacturer's warranty.

- 2 Align the riser card connector with the slot on the motherboard.
- 3 Gently push the riser card connector into the motherboard.
- 4 Replace the screw in the bottom left corner of the riser card.

### Reassembling the MAP/5P

To reassemble the MAP/5P, do the following:

- 1 Replace the circuit cards removed in [Extracting the Riser Card on page 192](#).

**Note:** Be sure to mount these cards in their correct riser card slot. See [Component Assignments on page 354](#) in [Appendix A, System Configuration](#), for circuit card placement.

- 2 Replace the Dress Cover. See [Replacing the Dress Cover on page 11](#) in [Chapter 1, Getting Inside the Computer](#).

### Restoring the Intuity CONVERSANT System to Service

To restore the Intuity CONVERSANT system, do the following:

- 1 Restore power to the MAP/5P. See [Restoring Power to the MAP/5P on page 11](#) in [Chapter 1, Getting Inside the Computer](#).
- 2 Verify the Intuity CONVERSANT system operation by placing a call to a user.

## Replacing a Terminator SIP

If the circuit card is the last circuit card connected to either end of the TDM bus, you must ensure that the TDM bus terminator single in-line packages (SIPs) are in place on the circuit card. If the circuit card is not the last circuit card on the bus, you must remove the SIPs.

**Note:** “Last circuit card connected” means that there are no other cards between the circuit card and the end of the bus. There may, however, be empty connectors.



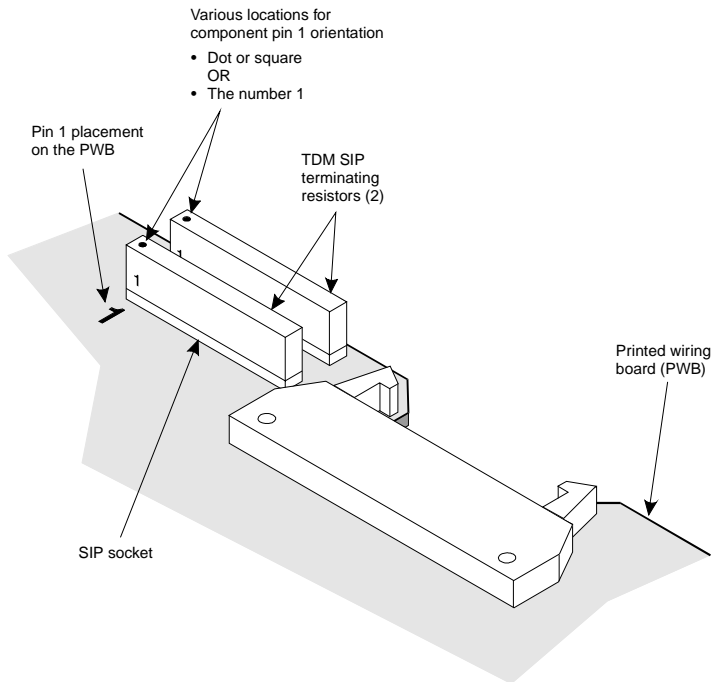
To replace a terminator SIP, complete the following:

- 1 Align the terminator SIP with the SIP socket on the circuit card ([Figure 71 on page 196](#)).

There are markings on both the terminator SIP and the circuit card that should be used to align the terminator SIP.

- 2 Insert the terminator SIP.

Figure 71. Replacing Terminator SIPs on the TDM Bus



# 5 Installing Base System Software

## Overview

This chapter describes the installation procedures necessary to reload the UnixWare operating system software on a computer that has experienced a disk failure.

Use this chapter in conjunction with [Appendix D, Disaster Recovery Checklists](#).

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

## Installing Base System Software

**Note:** Installing the UnixWare operating system unmounts file systems. 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.

### Beginning the UnixWare Installation

To load software onto a new or used disk, do the following:

- 1 Insert the diskette labeled “INTUITY CONVERSANT 7 INTUITY UnixWare 2.1.2 Boot Floppy 1” into the diskette drive.
- 2 If the system is off, turn it on using the power switch on the front of the MAP/5P. See [Restoring Power to the MAP/5P on page 11](#) in [Chapter 1, Getting Inside the Computer](#).

If the system is on, reboot the system. See “Reboot the System,” in “Common System Procedures,” in the *Intuity CONVERSANT System Reference*, 585-313-205.

The system displays the SCO introduction screen as it begins to load the base system software. When the system has loaded the first boot floppy it displays the following message:

```
Insert the second floppy and press ENTER.
```

- 3 Remove the diskette labeled “INTUITY CONVERSANT 7 INTUITY UnixWare 2.1.2 Boot Floppy 1” from the diskette drive.
- 4 Insert the diskette labeled “INTUITY CONVERSANT 7 INTUITY UnixWare 2.1.2 Boot Floppy 2” into the diskette drive.
- 5 Press **ENTER**.

The system displays the following message:

```
Please wait while the system software drivers are loaded.
```

After approximately 2 minutes the system displays the SCO UnixWare 2.1 menu ([Figure 72 on page 200](#)).

Figure 72. Start-Up Screen

```
SCO UnixWare 2.1 Menu

Install/Upgrade UnixWare 2.1
Access UnixWare Shell
Mount File System
Reboot

Use up/down arrow keys and ENTER to select; F1 for help
```

- 6 Press the down (▼) arrow to move to **Install/Upgrade UnixWare 2.1** and press **ENTER**.

The system displays the Remove Floppy screen ([Figure 73 on page 200](#)).

Figure 73. Remove Floppy Screen

```
UnixWare Installation                Remove Floppy

Remove the Floppy from the floppy drive

Press 'ENTER' to continue
```

7 Remove the diskette labeled “INTUITY CONVERSANT 7 INTUITY UnixWare 2.1.2 Boot Floppy 2” from the diskette drive.

8 Press **ENTER**.

The system displays the Introduction screen ([Figure 74 on page 201](#)).

**Figure 74. Introduction Screen**

```
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
continue.
```

 **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](#).

- 9 Continue with the procedure in [Setting Up the UnixWare Environment on page 202](#).

## Setting Up the UnixWare Environment

To set up the UnixWare Environment, complete the following:




- 1 Starting at the Introduction Screen ([Figure 74 on page 201](#)), press **ENTER**.

The system displays the Keyboard Setup screen ([Figure 75 on page 203](#)).



Figure 75. Keyboard Setup Screen




UnixWare Installation	Keyboard Setup
<p>The UnixWare installation procedure supports the following international keyboards. You may select alternate keyboard types by using the left and right arrow keys and then press the ENTER (or RETURN) key.</p>	
Keyboard Nationality: U.S. ASCII	
<input type="button" value="Apply"/>	<input type="button" value="Reset"/>
<p>When Finished, move the cursor to 'Apply' and then press 'Enter' to continue.</p>	

- 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 **ENTER**.

The system displays the Configure Date and Time screen ([Figure 76 on page 204](#)).

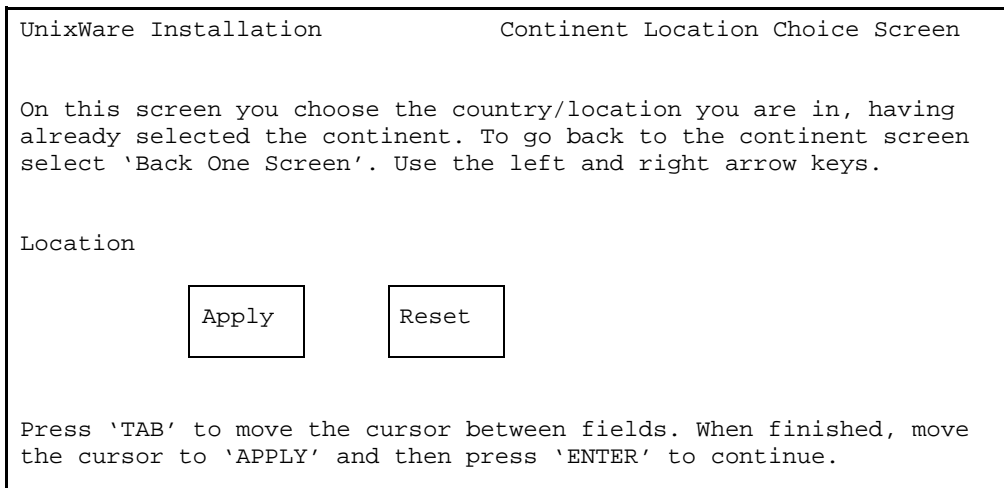
Figure 76. Configure Date and Time Screen

UnixWare Installation	Configure Date and Time
<p>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 select a continent(s) which will lead you onto a further screen with locations or Manual Entry for a custom timezone.</p>	
<p>The current date: The current Time: Enter the current year: Enter the month of the year (1-12): Enter the day of the month(1-31): Enter the hour of the day (0-23): Enter the minute of the hour (0-59): Timezone configuration:</p>	
<input type="button" value="Apply"/>	<input type="button" value="Reset"/>
<p>Press 'TAB' to move the cursor between fields. When finished, move the cursor to 'APPLY' and then press 'ENTER' to continue.</p>	

- 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.

- 6 Select the appropriate data for each field.
- 7 Press the down (▼) arrow to move to the `Apply` field and press **ENTER**.  
The system displays the Continent Location Choice screen ([Figure 77 on page 205](#)).

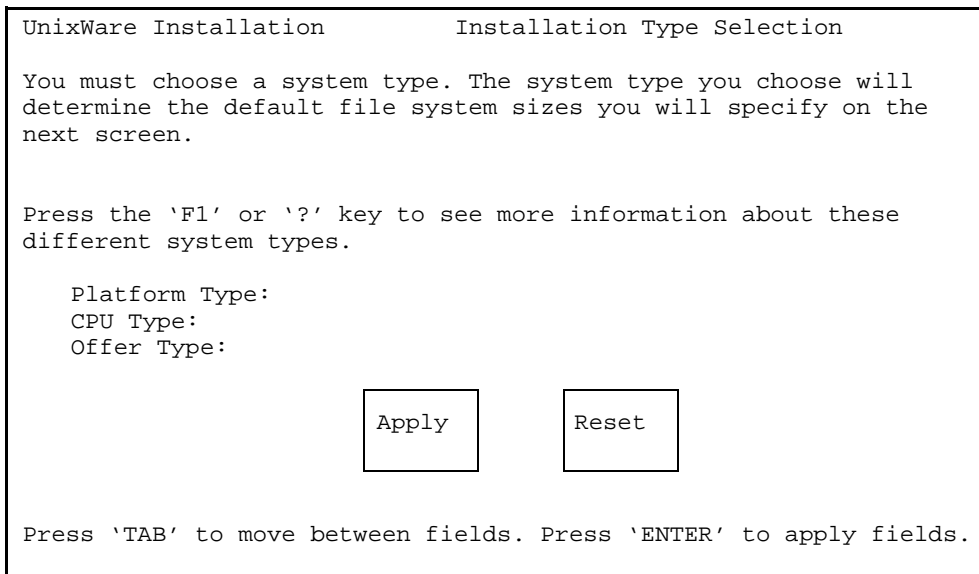
**Figure 77. Continent Location Choice Screen**






- 8 Use the left (◀) and right (▶) arrows on your keyboard to move through the field selections.

- 9 Select the appropriate data for each field.
- 10 Press the down (▼) arrow to move to the `Apply` field and press **ENTER**.  
The system displays the Installation Type Selection screen ([Figure 78 on page 206](#)).


**Figure 78. Installation Type Selection Screen**



- 11 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.
- 12 Select the appropriate data for each field as specified in [Table 1 on page 207](#).

**Table 1. Installation Type Selection Screen Entries**

Field	Setting
Platform type:	MAP/5P
CPU type:	Pentium/SCSI or Pentium/IDE
Offer type:	Intuity CONVERSANT

- 13 Press the down  arrow to move to the `Apply` field and press **ENTER**.

**Note:** If the system displays a message that the system must have at least 60 MByte 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 the Dress Cover on page 10](#) in [Chapter 1, Getting Inside the Computer](#).

The system displays the Primary Hard Disk Partitioning screen ([Figure 79 on page 208](#)).

**Figure 79. Primary Hard Disk Partitioning Screen**

```
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 60 MBs and labeled
'ACTIVE.'

Press 'ENTER' to continue
```

- 14 Continue with the procedure in [Initializing the Hard Disk Drives on page 209](#).

## Initializing the Hard Disk Drives

To partition the hard disk drives, do the following:

- 1 Starting at the Primary Hard Disk Partitioning screen ([Figure 79 on page 208](#)), press **ENTER**.

The system displays the Hard Disk Partitioning, Disk 1 screen ([Figure 80 on page 209](#)).

**Figure 80. Hard Disk Partitioning, Disk 1 Screen**

```
UnixWare Installation                Hard Disk Partitioning - Disk 1
                                     Total disk size is 263 cylinders (2063.0 MB)

Partition    Status    Type    Start    End    Length    %    Approx MB

1. Overwrite system master boot code
2. Create a partition
3. Change Active (Boot from) partition
4. Cancel (Exit without updating disk configuration)




Enter Selection:
```

**2 Enter 2**

The system displays the Create a Partition screen ([Figure 81 on page 210](#)).

**Figure 81. Create a Partition Screen**

UnixWare Installation				Create a Partition			
Total disk size is 263 cylinders (2063.0 MB)							
<u>Partition</u>	<u>Status</u>	<u>Type</u>	<u>Start</u>	<u>End</u>	<u>Length</u>	<u>%</u>	<u>Approx MB</u>
Partition Type							
Percentage of Disk							
<input type="button" value="Apply"/>				<input type="button" value="Reset"/>			

- 3** 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.



- 4 Select the appropriate data for each field as specified in [Table 8 on page 211](#).

**Table 8. Create a Partition Screen Entries**

Field	Setting
Partition type:	UNIX System
Percentage of Disk:	100


- 5 Press the down  arrow to move to the `Apply` field and press **ENTER**.  
The system displays the Hard Disk Partitioning, Disk 1 screen ([Figure 82 on page 212](#)).

Figure 82. Hard Disk Partitioning, Disk 1 Screen

```
Total disk size is 263 cylinders (2063.0MB)

                                Cylinders

Partition   Status   Type   Start   End   Length   %   Approx MB
-----
1           System  UNIX   0       262   263     100  2063.0

1. Overwrite system master boot code
2. Change Active (Boot from) partition
3. Delete a partition
4. Cancel (Exit without updating disk configuration)

Enter Selection:
```

**6 Press ENTER.**

The system displays the Hard Disk Partitioning, Disk 1 screen ([Figure 83 on page 213](#)).

Figure 83. Hard Disk Partitioning, Disk 1 Screen

```
Total disk size is 263 cylinders (2063.0MB)

                                Cylinders

Partition   Status   Type   Start   End   Length   %   Approx MB
-----
1           Active   UNIX   0       262   263     100  2063.0
                System

1. Do not overwrite system master boot code
2. Change Active (Boot from) partition
3. Delete a Partition
4. Cancel (Exit without updating disk configuration)

Enter Selection:
```

**7 Enter 2**

The system displays the Change Active Partition screen [Figure 84 on page 214](#).

Figure 84. Change Active Partition Screen

```
UnixWare Installation                Change Active Partition

      Total disk size is 263 cylinders (2063.0 MB)

Partition   Status   Type   Start End   Length   %   Approx MB
1             Active    UNIX    0       262    263       100   2063.0
              System

1. Partition 1

Enter the number of partition you want to boot from:
```

**8 Press ENTER**

The system displays the Hard Disk Partitioning, Disk 1 screen [Figure 85 on page 215](#).

Figure 85. Hard Disk Partitioning, Disk 1 Screen

```
Total disk size is 263 cylinders (2063.0MB)

Partition      Status      Type      Start  End    Length  %      Approx_MB
-----
1              Active     UNIX      0      262   263     100    2063.0
                System

1. Do not overwrite system master boot code
2. Delete a Partition
3. Exit (update disk configuration and exit)
4. Cancel (Exit without updating disk configuration)

Enter Selection:
```

**9 Enter 3**

If you have a second hard disk drive, the system displays the Secondary Hard Drive Partitioning Screen ([Figure 86 on page 216](#)).

If you do not have a second hard disk drive, skip to [step 11](#) and continue

**Figure 86. Secondary Hard Disk Partitioning Screen**

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 UNIX System.

Press '1' or '2' followed by 'ENTER'.

**10 Enter 1**

The system displays the UnixWare Installation Set Slice Sizes screen ([Figure 87 on page 217](#)).




Figure 87. UnixWare Installation Set Slice Sizes Screen

```
UnixWare Installation                Set up File Systems on Disk(s)
Enter filesystem sizes on first disk.

Size of / in MB:                    xx
Size of /stand in MB:              xx
Size of /dev/dump in MB:           xx
Size of /dev/swap in MB:           xx
Size of /mtce in MB:               xx
Size of /vs in MB:                 xx
Size of /oracle in MB:            xx
Size of /tmp in MB:                xx
Size of /voicel in MB:            xx
Size of /voxem in MB:             xx

                                     Apply      Reset

Consult software installation manual for correct sizes.
Megabytes in active partition: Disk 1 - 2063
```

- 11 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.

12 Enter the appropriate number of megabytes of space needed for each slice as specified in [Table 9 on page 218](#).

**Note:** The sizes listed in [Table 9 on page 218](#) are the recommended minimum sizes. If you are loading a system using a mkimage tape, use the sizes on the tape label. If there are no sizes, use the recommended size. If you are loading a new system, without a mkimage tape, use the recommended sizes.

**Table 9. Space Requirements for the MAP/5P**

Slice	Space Requirements (MBytes)
/	615
/stand	15
/dev/dump	129
/dev/swap	129 (64 -MByte system) 193 (96-MByte system) 257 (128-MByte system)  The boot floppies automatically configure the size using: $(2 \times \text{memory size}) + 1 = \text{size}$
/mtce	20

1 of 2



Table 9. Space Requirements for the MAP/5P

Slice	Space Requirements (MBytes)
/vs	100
/oracle	450 <b>Note:</b> Add 75 MBytes if your are loading ORACLE development packages.
/tmp	20
/voice1	100
/voxem	100

2 of 2

- 13 Press the down (▼) arrow to move to the `Apply` field and press **ENTER**.

The system displays the Hard Disk Surface Analysis screen ([Figure 88 on page 220](#)).

Figure 88. Hard Disk Surface Analysis Screen

```
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.

You choices are:

1. Perform surface analysis
2. Skip surface analysis

Press '1' or '2' followed by 'ENTER':1
```

 **CAUTION:**

Ignore the message at the top of this screen. Surface analysis is required for all systems because it makes a configuration change to the disk. Failure to perform surface analysis may cause the Intuity CONVERSANT system to fail.

- 14 Continue with the procedure in [Transferring the UnixWare Files on page 221](#).

## Transferring the UnixWare Files

To transfer the UnixWare files, do the following:

- 1 Starting at the Hard Disk Surface Analysis screen ([Figure 88 on page 220](#)), 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.
```

After about 5 minutes the system displays the Media Type screen ([Figure 89 on page 222](#)).

Figure 89. Media Type Screen

```
UnixWare Installation                               Media Type

The Intuity Software is available on tape
as an image depending on the application. You
must select the proper choice depending on the
application. For new CONVERSANT installation choose option 1.
For new Audix installation choose option 2. For restoring
CONVERSANT Make-image choose option 3.

Your choices are:

1. UnixWare for Intuity CONVERSANT Tape
2. UnixWare for Intuity Audix
3. Intuity Conversant Make-Image Tape

Press a number between '1' and '3' followed by 'ENTER':
```

- 2 Continue with the procedure in [Installing the Application Server on page 223](#).

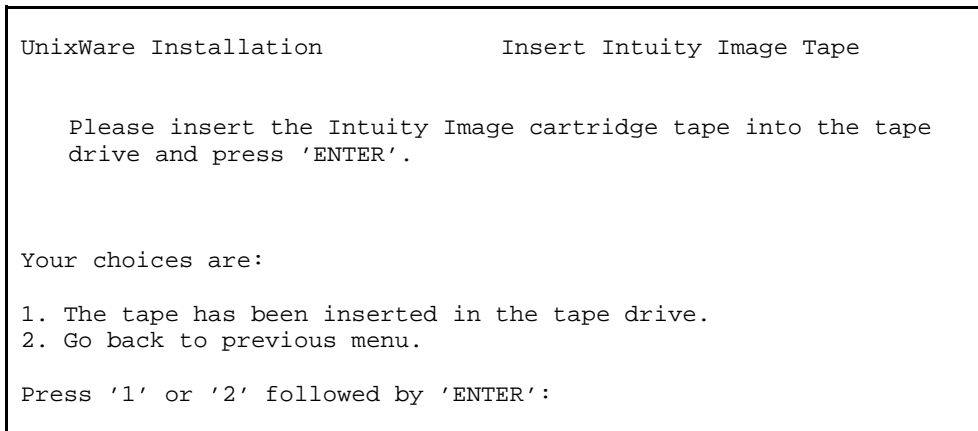
## Installing the Application Server

To Install the application server, do the following:

- 1 Starting at the Media Type screen ([Figure 89 on page 222](#)), enter 1

The system displays the Insert Tape screen ([Figure 90 on page 223](#)).

**Figure 90. Insert Lucent Intuity Tape Screen**



- 2 Insert the cartridge tape labeled “INTUITY CONVERSANT 7.0 INTUITY UnixWare 2.1.2 Image Tape for CONVERSANT with Veritas” into the tape drive.

### 3 Press **ENTER**.

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

The system displays the following message:

```
Retentioning the tape. This will take about 3 minutes. Please  
do not remove the tape.
```

After a few minutes the system displays the following message:

```
Copying Intuity Image Tape to hard disk.  
Do not remove tape until prompted to do so.
```

After about 30 minutes, the system displays the following message:

```
Please remove the Tape from the tape drive.  
Press ENTER to continue.
```

### 4 Remove the cartridge tape labeled “INTUITY CONVERSANT 7.0 INTUITY UnixWare 2.1.2 Image Tape for CONVERSANT with Veritas” from the tape drive.

### 5 Press **ENTER**.

The system displays the following message:

```
The UNIX System is now being rebuilt to reflect your  
selections. This will not require any user input  
  
Please wait
```

The system automatically reboots.

- 6 Continue with the procedure in [Activating the Volume Manager on page 225](#).

## Activating the Volume Manager

To activate the Volume Manager, complete the following steps.

- 1 Log in as **root**.

The system displays the following message:

```
Password:
```

- 2 Press **ENTER**.

- 3 At the system prompt, enter **installit**

The system displays the following message:

```
Installit execution started:
```

```
The system will attempt to perform a new installation.
```

```
Press enter, to continue the Volume Manager installation...
```

- 4 Press **ENTER**.

- 5 The system automatically reboots three times; each reboot takes approximately 5 minutes to complete.

When the initialization of the Volume Manager is complete, the system displays: `Console Login:`

## Installing the LAN Card Driver Package

See [PCI Ethernet LAN Circuit Cards on page 25](#) or [Token Ring Circuit Card on page 66](#) in [Chapter 2, Installing or Replacing Circuit Cards](#) for the procedure.

## Setting up the Monitor

To set up the monitor, do the following:

- 1 Login as **root**

The system displays the system prompt #.

In order to use the graphical user interfaces (GUI) with the video controller card installed in your system, perform the following video setup operations:

- 2 Enter **`/usr/X/lib/display/setvideomode`**

The system displays a menu listing the different video chipset options.

- 3 Enter **3**



This is the number corresponding to the video controller circuit card installed on your system.

The system displays a menu listing monitor mode numbers for video resolution.

### 4 Enter **13**

**Note:** The mode number corresponds to the video controller circuit card installed on your system. The resolution must be 640 x 480 and the color must be 256.

The system displays the following message:

```
Video RAM: 2048K
```

```
Do you want to change this value? (y/n) [n]:
```

### 5 Press **ENTER**.

The system displays the following message:

```
Default Monitor Size, 17 inches(y/n) [y]:
```

### 6 Enter **n**

The system displays the Monitor Size screen ([Figure 91 on page 228](#)).

Figure 91. Monitor Size Screen

```
Monitor Size
=====
12 inches
13 inches
14 inches
15 inches
16 inches
17 inches
19 inches
20 inches
21 inches
other

Enter Monitor Size =>
```

**7 Enter 14**

The system displays a screen similar to the Monitor Test screen ([Figure 92 on page 229](#)).

Figure 92. Monitor Test Screen

```
You have selected the following:  
VENDOR.....: Generic S3 Virge-VS  
CHIPSET.....: VIRGE-VX  
VIDEO RAM....: 2048K  
MONITOR.....: MULTISYNC 60 Hz  
RESOLUTION...: 640x480  
COLORS.....: 256
```

```
Do you want to test this mode?(y/n) [y]:
```

8 Press **ENTER**.

The system displays the Test Pattern screen ([Figure 93 on page 230](#)).

Figure 93. Test Pattern Screen

```
A TEST PATTERN WILL BE DRAWN ON YOUR SCREEN.  
AFTER A FEW SECONDS, YOU WILL RETURN TO THIS  
SCREEN. IF THE PATTERN DOESN'T LOOK RIGHT, YOU  
CANNOT USE THIS MODE. YOU SHOULD TRY ANOTHER MODE.  
IF THE PATTERN IS NOT EVEN STABLE,  
PRESS 'DEL' IMMEDIATELY TO AVOID DAMAGE TO YOUR  
HARDWARE.
```

```
Do you want to continue? (y/n) [y]:
```

**9** Press **ENTER**.

After the test pattern is drawn, the system displays the following message:

```
Do you want to try the test again? (y/n) [n]:
```

**10** Press **ENTER** to stop the test.

The system displays the following message:

```
Accept(y), Quit(q), Try another mode(anykey):
```

**11** Enter **y** to accept the setup.

The system displays the Current Selection screen ([Figure 94 on page 231](#)).

Figure 94. Current Selection Screen

```
Current Selection:
ENTRY.....: Generic S3 Virge-VX
RESOLUTION...: 640x480
VISUAL.....: PseudoColor
MONITOR.....: MULTISYNC 60Hz
```

## Initializing the Mouse

If you want to initialize the mouse, do the following:

- 1 Enter **mouseadmin** at the system prompt and press **ENTER**.

The system displays the Mouse Main Menu ([Figure 95 on page 232](#)).

Figure 95. Mouse Main Menu

```
There are no mice assigned.  
  
