

Lucent Technologies
Bell Labs Innovations



INTUITY CONVERSANT System
Version 6.0

MAP/100C New System Installation

585-310-177
Comcode 108002833
Issue 2.0
April 1997

Contents

About This Book	xi
■ Purpose	xi
■ Intended Audiences	xi
■ Release History	xii
■ Trademarks	xii
■ How to Use This Book	xiii
For Complete Installation Instructions	xiii
For a Quick Reference	xiii
For Troubleshooting Information	xiii
For Connectivity and Pinout Information	xiii
To Locate Specific Topics	xiii
■ Conventions Used in This Book	xiv
Terminology	xiv
Terminal Keys	xvii
Screen Displays	xvii
Other Typography	xviii
Safety and Security Alert Labels	xviii
■ Related Resources	xix
Documentation	xix
Electronic Updates to This Book	xix
Training	xx
■ How to Comment on This Book	xx
■ Disclaimer	xxi

1	Getting Started	1-1
	■ Overview	1-1
	■ Purpose	1-1
	■ Site Preparation	1-2
	Environmental Considerations	1-2
	Installation Area Considerations	1-2
	Space Requirements	1-3
	Power Requirements	1-3
	System Grounding Connections	1-5
	■ Installation Prerequisites	1-5
	Tools	1-5

Contents

Test Equipment	1-6
System Information	1-6
Switch Administration	1-6
Documentation	1-7
■ Regulatory Agency Guidelines	1-7
■ FCC Guidelines	1-7
Before You Connect to the Public Telephone Network	1-8
Type of Telephone Lines Needed	1-8
Telephone Service and Repair Problems	1-8
MAP/100C Repair Problems	1-9
When to Notify the Service Provider	1-9
■ Equipment Attachment Limitations	1-10
■ Points of Demarcation	1-11
LAN Connectivity Demarcation	1-11
INTUITY CONVERSANT Script Builder FAX Actions Demarcation	1-11
■ Maintaining System Security	1-12
Password Security	1-12
System Security	1-12
■ Getting Help with the Installation	1-12
System Help Screens	1-12

2	Unpacking the MAP/100C and Installing Nonassembled Hardware	2-1
■	Overview	2-1
■	Purpose	2-1
■	Unpacking the MAP/100C	2-2
■	Saving Packing Materials	2-2
	Return Repair Tag	2-2
■	Installing the MAP/100C in a 5ESS Switching Equipment Single Bay Frame	2-3
■	Installing the MAP/100C in a Common ESS Switching Equipment Single Bay Frame	2-7
■	Installing the MAP/100C in a Commercial 24-Inch Panel Rack	2-10

Contents

■ Locating Key Components on the MAP/100C	2-11
The Front of the Chassis	2-11
Peripheral Drive Devices	2-13
Chassis Cooling System	2-13
The Back of the Chassis	2-13

3	Making Cable Connections	3-1
■	Overview	3-1
■	Purpose	3-1
■	Connecting the Tip/Ring Circuit Card	3-2
	Direct Cable Connection	3-3
	Cable Connection Using a Line Splitter	3-4
	Cable Connection Using the Tip/Ring Distribution Panel	3-7
	Connecting FAX Lines	3-9
■	Connecting Asynchronous Devices	3-11
	Using COM1	3-11
	Using the 8-Port Asynchronous Circuit Card	3-11
	Connecting the MAP/100C to a Synchronous Host	3-13
■	Making Digital Connections	3-15
	Digital Connectivity Diagrams	3-15
	Connecting E1/T1 Circuit Cards	3-17
■	Making ASAI Connections	3-23
	Overview	3-23
	ASAI Connectivity Diagrams	3-24
■	Making PRI Connections	3-25
	PRI Switch Configuration	3-25
	PRI Connectivity Diagrams	3-26
■	Connecting Other Devices for Switch Connections	3-27
■	Making Network Connections	3-27
	Connecting the LAN Circuit Card	3-27
	Token Ring Circuit Card	3-29
	PC/ISDN (IPCI) Circuit Card	3-31
■	Connecting Standard Circuit Cards	3-31
	CPU Circuit Cards	3-32
	SCSI Circuit Cards	3-33

Contents

Video Controller Circuit Cards	3-35
Remote Maintenance Circuit Card	3-37

4	Connecting Peripherals and Powering Up	4-1
	■ Overview	4-1
	■ Purpose	4-1
	■ Connecting the Monitor	4-2
	Required Cabling	4-2
	Connecting Monitor Cables	4-3
	■ Connecting the Keyboard	4-3
	■ Connecting the Printer	4-4
	Configuring a Local Parallel Printer	4-5
	■ Connecting a Modem	4-12
	Connecting the 3820 Modem to the Platform	4-12
	Connecting the 3820 Modem Between a Remote Terminal and the Network	4-12
	Configuring the 3820 Modem for Remote Maintenance	4-13
	Configuring the 3820 Modem via a Terminal	4-19
	■ Powering Up the System	4-25
	Verifying the Intake Voltage	4-25
	Connecting the System to the AC Power Supply	4-25

5	Verifying Hardware, Software, and System Status	5-1
	■ Overview	5-1
	■ Purpose	5-1
	■ Verifying Controlled Applications	5-2
	Viewing Feature License Values	5-2
	■ Feature Test Script Package	5-4
	Feature Test Script Package Prerequisites	5-4
	Setting Up the Feature Test Script Package	5-5
	Changing the State of Voice Equipment	5-8
	Running the Feature Test Script Package	5-9

Contents

6	Initial Administration for Switch Integration	6-1
	■ Overview	6-1
	■ Purpose	6-1
	■ Administering the Switch Interface	6-2
	Analog Interface Administration	6-2
	Digital Interface Administration	6-5

7	Cut-to-Service Procedures	7-1
	■ Overview	7-1
	■ Purpose	7-1
	■ Activating Alarm Origination	7-2
	Testing Alarm Origination	7-5
	■ Backing Up the INTUITY CONVERSANT System	7-8
	Performing a System Backup	7-8
	Performing Other Backups	7-13
	■ Switch Cut-to-Service Procedures	7-13

A	System Installation Checklist	A-1
	■ Overview	A-1
	■ Purpose	A-1
	■ Books to Use with the Checklists	A-2
	■ System Installation Checklist	A-3

B	Accessing Windows and Screens	B-1
	■ Overview	B-1
	■ Purpose	B-1
	■ User Interface Components	B-2
	Screens, Menus, and Windows	B-3
	Message Line	B-7
	Function Key Labels	B-7
	■ Function Keys	B-8

Contents

Standard Function Keys	B-9
Alternate Function Keys	B-10
■ Online Help	B-11
■ Frame Management Menu	B-12
■ Command Menu	B-13
■ Logging in to the INTUITY CONVERSANT System	B-17
■ Exiting the INTUITY CONVERSANT System	B-18

C	Troubleshooting Procedures	C-1
■	Overview	C-1
■	Purpose	C-1
■	Repairing Power-Up Troubles	C-1
■	Repairing Boot-Up Troubles	C-3
■	Repairing System	
	Installation/Upgrade/Set-Up Troubles	C-5
■	Repairing Application-Related Troubles	C-7
■	Repairing 3270 Communication Troubles	C-9
■	Repairing External Alarms Troubles	C-13
■	Repairing Speech Recognition Troubles	C-14
	Repairing General Speech Recognition Troubles	C-14
	Repairing Speech Recognition Accuracy Troubles	C-20
■	Repairing ORACLE Database Troubles	C-24
■	Repairing Script Builder Troubles	C-28
	Repairing Script Builder FAX Actions Troubles	C-29
■	Repairing Primary Rate Interface Troubles	C-32
■	Repairing Form Filler Plus Troubles	C-35
■	Repairing Text-to-Speech Troubles	C-36
■	Repairing ASAI Troubles	C-40
	General ASAI Troubleshooting	C-41
■	Repairing Administrative Troubles	C-54
■	Repairing Operational Troubles	C-55
■	Repairing Other Voice System Troubles	C-56
	Repairing Call Transfer Troubles	C-57
	Repairing Performance Troubles	C-58
	Repairing Diagnostics Troubles	C-59

Contents

Repairing Touch-Tone Input Troubles	C-59
Repairing Report Troubles	C-59
Repairing Channel/Circuit Card State Troubles	C-60

D	Pinouts	D-1
	■ Overview	D-1
	■ Purpose	D-1
	■ Pinouts for the Tip/Ring Circuit Card	D-2
	■ Pinouts for Asynchronous Connections	D-7
	■ Pinouts for Peripheral Devices	D-9

E	Cable Connectivity	E-1
	■ Overview	E-1
	■ Purpose	E-1
	■ Connectivity Reference Tables	E-2
	■ Making Asynchronous Connections	E-5
	DTE/DCE Adapters	E-5
	Asynchronous Connectivity Diagrams	E-6
	■ Making Synchronous (Host) Connections	E-10
	The 3270 Host Communications Package	E-10
	Synchronous Connectivity Diagrams	E-11
	■ Making Analog (Tip/Ring) Connections	E-12
	Making Tip/Ring Connections to a 4ESS	E-12
	Analog Connectivity Diagrams	E-13
	■ Making Digital Connections	E-14
	Digital Connectivity Diagrams	E-14
	■ Making ASAI Connections	E-16
	ASAI Connectivity Diagrams	E-17
	■ Making PRI Connections	E-18
	PRI Connectivity Diagrams	E-19
	■ Making Graphical Speech	
	Editor Connections	E-20
	Microphone and Speaker Configuration	E-20
	Voice Workstation System Tip/Ring	
	Interface Configuration	E-21

Contents

■ Making Other System Connections	E-23
-----------------------------------	------

ABB	Abbreviations	ABB-1
------------	----------------------	-------

GL	Glossary	GL-1
-----------	-----------------	------

IN	Index	IN-1
-----------	--------------	------

About This Book

Purpose

This book, *INTUITY™ CONVERSANT® System Version 6.0 MAP/100C New System Installation*, 585-310-177, contains instructions for installing a Lucent INTUITY™ CONVERSANT system that has been assembled, loaded, and tested (ALT) at the Lucent Technologies factory. It includes procedures for unpacking, setup, configuration, initial administration, acceptance testing, and cut to service. These procedures apply to the MAP/100C platform and the INTUITY CONVERSANT system and most of its optional features.

Intended Audiences

This book is intended primarily for the on-site technical personnel who are responsible for installing the system and performing initial administration and acceptance testing. Secondary audiences include the following from Lucent:

- Field support—Technical Service Organization (TSO) and International Technical Assistance Center (ITAC)
- Helpline personnel
- Factory assemble, load, and test (ALT) personnel
- Provisioning project managers—Sales and Technical Resource Center (STRC)

We assume that the primary users of this book have completed the INTUITY CONVERSANT hardware installation training course (see “Related Documentation and Training” below).

Release History

This is the first release of this book.

Trademarks

Lucent Technologies has made every effort to supply trademark information about company names, products, and services mentioned in the INTUITY CONVERSANT documentation library. Trademarks indicated below were derived from various sources.

- 5ESS, AUDIX, CONVERSANT, DEFINITY, FlexWord, and Voice Power are registered trademarks and INTUITY is a trademark of Lucent Technologies.
- 3M is a trademark of Minnesota Mining and Manufacturing
- Phillips is a registered trademark of the Phillips Screw Co.
- Microsoft, MS, MS-DOS, Internet Explorer, and Excel are registered trademarks and Windows is a trademark of Microsoft Corporation.
- Truevoice is a registered trademark of AT&T.
- UnixWare is a registered trademark of The Santa Cruz Operation, Inc.
- UNIX is a registered trademark of UNIX System Laboratories, Inc.
- Novell is a registered trademark of Novell, Inc.
- ORACLE, ORACLE*Terminal, OBJECT*SQL, SQL*FORMS, SQL*Menu, SQL*Net, SQL*Plus, PRO*C, and SQL*ReportWriter are trademarks of the Oracle Corporation.
- IBM and VTAM are registered trademarks of International Business Machines Corporation.
- CLEO and LINKix are trademarks of CLEO Communications.
- Hayes and Smartmodem are trademarks of Hayes Microcomputer Products, Inc.
- Ethernet is a trademark of Xerox Corporation.
- VERITAS is a trademark of the Veritas Software Corporation.
- Netscape Navigator is a trademark of Netscape Communications Corporation

How to Use This Book

This book is designed to step you through the entire installation process. You can also use it as a quick-reference to obtain specific information you may need on a particular topic.

For Complete Installation Instructions

Read Chapter 1, "Getting Started" before you begin for information on prerequisites, including site preparation and the tools and information you need to complete the installation successfully. If you need help logging in and navigating through the system screens and windows, review Appendix B, "Accessing Windows and Screens" From there, read and use each chapter in the order presented. This will take you step by step through the procedures you must perform to install a factory-assembled, -loaded, and -tested (ALT) Lucent INTUITY system.

⇒ NOTE:

If you are installing a non-ALT system, see Appendix C, "Building a System," in *INTUITY™ CONVERSANT® System Version 6.0 MAP/100C Maintenance*, 585-310-180, for instructions.

For a Quick Reference

If you want a quick reference, Appendix A, "System Installation Checklist" contains a checklist of procedure titles. These titles are listed in the order in which you must perform them. Also included are references to where you will find the complete procedures in this book.

For Troubleshooting Information

Where troubleshooting information is available, notes in the text refer you to the appropriate place in Appendix C, "Troubleshooting Procedures" to look for help.

For Connectivity and Pinout Information

For supplemental pinout and connectivity information, see Appendix D, "Pinouts" and Appendix E, "Cable Connectivity" respectively.

To Locate Specific Topics

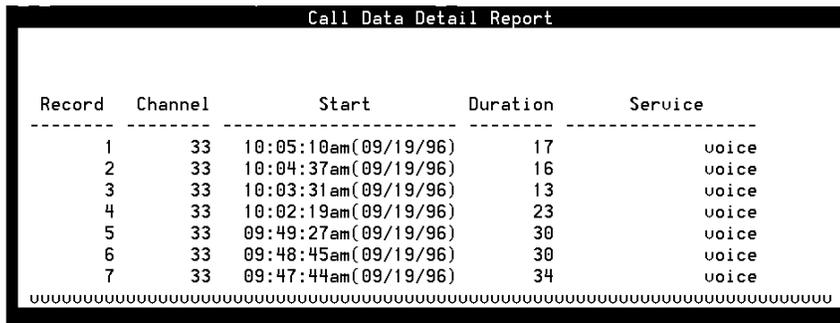
This book includes an alphabetical index at the end for quick access to specific topics.

Conventions Used in This Book

This section describes the conventions used in this book.

Terminology

- The word “type” means to press the key or sequence of keys specified. For example, an instruction to type the letter “y” is shown as
Type **y** to continue.
- The word “enter” means to type a value and then press `ENTER`. For example, an instruction to type the letter “y” and press `ENTER` is shown as
Enter **y** to continue.
- The word “select” means to move the cursor to the desired menu item and then press `ENTER`. For example, an instruction to move the cursor to the start test option on the Network Loop-Around Test screen and then press `ENTER` is shown as
Select **Start Test**.
- The INTUITY CONVERSANT system displays *windows, screens, and menus*. Windows and screens both show and request system information (Figure 1 through Figure 4). Menus (Figure 5) present options from which you can choose to view another menu, or a screen or window.



Record	Channel	Start	Duration	Service
1	33	10:05:10am(09/19/96)	17	voice
2	33	10:04:37am(09/19/96)	16	voice
3	33	10:03:31am(09/19/96)	13	voice
4	33	10:02:19am(09/19/96)	23	voice
5	33	09:49:27am(09/19/96)	30	voice
6	33	09:48:45am(09/19/96)	30	voice
7	33	09:47:44am(09/19/96)	34	voice

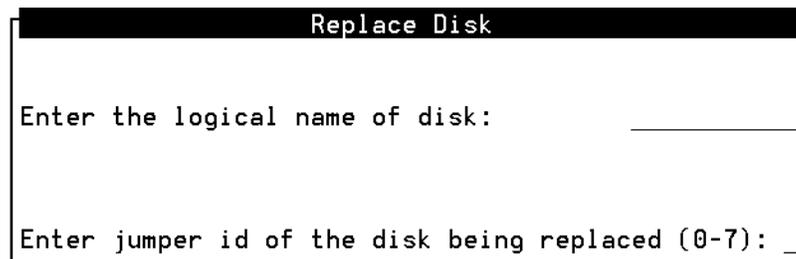
Figure 1. Example of an INTUITY CONVERSANT Window Showing Information

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 2. Example of an INTUITY CONVERSANT Screen Showing Information



The screenshot shows a window titled "Replace Disk" with a black title bar. Inside the window, there are two text prompts for user input. The first prompt is "Enter the logical name of disk:" followed by a horizontal line for text entry. The second prompt is "Enter jumper id of the disk being replaced (0-7):" followed by a single underscore character for text entry.

Figure 3. Example of an INTUITY CONVERSANT Window 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 Requesting Information

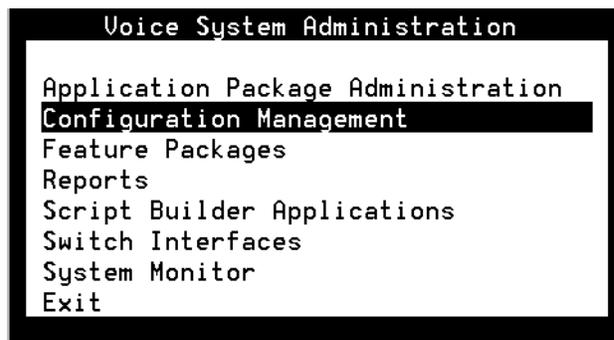


Figure 5. Example of an INTUITY CONVERSANT Menu

Terminal Keys

- Keys that you press on your *terminal or PC* are represented as rounded boxes. For example, an instruction to press the enter key is shown as
Press `ENTER`.
- Two or three keys that you press at the same time on your *terminal or PC* (that is, you hold down the first key while pressing the second and/or third key) are represented as a series of separate rounded boxes. For example, an instruction to press and hold `ALT` while typing the letter “d” is shown as
Press `ALT` `D`.
- Function keys on your terminal, PC, or system screens, also known as *soft keys*, are represented as square boxes 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 are represented as square boxes. For example, an instruction to press the first key on your telephone keypad is shown as
Press `1` to record a message.

Screen Displays

- Values, system messages, field names, and prompts that appear on the screen are shown in typewriter-style `constant-width` type, as shown in the following examples:
Example 1:
Enter the number of ports to be dedicated to outbound traffic in the
Maximum Simultaneous Ports field.
Example 2:
Alarm Form Update was successful.
Press <Enter> to continue.
- The sequence of menu options that you must select to display a specific screen or submenu is shown as follows:
Start at the Voice System Administration Menu and select:

```
> Reports
```

```
> Call Data Detail
```

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 Call Data Detail screen.

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

Other Typography

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

Example 1:

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

Example 2:

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

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

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

Safety and Security Alert Labels

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

 **CAUTION:**

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

 **WARNING:**

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

 **DANGER:**

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

 **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.

Related Resources

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

Documentation

 **NOTE:**

The *INTUITY CONVERSANT System Version 6.0 System Description*, 585-310-241, contains a detailed description of all books included in V6.0 INTUITY CONVERSANT documentation library. Always refer to the appropriate book for specific information on planning, installing, administering, or maintaining an INTUITY CONVERSANT system.

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

- *INTUITY CONVERSANT System Version 6.0 MAP/100C Maintenance*, 585-310-180
- *BCS Products Security Handbook*, 555-025-600

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

Electronic Updates to This Book

The ACCESS Electronic News online bulletin board is available to provide you with additional information about the INTUITY CONVERSANT product, including updates and supplements to the information in this book. This free service is available 24 hours a day, 7 days a week. To register and receive a special offer on ACCESS Plus software, call 1-800-242-6005 and ask for Department 186.

Training

The following training class is recommended as a prerequisite to installing a INTUITY CONVERSANT system:

- Course No. B03620A, INTUITY™ CONVERSANT® Installation and Maintenance (for domestic installations)
- Course No. GO3603A, CONVERSANT Installation and Maintenance (for international installations)

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

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

How to Comment on This Book

We are interested in your suggestions for improving this book. Please complete and return the reader comment card that is located behind the title page.

If the reader comment card has been removed, send your comments to:

Lucent Technologies
Product Documentation
Room 22-2H15
11900 North Pecos Street
Denver, Colorado 80234

You may also fax your comments to the attention of the Lucent INTUITY writing team at (303) 538-1741.

Please mention the name and order number of this book, *INTUITY™ CONVERSANT® System Version 6.0 MAP/100C New System Installation*, 585-310-177.

Disclaimer

Intellectual property related to this product and registered to AT&T Corporation has been transferred to Lucent Technologies Incorporated.

Any reference within this text to American Telephone and Telegraph Corporation or AT&T should be interpreted as references to Lucent Technologies Incorporated. The exception is cross references to books published prior to December 31, 1996, which retain their original AT&T titles.

Lucent Technologies—formed as a result of AT&T's planned restructuring—designs, builds, and delivers a wide range of public and private networks, communications systems and software, consumer and business telephone systems, and microelectronic components. The world-renowned Bell Laboratories is the research and development arm for the company.

Overview

This chapter describes:

- Site preparation, including environmental, space, and power requirements for the MAP/100C
- Installation prerequisites; specifically, tools, test equipment, system information, documentation, and switch administration requirements
- Points of demarcation for installation and maintenance
- Your responsibility with regard to the security of the customer's system
- Technical assistance and other resources available to you during installation

 **NOTE:**

The information in this book assumes that you are installing an assembled, loaded, and tested (ALT) system. If this is not the case, see Appendix C, "How to Build a System," in *INTUITY CONVERSANT System Version 6.0 MAP/100C Maintenance*, 585-310-180, for additional instructions.

Purpose

The purpose of this chapter is to ensure that:

- The customer site meets the physical requirements for installation of the MAP/100C
- You are prepared with the tools and information you need to complete the system installation successfully

Site Preparation

This section describes physical requirements for the installation site.

Environmental Considerations

Place the MAP/100C in an area where the environmental conditions shown in Table 1-1 are maintained.

Table 1-1. Environmental Considerations

Operating State	Temperature	Humidity
Continuous Operation	+10 to +38°C	5 to 55% noncondensing
Short-term operation	+10 to +38°C	5 to 80%, noncondensing
Nonoperating	-40 to +60°C	5 to 95%, noncondensing

Installation Area Considerations

Observe the following when determining where to place the MAP/100C.

- *Do not* install the unit in an area with high-power electrical equipment.
- *Do not* install the unit in the same area as copier machines because of the paper particles created by such equipment.
- Install the unit in an area that provides protection from excessive sunlight, heat, cold, chemicals, static electricity, magnetic fields, vibration, dust, and grime.
- Maintain an air-distribution system that provides adequately cooled, filtered, and humidity-controlled air.



NOTE:

The maximum heat output of a MAP/100C is approximately 2500 BTU.

- Provide surge protection and power backup in areas with volatile power (brown-outs or frequent power surges).
- Provide additional grounding if necessary in a multiple-system installation to facilitate an environment that is free of radio-frequency noise.

Space Requirements

Table 1-2 lists the approximate weight, size, and depth of the primary MAP/100C hardware components. Note that the weight listed includes only the basic chassis, hard disk, floppy disk, cartridge tape drive, and three circuit cards: Pentium CPU, video controller, and SCSI host adapter controller.

The MAP/100C can be rack-mounted in one of three ways:

- Standard 24-inch commercial frame
- Common ESS open frame
- 5ESS global frame

Follow the manufacturer's instructions, included in the rack kit, to install the MAP/100C..

Table 1-2. Space Requirements

Equipment	Weight (lbs.)	Height (in.)	Width (in.)	Depth (in.)
MAP/100C (in frame)	140	24	22.6	14.5
Monitor	15	13.5	13	14.5
Keyboard	5	2.5	19	8
Printer	20	5	16	11

Power Requirements

The MAP/100C powers the monitor through an interface cable. The rear of the unit contains a power supply receptacle for the monitor.

Table 1-3 lists the power requirements for the MAP/100C.

Table 1-3. Power Requirements

Attribute	MAP/100	Printer	Monitor
Volts AC	110–130 VAC +/- 5%	115 VAC +/- 5%	110–240 VAC auto sensing
Volts DC	-48 VDC	N/A	N/A
Hertz (Hz) (Power)	60	50–60	50–87
Phase	Single	Single	Single
Breaker Amps	20 (AC), 25 (DC)	2 (AC)	1 (AC)
Nominal Current Draw	7 (AC), 15 (DC)	N/A	N/A
Power Input	NEMA ¹ 5–15P	NEMA 5–15P	Included with monitor; 1 m (3 ft) long
Power Output	600 watts	N/A	N/A
Unit input receptacles	IEC-320 inlet	IEC-320 inlet	IEC-320 inlet
Heat Dissipation	2500 BTU	N/A	N/A

1. National Electrical Manufacturer's Association.

In addition to the above power requirements, you must also:

- Locate each unit and printer within 6 feet of its power receptacle
- Keep the communication cables separate from the power cables
- Install communication and power cables in accordance with National Electrical Codes (NEC)
- Use the AC power output receptacle on the back of the unit for a video monitor only. Never plug any other device into this receptacle.

⚠ CAUTION:

Use only shielded cables and equipment in conjunction with the MAP/100C to maintain safe levels of electromagnetic compatibility.

System Grounding Connections

Customer-premise-provided outlets should be grounded in accordance with NEC and applicable local codes.

To maintain electromagnetic interference (EMI) protection, personal protection, and immunity from circuit noise, you must ground each MAP/100C to a solid, stable single-point ground.



CAUTION:

Use extreme care when you make power and ground connections.

Installation Prerequisites

This section:

- Lists the tools, test equipment, system information, and documentation you must have to install and test the MAP/100C
- Describes the switch administration that must be done before you arrive on site

Tools

The following tools are recommended for installing the MAP/100C:

- A medium-width flat-blade screwdriver
- A No. 2 Phillips screwdriver
- A small pair of needle-nose pliers
- A small pair of wire cutters
- A sharp, pointed instrument such as a ball-point pen



NOTE:

Do not use the point of a lead pencil. The graphite can damage a circuit card, and cause problems such as electrical shorts.

Test Equipment

It is recommended that the following test equipment be used when installing a MAP/100C:

- A volt/ohm meter
- Two telephones connected through the switch. These must be of the same type as the majority of telephones the customer will be using on the system. If the message waiting indicator (MWI) for the system is a lamp, the test telephones must be equipped with a lamp. If the MWI is a stutter tone, they must be able to give the stutter notification.

The two test telephones must be placed so that you can easily see the monitor while you are using them.

- If the system includes INTUITY CONVERSANT Script Builder FAX Actions, you must have access to a customer fax machine for testing.

System Information

The installation procedures in this book assume that you know how to log on and off the system and how to move around using the INTUITY CONVERSANT system screens. To review this information, see Appendix B, "Accessing Windows and Screens".

Switch Administration

Before you begin the installation, the switch must be administered to support the following situations:

- Testing each channel connected to the system before assigning the channel(s) to INTUITY CONVERSANT or another application
- Testing the INTUITY CONVERSANT system
- Performing cut-to-service procedures that provide the users with an active coverage path

Before you arrive on-site, all of the initial switch or PBX administration should be complete unless otherwise specified by contract. Verify that this initial administration has been completed before you begin work on the system.

⇒ NOTE:

If the administration is not done, instructions are provided in Chapter 6, "Initial Administration for Switch Integration".

Documentation

Use the following documentation during the installation of a MAP/100C INTUITY CONVERSANT system:

- *INTUITY CONVERSANT System Version 6.0 MAP/100C New System Installation, 585-310-177*

Use this book to familiarize yourself with installation prerequisites and to perform hardware installation, initial administration, and acceptance testing.

- *INTUITY CONVERSANT MAP/100C System Version 6.0 Maintenance, 585-310-180*

Use this book for troubleshooting, alarm retirement or to correct errors in the factory assembly process.

Regulatory Agency Guidelines

Follow the installation procedures in this book to ensure compliance with the current FCC rules regarding radio-frequency devices (FCC Rules, Part 15) and the connection of terminal equipment to the telephone network (FCC Rules, Part 68).

FCC/CSA Part agency compliance label(s) for the MAP/100C system card and individual network interface cards are located on the rear surface of the chassis or individual circuit card.

FCC Guidelines

The guidelines in this section will help you to comply with procedures as you connect to the public telephone network.

Before You Connect to the Public Telephone Network

Before you make any connections to the public telephone network, give the local service provider the following information:

- The telephone and circuit numbers of the lines to which the VIS will be connected
- The FCC registration number of the MAP/100C (this is located on the faceplate of each Tip/Ring circuit card and visible at the rear of the unit)
- The ringer equivalence number (REN) of the PC/PBX circuit card and the IVP6 Tip/Ring circuit card (this is located on the faceplate of each circuit card and visible at the rear of the unit).

Type of Telephone Lines Needed

Use your application on standard-device telephone line circuits and standard T1 or E1 trunks.

Do not connect to telephone company-provided coin service (central office implemented systems).

Note that connecting to party-line service is subject to state tariffs.

If you have any questions about the telephone line(s), such as how many pieces of equipment you can connect to a line, contact the service provider.

Telephone Service and Repair Problems

If the service provider notes a problem with customer equipment, the company may

- Discontinue service to the customer temporarily
- Notify the customer prior to disconnecting service, if practicable

If advance notice is not feasible, the company may

- Discontinue service to the customer temporarily
- Notify the customer as soon as possible
- Give the customer an opportunity to correct the problem
- Inform the customer of the right to file a complaint with the FCC

MAP/100C Repair Problems

In the unlikely event that repairs are needed for the MAP/100C, ensure that they are performed by an authorized representative. If you are a field service representative and cannot solve a problem, contact your maintenance provider. If your maintenance provider is Lucent Technologies BCS and you are

- Within the domestic U.S., call the Technical Service Organization (TSO) at 1-800-242-2121
- Non-U.S., call the International Technical Assistance Center (ITAC) at 303-538-4666

**CAUTION:**

If any of the Intuity CONVERSANT equipment is not operating properly, remove it immediately from the telephone lines. Malfunctioning equipment can harm the telephone network.

When to Notify the Service Provider

**CAUTION:**

Notify the service provider immediately if you are permanently or temporarily disconnecting the MAP/100C from its present line or trunk circuits. (This applies to digital circuits ONLY.)

**CAUTION:**

If you disconnect the MAP/100C from the telephone network on a continuing basis without advising the service provider, they can discontinue your service permanently. (This applies to digital circuits ONLY.)

Equipment Attachment Limitations

 **NOTE:**

This section applies to Canadian customers only.

The Canadian Department of Communications label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational, and safety requirements. The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing the equipment, ensure that it is permissible to be connected to the facilities of the local service provider. The equipment must be installed using an acceptable method of connection. In some cases, the company's inside wiring associated with a single line individual service can be extended by means of a certified connector assembly (telephone extension cord). Be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment must be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the service provider cause to request that the user disconnect the equipment.

For your own protection, ensure that the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

 **CAUTION:**

Do not attempt to make such connections. Contact the appropriate electric inspection authority or electrician as appropriate.

The Load Number (LN) assigned to each terminal device denotes the percentage of the total load to be connected to a telephone loop that is used by the device, to prevent overloading. The termination on a loop can consist of any combination of devices, and is subject to only one requirement: the total of the Load Numbers of all devices cannot exceed 100.

 **NOTE:**

The LN for the AYC28 Tip/Ring circuit card is 9.

Points of Demarcation

A *demarcation point* defines the extent of Lucent Technologies' responsibilities for a product. Beyond this point, the customer is responsible for providing overall service.

When installing an INTUITY™ CONVERSANT® system, you must be aware of the following demarcations:

- Local area network (LAN) connectivity
- INTUITY™ CONVERSANT® Script Builder FAX Actions

LAN Connectivity Demarcation

The demarcation point for the INTUITY CONVERSANT TCP/IP is the point of connection into the LAN circuit card. The customer is responsible for

- The LAN cable
- The connector at the end of the cable for connection to the system
- LAN administration not performed on the system
- Maintaining the TCP/IP addresses and administration on the system after cutover, unless otherwise specified by contract

Lucent Technologies' service technicians dispatched for system installation are not responsible for troubleshooting the customer's LAN.

INTUITY CONVERSANT Script Builder FAX Actions Demarcation

INTUITY™ CONVERSANT® Script Builder FAX Actions uses the Brooktrout fax circuit card. The point of demarcation for INTUITY CONVERSANT Script Builder FAX Actions is the same as the switch integration point of demarcation.

Lucent Technologies' service technicians dispatched for system installation are not responsible for troubleshooting customer fax machines.

Maintaining System Security

During an installation, security of the customer's system is your responsibility. You must take the following precautions to protect password and system security.

Password Security

If you suspect that the security of any password has been compromised, notify your project manager or system administrator.

System Security

Do not leave a logged-on terminal unattended. Always log off the system if you will be leaving it unattended, even for a short period of time.

Getting Help with the Installation

The following resources are available for help during an installation:

- Help screens located on the system
- Remote maintenance center support

System Help Screens

Online help is available for the INTUITY CONVERSANT system and administration screens. To display help screens or command choices, press **HELP** (F1) or **CHOICES** (F2) from the field for which you want the help. If valid entries can be specified, the system displays a list of options from which you can choose. Otherwise, it displays general information about the field.

Unpacking the MAP/100C and Installing Nonassembled Hardware

2

Overview

This chapter describes:

- How to unpack and set up the MAP/100C
- The importance of saving packing materials
- Where to locate key components of the MAP/100C

Purpose

The purpose of this chapter is to:

- Facilitate unpacking and set up of the MAP/100C
- Provide illustrations and descriptions of key components of the MAP/100C for reference during the installation

Unpacking the MAP/100C

Follow this procedure to unpack the system at the customer site:

 **NOTE:**

Because of the size and weight of the MAP/100C, the keyboard and monitor are shipped separately from the chassis.

1. At the installation site, cut the bands holding the carton to the wooden pallet and remove the top of the box.
2. Remove the accessory boxes and foam packing materials from the top.
3. Remove the large cardboard “sleeve” that surrounds the chassis. The MAP/100C should now be fully exposed and resting on the bottom foam packing material.
4. Remove the plastic bag by “peeling” it from around the sides of the MAP/100C as far as possible.
5. Using an appropriate lifting system (the MAP/100C weighs approximately 140 lb), lift the chassis from the bottom of the carton.

Saving Packing Materials

Save the shipping carton and all packing materials to use in case you have to return the MAP/100C to the manufacturer. (If you ordered multiple MAP/100Cs, saving one carton and packing materials should be sufficient.) Packing materials include antistatic bags and bubble wrap as well as cardboard and foam inlays. This also applies to shipping cartons for the keyboard and monitor.

 **CAUTION:**

The manufacturer does not accept liability for a damaged unit if you do not return it in the original packing materials and carton. The carton has been designed to prevent damage and ensure product warranty.

Return Repair Tag

If you must return a MAP/100C to the manufacturer, complete the yellow BCS return repair tag and attach it to the unit. The factory information packet included in the MAP/100C carton contains the yellow return repair tag.

Installing the MAP/100C in a 5ESS Switching Equipment Single Bay Frame

Use the following procedure to install the MAP/100C in a 5ESS Switching Equipment Single Bay Frame with mounting kit ED5D184:

1. Remove the unit from the box. See the procedure above, "Unpacking the System."

⇒ NOTE:

If you are installing only one unit in a frame, it is recommended that you install the single unit central to the frame for easier accessibility and better frame stability.

2. Locate the left and right mounting ear brackets (A10039 and A10038) and attach them to the side plate of the unit as shown in Figure 2-4.
3. Secure the left and right mounting ear brackets (A10039 and A10038 bracket with four #10 screws.
4. Install C-channel brackets on the 5ESS Switch frame and on the MAP/100C. There are two sets that accompany each unit. The slotted C-channel must be installed onto the frame (Figure 2-2).

⇒ NOTE:

These guides aid you in installing in the unit without having to hold it up to secure it to the cabinet.

5. Position the unit by sliding the C-channel brackets located on each side of the unit inside the channel brackets located on each side of the frame.
6. Lift the unit with a mechanical lifting device using the four eye bolts located on the top of the MAP/100C and slide it onto the C-channel brackets in the cabinet so that the mounting ear brackets are against the cabinet uprights.
7. Secure the mounting ear brackets to the cabinet using three #12-24 screws for each bracket.
8. Attach the two cabinet frame dress filler panels (A10070 and A10071) to the frame under the mounting brackets (Figure 2-5).
9. Remove and discard the four eye bolts after the unit is secured to the frame.
10. Release the two latches on the front top corners of the unit and slide the unit out the front of the frame to the full extent of the slides.

⇒ NOTE:

The unit should lock in place.

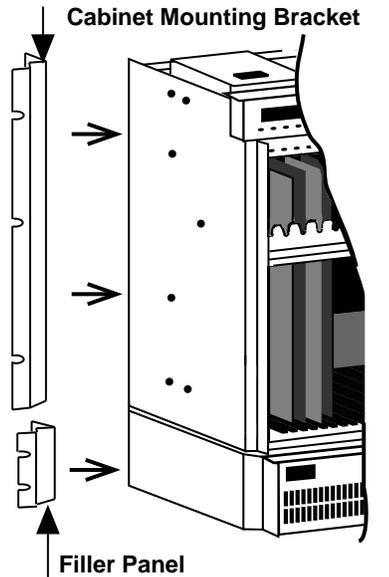


Figure 2-1. Installing Mounting Brackets onto the MAP/100C

11. Install the cable restraint bar on the rear of the unit, using two #10 screws in the bottom-most mounting holes (Figure 2-3).
12. From the front of the unit, release the slide latching mechanism on the sides of the two top slides while simultaneously pushing in on the unit.
13. Secure the unit into its mounting position with the two latches at the front top corners of the unit.



NOTE:

The 5ESS frame can hold one or two units, depending on the type of application (Figure 2-4).

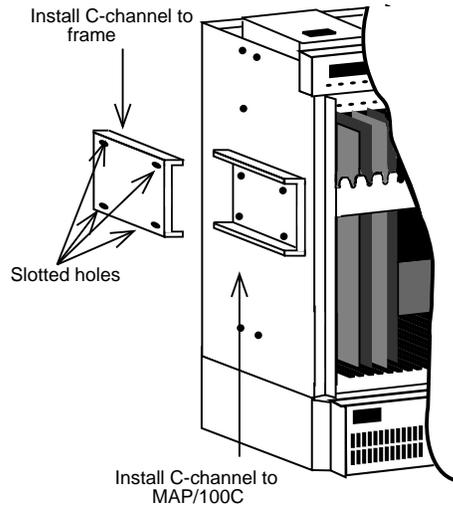


Figure 2-2. Installing C-Channel Brackets onto the Frame and the MAP/100C

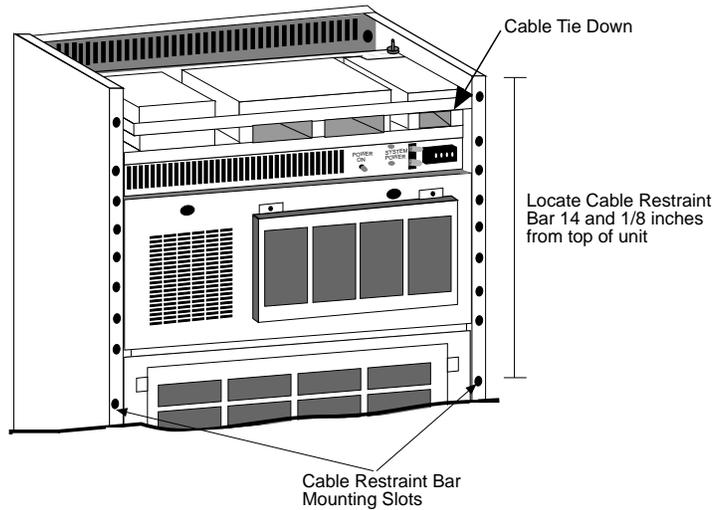


Figure 2-3. Installing the Cable Restraint Bar

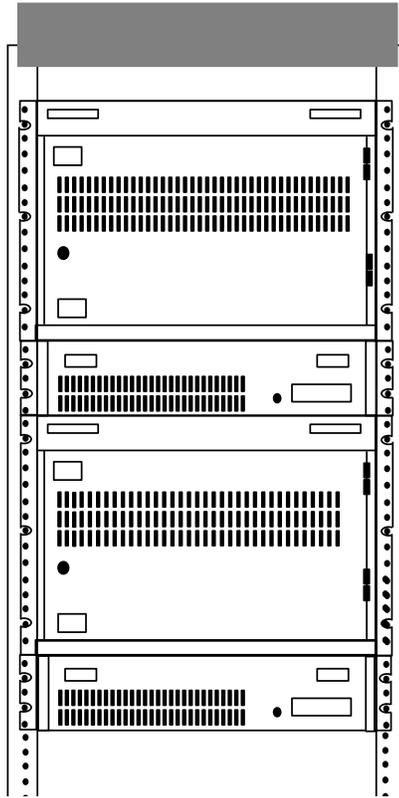


Figure 2-4. MAP/100C Units in a 5ESS Cabinet, Front View

Installing the MAP/100C in a Common ESS Switching Equipment Single Bay Frame

Use the following procedure to install the MAP/100C in a Common ESS Switching Equipment Single Bay Frame with mounting kit ED5A001:

⇒ NOTE:

The Common ESS cabinet can hold one, two, or three MAP/100C (Figure 2-5). If you are installing only one MAP/100C, it is recommended that you install it in the center of the frame for easier access and better stability.

1. Remove the unit from the box. See “Unpacking the System” in this chapter.
2. Locate and attach the two support brackets (A10040-B and A10041-B) to the frame (Figure 2-6) beginning with the lowest frame location.
3. Secure the two support brackets (A10040-B and A10041-B) with #12 screws.
4. Locate and attach the left and right mounting ear brackets (A10036-A and A10037-A) to the side plate of the unit (Figure 2-4).
5. Secure the left and right mounting ear brackets (A10036-A and A10037-A) with #10 screws.
6. Position the unit so that lower edge of the mounting ear brackets (A10036-A and A10037-A) rest on top of the support brackets.
7. Use the four eye bolts located on the top of the unit to lift the unit with a mechanical lifting device and fasten them to the frame using three #12-24 screws on each side of the unit.
8. Remove and discard the four eye bolts after the unit is secured to the frame.
9. Release the two latches on the front top corners of the unit and slide the unit out the front of the frame to the full extent of the slides.

⇒ NOTE:

The unit should lock in place.

10. Install the cable restraint bar on the rear of the unit in the bottom-most mounting holes (Figure 2-6).
11. Secure the cable restraint bar with two #10 screws.
12. From the front of the unit, release the slide latching mechanism on the sides of the two top slides while simultaneously pushing in on the unit.
13. Secure the unit into its mounting position with the two latches at the front top corners of the unit.

