

Lucent Technologies
Bell Labs Innovations



INTUITY CONVERSANT System

Version 6.0

Upgrade

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Comcode 107852329
Issue 1
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Comments

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Acknowledgment

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



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About This Book

Purpose

This book, *INTUITY™ CONVERSANT® System Version 6.0 Upgrade*, 585-310-183, describes the processes for upgrading to V6.0 of the INTUITY CONVERSANT system.

Intended Audiences

The primary audience for this document is the installer of the V6.0 upgrade. This includes

- On-site technicians who perform upgrades to V6.0 at the customer site
- End customers who choose to upgrade their own systems to V6.0
- Personnel from the Technical Service Organization (TSO) who support the on-site technician or customer who is performing an upgrade to V6.0

Release History

This is the first release of this book.

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How to Use This Book

This book is both a reference for information on upgrades to INTUITY CONVERSANT V6.0 and an installation manual for the upgrades engineer and technician.

To Use This Book as an Installation Manual

This book is designed to step you through the entire upgrade installation process, including prompts and system responses associated with the Platform Upgrade Assistance Package. If you are ready to start the upgrade now, turn to the appropriate checklist (Table 3-1 or Table 3-2) in Chapter 3 and complete all the steps in the order given. Check each task off when you are finished to ensure that you complete all of the necessary steps. The column titled "Where to Find the Required Information" directs you to where to look for help with any of the tasks. Most of the information is in this book, but to complete some of the steps, you will also need a copy of the maintenance book for the V6.0 target system. See "Related Resources" below for a list of titles and document numbers.

To Use This Book as a Reference

Read Chapter 1, "Introduction to Upgrades", for an overview of the upgrade process for V6.0 and a detailed discussion of the Platform Upgrade Assistance Package. Read Chapter 2, "Upgrade Planning and Prerequisites", for information on site preparation and the tools and other resources needed to complete the upgrade. Use the checklists in Chapter 3, "Upgrade Checklists", and refer to the information in Chapter 5, "Hardware Upgrades", and Appendix A, "Supplemental Procedures", as directed to see the exact process required to complete the upgrade. For a detailed description of the prompts and system responses displayed when you run the Platform Upgrade Assistance Program, see Chapter 4, "Performing the Upgrade". See Chapter 6, "Verification and Troubleshooting", for information on verification procedures and troubleshooting.

Appendix A, "Supplemental Procedures", provides information from other books in the INTUITY CONVERSANT library that the upgrade technician might also need to complete the upgrade. Appendix B, "Files Migrated as Part of an Assisted Upgrade", lists the files and directories that the Platform Upgrade Assistance Package automatically migrates from the source to the target system. Appendix C, "Package Mapping", includes tables that map the names of software packages in INTUITY CONVERSANT releases V3.1, 3.1.1, 4.0, and 5.0 to their equivalents in V6.0.

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.

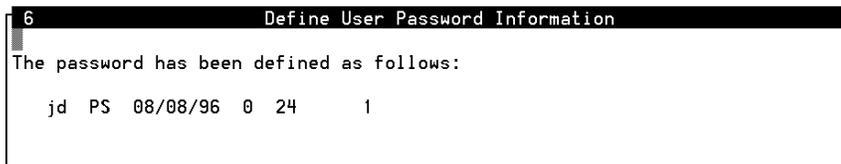


Figure 1. Example of an INTUITY CONVERSANT Window Showing Information

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 lines of text with input fields:

```
Enter the logical name of disk: _____
```

```
Enter jumper id of the disk being replaced (0-7): _
```

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

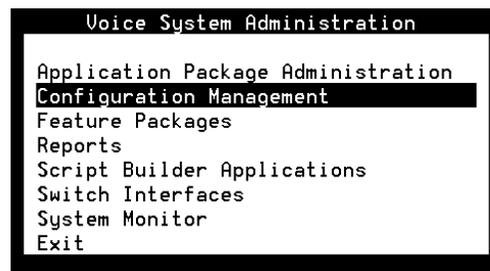


Figure 5. Example of an INTUITY CONVERSANT Menu

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 round 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:
The system displays the following message:

```
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 INTUITY CONVERSANT Main Menu and select

```
> Customer/Services Administration
```

```
> Alarm Management
```

In this example, you access the INTUITY CONVERSANT Main Menu and select the Customer/Service Administration menu. From the Customer/Service Administration menu, you then select the Alarm Management screen.

- The screens, windows, and menus shown in this book are examples only. Those 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 the INTUITY CONVERSANT system.

Documentation

 **NOTE:**

The *INTUITY™ CONVERSANT® System Version 6.0 System Description*, 585-310-241, contains a detailed description of all books included in the 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.

Required for the Upgrade

To complete an upgrade to V6.0, you must have a copy of this book, *INTUITY™ CONVERSANT® System V6.0 Upgrade*, 585-310-183, and the maintenance book specific to the platform of your target system:

- *INTUITY™ CONVERSANT® System Version 6.0 MAP/40 Maintenance*, 585-310-181
- *INTUITY™ CONVERSANT® System Version 6.0 MAP/100C Maintenance*, 585-310-180
- *INTUITY™ CONVERSANT® System Version 6.0 MAP/100 Maintenance*, 585-310-179

If your configuration includes an AYC21 E1/T1 circuit card *and* a DEFINITY switch, you will also have to refer to the installation book specific to your platform for connectivity instructions:

- *INTUITY™ CONVERSANT® System Version 6.0 MAP/40 New System Installation*, 585-310-178
- *INTUITY™ CONVERSANT® System Version 6.0 MAP/100C New System Installation*, 585-310-177
- *INTUITY™ CONVERSANT® System Version 6.0 MAP/100 New System Installation*, 585-310-176

Additional Suggested Documentation

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

- *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 on-line 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 an upgrade to a V6.0 INTUITY CONVERSANT system:

- Course no. BTT509H, INTUITY CONVERSANT Installation and Maintenance (for domestic installations)
- Course no. BTE509H, INTUITY CONVERSANT Installation and Maintenance (for international installations)

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

- Organizations within Lucent Technologies: (904) 636-3261
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For information on courses offered outside of the United States, call your local Lucent Technologies Center of Excellence.

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

Please mention the name and order number of this book,
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Introduction to Upgrades

1

Overview

This chapter provides an overview of the upgrade process for V6.0 and discusses the Platform Upgrade Assistance Package in detail.

Purpose

The purpose of this chapter is to introduce you to the process for upgrades of your current system (V3.1 and higher) to the INTUITY™ CONVERSANT® V6.0 product.

Overview of the V6.0 Upgrade Process

This section provides a high-level overview of the upgrade process in V6.0, including a description of the Platform Upgrade Assistance Package.

Assisted Software Upgrades

V6.0 continues the practice of assisted software upgrades. This practice was introduced in V4.0 and continued in V5.0 to simplify and shorten the upgrade process. Using the Platform Upgrade Assistance Package, the V6.0 release provides direct software upgrades from these previous releases:

- V5.0
- V4.0 and 4.0i
- V3.1 and 3.1.1

For more information on the assisted upgrade, see "The Platform Upgrade Assistance Package" below.

Supported Upgrade Scenarios

The following upgrade scenarios use the Platform Upgrade Assistance Package:

- Upgrade from V5.0, 4.0i, 4.0, 3.1, and 3.1.1 to V6.0 on a MAP/40/100/100C platform

Supported V6.0 upgrades do not include platform migration from a 6386 WGS to a MAP/40/100/100C.

Hardware Changes Required for Upgrades to V6.0

Every V6.0 upgrade except that from V5.0 without a CPU upgrade involves some kind of modification to hardware, for example, replacing an obsolete component or updating firmware on a component. Major hardware changes may be necessary on some systems since some previously supported configurations are being discontinued.

See Chapter 5, "Hardware Upgrades", for a complete list of all V6.0 hardware changes.

Software Changes Required for Upgrades to V6.0

Like V5.0, V6.0 uses a UnixWare operating system. This means that every field upgrade from a V4.0 or earlier system must include a full system reinstallation of the software. Also, any C-programs (such as custom application DIPs) in the system must be recompiled to be ANSI-C compliant. Any of the following applications present on the source system require recompilation and/or some modification:

- External functions and native-language script applications, that is, those written directly in transaction assembler script (TAS) code
- INTUITY Response Application Programming Interface (IRAPI) applications
- Graphical Designer applications
- Non-Lucent applications
- User logins
- cron and at jobs

The following add-on packages are not supported and must be removed:

- AUDIX® Voice Power™
- FAX Attendant
- Amigo Spanish Text-to-Speech (TTS)

Custom grammars must be upgraded for compatibility with V6.0. *Pre-V6.0 grammars will not work and must not be reinstalled on a V6.0 system.*

Script Builder applications are portable to V6.0 unless they include custom DIPs and/or Dial Pulse Recognition (DPR).

See "Files and Data" in Chapter 2, "Upgrade Planning and Prerequisites", for more information.

The Platform Upgrade Assistance Package

V6.0 software includes the Platform Upgrade Assistance Package, a software program designed specifically for performing an upgrade to V6.0. The Platform Upgrade Assistance Package is delivered on a single diskette for upgrades from pre-V5.0 systems and on two diskettes for upgrades from V5.0 systems. Once installed and running, it manages the installation of the V6.0 software and any INTUITY CONVERSANT optional packages you had installed on your source system that are also supported in V6.0.

As the name implies, the program "assists" you in completing an upgrade to V6.0. The program does *not* perform every step, nor can it run without user interaction. The program is divided into two parts.

Part 1, Source System

Part 1 of the Platform Upgrade Assistance Package completes Phase I of the upgrade on the source system.

Phase I

Phase I does the following:

- Asks questions to obtain information required to perform setup and other operations
- Gets the system configuration and parameter data required to determine reinstallation configuration and stores this information for later use
- Saves customer and other source system data, such as an identified set of user files, database information, applications (including speech), and configurations/parameter data

⇒ NOTE:

All speech stored on the source system is preserved *except* prerecorded speech associated with installable INTUITY CONVERSANT software programs. This speech is replaced when the V6.0 package is installed. See Appendix B, "Files Migrated as Part of an Assisted Upgrade", for a list of files and directories preserved.

⇒ NOTE:

Pre-V5.0 upgrades to V6.0 involve an operating system change that overwrites the existing contents of the disk and therefore removes all packages.

- Creates an installable package to be installed on the target system that includes all control and data files needed to complete the assisted upgrade procedure



NOTE:

The Platform Upgrade Assistance Package creates this installable package only when the upgrade includes a reload of the operating system.

Part 1 of the assisted upgrade also includes the following steps that you must perform manually:

- Obtain a target system configuration from the TSO or run the Hardware Resource Allocator program to produce one.
- Perform the required hardware upgrades and/or install CPU or tape drive firmware updates.
- Repartition the disk.
- Install the operating system software (including network software, if applicable).

Part 2, Target System

Part 2 of the Platform Upgrade Assistance Package completes Phases II through IV of the upgrade on the target system. Phases II through IV do the following:

Phase II

- Assists in installing the replacement of all INTUITY CONVERSANT packages (and backed-up ORACLE database tables) that were installed on the source system, taking into consideration order dependencies (The installation of these packages does not require the voice system to be running.)
- Rebuilds the operating system kernel and reboots the system

Phase III

- Installs the remainder of the packages to replace source system functionality (The installation of these packages requires the voice system to be running.)



NOTE:

For V6.0, no packages are installed in Phase III of the upgrade.

Phase IV

- Restores customer data, such as preserved user files, speech, applications, and configuration/parameters

- Prompts you for the restoration of custom grammars



NOTE:

Custom grammars must be restored manually.

- Performs upgrade conversion operations: converts Script Builder applications and attempts to verify and install them, and reports any native-language application script (TAS) incompatibilities

Hints for Using the Platform Upgrade Assistance Package

The following hints are specific to assisted upgrades, that is, those performed using the Platform Upgrade Assistance Package.

Help and Quit Options

All questions the upgrade assistance program asks provide help and quit options. Anytime you are prompted to enter data, you can enter **?** to access on-line help. Enter **q** to quit the upgrade at any point.



NOTE:

If you quit out of the upgrade during Part 1, you must start again from the beginning of the Platform Upgrade Assistance Package. (The program asks you to repeat everything you did up to the point where you quit.) If you quit out of the upgrade after the beginning of Part 2, you can begin again at the point where you left off.

Saving Program Output

The Platform Upgrade Assistance Package prints a large amount of output to the screen. In verbose operations, such as the listing of files the Platform Upgrade Assistance Package is copying to a tape, only one line displays on the screen. However, all screen information is written to the file **/usr/lib/upgrade/output.lst**. *It is strongly recommended that you save the screen output when the program presents you with this option.* It can be useful if it is necessary to review the upgrade for errors.

Tracing Upgrade History

The Platform Upgrade Assistance Package creates files in the **/usr/lib/upgrade** directory that keep track of its progress. These files can be useful in determining the upgrade history if needed for troubleshooting or upgrade verification. For more information, see the discussion of the **upg** command in *INTUITY™ CONVERSANT® System Version 6.0 Administration*, 585-310-591.

Accessing Local Commands

The upgrade assistance program may modify the path and/or environment in which you are running. If you need to access local commands from any shell controlled by the program (for example, the **CVIS.info** file containing configuration information), you may need to use full pathnames to access these commands.

Adding Packages or Hardware for Additional Functionality

The upgrade assistance program gives you an opportunity to install any hardware upgrade kits or firmware upgrades that are part of the upgrade scenario, and to swap out obsolete hardware. It *does not* give you an opportunity to add cards that provide additional functionality nor to add any new packages. You must install any additional packages or hardware components you want to add (such as token ring capability or SSP cards), after you complete the upgrade. However, be aware that replacement components and/or hardware you intend to add to your system may affect your target configuration. See Chapter 5, "Hardware Upgrades", for more information on hardware issues.

Upgrade Planning and Prerequisites

2

Overview

This chapter outlines what you need to do prior to performing an upgrade.

Purpose

A successful upgrade requires advance preparation by both the customer and Lucent Technologies personnel. Most of this preparation can be completed before the upgrade technician arrives at the customer site using the information in this chapter.

Customer Interface with the TSO

If Lucent Technologies will perform the upgrade, identify a person in your organization to serve as a contact to the Technical Services Organization (TSO) and the field technician assigned to your upgrade. This person should have a basic understanding of the operation of your system, including the applications installed. This person must be able to provide the following information to assist with the upgrade:

- Company name, installation location (IL) number, and the number and location of the machine(s) to be upgraded
- Modem dial-up number
- Passwords for root, install, ORACLE, Form Filler, etc.
- Current system information:
 - Platform type
 - Disk type and number of disks
 - Software version
 - What cards are installed
 - What software packages are installed
 - LAN addresses
 - Host information
- Number and type of applications currently installed and/or running on the system (especially custom DIPs, non-CONVERSANT packages, any nonstandard software, etc.)
- Software and upgrade resources available on site:
 - Blank tapes and/or floppies needed for the upgrade
 - Tapes and floppies containing packages to be upgraded

⇒ NOTE:

See "Performing a Software Inventory" below for a complete listing of the upgrade software you need on site.

Performing a Software Inventory

When you receive your V6.0 software, perform an inventory immediately. Compare the software against the contents of Table 2-1 and Table 2-2 and the list created by your service order. If there are any missing parts, call a Lucent Technologies customer service representative at 1-800-772-5409 to order them. You will need the order number and part number.

Table 2-1. UnixWare Base Software

Media	Package Name
Diskette	UnixWare for INTUITY Boot Floppy 1
	UnixWare for INTUITY Boot Floppy 2
	UnixWare for INTUITY Boot Floppy 3
	UnixWare for INTUITY Emergency Boot Floppy
Tape #1	UnixWare for INTUITY 1.1.2
	INTUITY UnixWare 1.1.2 Enhancement Set <ul style="list-style-type: none"> ■ INTUITY UnixWare 1.1.2 Platform Enhancements Extension ■ INTUITY Installit Utility ■ INTUITY Memory driver ed. C (CMemdrv) from Microport ■ INTUITY Process driver V1 from Microport
Diskette	VERITAS File System
	VERITAS Volume Manager
	VGA256 Video Driver for UnixWare
	Token Ring Hardware Support (optional)

Table 2-2. INTUITY CONVERSANT Base Software

Media	Package Name
Tape #2	<p>INTUITY CONVERSANT VIS V6.0 Set</p> <ul style="list-style-type: none"><li>■ INTUITY Utilities Package<li>■ INTUITY Runtime Processing Package<li>■ INTUITY Maintenance Package<li>■ INTUITY Logger/Alerter Package<li>■ INTUITY Base ORACLE RDBMS 7.0.12<li>■ INTUITY Extended ORACLE RDBMS 7.0.12 (optional)<li>■ INTUITY ORACLE 7 Integration Package<li>■ INTUITY Administration Screens Package<li>■ INTUITY Platform CONVERSANT Tuning<li>■ INTUITY Transaction State Machine Package

Preparing Your Source System

This section describes how to prepare the software and hardware on your source system prior to the upgrade to V6.0.

Files and Data

- Remove any obsolete files, applications, and speech that you do not want to move to your target system. For pre-V5.0 systems in particular, not all files will port to V6.0. Check the files in your home directories, especially the “dot” (.) files and those that use UNIX commands such as **face** and **cpio**, to determine if changes are required. If you are not sure what to change, use the defaults and rebuild the commands/files in the V6.0 environment.
- Make sure all the applications you intend to carry over to the target system compile and run on your source system (that is, no source code changes have been made since the applications were last updated/installed; all required speech is available, etc). If you are not sure if an application has changed, recompile and test it. *There must be no warning messages issued by the system during the verification of any application.*
- If you have an application that interfaces with a host computer and you are planning to use a separate link to test how the upgraded system works with the host, ensure proper operation of the link on your existing system before you connect it to the upgraded system. This will eliminate the link from the list of possible causes should there be a problem in the operation between the host and the INTUITY CONVERSANT system after the upgrade.
- If you have any C-language applications that use the **et_send** function to log error messages, you must convert these applications to work in the current logging environment, in which **logMsg** replaces **et_send**. This process requires that you
 1. Save the explain text on your source system.
 2. Restore it to the target system.
 3. Perform a *full* conversion after the upgrade to enable the application to produce logged messages that match the current message formats.

For detailed procedures, see "Upgrading Message Handling in DIPs" in Appendix A, "Supplemental Procedures".

NOTE:

This process requires specialized knowledge and could require some modification of the source code. Therefore, it must be performed by the developer of the original application or someone similarly qualified.

- In V6.0, fields have been added to the **/vs/data/sr_file** to which custom grammars add an entry; thus older formats are no longer compatible. Also, the data version of custom grammars require different filename suffixes, specifically, “**grm.seg**” for the Companion (CMP) circuit card and “**grm.seg.ssp**” for the Speech and Signal Processor (SSP) circuit card. Therefore, pre-V6.0 grammars will not work and must not be installed on your V6.0 system. If you have custom grammars, contact the provider of the grammar to obtain upgraded grammars and instructions on installing them.
- The upgrade assistance program does not back up or restore any packaged applications you may have on your source system. If you want these applications on your target system, you must:
 - Determine their compatibility with V6.0 (you may need to ask the software provider for assistance). If your current version of the application is not compatible, you will have to request a compatible replacement package from the software provider.
 - Use the back-up procedures specific to those packages to save the application(s) and any files associated with them.
- Back up any files that the Platform Upgrade Assistance Package does not migrate (see Appendix B, “Files Migrated as Part of an Assisted Upgrade”, for a list of what the program *does* migrate). *Do not rely on the mkimage tape to preserve these files for your upgrade.*



CAUTION:

Do NOT save programs created from C source code. All such programs must be recompiled.

- If you have
 - Applications written in native script language, that is, those written directly in transaction assembler script (TAS) code
 - Applications with custom database interface processes (DIPs)
 - INTUITY Response Application Programming Interface (IRAPI) applications
 - Graphical Designer applications
 - Custom external functions
 - Any other nonstandard files

you must move the source code into a subdirectory **/att/trans/sb** (or into **/vs/bin/ag/lib**) or copy it to a user's login ID directory so that the Platform Upgrade Assistance Package can restore the source code on the target system.

⇒ NOTE:

You may also request the TSO, SDO, or other Lucent Technologies service organization to upgrade these applications on a fee-for-service basis.

- Perform a system backup. Do this backup during off hours as close to the start of the upgrade as feasible, for example, a day or two before. For instructions, see the maintenance book for your source system platform.

Note that if disk mirroring is enabled, you must disable it before you create a `mkimage` tape. Do the following to check for the presence of mirroring on your system:

- On a V4.0 or V4.0i source system, enter `/etc/scsi/mirror`

The system displays the word `empty` if mirroring is not enabled.

- On a V5.0 source system, enter `volprint -hf`

The system displays a screen showing the current volume management configuration. A mirrored system will have two plexes (p1) for every volume (v), and the subdisk (sd) for every plex will be on a separate disk.

⇒ NOTE:

The `mkimage` command can take from 45 minutes to 2 hours to create the image tape. Several tapes may be required, depending on the amount of space used by your system. We recommend running this command during off-peak hours and using cartridge tapes as the back-up media, since backing up to floppy disk is also a time-consuming process.

- Disable mirroring if your source system has two SCSI disks and SCSI mirroring enabled. You cannot use the Platform Upgrade Assistance Program until you disable mirroring. For instructions see “Removing Mirroring” in Chapter 6, “Replacing the Hard Disk Drive”, of the maintenance book for your target system.
- If you have any user applications named
 - monitor
 - FFtemplate
 - transcribe
 - dc_sample
 - feature_tst

you *must* determine the talkfile each application uses, and perform a backup of the speech via Script Builder. The V6.0 INTUITY™ CONVERSANT® system also uses these application names, and thus they will not be brought forward from the source system.

- The upgrade procedure removes the Form Filler feature package. You must run the transcribe script and retrieve any caller responses that may be stored in the Form Filler database before you perform the upgrade.
- Call data is not carried forward nor can it be restored to the target system. If you want to preserve this information, print it out or otherwise save it prior to the upgrade.
- Complete the following procedure to save a listing of all the speech on your source system:
 1. Enter **list phrase all talkfile all>/tmp/phraselist**

The system creates the file **phraselist** with a list of all the speech phrases present on your source system.
 2. Insert a formatted diskette into the floppy disk drive.
 3. Enter **ls /tmp/phraselist | cpio -ocvBO /dev/rdisk/f0**

The system copies the file **phraselist** on the diskette.
 4. Label the floppy diskette "phraselist" and include the machine name and the date.

 **NOTE:**

If you are upgrading more than one machine, be sure to label *all* of the floppies or tapes you create with the machine name and the date.

- Before you start the Platform Upgrade Assistance Program, you must determine if the ORACLE database on the source system has been increased beyond the default size and if so by how much. This is so you can allocate the same amount of space on the target system when prompted. See "Determining the Size of the ORACLE Database" in Appendix A, "Supplemental Procedures", for instructions on how to access this information.

Hardware

- Clean your cartridge tape drive. Follow the instructions provided by the manufacturer.
- If you have a modem, administer it in case you should require remote technical support during the upgrade. See "Administering Modems" in Appendix A, "Supplemental Procedures".

Assembling What You Need

Assemble the items you need to perform the upgrade. The items you need depend on the upgrade scenario. Some of these items include:

- One or more blank cartridge tapes for the mkimage and up to three for the Platform Upgrade Assistance Program. These tapes must be compatible with the current type of cartridge tape unit (for example, 525 Mbyte or 2 Gbyte for SCSI units)



NOTE:

Lucent Technologies recommends the use of 3M brand cartridge tapes.

- Blank *formatted* floppy diskettes, including blank labels
- A pen, preferably with permanent ink
- A set of UnixWare operating system software (two diskettes and one tape; see Table 2-1)
- An INTUITY CONVERSANT applications tape (see Table 2-2)
- INTUITY CONVERSANT feature packages
- Target configuration information from the TSO
- Replacement hardware items, if any (see Table 5-1 in Chapter 5, "Hardware Upgrades")



NOTE:

If you are upgrading from a 486 CPU to a P5 120-MHz CPU, you can reuse the RAM from the 486 card on the P5 120-MHz card. However, P5 120-based systems require *matched pairs* of SIMMs that must be installed in a certain configuration depending on the amount of RAM. See "Replacing Defective Memory Modules" in Chapter 7, "Replacing Other Components", in the maintenance book for your target system for complete details.

- Hardware upgrade kits, if any (for example, a P5 120-MHz CPU with or without ESDI to SCSI) with the required tools
- Copies of the books applicable to your upgrade, as listed in "Related Resources" in the Chapter , "About This Book"

Required Reading

- Collect and read any articles from the ACCESS electronic bulletin board that apply to upgrades. For more information on ACCESS, see "Electronic Updates to This Book" in the Chapter , "About This Book" .

Overview

This chapter contains checklists that outline the upgrade process and post-upgrade requirements. These checklists list all steps in the process, numbered in the order in which you must perform them. They also tell you where to look for supplemental procedures or other information you might need.

Purpose

Use the checklists in this chapter to track your progress and ensure that you complete all the necessary steps in the required order. These checklists can also serve as a quick-reference guide for those already experienced with the upgrade process.

Checklists for Upgrades and Post-Upgrade Requirements

This chapter contains a series of checklists that take you step by step through the upgrade process and the post-upgrade requirements. Which of the checklists you use depends on the version of INTUITY™ CONVERSANT® from which you are upgrading and/or the specific configuration of your source and target systems.

To Complete the Upgrade

- Follow the steps listed in Table 3-1 to complete an upgrade from any of the following releases to V6.0:
 - V5.0 with an operating system reload



NOTE:

You must reload the operating system if your upgrade includes a platform migration; if you change or repartition the disk; or if as part of Step 3 in the installation checklist (Table 3-1), you install a P5 120-MHz CPU.

- V4.0i
 - V4.0
 - V3.1.1
 - V3.1
- Follow the steps listed in Table 3-2 to complete an upgrade from V5.0 to V6.0 that does *not* include any hardware changes.

V5.0 to V6.0 Filesystem Changes

The V6.0 filesystem structure differs from that of V5.0. Upgrading from V5.0 to V6.0 without an operating system reload leaves you with the V5.0 filesystem structure until the point at which you do a restore from a mkimage tape on your V6.0 system. *This does not affect the operation of your V6.0 system.* However, the following comparisons of filesystems and space requirements between the two releases are included for your information.

V5.0 Filesystem	V5.0 Space Requirements (Mbytes)	
	1.2-Gbyte Drive	1.7-Gbyte Drive
/root	340	400
/stand	10	10
/swap	65	65
/home	60	342
/home2	340	500
/dump	65	65
/var	100	100
/usr	200	200

V6.0 Filesystem	V6.0 Space Requirements (Mbytes)	
	1.7-Gbyte Drive	2.0-Gbyte Drive
/root	500	715
/stand	15	15
/dev/dump	65	65
/dev/swap	65	65
mtce	20	20
/vs	200	200
/oracle	200	200
/tmp	20	20
/voice1	500	600

For More Information

For additional important information on running the Platform Upgrade Assistance Package, be sure to read “Hints for Using the Platform Upgrade Assistance Package” in Chapter 1, “Introduction to Upgrades”.

Table 3-1. Checklist for Upgrades from V5.0 with an Operating System Reload, V4.0i, V4.0, V3.1.1, or V3.1 on a MAP/40/100/100C

Step	✓	Task	Where to Find the Required Information
1.		Complete the required upgrade prerequisites.	Chapter 2, "Upgrade Planning and Prerequisites"
2.		Complete Part 1 of the upgrade.	Steps 1–35 of "Upgrading from INTUITY CONVERSANT V5.0 with an Operating System Reload, V4.0i, V4.0, V3.1.1, or V3.1" in Chapter 4, "Performing the Upgrade"
3.		Upgrade hardware, as required.	Chapter 5, "Hardware Upgrades"
4.		<ul style="list-style-type: none"> ■ Install UnixWare. ■ Install VERITAS. ■ Install the SMC EtherCard driver (if the system has network capabilities). ■ Install the UnixWare 1.1.2 Enhancement Set. 	Steps 37–40 of "Upgrading from INTUITY CONVERSANT V5.0 with an Operating System Reload, V4.0i, V4.0, V3.1.1, or V3.1" in Chapter 4, "Performing the Upgrade"
5.		Complete Part 2 of the upgrade.	Steps 41–66 of "Upgrading from INTUITY CONVERSANT V5.0 with an Operating System Reload, V4.0i, V4.0, V3.1.1, or V3.1" in Chapter 4, "Performing the Upgrade"
6.		Perform the post-upgrade requirements.	Table 3-3 and Table 3-4 through Table 3-6 as appropriate
7.		Verify the upgrade.	"Verifying the Upgrade" in Chapter 6, "Verification and Troubleshooting"
8.		Perform a mkimage of your upgraded system.	"Backing up the INTUITY CONVERSANT System" in Chapter 3, "Common System Procedures", in the maintenance book for your target system
9.		Install additional hardware and software for new functionality.	Applicable chapters of the maintenance book for your target system

Table 3-2. Checklist for Upgrades from V5.0 without an Operating System Reload on a MAP/40/100/100C

Step	✓	Task	Where to Find the Required Information
1.		Complete the required upgrade prerequisites.	Chapter 2, "Upgrade Planning and Prerequisites"
2.		Complete Part 1 of the upgrade.	Steps 1–51 of "Upgrading from INTUITY CONVERSANT V5.0 without an Operating System Reload" in Chapter 4, "Performing the Upgrade"
3.		Complete Part 2 of the upgrade.	Steps 52–65 of "Upgrading from INTUITY CONVERSANT V5.0 without an Operating System Reload" in Chapter 4, "Performing the Upgrade"
4.		Perform the post-upgrade requirements.	Table 3-3 and Table 3-4
5.		Verify the upgrade.	Chapter 6, "Verification and Troubleshooting"
6.		Perform a mkimage of your upgraded system.	"Backing up the INTUITY CONVERSANT System" in Chapter 3, "Common System Procedures", in the maintenance book for your target system
7.		Install additional hardware and software for new functionality.	Applicable chapters of the maintenance book for your target system

Table 3-3. Checklist of Post-Upgrade Requirements for All Upgrades

If you upgraded from:	✓	Then you must:	Using the following:
Any source system		After all required data is restored, log off and log back on for the restored information to take effect.	
Any source system and you want to use V6.0 standard speech on the target system		Install the V6.0 standard speech software package on the target system	Chapter 11, "Installing the Optional Feature Software", in the maintenance book for your target system
Any source system with network capabilities		Readminister the network configuration.	The /etc/hosts and /etc/network files, and special 'ifconfig' entries in /etc/rc2.d/S86win386
Any source system with an SMC Ethernet card, an IBM Token Ring card, or both		Readminister TCP/IP	"Administering TCP/IP over Ethernet and Token Ring LANs" in Appendix A, "Supplemental Procedures"
Any source system with a user login called "install" that you want to also use on the target system		Use sysadm to recreate the user login called "install".	"Readministering Operating System Logins" in Appendix A, "Supplemental Procedures"
Any source system with user files manually preserved due to their nonstandard location		Restore user files manually preserved due to their nonstandard location on the source system.	"Restoring User Files" in Appendix A, "Supplemental Procedures"
Any source system with nonstandard user and non-CONVERSANT packages and files		Restore nonstandard user and non-CONVERSANT packages and files.	Instructions obtained from your software supplier

Continued on next page

Table 3-3. Checklist of Post-Upgrade Requirements for All Upgrades — Continued

If you upgraded from:	✓	Then you must:	Using the following:
Any source system with C-language applications using et_send that have not previously been converted <i>via full conversion</i> to the current logging environment ¹		Complete a <i>full conversion</i> to remove all et_send calls from the the source files.	“Upgrading Message Handling in DIPs” in Appendix A, “Supplemental Procedures”
Any source system with native language (TAS) applications		Recompile and/or reinstall native language (TAS) applications.	“Upgrading a TAS Application Script” and “Compiling a DIP” in Appendix A, “Supplemental Procedures”
Any source system with applications developed in Graphical Designer		Recompile and/or reinstall applications developed in Graphical Designer	“Installing a Graphical Designer Application,” in Appendix A, “Supplemental Procedures”
Any source system with ORACLE add-on packages (such as SQL*Forms)		Install the V6.0-supported version of the ORACLE add-on packages	Chapter 11, “Installing the Optional Feature Software”, in the maintenance book for your target system
		Restore any data or files associated with ORACLE add-on packages that you preserved from the source system.	“Restoring User Files” in Appendix A, “Supplemental Procedures”
Any source system on a MAP/100C		Administer alerter configuration settings on the target system.	The o.files in the /vs/etc/default/alerter and /vs/data/alarms directories

Continued on next page

Table 3-3. Checklist of Post-Upgrade Requirements for All Upgrades — Continued

If you upgraded from:	✓	Then you must:	Using the following:
Any source system with a customer application that used a reserved name (see “Files and Data” in Chapter 2, “Upgrade Planning and Prerequisites”)		Restore speech for applications backed up due to naming conflicts with INTUITY CONVERSANT package applications.	“Restoring Speech for User Applications Backed up due to Naming Conflicts with Package Applications” in Appendix A, “Supplemental Procedures”
Any source system with modified messages, destinations, priorities, or message thresholding, and/or added logger messages (in APPL message class)		Install the changes on the target system.	The o.files in the /usr/spool/log , /usr/spool/log/formats , and /usr/spool/log/head directories for reference (If no modifications were made on the source system, remove these o.files .)
Any source system with a modified 3270 host access helper program ²		Reapply any changes made to hostdip/helper program source code.	The o.helper.c and <other>.c and makefile in the /att/ag/hostdip/helper directory
Any source system with user-defined cron and/or at jobs		Readminister cron and at jobs.	Data preserved in o.files in /usr/spool/cron directories
Any source system with modem or printer capabilities		Readminister modems and printers.	Data preserved in the /usr/lib/upgrade/CVIS.info directory, if needed, and “Administering Modems” and “Administering Printers” in Appendix A, “Supplemental Procedures”

Continued on next page

Table 3-3. Checklist of Post-Upgrade Requirements for All Upgrades — Continued

If you upgraded from:	✓	Then you must:	Using the following:
Any source system with PRI		Readminister all cards in a D-channel group to have contiguous card numbers with the D channel on the first card.	“Administering PRI” in Appendix A, “Supplemental Procedures”
Any source system with WholeWord or FlexWord® speech recognition, Text-to-Speech, or Dial Pulse Recognition		Activate the licenses for these features.	Install and run the License Modification Package. Note: Only Lucent Technologies personnel are permitted to install this software package.
Any source system with SCSI mirroring		Readminister SCSI mirroring.	Steps 4–7 of “Establishing Mirroring” in Chapter 6, “Replacing the Hard Disk Drive”, in the maintenance book for your target system

1. If you have previously completed a *full* conversion of these files as part of an earlier upgrade to a pre-V6.0 release, it is not necessary to repeat it. However, if you performed a *transparent* conversion as part of an earlier upgrade, you must also complete a *full* conversion at this time. Transparent conversions are not supported and will not work in V6.0.
2. To determine if this program has been modified, check `/att/ag/hostdip/helper`. If (1) there are any new files besides `helper.o`, `extract.o`, or `makefile`, or (2) `extract.c` has been changed from the original, you must reapply the helper DIP changes.

Table 3-4. Checklist of Additional Post-Upgrade Requirements for Upgrades from V5.0 Systems

If you upgraded from:	✓	Then you must:	Using the following:
Any V5.0 source system with applications developed in IRAPI		<ol style="list-style-type: none"> 1. Search the application source files and replace the IRAPI function irsay() with the new version irFDSay(). 2. Recompile and retest the IRAPI applications. 	<ol style="list-style-type: none"> 1. vi or a comparable editor 2. "Compiling and Installing IRAPI Applications" in Appendix A, "Supplemental Procedures"
Any V5.0 source system with custom DIPs		Recompile and retest custom DIPs.	"Compiling a DIP" in Appendix A, "Supplemental Procedures"

Table 3-5. Checklist of Additional Post-Upgrade Requirements for Upgrades from Pre-V5.0 Systems

If you upgraded from:	✓	Then you must:	Using the following:
Any pre-V5.0 source system		Readminister operating system logins for users who had logins on the source system. Source system login ids are in the /etc/o.passwd file on the target system.	“Readministering Operating System Logins” in Appendix A, “Supplemental Procedures”
		Use the findhomes command to move the user login directory files brought forward by the upgrade program to the target system home directory for all source system users.	“Using the findhomes Command to Move User Login Files to the Home Directory on the Target System” in Appendix A, “Supplemental Procedures”
		Modify profiles for root and users from the system default as required.	The o.files (the <i>o.</i> version of the “dot” or hidden files from the login directories) on the source system in <i>/</i> and /home/login_id directories for reference

Table 3-6. Checklist of Additional Post-Upgrade Requirements for Upgrades from V4.0i Systems

If you upgraded from:	✓	Then you must:	Using the following:
Any V4.0i system with E1 cards		Manually redo any changes made to the source system .d1Parms file if you also want those changes on the target system.	The o.d1Parms file in the vs/switches/digital/pkg directory for the appropriate switch
Any V4.0i system that includes an ISDN PRI package used with an ACULAB circuit card		Modify the ISDN PRI parameters.	<ol style="list-style-type: none"> 1. Using vi, edit /vs/data/pri/pri.rc as described in /vs/man/cat4/pri.rc.4 2. Set the FLAG value to 0x19 to include the AFLG_IGN_CMP flag as well as other default flags. 3. Set the NPI_TOA parameter to 0x22 (for NAT_TEL) or to another suitable value.

Performing the Upgrade

4

Overview

This chapter provides step-by-step procedures for upgrades to an INTUITY CONVERSANT V6.0 system from

- INTUITY CONVERSANT V5.0 with an operating system reload, V4.0, V4.0i, V3.1, or V3.1.1
- INTUITY CONVERSANT V5.0 without an operating system reload

You must reload the operating system if your upgrade includes a platform migration; if you change or repartition the disk; or if as part of Step 3 in the installation checklist (Table 3-1), you install a P5 120-MHz CPU.

Purpose

The purpose of this chapter is to document the prompts and screens associated with the Platform Upgrade Assistance Package.

Upgrading from INTUITY CONVERSANT V5.0 with an Operating System Reload, V4.0, V4.0i, V3.1, or V3.1.1

⇒ NOTE:

Use the upgrade program diskette labeled "V4.0 Platform Upgrade Assistance Package" to perform any of the upgrades listed above.

1. Insert the diskette labeled "V4.0 Platform Upgrade Assistance Package" into the drive.

2. Enter **installpkg**

The system displays the following message:

```
Please indicate the installation medium you intend to use.
```

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

```
Strike ESC to stop.
```

3. Enter **f**

The system displays the following message:

```
Please insert the floppy disk.
```

```
If the program installation requires more than one  
floppy disk, be sure to insert the disks in the proper  
order, starting with disk number 1.
```

```
After the first floppy disk, instructions will be  
provided for inserting the remaining floppy disks.
```

```
Strike ENTER when ready  
or ESC to stop
```

4. Press **[ENTER]**.

The system displays the following message:

```
Installation is in progress -- do not remove the  
floppy.
```

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

```
Installation of the upgrade assistance package is  
complete. To start (or continue) upgrade procedure,  
enter:
```

```
/usr/lib/upgrade/bin/upg
```

```
If this is the second stage of the upgrade, it will  
pickup from where it left off after stage one.
```

The installation of the INTUITY Software Upgrade Assistance Pkg is now complete

5. At the UNIX prompt, enter **who -r**

The system displays the following message:

```
run level 4 Nov 14 12:07 2 0 3
```

6. If the run level is not 4, start the voice system. See "Starting the Voice System" in Chapter 3, "Common System Procedures", in the maintenance book for your target system for the procedure.

If the run level is 4, skip this step and continue with Step 7.

7. At the UNIX prompt, enter **/usr/lib/upgrade/bin/upg**

The system displays the following message:

```
Do you have any Upgrade Add-on disks you wish to install  
now? (y/n) [n]
```

8. Press **(ENTER)**.

The system displays the following message:

```
Select the Floppy Drive to be used to make any floppies:  
1) drive 0  
2) drive 1  
Enter selection: [1]
```

9. Press **(ENTER)**.

The system displays the following message:

```
Type of Floppy Drive:  
1) 3.5", 1.44 megabyte  
2) 5.25, 1.2 megabyte  
Enter selection: [1]
```

10. Press **(ENTER)**.

The system displays the following message:

```
Select the backup device:  
1) cartridge tape (c0s0)  
2) floppy  
Enter selection: [1]
```

11. Press **(ENTER)**.

The system displays the following message:

```
Cartridge tape drive capacity:  
1) 60 megabyte  
2) 120 megabyte  
3) 150 megabyte  
4) 525 megabyte  
5) 2 gigabyte  
Enter selection: [3]
```

12. If your system is an ESDI system, enter **3**
If your system has a Wangtek drive, enter **4**
If your system has a Tandberg drive, enter **5**



NOTE:

See "Types of Cartridge Tape Drives" in Chapter 3, "Common System Procedures", in the maintenance book for your target system for tape drive identification procedures.

The system extracts the configuration information. The system displays a series of messages then the following message:

```
The file "/usr/lib/upgrade/CVIS.info" contains the
configuration data just gathered. You will need to be
able to view this information during the reinstallation
of packages phase of the assisted upgrade.
```

```
You should either print this file or transfer it to
another machine, where you can access the file while
you continue to run the assisted upgrade procedure.
```

```
Do you want access to "ksh" to do this now? (y/n) [y]
```

13. Press **(ENTER)**.

The system displays the following message:

```
Enter "upg" to continue the upgrade
```

14. If you want to print the file, enter **lp /usr/lib/upgrade/CVIS.info**

If you want to transfer the file, use either the **cpio** or the **rcp** command. See Appendix A, "Summary of Commands", in *INTUITY CONVERSANT System Version 6.0 Administration*, 538-310-591, for more information on these commands.

The system displays the following message:

```
Enter "upg" to continue the upgrade
```

15. Enter **upg**

The system displays the following message:

```
Stop Voice System or Quit Upgrade
 1) stop Voice System and continue upgrade
 2) quit upgrade
Enter selection: [1]
```

16. Press **(ENTER)**.

The system displays the following message:

```
The Voice System is now stopping
Initiating request to clear all calls in the next 10
seconds.
```

Orderly idling of system succeeded
sb_logoff: all sessions are unassigned. no need to
logoff.

After the Voice System has completely stopped, use the
"Start Voice System" choice from the System Control
menu to restart the Voice System.

...Stopping the ORACLE database.....

Determining the amount of space required by the
parameter, data, user, and application files being
saved and restored by the upgrade procedure. Please be
patient. The amount of time required to perform this
job depends upon the size of your system, the number of
users, etc. It may take 10 minutes or more to
complete...

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

Determining the size of the database...XXXX blocks
You will need X tape(s) and 1 formatted floppy.

Do you have 1 formatted floppy? (y,n) [y]

17. Press **ENTER**.

The system displays the following message:

Label tape "Speech Backup: 1", place in drive, and
press <Enter>:

18. Label a cartridge tape.
19. Insert the cartridge tape into the drive.
20. Press **ENTER**.

The system displays the following message:

Customer and application speech will be preserved by
this procedure. Pre-recorded speech associated with
standard CONVERSANT packages will not be saved. This
will avoid conflicts with V6.0 speech which will be
loaded when the associated CONVERSANT packages are
installed.

Retensioning the cartridge tape...

Enter c when ready:

21. Enter **c**

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

```
Speech Backup is done
Please remove the tape and label it as Tape#1
Speech file system backup complete.
```

```
Please remove the cartridge tape now.
```

22. Remove the cartridge tape from the drive.

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

```
Label tape "ORACLE Backup: 1", place in drive, and
press <Enter>:
```

23. Label a cartridge tape.
24. Insert the cartridge tape into the drive.
25. Press **ENTER**.

The system displays the following message:

```
Retensioning the cartridge tape...
Saving ORACLE Database
```

```
Wait until the disk/tape activity stops before removing
the tape. Set the tape aside for later and press enter.
```

26. Remove the cartridge tape.
27. Press **ENTER**.

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

```
It is now time to start removing old packages of
software in preparation for reinstallation of the new
packages.
```

```
Label a free tape "Upgrade Save Files: 1", insert it in
the tape drive, and press <Enter>:
```

28. Label a cartridge tape as described.
29. Insert the cartridge tape into the drive.
30. Press **ENTER**.

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

```
Backup of UNIX files complete.
```

```
Creating installable floppy for next stage of upgrade.
Insert floppy into drive 0 and press <Enter>:
```

31. Insert the diskette into the drive.
32. Press **ENTER**.

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

Remove floppy & label: "Upgrade, Phase II -- use
installpkg to install". Set it aside for later

Press <Enter>:

33. Remove the diskette from the drive.
34. Label the diskette.



NOTE:

This concludes Part 1 of the upgrade. Check off the completion of
Step 2 in the checklist (TbTable 3-1).

35. Press **ENTER**.

The system displays the following message:

This phase of the upgrade is now complete. Read the
following multi-page message

You have indicated that you are going to repartition
the hard disk, install new disk hardware and/or reload
the operating system. Also hardware changes may be
required to make your system capable of running V6.0.
You must perform these activities manually now.

Refer to	For more information on
-----	-----
Intuity CONVERSANT VIS V6.0 Upgrades	Hardware modifications required

Intuity CONVERSANT VIS <MAP40 or MAP100[C]> Maintenance and/or applicable installation documentation	details on hardware installation procedures, as procedures, as required
--	---

Once you have accomplished these steps insert the disk
labeled

"Upgrade, Phase II"

into your floppy drive, and enter "installpkg". You
will then be given direction to complete the upgrade
procedures, which begin when you enter

/usr/lib/upgrade/bin/upg

36. Replace the hardware. Go to Step 3 in the checklist (Table 3-1) for the
information you need, complete this step, check it off, and then return here
and continue with Step 37.
37. Install the base system software. See "Installing Base System Software"
Chapter 9, "Installing Base System Software", in the maintenance book for
your target system and complete those procedures *with the following
exceptions*:

- If you are upgrading from V4.0, you must delete the existing UNIX system partition and recreate it. In the procedure “Initializing the Hard Disk Drives”, the second screen you see is the Hard Disk Partitioning–Disk 1 screen. Instead of selecting option 3 as the procedure directs you, select option 2 to delete a partition and follow the prompts to create a 100 percent UNIX partition. Complete the remainder of the procedure as it is written.

 **NOTE:**

Recreating the UNIX partition is necessary only if you are upgrading from V4.0.

- In the procedure “Installing the Application Server”, after you have inserted the cartridge tape labeled “INTUITY CONVERSANT VIS V6.0 UnixWare for INTUITY 1.1.2”, the second screen you see is the Verification Screen. This screen asks you to select the packages you want to install. You must select NO for the Network Support Utilities Package because SMC drivers and setup are not done at this point in the upgrade process.

38. Install the Veritas software. See “Installing the VERITAS Software Packages” in Chapter 9, “Installing Base System Software”, in the maintenance book for your target system.
39. If your system has a LAN circuit card, install the LAN circuit card driver. See “Installing a Version 2 LAN Circuit Card” in Chapter 5, “Replacing, Installing, and Upgrading Circuit Cards”, in the maintenance book for your target system.
40. Install the UnixWare Enhancement Set. See “Installing Base System Software” in Chapter 9, “Installing Base System Software”, in the maintenance book for your target system.

Go to Step 4 in the checklist (Table 3-1), check it off, and then return here and continue with the Step 41.

41. Insert the diskette labeled “Upgrade, Phase II -- use installpkg to install” into the drive.
42. Enter **installpkg**

The system displays the following message:

```
Please indicate the installation medium you intend to use.
```

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

```
Strike ESC to stop.
```

43. Enter **f**

The system displays the following message:

```
Please insert the floppy disk.
```

If the program installation requires more than one floppy disk, be sure to insert the disks in the proper order, starting with disk number 1.

After the first floppy disk, instructions will be provided for inserting the remaining floppy disks.

Strike ENTER when ready
or ESC to stop

44. Press **ENTER**.

The system displays the following message:

Installation is in progress -- do not remove the floppy.

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

Installation of the upgrade assistance package is complete. To start (or continue) upgrade procedure, enter:

`/usr/lib/upgrade/bin/upg`

If this is the second stage of the upgrade, it will pickup from where it left off after stage one.

The installation of the INTUITY Software Upgrade Assistance Pkg is now complete

45. Enter **usr/lib/upgrade/bin/upg**

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

This system, UNIX_SV does not have the same name as the system upon which the upgrade began, XXX

Press <Enter> to reset this system name UNIX_SV to the original source system name XXXX, or type the new system name then press <ENTER>: [XXXX]

46. Press **ENTER**.

The system displays the following message:

The system name is set to XXXX

Are you sure you want to continue phase II of the upgrade on this system? (y/n) [n]

47. Enter **y**

The system displays the following message:

Use information in `/usr/lib/upgrade/CVIS.info` and the configuration data provided to you by the TSO to answer the questions you are asked for individual package installations.

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

Installation of 1 package(s) is now going to be made from the Distribution Tape labeled:

“Platform CVIS Set”

Place the requested cartridge tape in drive and press <Enter>:

48. Place the tape in the drive.

49. Press **ENTER**.



CAUTION:

Do not press enter a second time. Continue directly with Step 50.

50. Complete Steps 4 through 7 of “Installing the INTUITY CONVERSANT Base Software Set” in Chapter 10, “Installing the INTUITY CONVERSANT System Software”, in the maintenance book for your target system.

51. At the completion of the INTUITY CONVERSANT system software installation, the system displays the following message:

*** IMPORTANT NOTICE***

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

The UNIX Operating System kernel will be rebuilt to include your configuration changes during the next system reboot.



NOTE:

The system reboots automatically. This is a deviation from the procedure outlined in Chapter 10, “Installing the INTUITY CONVERSANT System Software”, in the platform maintenance book.

After the system reboot, the system displays the following message:

NOTICE: Prior to the VIS 5.0 release, the analog tip/ring driver was bundled with the base application software. In VIS 5.0 and later, the tip/ring driver is a separate installable package. To accommodate systems with and without the need for this driver, an opportunity is given here to escape to a Unix shell in order to manually install the tip/ring driver and any country-specific switch integration packages desired.

Do you want to install the tip/ring driver now? (y/n)
[y]

52. If your system does not have Tip/Ring circuit cards, enter **n** and continue with Step 54.

If your system has Tip/Ring circuit cards, enter **y**

The system displays the following message:

```
You are being placed in the "ksh", to manually install  
the tip/ring driver.
```

```
To continue the upgrade, enter "upg"
```

53. Load the Tip/Ring circuit card driver. See Chapter 5, "Replacing, Installing, and Upgrading Circuit Cards," in the maintenance book for your target system for the procedure.

54. Enter **upg**

```
Do you want to add an additional file for the "SYSTEM"  
tablespace? (y/n) [n]
```

55. If the size of the ORACLE database on your system is greater than 65 Mbytes, complete the following Steps a through c:

- a. Enter **n**

The system displays the following message:

```
Name of file:
```

- b. Enter a name of the file.

 **NOTE:**

Follow the convention of adding a **.db** suffix to this file name.

The system displays the following message:

```
Size of file in kilobytes:
```

- c. Enter a size necessary for the file.

If the size of the ORACLE database on your system is not greater than 65 Mbytes, enter **n**

The system displays the following message:

```
Place the tape labeled "ORACLE Backup: 1" in the tape  
drive and press <Enter>:
```

56. Insert the cartridge tape into the drive.

57. Press **(ENTER)**.

The system displays a series of messages and then a message similar to the following message for every feature package installed on your system:

```
Find the installation floppies labeled:
```

```
"Switch Utilities Package"
```

```
Insert the first floppy and press <Enter>
```

58. Complete Steps a through e for every feature package to be installed on your system. See Chapter 11, "Installing Optional Feature Packages", in the maintenance book for your target system for more information.



NOTE:

If you do not want to add a particular package, enter **q** when you are asked to install it.

- a. Insert the diskette into the drive.
- b. Press `ENTER`.

The system displays the following message:

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

- c. Press `ENTER`.

When the system has completed the installation of the feature package, it displays the following message:

```
Make sure the last floppy has been removed and  
press <Enter>:
```

- d. Remove the diskette from the drive.
- e. Press `ENTER`.

If there is an additional feature package to install, the system displays a message similar to the following:

```
Find the installation floppies labeled:
```

```
  "Switch Utilities Package"
```

```
Insert the first floppy and press <Enter>
```

Repeat Steps a through e above.

If the system has completed the installation of the last feature package and your system has the host feature package, it displays the following message:

```
Installation of X package(s) is now going to be  
made from the Distribution Tape labeled:
```

```
  "LINKix (<number> packages)"
```

```
Place requested cartridge tape in drive and press  
<Enter>:
```

Install the host feature package. See Chapter 11, "Installing Optional Feature Software," in your platform maintenance book.

If the system has completed the installation of the last feature package, the system displays the following message:

All files saved prior to the upgrade will now be restored or merged with the upgraded system.

Place the tape labeled "Upgrade Save Files: 1" in the tape drive and press <Enter>:

59. Insert the tape into the tape drive.

60. Press **ENTER**.

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

Starting Speech Restoration. Insert the "SPEECH Files Backup: 1" tape into drive and press <Enter>.

61. Insert the tape into the tape drive.

62. Press **ENTER**.

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

Please insert tape #1...then type <enter> to continue.

63. Press **ENTER**.

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

Processing all files that need additional changes to upgrade and/or merge them into the new system.

The original file for the files that have been changed during this upgrade has been saved in /vs/data directory as o.filename.

Check these changes by comparing the entries for the files under /etc/conf/init.d with the o.filename to insure that they are correct. An old /vs/data/CONVERSANT file from your source machine has been saved in /vs/data/o.CONVERSANT

The system begins restoring talkfiles and displays the following message:

NOTICE: If you have any CUSTOM GRAMMARS to load, they must be loaded now, prior to converting and verifying ScriptBuilder applications in the next step. You are given the opportunity here to escape to the shell prompt in order to load custom grammars or anything else deemed necessary prior to the ScriptBuilder conversion step.

Do you want to load any custom grammars now?

⚠ CAUTION:

The custom grammars must be V6.0 grammars. Pre-V6.0 grammars will not work and must not be loaded.

64. If your system does not have custom grammars, enter **n**

The system displays the following message:

```
Script Builder applications will now be upgraded. Do
you want the upgrade to be run in Compatibility Mode?
  1) Minimum compatibility mode - errors only
  2) Full compatibility mode - errors and warnings
  3) Non-compatibility mode - Tell me everything!
Enter selection: [2]
```

If your system has custom grammars, complete the following Steps a through c.

⚠ CAUTION:

Failure to load custom grammars at this point will result in errors.

- a. Press **(ENTER)**.

The system displays the UNIX prompt.

- b. Load the custom grammars.

- c. Enter **upg**

The system displays the following message:

```
Script Builder applications will now be upgraded.
Do you want the upgrade to be run in Compatibility
Mode?
  1) Minimum compatibility mode - errors only
  2) Full compatibility mode - errors and
    warnings
  3) Non-compatibility mode - Tell me
    everything!
Enter selection: [2]
```

65. Enter **3**

The system starts the voice system, converts the Script Builder applications, and then displays the following message:

```
You have completed the assisted portion of this upgrade
from VIS Version 4 to VIS V6.0. However, this does NOT
complete your upgrade. There are several additional
steps you need to perform manually. (Depending on your
source and target scenarios, there may be many
additional steps.)
```

The manual steps required to complete your upgrade are listed in the checklist in the Intuity CONVERSANT VIS V6.0 Upgrades document.

Carefully review this checklist. It is important that you perform all listed steps which apply to your scenario. Follow the procedures described, making reference, as necessary to other documents in the Intuity CONVERSANT VIS V6.0 document set. Remember that the upgrade history files,

/usr/lib/upgrade/output.lst
/usr/lib/upgrade/filesList, etc.

as well as files named "o.<file>" in other directories (which were brought from your source system by the upgrade tool), are available to help you to administer your target system.

Once you have performed the manual completion steps, verify your upgrade. Some steps which might help you perform this verification are included in the Verification and Troubleshooting chapter of the Upgrades document.

When you are satisfied that your upgrade is complete, backup your target system according to the backup procedures described in the Intuity CONVERSANT VIS V6.0 Maintenance document.

Press <Enter>:

66. Press **ENTER**.

The system displays the system prompt.

This concludes Part 2 of the upgrade. Check off the completion of Step 5 in the upgrade checklist (Table 3-1). To finish the upgrade to V6.0, go back to the checklist and complete Steps 6, 7, 8, and (if applicable) Step 9.

Upgrading from INTUITY CONVERSANT V5.0 without an Operating System Reload

1. Insert the diskette labeled "INTUITY Platform Upgrade Assistance Package 1 of 2" into the diskette drive.

2. Enter **pkgadd -d diskette1**

The system displays the following message:

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

3. Press **ENTER**.

The system displays the following message:

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

The following packages are available:

```
1  pltupg  INTUITY Platform Upgrade Assistance  
          Package  
          (pentium)
```

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

4. Press **ENTER**.

The system displays the following message:

```
PROCESSING:  
Package: INTUITY Platform Upgrade Assistance Package  
(pltupg)
```

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

```
READY TO PROCESS:  
Package: INTUITY Platform Upgrade Assistance Package  
(pltupg) diskette 2 of 2
```

```
Insert diskette 2 of 2 into Floppy Drive 1.  
Type [go] when ready,  
    or [q] to quit: (default: go)
```

5. Remove the diskette labeled "INTUITY Platform Upgrade Assistance Package 1 of 2" from the diskette drive.
6. Insert the diskette labeled "INTUITY Platform Upgrade Assistance Package 2 of 2" into the diskette drive.
7. Press **ENTER**.

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

Installation of INTUITY Platform Upgrade Assistance
Package (pltupg) was successful.

Insert diskette into Floppy Drive 1.

Type [go] when ready,
or [q] to quit: (default: go)

8. Remove the diskette labeled "INTUITY Platform Upgrade Assistance
Package 2 of 2" from the diskette drive.

9. Enter **q**

The system displays the system prompt.

10. At the Unix prompt, enter **/usr/lib/upgrade/bin/upg**

The system displays the following message:

Responses to all questions are processed when the
<Enter> key is pressed. (This key may be labeled "RET"
or "Return" on some keyboards.)

After questions, values within ()s are the list of
possible choices, e.g. (y/n), and a value within []s is
the default choice, e.g. [n], which is selected by
pressing the <Enter> key.

When answering any questions during this procedure, the
response:

? produces detailed help about the question currently
being asked.

q causes you to immediately exit from the upgrade
procedure.

You will need to know what device is to be used to back
up files and have a supply of backup media. After the
first couple of questions, you will be informed as to
the amount and types of backup media required.

If you are upgrading an active machine, it is **HIGHLY
RECOMMENDED** that a backup be performed as part of the
upgrade procedure.

Do you need to do a backup now? (y/n) [y]

11. Press **ENTER**.

The system displays the following message followed by the system
prompt:

To do a backup, it is necessary to quit this upgrade
procedure temporarily in order to execute the mkimage
command. When you see the shell prompt, enter the
command:

```
mkimage
```

This will cause the system to go to run level 1 at which time you should enter the `mkimage` command again to do a full system backup. When this operation is complete go to run level 4 and execute the upgrade procedure again.

12. Enter **mkimage**

See “**mkimage**” in *INTUITY™ CONVERSANT® System Version 5.0 Command Reference*, 585-310-230, for the procedure.

13. When the `mkimage` process is complete, start the voice system. See “Starting the Voice System” in Chapter 3, “Common System Procedures”, in the maintenance book for your target system for the procedure.

14. Enter **/usr/lib/upgrade/bin/upg**

The system displays a message informing you to remove the update and patch packages.

15. Press **(ENTER)**.

The system displays the UNIX prompt.

16. Remove the package labeled “Spadm Audio Click” by completing the following Steps a through e:

a. Enter **pkgrm**

The system displays a list of all of the packages installed on the system.

b. Press **(ENTER)** to scroll through the list until you locate the Spadm Audio Click patch package.

c. Press **(CONTROL) (D)** to stop the display.

d. Enter the number next to the Spadm Audio Click patch package.

The system displays the following message:

```
The following packages are currently installed:
```

```
  1  spdm      Intuity CONVERSANT VIS V5.0
                SB/Spadm Audio/Click Patch
```

```
Do you want to remove this package [y,n,?,q]
```

e. Enter **y**

The system displays a series of messages and then the system prompt.

17. Remove the package labeled “Synch Host Update 1” by completing the following Steps a through e:

a. Enter **pkgrm**

The system displays a list of all of the packages installed on the system.

b. Press **(ENTER)** to scroll through the list until you locate the Synch Host Update 1 package.

- c. Press **CONTROL** **D** to stop the display.
- d. Enter the number next to the Synch Host Update 1 package.

The system displays the following message:

```
The following package is currently installed:
synchost1  Intuity CONVERSANT VIS V5.0 Synchronous
           Host Interface Package Update 1
           (i486) 5.0
```

```
Do you want to remove this package [y,n,?,q]
```

- e. Enter **y**

The system displays a series of messages and then the system prompt.

- 18. Some systems may also have a synchronous host update package installed labeled "Synch Host Update 2". If this is installed on your system, remove it by completing the following Steps a through e:

- a. Enter **pkgrm**

The system displays a list of all of the packages installed on the system.

- b. Press **ENTER** to scroll through the list until you locate the Synch Host Update 2 package.
- c. Press **CONTROL** **D** to stop the display.
- d. Enter the number next to the Synch Host Update 2 package.

The system displays the following message:

```
The following package is currently installed:
synchost2  Intuity CONVERSANT VIS V5.0 Synchronous
           Host Interface Package Update 2
           (i486) 5.0
```

```
Do you want to remove this package [y,n,?,q]
```

- e. Enter **y**

The system displays a series of messages and then the system prompt.

- 19. Remove the package labeled "Tip/Ring Update 1" by completing the following Steps a through c:

- a. Enter **removepkg**

The system displays a list of the packages installed and asks you to enter a number corresponding to the package you want to remove.

- b. Enter the number next to the Tip/Ring Update 1 package.

The system displays the following message:

```
Confirm
```

Insert the removable medium for the Tip/Ring Update 1 you wish to remove.

Strike ENTER when ready or ESC to stop.

c. Press **ENTER**.

20. Remove the package labeled "Application Update 1" by completing the following Steps a through c:

a. Enter **removepkg**

The system displays a list of the packages installed and asks you to enter a number corresponding to the package you want to remove.

b. Enter the number next to the Application Update 1 package.

The system displays the following message:

Confirm

Insert the removable medium for the Application Update 1 you wish to remove.

Strike ENTER when ready or ESC to stop.

c. Press **ENTER**.

21. Remove any additional update and patch packages contained on your system.

22. After you have removed the updates and patches, enter **/usr/lib/upgrade/bin/upg**

The system displays the following message:

Responses to all questions are processed when the <Enter> key is pressed. (This key may be labeled "RET" or "Return" on some keyboards.)

After questions, values within ()s are the list of possible choices, e.g. (y/n), and a value within []s is the default choice, e.g. [n], which is selected by pressing the <Enter> key.

When answering any questions during this procedure, the response:

? produces detailed help about the question currently being asked.

q causes you to immediately exit from the upgrade procedure.

You will need to know what device is to be used to back up files and have a supply of backup media. After the first couple of questions, you will be informed as to the amount and types of backup media required.

If you are upgrading an active machine, it is HIGHLY RECOMMENDED that a backup be performed as part of the upgrade procedure.

Do you need to do a backup now? (y/n) [y]

23. Enter n

The system displays the following message:

Do you want to exit the upgrade procedure now to run CDH reports? (y/n) [y]

24. Enter n

The system displays the following message:

Do you want to save a copy of the screen interactions during the upgrade procedure? It is strongly recommended that you do so. (y/n) [y]

25. Press **ENTER**.

The system displays the following message:

Do you have any Upgrade Add-on disks you wish to install now? (y/n) [n]

26. Press **ENTER**.

The system displays the following message:

Select the Floppy Drive to be used to make any floppies:

1) drive 0

2) drive 1

Enter selection: [1]

27. Press **ENTER**.

The system displays the following message:

Type of Floppy Drive:

1) 3.5", 1.44 megabyte

2) 5.25, 1.2 megabyte

Enter selection: [1]

28. Press **ENTER**.

The system displays the following message:

Select the backup device:

1) cartridge tape (c0s0)

2) floppy

Enter selection: [1]

29. Press **ENTER**.

The system displays the following message:

Cartridge tape drive capacity:

- 1) 60 megabyte
- 2) 120 megabyte
- 3) 150 megabyte
- 4) 525 megabyte
- 5) 2 gigabyte

Enter selection: [3]

- 30. If your system is an ESDI system, enter **3**
If your system has a Wangtek drive, enter **4**
If your system has a Tandberg drive, enter **5**



NOTE:

See "Types of Cartridge Tape Drives" in Chapter 3, "Common System Procedures", in the maintenance document for your target system for tape drive identification procedures.

The system extracts the configuration information. The system displays a series of messages then the following message:

The file `"/usr/lib/upgrade/CVIS.info"` contains the configuration data just gathered. You will need to be able to view this information during the reinstallation of packages phase of the assisted upgrade.

You should either print `/usr/lib/upgrade/CVIS.info` or transfer it to another machine, where you can access the file while you continue to run the assisted upgrade procedure.

Do you want access to "ksh" to do this now? (y/n) [y]

- 31. Press **(ENTER)**.

The system displays the following message:

Enter "upg" to continue the upgrade

- 32. If you want to print the file, enter **lp /usr/lib/upgrade/CVIS.info**

If you want to transfer the file, use either the **cpio** or the **rcp** command. See Appendix A, "Summary of Commands", in *INTUITY CONVERSANT System Version 6.0 Administration*, 538-310-591, for more information on these commands.

The system displays the following message:

Enter "upg" to continue the upgrade

- 33. Enter **upg**

The system displays the following message:

```
Stop Voice System or Quit Upgrade
  1) stop Voice System and continue upgrade
  2) quit upgrade
Enter selection: [1]
```

34. Press **ENTER**.

The system displays the following message:

```
The Voice System is now stopping
Initiating request to clear all calls in the next 10
seconds.
```

```
Orderly idling of system succeeded
sb_logoff: all sessions are unassigned. no need to
logoff.
```

After the Voice System has completely stopped, use the "Start Voice System" choice from the System Control menu to restart the Voice System.