Select one of the following:  
  B) Bus mouse add  
  P) PS2 mouse add  
  S) Serial mouse add  
  T) Test your mouse configuration  
  U) Update mouse configuration and quit  
  E) Exit (no update)
```

```
Enter Selection:
```

**2** If you are not installing a mouse, enter **e**

If you are installing a mouse, enter **s**

The system displays the following message:

```
There are no mice assigned.
```

```
Enter the display terminal that will be using  
the mouse, or strike the ENTER key to return to  
the main menu.
```

```
Display terminal (i.e., console, s0vt00, etc):
```

**3** Enter **console** and press **ENTER**.

The system displays the following message:

```
Enter the device that the mouse will be attached to  
or strike the ENTER key to return to the main menu.
```

```
Mouse device: (i.e., tty00, tty01):
```

- 4 Enter the appropriate data for the serial port your mouse is connected to as listed in [Serial Mouse Installation Entries on page 233, Table 10 on page 233](#).

**Note:** Be sure to use an available port and not the one assigned to the RMB.

**Table 10. Serial Mouse Installation Entries**

Serial Port Connection	Screen Entry
COM1 port	TTY00
COM2 port	TTY01

- 5 Press **ENTER**.

The system displays the following message:

```
Is your mouse configured to Mouse Systems  
(MSC compatible) mode? [y or n]:
```

- 6 Enter **y** and press **ENTER**.

The system displays the Mouse Main Menu ([Figure 96 on page 234](#)).

**Figure 96. Mouse Main Menu**

```
The following terminals have mice assigned:

Display Terminal                Mouse Device
-----
Console                        Serial Mouse on TTY01

Select one of the following:
  B) Bus mouse add
  P) PS2 mouse add
  S) Serial mouse add
  T) Test your mouse configuration
  U) Update mouse configuration and quit
  E) Exit (no update)

Enter Selection:
```

**7** Enter **u** and press **ENTER**.

The system displays the Mouse Main menu [Figure 96 on page 234](#).

TTY01 shown in [Figure 96 on page 234](#) reflects the port selected in [step 4](#).

Continue with the procedure in [Testing the Mouse on page 235](#).



## Testing the Mouse

To test the mouse, do the following:

- 1 Enter **mouseadmin** at the system prompt and press **ENTER**.

The system displays the Mouse Main Menu ([Figure 96 on page 234](#))

- 2 Enter **t** and press **ENTER**.

The system displays the following message:

```
Please try using your mouse when the next
screen appears.
```

```
Strike the ENTER key when ready:
```

- 3 Press **ENTER**.

The system displays the following message:

```
Press a mouse button to stop test.
Test will be cancelled automatically in 15 seconds.
```

The system displays the Mouse Main Menu ([Figure 96 on page 234](#)).

- 4 Enter **e** and press **ENTER**.

You have now installed all the required software for your UnixWare operating system.

# 6 Installing the Intuity CONVERSANT System Software

## Overview

This chapter provides the installation procedures for the Intuity CONVERSANT system software.

This information is necessary to reload the Intuity CONVERSANT system in the event of a disk failure.

**Note:** Use this chapter in conjunction with [Appendix D, Disaster Recovery Checklists](#).

Topics covered include:

- [Installing the Base Software Set on page 237](#)
- [Installing the TCP/IP Packages on page 248](#)

## Installing the Base Software Set

The Intuity CONVERSANT base software set includes:

- Intuity CONVERSANT Utilities Package
- Intuity CONVERSANT Runtime Processing Package
- Intuity CONVERSANT Maintenance Package
- Intuity CONVERSANT Logger/Alerter Package
- Intuity AUDIX Logger Package
- Intuity CONVERSANT Base ORACLE RDBMS 7.3.2
- Intuity CONVERSANT ORACLE 7 Integration Package
- Intuity CONVERSANT Administration Screens Package
- Intuity CONVERSANT Transaction State Machine Package
- Intuity CONVERSANT Switch Utilities Package
- Intuity CONVERSANT License Modification Package
- Intuity CONVERSANT Platform CONVERSANT Tuning

All of the packages included in the Intuity CONVERSANT base software set are required for the operation of the Intuity CONVERSANT system. All of the packages are contained on one cartridge tape.

To install the Intuity CONVERSANT base software set, do the following:

 **CAUTION:**

If you are using this procedure in conjunction with an upgrade, skip to [step 4](#) and continue.

- 1 Log in as **root**.
- 2 Insert the cartridge tape labeled “Intuity CONVERSANT VIS 7.0 Set” 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. CVISset    INTUITY CONVERSANT VIS V7 Set  
              (i486)

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:

PROCESSING:

Set: INTUITY CONVERSANT VIS V7 Set (CVISset) from  
<ctapel>

INTUITY CONVERSANT VIS V7 Set  
(i486)

Using </> as the package base directory.

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

### 6 Answer the questions in [Table 11 on page 239](#) with a check mark for “yes” or “no.”

**Table 11. Questions to Determine if the Default Installation is Appropriate**

Number	Question	Yes	No
1	Do you want to turn off daylight savings time?		
2	Does your system have a remote maintenance circuit card?  <b>Note:</b> If you answer yes to this question, you must answer yes to Question 3.		
<i>1 of 2</i>			

Table 11. Questions to Determine if the Default Installation is Appropriate

Number	Question	Yes	No
3	Do you want to disable COM1?		
4	Do you want to disable COM2?		
5	Do you want to disable the parallel port?		
6	Is Interrupt Level 4 being used by anything other than COM1?		
7	Is Interrupt Level 3 being used by anything other than COM2?		
8	Is Interrupt Level 7 being used by anything other than the parallel port?		
9	Is your ORACLE database larger than 65 Mbyte		
<i>2 of 2</i>			

7 If you answered **no** to all of the questions in [Table 11 on page 239](#), you can use the default installation; enter **y** and continue with [step 8](#).

If you answered **yes** to any of the questions in [Table 11 on page 239](#), you cannot use the default installation. Instead, complete the following [step a](#) through [step p](#):

**a** Enter **n**

The system displays the following message:

```
Do you want the default installation for mtce? [y,n,?]
```

- b** If you answered **no** to Question 1 in [Table 11 on page 239](#), enter **y** and continue with [step d](#).

If you answered **yes** to Question 1 in [Table 11 on page 239](#), enter **n**

The system displays the following message:

```
Is Daylight Savings Time ever used? [y,n,?]
```

- c** Enter **n**

The system displays the following message:

```
Do you want the default installation for vs? [y,n,?]
```

- d** If you answered **no** to all seven Questions 2, 3, 4, 5, 6, 7, and 8 in [Table 11 on page 239](#), enter **y** and skip to [step g](#).

If you answered **yes** to Question 2, 3, 4, 5, 6, 7, or 8 in [Table 11 on page 239](#), enter **n**

The system displays the following message:

```
The first serial port uses interrupt level 4  
The second serial port uses interrupt level 3  
The parallel port uses interrupt level 7
```

If you wish to reclaim some of these interrupts for other devices, you may disable one of these serial ports. However, one serial port must be enabled.

For serial ports would you like to:

1. Enable both
2. Enable first, disable second
3. Disable first, enable second

Please enter your selection:

- e If you answered **no** for Questions 2, 3, 4, 6, and 7 in [Table 11 on page 239](#), enter **1**

If you answered **no** for Questions 2, 3, and 6 and **yes** for Question 4 or 7 in [Table 11 on page 239](#), enter **2**

If you answered **yes** for Question 2, 3, or 6 and **no** for Questions 4 and 7 in [Table 11 on page 239](#), enter **3**

**Note:** If you would like to disable both serial ports, enter **3**, complete the installation procedure, edit the `/etc/conf/sdevice.d/asyc` file, and reboot the system.

The system displays the following message:

For the parallel port (interrupt 7) would you like to:

1. Enable the parallel port
2. Disable the parallel port



- f** If you answered **no** for Questions 5 and 8 in [Table 11 on page 239](#), enter **1**

If you answered **yes** for Question 5 or 8 in [Table 11 on page 239](#), enter **2**

The system displays the following message:

```
Do you want the default installation for maint?
```

- g** Enter **n**

**Note:** There is no difference between the default installation and a custom installation of the maint system.

The system displays the following message:

```
Do you want the default installation for machlog? [y,n,?]
```

- h** If you answered **no** to Questions 2, 3, and 4 in [Table 11 on page 239](#), enter **y** and skip to [step j](#).

If you answered **yes** to Question 2, 3, or 4 in [Table 11 on page 239](#), enter **n**

The system displays the following message:

```
The first serial port uses interrupt level 4  
The second serial port uses interrupt level 3
```

If you wish to reclaim some of these interrupts for other devices, you may have to free some of these ports.

However, one serial port must be configured as the alarm port.

For serial ports would you like to:

1. Enable first serial port (COM1) as alarm port
2. Enable second serial port (COM2) as alarm port

Please enter your selection:

- i If you answered **no** for Questions 2 and 3 and **yes** for Question 4 in [Table 11 on page 239](#), enter **1**

**Note:** If your system has a remote maintenance circuit card, make sure COM1 is disabled in the CMOS settings. See [Replacing the Motherboard on page 166](#) in [Chapter 4, Replacing Other Components](#), for the procedure to edit the CMOS settings.

If you answered yes to Questions 2 and 3 and no for Question 4 in [Table 11 on page 239](#), enter **1**

If you answered **yes** to Question 3 and **no** for Questions 2 and 4 in [Table 11 on page 239](#), enter **2**

The system displays the following message:

Serial port X has been configured as the alarm port.

- j If you answered **no** for Questions 9 in [Table 11 on page 239](#), enter **y** and skip to [step 8](#).

If you answered **yes** for Question 9 in [Table 11 on page 239](#), enter **n**

The system displays the following message:

```
The default name for the database file is dbsA.dbf
```

Enter a new name or strike ENTER to accept the default.

**k** Press **ENTER**.

The system displays the following message:

```
The default name for the first redo log file is log1A.dbf
```

Enter a new name or strike ENTER to accept the default.

**l** Press **ENTER**.

The system displays the following message:

```
The default name for the second redo log file is log2A.dbf
```

Enter a new name or strike ENTER to accept the default.

**m** Press **ENTER**.

The system displays the following message:

```
How many blocks do you want in your database? [default:  
132,000].
```

**n** Enter the number of blocks you want in your database.

** CAUTION:**

This number must be greater than 24,000.

The system displays the following message:

```
The default size for each of the redo log files is 800 [512
bytes] blocks.
```

```
How many blocks do you want in each of the redo log files?
[default: 800].
```

- o Enter the number of blocks you want in your redo log files.

The system displays the following message:

```
Do you want to install TSM? [y,n,?]
```

- p Enter **y**

The system displays the following message:

```
Lucent Technologies Inc.
## Processing package information.
## Processing system information.
## Verifying disk space requirements.

Installing INTUITY CONVERSANT VIS V7.0 Set as <CVISset>

## Executing preinstall script.
Executing the preinstall personality script for CVISstune.
Enter password for oracle:
New password:
```

 **CAUTION:**

If you are using this procedure in conjunction with an upgrade, STOP HERE and return to Intuity CONVERSANT System Version 7.0 Upgrade Procedures. Do NOT continue with the next step here.

**8** Type the new password.

**9** Press **ENTER**.

The system displays the following message:

```
Re-enter new password:
```

**10** Re-type the new password.

**11** Press **ENTER**.

The system displays a series of messages. After approximately one hour the system displays the following message:

```
Processing of <INTUITY CONVERSANT VIS V7.0 Set> is  
completed.
```

```
***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 Remove the cartridge tape labeled “Intuity CONVERSANT VIS 7.0 Set” from the cartridge tape drive.
- 13 Enter **shutdown -i6 -g0 -y**

## Installing the TCP/IP Packages

All of the UnixWare TCP/IP packages are installed during the installation of the operating system from the cartridge tape labeled “Intuity CONVERSANT VIS 7.0 Set”.

- Distributed File System Utilities
- Remote Procedure Calls Utilities
- Internet Utilities

Use the **pkginfo** command to view the list of packages on your system. If these packages are not installed on your system, install them now.

To install the TCP/IP packages, do the following:

- 1 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)
```

2 Insert the cartridge tape labeled “Intuity CONVERSANT VIS 7.0 Set” into the tape drive.

3 Press **ENTER**.

The system displays a list of packages from which you must specify yes or no.

4 Enter **yes** for the following packages:

- ~ Distributed File System Utilities
- ~ Remote Procedure Calls Utilities
- ~ Internet Utilities

Enter **no** for all other packages.

5 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)
```

6 Enter **q**

# 7 Installing the Optional Feature System Software

## Overview

**Note:** All of the procedures in this chapter require **root** permission.

This chapter describes the procedures to install all the software that was not included on the application software cartridge tape. This software is termed optional since it is not required for the basic system to function. You will not necessarily install all of these packages nor will you install them in the order documented. Packages that are order-specific are identified as such.

This purpose of this chapter is to provide the information necessary to reload the optional feature software after a disk failure. This chapter also describes the general procedure for removing software packages (see [Removing Software Packages on page 346](#)).

**Note:** Be sure you have run the Intuity CONVERSANT Hardware Resource Allocator and indicate all hardware that is or will be on your system. The data generated by the program is crucial for you to respond correctly to the prompts in this chapter. See [Hardware Resource Allocator Operation on page 359](#) in [Appendix A, System Configuration](#).



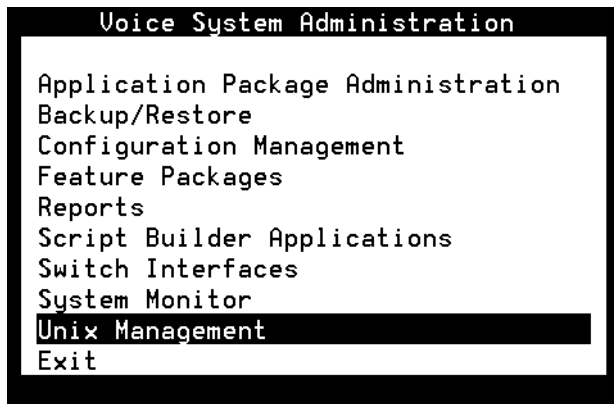
# Installing Software Packages Using the Unix Management Screens

If your system has been equipped the Unix Management Screens Package, software can be loaded using the Intuity CONVERSANT system screens.

To load software a software package using the Intuity CONVERSANT system screens, do the following:

- 1 Start at the Voice System Administration menu ([Figure 97 on page 251](#)).

**Figure 97. Voice System Administration Menu**



**2** Select:

```
> UNIX Management
> Software Install
```

The system displays the Software Install menu ([Figure 98 on page 252](#)).

**Figure 98. Software Install Menu**

```
Software Install
> Floppy drive
Tape drive
```

- 3** Select the appropriate media.
- 4** Continue with the procedures listed for each package. Procedures include:
  - ~ [Installing the Hardware Resource Allocator Package on page 253](#)
  - ~ [Installing the Backup/Restore Utility on page 265](#)
  - ~ [Installing the Data Collection Toolkit on page 269](#)
  - ~ [Installing the Enhanced Basic Speech Package on page 272](#)

- ~ [Installing the Feature Test Script Package on page 274](#)
- ~ [Installing the LAN Adapter Setup Program on page 279](#)
- ~ [Installing the Form Filler Application on page 281](#)
- ~ [Installing the CLEO Packages on page 284](#)
- ~ [Installing the Host Packages on page 308](#)
- ~ [Installing the ORACLE Development Packages on page 315](#)
- ~ [Installing the ORACLE SQL\\*Net TCP/IP Package on page 329](#)
- ~ [Installing the Script Builder Package on page 331](#)
- ~ [Installing the Script Builder FAX Actions Package on page 334](#)
- ~ [Installing the Unix Management Screens Package on page 342](#)
- ~ [Installing the SNMP Emanate Agent Package on page 344](#)

## Installing the Hardware Resource Allocator Package

**Note:** You must install and run the Intuity CONVERSANT Hardware Resource Allocator before installing any of the Intuity CONVERSANT System Version 7.0 base or optional packages.

To install this feature package, do the following:

- 1 If you are not already logged in as **root**, do so now.
- 2 Enter **pkgadd -d diskette1**

The system displays the following message:

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

- 3 Insert the diskette labeled “Hardware Resource Allocator 1 of 1” into the diskette drive.
- 4 Press **ENTER**.

The system displays the following message:

```
Installation in progress -- do not remove the diskette.
```

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

```
  1. config  INTUITY Hardware Resource Allocator  
          (i486)
```

```
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: INTUITY Hardware Resource Allocator (config) from  
<diskette1>
```

```
INTUITY Hardware Resource Allocator
(i486)
Using </> as the package base directory.
```

The system displays several status messages and then the following message:

```
Installation of INTUITY Hardware Resource Allocator
(config) was successful.
```

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

6 Remove the diskette labeled “Hardware Resource Allocator 1 of 1” from the diskette drive.

7 Enter **q**

Run the Intuity CONVERSANT Hardware Resource Allocator to obtain a current configuration listing for your system. See [Hardware Resource Allocator Operation on page 359](#) in [Appendix A, System Configuration](#).

 **CAUTION:**

You must run the Intuity CONVERSANT Hardware Resource Allocator and obtain the output from it. The information is needed to install software packages to correctly set addresses for interrupts, I/O, etc.

## Installing the Asynchronous Host Toolkit

To install this optional feature package, do the following:

1 If you are not already logged in as **root**, do so now.

2 Enter **pkgadd -d diskette1**

The system displays the following message:

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

3 Insert the diskette labeled “CGS Asynchronous Host Toolkit 1 of 1” into the diskette drive.

4 Press **ENTER**.

The system displays the following message:

```
Installation in progress -- do not remove the diskette.  
The following packages are available:  
  1. asynchost  INTUITY CSG Asynchronous Host Toolkit  
                (i486)
```

```
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: INTUITY CSG Asynchronous Host Toolkit (asynchost)
from <diskette1>

INTUITY CSG Asynchronous Host Toolkit
(i486)
Using </> as the package base directory.
Lucent Technologies Inc.
Enter number of host lines to be configured, 1 or 2:
```

**6** Enter the number of lines to be configured.

This is the number of lines your system will be using to communicate with the host.

~ If you entered **1**, the system displays the following message:

```
Enter asynchronous request function number, 1 or 2:
```

**Note:** Entering **1** turns on the DIP for hostreq1 host line only.  
Entering **2** turns on the DIP for hostreq2 host line only

~ If you entered **2**, the system displays the following message:

```
Enter asynchronous request function number, S or D:
```

**Note:** Entering **S** turns on both host DIPs and they will work independently of each other.  
Entering **D** turns on both host DIPs and they will work in conjunction with each other.

## 7 Enter the request number function.

The system displays the following message:

```
Enter tty port for the single line (e.g., ttys02):
```

**Note:** The tty port number is assigned to the port on the asynchronous circuit card to which you are connecting. See Chapter 3, “Making Cable Connections,” in *Intuity CONVERSANT System Version 7.0 New System Installation*, 538-313-106.

You can also determine the available tty addresses by viewing the **/dev** file.

## 8 Enter the tty port number you will be using.

The system displays the following message:

```
Installation of INTUITY CGS Asynchronous Host Toolkit  
(asynchost) was successful.
```

```
Insert diskette into Floppy Drive 1.
```

```
Type [go] when ready,
```

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

## 9 Remove the diskette labeled “CGS Asynchronous Host Toolkit 1 of 1” from the diskette drive.



## Installing the ASYNC\_TEST Transaction Script Builder Backup

To install this optional feature package, do the following:

- 1 If you are not already logged in as **root**, do so now.
- 2 Enter **pkgadd -d diskette1**

The system displays the following message:

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

- 3 Insert the diskette labeled “ASYNC\_TEST Transaction SB Backup 1 of 1” into the diskette drive.
- 4 Press **ENTER**.

The system displays the following message:

```
Installation in progress -- do not remove the diskette.
```

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

- ```
  1. asyncstest  INTUITY ASYNC_TEST SB Backup  
                (i486)
```

```
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: INTUITY ASYNC_TEST SB Backup (asynctest) from
<diskettel>

INTUITY ASYNC_TEST SB Backup
(i486)
Using </> as the package base directory.
Lucent Technologies Inc.
```

The system displays several status messages and then the following message:

```
Installation of INTUITY ASYNC_TEST SB Backup
(asynctest) was successful.

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

- 6 Remove the diskette labeled “ASYNC\_TEST Transaction SB Backup 1 of 1” from the diskette drive.

## Installing the ASYNC\_TEST Speech Script Builder Backup

To install this optional feature package, do the following:

- 1 If you are not already logged in as **root**, do so now.
- 2 Enter **pkgadd -d diskette1**

The system displays the following message:

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

- 3 Insert the diskette labeled “ASYNC\_TEST Speech SB Backup 1 of 1” into the diskette drive.
- 4 Press **ENTER**.

The system displays the following message:

```
Installation in progress -- do not remove the diskette.
```

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

```
1. asyncstest  INTUITY ASYNC_TEST SB Backup  
                (i486)
```

```
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: INTUITY ASYNC_TEST SB Backup (asynctest) from
<diskette1>

INTUITY ASYNC_TEST SB Backup
(i486)
Using </> as the package base directory.
Lucent Technologies Inc.
```

The system displays several status messages and then the following message:

```
Installation of INTUITY ASYNC_TEST SB Backup
(asynctest) was successful.

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

**6** Enter **q**

**7** Remove the diskette labeled “ASYNC\_TEST Speech SB Backup 1 of 1” from the diskette drive.

## Installing the Analog Switch Interface Package

To install this optional feature package, do the following:

1 If you are not already logged in as **root**, do so now.

2 Enter **pkgadd -d diskette1**

The system displays the following message:

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

3 Insert the diskette labeled “Analog Switch Interface - (**country**) 1 of 1” into the diskette drive.

4 Press **ENTER**.

The system displays the following message:

```
Installation in progress -- do not remove the diskette.
```

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

```
  1. usswtch INTUITY Analog Switch Interface Package  
     - US  
     (i486)
```

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

**Note:** The analog switch interface package used in this example is for the United States (US). The name will change depending on the country chosen.

#### 5 Press **ENTER**.

The system displays the following message:

```
PROCESSING:
Set: INTUITY Analog Switch Interface Package - US
(usswtch) from <diskette1>

INTUITY Analog Switch Interface Package - US
(i486)
Using </> as the package base directory.
Lucent Technologies Inc.
```

The system displays several status messages and then the following message:

```
Installation of INTUITY Analog Switch Interface Package
- US (usswtch) was successful.

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

#### 6 Enter **q**

7 Remove the diskette labeled “Analog Switch Interface - (**country**) 1 of 1” from the diskette drive.

## Installing the Backup/Restore Utility

To install the Backup/Restore Utility, do the following:

- 1 At the UNIX prompt, enter **pkgadd -d diskette1**

The system displays the following message:

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

- 2 Insert the diskette labeled “Backup/Restore Utility 1 of 1” into the diskette drive.
- 3 Press **ENTER**.

The system displays the following message:

```
Installation in progress -- do not remove the diskette.  
  