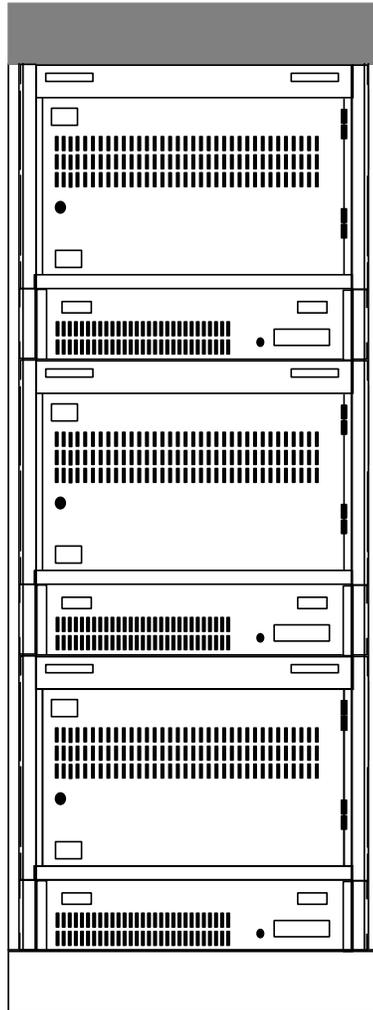


Figure 2-5. Multiple MAP/100Cs in a Common ESS Open Frame, Front View

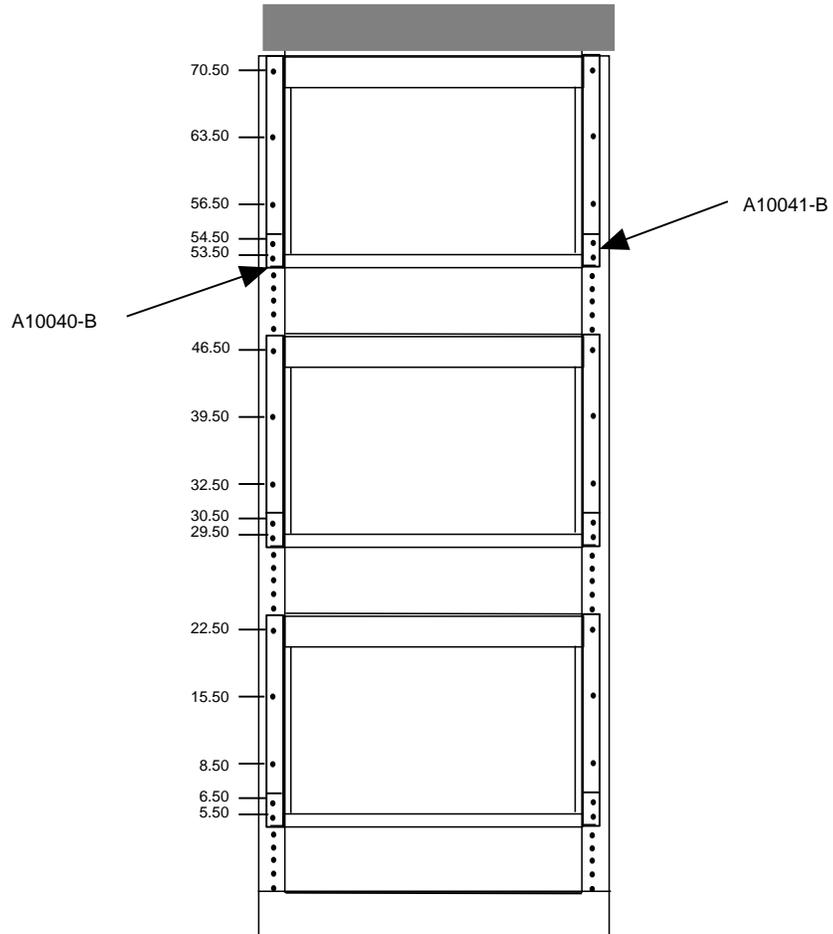


Figure 2-6. Mounting Locations on the Common ESS Frame

Installing the MAP/100C in a Commercial 24-Inch Panel Rack

Use the following procedure to install the MAP/100C in a commercial 24-inch panel rack:

1. Remove the unit from the box. See “Unpacking the System” in this chapter.



NOTE:

If you are installing only one unit in a frame, install the single unit central to the frame for easier access and frame stability.

2. Locate and attach the left and right support brackets (A20096 and A20097) using the hardware recommended by the rack manufacturer.



NOTE:

These support brackets are adjustable in length to accommodate 24-, 30-, and 36-in. depths.

3. Position the unit so that the main side plates of the unit rest on top of the support brackets mounted on the rack.
4. Lift the unit with a mechanical lifting device into the rack using the four eye bolts located on the top of the unit.
5. Slide the unit completely into the rack so that the front mounting ears rest against the vertical mounting uprights inside the rack.
6. Fasten the mounting to the rack using the hardware recommended by the manufacturer.
7. Locate and fasten the two cabinet frame dress filler plates to the rack uprights using the hardware recommended by the manufacturer.
8. Remove and discard the four eye bolts after the unit is secured to the rack.
9. Release the two latches on the front top corners of the unit and slide the unit out the front of the frame to the full extent of the slides.



NOTE:

The unit should lock in place.

10. Install the cable restraint bar on the rear of the unit in the bottom-most mounting holes (Figure 2-6).
11. Secure the cable restraint bar with two #10 screws.
12. From the front of the unit, release the slide latching mechanism on the sides of the two top slides while simultaneously pushing in on the unit.
13. Secure the unit into its mounting position with the two latches at the front top corners of the unit.

Locating Key Components on the MAP/100C

Use the following sections and diagrams to locate key components on the MAP/100C. For additional information describing the MAP/100C hardware, see *INTUITY CONVERSANT System Version 6.0 System Description*, 585-310-241.

The Front of the Chassis

Figure 2-7 shows the front view of the MAP/100C. Table 2-1 provides a description of the components on the front of the MAP/100C.

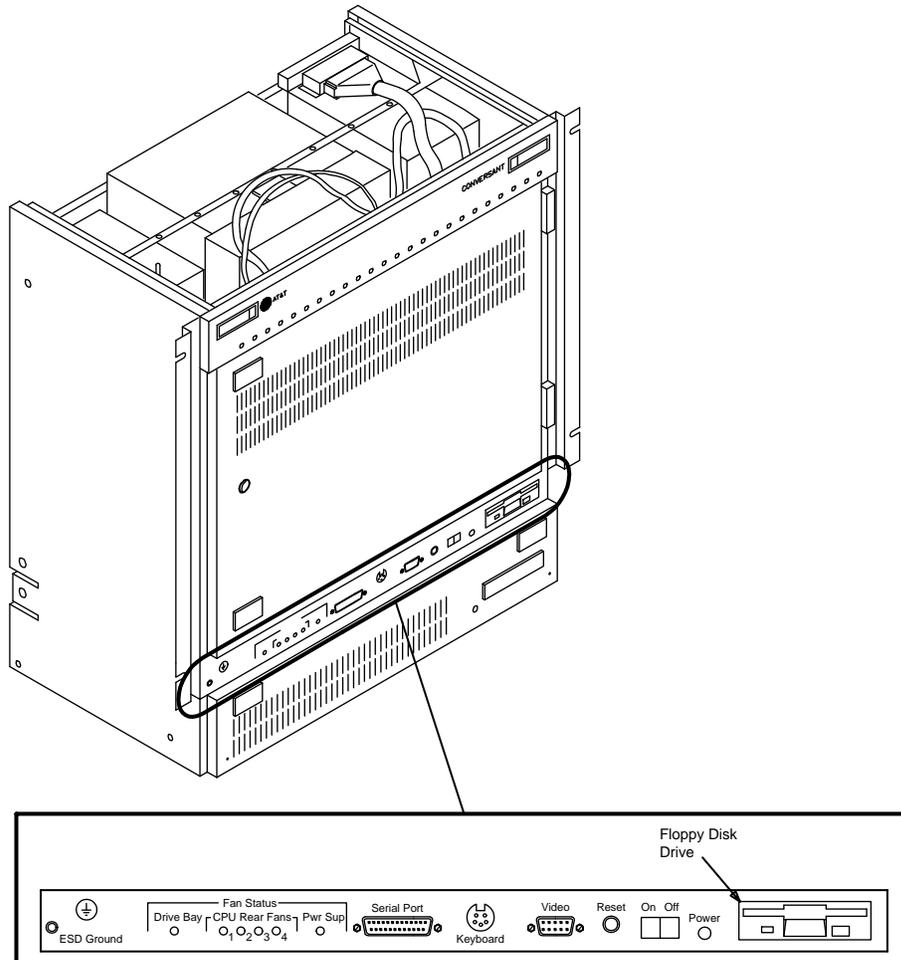


Figure 2-7. Front View of the MAP/100C

Table 2-1. Components on the Front of the MAP/100C

Component	Location	Description	Function
Front door	Upper middle section	Hinged on right; has latch fasteners	Covers the peripheral bay and card cage backplane
Keyboard receptacle	Lower center below front door	5-pin circular DIN female	Connects the keyboard to the MAP/100C
Video receptacle	Lower center below front door	15-pin high-density D subminiature female	Connects the monitor to the MAP/100C
Power switch	Lower right side below front door	Rocker switch	Turns the MAP/100C on and off
Reset button	Lower right side below front door	Recessed button	Resets the MAP/100C
Asynchronous port COM2	Lower center below front door	25-pin male D subminiature	Communicates with external devices
Power On indicator	Far lower right below front door	LED	Lights green when the power is on
Fan Status indicator (6)	Lower left below front door	LED	Lights green when the fan is working normally

Peripheral Drive Devices

Table 2-2 provides descriptions and functions of the various drives on the MAP/100C. These devices are located in the peripheral bay behind the right front door.

Table 2-2. Peripheral Bay Drives

Drive ¹	Description	Function
Cartridge tape	2.0-Gbyte SCSI	Backup and restore; loading the system
Floppy disk drive	3.5-inch, 1.44-Mbyte high density; located in control panel	System configuration; diagnostic testing
Hard disk	2.0-Gbyte SCSI	Storage for operating system, application software, and speech data
Hard disk(s) (optional)	2.0-Gbyte SCSI	Disk mirroring; storage

1. These devices are subject to change. For the most current information on drives, call Access, the INTUITY CONVERSANT online bulletin board, at 1-800-242-6005

Chassis Cooling System

Seven cooling fans provide forced-air cooling for the MAP/100C. Two are located in the peripheral drive bay, and four are located in the rear. The seventh fan is located inside the power supply.

The fans maintain air flow in the unit to prevent components from overheating, which can cause a component to malfunction. To prevent overheating, you must also maintain adequate clearance around the unit so that air can circulate.

The Back of the Chassis

Figure 2-8 shows the back view of the MAP/100C. Table 2-3 provides a description of the components on the back of the MAP/100C.



NOTE:

You can connect only one keyboard at a time to the MAP/100C. Do not use the monitor and keyboard receptacles for any other purpose than to connect the monitor and keyboard.

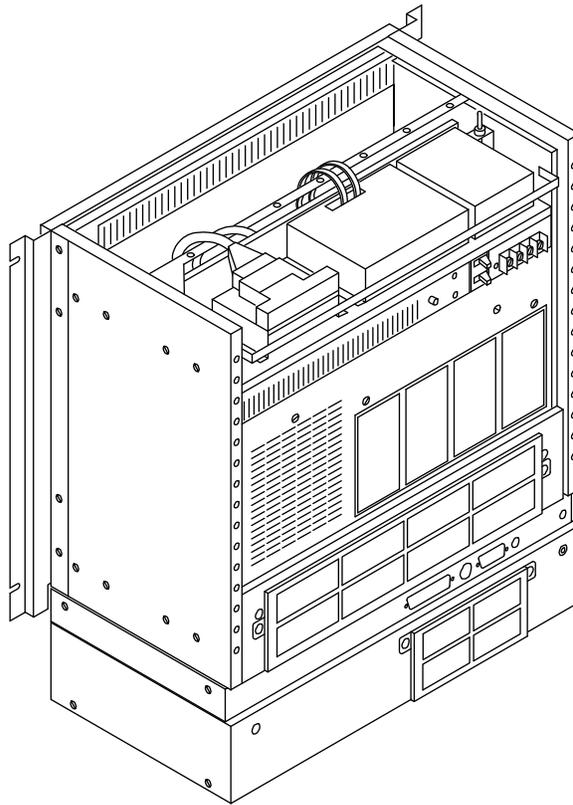


Figure 2-8. Back View of the MAP/100C

Table 2-3. Components on the Rear of the MAP/100C

Component	Location	Description	Function
Fan panel access door	Lower center	Hinged on the bottom to swing downward	Covers the four rear cooling fans
Asynchronous port COM2	Lower center below the fan panel door	25-pin male D subminiature	Provides access to the CPU card
Keyboard receptacle	Lower center below the fan panel door to the right of COM2	5-pin circular DIN female	Connects a keyboard to the MAP/100C
Video connector	Lower right below the fan panel door to the right of the keyboard	15-pin female D subminiature	Connects the MAP/100C to a monitor
Reset button	Lower right below the fan panel door	Recessed button	Resets the MAP/100C
Circuit breakers	Upper right corner	Rocker switches	Turns incoming power to the MAP/100C on or off
Power On	Upper right corner next to the circuit breakers	LED	Lights green when the power is on
AC power inlet receptacle	Upper right corner, next to the circuit breakers (AC units)	Three-prong 110/220 V	Connects the MAP/100C to a power supply via a power cord
DC power terminal strip	Upper right corner, next to the circuit breakers (DC units)	Four screw lugs	Connects the MAP/100C to DC power via a -48 VDC dedicated line

Making Cable Connections

3

Overview

The MAP/100C can contain up to 25 circuit cards that provide various functions for the system. These circuit cards include video controls, peripheral controls, communication controls, CPU, and analog Tip/Ring. They are located in the circuit card cage in backplane slot positions 1 through 25.

This chapter serves as an introduction to connecting cables to the faceplates of circuit cards that are installed in the MAP/100C. See Appendix E, "Cable Connectivity" for more detailed information.

This chapter also includes general steps for making cable connections, though additional steps may be required for some.

Purpose

The purpose of this chapter is to provide the information to make cable connections and complete the Lucent INTUITY system installation successfully.

Connecting the Tip/Ring Circuit Card

The Tip/Ring circuit cards (Figure 3-1) provide six channels which are used by the INTUITY CONVERSANT system. The MAP/100C accommodates seven Tip/Ring circuit cards. The Tip/Ring circuit card can be any of the following types:

- IVP4 (AYC6B)
 - IVP6 (AYC5B)
 - IVP6-IU (AYC16)
 - IVP6-IA (AYC26)
 - IVP6-ID (AYC27)
 - IVP6 (AYC28)
 - IVC6 (AYC10)
 - NGTR (AYC30)
-

Figure 3-1. Faceplate of the IVP6 (AYC5B), IVP6-IU (AYC16), IVP6 (AYC26), IVP6 (AYC27), NGTR (AYC30) and IVP6 (AYC28) Tip/Ring Circuit Cards

The Tip/Ring circuit cards use two 6-pin-conductor modular cords. These cords provide three lines for telephone hook-up. You can connect the Tip/Ring circuit card to telephone lines in one of three ways:

- Direct cable connection from the circuit card to the telephone line
- Cable connection from the circuit card through a line splitter and then to the telephone line
- Cable connection using a Tip/Ring distribution panel to the telephone line

Direct Cable Connection

When you use a two-conductor modular cord to make a direct connection from either of the two Tip/Ring circuit card jacks to the telephone line, only line 1 or line 4 of the three telephone lines is connected.

Figure 3-2 shows a typical direct Tip/Ring line connection for the IVC6 Tip/Ring circuit card. See Appendix D, "Pinouts" if you need pinout information.

Figure 3-2. Direct Line Connection from IVC6 (AYC10) Tip/Ring Circuit Card

Cable Connection Using a Line Splitter

Adapters or line splitters enable you to use multiple channels in modular cords.

885A Adapter

Using the 885A adapter or line splitter (Figure 3-3) to connect the IVC6 Tip/Ring circuit card to the telephone line enables you to use all three channels in the 6-pin-conductor modular cord.

NOTE:

Be sure to record the circuit card slot number and telephone extension numbers on the adapter.

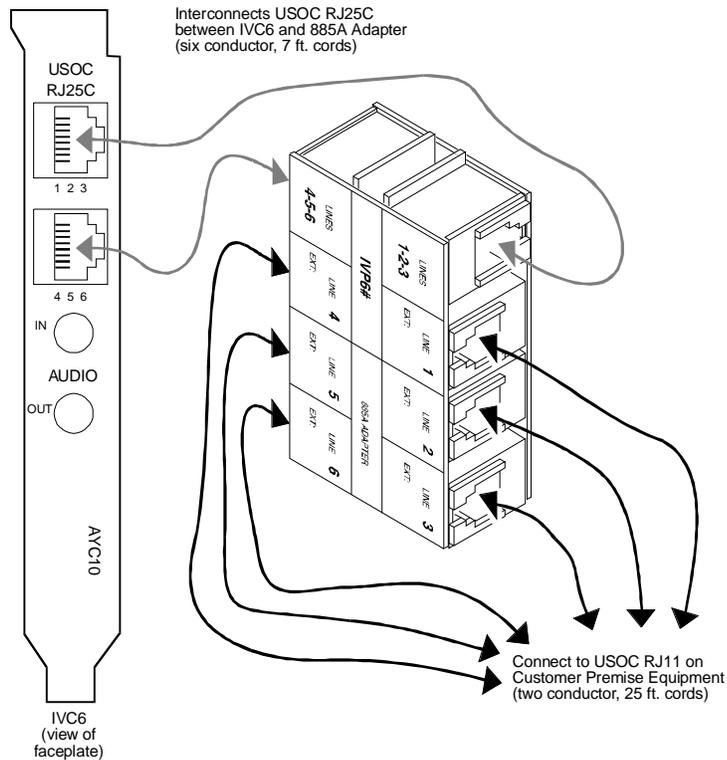


Figure 3-3. Line Splitter Connection (885A Adapter) with a Tip/Ring Circuit Card

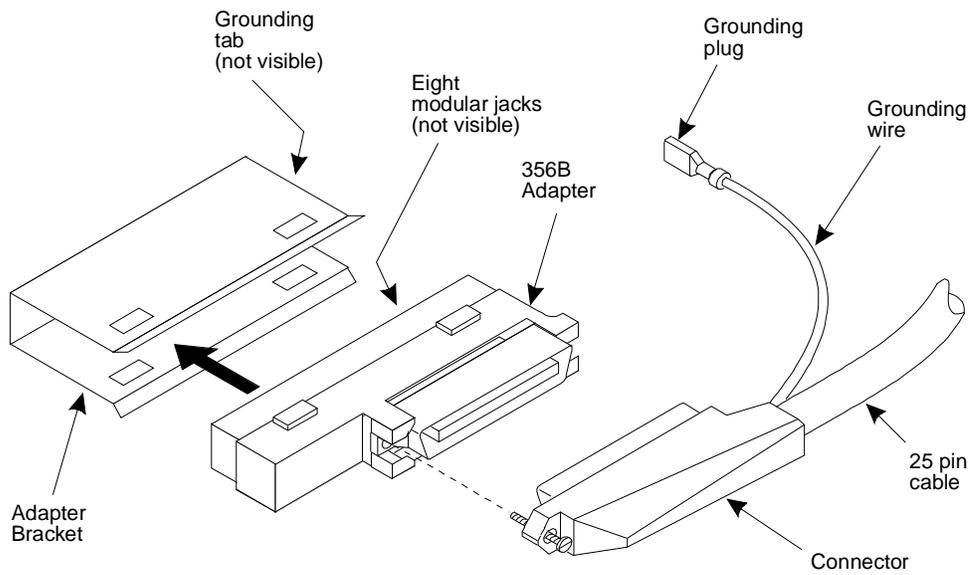
356B Adapter

Using the 356B adapter or line splitter (Figure 3-4) to connect the IVC6 Tip/Ring circuit card to the telephone line enables you to use eight 6-pin-conductor modular cords.



NOTE:

Be sure to record the circuit card slot number and telephone extension numbers on the adapter.



- SIDE VIEW -

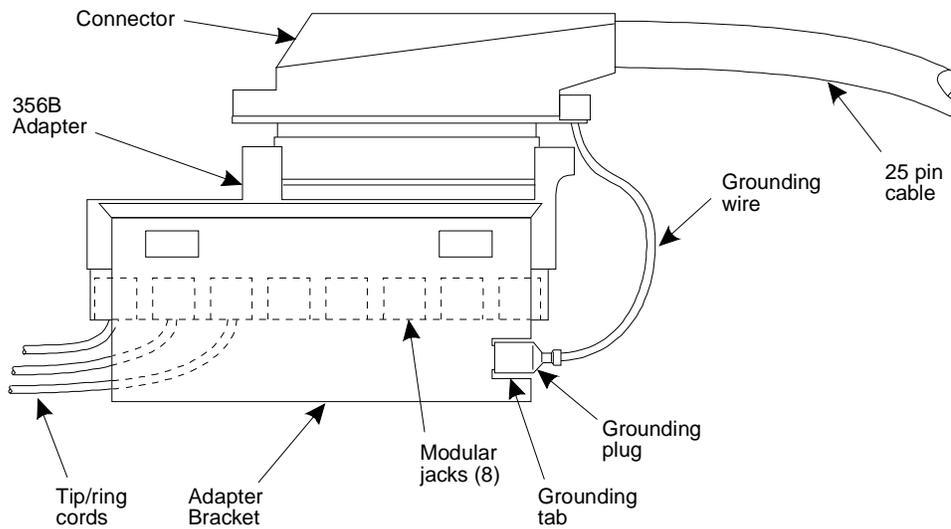


Figure 3-4. Line Splitter Connection (356B Adapter) with a Tip/Ring Circuit Card

Cable Connection Using the Tip/Ring Distribution Panel

The MAP/100C Tip/Ring distribution panel is located on the back of the chassis. This panel provides a simplified wiring scheme for connecting to the local customer premise equipment or building connecting block provided by the central office. This panel allows you to connect a maximum of 42 channels (up to seven Tip/Ring circuit cards).

Complete the following procedure to connect the panel:

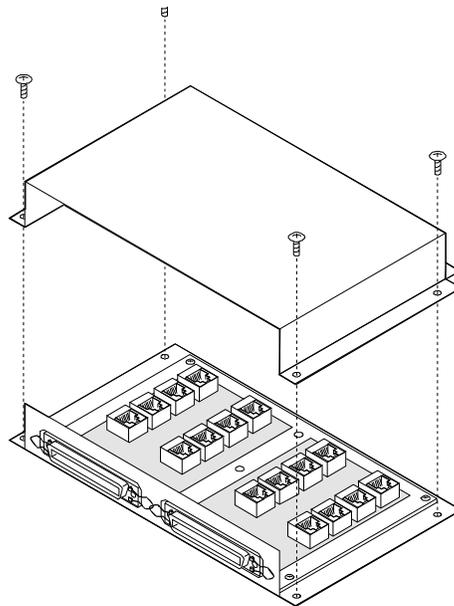


Figure 3-5. MAP/100C Tip/Ring Distribution Panel

1. Table 3-1 shows the numbering scheme for connecting the short modular cords provided with the Tip/Ring circuit cards to the panel. Use this information, the channel numbers on the Tip/Ring circuit cards, and the number of Tip/Ring circuit cards in the system to connect the Tip/Ring circuit card modular jacks to the appropriate jacks on the Tip/Ring distribution panel.
2. After you insert the modular cord into the appropriate jack, remove any slack in the cable on the back of the unit by dressing it so that it is stored in the area above the distribution panel. Use cable ties, if necessary, to dress the cables neatly.

3. Make telephone line connections to the MAP/100C with the 25-ft 50-conductor shielded cable(s) equipped with USOC RJ21X connections.

Different cable lengths are available. These cables are listed in Appendix E, "Cable Connectivity".

See Appendix D, "Pinouts", if you need wiring and pinout connections for the Tip/Ring distribution panel.

Table 3-1. Connections from the MAP/100C Tip/Ring Circuit Cards to the Tip/Ring Distribution Panel

Tip/Ring Card	Channel Nos. on the Tip/Ring Card	Jack No. on the Panel
1st	1, 2, 3	J1
	4, 5, 6	J2
2nd	1, 2, 3	J3
	4, 5, 6	J4
3rd	1, 2, 3	J5
	4, 5, 6	J6
4th	1, 2, 3	J7
	4, 5, 6	J8
5th	1, 2, 3	J9
	4, 5, 6	J10
6th	1, 2, 3	J11
	4, 5, 6	J12
7th	1, 2, 3	J13
	4, 5, 6	J14
8th	1, 2, 3	J15
	4, 5, 6	J16

Connecting FAX Lines

The INTUITY CONVERSANT system supports up to three Version 1 and up to three Version 2 fax circuit cards (Figure 3-6).

Figure 3-6. Fax Circuit Card Faceplate- Version 1 and Version 2

Each fax actions circuit card includes two RJ-45 telephone jacks. The top jack accesses lines 0 and 1. The bottom jack accesses lines 2 and 3. The cable splitters, which are included with the fax circuit card, connect the channels to single-pair wiring. To use only one or two lines of the card, plug a single-pair RJ-11 cord into the top jack to access line 0. Plug a single-pair RJ-11 cord into the bottom jack to access line 2.

The pinouts for the top and bottom telephone jacks are identical and are configured as shown in Table 3-2.

Connecting Analog Telephone Lines to the Fax Circuit Card

Each fax circuit card comes with two telephony connection cables. Each cable supports two telephone lines, and the circuit card provides modular jacks for two cables.

To connect analog telephone lines to a fax circuit card:

1. Plug the RJ14C connector into the fax actions circuit card.
2. Plug the two RJ11 single-line connectors into the telephone line.
3. Make sure that the Tip/Ring lines connected to the FAX channels:
 - Have dial tone
 - Are able to place calls
4. Make note of the telephone numbers associated with the Tip/Ring lines connected to the fax circuit cards.



NOTE:

If you cannot place calls on your Tip/Ring lines, you will not be able to deliver a fax message. You will need the numbers to administer fax line extensions.

Table 3-2. Telephone Jack Pinouts on the Fax Circuit Card

RJ-45 Pin	PJ1	PJ2
8	NC	NC
7	NC	NC
6	Ring 1	Ring 3
5	Ring 0	Ring 2
4	Tip 0	Tip 2
3	Tip 1	Tip 3
2	NC	NC
1	NC	NC

Connecting Asynchronous Devices

There are two types of asynchronous cards:

- 8-port IPC-900 or Gemini-1000 asynchronous serial card
- EQUINOX Megaport 8C5 8-port serial I/O card

There are two ways to connect the MAP/100C to a terminal, modem, or other DTE or DCE devices via an asynchronous link:

- Using COM1, an asynchronous port on the rear of the MAP/100C
- Using the additional asynchronous ports on the optional Multi-port serial card

⇒ NOTE:

The MAP/100C provides two asynchronous ports, COM1 and COM2. However, COM2 is reserved for Lucent Technologies remote maintenance and is not available for asynchronous connections.

Using COM1

A 9-pin D subminiature male connector is provided on the rear panel of the MAP/100C for COM1. This connector connects internally to the CPU. COM1 supports asynchronous host connections running at 300–19,200 baud. Networking modems typically use the 19,200 baud rate.

See Appendix D, "Pinouts", if you need pinout information for the COM1 connector.

Using the 8-Port Asynchronous Circuit Card

The optional 8-port asynchronous circuit card provides eight additional asynchronous ports for connecting to modems, terminals, or switch integration devices.

⇒ NOTE:

Each port has a maximum of 9600 Baud rate.

Each 8-port circuit card includes eight 6-conductor 14-ft modular cords (D6AP-87; comcode 102937604). The faceplate of the card contains modular jacks. These jacks connect to two types of 25-pin D subminiature adapters, one of which is needed for each device you are connecting:

- A terminal/printer adapter for connection to terminals, printers, or other DTE devices
- A modem adapter for connection to modems or other DCE devices



NOTE:

These are special adapters that have been customized for use with the 8-port circuit card.

Asynchronous Circuit Card (EQUINOX Megaport 8C5 8-Port Serial I/O Board)

Figure 3-7 shows the EQUINOX Megaport 8C5 8-port asynchronous circuit card.

Figure 3-7. 8-Port Asynchronous Circuit Card (EQUINOX Megaport 8C5 8-Port Serial I/O Card)

Follow the instructions provided with the device(s) you are installing for connection and setup. See Appendix E, "Cable Connectivity", to determine how to cable these devices between the system and the switches or other peripherals. See Appendix D, "Pinouts", if you need pinout information.

Connecting the MAP/100C to a Synchronous Host

There are two possible types of synchronous circuit cards:

- PC/XL synchronous input/output circuit card (Revision D or newer)
- AT&T FIFO/SIB synchronous host circuit card

PC/XL Synchronous I/O Circuit Card

Only one PC/XL synchronous circuit card is supported (Revision D or newer). The PC/XL synchronous circuit card is shown in Figure 3-8. The location of the switches and interrupt jumpers are identified.

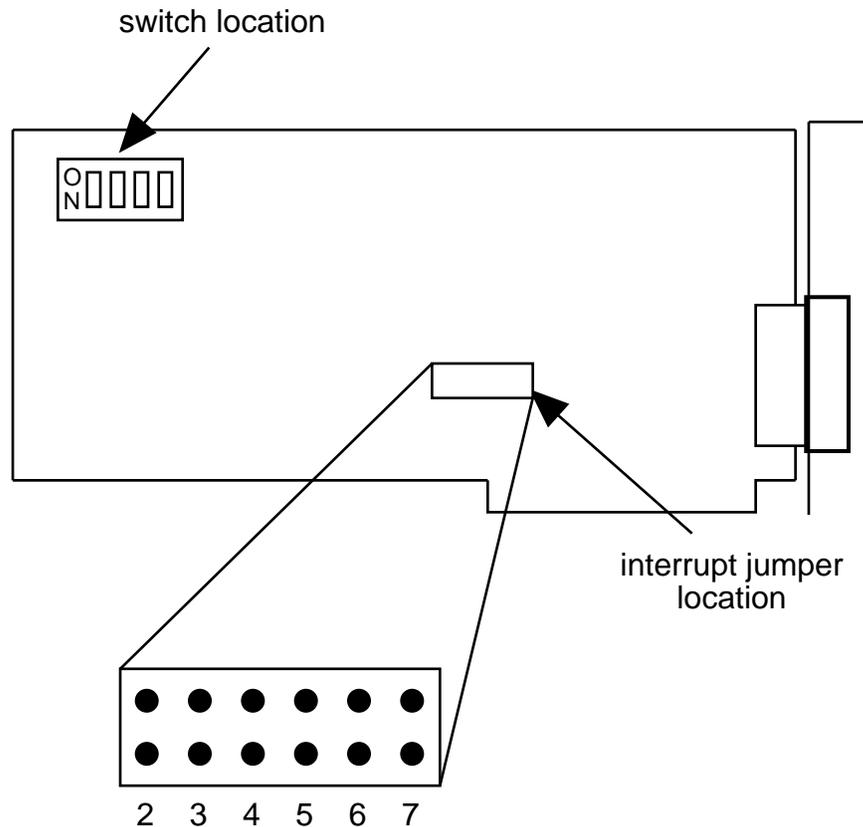


Figure 3-8. PC/XL Synchronous I/O Circuit Card

FIFO/SIB Synchronous Host Circuit Card

Up to two FIFO/SIB synchronous host circuit cards are supported. The FIFO/SIB synchronous host circuit card is shown in Figure 3-9.

Figure 3-9. FIFO/SIB Synchronous Host Circuit Card

The MAP/100C synchronous circuit card(s) supports an SDLC protocol line that connects to the host communication equipment with a male D subminiature RS-232 connector.

Host Cable Specifications

Data links between the MAP/100C and the host computer are made using a shielded RS-232 cable. This cable extends from the synchronous host circuit card port on the rear of the MAP/100C and connects to host equipment.

Data link cables provided with the MAP/100C are shielded cables to ensure compliance with FCC rules and regulations. The cabling is available in 25 ft increments. A 25-ft foot cable is packaged with this feature.

Note that all cables should be shielded. Also note that you should use limited-distance modems when data links exceed 100 ft.

The data link cable layout or house wiring is engineered on a per-job basis. The exact arrangement is site dependent.

The customer order should specify the required number of data-link cables. For a direct connection to a host, you need a modem eliminator.

Making Digital Connections

The MAP/100C supports a T1 interface to the central office 5ESS.

For information about setting options on the MAP/100C and the 5ESS, see Chapter 6, "Initial Administration for Switch Integration".

A Channel Service Unit (CSU) is used to connect digital telephone lines (T1) coming into the MAP/100C. A CSU performs certain line-conditioning and equalization functions and responds to loopback commands from the central office. A CSU also regenerates digital signals, monitors them for problems, and provides a way to test the digital circuit. See Appendix E, "Cable Connectivity", for additional information about digital connections using a CSU.

Digital Connectivity Diagrams

Figure 3-10 through Figure 3-12 show examples of typical T1 connections. Figure 3-13 shows an optional adapter cable for line side T1.

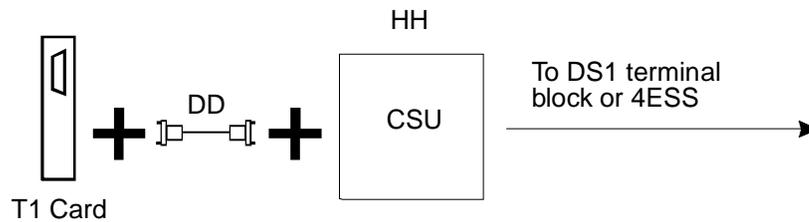


Figure 3-10. T1 Interface Connection to a CSU with a 15-Pin D-Subminiature Connector

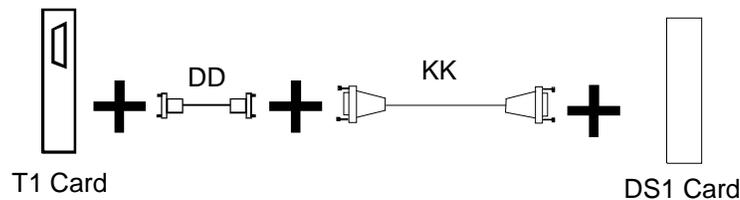


Figure 3-11. T1 Interface Connection to DS1 for Line Side T1

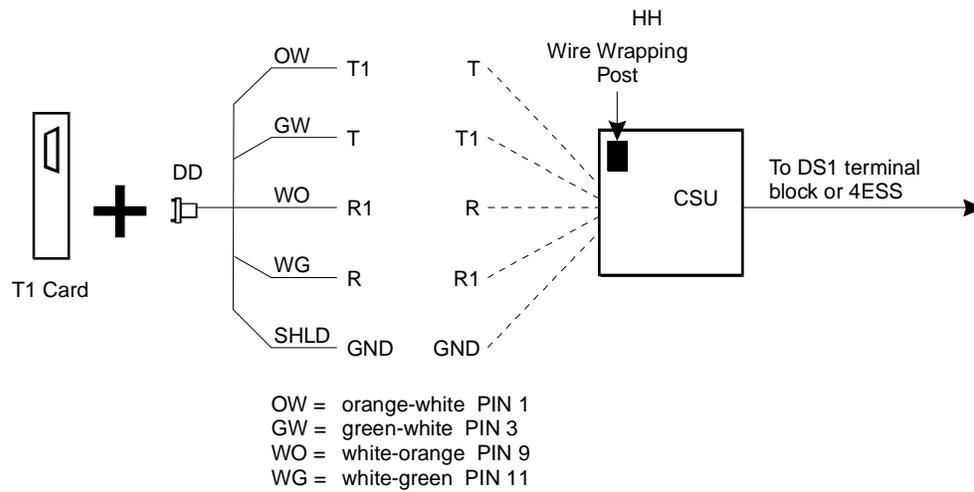


Figure 3-12. T1 Interface Connection to a CSU with Wire-Wrapping Posts

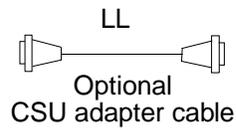


Figure 3-13. Optional Adapter Cable for Use between DD and HH in Figure 3-10

Connecting E1/T1 Circuit Cards

The E1/T1 circuit card (Figure 3-14) detects call progress tones for call transfer or call origination to another destination on the switch.

Figure 3-14. E1/T1 (AYC21) Circuit Card Faceplate

Central Office Connection—T1 Circuit Cards

There are two T1 circuit cards supported by the system.

- AYC3B
- AYC11

You can connect the MAP/100C T1 circuit cards to the standard T1 carrier directly to a DS1 terminal block or through the following types of customer premise equipment:

- Channel Service Unit (CSU)
- Automatic call distributor (ACD)
- Private branch exchange (PBX)

You *must* use a CSU if any of the following situations applies to your MAP/100C setup:

- The system is more than 655 ft from the signal source. The signal source may be a DSX or the last T1 repeater. In this situation, the CSU regenerates the received signal and properly attenuates the transmitted signal to prevent crosstalk.
- The system is terminating the T1 trunk from outside the building. In this situation, the CSU provides the primary lightning and surge protection as required by FCC Part 68.
- The T1 loop is not dry (that is, is powered by either 110 VAC or +24 or -48 VDC sources).
- You want to use the remote loopback and/or extended super frame maintenance features. In this situation, the CSU recognizes the in-band bit patterns that signal it to loop back the incoming signal or to perform other maintenance functions.

Connecting T1 Circuit Cards to a CSU

This section explains how to connect the MAP/100C T1 circuits to a CSU. It uses the Paradyne ACCULINK 3150 CSU (Figure 3-15) as an example.

Before You Begin

- Verify that the Paradyne ACCULINK 3150 CSU kit is on site and contains the following:
 - An ACCULINK 3150 CSU (comcode 107063828)
 - A 15-pin male-to-female slide latch adapter cable (comcode 107063711)
 - A T1 line interface cable (comcode 406941559)
 - A 75-ft T1 extension cable (ED5P208-30-G1)
- With the addition of an optional DC power cable, the 3150 CSU can operate on either a +24 VDC power source, a -48 VDC single source battery, or -48 VDC redundant source batteries (for power backup). For more information, see the *ACCULINK 3150 Channel Service Unit Operator's Guide*.
- There is an extension cable included in the ACCULINK 3150 CSU kit. However, if you are locating the CSU over 75 ft away from the MAP/100C, you will need another one or more of these 75-ft cables. Note that 655 ft is the maximum distance to which you can daisy-chain these cables.

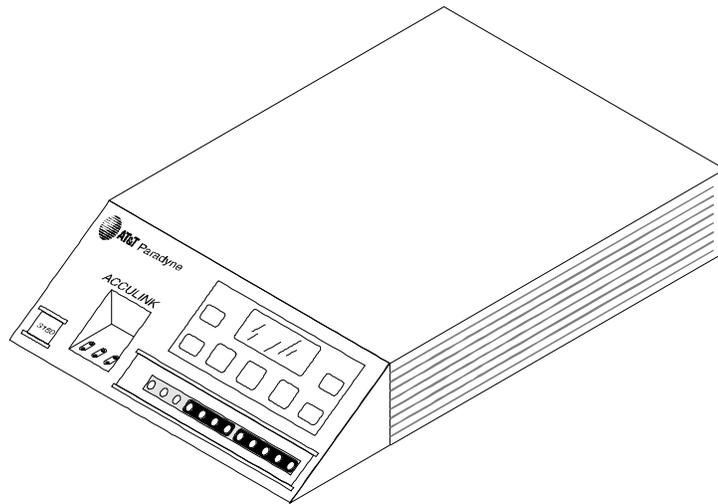


Figure 3-15. Paradyne ACCULINK 3150 Channel Service Unit for T1 Connections

Procedure

1. Connect the 15-pin slide latch adapter cable to the DTE port of the CSU rear panel (Figure 3-16).
2. Connect the other end of the adapter cable to the T1 extension cable. The slide latch on the cable ensures that the two cables are connected properly.
3. Plug the extension cable into the receptacle on the faceplate of the T1 circuit card. If the distance between the CSU and the MAP/100C is greater than 75 ft, use additional extension cables daisy-chained to a maximum of 655 ft.
4. Plug the appropriate end of the transformer into the POWER port of the CSU rear panel. Plug the other end of the transformer into a 110-VAC, 60-Hz grounded receptacle.
5. Connect the appropriate end of the T1 line interface cable to the NETWORK port on the rear panel of the CSU (Figure 3-16).

Figure 3-17 shows the equipment configuration for the ACCULINK 3150 CSU. Figure 3-18 shows a typical cable connection from a T1 circuit card to a CSU.

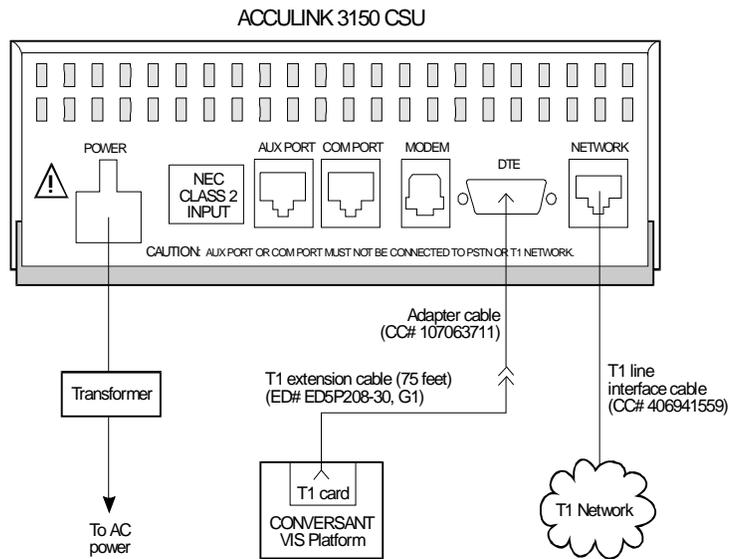


Figure 3-17. Equipment Configuration for the ACCULINK 3150 Channel Service Unit

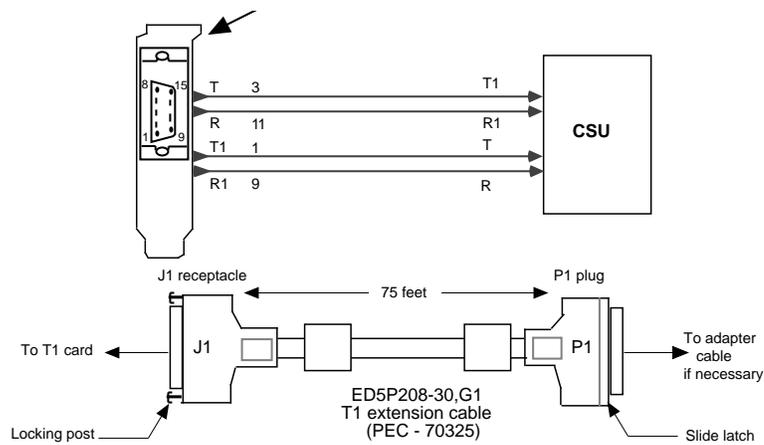


Figure 3-18. Typical Cable Connection from a Channel Service Unit to a T1 Circuit Card

Connecting T1 Circuit Cards to Devices Other than a CSU

The T1 circuit card connector is a 15-pin, D subminiature male connector equipped with slide locks.

To connect the MAP/100C to the device, you need a 75-ft T1 extension cable (ED5P208-30-G1). Plug the extension cable via the connector into the receptacle on the faceplate of the T1 circuit card. This cable terminates via a 15-pin D subminiature connector to a CSU, PBX, etc.

➤ NOTE:

If the distance between the CSU and the MAP/100C is greater than 75 ft, use additional extension cables daisy-chained to a maximum of 655 ft. The total number of cables daisy-chained together must be an odd number to maintain the cross-over connections intended in the cable design.

If you are connecting line-side T1 directly to a DS1 bank, use the female-to-female adapter cable that was selected as an attribute to the T1 circuit card price element code (PEC).

When connecting to certain devices, you may need to cut off the network end of the cable, strip the wires, and connect them using the information in Table 3-3.

Table 3-3. T1 Extension Cable Internal Wire Connections

Wire Color	Pin No. of the J1 15-Pin D Subminiature Connector	Signal Connection Type ¹	Signals to/from the VIS	P1 Connects to
Orange/white	1	T1	To	CSU or network T
White/orange	9	R1	To	CSU or network R
Green/white	3	T	From	CSU or network T1
White/green	11	R	From	CSU or network R1

1. Transmitter connections are identified as T or R. Receiver connections are identified as T1 or R1. You must reverse the connections to any equipment. This means that one equipment's references to T and R must connect to another equipment's references to T1 and R1, respectively.

Making ASAI Connections

The following details the information required to make Adjunct/Switch Application Interface (ASAI) connections to the MAP/100C.

Overview

The MAP/100C is designed to operate with the Lucent Technologies DEFINITY Communications System, Generic 3i (DEFINITY Generic 3i) with the installation of a PC/ISDN circuit card. In addition, an ISDN line circuit pack (TN556) must be installed on the DEFINITY Generic 3i. For information on the TN556, see the *DEFINITY Communications System Generic 1 and Generic 3i System Description*, 555-230-200, and the *DEFINITY Generic 1 and Generic 3i Wiring Manual, Issue 2*, 555-104-630.

To support the ASAI capability, the MAP/100C must be connected via a point-to-point ISDN BRI to the DEFINITY Generic 3i. The Tip/Ring lines that must access ASAI capabilities must be configured as members of an ACD split of the PBX. For the DEFINITY G3i, three analog circuit packs provide this capability. They are the TN742, the TN746, and the TN769. The PC/ISDN circuit card supports the BRI D-channel interface from the switch. One ASAI link per MAP/100C is supported.