```
...Stopping the ORACLE database.....
```

```
Will you be moving to a different Conversant VIS
hardware platform? (y/n) [n]
```

35. Press **ENTER**.

The system displays the following message:

```
Will you be replacing or repartitioning your current
disk, or reloading the operating system? (y/n) [n]
```

36. Enter **n**

The system displays the following message:

```
Determining the amount of space required by the
parameter, data, user, and application files being
saved and restored by the upgrade procedure. Please be
patient. The amount of time required to perform this
job depends upon the size of your system, the number of
users, etc. It may take 10 minutes or more to
complete...
```

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

```
Determining the size of the database...XXXX blocks
You will need X tape(s)
```

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

```
Label tape "ORACLE Backup: 1", place in drive, and
press <Enter>:
```

37. Label a cartridge tape as described.

38. Insert the cartridge tape into the drive.

39. Press **ENTER**.

The system displays the following message:

```
Retensioning the cartridge tape...
Saving ORACLE Database
```

```
Wait until the disk/tape activity stops before removing
the tape. Set the tape aside for later and press enter.
```

40. Remove the cartridge tape.

41. Press **ENTER**.

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

```
It is now time to save files that will be either
reinstalled on the upgraded system or merged with new
files on the upgraded system.
```

```
Label a free tape "Upgrade Save Files: 1", insert it in
the tape drive, and press <Enter>:
```

42. Label a cartridge tape.

43. Insert the cartridge tape into the drive.

44. Press **ENTER**.

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

```
It is now time to start removing old packages of
software in preparation for reinstallation of the new
packages.
```

```
If for any reason you DO NOT want to perform the upgrade
at this time, answer 'n'. This will cause the upgrade to
abort. You will be able to perform the upgrade at a
later time, at the expense of having to answer all of
the questions asked so far again and making new tapes of
backed up information.
```

```
If you answer 'y', you should then be prepared to
continue to the end of the assisted upgrade procedure.
```

```
Do you want to proceed with the upgrade? (y/n) [y]
```

45. If your system does not have the host feature package, skip this step and continue with Step 46.

If your system has the host feature package, the system displays a series of messages and then the following message:

⇒ NOTE:

The host feature packages may not be removed in the order shown here.

The following package is currently installed:

```
synchost      Intuity CONVERSANT VIS V5.0 Synchronous
                (3.0.2.7)
                (386) 3.0.2.7
```

Do you want to remove this package [y,n,?,q]

Complete the following Steps a through k:

a. Enter **y**

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

```
Removal of <synchost> was successful.
```

The following package is currently installed:

```
linkxHTE      linkix_hte, Feature Level 2
                (3.0.2.7)
                (386) 3.0.2.7
```

Do you want to remove this package [y,n,?,q]

b. Enter **y**

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

```
Removal of <linkxHTE> was successful.
```

The following package is currently installed:

```
mgmt          linkix_mgmt, Feature Level 1
                (3.0.2.0)
                (386) 3.0.2.0
```

Do you want to remove this package [y,n,?,q]

c. Enter **y**

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

```
Removal of <mgmt> was successful.
```

The following package is currently installed:

```
netman       linkix_netman, Feature Level 2
                (3.0.2.0)
                (386) 3.0.2.0
```

Do you want to remove this package [y,n,?,q]

d. Enter **y**

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

Removal of <netman> was successful.

The following package is currently installed:
13270s02 linkix_3270, Feature Level 1,
Supplement 02
(386) 3.0.2.3

Do you want to remove this package [y,n,?,q]

e. Enter y

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

Removal of <13270s02> was successful.

The following package is currently installed:
linkx3270 linkix_3270, Feature Level 2
(3.0.2.3)
(386) 3.0.2.3

Do you want to remove this package [y,n,?,q]

f. Enter y

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

Removal of <linkx3270> was successful.

The following package is currently installed:
sna1281u linkix_sna_1281u, SNA Level 2
(3.0.3.0)
(386) 3.0.3.0

Do you want to remove this package [y,n,?,q]

g. Enter y

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

Resetting kernel tuning parameters...

Would you like to link the kernel at this time?
(y/n)

h. Enter n

The system displays the following message:

The kernel has to be linked at a later time to
activate the linkix_sna_1281u, SNA Level (3.0.3.0)
removal.

Press ENTER to continue

i. Press ENTER.

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

Removal of <snal281u> was successful.

The following package is currently installed:
coproc03 linkix_coproc, Link Level,
 Supplement 03
 (386) 3.0.2.1

Do you want to remove this package [y,n,?,q]

j. Enter **y**

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

Removal of <coproc03> was successful.

The following package is currently installed:
coproc linkix_coproc, Link Level
 (3.0.2.1)
 (386) 3.0.2.1

Do you want to remove this package [y,n,?,q]

k. Enter **y**

46. Press **ENTER**.

The system displays the following message:

Do you want to save your old logging data? [n]

47. Press **ENTER**.

The system displays the following message:

Linking new kernel.
Intentionally deferring rebuilding of UNIX kernel.

The kernel has been successfully linked. To activate it, you must reboot your system.

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

Removal of <coproc> was successful.

The system automatically removes the

- Form Filler Plus Package
- Speech Collection Toolkit
- Script Builder Package
- Speech Recognition Package
- SP circuit card driver
- Tip/Ring circuit card driver
- INTUITY CONVERSANT VIS V5.0 Application Software

The system then displays the following message:

All files under /oracle (and its subdirectories) are going to be removed. If you wish to save some of the files before they are removed, please answer <N> to stop the process. Otherwise, answer <Y> to continue:

48. Enter **y**

The system displays the following message:

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

The system rebuilds the kernel, reboots, and displays the system prompt.

49. Remove all custom grammar packages.

These packages are identified as custom grammar packages in the output of the **displaypkg** command.

50. Verify that all feature packages have been removed by entering **displaypkg**

If the only INTUITY CONVERSANT package still present on the system is the INTUITY Platform Upgrade Assistance Package, all packages have been successfully removed.

If there are additional INTUITY CONVERSANT packages still present on the system, remove them manually using **removepkg** or **pkgrm** as applicable.



CAUTION:

Do not remove the package labeled "INTUITY Platform Upgrade Assistance Package."



NOTE:

Any feature package removed manually will not appear to have been removed until after you reboot the system.

51. If you removed any packages in Steps 21, 49, or 50, complete the following Steps a through c:

- a. Shut down the system.
- b. Reboot the system.
- c. Log in as root

If you did not remove any packages in Steps 21, 49, or 50, skip Steps 51 a through c and continue with Step 52.



NOTE:

This concludes Part 1 of the upgrade. Check off the completion of Step 2 in the upgrade checklist (Table 3-2). To continue with Step 3 and begin Part 2 of the upgrade, you need configuration information for the target system. If

you do not have a system configuration from the TSO, you will have to run the Hardware Resource Allocator program. See "Operating the Hardware Resource Allocator" in Appendix A, "System Configuration", of the maintenance book for your target system for more information.

52. Enter **/usr/lib/upgrade/bin/upg**

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

```
Installation of 1 package(s) is now going to be made  
from the Distribution Tape labeled:
```

```
"Platform CVIS Set"
```

```
Place the requested cartridge tape in drive and press  
<Enter>:
```

53. Place the tape in the drive.

54. Press **ENTER**.

 **CAUTION:**

Do not press enter a second time. Continue directly with Step 55.

55. Complete Steps 4 through 7 of "Installing the INTUITY CONVERSANT Base Software Set" in Chapter 10, "Installing the INTUITY CONVERSANT System Software," in the maintenance book for your target system.

At the completion of the INTUITY CONVERSANT system software installation, the system displays the following message:

```
Do you want to add an additional file for the "SYSTEM"  
tablespace? (y/n) [n]
```

56. If the size of the ORACLE database on your system is greater than 65 Mbytes, complete the following Steps a through d:

a. Enter **n**

The system displays the following message:

```
Name of file:
```

b. Enter the name of the file.

 **NOTE:**

Follow the convention of adding the suffix **.db** to this file name.

The system displays the following message:

```
Size of file in kilobytes:
```

c. Enter the size necessary for the file.

The system displays the following message:

```
Do you want to add an additional file for the
"SYSTEM" tablespace? (y/n) [n]
```

d. Enter **n**

If the size of the ORACLE database on your system is not greater than 65 Mbytes, enter **n**

The system displays the following message:

```
Place the tape labeled "ORACLE Backup: 1" in the tape
drive and press <Enter>:
```

57. Insert the cartridge tape into the drive.

58. Press **ENTER**.

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

```
Find the installation floppies labeled:
```

```
"Hardware Resource Allocator"
```

```
Insert the first floppy and press <Enter>
```

59. Complete Steps a through e for every feature package to be installed on your system. See Chapter 11, "Installing Optional Feature Packages", in the maintenance book for your target system for more information.

⇒ NOTE:

If you do not want to add a particular package, enter **q** when you are asked to install it and continue with the upgrade.

a. Insert the diskette into the drive.

b. Press **ENTER**.

The system displays the following message:

```
Insert diskette into Floppy Drive 1.
```

```
Type [go] when ready,
  or [q] to quit: (default: go)
```

c. Press **ENTER**.

When the system has completed the installation of the feature package the system displays the following message:

```
Make sure the last floppy has been removed and
press <Enter>:
```

d. Remove the diskette from the drive.

e. Press **ENTER**.

⇒ NOTE:

If you are installing the Form Filler feature package, you will be asked for the review and transcription passwords. Press **ENTER** for both passwords.

If there is an additional feature package to install, the system displays a message similar to the following:

Find the installation floppies labeled:

"Switch Utilities Package"

Insert the first floppy and press <Enter>

Repeat Steps a through e above.

If your system has the host feature package, the system displays the following message when it has completed the installation of the last feature package:

Installation of X package(s) is now going to be made from the Distribution Tape labeled:

"LINKix (<number> packages)"

Place requested cartridge tape in drive and press <Enter>:

Install the host feature package. See "Installing the LINKix Packages" in Chapter 11, "Installing Optional Feature Software", in the maintenance book for your platform.

When the system has completed the installation of the last feature package, it displays the following message:

All files saved prior to the upgrade will now be restored or merged with the upgraded system.

The system reboots.

60. After the reboot, enter **/usr/lib/upgrade/bin/upg**

The system displays the following message:

Place the tape labeled "Upgrade Save Files: 1" in the tape drive and press <Enter>:

61. Insert the tape into the tape drive.

62. Press **ENTER**.

The system displays the following message:

Processing all files that need additional changes to upgrade and/or merge them into the new system.

The original file for the files that have been changed during this upgrade has been saved in /vs/data directory as o.filename.

Check these changes by comparing the entries for the files under /etc/conf/init.d with the o.filename to insure that they are correct. An old /vs/data/CONVERSANT file from your source machine has been saved in /vs/data/o.CONVERSANT

The system begins restoring talkfiles and displays the following message:

NOTICE: If you have any CUSTOM GRAMMARS to load, they must be loaded now, prior to converting and verifying ScriptBuilder applications in the next step. You are given the opportunity here to escape to the shell prompt in order to load custom grammars or anything else deemed necessary prior to the ScriptBuilder conversion step.

Do you want to load any custom grammars now?



CAUTION:

The custom grammars must be V6.0 grammars. Pre-V6.0 grammars will not work and must not be loaded.

63. If your system has custom grammars, complete the following Steps a through c.



CAUTION:

Failure to load custom grammars at this point will result in errors.

- a. Press **ENTER**.

The system displays the UNIX prompt.

- b. Load the custom grammars.

- c. Enter **upg**

The system displays the following message:

```
Script Builder applications will now be upgraded.
Do you want the upgrade to be run in Compatibility
Mode?
```

- ```
1) Minimum compatibility mode - errors only
2) Full compatibility mode - errors and
 warnings
3) Non-compatibility mode - Tell me
 everything!
```

```
Enter selection: [2]
```

If your system does not have custom grammars, enter **n**

The system displays the following message:

```
Script Builder applications will now be upgraded. Do
you want the upgrade to be run in Compatibility Mode?
 1) Minimum compatibility mode - errors only
 2) Full compatibility mode - errors and warnings
 3) Non-compatibility mode - Tell me everything!
Enter selection: [2]
```

**64. Enter 3**

The system starts the voice system, converts the Script Builder applications, and then displays the following message:

```
You have completed the assisted portion of this upgrade
from VIS Version 5 to VIS V6.0. However, this does NOT
complete your upgrade. There are several additional
steps you need to perform manually. (Depending on your
source and target scenarios, there may be many
additional steps.)
```

The manual steps required to complete your upgrade are listed in the checklist in the Intuity CONVERSANT VIS V6.0 Upgrades document.

Carefully review this checklist. It is important that you perform all listed steps which apply to your scenario. Follow the procedures described, making reference, as necessary to other documents in the Intuity CONVERSANT VIS V6.0 document set. Remember that the upgrade history files,

```
 /usr/lib/upgrade/output.lst
 /usr/lib/upgrade/filesList, etc.
```

as well as files named "o.<file>" in other directories (which were brought from your source system by the upgrade tool), are available to help you to administer your target system.

Once you have performed the manual completion steps, verify your upgrade. Some steps which might help you perform this verification are included in the Verification and Troubleshooting chapter of the Upgrades document.

When you are satisfied that your upgrade is complete, backup your target system according to the backup procedures described in the Intuity CONVERSANT VIS V6.0 Maintenance document.

Press <Enter>:

**65. Press `ENTER`.**

The system displays the system prompt.

This concludes Part 2 of the upgrade. Check off the completion of Step 3 on the upgrade checklist (Table 3-2). To finish the upgrade to V6.0, complete Steps 4, 5, 6, and (if applicable) Step 7.

**Overview**

---

This chapter provides lists of obsolete components, and those that you can reuse with or without modification in V6.0. Where you are required to modify a component for reuse, this chapter either provides the procedure you need or a reference to where in the maintenance book you can find it.

**Purpose**

---

The purpose of this chapter is to help you determine which components you can reuse from your source system and how to modify them to work in the V6.0 environment.

## **Hardware Upgrade Components**

---

Some components in your source system are now *obsolete*; that is, they have been replaced in V6.0 by newer components and cannot be used again. Other components in your source system have been replaced in V6.0 by newer components, but are still supported in upgrade situations only. These components are *reusable*. Of these reusable components, some may be moved without modification from your source to target system, while others require a change in configuration or setup for use with V6.0. This section describes all of those components.

### **Obsolete Components That You Cannot Reuse in V6.0**

---

This section lists those components that may be part of your source system that are no longer supported and cannot be used in V6.0. These components are also included in Figure 5-1 with replacement instructions.

- Hard disk drives
  - 135-Mbyte MAXTOR ESDI hard disk drive
  - 200-Mbyte IDE hard disk drive
  - 600-Mbyte MAXTOR ESDI hard disk drive
  - 1.2-Gbyte MAXTOR SCSI hard disk drive
- Circuit cards
  - VDC600U video card
  - AYC1 analog card
  - AYC3 digital card
  - AYC2 speech processing card
  - EMULEX host interface card
  - PC/PBX Interface card
  - Racal Interlan or STARLAN LAN cards
  - IPC 802 serial port expansion card
  - PC/XL host communication card prior to Rev.D
  - More than two SP cards (AYC2C, AYC2B, or AYC9) in a P5 120-MHz system on a MAP/100 or MAP/100C
  - WDXLR831124 or 3124 video controller cards in a P5 120-MHz CPU system

## **Components That You Can Reuse without Modification in V6.0**

---

This section lists those components that are reusable in your V6.0 target system without physical or software changes.

**⇒ NOTE:**

These components are supported for upgrades only.

- 2-Gbyte Tandberg SCSI tape drive
- Hard disk drives
  - 1.7-Gbyte Micropolis SCSI hard disk drive
  - 2.0-Gbyte IBM Starfire hard disk drive
- Circuit cards
  - AYC6 IVP4 Tip/Ring card
  - AYC5/5B, AYC16, AYC26, or AYC27 IVP6 Tip/Ring card
  - AYC11 or AYC3B T1 card
  - AYC2B, AYC2C, and AYC9 SP cards
  - AYC7 CMP card
  - PC/ISDN Interface (formerly known as IPCI) card
  - IPC-900 or Gemini-1000 asynchronous card
  - External Alarm card (for use with MAP/100C only)
  - Brooktrout TR114-14L and TR110+ 14L fax cards

### **Components That You Must Remove, Replace, or Otherwise Modify for Use in V6.0**

---

Table 5-1 identifies obsolete and reusable components and provides information on jumper and switch settings for each of the replacement component(s).

Go through each item in Table 5-1 and follow the directions there to upgrade your hardware as part of your V6.0 upgrade.

**⇒ NOTE:**

If your target system configuration is different from your source system, be sure to modify the switch and/or jumper settings as needed to accommodate the new configuration. Whenever possible, use the same slot, jumper settings, dip switch settings, etc. for the replacement component(s). For a general listing of the supported address settings, see Chapter 2, "Hardware", of the *INTUITY™ CONVERSANT® System Version 6.0 System Description*, 585-310-225.

For instructions on removing components, see the applicable chapters in the maintenance book for your target system.

**Table 5-1. Components That You Must Remove, Replace, or Otherwise Modify for Use in V6.0**

| If you have:                                                                                    | Then you must:                                                                                                                                                                                                                                                                                                                                                | Using the following procedures:                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CPU</b>                                                                                      |                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                        |
| A 386 CPU                                                                                       | Upgrade to a P5 120-MHz CPU                                                                                                                                                                                                                                                                                                                                   | Chapter 5, "Replacing, Installing, or Upgrading Circuit Cards", in the maintenance book for your target system                                                                                                                                                                                                                                                                                                         |
| A 486 CPU with BIOS earlier than version 2.1c <i>and/or</i> 16 Mbytes of memory                 | <ul style="list-style-type: none"> <li>■ Update the BIOS to Version 2.1c</li> </ul> <p style="text-align: center;">and</p> <ul style="list-style-type: none"> <li>■ Add 16 Mbyte of memory to equal at least 32 Mbyte</li> </ul> <p style="text-align: center;"><i>or</i></p> <ul style="list-style-type: none"> <li>■ Upgrade to a P5 120-MHz CPU</li> </ul> | <ul style="list-style-type: none"> <li>■ "CPU Circuit Cards" in Chapter 5, "Replacing, Installing, or Upgrading Circuit Cards", in the maintenance book for your target system</li> <li>■ Chapter 7, "Replacing Other Components", in the maintenance book for your target system</li> <li>■ Chapter 5, "Replacing, Installing, or Upgrading Circuit Cards", in the maintenance book for your target system</li> </ul> |
| A P5 120-MHz CPU                                                                                | Install electromagnetic interference (EMI) reduction components on any cables attached to the platform                                                                                                                                                                                                                                                        | "Replacing or Installing Electromagnetic Interference Reduction Components" in Chapter 7, "Replacing Other Components", in the maintenance book for your target system                                                                                                                                                                                                                                                 |
| <b>Disk Subsystem</b>                                                                           |                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                        |
| ESDI or IDE components, including hard disk drives, cartridge tape drives, and controller cards | Upgrade to SCSI components                                                                                                                                                                                                                                                                                                                                    | Chapter 6, "Replacing the Hard Disk Drive", and Chapter 9, "Installing Base System Software", in the maintenance book for your target system                                                                                                                                                                                                                                                                           |

*Continued on next page*

**Table 5-1. Components That You Must Remove, Replace, or Otherwise Modify for Use in V6.0 — *Continued***

| <b>If you have:</b>                                                               | <b>Then you must:</b>                                                                                                                                                                   | <b>Using the following procedures:</b>                                                                                                                                                                                                                                                                                                   |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Wangtek SCSI tape drive(s)                                                        | <ul style="list-style-type: none"> <li>■ Update the firmware on the tape drive(s) to 5525ES REV7</li> </ul> and <ul style="list-style-type: none"> <li>■ Add a jumper at JP2</li> </ul> | <ul style="list-style-type: none"> <li>■ “Checking the Wangtek SCSI Tape Drive Firmware Version” and “Upgrading the Wangtek SCSI Tape Drive Firmware Version” in this chapter</li> <li>■ “Replacing the SCSI Cartridge Tape Drive” in Chapter 7, “Replacing Other Components”, in the maintenance book for your target system</li> </ul> |
| A SCSI hard disk drive smaller than 1.7 Gbyte or with disk usage greater than 80% | Upgrade to a larger SCSI hard disk drive and/or plan to add an additional hard disk drive                                                                                               | Chapter 6, “Replacing the Hard Disk Drive”, in the maintenance book for your target system                                                                                                                                                                                                                                               |
| Dual/multiple SCSI hard disk drives on a pre-V5.0 system                          | Low-level format all non-boot SCSI hard disk drive(s)                                                                                                                                   | “Low-Level Formatting the SCSI Hard Disk Drive” in Chapter 6, “Replacing the Hard Disk Drive”, in the maintenance book for your target system                                                                                                                                                                                            |
| A 2-Gbyte IBM tape drive <i>and</i> you are upgrading to a P5 120-MHz CPU         | Update the firmware on the tape drive <i>before</i> you install the CPU card                                                                                                            | “Replacing the SCSI Cartridge Tape Drive” in Chapter 7, “Replacing Other Components”, in the maintenance book for your target system                                                                                                                                                                                                     |
| <b>Circuit Cards</b>                                                              |                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                          |
| Any SP cards in your target system                                                | Reset DIP switches on all SP cards from OS index 0–3 to 4–7                                                                                                                             | “Signal Processor (AYC2C or AYC9) Circuit Card” in Chapter 5, “Replacing, Installing, or Upgrading Circuit Cards”, in the maintenance book for your target system                                                                                                                                                                        |
| More than four SP cards in any system                                             | Replace the number of SP cards in excess of four with the appropriate number of SSP (AYC43) cards                                                                                       | Chapter 5, “Replacing, Installing, or Upgrading Circuit Cards”, in the maintenance book for your target system                                                                                                                                                                                                                           |

*Continued on next page*

**Table 5-1. Components That You Must Remove, Replace, or Otherwise Modify for Use in V6.0 — *Continued***

| If you have:                                                                                      | Then you must:                                                                                                                                                                                                                                                                                                                                          | Using the following procedures:                                                                                |
|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| More than two SP cards in your target system <i>and</i> a P5 120-MHz CPU on a MAP/100 or MAP/100C | <ul style="list-style-type: none"> <li>■ Replace the pre-series 8 SP cards with the new series 8 version <i>and</i> set the DIP switches to OS index 4–7</li> </ul> <p style="text-align: center;"><i>or</i></p> <ul style="list-style-type: none"> <li>■ Replace the pre-series 8 SP cards with the appropriate number of SSP (AYC43) cards</li> </ul> | Chapter 5, “Replacing, Installing, or Upgrading Circuit Cards”, in the maintenance book for your target system |
| A WDXLR83160 video controller card                                                                | Remove jumper block from JP3                                                                                                                                                                                                                                                                                                                            | Chapter 5, “Replacing, Installing, or Upgrading Circuit Cards”, in the maintenance book for your target system |
| A WDXLR831124 video controller card <i>and</i> a 486 CPU                                          | Remove jumper block from JP5                                                                                                                                                                                                                                                                                                                            | Chapter 5, “Replacing, Installing, or Upgrading Circuit Cards”, in the maintenance book for your target system |
| A WDXLR831124 video controller card <i>and</i> a P5 120-MHz CPU                                   | Replace the WDXLR831124 video controller card with the STB Horizon video card                                                                                                                                                                                                                                                                           | Chapter 5, “Replacing, Installing, or Upgrading Circuit Cards”, in the maintenance book for your target system |
| A WDXLR833124 video controller card <i>and</i> a P5 120-MHz CPU                                   | Replace the WDXLR833124 video controller card with the STB Horizon                                                                                                                                                                                                                                                                                      | Chapter 5, “Replacing, Installing, or Upgrading Circuit Cards”, in the maintenance book for your target system |
| One or more T1 cards in your system and you plan to add a Token Ring card                         | Reset the base I/O address switch settings on your V6.0 T1 card(s) as specified by the output of the Hardware Resource Allocator program                                                                                                                                                                                                                | “Resetting Switches on the T1 (AYC11) Circuit Card” in this chapter                                            |

*Continued on next page*

**Table 5-1. Components That You Must Remove, Replace, or Otherwise Modify for Use in V6.0 — *Continued***

| <b>If you have:</b>                                                                                                                               | <b>Then you must:</b>                                                                                                                                                                                                                                                   | <b>Using the following procedures:</b>                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| A MAP/100C with a power supply manufactured prior to March 1, 1993 <i>and</i> you plan to have more than eight Tip/Ring cards in your V6.0 system | Upgrade your power supply                                                                                                                                                                                                                                               | Contact the TSO.<br><br>Note: The date the power supply was manufactured is handwritten on the label affixed to the top of the MAP/100C. |
| Two PC/XL host communication cards for dual host connectivity                                                                                     | Replace both cards with FIFO/SIB cards                                                                                                                                                                                                                                  | Chapter 5, "Replacing, Installing, or Upgrading Circuit Cards", in the maintenance book for your target system                           |
| Two PC/XL host communication cards for support of more than 32 LUs to the same host                                                               | <ul style="list-style-type: none"> <li>■ Remove one PC/XL card<sup>1</sup> (save it for a spare)</li> </ul> <p style="text-align: center;"><i>or</i></p> <ul style="list-style-type: none"> <li>■ Remove both PC/XL cards and replace with one FIFO/SIB card</li> </ul> | Chapter 5, "Replacing Installing, or Upgrading Circuit Cards", in the maintenance book for your target system                            |
| A PC/XL host communication card prior to Revision D <sup>2</sup>                                                                                  | <ul style="list-style-type: none"> <li>■ Replace with a PC/XL card Revision D or later</li> </ul> <p style="text-align: center;"><i>or</i></p> <ul style="list-style-type: none"> <li>■ Replace with a FIFO/SIB card</li> </ul>                                         | Chapter 5, "Replacing, Installing, or Upgrading Circuit Cards", in the maintenance book for your target system                           |
| An EMULEX host communication card                                                                                                                 | Replace with a FIFO/SIB card                                                                                                                                                                                                                                            | Chapter 5, "Replacing, Installing, or Upgrading Circuit Cards", in the maintenance book for your target system                           |
| An AYC3 T1 card                                                                                                                                   | Replace with an AYC11 T1 or AYC21 E1/T1 card                                                                                                                                                                                                                            | Chapter 5, "Replacing, Installing, or Upgrading Circuit Cards", in the maintenance book for your target system                           |
| An AYC2 SP card                                                                                                                                   | Replace with an AYC43 SSP card                                                                                                                                                                                                                                          | Chapter 5, "Replacing, Installing, or Upgrading Circuit Cards", in the maintenance book for your target system                           |

*Continued on next page*

**Table 5-1. Components That You Must Remove, Replace, or Otherwise Modify for Use in V6.0 — *Continued***

| <b>If you have:</b>                                                                         | <b>Then you must:</b>                                                                                           | <b>Using the following procedures:</b>                                                                                 |
|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| An AYC6 IVP4 Tip/Ring card                                                                  | Install the TDM upgrade for each IVP4 card, if it is not already installed                                      | “Upgrading IVP4 Cards with the Time Division Multiplexer Adapter Kit” in this chapter                                  |
| An AYC1 VRS6 Tip/Ring card                                                                  | Replace with an AYC28 IVP6 Tip/Ring or AYC30 NGTR card                                                          | Chapter 5, “Replacing, Installing, or Upgrading Circuit Cards”, in the maintenance book for your target system         |
| An AYC21 E1/T1 card <i>and</i> a direct connection to a DEFINITY switch                     | Install the card first using T1 twisted pair modular cabling                                                    | “Making Digital Connections” in Chapter 3, “Making Cable Connections”, of the installation book for your target system |
| An AYC21 E1/T1 card <i>and</i> a connection to a DEFINITY switch through a Paradyne 551 CSU | Install the card first using T1 twisted pair modular cabling and a special adapter between the card and the CSU | “Making Digital Connections” in Chapter 3, “Making Cable Connections”, of the installation book for your target system |
| Racal Interlan and STARLAN cards                                                            | Replace with a supported version of an ethernet LAN circuit card                                                | Chapter 5, “Replacing, Installing, or Upgrading Circuit Cards”, in the maintenance book for your target system         |
| A DCP PC/PBX interface card <sup>3</sup>                                                    | Remove and do not replace                                                                                       | Chapter 5, “Replacing, Installing, or Upgrading Circuit Cards”, in the maintenance book for your target system         |

1. A single PC/XL (must be Revision D or later) can support up to 128 LUs in V6.0.
2. The correct version of this card will have (1) either the letter “D” *handwritten* or the letter “E” *etched* on the back or solder side, and (2) a Zilog 85C30 (not an 8530) chip in the upper right corner of the front side.
3. AUDIX Voice Power is not supported in V6.0.

## **Hardware Modification Procedures**

---

This section contains procedures you will need to modify applicable hardware from your source system that is reusable in V6.0.

### **Reusing the 486 CPU Card**

---

The 486 CPU in your pre-V6.0 source system is reusable in the following scenarios:

- 486 25- or 50-MHz in a V6.0 system on a MAP/40
- 486 50-MHz in a V6.0 system on a MAP/100

However, to reuse the 486 CPU, you may first have to update the BIOS to correct a timing problem and/or add additional memory if the card currently has less than 32 Mbyte.

- See “CPU Circuit Cards” in Chapter 5, “Replacing, Installing, or Upgrading Circuit Cards”, in the maintenance book for your target system for the procedures to determine which version of the BIOS you have and upgrade it if necessary.
- See “Replacing Defective Memory Modules” in Chapter 7, “Replacing Other Components”, in the maintenance book for your target system for procedures on installing additional memory.

### **Reusing the Wangtek SCSI Tape Drive**

---

The 1.7-Gbyte or larger Wangtek SCSI tape drive in your source system is reusable in your V6.0 system, but only if you update the firmware using the software provided with your upgrade.

 **NOTE:**

If you are upgrading from V5.0, this firmware update software may already be loaded.

### **Checking the Wangtek SCSI Tape Drive Firmware Version**

Use one of the following procedures to check the firmware version of your Wangtek SCSI tape drive.

#### **On Systems with the UnixWare 1.1 Operating System Installed**

1. From the system prompt, enter **sysadm**

The system displays the UNIX System V Administration menu (Figure 5-1).

```
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 5-1. UNIX System V Administration Menu**

2. Select

```
> machine
> configuration
> summary
```

The system displays the System Configuration Information window (Figure 5-2).

```
4 System Configuration Information

SYSTEM CONFIGURATION:

Memory Size: 64 Megabytes
System Peripherals:

 Floppy Disk0 - 1.44MB 3.5
 Hard Disk0 - 1183 Megabyte Disk
 Tape Device - WANGTEK 5525ES SC
SI REV7
```

**Figure 5-2. System Configuration Information Window**

3. Check the Tape Device line.

If the entry is `WANGTEK 5525ES SCSI REV7`, *do not* perform the firmware upgrade.

If the entry is `WANGTEK KS23569`, you *must* perform the firmware upgrade during Step 3 in Table 3-1 when you upgrade the hardware.