The following packages are available:  
  1. backrest      INTUITY Backup/Restore Utility  
                      (i486)
```

```
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:
Set: INTUITY Backup/Restore Utility (backrest) from
<diskette1>

INTUITY Backup/Restore Utility
(i486)
Using </> as the package base directory.
Lucent Technologies Inc.
```

The system displays several status messages and then the following message:

```
Installation of INTUITY Backup/Restore Utility
(backrest) was successful.

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

### 5 Enter **q**

The system displays the UNIX prompt.

### 6 Make sure that the light on the diskette drive is off and remove the diskette.

For more information on this feature package, see “Back Up the System,” in “Common System Procedures,” in the *Intuity CONVERSANT System Reference*, 585-313-205.



## Installing the Call Bridge Application Package

To install this optional feature package, do the following:

1 If you are not already logged in as **root**, do so now.

2 Enter **pkgadd -d diskette1**

The system displays the following message:

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

3 Insert the diskette labeled “Call Bridge Application Package 1 of 1” into the diskette drive.

4 Press **ENTER**.

The system displays the following message:

```
Installation in progress -- do not remove the diskette.
```

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

```
  1. xferdip      INTUITY Call Bridge Application Package  
      (i486)
```

```
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: INTUITY Call Bridge Application Package (xferdip)  
from <diskette1>
```

```
INTUITY Call Bridge Application Package  
(i486)  
Using </> as the package base directory.  
Lucent Technologies Inc.
```

After the installation, do you wish to activate bridging capability? (y/n)

#### **6** Enter **y**

The system displays several status messages and then the following message:

```
Installation of INTUITY Call Bridge Application Package  
(xferdip) was successful.
```

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

#### **7** Enter **q**

- 8** Remove the diskette labeled “Call Bridge Application Package 1 of 1” from the diskette drive.

## Installing the Data Collection Toolkit

To install this optional feature package, do the following:

**1** If you are not already logged in as **root**, do so now.

**2** Enter **pkgadd -d diskette1**

The system displays the following message:

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

**3** Insert the diskette labeled “Data Collection Toolkit 1 of 3” into the diskette drive.

**4** Press **ENTER**.

The system displays the following message:

```
Installation in progress -- do not remove the diskette.
```

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

```
  1. dctoolkit  INTUITY Data Collection Toolkit  
           (i486)
```

```
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: INTUITY Data Collection Toolkit (dctoolkit) from
<diskette1>
```

```
INTUITY Data Collection Toolkit
(i486)
Using </> as the package base directory.
Lucent Technologies Inc.
```

```
READY TO PROCESS:
  Package: INTUITY Data Collection Toolkit
           (dctoolkit) diskette 2 of 3
```

```
Insert diskette 2 of 3 into Floppy Drive 1.
Type [go] when ready,
  or [q] to quit: (default: go)
```

- 6 Remove the diskette labeled “Data Collection Toolkit 1 of 3” from the diskette drive.
- 7 Insert the diskette labeled “Data Collection Toolkit 2 of 3” into the diskette drive.
- 8 Press **ENTER**.

The system displays the following message:

```
READY TO PROCESS:
```

```
Package: INTUITY Data Collection Toolkit  
(dctoolkit) diskette 3 of 3
```

```
Insert diskette 3 of 3 into Floppy Drive 1.
```

```
Type [go] when ready,
```

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

- 9 Remove the diskette labeled “Data Collection Toolkit 2 of 3” from the diskette drive.
- 10 Insert the diskette labeled “Data Collection Toolkit 3 of 3” into the diskette drive.
- 11 Press **ENTER**.

The system displays several status messages and then the following message:

```
Installation of INTUITY Data Collection Toolkit (dctoolkit)  
was successful.
```

```
Insert diskette into Floppy Drive 1.
```

```
Type [go] when ready,
```

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

- 12 Enter **q**

- 13 Remove the diskette labeled “Data Collection Toolkit 3 of 3” from the diskette drive.

## Installing the Enhanced Basic Speech Package

To install this optional feature package, do the following:

- 1 If you are not already logged in as **root**, do so now.

- 2 Enter **pkgadd -d diskette1**

The system displays the following message:

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

- 3 Insert the diskette labeled “Enhanced Basic Speech Package - (**language**) 1 of 1” into the diskette drive.

**Note:** The enhanced basic speech package used in this example is for United States English (US English). The name will change depending on the language chosen.

- 4 Press **ENTER**.

The system displays the following message:

```
Installation in progress -- do not remove the diskette.
```

The following packages are available:

1. ebspch US Enhanced Basic Speech - US English - Female  
(i486)

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: Enhanced Basic Speech - US English - Female  
(ebspchUS) from <diskette1>

INTUITY Enhanced Basic Speech - US English - Female  
(i486)

Using </> as the package base directory.

Lucent Technologies Inc.

Installation of Enhanced Basic Speech - US English - Female (ebspchUS) was successful.

Insert diskette into Floppy Drive 1.

Type [go] when ready,

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

## 6 Enter **q**

- 7 Remove the diskette labeled "Enhanced Basic Speech Package - (*language*) 1 of 1" from the diskette drive.

- 8 Reboot the system. See “Reboot the System,” in “Common System Procedures,” in the *Intuity CONVERSANT System Reference*, 585-313-205.

## Installing the Feature Test Script Package

Use the following procedure to install this optional feature package *only after* all the other optional feature packages have been installed:

- 1 The voice system must be running. To see if the system is running, use the **who -r** command.

The voice system is running if the run-level is 4. If the system is not running, enter **start\_vs**

- 2 Enter **pkgadd -d diskette1**

The system displays the following message:

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

- 3 Insert the diskette labeled “Feature Test Script Package 1 of 3” into the diskette drive.
- 4 Press **ENTER**.



The system displays the following message:

```
Installation in progress -- do not remove the diskette.
```

The following packages are available:

1. ftst INTUITY Feature Test Script Package  
(i486)

```
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: INTUITY Feature Test Script Package (ftst) from  
<diskette1>
```

```
INTUITY Feature Test Script Package  
(i486)
```

```
Using </> as the package base directory.  
Lucent Technologies Inc.
```

The system displays several status messages and then the following message:

```
Do you want to include the Simple CCA test? (y/n)
```

**Note:** If you answer **y** and that package has not been installed on your system, you are given an opportunity to cancel the installation. The following is an example for Full CCA:

```
Displaypkg shows that Full CCA is not installed.  
You will not be able to test Full CCA with this script.  
Type q to quit or return to continue.
```

**6 Enter y**

The system displays the following message:

```
Do you want to include the Full CCA test? (y/n)
```

**7 Enter y**

The system displays the following message:

```
Do you want to include the Playback and Coding test? (y/n)
```

**8 Enter y**

The system displays the following message:

```
Do you want to include the Chantst test? (y/n)
```

**9 Enter y**

The system displays the following message:

```
Do you want to include the Transfer Test test? (y/n)
```

**10 Enter y**

The system displays the following message:

```
Do you want to include the Dial Pulse Recognition test? (y/n)
```

**11 Enter y**

The system displays the following message:

```
READY TO PROCESS:
```

```
Package: INTUITY Feature Test Script Package (ftst)  
diskette 2 of 3
```

```
Insert diskette 2 of 3 into Floppy Drive 1.
```

```
Type [go] when ready,  
or [q] to quit: (default: go)
```

```
Do you want to include the Speech Recognition test? (y/n)
```

**12 Remove the diskette labeled “Feature Test Script Package 1 of 3” from the diskette drive.**

**13 Insert the diskette labeled “Feature Test Script Package 2 of 3” into the diskette drive.**

**14 Press ENTER.**

The system displays several status messages and then the following message:

```
READY TO PROCESS:
```

```
Package: INTUITY Feature Test Script Package (ftst)  
diskette 3 of 3
```

```
Insert diskette 3 of 3 into Floppy Drive 1.  
Type [go] when ready,  
    or [q] to quit: (default: go)
```

- 15 Remove the diskette labeled “Feature Test Script Package 2 of 3” from the diskette drive.
- 16 Insert the diskette labeled “Feature Test Script Package 3 of 3” into the diskette drive.
- 17 Press **ENTER**.

The system displays several status messages and then the following message:

```
The UNIX Operating System kernel will be rebuilt  
to include your configuration changes during the  
next system reboot.
```

```
Installation of Adjunct/Switch Application Interface  
Package (asai) was successful.
```

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

- 18 Enter **q**
- 19 Remove the diskette labeled “Feature Test Script Package 3 of 3” from the diskette drive.

## Installing the LAN Adapter Setup Program

To install this optional feature package, do the following:

1 If you are not already logged in as **root**, do so now.

2 Enter **pkgadd -d diskette1**

The system displays the following message:

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

3 Insert the diskette labeled “SMC LAN Adapter Setup Program 1 of 1” into the diskette drive.

4 Press **ENTER**.

The system displays the following message:

```
Installation in progress -- do not remove the diskette.
```

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

```
  1. ezsetup SMC LAN Adapter Setup program  
     (i486)
```

```
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: SMC LAN Adapter Setup program (ezsetup) from
<diskette1>

SMC LAN Adapter Setup program
(i386)
Using </var/spool/pkg> as the package base directory.
Lucent Technologies Inc.
```

The system displays several status messages and then the following message:

```
Installation of SMC LAN Adapter Setup program (ezsetup)
was successful.

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

**6** Enter **q**

**7** Remove the diskette labeled “SMC LAN Adapter Setup Program 1 of 1” from the diskette drive.

## Installing the Form Filler Application

### CAUTION:

Talkfiles 8 and 9 are reserved talkfile numbers for Form Filler. If you have other applications that use talkfile numbers 8 or 9, do not erase your phrases; reassign new talkfile numbers to them. To do this, back up the speech in talkfiles 8 and 9, remove the speech, then install the Form Filler package. Once the Form Filler package is installed, restore the speech you backed up so the talkfile is assigned a new number. See *Intuity CONVERSANT Version 7.0 Administration*, 585-313-501, for information on speech backup with the **spsav** command.

To install this optional feature package, do the following:

- 1 If you are not already logged in as **root**, do so now.
- 2 Enter **pkgadd -d diskette1**

The system displays the following message:

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

- 3 Insert the diskette labeled “Form Filler Application 1 of 2” into the diskette drive.
- 4 Press **ENTER**.

The system displays the following message:

```
Installation in progress -- do not remove the diskette.
```

The following packages are available:

1. ff INTUITY Form Filler Application  
(i486)

```
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: INTUITY Form Filler Application (ff) from <diskette1>  
  
INTUITY Form Filler Application  
(i486)  
Using </> as the package base directory.  
Lucent Technologies Inc.
```

The system displays several status messages and then the following message:

```
READY TO PROCESS:  
Package: INTUITY Form Filler Application (ff)  
diskette 2 of 2
```



```
Insert diskette 2 of 2 into Floppy Drive 1.  
Type [go] when ready,  
    or [q] to quit: (default: go)
```

- 6 Remove the diskette labeled “Form Filler Application 1 of 2” from the diskette drive.
- 7 Insert the diskette labeled “Form Filler Application 2 of 2” into the diskette drive.
- 8 Press **ENTER**.

The system displays several status messages and then the following message:

```
Changing Form Filler Passwords.
```

```
Enter new transcription password:
```

- 9 Enter the new transcription password.

The system displays the following message:

```
Enter new review password:
```

- 10 Enter the new review password.

The system displays several status messages and then the following message:

```
Installation of INTUITY Form Filler Application (ff)  
was successful.
```

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

- 11 Enter **q**
- 12 Remove the diskette labeled “Form Filler Application 2 of 2” from the diskette drive.

To begin using the Form Filler feature as well as the FFtemplate, see Chapter 8, “Using Optional Features,” of *Intuity CONVERSANT Version 7.0 Application Development with Script Builder*, 585-313-206.

## Installing the CLEO Packages

The following packages must be installed before installing any of the CLEO packages:

- UnixWare 2.1.2 operating system
- Intuity CONVERSANT VIS V7.0 set
- Token Ring Hardware Support (if you have a Token Ring card)

Use the following rules to guide your package selections:

- Install all the packages (based on the remaining rules in this list) at this time. Do not choose some packages now and then go back later to install more packages. Make all your package selections for installation now.

- If you have the FIFO/SIB synchronous interface card, you must choose package 5 from the menu.
- If you have the Token Ring card, you must choose package 7 from the menu.
- Select packages 1, 2, 3, 4, and 6 in every installation case.
- Perform the procedures to load the packages in the following order:
  - a [Installing the cleo\\_tkrn Package on page 285](#) and/or [Installing the cleo\\_sib Package on page 287](#)
  - b [Installing the cleo\\_sna\\_1281u Package on page 294](#)
  - c [Installing the cleo\\_3270 Package on page 297](#)
  - d [Installing the cleo\\_mgmt Package on page 300](#)
  - e [Installing the cleo\\_netman Package on page 302](#)
  - f [Installing the cleo\\_HTE Package on page 305](#)

## Installing the cleo\_tkrn Package

To install the cleo\_tkrn package, do the following:

- 1 If you are not already logged in as **root**, do so now.
- 2 Insert the cartridge tape labeled “CLEO 4.1.2.0 1 of 1” 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 cleo3270    cleo_3270, Feature Level 1 (4.1.2.0)  
              (386) 4.1.2.0  
2 cleoHTE    cleo_hte, Feature Level 2 (4.1.2.0)  
              (386) 4.1.2.0  
3 mgmt       cleo_mgmt, Feature Level 1 (4.1.2.0)  
              (386) 4.1.2.0  
4 netman     cleo_netman, Feature Level 1 (4.1.2.0)  
              (386) 4.1.2.0  
5 sib        cleo_sib, Link Level (4.1.2.0)  
              (386) 4.1.2.0  
6 sna128lu   cleo_sna_128lu, SNA Level, (4.1.2.0)  
              (386) 4.1.2.0  
7 tkrn       cleo_tkrn, Link Level, (4.1.2.0)  
              (386) 4.1.2.0
```

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

## 5 Enter 7

The system displays the following message:

```
PROCESSING:
Package: cleo_tkrn, Link Level (4.1.2.0) <tkrn> from <->
cleo_tkrn
(386) (4.1.2.0)
Using </> as the package base directory.
Lucent Technologies Inc.

Adding driver configurations to the kernel.
All previous configurations will be deleted.
Please wait...
```

The system then displays the following message and the system prompt:

```
Installation of the cleo_tkrn, Link Level (4.1.2.0) (tkrn) was successful.
```

## Installing the cleo\_sib Package

To install the cleo\_sib package, do the following:

- 1 If you are not already logged in as **root**, do so now.

2 Insert the cartridge tape labeled “CLEO 4.1.2.0 1 of 1” 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 cleo3270    cleo_3270, Feature Level 1 (4.1.2.0)  
              (386) 4.1.2.0  
2 cleoHTE    cleo_hte, Feature Level 2 (4.1.2.0)  
              (386) 4.1.2.0  
3 mgmt       cleo_mgmt, Feature Level 1 (4.1.2.0)  
              (386) 4.1.2.0  
4 netman     cleo_netman, Feature Level 1 (4.1.2.0)  
              (386) 4.1.2.0  
5 sib        cleo_sib, Link Level (4.1.2.0)  
              (386) 4.1.2.0  
6 sna128lu   cleo_sna_128lu, SNA Level, (4.1.2.0)  
              (386) 4.1.2.0
```

```
7 tkrn          cleo_tkrn, Link Level, (4.1.2.0)
                (386) 4.1.2.0
```

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

## 5 Enter 5

The system displays the following message:

```
PROCESSING:
Package: cleo_sib, Link Level (4.1.2.0) <sib> from <->
cleo_sib
(386) (4.1.2.0)
Using </> as the package base directory.
Lucent Technologies Inc.

Adding driver configurations to the kernel.
All previous configurations will be deleted.
Please wait...
```

The system then displays the Possible Board Selections screen ([Figure 99 on page 290](#)).

**Figure 99. Possible Board Selections Screen**

```
Cleo ADD Board Options
-----
Possible Board Selections

1. Cleo FIFO SIB
2. Cleo Microchannel FIFO SIB
3. Cleo PC 201 Modem Board
4. Cleo PC SIB
5. Cleo Microchannel SIB
6. ICOT SIB
7. ICOT Microchannel SIB

Please enter selection or q to quit:
```

**6 Enter 1**

The system displays the following message:

```
You have selected Cleo FIFO SIB.
Is this correct (y/n)?
```

**7 Enter y**

The system then displays the IRQ Selections screen ([Figure 100 on page 291](#)).



Figure 100. IRQ Selections Screen

```
Cleo ADD Board Options
-----
IRQ Selections

      5
      9
     10
     11
     12
     13

Please enter selection or q to quit:
```

- 8 Enter the appropriate IRQ as determined by the hardware resource allocator.

The system displays the following message:

```
Validating you selection...Please wait
You have selected X. Is this correct (y/n)?
```

- 9 Enter **y**

The system then displays the I/O Address Selections screen ([Figure 101 on page 292](#)).

**Figure 101. I/O Address Selections Screen**

```
Cleo ADD Board Options
-----
I/O Address Selections

0x250
0x260
0x2B0
0x2E0
0x380
0x3A0
0x3E0

Please enter selection, <CR> for default of 0x380 or q to quit:
```

- 10** Enter the appropriate I/O address as determined by the hardware resource allocator.

The system displays the following message:

```
You have selected X. Is this correct (y/n)?
```

- 11** Enter **y**

The system displays the Board Configuration screen ([Figure 102 on page 293](#)).

**Figure 102. Board Configuration Screen**

```

                                Cleo ADD Board Options
                                -----
Configuration for board 1 is:

Board Description   =   Cleo FIFO SIB
IRQ                =   X
I/O Address        =   X - X

This board has 1 physical port(s).
When configuring the Link Service record(s) of the Cleo SNA
Server use the following mapping:

    Boards Physical Port #      Link Service Port #
    -----
                1                      1

Is this configuration acceptable:

```

**12 Enter y**

The system displays the following message:

```

Board configuration successfully added.
Do you wish to add another board?

```

**13 Enter n**

The system then displays the following message and the system prompt:

```
Installation of the cleo_sib, Link Level (4.1.2.0)
(sib) was successful.
```

## Installing the cleo\_sna\_1281u Package

To install the cleo\_sna\_1281u package, do the following:

- 1 Make sure you have loaded at least one of the following packages:
  - ~ cleo\_tkrn
  - ~ cleo\_sib
- 2 Insert the cartridge tape labeled “CLEO 4.1.2.0 1 of 1” 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 cleo3270    cleo_3270, Feature Level 1 (4.1.2.0)
              (386) 4.1.2.0
2 cleoHTE    cleo_hte, Feature Level 2 (4.1.2.0)
              (386) 4.1.2.0
3 mgmt       cleo_mgmt, Feature Level 1 (4.1.2.0)
              (386) 4.1.2.0
4 netman     cleo_netman, Feature Level 1 (4.1.2.0)
              (386) 4.1.2.0
5 sib        cleo_sib, Link Level (4.1.2.0)
              (386) 4.1.2.0
6 sna128lu   cleo_sna_128lu, SNA Level, (4.1.2.0)
              (386) 4.1.2.0
7 tkrn       cleo_tkrn, Link Level, (4.1.2.0)
              (386) 4.1.2.0
```

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

## 5 Enter 6

The system displays the following message:

```
PROCESSING:
Package: cleo_sna_128lu, SNA Level (4.1.2.0) <sna128lu>
from <->

cleo_sna_128lu
(386) (4.1.2.0)
```

```
Using </> as the package base directory.  
Lucent Technologies Inc.
```

```
Adding driver configurations to the kernel.  
All previous configurations will be deleted.  
Please wait...
```

```
Enabling Link Level Drivers
```

```
cleo_sna1281u, Link Level (4.1.2.0) installation has  
detected the following SDLC Frame Size.
```

```
265 (256 + 9) bytes
```

```
Do you want to change the SDLC Frame Size? (y/n)
```

## 6 Enter n

The system displays the following message:

```
You can use the "cleohw.cfg" utility should you  
need to change the SDLC Frame Size after the  
installation.
```

```
Enter <CR> to continue.
```

## 7 Press ENTER.

The system displays the following message:

```
A kernel link is required to activate the cleo_sna_  
1281u, SNA Level (4.1.2.0) installation. In most cases  
the kernel must be relinked now. However, if the cleo_
```

```
slim package is to be installed before using the Cleo
product the kernel link can be postponed. cleo_slim
will relink the kernel automatically when installed.
```

```
Do you want to link the kernel now?
```

## 8 Enter y

The system displays the following message:

```
The Unix kernel will be rebuilt now.
This will take some time. Please wait
```

The system then displays the following message and the system prompt:

```
Installation of the cleo_sna_1281u, SNA Level (4.1.2.0)
(sna1281u) was successful.
```

## Installing the cleo\_3270 Package

To install the cleo\_3270 package, do the following:

- 1 Make sure you have loaded at least one of the following packages:
  - ~ cleo\_tkrn and or cleo\_sib
  - ~ cleo\_sna\_1281u
- 2 Insert the cartridge tape labeled “CLEO 4.1.2.0 1 of 1” 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 cleo3270    cleo_3270, Feature Level 1 (4.1.2.0)  
              (386) 4.1.2.0  
2 cleoHTE    cleo_hte, Feature Level 2 (4.1.2.0)  
              (386) 4.1.2.0  
3 mgmt       cleo_mgmt, Feature Level 1 (4.1.2.0)  
              (386) 4.1.2.0  
4 netman     cleo_netman, Feature Level 1 (4.1.2.0)  
              (386) 4.1.2.0  
5 sib        cleo_sib, Link Level (4.1.2.0)  
              (386) 4.1.2.0  
6 sna128lu   cleo_sna_128lu, SNA Level, (4.1.2.0)  
              (386) 4.1.2.0  
7 tkrn       cleo_tkrn, Link Level, (4.1.2.0)  
              (386) 4.1.2.0
```



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

## 5 Enter 1

The system displays the following message:

```
PROCESSING:
Package: cleo_3270, Feature Level 1 (4.1.2.0)
<cleo3270> from <->

cleo_3270
(386) (4.1.2.0)
Using </> as the package base directory.
Lucent Technologies Inc.
```

The system displays several status messages and then the following message:

```
Installing cleo_3270, Feature Level 1 (4.1.2.0)
(cleo3270).
Please wait.
```

The system then displays the following message and the system prompt:

```
Installation of the cleo_3270, Feature Level 1
(4.1.2.0) (cleo3270) was successful.
```

## Installing the cleo\_mgmt Package

To install the cleo\_mgmt package, do the following:

- 1 Make sure you have loaded at least one of the following packages:
  - ~ cleo\_tkrn and or cleo\_sib
  - ~ cleo\_sna\_1281u
  - ~ cleo\_3270
- 2 Insert the cartridge tape labeled “CLEO 4.1.2.0 1 of 1” 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 cleo3270      cleo_3270, Feature Level 1 (4.1.2.0)  
                (386) 4.1.2.0
```

```
2 cleoHTE      cleo_hte, Feature Level 2 (4.1.2.0)
                (386) 4.1.2.0
3 mgmt        cleo_mgmt, Feature Level 1 (4.1.2.0)
                (386) 4.1.2.0
4 netman      cleo_netman, Feature Level 1 (4.1.2.0)
                (386) 4.1.2.0
5 sib         cleo_sib, Link Level (4.1.2.0)
                (386) 4.1.2.0
6 sna128lu    cleo_sna_128lu, SNA Level, (4.1.2.0)
                (386) 4.1.2.0
7 tkrn        cleo_tkrn, Link Level, (4.1.2.0)
                (386) 4.1.2.0
```

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

## 5 Enter 3

The system displays the following message:

```
PROCESSING:
Package: cleo_mgmt, Feature Level 1 (4.1.2.0) <mgmt>
from <->

cleo_mgmt
(386) (4.1.2.0)
Using </> as the package base directory.
Lucent Technologies Inc.
```

The system displays several status messages and then the following message:

```
Installing cleo_mgmt, Feature Level 1 (4.1.2.0) (mgmt).  
Please wait.
```

The system then displays the following message and the system prompt:

```
Installation of the cleo_mgmt, Feature Level (4.1.2.0)  
(mgmt) was successful.
```

## Installing the cleo\_netman Package

To install the cleo\_netman package, do the following:

- 1 Make sure you have loaded at least one of the following packages:
  - ~ cleo\_tkrn and or cleo\_sib
  - ~ cleo\_sna\_1281u
  - ~ cleo\_3270
  - ~ cleo\_mgmt
- 2 Insert the cartridge tape labeled “CLEO 4.1.2.0 1 of 1” 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 cleo3270    cleo_3270, Feature Level 1 (4.1.2.0)  
              (386) 4.1.2.0  
2 cleoHTE    cleo_hte, Feature Level 2 (4.1.2.0)  
              (386) 4.1.2.0  
3 mgmt       cleo_mgmt, Feature Level 1 (4.1.2.0)  
              (386) 4.1.2.0  
4 netman     cleo_netman, Feature Level 1 (4.1.2.0)  
              (386) 4.1.2.0  
5 sib        cleo_sib, Link Level (4.1.2.0)  
              (386) 4.1.2.0  
6 sna128lu   cleo_sna_128lu, SNA Level, (4.1.2.0)  
              (386) 4.1.2.0  
7 tkrn       cleo_tkrn, Link Level, (4.1.2.0)  
              (386) 4.1.2.0
```

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

## 5 Enter 4

The system displays the following message:

```
PROCESSING:
Package: cleo_netman, Feature Level (4.1.2.0) <netman>
from <->

cleo_netman
(386) (4.1.2.0)
Using </> as the package base directory.
Lucent Technologies Inc.
```

The system displays several status messages and then the following message:

```
Installing cleo_netman, Feature Level 1 (4.1.2.0)
(netman).
Please wait.
```

The system then displays the following message and the system prompt:

```
Installation of the cleo_netman, Feature Level
(4.1.2.0) (netman) was successful.
```

## Installing the cleo\_HTE Package

To install the cleo\_HTE package, do the following:

- 1 Make sure you have loaded at least one of the following packages:

- ~ cleo\_tkrn and or cleo\_sib
- ~ cleo\_sna\_1281u
- ~ cleo\_3270
- ~ cleo\_mgmt
- ~ cleo\_netman

- 2 Insert the cartridge tape labeled “CLEO 4.1.2.0 1 of 1” 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 cleo3270    cleo_3270, Feature Level 1 (4.1.2.0)
              (386) 4.1.2.0
2 cleoHTE    cleo_hte, Feature Level 2 (4.1.2.0)
              (386) 4.1.2.0
3 mgmt       cleo_mgmt, Feature Level 1 (4.1.2.0)
              (386) 4.1.2.0
4 netman     cleo_netman, Feature Level 1 (4.1.2.0)
              (386) 4.1.2.0
5 sib        cleo_sib, Link Level (4.1.2.0)
              (386) 4.1.2.0
6 sna128lu   cleo_sna_128lu, SNA Level, (4.1.2.0)
              (386) 4.1.2.0
7 tkrn       cleo_tkrn, Link Level, (4.1.2.0)
              (386) 4.1.2.0
```

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

## 5 Enter 2

The system displays the following message:

```
PROCESSING:
Package: cleo_HTE, Feature Level (4.1.2.0) <cleoHTE>
from <->

cleo_HTE
(386) (4.1.2.0)
```



```
Using </> as the package base directory.  
Lucent Technologies Inc.
```

The system then displays the following message and the system prompt:

```
Installation of the cleo_HTE, Feature Level (4.1.2.0)  
(cleoHTE) was successful.
```

## Completing the Installation

When all of the chosen packages have been installed the system displays the following message:

- 1 Remove the cartridge tape from the cartridge tape drive.
- 2 Reboot the system. See “Reboot the System,” in “Common System Procedures,” in the *Intuity CONVERSANT System Reference*, 585-313-205.