Figure 3-19 shows a typical MAP/100C and DEFINITY Generic 3 configuration.

See *INTUITY™ CONVERSANT™ System Version 6.0 Administration*, 585-310-591, for additional information about administration.

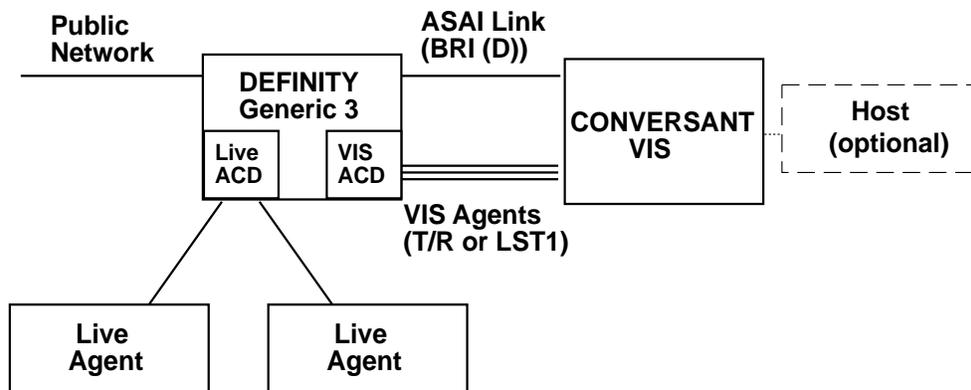


Figure 3-19. Typical DEFINITY Generic 3i Configuration

ASAI Connectivity Diagrams

Figure 3-20 shows typical wiring architecture for the ASAI link.

Note that you must connect the Lucent Technologies 440A4 eight-pin terminating resistor (or equivalent) to the LINE connector of the PC/ISDN circuit card using the DW8 cable provided. Use the other DW8 cable to connect from the connecting block to the terminating resistor.

⚠ CAUTION:

Total cable length from the DEFINITY Generic 3 system to the MAP/100C must not exceed 1900 ft.

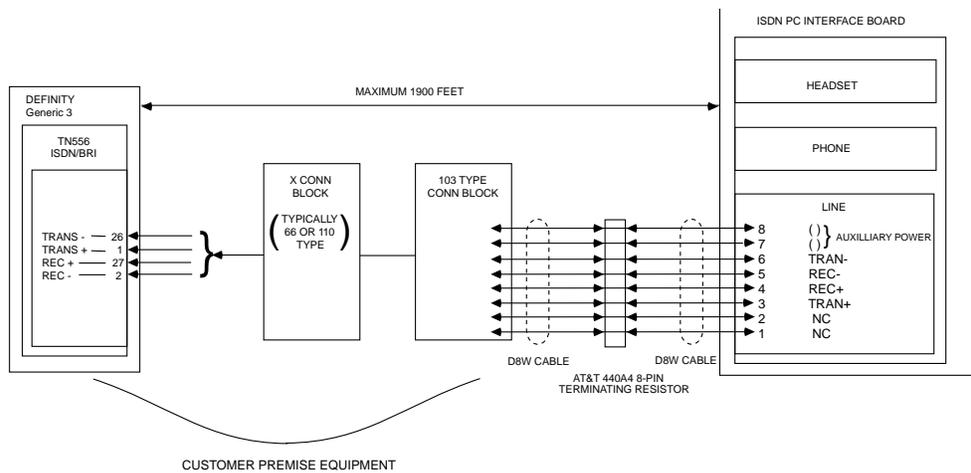


Figure 3-20. Typical Wiring for ASAI Link

Making PRI Connections

The following section details the information you need to make a primary rate interface (PRI) connection to the MAP/100C.

PRI Switch Configuration

The MAP/100C supports a PRI to the network over layer-1 T1 using either D4 or extended super frame (ESF) framing.

Two parameters are dependent on the framing protocol used:

- If D4 framing is used, line coding must be “ZCS” and D-channel inversion must be “Inverted.”
- If ESF framing is used, line coding must be “B8ZS” and D-channel inversion must be “Non-Inverted.”

⇒ NOTE:

Special provisioning of PRI is required on the 5ESS switch for compatibility with the MAP/100C. The interface ID (CCID) parameter default value must be set to 1 instead of the normal value of 0. The interface ID (CCID) must be provisioned on the 4ESS switch as follows:

— 23B+D configurations:

- Interface ID (CCID): 1

— 47B+D Configurations:

- Interface ID (CCID) for circuit with D channel: 1
- Interface ID (CCID) for circuit without D channel: 2

Specification of this parameter is currently not part of the normal order process for Lucent Technologies PRI network services. Thus, special attention is required when ordering.

In addition, the MAP/100C uses some Layer 2 and Layer 3 parameters. You must set these parameters on the switch as shown in Table 3-4 and Table 3-5, respectively.

Note that incoming calls to the system should be provisioned so that the channel number is exclusive and not preferred.

Also note that if the switch is configured to deliver ANI on a subscription basis, it is not possible for the system to request a different type of ANI on a call-by-call basis.

Table 3-4. PRI Layer 2 Parameters

Layer 2 Parameter	Value
Retry Count N200	3
Timer T200	1 sec
Timer T203	30 sec
HDLC (D4/ZCS)	Inverted
HDLC (ESF/B8ZS)	Noninverted

Table 3-5. PRI Layer 3 Parameters

Layer 3 Parameter	Value
Timer T302	10 sec
Timer T303	4 sec
Timer T305	4 sec
Timer T308	4 sec
Timer T310	10 sec
Timer T313	4 sec
Timer T316	120 sec
Timer TL3	120 sec
Timer T309	10 sec
Interface ID (with D channel)	1
Interface ID (without D channel)	2
Bearer capability	64 Kbit voice

PRI Connectivity Diagrams

See "Making Digital Connections" for information on PRI connections. Currently, PRI is not supported in an interface between the MAP/100C and a PBX.

Connecting Other Devices for Switch Connections

You may use the following other devices to connect the system and the switches or other peripherals:

- Z3A Asynchronous Data Unit
- Isolating data interface (IDI) ground isolation device
- Modular Processor Data Module (MPDM)
- 3A translator

Follow the instructions provided with these devices for connection and setup. See Appendix E, "Cable Connectivity", to determine how to cable these devices between the system and the switches or other peripherals.

Making Network Connections

The INTUITY CONVERSANT system enables you to connect to the customer's local area network.

Connecting the LAN Circuit Card

There are two versions of the Ethernet LAN circuit card supported by the system. Both versions allow you to connect the system to your local area network.

The type of cable you use to connect the Ethernet LAN circuit card to the customer's LAN depends on the connection already in use for the LAN. This cable connection can be one of three types:

- Thin Ethernet (BNC)
- Thick Ethernet (AUI)
- 8-pin modular connector (Tbase or twisted pair)



CAUTION:

Do NOT cable the Ethernet LAN circuit card before you power up. Doing so can disturb the customer's existing LAN.

Version 1

Figure 3-21 shows the faceplate connector for Version 1 and 2 of the Ethernet LAN circuit card.

Figure 3-21. Ethernet LAN Circuit Card Faceplate - Version 1 and 2

Verifying the LAN Circuit Card Installation

To set the Version 2 LAN circuit card installation, do the following:

1. Reboot the system. See “Rebooting the UNIX System” in Chapter 3, “Common System Procedures”, in *INTUITY™ CONVERSANT® System Version 6.0 MAP/100C Maintenance*, 585-310-180.
2. Check the message log report for TCP/IP or LAN adapter errors. See Chapter 1, “Getting Started,” in *INTUITY™ CONVERSANT® System Version 6.0 System Alarms and Log Messages*, 585-310-182.
3. Verify that you have network connectivity using the **ping** command. See Appendix A, “Summary of Commands,” in *INTUITY™ CONVERSANT® System Version 6.0 Administration*, 585-310-591.

Token Ring Circuit Card

The INTUITY CONVERSANT system supports two versions (Figure 3-22 and Figure 3-23) of the Token Ring circuit card. Both versions allow you to connect the INTUITY CONVERSANT system to your local area network.

⚠ CAUTION:

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

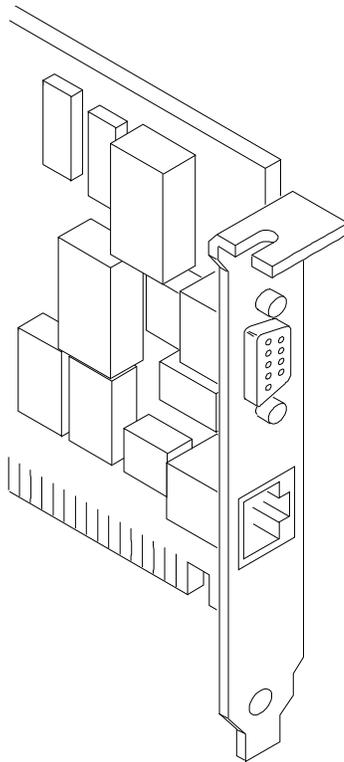


Figure 3-22. Token Ring Circuit Card Faceplate - Version 1

Figure 3-23. Token Ring Circuit Card - Version 2

PC/ISDN (IPCI) Circuit Card

The PC/ISDN circuit card (Figure 3-24) supports the Adjunct/Switch Application Interface (ASAI).



NOTE:

Other Lucent Technologies' documentation may refer to this circuit card as the IPCI circuit card.

Figure 3-24. PC/ISDN Circuit Card Faceplate

Connecting Standard Circuit Cards



WARNING:

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," in Chapter 1, "Getting Started", for detailed electrostatic discharge precautions.

This section provides the cable connectivity for the CPU circuit cards that are included with every MAP/100C.

CPU Circuit Cards

There are two CPU circuit cards available with the INTUITY CONVERSANT system:

- P5 120 MHz CPU circuit card
- 486 CPU circuit card

Connecting the P5 CPU Circuit Card

There is one P5 CPU circuit card installed in the MAP/100C.

Figure 3-25. P5 CPU Circuit Card and Cable Locations

Install toroids on all cables. See "Replacing the Electromagnetic Interference Reduction Components" in Chapter 7, "Replacing Other Components," *INTUITY™ CONVERSANT™ System Version 6.0 MAP/100 Maintenance*, 585-310-180, for toroid installation procedures.

Connecting the 486 CPU Circuit Card

There are two revisions of the 486 CPU circuit card, however, the faceplate connectors (Figure 3-26) are the same.

Figure 3-26. 486 CPU Circuit Card Faceplate, Revision 1 and 2

SCSI Circuit Cards

There are two SCSI circuit cards available for the INTUITY CONVERSANT system.

If your system uses the P5 CPU circuit card, you must have the external SCSI connector circuit card.

If your system uses the 486 CPU circuit card, you must have the SCSI host adapter controller circuit card.

External SCSI Connector Circuit Card

The external SCSI connector circuit card provides an the ability to interface with external SCSI devices (Figure 3-27). There is only one external SCSI connector circuit card installed on the system.

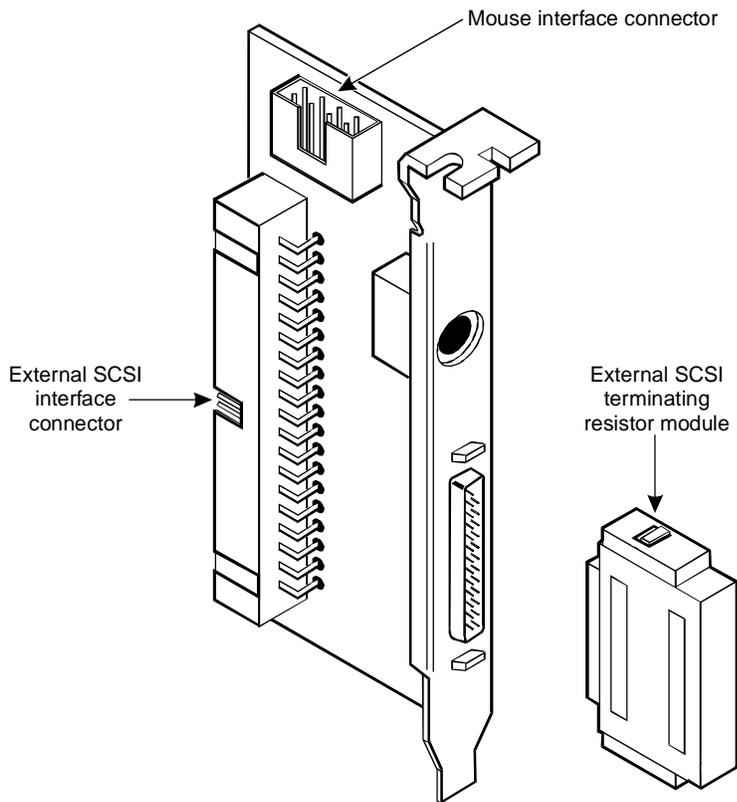


Figure 3-27. External SCSI Connector Circuit Card and Terminating Resistor Module

Once the external SCSI connector circuit card has been installed, the terminating resistor can be attached. The terminating resistor must remain on the external SCSI connector circuit card whenever the MAP/100C is in operation.

SCSI Host Adapter Controller Circuit Card

Figure 3-28 shows the SCSI host adapter controller circuit card.

Figure 3-28. SCSI Host Adapter Controller Circuit Card Faceplate

Video Controller Circuit Cards

There are five video controller circuit cards supported by the system.

- STB Horizon
- WDXLR831124
- WDXLR83160
- WDXLR833124
- VDC 600U

The video controller circuit cards allow the MAP/100C to interface with a monitor. There is one video controller circuit card installed on the system and the faceplate connectors (Figure 3-29 and Figure 3-31) are identical.

Figure 3-29. Video Controller Circuit Card Connector

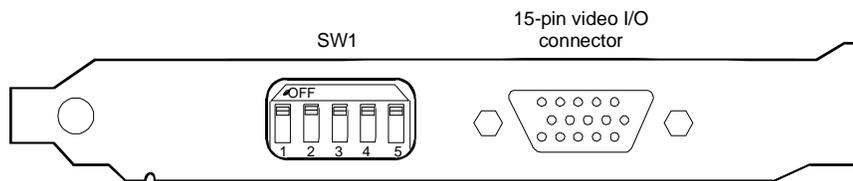


Figure 3-30. Video Controller Circuit Card Faceplate

Model VDC600U

NOTE:
The VDC600U model *cannot* be used with the Graphical Speech Editor.

Remote Maintenance Circuit Card

The remote maintenance circuit card provides remote diagnostics of basic MAP/100C components (Figure 3-31). There is one remote maintenance circuit card installed on the system.

Ensure that the BIOS Extension EPROM (BEE) enable switch is set to the ON (default) position as shown (Figure 3-32).

Figure 3-31. Remote Maintenance Circuit Card

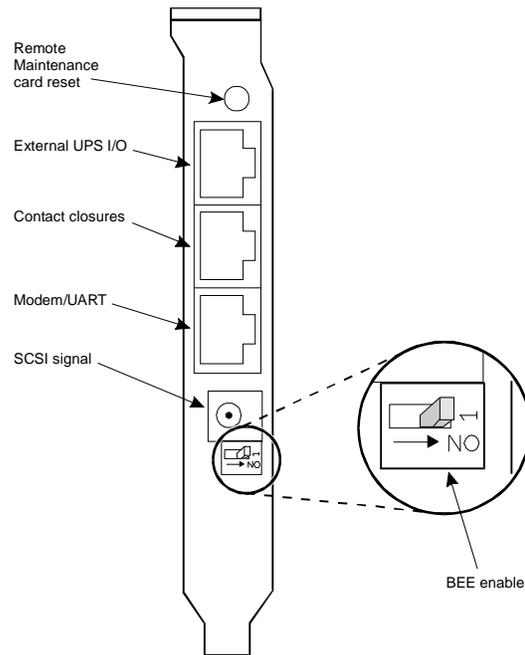


Figure 3-32. Faceplate of the Remote Maintenance Circuit Card Showing the BEE Enable Switch

Connecting Peripherals and Powering Up

4

Overview

This chapter contains procedures for connecting peripherals and powering up. These procedures include

- Connecting the monitor
- Connecting the keyboard
- Connecting the printer
- Connecting a modem
- Powering up the system

Purpose

The purpose of this chapter is to ensure proper connectivity of the MAP/100C to all peripherals.

Connecting the Monitor

This section describes how to make the connections between the MAP/100C and a monitor.

Required Cabling

A power cable and a signal cable connect the monitor to the MAP/100C. The power cable has a male plug at one end and a female plug at the other end. One end of the signal cable has a video input connector and the other end is permanently attached to the monitor.

Use the 15-pin, high-density D-subminiature female connector located on the video circuit card faceplate (Figure 4-1) to connect to the monitor.

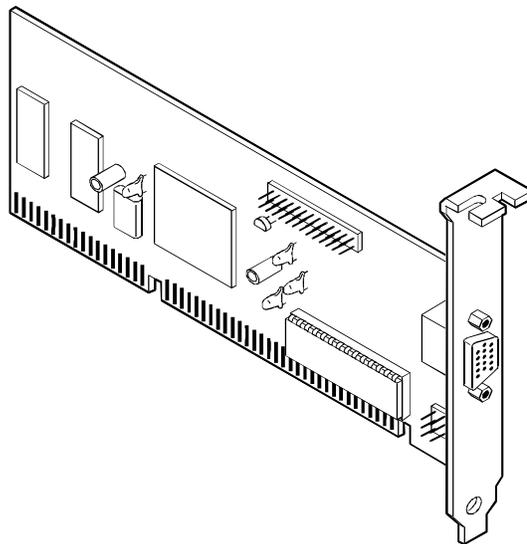


Figure 4-1. Video Circuit Card Cable Connector

Connecting Monitor Cables

Follow these steps to connect the cables:

1. Plug the video cable connector from the monitor directly into the video connector located on the faceplate of the video controller circuit card.

⇒ NOTE:

Access this faceplate from the rear of the MAP/100C.

2. Tighten the thumb-screws on the video cable connector with your fingers or with a small flat-blade screw driver.
3. Match the ends of the power cable to the monitor first and then to a grounded outlet.
4. Plug the female end of the cable into the monitor and the male end into the grounded outlet.

Connecting the Keyboard

A 5-pin, female DIN receptacle is located in the rear of the MAP/100C and a second receptacle is provided on the front panel. The mating male plug is provided with the keyboard. Both of the connector assemblies are keyed to provide proper alignment.

Figure 4-2 shows the receptacle and plug. See Appendix D, "Pinouts", if you need pinout information.

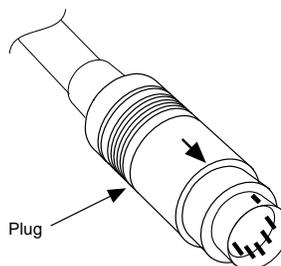


Figure 4-2. Circular DIN 5-Pin Connector for the Keyboard

Connecting the Printer

A 25-pin D-subminiature female receptacle located on faceplate of the CPU circuit card provides a parallel printer interface.

Lucent Technologies recommends and supports the Okidata 320 printer for connection to the system. Use the instructions supplied in the manufacturer's manual, *Users' Guide Okidata 320 Printer*, or the manual provided with your printer to unpack and install your printer. The following installation overview supplements the information provided in the printer guide. See Appendix D, "Pinouts", if you need pinout information.

1. Unpack your printer according to the steps provided in the printer guide.
2. Install the ribbon cassette and paper as shown in your printer guide.
3. Ensure that the ON-OFF switch of the printer is OFF.
4. Set the options as described in your printer guide.



NOTE:

The INTUITY CONVERSANT system works with the default settings for the 320 printer.

5. Connect the AC power cable to your printer.
6. If your printer has a self-test feature, plug the AC power cable into a grounded wall outlet and initiate the self test by following the instructions in the printer guide. When the self-test is completed, turn the printer off and disconnect the power cable from the wall outlet.

If your printer does not have a self-test feature, skip this step. Continue with Step 7.
7. Insert the male end of your cable into the 25-pin female parallel port connector on the back of the CPU circuit card.
8. Fasten the screws.
9. Insert the other end of your cable to the parallel port on your printer. Press the two wire-retaining clips together until you hear them click into the lock slots on either side of the plug.
10. Connect the AC power cable of the MAP/100C to a grounded outlet.
11. Continue with the next procedure, "Configuring a Local Parallel Printer".

Configuring a Local Parallel Printer

Lucent Technologies supports parallel printers for connection to the system. Contact your local Lucent Technologies representative if you want to connect a serial printer to the system.

Use the following procedure to configure a local parallel printer.

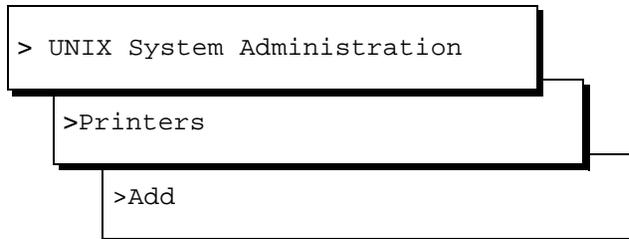
1. Log in as root.
2. Enter **cvis_mainmenu**

The system displays the INTUITY CONVERSANT V6.0 menu (Figure 4-3).



Figure 4-3. INTUITY CONVERSANT V6.0 Menu

3. Select



4. Press **ENTER**.

The system displays the Add a New Printer screen (Figure 4-4).

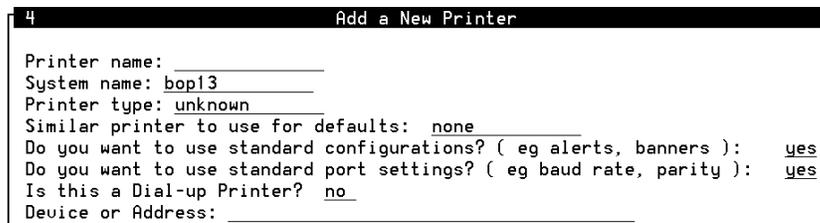


Figure 4-4. Add a New Printer Screen

5. Enter the name of the new printer in the `Printer Name:` field.
6. Enter the local system name in the `System Name:` field.
7. Enter **oki-320** in the `Printer Type:` field.
8. Enter **none** in the `Similar printer to use for defaults:` field.
9. Enter **no** in the `Do you want to use standard configurations? (eg alerts, banners):` field.
10. Enter **yes** in the `Do you want to use standard port settings? (eg baud rate, parity):` field.
11. Enter **no** in the `Is this a Dial-up Printer?` field.



NOTE:

If you enter **yes**, the system displays a `Dial-info:` field.

12. Enter **/dev/lp0** in the `Device or Address:` field.
13. Press **F3** (SAVE).

The system displays the Configure New Printer screen (Figure 4-5).

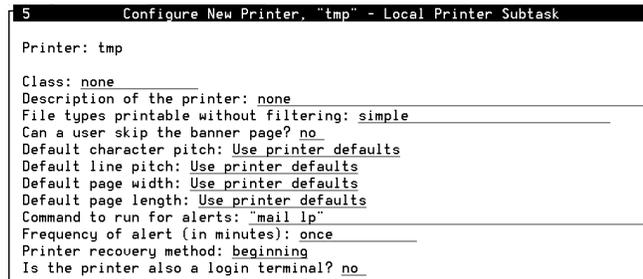


Figure 4-5. Configure New Printer Screen

14. Enter **none** in the Class: field.
15. Enter **printer one** in the Description of the printer: field.
16. Enter **simple** in the File types printable without filtering: field.
17. Enter **yes** in the Can a user skip the banner page? field.
18. Enter **Use printer defaults** in the following fields:
 - Default char. pitch:
 - Default line pitch:
 - Default page width:
 - Default page length:
19. Enter **"mail lp"** in the Command to run for alerts: field.
20. Enter **once** in the Frequency of alert (in minutes): field.
21. Enter **beginning** in the Printer recovery method: field.
22. Enter **no** in the Is Printer also a login terminal: field.
23. Press **F3** (SAVE).

The system displays the Printer: Successfully Added screen (Figure 4-6).

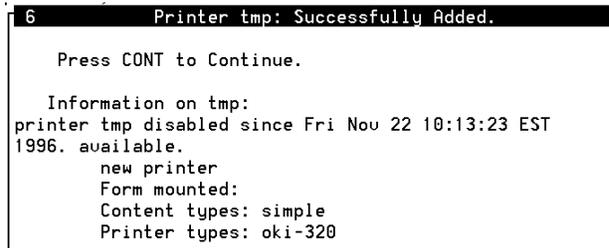


Figure 4-6. Printer: Successfully Added Screen

24. Press **F8** (CONT).

The system displays the Setup Printer Access screen (Figure 4-7).

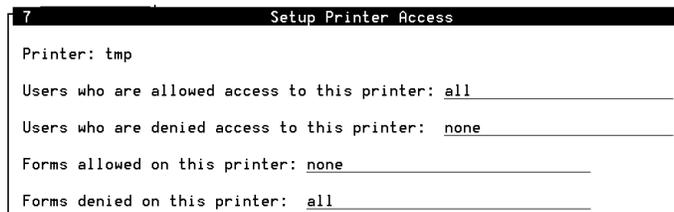


Figure 4-7. Setup Printer Access Screen

25. Enter **all** in the Users who are allowed access to this printer: field.



NOTE:

Do not press **ENTER** until all of the fields are complete.

26. Enter **none** in the Users who are denied access to this printer: field.

27. Enter **all** in the Forms allowed on this printer: field.

28. Enter **none** in the Forms denied on this printer: field.

29. Press **F3** (SAVE).

The system displays the Configure Printers for the Printer Service screen (Figure 4-8).

```
3 Configure Printers for the Printer Service
+add      - Add a New Printer
list      - List Printer Configurations
modify    - Modify a Printer Configuration
remove    - Remove Printers
```

Figure 4-8. Configure Printers for the Printer Service Screen

30. Press (F6) (CANCEL).

The system displays the Line Printer Services Configuration and Operations screen (Figure 4-9).

⇒ NOTE:

Wait at least 30 minutes before continuing with the next step.

```
2 Line Printer Services Configuration and Operation
classes   - Manage Classes of Related Printers
filters   - Manage Filters for Special Processing
forms     - Manage Pre-Printed Forms
+operations - Perform Daily Printer Service Operations
printers  - Configure Printers for the Printer Service
priorities - Assign Print Queue Priorities to Users
requests  - Manage Active Print Requests
status    - Display Status of Printer Service
systems   - Configure Connections to Remote Systems
```

Figure 4-9. Line Printer Services Configuration and Operations Screen

31. Select

```
> Operations
>Accept
```

32. Press (ENTER).

The system displays the Allow Classes/Printers to Accept Requests screen (Figure 4-10).

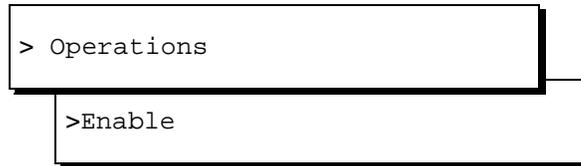


Figure 4-10. Allow Classes/Printers to Accept Requests Screen

33. Enter *printer name* in the Printer(s) and/or Class(es): field.
34. Press **F3** (SAVE).
35. Press **F6** (CANCEL) twice.

The system displays the Line Printer Services Configuration and Operations screen (Figure 4-9).

36. Select



37. Press **ENTER**.

The system displays the Enable Printer for Printing screen (Figure 4-11).

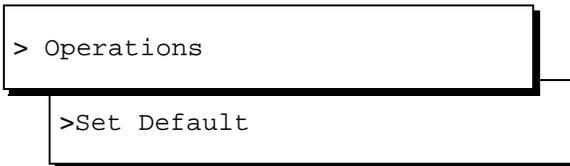


Figure 4-11. Enable Printer for Printing Screen

38. Enter *printer name* in the Printer(s): field.
39. Press **F3** (SAVE).
40. Press **F6** (CANCEL).

The system displays the Line Printer Services Configuration and Operations screen (Figure 4-9).

41. Select



```
> Operations
>Set Default
```

42. Press **(ENTER)**.

The system displays the Set Default Print Destination screen (Figure 4-12).



Figure 4-12. Set Default Print Destination Screen

43. Enter *printer name* in the Default Printer or Printer Class: field.
44. Press **(F3)** (SAVE).
45. Press **(F6)** (CANCEL) until you return to the UNIX System V Administration menu (Figure 4-3).

Connecting a Modem

A modem connects

- To the Multi-port serial circuit card or COM1 on the CPU circuit card to enable remote access
- Between a remote terminal and the network at a remote site
- To the CPU circuit card if using COM2 to enable remote login for Lucent Technologies' maintenance

The Paradyne 3820 modem is the only modem supported for connection to the COM2 port. The COM2 port is reserved for Lucent Technologies' remote maintenance.

Connecting the 3820 Modem to the Platform

To connect the 3820 modem to the hardware platform:

1. Connect a 9-to 25-pin adapter to the 9-pin COM2 port on the CPU circuit card.
2. Use a 25-to 8-pin adapter to complete the connection between the 9-pin COM2 port and the 8-pin modular cable that comes with the 3820 modem. Connect the 9-to 25-pin adapter to the 25-8 pin adapter and then connect the 25-8 pin adapter to the 8-pin modular cable.
3. Plug the 8-pin modular cable into the 3820 modem.

Once connected, RTS, CTS, and LSD on the 3820 modem should be on.

 **NOTE:**

If you are using the modem for anything other than remote maintenance, use the RS-232 adapter marked as DTE and the six-pin cable to connect to the ports (ttysaa, etc.) on the Multi-port Serial circuit card and the 3820 modem.

Connecting the 3820 Modem Between a Remote Terminal and the Network

To configure the 3820 via a terminal

1. Connect a terminal to the 3820 modem.

 **NOTE:**

See the documentation provided with the terminal.

2. Verify that the terminal is acting as a DTE.
3. Set the terminal line to 8 bits, no parity, and 1 stop bit.

4. Set the baud rate of the terminal line to the required modem speed.

For example, if the 3820 modem is attached to the remote maintenance port, set the terminal line to a baud rate of 9600.

5. Enter **AT** from the terminal.

The modem displays

OK

 **NOTE:**

If the modem does not display OK, the modem is unable to accept AT commands from the terminal. Check the connection and the terminal setup.

6. Enter

```
/mtce/bin/cont_ser
```

7. Enter

```
/mtce/bin/add_ser_pm
```

8. Enter

```
/mtce/bin/add_device modem /dev/ttyxxx 9600
```

where xxx = 01 (COM1) or 02 (COM2)

9. Enter the following in /etc/uucp/Devices if the modem is connected to the:

- COM port:

```
ACU ttyxxx,M - 9600 Comsphere3820 \T
```

```
DIR ttyxxx 9600 dir
```

- Serial port (ttysaa - ttysaf):

```
ACU ttyxxx - 9600 Comsphere3820
```

```
DIR ttyxxx 9600 dir
```

10. Enter the following in /etc/uucp/Dialers

```
Comsphere =W-
```

```
“ “ \M\daTZ3\r\c OK\r AT&F3LO&D2&S1\N5\Q3S41=8S2=128S65=2&WO\r\c\ OK\r
```

Configuring the 3820 Modem for Remote Maintenance

The 3820 modem can be configured by:

- Using the control panel on the 3820 modem after connecting to the CPU circuit card on the hardware platform
- Connecting the modem to a terminal that acts as a DTE

The 3820 modem has a Diagnostic Control Panel (DCP) that is the user interface to the modem. Use the following procedures to configure the 3820 modem via its control panel:

- Activating the UNIX dial default factory configuration
- Setting the Async DTE rate
- Setting the DTR action and the DSR control
- Setting the error control mode

See "Configuring the 3820 Modem via a Terminal", below for details on connecting the modem to a terminal.

Activating the UNIX Dial Default Factory Configuration

To activate the UNIX Dial default factory setting

1. Turn the modem off and then back on.
2. Press ◀ or ▶ on the DCP to display `Configure`.
3. Press **F2** (Select).
The LCD displays
`Ld EditArea frm.`
4. Press ◀ or ▶ to display `Factory`.
5. Press **F1** to display the factory preset configuration.
The LCD displays
`Async Dial.`
6. Press ◀ or ▶ to display `Unix Dial`.
7. Press **F2** (Select).
The LCD displays
`Choose Function`
`Edit and Save.`
8. Press **F3** (Save).
The LCD displays
`Sav EditArea to`
`Active.`

9. Press **F1** (Save).
The LCD displays
Command Complete
10. Press the double **▲** to return to the top-level menu.

Setting the Async DTE Rate

To set the Async DTE rate to the required speed

1. Press **◀** or **▶** on the DCP to display `Configure`.
2. Press **F2** (Select).
The LCD displays
`Ld EditArea frm.`
3. Press **◀** or **▶** to display `Active`.
4. Press **F1** (Saved).
The LCD displays
`Choose Function`
`Edit and Save`
5. Press **F1** (Edit).
The LCD displays
`Edit StrapGroup`
`DTE Interface`
6. Press **F1** (Edit).
The LCD displays
`Async/Sync Mode`
7. Press **F1** (Next) to display `Async DTE Rate`.
8. Press **◀** or **▶** to display baud rates.

⇒ NOTE:

The recommended speed for networking is 19,200 baud. The recommended speed for administration is 9,600 baud.

9. Press **F2** (Select).
The LCD displays the baud rate.
10. Continue with the next procedure, "Setting the DTR Action and DSR Control to Standard RS-232 on the Modem". Do *not* return to the top-level menu.

Setting the DTR Action and DSR Control to Standard RS-232 on the Modem

To set the DTR action to standard RS-232 on the 3820 modem:

1. Press **F1** (Next) to display `DTR Action`.
2. Press **◀** or **▶** to display `Stndrd_RS-232`.
3. Press **F2** (Select).
4. Press **F1** (Next) to display `DSR Control`.
5. Press **◀** or **▶** to display `Stndrd_RS-232`.
6. Press **F2** (Select).
7. Press the single **▲**.

The LCD displays

```
Edit StrapGroup
```

8. Press **◀** or **▶** to display `DTE Dialer`.
9. Press **F1** (Edit).

The LCD displays

```
DTE Dialer Type
```

10. Press **F1** (Next) to display `AT Escape Char`.
11. Press **◀** or **▶** to display `128`.
12. Press **F2** (Select).
13. Press the single **▲**.

The LCD displays

```
Edit StrapGroup
```

14. Press **◀** or **▶** to display `Dial Line`.
15. Press **F1** (Edit).

The LCD displays

```
Dial Line Rate
```

16. Press **◀** or **▶** to display baud rates.

⇒ NOTE:

The recommended speed for networking is 19,200 baud. The recommended speed for administration is 9,600 baud.

17. Press **F2** (Select).
The LCD displays the baud rate.
18. Press the single **▲**.
The LCD displays
Edit StrapGroup
19. Continue with the next procedure, "Setting the Error Control Mode to Buffer Mode on the 3820 Modem". Do *not* return to the top-level menu.

Setting the Error Control Mode to Buffer Mode on the 3820 Modem

To set the error control mode to buffer mode:

1. Press **◀** or **▶** to display V42/MNP/Buffer.
2. Press **F1** (Edit).
The LCD displays
Err Control Mode
3. Press **◀** or **▶** to display BufferMode.
4. Press **F2** (Select).
5. Press **F1** (Next) to display Flw Cntl of DTE.
6. Press **◀** or **▶** to display CTS_to_DTE.
7. Press **F2** (Select).
8. Press the single **▲**.
The LCD displays
Edit StrapGroup
9. Press the single **▲**.
The LCD displays
ChooseFunction
Edit and Save
10. Press **F3** (Save).
The LCD displays
Sav EditArea to
Active

11. Press **[F]**.
The LCD displays
Command Complete
12. Press the double **[▲]** to return to the top-level menu.

Configuring the 3820 Modem via a Terminal

To configure the 3820 via a terminal

1. Connect a terminal to the 3820 modem.



NOTE:

See the documentation provided with the terminal.

2. Verify that the terminal is acting as a DTE.
3. Set the terminal line to 8 bits, no parity, and 1 stop bit.
4. Set the baud rate of the terminal line to the required modem speed.

For example, if the 3820 modem is attached to the remote maintenance port, set the terminal line to a baud rate of 9600.

5. Enter **AT** from the terminal.

The modem displays

OK



NOTE:

If the modem does not display OK, the modem is unable to accept AT commands from the terminal. Check the connection and the terminal setup.

6. Enter

AT&F3L0&D2&S1\N0\Q3S41=<dial line rate>S2=128&W0

where <dial line rate> is one of the following values:

- **3**=9600



NOTE:

For example, to set the 3820 modem to use COM2, where the baud rate is 9600, enter **3** as the <dial line rate> as shown below:

AT&TF3L0&D2&S1\N0\Q3S41=3S2=128&W0

- **5** (4800 baud rate)
- **6** (2400 baud rate)

- 7 (1200 baud rate) (V.22)
- 8 (1200 baud rate) (212A)
- 20 (19200 baud rate)

The system displays

OK

7. Disconnect the terminal.
8. Connect the modem to the communication port (COM2).

The system activates the RTS, CTS, and LSD indicators.

Configuring the 3820 Modem via a Terminal

To set up a modem using the terminal:

1. Log in as root.
2. Enter **cvvis_mainmenu**

The system displays the INTUITY CONVERSANT V6.0 main menu (Figure 4-3).

3. Select

```
> UNIX System Administration
```

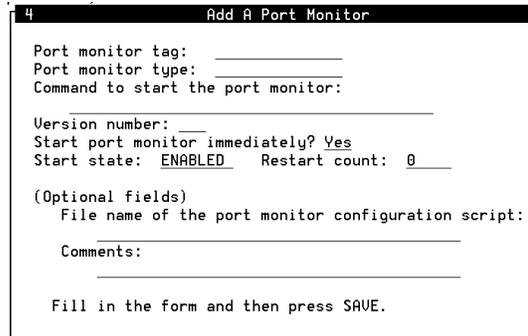
```
>Ports
```

```
>Port Monitor
```

```
>Add - Add a Port Monitor
```

4. Press **ENTER**.

The system displays the Add a Port Monitor Screen (Figure 4-13).



```
4 Add A Port Monitor
Port monitor tag: _____
Port monitor type: _____
Command to start the port monitor:
_____
Version number: _____
Start port monitor immediately? Yes
Start state: ENABLED Restart count: 0
(Optional fields)
File name of the port monitor configuration script:
_____
Comments:
_____
Fill in the form and then press SAVE.
```

Figure 4-13. Add a Port Monitor Screen

5. Enter **modem** in the Port monitor tag: field.
6. Enter **ttymon** in the Port monitor type: field.
7. Enter **/usr/lib/saf/ttymon** in the Command to start the port monitor: field.
8. Use the default values for the following fields:
 - Version number:
 - Start port monitor immediately?
 - Start state:
 - Restart count:
9. Do not enter values in the Optional fields.
10. Press **F3** (SAVE).

11. Press **(F6)** (CANCEL) twice.

The system displays the Service Access Management menu (Figure 4-14).

```
2 Service Access Management
>port_monitors - Port Monitor Management
port_services - Port Service Management
quick_terminal - Quick Terminal Setup
tty_settings - Terminal Line Setting Management
```

Figure 4-14. Service Access Management menu

12. Select

```
> Port Services
>Add - Add a Service
>Add to one
```

13. Press **(ENTER)**.

The system displays the Add a Service Screen, Page 1 (Figure 4-15).

```
6 Add Port Services to Port Monitor (serial) Page 1 of 2
Service tag: _____
Identification & authentication scheme:
  login
Service invocation identity: _____
Port/service state: ENABLED
utmp entry to be created for this service? Yes
Version number: 2_
(Optional fields)
File name of the port service configuration script:
Comments:
_____
Fill in the form and then press [SAVE] to continue on page 2.
```

Figure 4-15. Add a Service Screen, Page 1

14. Enter **01** in the Service tag: field.
15. Enter **login** in the Identification and Authentication scheme: field.
16. Use the default values for the following fields:

- Service invocation identity:
 - Port/service state:
 - utmp entry to be created for this service?
 - Version number:
17. Do not enter values in the following fields (optional):
- File name of the port service configuration script:
 - Comments:
18. Press **F3** (SAVE) to go to page 2 (Figure 4-16).
The system displays the Add a Service Screen, Page 2 (Figure 4-16).

```
7 Add Port Services for ttymon Page 2 of 2
Name of TTY device: _____
ttylabel: 9600
Service command: /usr/bin/shserv
TTY line options:
  Hangup: Yes Connect-on-carrier: No
  Bidirectional: No Wait-read: No (Wait-read count: ___)
Timeout: 0
Prompt message: login
(Optional fields)
  Modules to be pushed: ldterm
  Disabled response message:
_____

Fill in the form and then press [SAVE].
```

Figure 4-16. Add a Service Screen, Page 2

19. Enter **/dev/tty01** in the Name of TTY device: field
20. Enter **9600** in the ttylabel: field
21. Enter **/usr/bin/shserv** in the Service command: field.
22. Enter **yes** in the Bidirectional: field
23. Use the default values for the following fields:
- Hangup:
 - Connect-on-carrier:
 - Wait-read:
 - Timeout:
 - Prompt Message:

24. Do not enter values in the following fields (optional):
 - Modules to be pushed:
 - Disabled response message:
25. Press **F3** (SAVE).
26. Press **F6** (CANCEL) until you return to the UNIX System V Administration menu (Figure 4-17).

```
1 UNIX System V Administration
backup_service - Backup Scheduling, Setup and Control
file_systems - File System Creation, Checking and Mounting
machine - Machine Configuration, Display and Shutdown
*network_services - Network Services Administration
ports - Port Access Services and Monitors
preSUR4 - Peripherals Setup
printers - Printer Configuration and Services
restore_service - Restore From Backup Data
schedule_task - Schedule Automatic Task
software - Software Installation and Removal
storage_devices - Storage Device Operations and Definitions
system_setup - System Name, Date/Time and Initial Password Setup
users - User Login and Group Administration
volume_mgmt - VERITAS Volume Manager Administration
```

Figure 4-17. UNIX System V Administration Menu

27. Select

```
> Network Services
  >Basic Networking
    >Add
      >Modem
```

The system displays the Add a Modem Device for use by Basic Networking screen (Figure 4-18).

```
7 Add a Modem Device for use by Basic Networking
Device Type: ACU
Modem Type: att2212c
Port: _____
Speed: 1200
Flow Control: Software
```

Figure 4-18. Add a Modem Device for use by Basic Networking Screen

28. Enter **ACU** in the Device Type: field
29. Enter **HayesSmartm2900B** in the Modem Type: field
30. Enter **tty01** in the Port: field.
31. Enter **19200** in the Speed: field.
32. Use the default value (**Software**) in the Flow Control: field.
33. Press **F3** (SAVE).

Powering Up the System

Before you power up the system, verify that the MAP/100C is set to accommodate the appropriate intake voltage.

Verifying the Intake Voltage

The manufacturer labels the platform to indicate which intake voltage the MAP/100C is set to accommodate. Check this label, if it is necessary to change the intake voltage or verify the setting.

Connecting the System to the AC Power Supply

Complete the following procedure to ensure that the system is connected properly to the power outlet and is receiving power.

 **NOTE:**

You must provide a dedicated line for the MAP/100C chassis.

1. Plug one end of the power cord into the input AC on the back panel of the MAP/100C unit.
2. Plug the other end of the power cord into the designated power outlet.
3. Turn on the monitor power switch.
4. Turn on the MAP/100C power switch located on the front of the unit.

The system displays the following:

- An illuminated green lamp labeled "POWER ON" on the front of the unit
- Resident diagnostics on the monitor
- An illuminated green or amber lamp on the bottom-front, screen-base area of the monitor

 **NOTE:**

If the monitor lamp does not come on or if diagnostics do not initiate on the monitor screen, recheck the power connections.

Verifying Hardware, Software, and System Status

5

Overview

This chapter describes how to

- View controlled applications
- Verify INTUITY™ CONVERSANT® feature options
- Verify system status

Purpose

The purpose of this chapter is to provide procedures to identify the hardware and required software installed on the MAP/100C and verify system status.

Verifying Controlled Applications

Access to certain features is controlled by feature licensing limits. The voice system keeps track of the total number of licenses purchased and currently in use for an application.



NOTE:

Contact the Remote Support Center to modify License Values.