4. Press `F6` (CANCEL) three times to return to the UNIX System V Administration menu (Figure 5-1).
5. Press `F7` (CMD-MENU).  
The system displays the Command Menu.
6. Select exit and press `ENTER` to return to the system prompt.
7. If you must perform the tape drive firmware upgrade as determined in Step 3 above, continue with “Upgrading the Wangtek SCSI Tape Drive Firmware” below.

### On Systems without the UnixWare 1.1 Operating System Installed

During boot up, check the last line on the boot up screen (before it goes to the operating system loading screen).

If the entry is `WANGTEK 5525ES SCSI REV7` (other characters may appear also), *do not* perform the firmware upgrade.

If the entry is `WANGTEK KS23569`, you *must* perform the firmware upgrade. Continue with “Upgrading the Wangtek SCSI Tape Drive Firmware” below.

### Upgrading the Wangtek SCSI Tape Drive Firmware Version

Use the following procedure to upgrade the firmware version of your Wangtek SCSI tape drive:

1. Insert the diskette labeled “WANGTEK SCSI Tape Drive Update” into the floppy disk drive.
2. If the voice system is running, enter **stop\_vs**
3. Enter **-i0 -g0 -y** to initiate a graceful shutdown.
4. Press the platform RESET button to reboot the system.

As the system comes up again, it boots from the diskette in the floppy drive and displays the following message:

```
This floppy disk WILL change your WANGTEK TAPE DRIVE if
you continue
```

5. Press `ENTER`.

The system displays the following message:

Please enter system type that you are using now (enter either MAP/5, MAP/40, or MAP/100).

Type one of the names as listed above and press enter.

6. Enter the appropriate name.

The system displays a multi-color screen with the following message:

```
The system has completed the attempt to change the
WANGTEK TAPE DRIVE. If the change was successful the
ATTTO00.LOG file will have recorded a CHECK CONDITION:
UNIT ATTENTION message after the second "lsl" command.
If your ATTTO00.LOG file does not reflect this
condition then enter TYPE README.TXT and follow those
instructions.
```

7. At the A:\> prompt, enter **type ATTTO00.LOG**

8. Look for two lines beginning with lsl; after those two lines you should see the following message:

```
** Check Condition: Unit Attention
```

This line indicates whether the installation of the firmware upgrade is successful.

If the installation is successful, remove the diskette from the floppy disk drive and continue with Step 9.

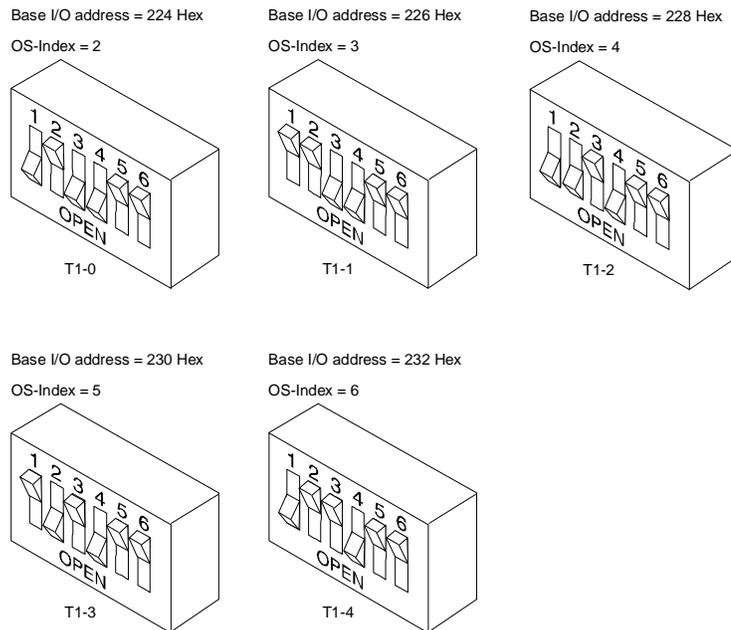
If the installation fails, see "Post-Installation Problems" in Chapter 6, "Verification and Troubleshooting".

9. Reboot the system or continue with other required hardware modifications.

### **Resetting Switches on the T1 (AYC11) Circuit Card**

---

In systems equipped with both T1 and Token Ring cards, a conflict exists in the I/O address between T1-0 and T1-1 and the Token Ring card. To resolve this conflict, you must reset the base I/O address switch settings of all T1 cards as shown in Figure 5-3.



**Figure 5-3. Switch Settings for T1 (AYC11) Circuit Cards T1-0 through T1-4 in an INTUITY CONVERSANT System with a Token Ring Circuit Card**

### Upgrading IVP4 Cards

---

If you have one or more AYC5 IVP4 cards on your source system, you must upgrade them using the IVP4 Time Division Multiplexer (TDM) Adapter Kit.

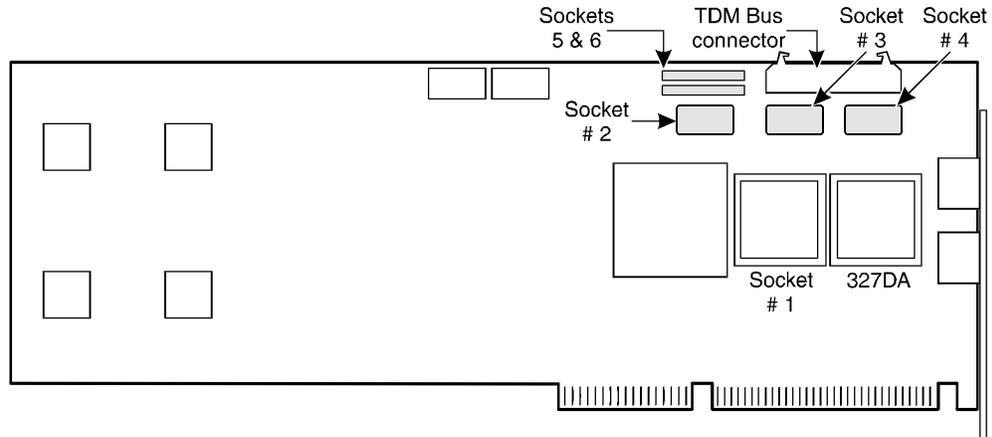
The IVP4 TDM Adapter Kit includes:

- One integrated circuit chip labeled “327DA”
- One integrated circuit chip labeled “320G”
- Two integrated circuit chip labeled “320H”
- Two resistor termination chips
- One set of TDM bus connector latches
- One 12-position TDM bus cable

Use the following procedure to upgrade your AYC5 IVP4 card(s):

1. Remove the IVP4 card(s) from your platform using the procedure “Removing Circuit Cards” in Chapter 5, “Replacing, Installing, or Upgrading Circuit Cards”, in the maintenance book for your target system.

2. Orient the IVP4 card with the metal face plate to the right and the component side up (Figure 5-4).



**Figure 5-4. IVP4 Circuit Card**

3. Plug the integrated circuit chip labeled “327DA” into socket #1. Orient the markings on top of the chip in the same manner as those on the 327DA chip just to the right of socket #1 (Figure 5-4). Align the chip squarely and snap it firmly into the socket.
4. Plug the integrated circuit chip labeled “320G” into socket #2. The U-shaped notch should be to the left.
5. Plug the two integrated circuit chips labeled “320H” into sockets #2 and #3. The U-shaped notches should be to the left.
6. Determine whether or not your IVP4 card, once installed in the platform, is at either end to the TDM bus (that is, whether it will be the last card that the TDM bus connects to on either end). If the answer is no, do not install the terminating resistors on the card. If the card is at either end of the bus, install the terminating resistors into sockets #5 and #6. Orient the terminators so that the pin 1 marking on the side of the chip is to the left.

**NOTE:**

Only two cards (the cards at either end of the TDM bus) can have terminating resistors. The two cards at either end of the bus *must* have the resistors.

7. Slide the TDM bus connector latches into the slots at either end of the TDM bus connector on the card.
8. Install the TDM bus cable into the TDM Bus connector. (This cable connects to all the INTUITY CONVERSANT circuit cards, such as T/R, T1, SSP, and SP circuit cards.)



---

# Verification and Troubleshooting

# 6

---

## **Overview**

---

This chapter describes how to verify the upgrade and includes troubleshooting solutions.

## **Purpose**

---

Completing the verification steps in this chapter will help you ensure that all facets of the upgrade have completed successfully. The troubleshooting information included can help you correct known problems and common errors.

## Verifying the Upgrade

---

Complete the following tasks to verify the upgrade:

- Check the Script Builder installation output for failures:

1. Enter **vi /usr/lib/upgrade/output.list**
2. Once you are in the file, enter **/converting**

This instruction searches the file for all instances of the text `converting`. You can then read the file for information on the success of the `VERIFY` and `INSTALL` actions.

Investigate and correct any errors. Once you resolve any problems, verify and install the applications again manually.

- Readminister configuration information, parameters, etc. Be sure to check the following:
  - Analog and digital switch interface parameters
  - Service-to-channel assignments
  - Service-to-DNIS assignments
  - Card options
  - Display options
  - Network connectivity information
- Repeat on the target system any verification you did on your source system as part of the procedures in Chapter 2, "Upgrade Planning and Prerequisites". This is to confirm that all tests/applications behave the same way.
- Run the tests provided in the Feature Test Script Package on the target system.
- Run each of your applications in a test mode to verify its behavior.
- For installations within the U.S., dial out and dial in using the Remote Maintenance circuit card.
- For installations outside of the U.S., test modem functionality by calling into the system using the external modem connected to the INTUITY™ CONVERSANT® system.
- For any system with an SDLC or token ring connection to a host computer, verify that all LU's are logged in:
  1. Enter **hstatus <host-application>**

where *<host-application>* is your application name. The system displays a screen similar to the following:

| SESSION | CONNECTION | LU | SERVICE   | STATE     |
|---------|------------|----|-----------|-----------|
| 0       | TKR1       | 2  | tsys-host | logged in |
| 1       | TKR1       | 3  | tsys-host | logged in |
| 2       | TKR1       | 4  | tsys-host | logged in |
| 3       | TKR1       | 5  | tsys-host | logged in |
| 4       | TKR1       | 6  | tsys-host | logged in |
| 5       | TKR1       | 7  | tsys-host | logged in |
| 6       | TKR1       | 8  | tsys-host | logged in |
| 7       | TKR1       | 9  | tsys-host | logged in |
| 8       | TKR1       | 10 | tsys-host | logged in |
| 9       | TKR1       | 11 | tsys-host | logged in |
| 10      | TKR1       | 12 | tsys-host | logged in |
| 11      | TKR1       | 13 | tsys-host | logged in |

2. Check the *STATE* column. If *logged in* is not showing for the LU's, see Table 1-5 in Chapter 1, "Troubleshooting," of the V6.0 maintenance book for what actions to take.

## Troubleshooting

---

The following troubleshooting information is divided into three sections:

- Problems with Starting, Restarting, or Running the Platform Upgrade Assistance Package
- Problems with System Software Reinstallation, Data Restoration, and Upgrade Conversion Operations
- Post-Installation Problems

These sections are further divided by specific headings that describe the problem or the part of the system to which the problem is related.

### **Problems with Starting, Restarting, or Running the Platform Upgrade Assistance Package**

---

This section describes problems you might encounter when starting, restarting, or running the Platform Upgrade Assistance Package.

#### **You Cannot Start/Restart the Program**

- *Problem:* You are at a system prompt and do not know how to get the Platform Upgrade Assistance Program started. (Either the system has been rebooted automatically as part of the assisted upgrade program, or you entered **q** to quit in response to a question.)

*Solution:* Enter **/usr/lib/upgrade/bin/upg** to continue the assistance program, beginning at the point where it stopped.

- *Problem:* You have just completed the hardware upgrades and installed the operating system, and you do not know how to get the upgrade assistance program restarted.

*Solution:*

1. If you are in the graphical login screen interface, press **(ALT) (E)**.

The system displays the following message:

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

2. Enter **root**
3. Enter your root password.

The system displays the system prompt (#).

4. Place the diskette labeled "Upgrade Part 2" into the floppy disk drive.

5. Enter **pkgadd**
6. Enter **/usr/lib/upgrade/bin/upg** to restart the Platform Upgrade Assistance Program.

### The System Detects the Presence of Mirroring on a Nonmirrored System

- *Problem:* You attempt to run the upgrade assistance program and it tells you that you cannot proceed on a mirrored system and to turn SCSI disk mirroring off. You do not have SCSI disk mirroring on your system.

*Solution:* There is some indication to the upgrade program that mirroring is running on the source system. It may be that mirroring was on the system and active at one time, but it did not clean up properly when mirroring was disabled/removed. To work around this incorrect indicator of active SCSI disk mirroring, perform the following steps:

1. Log in to the system as root, if you have not done so already.
2. Enter **cd /etc/scsi**
3. Enter **ls -l mirrrtab**
4. Look at the fifth column in the output on the screen (the number just before the date).
5. If this number is not zero (0), enter **mirrrtab o.mirrrtab**
6. Enter **cd -** to go back to the previous location.
7. Enter **/usr/lib/upgrade/bin/upg** to start the upgrade program again.

### You Are Prompted to Reset the System Name

- *Problem:* The system displays the following message when you restart the upgrade program after the disk change operations:

```
This system, <UNIX_SV> does not have the same name
as the system upon which the upgrade began, <name
of source system>.
```

```
Press <Enter> to reset this system name <UNIX_SV>
to the original source system name <name of source
system>, or type the new system name then press
<ENTER>: [<name of source system>]
```

*Solution:*

1. Press **(ENTER)** to accept the name of the source system.

The system displays the following message:

```
The system name is set to <name of source system>.
```

```
Are you sure you want to continue phase II of the
upgrade on this system? (y/n) [n]
```

2. Enter **y**

These steps correct the default system name installed with the operating system software and also continue the upgrade.

### **You Cannot View the /usr/lib/upgrade/output.lst File**

- *Problem:* You try to view the **/usr/lib/upgrade/output.lst** file in the middle of the upgrade program, but the lines are too long for the editor and clear the screen if printed to screen.

*Solution:* This file gets cleaned up at the end of each phase and when the upgrade program is exited. Wait to view the file until after the upgrade program is exited. If you need to view the file at other times, you must translate much of the UNIX syntax.

### **Problems with System Software Reinstallation, Data Restoration, and Upgrade Conversion Operations**

---

This section describes problems you might encounter when you are running Part 2 of the Platform Upgrade Assistance Package.

#### **There Is No Output to the Screen while Installing Packages from Tape**

- *Problem:* You are installing one or more packages from a tape. You see no screen output for a long time, perhaps for as long as 5 or 6 minutes.

*Solution:* As long as the tape drive seems to be reading the tape, this problem is of no concern.

#### **You Need Help Responding to the System Prompts during Package Installation**

- *Problem:* You need help with a question the system asks during package installation, and using Help (?) does not provide the required information.

*Solution:* Do not use Help and Quit while answering questions during package installations. Use the information found in the **/usr/lib/upgrade/CVIS.info** file, and the TSO-provided target configuration data, if you have any. Also, use the package installation instructions found in the maintenance book for your target system. Depending on what package you are installing, check one of the following chapters in that book:

- Chapter 9, “Installing Base System Software”
- Chapter 10, “Installing the INTUITY CONVERSANT System Software”
- Chapter 11, “Installing the Optional Feature Software”

### **The System Does Not Recognize the Time Zone You Have Entered**

- *Problem:* While installing the INTUITY Utilities Package, you receive the following error message:

Error: Unknown time zone. Please enter the time zone from the following:

- 1) Eastern Time Zone
- 2) Central Time Zone
- 3) Mountain Time Zone
- 4) Pacific Time Zone

*Solution:* Select option 1, Eastern Time Zone.

#### **⇒ NOTE:**

This problem will occur only in locations outside of the U.S. because the software does not currently recognize international time zones.

### **The System Prompts You to Install an Unwanted Package**

- *Problem:* During software reinstallation, you are prompted for a software package that you cannot or do not want to install on your target system. For example, you do not have the upgraded software for the package.

*Solution:*

1. When you are prompted for the first diskette of the package, do not put a diskette into the floppy disk drive.

2. Press **[ENTER]**.

The system displays the following message:

Press <ESC> to stop or <CR> to continue.

3. Press **[ESC]**.

The screen displays the word **FAILED!** and asks if you want to try manual installation.

4. Enter **n**

The tool skips to the next package it expects you to install.

## You Need Configuration and Set-Up Information for Your Source System

- *Problem:* You are at a system prompt after determining the current configuration of your system and you are not sure what to do.

*Solution:* **CVIS.info** is created during the first phase of the upgrade. It contains important information on configuration and set up of your source system. If the configuration of your source system is valid for the target system, you need the information discussed here.

The file **/usr/lib/upgrade/CVIS.info** contains information you may need when reinstalling upgraded VIS packages. You will need to be able to view the file during the reinstallation phases. How you provide yourself access to this file depends on the capabilities of your specific machine.

- To print the file, use whatever print command you normally use.
- To move the file to another machine:
  1. Transfer it over a network if your machine is networked.
  2. Enter **cpio -ocvB > /dev/rdisk/f0** to copy the file onto a diskette.
  3. Enter **cpio -icvBd < /dev/rdisk/f0** to copy the file on the diskette onto the other machine.

## You Have Inserted Floppies for the Wrong Package

- *Problem:* In the midst of installing a software package, you discover that you have inserted floppies for the wrong software package.

*Solution:*

1. *Do not* attempt to abort the installation. Complete the installation of the incorrect package.
2. At the next prompt for user input (for example, the program asks for the first diskette of the next package), enter **q** to exit from the upgrade program.
3. Remove the incorrectly installed package:
  - a. Enter **pkgrm**
  - b. Select the incorrectly installed package from the list.
4. Enter **/usr/lib/upgrade/bin/upg** to restart the upgrade procedure.

The system prompts you for the next software package you should install.

### **You Receive Warnings while Installing the Application Software Package**

- *Problem:* Warning message(s) appear on the screen while you are installing the INTUITY CONVERSANT VIS V6.0 Application Software Package:

UX: cpio: WARNING: Cannot link "/usr/spool/oldLog/..."

*Solution:* These are normal messages. Ignore them.

### **The System Fails to Prompt for the ORACLE Database**

- *Problem:* The upgrade assistance program fails to prompt you for the tape containing the ORACLE database.

*Solution:* Complete the following procedure to manually restore the contents of the ORACLE database:

1. Insert the tape containing the ORACLE database.
2. At the shell command prompt, enter **rstDB**
3. Enter **/usr/lib/upgrade/bin/upg** to restart the upgrade assistance program.

### **The System Fails to Prompt for the Speech Tape**

- *Problem:* The upgrade assistance program fails to prompt you for the tape containing speech.

*Solution:* Complete "Using the **spres** Command to Restore Speech" in Appendix A, "Supplemental Procedures", to restore speech manually. When finished, enter **/usr/lib/upgrade/bin/upg** to restart the upgrade assistance program.

### **The System Reports Errors for the FFtemplate Application**

- *Problem:* When the upgrade tool converts/verifies/installs your Script Builder applications, the system reports unrecorded speech errors for the FFtemplate application.

*Solution:* FFtemplate is a sample application delivered with the Form Filler Plus optional software package. There is no speech associated with this sample application. These errors may be ignored. (If you copy this template to create a Form Filler application, you need to record speech for your application. Be sure to rename the speech pool your application uses to the name of your application.)

### The System Reports Problems with the IPC-900 Driver Package

- *Problem:* After installing the IPC-900 driver package on your target system (but before the system has been rebooted), the screen is flooded with messages indicating that ports cannot be opened.

*Solution:* Ignore the messages. Within a few minutes, the upgrade assistance program reboots the system and the messages will cease.

### The Voice System Fails to Start the First Time after Loading the Base Runtime Package

- *Problem:* UnixWare dynamic loadable drivers do not always link properly into the UNIX kernel. The system may or may not report errors as the drivers are being installed.

*Solution:* While at run level 4, try to execute **rmdb** to see if the RM driver was loaded properly. If the system reports errors, try the following to reinstall the package:

1. Use **pkgrm** to remove the base runtime package (vs package).
2. Reboot the system to force a kernel rebuild.
3. Use **pkgadd** to reinstall the base runtime package (vs package).
4. Use **start\_vs** to restart the voice system and check for problems.

### The System Does Not Recognize T1/E1 Cards after Loading the T1/E1 Driver Package

- *Problem:* UnixWare dynamic loadable drivers do not always link properly into the UNIX kernel. The system may or may not report errors as the drivers are being installed.

*Solution:* After starting the system, if **display card** does not show that T1 or E1 cards are installed, try the following to reinstall the package:

1. Use **pkgrm** to remove any digital protocol packages installed, for example Line Side T1 or E&M protocol.
2. Use **pkgrm** to remove the T1/E1 driver package (t1 driver package).
3. Reboot the system to force a kernel rebuild.
4. Use **pkgadd** to reinstall the T1/E1 driver package (t1 driver package).

5. Use **start\_vs** to restart the voice system.
6. Use **display card** to see if the system now recognizes the T1/E1 cards.

### **The System Does Not Recognize Tip/Ring Cards after Loading the Tip/Ring Driver Package**

- *Problem:* UnixWare dynamic loadable drivers do not always link properly into the UNIX kernel. The system may or may not report errors as the drivers are being installed.

*Solution:* After starting the system, if **display card** does not show that Tip/Ring cards are installed, try the following to reinstall the package:

1. Use **pkgrm** to remove the Tip/Ring driver package (tipring package).
2. Reboot the system to force a kernel rebuild.
3. Use **pkgadd** to reinstall the Tip/Ring driver package (tipring package).
4. Use **start\_vs** to restart the voice system.
5. Use **display card** to see if the system now recognizes the Tip/Ring cards.

### **Post-Installation Problems**

---

This section describes problems you might encounter on your target system after the upgrade is complete.

#### **The System Fails to Come up After a Reboot**

- *Problem:* The system may start to boot, but then seems to hang.  
*Solution:* Check the floppy disk drive. If there is a diskette in the drive, remove it. Press the RESET button to reboot the system.
- *Problem:* The system may have started to boot, and partially displayed the red UnixWare Loading screen, but then quits.

*Solution:* If you have a WDLXR831124 or WDLXR83160 video controller card, you must remove a jumper for these cards to work properly in a V6.0 system. See Table 5-1 for the information you need to correct this problem.

#### **Speech Recognition Does Not Work**

- *Problem:* After upgrading, Speech Recognition does not work.

*Solution:* From the Voice System Administration menu, access the Configuration Management menu and select `Feature Licensing`. Check the Display Feature Licenses window to ensure that the licenses are set appropriately for your system. If they are, check the Signal Processor (SP) or Speech and Signal Processor (SSP) card(s) as follows:

1. Enter **display card sp** and examine the output.
2. Check the Function assigned to the SP or SSP cards in the system. At least one SP card (with at least one Companion [CMP] card) or one SSP card must be assigned function `WW_RECOG` or `WW_RECOG+VOICE`.
3. Check the service status of the SP and CMP cards. If the CMP card(s) indicate "Not diag," then
  - a. Enter **remove ca n** (where *n* is the card number of the SP card identified above).
  - b. Enter **diagnose ca n** to diagnose the SP card and its attached CMP card(s).
  - c. After they have passed diagnostics, if the cards remain in the Out-Of-Service state, enter **restore ca n**

### **T1 Card(s) Report PANICs (TWIP022 Errors)**

- *Problem:* You have EtherCard hardware and software in your target system and notice that your T1 card(s) are reporting PANICs (TWIP022 errors).

*Solution:* Running the **smc\_setup** utility while the voice system is also running causes this error. Enter **stop\_vs** and wait until the system comes down before running **smc\_setup** to examine, verify, and/or reset network card resource (IRQ, RAM, and I/O address) status.

### **The ASAI Link Does Not Come Up**

- *Problem:* The ASAI link does not come up after the upgrade is complete.

*Solution:* On the switch side (DEFINITY), the CRV length of the extension associated with the BRI link to the system *must* be set to 2. If the DEFINITY switch is properly administered and the wiring is correct, call the CALLVISOR PC hotline at (303) 538-5622.

### **FlexWord® Speech Recognition Return Phrases Contain Control Characters**

- *Problem:* You are using Flexword speech recognition and you see control characters in your return phrases. For example, "Operator" is returned as "^Operator."

*Solution:* All FlexWord packages are shipped with AYC2C SP cards and shielded SP-to-CMP cables. However, if you are reusing older hardware, you may have some obsolete nonshielded cables. Replace any nonshielded cables with newer, shielded cables (comcode 601412828) to correct this problem.

### **Script Builder Applications Fail to Verify and Install**

- *Problem:* Script Builder applications fail to verify and install due to database errors.

*Solution:* Check the file `/att/trans/sb/application/symbols`, where *application* is the name of your application. If referenced tables are in the remote database, manually reverify and reinstall the applications after the host network connections are reestablished.

### **The SCSI Tape Drive Firmware Update Fails**

- *Problem:* You are trying to upgrade the firmware on the SCSI tape drive and it fails.

*Solution:* Perform the following steps:

1. Insert the diskette labeled "WANGTEK SCSI Tape Drive Update" into the floppy disk drive.
2. Enter **README.TXT** and read the instructions.
3. Repeat the "Upgrading the WANGTEK SCSI Tape Drive Firmware Version" procedure in Chapter 5, "Hardware Upgrades".

### **The System Reports Problems When You Stop and Restart the ORACLE Database**

- *Problem:* You see messages and announcements regarding run level or state changes when you stop and restart the ORACLE database and voice system during the upgrade. These messages are often intermingled with the output from the other operations that are going on in the same time frame.

*Solution:* Ignore these messages.

### **On an Upgrade from V4.0, the Database is Not Running**

- *Problem:* You are upgrading from V4.0 and recovering your system from an image tape. During the start up of the voice system, you receive error messages that the database is not running.

*Solution:* Use the following procedure to check for the existence of the **S98voice** file and recover it if necessary.

1. Enter **cd /etc/rc2.d**
2. Enter **ls -CFa**
3. Check for the **S98voice** file.

If it is not there, it may be recovered from the **/etc/init.d** directory or from the **/oracle/dist** directory.

- To recover from the **/etc/init.d** directory, enter  
**cp /etc/init.d/S98voice /etc/rc2.d/S98voice**
  - To recover from the **/oracle/dist** directory, enter  
**cp /oracle/dist/S98voice /etc/rc2.d/S98voice**
4. Reboot your system.
  5. Start the voice system again.

### Shell Programs Do Not Work

- *Problem:* Your shell programs do not work on your target system.  
*Solution:* The change in the operating system may cause shell programs to break. Make sure kshell is running on your system. Check your **.profile** file for the line `SHELL=/usr/bin/ksh`.

Refer to the ACCESS bulletin board and consult the UnixWare documentation for commands to repair your shell scripts on the target system.



#### NOTE:

For more information on ACCESS, see "Electronic Updates to This Book" in the Chapter , "About This Book" .

### Application Speech is Missing

- *Problem:* Application speech is missing on your target system.  
*Solution:*
  1. To determine the talkfile that was not carried to the target system, enter **vi /speech/talk**  
The talkfile number is the first number in the first column of the output.
  2. Insert the speech tape created during the most recent mkimage backup.
  3. Enter **spres -t talkfile <talkfile#>**  
where **<talkfile#>** is the number of the talkfile that was not carried forward.

### Speech from a Restored V5.0 Application Plays out with a Clicking Sound

- *Problem:* Speech in an application restored from a V5.0 system plays out with a clicking sound that is constant throughout the entire phrase.

*Solution:* The only known solution is to re-record the bad speech.

### The Network Does Not Come up

- *Problem:* The network does not come up after the upgrade is complete.

*Solution:* Perform the following procedure to verify the network setup and configuration:

1. Enter **uname -S <machine\_name>**
2. Enter **setuname -s <machine\_name> -n <machine\_name>**
3. Merge the **/etc/hosts** and **/etc/networks** files with the migrated versions of these files, that is, **o.hosts** and **o.networks**.
4. Modify **/etc/inet/rc.inet** to configure access to the router.
5. Enter **stop\_vs**
6. Enter **/usr/bin/smc\_setup**

The system displays the set-up file and the following message:

```
Do you want to change the setup? (y)
```

7. Enter **y**

The system displays the following message:

```
I/O base address? (280)
```

8. Press **(ENTER)**.

The system displays the following message:

```
IRQ? (15)
```

9. Press **(ENTER)**.

The system displays the following message:

```
cRAM base address (0D8000)
```

10. Press **(ENTER)**.

The system displays the following message:

```
Add wait states? (y)
```

11. Press **(ENTER)**.

The system displays the following message:

```
Network Connection:
```

1 = BNC or 10BaseT  
2 = AUI or 10BaseT  
3 = Twisted Pair - No Link Integrity  
?(3)

12. Enter **3**

The system displays the following message:

ROM disabled? (y)

13. Press **ENTER**.

The system displays the following message:

Save the new setup? (y)

14. Press **ENTER**.

The system displays the system prompt (#).

15. Enter **/etc/confnet.d/configure -i**

16. Enter **shutdown -g0 -y** to shut down the machine.

17. When prompted, press **CTRL ALT DEL** to reboot.

### The System Reports vtoc or Other Disk Write Problems

- *Problem:* You receive messages about vtoc or other disk write problems when booting the system from the UnixWare for INTUITY Boot Floppies (while installing UnixWare or an INTUITY CONVERSANT image tape).

*Solution:* Try Selection 1 (Overwrite system master boot code) in the Hard Disk Partitioning screen menu. If the problem persists, low-level format the disk and attempt the installation again. See “Low-Level Formatting the Hard Disk Drive” in Chapter 6, “Replacing the Hard Disk Drive”, in the maintenance book for your target system.

### The System Reports Errors while Running Volume Manager Commands

- *Problem:* You get errors during the “Activating the Volume Manager” procedure (running **volinstall**) from **volassist** or other Volume Manager commands.

*Solution:* The Volume Manager has encountered something that it did not expect to see. You need to low-level format the second hard disk. For the procedure, see “Low-Level Formatting the Hard Disk Drive” in Chapter 6, “Replacing the Hard Disk Drive”, in the maintenance book for your target system.

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## Supplemental Procedures



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### Overview

This appendix provides procedures you may need to complete the upgrade as outlined in Chapter 3, "Upgrade Checklists". Whether or not you use this information depends on the particular configuration of your source and/or target systems. Any supplemental procedures not provided here are contained in the maintenance book associated with the platform of your target system. The checklists will tell you which book you need.

### Purpose

The purpose of this appendix is to consolidate supplemental procedures you may need from other books in the INTUITY™ CONVERSANT® library. By presenting that information here, you can complete the upgrade and post-upgrade requirements using only this book and the maintenance book for your target system.

## Supplemental Procedures for Assisted Upgrades

---

This section contains the following procedures, some of which you may need to complete the upgrade to V6.0 using the Platform Upgrade Assistance Package. See the maintenance book for your target system for any additional information you need, as directed by the upgrade checklists.

- Determining the Size of the ORACLE Database
- Getting a Target System Configuration
- Restoring User Files Manually
- Upgrading Message Handling in DIPs
- Upgrading a TAS Application Script
- Compiling a DIP
- Installing a Graphical Designer Application
- Administering TCP/IP over Ethernet and Token Ring LANs
- Restoring Speech for User Applications Backed up due to Naming Conflicts with Package Applications
- Administering Modems
- Administering Printers
- Compiling and Installing IRAPI Applications
- Administering Operating System Logins
- Using the **findhomes** Command to Move User Login Files to the Home Directory on the Target System

### Determining the Size of the ORACLE Database

If the size of the ORACLE database on the source system has been increased beyond the default, you must allocate the same amount of space on the target system when prompted by the upgrade assistance program. Before you begin the upgrade, perform the following procedure on the *source* system to access the tablespace information and determine the size of the database.

 **NOTE:**

This procedure assumes that you will accept the general default configuration for the size of the ORACLE database and other packages when prompted by the upgrade assistance program.

1. Enter **dbfrag**

The system displays the system tablespace in a screen similar to the following:

```
System Tablespace, Space is in ORACLE Blocks (2048 Bytes/Block)
ALLOCATED FREE % AVG/FRAG LARGEST FRAGMENTS DB_ ROLLBACK
 FREE
 FREE
30000 22145 73.82 63 470 353 1 2824
```

2. Add the values that appear in the **ALLOCATED** and **FREE** columns, in this case 30000 and 22145, to get the size of the ORACLE database in blocks.
3. Multiply the value you calculated in Step 2 by 2,048 to get the size of the ORACLE database in bytes.
4. The standard or default size of the ORACLE database is 65 Mbytes. Subtract this from the value you calculated in Step 3 to get the size of the file in bytes that you must add to the ORACLE database on the target system.