**Note:** If you should want to change IRQ, I/O Address, RAM Address, and/or SDLC frame size after installing the CLEO software, see **cleohw.cfg** in the procedure titled “Changing Hardware Configuration using cleohw.cfg” in Chapter 3, “Software Installation,” of the *CLEO Administration Guide*.

You have completed the installation of the CLEO packages. To finish the installation of the host software, go to [Installing the Host Packages on page 308](#).

## Installing the Host Packages

When installing the Intuity CONVERSANT Host software, the order in which you install the packages is very important.

**Note:** The Intuity CONVERSANT VIS V7.0 set and the CLEO packages must be installed before any of the Host packages. Ensure the appropriate hardware (FIFO/SIB and/or Token Ring) is not installed at this time, otherwise you may get an error message when you stop and start the voice system.

Make sure you perform the procedures to install the Host software in the following order:

- 1 [Installing the Synchronous Host Interface Package on page 308](#)
- 2 [Installing the 3270 Enhanced File Transfer Package on page 311](#)
- 3 [Installing the NetView Alarm Interface Package on page 313](#)

## Installing the Synchronous Host Interface Package

Use the following procedure to install this optional feature package:

- 1 If you are not already logged in as **root**, do so now.

- 2 Stop the voice system. See “Administer the Voice System,” in “Common System Procedures,” in the *Intuity CONVERSANT System Reference*, 585-313-205.
- 3 Insert the diskette labeled “Synchronous Host Interface Package 1 of 1” into the diskette drive.

4 Enter **pkgadd -d diskette1**

The system displays the following message:

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

5 Press **ENTER**.

The system displays the following message:

```
Installation in progress -- do not remove the diskette.  
  
The following packages are available:  
  1. synchost      INTUITY Synchronous Host Interface  
                    Package (i486)
```

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

6 Press **ENTER**.

The system displays the following message:

```
PROCESSING:
Set: INTUITY Synchronous Host Interface Package
(synchost) from <diskette1>

INTUITY Synchronous Host Interface Package
(i486)
Using </> as the package base directory.
Lucent Technologies Inc.
```

The system displays several status messages and then the following message:

```
Installation of Synchronous Host Interface Package
(synchost) was successful.

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

**7** Enter **q**

**8** Make sure that the light on the floppy disk drive is off and remove the diskette.

## Installing the 3270 Enhanced File Transfer Package

To install this optional feature package, do the following:

- 1 If you are not already logged in as **root**, do so now.
- 2 Enter **pkgadd -d diskette1**

The system displays the following message:

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

- 3 Insert the diskette labeled “3270 Enhanced File Transfer 1 of 1” into the diskette drive.
- 4 Press **ENTER**.

The system displays the following message:

```
Installation in progress -- do not remove the diskette.
```

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

- ```
  1. fts  INTUITY 3270 Enhanced File Transfer  
      Package (i486)
```

```
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: INTUITY 3270 Enhanced File Transfer Package (fts)
from <diskette1>

INTUITY 3270 Enhanced File Transfer Package
(i486)
Using </> as the package base directory.
Lucent Technologies Inc.
```

The system displays several status messages and then the following message:

```
Installation of INTUITY 3270 Enhanced File Transfer
Package (fts) was successful.

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

**6** Enter **q**

**7** Remove the diskette labeled “3270 Enhanced File Transfer 1 of 1” from the diskette drive.

## Installing the NetView Alarm Interface Package

To install this optional feature package, do the following:

- 1 If you are not already logged in as **root**, do so now.
- 2 Enter **pkgadd -d diskette1**

The system displays the following message:

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

- 3 Insert the diskette labeled “3270 Netview Alarm Interface 1 of 1” into the diskette drive.
- 4 Press **ENTER**.

The system displays the following message:

```
Installation in progress -- do not remove the diskette.
```

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

- ```
1. mtcxmtr      INTUITY 3270 Netview Alarm Interface  
                Package (i486)
```

```
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: INTUITY 3270 Netview Alarm Interface Package
(mtcxmtr) from <diskette1>

INTUITY 3270 Netview Alarm Interface Package
(i486)
Using </> as the package base directory.
Lucent Technologies Inc.
```

The system displays several status messages and then the following message:

```
Installation of INTUITY 3270 Netview Alarm Interface
Package (mtcxmtr) was successful.

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

## 6 Enter **q**

- 7 Remove the diskette labeled “3270 Netview Alarm Interface 1 of 1” from the diskette drive.

Once the host software is installed, see *Intuity CONVERSANT Version 7.0 Communications Development*, 585-313-202, for more information about using the features.



# Installing the ORACLE Development Packages

ORACLE provides many packages that are not required to support the Intuity CONVERSANT system operation. Intuity CONVERSANT system refers to these packages as ORACLE add-on packages.

This section describes the installation procedures for each add-on package. For detailed installation and removal information, see the *ORACLE7 for Intel UNIX SVR4 (iABI) Installation & Configuration Guide*.

## Package List

The ORACLE development packages are included on the following 3 tapes:

- ORACLE 7 Pro\*C Package
- ORACLE 7 Developer Toolkit – which contains ORACLE FORMS 4.5.7.12 and ORACLE Reports 2.5.5.4.0

### CAUTION:

The ORACLE Developer Toolkit cartridge tape contains more ORACLE products than those listed. However, Intuity CONVERSANT system customers must NOT install products that are not listed. Some of the products are already included in the various Intuity CONVERSANT system packages, while other products are not authorized to be used by the Intuity CONVERSANT system customers. A violation of the recommendation may

result into the corruption of the Intuity CONVERSANT system software configuration and may be illegal usage of the ORACLE software.

- ORACLE 7 Patch 19

## Installation Requirements

The basic requirements for installing ORACLE add-on packages are as follows:

- Intuity CONVERSANT Base ORACLE RDBMS 7.3.2 package is installed.
- The voice system and ORACLE database are stopped during the installation. (You can stop the database by entering **ior s.**)

## Procedures

Use the procedures in this section to install the ORACLE development packages.

**Note:** These procedures take approximately 1 hour to complete and must be completed in the order outlined in this document.

**Increasing ORACLE File System** **Note:** This procedure adds 150 Mbytes of space to **/oracle**. This space must be on disk0.

- 1 Log on to the system as **root**.

## Creating a Temporary File System

### 2 Enter **addfs /oracle 307200 1024**

**Note:** This procedure creates a 230-Mbyte temporary file system. This file system may exist on any disk in the system.

### 1 Enter the following commands in the sequence below:

```
mkdir /xtmp  
volassist make xtmp 460800  
mkfs -F vxfs /dev/vx/dsk/xtmp 460800  
mount -F vxfs /dev/vx/dsk/xtmp  
chmod 777 xtmp
```

### 2 Enter **df** to verify the /xtmp file system is mounted.

### 3 Enter **TMPDIR=/xtmp**

### 4 Enter **export TMPDIR**

## Installing the Intuity ORACLE 7 Pro\*C Package

### 1 Enter **pkgadd -d ctape1**

The system displays the following message:

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

### 2 Insert the diskette labeled "ORACLE 7.3.2 Pro\*C Package" into the cartridge tape drive.

### 3 Press ENTER.

The system displays the following message:

```
Installation in progress -- do not remove the cartridge.
```

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

1. proc INTUITY ORACLE 7 Pro\*C Package  
(i486) i.3.1

```
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:  
Set: INTUITY ORACLE 7 Pro*C Package (proc) from <ctapel>  
INTUITY ORACLE 7 Pro*C Package  
(i486)  
Using </> as the package base directory.  
Lucent Technologies Inc.
```

The system displays several status messages and then the following message:

```
Installation of INTUITY ORACLE 7 Pro*C Package  
(proc) was successful.
```

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

5 Enter **q**

6 Make sure that the light on the cartridge tape drive is off and remove the tape.

### Installing the Intuity ORACLE Developer 2000 Toolkit

**Note:** To select a response other than the screen default, use the **TAB** key to highlight the selection, and then press **ENTER**.

- 1 Insert the tape labeled “ORACLE 7.3.2 Developer 2000 Toolkit” into the cartridge tape drive.
- 2 Enter the following commands in the sequence below:

```
mkdir /xtmp/d2k132  
chmod 777 /xtmp/d2k132  
su - oracle  
cd /xtmp/d2k132  
cpio -icvdB < /dev/rmt/ctape1  
cd /oracle/orainst  
./orainst
```

The system displays the following message:

```
Select the Installer Activity.
```

**3 Select Install/Upgrade/Patch Software Only.**

The system displays the following message:

```
Select the Installer option
```

**4 Select New Product .**

The system displays the following message:

```
Enter mount point for your software installation.
```

**5 Enter /oracle**

The system displays the following message:

```
Complete $ORACLE_HOME location:
```

```
/oracle/app/oracle/product
```

**6 Enter 7.3.2****7 Press ENTER at the confirmation message.**

The system displays the following message:

```
Do you want to create DB objects also?
```

**8 Select No.**

The system displays the Logging and Status screen:

**9 Press ENTER.**

The system displays the README.FIRST file.

**10** Press **ENTER** to exit the README.FIRST file

**11** Press **ENTER** to avoid displaying the README.FIRST file in the future.

The system displays the following message:

```
Select one of the following:
```

```
(o) Install from CD-ROM
```

```
( ) Install from staging area
```

**12** Press **TAB**, **▲** (up arrow), and the spacebar to select `Install from CD-ROM`.

**13** Press **ENTER**.

The system displays the following message:

```
Enter the pathname of the $ORACLE_LINK directory
```

**14** Enter `/xtmp/d2k132`

The system displays the following message

```
Select the native language to be installed:
```

**15** Select **American/English**.

The system displays the following message

```
The /oracle/app/oracle/product/7.3.2/orainst/root.sh file
already exists. Select one of the following actions:
```

```
( ) Append root-related actions to this file
(o) Create new root.sh file
```

- 16** Press **TAB**, **▲** (up arrow), and the spacebar to select **Append root-related actions to this file**.

- 17** Press **ENTER**.

The system displays the following message

```
Post-installation steps that need to be run by root will be
written to
/oracle/app/oracle/product/7.3.2/orainst/root.sh
```

- 18** Press **ENTER**.

The system displays the following message

```
Install online help for:
( ) All Product Being Installed
(o) Products of Your Choice
( ) No Products
```

- 19** Press **TAB**, **▲** (up arrow), and the spacebar to select **All Products Being Installed**.



**20 Press ENTER.**

The system displays the following message:

```
Do you want to install UNIX-specific documentation?
```

**21 Select Yes.**

The system displays the following message:

```
Install product documentation from the product documentation  
CD-ROM for:
```

```
(o) All Product Being Installed  
( ) Products of Your Choice  
( ) No Products
```

**22 Select All Products Being Installed.**

The system displays the following message:

```
Enter the pathname for your $ORACLE_DOC directory  
  
/oracle/app/oracle/doc
```

**23 Press ENTER to select the default pathname.**

The system displays the Software Assist Manager screen.

- 24 Use the  (down arrow) and space bar to highlight the following products:
- ~ ORACLE FORMS 4.5.7.12
  - ~ ORACLE Reports 2.5.5.4.0

- 25 Press **TAB** to select **Install**, and then press **ENTER**.

The system displays the following message:

```
Would you like to install the PL/SQL Procedure Builder demos?  
(Note: this will take up 5120 bytes of disk space).
```

- 26 Select **Yes**.

The system displays the following message:

```
Please enter the directory where the X-Windows libraries  
(libxt.a, libX11.a) may be found:
```

- 27 Enter **/usr/X/lib**

The system displays the following message:

```
Please enter the directory where the MOTIF library (libXm.a)  
is located:
```

- 28 Enter **/usr/X/lib**

The system displays the following message:

```
Would you like to install the ORACLE Graphics 2.5 demos?  
(Note: this will take up 4405248 bytes of disk space).
```

**29 Select No.**

The system displays the following message:

```
Select one or more user interfaces for Oracle Forms...  
  
(x) Character Mode Interface  
( ) Motif Bitmapped Interface
```

**30 Select Character Mode Interface.**

The system displays the following message:

```
Would you like to install the ORACLE Forms demos?  
(Note: this will take up 7963648 bytes of disk space).
```

**31 Select Yes.**

The system displays the following message:

```
Select one or more user interfaces for Oracle Reports 2.5...  
  
(x) Character Mode Interface  
( ) Motif Bitmapped Interface
```

**32 Select Character Mode Interface.**

The system displays the following message:

```
Would you like to install the ORACLE Reports 2.5 demos?  
(Note: this will take up 27224064 bytes of disk space).
```

**33** Select **Yes**.

After approximately 30 minutes, the system displays a confirmation message.

**34** Select **OK**.

**35** Type **x** at the Software Asset Manager screen.

**36** Press **y** at the confirmation message.

## Post Installation Setup

- 1 At the UNIX system prompt, enter **su - root**
- 2 Enter the **root** password.
- 3 Enter **cd /oracle/app/oracle/product/7.3.2/orainst**
- 4 Enter **./root.sh**

The system displays the following message:

The following environment variables are set as

```
ORACLE_OWNER= oracle
ORACLE_HOME= oracle
ORACLE_SID= A
```

Are these settings correct (Y/N)? [Y]

**5 Press ENTER.**

The system displays the following message:

```
Enter the full pathname of the local bin directory
[/usr/bin]:
```

**6 Press ENTER.**

**7 The procedure is complete when the UNIX system prompt is returned.**

## Installing the Intuity ORACLE 7 Patch 19

**1 Log on to the system as root.**

**2 Insert the tape labeled “ORACLE 7.3.2 Patch 19” into the cartridge tape drive.**

**3 Enter the following commands in the sequence below:**

```
cd /xtmp
rm -rf d2k132
cpio -icvdB < /dev/rmt/ctape1
chmod 444 *
```

```
su - oracle
mkdir /oracle/app/oracle/product/7.3.2/D2K132_19
cd /oracle/app/oracle/product/7.3.2/D2K132_19
```

The system places you in the directory that you created. The files will be installed to this directory from **/xtmp**.

- 4 Enter the following commands in the sequence below:

```
tar -xvf /xtmp/tar.patch19
```

The system displays a series of file names and sizes before the system prompt appears.

- 5 Enter **.patch\_install.sh** to install the Intuity ORACLE 7 Patch 19.
- 6 Enter **cd ..**
- 7 Enter **rm -rf D2K132\_19** to remove the directory where the patch files were temporarily placed.

## Completing Installation

- 1 Enter the following commands to complete installation of the ORACLE development packages

```
umount /xtmp
voledit -rf rm xtmp
```

- 2 Enter **vxldg free** to show the currently available disk space.

## Installing the ORACLE SQL\*Net TCP/IP Package

To install this optional feature package, do the following:

1 If you are not already logged in as **root**, do so now.

2 Enter **pkgadd -d diskette1**

The system displays the following message:

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

3 Insert the diskette labeled “SQL\*NET TCP/IP for ORACLE 7.3.2” into the diskette drive.

4 Press **ENTER**.

The system displays the following message:

```
Installation in progress -- do not remove the diskette.
```

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

```
  1. ora7sql INTUITY SQL*NET TCP/IP for ORACLE  
     7.3.2 (i486)
```

```
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: INTUITY SQL*NET TCP/IP for ORACLE 7.3.2 (ora7sql) from
<diskettel>

INTUITY SQL*NET TCP/IP for ORACLE 7.3.2
(i486)
Using </> as the package base directory.
Lucent Technologies Inc.
```

The system displays several status messages and then the following message:

```
Installation of SQL*NET TCP/IP for ORACLE 7.3.2 (ora7sql)
was successful.

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

## 6 Enter q

## 7 Make sure that the light on the floppy disk drive is off and remove the diskette.

For more information on this feature, see

- Chapter 2, “Digital Telephony Interfaces,” of *Intuity CONVERSANT Version 7.0 Communication Development*, 585-313-202.



- Chapter 5, “Switch Interface Administration,” of *Intuity CONVERSANT Version 7.0 Administration*, 585-313-201.

## Installing the Script Builder Package

To install this optional feature package, do the following:

1 If you are not already logged in as **root**, do so now.

2 Enter **pkgadd -d diskette1**

The system displays the following message:

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

3 Insert the diskette labeled “Script Builder 1 of 3” into the diskette drive.

4 Press **ENTER**.

The system displays the following message:

```
Installation in progress -- do not remove the diskette.  
The following packages are available:  
  1. sb    INTUITY Script Builder  
        (i486)
```

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: INTUITY Script Builder (sb) from <diskette1>
INTUITY Script Builder
(i486)
Using </> as the package base directory.
Lucent Technologies Inc.
```

The system displays several status messages and then the following message:

```
READY TO PROCESS:
Package: INTUITY Script Builder (sb)
          diskette 2 of 3

Insert diskette 2 of 3 into Floppy Drive 1.
Type [go] when ready,
      or [q] to quit: (default: go)
```

**6 Remove the diskette labeled "Script Builder 1 of 3" from the diskette drive.**

**7 Insert the diskette labeled "Script Builder 2 of 3" into the diskette drive.**

**8 Press ENTER.**

The system displays several status messages and then the following message:

```
READY TO PROCESS:
Package:  INTUITY Script Builder (sb)
          diskette 3 of 3

Insert diskette 3 of 3 into Floppy Drive 1.
Type [go] when ready,
    or [q] to quit: (default: go)
```

- 9 Remove the diskette labeled “Script Builder 2 of 3” from the diskette drive.
- 10 Insert the diskette labeled “Script Builder 3 of 3” into the diskette drive.
- 11 Press **ENTER**.

The system displays several status messages and then the following message:

```
Installation of Script Builder (sb) was successful.

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

- 12 Enter **q**
- 13 Remove the diskette labeled “Script Builder 3 of 3” from the diskette drive.

For more information on this feature, see *Intuity CONVERSANT System Version 7.0 Application Development with Script Builder*, 585-313-206.

## Installing the Script Builder FAX Actions Package

To install the Script Builder FAX Actions package, do the following:

- 1 At the UNIX prompt, enter **pkgadd -d ctape1**

The system displays the following message:

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

- 2 Insert the tape labeled “Script Builder FAX Actions for Lucent Technologies” into the tape drive.
- 3 Press **ENTER**.

The system displays the following message:

```
Installation in progress -- do not remove the  
cartridge.
```

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

- ```
  1. sbfax    INTUITY Script Builder Fax Actions  
           (i486)
```

```
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:
Set: INTUITY Script Builder Fax Actions (sbfax) from
<ctapel>

INTUITY Script Builder Fax Actions
(i486)
Using </> as the package base directory.
```

The system displays the following message:

```
Select the interrupt level for the FAX Circuit Card(s)
from the following level:
    3
    4
    5
    6
    7
    9
   10
   11
   12
   14
   15
enter choice:
```

**5** Enter the interrupt level.

The system displays the following message:

```
Confirm. Interrupt level X. (y/n)
```

## 6 Enter y

The system displays the following message:

```
REMEMBER to set the jumpers on the FAX circuit card(s)  
to use interrupt X. Otherwise, the system will not  
function properly.
```

```
Enter the code of the country in which this system will  
operate. For a list of codes, consult your user  
documentation. If you decide at a later date to change this  
setting, simply use the SetPlace.sb utility (see your user  
documentation.)
```

```
Enter choice:
```

## 7 Enter the appropriate country code from [Table 12 on page 337](#).

Table 12. Country Codes

Country: Code	Country: Code	Country: Code	Country: Code
USA: 10	Canada: 11	Algeria: 2130	American Samoa: 6840
Andorra: 330	Argentina: 540	Australia: 610	Austria: 430
Barrington: 9730	Belgium: 320	Belize: 5010	Bolivia: 5910
Brazil: 550	Cameroon: 2370	Chile: 560	Columbia: 570
Costa Rica: 5060	Cyprus: 3570	Czech Republic/Slovakia: 420	Denmark: 450
Ecuador: 5930	Egypt: 200	El Salvador: 5030	Ethiopia: 2510
Fiji: 6790	Finland: 3580	France: 330	French Antilles: 5960
French Antilles Guadeloupe: 5900	French Polynesia: 6890	Gabon: 2410	German Democratic Republic: 370
German Federal Republic: 490	Greece: 300	Guam: 6710	Guantanamo Bay: 530
Guatemala: 5020	Guyana: 5920	Haiti: 5090	Honduras: 5040

1 of 3

Table 12. Country Codes

Country: Code	Country: Code	Country: Code	Country: Code
Hong Kong: 8520	Hungary: 360	Iceland: 3540	India: 910
Indonesia: 620	Iran: 980	Iraq: 9640	Ireland: 3530
Israel: 9720	Italy (Co): 390	Italy (PBX): 391	Ivory Coast: 2250
Japan 10: 810 (10 pulse per second)	Japan 20: 811 (20 pulses per second)	Japan 10 DID: 812 (10 pulses per second)	Japan 2 DID: 813 (10 pulses per second)
Jordan: 9620	Kenya: 2540	Korea: 820	Kuwait: 9650
Liberia: 2310	Libya: 2180	Liechtenstein: 410	Luxembourg: 3520
Malawi: 2650	Malaysia: 600	Mexico: 520	Monaco: 330
Morocco: 2120	Namibia: 2640	Netherlands: 310	Netherlands Antilles: 5990
Netherlands Antilles Aruba: 2970	New Caledonia: 6870	New Zealand: 640	Nicaragua: 5050
Nigeria: 2340	Norway: 470	Norway X: 471	Oman: 9680

2 of 3



Table 12. Country Codes

Country: Code	Country: Code	Country: Code	Country: Code
Pakistan: 920	Panama: 5070	Papua New Guinea: 6750	Paraguay: 5950
Peru: 510	Philippines: 630	Poland: 480	Portugal: 3510
Qatar: 9740	Romania: 400	Saipan: 6700	San Marino: 390
Saudi Arabia: 9660	Senegal: 2210	Singapore: 650	South Africa: 270
Spain: 340	Sri Lanka: 940	Suriname: 5970	Sweden: 460
Switzerland: 410	Taiwan: 8860	Thailand: 660	Tunisia: 2160
Turkey: 900	United Arab Emirates: 9710	U.K. (CO): 440	U.K. (PBX): 441
Uruguay: 5980	Vatican City: 390	Venezuela: 580	Yemen Arab Republic: 9670
Yugoslavia: 380			

3 of 3

The system displays the following message:

Confirm. The country is **country**. (y/n)

## 8 Enter **y**

The system displays the following message:

```
Enter the number of faxingDips you want running on your
system. Your application will work fine regardless of
how many you choose. If you decide at a later date to
change this setting, simply use the SetFaxDip.sb
utility (see your user documentation.)
```

### CAUTION:

Using more than two faxingDips could cause your CPU idle time to be reduced to 0%. This will result in SPIO001 alarm messages and notification of the TSC.

```
For light expected FAX traffic           enter 1
For average expected FAX traffic         enter 2
For moderately heavy expected FAX traffic enter 3
For heavy expected FAX traffic           enter 4

enter choice:
```

## 9 Enter **1** or **2** as appropriate.

The system displays the following message:

```
Confirm. Number of faxingDips is number. (y/n)
```

## 10 Enter **y**

The system displays the following message:

```
If you currently have applications that use FAX
Actions, re-verify and re-install them for best
performance.
```

```
Your system will have X running faxingDips
```

```
The sbfax has been successfully installed. You must
remove the last floppy disk. The system will reboot
shortly.
```

```
    The UNIX Operating System kernel will be rebuilt to
    include your configuration changes during the
    next system reboot.
```

```
Installation of INTUITY Script Builder Fax Actions
(sbfax) was successful.
```

- 11** Enter **q**
- 12** Make sure that the light on the tape drive is off and remove the tape.
- 13** Reboot the system. See “Reboot the System,” in “Common System Procedures,” in the *Intuity CONVERSANT System Reference*, 585-313-205.