Viewing Feature License Values

To view all of the applications controlled by feature licensing:

1. Log in as root.
2. Enter **cvvis_menu**

The system displays the Voice System Administration menu (Figure 5-1)

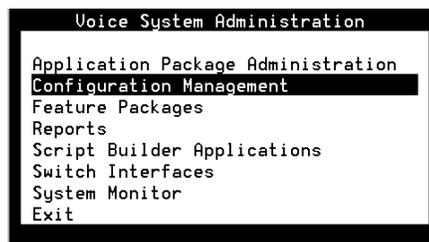


Figure 5-1. Voice System Administration Menu

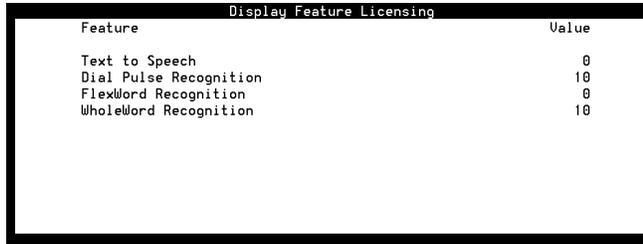
3. Select

```
>Configuration Management
```

```
> Feature Licensing
```

4. Press **ENTER**.

The system displays the Display Feature Licensing screen (Figure 5-2).



Feature	Value
Text to Speech	0
Dial Pulse Recognition	10
FlexWord Recognition	0
WholeWord Recognition	10

Figure 5-2. Display Feature Licensing Screen

5. To update the list of features, press **F8** (ACTIONS).

The system displays the Actions menu (Figure 5-3).

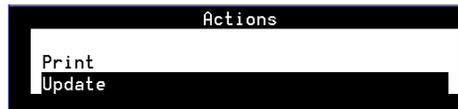


Figure 5-3. Actions Menu

6. Select



7. Press **ENTER**.

The system refreshes the Display Feature Licensing screen (Figure 5-2).

8. To print a copy of the Display Feature Licensing screen, press **F8** (ACTIONS).

The system displays the Actions Menu (Figure 5-3).

9. Select



10. Press **ENTER**.

The systems prints a copy of the Display Feature Licensing screen (Figure 5-2).

Feature Test Script Package

Use the Feature Test Script package to verify the following features and capabilities of the voice system:

- Call Classification Analysis (CCA)
- Playback and coding
- WholeWord Speech Recognition
- Chantst
- T1/E1 Digital Interface
- Dial Pulse Recognition
- Graphical Designer

This script works on Tip/Ring, Line Side T1/E1, E1, and PRI channels.

Feature Test Script Package Prerequisites

The required voice system and PBX configurations for testing features are listed below. All lines from the PBX must be configured and operational before running the script to test features. The remaining feature tests (speech technologies, chantst, CCA, and coding/playback) require at least one Tip/Ring channel, T1/E1 channel, or PRI channel, except for CCA, which requires at least 2 channels.

- Call Classification Analysis
 - The CCA package must be installed.
 - The Call Bridge (xferdip) package must be installed.



NOTE:

For call bridging, some channels must be assigned to equipment group 2.

- For Full CCA, at least 1 Signal Processor (SP/SSP) circuit card must be installed with CCA functionality.
- The SP/SSP circuit card must be in the INSERT state.

See *INTUITY CONVERSANT System Version 6.0 MAP/100C Maintenance, 585-310-180*, to verify that the Tip/Ring lines are configured properly.

- WholeWord Speech Recognition
 - The WholeWord Speech Recognition software package must be installed.
 - An SP/SSP circuit card must be installed with either RECOG or RECOG+voice functionality.

- A Companion (CMP) circuit card must be installed.
- The SP and CMP circuit cards must be in the INSERT state.
- Playback and coding
 - There must be room on the speech disk slice to store a 45-second phrase.
 - Tip/Ring or T1/E1 lines must be in the INSERT state.
- Chantst
 - At least one Tip/Ring circuit card must be installed.
 - Tip/Ring or T1/E1 lines must be in the INSERT state
 - Circuit cards can only have terminating resistors at each end of the bus ribbon cable. All Tip/Ring circuit cards that are not on the bus ribbon cable must not contain terminating resistors
- Transfer test
 - At least one Tip/Ring or T1/E1 circuit card must be installed
 - Tip/Ring or T1/E1 lines must be in the INSERT state.
 - Circuit cards can only have terminating resistors at each end of the bus ribbon cable. Any Tip/Ring circuit cards that are not on the bus ribbon cable must not contain terminating resistors.
 - The lines coming from the switch or PBX must be configured for both incoming and outgoing calls.

Setting Up the Feature Test Script Package

To set up the Feature Test Script package:

1. Start at the Voice System Administration Menu (Figure 5-1) and select:

```
>Configuration Management
> Voice Equipment
> Display Voice Equipment
```

The system displays the Display Voice Equipment screen (Figure 5-4).

5. Select

```
Voice Equipment>
> Voice Services
>Channel Services
> Assign Service
```

The system displays the Assign Channel Service screen (Figure 5-6).



Figure 5-6. Assign Channel Service Screen

6. Enter the number of the INSERTV channel, from Step 3 in “Setting Up the Feature Test Script Package,” in the `Channel Numbers:` field.
7. Press \downarrow to move to the `Service Name:` field.
8. Enter **feature_tst**
9. Press $F3$ (SAVE).
The system displays a Command Output screen.
10. Press $F6$ (CANCEL) four times to return to the Configuration Management menu (Figure 5-5).
11. Select

```
Voice Equipment>
```

The system displays the Voice Equipment screen (Figure 5-4).

12. Check the channel you just assigned. Verify that `feature_tst` appears in the `SERVICE-NAME` column.



NOTE:

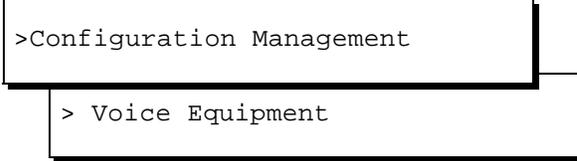
If `feature_tst` is not displayed, repeat Step 4 through Step 12.

13. Press **F6** (CANCEL) to return to the Voice System Administration menu (Figure 5-1).
14. Continue with the next procedure, "Running the Feature Test Script Package."

Changing the State of Voice Equipment

To change the state of voice equipment:

1. Start at the Voice System Administration Menu (Figure 5-1) and select:



The system displays the Voice Equipment screen (Figure 5-4).

2. Press **F8** (CHG-KEYS).
3. Press **F2** (CHGSTATE).

The system displays the Change State of Voice Equipment screen (Figure 5-7).

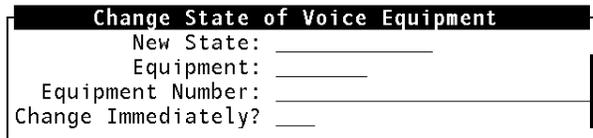


Figure 5-7. Change State of Voice Equipment Screen

4. Enter **i** in the `New State:` field.
The system displays `inserv`.
5. Press **▼** to move to the `Equipment:` field.
6. Enter **ch**
The system displays `channel`.
7. Press **▼** to move to the `Equipment Number:` field.
8. Enter the number of the channel that you want to change to `INSERV`.
9. Press **▼** to move to the `Change Immediately?` field.
10. Enter **y**
The system displays `yes`.

11. Press **F3** (SAVE).
The system displays a Command Output screen.
12. Continue with Step 3, in the procedure, "Setting Up the Feature Test Script Package."

Running the Feature Test Script Package



NOTE:

See "Feature Test Script Package Prerequisites" above before using **feature_tst**.

1. Start at the Voice System Administration Menu (Figure 5-1) and select:

```
>System Monitor
```

The system displays the System Monitor-Voice Channels screen (Figure 5-8).

System Monitor - Voice Channels						
Channel	Calls Today	Voice Service	Service Status	Caller Input	Dialed Digits	
0	0		*Manoos			
1	0		*0n Hook			
2	0		*0n Hook			
3	2		*0n Hook			
4	0		*0n Hook			
5	0		*0n Hook			
6	0		*0n Hook			
7	0		*0n Hook			
8	0		*0n Hook			
9	0		*0n Hook			
10	0		*0n Hook			
11	0		*0n Hook			

Figure 5-8. System Monitor-Voice Channels Screen

2. Dial the telephone number associated with the assigned channel.



NOTE:

The touch tones on the telephone are used to access **feature_tst**.

The voice system plays the following:

"Follow all touch-tone entries with pound. Continue testing.
To quit the script, enter 0 pound."

The voice system then plays the list of features with the corresponding number to enter to test each feature.

3. Select a feature using the telephone's touch tone pad.
4. Press the number that corresponds to the feature you want to test and then press #.
5. Follow the prompts to complete the test for each selected feature.

Initial Administration for Switch Integration

6

Overview

This chapter describes how to perform initial administration for switch integration. That process consists of

- Analog interface administration
- Digital interface administration

 **NOTE:**

This chapter contains integration procedures for the System 25, System 75, System 85, DEFINITY, and Galaxy series of switches. For other switches, see the switch integration book that accompanies the switch.

Purpose

This chapter provides the information you need to initiate basic operation of the system with the customer's switch/PBX. Once the two are integrated, you can perform acceptance tests for individual system applications to ensure that the system is operating properly.

Administering the Switch Interface

Analog Interface Administration

The Analog Interfaces screen automatically lists the system card numbers of the Tip/Ring circuit cards installed in the voice system, and the analog protocol assigned to each.

Displaying Switch/PBX Settings

To view switch/PBX settings:

1. Log in as root.

⇒ NOTE:

The voice system must be running before you can perform switch interface administration. To save changes made in the Switch Interface screens, you must stop and restart the voice system. See “Common System Procedures,” Chapter 3, *INTUITY CONVERSANT System Version 6.0 MAP/100C Maintenance, 585-310-180*, for details on how to start and stop the voice system.

2. Enter **cvis_menu**

The system displays the Voice System Administration menu (Figure 6-1)

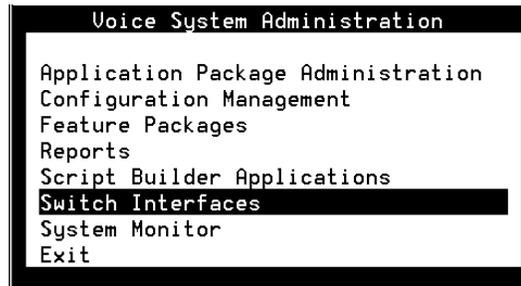


Figure 6-1. Voice System Administration Menu

3. Select

```
> Switch Interfaces
> Analog Interfaces
```

4. Press **ENTER** .

The system displays the Analog Interfaces screen (Figure 6-2).

⇒ NOTE:

The Analog Interfaces screen (Figure 6-2) displays the most recently saved analog switch settings. If you have not previously established your own settings, it shows the default PBX values.

```

Analog Interfaces
Definity(Brasil)
Switch Hook Flash Duration: 500
Wink Disconnect Interval: 300
Type of Signaling: TT
Incoming Speech Volume: 4000
Outgoing Speech Volume: 1000

Dial Tone Training: Yes

Blind Transfer Actions
To Initiate Transfer: FW
To Complete Transfer: H

Intelligent Transfer Actions
To Initiate Transfer: FW
To Complete Transfer: H
To Reconnect Caller
No Answer: FPF
Busy: FPF
```

Figure 6-2. Analog Interfaces Screen

⇒ NOTE:

The Outgoing Text Volume field is displayed in the Analog Interfaces screen only if the Text-to-Speech optional feature package software is installed on your system. See *INTUITY CONVERSANT System Version 6.0 Speech Development, Processing, and Recognition*, 585-310-762, for additional information.

5. Press **F8** (CHG-KEYS).

6. Press **(F1)** (DEFAULTS).

The system displays the PBX Defaults Menu (Figure 6-3).

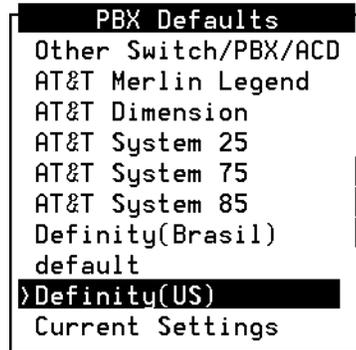


Figure 6-3. PBX Defaults Menu (Analog)

7. Select the desired PBX from the menu.

The system displays the default values for the selected PBX (Figure 6-4).

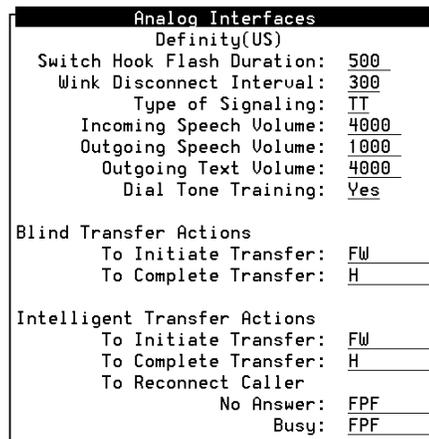


Figure 6-4. PBX Default Values Screen

8. Enter the appropriate values in the field for the protocol you are defining. See Chapter 6, "Switch Interfaces," *INTUITY CONVERSANT System Version 6.0 Administration*, 585-310-591, for details on valid values.
9. Press **(F3)** (SAVE).

10. Stop and start the voice system if the current settings were modified. See Chapter 3, "Common System Procedures," *INTUITY CONVERSANT System Version 6.0 MAP/100C Maintenance*, 585-310-180, for details on how to start and stop the voice system.
11. Reinstall any scripts that use transfer sequences.



NOTE:

The Outgoing Text Volume field is displayed on the Analog Interfaces screen only if the Text-to-Speech optional feature package software is installed on your system. See *INTUITY CONVERSANT System Version 6.0 Speech Development, Processing, and Recognition*, 585-310-762, for additional information.

Digital Interface Administration

The Digital Interfaces screen automatically lists the system card numbers of the T1 (Figure 6-5) or E1 (Figure 6-6) cards installed in the voice system, and the digital protocol assigned to each.

Displaying Installed Switch Packages

To view switch packages:

1. Log in as root.



NOTE:

The voice system must be running before you can use Switch Interface Administration. To save changes made in the Switch Interface screens, you must stop and restart the voice system. See Chapter 3, "Common System Procedures," *INTUITY CONVERSANT System Version 6.0 MAP/100C Maintenance*, 585-310-180, for details on how to start and stop the VIS.

2. Enter **cvis_menu**

The system displays the Voice System Administration Menu (Figure 6-1).

3. Select:

```
>Switch Interfaces
>Digital Interfaces
```

4. Press **ENTER** .

The system displays the Digital Interfaces screen (Figure 6-5).

⇒ NOTE:
The Digital Interfaces screen (Figure 6-5) displays the most recently saved digital switch packages. If you have not previously established your own switches, the default switch packages appear on the screen.

⇒ NOTE:
The Line Side T1 Protocol entries for DEFINITY and Galaxy (Figure 6-5) appear only if you have the packages installed. If you have PRI, see "Administering PRI," *INTUITY CONVERSANT System Version 6.0 Communication Development*, 585-310-763.

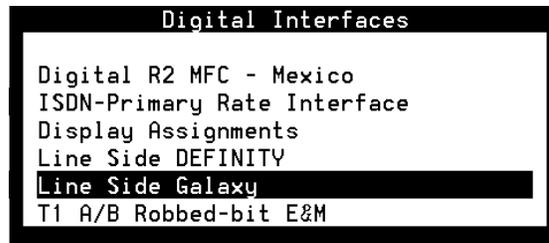


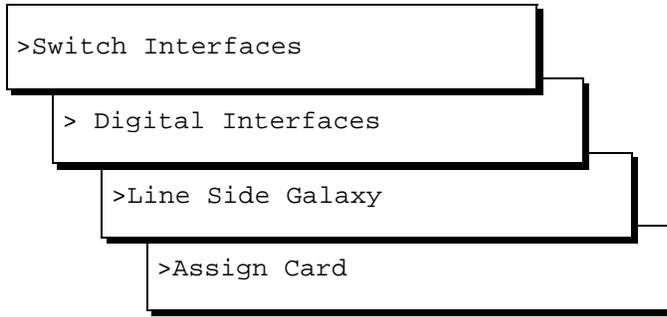
Figure 6-5. Digital Interfaces Screen

5. Continue with the next procedure, "Assigning Digital Protocols".

Assigning Digital Protocols

To assign a protocol to a switch circuit card:

1. Start at the Voice System Administration Menu (Figure 6-1)
2. Select



3. Press (ENTER).

The system displays the Assign Card: Line Side Galaxy screen (Figure 6-6).

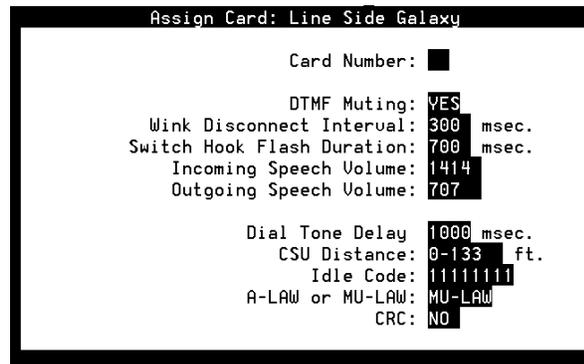


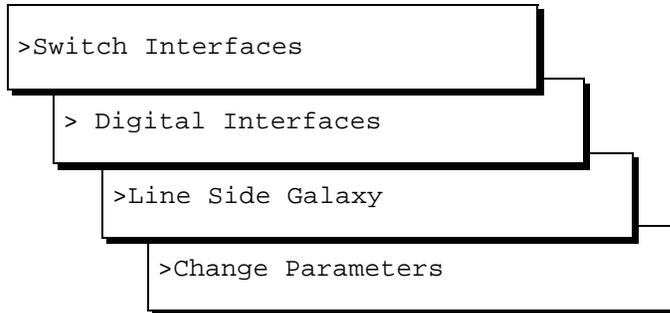
Figure 6-6. Assign Card: Line Side Galaxy Screen

4. Enter the number of the switch circuit card in the Card Number: field.
5. Press (F3) (SAVE).
6. Stop and start the voice system. See Chapter 3, "Common System Procedures," in *INTUITY CONVERSANT System Version 6.0 MAP/100C Maintenance*, 585-310-180, for details on how to start and stop the voice system.
7. To make changes to any of the default switch value fields, continue with the next procedure, "Changing Parameter Values".

Changing Parameter Values

To change parameter values:

1. Start at the Voice System Administration Menu (Figure 6-1) and select



2. Press **(ENTER)**.

The system displays the Change Parameters: Line Side Galaxy screen (Figure 6-7).

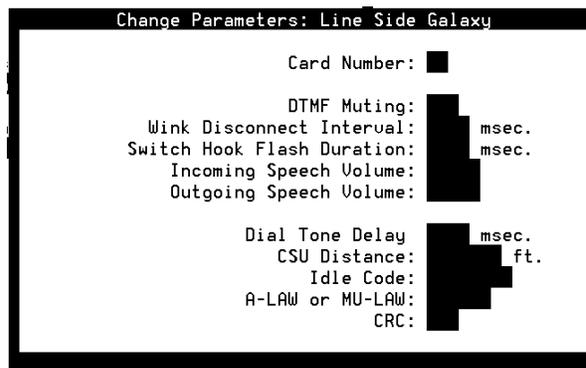


Figure 6-7. Change Parameters: Line Side Galaxy Screen

3. Select the field that you want to change.
4. Enter the appropriate values in the field for the protocol you are defining. See Chapter 6 in *INTUITY CONVERSANT System Version 6.0 Administration*, 585-310-591, for details on valid values.



NOTE:

The system displays the last saved or default values for the selected protocol.

5. Repeat steps 3 and 4 for each parameter that you want to change.
6. Press **(F3)** (SAVE).

7. Stop and start the voice system. See Chapter 3, "Common System Procedures," in *INTUITY CONVERSANT System Version 6.0 MAP/100C Maintenance*, 585-310-180, for details on how to start and stop the voice system.
8. Reinstall any scripts that use transfer sequences.



NOTE:

See Chapter 6 in *INTUITY CONVERSANT System Version 6.0 Administration*, 585-310-591, for details on valid values.

Removing Digital Protocols



NOTE:

Before making any changes to the digital protocol, make sure the cards that will be affected are in the MANOOS state. See Chapter 3, "Configuration Management," in *INTUITY CONVERSANT System Version 6.0 Administration*, 585-310-591, for additional information. If the digital protocol is changed on the voice system, it must also be changed on the switch side.

To remove a protocol from a switch circuit card:

1. Start at the Voice System Administration Menu (Figure 6-1) and select:

```
>Switch Interfaces
```

```
> Digital Interfaces
```

```
>Line Side Galaxy
```

```
>Unassign Card
```

2. Press **ENTER**.

The system displays the Unassign Card: Line Side Galaxy screen (Figure 6-8).

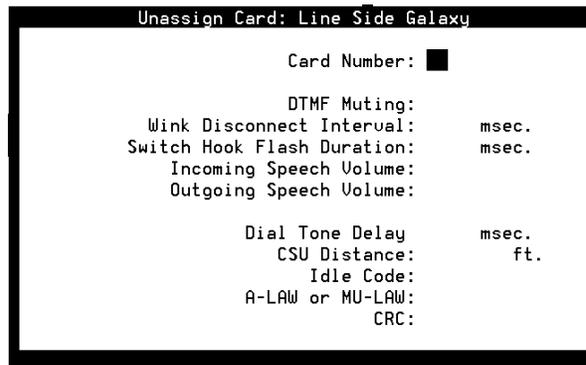


Figure 6-8. Unassign Card: Line Side Galaxy Screen

3. Enter the number of the switch circuit card in the `Card Number:` field.
4. Press **F3** (SAVE).
5. Stop and start the voice system. See Chapter 3, “Common System Procedures,” in *INTUITY CONVERSANT System Version 6.0 MAP/100C Maintenance*, 585-310-180, for details on how to start and stop the voice system.

Cut-to-Service Procedures

7

Overview

This chapter contains cut-to-service procedures that are required for

- Activating alarm origination
- Backing up the system

Purpose

This chapter provides the information to ensure that the system is fully operational.

Activating Alarm Origination

Remote alarming allows a technician in the Technical Support Organization (TSO) to receive notice that your voice system is experiencing difficulty. Alarms levels are categorized by their severity as: Critical, Major and Minor. See *INTUITY™ CONVERSANT® System Version 6.0 System Alarms and Log Messages, 585-310-182*, for information about remote alarming.

To activate alarm origination

1. Clear all alarms. See *INTUITY™ CONVERSANT® System Version 6.0 System Alarms and Log Messages, 585-310-182*, for details on clearing alarms.
2. Check the tape drive for a tape. The light on the tape drive is on if it contains a tape.

⚠ CAUTION:

Do not activate Alarm Origination unless the tape drive contains a back-up tape.

If the tape drive does not contain a tape for the nightly backup, locate a tape and insert it into the tape drive.

3. Log in as root.
4. Enter **cvvis_menu**

The system displays the Voice System Administration menu (Figure 7-1)

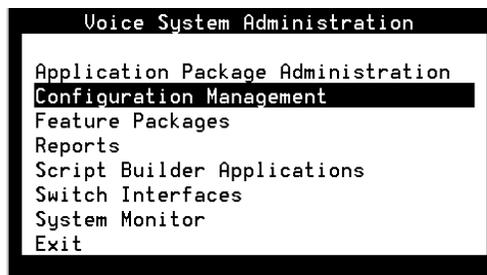


Figure 7-1. Voice System Administration Menu

5. Select

```
> Configuration Management
```

```
> Remote Alarming Administration
```

The system displays the Alarm Management window (Figure 7-2).

Alarm Management	
Product ID	_____
Alarm Destination	_____
Alarm Origination	INACTIVE
Alarm Level	MINOR
Alarm Suppression	INACTIVE
Clear Alarm Notification	ACTIVE

Figure 7-2. Alarm Management Window

6. Enter the product ID number in the Product ID field.

⚠ CAUTION:

The product ID is always a 9-digit number beginning with the number 2. Do not continue without the correct product ID number.

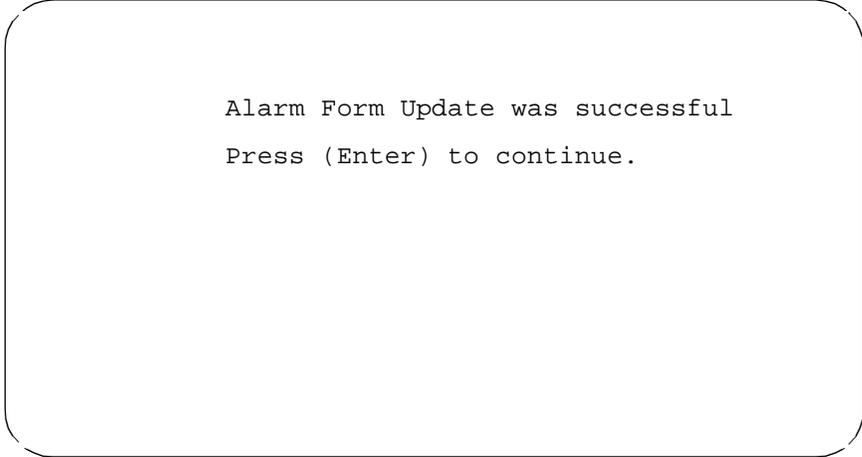
7. Move \blacktriangledown to the Alarm Origination: field.
8. Press F2 (CHOICES).
9. Select

```
> Active
```

10. Verify that the entry in the Alarm Suppression: field is inactive.
If it is not, move the cursor to the Alarm Suppression: field, press F2 (CHOICES), and select inactive for the field.

11. Press **F3** (SAVE).

The system displays the following:



```
Alarm Form Update was successful
Press (Enter) to continue.
```

12. Press **ENTER**.
13. Continue with the next procedure, "Testing Alarm Origination", if you want to test the alarm origination or if a significant amount of time has lapsed since administering the Alarm Management window.

Continue with the procedure, "Backing Up the INTUITY CONVERSANT System", if you do not want to test the alarm origination,

Testing Alarm Origination

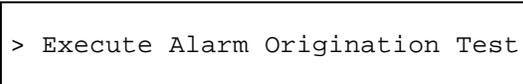
Use the following procedure to test remote alarm origination or if a significant amount of time has lapsed since administering the Alarm Management window.

1. Start at the Alarm Management window (Figure 7-2) and press **F8** (CHGKEYS).
2. Press **F1** (TEST-ALM).

The system displays the Alarm Origination Test menu (Figure 7-3).

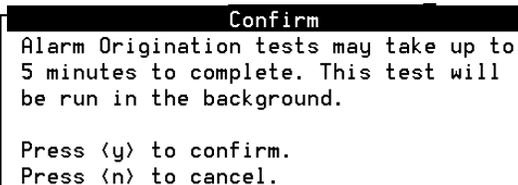
Figure 7-3. Alarm Origination Test Menu

3. Select



```
> Execute Alarm Origination Test
```

The system displays the Confirm window (Figure 7-4).



```
Confirm
Alarm Origination tests may take up to
5 minutes to complete. This test will
be run in the background.

Press <y> to confirm.
Press <n> to cancel.
```

Figure 7-4. Confirm Window

4. Press **y**.



NOTE:

Wait approximately 1 minute for the system to process the command.

5. Select

```
> Review Latest Test Results
```

The system displays the Alarm Origination Test Results screen (Figure 7-5).

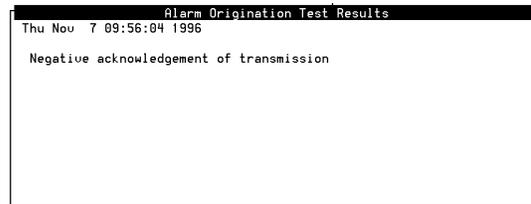


Figure 7-5. Alarm Origination Test Results Screen

6. Verify that no entry on the screen corresponds with the time you sent the alarm.



NOTE:

Wait approximately 4 minutes for the test to complete.

7. Press **(F6)** (CANCEL).

The system displays the Alarm Origination Test menu (Figure 7-3).

8. Select

```
> Review Latest Test Results
```

The system displays the Alarm Origination Test Results window (Figure 7-6).

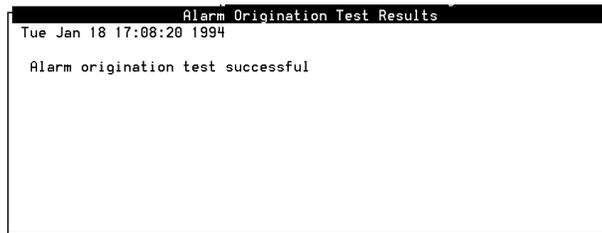


Figure 7-6. Alarm Origination Test Results Screen

9. Verify that the message on the screen reads:

Day Date Time

Alarm origination test successful.

10. Press **F6** (CANCEL) until you reach the Voice System Administration menu (Figure 7-1) if the test completed successfully, and continue with the next procedure on your checklist.
11. Press **F6** (CANCEL) to log out of the system.

Backing Up the INTUITY CONVERSANT System

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

⇒ NOTE:

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

The **mkimage** command backs up all files and speech to cartridge tapes. The **mkimage** command should only be used in the following situations:

- After initially loading a new system
- After upgrading to a new software release
- After upgrading hardware
- After reconfiguring the system

See *INTUITY™ CONVERSANT® V6.0 Administration*, 585-310-591, for additional information about the **mkimage** command.

Performing a System Backup

To conduct a full system backup using **mkimage**, do the following:

1. Log in as **root**.
2. Enter **mkimage**

The system displays the following message:

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

```
WARNING: This process will put the system in single
         user mode!!!
```

```
Do you wish to continue (y/n)?
```

3. Enter **y**

The system displays the following message:

```
The system will now be put in single user mode.
Re-login after the prompt and re-execute this command
to continue the mkimage process.
```

```
Console Login:
```

4. Continue with the next procedure, "Backing Up the Root File System".

Backing Up the Root File System

To back up the root file system, do the following:

1. Log in as **root**.
2. Enter **mkimage**

The system displays the following message:

```
Checking the system run level: Please wait
```

```
The system is in single user mode: Continuing
```

```
The following are approximate tape counts required for  
this backup for various tape drive sizes
```

```
150 Mbyte drive:      X tape(s)  
320 Mbyte drive:      X tape(s)  
525 Mbyte drive:      X tape(s)  
1.2 Gbyte drive:      X tape(s)  
2.0 Gbyte drive:      X tape(s)
```

Be sure to number the cartridge tapes consecutively in the order they will be inserted.

Label the tapes 'CONVERSANT Image Tape x' where x indicates the insertion sequence. Also include the current date.

Note: Very large files, such as database files, take several minutes to backup. During this time you will not see any progress reported to the console. If the tape drive is running and the system disk light is flashing, the operation is in progress.

Please insert the first tape now. Press 'ENTER' to start image tape creation.

3. Label the appropriate number of cartridge tapes.

Label the tapes *CONVERSANT Image Tape x*, where x indicates the insertion sequence. Also include the current date on the label.

4. Insert the cartridge tape labeled "CONVERSANT Image Tape 1" into the cartridge tape drive. See "Inserting and Removing Cartridge Tapes," Chapter 3, "Common System Procedures," in *INTUITY™ CONVERSANT® System Version 6.0 MAP/100C Maintenance*, 585-310-180, for the procedure.
5. Press **ENTER**.

The system takes approximately 30 minutes to load the information onto one cartridge tape.

If your system backup requires more than one cartridge tape, the system displays the following message:

```
End of medium on output
Change to part 2 and press RETURN key. (q)
```

If your backup requires more than one tape, complete Steps a through d:

- a. Remove the cartridge tape labeled "CONVERSANT Image Tape 1" from the cartridge tape drive. See "Inserting and Removing Cartridge Tapes," Chapter 3, "Common System Procedures," in *INTUITY™ CONVERSANT® System Version 6.0 MAP/100C Maintenance*, 585-310-180, for the procedure.
- b. Insert the cartridge tape labeled "CONVERSANT Image Tape 2" into the cartridge tape drive. See "Inserting and Removing Cartridge Tapes," Chapter 3, "Common System Procedures," in *INTUITY™ CONVERSANT® System Version 6.0 MAP/100C Maintenance*, 585-310-180, for the procedure.
- c. Press **ENTER**.
- d. Repeat Steps a through c for all necessary cartridge tapes.

If your backup does not require more than one tape, continue with Step 6.

6. When the system displays the following message, remove the last cartridge tape from the cartridge tape drive. See "Inserting and Removing Cartridge Tapes," Chapter 3, "Common System Procedures," in *INTUITY™ CONVERSANT® System Version 6.0 MAP/100C Maintenance*, 585-310-180, for the procedure.

The image tapes will be verified now.
Make sure the tapes are inserted in the order they are made.

Press 'Enter' to start verification.

7. Press **ENTER**.

The system displays the following message:

```
Please insert the first tape now. Press 'Enter' to
continue.
```

8. Insert the cartridge tape labeled "CONVERSANT Image Tape 1" into the cartridge tape drive. See "Inserting and Removing Cartridge Tapes," Chapter 3, "Common System Procedures," in *INTUITY™ CONVERSANT® System Version 6.0 MAP/100C Maintenance*, 585-310-180, for the procedure.

9. Press **ENTER**.

The system takes as long to verify a cartridge tape as it did to create it.

The system will prompt for additional tapes if necessary.

10. Record the file system sizes on the tape label.

The file system sizes can be viewed using the **dfspace** command.

11. If your system has speech files located on a second disk, perform the next procedure, "Backing Up the Speech Files".

If your system has only one disk, or is mirrored, continue with the procedure, "Verifying the Back Up".

Backing Up the Speech Files

If your system contains speech files on Hard Disk Drive 2, the system displays the following message:

The following are approximate tape counts required for this backup for various tape drive sizes

150 Mbyte drive:	X tape(s)
320 Mbyte drive:	X tape(s)
525 Mbyte drive:	X tape(s)
1.2 Gbyte drive:	X tape(s)
2.0 Gbyte drive:	X tape(s)

Be sure to number the cartridge tapes consecutively in the order they will be inserted.

Label the tapes 'CONVERSANT Speech Tape x' where x indicates the insertion sequence. Also include the current date.

Note: Very large files, such as database files, take several minutes to backup. During this time you will not see any progress reported to the console. If the tape drive is running and the system disk light is flashing, the operation is in progress.

Please insert the first tape now. Press 'ENTER' to start image tape creation.

To back up the speech files, using the `mkimage` command, do the following:

1. Label the appropriate number of cartridge tapes.

Label the tapes 'CONVERSANT Speech Tape x' where x indicates the insertion sequence. Also include the current date on the label.

2. Insert the cartridge tape labeled "CONVERSANT Speech Tape 1" into the cartridge tape drive. See "Inserting and Removing Cartridge Tapes," Chapter 3, "Common System Procedures," in *INTUITY™ CONVERSANT® System Version 6.0 MAP/100C Maintenance*, 585-310-180, for the procedure.
3. Press `ENTER`.

The system takes approximately 30 minutes to load the information onto one cartridge tape.

If your system backup requires more than one cartridge tape, the system displays the following message:

```
End of medium on output
Change to part 2 and press RETURN key. (q)
```

If your backup requires more than one tape, complete Steps a through d:

- a. Remove the cartridge tape labeled "CONVERSANT Speech Tape 1" from the cartridge tape drive. See "Inserting and Removing Cartridge Tapes," Chapter 3, "Common System Procedures," in *INTUITY™ CONVERSANT® System Version 6.0 MAP/100C Maintenance*, 585-310-180, for the procedure.
- b. Insert the cartridge tape labeled "CONVERSANT Speech Tape 2" into the cartridge tape drive. See "Inserting and Removing Cartridge Tapes," Chapter 3, "Common System Procedures," in *INTUITY™ CONVERSANT® System Version 6.0 MAP/100C Maintenance*, 585-310-180, for the procedure.
- c. Press **ENTER**.
- d. Repeat Steps a through c for all necessary cartridge tapes.

If your backup does not require more than one tape, continue with Step 4.

4. When the system displays the following message, remove the last cartridge tape from the cartridge tape drive. See "Inserting and Removing Cartridge Tapes," Chapter 3, "Common System Procedures," in *INTUITY™ CONVERSANT® System Version 6.0 MAP/100C Maintenance*, 585-310-180, for the procedure.

The speech tapes will be verified now.
Make sure the tapes are inserted in the order they are made.

Press 'Enter' to start verification.

5. Press **ENTER**.

The system displays the following message:

```
Please insert the first tape now. Press 'Enter' to
continue.
```

6. Insert the cartridge tape labeled "CONVERSANT Speech Tape 1" into the cartridge tape drive. See "Inserting and Removing Cartridge Tapes," Chapter 3, "Common System Procedures," in *INTUITY™ CONVERSANT® System Version 6.0 MAP/100C Maintenance*, 585-310-180, for the procedure.

7. Press **ENTER**.

The system takes as long to verify a cartridge tape as it did to create it.

The system will prompt for additional tapes if necessary.

8. Continue with the procedure, "Verifying the Back Up."

Verifying the Back Up

When the system is done verifying a cartridge tape it automatically reboots, returns to multi-user format, and displays the console login. To verify the back up, do the following:

1. Log in as **root**.
2. Enter **vi /SaveVsData/mkimage.log**

If the system displays the following message, the mkimage back up was successful.

Creation and verification of the CONVERSANT Image Tape is complete.

If the system does not display this message, the mkimage back up was not successful. Repeat the procedure.

Performing Other Backups

See the *Novell UnixWare Backup and Restore Services* book, which is part of the *UnixWare Documentation Set*, 585-350-908, for information on:

- Establishing an automatic backup using **bkreg**
- Backing up the UnixWare system
- Performing a UnixWare incremental backup
- Copying files using **cpio**
- Backing up non-Script Builder applications
- Backing up a database

See *INTUITY™ CONVERSANT® V6.0 Application Development with Script Builder*, 585-310-760, for information on:

- Backing up Script Builder applications

See *INTUITY™ CONVERSANT® V6.0 Speech Development, Processing and Recognition*, 585-310-762, for information on:

- Backing up speech files using **spsav**

Switch Cut-to-Service Procedures

For cut-to-service procedures for non-Lucent Technologies' switches/PBXs, see the documentation accompanying the switch.

System Installation Checklist



Overview

The checklist provides a description of the required procedures, in sequence, to use when installing an assembled, loaded, and tested (ALT) INTUITY system. A “Chapter/Section” or “Resource” column refers you to the appropriate document or chapter number and section title of the book that applies to the procedure and installation you are completing. Use the books listed on the next page to support the checklist.

Purpose

Using this checklist ensures that you complete the required procedures in the proper sequence.

Books to Use with the Checklists

Use the following books to install a Lucent Technologies' INTUITY™
CONVERSANT® system MAP/100C:

- *INTUITY™ CONVERSANT® System Version 6.0 MAP/100C New System Installation, Issue 1, 585-310-177*

This is the primary reference book for installing a factory assembled MAP/100C.

- *INTUITY™ CONVERSANT® System Version 6.0 MAP/100C Maintenance, 585-310-180*
- *INTUITY™ CONVERSANT® System Version 6.0 Administration, 585-310-591*

⇒ NOTE:

If you need to install a feature for the customer to an ALT system, contact your project manager to verify the requirement and contact your remote maintenance center.

System Installation Checklist

The checklist (Table A-1) provides a description of the required procedures numbered in the sequence in which you must complete them. A “Chapter/Section” column refers you to the appropriate chapter number and section title of the system installation book.

As you complete a procedure, make a check mark in the “✓” column.

**Table A-1. MAP Hardware Installation Checklist —
Pre-assembled System**

Task	Task Description	Comments	Chapter/Section	✓
1	Verify site environmental requirements.		1— “Environmental Considerations”	
2	Verify site installation requirements.		1 — “Installation Area Considerations”	
3	Verify site space requirements.		1 — “Space Requirements”	
4	Verify site power requirements.		1 — “Power Requirements”	
5	Verify site is prewired for all pinout connections.	Required for telephone lines and switch integration.	1 — “Prewiring for Pinout Connections”	
6	Review demarcation points.	All systems, application dependent	1 — “Points of Demarcation”	
7	Review all safety warnings before getting started.		1 — “System Grounding Connections”	
8	Observe electrostatic discharge guidelines.	Required for all circuit cards and peripheral disk drives.	1 — “System Grounding Connections”	
9	Gather the required tools.		1 — “Tools” and “Test Equipment”	
10	Unpack the MAP.	Open as instructed to reuse packing materials.	2 — “Unpacking the MAP/100C”	

Continued on next page

**Table A-1. MAP Hardware Installation Checklist —
Pre-assembled System — *Continued***

Task	Task Description	Comments	Chapter/Section	✓
11	Locate key components on the MAP.		2 — “Front of the Chassis” and “Back of the Chassis”	
12	Make cable connections.	Included are switch, network, and asynchronous connections. These MUST be made prior to powering up.	Chapter 3	
13	Connect the MAP to the power service and power up.		Chapter 4	
14	Verify the CPU screen is correct, if necessary.		Chapter 4	
15	Administer modem for remote administration.	Systems using a modem for remote administration	Chapter 4	
16	Administer modem(s) on the system. ⇒ NOTE: Do not use these procedures on the remote <i>maintenance</i> modem connected to COM2.	Systems using a modem for remote administration (Ports other than COM2)	Chapter 4	
17	Administer the printer.	Systems using a printer	Chapter 4	

Continued on next page

**Table A-1. MAP Hardware Installation Checklist —
Pre-assembled System — *Continued***

Task	Task Description	Comments	Chapter/Section	✓
18	Continue with the checklist if the system setup screen is correct.	If, at this point, the system does not seem to be working, refer to Appendix C, "Troubleshooting Procedures" to verify hardware connections or to clean equipment if necessary.		
19	Verify system status.		Chapter 5	
20	Verify channel state.	All systems	Chapter 5	
21	Assign service to channels for testing.	All systems	Chapter 5	
22	Test each channel.	All systems	Chapter 5	
23	Map services to channels for operation.	All systems	Chapter 5	
24	Administer the switch on the system.		Chapter 6	
25	Administer and test alarm origination or configure remote maintenance modem.		Chapter 7	
26	Backup the system.	All systems	Chapter 7	

Continued on next page

Accessing Windows and Screens

B

Overview

This chapter gives you an overview of how to access and use the INTUITY™ CONVERSANT® administration screens platform windows.

It describes

- How to activate a screen/window
- The layout of the screens and windows
- How to use screen, window, and field help
- How to navigate through the data-entry fields of a screen/window
- How to enter data in a field
- How to invoke or cancel the screen/window operation
- The terminals supported

This chapter also details command line “shortcuts.”

Purpose

This chapter provides instructions to use INTUITY CONVERSANT system windows and screens. After reading this chapter, you should understand

- Logging in and out of the system
- Screen layout, navigation, and data entry
- Command line syntax and shortcuts
- Function keys

- Changing the sequence of the function keys
- Managing windows (moving and sizing windows)
- Enabling a system printer and printing screen display contents
- Administrating passwords, checking for password compliance, and setting password aging parameters

User Interface Components

The video monitor, in conjunction with the keyboard, is the primary means of communication between you and the voice system. Although the information on the monitor often changes, the way the information is arranged does not change. The video monitor is divided into the following areas (Figure B-1):

- Screen, menu, and or window
- Message line
- Function key labels

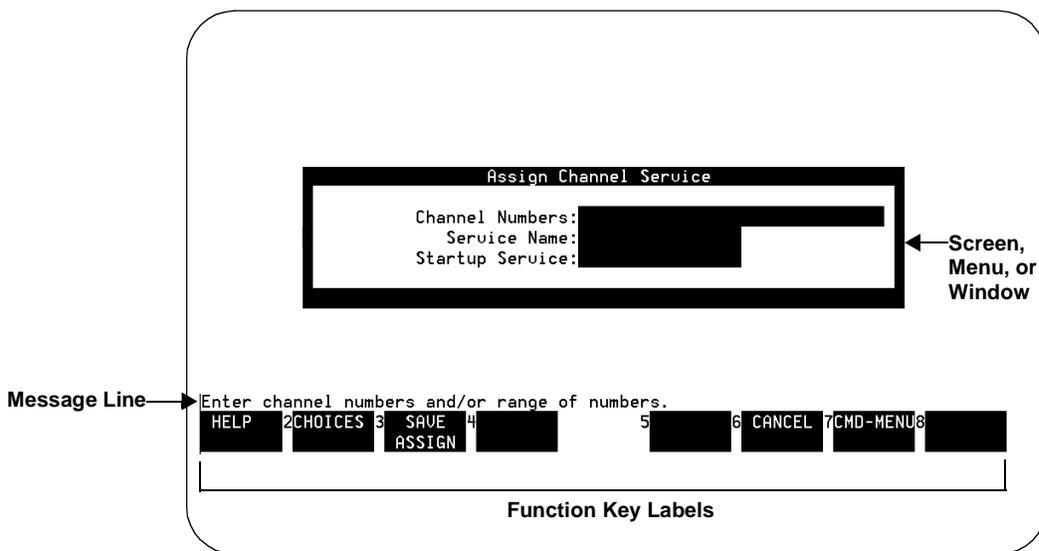


Figure B-1. Sample INTUITY CONVERSANT System Screen

Screens, Menus, and Windows

Screens, menus, and windows are the medium through which you exchange information with the voice system. This exchange may involve activities such as filling in fields or making menu selections. Since the display may contain more than one screen, menu, or window at the same time, each screen, menu, and window is boxed so that it is clear what information it contains. At any given time, only one screen, menu, or window in the display is designated as active.