This is the number you must enter when prompted during Part 2 of the upgrade assistance program when it restores the ORACLE database. Make a note of this number so it is available when you begin the upgrade.

### Getting a Target System Configuration

If you do not have a target system configuration from the TSO, you can install and run the Hardware Resource Allocator Program to obtain one.

1. The upgrade assistance program helps you install the Hardware Resource Allocator Program. When this is complete, quit out of the upgrade program. Enter **q** when prompted to continue.
2. Complete the procedure, "Operating the Hardware Resource Allocator" in Appendix A, "System Configuration", of the maintenance book for your target system. Use the **configure new** command to create a new configuration for your target system.
3. While creating your configuration, use the information in the **CVIS.info** file to preset the interrupts, I/O, RAM addresses, etc. for as many of the hardware components in your target configuration as possible.

There are some hardware components for which the file will probably not have the information necessary to preset the attributes. For example, if you are adding a Token Ring card to your target system configuration, you will not have the information in **CVIS.info** needed to preset any attributes on this component. For these new components and also for replacement components, let the Hardware Resource Allocator Program select the attribute settings.

4. Once the Hardware Resource Allocator Program is complete, use the **show\_config** command to view (and possibly print) the new configuration output.
5. Go back to the appropriate step in the upgrade checklist you are using (Table 3-1 or Table 3-2) and follow the instructions to install the INTUITY CONVERSANT VIS V6.0 Set.
6. Enter **/usr/lib/upgrade/bin/upg** to restart the upgrade program.

### Restoring User Files Manually

The upgrade assistance program restores user files for you if they were saved from standard locations as listed in Appendix B, "Files Migrated as Part of an Assisted Upgrade". If you saved some other user files manually, restore those files using the information below.

User files that you saved using the FACE interface back-up utilities or the **sysadm** command must be restored manually using the **cpio** command.

- To restore from cartridge tape:
  1. Insert the tape into the tape drive.
  2. Enter **cpio -icvBd -Hodc < /dev/rmt/c0s0**
- To restore from diskette:
  1. Insert the diskette into the floppy disk drive.
  2. Enter **cpio -icvBd -Hodc < /dev/rdisk/f0**

### Upgrading Message Handling in DIPs

The following procedures detail how to upgrade the message handling of your native script or DIP to work in the V6.0 logging environment. Complete the first procedure, "Saving Explain Text", on the source system *before* you perform the upgrade. Complete the next two procedures, "Restoring Explain Text" and "Performing a Full Conversion", on the target system *after* you complete the upgrade to V6.0.

#### **Saving Explain Text**

1. From the *source* system, enter the following command:

```
> appl.explain
while read errNum ; do explain $errNum >>appl.explain 2>&1 ;\
done
{type each error number defined in "appl_et.h", that has
explain text associated with it, 1 per line, end with <CTRL>D}
```

This produces the file **appl.explain** that has the form:

```
The message for error code 101 is:
A serious system error has occurred.
Reboot the system.
The message for error code 102 is:
A fairly serious system error has occurred.
If it happens again, reboot the system.
The message for error code 103 is:
This error is not serious at all. However, if it
happens three times a week for more 10 consecutive
weeks, reboot the system.
```

2. Save the **appl.explain** file that contains the explain messages on external media (for example, on a floppy disk). Also, save **appl\_et.h** (or whatever header files contain the programming defines) for the application error numbers defined by your application.

After the upgrade to V6.0 is complete, return to this section and continue with the next procedure, "Restoring Explain Text".

### Restoring Explain Text

Perform this procedure on the *target* system *after* the V6.0 upgrade is installed.

1. Restore the **appl.explain** and **appl\_et.h** files.
2. Create the following shell script:

```
cat >/vs/upgrade/fmtExp <<!
vName='basename $3' ; echo '<< '$vName' >>' ; echo ; cat $3
chmod +x /vs/upgrade/fmtExp
```

3. Enter **/vs/upgrade/upgExp**

The system prompts you for the name of the file with your explanations in it and the name of the header file with the defines. If your file names match the default file names (that is, **appl.explain** and **appl\_et.h**), press **(ENTER)**. Otherwise, type the pathname for the requested file.

If the length of all of your error number defines is less than or equal to 14 characters, **upgExp** automatically converts each explanation into the appropriate form. A session might look like:

```
/vs/upgrade/upgExp

Name of the file in which the output from the pre-3.1
explain for application DIP error numbers was
saved:[appl.explain]
Name of the header file defining error numbers:[appl_
et.h]
Converting 109 APPL001 CORRUPT_DATA
Converting 110 APPL002 DATA_TOO_OLD
Converting 111 APPL003 NO_SERVER
```

If any of your define names are 15 or more characters long, **upgExp** truncates it after the 14th character. If you are satisfied with this short name, press **(ENTER)**.

**⇒ NOTE:**

This *short* name is the internal file name in which the explanation will be stored. The full *long* mnemonic is still an acceptable way to reference the explanation.

If an explanation is found in your explanation text file, **appl.explain**, but is not found in your header file, **appl\_et.h**, **upgExp** asks you for the mnemonic name associated with the error number.

You may rerun the **upgExp** command on the same set of explanations if you want to change the actual explanation texts. First edit the explanation text file, **appl.explain**, changing *only* the text of the explanation itself (the lines of text between those beginning with `The message for error code . . .`). Once you have the explanations as you want them to appear, type **upgExp** again. The second and subsequent times, the system asks if you want to overwrite each explanation. Press **(ENTER)**.

4. Continue with the next procedure, "Performing a Full Conversion".

## Performing a Full Conversion

To complete a full conversion in an upgrade process, follow the steps below.

1. Copy to tape or diskette all of the application source code, headers, and **/gendb/data/errors** file that you saved before you removed the pre-V6.0 version.
2. Restore the application source code, headers, and **/gendb/data/errors** file to the machine.
3. Perform the following steps to create the file **/usr/spool/log/head/logAPPL.h**. This file should *not* exist prior to the upgrade procedure.

```
cd /usr/spool/log/head
if diff ORGlogAPPL.h logAPPL.h
then rm logAPPL.h
else echo You will need to manually combine o.logAPPL.h after
upgrade.
rm -f o.logAPPL.h
mv logAPPL.h o.logAPPL.h
fi
```

4. Remove all the comment lines up to the first `#include` at the top of file **/gendb/data/errors**.
5. If your error numbers are described in **/gendb/data/errors** file as they should be and if the name of your header file defining your error numbers is **/att/msgipc/etmsgs/appl\_et.h**, enter **/vs/upgrade/cvtAPPL**

This shell script creates two files, **/usr/spool/log/formats/APPLmsg** and **/usr/spool/log/head/logAPPL.h**. The former contains the formats of each error number message. The latter contains the mnemonic defines for each error number to be used by your application code. If you used a header by some other name, you must either temporarily rename it **appl\_et.h** so that you can use the **cvTAPPL** script, or you can manually execute the commands contained in **/vs/upgrade/cvtAPPL** with appropriate modifications to perform the necessary upgrade procedure.

6. Enter **cd /usr/spool/log/formats**
7. Enter **make -f formats.mk install**
8. Verify that
  - a. **APPLmsg** exists and contains the message formats for your applications
  - b. The file **../head/logAPPL.h** exists and contains the define symbols identifying your logging messages
  - c. **cmpLogFmt**, **textLogFmt.Mne**, **textLogFmt.NoM** exist in **.** and **..**
  - d. **textLogFmt** exists in **..** and is linked to either **textLogFmt.NoM** or **textLogFmt.Mne**
  - e. **systemLog.h** exists in both **.** and **../head**
9. Enter **msgadm** or use the Message Administration screen to reestablish the priority of each APPL message and specify the destination. For more information on
  - the **msgadm** command, see Appendix A, "Summary of Commands"
  - the Message Administration screen, see "Message Administration" in Chapter 3, "Configuration Management"of *INTUITY CONVERSANT System Version V6.0 Administration*, 585-310-591.

**⇒ NOTE:**

This step is optional if you used full pathnames in the previous step.

10. Enter **cd {src-directory}** where *{src-directory}* is the directory in which your application code is located.
11. Create the file **/tmp/cvt.lst** files, containing a list of all compilable source code, **\*.c**, **\*.h**, and **\*.pc** files, for any application programs you want to recompile for the current environment.

**⇒ NOTE:**

Each file name should appear on a line by itself. Pathnames should either be full pathnames (starting with **/**) or relative to the directory in which you plan to run the **upgCode** program.

**⇒ NOTE:**

If you have not used **appl\_et.h** as the name of your header file defining your error message numbers, you will need to amend the rules used to upgrade header files before proceeding. Your header file should have been named something like **xxx\_et.h**.

12. Having already performed the header file upgrade in Step 3, you should now have a new header file of the form, **logXXX.h**.

To amend the rules:

- a. Edit the file **/vs/upgrade/incChgs**.
- b. Add a line of the following form to the end of the list of rules:

```
xxx_et.hh'+.3i'logXXX.h
```

where **xxx** and **XXX** are the specific file name identifiers you used in your application.

13. Enter **/vs/upgrade/upgCode**

14. Examine all files for which warning messages were created during the conversion process. See **/tmp/cvt.lst** for the list of potential problems.

Problems fall into three major classes:

- Use of **#define** symbols or structure definitions from the header files **et\_send.h** or **et\_h**

For example, references to struct **et\_msg**, **ET\_MSG**, and **ERRORS\_ATT** will generate warnings. The complete list of items that will produce warnings is found in **/vs/upgrade/warningPats**. Manually change the code so that it no longer uses these symbols or structure elements.

- Calls to **et\_send** that are expressed as a macro, for example:

```
#define ETSEND(msgID,arg,str)
et_send(chan,msgID,arg,0,0,0,str)

ETSEND(VMD_MMLUPD,5,"message text")
```

The conversion program cannot deal with such cases. To allow the conversion program to operate on the previous example, manually change it to the following form:

```
et_send(chan,VMD_MMLUPD,5,0,0,0,"message text")
```

- Calls to **et\_send** that use a variable for the message ID, for example:

```
void func(id,arg0,arg1,str)
int id,arg0,arg1 ;
char *str ;
{
et_send(-1,id,arg0,arg1,0,0,str) ;
}
```

These are the most complicated to convert. Read the manual page for the **logMsg** function in Appendix C, "C-Library Functions", of *INTUITY CONVERSANT System Version 6.0 Application Development with Advanced Methods*, 585-310-761.

The **logMsg** function replaces the **et\_send** function. Where **et\_send** had an invariant set of arguments in a fixed order, **logMsg** has a variable list of arguments the order and type of which depend on the message being logged.

To convert such references, you will have to understand the true intent of the underlying code. In the above example, the best solution would be to just replace the calls to **func()** with direct calls to **logMsg** since this function does not do anything except log a message.

In more complicated cases, the solution depends on the format of the messages that must be logged. Make changes to the code to resolve the problems if necessary.

15. Add a call of the form **logInit("{program-name}")** to each executable, where *{program-name}* is the name you want associated with messages logged by your application (for example, DBDIP). This name should match the bulletin board (BB) name provided to the **startup** or **VSstartup** routine.

You should normally place this call in the **main()** routine. This call must appear prior to any attempt to log information via the **logMsg**, **vlogMsg**, or **logSysError** functions.

16. Add the compiler option **-I /usr/spool/log/head** so that header files can be referenced from the **/usr/spool/log/head** directory.

**⇒ NOTE:**

You may remove the compiler option **-I /att/msgipc/etmsg** since header files from the old system will not be used after conversion.

17. Add the following libraries to the make rules file of the application to include them in the load option:

**/vs/lib/liblog.a**  
**/vs/lib/libprism.a**

18. Recompile all modified applications.

## Upgrading a TAS Application Script

---

This section describes how to upgrade your TAS application script for use in the INTUITY CONVERSANT V6.0 environment.

## Compiling the TAS Script

If you have upgraded your system to V6.0 from a release prior to V5.0, TAS may have been installed with “4.0 Compatibility Mode” set. Compatibility Mode allows older scripts that may not meet the TAS language definition to compile with a minimum of changes.

### Script Changes for Compatibility Mode

The following script source code changes may be required before TAS V6.0 will successfully compile a script in Compatibility Mode. Although they occur only rarely, these incompatibilities produce error messages that prevent successful compilation of the script.

#### NOTE:

Warning messages may also be produced by TAS in Compatibility Mode. These messages do not prevent successful compilation, but indicate changes that you should make in the script source code to ensure compatibility with future releases of the INTUITY CONVERSANT system.

- Invalid register number errors

TAS now does range checking on script instruction arguments that require register numbers (for example, arguments of the form `r.X`, `*ch.X`, `*int.X`, `*sh.X`, `*ev.X`, where `X` is a script register number). In releases prior to V5.0, only four registers were available, so `X` should be in the range 0–3. In INTUITY CONVERSANT V5.0 and V6.0, 16 registers are available, so the valid range for `X` is 0–15. Invalid register numbers are a script bug and should be corrected.

The most common mistake with the argument types that begin with an asterisk (\*) is not that the register number is wrong, but that the asterisk was put there erroneously. For example, the argument `int.254` refers to the integer value stored at script address 254. The argument `*int.254` refers to the integer value stored at the script address contained in register 254, and therefore in this case 254 is not a valid register number. Prior to V5.0, TAS would not catch this error and TSM would substitute a null value for the argument when executing the script. Therefore, in cases of arguments like `*int.254`, it is likely that the asterisk was put there in error (especially if the number is not even close to the valid range for register numbers).

For errors involving an argument of the form `r.X` (where `X` is negative or greater than 15), the error is either in the use of a register value where some other data type was intended or in the use of an invalid register number. Examine the context of the instruction to determine the programmer’s intent and make the correction accordingly.

- An instruction argument with a missing dot or period ( . ) between an immediate data type keyword (`im`, `imm`, `immed`, etc.) and a quoted string (for example, `im"xyz"`)

Place a dot between the data type and the quoted string or delete the data type keyword altogether since it is optional in this case (that is, `im."xyz"` and `"xyz"` are equivalent). Prior to INTUITY CONVERSANT V5.0, TAS would accept this syntax, although leaving out the dot in any other argument type was not acceptable. The error messages produced by this syntax in V5.0 and V6.0 indicate that the instruction has the wrong number of arguments, as the TAS compiler interprets it as two separate arguments (for example, a label argument and a literal string argument). This may also cause the system to produce an "undefined label 'im'" message.

- **Numeric labels**

Prior to V5.0, it was possible to define an unused label name with a numeric rather than an alphanumeric string and TAS would not complain. Valid labels must always begin with an alphabetic character to distinguish them from integer constants. This usually happens in a script where a `#define` symbol that has an integer value is used. If a label happens to have the same name as the `#define` symbol, the preprocessor substitutes the integer value of the `#define` symbol for the label name before being run through TAS. The following script fragment illustrates this:

```
#define VALUE 128
...
load(r.0, int.VALUE)
...
VALUE:
...
```

When TAS runs this script through the preprocessor, the value 128 is substituted for every occurrence of `VALUE`. This is acceptable for the `load` instruction (which is loading an integer at script address 128 into register 0), but the label is changed to `"128:"`, which is an invalid label definition.

If a script like this compiled with the old TAS, then it is certain that the label was not being used anywhere in the script (for example, by any `goto()` or `jmp()` instructions), since instructions do not allow integer constants as labels. Therefore, you should delete the offending label.

## Turning Off Compatibility Mode

If TAS was installed with Compatibility Mode set, you can unset the mode by renaming the file `/vs/data/tas.debug`. For example, use the UNIX command `mv /vs/data/tas.debug /vs/data/tas.debug.save`. To set the mode back, move the saved file back to its original name.

**⇒ NOTE:**

If the file gets deleted, simply create the `/vs/data/tas.debug` file with the contents `"0x2000"` to set Compatibility Mode.

## Running TAS without Setting Compatibility Mode

Running TAS without Compatibility Mode set may produce more warning and error messages for a particular script. These are problems that you should correct in the script source code to ensure compatibility with future releases of the INTUITY CONVERSANT product. All new scripts you develop should be compiled without Compatibility Mode. Existing scripts that have been compiled in Compatibility Mode should be modified at some point (if necessary) to compile without it.

Error and warning messages point the user to the file, line number, instruction, and argument where the error or warning is caused and give a brief explanation of the problem. Error messages prevent successful compilation of the script by indicating improper TAS language syntax. Warning messages do not prevent successful compilation, but indicate that TAS is accepting an outdated form of an argument or instruction which may not be acceptable in the future. These messages indicate what the acceptable form should be so that you can change the source code accordingly.

### NOTE:

If the error messages are being overwhelmed in the output by numerous warning messages, use the **-w** command line option to suppress all warning messages.

## Compiling a DIP

---

When upgrading to INTUITY CONVERSANT V6.0 from releases V3.1 through V5.0, you must recompile all DIPs. Use the following information to compile your DIP. If additional information is required, see *UNIX SVR2 Programming in Standard C* or any standard ANSI-C reference document.

## Header Files and Libraries

The DIP source program is compiled in a standard method using the C-compiler (`cc`) to include the voice system header files and to link the voice system library **libssp.a** that resides in the directory **/vs/lib**. The voice system header files **mesg.h**, **VS.h**, and **shmentab.h** reside in the directories **/att/include**, **/att/msgipc**, and **/usr/spool/log/head**, respectively.

### NOTE:

Whenever a DIP reports errors to the logger/alerter, be sure that **\_INSTALLABLE\_APPL** is defined, that is, **-D\_INSTALLABLE\_APPL**.

## Example

For example, enter the following to create the executable version of DIP `stock_dip.c`.

**⇒ NOTE:**

The backslashes at the end of each line mean that you are to type the information entirely on one single line.

```
cc -I/att/include -I/att/msgipc -I/usr/spool/log/head\
_D _INSTALLABLE_APPL -o stock_dip stock_dip.c\
/vs/lib/lib spp.a/vs/lib/liblog.a/vs/lib/libprism.a
```

Once you create the executable version, you can start it manually from the shell command line or automatically through the inittab file.

### Automatic Startup via inittab

A DIP can be started and managed automatically by the UNIX system process `init` if it appears in the `/etc/inittab` file. If you display the inittab file, entries for the voice system processes like TSM, logdaemon, and iCk are shown. Typically, one entry is made for each process to run. Entries in the inittab file consist of fields separated by colons (:). These fields allow you to specify

- A unique label to identify the entry
- The run levels to run the program; voice system processes and most DIPs use run level 4
- Whether the program is to be run once only or re-run if it dies

The `start_vs` command rebuilds the modified inittab file by concatenating all the files in `/etc/conf/init.d`. Perform the following procedure to make your entries permanent:

1. Enter `stop_vs` to stop the voice system.
2. Edit your entry in the `/etc/conf/init.d` directory. The following is an entry for a DIP called `stock_dip` in the `init.d` directory that runs at run level 4, is re-run if it dies, and is labeled `PI1`:
  - a. Enter `vi stock_dip`
  - b. Add the following to the `stock_dip` file:

```
PI1:4:respawn:/local/bin/stock_dip > /dev/null 2>&1
```
  - c. Enter `:wq`
3. Enter `/vs/bin/util/mkitab`
4. Enter `start_vs` to start the voice system.

Your DIP will now start up automatically each time the voice system is started. If you experience problems with the procedure, execute `touch /etc/conf/init.d/CONVERSANT` before restarting the voice system.

## Installing a Graphical Designer Application

To install a Graphical Designer application file, perform the following procedure.

**⇒ NOTE:**

If the application includes FlexWord® wordlists or professionally recorded speech, there will be some additional prompts. These prompts are explained in “Installing an Application with FlexWord Wordlists” and “Installing an Application with Professionally Recorded Speech” following this procedure.

## Installing All Application Files

**⇒ NOTE:**

All applications are installed in the following default path:  
**`\att\trans\graphd\<application name>`**

1. Enter **`gd_install [-f] [-n] [-s] [-o <{s|f|a|d|h}>] [-l <language name>] [-dp <application name>`**

**⇒ NOTE:**

Application names are case sensitive.

The optional arguments are as follows:

- f Instructs the system that your files are on a floppy disk and prompts you to insert your floppy disk(s) so that the system can read the application files into the **`\att\trans\graphd/<application name>`** directory.
- l Instructs the system that you want to convert the specified application to a new language. The dates, times, money values and digits will be converted so they can be spoken in the new language formats, provided that standard speech in the language desired is loaded and selected as the standard speech for the application. This instruction also converts speech recognition input to the appropriate speech recognition grammar for the new language. For example, if US 1 to 3 was chosen in Graphical Designer and Japanese is selected during `gd_install`, the system converts US 1 to 3 to JN 1 to 3.
- n Instructs the system to overwrite all existing application files that are used by the specified application. For example, if the database table **`acctinfo`** already exists in the ORACLE database and your specified application also uses a database table named **`acctinfo`**, the system replaces the table in the ORACLE database with the table used by your application.

- s Instructs the system that you want to use professionally recorded speech in the specified application. The system then ignores any .WAV files that you may have transferred. When using this option, you are prompted to insert your floppy disk(s) so that the system can read the speech files into the talkfile directory. The default talkfile directory for INTUITY CONVERSANT V6.0 systems upgraded from V5.0 without a reload of the operating system is **/home2/vfs/talkfiles** and **/voice1/vfs/talkfiles** for all other upgrades.
- dp Modifies all prompts that listen for speech recognition input, touch tones, or WholeWord to also listen for Dial Pulse Recognition.
- ot Instructs the system to overwrite all database tables with the same name.
- os Instructs the system to overwrite all speech files that have the same phrase tag number.
- of Instructs the system to overwrite all FlexWord wordlists that have the same wordlist name.
- oa Instructs the system to overwrite the entire **/att/trans/graphd/<application name>** directory.
- od Instructs the system to overwrite the **.d** file which indicates a list of Call Data Events.
- oh Instructs the system to overwrite the **.hs** file.
  - a. If database files exist, the system prompts you with the following question:  

```
Update the Oracle database? [Y/N]
```
  - b. If you enter **Y**, the system asks you whether you want to overwrite tables that already exist in the ORACLE database:  

```
Table ACCTINFO already exists.
Overwrite? [Y/N]
```
  - c. After all tables have been processed, the system asks you to restart the database dip. You must do this if the tables have changed.  

```
The database dip needs to be restarted. THIS WILL
AFFECT CALLS IN PROGRESS. If the database dip is
not restarted then the changes will not be
present. Restart the database dip? [Y/N]
```
  - d. The system then looks for any recorded speech that you transferred, unless you specify the **-s** argument. If you specify the **-s** argument, the system prompts you with the following message:  

```
Place the speech floppy into the drive and press
enter.
```

 **NOTE:**

If your speech will be professionally recorded by Lucent Technologies, be sure to print out a phrase listing of your application and give it to the Lucent Technologies account executive. To do this from the Graphical Designer, select `Print` from the `File` menu and select the `Phrase Listing` option. If your speech is being recorded by someone other than Lucent Technologies, make sure that when you are creating the phrase listing on the `INTUITY CONVERSANT` system, you use the actual phrase numbers for the phrase tag names of each phrase you want recorded.

If you do not specify the `-s` argument and a particular talkfile number is already in use, the system prompts you with the following message:

```
Talkfile already exists.
Overwrite? [Y/N]
```

2. Press `(Y)` if you want to overwrite the existing talkfile number with the talkfile number you specified with the Graphical Designer. If you press `(N)`, you may need to go back to the Graphical Designer and assign a different talkfile number to the recorded phrases for the specified application.

 **CAUTION:**

*The Graphical Designer does not automatically assign talkfile numbers to a particular phrase. Therefore you need to specify the talkfile numbers and be aware of those already in use as you could overwrite a talkfile that is being used by another application.*

The system prompts you with the following message:

```
Do you want to use standard speech in addition to the
application speech? (y/n)
```

3. Press `(Y)` if you want to use standard speech.

The system shows you the current list of available speech pools and then prompts you with the following message:

```
Please enter the name of the standard phrase list.
```

4. Enter a name of one of the available speech pool names. Make sure to enter the full name with the `.pl` extension.

The system prompts you with the following message:

```
Please enter the name of the custom phrase list.
```

5. Enter a name of one of the available speech pool names. Make sure to enter the full name with the `.pl` extension.

If your application uses a host interface and you have installed the application once before, the system prompts you with the following message:

```
.HS file already exists.
Overwrite? [Y/N]
```

If your application does not use a host interface or if you are installing your application for the first time, the system does not display this prompt.

6. Press  **Y** if you want to overwrite the **.HS** file. The **.HS** file includes host screen information.

The system prompts you with the following message:

```
.D file already exists.
Overwrite? [Y/N]
```

7. Press  **Y** if you want to overwrite the **.D** file. The **.D** file indicates a list of Call Data Events.

The system tells you that TAS is executing and eventually displays the following message:

```
TAS: Script application name.t compiled successfully.
Output file: /vs/trans/application name.T
```

### **Installing an Application with FlexWord Wordlists**

If you are using any FlexWord wordlists in your application, the system prompts you with additional questions during the installation process.

If a wordlist already exists, the system prompts you with the following:

```
The wordlist <wordlist name> already exists.
Overwrite? [Y/N]
```

If a wordlist does not already exist, the system prompts you with the following:

```
Is <wordlist name> a new wordlist? [Y/N]
Overwrite? [Y/N]
```

If you press  **Y**, the new wordlist is added to the system. If you press  **N**, the system displays a list of active wordlists and prompts you to enter an active wordlist.

#### **CAUTION:**

*The Graphical Designer only allows you to include up to eight characters for the name of a wordlist. If you want to use a wordlist that already exists on the system with a longer name, you must respond to the above questions so that you can choose from the list that is displayed.*

## Installing an Application with Professionally Recorded Speech

If you are using professionally recorded speech in your application, the system prompts you with additional questions during the installation process.

If professional speech for your application already exists on the system, the system prompts you with the following:

```
You already have professionally recorded speech.
Overwrite? [Y/N]
```

If you press **Y**, the system prompts you to insert the professional speech floppy disk into the disk drive and press **ENTER**. It then prompts you for each floppy disk until it reads all of them.

## Administering TCP/IP over Ethernet and Token Ring LANs

---

This section discusses administration of TCP/IP on INTUITY CONVERSANT systems that contain either the SMC Ethernet card, the IBM Token Ring card, or both.

### TCP/IP without a Token Ring Card

1. Install the SMC Ethernet LAN card. For procedures, see Chapter 5, "Replacing, Installing, or Upgrading Circuit Cards", in the maintenance book for your target system. There you will also make sure that all of the necessary UnixWare TCP/IP packages are loaded on the system. If they are not, follow the instructions to load TCP/IP from the UnixWare tape.

**⇒ NOTE:**

If cabling to the network is available, you may also connect the Ethernet card to the network hub at this time.

2. Complete the procedure "Installing the LAN Card Driver Package" in Chapter 9, "Installing Base System Software", of the maintenance book for your target system.

**⇒ NOTE:**

The user responses provided in the maintenance book are recommendations only. If your situation calls for a different IRQ or a BNC connection rather than twisted pair, respond to the prompts accordingly.

3. Following the software installation procedure, refer to the Novell UnixWare guide entitled *TCP/IP & NFS; TCP/IP Administration*. In Chapter 3, pages 44–47, perform the following steps:

- a. Enter `/etc/confnet.d/configure -i`

The system prompts you for the interface type.

- b. Select `sme_0`.

The system prompts you for the host name, that is, the network node name for the system.

- c. Enter the name of your INTUITY CONVERSANT system as you want it to appear in the `/etc/hosts` file. The typical response is to enter the system UNIX name or some alias name for the system.

The system prompts you for the ifconfig options.

- d. Select `ClassC`.
- e. From page 47 in the UnixWare TCP/IP administration guide, change the route daemon to the active mode by editing the `/etc/inet/rc.inet` file and changing the line

```
/usr/sbin/in.routed -q
to
/usr/sbin/in.routed
```

- 4. Enter **stop\_vs**
- 5. Run **smc\_setup** again to reaffirm the entries that you made when you installed the EtherCard Driver Package.
- 6. Enter **/etc/conf/bin/idbuild**
- 7. Enter **shutdown -y -g0 -i6**
- 8. Edit the `/etc/hosts` file to enter the remaining network node names for your LAN.
- 9. Enter **netstat -r**

The system displays the network routing table. This table will look similar to the one below.

Routing tables

| Destination | Gateway   | Flags | Refs | Use | Interface |
|-------------|-----------|-------|------|-----|-----------|
| localhost   | localhost | UH    | 0    | 0   | lo0       |
| xxx.yy.zzz  | host_name | U     | ?    | ?   | sme0      |

 **NOTE:**

If your SMC Ethernet card is already wired to the LAN, your routing table may have additional entries. These additional entries represent any routing devices that may be part of your network.

## TCP/IP over an IBM Token Ring Card with No Ethernet Card

1. Install the IBM Token Ring card. For procedures, see Chapter 5, “Replacing, Installing, or Upgrading Circuit Cards”, in the maintenance book for your target system. There you will also make sure that all of the necessary UnixWare TCP/IP packages are loaded on the system. If they are not, follow the instructions to load TCP/IP from the UnixWare tape.



### NOTE:

If cabling to the ring is available, you may also connect the Token Ring card to the MAU at this time.

2. Complete the following software installation procedures for the entire Synchronous Host Interface feature:
  - a. “Installing the Token Ring Hardware Support Package” in Chapter 5, “Replacing, Installing, or Upgrading Circuit Cards”, of the maintenance book for your target system
  - b. “Installing the LINKix Packages” in Chapter 9, “Installing the Optional Feature Software”, of the maintenance book for your target system
  - c. “Installing the Host Packages” Chapter 9, “Installing the Optional Feature Software”, of the maintenance book for your target system
3. See the Novell UnixWare guide entitled *TCP/IP & NFS; TCP/IP Administration*. In Chapter 3, pages 44–47, perform the following steps:
  - a. Enter **/etc/confnet.d/configure -i**  
The system prompts you for the interface type.
  - b. Select `ibmtok_0`.  
The system prompts you for the host name, that is, the network node name for the system.
  - c. Enter the name of your INTUITY CONVERSANT system as you want it to appear in the **/etc/hosts** file. The typical response is to enter the system UNIX name or some alias for the system.  
The system prompts you for the ifconfig options.
  - d. Select `ClassC`.
  - e. From page 47 in the UnixWare TCP/IP administration guide, change the route daemon to the active mode by editing the **/etc/inet/rc.inet** file and changing the line  

```
/usr/sbin/in.routed -q
```

to  

```
/usr/sbin/in.routed
```
4. Enter **shutdown -y -g0 -i6**

5. Edit the `/etc/hosts` file to enter the remaining network node names for your LAN.
6. Enter `netstat -r`

The system displays the network routing table. This table will look similar to the one below.

```
Routing tables
Destination Gateway Flags Refs Use Interface
localhost localhost UH 0 0 lo0
xxx.yy.zzz host_name U ? ? ibmtok0
```

**⇒ NOTE:**

If your Token Ring card is already wired to the MAU, your routing table may have additional entries. These additional entries represent any routing devices that may be part of your network.

### TCP/IP over the IBM Token Ring Interface and SMC Ethernet Cards

1. Install the IBM Token Ring card. For procedures, see Chapter 5, "Replacing, Installing, or Upgrading Circuit Cards", in the maintenance book for your target system. There you will also make sure that all of the necessary UnixWare TCP/IP packages are loaded on the system. If they are not, follow the instructions to load TCP/IP from the UnixWare tape.

**⇒ NOTE:**

If cabling to the ring is available, you may also connect the Token Ring card to the MAU at this time.

2. Complete the following software installation procedures for the entire Synchronous Host Interface feature:
  - a. "Installing the Token Ring Hardware Support Package" in Chapter 5, "Replacing, Installing, or Upgrading Circuit Cards", of the maintenance book for your target system
  - b. "Installing the LINKix Packages" in Chapter 9, "Installing the Optional Feature Software", of the maintenance book for your target system
  - c. "Installing the Host Packages" Chapter 9, "Installing the Optional Feature Software", of the maintenance book for your target system
3. See the Novell UnixWare guide entitled *TCP/IP & NFS; TCP/IP Administration*. In Chapter 3, pages 44–47, perform the following steps:
  - a. Enter `/etc/confnet.d/configure -i`  
The system prompts you for the interface type.

- b. Select `ibmtok_0`.

If this choice is accepted, skip to Step e.

If “`ibmtok_0`” is not one of the choices for configuration, continue with Step c.