See *Intuity CONVERSANT Version 7.0 Application Development with Script Builder*, 585-313-206, for more information on using Script Builder FAX Actions, as well as procedures to install the diskettes labeled “SBFAX\_demo Backup Speech” and “Transmissions.”

## Installing the Unix Management Screens Package

To install the Unix Management Screens package, do the following:

- 1 At the UNIX prompt, enter **pkgadd -d diskette1**

The system displays the following message:

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

- 2 Insert the diskette labeled “Unix Management Screens Package 1 of 1” into the diskette drive.

- 3 Press **ENTER**.

The system displays the following message:

```
Installation in progress -- do not remove the diskette.
```

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

```
  1. unixmgmt      INTUITY Unix Management Screens Package  
                    (i486)
```

```
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:
Set: INTUITY Unix Management Screens Package (unixmgmt)
from <diskette1>

INTUITY Unix Management Screens Package
(i486)
Using </> as the package base directory.
Lucent Technologies Inc.
```

The system displays several status messages and then the following message:

```
Installation of INTUITY Unix Management Screens Package
(unixmgmt) was successful.

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

#### 5 Enter **q**

The system displays the UNIX prompt.

#### 6 Make sure that the light on the diskette drive is off and remove the diskette.

## Installing the SNMP Emanate Agent Package

To install the SNMP Emanate Agent package, do the following:

**1** If you are not already logged in as **root**, do so now.

**2** 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)
```

**3** Insert the diskette labeled “Intuity SNMP Emanate Agent” into the diskette drive.

**4** Press **ENTER**.

The system displays the following message:

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

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

```
1.snmp      INTUITY SNMP Emanate Agent (snmp)  
            (i486)
```

```
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: INTUITY SNMP Emanate Agent (snmp) from <diskette1>

INTUITY Emanate Agent
(i486) i.3.1

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

The system displays several status messages and then the following message:

```
Installation of INTUITY SNMP Emanate Agent (snmp) was
successful

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

**6** Enter **q**

The system displays the Console Login prompt.

**7** Remove the diskette labeled “Intuity SNMP Emanate Agent” from the diskette drive.

## Removing Software Packages

Software packages can be removed using:

- The command line
- The Intuity CONVERSANT screens

### Using the Command Line

Use the **pkgrm** command to remove a software package from your system. See Appendix A, “Summary of Commands” in *Intuity CONVERSANT Version 7.0 Administration*, 585-313-501, book for more information on these commands.

There are some important issues you need to be aware of when removing software from your system:

- Remove all services, functions, or card assignments before removing any software packages.
- When removing the Application software, you are asked if you want to remove speech file systems. Answer **no** to this prompt.
- During an initial installation of the Base ORACLE RDBMS package, a user called “oracle” is created. This user is NOT removed when the Base ORACLE RDBMS package is removed. Once all the base and add-on ORACLE packages have been removed, if you want to remove the



“oracle” user, do so through **sysadm**. See Appendix A, “Summary of Commands” in *Intuity CONVERSANT Version 7.0 Administration*, 585-313-501.

To remove software packages, do the following:

1 Enter **pkginfo** at the system prompt #.

The system displays all the packages installed on your system.

2 Once you have determined the packages to be removed, enter **pkgrm**

3 At the prompt, enter the number (as it appears on the screen) beside the package you want to remove.

Repeat [step 2](#) for each package you want to remove.

### CAUTION:

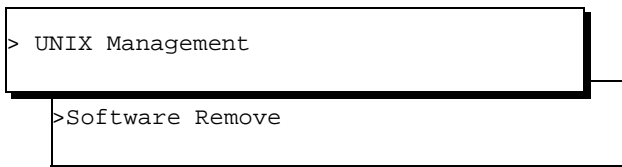
After you have removed packages from a UnixWare system, you **MUST** reboot the system before reinstalling packages. You can remove more than one package before rebooting, but you must reboot before reinstalling any packages.

## Using the Intuity CONVERSANT Screens

**Note:** To use this procedure, your system must have the Unix Management Screens Package installed.

To remove software using the Intuity CONVERSANT screens, do the following:

- 1 Start at the Voice System Administration menu ([Figure 97 on page 251](#)) and select



```
> UNIX Management
> Software Remove
```

The system displays the Software Remove screen ([Figure 103 on page 349](#)), which lists the software installed on the system.

**Figure 103. Software Remove Screen**

```
The following packages are available:
 1 CVISset      INTUITY CONVERSANT VIS V7.0 Set
                  (i486) i.2.0
 2 PerfBack    Perfect Backup and Restore
                  (SVR4.2-intel) 5.0.0
 3 TSM         INTUITY Transaction State Machine Package
                  (i486) i.2.0
 4 acp         Enhanced Application Compatibility
                  (386) 1
 5 as          UnixWare for Intuity
                  (386) 1
 6 asai        INTUITY Adjunct/Switch Application Interface Package
                  (i486) i.2.0
 7 asp         INTUITY ASP Driver Package
                  (i486) i.2.0
 8 atm         Adobe Type Manager (TM)
                  (386) 1
 9 atm13       ATM Basic Fonts
                  (386) 1
10 backrest    INTUITY Backup/Restore Utilities
                  (i486) 1.0

... 99 more menu choices to follow;
<RETURN> for more choices, <CTRL-D> to stop display:
```

**2** Locate the package you wish to remove.

3 Note the number of the package given in the first column.

4 Press **Control + D**.

The system displays the following message:

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

5 Enter the number of the package.

The system displays the name and version number for the package selected.

6 Enter **y**

The system removes the package.

**Note:** If the system displays any messages warning of dependencies, enter **y** again to continue with the software removal.

7 Press **ENTER**.

# A System Configuration

## Overview

This appendix describes the configuration of components in the MAP/5P and the operation of the Hardware Resource Allocator.

The information is required for technicians to reconfigure the Intuity CONVERSANT when it is necessary to add or remove hardware.

Topics covered include:

- [System Configuration on page 352](#)
  - ~ [Memory on page 352](#)
  - ~ [Component Assignments on page 354](#)
- [Hardware Resource Allocator Operation on page 359](#)
- [Configuration Device Data on page 381](#)

# System Configuration

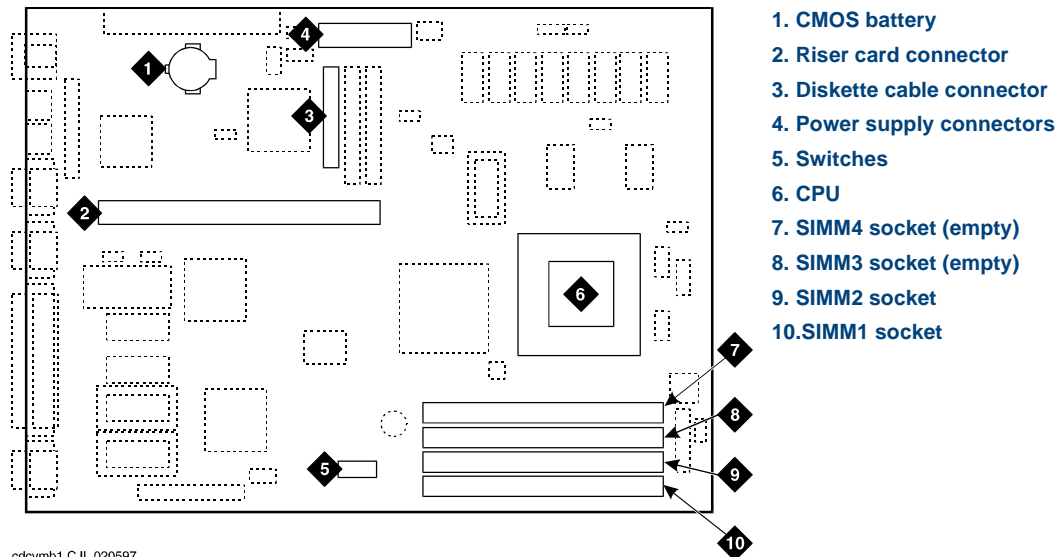
The system configuration consists of:

- Memory
- Component Assignments

## Memory

The MAP/5P supports 64-Mbyte of memory packaged on two 32-Mbyte single in-line memory modules (SIMMs). These modules are placed in sockets located in the bottom right corner of the motherboard ([Figure 104 on page 353](#)).

Figure 104. Motherboard



**Note:** The system will not boot if there is an odd number of SIMMs

## Component Assignments

The components included in a system configuration are:

- Circuit cards
- Operating hardware

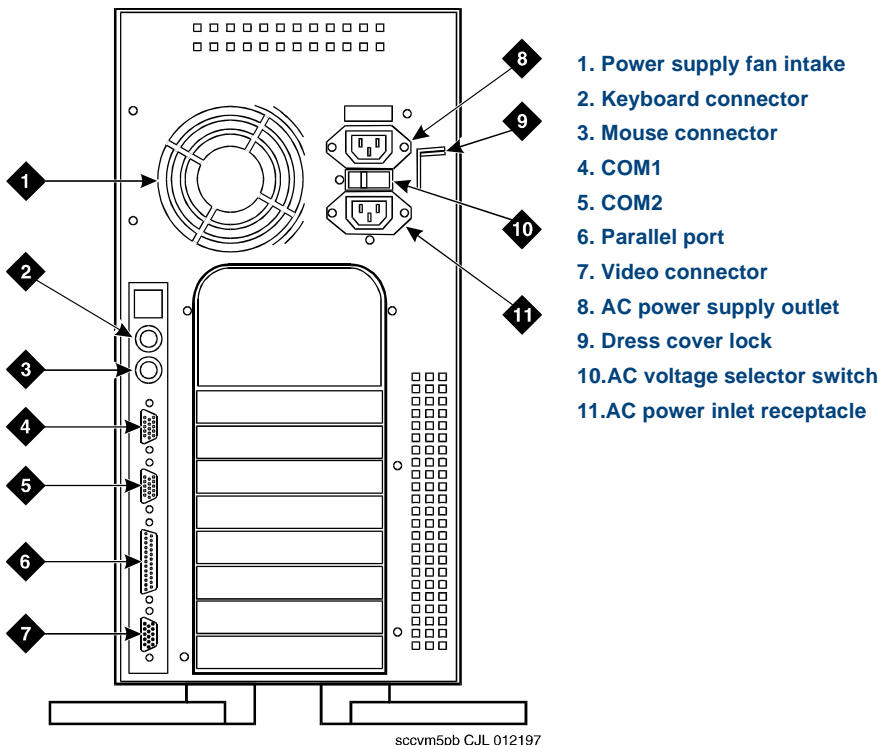
### Circuit Cards

Circuit cards are placed in the MAP/5P in locations called slots. Slots are numbered PCI 1 through PCI 3 and ISA 2 through ISA 6 from the top of the MAP/5P to the bottom. Slots are accessible from the back of the MAP/5P ([Figure 105 on page 355](#)).

The SCSI controller circuit card is assigned to a fixed slot in the MAP/5P, PCI Slot 1.



Figure 105. Back View of the MAP/5P



**Operating Hardware** Operating hardware is placed in the MAP/5P in locations called bays. Bays are numbered 1 through 7.

Bays 1 through 5 are accessible from the front of the MAP/5P ([Figure 106 on page 357](#)).

Bays 6 and 7 are accessible only after you remove the dress cover ([Figure 107 on page 358](#)).

The following bay assignments are fixed in the MAP/5P:

- Bay 1 — Cartridge tape drive
- Bay 2 — Empty
- Bay 3 — Empty
- Bay 4 — Diskette drive
- Bay 5 — Hard Disk Drive 1 (if provided)
- Bay 6 — Hard Disk Drive 0
- Bay 7 — Empty

Figure 106. Front View of the MAP/5P

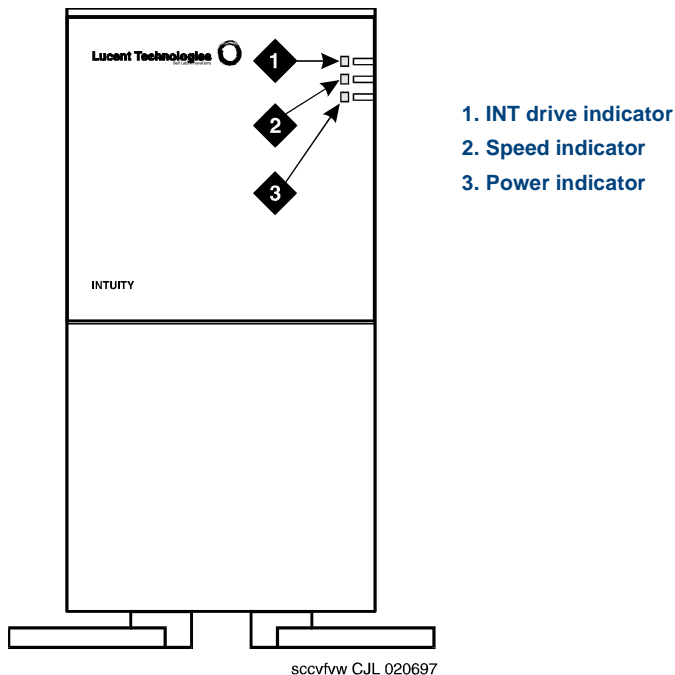
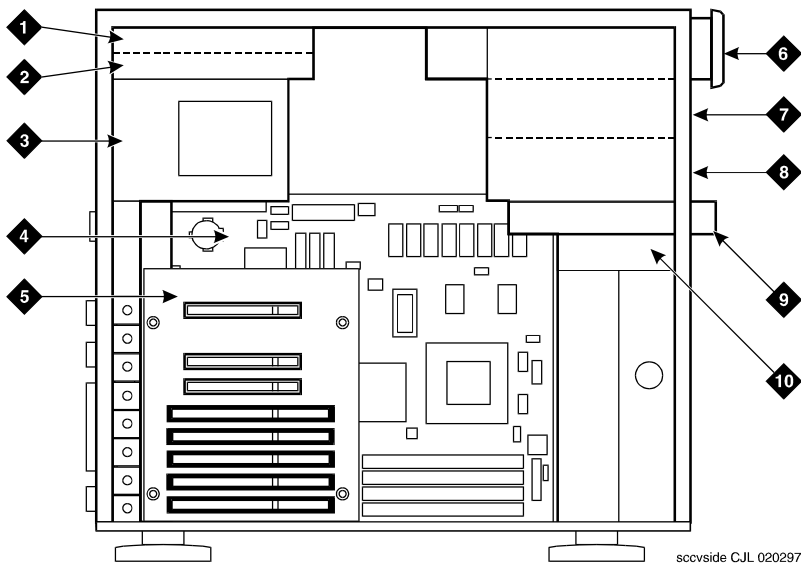


Figure 107. MAP/5P Internal Layout



1. Bay 6 - Hard Disk Drive 0

2. Bay 7 - Empty

3. Power supply

4. Motherboard

5. Riser card

6. Bay 1 - Cartridge tape drive

7. Bay 2 - Empty

8. Bay 3 - Empty

9. Bay 4 - Diskette drive

10. Bay 5 - Hard Disk Drive 1 (if used)

## Hardware Resource Allocator Operation

Operation of the Hardware Resource Allocator includes the following tasks:

- [Adding Hardware to an Existing Configuration on page 359](#)
- [Removing Hardware from an Existing Configuration on page 363](#)
- [Specifying a New Configuration on page 368](#)
- [Saving a Configuration on page 373](#)
- [Viewing a Configuration on page 375](#)
- [Comparing a Configuration on page 379](#)
- [Presetting Hardware Resources on page 379](#)

### Adding Hardware to an Existing Configuration

When you modify an existing configuration, you may have to change the current resource assignments:

- Differences in slot assignments or serial/parallel port assignments *will not* require switch settings and/or driver software changes. However, you may need to rearrange the cards and/or cables to fit the new configuration output.

- Differences in INTR, DMAC, IOADDR, or RAMADDR assignments *will* in most cases require you to change switch settings and reinstall driver software for the affected cards.

To add hardware to an existing configuration, do the following:

### 1 Enter **get\_config**

The system displays the following message:

```
This program retrieves the /vs/data/confData file for a
given VIS machine from floppy disk. This file represents the
configuration of the machine and is required in order for the
/vs/bin/util/configure program to upgrade the machine with
new or additional hardware.
```

```
Please insert the "CONFIGURATION DATA" floppy for this
machine.
```

```
Press <Enter> when ready to proceed...
```

### 2 Insert the diskette labeled "Configuration Data" into the diskette drive.

### 3 Press **ENTER**.

The system displays the following message:

```
Working.../vs/data/confData retrieved
```

```
UNIX_SV#
```

4 Make a hard copy of the current configuration by printing the output of the **show\_config** command. See [Viewing a Configuration on page 375](#) for an explanation of the **show\_config** command.

5 Enter **configure**

The system displays the following message:

```
A configuration file, confData, exists.  
Do you wish to make changes to the previous configuration  
[y|n]?
```

6 Enter **y**



The system displays the following message:

```
Reading old configuration. Please wait...  
  
Successfully read MAP/5P Platform with PCI backplane and P5  
200 MHz CPU.  
  
Adding device ADAPSCSI  
Adding device VIDEO  
Adding device SCSIHD  
Adding device SCSITAPE  
  
Press any key to continue...
```

**Note:** This message is dependent on your system configuration and may look different than the one shown.

7 Press **ENTER**.

The system displays the Device Menu screen ([Figure 112 on page 371](#)).

- 8 Select the hardware item you want to add to the configuration file. Use the  up arrow and  down arrow keys to move through the screen.

- 9 Press **ENTER**.

- 10 If the system displays the following message:

```
Enter quantity to add (X max in multiples of 1):
```

Enter the quantity of this hardware item you want to install in your system.

If the system does not display this message, continue with [step 11](#).

- 11 If the system displays the following message:

```
Do you wish to preset hardware options for device  
XXXX [y|n]?
```

Enter **n**

If the system does not display this message, continue with [step 12](#).

- 12 When the system displays the following message:

```
1 XXXX device(s) added.
```

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

Press **ENTER**.

The system displays the Device Menu screen ([Figure 112 on page 371](#)).



- 13 When you are done adding hardware to the configuration press **d**

The system displays the following message:

```
Configuration complete and successful.  
Configuration data written to file: /vs/data/confData.
```

- 14 View the new configuration file to make sure you have added the correct hardware. See [Viewing a Configuration on page 375](#).
- 15 Make the necessary adjustments on the installed hardware based on the new configuration.
- 16 Save the new configuration. See [Saving a Configuration on page 373](#).
- 17 Enter **hconchk**

The system displays the following message:

```
hconchk: The hardware configuration check is complete.
```

## Removing Hardware from an Existing Configuration

When you modify an existing configuration, you may have to change the current resource assignments:

- Differences in slot assignments or serial/parallel port assignments *will not* require switch settings and/or driver software changes. However, you may need to rearrange the cards and/or cables to fit the new configuration output.

- Differences in INTR, DMAC, IOADDR, or RAMADDR assignments *will* in most cases require you to change switch settings and reinstall driver software for the affected cards.

To remove hardware from an existing configuration, do the following:

### 1 Enter **get\_config**

The system displays the following message:

```
This program retrieves the /vs/data/confData file for a
given VIS machine from floppy disk. This file represents the
configuration of the machine and is required in order for the
/vs/bin/util/configure program to upgrade the machine with
new or additional hardware.
```

```
Please insert the "CONFIGURATION DATA" floppy for this
machine.
```

```
Press <Enter> when ready to proceed...
```

### 2 Insert the diskette labelled "Configuration Data" into the diskette drive.

### 3 Press **ENTER**.

The system displays the following message:

```
Working.../vs/data/confData retrieved
```

```
UNIX_SV#
```

4 Make a hard copy of the current configuration by printing the output of the **show\_config** command. See [Viewing a Configuration on page 375](#) for an explanation of the **show\_config** command.

5 Enter **configure**

The system displays the following message:

```
A configuration file, confData, exists.  
Do you wish to make changes to the previous configuration  
[y|n]?
```

6 Enter **y**

The system displays the following message:

```
Reading old configuration. Please wait...  
  
Successfully read MAP/5P Platform with PCI backplane and P5  
200 MHz CPU.  
  
Adding device ADAPSCSI  
Adding device VIDEO  
Adding device SCSIHD  
Adding device SCSITAPE  
  
Press any key to continue...
```

**Note:** This message is dependent on your system configuration and may look different than the one shown.

7 Press **ENTER**.

The system displays the Device Menu screen ([Figure 112 on page 371](#)).

**8** Press **r**

The system displays the Currently Selected Devices screen ([Figure 108 on page 366](#)).

**Figure 108. Currently Selected Devices Screen**

```

                                Currently Selected Devices
1  SCSI_TAPE_DRIVE             5  SCSI_TAPE_DRIVE             9  SP
2  VIDEO_CONTROLLER           6  16MB_SIMM                   10 SP
3  RMB_M                      7  16MB_SIMM                   11 IVP6
4  SCSI_DISK                  8  COMPANION                   12 ETHERNET

Select Device to remove, q to quit
```

**Note:** This screen is dependent on your system configuration and may look different than the one shown.

**9** Place the cursor on the hardware item you want to remove from the configuration file. Use the **▲** up arrow and **▼** down arrow keys to move through the screen.

**10** Press **ENTER**.

The system displays the following message:

```
You have currently selected 1 XX device(s)
How many do you wish to remove?
```

- 11 Enter the quantity of the hardware item you want to remove from your system.

The system displays the Currently Selected Devices screen ([Figure 108 on page 366](#)).

- 12 If you want to remove additional hardware from your system, repeat [step 9](#) through [step 11](#).

If you are done removing hardware from your system press **q**

The system displays the Device Menu screen ([Figure 112 on page 371](#)).

- 13 Press **d**

The system displays the following message:

```
Configuration complete and successful.
Configuration data written to file: /vs/data/confData.
```

- 14 View the new configuration file to make sure you have removed the correct hardware. See [Viewing a Configuration on page 375](#).
- 15 Make the necessary adjustments on the installed hardware based on the new configuration.
- 16 Save the new configuration. See [Saving a Configuration on page 373](#).

**17** Enter **hconchk**

The system displays the following message:

```
hconchk: The hardware configuration check is complete.
```

## Specifying a New Configuration

To specify a new configuration, do the following:

**1** Enter **configure new**

The system displays the Platform Menu screen ([Figure 109 on page 368](#)).

**Figure 109. Platform Menu Screen**

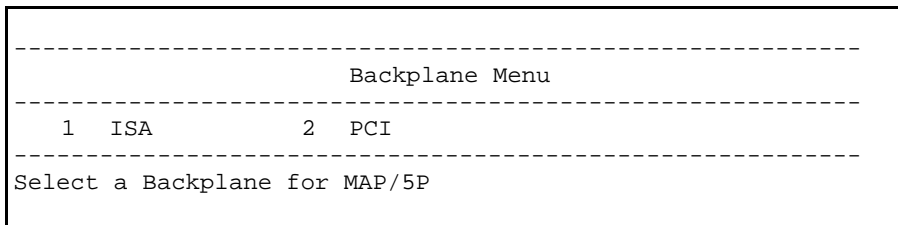
```
-----  
Platform Menu  
-----  
1  MAP/5P           3  MAP/100P  
2  MAP/40P         4  MAP/100C  
-----  
Select a Platform
```

**2** Place the cursor on **MAP/5P**.

**3** Press **ENTER**.

The system displays the Backplane Menu screen ([Figure 110 on page 369](#)).