Screens

A screen takes up the entire display and allows you to enter and view information (Figure B-2).

```

Voice Equipment
Card 3 is SP-2  O.S.Index: 1      Function: VOICE+WW_RECOG
                State: Inseru    Options: slave,tdm1
                CMP 0            State: Inseru
Card 4 is SP-2  O.S.Index: 2      Function: SW_RECOG
                State: Inseru    Options: slave,tdm1
                CMP 0            State: Inseru
```

Figure B-2. Sample Screen

Menus

A menu allows you to select an option that takes you to the next screen, menu, or window (Figure B-3).

```

Configuration Management
Database Administration
Equipment
Host Configuration
Message Administration
System Control
Voice Services
```

Figure B-3. Sample Menu

Windows

A window allows you to enter and view information, but does not take up the entire display (Figure B-4).



Figure B-4. Sample Window

Components

The components of a screen, menu, or window may include:

- *Title* — Each screen, menu, and window has a unique title that appears at the top. The title describes the kind of information contained within the screen, menu, or window, or the task you can accomplish using it. In this book, titles are shown with the first letter of each word capitalized, followed by the word “screen,” or “menu,” or “window.” Sample titles are “Voice System Administration screen” and “Configuration Management menu.”
- *Scroll Indicator* — The scroll bar indicates whether there is additional text to be displayed. The  means you can use the cursor movement keys to view information below what is presently shown. The  means you can use the cursor movement keys to view information above what is currently displayed. Not every screen, menu, or window has a scroll indicator.
- *Fields* — Fields are the areas on a screen or window where you enter information. For example, in Figure B-1 the fields are Channel Numbers, Service Name, and Startup Service. Menus do not have fields.

Moving on and Between Screens, Menus, and Windows

Table B-1 lists the keys used to maneuver within a screen, menu, or window. They are referred to throughout this book as the cursor movement keys.

Table B-1. Navigation Keys

Type of Movement	Keys
Move to next line in menu, list, or text; “wrap” from last item to first item in a menu or form	▼
Move to previous line in menu, list, or text; “wrap” from first item to last item in a menu or form	▲
Move down one “screenful”	(PgDn)
Move up one “screenful”	(PgUp)
Move to beginning of menu, text, or list	(HOME)
Move to end of menu, text, or list	(END)
Next field in a screen or window	▼, (TAB), or (ENTER)
Move to previous field in a screen or window	▲, (SHIFT), or (TAB)
Move to next character within a field	▶
Move to previous character within a field	◀
Delete character to the left of the cursor	(BACK SPACE)

Choosing a Menu Item

To choose a menu item, highlight it using one of the following methods:

- Use your keyboard cursor movement keys to move the highlight bar:
 - Press **▼** to move the highlight bar down.
 - Press **▲** to move the highlight bar up.
 - Press **ENTER** when the desired menu item is highlighted.

Menu screens have a “rollover” feature. When the cursor reaches the last item of the menu, press **▼** to return to the first menu item. If the cursor is located at the first menu item, press **▲** to move to the last menu item.

- Press **TAB** to move the highlight bar down, then press **ENTER** when the desired menu item is highlighted.
- Type the first character of the item. The first menu item beginning with that letter is selected. If more than one item begins with the same letter, then type enough letters to identify the desired item. For example, in Figure B-3, to select *System Control*, type **S**.

The search for a menu item by typing a character is not case-sensitive; that is, typing **A** is the same as typing **a**. If you type a letter for which there is no matching item, the system sounds a “beep” and the cursor does not move.

Filling in Fields

There are three ways to fill in fields, as described below.

- Type the beginning letter(s) of the entry.

With the cursor positioned on the field, begin to type the entry. As soon as you type enough characters to uniquely identify which entry you want, the system automatically fills in the rest. If the entry is invalid, the voice system sounds a beep and removes the invalid characters.

For example, looking at the *Day*: field in Figure B-5, assume that valid entries are Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday. When you type **M**, the system fills in the entire word “Monday” because there is only one valid entry that begins with M.

However, if you type **S**, the voice system waits before filling in the day of the week because there are two valid entries that begin with “S” (Saturday and Sunday). At this point, if you type **a**, the voice system fills in the word “Saturday.” If you type **u**, the system fills in the word Sunday. This technique is not case-sensitive. In other words, typing either **M** or **m** in the above example results in the system filling in the word “Monday.”



```
Options for Call Data Summary Report
Day: Saturday
Hours: _____
Service: _____
Include Call Data Fields? no
```

Figure B-5. Options for Call Data Summary Report Screen

- Type the entire entry.
Move to the desired field and type the entire entry. While in a field, you can also edit the entry.
- Use the CHOICES screen selections.
Press **(F2)** (CHOICES) to open a menu which shows the available choices for a field. Select an option as you would in a standard menu. The content of the CHOICES menu varies depending on the situation, and sometimes no CHOICES menu is available for a screen or window.

Message Line

This is the line above the function key labels on the display. The message line usually contains a brief instruction to help you decide what to do next. Occasionally, the message line reports the successful or unsuccessful completion of a task.

Function Key Labels

The boxed labels at the bottom of the display correspond to the function keys on your keyboard. Function keys are the means by which you command the voice system to perform some function within the active screen or window. The label describes the instruction that is sent to the system when you press the corresponding function key. The commands, and therefore the labels, that are available at any given time vary depending on the screen being used. Screens may have one or two rows of function key labels.

Function Keys

Your keyboard has eight to twelve function keys. The system uses the first eight function keys, labeled **F1** through **F8**.

The bottom line of every screen has boxes showing the commands that are available. Figure B-6 shows the System Monitor screen with the function key labels at the bottom of the screen.

In Figure B-6 you would press **F1** to bring up the Help screen for the System Monitor screen. Also in Figure B-6, notice that the label for **F4** is blank. This means that no command is issued if you press the **F4** function key. The voice system sounds a beep and the message line either informs you that you have pressed an undefined function key or continues to show the last message. The function key commands displayed on the screen apply only to the active screen.

System Monitor - Voice Channels						
Channel	Calls Today	Voice Service	Service Status	Caller Input	Dialed Digits	
48	0		*0n Hook			
49	0		*Foos			
50	0		*Foos			
51	0		*Foos			
52	0		*Foos			
53	0		*Foos			
54u	0	BGM				

HELP PREVPAGE NEXTPAGE CANCEL CMD-MENU CHG-KEYS

Figure B-6. Function Keys — System Monitor Screen

Standard Function Keys

The standard function keys that are common to every screen, menu, and window are shown below.

- (F1) HELP Opens an online help screen (see "Online Help" in this chapter).
- (F6) CANCEL Closes the active screen and cancels any additions, deletions, or changes made. The screen that immediately precedes the just-closed screen becomes the active screen. If there is an activity in progress, such as making a back-up copy of an application on a floppy disk, pressing (F6) (CANCEL) does not interrupt the operation.
- (F7) CMD-MENU Opens the Command Menu (see "Command Menu" below). Options include System Monitor, Trace Service, and Exit.

Alternate Function Keys

The alternate function keys change based on each screen, menu, or window you select and provide commands that are unique to that screen, menu, or window.

F2 (CHOICES)	Opens a menu screen containing choices for the current field, if there is a finite set of choices for a particular field. Move the cursor to the field you want to fill, then press F2 (CHOICES). The CHOICES menu opens, displaying the options available for that field.
F2 (PREVPAGE)	Scrolls back one full page, towards the beginning of text that is too long to fit within the active screen or window.
F3 (NEXTPAGE)	Scrolls forward, toward the end of text that is too long to fit within the active screen, menu, or window. For example, pressing F3 in Figure B-6 orders the system to move to the next page, while pressing F3 in Figure B-7 sounds a beep, but does nothing else because that key is "empty."
F3 (SAVE)	Preserves all changes made in the screen.
F4 (TOP)	Scrolls toward the top of a page.
F5 (BOTTOM)	Scrolls toward the bottom of a page.
F6 (PRINT)	Prints the information provided by the active screen, such as a report.
F7 (FRM-MGMT)	Opens the Frame Management Menu (see "Command Menu" below). Options include list, move, refresh, and UNIX system.
F8 CHG-KEYS	Switches the function key display from the standard to the screen-specific set of commands, or vice versa. For example, Figure B-6 and Figure B-7 show the System Monitor screen under identical conditions, except that in Figure B-7 CHG-KEYS has been pressed to switch between the standard (Figure B-6) and alternate (Figure B-7) keys.

System Monitor - Voice Channels					
Channel	Calls Today	Voice Service	Service Status	Caller Input	Dialed Digits
48	0		*On Hook		
49	0		*Foos		
50	0		*Foos		
51	0		*Foos		
52	0		*Foos		
53	0		*Foos		
54u	0	BGM			

CHG-RATE HOST MON PRINT FRM-MGMT CHG-KEYS

Figure B-7. Change Keys — System Monitor Screen

NOTE:

In Figure B-7, the Host Mon function key selection does not appear if host software is not installed.

Online Help

Most screens and windows have a companion text window that contains helpful reference information. Figure B-8 shows the help screen associated with the Database Access ID Table. The system online help screens are not designed to be a substitute for this book. They only briefly describe each of your options for a given screen.

Press (F1) to access online help.

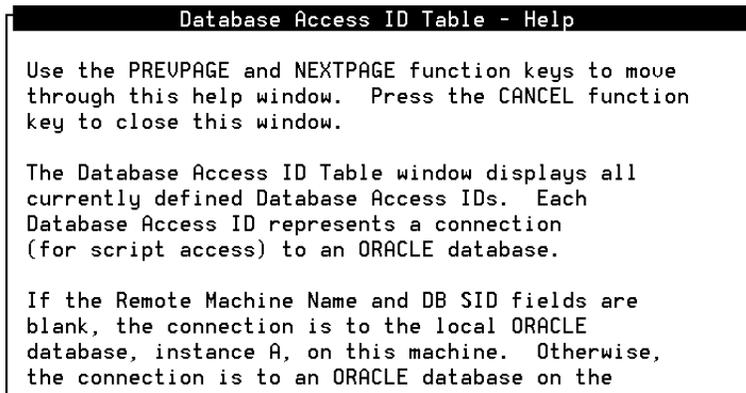


Figure B-8. Sample Online Help Screen, Database Access ID Table — Help

Frame Management Menu

The voice system gives you the opportunity to manipulate various screen features through the Frame Management menu shown in Figure B-9. The Frame Management menu is not available from every screen.

To access the Frame Management menu:

1. Press **(F8)** (CHG-KEYS) to display the alternate set of function keys.
2. Press **(F7)** (FRM-MGMT) to display a five-item menu that enables you to perform the following activities:
 - List all open screens
 - Move the active screen
 - Refresh the screen
 - Access the UNIX system prompt



Figure B-9. Frame Management Menu

Listing Open Screens

From the Frame Management menu, select `list`. The Open Frames menu appears with a listing of all the currently opened screens. Press `(F6)` (CANCEL) to close the Open Frames menu and return to the previous screen.

Moving the Active Screen

From the Frame Management menu, select `move`. The previously opened screen disappears and is replaced by a four-cornered outline of the screen. Note that the cursor is blinking on the top-left corner of the screen outline. Use the cursor movement keys to position the blinking cursor where you want the screen to be moved. Press `(ENTER)` to reposition the screen.

Refreshing the Screen

From the Frame Management menu, select `refresh`. Any extraneous information is cleared from the screen and the screen is redrawn.

Accessing the UNIX System Prompt

From the Frame Management menu, select `UNIX System` to temporarily leave Voice System Administration and go to the UNIX system prompt. Press `(CONTROL)` `(D)` to exit UNIX and return to the Voice System Administration menu.

⚠ CAUTION:

Do not invoke `cvls_mainmenu` or `cvls_menu` while at the UNIX prompt through Frame Management. You are logged into the system through the menus and invoking the menus again could cause system problems.

Command Menu

The Command Menu enables you to access System Monitor and Trace Service, and exit the voice system. The CMD-MENU key appears as `(F7)` on almost every INTUITY CONVERSANT system screen, menu, or window.

To access the Command Menu (Figure B-10), press `(F7)` (CMD-MENU).



Figure B-10. Command Menu

System Monitor

From the Command Menu select `System Monitor`. The System Monitor screen (Figure B-11) displays the following information:

Channel:	Channel number. Virtual channels have the letter "v" added to them.
Calls Today:	Number of calls received today on that channel
Voice Service:	Script or application name
Service Status:	Current status of that script or application
Caller Input:	Any touch tones received from the caller
Dialed Digits:	Digits dialed by the voice system during transfer attempts

Figure B-11. System Monitor Screen

Changing the Refresh Rate

The System Monitor screen is updated periodically, every 1 to 30 seconds. The default setting is 5 seconds.

To change the refresh rate;

1. Press `F8` (CHG-KEYS).

The system displays the Change Refresh Rate screen.

2. Enter the number of seconds, between 1 and 30, in the `Refresh Rate:` field.

The System Monitor screen updates based on the number of seconds entered.

Trace Service

From the Command Menu, select `Trace Service`. The system displays the Trace Service window (Figure B-12).

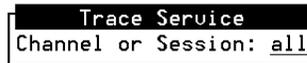


Figure B-12. Trace Service Window

Use this screen to specify the channel or session number for the system to track. Tracing channels takes precedence over tracing host sessions. This means the system looks for active channels to trace before looking for active host sessions to trace.



NOTE:

Space on the root partition may become full, so you should occasionally remove old files from the `/vs/trans/hostdata` directory.

Conducting a Trace

To trace a channel or session or both;

1. Press `F7` (CMD-MENU).

The system displays the Command Menu (Figure B-10).

2. Select `Trace Service` from the Command Menu.

The system displays the Trace Service window (Figure B-12).

3. Enter a single channel or session number, or **all**

4. Press `F3` (SAVE).

The system displays the Trace Output screen (Figure B-13). This screen displays trace output information from the system.

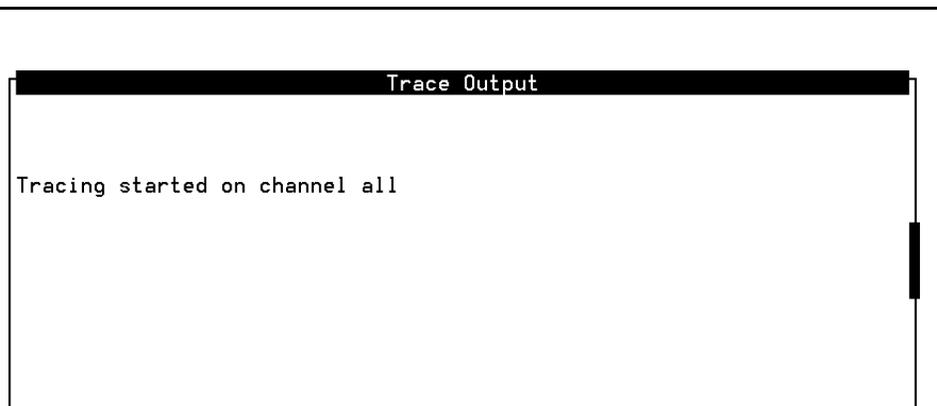


Figure B-13. Trace Output Screen

5. Select one of the following options:

- Press **F1** (PAUSE) if you want to stop the information from scrolling.
- Press **F2** (PREV-PAGE) and **F3** (NEXT-PAGE) to maneuver within the display.
- Press **F1** (RESUME) to continue scrolling through the trace output.
- Press (DELETE) to stop the trace.
- Press **F2** (PRINT) from the Trace Service screen.



NOTE:

The last 250 lines of output will be printed.

Exit

From the Command Menu, select `Exit`. This immediately takes you out of the current screen and returns you to the system prompt.

Logging in to the INTUITY CONVERSANT System

1. Log in as root.
2. Enter one of the following commands at the prompt:
 - **cvis_mainmenu**
The system displays the INTUITY CONVERSANT menu (Figure B-14).
 - **cvis_menu**
The system displays the Voice System Administration menu (Figure B-15).



CAUTION:

*Do not create multiple, simultaneous **cvis_menu** processes, as this could severely impact performance and may lock up the system.*

3. From the INTUITY CONVERSANT menu, you can initiate two programs, UNIX System Administration or Voice System Administration, or you may exit.
 - UNIX System Administration allows you to set up a variety of generic software operations including backups, printer operations, and peripheral setup.
 - Voice System Administration brings up the program that allows you to begin your session for administering voice and non-voice related aspects of the system, such as application package administration and reports.
 - Exit takes you out of the INTUITY CONVERSANT system and returns you to the prompt where you invoked **cvis_mainmenu**.



Figure B-14. INTUITY CONVERSANT Menu

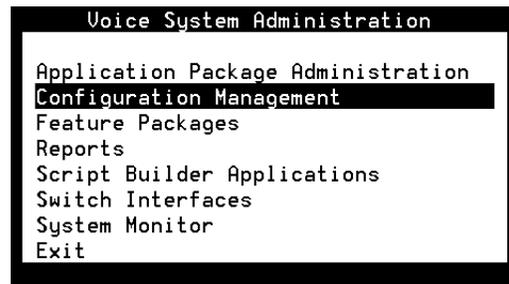


Figure B-15. Voice System Administration Menu

Exiting the INTUITY CONVERSANT System

There are two ways to exit the INTUITY CONVERSANT system.

- From any screen in the system, press **F7** (CMD-MENU) and select `Exit`.
- Press **F6** (CANCEL) until you return to the Voice System Administration menu, then select `Exit`.

Troubleshooting Procedures

C

Overview

This chapter describes some basic troubleshooting procedures for the most common system problems.

Purpose

The purpose of this chapter is to provide the on-site technician or system administrator with repair procedures for the most common system procedures.

The following assumptions are made in this chapter:

- You have checked the Message Log for any relevant messages. See Chapter 1, “Getting Started” in *INTUITY™ CONVERSANT® System Version 6.0 System Alarms and Log Messages*, 585-310-182.
- The resolutions in the second column of the tables are intended to provide a starting point to isolate a problem and may not be exhaustive.
- The procedures in the second column assume general editing knowledge and script familiarity, as most of the commands and procedures are performed from the command line.
- You have already performed a visual inspection of the system.

Repairing Power-Up Troubles

Power-up troubles are experienced when you are first turning the system on. Table C-1 lists the indications related to power-up troubles:

Table C-1. Repairing Power Up Troubles

Indication	Corrective Action
The system will not power up.	<ol style="list-style-type: none"> 1. Verify that the power toggle switch on the front is in the ON position. 2. Verify all external system connections (power cords and monitor cables) are correct (for example, the blue cable connects to the 3270 circuit card and not to the system parallel port). 3. Verify all external system connections are secure.
<p>During startup, the system displays the following message:</p> <pre> "Shared memory is marked as invalid. cvis_ menu exiting." </pre>	<ol style="list-style-type: none"> 1. Stop the voice system. See "Stopping the Voice System" in Chapter 3, "Common System Procedures," in your platform system maintenance book 2. Start the voice system. See "Starting the Voice System" in Chapter 3, "Common System Procedures," in your platform system maintenance book. 3. Enter cvis_mainmenu 4. If the problem persists: <ol style="list-style-type: none"> a. Stop the voice system. See "Stopping the Voice System" in Chapter 3, "Common System Procedures," in your platform system maintenance book b. Enter cp /gendb/shmem/devtbl gendb/shmem/devtbl.old c. Enter rm /gendb/shmem/devtbl d. Start the voice system. See Chapter 3, "Common System Procedures," in your platform system maintenance book.
The start_vs command takes a long time to initialize on a system with many analog lines.	<ol style="list-style-type: none"> 1. Starting at the Switch Administration screen, set Dial-Tone Training to "No." See Chapter 5, "Switch Interface Administration," of <i>INTUITY™ CONVERSANT® System Version 6.0 Administration</i>, 585-310-591. <p>⇒ NOTE: If dial-tone training is "no," you should specify that the dial-tone frequency to be used with a particular switch (350 and 440 is the default for DEFINITY).</p> <ol style="list-style-type: none"> 2. Verify that the transfers being performed in the application are still functioning properly.

Continued on next page

Repairing Boot-Up Troubles

Boot-up troubles are experienced when the system crashes and reboots itself or when you reboot the system. Table C-2 lists the indications and possible repair procedures related to boot-up troubles.

Table C-2. Repairing Boot-Up Troubles

Indication	Corrective Action
<p>Circuit cards are not recognized during boot up.</p>	<ol style="list-style-type: none"> 1. Enter pkginfo 2. Make sure the driver software is installed (SP, Tip/Ring, or T1). 3. Check the circuit cards. See "Circuit Card Diagnostics" in Chapter 2, "Diagnostics," in your platform system maintenance book. 4. Make sure that the circuit cards have the proper switch settings and correct placement of terminating resistors if attached to the TDM bus cable.
<p>When the system boots, it displays messages in the message log report or on the console similar to the following message:</p> <pre>Unable to attach shared memory, Bad DEVTL, and/or VROP respawning too rapidly.</pre>	<ol style="list-style-type: none"> 1. Stop the voice system. See Chapter 3, "Common System Procedures," in your platform system maintenance book. 2. Enter cp /gendb/shmem/devtbl /gendb/shmem/devtbl.old 3. Enter rm /gendb/shmem/devtbl 4. Start the voice system. See "Starting the Voice System" in Chapter 3, "Common System Procedures," in your platform system maintenance book.
<p>The system displays the following message:</p> <pre>Non-system disk or disk error. Replace and hit any key to continue.</pre>	<ol style="list-style-type: none"> 1. Check the diskette drive and confirm that it is empty. 2. Check the cartridge tape drive and confirm that it is empty. 3. Check the power connections. 4. Reboot the system. See "Rebooting the UNIX System" in Chapter 3, "Common System Procedures," in your platform system maintenance book.

Continued on next page

Table C-2. Repairing Boot-Up Troubles — *Continued*

Indication	Corrective Action
<p>The system passes run level four then reboots continuously (rolling reboot).</p>	<ol style="list-style-type: none"> 1. Power off the platform immediately after the system reboots. 2. Remove one optional circuit card (for example, SP, T1, Tip/Ring). 3. Reboot the system. See “Rebooting the UNIX System,” in Chapter 3, “Common System Procedures,” in your platform system maintenance book. 4. Repeat Steps 1–3 until the system reboots properly. 5. Replace the circuit cards.
<p>The system exhibits rolling reboot when static kernel size exceeds 8-Mbyte.</p>	<ol style="list-style-type: none"> 1. Reboot the system. See “Rebooting the UNIX System,” in Chapter 3, “Common System Procedures,” in your platform system maintenance book. 2. While rebooting the system, hold down the ENTER key when the system displays the UnixWare graphics. 3. When the system prompts you for a previously saved kernel, enter unix.old or enter the name of a kernel that you saved manually at a previous time. This file is created automatically each time the kernel is rebuilt. 4. To prevent this problem from occurring again, remove those packages that affect the size of the static kernel from your configuration permanently. The UnixWare limitation of the size of the static kernel is maximum of 8Mbyte.

Continued on next page

Table C-2. Repairing Boot-Up Troubles — Continued

Indication	Corrective Action
<p>A file system check shows a file system with 0 files, 0 blocks, or 0 free.</p>	<ol style="list-style-type: none"> 1. Verify the disk partition was adequate. See “Initializing the Hard Disk Drives” in Chapter 9, “Installing Base System Software,” in your platform system maintenance book. 2. Restore the system software from the mkimage backup tape. See “Performing a System Restoration” in Chapter 3, “Common System Procedures,” in your platform system maintenance book. <p>If no backup is available, reload the system software. See Chapter 9, “Installing Base System Software,” Chapter 10, “Installing the INTUITY CONVERSANT System Software,” and Chapter 11, “Installing the Optional Feature Software,” in your platform system maintenance book.</p>
<p>The system hangs after a reboot and the screen is blank.</p>	<ol style="list-style-type: none"> 1. Check the diskette drive and confirm that it is empty. 2. Check the power connections. 3. Check the power supply by watching for hard disk access with the disk access light. 4. Reboot the system. See “Rebooting the UNIX System,” in Chapter 3, “Common System Procedures,” in your platform system maintenance book.

Repairing System Installation/Upgrade/Set-Up Troubles

These troubles are experienced during initial installation of the voice system, while upgrading either hardware or software, or when adding additional hardware or software. Table C-3 lists the indications and possible repair procedures related to these troubles.

Table C-3. Repairing System Installation/Upgrade/Set-Up Troubles

Indication	Corrective Action
The system cannot initialize the IPCI circuit card.	<ol style="list-style-type: none"> 1. Check for possible conflict with memory and I/O addresses or interrupt conflicts. 2. Log in as root. 3. Enter crash 4. Enter strstat <p data-bbox="678 604 1214 667">The system displays a message similar to the message shown in Figure C-1.</p> <ol style="list-style-type: none"> a. Increase the values to slightly higher than what is listed under the <code>CONFIG</code> column. b. If there is anything other than 0's in the <code>FAIL</code> column, use the <code>/etc/conf/bin/ldtune</code> command to increase the tunable parameter. The parameters to tune are <code>NSTREAM</code>, <code>NQUEUE</code> (should be 4 X <code>NSTREAM</code>), <code>NBLK4</code>, <code>NBLK16</code>, <code>NBLK64</code>, <code>NBLK128</code>, <code>NBLK256</code>, <code>NBLK512</code>, <code>NBLK1024</code>, <code>NBLK2048</code>, and <code>NBLK4096</code>. c. After you have changed the tunable parameters, use the <code>/etc/conf/bin/ldbuild</code> command to rebuild the UNIX kernel. 5. Reboot the system. See "Rebooting the UNIX System," in Chapter 3, "Common System Procedures," in your platform system maintenance book.

```

) strstat
ITEM          CONFIG  ALLOC  FREE   TOTAL  MAX   FAIL
streams       106    106    0      592   109   0
queues        522    522    0     1926  530   0
message blocks 75     57    18    24269  77    0
data blocks   68     57    11    18271  68    0
link blocks   16     16    0      16    16    0
stream events  6      4     2      6     6     0

Count of scheduled queues:  0

```

Figure C-1. strstat Sample Output

Repairing Application-Related Troubles

These troubles are experienced when the voice system is not taking calls or when the voice system is taking calls but the application is not working as expected. There are a number of subgroups for application troubles, such as speech, database, Text-to-Speech, and Speech Recognition. Table C-4 lists the indications and possible repair procedures related to these troubles.

Table C-4. Repairing Application-Related Troubles

Indication	Corrective Action
The voice system is ringing but is not answering the telephone or the voice system is busy.	<ol style="list-style-type: none">1. Scan the Message Log Report for messages related to the trouble. See Chapter 1, "Getting Started," in <i>INTUITY™ CONVERSANT® System Version 6.0 System Alarms and Log Messages</i>, 585-310-182.2. Enter display card all3. Check the status of all the circuit cards.4. Check if the application is properly assigned to the channel(s).5. Make sure the application contains the Answer Phone action.

Continued on next page

Table C-4. Repairing Application-Related Troubles — *Continued*

Indication	Corrective Action
<p>The voice system answers the call, but does not play any speech.</p>	<ol style="list-style-type: none"> 1. Scan the Message Log Report for messages related to the trouble. See Chapter 1, "Getting Started," in <i>INTUITY™ CONVERSANT® System Version 6.0 System Alarms and Log Messages</i>, 585-310-182. 2. Enter display card all 3. Verify that the spadm script is not assigned to any channels. 4. Check the status of all the circuit cards. 5. If spadm is assigned, re-assign the channel to the correct script name. See Chapter 3, "Configuration Management," in <i>INTUITY™ CONVERSANT® System Version 6.0 Administration</i>, 585-310-591. 6. Place test calls to determine if this is occurring on every channel. 7. If the problem is occurring only on certain channels, this could be a hardware problem. Place the problem channels in a MANOOS state until the circuit card can be replaced. 8. Enter trace tsm chan all tee /tmp/trace.out. This sends the trace output to the console and to the file /tmp/trace.out. 9. Review the trace output for failure indications or error messages.

Continued on next page

Table C-4. Repairing Application-Related Troubles — *Continued*

Indication	Corrective Action
All calls are dropped.	<ol style="list-style-type: none"> <li data-bbox="760 373 1430 499">1. Scan the Message Log Report for messages related to the trouble. See Chapter 1, "Getting Started," in <i>INTUITY™ CONVERSANT® System Version 6.0 System Alarms and Log Messages</i>, 585-310-182. <li data-bbox="760 520 1430 709">2. Enter hstatus all This will allow you to check the status of the host if this feature is being used. If all sessions are recovering or logging in, this could explain the trouble. <li data-bbox="760 730 1430 762">3. Enter who -rpb <li data-bbox="760 783 1430 888">4. Search for different time stamps on the processes. A recent date different from most of the others may indicate the process respawned. <li data-bbox="760 909 1430 940">5. Record the scenario that caused the problem. <li data-bbox="760 961 1430 1066">6. If the process is specific to a feature package, see the trouble table for that feature package in this chapter.

Repairing 3270 Communication Troubles

Table C-5 lists the indications and possible repair procedures related to 3270 communication troubles. See Chapter 6 of the *3270 User's Guide* for more information on troubleshooting the host interface.

Table C-5. Repairing 3270 Communications Troubles

Indication	Corrective Action
<p>The hassign command displays the following message:</p> <pre>Rejected by the host interface process</pre>	<ol style="list-style-type: none"> 1. Scan the Message Log Report for host related messages. See Chapter 1, "Getting Started," in <i>INTUITY™ CONVERSANT® System Version 6.0 System Alarms and Log Messages</i>, 585-310-182. 2. Ensure that the host script has been successfully verified and installed. 3. If host administration commands have recently been issued, it may have caused the host interface process to mark this session as "not available." To verify this, enter hstatus <p>An error may have occurred on that particular session or the session is being used by another process. If you are unable to clear the session, you may need to download the host circuit card. Downloading the host interface circuit card will free it immediately, but should only be done in a test environment or if nothing else has cleared the problem. All activity must be removed from the circuit card prior to download, or the voice system must be stopped and started after the download.</p>
<p>The hstatus command displays the following messages:</p> <pre>host interface is not responding</pre>	<p>This does not always mean the host has stopped communicating. It may indicate that the host process is very active, and has not been able to service your command after 60 seconds.</p> <ol style="list-style-type: none"> 1. Scan the Message Log Report for host related messages. See Chapter 1, "Getting Started," in <i>INTUITY™ CONVERSANT® System Version 6.0 System Alarms and Log Messages</i> 585-310-182. 2. Enter trace dip0 tee /tmp/dip0.out 3. Check for any host process activity. There could be a 10 minute delay if the sessions have been in recovery for a while. 4. Press (DEL) to exit trace when you are finished.
<p>The hstatus command displays the following message:</p> <pre>host interface is not running</pre>	<ol style="list-style-type: none"> 1. Verify that the host interface process is running. 2. If it is not, enter sh -x /vs/data/S96hostint <p>This command will attempt to start the host interface process.</p>

Continued on next page

Table C-5. Repairing 3270 Communications Troubles — Continued

Indication	Corrective Action
<p>Login or logout does not work.</p>	<ol style="list-style-type: none"> 1. Enter sb_trace <session number> This will capture a trace of the process. 2. Use hassign to assign the host application to the host session. See Appendix A, "Summary of Commands," in <i>INTUITY™ CONVERSANT® System Version 6.0 Administration</i>, 585-310-591. Trace data may appear on the screen. 3. If you are testing login, enter hstatus If you are testing logout, enter hlogout <session number> See Appendix A, "Summary of Commands," in <i>INTUITY™ CONVERSANT® System Version 6.0 Administration</i>, 585-310-591. 4. After the application has had enough time to complete, press (DELETE) to stop the trace. 5. To view this data, enter pg /vs/trans/hostdata/chanxx where xx is the host session number.
<p>Screens not being dumped through sb_trace</p>	<ol style="list-style-type: none"> 1. Stop the voice system. See "Stopping the Voice System" in Chapter 3, "Common System Procedures," in your platform system maintenance book. 2. Start the voice system. See "Starting the Voice System" in Chapter 3, "Common System Procedures," in your platform system maintenance book. <p>⇒ NOTE: Do not remove the files in /vs/trans/hostdata/chanxx as the host DIP will not recreate them unless a stop_vs and start_vs has been done.</p>

Continued on next page

Table C-5. Repairing 3270 Communications Troubles — Continued

Indication	Corrective Action
<p>Recovery does not work.</p>	<ol style="list-style-type: none"> 1. Enter sb_te <i><session number></i> on an available session. See Appendix A, "Summary of Commands," in <i>INTUITY™ CONVERSANT® System Version 6.0 Administration</i>, 585-310-591. 2. Take this session to various screens this application may receive, then press (CONTROL) (X) to exit sb_te. 3. Enter sb_trace <i><session number used in Step 1></i>. 4. Use hassign to assign the host application to the host session. This causes the application to jump to the recovery procedure. See Appendix A, "Summary of Commands," in <i>INTUITY™ CONVERSANT® System Version 6.0 Administration</i>, 585-310-591. 5. Enter hstatus to monitor the status of this session. If it reaches "logged in," the recovery was successful. If not, stop the trace and review the data. 6. Enter hfree <i><session number></i> 7. Repeat all steps for each screen the application may receive.
<p>The system detects a hardware fault on the host interface circuit card.</p>	<ol style="list-style-type: none"> 1. A parity error has occurred on the PC/XL circuit card. Verify that the SIMMs on this circuit card are not loose. 2. If the inspection of the SIMMs does not reveal a problem, replace the circuit card. See "Removing a Circuit Card," in Chapter 5, "Replacing, Installing, or Upgrading Circuit Cards," in your platform system maintenance book.
<p>The system cannot establish connection with the host.</p>	<p>Make sure the configuration parameters are set correctly as described in Chapter 3, "Configuration Management," in <i>INTUITY™ CONVERSANT® System Version 6.0 Administration</i>, 585-310-591.</p>

Repairing External Alarms Troubles

The following tables attempt to isolate troubles related to the external alarm interface available on the MAP/100C.

Table C-6. Repairing External Alarms Troubles

Trouble Indication	Corrective Action
<p>At UNIX system prompt, you use the alarm command and the system responds with the following message:</p> <pre data-bbox="363 779 683 835">/bin/ksh: alarm: not found</pre>	<ol style="list-style-type: none"> 1. Verify that the /vs/bin/alarm file exists by executing: ls -l /vs/bin/alarm 2. If the /vs/bin/alarm file is not there, remove and reinstall the External Alarms package. Second, verify that /vs/bin is in your path by executing: echo \$PATH 3. If /vs/bin is not in your path, log out and log back in to the VIS.
<p>The alarm command reports status but changes do not appear on the external alarm circuit card LED settings.</p>	<ol style="list-style-type: none"> 1. Verify that the dip switch settings are set as described in your platform system maintenance book. If not, set properly. 2. Verify that the alarm relay circuit card is properly positioned in the slot. 3. Verify that there are no Critical, Major, or Minor priority external alarm (EXTA) system messages in the message log. If EXTA messages exist in the log, see Chapter 2, "Message Log Entries," in <i>INTUITY™ CONVERSANT® System V6.0 System Alarm and Log Messages</i>, 585-310-182, for the appropriate repair procedure.
<p>The alarm command works and LED lights change when alarm text or alarm reset is executed but changes do not appear on the External Alarms annunciators.</p>	<ol style="list-style-type: none"> 1. Verify that the alarm relay circuit card external cabling is connected properly. Use a multimeter to verify that the alarm relay circuit card contacts are closing properly. 2. If the contacts are not closing properly, the circuit card may be malfunctioning and may need to be replaced. Refer to the "Checking a Card" procedure in Chapter 4, "Common Maintenance Procedures."

Continued on next page

Table C-6. Repairing External Alarms Troubles — *Continued*

Trouble Indication	Corrective Action
The alarm relay circuit card is not responding to system error messages.	<ol style="list-style-type: none"> 1. Verify that the system messages in question are assigned to the alarm contact sets. 2. Verify that there are no Critical, Major, or Minor priority external alarm (EXTA) system messages in the message log. 3. If EXTA messages exist in the log, see Chapter 2, "Message Log Entries," in <i>INTUITY™ CONVERSANT® System V6.0 System Alarm and Log Messages</i>, 585-310-182, for the appropriate repair procedure.
External Alarm sanity timer periodically or always times out	<ol style="list-style-type: none"> 1. Verify that the switch settings for the alarm relay circuit card are correct. 2. Verify that there are no Critical, Major, or Minor priority external alarm (EXTA) system messages in the message log. 3. If EXTA messages exist in the log, see Chapter 2, "Message Log Entries," in <i>INTUITY™ CONVERSANT® System V6.0 System Alarm and Log Messages</i>, 585-310-182, for the appropriate repair procedure.
LED indicator light 1 is off	Relay 1 is closed; that is, power is not being applied to the system. Check the power connections.

Repairing Speech Recognition Troubles

The following tables attempt to isolate troubles related to the speech recognition functionality on the system. These troubles are separated into general speech recognition troubles (WholeWord and FlexWord™) and accuracy troubles.

Repairing General Speech Recognition Troubles

The following speech recognition troubles (Table C-7 and Table C-8) are related to general problems with the WholeWord or FlexWord feature.

Table C-7. Repairing WholeWord Speech Recognition Troubles

Indication	Corrective Action
<p>The script prompt does not give you time to respond.</p>	<p>Enter display card <sp card number></p> <ol style="list-style-type: none"> 1. Make sure that the functionality assigned to the SP circuit card is WW_RECOG or VOICE+WW_RECOG. See Chapter 3, "Configuration Management," in <i>INTUITY™ CONVERSANT® System Version 6.0 Administration</i>, 585-310-591. 2. Make sure the SP circuit card is in the INSERV state. <p style="margin-left: 40px;">Enter restore card <sp_card_number> if the SP circuit card is MANOOS.</p> <p style="margin-left: 40px;">Enter diagnose card <sp_card_number> if the SP circuit card is BROKEN.</p> 3. If the SP circuit card or CMP circuit card(s) associated with it fail diagnostics, replace the circuit card. See "Removing a Circuit Card," in Chapter 5, "Replacing, Installing, or Upgrading Circuit Cards," in your platform system maintenance book. 4. Make sure all CMP circuit cards attached to the SP circuit card providing speech recognition are in the INSERV state. <p style="margin-left: 40px;">If any CMP circuit card is BROKEN or NOT_DIAG complete the following:</p> <ol style="list-style-type: none"> a. Make sure the SP has WW_RECOG or VOICE+WW_RECOG assigned. b. Enter diagnose card <sp_card_number>. c. If either the SP circuit card or CMP circuit card(s) fail diagnostics, replace the circuit card. See "Removing a Circuit Card" in Chapter 5, "Replacing, Installing, or Upgrading Circuit Cards," in your platform system maintenance book.

Continued on next page

Table C-7. Repairing WholeWord Speech Recognition Troubles — *Continued*

Indication	Corrective Action
<p>The script prompt does not give you time to respond (<i>continued</i>).</p>	<p>d. Check the number of speech recognition resources available.</p> <p>For each CMP circuit card attached to an SP, 6 channels of speech recognition are provided.</p> <ul style="list-style-type: none"> — Use SP_Allocate to check if a recognition resource is available before each <code>Prompt</code> and <code>Collect</code> statement. — If possible, explicitly reserve the resource. <p>e. Enter diagnose card <sp_card_number> to make sure the SP circuit card performing speech recognition and the telephone circuit cards indicate <code>tdm1</code> in the <code>OPTIONS</code> list.</p> <p>f. If the system indicates <code>no tdm</code>, install a TDM bus cable between these boards.</p> <p>If the cable is already there and the system indicates “no tdm,” make sure the cable is installed properly.</p> <p>If the problem persists, replace the TDM cable.</p>

Table C-8. Repairing Speech WholeWord and FlexWord Recognition Troubles

Indication	Corrective Action
<p>The CMP circuit card is in a <code>NOT_DIAG</code> state.</p>	<ol style="list-style-type: none"> 1. Assign speech recognition functionality (<code>WW_RECOG</code>, <code>SW_RECOG</code>, <code>Voice+WW_RECOG</code> or <code>VOICE+SW_RECOG</code>) to the SP circuit card. See Chapter 3, “Configuration Management,” in <i>INTUITY™ CONVERSANT® System Version 6.0 Administration</i>, 585-310-591. 2. Enter diagnose card <sp_card_number> where <code><sp_card_number></code> is the number of the SP circuit card with the <code>NOT_DIAG</code> CMP circuit card attached.
<p>A BSS error occurred during boot or start_vs.</p>	<ol style="list-style-type: none"> 1. Check the circuit cards. See “Circuit Card Diagnostics” in Chapter 2, “Diagnostics,” in your platform system maintenance book. 2. Check the SP/CMP cable connections.

Continued on next page

Table C-8. Repairing Speech WholeWord and FlexWord Recognition Troubles —

Indication	Corrective Action
<p>SP_INIT failed, and diagnostics did not run.</p>	<ol style="list-style-type: none"> 1. Shut down system. See “Shutting Down the Operating System” in Chapter 3, “Common System Procedures,” in your platform system maintenance book 2. Disconnect the SP/CMP cables from one of the CMP cards. 3. Reboot the system. See “Rebooting the UNIX System” in Chapter 3, “Common System Procedures,” in your platform system maintenance book. 4. Run the SP diagnostics again. See “Circuit Card Diagnostics” in Chapter 2, “Diagnostics,” in your platform system maintenance book. 5. If the error is resolved, replace the CMP circuit card that is no longer connected to the SP/CMP cables. See “Companion (AYC7) Circuit Card,” in Chapter 5, “Replacing, Installing, or Upgrading Circuit Cards,” in your platform system maintenance book. If the error is not resolved, repeat Steps 1 through 4 for each additional CMP circuit card. 6. Replace the SP/CMP cables. 7. Make sure the SP circuit card is an AYC2B or an AYC2C by verifying the name of the circuit card on the faceplate.
<p>Speech playback stops on the first keyword spoken by voice system.</p>	<ol style="list-style-type: none"> 1. Scan the Message Log Report for SP circuit card related messages. See Chapter 1, “Getting Started,” in <i>INTUITY™ CONVERSANT® System Version 6.0 System Alarms and Log Messages</i>, 585-310-182. 2. Determine if barge-in is enabled for this prompt by checking the <code>Announce</code> or <code>Prompt</code> and <code>Collect</code> actions. There may be a touch-tone simulation in the prompt. 3. Disable the prompt if enabled to see if it plays.
<p>A corrupted speech phrase is heard.</p>	<p>When re-recording an active speech phrase, first record the speech into a temporary speech buffer, then copy the phrase into the active phrase.</p>

Continued on next page

Table C-8. Repairing Speech WholeWord and FlexWord Recognition Troubles —

Indication	Corrective Action
Clicking is heard on the line.	<ol style="list-style-type: none"> 1. If the lines are connected to PBX and T/R lines, verify that the lines are configured on the PBX as ECTS (electronic custom telephone service) and <i>not</i> POTS (plain old telephone service). 2. Check the outgoing and incoming volume parameters as described in Chapter 6, "Switch Interface Administration," of <i>INTUITY™ CONVERSANT® System Version 6.0 Administration</i>, 585-310-591. For T1 circuit cards, defaults are <ul style="list-style-type: none"> ■ ovol = 707 ■ ivol = 1414 For Tip/Ring circuit cards, defaults are <ul style="list-style-type: none"> ■ ovol = 1000 ■ ivol = 4000 3. Re-record speech if volume levels were too high. 4. If necessary, check the circuit cards. See "Circuit Card Diagnostics" in Chapter 2, "Diagnostics," in your platform system maintenance book. 5. If other lines are available on the system, connect those to the circuit card exhibiting the noisy/clicking conditions. If the problem goes away, the lines may be bad. If the problem persists, enter diagnose card <card number>. If the circuit card passes and the problem persists, replace the circuit card. See Chapter 5, "Replacing, Installing, or Upgrading Circuit Cards," in your platform system maintenance book.
No memory found on CMP <cmp number>.	Replace the CMP circuit card. See "Companion (AYC7) Circuit Card" in Chapter 5, "Replacing, Installing, or Upgrading Circuit Cards," in your platform system maintenance book.
SP diagnostics fail intermittently.	Replace the SP/CMP cables.