- c. Edit the `/etc/confnet.d/netdrivers` file and add the following line:

```
ibmtok_0 inet
```

- d. Re-run the `configure -i` command and select `ibmtok_0`.

The system prompts you for the host name, that is, the network node name for the system.

- e. Enter the name of your INTUITY CONVERSANT system as you want it to appear in the `/etc/hosts` file.

 **CAUTION:**

*In this procedure you are connecting the INTUITY CONVERSANT system to a second network. The ethernet LAN was configured previously, and now you are configuring a token ring LAN. Therefore, the token ring name for the system in the `/etc/hosts` file must be unique.*

The system prompts you for the `ifconfig` options.

- f. Select `ClassC`.

The system asks you want to use this machine as a gateway.

- g. Respond accordingly.

- h. From page 47 in the UnixWare TCP/IP administration guide, check the `/etc/inet/rc.inet` file to see if the routing daemon is in the active mode. Ensure that the line looks like this:

```
/usr/sbin/in.routed
```

rather than this:

```
/usr/sbin/in.routed -q
```

- 4. Physically connect the IBM Token Ring card to an active MAU and then skip to Step 7.

If access to the ring is not yet available, continue with Step 5.

- 5. Edit the `/etc/confnet.d/inet/interface` file and comment out the line that begins with “`ibmtok`”.

 **NOTE:**

If you do not make this change, the next time the INTUITY CONVERSANT is rebooted, the system will try to access the token ring and fail. The following message will appear on boot up:

```
"TCP/IP start up not entirely successful. Error in
/tmp/inet.start"
```

and the system will no longer be able to connect to the ethernet network, even though the SMC Ethernet card is still physically connected to the LAN and the card is fine.

If the IBM Token Ring card is still not physically connected to an active ring, *stop here*. When you have made the connection to the ring, return to this procedure and continue with Step 6.

6. With the IBM Token Ring card hooked up to an active MAU, edit the **/etc/confnet.d/inet/interface** file and comment in the line at the bottom that begins with "ibmtok".
7. Enter **shutdown -y -g0 -i6**
8. Edit the **/etc/hosts** file to enter the remaining network node names for your token ring LAN.
9. Enter **netstat -r**

The system displays the network routing table. This table will look similar to the one below.

Routing tables

| Destination | Gateway    | Flags | Refs | Use | Interface |
|-------------|------------|-------|------|-----|-----------|
| localhost   | localhost  | UH    | 0    | 0   | lo0       |
| aaa.bb.ccc  | host_name1 | U     | ?    | ?   | sme0      |
| xxx.yy.zzz  | host_name2 | U     | ?    | ?   | ibmtok0   |

**⇒ NOTE:**

If the ethernet LAN or the token ring network include any routing devices, the routing table may have additional entries.

### **TCP/IP on the SMC Ethernet Card but Not on a Token Ring Card Installed for SNA-3270**

1. Install the SMC Ethernet LAN card. For procedures, see Chapter 5, "Replacing, Installing, or Upgrading Circuit Cards", in the maintenance book for your target system. There you will also make sure that all of the necessary UnixWare TCP/IP packages are loaded on the system. If they are not, follow the instructions to load TCP/IP from the UnixWare tape.

**⇒ NOTE:**

The user responses provided in the maintenance book are recommendations only. If your situation calls for a different IRQ or a BNC connection rather than twisted pair, respond to the prompts accordingly.

 **NOTE:**

If cabling to the network is available, you may also connect the Ethernet card to the network hub at this time.

2. Following the software installation procedure, refer to the Novell UnixWare guide entitled *TCP/IP & NFS; TCP/IP Administration*. In Chapter 3, pages 44–47, perform the following steps:

- a. Enter **/etc/confnet.d/configure -i**

The system prompts you for the interface type.

- b. Select `sme_0`.

The system prompts you for the host name, that is, the network node name for the system.

- c. Enter the name of your INTUITY CONVERSANT system as you want it to appear in the **/etc/hosts** file. The typical response is to enter the system UNIX name or some alias for the system.

The system prompts you for the ifconfig options.

- d. Select `ClassC`.

- e. From page 47 in the UnixWare TCP/IP administration guide, change the route daemon to the active mode by editing the **/etc/inet/rc.inet** file and changing the line

```
/usr/sbin/in.routed -q
to
/usr/sbin/in.routed
```

3. Edit the **/etc/confnet.d/inet/interface** file and comment out the line at the bottom that begins with “`ibmtok`”.

 **NOTE:**

This change is necessary to keep the SMC Ethernet connection working whether or not there is a connection to the IBM Token Ring card. If you do not make this change, the next time the INTUITY CONVERSANT is rebooted, the system will try to access the token ring and fail. The following message will appear on boot up:

```
“TCP/IP start up not entirely successful. Error in
/tmp/inet.start”
```

If this message appears, the system will no longer be able to connect to the ethernet network, even though the SMC Ethernet card is still physically connected to the LAN and the card is fine.

4. Enter **stop\_vs**
5. Run **smc\_setup** again to reaffirm the entries that you made when you installed the EtherCard Driver.

6. Enter **/etc/conf/bin/idbuild**
7. Enter **shutdown -y -g0 -i6**
8. Edit the **/etc/hosts** file to enter the remaining network node names for your LAN.
9. Enter **netstat -r**

The system displays the network routing table. This table will look similar to the one below.

```
Routing tables

Destination Gateway Flags Refs Use Interface
localhost localhost UH 0 0 lo0
xxx.yy.zzz host_name U ? ? sme0
```

**⇒ NOTE:**

If the SMC Ethernet card is already wired to the LAN, your routing table may have additional entries. These additional entries represent any routing devices that may be part of your network.

### **TCP/IP on the SMC Ethernet Card with an IBM Token Ring Card Already Running TCP/IP**

1. Install the SMC Ethernet LAN card. For procedures, see Chapter 5, "Replacing, Installing, or Upgrading Circuit Cards", in the maintenance book for your target system. There you will also make sure that all of the necessary UnixWare TCP/IP packages are loaded on the system. If they are not, follow the instructions to load TCP/IP from the UnixWare tape.

**⇒ NOTE:**

If cabling to the network is available, you may also connect the Ethernet card to the network hub at this time.

2. Complete the procedure "Installing the LAN Card Driver Package" in Chapter 9, "Installing Base System Software", of the maintenance book for your target system.

**⇒ NOTE:**

The user responses provided in the maintenance book are recommendations only. If your situation calls for a different IRQ or a BNC connection rather than twisted pair, respond to the prompts accordingly.

3. Following the software installation procedure, refer to the Novell UnixWare guide entitled *TCP/IP & NFS; TCP/IP Administration*. In Chapter 3, pages 44–47, perform the following steps:
  - a. Enter **/etc/confnet.d/configure -i**

The system prompts you for the interface type.

- b. Select `sme_0`.

If this choice is accepted, skip to Step 7.

If `sme_0` is not one of the choices for configuration, continue with Step c.

- c. Edit the **`/etc/confnet.d/netdrivers`** file and add the following line:

```
sme_0 inet
```

- d. Re-run the **`configure -i`** command and select `sme_0`.

The system prompts you for the host name, that is, the network node name for the system.

- e. Enter the name of your INTUITY CONVERSANT system as you want it to appear in the **`/etc/hosts`** file.

 **CAUTION:**

*In this procedure you are connecting the INTUITY CONVERSANT system to a second network. The token ring network was configured previously, and now you are configuring an ethernet LAN. Therefore, the ethernet name for the system in the **`/etc/hosts`** file must be unique.*

The system prompts you for the ifconfig options.

- f. Select `ClassC`.

The system asks you want to use this machine as a gateway.

- g. Respond accordingly.

- h. From page 47 in the UnixWare TCP/IP administration guide, check the **`/etc/inet/rc.inet`** file to see if the routing daemon is in the active mode. Ensure that the line looks like this:

```
/usr/sbin/in.routed
```

rather than this:

```
/usr/sbin/in.routed -q
```

- 4. Now that two TCP/IP interfaces have been configured on the system, the IBM Token Ring card *must* remain physically connected to an active MAU. If the connection to the Token Ring is up and active, skip to Step 6. If access to the ring is no longer available, continue with Step 5.
- 5. Edit the **`/etc/confnet.d/inet/interface`** file and comment out the line at the bottom that begins with `ibmtok`. When you are finished, skip to Step 7.

**⇒ NOTE:**

If you do not make this change, the next time the INTUITY CONVERSANT is rebooted, the system will try to access the token ring and fail. The following message will appear on boot up:

```
"TCP/IP start up not entirely successful. Error in
/tmp/inet.start"
```

If this error message appears, the system will no longer be able to connect to the ethernet network, even though the SMC Ethernet card is still physically connected to the LAN and the card is fine.

6. Edit the **/etc/confnet.d/inet/interface** file and make sure that the final entries in this file are in the following order:

```
lo:0:
sme:0:.....
ibmtok:0:
```

If the entries are not in the proper order in this file, the network routing table may not build correctly.

7. Enter **stop\_vs**
8. Run **smc\_setup** again to reaffirm the entries that you made during the EtherCard Driver installation.
9. Enter **/etc/conf/bin/idbuild**
10. Enter **shutdown -y -g0 -i6**
11. Edit the **/etc/hosts** file to enter the remaining network node names for your LAN.
12. Enter **netstat -r**

The system displays the network routing table. This table will look similar to the one below.

```
Routing tables

Destination Gateway Flags Refs Use Interface
localhost localhost UH 0 0 lo0
aaa.bb.ccc host_name1 U ? ? sme0
xxx.yy.zzz host_name2 U ? ? ibmtok0
```

**⇒ NOTE:**

If the ethernet LAN or the token ring network include any routing devices, the routing table may have additional entries.

**⇒ NOTE:**

If the IBM Token Ring card is disconnected, the network routing table will not contain any entries of the type "ibmtok0".

## Restoring Speech for User Applications Backed up due to Naming Conflicts with Package Applications

---

If your source system had user applications that were backed up due to naming conflicts with INTUITY CONVERSANT package applications (see "Files and Data" in Chapter 2, "Upgrade Planning and Prerequisites"), you must now restore speech for those applications. Do this through Script Builder or using the **spres** command.

### Using Script Builder to Restore Speech

To restore speech using Script Builder, perform the following procedure:

1. Enter your login and password at the console prompt.
2. Enter **cvvis\_mainmenu**

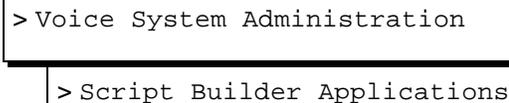
The system displays the INTUITY CONVERSANT V6.0 menu (Figure A-1).



---

**Figure A-1. INTUITY CONVERSANT V6.0 Menu**

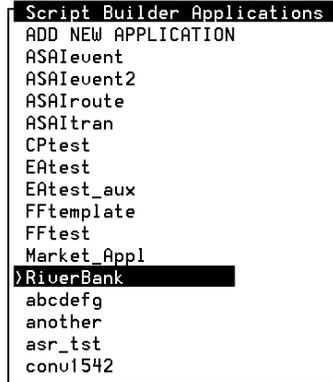
3. Select



```
> Voice System Administration
```

```
> Script Builder Applications
```

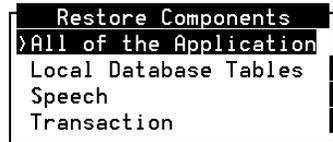
The system displays the Script Builder Applications menu (Figure A-2).



**Figure A-2. Script Builder Applications Menu**

4. Highlight the application for which you are restoring speech.
5. Insert the appropriate disks into the disk drive.
6. Press (F6) (Restore).

The system displays the Restore Components menu (Figure A-3).



**Figure A-3. Restore Components Menu**

7. Select



The system displays the following message:

```
Enter F to use FLOPPY DISK
Enter C to use CARTRIDGE TAPE
ENTER Q to stop.
```

8. Enter **F** to restore from floppy disk, **C** to restore from cartridge tape, or **Q** to quit.

When the speech is restored, the system displays the following message:

```
Restore speech successful
```

9. Press **ENTER** to return to the Restore Components menu (Figure A-3).

## Using the **spres** Command to Restore Speech

The **spres** command restores speech from a backup.

### Synopsis

```
spres -l <file> [-v] -t [talkfile <list>] [phrase <list>] [listfile <list>]
```

### Description

The **spres** command restores the specified talkfile number, phrase number, listfile, or phrase and talkfile of the speech.

### ⇒ NOTE:

Only speech that is backed up from a pre-V5.0 mkimage backup or using the **spsav** command can be restored with the **spres** command.

### Parameters

The parameters for the **spres** command are as follows:

|                                |                                                                                                                                                           |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>-l file</i>                 | This parameter specifies the input device. Typically this is cartridge tape ( <b>/dev/rmt/c0s0</b> ).                                                     |
| <i>-v</i>                      | This parameter is the verbose flag that gives a running commentary of the <b>restore</b> procedure.                                                       |
| <i>-t</i>                      | This parameter is the tape flag. It is required for restore from cartridge tape.                                                                          |
| <i>[talkfile &lt;list&gt;]</i> | This parameter specifies the list of talkfiles to be restored as either a single digit, a range m–n, or the word <b>all</b> . The default is <b>all</b> . |
| <i>[phrase &lt;list&gt;]</i>   | This parameter specifies the list of phrases to be restored, as either a single digit, a range m–n, or the word <b>all</b> . The default is <b>all</b> .  |
| <i>[listfile &lt;list&gt;]</i> | This parameter specifies the list of listfiles and associated speech to be restored, for example, <b>listfile list.cabnt</b>                              |

The **spres** command invokes an interactive program asking you to insert and remove cartridge tapes periodically. If you use the **-v** option, the system displays information about each step of the recovery.

### Example

The following example restores listfile "list.cabnt" verbosely from cartridge tape:

```
spres -l /dev/rmt/c0s0 -v -t listfile list.cabnt
```

## Administering Modems

---

Complete the following procedure to set up UnixWare to use a modem for outgoing calls.

### ⇒ NOTE:

For more information, see "Connecting a Modem" in Chapter 4, "Connecting Peripherals and Powering Up", in the installation book for your target system and the modem manufacturer's instructions.

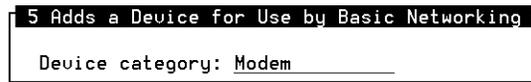
1. Log in as root.
2. Enter **cvvis\_mainmenu**

The system displays the INTUITY CONVERSANT V6.0 menu (Figure A-1).

3. Select

```
> UNIX System Administration
> Network_Services
> Basic_Networking
>Add
```

The system displays the Adds a Device for Use by Basic Networking window (Figure A-4).



---

**Figure A-4. Adds a Device for Use by Basic Networking Window**

4. Enter **Modem** in the Device Category: field.
5. Press **F3** (Save).

The system displays the Add a Modem Device for Use by Basic Networking window (Figure A-5).

---



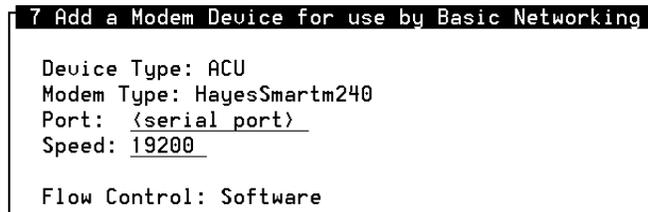
---

**Figure A-5. Add a Modem Device for Use by Basic Networking Window**

6. Enter **ACU** in the Device Type: field.
7. Enter **HayesSmartm2400B** in the Modem Type: field or press **F2** (Choices) to select from the menu.
8. Press **F3** (Save).

The system displays your choice in the Add a Modem Device for Use by Basic Networking window (Figure A-6).

---



---

**Figure A-6. Add a Modem Device for Use by Basic Networking Window**

9. Enter the serial port to be used in the Port: field or press **F2** (Choices) to select from the menu.

10. Enter **19200** in the Speed: field.

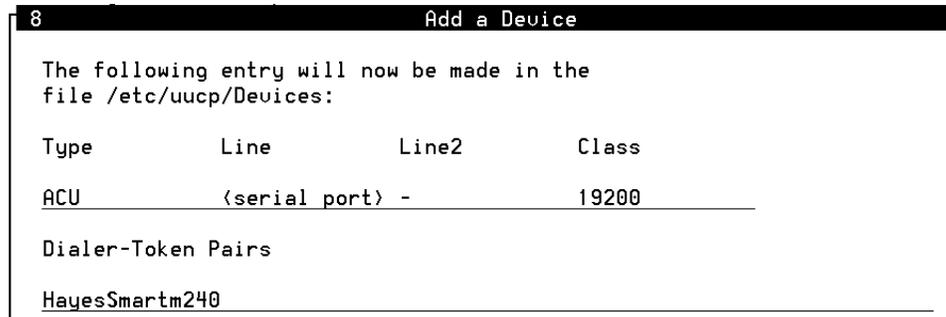


**NOTE:**

The word "Software" already appears in the Flow Control: field.

11. Press **F3** (Save).

The system displays the Add a Device window (Figure A-7).



**Figure A-7. Add a Device Window**

12. Press **F3** (Cont).

The system displays the following message:

Entry was added to the system. Use Ports menu to add a port monitor for a bidirectional port.

13. Press **F6** (Cancel) repeatedly until you return to the UNIX System V Administration menu.
14. Press **F7** (Cmd-Menu) and select Exit.
15. If you are using the AT&T Data Port Express 14.4 FAX modem or a Hayes modem, follow the steps below:

- a. At the UNIX prompt, enter **vi /etc/uucp/Devices**

- b. Change the following line from:

```
ACU <serial port from above> - 19200 HayesSmartm240 \T
```

to

```
ACU <serial port from above>,M - 19200 HayesSmartm2400B
```

- c. If you want to access the modem directly, add the following line to the **/etc/uucp/Devices** file:

Direct <serial port from above>,M - 19200 direct

- d. For the Hayes Smartm2400B modem, change the following line in the **/etc/uucp/Dialers** file:

```
HayesSmartm2400B =,-, ""\M\dAT&F\r\c OK\r
\EATDT\T\r\c00\r\m\c
```

16. If serial ports are being used as either tty00s or tty01s, verify the following:
- Enter **vi /etc/conf/sdevice.d/asyc** and **vi /etc/conf/sdevice.d/asyhp** and check the second column on the first line of each file. If it is set to **N**, change it to **Y**
  - Execute **/etc/conf/bin/idbuild**
  - Reboot the system.
17. To set up tty01s (COM2):
- Substitute tty01s for every <serial port> prompt in the above procedure through Step 15.
  - In Step 16a, change the second column on the second line in the **etc/conf/sdevice.d/asyc** file from **N** to **Y**
  - Follow Steps 16b and 16c.

## Administering Printers

---

Figure A-8 shows the options available for printer administration. See *NOVELL UnixWare System Administration Print Service Administration* for additional information about each of these options.

---

```
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 A-8. Line Printer Services Configuration and Operation Menu**

Complete the following procedure to administer a printer:

**⇒ NOTE:**

For more information, see “Connecting the Printer” in Chapter 4, “Connecting Peripherals and Powering Up”, in the installation book for your target system and the printer manufacturer’s instructions.

1. Log in as root.
2. Enter **cvis\_mainmenu**  
The system displays the INTUITY CONVERSANT V6.0 menu (Figure A-1).
3. Select

```
> UNIX System Administration
>Printers
>Printers
>Add
```

The system displays the Add a New Printer screen (Figure A-9).

```
4 Add a New Printer
Printer name: _____
System name: bop1
Printer type: unknown
Similar printer to use for defaults: none
Do you want to use standard configurations? (eg alerts, banners): yes
Do you want to use standard port settings? (eg baud rate, parity): yes
Is this a Dial-up Printer? no
Device or Address: _____
```

---

**Figure A-9. Add a New Printer Screen**

4. Enter **printer1** (or any other unique name) in the `Printer name:` field.
5. Enter your system name in the `System name:` field.
6. Enter **none** or the name of another printer in the `Similar printer to use for defaults:` field.
7. Enter **yes** in the `Do you want to use standard configurations?` field.

8. Enter **yes** in the `Do you want to use standard port settings?` field.
9. Enter **no** in the `Is this a Dial-up Printer?` field.
10. Enter **/dev/lp** or the name of another printer port in the `Device or Address:` field
11. Press **F3** (SAVE).
12. Press **F8** (CONT).  
The system displays the Configure Printers for the Printer Service menu.
13. Press **F6** (CANCEL) twice to return to the UNIX System V Administration menu.
14. Press **F7** (CMD-MENU).  
The system displays the Command Menu.
15. Select

```
> Exit
```

The system displays the system prompt.

16. At the system prompt, enter **accept printer1** to allow printer1 to begin accepting jobs.
17. Enter **enable printer1** to enable printer1.
18. Enter **lpadmin -d printer1** to make the newly defined printer the default printer.
19. Test the printer by entering **lp /etc/passwd**  
The system prints the contents of the `/etc/passwd` file to the printer.

## Compiling and Installing IRAPI Applications

Use this procedure to recompile and install an IRAPI application. The following example, `chantest.c`, shows the options and the libraries you will need:

```
cc -I/att/include -L/vs/lib chantest.c -o chantest \
-lirEXT -lirAPI -lspp -ITOOLS -llog -lprism
```

The INTUITY CONVERSANT VIS V6.0 Set contains all the necessary libraries and header files.

 **CAUTION:**

The IRAPI function *irsay()* has been changed to *irFDSay()* in V6.0. There are no parameter changes. Therefore, before you recompile the application, do a search and replace for the function name.

1. Compile the IRAPI application.
2. Install the executable file anywhere on the system.
3. Install the speech files with the UNIX **cp(1)** or **cpio(1)** commands in the location where they are referenced by the application. For example, the chantest.c application shown above stores all its speech files in the **/speech/chantest** directory.
4. Use the **defService** command to define the service for the IRAPI application. This following example shows how to do this for the chantest.c application:

```
defService -n -p chantest -t P chantest
```

In the above command, the

- **-n** option specifies the use of default values for all options not specified on the command line
- **-p** option specifies the process name to which the service belongs. The process name string must be identical to the name used by the process as an argument to the `irRegister(3IRAPI)` function. (In this case the service and process names are identical.)
- **-t** option specifies that chantest is a permanent process. This process should be running when the voice system is started and continue running until the voice system is stopped.

See “**defService**” in *INTUITY™ CONVERSANT® System Version 6.0 Administration*, 585-310-591, for information on additional options.

5. Assign the service you defined in Step 4 to a channel or dialed number in the same manner that TSM script services are assigned. The following example assigns the chantest service to channel 0:

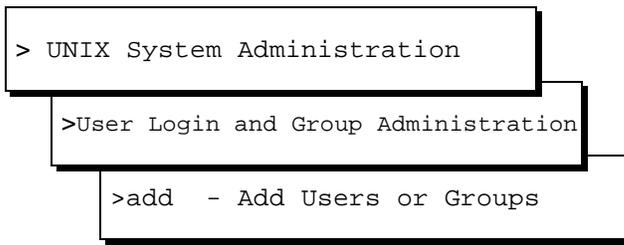
```
assign service chantest to chan 0
```

See “**assignService**” in *INTUITY™ CONVERSANT® System Version 6.0 Administration*, 585-310-591, for more information.

6. Run a permanent IRAPI application when the voice system is started. The recommended way to do this is to add a file to the **/etc/conf/init.d** directory containing an **inittab(4)** entry for the IRAPI process.

## Administering Operating System Logins

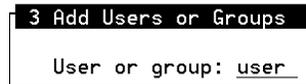
1. Log in as root.
2. Enter **cvis\_mainmenu**  
The system displays the INTUITY CONVERSANT V6.0 menu (Figure A-1).
3. Select



```
> UNIX System Administration
>User Login and Group Administration
>add - Add Users or Groups
```

The system displays the Add Users or Groups window (Figure A-10).  
"User" is preselected in the window.

---

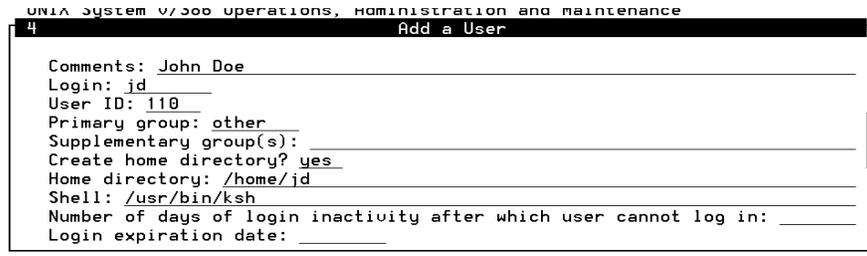


```
3 Add Users or Groups
User or group: user
```

---

**Figure A-10. Add Users or Groups Window**

4. Press **(F3)** (Save).  
The system displays the Add a User window (Figure A-11).



---

**Figure A-11. Add a User Window**

5. Enter the user's name in the `Comments:` field.
6. Enter the user's login in the `Login:` field.
7. Press `(RETURN)` four times to move the cursor to the `Create home directory?` field. Type **yes** into the field.

The system displays the `Home directory:` field listing the home directory for the user.

8. Type `/usr/bin/ksh` into the `Shell:` field.
9. Press `(F3)` (Save).

The system displays the Define User Password Information window (Figure A-12).

---



---

**Figure A-12. Define User Password Information Window**

10. Enter **password** into the `Password status:` field.
11. Press `(F3)` (Save).

The system displays the following prompt:

New password:

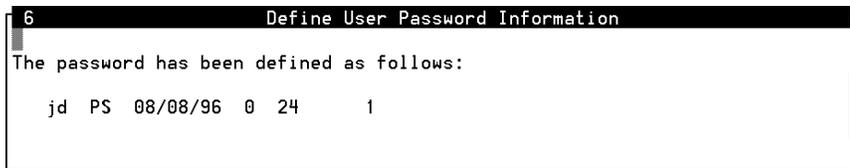
12. Enter the password for the user.

The system displays the following prompt:

```
Re-enter new Password:
```

13. Re-enter the password for the user.

The system displays the Define User Password Information window showing information for the user you have just entered (Figure A-13).



---

**Figure A-13. Define User Password Information Window**

14. If you want to add additional users, continue with Steps a and b below:

- a. Press **F3** (CONT).

The system displays the Add a User window (Figure A-11).

- b. Repeat Steps 9 through 13 for each user.

If you are finished adding users, press **F6** (Cancel) several times to return to the UNIX System V Administration menu.

### Using the `findhomes` Command to Move User Login Files to the Home Directory on the Target System

---

Use the `findHomes` command to populate your home directory with user files saved as part of an assisted upgrade.

#### Synopsis

```
findHomes [-?] [-v] [-D <dir>]
```

## Description

The **findHomes** command is part of the Platform Upgrade Assistance Package. It provides a convenient way to restore your files from the location where the Platform Upgrade Assistance Package saves them to the home directory for each user defined in the **/etc/passwd** file, if the user has the same login ID as on the source system.

For each user, the entire directory structure (including all files) preserved from the user home directory on the source system is moved to the user home directory on the target system. If a saved file has the same name as a file that already exists in a user's home directory on the target system, the saved version is moved to **o.<filename>** in that directory.

Files for any users whose login ID changes from the source to the target system must be moved from their saved location to their new home directory manually. This manual intervention is also required for any users who did not use their login IDs as the name of their home directories on the source system.

Run the **findHomes** command after the assisted software upgrade has completed and logins for all users expected to move from the source to the target system have been administered on the target system. See "Administering Operating System Logins" above for more information about administration of user logins.

The **[?]** argument displays a help message.

The **[-v]** argument causes a list of saved files to be printed as they are moved.

The **-D <dir>** argument specifies an additional directory to be searched for saved user files.

The Platform Upgrade Assistance Package saves user files in **/home/o.<homedir>**, where **<homedir>** is the last directory in the full-pathname home directory specified for each user in the **/etc/passwd** file on the source system. Often, **<homedir>** is the user's login ID. If the file restoration to this directory fails, the files are restored in a directory with the full pathname of the user's home directory on the source system.

### ⇒ NOTE:

A message is printed indicating any directory for which all the files are not successfully relocated.

## Example

The following example causes all files found in **/home/o.<homedir>** to be moved to the home directory specified for each non-system-user specified in the **/etc/passwd** file on the upgraded system:

```
/usr/lib/upgrade/bin/findHomes -v -D/home
```

## Administering PRI

---

For any upgraded system that includes PRI, you must verify that the appropriate cards are assigned to PRI and ensure that the configuration of assigned cards is valid. In particular, for V6.0 all cards in a D-channel group must now have contiguous card numbers and the first card must have the D-channel assigned to it. Use the following procedures to readminister SP, T1, and E1 cards as required. For additional information, see the following chapters in *INTUITY CONVERSANT System Version 6.0 Administration*, 585-310-591:

- Chapter 3, "Configuration Management"
- Chapter 6, "Switch Interfaces"

### Assigning Functions to or Changing Functions on SP/SSP Circuit Cards

Use the Assign/Change Functions to SP/SSP Cards window to assign one of several installed pack files functions to SP/SSP circuit cards or to change the current functions assigned to SP/SSP circuit cards.

**⇒ NOTE:**

The SP or SSP circuit card must be in the Manoos state before you can assign functions to it.

To change/assign functions to SP/SSP circuit cards:

1. Log in as root.
2. Enter **cviss\_menu**

The system displays the INTUITY CONVERSANT V6.0 menu (Figure A-1).

3. Select

```
>Voice System Administration
```

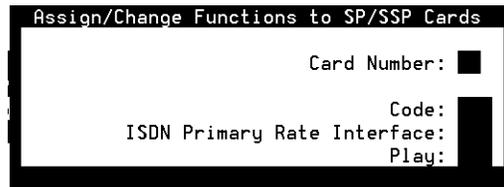
```
> Configuration Management
```

```
> Voice Equipment
```

```
> SP/SSP Functions
```

```
Assign/Change SP/SSP Functions
```

4. The system displays the Assign/Change Functions to SP/SSP Cards window (Figure A-14).



---

**Figure A-14. Assign/Change Functions to SP/SSP Cards Window**

**⚠ CAUTION:**

*Assignments made in the Assign Functions to SP/SSP Cards window overwrite any other assignments currently in effect on the specified circuit cards. Make such assignments and reassignments carefully.*

5. Enter information in the following fields or press **F2** (Choices) to select from a menu:

**Card Number:** — Specify the circuit card or range of circuit cards to which you want to assign functions. Type a single number or a range of numbers separated by commas or spaces.

Enter **yes** to enable or **no** to disable the remaining three fields:

- **Code:** — whether to record (encode) caller input
- **ISDN-Primary Rate Interface:** — whether to allow an SP circuit card to perform the D-channel processing for a T1 circuit card (AYC11, AYC3B) that will have an ISDN-PRI D-channel. This choice is only available for SP circuit cards (not SSP circuit cards) and cannot be used with any other functions. Only one SP circuit card may be assigned to PRI.
- **Play:** — whether to play prerecorded voice files

The following optional packages also appear in the Assign/Change Functions to SP/SSP Cards window and are enabled or disabled:

- Echo cancellation
- Whole Word speech recognition
- FlexWord speech recognition
- Call classification analysis (CCA)

**⇒ NOTE:**

Full CCA is not enabled for SSP cards. An SP circuit card assigned to CCA can perform no other functions.

- Text-to-Speech (TTS)

**⇒ NOTE:**

When changing the function of an SP circuit card to remove PRI, the system asks you if it is acceptable to unassign PRI for any T1 circuit cards associated with that SP.

### Administering ISDN PRI Layer 1 Protocol

This section describes how to access, change, and display ISDN PRI Layer 1 Protocol.

#### Accessing the ISDN PRI Layer 1 Menu

**⇒ NOTE:**

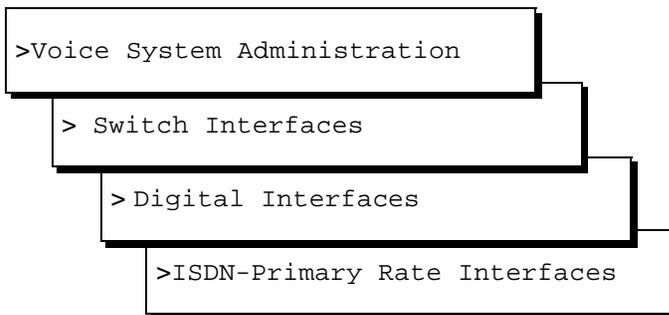
All options that are selected match the corresponding options on the PBX or network switch.

To access the ISDN Primary Rate Interface (ISDN-PRI) Layer 1 menu:

1. Log in as root.
2. Enter **cvvis\_menu**

The system displays the INTUITY CONVERSANT V6.0 menu (Figure A-1).

3. Select



The system displays the ISDN-PRI Layer 1 menu (Figure A-15).



**Figure A-15. ISDN-PRI Layer 1 Menu**

## Assigning an ISDN-PRI Layer 1 Circuit Card

### ⇒ NOTE:

The E1/T1 circuit card must first be in MANOOS state and any previously assigned protocol must first be unassigned before a new protocol can be assigned.

If you are going to configure an AYC11 or an AYC3B circuit card to have a D-channel, you must first assign an SP circuit card to PRI service. Assigning an SP card to PRI is not required when the D-channel is on an AYC21 circuit card since the AYC21 has sufficient CPU capacity to perform the D-channel processing without an SP card.

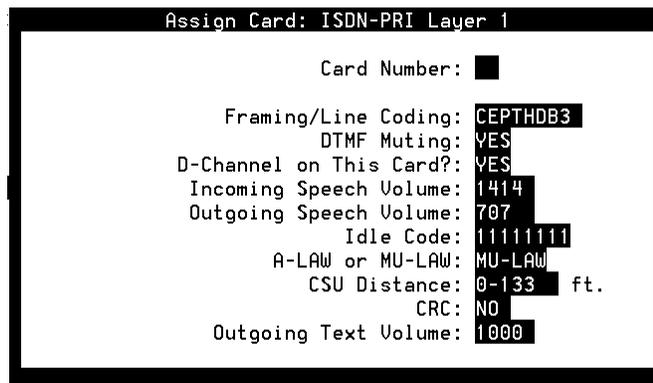
To assign an ISDN-PRI Layer 1 circuit card:

1. From the ISDN-PRI Layer 1 menu (Figure A-15) select



```
> Assign Card
```

The system displays the Assign Card: ISDN-PRI Layer 1 window (Figure A-16).