**Figure 110. Backplane Menu screen**

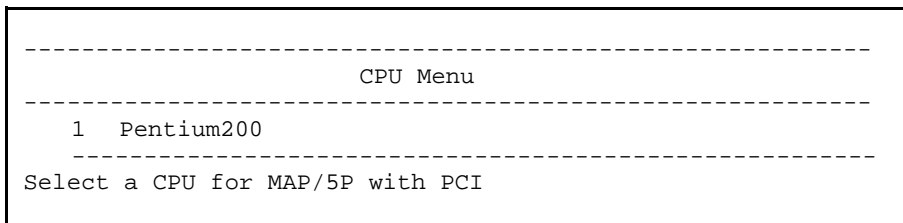


**Note:** This menu screen is dependent on your system configuration and may look different than the one shown.

- 4 Place the cursor on appropriate backplane type.
- 5 Press **ENTER**.

The system displays the CPU Menu screen ([Figure 111 on page 370](#)).

Figure 111. CPU Menu screen



**Note:** This menu screen is dependent on your system configuration and may look different than the one shown.

- 6 Place the cursor on the appropriate CPU type.
- 7 Press **ENTER**.

The system displays the Device Menu screen ([Figure 112 on page 371](#)).





Figure 112. Device Menu screen

## Device Menu

1	SCSI_TAPE_DRIVE	17	T1	33	EICON
2	SCSI_DISK	18	T1_AYC21	34	8_PORT_SERIAL_EXP
3	PCI_SCSI	19	E1_AYC21	35	MEGA_8_PORT_SERIAL
4	EXT_SCSI	20	SP	36	REMOTE_TERMINAL
5	16MB_SIMM	21	MEGASP	37	EXTERNAL_MODEM
6	32MB_SIMM	22	SSP	38	SERIAL_PRINTER
7	VIDEO_CONTROLLER	23	COMPANION	39	SERIAL_MOUSE
8	RMB_M	24	TOKEN_RING	40	PS2_MOUSE
9	RMB_SP	25	CLEO_PCXL	41	PARALLEL_PRINTER
10	IVP6	26	FIFO_SIB	42	FAX
11	IVC6	27	ETHERNET	43	DCP
12	IVP6IU	28	PCI_LAN	44	DCP_NO_DMA
13	IVP6IA	29	IPCI	45	COLOR_CONSOLE
14	IVP6ID	30	PROTOCOL_CONV	46	VOICE_WORKSTATION
15	IVC6IA	31	ACCX		
16	NGTR6	32	GPSYNC		

Select Device #, r to remove, s to show, d when done, or q to quit

**Note:** This menu screen is dependent on your system configuration and may look different than the one shown.

8 Place the cursor on the hardware item you want to add to the configuration file. Use the  up arrow and  down arrow keys to move through the screen.

9 Press **ENTER**.

10 If the system displays the following message:

```
Enter quantity to add (X max in multiples of 1):
```

Enter the quantity of this hardware item you want to install in your system.

If the system does not display this message, continue with [step 11](#).

11 If the system displays the following message:

```
Do you wish to preset hardware options for device  
XXXX [y|n]?
```

Enter **n**

If the system does not display this message, continue with [step 12](#).

12 When the system displays the following message:

```
1 XXXX device(s) added.
```

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

Press **ENTER**.

The system displays the Device Menu screen ([Figure 112 on page 371](#)).

- 13 When you are done adding hardware to the configuration press **d**

The system displays the following message:

```
Configuration complete and successful.  
Configuration data written to file: /vs/data/confData.
```

- 14 View the new configuration file to make sure you have added the correct hardware. See [Viewing a Configuration on page 375](#).
- 15 Make the necessary adjustments on the installed hardware based on the new configuration.
- 16 Save the new configuration. See [Saving a Configuration on page 373](#).
- 17 Enter **hconchk**

The system displays the following message:

```
hconchk: The hardware configuration check is complete.
```

## Saving a Configuration

The system configuration should be saved to diskette whenever a change has been made. To save the system configuration, do the following:

- 1 Enter **save\_config**

The system displays the following message:

```
This program copies the /vs/data/confData file for a given
VIS machine to floppy disk. This file represents the
configuration of the machine. The floppy must be kept in a
safe place. It will be required as input for the
/vs/bin/util/configure program in the event of a hardware
upgrade to this machine.
```

```
Please insert the "CONFIGURATION DATA" floppy for this
machine.
```

```
Press <Enter> when ready to proceed...
```

- 2 Insert the diskette labeled "Configuration Data" into the diskette drive.
- 3 Press **ENTER**.

The system displays the following message:

```
Working.../vs/data/confData
/vs/data/confData saved

UNIX_SV#
```

- 4 Remove the diskette labeled "Configuration Data" from the diskette drive.

 **CAUTION:**

Be sure you put the diskette in a safe place.

## Viewing a Configuration

The `show_config` command allows you to view:

- Successful configurations
- Unsuccessful configurations
- Dated configurations

### Viewing a Successful Configuration

To view a successful system configuration, do the following:

**1** Enter `show_config`

The system displays the following message:

```
Using /vs/data/confData as configuration data input file.  
Output file is ./configuration
```

**2** If the system displays the following message:

```
A "./configuration" file already exists  
Overwrite? [y|n]
```

Enter **y**

**3** The system displays the following message:



```
Configuration has been written to the "./configuration"  
file.
```

**4** Enter `vi ./configuration`

The system displays the System Configuration Table screen ([Figure 113 on page 376](#)).

**Figure 113. Partial System Configuration Table Screen**

SYSTEM CONFIGURATION TABLE							
PLATFORM							
MAP/5P							
Description: MAP/5P platform w/ PCI backplane and Pentium 200MHz CPU							
Backplane: PCI							
CPU: Pentium 200							
DEVICES							
Device Name: VIDEO_CONTROLLER							
Device Description: [S]VGA Video Card							
LOCATION	TDM?	INTR	IOADDR	RAMADDR	DMA	PORT	SCSI ID
-----	----	----	-----	-----	---	-----	-----
ISA11			3b0	a0000			
Device Name: RMB_M							
Device Description: Remote Maintenance Board with modem interface							
LOCATION	TDM?	INTR	IOADDR	RAMADDR	DMA	PORT	SCSI ID
-----	----	----	-----	-----	---	-----	-----
ISA9		3	180	d1000			

- 5 Use the  up arrow and  down arrow keys to move through the screen.

### Viewing an Unsuccessful Configuration

To view an unsuccessful system configuration, do the following:

- 1 Enter **show\_config fail**



The system displays the following message:

```
Using /vs/data/fail_data as configuration data input file.  
Output file is ./failed_config
```

```
Configuration has been written to the "./failed_config"
```

- 2 Enter **vi ./failed\_config**

The system displays a System Configuration Table screen similar to the one shown in [Figure 113 on page 376](#). Asterisks (\*) next to any field value indicate an unresolved resource conflict.

- 3 Use the  up arrow and  down arrow keys to move through the screen.

### Viewing a Dated Configuration

- Show a dated configuration

You can also use **show\_config** to view a previous configuration file saved by the configure program. To do this, type the command with a file name argument (for example, **show\_config /vs/data/conf\_MMDDYY**). This command line expands the contents of the **conf\_MMDDYY** file (if it

exists) and prints its output to the screen. The program prompts you for an output file name so as to specify the output to this file rather than to the **./configuration** file.

To view a dated system configuration, do the following:

**1** Enter **show\_config /vs/data/conf\_MMDDYY**

where *MMDDYY* is the month, day, and year of the configuration you want to view.

The system displays the following message:

```
Using /vs/data/conf_MMDDYY as configuration data input file.
```

Please specify full path name of output file for this configuration:

**2** Enter **pathname/fn**

where *pathname* is the file location and *fn* is the filename.

The system displays the following message:



```
Configuration has been written to the "pathname/fn" file.
```

**3** Enter **vi pathname/fn**

where *pathname* is the file location and *fn* is the filename from the previous step.

The system displays a System Configuration Table screen similar to the one shown in [Figure 113 on page 376](#).



- 4 Use the  up arrow and  down arrow keys to move through the screen.

## Comparing a Configuration

The hardware configuration checker verifies that the device configuration information associated with the hardware resource allocator is consistent with the actual system device configuration. To verify the configuration, do the following:

- 1 Enter **hconchk**

The system displays the following message:

```
hconchk: The hardware configuration check is complete.
```

If you receive any other error message or warning see “Alarm and Log Messages,” in the *Intuity CONVERSANT System Reference*, 585-313-205.

## Presetting Hardware Resources

The preset option allows you to preset the resources used for a particular card. This makes the card compatible and interchangeable with any of your application setups. The purpose of this option is to give you the flexibility to use your hardware with more than one application. You may want to preset

certain resources of a single new device being selected for a configuration (for example, to force the configure program to select interrupt 6 for a particular device being specified).

If you have preset hardware resources, the Intuity CONVERSANT Hardware Resource Allocator makes one attempt at configuration. If this attempt is successful, the program terminates normally. A second attempt is not performed.

Use the following procedure to preset resources:

- 1 When you specify a single device, the system displays the following prompt:

```
Do you wish to preset any hardware options of <device name>?  
[y|(n)]
```

- 2 Press **y**

The system asks you to select a value for the following parameters (where applicable):

- ~ IRQ
- ~ I/O address
- ~ RAM address
- ~ DMA address

When you have entered all applicable presets, the system displays the following message:

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

**3** Press **ENTER**.

The system displays the following message:

```
1 XXX device(s) added.
```

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

**4** Press **ENTER**.

The system displays the Device Menu screen ([Figure 112 on page 371](#)).

**5** Enter **hconchk**

The system displays the following message:

```
hconchk: The hardware configuration check is complete.
```

## Configuration Device Data

The **deviceData** file stores the devices and the attributes for creating a configuration. In most cases, you will not work with this file. Your only option is the **show\_devices** command. This command displays and prints to a file all devices and their attributes as represented in the **deviceData** file.

 **CAUTION:**

Do not alter this file.

## The `show_devices` Command

The **show\_devices** command uncompresses the database of devices and their attributes contained in the **deviceData** file and displays the information on the screen. At the same time, it creates a **.devices** file so that you can send this information to a printer.

If a **.devices** file already exists, you are prompted as to whether it is acceptable to overwrite the existing file.

See *Intuity CONVERSANT Version 7.0 Administration*, 585-313-501 for information on the **show\_devices** command.

# B Component Ordering Numbers

## Overview

This appendix provides the ordering numbers for replacement components used in the MAP/5P.

## Component Ordering Numbers

[Table 13 on page 384](#) lists the component ordering numbers for available replacement components associated with the MAP/5P.

**Table 13. Component Ordering Numbers**

<b>Basic Component Description</b>	<b>Order Number</b>
Adapter, electrical, DCE female	407345776
Adapter, electrical, DCE male (wyse trm, prntrs)	407050111
Adapter, electrical, DTE female	407345768
Adapter, electrical, DTE male (modems)	407050095
Adapter, SCSI, 68-50 pin	407714526
Adapter, SPM port connector	105012645
Cable assembly, ACCX	407027564
Cable assembly, ACCX	601436124
Cable assembly, ACCX/DCP	601447170
Cable assembly, ACCX/DCP	601447188

*1 of 4*

Table 13. Component Ordering Numbers

Basic Component Description	Order Number
Cable assembly, diskette drive	407714559
Cable assembly, port/line	601447014
Cable assembly, port/line	601447162
Cable assembly, SCSI, 68-pin	407714542
Cable assembly, telephone cord, 3-ft	601448632
Circuit card, fax, TR114+14L (US & Canada)	407612126
Circuit card, SCSI controller	407711639
Circuit card, Tip/Ring (AYC10)	106406580
Circuit card, Tip/Ring, (AYC30)	107224586
Circuit card, remote maintenance	107725467
Circuit card, Turbo Token Ring	601876188
Cord, 6-pin modular, 14-ft	102937604
Cord, AC power, United States	407714773
Cord, AC power, Australia, 8-ft	407051630
<i>2 of 4</i>	

Table 13. Component Ordering Numbers

Basic Component Description	Order Number
Cord, AC power, Germany, 6-ft	407051648
Cord, AC power, India, 8-ft	407406735
Cord, AC power, United Kingdom, 6-ft	406999243
Cord, power, monitor (PC style)	407714781
Cord, telephone, 25-ft	103623195
Cord, telephone, DW8A-SE, 25 ft	103848800
Cover, dress	407714609
Diskette drive, 1.44-Mbyte	407714765
Disk drive, hard, SCSI, 2.0-Gbyte	407711647
Door, front	407714617
Fan, card cage	407714807
Fan, CPU	407714815
Hardware, SID, Nor Telcom (Meridian)	407024702
Hardware, SID, Nor Telcom (SL-1)	407024694
<b>3 of 4</b>	



Table 13. Component Ordering Numbers

Basic Component Description	Order Number
Hardware, SID, Mitel	407024728
Hardware, SID, NEAX	407024710
Hardware, SID, Rolm	407024686
IC, 32-Mbyte SIMM	407711654
Interface unit, AYC22 cable	107221467
Interface unit, AYC22 cable	407020510
Keyboard	407681907
Monitor, color, VGA	406504571
Motherboard, 0-Mbytes memory	407711548
Power supply, AC	407711662
Riser card	407711621
Software, diagnostics diskette	407714799
Tape drive, SCSI streaming, 2-Gbyte	407329937

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# C How to Build a System Using This Book

## Overview

This appendix provides the sequence of operations for building an Intuity CONVERSANT system.

## Checklist for Building a System

The following checklist ([Table 14 on page 389](#)) assumes that you are starting with a MAP/5P shell that has only the power supply, motherboard, and riser card.

If your system does not include a power supply, motherboard, or riser card, see [Chapter 4, Replacing Other Components](#), for installation procedures for these components.

**Table 14. Checklist for Building a System**

Task	Description	See	✓
1	Acquire all of the components necessary to build your system.	<a href="#">Component Ordering Numbers on page 384</a> in <a href="#">Appendix , Component Ordering Numbers</a>	
2	Determine the slot and bay locations for the equipment.	<a href="#">System Configuration on page 352</a> in <a href="#">Appendix A, System Configuration</a>	
3	Install the hard disk drive(s).	<a href="#">Replacing a Hard Disk Drive on page 100</a> in <a href="#">Chapter 3, Replacing a Hard Disk Drive</a>	
4	Install the tape drive.	<a href="#">Installing a Cartridge Tape Drive on page 143</a> in <a href="#">Chapter 4, Replacing Other Components</a>	
			<b>1 of 2</b>

Table 14. Checklist for Building a System

Task	Description	See	✓
5	Install the diskette drive.	<a href="#">Installing the Diskette Drive on page 152 in Chapter 4, Replacing Other Components</a>	
6	Install the circuit cards.	<a href="#">Settings for Optional Circuit Card on page 19 in Chapter 2, Installing or Replacing Circuit Cards</a>	
7	Apply power to the unit.	<a href="#">Restoring Power to the MAP/5P on page 11 in Chapter 1, Getting Inside the Computer</a>	
8	Install the base system software.	<a href="#">Installing Base System Software on page 198 in Chapter 5, Installing Base System Software</a>	
9	Install the Intuity CONVERSANT system software.	<a href="#">Installing the Base Software Set on page 237 in Chapter 6, Installing the Intuity CONVERSANT System Software</a>	
10	Install the feature software.	<a href="#">Chapter 7, Installing the Optional Feature System Software</a>	

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# D Disaster Recovery Checklists

## Overview

This appendix provides a general task checklist for disaster recovery. Use this checklist as a guide to the necessary procedures for completing a disaster recovery. The following checklists are included:

- [Checklist for Software Reloading on a Nonmirrored Intuity CONVERSANT System with Existing Hard Disk Drives on page 392](#)
- [Checklist for a Intuity CONVERSANT System with All New Hard Disk Drives on page 393](#)
- [Checklist for a Nonmirrored Intuity CONVERSANT System with a New Hard Disk Drive 0 and an Existing Hard Disk Drive 1 on page 395](#)
- [Checklist for a Nonmirrored Intuity CONVERSANT System with an Existing Hard Disk Drive 0 and a New Hard Disk Drive 1 on page 396](#)
- [Checklist for a Mirrored Intuity CONVERSANT System with a New Hard Disk Drive 0 and an Existing Hard Disk Drive 1 on page 398](#)
- [Checklist for a Mirrored Intuity CONVERSANT System with an Existing Hard Disk Drive 0 and a New Hard Disk Drive 1 on page 400](#)

# Disaster Recovery Checklists

## Checklist for Software Reloading on a Nonmirrored Intuity CONVERSANT System with Existing Hard Disk Drives

Complete the procedures in [Table 15 on page 392](#) when your Intuity CONVERSANT system experiences a software disaster. Do not use this checklist if hard disk drives are being replaced.

**Table 15. Checklist for Software Reloading for Nonmirrored Intuity CONVERSANT Systems with Existing Hard Disk Drives**

Task	Description	See	✓
1	Locate the most recent <b>mkimage</b> backup tape. You will also need to use any <b>spres</b> backup tape which has been created.		
2	Shutdown the Intuity CONVERSANT system.	“Shut Down the System,” in “Common System Procedures,” in the <i>Intuity CONVERSANT System Reference</i> , 585-313-205.	
			<b>1 of 2</b>

**Table 15. Checklist for Software Reloading for Nonmirrored Intuity CONVERSANT Systems with Existing Hard Disk Drives**

Task	Description	See	✓
3	Leave all hard disks connected to the SCSI bus.		
4	Restore the system using the <b>mkimage</b> backup tape.	“Restore the System,” in “Common System Procedures,” in the <i>Intuity CONVERSANT System Reference</i> , 585-313-205.	
5	Restore any speech files using the <b>spres</b> backup tape.	<i>Intuity CONVERSANT Version 7 Speech Development, Processing, and Recognition</i> , 535-313-201.	
			<i>2 of 2</i>

## Checklist for a Intuity CONVERSANT System with All New Hard Disk Drives

Complete the procedures in this checklist ([Table 16 on page 394](#)) when you are replacing both hard disk drives on your Intuity CONVERSANT system. There are no provisions in this checklist for recovering existing file systems. Therefore, do not use this checklist if either hard disk drive has been previously used in your Intuity CONVERSANT system.

Table 16. Checklist for Intuity CONVERSANT Systems with New Hard Disk Drives 0 and 1

Task	Description	See	✓
1	Locate the most recent <b>mkimage</b> backup tape. You will also need to use any <b>spres</b> backup tape which has been created.		
2	Replace the hard disk(s).	<a href="#">Replacing a Hard Disk Drive on page 100</a> , in <a href="#">Chapter 3, Replacing a Hard Disk Drive</a> .	
3	Restore the system using the <b>mkimage</b> backup tape.	“Restore the System,” in “Common System Procedures,” in the <i>Intuity CONVERSANT System Reference</i> , 585-313-205.	
4	Restore any speech files using the <b>spres</b> backup tape.	<i>Intuity CONVERSANT Version 7 Speech Development, Processing, and Recognition</i> , 353-313-201.	



## Checklist for a Nonmirrored Intuity CONVERSANT System with a New Hard Disk Drive 0 and an Existing Hard Disk Drive 1

Complete the procedures in this checklist ([Table 17 on page 395](#)) on a two disk nonmirrored Intuity CONVERSANT system in which Hard Disk Drive 0 has failed. Do not use this checklist if Hard Disk Drive 1 has also failed.

**Table 17. Checklist for Nonmirrored Lucent Intuity Systems with a New Hard Disk Drive 0 and an Existing Hard Disk Drive 1**

Task	Description	See	✓
1	Locate the most recent <b>mkimage</b> backup tape. You will also need to use any <b>spres</b> backup tape which has been created.		
2	Replace the hard disk drive.	<a href="#">Replacing a Hard Disk Drive on page 100</a> , in <a href="#">Chapter 3, Replacing a Hard Disk Drive</a>	
			<i>1 of 2</i>

**Table 17. Checklist for Nonmirrored Lucent Intuity Systems with a New Hard Disk Drive 0 and an Existing Hard Disk Drive 1**

Task	Description	See	✓
3	Restore the system using the <b>mkimage</b> backup tape.	“Restore the System,” in “Common System Procedures,” in the <i>Intuity CONVERSANT System Reference</i> , 585-313-205.	
4	Restore any speech files using the <b>spress</b> backup tape.	<i>Intuity CONVERSANT Version 7.0 Speech Development, Processing, and Recognition</i> , 353-313-201.	
			<i>2 of 2</i>

## Checklist for a Nonmirrored Intuity CONVERSANT System with an Existing Hard Disk Drive 0 and a New Hard Disk Drive 1

Complete the procedures in this checklist ([Table 18 on page 397](#)) on a two disk nonmirrored Intuity CONVERSANT system in which Hard Disk Drive 1 has failed. Do not use this checklist if Hard Disk Drive 0 has also failed.

**Table 18. Checklist for Nonmirrored Intuity CONVERSANT Systems with an Existing Hard Disk Drive 0 and a New Hard Disk Drive 1**

Task	Description	See	✓
1	Locate the most recent <b>mkimage</b> backup tape. You will also need to use any <b>spres</b> backup tape which has been created.		
2	Replace the hard disk drive.	<a href="#">Replacing a Hard Disk Drive on page 100, in Chapter 3, Replacing a Hard Disk Drive</a>	
3	Remove, for replacement, the old Hard Disk Drive 1 using the VERITAS screens.	<a href="#">Recovering from a Hard Disk Drive 1 Failure (Nonmirrored System) on page 94, in Chapter 3, Replacing a Hard Disk Drive</a>	
4	Add the new Hard Disk Drive 1, using the VERITAS screens.	<a href="#">Adding a Hard Disk Drive to a System for Speech Storage on page 120, in Chapter 3, Replacing a Hard Disk Drive</a>	
5	Initialize the new Hard Disk Drive 1 as a speech drive.	<a href="#">Adding a Hard Disk Drive to a System for Speech Storage on page 120, in Chapter 3, Replacing a Hard Disk Drive</a>	

1 of 2

**Table 18. Checklist for Nonmirrored Intuity CONVERSANT Systems with an Existing Hard Disk Drive 0 and a New Hard Disk Drive 1**

Task	Description	See	✓
6	Exit the VERITAS screens.	<a href="#">Adding a Hard Disk Drive to a System for Speech Storage on page 120</a> , in <a href="#">Chapter 3, Replacing a Hard Disk Drive</a>	
7	Restore any speech files using the <b>spress</b> backup tape.	<i>Intuity CONVERSANT Version 7.0 Speech Development, Processing, and Recognition</i> , 353-313-201	
			<i>2 of 2</i>

## Checklist for a Mirrored Intuity CONVERSANT System with a New Hard Disk Drive 0 and an Existing Hard Disk Drive 1

Complete the procedures in this checklist ([Table 19 on page 399](#)) on a two disk mirrored Intuity CONVERSANT system in which Hard Disk Drive 0 has failed. Do not use this checklist if Hard Disk Drive 1 has also failed.

**Table 19. Checklist for Mirrored Intuity CONVERSANT Systems with a New Hard Disk Drive 0 and an Existing Hard Disk Drive 1**

Task	Description	See	✓
1	Locate the diskette labeled "VERITAS Boot Floppy 1 of 1."		
2	Replace the hard disk drive.	<a href="#">Replacing Hard Disk Drive 0 on page 102</a> , in <a href="#">Chapter 3, Replacing a Hard Disk Drive</a>	
3	Reboot the system with the diskette labeled "VERITAS Boot Floppy 1 of 1" in the diskette drive.	<a href="#">Recovering from a Hard Disk Drive 0 Failure (Mirrored System) on page 87</a> , in <a href="#">Chapter 3, Replacing a Hard Disk Drive</a>	
4	Remove, for replacement, the old Hard Disk Drive 0 using the VERITAS screens.	<a href="#">Recovering from a Hard Disk Drive 0 Failure (Mirrored System) on page 87</a> , in <a href="#">Chapter 3, Replacing a Hard Disk Drive</a>	
5	Replace the old Hard Disk Drive 0 with the new Hard Disk Drive 0, using the VERITAS screens.	<a href="#">Recovering from a Hard Disk Drive 0 Failure (Mirrored System) on page 87</a> , in <a href="#">Chapter 3, Replacing a Hard Disk Drive</a>	
			<b>1 of 2</b>

**Table 19. Checklist for Mirrored Intuity CONVERSANT Systems with a New Hard Disk Drive 0 and an Existing Hard Disk Drive 1**

Task	Description	See	✓
6	Create a partition on Hard Disk Drive 0 using the VERITAS screens.	<a href="#">Recovering from a Hard Disk Drive 0 Failure (Mirrored System) on page 87</a> , in <a href="#">Chapter 3, Replacing a Hard Disk Drive</a>	
7	Exit the VERITAS screens.	<a href="#">Recovering from a Hard Disk Drive 0 Failure (Mirrored System) on page 87</a> , in <a href="#">Chapter 3, Replacing a Hard Disk Drive</a>	
8	Remove the diskette labeled "VERITAS Boot Floppy 1 of 1" from the diskette drive.		
			<i>2 of 2</i>

## Checklist for a Mirrored Intuity CONVERSANT System with an Existing Hard Disk Drive 0 and a New Hard Disk Drive 1

Complete the procedures in this checklist ([Table 20 on page 401](#)) on a two disk mirrored Intuity CONVERSANT system in which Hard Disk Drive 1 has failed. Do not use this checklist if Hard Disk Drive 0 has also failed.