Continued on next page

Table C-8. Repairing Speech WholeWord and FlexWord Recognition Troubles —

Indication	Corrective Action
<p>No voice is heard when the script answers the telephone.</p>	<ol style="list-style-type: none"> 1. Enter display card to determine the type of Tip/Ring circuit card you have. <ol style="list-style-type: none"> a. The SP circuit card should be assigned to WW_RECOG, VOICE+WW_RECOG, SW_RECOG, or VOICE+SW_RECOG functionality or some other SP circuit card in the system should have just VOICE functionality. To change the VRS6 circuit card to TDM mode, see “Changing Voice Equipment Options” in Chapter 3, “Configuration Management,” of <i>INTUITY™ CONVERSANT® System Version 6.0 Administration</i>, 585-310-591. b. The IVP6 circuit card must be set to “talk” if the SP circuit card is assigned to WW_RECOG or SW_RECOG. There must be another SP circuit card in the system with VOICE only functionality providing the voice. 2. Make sure the SP circuit card is in the INSERT state. If MANOOS, enter restore card <sp_card_number>. If BROKEN, complete Steps a and b below: <ol style="list-style-type: none"> a. Enter remove card <sp_card_number> b. Enter diagnose card <sp_card_number> <p>If either the SP circuit card or CMP circuit card(s) fail diagnostics, replace the circuit card. See “Companion (AYC7) Circuit Card” or “Signal Processor (AYC2C or AYC9) Circuit Card” in Chapter 5, “Replacing, Installing, or Upgrading Circuit Cards,” in your platform system maintenance book.</p> 3. Make sure that both the SP circuit card performing speech recognition and the telephony circuit cards say <code>tdm1</code> in the OPTIONS list. If it says <code>no tdm</code>, install a TDM bus cable between these circuit cards. If the cable is already there and it says <code>no tdm</code>, check the cable connection by pushing down the cable at each connector to insure proper installation. If the problem persists, replace the TDM cable.

Repairing Speech Recognition Accuracy Troubles

The following speech recognition troubles are related to accuracy problems on the voice system with the feature.

Table C-9. Repairing Speech Recognition Accuracy Troubles

Indication	Corrective Action
<p>The script chooses the wrong option after you speak.</p>	<ol style="list-style-type: none"> 1. Have your script speak back what it recognized (the value of \$CI_VALUE) right in the Prompt and Collect action. This helps ensure it is not a bug in the script that is making you think that recognition does not work. Perhaps your script is copying the result of \$CI_VALUE to a variable and then evaluating the variable. For a YES/NO prompt, the variable must be of type character since it returns "Y" or "N." 2. If you are using an SDIG recognition type with a length greater than 1, you can trace the recognition dip (trace recog_dip) to see what the dip is returning to the script.
<p>The initial timeout is not long enough for the digit string.</p>	<ol style="list-style-type: none"> 1. Make sure the Initial Timeout value in the Prompt and Collect action is long enough for the system to recognize valid keywords in the caller's speech. 2. If you are having recognition problems on a prompt expecting a digit string, try increasing the initial timeout by three to five seconds.
<p>A CMP or SP circuit card is broken.</p>	<ol style="list-style-type: none"> 1. Enter diagnose card <sp_card_number> 2. Make sure all the tests pass.
<p>Pressing return does not produce a result.</p>	<p>If a Prompt & Collect statement is using speech recognition and has Speak with Interrupt enabled, the prompt should not exceed 30 seconds. This is because the SP circuit card can only buffer up to 30 seconds worth of input speech for performing recognition.</p> <ol style="list-style-type: none"> 1. Replace the single Prompt & Collect statement (which had the >30 second prompt) by a series of Prompt & Collect statements all with prompts shorter than 30 seconds. <p>As long as the prompts within the commands are less than 30 seconds long, a series of statements can be used to replace a single Prompt & Collect that has a long prompt.</p>

Continued on next page

Table C-9. Repairing Speech Recognition Accuracy Troubles — Continued

Indication	Corrective Action
<p>Trouble is affecting a specific person and not all callers.</p>	<p>There are people whose voices fall outside of the speech models and will have difficulty getting speech recognition to work for their voice every time.</p> <p>You may want to attempt to collect data samples of the specific audience.</p>
<p>Callers responses are not being recognized.</p>	<p>Make sure the recognition types used are appropriate for what the caller is being asked to say.</p> <p>For example, if the recognition type is SY_N, the system expects callers to say “Yes” or “No.”</p> <p>If the callers are responding with digits instead of the words “Yes” or “No,” accuracy will be very poor.</p> <p>Check your wordlist to make sure the words the caller is speaking are included in the wordlist.</p>
<p>A custom grammar was overwritten.</p>	<p>Reinstall the custom work package if your script uses a custom grammar and the speech recognition package has been reloaded for some reason.</p>
<p>A custom grammar or DIP is inoperable.</p>	<ol style="list-style-type: none"> 1. Check to see if the speech recognition problem you are having is only for prompts that use custom work (a custom grammar or DIP). 2. Contact the developer of your custom work for assistance.
<p>SP circuit card will not download with speech recognition functionality assigned.</p>	<ol style="list-style-type: none"> 1. If using custom grammars, check with the developer of the custom work to make sure the grammar does not exceed design limitations. 2. Make sure the SP circuit card is an AYC2B or an AYC2C by verifying the name of the card on the front plate.
<p>The voice system is too slow.</p>	<p>Use the WholeWord recognition type which is smallest for the expected data.</p> <p>For example, if callers are asked to say 1, 2, 3, or 4, use the SI_5 rather than SDIG with minimum and maximum digits of 1.</p>
<p>The script reprompts MAX_TRIES a number of times.</p>	<p>Check for sufficient speech recognition resources. See the SP_Allocate external action as described in <i>INTUITY™ CONVERSANT® System Version 6.0 Application Development with Script Builder</i>, 585-310-763.</p>

Continued on next page

Table C-9. Repairing Speech Recognition Accuracy Troubles — Continued

Indication	Corrective Action
<p>Barge-in does not work when talk over the prompt (applies to WholeWord speech recognition only — FlexWord does not support barge-in).</p>	<ol style="list-style-type: none"> 1. Make sure SR_Prompt is set to “yes.” See <i>INTUITY™ CONVERSANT® System Version 6.0 Application Development with Script Builder</i>, 585-310-763. 2. Make sure the Prompt and Collect and Announce actions have Prompt With Interrupt set to “yes.” 3. Check that your incoming and outgoing speech volume levels are near the recommended levels. See Chapter 6, “Switch Interface Administration,” of <i>INTUITY™ CONVERSANT® System Version 6.0 Administration</i>, 585-310-591. <p>If these values are changed, complete Steps a and b:</p> <ol style="list-style-type: none"> a. Stop the voice system. See “Stopping the Voice System,” in Chapter 3, “Common System Procedures,” in your platform system maintenance book. b. Start the voice system. See “Starting the Voice System,” in Chapter 3, “Common System Procedures,” in your platform system maintenance book. <ol style="list-style-type: none"> 4. Check that a Tip/Ring circuit card is set to “tdm.”
<p>Barge in does not work.</p>	<p>The circuit cards are not set correctly for barge-in (applies to WholeWord speech recognition only)</p> <p>For T1 systems, at least one SP circuit card must be assigned VOICE function and at least one SP circuit card must be assigned WW_RECOG or VOICE+WW_RECOG.</p> <p>For Tip/Ring systems, at least one SP circuit card must be assigned VOICE+WW_RECOG and IVP6 or VRS circuit cards must be set to “tdm.”</p> <p>The system can also have an SP circuit card with VOICE only, an SP circuit card for speech recognition set to WW_RECOG, and IVP6 or VRS6 circuit cards set to “tdm.”</p>
<p>No barge-in resources available (applies to WholeWord speech recognition only — FlexWord does not support barge-in).</p>	<ol style="list-style-type: none"> 1. Check the return code for SR_Prompt to see if barge-in resources are available (return = 0). 2. If none are available, the call should be handled as touch tone if possible, or sent to an agent. <p>If problem persists, consider adding SP and CMPs circuit cards to increase the available resources.</p>

Continued on next page

Table C-9. Repairing Speech Recognition Accuracy Troubles — *Continued*

Indication	Corrective Action
<p>Prompt is talked off without saying keywords (applies to WholeWord speech recognition only — FlexWord does not support barge-in).</p>	<ol style="list-style-type: none"> 1. Test the prompt with considerable background noise 2. Test the prompt again in a quiet environment. 3. Make sure the caller is not using a speakerphone. 4. Investigate whether the prompt needs to be interruptible. If not, set Speak With Interrupt to “no” in the Prompt and Collect action. 5. Make sure SR_Prompt is set early enough in the script. This can be done immediately after the Answer Phone action as shown below: start <ol style="list-style-type: none"> 1. Answer Phone 2. External Action SR_Prompt Recognize_During_Prompt = “yes” 3. Announce Speak Without Interrupt Phrase “sil.050”.in -2
<p>You hear stuttered speech during talkoff.</p>	<p>Reduce the load. See Table C-29 below for the procedure.</p>

Repairing ORACLE Database Troubles

Table C-10 lists troubles related to database problems on the voice system.

Table C-10. Repairing ORACLE Database Troubles

Indication	Corrective Action
<p>The voice script gets incorrect information or no information from the local database.</p>	<ol style="list-style-type: none"> 1. Scan the Message Log Report for messages related to the trouble. See Chapter 1, "Getting Started," in <i>INTUITY™ CONVERSANT® System Version 6.0 System Alarms and Log Messages</i>, 585-310-182. 2. Enter dbfree 3. Check the amount of free database space. 4. Enter trace tsm dip1 chan all where <i>dip 1</i> is the local database dip, 5. Determine whether the database is full. 6. Determine whether an attempt has been made to modify a record without first reading the record. 7. Check to see if the local database table exists and is properly configured with data.
<p>Occasionally, the script does not find an existing database record.</p>	<ol style="list-style-type: none"> 1. Scan the Message Log Report for messages related to the trouble. See Chapter 1, "Getting Started," in <i>INTUITY™ CONVERSANT® System Version 6.0 System Alarms and Log Messages</i>, 585-310-182. 2. If no message exists, it is likely the database DIP is not responding to the script request in a timely fashion due to heavy traffic load or system load. Verify the MATCH_FOUND value after the Read Table action. If MATCH_FOUND is -2, the script timed out on the Read Table request. The application should retry the Read Table or prompt caller to call back later.

Continued on next page

Table C-10. Repairing ORACLE Database Troubles — *Continued*

Indication	Corrective Action
<p>The open cursor limit has been reached.</p>	<p>Increase the number of open cursors to 511:</p> <ol style="list-style-type: none"> 1. Enter vi /oracle/dbs/initA.ora 2. Change line open_cursors = 255 to open_cursors = 511 3. Stop the voice system. See “Stopping the Voice System” in Chapter 3, “Common System Procedures,” in your platform system maintenance book. 4. Stop the database system. See “Stopping the Database System” in Chapter 3, “Common System Procedures,” in your platform system maintenance book. 5. Start the database system. See “Starting the Database System” in Chapter 3, “Common System Procedures,” in your platform system maintenance book. 6. Start the voice system. See “Starting the Voice System” in Chapter 3, “Common System Procedures,” in your platform system maintenance book.

Continued on next page

Table C-10. Repairing ORACLE Database Troubles — Continued

Indication	Corrective Action
<p>The voice script gets incorrect information or no information from the remote database.</p>	<ol style="list-style-type: none"> 1. Scan the Message Log Report for messages related to the trouble. See Chapter 1, "Getting Started," in <i>INTUITY™ CONVERSANT® System Version 6.0 System Alarms and Log Messages</i>, 585-310-182. 2. Check the Database Access ID Table under Database Administration in the cvis_menu to make sure the Database Access ID is assigned to the remote machine. 3. Enter ps -ef grep oraldb 4. Verify that the name of the remote machine is displayed. 5. Consult the database administrator of the remote machine to determine if the remote database is up and had not been shutdown ungracefully during the period the voice system was running. <p>An example of an ungraceful shutdown of the database is to abort the database using the sqldba command shutdown abort. The observed ORACLE 6.0.30 symptom is that the shadow process of orasrv in the remote machine to which the voice system remains connected remains alive in memory after the remote database is shutdown gracefully. When the remote database is up again, this shadow process of orasrv is still able to access some of the database data in memory. However, the result would be unexpected. The script is not able to get information correctly from the remote database in this case and you should perform the following Steps a and b</p> <ol style="list-style-type: none"> a. Stop the voice system. See "Stopping the Voice System" in Chapter 3, "Common System Procedures," in your platform system maintenance book. b. Start the voice system. See "Starting the Voice System" in Chapter 3, "Common System Procedures," in your platform system maintenance book. 6. Consult with the database administrator to see if any changes have been made to the tables on the remote machine. <p>If changes have been made, the effected application must be verified and installed again. See Chapter 9, "Installing the Application," of <i>INTUITY™ CONVERSANT® System Version 6.0 Application Development with Script Builder</i>, 585-310-763.</p> 7. Enter trace tsm chan all dbdipx where x is the database ID number (either 2, 3, 4, or 5).

Continued on next page

Table C-10. Repairing ORACLE Database Troubles — Continued

Indication	Corrective Action
ccasum never finishes its cron job	<ol style="list-style-type: none"> 1. Determine if you are transferring to more than 100 numbers. If so, kill the cron job by completing the following Steps a through c: <ol style="list-style-type: none"> a. Enter ps -ef grep ccasum b. Search for the PID for ccasum. It is located in the second column from the left. c. Enter kill -9 <pid #>, where <i><pid #></i> is the parent process id (PID) number. 2. Create an index for ccasum. <ol style="list-style-type: none"> a. Log on to sqlplus as sti/sti. b. Enter create index cca_idx on cca(phone_num); c. Enter quit 3. Enter /vs/bin/util/ccasum when the call traffic is light. 4. Enter /vs/bin/util/ccadel when ccasum is finished.
Concern about memory usage.	Decrease the value of nbuf in the /vs/data/spchconfig file.
Need to increase nbuf.	<ol style="list-style-type: none"> 1. Edit /etc/conf/mtune.d/shm to change the SHMMAX value from 4194304 (4-Mbyte) to 6291456 (6-Mbyte). 2. Edit /etc/conf/cf.d/mtune to change the SHMMAX value from 4194304 to 6291456. 3. Run /etc/conf/bin/idtune SHMMAX 6291456 4. Run /etc/conf/bin/idbuild -B 5. Edit /vs/data/spchconfig to change the nbuf value to 360. 6. Reboot the system. See “Rebooting the UNIX System” in Chapter 3, “Common System Procedures,” in your platform system maintenance book.

Repairing Script Builder Troubles

Table C-11 and Table C-12 provide information on troubles related to the Script Builder package.

Table C-11. Repairing Script Builder Troubles

Indication	Corrective Action
Messages are cut off.	<p>Add a few seconds of initial silence (0.2 to 0.5 seconds) to the beginning of the message to be played.</p> <p>Another way to avoid missing any segment of a message is to construct a phrase consisting of a few seconds of silence and play that phrase first.</p>
The terminal is locked-up.	<p>Use the following key sequence to release your terminal keypad:</p> <p>(CONTROL) (J) stty sane (CONTROL) (J)</p>
You receive the message No Space On Root File System.	<ol style="list-style-type: none"> 1. Press (EXIT) from Script Builder. 2. Clean up the root file system. <ul style="list-style-type: none"> Try to free a minimum of several hundred free blocks. 3. Re-enter Script Builder with your application. <p>You may find that everything is functioning properly with your application. You may be able to continue right where you left off and just retype any previous changes that were not saved. However, depending on where you were in the application when root ran out of space, some files may be corrupted.</p> 4. If Script Builder fails completely with this application, complete the following Steps a and b: <ol style="list-style-type: none"> a. Remove the transaction part of the application by pressing REMOVE in the Script Builder Applications screen. b. Restore it from a backup. See <i>INTUITY™ CONVERSANT® System Version 6.0 Application Development with Script Builder</i>, 585-310-763.

Continued on next page

Table C-11. Repairing Script Builder Troubles — Continued

Indication	Corrective Action
There is no speech output.	<ol style="list-style-type: none"> 1. Make sure the phrase actually exists. If it does not, record it. See the Speech Administration screen in Chapter 7, "Producing Speech," of <i>INTUITY™ CONVERSANT® System Version 6.0 Application Development with Script Builder</i>, 585-310-763. 2. Make sure the OVOL and IVOL parameters are correctly set in the Switch Interface screen. See Chapter 6, "Switch Interface Administration," of <i>INTUITY™ CONVERSANT® System Version 6.0 Administration</i>, 585-310-591. 3. Enter display card sp 4. Check the status of the SP circuit cards.
Host sessions recover repeatedly.	<ol style="list-style-type: none"> 1. Scan the Message Log Report for messages related to the trouble. See Chapter 1, "Getting Started," in <i>INTUITY™ CONVERSANT® System Version 6.0 System Alarms and Log Messages</i>, 585-310-182. 2. Make sure a Transaction Base screen has been specified. 3. Make sure the Login and Recovery sequences both leave the host session at a Transaction Base screen.
A ring no answer occurs for an application that has a host interface.	<ol style="list-style-type: none"> 1. Scan the Message Log Report for messages related to the trouble. See Chapter 1, "Getting Started," in <i>INTUITY™ CONVERSANT® System Version 6.0 System Alarms and Log Messages</i>, 585-310-182. 2. Check the host timeout value and verify that the host response time is not exceeded.

Repairing Script Builder FAX Actions Troubles

The following table provides information about trouble related to the Script Builder FAX Actions package. See these tables for appropriate corrective action if trouble with Script Builder FAX Actions arises.

Table C-12. Repairing Script Building FAX Actions Troubles

Trouble Indication	Corrective Action
<p>The ASCII to TIFF conversion process failed</p>	<p>The << SBFAX006 SBF_ASCTOTIFF_FAILED >> line above and similar lines throughout this chapter are explain message identifiers and mnemonics that can be used as arguments to the explain function which is used to obtain the explain text associated with the error message. For example, to obtain the information below, enter at the UNIX shell prompt the command explain SBFAX006.</p> <p>The script made a request to transmit a text file to the caller. Before the text file can be sent, it must be converted into the appropriate format. This conversion failed for the text file specified.</p> <p>Most likely, the file requested is not suitable for transmission. Check to make sure the file is either a text file or a FAX file entered through the Fax Response Workspace.</p>
<p>The FAX combine process failed</p>	<p>The system attempted to combine two or three files into a single FAX file. This operation failed. For this operation to be completed, file conversions are performed to get the information into a form suitable for transmission.</p> <p>Most likely, one or more of the files requested are not suitable for transmission. Check to make sure the files requested are either text files or FAX files entered through the Fax Response Workspace.</p>
<p>The FAX cover page process failed</p>	<p>The script request to join two files into a single FAX file (possibly for use as a cover page) failed. For this operation to be completed, file conversions are performed to get the information into a form suitable for transmission.</p> <p>Most likely, one or both of the files requested are not suitable for transmission. Check to make sure the files requested are either text files or FAX files entered through the Fax Response Workspace.</p>
<p>FAX file not found</p>	<p>The script request to transmit a FAX file to the caller failed because the FAX file requested could not be found. Verify that the FAX file exists either in the Fax Response Workspace or at the full path specified in the script.</p> <p>The caller did not receive the FAX requested. Consider manually transmitting the FAX message requested by the caller using the delivery number contained in the error message.</p>

Continued on next page

Table C-12. Repairing Script Building FAX Actions Troubles — *Continued*

Trouble Indication	Corrective Action
Text file not found	<p>The script request to transmit a file to the caller failed because the file requested could not be found. Verify that the file exists and was specified in the script with the appropriate path.</p> <p>The caller did not receive the FAX they requested. Consider transmitting it manually to the caller using the delivery number contained in the error message.</p>
The FAX send process failed	<p>The script request to transmit one or two FAX messages to the caller failed. The return code reported in the error message indicates the result of the delivery request.</p> <p>This error may be the result of the failure of earlier FAX Actions. For example, if another FAX Action failed and the script did not check its return value, it is likely that the associated FAX_Send action would also fail. Consult the list below to determine the source of the problem.</p> <ul style="list-style-type: none"> — 6003 FAX file missing — 6105 FAXMGR not running/FAX channels not in service/No phone lines attached
The execute UNIX command failed	<p>The script request to execute a UNIX command or shell script failed.</p> <p>Most likely, the problem is with the command or shell script. Check that the command or shell script that was attempted works when executed manually. If it does, make sure that its full path name is provided to the script.</p>

Repairing Primary Rate Interface Troubles

The following troubles (Table C-13) are related to the Primary Rate Interface (PRI) feature. It details what action should be taken if the D- or B-channels do not come into service as expected.

Table C-13. Repairing PRI Troubles

D-Channel Status	B-Channel Status	Trouble Indication	Corrective Action
D-MANOOS	MANOOS	Channels have not been put into service.	Change the state of the channels to inserv.
FOOS	FOOS	The T1/E1 facility has not established physical connectivity or is experiencing a problem.	<p>Could be due to one of several reasons. This is normal for about 10–20 seconds after restoring T1/E1 channels. If the condition persists, the System Message Display screen should contain an error message numbered TWIP013 through TWIP018 that indicates the nature of the problem.</p> <p>See error messages TWIP013 through TWIP018 in Chapter 2, “Message Log Entries,” in <i>INTUITY™ CONVERSANT® System Version 6.0 System Alarms and Log Messages</i>, 585-310-182</p>
D-MANOOS	HWOOS	The D-channel has not been put into service.	Change the state of the D-channel to inserv.
D-HWOOS	HWOOS	The SP circuit card assigned to PRI is not in service.	<ol style="list-style-type: none"> 1. Restore SP circuit card to service. 2. If SP circuit card is broken, diagnose it. See “Circuit Card Diagnostics” in Chapter 2, “Diagnostics,” in your platform system maintenance book. 3. If the circuit card is bad, replace it. See “Speech and Signal Processor (AYC43) Circuit Card” in Chapter 5, “Replacing, Installing, or Upgrading Circuit Cards,” in your platform system maintenance book.

Table C-13. Repairing PRI Troubles — *Continued*

D-Channel Status	B-Channel Status	Trouble Indication	Corrective Action
<i>Continued on next page</i>			
D-NETOOS	HWOOS	The D-channel has not yet established connection.	<ol style="list-style-type: none"> 1. If the D-channel does not change after 5 minutes, check that the circuit card with the D-channel is connected to the correct port on the switch. 2. Make sure that the switch is provisioned to invert the HDLC data and D channel data if the framing/coding used is D4ZCS. Data is not inverted if the framing/coding is ESFB8ZS.
D-INSERV	MANOOS	The B-channel has not been put into service.	Change the state of the B-channel to inserv.
D-INSERV	NETOOS	The B-channel has not been put into service by the switch.	This condition can last several seconds after the D-channel comes into service. If the condition persists, check the configuration of the switch.
FOOS	HWOOS	The T1/E1 circuit card that contains the D-channel is having problems.	See the previous case where D-channel is Foos.
D-NETOOS	PENDING	The D-channel has lost connection. Active call on the B-channel is being kept up.	See Chapter 2, "Message Log Entries," in <i>INTUITY™ CONVERSANT® System Version 6.0 System Alarms and Log Messages</i> , 585-310-182 for indication of why D-channel connection was lost.

Continued on next page

Table C-13. Repairing PRI Troubles — *Continued*

D-Channel Status	B-Channel Status	Trouble Indication	Corrective Action
D-HWOOS	PENDING	The SP circuit card assigned to PRI is not in service. An active call on the B-channel is being kept up.	<ol style="list-style-type: none"> 1. Restore the SP circuit card to service. 2. If SP circuit card is broken, diagnose it. See Circuit Card Diagnostics in Chapter 2, "Diagnostics," in your platform system maintenance book. 3. If the circuit card is bad, replace it. See "Speech and Signal Processor (AYC43) Circuit Card" in Chapter 5, "Replacing, Installing, or Upgrading Circuit Cards," in your platform system maintenance book.
Foos	PENDING	The T1/E1 circuit card that contains the D-channel is having link problems. Active call is being kept up on the B-channel.	See the previous case where the D-channel is Foos.
D-INSERV	ON-HOOK	Incoming calls to voice system are not answered. The switch reports an error that indicates the voice system is attempting to negotiate to a nonexistent channel.	<p>The interface ID Provisioning on the switch may not be correct.</p> <ol style="list-style-type: none"> 1. Make sure the circuit card that has the D-channel is set for an Interface ID of 1. 2. Make sure the circuit cards without the D-channel are set for an Interface ID of 2 through 5.
D-INSERV	ON-HOOK	Outgoing calls are rejected by the switch. The switch reports an error indicating an invalid information element or invalid service.	Make sure that you have correctly specified the service type (using the "ISDN_Service" function in Script Builder or the "setparam" script instruction).

Repairing Form Filler Plus Troubles

The following troubles (Table C-14) are related to the Form Filler Plus feature.

Table C-14. Repairing Form Filler Plus Troubles

Trouble Indication	Corrective Action
<ul style="list-style-type: none"> ■ Form Filler Coding has failed for a reason other than voice coding timeouts (that is, Form Filler Code fails due to voice coding failure – return code -1). ■ FF_Code has been called more than 10 times in the call session (return code -20). ■ Form Filler Code fails due to insufficient space on the speech file system (return code -555). 	<ol style="list-style-type: none"> 1. Stop the voice system. See “Stopping the Voice System” in Chapter 3, “Common System Procedures,” in your platform system maintenance book. 2. Start the voice system. See “Starting the Voice System” in Chapter 3, “Common System Procedures,” in your platform system maintenance book. 3. Test the Form Filler Plus database by calling an application script and starting a test record. 4. Check all Form Filler Plus application scripts to confirm that they are not calling the FF_Code action more than 10 times with the Re-Record Phrase option set to “no.” 5. Verify that valid script ID is being used for each FF_Code and that the Script ID is always the same for FF_Code in a single application script. 6. Verify that FF_Store is being called by the script only once per call session and that at least one call to FF_Code precedes the call to FF_Store. 7. Check the Speech Space Statistics in the Form Filler Call Record Summary Report screen. <p>If the speech filesystem is low on space, transcribe and delete more records using the Form Retriever (that is, the transcription script).</p> <p>If disk space shortages occur frequently, allot more disk space to speech storage. See Chapter 5, “Reports Administration,” of <i>INTUITY™ CONVERSANT® System Version 6.0 Administration</i>, 585-310-591, for additional information on the Form Filler Call Record Summary Report.</p> <p>⇒ NOTE: The system sets the maximum number of speech phrases that may be recorded at installation. See <i>INTUITY™ CONVERSANT® System Version 6.0 Administration</i>, 585-310-5911, for additional information.</p>

Repairing Text-to-Speech Troubles

The following troubles (Table C-15) are related to the Text-to-Speech (TTS) feature.

Table C-15. Repairing Text-to-Speech Troubles

Indication	Corrective Action
<p>Text is not spoken during playback of a PROMPT that is text.</p>	<ol style="list-style-type: none"> 1. Check the outgoing text volume in the Analog/Digital Interface screen. See Chapter 6, "Switch Interface Administration," of <i>INTUITY™ CONVERSANT® System Version 6.0 Administration</i>, 585-310-591, for changing the volume level. 2. To verify the circuit card is in the INSERT state, enter display card <sp card number> where <sp card number> is the number of the SP circuit card allocated for TTS. 3. Verify the SP circuit card is assigned to the function TTS. See "Assigning Functions to SP Cards" in Chapter 3, "Configuration Management," of <i>INTUITY™ CONVERSANT® System Version 6.0 Administration</i>, 585-310-591. 4. Check the return code of either the tts_file external function or the particular say instruction. If the return value is -2, the SP circuit card may be under the maximum load it can handle for TTS (six simultaneous channels per SP). 5. Make sure the tts_dip is running. Enter ps -ef 6. Make sure the TDM cable connects the SP circuit card with the Tip/Ring circuit cards on the system. 7. Stop the voice system. See "Stopping the Voice System" in Chapter 3, "Common System Procedures," in your platform system maintenance book. 8. Start the voice system. See "Starting the Voice System" in Chapter 3, "Common System Procedures," in your platform system maintenance book.

Continued on next page

Table C-15. Repairing Text-to-Speech Troubles — Continued

Indication	Corrective Action
<p>Text is not spoken during playback of a TTS file.</p>	<ol style="list-style-type: none"> 1. Check the outgoing text volume in the Analog/Digital Interface screen. See Chapter 6, "Switch Interface Administration," of <i>INTUITY™ CONVERSANT® System Version 6.0 Administration</i>, 585-310-591, for changing the volume level. 2. Enter ps -ef to verify that the /vs/bin/vrs/tts_dip process is running on the system. 3. Check the Script Builder function tts_file for the particular application and ensure that the function has been correctly configured. See Chapter 5, "Defining the Transaction," of <i>INTUITY™ CONVERSANT® System Version 6.0 Application Development with Script Builder</i>, 585-310-763. 4. Verify where and what file the tts_dip external function is attempting to access. The file is located in /vs/data/tts_file directory by default. 5. Verify that the file contains data to be synthesized. 6. Make sure the text file does not have unusual characters. 7. Create a test file to be spoken. 8. Check the tts_dip external function in the application and verify that argument 2 of the external function contains the full directory path of the file to be synthesized.
<p>TTS speech is being played too fast or too slow.</p>	<p>Check the speaking rate of the text being played.</p> <p>The default speaking rate is the rate value of 2.</p> <p>See "Advanced Text-to-Speech Features" in <i>INTUITY™ CONVERSANT® System Version 6.0 Speech Development, Processing, and Recognition</i>, 585-310-762.</p>

Continued on next page

Table C-15. Repairing Text-to-Speech Troubles — Continued

Indication	Corrective Action
Addresses, telephone numbers, fractions and proper names not being properly pronounced.	<ol style="list-style-type: none"> 1. Verify that the text is grammatically correct. 2. Attempt to activate a “class detector” for the appropriate text class (address, proper names, telephone numbers, or proper names) that is not being properly pronounced. See “Advanced Text-to-Speech Features” of <i>INTUITY™ CONVERSANT® System Version 6.0 Speech Development, Processing, and Recognition</i>, 585-310-762.
Assigning the TTS function to the SP circuit card fails.	<ol style="list-style-type: none"> 1. Verify that the SP circuit card is an AYC9 SP circuit card. The output for display card <sp card number> should be “SP-8.” 2. Make sure that the SP circuit card is in the MANOOS state before attempting to assign the TTS function to the circuit card. 3. Verify that the system recognizes that the SP circuit card exists in the system.
The SP (AYC9) circuit card is not recognized by the system.	<ol style="list-style-type: none"> 1. Check the switch settings for the AYC9 SP circuit card and ensure there are no address/interrupt conflicts. 2. Verify that the SP circuit card is properly connected to the TDM bus. 3. Verify that the other circuit cards are configured correctly for communication on the TDM bus (for example, TDM resistors, etc). 4. Install a new SP circuit card if available. See “Speech and Signal Processor (AYC43) Circuit Card” in Chapter 5, “Replacing, Installing, or Upgrading Circuit Cards,” in your platform system maintenance book.
You run out of disk space while loading the TTS package.	<ol style="list-style-type: none"> 1. Check the remaining disk space to ensure that the root slice has at least 7 Mbytes of free space to install the TTS package. 2. Check if there are any files that can be temporarily moved to another area of the disk or removed.

Continued on next page

Table C-15. Repairing Text-to-Speech Troubles — Continued

Indication	Corrective Action
<p>The TTS pronunciation of text output is grammatically incorrect.</p>	<ol style="list-style-type: none"> 1. Verify that the text being synthesized contains appropriate sentence structure using capitalization, commas, and action verbs. 2. See “Advanced Text-to-Speech Features” in <i>INTUITY™ CONVERSANT® System Version 6.0 Speech Development, Processing, and Recognition</i>, 585-310-762, for escape sequences that can improve the pronunciation.
<p>Script Builder fields are not correctly spoken using TTS.</p>	<ol style="list-style-type: none"> 1. Verify that the <code>TYPE</code> field in the Announce screen is set for TEXT. 2. Verify that the <code>FORMAT</code> field of the Announce screen is preceded with an “A” for speaking fields in the TTS format. See “Advanced Text-to-Speech Features” in <i>INTUITY™ CONVERSANT® System Version 6.0 Speech Development, Processing, and Recognition</i>, 585-310-762, for changes to the ANNOUNCE action for TTS.
<p>Talkoff is inhibited during TTS playback.</p>	<ol style="list-style-type: none"> 1. Utilizing the <code>tts_file</code> external function complete the following Steps a and b: <ol style="list-style-type: none"> a. Verify that argument one of the external function for <code>tts_file</code> has the numeric value of “1” to enable talkoff. b. Check the return value for the <code>tts_file</code> external function. See “Advanced Text To Speech Features” in <i>INTUITY™ CONVERSANT® System Version 6.0 Speech Development, Processing, and Recognition</i>, 585-310-762, for the possible reasons for the return code. 2. Utilizing the Announce action, check the Announce action and ensure the <code>Speak with Interrupt</code> option is set to “Yes”.
<p>Sentences using TTS are spoken as if they are run together.</p>	<p>Verify that there is a space after the last character in a complete sentence on the lines within the Announce action. See “Hints for Writing Applications Using TTS” in <i>INTUITY™ CONVERSANT® System Version 6.0 Speech Development, Processing, and Recognition</i>, 585-310-762.</p>
<p>Fields using TTS are spoken as if they are run together.</p>	<p>Insert a silence phrase (<code>!/si50</code>) at the beginning of a sentence to make it sound more natural.</p>

Continued on next page

Table C-15. Repairing Text-to-Speech Troubles — Continued

Indication	Corrective Action
Text that should be spoken in sentence format is being spelled.	<ol style="list-style-type: none"> 1. Verify that the text that is being spelled is <i>not</i> in all capital letters. Text in all capital letters will be spelled. 2. Check all escape sequences for correctness.
The state of the SP card changes to BROKEN after executing an application that uses TTS.	<ol style="list-style-type: none"> 1. Check the text that is being spoken in the application and ensure all escape sequences are being properly implemented. See “Advanced Text-to-Speech Features” in <i>INTUITY™ CONVERSANT® System Version 6.0 Speech Development, Processing, and Recognition</i>, 585-310-762. 2. Ensure that escape sequences that are inserted within the text are adjacent to some text and not surrounded by space. 3. Diagnose the SP. See “Circuit Card Diagnostics,” in Chapter 2, “Diagnostics,” in your platform system maintenance book.
TTS quits speaking.	<ol style="list-style-type: none"> 1. Make sure all escape sequences are utilized properly (especially the <i>!si</i> and <i>!sf</i> sequences). 2. Check that the amount of silence with the escape sequences are either greater than 0 or less than 100. For example, <i>!si100</i> will cause TTS to quit talking. See “Advanced Text-to-Speech Features” in <i>INTUITY™ CONVERSANT® System Version 6.0 Speech Development, Processing, and Recognition</i>, 585-310-762, for information on the use of these instructions. 3. Make sure the text does not have considerable white space or commas in a row (,,,,).

Repairing ASAI Troubles

The trouble resolution information for ASAI covers the following areas of ASAI operation:

- General ASAI troubleshooting
- Domain troubles
- Channel trouble
- Digital link troubles
- Trace utility information

General ASAI Troubleshooting

Several tools are available to diagnose problems with the ASAI system, including

- System messages
- STATUS field of the Domain Administration and Channel Administration screens
- Trace utility

If you suspect or are experiencing problems with the ASAI system, perform the following procedure:

1. Display the Message Log Report screen as described in Chapter 5, "Reports Administration", of *INTUITY™ CONVERSANT® System Version 6.0 Administration*, 585-310-591.



NOTE:

ASAI system messages are numbered from ASAI001 through ASAI031 and are described in Chapter 2, "Message Log Entries" of *INTUITY™ CONVERSANT® System Version 6.0 System Alarms and Log Messages*, 585-310-182. Follow the instructions given for the appropriate system message.

2. If an ASAI system message appears in the Message Log Report, display the Domain Administration screen.
3. In the Domain Administration screen, check the STATUS field of each domain to confirm that it is inserv.

If a domain is not in an inserv state, see Table C-16 for additional information.

Table C-16. Repairing ASAI Domain Troubles

Status	Indication	Corrective Action
MANOOS	(manual out of service) Domain has not been placed into service.	Use the ENABLE key to place the domain into service.
FOOS	(facility out of service) The ASAI digital link is not operating.	This could be due to several factors. See (Table C-20).

Continued on next page

Table C-16. Repairing ASAI Domain Troubles — *Continued*

Status	Indication	Corrective Action
BROKEN	(broken) A virtual channel could not be allocated for the service assigned to this domain	<ol style="list-style-type: none"> 1. Verify that the correct service is assigned to the domain. For the voice system ACD domain, this service must be voice system. 2. Use the DISABLE key to return the state to manoos. 3. Use the ENABLE key again.
INITING	(initializing) The service assigned to the domain is failing initialization.	<ol style="list-style-type: none"> 1. Verify that the correct service is assigned to the domain. For the voice system ACD domain, this service must be voice system. 2. Use the DISABLE key to return the state to manoos. 3. Use the ENABLE key again.
NETOOS	(network out of service) ASAI link is up, but attempts to initialize the domain are failing.	<p>This could be caused by several factors, including:</p> <ul style="list-style-type: none"> ■ The wrong domain type is specified (for example, ACD or VDN). ■ The wrong extension is specified. ■ The domain is not administered on the PBX. <ol style="list-style-type: none"> 1. See Chapter 2, "Message Log Entries" in <i>INTUITY™ CONVERSANT® System Version 6.0 System Alarms and Log Messages</i>, 585-310-182, for information on ASAI017 through ASAI024 system messages numbered. 2. Use the DISABLE key to return the state to manoos. 3. Check these parameters 4. Use the CHANGE key to change a domain parameter is necessary. 5. Use the ENABLE key again.

If all domains are inserv, complete the following steps:

- a. Display the Channel Administration screen.
- b. In the Channel Administration screen, check the `STATUS` field of each channel to confirm that it is in a `LOGIN` state.

If any channels are not in a `LOGIN` state, see Table C-18 for additional information.

4. If the above steps do not resolve the problem, check the following if you are diagnosing either an existing system which was working previously or a new system:
 - Verify that all voice equipment (Tip/Ring circuit cards, T1 circuit cards, SP circuit cards, etc) is functioning properly.
 - Verify that the lines to the Tip/Ring or T1 circuit cards are functioning properly.
 - Verify that the administration of the PBX or voice system has not changed. You can verify the administration of the PBX values through the Switch Interfaces screen. See Chapter 6, "Switch Interface Administration" of *INTUITY™ CONVERSANT® System Version 6.0 Administration*, 585-310-591, for information.
5. If you are diagnosing a new system and the procedures in Step 4 do not point to the source of the problem, check the following:
 - Verify that all domains are administered properly.
 - Verify that the PBX is properly routing calls to the voice system ACD split, if applicable.
 - If using a host, verify that there is not a problem with the host.
 - Trace utility

Repairing ASAI Domain Troubles

Use the following table if, after following the steps to administer a domain, the domain is not in service. In most cases when the domain is not in service, system messages ASAI017 – ASAI024 appear in the Message Log Report. The Message Log Report screen is described in Chapter 1, "Getting Started," of *INTUITY™ CONVERSANT® System Version 6.0 System Alarms and Log Messages*, 585-310-182. See Table C-17 for assistance in determining the cause of the trouble.

Table C-17. Domain Failure Causes

Cause	Corrective Action
Can't start script,state=11	Cannot start service assigned to domain. You may be attempting to monitor more domains than the system is able to handle under the current call loads. See Chapter 4, "Feature Packages" of <i>INTUITY™ CONVERSANT® System Version 6.0 Administration</i> , 585-310-591, for information on ASAI system specifications.
Script not responding,state=12	Service assigned to domain is not responding. 1. Verify that the correct service is assigned to the specified domain. If it has, then the service is not responding correctly. 2. Make sure that the service follows the guidelines described in <i>INTUITY™ CONVERSANT® System Version 6.0 Administration</i> , 585-310-591.
Rejected by switch,cause=0	Invalid number or domain. The domain value is neither a valid VDN or a valid ACD split extension.
Rejected by switch,cause=2	Resources not available. The request cannot be executed because the switch limit would be exceeded for the maximum number of monitored domains.
Rejected by switch,cause=3	The user has not subscribed for the requested capability.
Rejected by switch,cause=7	Service or option not implemented. The given domain is already being monitored.
Rejected by switch,cause=10	Invalid association. The association is already in existence.
Rejected by switch,cause=24	Switch not administered correctly. The domain value is an adjunct controlled split or a vector controlled split.
Rejected by switch,cause=26	Switching equipment congestion. The switch is not accepting the request at this time because of processor overload. The adjunct or user may wish to retry the request but should not do so immediately.
Rejected by switch,cause=X	Domain cannot be monitored for other reasons. Verify that the Type and Extension are correctly administered for the specified domain. See Table C-21 for other cause values.

Repairing ASAI Channel Troubles

Use the following table, if after administering and logging in an ASAI channel, the domain is not in service. In most cases when the ASAI channel is not logged in, system messages ASAI009 – ASAI016 appear in the Message Log report.

Table C-18. Repairing ASAI Channel (voice system Agent Line) Troubles

Status	Indication	Corrective Action
MANOOS	(manual out of service) The channel has not been placed into service.	Use the ASSIGN key in the Voice Equipment screen to change state to inserv.
FOOS	(facility out of service) The line is not functional.	This could be the result of several factors, including: <ul style="list-style-type: none"> ■ The line is not connected to PBX (or the wiring is bad). ■ No loop current is detected on line.
BROKEN	(broken) A possible malfunction has been detected on the line.	Diagnose the circuit card. See “Circuit Card Diagnostics” in Chapter 2, “Diagnostics,” in your platform system maintenance book. If the diagnostics fail, replace the circuit card. See “General Procedures” in Chapter 5, “Replacing, Installing, or Upgrading Circuit Cards,” in your platform system maintenance book.
LOGOUT	(logged out) The channel has not been administered for login.	Use the LOGIN key to log in the channel.