```
Assign Card: ISDN-PRI Layer 1
Card Number: █
Framing/Line Coding: CEPTHDB3
DTMF Muting: YES
D-Channel on This Card?: YES
Incoming Speech Volume: 1414
Outgoing Speech Volume: 707
Idle Code: 11111111
A-LAW or MU-LAW: MU-LAW
CSU Distance: 0-133 ft.
CRC: NO
Outgoing Text Volume: 1000
```

**Figure A-16. Assign Card: ISDN-PRI Layer 1 Window**

### ⇒ NOTE:

The `Outgoing Text Volume:` field is displayed only if the Text-to-Speech optional feature package software is installed on your system.

2. In the `Card Number:` field, enter the number of the circuit card you want to assign, or press `F2` (Choices) to select from a menu. Initially, all fields are populated with the default values of the circuit card you have chosen. Certain fields are not displayed depending on whether the E1 or T1 rate is selected.

The following E1-specific fields are not displayed if you select T1:

- Idle Code
- A-LAW or MU-LAW
- CRC

The following T1-specific field is not displayed if you select E1:

- CSU Distance

3. In the `Framing/Line Coding:` field, enter the framing/line coding, or press `F2` (Choices) to select from a menu. Valid values for T1 PRI are "D4ZCS" or "ESFB8ZS". "ESFB8ZS" is the default. The only valid choice for E1 PRI is "CEPTHDB3".
4. In the `DTMF Muting:` field, enter **Yes** or **No** or press `F2` (Choices) to select from a menu. Yes is the default. Enter Yes if you want to use DTMF Muting to reduce false DTMF recognitions. These sometimes result from played speech or other output from the voice system being echoed back by the network and falsely recognized as touch tones.

If DTMF Muting is turned on, the outgoing speech path is interrupted so the system can determine whether the touch tone was entered or simulated by the echoed speech that was generated by the voice system. DTMF Muting should, therefore, be set to Yes in most applications. Some applications cannot tolerate random interruptions in the outgoing speech path.

If DTMF Muting is turned off, the outgoing speech is not interrupted, and false DTMF detections might occur if the echoed speech simulates a touch tone. If you have an application that must pass DTMF tones to another system through a bridge, or if you require DTMF detection that adheres to LSSGR requirements for DTMF receivers, you may want to set DTMF Muting to No.

5. In the `D-channel on this Card?:` field, enter **Yes** or **No** to specify whether or not the circuit card carries the D-channel, or press `F2` (Choices) to select from a menu. Up to five PRI T1 or three PRI E1 circuit cards can have a D-channel. The voice system supports up to five 23B+D interfaces (each with its own D-channel and each optioned for Yes in this field) or up to 119B+D (where one card has the D-channel and the other four cards are controlled by that D-channel and have No in this field since they do not have a D-channel). The system also supports configurations with two to four D-channels so long as there are no more than five T1 cards in the system. Typically, each E1 PRI interface has its own D-channel and the system supports up to three 30B+D interfaces.

Cards that do not have a D-channel must have contiguous system card numbers that follow a card that has already been assigned to PRI and configured to have a D-channel. While both T1 PRI and E1 PRI are allowed in the same system, E1 and T1 cards are not permitted to use the same D-channel. When an AYC11 or AYC3B card has a D-channel, it is first necessary to assign PRI to an SP card so that the SP card can do the PRI message processing for that D-channel.

When an AYC21 card has the D-channel, it is not necessary to assign an SP card to PRI for that interface since the AYC21 card has sufficient CPU power to internally process the D-channel messages. At most, one SP card can be assigned to PRI, therefore AYC21 cards must be used to support configurations with more than one D-channel. It is acceptable to mix the newer AYC21 and older AYC11 and AYC3B cards within a D-channel group; when doing so, it is best to have the D-channel on the AYC21 card so that an SP card does not have to be assigned to PRI.

6. In the `Incoming Speech Volume:` field, enter the volume adjustment for all incoming speech on the E1/T1 circuit card. Valid values range from 0–32000; however, values less than 100 or more than 8000 may distort the incoming speech and make it difficult to understand. The default value for digital (E1/T1) circuit cards is 1414.

The default is based on network standards and performance and should be used unless experience with your system dictates a change. If you have trouble hearing speech you recorded using this value, you can increase the value and record the speech again. This field has no effect on prerecorded speech from other sources.

Any adjustment occurs before the incoming speech is processed by the system, for example, being coded for later playback. The value represents a gain applied to the speech input using a logarithmic scale on which a value of 1000 equals no gain; that is, the input is recorded at the level received. Multiplying by 1.414 (the square root of 2) approximately doubles the volume (in fact, increases it by 3 decibels). Therefore, a value of 1414 in this field doubles the volume of any incoming speech before it is used; 2000 doubles it again, 2828 doubles it a third time, etc.

On the other hand, multiplying by 0.707 approximately halves the volume (decreases it by 3 decibels). Therefore, a value of 707 in this field reduces the volume by one half, 500 by half again, etc. The following table shows the relationship between the volume number and the actual change in volume expressed in decibels (dB).

| Volume Number | Gain (dB) |
|---------------|-----------|
| 500           | -6        |
| 707           | -3        |

| Volume Number | Gain (dB) |
|---------------|-----------|
| 1000          | 0         |
| 1414          | +3        |
| 2000          | +6        |

Note that the incoming speech volume value is set on a per-card basis for digital circuit cards versus on a system-wide basis for analog circuit cards.

- In the `Outgoing Speech Volume:` field, enter the volume adjustment for all outgoing speech played on the circuit card. Valid values range from 0–32000. The default is 707.

Any adjustment is applied to recorded speech as it is processed for playback. The value and its effect are the same as for the incoming speech volume.

As with the incoming speech volume, the default is based on network standards and performance and should be used unless experience with your system dictates a change. If you have trouble hearing speech phrases when played back at this level, you can increase the output volume by increasing the value in this field. With speech you supply, you also can rerecord the speech using a higher input gain to increase the recorded speech volume level.

**⇒ NOTE:**

Distortion can result when the Incoming Volume or Outgoing Volume is too large.

- (E1 only) In the `Idle Code:` field, enter the 8-bit code that will be generated when the channel is idle.
- (E1 only) In the `A-LAW` or `MU-LAW:` field, enter which companding scheme to use. Enter A-LAW or MU-LAW. A-LAW is the default.
- (T1 only) In the `CSU Distance:` field, enter the cable distance, in feet, between the Channel Service Unit (CSU) and the voice system, or press **F2** (Choices) to select from a menu. Valid values are 0–133, 134–266, 267–399, 400–533, and 534–666. The default is 0–133 feet. If there is no CSU, the value entered in this field should be the cable distance between the voice system and the equipment to which it is connected.
- (E1 only) In the `CRC:` field, enter **yes** to use the Cyclical Redundancy Check error checking or **no** to disable it.

### PRI Layer 2 and Layer 3 Parameters

Your PRI service provider may need to know some Layer 2 and Layer 3 parameters used by the voice system. Table A-1 and Table A-2 list the most

commonly requested parameters. Incoming calls to the voice system should be provisioned so that the channel number is exclusive and not preferred.

Note that changing the timer values from the default is not recommended. However, if this is necessary, see the */vs/man/cat4/pri.rc.4* manual page for instructions.

 **NOTE:**

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

**Table A-1. PRI Layer 2 Parameters**

---

| Layer 2 Parameter | Value       |
|-------------------|-------------|
| Retry Count N200  | 3           |
| Timer T200        | 1 second    |
| Timer T203        | 30 seconds  |
| HDLC (D4ZCS)      | Inverted    |
| HDLC (ESFB8ZS)    | Noninverted |

---

**Table A-2. PRI Layer 3 Parameters**

---

| Layer 3 Parameter                | Value        |
|----------------------------------|--------------|
| Timer T302                       | 15 seconds   |
| Timer T303                       | 4 seconds    |
| Timer T305                       | 4 seconds    |
| Timer T308                       | 4 seconds    |
| Timer T310                       | 10 seconds   |
| Timer T313                       | 4 seconds    |
| Timer T316                       | 120 seconds  |
| Timer T3M1                       | 120 seconds  |
| Timer T309                       | 30 seconds   |
| Interface ID (with D-channel)    | 1            |
| Interface ID (without D-channel) | 2-5          |
| Bearer capability                | 64 bit voice |

---

## Changing ISDN PRI Layer 1 Card Parameters

**⇒ NOTE:**

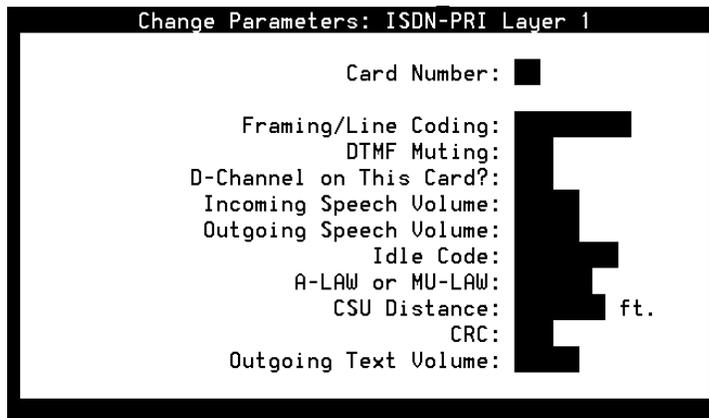
Before you perform this procedure, the circuit card must be in the MANOOS state and already assigned to ISDN-PRI Layer 1.

To change ISDN-PRI Layer 1 card parameters:

1. Log in as root.
2. Enter **cvvis\_menu**  
The system displays the INTUITY CONVERSANT V6.0 menu (Figure A-1).
3. Select

```
>Voice System Administration
> Switch Interfaces
> Digital Interfaces
>ISDN - Primary Rate Interfaces
Change Parameters
```

The system displays the Change Parameters: ISDN-PRI Layer 1 window (Figure A-17).



**Figure A-17. Change Parameters: ISDN-PRI Layer 1 Window**

4. Enter the circuit card number in the `Card Number:` field or press **F2** (Choices) to select from a menu. Certain fields are not displayed depending on whether you select the E1 or T1 rate.

The following E1-specific fields are not displayed if you select T1:

- Idle Code
- A-LAW or MU-LAW
- CRC

The following T1-specific field is not displayed if you select E1:

- CSU Distance

**⇒ NOTE:**

The `Outgoing Text Volume:` field is displayed only if the Text-to-Speech optional feature package software is installed on your system.

5. Change any of the parameters as described in “Assigning an ISDN-PRI Layer 1 Circuit Card” above.
6. Press **F3** (Save Change).

The system changes parameters for the specified circuit card.

### Displaying ISDN-PRI Layer 1 Parameters

**⇒ NOTE:**

To perform this procedure, the circuit card must be assigned to ISDN-PRI Layer 1. It does *not* have to be in the MANOOS state.

To display ISDN-PRI Layer 1 parameters:

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

The system displays the INTUITY CONVERSANT V6.0 menu (Figure A-1).

3. Select

```
>Voice System Administration
```

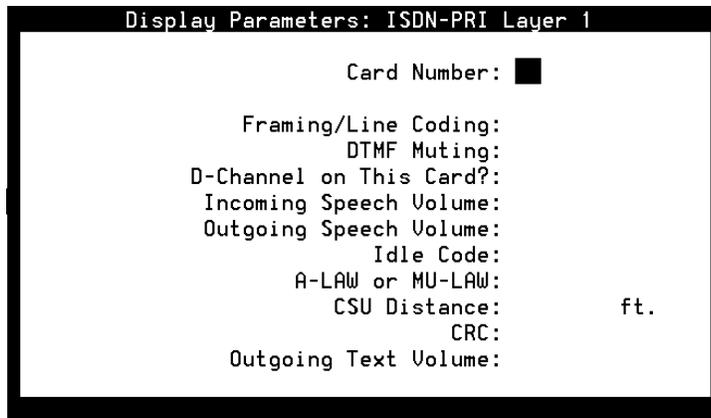
```
>Switch Interfaces
```