**Table 20. Checklist for Mirrored Intuity CONVERSANT Systems with an Existing Hard Disk Drive 0 and a New Hard Disk Drive 1**

Task	Description	See	✓
1	Replace the hard disk drive.	<a href="#">Replacing Hard Disk Drive 1 on page 106, in Chapter 3, Replacing a Hard Disk Drive</a>	
2	Remove, for replacement, the old Hard Disk Drive 1 using the VERITAS screens.	<a href="#">Recovering from a Hard Disk Drive 1 Failure (Mirrored System) on page 96, in Chapter 3, Replacing a Hard Disk Drive</a>	
3	Replace the old Hard Disk Drive 1 with the new Hard Disk Drive 1, using the VERITAS screens.	<a href="#">Recovering from a Hard Disk Drive 0 Failure (Mirrored System) on page 87, in Chapter 3, Replacing a Hard Disk Drive</a>	
4	Create a partition on Hard Disk Drive 1 using the VERITAS screens.	<a href="#">Recovering from a Hard Disk Drive 0 Failure (Mirrored System) on page 87, in Chapter 3, Replacing a Hard Disk Drive</a>	
5	Exit the VERITAS screens.	<a href="#">Recovering from a Hard Disk Drive 0 Failure (Mirrored System) on page 87, in Chapter 3, Replacing a Hard Disk Drive</a>	

# E MAP/5P Platform Alarms

## Overview

This appendix provides service technicians with information relating to the platform alarms generated by the MAP/5P.

These alarms are specific to the MAP/5P hardware platform. They appear on the console during a system reboot.

**Note:** The platform alarms are not generated by the Intuity CONVERSANT system and are not documented in the Intuity CONVERSANT alarm logs.



## Platform Alarms

[Table 21 on page 403](#) lists the alarms associated with the MAP/5P as well as possible repair actions.

**Table 21. Platform Alarms**

Alarm Message	Repair Action
CMOS Battery Error	Replace the battery. See <a href="#">Replacing a CMOS Battery on page 145</a> in <a href="#">Chapter 4, Replacing Other Components</a> .
CMOS Checksum Error	<ol style="list-style-type: none"> <li>1 Replace the battery. See <a href="#">Replacing a CMOS Battery on page 145</a> in <a href="#">Chapter 4, Replacing Other Components</a>.</li> <li>2 If <a href="#">step 1</a> does not work, run setup by pressing   or <b>b+a+^</b></li> </ol>
Display Card Mismatch	Run setup by pressing   or <b>b+a+^</b>
Diskette Drive Controller Error or Not Installed	Check the diskette cable connections See <a href="#">Replacing the Diskette Drive on page 148</a> in <a href="#">Chapter 4, Replacing Other Components</a> .

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Table 21. Platform Alarms

Alarm Message	Repair Action
Diskette Drive Error	Diskette may be defective. If the diskette is good, replace the diskette drive. See <a href="#">Replacing the Diskette Drive on page 148</a> in <a href="#">Chapter 4, Replacing Other Components</a> .
Diskette Drive A Type Mismatch	Run setup by pressing   or <b>b+a+^</b> and select the proper drive type.
Diskette Drive B Type Mismatch	Run setup by pressing   or <b>b+a+^</b> and select the proper drive type.
Equipment Configuration Error	Check the memory configuration.
Hard disk Controller Error	Run setup by pressing   or <b>b+a+^</b>
Hard disk 0 Error	Check all cable connections. Replace Hard Disk Drive 0. See <a href="#">Recovering from a Hard Disk Drive 0 Failure on page 86</a> in <a href="#">Chapter 3, Replacing a Hard Disk Drive</a> .
Hard disk 1 Error	Check all cable connections. Replace Hard Disk Drive 1. See <a href="#">Recovering from a Hard Disk Drive 1 Failure on page 93</a> in <a href="#">Chapter 3, Replacing a Hard Disk Drive</a> .
Keyboard Error or No Keyboard Connected	Check and connect the keyboard to the MAP/5P.

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Table 21. Platform Alarms

Alarm Message	Repair Action
Keyboard Interface Error	Replace the keyboard.
Memory Error at: MMMM:SSSS:OOO (W:XXXX, R:YYYY) where: M is Mbytes, S is Segment, O is Offset, and X/Y are write/read pattern	Replace the SIMMs. See <a href="#">Replacing Memory Modules on page 160</a> in <a href="#">Chapter 4, Replacing Other Components</a> .
CPU Clock Mismatch	<ol style="list-style-type: none"> <li>1 Run setup by pressing   or <b>b+a+^</b> and check the CPU clock setting.</li> <li>2 If the clock setting is correct, reboot the system.</li> <li>3 If the error persists, contact the remote maintenance service center.</li> </ol>
Onboard Serial Port 1 Conflict	Run setup by pressing   or <b>b+a+^</b> and disable the port.
Onboard Serial Port 2 Conflict	Run setup by pressing   or <b>b+a+^</b> and disable the port.

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Table 21. Platform Alarms

Alarm Message	Repair Action
Onboard Parallel Port Conflict	Run setup by pressing   or <b>b+a+^</b> and disable the port.
Pointing Device Error	Check the connections on the mouse.
Pointing Device Interface error	Replace the mouse.
Press   key to continue or b+a+^ for setup.	Press   or <b>b+a+^</b> to enter setup.
Real Time Clock Error	Replace the battery. See <a href="#">Replacing a CMOS Battery on page 145</a> in <a href="#">Chapter 4, Replacing Other Components</a> .

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## Numerics

### **23B+D**

23 bearer (communication) and 1 data (signaling) channel on a T1 PRI circuit card.

### **30B+D**

30 bearer (communication) and 1 data (signaling) channel (plus framing channel 0) on an E1 PRI circuit card.

### **3270 interface**

A link between one or more Intuity CONVERSANT machines and a host mainframe. In Intuity CONVERSANT system documentation, the 3270 interface specifically means the link between one or more system machines and an IBM host mainframe.

### **47B+D**

47 bearer (communication) and 1 data (signaling) channel on two T1 PRI circuit cards.

**4ESS®**

A large Lucent central office switch used to route calls through the telephone network.

**A****AC**

alternating current

**ACD**

[automatic call distributor](#)

**AD**

application dispatch

**AD-API**

application dispatch application programming interface

**adaptive differential pulse code modulation**

A means of encoding analog voice signals into digital signals by adaptively predicting future encoded voice signals. This adaptive modulation method reduces the number of bits required to encode voice. See also "[pulse code modulation](#)."

**adjunct products**

Products (for example, the Adjunct/Switch Application Interface) that the Intuity system administers via cut-through access to the inherent management capabilities of the product itself; this is in opposition to the ability of the Intuity CONVERSANT system to administer the switch directly.

**Adjunct/Switch Application Interface**

An optional feature package that provides an Integrated Services Digital Network-based interface between Lucent Technologies PBXs and adjunct processors.

**ADPCM**

[adaptive differential pulse code modulation](#)

**ADU**

[asynchronous data unit](#)

**advanced speech recognition**

A speech recognition ability that allows the system to understand WholeWord and FlexWord™ inputs from callers.

**affiliate**

A business organization that Lucent controls or with which Lucent is in partnership.

**AGL**

application generation language

**alarm relay unit**

A unit used in central office telecommunication arrangements that transmits warning indicators from telephone communications equipment (such as an Intuity CONVERSANT system) to audio.

**ALERT**

System alerter process

**alerter**

A system process that responds to patterns of events logged by the “logdaemon” process.



## American Standard Code for Information Interchange

A standard code for data representation that represents alphanumeric characters as binary numbers. The code includes 128 upper- and lowercase letters, numerals, and special characters. Each alphanumeric and special character has an ASCII code (binary) equivalent that is 1 byte long.

## analog

An analog signal, such as voice or music, that varies in a continuous manner. An analog signal may be contrasted with a digital signal, which represents only discrete states.

## ANI

[automatic number identification](#)

## announcement

A message the system plays to the caller to provide information. The caller is not asked to give a response. Compare to “[prompt](#).”

## API

Application programming interface

**application**

The automated transaction (interactions) among the caller, the voice response system, and any databases or host computers required for your business. See also [“application script.”](#)

**application administration**

The component of the Intuity CONVERSANT system that provides access to the applications currently available on your system and helps you to manage and administer them.

**application installation**

A two-step process in which the Intuity CONVERSANT system invokes the TSM script assembler for the specific application name and moves files to the appropriate directories.

**application script**

The computer program that controls the application (the transaction between the caller and the system). The Intuity CONVERSANT system provides several methods for creating application scripts, including Voice@Work, Script Builder, Transaction Assembler Script (TAS) language, and the Intuity Response Application Programming Interface (IRAPI).

**application verification**

A process in which the Intuity CONVERSANT system verifies that all the components needed by an application are complete.

**ASCII**

[American Standard Code for Information Interchange](#)

**ASI**

analog switch integration

**ASR**

[advanced speech recognition](#)

**asynchronous communication**

A method of data transmission in which bits or characters are sent at irregular intervals and spaced by start and stop bits rather than by time. Compare to "[synchronous communication](#)."

**asynchronous data unit**

An electronic communications device that allows computer systems to communicate over asynchronous lines more than 50 feet (15 m) in length.

**automatic call distributor**

That part of a telephone system that recognizes and answers incoming calls and completes these calls based on a set of instructions contained in a database. The ACD can send the call to an operator or group of operators as soon as the operator has completed a previous call or after the system has played a message to the caller.

**automatic number identification**

A method of identifying the calling party by automatically receiving a string of digits that identifies the calling station of a particular customer.

**AYC5B**

The IVP6 Tip/Ring (analog) circuit card.

**AYC10**

The IVC6 Tip/Ring (analog) circuit card.

**AYC21**

The E1/T1 (digital) circuit card.

**AYC30**

The [NGTR](#) (analog) circuit card.

**AYC43**

The speech and signal processor (SSP) circuit card.

**B****back up**

The preservation of the information in a file in a different location, so that the data is not lost in the event of hardware or system failure.

**backing up an application**

Using a utility that makes an archive copy of a completed application or an interim copy of an application in progress. The back-up copy can be restored to the system if the on-line version is damaged, or if you make revisions and want to go back to the previous version.

**barge-in**

A capability provided by WholeWord speech recognition and Dial Pulse Recognition (DPR) that allows callers to speak or enter their responses during the prompt and have those responses recognized (similar to the Speak with Interrupt capability). See also "[echo cancellation](#)."

**batch file**

A file containing one or more lines, each of which is a command executable by the UNIX shell.

**BB**

bulletin board

**binary synchronous communications**

A character-oriented synchronous link protocol.

**blind transfer protocol**

A protocol in which a call is completed as soon as the extension is dialed, without having to wait to see if the telephone is busy or if the caller answered.

**bps**

bits per second

**BRDG**

call bridging process

**bridging**

The process of connecting one telephone network connection to another over the Intuity CONVERSANT system TDM bus. Bridging decreases the processing load on the system since an active bridge does not require speech processing, database access, host activity, etc., for the transaction.

**BSC**

[binary synchronous communications](#)

**bundle**

In the context of the Enhanced File Transfer package, this term is used to denote a single file, a group of files (package), or a combination of both.

**byte**

A unit of storage in the computer. On many systems, a byte is 8 bits (binary digits), which is the equivalent of one character of text.

**C****call classification analysis**

A process that enables application designers to use information available within the system to classify the disposition of originated and transferred calls. Intelligent CCA is provided with the system. Full CCA is an optional feature package.

**call data event**

A parameter that specifies a list of variables that are appended to a call data record at the end of each call.

**call data handler process**

A software process that accumulates generic call statistics and application events.

**called party number**

The number dialed by the person making a telephone call. Telephone switching equipment can use this number to selectively route an incoming call to a particular department or agent.

**caller**

The party who calls for a service, gets connected to the Intuity CONVERSANT system, and interacts with it. As the Intuity CONVERSANT system can also make outbound calls for service, the caller can also be the person who responds to those outbound calls.



**call flow**

See "[transaction](#)."

**call progress tones**

Standard telephony sounds that indicate the status of the call. These sounds include busy, fast busy, ringback, reorder, etc.

**card cage**

An area within a Intuity CONVERSANT system platform that contains and secures all of the standard and optional circuit cards used in the system.

**cartridge tape drive**

A high-capacity data storage/retrieval device that can be used to transfer large amounts of information onto high-density magnetic cartridge tape based on a predetermined format. This tape can be removed from the system and stored as a backup, or used on another system.

**CAS**

channel associated signalling

**caution**

An admonishment or advisory statement used in Intuity CONVERSANT system documentation to alert the user to the possibility of a service interruption or a loss of data.

**CCA**

[call classification analysis](#)

**CDH**

[call data handler process](#)

**CELP**

[code excited linear prediction](#)

**central office**

An office or location in which large telecommunication devices such as telephone switches and network access facilities are maintained. These locations follow strict installation and operation requirements.

**central processing unit**

See "[processor](#)."

**CGEN**

Voice system general message class

**channel**

See [“port.”](#)

**channel associated signaling**

A type of signaling that can be used on E1 circuit cards. It occurs on channel 16.

**CICS**

[Customer Information Control System](#)

**circuit card upgrade**

A new circuit card that replaces an existing card in the platform. Usually the replacement is an updated version of the original circuit card to replace technology made obsolete by industry trends or a new system release.

**cluster controller**

A bisynchronous interface that provides a means of handling remote communication processing.

**CMS**

Call Management System

**CO**

[central office](#)

**code excited linear prediction**

A means of encoding analog voice signals into digital signals that provides excellent quality with use of minimum disk space.

**command**

An instruction or request the user issues to the system software to make the system perform a particular function. An entire command consists of the command name and options.

**configuration**

The arrangement of the software and hardware of a computer system or network. The Intuity CONVERSANT system configuration includes either a standard or custom processor, peripheral equipment (for example, printers and modems), and software applications. Configuration also refers to the way the switch network is set up; that is, the types of products that are in the network and how those products communicate.

## **configuration management**

The component of the system that allows you to manage the current configuration of voice channels, host sessions, and database connections, assign scripts to run on specific voice channels or host sessions, assign functionality to SSP and E1/T1 circuit cards, and perform various maintenance functions.

## **connect and disconnect (C and D) tones**

DTMF tones that inform the system when the attendant has been connected (C) and when the caller has been disconnected (D).

## **connected digits**

A sequence of digits that the system can process as a group, rather than requiring the caller to enter the digits one at a time.

## **Converse Data Return (conv\_data)**

A Script Builder action that supports the DEFINITY<sup>®</sup> call vectoring (routing) feature by enabling the switch to retain control of vector processing in the system environment. It supports the DEFINITY “converse” vector command to establish a two-way routing mechanism between the switch and the system to facilitate data passing and return.

**controller circuit card**

A circuit card used on a computer system that controls its basic functionality and makes the system operational. These circuit cards are used to control magnetic peripherals, video monitors, and basic system communications.

**copying an application**

A utility in which information from a source application is directed into the destination application.

**coresidency**

The ability of two products or services to operate and interact with each other on a single hardware platform. An example of this is the use of an Intuity CONVERSANT system along with a package from a different vendor on the same system platform.

**CPE**

customer provided equipment or customer premise equipment

**CPN**

[called party number](#)

**CPT**

[call progress tones](#)

**CPU**

[central processing unit](#)

**crash**

An interactive utility for examining the operating system core and for determining if system parameters are being exceeded.

**CSU**

channel service unit

**custom speech**

Unique words or phrases to be used in Intuity CONVERSANT system voice prompts that Lucent Technologies custom records on a per-customer basis.

**custom vocabulary**

A specialized package of unique words or phrases created on a per-customer basis and used by WholeWord or FlexWord speech recognition.

**Customer Information Control System**

Part of the operating system that manages resources for running applications (for example, IND\$FILE). Note that [TSO](#) and CMS provide analogous functionality in other host environments.

**CVS**

converse vector step

**D****danger**

An admonishment or advisory statement used in Intuity CONVERSANT system documentation to alert the user to the possibility of personal injury or death.

**data interface process**

A software process that communicates with Script Builder applications.

**database**

A structured set of files, records, or tables.

**database field**

A field used to extract values from a local database and form the structure upon which a database is built.

**database record**

The information in a database for a person, product, event, etc. The database record is made up of individual fields for each information item.



**database table**

A structure, made up of columns and rows, that holds information in a database. Database tables provide a means of storing information that changes too often to “hard-code,” or store permanently, in the transaction outline.

**dB**

decibel

**DB**

database

**DBC**

database checking process

**DBMS**

database management system

**DC**

direct current

**DCE**

data communications equipment

**DCP**

digital communications protocol

**debug**

The process of locating and correcting errors in computer programs; also referred to as "[troubleshooting](#)."

**default**

The way a computer performs a task in the absence of other instructions.

**default owner**

The owner of a channel when no process takes ownership of that channel. The default owner holds all idle, in-service channels. In terms of the IRAPI, this is typically the Application Dispatch process.

**diagnose**

The process of performing diagnostics on a bus or on Tip/Ring, E1/T1, or SSP circuit cards.

**dial ahead**

The ability to collect and process touch-tone inputs in sequence, even when they are received before the prompts.

**dial pulse recognition**

A method of recognizing caller pulse inputs from a rotary telephone.

**dialed number identification service**

A service that allows incoming calls to contain information about the telephone number for which it is destined.

**dial through**

A capability provided by touch-tone and dial pulse recognition that allows callers to enter their responses during the prompt and have those responses recognized (similar to the Speak with Interrupt capability). See also “[barge-in](#)” and “[echo cancellation](#)”.

**dictionary**

A reference book containing an alphabetical list of words, with information given for each word including meaning, pronunciation, and etymology.

**DIMM**

dual in-line memory module

**DIO**

disk input and output process

**DIP**

[data interface process](#)

**directory**

A type of file used to group and organize other files or directories.

**display errdata**

A command that displays system errors sent to the logger.

**DMA**

direct memory address

**DNIS**

[dialed number identification service](#)

**DPR**

[dial pulse recognition](#)

**DSP**

digital signal processor

**DTE**

data terminal equipment

**DTMF**

[dual tone multi-frequency](#)

**DTR**

data terminal ready

**dual 3270 links**

A feature that provides an additional physical unit (PU) for a cost-effective means of connecting to two host computers. The customer can connect a system to two separate FEPs or to a single FEP shared by one or more host computers. Each link supports a maximum of 32 LUs.

**dual tone multi-frequency**

A touch-tone sound that is an audio signal including two different frequencies. *DTMF feedback* is the process of the “switch” providing this information to the system. *DTMF muting* is the process of ignoring these tones (which might be simulated by human speech) when they are not needed for the application.

**dump space**

An area of the disk that is fixed in size and should equal the amount of RAM on the system. The operating system “dumps” an image of core memory when the system crashes. The dump can be fetched after rebooting to help in analyzing the cause of the crash.

**E****E&M**

[Ear and Mouth](#)

**E1 / T1**

Digital telephony interfaces, commonly called *trunks*. E1 is an international standard at 2.048 Mbps. T1 is a North American standard at 1.544 Mbps.

**Ear and Mouth**

A common T1 trunking protocol for connection between two “switches.”

**EBCDIC**

Extended Binary Coded Decimal Interexchange Code

**echo cancellation**

The process of making the channel quiet enough so that the system can hear and recognize WholeWord and dial pulse inputs during the prompt. See also “[barge-in](#).”

**ECS**

[Enterprise Communications Server](#)

**editor system**

A system that allows speech phrases to be displayed and edited by a user. See “[Graphical Speech Editor](#).”

**EFT**

[Enhanced File Transfer](#)

**EIA**

Electronic Industries Association

**EISA**

Extended Industry Standard Architecture

**EMI**

electromagnetic interference

**enhanced basic speech**

Pre-recorded speech available from Lucent Technologies in several languages. Sometimes called "[standard speech](#)."

**Enhanced File Transfer**

A feature that allows the transferring of files automatically between the Intuity CONVERSANT system and a synchronous host processor on a designated logical unit.

**Enhanced Serial Data Interface**

A software- and hardware-controlled method used to store data on magnetic peripherals.

**Enterprise Communications Server**

The telephony equipment that connects your business to the telephone network. Sometimes called a "switch."

**error message**

A message on the screen indicating that something is wrong with a possible suggestion of how to correct it.



**ESD**

electrostatic discharge

**ESDI**

[Enhanced Serial Data Interface](#)

**ESS**

electronic switching system

**EST**

Enhanced Software Technologies, Inc.

**ET**

error tracker

**Ethernet**

A name for a local area network that uses 10BASE5 or 10BASE2 coaxial cable and InterLAN signaling techniques.

**event**

The notification given to an application when some condition occurs that is generally not encountered in normal operation.

## EXTA

external alarms feature message class

### external actions

Specific predefined system tasks that Script Builder can call or *invoke* to interact with other products or services. When an external action is invoked, the systems displays a form that provides choices in each field for the application developer to select. Examples are Call\_Bridge, Make\_Call, SP\_Allocate, SR\_Prompt, etc. In Voice@Work, external actions are treated as “[external functions](#).”

### external functions

Specific predefined (or customer-created) system tasks that Voice@Work or Script Builder can call or *invoke* to interact with other products or services. The function allows the application developer to enter the argument(s) for the function to act on. Examples are concat, getarg, length, substring, etc. See also “[external actions](#).”

## F

### FAX Actions

An optional feature package that allows the system to send fax messages.

**FCC**

Federal Communications Commission

**FDD**

floppy disk drive

**feature**

A function or capability of a product or an application within the Intuity CONVERSANT system.

**feature package**

An optional package that may contain both hardware and software resources to provide additional functionality to a standard system.

**feature\_tst script package**

A standard Intuity CONVERSANT system software program that allows a user to perform self-tests of critical hardware and software functionality.

**FEP**

front end processor

**FFE**

Form Filler Plus feature message class

**field**

See “[database field](#).”

**FIFO**

first-in-first-out processing order

**file**

A collection of data treated as a basic unit of storage.

**file transfer**

An option that allows you to transfer files interactively or directly to and from UNIX using the file transfer system (FTS).

**filename**

Alphabetic characters used to identify a particular file.

**FlexWord™ speech recognition**

A type of speech recognition based on subword technology that recognizes phonemes or parts of words in a specific language. See also “[subword technology](#).”

**foos**

facility out-of-service state

**Form Filler Plus**

An optional feature package that provides the capability for application scripts to record a caller's responses to prompts for later transcription and review.

**FTS**

file transfer process message class

**Full CCA**

A feature package that augments the types of call dispositions that Intelligent CCA can provide.

**function key**

A key, labeled F1 through F8, on your keyboard to which the Intuity CONVERSANT system software gives special properties for manipulating the user interface.

**G****GEN**

PRISM logger and alerter general message class

**grammar**

The inputs that a recognizer can match (identify) from a caller.

**Graphical Speech Editor**

A window-driven, X Windows/Motif based, graphical user interface (GUI) that can be accessed to perform different functions associated with the creation and editing of speech files for applications. The editing is done on the Intuity CONVERSANT system.

**GSE**

[Graphical Speech Editor](#)

**GUI**

graphical user interface

**H****hard disk drive**

A high-capacity data storage/retrieval device that is located inside a computer platform. A hard disk drive stores data on nonremovable high-density magnetic media based on a predetermined format for retrieval by the system at a later date.

**hardware**

The physical components of a computer system. The central processing unit, disks, tape, and floppy drives, etc., are all hardware.

**Hardware Resource Allocator**

A software program that resolves or blocks the allocation of CPU and memory resources for controlling and optional circuit cards.

**hardware upgrade**

Replacement of one or more fundamental platform hardware components (for example, the CPU or hard disk drive), while the existing platform and other existing optional circuit cards remain.

**HDD**

[hard disk drive](#)

**High Level Language Applications Programming Interface**

An application programming interface that allows a user to write custom applications that can communicate with a host computer via an API.