Continued on next page

Table C-18. Repairing ASAI Channel (voice system Agent Line) Troubles — Continued

Status	Indication	Corrective Action
HWOOS	(hardware out of service) The channel cannot be logged in because ASAI digital link is not operating.	This could be a result of several factors. See Table C-20 for additional information.
NETOOS	(network out of service) The ASAI link is up, but attempts to log in the channel are failing.	<p>This could be caused by several factors, including:</p> <ul style="list-style-type: none"> ■ The wrong extension is specified. ■ The extension does not exist. ■ The extension does not belong to the voice system ACD hunt group. <ol style="list-style-type: none"> 1. See system messages ASAI009–ASAI016 in Chapter 2, “Message Log Entries,” in <i>INTUITY™ CONVERSANT® System Version 6.0 System Alarms and Log Messages</i>, 585-310-182. 2. Use the LOGOUT key to return the state to logout. 3. Use the CHANGE key to change the extension if necessary. 4. Try the LOGIN key again.
NONEX	(nonexistent) The circuit card is not physically linked to the channels.	<p>If desired, you may leave the channels in a nonex state.</p> <p>If you leave the channels in a nonex state, unassign the channels as a voice system agent (by pressing REMOVE in the Channel Administration screen).</p> <p>If you wish, you may renumber the channels in the Change A Channel Entry screen.</p> <p>Otherwise, add the circuit card to the channels to physically link the circuit card to the channel.</p>

Table C-19. Channel Login Failure Causes

Cause	Corrective Action
No VIS Domain, cause=1	An ACD domain has not been administered (on the voice system) with the service "VIS." Add and enable an ACD type domain with service "VIS." See <i>INTUITY™ CONVERSANT® System Version 6.0 Administration</i> , 585-310-591.
Rejected by switch, cause=0	The extension assigned to the channel on the voice system may be incorrect. Correct the extension assignment for the channel.
Rejected by switch, cause=0	An invalid ACD split or channel extension value is designated in the request.
Rejected by switch, cause=2	The request cannot be executed because of a lack of available switch resources.
Rejected by switch, cause=3	The user has not subscribed for the requested capability.
Rejected by switch, cause=7	Login is not available for the extension entered as the split extension. ⇒ NOTE: An invalid split extension can be a valid non-split extension (such as a channel extension) on the switch, but it will still be denied.
Rejected by switch, cause=10	Invalid association. The association is already in existence.
Rejected by switch, cause=21	Channel logged in to another split. The channel is already logged in to the maximum number of splits.
Rejected by switch, cause=22	Incorrect number of channel login digits. The channel is not logged in (applies only to the channel login).
Rejected by switch, cause=24	The split is not administered correctly. A request has been denied by the switch to log in a member of the auto-available split.
Rejected by switch, cause=26	Switching equipment congestion. The switch is not accepting the request at this time because of processor overload. The adjunct or user may wish to retry the request, but should not do so immediately.
Rejected by switch, cause=X	The PBX cannot log in the channel for other reasons. See Table C-21 for other cause values.

Repairing ASAI Digital Link Troubles

The ASAI digital link is not operating if

- It remains in the foos state after following the steps to administer and enable a domain.
- It remains in the hwoos state after administering a channel as a voice system agent line and logging it in.
- You receive a system message indicating the ASAI link is down while attempting to ENABLE a domain or LOGIN a channel.

If you encounter one of these conditions, select *Show Status of ASAI link* while in the ASAI Administration menu to display the current status of the link. Then see Table C-20 to resolve the trouble.

⇒ NOTE:

If you cannot establish the ASAI link to the switch, check the CRV Length of the extension associated with the BRI link. This parameter must be set to 2, not 1.

Table C-20. Repairing ASAI Digital Link Troubles

Status	Indication	Corrective Action
OFFLINE	The IPCI circuit card is in an off-line mode.	Select <i>initialize IPCI Board</i> to place the circuit card on-line.
L1 DOWN, L2 DOWN	The ASAI physical link is down.	<ol style="list-style-type: none"> 1. Check the ASAI link wiring between the voice system and the PBX. 2. If the wiring is correct, diagnose the IPCI circuit card. See "Circuit Card Diagnostics" in Chapter 2, "Diagnostics," in your platform system maintenance book. 3. If the circuit card is bad, replace it. See "General Procedures" in Chapter 5, "Replacing, Installing, or Upgrading Circuit Cards," in your platform system maintenance book.

Continued on next page

Table C-20. Repairing ASAI Digital Link Troubles — *Continued*

Status	Indication	Corrective Action
LI UP, L2 DOWN	The ASAI physical link is correct, but the link layer is down.	<ol style="list-style-type: none"> 1. Make certain the ASAI port on the PBX is administered with Fixed TEI=y and TEI=3. 2. If TEI parameters are correct, diagnose the IPCI circuit card. See "Circuit Card Diagnostics" in Chapter 2, "Diagnostics," in your platform system maintenance book. 3. If the circuit card is bad, replace it. See "General Procedures" in Chapter 5, "Replacing, Installing, or Upgrading Circuit Cards," in your platform system maintenance book.
PUMPING	The IPCI circuit card is in the process of initialization.	<p>This should be a temporary state.</p> <p>If the circuit card stays in this state, take the circuit card OFFLINE and initialize it.</p> <p>If this unsuccessful, try restarting the system or replacing the circuit card.</p>
AWAITING GOING OFFLINE	The IPCI circuit card is attempting to go off-line.	<p>This should be a temporary state.</p> <p>If the circuit card stays in this state, take the circuit card OFFLINE and initialize it.</p> <p>If this is unsuccessful, try restarting the system or replacing the circuit card.</p>

Continued on next page

Table C-20. Repairing ASAI Digital Link Troubles — *Continued*

Status	Indication	Corrective Action
<p>FAULTY HARDWARE, UNKNOWN, UNDETERMINE D</p>	<p>The IPCI circuit card is in an unknown state.</p>	<p>The IPCI circuit card is either nonexistent or malfunctioning. Assuming the circuit card is installed complete the following:</p> <ol style="list-style-type: none"> 1. Take the circuit card OFFLINE. 2. Initialize the circuit card. 3. Diagnose the circuit card. See "Circuit Card Diagnostics," in Chapter 2, "Diagnostics," in your platform system maintenance book. 4. If you are unable to successfully initialize and diagnose the circuit card, replace the circuit card. See "General Procedures," in Chapter 5, "Replacing, Installing, or Upgrading Circuit Cards," in your platform system maintenance book.
<p>L1 UP, L2 UP</p>	<p>The ASAI link should be operative.</p>	<p>If the domain is still foos, do the following:</p> <ol style="list-style-type: none"> 1. Take the IPCI circuit card OFFLINE. 2. Initialize the circuit card. 3. If the problem persists, diagnose the circuit card. See "Circuit Card Diagnostics" in Chapter 2, "Diagnostics," in your platform system maintenance book. <p>If the circuit card is bad, replace it. See "General Procedures" in Chapter 5, "Replacing, Installing, or Upgrading Circuit Cards," in your platform system maintenance book.</p> <p>If the diagnose is successful, reboot the system. See "Rebooting the UNIX System" in Chapter 3, "Common System Procedures," in your platform system maintenance book.</p>

Correlation Between Voice System and PBX Cause Values

Table C-21 correlates the voice system ASAI cause values with the DEFINITY Generic 3i coding standards and values.



NOTE:

The VIS Value is the number returned in the Cause Value field of the ASAI Script Builder actions.

Table C-21. Correlation Between Voice System and DEFINITY Generic 3i Coding Standards and Values

VIS Value	DEFINITY Value	Description
0	CS0/28	Invalid number or domain; the domain value is not a valid VDN or a valid ACD split extension.
1	CS0/111	Protocol error; the Q.932 protocol has been violated.
2	CS3/40	Resources not available; the request cannot be executed because the switch limit would be exceeded for the maximum number of monitored domains.
3	CS0/50	The user has not subscribed for the requested capability.
4	CS3/79	The service or option is not implemented.
5	CS0/96	A mandatory information element is missing.
6	CS0/100	The contents of an information element are invalid.
7	CS3/63	Login is not available for the extension entered as the split extension. NOTE: An invalid split extension can be a valid non-split extension (such as a channel extension) on the switch, but it will still be denied.
8	CS3/86	Calls with the requested identity have been terminated.
9	CS0/98	The message is not compatible with the call state.
10	CS0/81	Invalid association; the association is already in existence.
11	CS3/80	The options are incompatible
12	CS0/102	Recovery on timer has expired

Continued on next page

Table C-21. Correlation Between Voice System and DEFINITY Generic 3i Coding Standards and Values — *Continued*

VIS Value	DEFINITY Value	Description
13	CS3/15	The agent is not logged in.
14	CS3/11	The extension assigned to the channel on the voice system does not belong to the ACD split assigned to the voice system service. Correct the extension assignment for the channel.
15	CS0/17	The specified extension currently has an active call. A channel cannot be logged in when it is off-hook.
16	CS0/18	No user is responding.
17	CS3/43	Permission is denied.
18	CS3/87	Internal switch audit
19	CS3/27	Out of service
20	CS3/12	The agent state is inconsistent with the request.
21	CS3/13	The channel is logged in to another split. The channel is already logged into the maximum number of splits.
22	CS3/14	The number of channel login digits is incorrect. The channel is not logged in (applies only to channel login).
23	CS3/16	The options are in the same state
24	CS3/41	The split is not administered correctly. A request has been denied by the switch to log in a member of the auto-available split.
25	CS0/16	The options have normal clearing
26	CS0/42	Switch equipment congestion. The switch is not accepting the request at this time because of processor overload. The adjunct or user may wish to retry the request, but should not do so immediately.
27	CS0/99	An information element is nonexistent.
28	CS3/22	Queues are full.
29	CS0/01	Unassigned number
30	CS0/21	Call rejected
31	CS0/22	Number changed/SIT-Vacant
32	CS0/31	Normal, unspecified/SIT-unknown

Continued on next page

Table C-21. Correlation Between Voice System and DEFINITY Generic 3i Coding Standards and Values — *Continued*

VIS Value	DEFINITY Value	Description
33	CS0/34	No circuit or channel available/SIT-not circuit
35	CS0/58	Bearer capability is not presently available.
36	CS0/88	The destination is incompatible.
37	CS0/95	Invalid message, unspecified
38	CS0/97	The message is nonexistent/not implemented.
39	CS3/19	There is no answer.
40	CS3/20	Trunks are not available.
41	—	The ASAI link is down.
42	CS3/30	Redirected
43	CS3/38	The network is out of order.
44	CS3/42	Reorder/denial
45	CS3/46	Administration is in progress.
46	CS3/53	The feature request was rejected.

Repairing Administrative Troubles

Administrative troubles are experienced while performing a task you have initiated (for example, a trouble arises while performing a *mkimage* of the system software). Table C-22 contains troubles related to administrative tasks.

Table C-22. Repairing Administrative Troubles

Trouble Indication	Corrective Action
UNIX commands are failing or the disk reported failures.	<ol style="list-style-type: none"> 1. Scan the Message Log Report in Chapter 2, "Message Log Entries," in <i>INTUITY™ CONVERSANT® System Version 6.0 System Alarms and Log Messages</i>, 585-310-182.
ccasum never finishes its cron job	<ol style="list-style-type: none"> 1. Determine if you are transferring to more than 100 numbers. If you are, kill the cron job by completing the following Steps a through c: <ol style="list-style-type: none"> a. Enter ps -ef grep ccasum b. Search for the PID for ccasum (is it located in the second column from the left) c. Enter kill -9 pid# where <i>pid#</i> is the parent process id (PID) number 2. Create an index for ccasum by completing the following Steps a through c: <ol style="list-style-type: none"> a. Log in to SQL*Plus as sti/sti b. Enter create index cca_idx on cca(phone_num); c. Enter :quit to exit the SQL*Plus Utility 3. When the call traffic is light, enter /vs/bin/util/ccasum 4. Enter /vs/bin/util/ccadel when ccasum is finished.
Using the vi editor causes a core dump.	<ol style="list-style-type: none"> 1. To split the file into multiple segments, enter split -n filename name where: -n is the number of lines in each piece (1000 is the default, <i>filename</i> is the name of the files you want to split, and <i>name</i> is the new segment you are creating

Repairing Operational Troubles

Operational troubles are experienced with the physical components of the voice system, such as a blank monitor or an inoperable modem. These troubles can occur at any time. Table C-23 contains troubles related to operational tasks.

Table C-23. Repairing Operational Troubles

Trouble Indication	Corrective Action
The monitor screen is blank, but the voice system is still taking calls.	<ol style="list-style-type: none">1. Check the power on the voice system. If on, place a test call to the system.2. Check the LED on the monitor. If on, check the contrast and brightness controls on the monitor.3. Check the monitor connection to the voice system.4. Unplug/plug in the monitor cable to the voice system.5. Check the on/off switch on the monitor.6. Log in remotely to check out the system and see if the voice system is taking calls.7. If the problem persists, replace the monitor and or the video controller circuit card.

Repairing Other Voice System Troubles

Other voice system troubles include those general trouble areas that do not fall into the other classes listed above. The following tables contain some general trouble areas that do not fall into the other classes listed above. Specifically, the troubles include:

- Call transferring troubles
- Performance-related troubles
- Speech-related troubles
- Diagnostic troubles
- Touch-tone input troubles
- Report troubles
- Channel state troubles

Repairing Call Transfer Troubles

Table C-24 lists the repair procedures for repairing call transfer troubles.

Table C-24. Repairing Call Transfer Troubles

Indication	Corrective Action
<p>Voice system not transferring calls properly.</p>	<ol style="list-style-type: none"> 1. Scan the Message Log Report in Chapter 2, "Message Log Entries," in <i>INTUITY™ CONVERSANT® System Version 6.0 System Alarms and Log Messages</i>, 585-310-182. 2. Verify the values on the Switch Administration screen as described in Chapter 6, "Switch Interface Administration," of <i>INTUITY™ CONVERSANT® System Version 6.0 Administration</i>, 585-310-591. If this screen has changed, complete the following Steps a through d: <ol style="list-style-type: none"> a. Save the values. b. Stop the voice system. See "Stopping the Voice System" in Chapter 3, "Common System Procedures," in your platform system maintenance book. c. Start the voice system. See "Starting the Voice System" in Chapter 3, "Common System Procedures," in your platform system maintenance book. d. Reinstall the application. See "Installing the Script Builder Package" in Chapter 11, "Installing the Optional Feature Software," in your platform system maintenance book. e. Try to transfer a call manually, by completing the following Steps a through d: <div style="margin-left: 20px;"> <p> NOTE: An analog phone is needed for this text.</p> </div> <ol style="list-style-type: none"> f. Plug the line going into the voice system into the phone. g. Place the call to this phone. h. Answer the call. i. Try to transfer to another extension. 3. Assign the feature test script to the channel and place test calls. 4. Enter trace tsm chan all trip tee /tmp/trace.out 5. Check the logic of the application that is doing the transfer.

Continued on next page

Table C-24. Repairing Call Transfer Troubles

Indication	Corrective Action
Direct agent calls do not work properly.	<p>Make sure all fields within the ASAI external actions are defined as the feature documentation states.</p> <p>If Script Builder must convert fields from one type to another (that is, char to num) sometimes fields do not contain the values expected.</p> <p>For a direct agent call to be successful, the <code>Split Extension</code> field must contain the number identifying a valid ACD split.</p> <p>If the field is corrupted the direct agent call will not work.</p>

Repairing Performance Troubles

Table C-25 lists the repair procedures for repairing performance troubles.

Table C-25. Repairing Performance Troubles

Indication	Corrective Action
The system is slow or delayed in speaking.	1. Make sure the value for the Cache Controller is set to "Enable" in the CPU CMOS SETUP screen.
<p>The system performance is degraded. For example</p> <ul style="list-style-type: none"> ■ Speech breaks are occurring ■ There is bad response time to commands 	<p>It is highly unlikely that this is the root cause of degraded system performance and the system must be powered down and rebooted to check this screen. See "Accessing the Setup Screen" in Chapter 4, "Connecting Peripherals and Powering Up," of the new system installation book for your platform.</p> <p>2. Reduce the load. See Table C-25 below.</p>

Repairing Diagnostics Troubles

Table C-26 lists the repair procedures for repairing diagnostics troubles.

Table C-26. Repairing Diagnostics Troubles

Indication	Corrective Action
Circuit card diagnostics failed.	Check the circuit cards. See "Circuit Card Diagnostics" in Chapter 2, "Diagnostics," in your platform system maintenance book.

Repairing Touch-Tone Input Troubles

Table C-27 lists the repair procedures for repairing touch-tone input troubles.

Table C-27. Repairing Touch-Tone Input Troubles

Indication	Corrective Action
User touch-tone input is not being correctly interpreted by the system.	<ol style="list-style-type: none"> 1. Verify the Prompt and Collect action matches the intended use in the script. 2. If this is channel related (that is, the trouble only appears on a particular channel) and you have another circuit card, see if the trouble occurs on the other circuit card. <p>If not, replace the original circuit card. See "General Procedures" in Chapter 5, "Replacing, Installing, or Upgrading Circuit Cards," in your platform system maintenance book.</p>

Repairing Report Troubles

Table C-28 lists the repair procedures for repairing report troubles.

Table C-28. Repairing Report Troubles

Indication	Corrective Action
Call data reports are not accurate or they are not complete.	<ol style="list-style-type: none"> 1. Determine if there is any additional free space in the database by entering dbfrag 2. Scan the Message Log Report in Chapter 2, "Message Log Entries," in <i>INTUITY™ CONVERSANT® System Version 6.0 System Alarms and Log Messages</i>, 585-310-182.

Repairing Channel/Circuit Card State Troubles

Table C-29 lists the repair procedures for repairing channel/circuit card state troubles.

Table C-29. Repairing Channel/Circuit Card State Troubles

Indication	Corrective Action
The channel/circuit card is in the state Hwoos or Netoos.	<p>Determine the type of channel by entering display channel <channel number></p> <ol style="list-style-type: none"> 1. If the outcome shows PRIB or PRID, see Table C-13. 2. If the maintenance state is displayed by looking at the Channel Administration screen under the ASAI Feature Packages, see the ASAI troubleshooting section in this book.
Channel/circuit card is in state Manoos.	<p>Restore the channel or circuit card by entering restore [channel/card] [channel/card #]</p> <p>See Appendix A, "Summary of Commands," in <i>INTUITY™ CONVERSANT® System Version 6.0 Administration</i>, 585-310-591.</p>
Channel/circuit card is in state Foos.	<p>Enter display channel <channel number></p> <p>If T1.5, PRIB, or PRID is displayed, check the error log for a message in the range TWIP013–TWIP018. Follow the recommended repair procedure for that message.</p> <p>If VRS6, IVP4, or IVP6 is displayed:</p> <ol style="list-style-type: none"> 1. Enter diagnose card <card number>. 2. If the channel remains Foos, check the phone connection to the circuit card.
Channel/circuit card is in state Broken.	<p>Follow the repair procedure for message MTC003 provided in Chapter 3, "System Message Listings."</p> <p>If the circuit card is an SP circuit card, perform the "Checking the TDM Bus" procedure in Chapter 4, "Common Maintenance Procedures," as well.</p>

Pinouts

D

Overview

This chapter provides the pinout information for the

- Tip/Ring circuit card
- Asynchronous connections
- Peripheral drives

Purpose

The purpose of this chapter is to provide the pinout information to ensure proper connectivity and complete the system installation successfully.

Pinouts for the Tip/Ring Circuit Card

Figure D-1 shows typical Tip/Ring line connection for the IVC6 circuit card. Table D-1 shows the numbering scheme for connecting the short modular cords provided with the Tip/Ring cards to the Tip/Ring distribution panel.

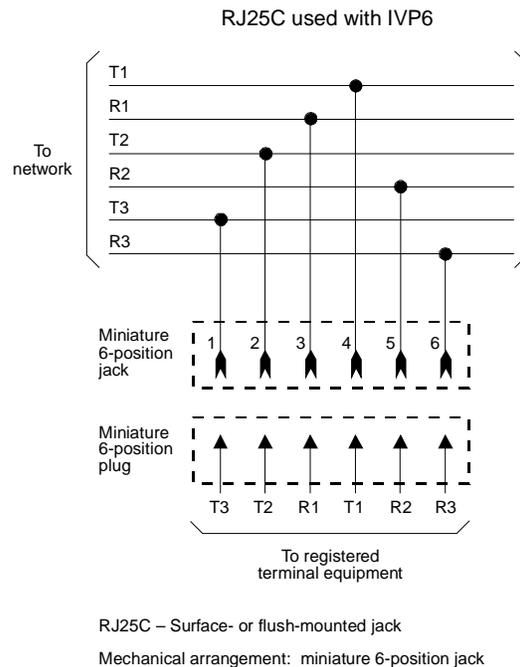


Figure D-1. Wiring and Pin Diagram for the IVC6 Tip/Ring Card

Table D-1. MAP/100C Tip/Ring Consolidation Wiring and Pinouts

From				To			
Channel No.	IVC6 Card No.	Jack No.	Pin No.	Jack No.	PinNo.	50-Pin Connector	
						T or R	Pin No.
1	1	1	3	1	4	R1	1
	1	1	4	1	5	T1	26
2	1	1	2	1	3	T2	27
	1	1	5	1	6	R2	2
3	1	1	1	1	2	T3	28
	1	1	6	1	7	R3	3
4	1	2	3	2	4	R4	4
	1	2	4	2	5	T4	29
5	1	2	2	2	3	T5	30
	1	2	5	2	6	R5	5
6	1	2	1	2	2	T6	31
	1	2	6	2	7	R6	6
7	2	1	3	3	4	R7	7
	2	1	4	3	5	T7	32
8	2	1	2	3	3	T8	33
	2	1	5	3	6	R8	8
9	2	1	1	3	2	T9	34
	2	1	6	3	7	R9	9
10	2	2	3	4	4	R10	10
	2	2	4	4	5	T10	35
11	2	2	2	4	3	T11	36
	2	2	5	4	6	R11	
12	2	2	1	4	2	T12	37
	2	2	6	4	7	R12	12

Continued on next page

Table D-1. MAP/100C Tip/Ring Consolidation Wiring and Pinouts — Continued

From				To			
Channel No.	IVC6 Card No.	Jack No.	Pin No.	Jack No.	Pin No.	50-Pin Connector	
						T or R	Pin No.
13	3	1	3	5	4	R13	13
	3	1	4	5	5	T13	38
14	3	1	2	5	3	T14	39
	3	1	5	5	6	R14	14
15	3	1	1	5	2	T15	40
	3	1	6	5	7	R15	15
16	3	2	3	6	4	R16	16
	3	2	4	6	5	T16	41
17	3	2	2	6	3	T17	42
	3	2	5	6	6	R17	17
18	3	2	1	6	2	T18	43
	3	2	6	6	7	R18	18
19	4	1	3	7	4	R19	19
	4	1	4	7	5	T19	44
20	4	1	2	7	3	T20	45
	4	1	5	7	6	R20	20
21	4	1	1	7	2	T21	46
	4	1	6	7	7	R21	21
22	4	2	3	8	4	R22	22
	4	2	4	8	5	T22	47
23	4	2	2	8	3	T23	48
	4	2	5	8	6	R23	23
24	4	2	1	8	2	T24	49
	4	2	6	8	7	R24	24
25	5	1	3	1	4	R25	1
	5	1	4	1	5	T25	26

Continued on next page

Table D-1. MAP/100C Tip/Ring Consolidation Wiring and Pinouts — Continued

From				To			
Channel No.	IVC6 Card No.	Jack No.	Pin No.	Jack No.	Pin No.	50-Pin Connector	
						T or R	Pin No.
26	5	1	2	1	3	T26	27
	5	1	5	1	6	R26	2
27	5	1	1	1	2	T27	28
	5	1	6	1	7	R27	3
28	5	2	3	2	4	R28	4
	5	2	4	2	5	T28	29
29	5	2	2	2	3	T29	30
	5	2	5	2	6	R29	5
30	5	2	1	2	2	T30	31
	5	2	6	2	7	R30	6
31	6	1	3	3	4	R31	7
	6	1	4	3	5	T31	32
32	6	1	2	3	3	T32	33
	6	1	5	3	6	R32	8
33	6	1	1	3	2	T33	34
	6	1	6	3	7	R33	9
34	6	2	3	4	4	R34	10
	6	2	4	4	5	T34	35
35	6	2	2	4	3	T35	36
	6	2	5	4	6	R35	11
36	6	2	1	4	2	T36	37
	6	2	6	4	7	R36	12
37	7	1	3	5	4	R37	13
	7	1	4	5	5	T37	38
38	7	1	2	5	3	T38	39
	7	1	5	5	6	R38	14

Continued on next page

Table D-1. MAP/100C Tip/Ring Consolidation Wiring and Pinouts — *Continued*

From				To			
Channel No.	IVC6 Card No.	Jack No.	Pin No.	Jack No.	Pin No.	50-Pin Connector	
						T or R	Pin No.
39	7	1	1	5	2	T39	40
	7	1	6	5	7	R39	15
40	7	2	3	6	4	R40	16
	7	2	4	6	5	T40	41
41	7	2	2	6	3	T41	42
	7	2	5	6	6	R41	17
42	7	2	1	6	2	T42	43
	7	2	6	6	7	R42	18

Pinouts for Asynchronous Connections

Table D-2 lists the pinouts for the COM1 asynchronous port on the rear of the MAP/100C. Figure D-2 shows pinouts for the modular jacks on the 8-port asynchronous card. Figure D-3 shows pinouts for the terminal/printer or modem adapters.

Table D-2. COM1 Pinouts

Pin No.	Signal	Signal
1	Data Carrier Detect (DCD)	Input
2	Receive Data (RX)	Input
3	Transmit Data (TX)	Output
4	Data Terminal Ready (DTR)	Output
5	Signal Ground (GND)	Bidirectional
6	Data Set Ready (DSR)	Output
7	Request to Send (RTS)	Output
8	Clear to Send (CTS)	Input
9	Ring Indicator (RI)	Input

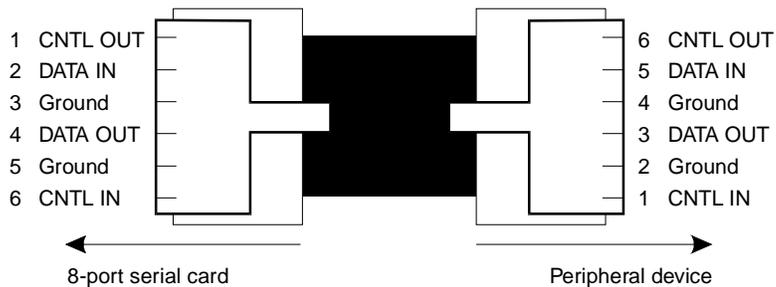
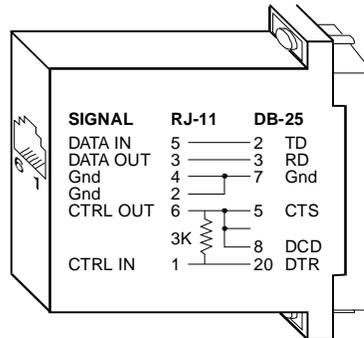


Figure D-2. Pinout Connections for Modular Jacks on the 8-Port Asynchronous Circuit Card

FOR TERMINALS & PRINTERS:
PEC 70854 [DB-25 DCE Male]



FOR MODEMS:
PEC 70853 [DB-25 DTE Male]

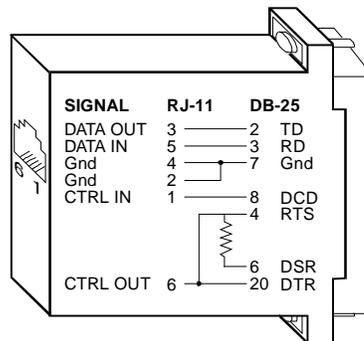


Figure D-3. Pinout Connections for DTE or DCE Devices

Pinouts for Peripheral Devices

Table D-3 shows pinouts for the DIN receptacles for keyboard connection. These receptacles are on the front and rear of the MAP/100C. Table D-4 shows pinouts for the 25-pin D-subminiature connector for printer connection. This connector is on the faceplate of the Pentium card.

Table D-3. Pinout Connections for the Keyboard

Pin No.	Signal
1	Clock
1	Data
3	Reset
4	Ground
5	+5 Volts

Table D-4. Pinout Connections for a Printer

Pin No.	Description	Pin No.	Description
1	- Strobe	10	- Acknowledge
2	+ Data Bit 0	11	+ Busy
3	+ Data Bit 1	12	+ Paper Feed
4	+ Data Bit 2	13	+ Select
5	+ Data Bit 3	14	- Auto Feed
6	+ Data Bit 4	15	- Error
7	+ Data Bit 5	16	- Init. Printer
8	+ Data Bit 6	17	- Select Printer
9	+ Data Bit 7	18	Ground

Cable Connectivity

E

Overview

This appendix details external connectivity and cabling from the MAP/100C platform to the following:

- Lucent Technologies switches



NOTE:

See the individual documents associated with switches for cable connectivity information.

- Networks
- Terminals and distant modems

Tables which list cable ordering numbers and lengths are provided in this appendix should you need to order cables.

Purpose

This appendix provides procedures and illustrations for connections made at switches, networks, or terminals.

Connectivity Reference Tables

Table E-1 lists the parts required for making connections to and from the MAP/100C. The letter(s) in the "Label" column correspond to the alphabetic labels used in the figures throughout this appendix.

Table E-1. Connectivity Reference Table

Label	Part Name	Description	Order Number(s)
A	Terminal/printer (DTE) adapter	RJ-45 (10-conductor) to female DB-25	BCSystems PEC 69609; CS PEC 37784, ED3P001-70 G1305
B	Terminal/printer (DTE) adapter	RJ-45 (6-conductor) to male DB-25	BCSystems PEC 69608; CS PEC 37782, ED3P001-70 G1304
C	Printer (DTR) adapter	RJ-45 (10-conductor) to male DB-25*	BCSystems PEC 69622; CS PEC 37800, ED3P001-70 G1319
D	ACU/modem (DCE) adapter	RJ-45 (10-conductor) to female DB-25	BCSystems PEC 69611; CS PEC 37788, ED3P001-70 G1307
E	ACU/modem adapter	RJ-45 (10-conductor) to male DB-25	BCSystems PEC 69610; CS PEC 37786, ED3P001-70 G1306
F	Remote console adapter	RJ-45 (10-conductor) to male DB-25†	BCSystems PEC 69612; CS PEC 37790, ED3P001-70 G1308
G	Terminal/printer adapter	RJ-45 (8-conductor) to male DB-25	CS PEC 2750-C09, TRW-232125010
H	Terminal/printer adapter	RJ-45 (8-conductor) to female DB-25	TRW-2322225010
I	ACU/modem adapter	RJ-45 (8-conductor) to male DB-25	CS PEC 2750-C10, TRW-2322125005
J	ACU/modem adapter	RJ-45 (8-conductor) to female DB-25	TRW-232225005
K	Cable, 10 ft	10-Conductor modular	BCSystems PEC 69605; CS PEC 37776
L	Cable, 25 ft	10-Conductor modular	BCSystems PEC 69606; CS PEC 37778
M	Cable, 50 ft	10-Conductor modular	BCSystems PEC 69607; CS PEC 37780
N	Cable, 7 ft	8-Conductor modular	CS PEC 2725-16G

Continued on next page

Table E-1. Connectivity Reference Table — Continued

Label	Part Name	Description	Order Number(s)
O	Cable, 14 ft	8-Conductor modular	CS PEC 2725-16N
P	Cable, 25 ft	8-Conductor modular	CS PEC 2725-16S
Q	Cable, 50 ft	8-Conductor modular	CS PEC 2725-16V
R	Cable, 7 ft, parallel printer	DB-25 male to Centronics 37	BCSystems PEC 6950EB1; ED3P001-70 G1109, tp-440500
S	Cable, 7 ft, modem	DB-25 male to DB-25 male	BCSystems PEC 6950EA1; CS PEC 2721-28E, ED3P001-70 G1100, tp-416174
T	Gender changer	Male to male	N/A
U	Gender changer	Female to female	N/A
V	Null modem adapter	RJ-45 (10-conductor) DTE to female DB-9	BCSystems PEC 69619; CS PEC 37792, ED3P001-70 61318
W	Null modem adapter	DB-25 female to DB-25 female	N/A
X	Extender, 10-conductor	RJ-45 (10) to RJ-45 (10)	CS PEC 37796
Y	Extender, 8-conductor	RJ-45 (8) to RJ-45 (8)	N/A
Z	Adapter	DB-25 male to DB-9 female	N/A
AA	Cable, 25 ft	RJ-21X male/female 50-pin (25 pair) distribution panel	CS PEC 70335
BB	Cable, 2 ft	6-Conductor mounting analog Tip/Ring modular	N/A
CC	Cable, 25 ft	6-Conductor analog Tip/Ring modular	N/A
DD	Cable, 75 ft, 15-pin	D-subminiature T1/E1 extension male/male [†]	CS PEC 70325MDL02
EE	Cable, asynch shielded	Male/female (3270)	CS PEC 6950EA5 (7 ft), 6950EA6 (12 ft), 6950EA7 (25 ft), 6950EA8 (50 ft.)
FF	Cable, ASAI interface	8-Conductor D8W-87	CS PEC 272507G (7 ft), 272507N (14 ft), 272507S (25 ft)
GG	Cable, LAN	8-Conductor modular	CS PEC 2725-16N

Continued on next page

Table E-1. Connectivity Reference Table — Continued

Label	Part Name	Description	Order Number(s)
HH	CSU and cable RJ-48C	15-pin to 8-pin	BCSystems PEC 63158, 63157 (wall mount)
II	Null modem adapter	8-Conductor to DB-25 male	CS PEC 2750-C11, TRW-2322125021
JJ	Cable, 14 ft	6-Conductor D6AP-87	Comcode 102937604
KK	Adapter cable	Female/female adapter for LST1/E1	H600-435-G1
LL	Adapter cable	Male/female T1/E1-CSU slide latch adapter cable (optional)	Comcode 107063711
MM	Adapter	DB-25 for terminals and printers	PEC 70854; Comcode 407050111
NN	Adapter	DB-25 DTE male for modems	PEC 70853; Comcode 407050095

*Provides DTR hardware flow control.

†Used to maintain communication with the host system when it resets or reboots.

‡Up to seven cables supported.

Making Asynchronous Connections

Serial ports on the MAP/100C and 8-Port Asynchronous circuit card are configured as data terminal equipment (DTE). DTE ports require a cross-over or null modem cable to connect to serial devices such as a terminal, computer, or printer.

Connecting to a modem does not require a cross-over cable. A modem is normally considered data communications equipment (DCE). DCE ports require a modem or straight-through cable. The cross-over of transmit and receive are handled within the modem.

DTE/DCE Adapters

The following adapters enable DCE equipment to communicate with DTE and vice versa:

- Null modem adapter or cable. This adapter “flips” the transmit and receive lines while still maintaining the functions of the other lines, that is, data terminal ready (DTR) and ground. This device is normally used to connect one DTE device to a another DTE device.
- Terminal/printer adapter. This adapter provides a cross-over function much the same as a null modem adapter.
- ACU modem adapter. This adapter or cable provides a straight-through connection.
- Gender changers. Gender changers convert a male adapter to female and vice versa. There are two types of gender changers, male/male and female/female. The functionality of the incoming lines is maintained on the outgoing side.
- Modular extenders. Extenders allow you to connect two modular cables to each other without losing functionality. An extender consists of two female RJ-45 type ports linked to each other. The number of conductors in the extender must match the number of conductors in the cables used. There are three types of modular cables used with the MAP/100C:
 - A 6-conductor telephone hook-up cable (three pair) for analog Tip/Ring connections
 - An 8-conductor data cable for LAN and serial port peripheral connections (the standard serial ports provided on the MAP/100C)
 - A 10-conductor cable to connect devices with the modular ports provided on the 8-Port Asynchronous circuit card

You can also make serial port connections via standard EIA-232 cables. Note that according to the EIA-232 standard recommendation, the distance between devices should not exceed 50 ft. You can separate devices by longer distances, however, depending on how much electrical interference exists in the area. An asynchronous data unit (ADU) should be used for distances from 50 to 5000 ft. Refer to the appropriate ADU documentation for maximum limits.

It is possible to connect 8-conductor to 10-conductor cable. The adapters used with the 8-conductor cable must be 8-pin adapters. Ten-pin adapters can be used with 10-conductor modular cables only. Eight-pin adapters can be connected to 10-pin adapters. However, check the wiring diagrams of both adapters to make sure that there is no loss of functionality when connecting 8- to 10-pin adapters.

In most cases, if transmit goes to receive (and vice versa) in connecting DTE devices, you can use any combination of equipment. For modems, it is most likely that a straight-through connection will be required since they are DCE devices. However, you should confirm the pin positions of other functions (that is, DSR, DTR, carrier, etc.) on all connected devices to ensure proper functionality.

Asynchronous Connectivity Diagrams

The following figures detail various scenarios for external asynchronous connections to terminals, computers, and modems.

Eight-Port Asynchronous Connection to a Terminal

Figure E-1 shows an example of external connectivity and cabling for an 8-port asynchronous connection to a terminal.

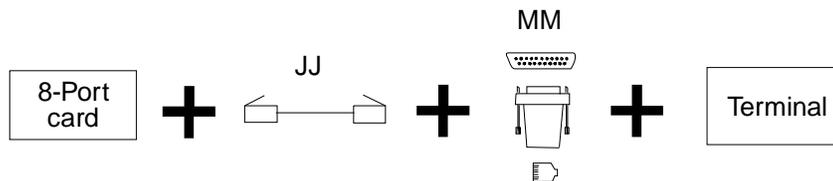


Figure E-1. Eight-Port Asynchronous Terminal Connection Using 6-Conductor Cable

Eight-Port Asynchronous Connection to a Computer

Figure E-2 shows an example of external connectivity and cabling for an 8-port asynchronous connection to a computer.

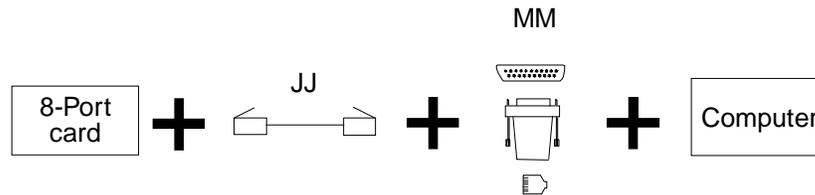


Figure E-2. Eight-Port Asynchronous Computer Connection Using 6-Conductor Cable

Eight-Port Asynchronous Connection to a Modem

Figure E-3 and Figure E-4 show examples of external connectivity and cabling for an 8-port asynchronous connection to a modem.

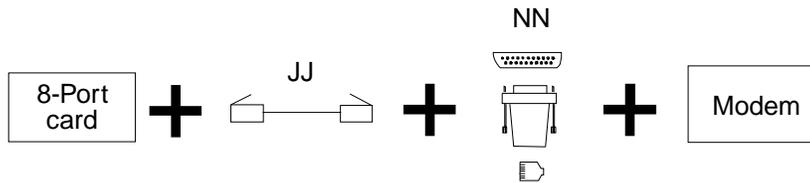


Figure E-3. Eight-Port Asynchronous Modem Connection Using 6-Conductor Cable

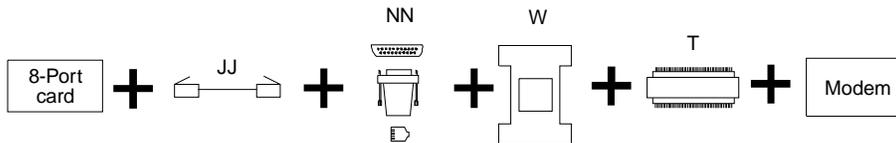


Figure E-4. Eight-Port Asynchronous Modem Connection Using 6-Conductor Cable and a Null Modem

Eight-Port Asynchronous Connection to an ADU

Figure E-5 shows an example of external connectivity and cabling for an 8-port asynchronous connection to an ADU.

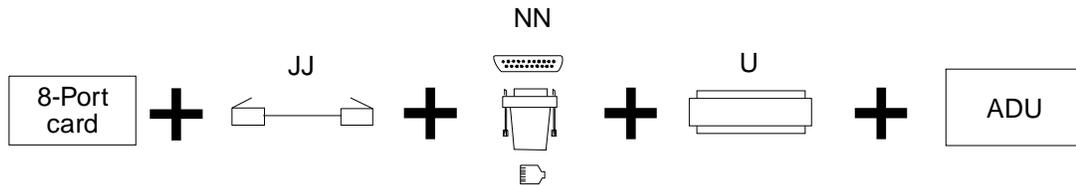


Figure E-5. Eight-Port Asynchronous ADU Connection

Making Synchronous (Host) Connections

Host cable access from the main unit of the MAP/100C to host equipment is accomplished via a shielded EIA-232 cable. If the distance is less than 100 ft, you must use a modem eliminator cable with leads for timing. The total cable length must not exceed 100 ft without a modem between the system controller and host equipment.

Standard installation of the MAP/100C does *not* include installing or testing the logical interface. Lucent Technologies will contract for additional installation services. All host connections must be in place prior to any loading and testing of application software.

⇒ NOTE:

Lucent Technologies recommends that any required host computer channels be operational before the equipment is installed. This includes any data facilities and cabling that may be required.

The 3270 Host Communications Package

The 3270 Host Communications Package is an option that requires the use of a Synchronous Host circuit card.

This package emulates a 3274-41C or a 3174-01R cluster controller, with up to 32 logical units (that is, 3278 Model 2 terminals) connected to it. It does *not* emulate the extended attributes of a 3279 terminal or any other terminal. The 3270 card typically links to a 3725 or 3745 front end processor (FEP), and uses 3270 data streams through either Binary Synchronous Communication (BSC) or Synchronous Data Link Control (SDLC) and Synchronous Network Architecture (SNA) protocols.

Standard links from the card to the FEP can be made through synchronous modems (for distances over 100 ft), leased lines (for out-of-building connections), or modem eliminators (for distances under 100 ft) with speeds up to 9600 baud.

⇒ NOTE:

Channel attachment is *not* possible with this card.

Synchronous Connectivity Diagrams

Figure E-6 through Figure E-8 show examples of external connectivity and cabling for a 3270 connection to the FEP.

⇒ NOTE:

Note the following about these connections:

- The 3270 card requires straight-through connections on pins 18, 25, 17, and 20.
- The synchronous modem (Figure E-6) must provide clocking on pins 15 and 17.
- The modem eliminator (Figure E-7) is used for distances of 100 to 400 ft and must provide a DB-25 female connector.
- The example in Figure E-8 assumes that the FEP provides the clocking on pins 15 and 17 to transmit and receive. This type of connection is rarely used.

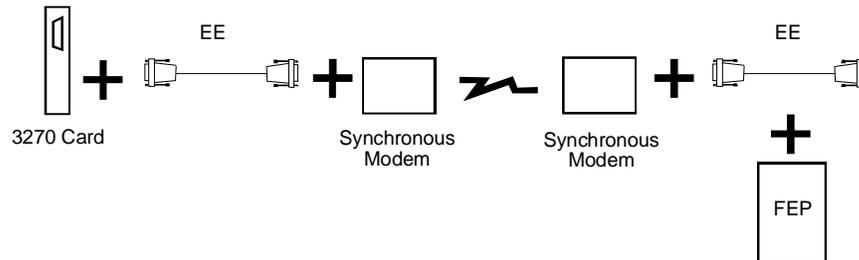


Figure E-6. 3270 Interface Connection Using Synchronous Modems

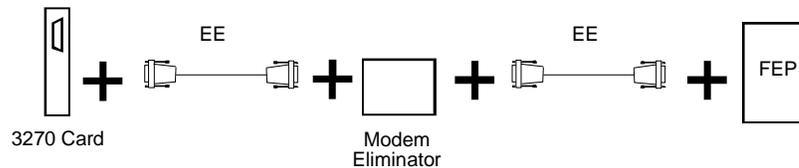


Figure E-7. 3270 Interface Connection Using a Modem Eliminator

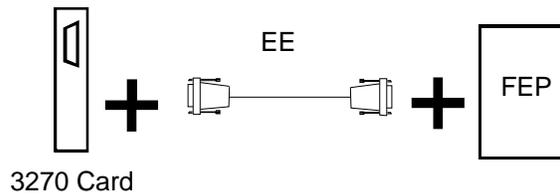


Figure E-8. 3270 Interface Connection Using a Direct Connection to the FEP

Making Analog (Tip/Ring) Connections

The MAP/100C supports analog Tip/Ring interface to either the central office 4ESS or the System 75 and DEFINITY G3 PBXs. See Chapter 6, "Switch Interface Administration," of *INTUITY™ CONVERSANT System Version 6.0 Administration*, 585-310-591, for the various switch settings for PBXs.

Making Tip/Ring Connections to a 4ESS

If they are not already in place, you must order analog lines from the service provider. Configure the lines as a 2500 set on the switch.

Making Tip/Ring Connections to the System 75 and DEFINITY PBX

The following settings and configuration data must be present on the PBX for analog Tip/Ring communication:

- The PBX must provide analog service using CCITT and LSSGR standards. For System 75 and DEFINITY PBXs, three circuit packs provide this capability. They are the TN742, TN746, and TN769.
- Each analog Tip/Ring channel must be configured to communicate with a standard 2500 analog set. On System 75 and DEFINITY PBXs, the command to bring up this screen is **add station**. The only required inputs are the telephone number assigned to each analog channel, line type (2500), and port identifier. The port identifier references the cabinet that the analog pack physically sits in (either A or B), the card number, and the channel number. An example of a port identifier is A0101. Also, make sure that the field auto answer is set to "n," which is the default.
- The telephone numbers assigned to each analog channel must be valid entries in the dial plan record.