```
>Digital Interfaces
```

```
>ISDN-Primary Rate Interfaces
```

```
Display Parameters
```

The system displays the Display Parameters: ISDN-PRI Layer 1 window (Figure A-18).



---

**Figure A-18. Display Parameters: ISDN-PRI Layer 1 Window**

4. Enter the circuit card number in the `Card Number:` field or press `F2` (Choices) to select from a menu.

The system displays the current parameters for the specified circuit card.

T1- or E1-specific fields that are not applicable to the selected card are not displayed.

### Unassigning the ISDN-PRI Layer 1 Card

#### ⇒ NOTE:

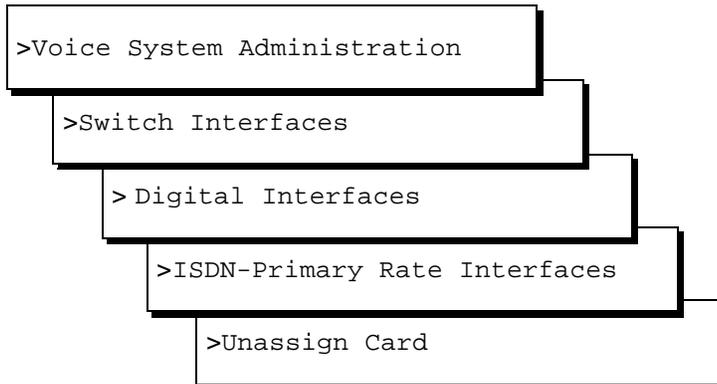
To perform this procedure, the circuit card must first be in the MANOOS state and must be assigned to ISDN-PRI Layer 1.

This procedure removes any protocols assigned to the circuit card and leaves it "Unassigned." To unassign an ISDN-PRI Layer 1 card:

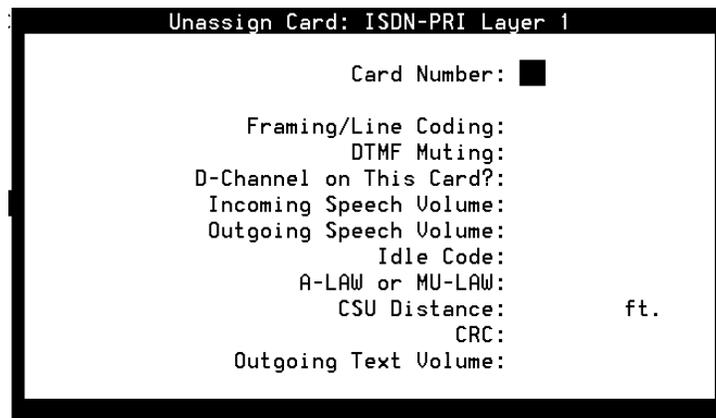
1. Log in as root.
2. Enter `cvvis_menu`

The system displays the INTUITY CONVERSANT V6.0 menu (Figure A-1).

3. Select



The system displays the The Unassign Card: ISDN-PRI Layer 1 window (Figure A-19).



---

**Figure A-19. Unassign Card: ISDN-PRI Layer 1 Window**

4. Enter the circuit card number in the Card Number: field or press **F2** (Choices) to select from a menu.

The system displays the current parameters for the specified circuit card.

T1- or E1-specific fields that are not applicable to the selected card are not displayed.

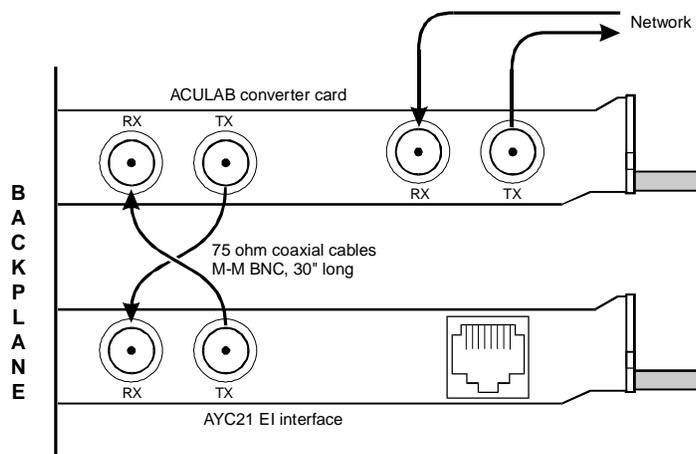
5. Press **F3** (Save Unassign).

The system unassigns ISDN-PRI from the specified circuit card.

### E1 PRI Using the ACULAB Protocol Converter

In V4.0i, E1 PRI capability using the ACULAB protocol converter card was introduced to support the United Kingdom's DASS2 and DPNSS protocols. V6.0 supports the same configuration, however, it is no longer necessary to assign an SP card to PRI. The AYC21 card can now perform the D-channel processing, which makes the SP card available for other uses.

Systems that require the use of an ACULAB protocol converter card must connect the network, the AYC21 circuit card, and the ACULAB converter card as shown (Figure A-20).



**Figure A-20. ACULAB Converter Card Connections**

When using the ACULAB protocol converter, it is also necessary to set the `FLAGS` and `NPI_TOA` parameters in the `/vs/data/pri/pri.rc` file as described in the `/vs/man/cat4/pri.rc.4` file. You must do this administration manually. It is not automatically performed by the upgrade assistance program.

### Digital Protocol Parameters

Table A-3 and Table A-4 show the field ranges and the field default values for digital protocols.

**Table A-3. T1 Digital Protocol Parameters, Ranges, and Defaults**

| <b>Protocol</b>                           | <b>Parameter Range/Value</b> | <b>ISDN PRI Layer 1</b> |
|-------------------------------------------|------------------------------|-------------------------|
| Framing/Line Coding                       | D4ZCS, ESFB8ZS               | CEPTHDB3                |
| DTMF Muting                               | Yes, No                      | Yes                     |
| CSU Distance                              | 0–666 ft                     | 0–133 ft                |
| Wink Time <sup>1</sup>                    | 10–2550 msec                 | N/A                     |
| Post Wink Time <sup>1</sup>               | 10–2550 msec                 | N/A                     |
| Max. Digits in Called Number <sup>1</sup> | 0–16                         | N/A                     |
| D-channel on This Card?                   | Yes, No                      | Yes                     |
| Wink Disconnect Interval <sup>2</sup>     | 10–2550 msec                 | N/A                     |
| Dial Tone Delay                           | 20–5100 msec                 | N/A                     |
| Switch Hook Flash Duration <sup>2</sup>   | 10–2550 msec                 | N/A                     |
| Incoming Speech Volume                    | 0–32000<br>(-30 to +30 dB)   | 1414                    |
| Outgoing Speech Volume                    | 0–32000<br>(-30 to +30 dB)   | 707                     |
| Outgoing Text Volume <sup>3</sup>         | 0–32000<br>(-30 to +30 dB)   | 1000                    |

1. Applies only to T1 0.5 robbed-bit E&M.
2. Applies only to line side T1 protocol.
3. Applies only when Text-to-Speech is installed.

**Table A-4. E1 Digital Protocol Parameters, Ranges, and Defaults**

| <b>Protocol</b>         | <b>Parameter Range/Value</b> | <b>E1 PRI</b> | <b>ISDN PRI LAYER 1 (with ACULAB)</b> |
|-------------------------|------------------------------|---------------|---------------------------------------|
| Framing/Line Coding     | CEPTHDB3                     | CEPTHDB3      | CEPTHDB3                              |
| DTMF Muting             | Yes                          | Yes           | Yes                                   |
| D-channel on This Card? | Yes/No                       | N/A           | Yes                                   |
| Dial Tone Delay         | 1000 msec, N/A               | N/A           | N/A                                   |
| Incoming Speech Volume  | 1414                         | 1414          | 1414                                  |
| Outgoing Speech Volume  | 707                          | 707           | 707                                   |

**Table A-4. E1 Digital Protocol Parameters, Ranges, and Defaults**

| <b>Protocol</b>                   | <b>Parameter Range/Value</b> | <b>E1 PRI</b> | <b>ISDN PRI LAYER 1 (with ACULAB)</b> |
|-----------------------------------|------------------------------|---------------|---------------------------------------|
| Outgoing Text Volume <sup>1</sup> | 1000                         | N/A           | 1000                                  |
| Idle Code                         | 01010100                     | 01010101      | 01010100                              |
| A-LAW or MU-LAW                   | A-LAW                        | A-LAW         | A-LAW                                 |
| CRC                               | Yes                          | N/A           | Yes                                   |

---

1. Applies only when Text-to-Speech is installed.

---

## **Files Migrated as Part of an Assisted Upgrade**

# **B**

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### **Overview**

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This appendix lists the files and directories that, if found on the source system, the upgrade assistance program attempts to migrate to the target system. In the case of a file name, only that file is migrated. In the case of a directory name, that entire directory tree on the source system is migrated.

### **Purpose**

---

This appendix is provided for your reference. If your source system contains files that are not listed here and you want to use those files also on the upgraded system, you must back them up and restore them manually. See "Files and Data" in Chapter 2, "Upgrade Planning and Prerequisites", for more information.

## **File Operations**

---

This section describes the operations that are associated with each file or directory tree listed in the following tables.

- *NoChange* — The file or directory tree is migrated to the target system with no changes. When these files are reinstalled, they overwrite any like-named files that may be on the target system.
- *SvNotFiles* — The file or files in the directory tree are migrated without change only if they do not “belong” to an INTUITY CONVERSANT software package that is currently installed on the source system. When these files are reinstalled, they overwrite any like-named files that may be on the target system.
- *SvAsOld* — The file or files in the directory tree are migrated to the target system (in the same directory), but are found on the target system with the name **o.file**.
- *SvOldNotFiles* — The file or files are migrated as **o.files** only if they do not “belong” to an INTUITY CONVERSANT software package that is currently installed on the source system.
- *MvToNew* — The file or files are migrated, but are installed with a different file name and/or in a different directory on the target system.
- *MvDirToNew* — The file or files are installed in a new location on the target system. For these entries, the second file/directory named is the target system location.
- *NoSave* — The file or files are deliberately *not* migrated to the target system, even if they would have been preserved according to another operation coming later in the list.
- *MergeOp* and *TransOp* — The file or files may pass through a conversion or merge operation to transform the information provided in them into a format that accomplishes the same purpose on the target system. At this time, those merge operations that are noted with an asterisk (\*) are simply placeholders. Files with notated merge operations may be migrated without change or as **o.files**. Some manual action may be required to configure the associated feature to mimic its behavior on the source system.

## Files and Directories Listing

This section lists the files and/or directories that are migrated to the V6.0 target system as part of the assisted upgrade. It includes the following tables:

- Table B-1. Files Migrated in All Upgrades to V6.0
- Table B-2. Files Migrated in Upgrades from V3.1 to V6.0
- Table B-3. Files Migrated in Upgrades from V3.1.1 to V6.0
- Table B-4. Files Migrated in Upgrades from V4.0 to V6.0

**Table B-1. Files Migrated in All Upgrades to V6.0**

| Comment                                              | Operation   | File or Directory                       |
|------------------------------------------------------|-------------|-----------------------------------------|
|                                                      | MergeCONV   | <b>/vs/data/CONVERSANT</b>              |
|                                                      | SvAsOld     | <b>/vs/data/alarms/alarm[1-6]</b>       |
|                                                      | NoChange    | <b>/vs/data/alarms/masks</b>            |
| # for NetView                                        | MergeAFlags | <b>/vs/data/alarm_flags</b>             |
| # 3.0+ source systems                                | NoChange    | <b>/vs/data/asai/chantbl</b>            |
|                                                      | NoChange    | <b>/vs/data/asai/domaintbl</b>          |
|                                                      | NoChange    | <b>/vs/data/asai/Parameters</b>         |
| # options for display-type<br># screens in cvis_menu | NoChange    | <b>/vs/data/cadm/cca.opts</b>           |
|                                                      | NoChange    | <b>/vs/data/cadm/cd.opts</b>            |
|                                                      | NoChange    | <b>/vs/data/cadm/cdsum.opts</b>         |
|                                                      | NoChange    | <b>/vs/data/cadm/evlog.opts</b>         |
|                                                      | NoChange    | <b>/vs/data/cadm/shutwait</b>           |
|                                                      | NoChange    | <b>/vs/data/cadm/traf.opts</b>          |
|                                                      | NoChange    | <b>/vs/data/cadm/voicedspopt</b>        |
|                                                      | NoChange    | <b>/vs/data/cadm/waittime</b>           |
| # parameters for IRAPI                               | CvtTsmrc    | <b>/vs/data/tsm.rc/vs/data/irAPI.rc</b> |
| # for SCCS                                           | NoChange    | <b>/vs/data/console_stat</b>            |
| # etStub msg conversion<br># files 3.1 or later      | MergeEtStub | <b>/vs/data/etStub.rules</b>            |
| # Form Filler Records                                | SvNotFiles  | <b>/vs/data/ff</b>                      |

*Continued on next page*

**Table B-1. Files Migrated in All Upgrades to V6.0 — Continued**

| <b>Comment</b>                                                        | <b>Operation</b> | <b>File or Directory</b>                |
|-----------------------------------------------------------------------|------------------|-----------------------------------------|
| # File Transfer<br># Configuration                                    | NoChange         | <b>/vs/data/fts_config</b>              |
| # CLEO LINKix                                                         | UpgHostSvc       | <b>/vs/data/hostsvc</b>                 |
| # replaces trtune_file in<br># V4.0                                   | NoChange         | <b>/vs/data/trhypot</b>                 |
| # new in V4.0                                                         | NoChange         | <b>/vs/data/mtc.rc</b>                  |
| # database dip<br># information                                       | NoChange         | <b>/vs/data/sb_databases</b>            |
|                                                                       | SvAsOld          | <b>/vs/data/spchconfig</b>              |
| # for V3.0, LST1+V5.0<br># changes; for V4.0, V5.0<br># changes 5 T1s | MergeTlcfg       | <b>/vs/data/t1_config</b>               |
| # parameters for irAPI                                                | MvToNew          | <b>/vs/data/irAPI.rc</b>                |
| # for Text-to-Speech                                                  | NoChange         | <b>/vs/data/tts_file</b>                |
| # for SCCS                                                            | NoChange         | <b>/vs/data/wdogOff</b>                 |
|                                                                       | NoChange         | <b>/vs/data/Aru_tty</b>                 |
|                                                                       | NoChange         | <b>/vs/data/Machname</b>                |
|                                                                       | NoChange         | <b>/vs/data/Sccs_tty</b>                |
| # driving rules for iCk<br># 3.1 or later                             | SvAsOld          | <b>/vs/etc/iCk.rules</b>                |
| # iCk configuration<br># settings                                     | SvAsOld          | <b>/vs/etc/default/iCk</b>              |
| # alerter configuration<br># settings                                 | SvAsOld          | <b>/vs/etc/default/alerter</b>          |
| # pre-3.1 custom<br># error/explain                                   | NoChange         | <b>/gendb/data/datafile</b>             |
|                                                                       | NoChange         | <b>/gendb/data/message_file</b>         |
|                                                                       | NoChange         | <b>/gendb/data/errors</b>               |
|                                                                       | NoChange         | <b>/gendb/data/appl.explain</b>         |
| # msgID to explain src<br># mapping                                   | MergeTransl      | <b>/gendb/data/explain/translateLst</b> |

*Continued on next page*

**Table B-1. Files Migrated in All Upgrades to V6.0 — Continued**

| <b>Comment</b>                                                                                                 | <b>Operation</b> | <b>File or Directory</b>           |
|----------------------------------------------------------------------------------------------------------------|------------------|------------------------------------|
| # binary config/setup info;<br># will require version-<br># specific conversions                               | ChgDevTbl        | /gendb/shmem/devtbl                |
| # services -> channel<br># assignments; may<br># require<br># version-specific<br># conversions                | ChgTransTbl      | /gendb/shmem/transconfig           |
|                                                                                                                | NoChange         | /vs/data/ad_channel_table          |
|                                                                                                                | NoChange         | /vs/data/ad_dnisani_table          |
|                                                                                                                | NoChange         | /gendb/switch/analog/noDTtrain     |
|                                                                                                                | NoChange         | /gendb/switch/analog/cad.timing.B  |
|                                                                                                                | NoChange         | /gendb/switch/analog/cad.pattern.B |
|                                                                                                                | NoChange         | /gendb/switch/analog/current       |
|                                                                                                                | SwtUserTune      | /gendb/switch/analog/userTunable   |
| # user changes need to<br># be merged into new<br># version;<br># may be other user src in<br># this directory | SvAsOld          | /att/ag/hostdip/helper/*.c         |
|                                                                                                                | SvAsOld          | /att/ag/hostdip/helper/makefile    |
|                                                                                                                | SvAsOld          | /att/asr/findbest.c                |
| # custom et error<br># messages                                                                                | NoChange         | /att/msgipc/etmsgs/appl_et.h       |
| # config for host boards                                                                                       | UpgHostCfg       | /usr/lib/3270/host.cfg0            |
| # differ from 2.1 to 3.0                                                                                       | UpgHostCfg       | /usr/lib/3270/host.cfg1            |
|                                                                                                                | NoChange         | /usr/lib/linkix/com.cfg            |
|                                                                                                                | NoChange         | /usr/lib/linkix/com.sec            |
|                                                                                                                | NoChange         | /usr/lib/linkix/com3270.stu        |
| # no preserve if in Files file                                                                                 | SvNotFiles       | /usr/spool/log/formats/*msg        |
|                                                                                                                | MvToNew          | /usr/spool/log/formats/APPLmsg     |
|                                                                                                                | MergeFMk         | /usr/spool/log/formats/formats.mk  |

*Continued on next page*

**Table B-1. Files Migrated in All Upgrades to V6.0 — Continued**

| <b>Comment</b>                                                                   | <b>Operation</b> | <b>File or Directory</b>        |
|----------------------------------------------------------------------------------|------------------|---------------------------------|
|                                                                                  | SvAsOld          | /usr/spool/log/head/logAPPL.h   |
|                                                                                  | SvNotFiles       | /usr/spool/log/head/log[A-Z]*.h |
|                                                                                  | MvToNew          | /usr/spool/log/head/logAPPL.h   |
|                                                                                  | MvToNew          | /usr/spool/log/dataDictLog      |
|                                                                                  | MvToNew          | /usr/spool/log/ddMapLog         |
|                                                                                  | MvToNew          | /usr/spool/log/kMsgsScript      |
|                                                                                  | MvToNew          | /usr/spool/log/msgDst.rules     |
|                                                                                  | MvToNew          | /usr/spool/log/thresh.rules     |
|                                                                                  | MvToNew          | /usr/spool/log/cmpLogFmt        |
|                                                                                  | MvToNew          | /usr/spool/log/textLogFmt       |
| # logger data                                                                    | UpgLogData       | /usr/spool/log/data             |
|                                                                                  | MvDirToNew       | /usr/spool/oldLog               |
|                                                                                  | SvNotFiles       | /att/ag/hostdip/helper/*.c      |
|                                                                                  | SvNotFiles       | /att/include                    |
| # Form Filler Plus pkg                                                           | NoSave           | /speech/talk/FFtemplate.pl      |
|                                                                                  | NoSave           | /speech/talk/transcribe.pl      |
| # feature_tst pkg                                                                | NoSave           | /speech/talk/feature_tst.pl     |
| # speech collection toolkit<br># pkg                                             | NoSave           | /speech/talk/dc_sample.pl       |
|                                                                                  | NoSave           | /speech/talk/monitor.pl         |
| # phrase lists for<br># applications                                             | NoChange         | /speech/talk/*.pl               |
| # sb applications src; use<br># sb_conv when restoring<br># to get them upgraded | SvNotFiles       | /att/trans/sb                   |
| # customer explain files                                                         | SvNotFiles       | /gendb/data/explain/[A-Z0-9]*   |
|                                                                                  | NoSave           | /etc/default/boot               |
|                                                                                  | NoSave           | /etc/default/default.*          |
|                                                                                  | SvAsOld          | /etc/default/*                  |
|                                                                                  | SvOldNotFiles    | /etc/init.d                     |

*Continued on next page*

**Table B-1. Files Migrated in All Upgrades to V6.0 — Continued**

| <b>Comment</b>                                                     | <b>Operation</b> | <b>File or Directory</b>     |
|--------------------------------------------------------------------|------------------|------------------------------|
| # system-wide profile                                              | SvAsOld          | <b>/etc/profile</b>          |
|                                                                    | SvAsOld          | <b>/etc/rc[023].d</b>        |
|                                                                    | SvAsOld          | <b>/oracle/dbs/initA.ora</b> |
| # preserve if not in Files                                         | SvNotFiles       | <b>/vs/bin/ag/eaforms</b>    |
|                                                                    | SvNotFiles       | <b>/vs/bin/ag/eascripts</b>  |
| # preserve if not in Files<br># SB external functions              |                  | <b>/vs/bin/ag/lib</b>        |
|                                                                    | SvAsOld          | <b>/vs/data/conf_data</b>    |
| # user login information                                           | SvAsOld          | <b>/etc/passwd</b>           |
| # password file for logins                                         | SvAsOld          | <b>/etc/shadow</b>           |
| # getty terminal behavior<br># replaced by vfstab<br># in UnixWare | SvAsOld          | <b>/etc/gettydefs</b>        |
| # LAN network hosts                                                | SvAsOld          | <b>/etc/hosts</b>            |
| # LAN networks known                                               | SvAsOld          | <b>/etc/networks</b>         |
|                                                                    | NoSave           | <b>/usr/add-on/ksh</b>       |
|                                                                    | SvNotFiles       | <b>/usr/add-on</b>           |
| # lp spooler configuration                                         | NoChange         | <b>/usr/spool/lp</b>         |
| # cron & at jobs                                                   | SvAsOld          | <b>/usr/spool/cron</b>       |
| # uucp log files, etc.                                             | NoChange         | <b>/usr/spool/uucp</b>       |
| # files from uucp                                                  | NoChange         | <b>/usr/spool/uucppublic</b> |
| # files controlling uucp                                           | SvAsOld          | <b>/usr/lib/uucp/[DMPS]*</b> |
| # root .profile                                                    | SvAsOld          | <b>/.profile</b>             |
| # root .env                                                        | SvAsOld          | <b>/.env</b>                 |
| # root .aliases                                                    | SvAsOld          | <b>/.alias*</b>              |
| # root .*rc                                                        | SvAsOld          | <b>/*.rc</b>                 |
| # V5 and later speech fs                                           | NoChange         | <b>/home2/vfs</b>            |
| # FlexWord files                                                   | FlexWordC        | <b>/att/asr/wordlists</b>    |
| # o.<dir> from dirsList file<br># on target systems                | NoChange         | <b>\$ (homeDirs)</b>         |

**Table B-2. Files Migrated in Upgrades from V3.1 to V6.0**

| <b>Comment</b>            | <b>Operation</b> | <b>File or Directory</b> |
|---------------------------|------------------|--------------------------|
| # database dip parameters | MergeOp          | /vs/data/ldb dip.rc      |

**Table B-3. Files Migrated in Upgrades from V3.1.1 to V6.0**

| <b>Comment</b>           | <b>Operation</b> | <b>File or Directory</b> |
|--------------------------|------------------|--------------------------|
| #database dip parameters | NoChange         | /vs/data/ldb dip.rc      |

**Table B-4. Files Migrated in Upgrades from V4.0 to V6.0**

| <b>Comment</b>            | <b>Operation</b> | <b>File or Directory</b>                          |
|---------------------------|------------------|---------------------------------------------------|
| # custom grammars         | NoChange         | /vs/data/sr_file                                  |
| # database dip parameters | NoChange         | /vs/data/ldb dip.rc                               |
| # custom grammars         | NoChange         | /vs/pack/cmp.seg                                  |
|                           | NoChange         | /att/include/sr_grammar.h                         |
| # FlexWord wordlists      | MvDirToNew       | /att/asr/wordlists/<br>/att/asr/wordlists/active/ |
| # Flexword                | NoChange         | /att/asr/sr_files/sr_file.sw                      |

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## Package Mapping

# C

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### **Overview**

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This appendix includes tables that map the names of software packages in INTUITY™ CONVERSANT® releases V3.1, 3.1.1, 4.0, and 5.0 to their equivalents in V6.0.

### **Purpose**

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This appendix is provided to help you verify that your V6.0 system contains the proper set of software packages when the upgrade is complete.

## Package Mapping Tables

This section includes the following tables:

- Table C-1. Package Mapping from V3.1 to V6.0
- Table C-2. Package Mapping from V3.1.1 to V6.0
- Table C-3. Package Mapping from V4.0 to V6.0
- Table C-4. Package Mapping from V5.0 to V6.0

**Table C-1. Package Mapping from V3.1 to V6.0**

| <b>V3.1 Package</b>                                                  | <b>V6.0 Replacement Package(s)</b>           |
|----------------------------------------------------------------------|----------------------------------------------|
| CONVERSANT Intro Advanced DBMS Software R1.0                         | None                                         |
| CONVERSANT Adjunct/Switch Application Feature Package Version 3.1    | Adjunct/Switch Application Interface Package |
| CONVERSANT Intro Application Support Software R1.0                   | None                                         |
| CONVERSANT Intelligent Ports Card (AT&T IPC-802) Version 3.1         | Intelligent Ports Card                       |
| CONVERSANT Intro Advanced Application Toolkit R1.0                   | None                                         |
| CONVERSANT Call Classification Analysis Package Version 3.1          | Call Classification Analysis Package         |
| CONVERSANT Chantst Speech Package Version 3.1                        | Feature Test Script Package                  |
| CONVERSANT CVMS - Interface For VIS Development Machines Version 1.0 | None                                         |
| CONVERSANT CVMS Interface Version 3                                  | None                                         |
| Form Filler Plus Version 3.1                                         | Form Filler Application                      |
| CONVERSANT VIS Application Software Version 3.1                      | CONVERSANT VIS V6.0 Set                      |
| CONVERSANT Intro Application Development Software R1.0               | None                                         |
| Integrated Voice Power System Software R2.0                          | None                                         |
| CONVERSANT Intelligent Ports Card (AT&T IPC-900) Version 3.1         | Intelligent Ports Card                       |

*Continued on next page*

**Table C-1. Package Mapping from V3.1 to V6.0 — Continued**

| <b>V3.1 Package</b>                                                      | <b>V6.0 Replacement Package(s)</b>                                                 |
|--------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Conversant VIS Performance Test Analysis Tools Version 3.1               | None                                                                               |
| Conversant VIS Performance Test Tools Version 3.1                        | None                                                                               |
| CONVERSANT ISDN Primary Rate Interface Package Version 3.1               | ISDN Primary Rate Interface Package                                                |
| CONVERSANT Speech Recognition Package Version 3.1                        | WholeWord Recognition Package - Base<br>WholeWord Recognition Package - US English |
| CONVERSANT Script Builder Version 3.1                                    | Script Builder                                                                     |
| CONVERSANT SP Board Driver Version 3.1                                   | ASP Driver Package                                                                 |
| CONVERSANT T1 Board Driver Version 3.1                                   | T1/E1 Board Driver<br>T1 E&M Interface Package                                     |
| CONVERSANT(TM) VIS T1 A/B Robbed-bit E&M Protocol Package (Version 1.14) | None                                                                               |
| CONVERSANT Text to Speech Package Version 3.1                            | Text to Speech Package                                                             |
| Voice Mail External Actions Package Version 3.1                          | None                                                                               |
| CONVERSANT Configuration Package Version 3.1                             | Hardware Resource Allocator                                                        |
| CONVERSANT ISDN Network Primary Rate Interface Package Version 3.1       | Available as a custom package only                                                 |
| CONVERSANT VIS External Alarm Interface Package Version 3.1              | External Alarms Package                                                            |
| CONVERSANT VIS 3270 Enhanced File Transfer Version 3.1                   | 3270 Enhanced File Transfer Package                                                |
| CONVERSANT AYC11 Upgrade Package for T1 E&M, Issue 1                     | T1 E&M Interface Package                                                           |
| CONVERSANT AYC11 Upgrade Package for ISDN-PRI, Issue 1                   | None                                                                               |

*Continued on next page*

**Table C-1. Package Mapping from V3.1 to V6.0 — *Continued***

| <b>V3.1 Package</b>                         | <b>V6.0 Replacement Package(s)</b>   |
|---------------------------------------------|--------------------------------------|
| CONVERSANT AYC11 Upgrade Package, Issue 1   | None                                 |
| Compuert/SCCS Interface Package Version 3.1 | Compuert/SCCS Interface Package      |
| 3270 NetView Alarm Interface Version 3.1    | 3270 Netview Alarm Interface Package |

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**Table C-2. Package Mapping from V3.1.1 to V6.0**

| <b>V3.1.1 Package</b>                                                | <b>V6.0 Replacement Packages(s)</b>          |
|----------------------------------------------------------------------|----------------------------------------------|
| AT&T UNIX System V/386 Release 3.2.2 Maintenance Update #1           | None                                         |
| CONVERSANT Intro Advanced DBMS Software R1.0                         | None                                         |
| CONVERSANT Adjunct/Switch Application Feature Package Version 3.1    | Adjunct/Switch Application Interface Package |
| CONVERSANT Intro Application Support Software R1.0                   | None                                         |
| CONVERSANT Intelligent Ports Card (AT&T IPC-802) Version 3.1         | Intelligent Ports Card                       |
| CONVERSANT Intro Advanced Application Toolkit R1.0                   | None                                         |
| CONVERSANT Call Classification Analysis Package Version 3.1          | Call Classification Analysis Package         |
| CONVERSANT Chantst Speech Package Version 3.1                        | Feature Test Script Package                  |
| CONVERSANT CVMS - Interface For VIS Development Machines Version 1.0 | None                                         |
| CONVERSANT CVMS Interface Version 3                                  | None                                         |
| Form Filler Plus Version 3.1                                         | Form Filler Application                      |
| CONVERSANT VIS Application Software Version 3.1                      | CONVERSANT VIS V6.0 Set                      |
| CONVERSANT Intro Application Development Software R1.0               | None                                         |
| Integrated Voice Power System Software R2.0                          | None                                         |
| CONVERSANT Intelligent Ports Card (AT&T IPC-900) Version 3.1         | Intelligent Ports Card                       |
| Conversant VIS Performance Test Analysis Tools Version 3.1           | None                                         |
| Conversant VIS Performance Test Tools Version 3.1                    | None                                         |
| CONVERSANT ISDN Primary Rate Interface Package Version 3.1           | ISDN Primary Rate Interface Package          |

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**Table C-2. Package Mapping from V3.1.1 to V6.0 — Continued**

| <b>V3.1.1 Package</b>                                                    | <b>V6.0 Replacement Packages(s)</b>                                                |
|--------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| CONVERSANT Speech Recognition Package Version 3.1                        | WholeWord Recognition Package - Base<br>WholeWord Recognition Package - US English |
| CONVERSANT Script Builder Version 3.1                                    | Script Builder                                                                     |
| CONVERSANT SP Board Driver Version 3.1                                   | ASP Driver Package                                                                 |
| CONVERSANT T1 Board Driver Version 3.1                                   | T1/E1 Board Driver<br>T1 E&M Interface Package                                     |
| CONVERSANT(TM) VIS T1 A/B Robbed-bit E&M Protocol Package (Version 1.14) | None                                                                               |
| CONVERSANT Text To Speech Package Version 3.1                            | Text To Speech Package                                                             |
| Voice Mail External Actions Package Version 3.1                          | None                                                                               |
| CONVERSANT Configuration Package Version 3.1                             | Hardware Resource Allocator                                                        |
| CONVERSANT ISDN Network Primary Rate Interface Package Version 3.1       | Available as a custom package only                                                 |
| CONVERSANT VIS External Alarm Interface Package Version 3.1              | External Alarms Package                                                            |
| CONVERSANT VIS 3270 Enhanced File Transfer Version 3.1                   | 3270 Enhanced File Transfer Package                                                |
| CONVERSANT AYC11 Upgrade Package for T1 E&M, Issue 1                     | T1 E&M Interface Package                                                           |
| CONVERSANT AYC11 Upgrade Package for ISDN-PRI, Issue 1                   | None                                                                               |
| CONVERSANT AYC11 Upgrade Package, Issue 1                                | None                                                                               |
| Compulert/SCCS Interface Package Version 3.1                             | Compulert/SCCS Interface Package                                                   |
| 3270 NetView Alarm Interface Version 3.1                                 | 3270 Netview Alarm Interface Package                                               |

**Table C-3. Package Mapping from V4.0 to V6.0**

| <b>V4.0 Package</b>                                                  | <b>V6.0 Replacement Package(s)</b>           |
|----------------------------------------------------------------------|----------------------------------------------|
| CONVERSANT Intro Advanced DBMS Software R1.0                         | None                                         |
| CONVERSANT VIS V4.0 Adjunct/Switch Application Interface Package     | Adjunct/Switch Application Interface Package |
| CONVERSANT Intro Application Support Software R1.0                   | None                                         |
| CONVERSANT Intelligent Ports Card (AT&T IPC-802)                     | Intelligent Ports Card                       |
| CONVERSANT Intro Advanced Application Toolkit R1.0                   | None                                         |
| CONVERSANT AYC11 Upgrade Package for T1 E&M, Issue 1                 | T1 E&M Interface Package                     |
| CONVERSANT AYC11 Upgrade Package, Issue 1                            | None                                         |
| CONVERSANT AYC11 Upgrade Package for ISDN-PRI, Issue 1               | None                                         |
| CONVERSANT VIS V4.0 Call Classification Analysis Package             | Call Classification Analysis Package         |
| CONVERSANT Chantst Speech Package                                    | None                                         |
| CONVERSANT CVMS - Interface For VIS Development Machines Version 1.0 | None                                         |
| CONVERSANT CVMS Interface Version 3                                  | None                                         |
| CONVERSANT VIS V4.0 Form Filler Plus Package                         | Form Filler Application                      |
| CONVERSANT VIS V4.0 Application Software                             | CONVERSANT VIS V6.0 Set                      |
| CONVERSANT Intro Application Development Software R1.0               | None                                         |
| Integrated Voice Power System Software R2.0                          | None                                         |
| CONVERSANT VIS V4.0 Intelligent Ports Card (AT&T IPC-900)            | Intelligent Ports Card                       |
| CONVERSANT VIS V4.0 Performance Test Analysis Tools                  | None                                         |

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**Table C-3. Package Mapping from V4.0 to V6.0 — Continued**

| <b>V4.0 Package</b>                                             | <b>V6.0 Replacement Package(s)</b>             |
|-----------------------------------------------------------------|------------------------------------------------|
| CONVERSANT VIS V4.0 Performance Test Tools                      | None                                           |
| CONVERSANT VIS V4.0 ISDN Primary Rate Interface Package         | ISDN Primary Rate Interface Package            |
| CONVERSANT VIS V4.0 Script Builder                              | Script Builder                                 |
| CONVERSANT VIS V4.0 SP Board Driver                             | ASP Driver Package                             |
| CONVERSANT VIS V4.0 T1 Board Driver                             | T1/E1 Board Driver<br>T1 E&M Interface Package |
| CONVERSANT VIS T1 A/B Robbed-bit E&M Interface Package          | None                                           |
| CONVERSANT VIS V4.0 Line Side T1 Interface Package - Galaxy     | Line Side T1 Package - Galaxy                  |
| CONVERSANT VIS V4.0 Line Side T1 Interface Package - DEFINITY   | Line Side T1 Package - Definity                |
| CONVERSANT VIS V4.0 Text To Speech Package                      | Text To Speech Package                         |
| CONVERSANT VIS V4.0 Voice Mail External Actions Package         | None                                           |
| CONVERSANT VIS V4.0 Speech Collection Toolkit                   | Data Collection Toolkit                        |
| CONVERSANT VIS V4.0 ISDN Network Primary Rate Interface Package | Available as a custom package only             |
| CONVERSANT VIS V4.0 Configuration Package                       | Hardware Resource Allocator                    |
| CONVERSANT VIS V4.0 External Alarm Interface Package            | External Alarms Package                        |
| CONVERSANT VIS V4.0 3270 Enhanced File Transfer                 | 3270 Enhanced File Transfer Package            |
| CONVERSANT VIS V4.0 Compulert/SCCS Interface Package            | Compulert/SCCS Interface Package               |
| CONVERSANT VIS V4.0 3270 NetView Alarm Interface                | 3270 Netview Alarm Interface Package           |
| CONVERSANT VIS V4.0 FlexWord Recognition Package (AT&T D1390)   | FlexWord Recognition - Base                    |

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**Table C-3. Package Mapping from V4.0 to V6.0 — Continued**

| <b>V4.0 Package</b>                                               | <b>V6.0 Replacement Package(s)</b>                                                             |
|-------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| CONVERSANT VIS V4.0 Speech Recognition Package - US English       | WholeWord Recognition Package - Base<br>WholeWord Recognition Package - US English             |
| CONVERSANT VIS V4.0 Speech Recognition Package - UK English       | WholeWord Recognition Package - Base<br>WholeWord Recognition Package - UK English             |
| CONVERSANT VIS V4.0 Speech Recognition Package - Canadian French  | WholeWord Recognition Package - Base<br>WholeWord Recognition Package - Canadian French        |
| CONVERSANT VIS V4.0 Speech Recognition Package - Mexican Spanish  | WholeWord Recognition Package - Base<br>WholeWord Recognition Package - Latin American Spanish |
| CONVERSANT VIS V4.0 PBX/PSTN Switch Interface Package - Hong Kong | Analog Switch Interface Package -- Hong Kong                                                   |
| CONVERSANT VIS V4.0 PBX/PSTN Switch Interface Package - Mexico    | Analog Switch Interface Package -- Mexico                                                      |
| CONVERSANT VIS V4.0 PBX/PSTN Switch Interface Package - UK        | Analog Switch Interface Package -- UK                                                          |
| CONVERSANT VIS Line Side T1 Interface Package - Galaxy            | Line Side T1 Package - Galaxy                                                                  |
| CONVERSANT VIS Line Side T1 Interface Package - DEFINITY          | Line Side T1 Package - Definity                                                                |
| CONVERSANT VIS V4.0 Graphical Speech Editor Package               | Graphical Speech Editor                                                                        |
| CONVERSANT VIS V4.0 Software Upgrade Assistance Package           | None                                                                                           |

**Table C-4. V5.0 to V6.0 Package Mapping**

| <b>V5.0 Package</b>                                                  | <b>Remove?<sup>1</sup></b> | <b>V6.0 Replacement Package(s)</b>   |
|----------------------------------------------------------------------|----------------------------|--------------------------------------|
| UnixWare for Intuity Emergency Boot Floppy                           | No                         | None                                 |
| CONVERSANT Intro Application Support Software R1.0                   | No                         | None                                 |
| CONVERSANT Intelligent Ports Card (AT&T IPC-802)                     | Yes                        | Intelligent Ports Card               |
| CONVERSANT AYC11 Upgrade Package for T1 E&M, Issue 1                 | Yes                        | T1 E&M Interface Package             |
| CONVERSANT AYC11 Upgrade Package, Issue 1                            | No                         | None                                 |
| CONVERSANT AYC11 Upgrade Package for ISDN-PRI, Issue 1               | No                         | None                                 |
| Intuity CONVERSANT VIS V5.0 Call Classification Analysis Package     | Yes                        | Call Classification Analysis Package |
| CONVERSANT Chantst Speech Package                                    | Yes                        | None                                 |
| CONVERSANT CVMS - Interface For VIS Development Machines Version 1.0 | Yes                        | None                                 |
| CONVERSANT CVMS Interface Version 3                                  | Yes                        | None                                 |
| Intuity CONVERSANT VIS V5.0 Speech Collection Toolkit                | Yes                        | Data Collection Toolkit              |
| Fax Attendant R2.5 Script Builder FAX Actions                        | No                         | None                                 |
| Intuity CONVERSANT VIS V5.0 Form Filler Plus Package                 | Yes                        | Form Filler Application              |
| Intuity CONVERSANT VIS V5.0 Intelligent Ports Card                   | Yes                        | Intelligent Ports Card               |
| Intuity CONVERSANT VIS V5.0 Intro Application Software               | Yes                        | CONVERSANT VIS V6.0 Set              |
| Intuity CONVERSANT VIS V5.0 Application Software                     | Yes                        | CONVERSANT VIS V6.0 Set              |
| CONVERSANT Intro Application Development Software R1.0               | No                         | None                                 |

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**Table C-4. V5.0 to V6.0 Package Mapping — Continued**

| <b>V5.0 Package</b>                                                   | <b>Remove?<sup>1</sup></b> | <b>V6.0 Replacement Package(s)</b>             |
|-----------------------------------------------------------------------|----------------------------|------------------------------------------------|
| Integrated Voice Power System Software R2.0                           | No                         | None                                           |
| CONVERSANT VIS Intelligent Ports Card (AT&T IPC-900)                  | Yes                        | Intelligent Ports Card                         |
| Intuity CONVERSANT VIS V5.0 3270 NetView Alarm Interface              | Yes                        | 3270 Netview Alarm Interface Package           |
| Intuity CONVERSANT VIS V5.0 Performance Test Analysis Tools           | No                         | None                                           |
| Intuity CONVERSANT VIS V5.0 Performance Test Tools                    | No                         | None                                           |
| Intuity CONVERSANT VIS V5.0 ISDN Primary Rate Interface Package       | Yes                        | ISDN Primary Rate Interface Package            |
| Intuity CONVERSANT VIS V5.0 Script Builder                            | Yes                        | Script Builder                                 |
| Intuity CONVERSANT VIS V5.0 SP Board Driver                           | Yes                        | ASP Driver Package                             |
| Intuity CONVERSANT VIS V5.0 SQL*NET TCP/IP for ORACLE 7.0.12          | Yes                        | SQL*NET TCP/IP for ORACLE 7.0.12               |
| Intuity CONVERSANT VIS V5.0 FlexWord Recognition Package              | Yes                        | FlexWord Recognition - Base                    |
| Intuity CONVERSANT VIS V5.0 T1 Board Driver                           | Yes                        | T1/E1 Board Driver<br>T1 E&M Interface Package |
| CONVERSANT VIS T1 A/B Robbed-bit E&M Interface Package                | No                         | None                                           |
| Intuity CONVERSANT VIS V5.0 Line Side T1 Interface Package - Galaxy   | Yes                        | Line Side T1 Package - Galaxy                  |
| Intuity CONVERSANT VIS V5.0 Line Side T1 Interface Package - DEFINITY | Yes                        | Line Side T1 Package - DEFINITY                |
| Intuity CONVERSANT VIS V5.0 Tip/Ring Board Driver                     | Yes                        | Tip/Ring Board Driver                          |
| Intuity CONVERSANT VIS V5.0 Text To Speech Package                    | Yes                        | Text To Speech Package                         |

*Continued on next page*

**Table C-4. V5.0 to V6.0 Package Mapping — Continued**

| <b>V5.0 Package</b>                                                      | <b>Remove?<sup>1</sup></b> | <b>V6.0 Replacement Package(s)</b>                                                             |
|--------------------------------------------------------------------------|----------------------------|------------------------------------------------------------------------------------------------|
| Intuity CONVERSANT VIS V5.0 Voice Mail External Actions Package          | Yes                        | None                                                                                           |
| Intuity CONVERSANT VIS V5.0 Network Primary Rate Interface Package       | Yes                        | Available as a custom package only                                                             |
| Intuity CONVERSANT VIS V5.0 Line Side T1 Interface Package - Galaxy      | Yes                        | Line Side T1 Package - Galaxy                                                                  |
| CONVERSANT VIS Line Side T1 Interface Package - DEFINITY                 | Yes                        | Line Side T1 Package - Definity                                                                |
| Intuity CONVERSANT VIS V5.0 Speech Recognition Package - US English      | Yes                        | WholeWord Recognition Package - Base<br>WholeWord Recognition Package - US English             |
| CONVERSANT VIS Speech Recognition Package - UK English                   | Yes                        | WholeWord Recognition Package - Base<br>WholeWord Recognition Package - UK English             |
| Intuity CONVERSANT VIS V5.0 Speech Recognition Package - Canadian French | Yes                        | WholeWord Recognition Package - Base<br>WholeWord Recognition Package - Canadian French        |
| Intuity CONVERSANT VIS V5.0 Speech Recognition Package - Mexican Spanish | Yes                        | WholeWord Recognition Package - Base<br>WholeWord Recognition Package - Latin American Spanish |
| Intuity CONVERSANT VIS V5.0 Configuration Package                        | Yes                        | Hardware Resource Allocator                                                                    |
| Intuity CONVERSANT VIS V5.0 External Alarms Package                      | Yes                        | External Alarms Package                                                                        |
| Intuity CONVERSANT VIS V5.0 3270 Enhanced File Transfer                  | Yes                        | 3270 Enhanced File Transfer Package                                                            |
| Intuity CONVERSANT VIS V5.0 Compulert/SCCS Interface Package             | Yes                        | Compulert/SCCS Interface Package                                                               |

*Continued on next page*

**Table C-4. V5.0 to V6.0 Package Mapping — Continued**

| <b>V5.0 Package</b>                                                            | <b>Remove?<sup>1</sup></b> | <b>V6.0 Replacement Package(s)</b>           |
|--------------------------------------------------------------------------------|----------------------------|----------------------------------------------|
| CONVERSANT VIS PBX/PSTN Switch Interface Package - Hong Kong                   | Yes                        | Analog Switch Interface Package -- Hong Kong |
| CONVERSANT VIS PBX/PSTN Switch Interface Package - Mexico                      | Yes                        | Analog Switch Interface Package -- Mexico    |
| CONVERSANT VIS PBX/PSTN Switch Interface Package - UK                          | Yes                        | Analog Switch Interface Package -- UK        |
| Intuity CONVERSANT VIS V5.0 Graphical Speech Editor Package                    | Yes                        | Graphical Speech Editor                      |
| Intuity CONVERSANT VIS V5.0 Software Upgrade Assistance Package                | No                         | None                                         |
| CGS Asynchronous Host Toolkit Version 1.0                                      | No                         | None                                         |
| FAX Attendant R2.5 Script Builder FAX Actions - SBFAX_demo Backup Transactions | No                         | None                                         |
| FAX Attendant R2.5 Script Builder FAX Actions - SBFAX_demo Backup Speech       | No                         | None                                         |
| Intuity CONVERSANT VIS V5.0 Feature Test Script Package                        | Yes                        | Feature Test Script Package                  |
| Intuity CONVERSANT VIS V5.0 Adjunct/Switch Application Interface Package       | Yes                        | Adjunct/Switch Application Interface Package |
| AUDIX Voice Power Release 2.5 - Speech                                         | No                         | None                                         |
| AUDIX Voice Power Release 2.5 - Speech                                         | No                         | None                                         |
| AUDIX Voice Power Release 2.5 - Software                                       | No                         | None                                         |
| AUDIX Voice Power Release 2.5 - Software                                       | No                         | None                                         |
| AVP R2.5 Switch Integration Software for S75/DEFINITY G1/G3 PBX                | No                         | None                                         |

*Continued on next page*

**Table C-4. V5.0 to V6.0 Package Mapping — Continued**

| <b>V5.0 Package</b>                                                                         | <b>Remove?<sup>1</sup></b> | <b>V6.0 Replacement Package(s)</b>    |
|---------------------------------------------------------------------------------------------|----------------------------|---------------------------------------|
| AVP R2.5 Switch Integration Software for S25 PBX                                            | No                         | None                                  |
| FAX Attendant Release 2.5 (For Use With AVP)                                                | No                         | None                                  |
| FAX Attendant Release 2.5 (For Use Without AVP)                                             | No                         | None                                  |
| FAX Attendant R2.5 Switch Integration Software for S75/DEFINITY G1/G3 (For Use Without AVP) | No                         | None                                  |
| FAX Attendant R2.5 Switch Integration Software for S85/DEFINITY G2 (For Use Without AVP)    | No                         | None                                  |
| FAX Attendant R2.5 Switch Integration Software for S75/DEFINITY G1/G3 (For Use With AVP)    | No                         | None                                  |
| FAX Attendant R2.5 Switch Integration Software for S25 (For Use With AVP)                   | No                         | None                                  |
| Intuity CONVERSANT VIS V5.0 Synchronous Host Interface Package                              | Yes                        | Synchronous Host Interface Package    |
| Intuity CONVERSANT VIS V5.0 FlexWord Toolkit                                                | Yes                        | FlexWord Toolkit                      |
| Intuity CONVERSANT VIS V5.0 CALLVISOR PC ASAI Package                                       | Yes                        | CALLVISOR PC ASAI Package             |
| Intuity CONVERSANT VIS V5.0 CALLVISOR PC ISDN Package                                       | Yes                        | CALLVISOR PC ISDN Package             |
| linkix_coproc, Link Level (3.0.2.1)                                                         | Yes                        | linkix_coproc, Link Level (3.0.2.1)   |
| linkix_sib, Link Level (3.0.2.1)                                                            | Yes                        | linkix_sib, Link Level (3.0.2.1)      |
| linkix_tkrn, Link Level (3.0.2.5)                                                           | Yes                        | linkix_tkrn, Link Level (3.0.2.5)     |
| linkix_sna_128lu, SNA Level (3.0.3.0)                                                       | Yes                        | linkix_sna_128lu, SNA Level (3.0.3.0) |

*Continued on next page*

**Table C-4. V5.0 to V6.0 Package Mapping — Continued**

| <b>V5.0 Package</b>                         | <b>Remove?<sup>1</sup></b> | <b>V6.0 Replacement Package(s)</b>         |
|---------------------------------------------|----------------------------|--------------------------------------------|
| linkix_3270, Feature Level 1 (3.0.2.3)      | Yes                        | linkix_3270, Feature Level 1 (3.0.2.3)     |
| linkix_hte, Feature Level 2 (3.0.2.7)       | Yes                        | linkix_hte, Feature Level 2 (3.0.2.7)      |
| linkix_mgmt, Feature Level 1 (3.0.2.3)      | Yes                        | linkix_mgmt, Feature Level 1               |
| linkix_netman, Feature Level 1 (3.0.2.0)    | Yes                        | linkix_netman, Feature Level 1             |
| linkix_coproc, Link Level, Supplement 04    | Yes                        | linkix_coproc, Link Level, Supplement 04   |
| linkix_3270, Feature Level 1, Supplement 03 | Yes                        | linkix_3270, Feature Level, Supplement 03  |
| linkix_hte, Feature Level 2, Supplement 02  | Yes                        | linkix_hte, Feature Level 2, Supplement 02 |
| linkix_sib, Link Level, Supplement 02       | Yes                        | linkix_sib, Link Level, Supplement 02      |
| linkix_sna, Link Level, Supplement 01       | Yes                        | linkix_sna_128lu, SNA Level, Supplement 01 |

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1. Indicates whether or not the V5.0 package is removed from the source system in those upgrades that do not involve an operating system reload.

---



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# Abbreviations

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## 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**

### **manoos**

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

## Abbreviations

---

### **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<sup>®</sup> call vectoring (routing) feature by enabling the switch to retain control of vector processing in the system environment. It supports the DEFINITY “converse” vector command to establish a two-way routing mechanism between the switch and the system to facilitate data passing and return.

**controller circuit card**

A circuit card used on a computer system that controls its basic functionality and makes the system operational. These circuit cards are used to control magnetic peripherals, video monitors, and basic system communications.

**copying an application**

A utility in which information from a source application is directed into the destination application.

**coresidency**

The ability of two products or services to operate and interact with each other on a single hardware platform. An example of this is the use of 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.

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## 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.

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**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.”

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**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.



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