**HLLAPI**

[High Level Language Applications Programming Interface](#)

**HOST**

host interface process message class

**host computer**

A computer linked to a network to provide a range of services, such as database access and computation. The host computer operates in a time-sharing manner with other computers linked to it via the network.

**hwoos**

hardware out-of-service state

**Hz**

Hertz

**IBM**

International Business Machines

**iCk or ICK**

The system integrity checking process.



**ID**

identification

**IDE**

integrated disk electronics

**idle channel**

A channel that either has no owner or is owned by its default owner and is onhook.

**IE**

information element

**IND\$FILE**

The standard SNA file transfer utility that runs as an application under CICS, TSO, and CMS. IND\$FILE is independent of link-level protocols such as BISYNC and SDLC.

**independent software vendor**

A company that has an agreement with Lucent Technologies to develop software to work with the Intuity CONVERSANT system to provide additional features required by customers.

**indexed table**

A table that, unlike a nonindexed table, can be searched via a field name that has been indexed.

**industry standard architecture**

A PC bus standard that allows processors and other circuit cards to communicate with each other.

**INIT**

voice system initialization message class

**initialize**

To start up the system for the first time.

**inserv**

in-service state

**Integrated Services Digital Network**

A network that provides end-to-end digital connectivity to support a wide range of voice and data services.

**Integrated Voice Processing (IVP) circuit card**

The IVP6 circuit card that provides Tip/Ring connections. The NGTR (AYC30) card also provides the same functions.

**intelligent CCA**

Monitoring the line after dialing is complete to determine whether a busy, reorder (fast busy), or other failure has been encountered. It also recognizes when the extension is answered or if the extension is not answered after a specified number of rings. The monitoring capabilities are dependent on the network interface circuit card and protocol used

**interface**

The access point of a system. With respect to the Intuity CONVERSANT system, the interface is designed to provide you with easy access to the software capabilities.

**interrupt**

The termination of voice and/or telephony functions when some condition occurs.

**Intuity Response Application Programming Interface**

A library of commands that provide a standard development interface for voice-telephony applications.

**IPC**

interprocess communication

**IPC**

intelligent ports card (IPC-900)

**IPCI**

integrated personal computer interface

**IRAPI**

[Intuity Response Application Programming Interface](#)

**IRQ**

interrupt request

**ISA**

[industry standard architecture](#)

**ISDN**

[Integrated Services Digital Network](#)

**ISV**

[independent software vendor](#)

**ITAC**

International Technical Assistance Center

**IVC6 circuit card (AYC10)**

A Tip/Ring (analog) circuit card with six channels.

**IVP6 circuit card (AYC5B)**

A Tip/Ring (analog) card with six channels.

**K****Kbps**

kilobytes per second

**Kbyte**

kilobyte

**keyboard mapping**

In emulation mode, this feature enables the keyboard to send 3270 keyboard codes to the host according to a configuration table set up during installation.

**keyword spotting**

A capability provided by WholeWord speech recognition that allows the system to recognize a single word in the middle of an entire phrase spoken by a caller in response to a prompt.

**L****LAN**

[local area network](#)

**LDB**

[local database](#)

**LED**

light-emitting diode

**library states**

The state information about channel activities maintained by the IRAPI.

**LIFO**

last-in-first-out processing order

**line side E1**

A digital method of interfacing an Intuity CONVERSANT system to a PBX or “switch” using E1-related hardware and software.

**line side T1**

A digital method of interfacing an Intuity CONVERSANT system to a PBX or “switch” using T1-related hardware and software.

**listfile**

An ASCII catalog that lists the contents of one or more talkfiles. Each application script is typically associated with a separate listfile. The listfile maps speech phrase strings used by application scripts into speech phrase numbers.

**local area network**

A data communications network in a limited geographical area. The LAN provides communications between computers and peripherals.

**local database**

A database residing on the Intuity CONVERSANT system.

**LOG**

Intuity CONVERSANT system logger process message class

**logical unit**

A type of SNA Network Addressable Unit.

**logdaemon**

A UNIX system information and error logging process.

**logger**

See "[logdaemon](#)."

**logging on/off**

Entering or exiting the Intuity CONVERSANT system software.

**LSE1**

[line side E1](#)

**LST1**

[line side T1](#)



**LU**

[logical unit](#)

**M****magnetic peripherals**

Data storage devices that use magnetic media to store information. Such devices include hard disk drives, floppy disk drives, and cartridge tape drives.

**main screen**

The Intuity CONVERSANT system screen from which you are able to enter either the System Administration or Voice System Administration menu.

**maintenance process**

A software process that runs temporary diagnostics and maintains the state of circuit cards and channels.

**manooos**

manually out-of-service state

**MAP/100P**

multi application platform 100P

**MAP/100C**

multi application platform 100C

**MAP/40P**

multi application platform 40P

**MAP/5P**

multi application platform 5P

**masked event**

An event that an application can ignore (that is, the application can request not to be informed of the event).

**master**

A circuit card that provides clock information to the TDM bus.

**Mbps**

megabits per second

**MByte**

[megabyte](#)

**megabyte**

A unit of memory equal to 1,048,576 bytes (1024 x 1024). It is often rounded to one million.

**menu**

Options presented to a user on a computer screen or with voice prompts.

**MF**

[multifrequency](#)

**MHz**

megahertz

**Microsoft**

A manufacturer of software products, primarily for IBM-compatible computers.

**mirroring**

A method of data backup that allows all of the data transactions to the primary hard disk drive to be copied and maintained on a second identical drive in near real time. If the primary disk drive crashes or becomes disabled, all of the data stored on it (up to 1.2 billion bytes of information) is accessible on the second mirrored disk drive.

**ms**

millisecond

**msec**

millisecond

**MS-DOS**

A personal computer disk operating system developed by the Microsoft Corporation.

**MTC**

[maintenance process](#)

**multifrequency**

Dual tone digit signalling (similar to DTMF), used for trunk addressing between network switches or by network operators.

**multithreaded application**

A single process/application that controls several channels. Each thread of the application is managed explicitly. Typically this means state information for each thread is maintained and the state of the application on each channel is tracked.

**N****NCP**

Network Control Program

**NEBS**

Network Equipment Building Standards

**NEMA**

National Electrical Manufacturers Association

**netoos**

network out-of-service state

**NetView**

An optional feature package that transmits high-priority (major or critical) messages to the host as operator-generated alerts (OGAs) over the 3270 host link. The NetView Alarm feature package does not require a dedicated LU.

**next generation Tip/Ring (AYC30) circuit card**

An analog circuit card with six channels.

**NFAS**

non-facility associated signalling

**NFS**

network file sharing

**NGTR**

[next generation Tip/Ring \(AYC30\) circuit card](#)

**NM-API**

Network Management - Application Programming Interface

**NMVT**

network management vector transport

**nonex**

nonexistent state

**nonindexed table**

A table that can be searched only in a sequential manner and not via a field name.

**nonmasked event**

An event that must be sent to the application. Generally, an event is nonmaskable if the application would likely encounter state transition errors by trying to it.

**NRZ**

non return to zero

**NRZI**

non return to zero inverted

**null value**

An entry containing no value. A field containing a null value is normally displayed as blank and is different from a field containing a value of zero.

**O****obsolete hardware**

Hardware that is no longer supported on the Intuity CONVERSANT system.

**OEM**

original equipment manufacturer

**OGA**

[operator-generated alert](#)

**on-line help**

Messages or information that appear on the user's screen when a "function key" (F1 through F8) is pressed.

**operator-generated alert**

A system-monitoring message that is transmitted from the Intuity CONVERSANT system or other computer system to an IBM host computer and is classified as critical or major.

**option**

An argument used in a command line to modify program output by modifying the execution of a command. When you do not specify any options, the command executes according to its default options.

**ORACLE**

A company that produces relational database management software. It is also used as a generic term that identifies a database residing on a local or remote system that is created and maintained using an ORACLE RDBMS product.



**P****P&C**

Prompt and Collect Script Builder action step

**PBX**

[private branch exchange](#)

**PC**

personal computer

**PCB**

printed circuit board

**PCI**

[peripheral component interconnect](#)

**PCM**

[pulse code modulation](#)

**PEC**

price element code

**peripheral (device)**

Equipment such as printers or terminals that is in addition to the basic processor.

**peripheral component interconnect**

A newer, higher speed PC bus that is gradually displacing ISA for many components.

**permanent process**

A process that starts and initializes itself before it is needed by a caller.

**phoneme**

A single basic sound of a particular spoken language. For example, the English language contains 40 phonemes that represent all basic sounds used with the language. The English word "one" can be represented with three phonemes, "w" - "uh" - "n." Phonemes vary between languages because of guttural and nasal inflections and syllable constructs.

**phrase filtering (screening)**

The rejection of unrecognized speech. The WholeWord and FlexWord speech recognition packages can be programmed to reprompt the caller if the Intuity CONVERSANT system does not recognize a spoken response.

**phrase tag**

A string of up to 50 characters that identifies the contents of a speech phrase used by an application script.

**platform migration**

See "[platform upgrade](#)."

**platform upgrade**

The process of replacing the existing platform with a new platform.

**pluggable**

A term usually used with speech technologies, in particular standard speech, to indicate that a basic algorithmic technique has been implemented to accept one or more sets of parameters that tailors the algorithm to perform in one or more languages.

**poll**

A message sent from a central controller to an individual station on a multipoint network inviting that station to send if it has any traffic.

**polling**

A network arrangement whereby a central computer asks each remote location whether it wants to send information. This arrangement enables each user or remote data terminal to transmit and receive information on shared facilities.

**port**

A connection or link between two devices that allows information to travel to a desired location. See "[telephone network connection](#)."

**PRI**

[Primary Rate Interface](#)

**Primary Rate Interface**

An ISDN term for connections over E1 or T1 facilities that are usually treated as trunks.

**private branch exchange**

A private switching system, either manual or automatic, usually serving an organization, such as a business or government agency, and usually located on the customer's premises.

**processor**

In Intuity CONVERSANT system documentation, the computer on which UnixWare and Intuity CONVERSANT system software runs. In general, the part of the computer system that processes the data. Also known as the “[central processing unit](#).”

**prompt**

A message played to a caller that gives the caller a choice of selections in a menu and asks for a response. Compare to “[announcement](#).”

**prompt and collect (P and C)**

A message played to a caller that gives the caller a choice of selections in a menu and asks for a response. The responses is collected and the script progresses based on the caller's response.

**pseudo driver**

A driver that does not control any hardware.

**PS&BM**

power supply and battery module

**PSTN**

public switch telephone network

**pulse code modulation**

A digital modulation method of encoding voice signals into digital signals. See also "[adaptive differential pulse code modulation](#)."

**R****RAID**

redundant array of independent disks

**RAID array**

An assembly of disk drives configured to provide some level of RAID functionality.

**RAM**

random access memory

**RDMBS**

ORACLE relational database management system

**RECOG**

speech recognition feature message class

**recognition type**

The type of input the recognizer can understand. Available types include touch-tone, dial pulse, and Advanced Speech Recognition (ASR), which includes WholeWord and FlexWord speech recognition.

**recognizer**

The part of the system that compares caller input to a grammar in order to correctly match (identify) the caller input.

**record**

See "[database record](#)."

**recovery**

The process of using copies of the Intuity CONVERSANT system software to reconstruct files that have been lost or damaged. See also "[restore](#)."

**remote database**

Information stored on a system other than the Intuity CONVERSANT system that can be accessed by the Intuity CONVERSANT system.

**remote maintenance circuit card**

An Intuity CONVERSANT system circuit card, available with a built-in modem, that allows remote personnel (for example, field support) to access all Intuity CONVERSANT system machines. This card is standard equipment on all new MAP/100, MAP/40, and MAP/5P purchases.

**REN**

ringer equivalence number

**reports administration**

The component of Intuity CONVERSANT system that provides access to system reports, including call classification, call data detail, call data summary, message log, and traffic reports.

**restore**

The process of recovering lost or damaged files by retrieving them from available back-up tapes or from another disk device. See also “recovery.”

**restore application**

A utility that replaces a damaged application or restores an older version of an application.



**reuse**

The concept of using a component from a source system in a target system after a software upgrade or platform migration.

**RFS**

remote file sharing

**RM**

resource manager

**RMB**

[remote maintenance circuit card](#)

**roll back**

To cancel changes to a database since the point at which changes were last committed.

**rollback segment**

A portion of the database that records actions that should be undone under certain circumstances. Rollback segments are used to provide transaction rollback, read consistency, and recovery.

**RTS**

request to send

**S****SBC**

sub-band coding

**screen pop**

A method of delivering a screen of information to a telephone operator at the same time a telephone call is delivered. This is accomplished by a complex chain of tasks that include identifying the calling party number, using that information to access a local or remote ORACLE database, and pulling a “form” full of information from the database using an ORACLE database utility package.

**script**

The set of instructions for the Intuity CONVERSANT system to follow during a transaction.

**Script Builder**

An optional software package that provides a menu-oriented interface designed to assist in the development of custom voice response applications on the Intuity CONVERSANT system (see also "[Voice@Work](#)").

**SCSI**

[small computer system interface](#)

**SDLC**

synchronous data link control

**SDN**

software defined network

**shared database table**

A database table that is used in more than one application.

**shared speech**

Speech that is a part of more than one application.

**shared speech pools**

A parameter that allows the user of a voice application to share speech components with other applications.

**SID**

station identification

**signal processor circuit card (AYC2, AYC2B, AYC2C, or AYC9d)**

A speech processing circuit card that is an older, lower-capacity version of the speech and signal processor (SSP) circuit card (AYC43).

**SIMMs**

[single inline memory modules](#)

**single inline memory modules**

A method of containing random access memory (RAM) chips on narrow circuit card strips that attach directly to sockets on the CPU circuit card. Multiple SIMMs are sometimes installed on a single CPU circuit card.

**single-threaded application**

An application that runs on a single voice channel.

**slave**

A circuit card that depends on the TDM bus for clock information.

**SLIP**

serial line interface protocol

**small computer system interface**

A disk drive control technology in which a single SCSI adapter circuit card plugged into a PC slot is capable of controlling as many as seven different hard disks, optical disks, tape drives, etc.

**SNA**

systems network architecture

**SNMP**

simple network management protocol

**software**

The set or sets of programs that instruct the computer hardware to perform a task or series of tasks — for example, UnixWare software and the Intuity CONVERSANT system software.

**software upgrade**

The installation of a new version of software in which the existing platform and circuit cards are retained.

**source system**

The system from which you are upgrading (that is, your system as it exists *before* you upgrade).

**speech and signal processor circuit card (AYC43)**

The high-performance signal processing circuit card introduced in V6.0 capable of simultaneous support for various speech technologies.

**speech energy**

The amount of energy in an audio signal. Literally translated, it is the output level of the sound in every phonetic utterance.

**speech envelope**

The linear representation of voltage on a line. It reflects the sound wave amplitude at different intervals of time. This envelope can be plotted on a graph to represent the oscillation of an audio signal between the positive and negative extremes.

**speech file**

A file containing an encoded speech phrase.

**speech filesystem**

A collection of several talkfiles. The filesystem is organized into 16-Kbyte blocks for efficient management and retrieval of talkfiles.

**speech modeling**

The process of creating WholeWord speech recognition algorithms by collecting thousands of different speech samples of a single word and comparing them all to obtain a statistical average of the word. This average is then used by a WholeWord speech recognition program to recognize a single spoken word.

**speech space**

An area that contains all digitized speech used for playback in the applications loaded on the system.

**speech phrase**

A continuous speech segment encoded into a digital string.

**speech recognition**

The ability of the system to understand input from callers.

**SPIP**

signal processor interface process

**SPPLIB**

speech processing library

**SQL**

[structured query language](#)

**SR**

[speech recognition](#)

**SSP**

[speech and signal processor circuit card \(AYC43\)](#)

**standard speech**

The speech package available in several languages containing simple words and phrases produced by Lucent Technologies for use with the Intuity CONVERSANT system. This package includes digits, numbers, days of the week, and months, each spoken with initial, medial, and falling inflection. The speech is in digitized files stored on the hard disk to be used in voice prompts and messages to the caller. This feature is also called enhanced basic speech.



**standard vocabulary**

A standard package of simple word speech models provided by Lucent Technologies and used for WholeWord speech recognition. These phrases include the digits “zero” through “nine,” “yes,” “no,” and “oh,” or the equivalent words in a specific local language.

**string**

A contiguous sequence of characters treated as a unit. Strings are normally bounded by white spaces, tabs, or a character designated as a separator. A string value is a specified group of characters symbolized by a variable.

**structured query language**

A standard data programming language used with data storage and data query applications.

**subword technology**

A method of speech recognition used in FlexWord recognition that recognizes phonemes or parts of words. Compare to “[WholeWord speech recognition](#).”

**switch**

A software and hardware device that controls and directs voice and data traffic. A customer-based switch is known as a “[private branch exchange](#).”

**switch hook**

The device at the top of most telephones that is depressed when the handset is resting in the cradle (in other words, is *on hook*). The device is raised when the handset is picked up (in other words, when the telephone is *off hook*).

**switch hook flash**

A signaling technique in which the signal is originated by momentarily depressing the “switch hook.”

**switch interface administration**

The component of the Intuity CONVERSANT system that enables you to define the interaction between the Intuity CONVERSANT system and switches by allowing you to establish and modify switch interface parameters and protocol options for both analog and digital interfaces.

**switch network**

Two or more interconnected telephone switching systems.

**synchronous communication**

A method of data transmission in which bits or characters are sent at regular time intervals, rather than being spaced by start and stop bits. Compare to “[asynchronous communication](#).”

**SYS**

UNIX system calls message class

**sysgen**

system generation

**System 75**

An advanced digital switch supporting up to 800 lines that provides voice and data communications for its users.

**System 85**

An advanced digital switch supporting up to 3000 lines that provides voice and data communications for its users.

**system administrator**

The person assigned the responsibility of monitoring all Intuity CONVERSANT system software processing, performing daily system operations and preventive maintenance, and troubleshooting errors as required.

**system architecture**

The manner in which the Intuity CONVERSANT system software is structured.

**system message**

An event or alarm generated by either the Intuity CONVERSANT system or end-user process.

**system monitor**

A component of the Intuity CONVERSANT system that tests to verify that each incoming telephone line and its associated Tip/Ring or T1 circuit card is functional. Through the “System Monitor” component, you are able to see displays of the Voice Channel and Host Session Monitors.

**T****T1**

A digital transmission link with a capacity of 1.544 Mbps.

**table**

See “[database table](#).”

**tag image file format**

A format for storing and exchanging digital image data associated with fax modem data transfers and other applications.

**talkfile**

An ASCII file that contains the speech phrase tags and phrase tag numbers for all the phrases of a specific application. The speech phrases are organized and stored in groups. Each talkfile can contain up to 65,535 phrases, and the speech filesystem can contain multiple talkfiles.

**talkoff**

The process of a caller interrupting a prompt, so the prompt message stops playing.

**target system**

The system to which you are upgrading (that is, your system as you expect it to exist *after* you upgrade).

**TAS**

[transaction assembler script](#)

**TCC**

Technology Control Center

**TCP/IP**

transmission control protocol/internet protocol

**TDM**

time division multiplexing

**TE**

[terminal emulator](#)

**telephone network connection**

The point at which a telephone network connection terminates on an Intuity CONVERSANT system. Supported telephone connections are Tip/Ring, T1, and E1.

**terminal emulator**

Software that allows a PC or UNIX process to look like a specific type of terminal. In particular, it allows the Intuity CONVERSANT system to temporarily transform itself into a “look alike” of an IBM 3270 terminal. In addition to providing full 3270 functionality, the terminal emulator enables you to transfer files to and from UNIX.

**text-to-speech**

An optional feature that allows an application to play US English speech directly from ASCII text by converting that text to synthesized speech. The text can be used for prompts or for text retrieved from a database or host, and can be spoken in an application with prerecorded speech. text-to-speech application development is supported through Voice@Work and Script Builder.

**ThickNet**

A 10-mm (10BASE5) coaxial cable used to provide interLAN communications.

**ThinNet**

A 5-mm (10BASE2) coaxial cable used to provide interLAN communications.

**TIFF**

[tag image file format](#)

**time-division multiplex**

A method of serving a number of simultaneous channels over a common transmission path by assigning the transmission path sequentially to the channels, with each assignment being for a discrete time interval.

**Tip/Ring**

Analog telecommunications using four-wire media.

**token ring**

A ring type of local area network that allows any station in the network to communicate with any other station.

**trace**

A command that can be used to monitor the execution of a script.

**traffic**

The flow of information or messages through a communications network for voice, data, or audio services.

**transaction**

The interactions (exchanges) between the caller and the voice response system. A transaction can involve one or more telephone network connections and voice responses from the Intuity CONVERSANT system. It can also involve one or more of the system optional features, such as speech recognition, 3270 host interface, FAX Actions, etc.

**transaction assembler script**

The computer program code that controls the application operating on the voice response system. The code can be produced from Voice@Work, Script Builder, or by writing directly in TAS code.

**transaction state machine process**

A multi-channel IRAPI application that runs applications controlled by TAS script code.



**transient process**

A process that is created dynamically only when needed.

**TRIP**

Tip/Ring interface process

**troubleshooting**

The process of locating and correcting errors in computer programs. This process is also referred to as debugging.

**TSO**

Technical Services Organization

**TSO**

time share operation

**TSM**

[transaction state machine process](#)

**TTS**

[text-to-speech](#)

**TWIP**

T1 interface process

**U****UK**

United Kingdom

**US**

United States of America

**UNIX Operating System**

A multiuser, multitasking computer operating system originally developed by Lucent Technologies.

**UNIX shell**

The command language that provides a user interface to the UNIX operating system.

**upgrade scenario**

The particular combination of current hardware, software, application and target hardware, software, applications, etc.

**usability**

A measurement of how easy an application is for callers to use. The measurement is made by making observations and by asking questions. An application should have high usability to be successful.

**USOC**

universal service ordering code

**UVL**

unified voice library

**V****VDC**

video display controller

**vi editor**

A screen editor used to create and change electronic files.

**virtual channel**

A channel that is not associated with an interface to the telephone network (Tip/Ring, T1, LSE1/LST1, or PRI). Virtual channels are intended to run “data-only” applications which do not interact with callers but may interact with DIPs. Voice or network functions (for example, coding or playing speech, call answer, origination, or transfer) will not work on a virtual channel. Virtual channel applications can be initiated only by a “virtual seizure” request to TSM from a DIP.

**vocabulary**

A collection of words that the Intuity CONVERSANT system is able to recognize using either WholeWord or FlexWord speech recognition.

**vocabulary activation**

The set of active vocabularies that define the words and wordlists known to the FlexWord recognizer.

**vocabulary loading**

The process of copying the vocabulary from the system where it was developed and adding it to the target system.

## **Voice@Work**

An optional software package that provides a graphical interface to assist in development of voice response applications on the Intuity CONVERSANT system (see also "[Script Builder](#)").

## **voice channel**

A channel that is associated with an interface to the telephone network (Tip/Ring, T1, E1, LSE1/LST1, or PRI). Any Intuity CONVERSANT system application can run on a voice channel. Voice channel applications can be initiated by being assigned to particular voice channels or dialed numbers to handle incoming calls or by a "soft seizure" request to TSM from a DIP or the **soft\_srz** command.

## **voice processing co-marketer**

A company licensed to purchase voice processing equipment, such as the Intuity CONVERSANT system, to market and sell based on their own marketing strategies.

## **voice response output process**

A software process that transfers digitized speech between system hardware (for example, Tip/Ring and SSP circuit cards) and data storage devices (for example, hard disk, etc.)

**voice response unit**

A computer connected to a telephone network that can play messages to callers, recognize caller inputs, access and update a databases, and transfer and monitor calls.

**voice system administration**

The means by which you are able to administer both voice- and nonvoice-related aspects of the system.

**VPC**

[voice processing co-marketer](#)

**VROP**

voice response output process

**VRU**

[voice response unit](#)

**W****warning**

An admonishment or advisory statement used in Intuity CONVERSANT system documentation to alert the user to the possibility of equipment damage.

**WholeWord speech recognition**

An optional feature, available in several languages, based on whole-word technology that can recognize the numbers one through zero, “yes”, and “no” (the key words). This feature is reliable, regardless of the individual speaker. This feature can identify the key words when spoken in phrases with other words. A string of key words, called *connected digits*, can be recognized. During the prompt announcement, the caller can speak or use touch tones (or dial pulses, if available). See also “[whole-word technology](#).”

**whole-word technology**

The ability to recognize an entire word, rather than just the phoneme or a part of a word. Compare to “subword technology.”

**wink signal**

An interruption of current to a busy lamp indicating that there is a line on hold.

**word**

A unique utterance understood by the recognizer.

**wordlist**

A set of words available for FlexWord recognition by an application during a Prompt & Collect action step.

**word spotting**

The ability to search through extraneous speech during a recognition.



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