Analog Connectivity Diagrams

Figure E-9 and Figure E-10 show typical Tip/Ring (IVP6) connections from the MAP/100C.

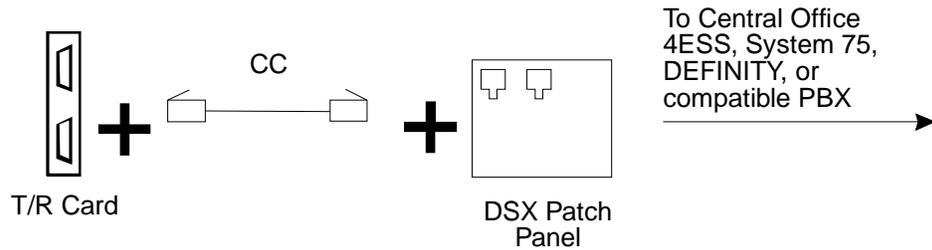


Figure E-9. Analog Tip/Ring Interface Connection to a DSX Patch Panel

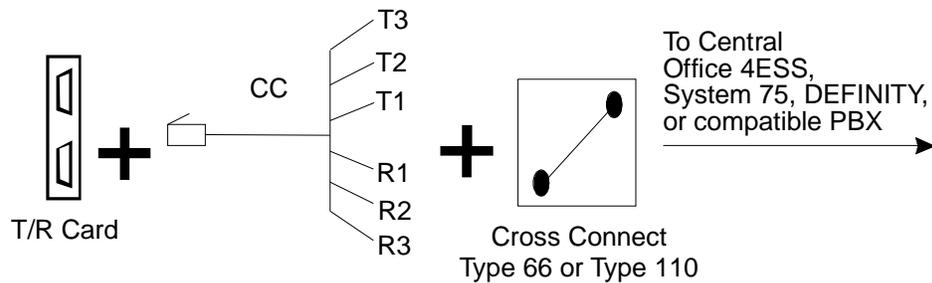


Figure E-10. Analog TR Interface Connection to a Type 66 or 110 Cross-Connect

Making Digital Connections

The MAP/100C supports a T1/E1 interface to the central office 4ESS.

For information about setting options on the MAP/100C and the 4ESS, see Chapter 6, "Switch Interface Administration," of *INTUITY™ CONVERSANT System Version 6.0 Administration*, 585-310-591.

A Channel Service Unit (CSU) is used to connect digital telephone lines coming into the MAP/100C. A CSU performs certain line-conditioning and equalization functions and responds to loopback commands from the central office. A CSU also regenerates digital signals, monitors them for problems, and provides a way to test the digital circuit.

Digital Connectivity Diagrams

Figure E-11 through Figure E-13 show examples of typical digital connections. Figure E-14 shows an optional adapter cable for LST1/E1.

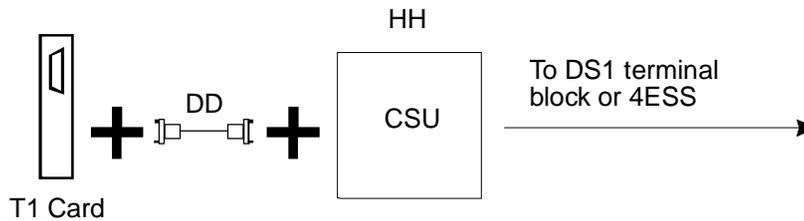


Figure E-11. Digital Interface Connection to a CSU with a 15-Pin D-Subminiature Connector

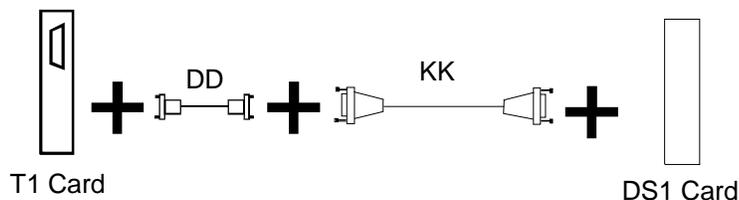


Figure E-12. Digital Interface Connection to DS1 for Line Side T1/E1

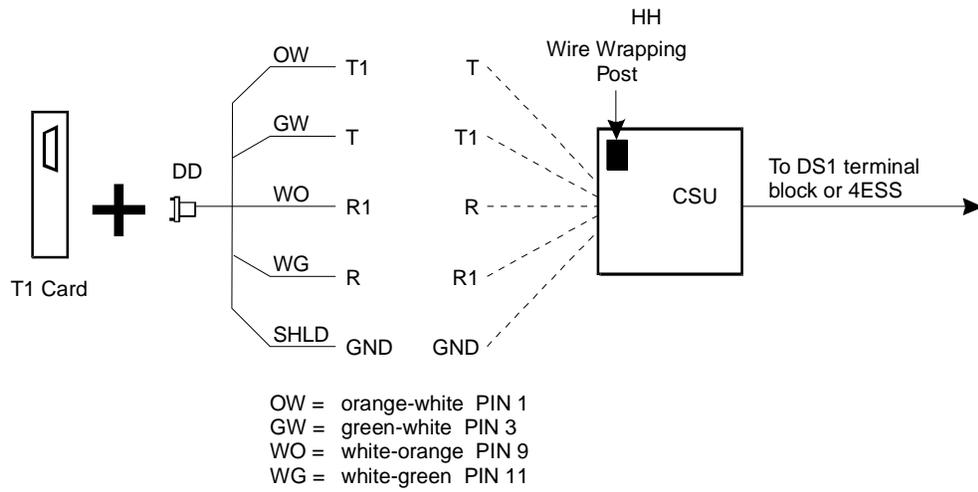


Figure E-13. Digital Interface Connection to a CSU with Wire-Wrapping Posts

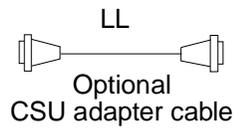


Figure E-14. Optional Adapter Cable for Use between DD and HH in Figure E-11

Making ASAI Connections

The MAP/100C is designed to operate with the DEFINITY Communications System, Generic 3i (DEFINITY Generic 3i) with the installation of a PC/ISDN circuit card. In addition, an ISDN line circuit pack (TN556) must be installed on the DEFINITY Generic 3i. For information on the TN556, see the *DEFINITY Communications System Generic 1 and Generic 3i System Description*, 555-230-200, and the *DEFINITY Generic 1 and Generic 3i Wiring Manual*, 555-104-630.

To support the ASAI capability, the MAP/100C must be connected via a point-to-point ISDN BRI to the DEFINITY Generic 3i. The Tip/Ring lines that must access ASAI capabilities must be configured as members of an ACD split of the PBX. For the DEFINITY G3i, three analog circuit packs provide this capability. They are the TN742, TN746, and TN769. The PC/ISDN card supports the BRI D-channel interface from the switch. One ASAI link per MAP/100C is supported.

Figure E-15 shows a typical MAP/100C and DEFINITY Generic 3 configuration.

See *INTUITY™ CONVERSANT System Version 6.0 Administration*, 585-310-591, for additional information about administration.

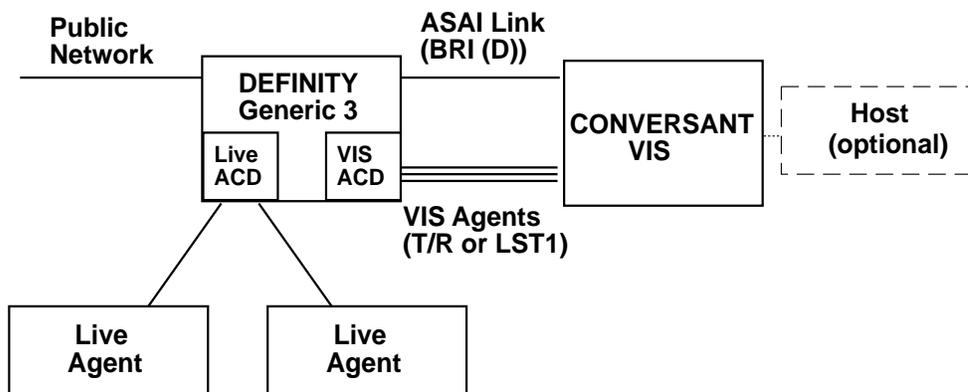


Figure E-15. Typical DEFINITY Generic 3i Configuration

ASAI Connectivity Diagrams

Figure E-16 shows typical wiring architecture for the ASAI link.

NOTE:

You must connect the Lucent Technologies 440A4 eight-pin terminating resistor (or equivalent) to the LINE connector of the PC/ISDN card using the DW8 cable provided. Use the other DW8 cable to connect from the connecting block to the terminating resistor.

CAUTION:

Total cable length from the DEFINITY Generic 3 system to the MAP/100C must not exceed 1900 ft.

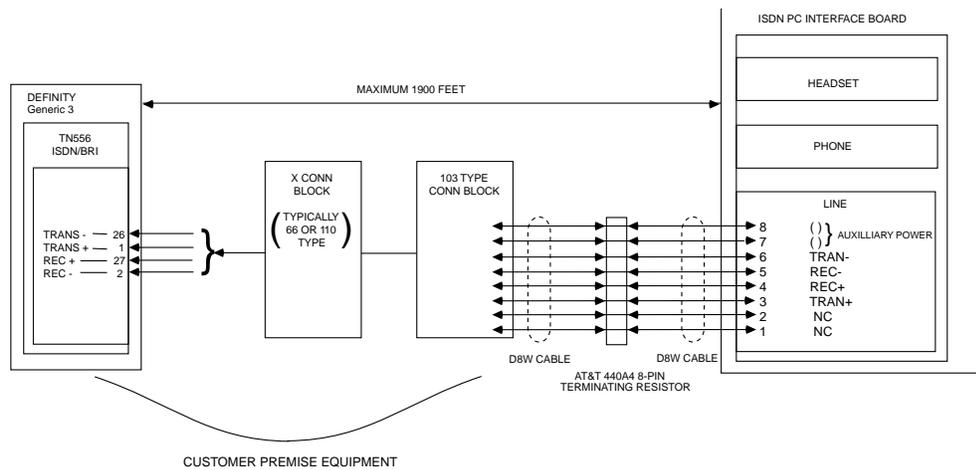


Figure E-16. Typical Wiring for ASAI Link

Making PRI Connections

The MAP/100C supports a PRI to the network over layer-1 T1/E1 using either D4 or extended super frame (ESF) framing.

Two parameters are dependent on the framing protocol used:

- If D4 framing is used, line coding must be “ZCS” and D-channel inversion must be “Inverted.”
- If ESF framing is used, line coding must be “B8ZS” and D-channel inversion must be “Non-Inverted.”

 **NOTE:**

Special provisioning of PRI is required on the 4ESS switch for compatibility with the MAP/100C. The interface ID (CCID) parameter default value must be set to 1 instead of the normal value of 0. The interface ID (CCID) must be provisioned on the 4ESS switch as follows:

- 23B+D configurations:
 - Interface ID (CCID): 1
- 47B+D Configurations:
 - Interface ID (CCID) for circuit with D channel: 1
 - Interface ID (CCID) for circuit without D channel: 2

Specification of this parameter is currently not part of the normal order process for PRI network services. Thus, special attention is required when ordering.

In addition, the MAP/100C uses some Layer 2 and Layer 3 parameters. You must set these parameters on the switch as shown in Table E-2 and Table E-3, respectively.

 **NOTE:**

Incoming calls to the system should be provisioned so that the channel number is exclusive and not preferred.

If the switch is configured to deliver ANI on a subscription basis, it is not possible for the system to request a different type of ANI on a call-by-call basis.

Table E-2. PRI Layer 2 Parameters

Layer 2 Parameter	Value
Retry Count N200	3
Timer T200	1 sec
Timer T203	30 sec
HDLC (D4/ZCS)	Inverted
HDLC (ESF/B8ZS)	Noninverted

Table E-3. PRI Layer 3 Parameters

Layer 3 Parameter	Value
Timer T302	10 sec
Timer T303	4 sec
Timer T305	4 sec
Timer T308	4 sec
Timer T310	10 sec
Timer T313	4 sec
Timer T316	120 sec
Timer TL3	120 sec
Timer T309	10 sec
Interface ID (with D channel)	1
Interface ID (without D channel)	2
Bearer capability	64 Kbit voice

PRI Connectivity Diagrams

See “Making Digital Connections” earlier in this appendix for information on PRI connections. Currently, PRI is not supported in an interface between the MAP/100C and a PBX.

Making Graphical Speech Editor Connections

You can add a Graphical Speech Editor to the MAP/100C in one of three configurations:

- Microphone and speaker
- Voice workstation system Tip/Ring interface
- Telephone switch

Microphone and Speaker Configuration

Required Equipment

- Microphone
- Speaker

Procedure



CAUTION:

The input impedance of the AUDIO IN jack on the VWS-TR interface module is 600 ohms. Do not attempt to drive this input with an audio source with an impedance of less than 600 ohms.

1. Locate the selected Tip/Ring circuit card at the back of the MAP/100C.
2. Plug the microphone cable into the AUDIO IN jack on the faceplate of the Tip/Ring circuit card (Figure 7-7). This connection dedicates line 0 of the Tip/Ring circuit card.
3. Plug the speaker cable into the AUDIO OUT jack.



NOTE:

If you are using an *external* amplifier, turn it to the lowest volume setting.

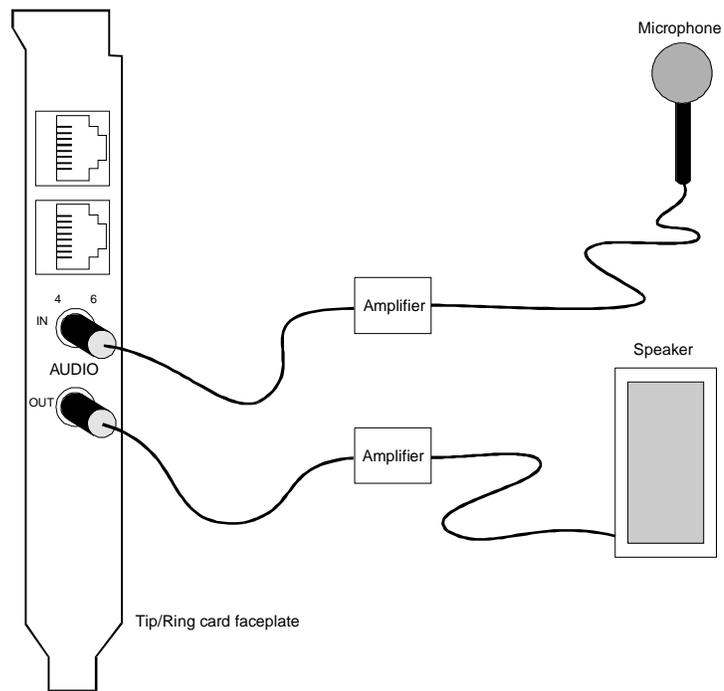


Figure 7-7. Connecting the Tip/Ring Circuit Card and Graphical Speech Editor

Voice Workstation System Tip/Ring Interface Configuration

Required Equipment

- Audio Jack Kit (see Figure 7-8); this includes:
 - Audio cable
 - Modular telephone cord
 - 24-VDC power supply
 - Voice workstation-tip/ring (VWS-TR) interface module
- Tape deck or reel-to-reel tape player with an integrated low-wattage amplifier
- Tape deck or reel-to-reel tape player with an external amplifier (the tape player is connected to the amplifier line-input connector)
- Headphones

Procedure



CAUTION:

The input impedance of the AUDIO IN jack on the VWS-TR interface module is 600 ohms. Do not attempt to drive this input with an audio source with an impedance of less than 600 ohms.

1. Place your tape device or microphone close to the back panel of the MAP/100C.
2. Connect the audio cable to your tape device or microphone.
3. Plug the other end of the audio cable into the AUDIO IN connector of the VWS-TR interface module (Figure 7-8).
4. Plug one end of the modular telephone cord into the connector receptacle labeled "Tip/Ring Interface" on the VWS-TR interface module.
5. Plug the jack end of the 24-VDC power supply cable into the connector labeled "24 VDC IN" on the VWS-TR interface module.
6. Plug the power module of the 24-VDC power supply into a 120-VAC power outlet.
7. On the selected Tip/Ring circuit card, plug the other end of the modular telephone cord into the top connector receptacle if you are using channel 0 or the bottom connector receptacle if you are using channel 2.

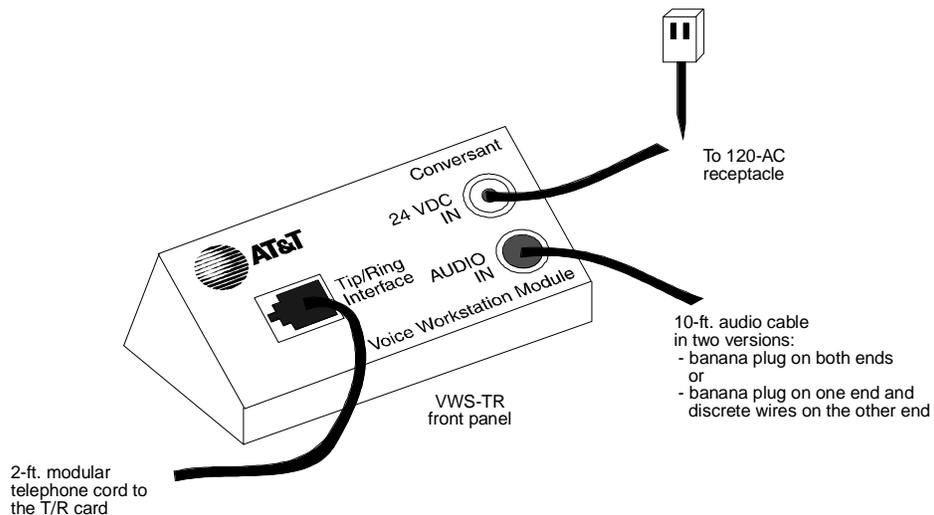


Figure 7-8. Voice Workstation System, Tip/Ring Interface Module

Making Other System Connections

There are other basic connections located on the MAP/100C:

- Main serial port (COM1) connection

COM1 is located on the faceplate of the CPU. This port is a 9-pin male DTE connector (item "Z" in Table E-1). See "Eight-Port Asynchronous Connections to Terminals" above for additional information on connectivity.

- Second serial port (COM2) connection

COM2 is located on the front and rear lower center of the MAP/100C. This port is a DB 25 male connector. Refer to "Eight-Port Asynchronous Connections to Terminals" for information on connecting devices to this port.

- Parallel port connection

The parallel port connection is located on the faceplate of the CPU card. This port is a DB 25 male connector.

Abbreviations

A

AC

Alternating current

ACD

Automatic call distributor

AD

Application dispatch

AD-API

Application dispatch application programming interface

ADPCM

Adaptive differential pulse code modulation

ADU

Asynchronous data unit

AGL

Application generation language

ALERT

System alerter process

ANI

Automatic number identification

API

Application programming interface

ARU

Alarm relay unit

ASAI

Adjunct/Switch Application Interface

ASCII

American Standard Code for Information Interchange

ASI

Analog switch integration

ASR

Advanced Speech Recognition

AYC2C

The signal processor (SP) circuit card

AYC3B

A T1 (digital) circuit card

AYC5B

The IVP6 Tip/Ring (analog) circuit card

AYC6B

The IVP4 Tip/Ring (analog) circuit card.

AYC7

The companion (CMP) circuit card.

AYC9

The Text-to-Speech circuit card

AYC10

The IVC6 Tip/Ring (analog) circuit card

AYC11

A T1 (digital) circuit card

AYC16

The IVP6-IU Tip/Ring (analog) circuit card

AYC21

The E1/T1 (digital) circuit card

AYC26

The IVP6-IA Tip/Ring (analog) circuit card

AYC27

The IVP6-ID Tip/Ring (analog) circuit card

AYC28

The IVP6 Tip/Ring (analog) circuit card

AYC30

The NGTR (analog) circuit card

AYC43

The speech and signal processor (SSP) circuit card

B

BB

Bulletin board

bps

Bits per second

BRDG

Call bridging process

BSC

Binary synchronous communication

C

CCA

Call classification analysis

Abbreviations

CDH

Call data handler

CELP

Code Excited Linear Prediction

CGEN

Voice system general message class

CICS

Customer Information Control System

CMP

Companion circuit card

CMS

Call Management System

CO

Central office

CPE

Customer provided equipment or customer premise equipment

CPN

Calling party number

CPT

Call progress tones

CPU

Central processing unit

CSU

Channel service unit

CVS

Converse vector step

D

dB

Decibel

DB

Database

DBC

Database checking process

DBMS

Database management system

DC

Direct current

DCE

Data communications equipment

DCP

Digital communications protocol

DIMM

Dual in-line memory module

DIO

Disk input and output process

DIP

Data interface process

DMA

Direct memory access

DNIS

Dialed number identification service

DPR

Dial Pulse Recognition

DSP

Digital signal processor

DTE

Data terminal equipment

DTMF

Dual tone multifrequency

DTR

Data terminal ready

E

E&M

Ear and Mouth

EBCDIC

Extended Binary Coded Decimal Interexchange Code

ECS

Enterprise Communications Server

EIA

Electronic Industries Association

EISA

Extended Industry Standard Architecture

EMI

Electromagnetic interference

ESD

Electrostatic discharge

ESDI

Extended Serial Data Interface

ESS

Electronic Switching System

ET

Error tracker

EXTA

External alarms feature message class

F

FCC

Federal Communications Commission

FDD

Floppy disk drive

FEP

Front end processor

FFE

Form Filler Plus feature message class

FIFO

First-in-first-out processing order

foos

Facility out-of-service state

FTS

File transfer process message class

G

GEN

PRISM logger and alerter general message class

GSE

Graphical Speech Editor

GUI

Graphical user interface

H

HDD

Hard disk drive

HLLAPI

High Level Language Application Programming Interface

HOST

Host interface process message class

hwoos

Hardware out-of-service state

Hz

Hertz

I

IBM

International Business Machines

ICK

Integrity checking process message class

ID

Identification

IDE

Integrated Disk Electronics

IE

Information element

INIT

Voice system initialization message class

inserv

In-service state

IPC

Interprocess communication

IPC

Intelligent Ports Card (IPC-900)

IPCI

Integrated personal computer interface

IRAPI

INTUITY Response Application Programming Interface

Abbreviations

IRQ

Interrupt request

ISA

Industry Standard Architecture

ISDN

Integrated Services Digital Network

ISV

Independent Software Vendor

ITAC

International Technical Assistance Center

IVP4

Integrated Voice Processing card with 4 analog channels

IVP6

Integrated Voice Processing card with 6 analog channels

IVPSS

Integrated Voice Processing System Software

K

Kbps

Kilobites per second

Kbyte

Kilobyte

L

LAN

Local area network

LDB

Local database

LED

Light-emitting diode

LIFO

Last-in-first-out processing order

LN

Load number

LOG

VIS logger process message class

LSE1

Line side E1

LST1

Line side T1

LU

Logical unit

M

manooos

Manually out-of-service state

MAP/100

Multi-Application Platform 100

MAP/100C

Multi-Application Platform 100C

MAP/40

Multi-Application Platform 40

Mbps

Megabits per second

Mbyte

Megabyte

MF

Multifrequency

ms

Millisecond

msec

Millisecond

MHz

Megahertz

MTC

Maintenance process

N

NCP

Network Control Program

NEBS

Network Equipment Building Standards

Abbreviations

NEMA

National Electrical Manufacturers Association

netoos

Network out-of-service state

NFAS

Non-Facility Associated Signaling

NFS

Network file sharing

NGTR

Next Generation Tip/Ring

NMVT

Network Management Vector Transport

NM-API

Network Management - Application Programming Interface

nonex

Nonexistent state

NRZ

Non Return to Zero

NRZI

Non Return to Zero Inverted

O

OEM

Original equipment manufacturer

OGA

Operator generated alert

P

P & C

Prompt and Collect

PBX

Private branch exchange

PC

Personal computer

PCB

Printed circuit board

PCM

Pulse code modulation

PEC

Price element code

PRI

Primary rate interface

PSTN

Public switch telephone network

PS&BM

Power supply and battery module

R

RAM

Random access memory

RECOG

Speech recognition feature message class

RDBMS

ORACLE relational database management system

REN

Ringer equivalence number

RFS

Remote file sharing

RM

Resource manager

RMB

Remote maintenance circuit card

RTS

Request to send

S

SBC

Sub-band coding

SCCS

Switching Control Center System

SCSI

small computer system interface

Abbreviations

SDLC

Synchronous Data Link Control

SDN

Software Defined Network

SID

Station identification

SIMM

Single in-line memory module

SLIP

Serial Line Interface Protocol

SNA

Systems Network Architecture

SNMP

Simple Network Management Protocol

SP

Signal processor circuit card

SPIP

Signal processor interface process

SPPLIB

Speech processing library

SQL

Structured Query Language

SR

Speech recognition

SYS

UNIX system calls message class

sysgen

System generation

T**TAS**

Transaction Assembler Script

TCC

Technology Control Center

TCP/IP

Transmission control protocol/internet protocol

TDM

Time division multiplexing

TE

Terminal emulator

THR

Threshold message class

TKR

Token Ring

TLI

Transport layer interface

TLP

Transmission level plan

T/R

Tip/Ring circuit card

TRIP

Tip/Ring interface process

TSO

Technical Service 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

USOC

Universal service ordering code

UVL

Unified Voice Library

V

VDC

Video display controller

VPC

Voice processing comarketer

VRU

Voice response unit

VROP

Voice response output process

Glossary

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 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

adaptive differential pulse code modulation (ADPCM)

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 CONVERSANT system to administer the switch directly.

Adjunct/Switch Application Interface (ASAI)

An optional feature package that provides an Integrated Services Digital Network-based interface between Lucent Technologies PBXs and adjunct processors.

advanced speech recognition (ASR)

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.

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.

alerter

A system process that responds to patterns of events logged by the "logdaemon" process.

American Standard Code for Information Interchange (ASCII)

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.

announcement

A message the system plays to the caller to provide information. The caller is not asked to give a response. Compare to "prompt."

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 Graphical Designer, 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.

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 (ACD)

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 (ANI)

A method of identifying the calling party by automatically receiving a string of digits that identifies the calling station of a particular customer.

AYC2C

The signal processor (SP) circuit card.

AYC3B

A T1 (digital) circuit card.

AYC5B

The IVP6 Tip/Ring (analog) circuit card.

AYC6B

The IVP4 Tip/Ring (analog) circuit card.

AYC7

The companion (CMP) circuit card.

AYC9

The Text-to-Speech circuit card.

AYC10

The IVC6 Tip/Ring (analog) circuit card.

AYC11

A T1 (digital) circuit card.

AYC16

The IVP6-IU Tip/Ring (analog) circuit card.

AYC21

The E1/T1 (digital) circuit card.

AYC26

The IVP6-IA Tip/Ring (analog) circuit card.

AYC27

The IVP6-ID Tip/Ring (analog) circuit card.

AYC28

The IVP6 Tip/Ring (analog) 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.

binary synchronous communications (BCS)

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.

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.

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 (CCA)

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 (CHD) 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 progress tones (CPT)

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.

caution

An admonishment or advisory statement used in INTUITY CONVERSANT documentation to alert the user to the possibility of a service interruption or a loss of data.

central office (CO)

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 (CPU)

See "processor."

channel

See "port."

channel associated signaling (CAS)

A type of signaling that can be used on E1 circuit cards. It occurs on channel 16.

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.

CMP (AYC7)

The companion circuit card to the signal processor (SP).

code excited linear prediction (CELP)

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.

CompuLert/SCCS interface

An optional feature that enables remote or console monitoring of error messages generated from the INTUITY CONVERSANT system. CompuLert is a centralized maintenance system for monitoring minicomputers, computer mainframes, etc. The Switching Control Center System (SCCS) is similar to the CompuLert system, but is used to support 4ESS local switching systems.

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 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 INTUITY CONVERSANT along with a package from a different vendor on the same system platform.

crash

An interactive utility for examining the operating system core and for determining if system parameters are being exceeded.

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 (CICS)

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.

D

danger

An admonishment or advisory statement used in INTUITY CONVERSANT documentation to alert the user to the possibility of personal injury or death.

data interface process (DIP)

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.

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 (DPR)

A method of recognizing caller pulse inputs from a rotary telephone.

dialed number identification service (DNIS)

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.

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.

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 (DTMF)

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

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 (E&M)

A common T1 trunking protocol for connection between two "switches."

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."

editor system

A system that allows speech phrases to be displayed and edited by a user. See "Graphical Speech Editor."

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 (ESDI)

A software- and hardware-controlled method used to store data on magnetic peripherals.

Enterprise Communications Server (ECS)

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.

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.

external actions

Specific predefined system tasks that Graphical Designer or 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.

external functions

Specific predefined (or customer-created) system tasks that can Graphical Designer 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 (they are not provided in a choices list). Examples are concat, getarg, length, substring, etc.

F

FAX Actions

An optional feature package that allows the system to send fax messages.

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 CONVERSANT software program that allows a user to perform self-tests of critical hardware and software functionality.

field

See "database field."

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."

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.

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 software gives special properties for manipulating the user interface.

G

grammar

The inputs that a recognizer can match (identify) from a caller.

Graphical Speech Editor (GSE)

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.

Graphical Designer

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*).

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.

High Level Language Applications Programming Interface (HLLAPI)

An application programming interface that allows a user to write custom applications that can communicate with a host computer via an API.

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.

I

iCk

The system integrity checking process.

idle channel

A channel that either has no owner or is owned by its default owner and is onhook.

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 (ISV)

A company that has an agreement with Lucent Technologies to develop software to work with INTUITY CONVERSANT 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 (ISA)

A PC bus standard that allows processors and other circuit cards to communicate with each other.

initialize

To start up the system for the first time.

Integrated Services Digital Network (ISDN)

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 IVP4 or 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, 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 (IRAPI)

A library of commands that provide a standard development interface for voice-telephony applications.

IVC6 circuit card (AYC10)

A Tip/Ring (analog) circuit card with six channels.

IVP4 circuit card (AYC6 or AYC6B)

A Tip/Ring (analog) card with four channels.

IVP6 circuit card (AYC5, AYC5B, or AYC28)

A Tip/Ring (analog) card with six channels.

K

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

library states

The state information about channel activities maintained by the IRAPI.

line side E1 (LSE1)

A digital method of interfacing an INTUITY CONVERSANT to a PBX or "switch" using E1-related hardware and software.

line side T1 (LST1)

A digital method of interfacing an INTUITY CONVERSANT 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 (LAN)

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.

logical unit (LU)

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.

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 screen from which you are able to enter either the System Administration or Voice System Administration menu.

maintenance process (MTC)

A software process that runs temporary diagnostics and maintains the state of circuit cards and channels.

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.

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.

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-DOS

A personal computer disk operating system developed by the Microsoft Corporation.

multifrequency (MF)

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

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 (NGTR) Tip/Ring (AYC30) circuit card

An analog circuit card with six channels.

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.

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.

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 (OAG)

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

peripheral (device)

Equipment such as printers or terminals that is in addition to the basic processor.

peripheral component interconnect (PCI)

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.”

Primary Rate Interface (PRI)

An ISDN term for connections over E1 or T1 facilities that are usually treated as trunks.

private branch exchange (PBX)

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 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.

pulse code modulation (PCM)

A digital modulation method of encoding voice signals into digital signals. See also “adaptive differential pulse code modulation.”

R

record

See “database record.”

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.

recovery

The process of using copies of the INTUITY CONVERSANT 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

A INTUITY CONVERSANT circuit card, available with a built-in modem, that allows remote personnel (for example, field support) to access all INTUITY CONVERSANT machines. This card is standard equipment on all new MAP/100 and MAP/40 purchases.

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.

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.

S

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.

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.

signal processor (SP) 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).

single inline memory modules (SIMMs)

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.

small computer system interface (SCSI)

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.

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 (SSP) 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 (SR)

The ability of the system to understand input from callers.

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 (SQL)

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 "whole-word technology."

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 (PBX).

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."

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 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."

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).

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 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 (TTS)

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 Graphical Designer 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.

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 (T/R)

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 (TAS)

The computer program code that controls the application operating on the voice response system. The code can be produced from Graphical Designer, Script Builder, or by writing directly in TAS code.

transaction state machine (TSM) 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.

troubleshooting

The process of locating and correcting errors in computer programs. This process is also referred to as debugging.

U

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.

V

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 INTUITY CONVERSANT 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 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 (VROP)

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 (VRU)

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.

W

warning

An admonishment or advisory statement used in INTUITY CONVERSANT documentation to alert the user to the possibility of equipment damage.

WholeWord speech recognition (SR)

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 FlexWords that are available for recognition by an application during a Prompt & Collect action step.

word spotting

The ability to search through extraneous speech during a recognition.

Index

Numerics

- 14902
 - Heading4
 - Verifying the LAN Circuit Card Installation, 3-28
- 5ESS switch
 - installing MAP/100C in Switching Equipment Single Bay frame, 2-3
- 8-port asynchronous circuit card
 - connections, 3-11

A

- AC power supply, connecting the system, 4-25
- Adjunct/Switch Application Interface (ASAI)
 - channel troubles, repairing, C-45
 - digital link troubles, repairing, C-48
 - domain troubles, repairing, C-43
 - troubles, repairing, C-40
- administrative troubles, repairing, C-54
- analog interfaces
 - switch interface parameters, 6-5
- Assign Date and Time, 6-2
- AT&T 3820 Paradyne modem
 - connecting, 4-12
 - selecting UNIX dial default configuration, 4-14
 - setting Async DTE rate, 4-15
 - setting DTR action and DSR control, 4-16
 - setting the error control mode, 4-17
- automatic call distributor (ACD)
 - connecting platform to, 3-17
- AYC10 Tip/Ring circuit card
 - direct line connection, 3-3

B

- backing up
 - system, 7-8
- boot-up troubles, repairing, C-3
- BOTTOM function key, B-10
- BTU output, 1-2

C

- cables
 - connectivity, E-1

- Canada
 - equipment attachment limitations, 1-10
- cartridge tapes
 - drives, 2-13
- cause values, C-51
- channel
 - state trouble, repairing, C-60
- Channel Service Unit (CSU), 3-17
 - ACCULINK 3150, 3-20
- chassis back, description of, 2-13
- CHG-KEYS function key, B-10
- CHOICES function key, B-10
- circuit breakers, 2-15
- circuit cards
 - Ethernet LAN
 - function, 3-27
 - version 1
 - view, 3-28
 - external SCSI connector
 - function, 3-33
 - maximum installed, 3-33
 - terminating resistor
 - function, 3-34
 - view, 3-34
 - view, 3-34
 - P5 120 MHz CPU
 - maximum installed, 3-32
 - view, 3-32
 - PC/ISDN (IPCI), 3-31
 - remote maintenance
 - function, 3-37
 - maximum installed, 3-37
 - switch settings, 3-38
 - view, 3-37
 - Tip/Ring
 - function, 3-2
 - maximum installed, 3-2
 - video controller
 - function, 3-35
 - maximum installed, 3-35
 - types, 3-35
- COM2 asynchronous port, 3-11
- Command menu, B-13
 - exiting, B-16
 - trace service, B-15
- commercial 24-inch panel rack, installing MAP/100C, 2-10
- common ESS frame, installing MAP/100C, 2-7
- connections
 - 3820 modem, 4-12
 - adapters, 4-12
 - COM2 port, 4-12
 - direct line IVC6 Tip/Ring card, 3-3
 - MAP/100C to power supply, 4-25
 - modem for remote access, 4-12
 - printer, 4-4
 - system to AC power, 4-25

Connectors
 RJ11 single-line, 3-10
 RJ14C, 3-10
CONVERSANT VIS main menu, B-17
cooling
 system, 2-13
CPU
 see under circuit cards or specific card
CPU circuit cards
 486, 3-33

D

DC power, terminal strips, 2-15
dimensions
 of the MAP/100C, 1-3
 of the monitor, 1-3
 of the printer, 1-3
DS1, connecting to a, 3-17, 3-22

E

Ethernet LAN circuit card
 function, 3-27
 version 1 view, 3-28
external SCSI connector circuit card
 function, 3-33
 maximum installed, 3-33
 terminating resistor
 function, 3-34
 view, 3-34
 view, 3-34

F

fans
 location, 2-13
 status indicator location, 2-12
FCC
 compliance label, 1-7
 rules, 1-7
feature administration, B-1
feature test script
 prerequisites for, 5-4
 running the program, 5-9
 set up, 5-5
floppy disk drive
 description, 2-13
Form Filler Plus
 repairing, C-35
Frame management, B-12
 list open screens, B-13

 move active screen, B-13
 refresh screen, B-13
 UNIX system, B-13
FRM-MGMT function key, B-10
function keys
 BOTTOM, B-10
 CHG-KEYS, B-10
 CHOICES, B-10
 FRM-MGMT, B-10
 labels, B-2, B-7, B-8
 NEXTPAGE, B-10
 PREVPAGE, B-10
 PRINT, B-10
 SAVE, B-10
 standard, B-9
 TOP, B-10

G

Graphical Speech Editor, installation procedure for a, E-20
grounding, 1-2, 1-5

H

hard disk drives
 description of, 2-13
heat output, 1-2
HELP screens, B-11
host interface
 cable, synchronous connections, 3-14
 channels, preparation of the, 3-20
humidity levels, 1-2

I

indicators
 fan status, 2-12
 Power On, 2-12, 2-15
 power on, 2-12
International Technical Assistance Center (ITAC), 1-9
INTUITY switch connection device, 3-27
 IDI ground device, 3-27
 Modular Processor Data Module, 3-27
 Z3A asynchronous data unit, 3-27
isolation troubles
 boot up, C-3
 Form Filler Plus, C-35
 installation, C-5
 operational, C-55
 ORACLE, C-24
 performance, C-58
 power up, C-1

- primary rate interface (PRI), C-32
- report, C-59
- Script Builder, C-28
- Script Builder FAX actions, C-29
- set up, C-5
- speech recognition, C-14
- speech recognition accuracy, C-20
- Text-to-Speech (TTS), C-36
- touch tone, C-59
- upgrade, C-5

J

- Jacks, modular, 3-10

K

- keyboard
 - connecting, 4-3

L

- limited-distance modem, 3-14
- Line Side T1 (LST1), 3-22
- List open screens, B-12
- load
 - number (LN), for the AYC28 circuit card, 1-10

M

- main menu, VIS, B-17
- MAP/100C
 - circuit card
 - replacement, 3-1
 - circuit cards
 - external SCSI connector
 - function, 3-33
 - maximum installed, 3-33
 - terminating resistor
 - function, 3-34
 - view, 3-34
 - view, 3-34
 - remote maintenance
 - function, 3-37
 - maximum installed, 3-37
 - switch settings, 3-38

- view, 3-37
- Tip/Ring
 - function, 3-2
 - maximum installed, 3-2
- video controller
 - function, 3-35
 - maximum installed, 3-35
 - types, 3-35
- power supply, 4-25
- powering up, 4-25
- turning on, 4-25
- menu, B-2
 - choosing an item, B-6
- message line, B-2, B-7
- modem
 - connecting, 4-12
 - limited-distance, 3-14
 - uses for, 4-12
- monitor
 - cables
 - power cable, 4-3
 - video cable, 4-3
 - dimensions, 1-3
 - power requirements, 1-4
- Move active screen, B-12

N

- NEXTPAGE function key, B-10
- nonoperating temperature, 1-2

O

- on-line help, B-11
- open cursors, increasing limits, C-25
- operating temperature, 1-2
- operational troubles, repairing, C-55
- Optional
 - hardware
 - Graphical Speech Editor, E-20
- ORACLE
 - troubles, repairing, C-24

P

- P5 120 MHz CPU circuit card
 - maximum installed, 3-32
 - view, 3-32
- packing materials, 2-2

- party line service, 1-8
- password
 - security, 1-12
- PC/ISDN interface circuit card, 3-31
- performance
 - troubles, repairing, C-58
- Phone lines, FAX connection, 3-10
- pinouts
 - for printer, D-9
 - for the COM2 connector, 3-11
- power
 - indicator, 2-12, 2-15
 - requirements
 - MAP/100C, 1-4
 - monitor, 1-4
 - printer, 1-4
 - switch
 - location, 2-12
- power supplies
 - MAP/100C, 4-25
- power up troubles, isolating, C-1
- powering up the system, 4-25
- PREVPAGE function key, B-10
- Primary Rate Interface (PRI)
 - troubles, repairing, C-32
- PRINT function key, B-10
- printer
 - connecting, 4-4
 - dimensions, 1-3
 - pinout connections, D-9
 - power requirements, 1-4
 - selftest feature, 4-4
- private branch exchange (PBX)
 - connecting platform to, 3-17

R

- receptacles
 - AC power inlet, 2-15
 - keyboard, 2-12
 - video, 2-12
- remote
 - access, connecting modem, 4-12
 - maintenance circuit card
 - function, 3-37
 - maximum installed, 3-37
 - switch settings, 3-38
 - view, 3-37
- remote maintenance
 - configuring 3820 modem, 4-13
 - connecting modem, 4-12
- repair
 - application-related troubles, C-7
 - power-up troubles, C-1
 - returning a MAP/100C for, 2-2
 - tag, 2-2

- Text-to-Speech (TTS) troubles, C-36
- troubles
 - form filler plus, C-35
 - operational, C-55
 - ORACLE, C-24
 - performance, C-58
 - primary rate interface (PRI), C-32
 - report, C-59
 - Script Builder, C-28
 - Script Builder FAX actions, C-29
 - speech recognition, C-14
 - speech recognition accuracy, C-20
 - touch tone, C-59
 - where to call for, 1-9
- reports
 - troubles, repairing, C-59
- requirements
 - environmental, 1-1
 - power, 1-1
 - space, 1-1
- reset button, location, 2-12
- return to the UNIX system prompt, B-12
- RJ11, 3-10
- RJ14C, 3-10
- RMB, see remote maintenance circuit card

S

- SAVE function key, B-10
- screens, B-2
 - online help, B-11
- Script Builder
 - FAX Actions
 - troubles, repairing, C-29
 - troubles, repairing, C-28
- SCSI
 - external connector card, see external SCSI connector card
- SDLC
 - protocol, 3-14
- selftest feature
 - printer, 4-4
- service provider, when to notify your, 1-9
- setting
 - Async DTE rate on 3820 modem, 4-15
 - DTR action and DSR control on 3820 modem, 4-16
 - error control mode on 3820 modem, 4-17
- site preparation
 - host channels, 3-20
 - humidity, 1-2
 - operating temperature, 1-2
 - space requirements, 1-3
- speech recognition
 - accuracy
 - troubles, repair, C-20

- troubles, repairing, C-14
- standard function keys, B-9
- switch connection device
 - IDI ground device, 3-27
 - Modular Processor Data Module, 3-27
 - Z3A asynchronous data unit, 3-27
- switch connections device, 3-27
- switch interface
 - administration
 - digital interfaces, 6-5
- synchronous
 - connections, host cable specifications for, 3-14
- system
 - backing up, 7-8
 - connections with synchronous host, 3-13
 - security, 1-12

T

- T1
 - circuit cards, 3-22
 - connecting to the T1 carrier, 3-17
- Technical Services Organization (TSO), 1-9
- telephone lines, types needed, 1-8
- temperature, operating and nonoperating, 1-2
- Text-to-Speech (TTS)
 - troubles, repairing, C-36
- Tip/Ring
 - circuit card
 - function, 3-2
 - maximum installed, 3-2
 - lines
 - connection through a line splitter (885A adapter), 3-4, 3-5
 - connection through a Tip/Ring distribution panel, 3-7
- TOP function key, B-10
- touch-tone
 - troubles, repairing, C-59
- TR114, 3-9
- trace
 - service, B-15
 - trace output, B-15
- transfer test, see feature_tst
- trouble isolation
 - application-related, C-7
 - installing, C-5
 - power-up, C-1

U

- UNIX system, B-13
- UNIX system prompt, B-12
- unpack the platform, 2-11

- user interface
 - function keys, B-8

V

- video connector, 2-15
- video controller circuit card
 - function, 3-35
 - maximum installed, 3-35
 - types, 3-35
- VIS screen, example, B-2

W

- window, B-2

