Lucent Technologies
Bell Labs Innovations

INTUITY™ CONVERSANT® System

Version 7.0

Upgrade Procedures

585-313-111
Comcode 108197955
Issue 1
December 1998

Notice
Every effort was made to ensure that the information in this book was complete and accurate at the time of printing. However, information is subject to change.

Your Responsibility for Your System's Security
Toll fraud is the unauthorized use of your telecommunications system by an unauthorized party, for example, persons other than your company's employees, agents, subcontractors, or persons working on your company's behalf. Note that there may be a risk of toll fraud associated with your telecommunications system and, if toll fraud occurs, it can result in substantial additional charges for your telecommunications services.

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Part 68: Network Registration Number. This equipment is registered with the FCC in accordance with Part 68 of the FCC Rules. It is identified by an FCC registration number.

Part 68: Answer-Supervision Signaling. Allowing this equipment to be operated in a manner that does not provide proper answer-supervision signaling is in violation of Part 68 Rules. This equipment returns answer-supervision signals to the public switched network when:

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

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

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

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For additional documents, refer to the section in "About This Document" entitled "Related Resources."

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EMC Directive	89/336/EEC
Low-Voltage Directive	73/23/EEC
CE	The "CE" mark affixed to the equipment means that it conforms to the above directives.

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

Contents

About This Book

Purpose

This book, *INTUITY™ CONVERSANT® System Version 7.0 Upgrade Procedures*, 585-313-111, describes the processes and provides the procedures for upgrading the INTUITY CONVERSANT system to V7.0.

Intended Audiences

The primary audience for this document is the installer of the V7.0 upgrade. This includes

- Onsite Lucent technicians who perform upgrades to V7.0 at the customer site
- End customers who choose to upgrade their own systems to V7.0
- Personnel from the Technical Service Organization (TSO) and the Remote Services Center (ITAC, COE) who support the onsite technician or customer who is performing an upgrade to V7.0

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How to Use This Book

This book is both

- An installation manual for the upgrade engineer and technician
- A reference source

with information on upgrades to INTUITY CONVERSANT V7.0.

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 Upgrade Assistance Tool.

If you are ready to start the upgrade now, turn to the appropriate checklist (Table 1-1 or Table 1-2) in Chapter 1, "Upgrade Overview and Checklists" 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 locations to find 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 V7.0 target system. See "Related Resources" below for a list of titles and document numbers.

To Use This Book as a Reference

For information on site preparation and the tools and other resources needed to complete the upgrade, see the "Upgrade Planning" book, 585-313-601.

To get an understanding of the exact process required to complete the upgrade, see the following:

- The checklists in Chapter 1, "Upgrade Overview and Checklists"
- Appendix A, "Supplemental Procedures"

See Chapter 2, "Performing the Data Migration" for a detailed description of the prompts and system responses displayed when you run the Data Migration Tool.

For information on verification of the upgrade, see Chapter 3, "Verifying the Upgrade".

For information on troubleshooting known problems and system errors, see Chapter 4, "Troubleshooting".

Chapter A, "Supplemental Procedures", provides information from other books in the INTUITY CONVERSANT library that the upgrade technician might also need to complete the upgrade.

Chapter B, "Migrated Files", lists the files and directories that the Upgrade Assistance Tool automatically migrates from the source to the target system.

Chapter C, "Package Mapping", includes tables that map the names of software packages in INTUITY CONVERSANT releases V3.1, 3.1.1, 4.0, 5.0, and V6.0 to the equivalents in V7.0.

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.

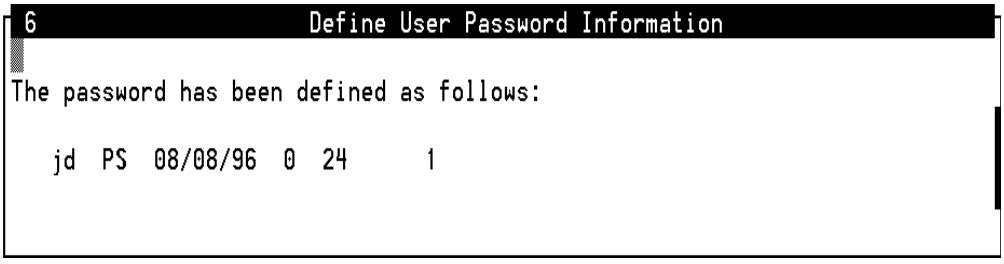


Figure 1. Example of an INTUITY CONVERSANT Window Showing Information

```
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

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

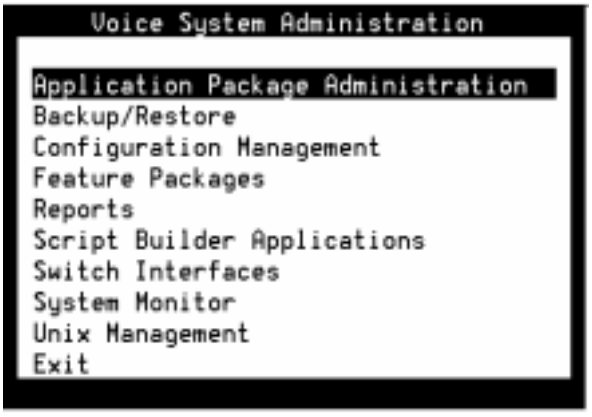


Figure 5. Example of an INTUITY CONVERSANT Menu

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:

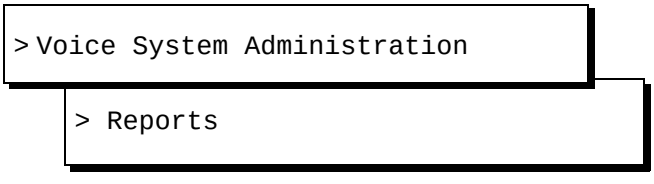
  The system displays the following message:

  ```
  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

  In this example, you access the INTUITY CONVERSANT Main Menu and select the Voice System Administration menu. From the Voice System Administration menu, you then select the Reports 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 7.0 System Description*, 585-310-241, contains a detailed description of all books included in the V7.0 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

In addition to this book, you need the following book to complete an upgrade to V7.0:

- *INTUITY™ CONVERSANT® System Version 7.0 Upgrade Planning*, 585-311-601 (available from the SDSC web site)

In addition, you need the maintenance book specific to the platform of your target system:

- *INTUITY™ CONVERSANT® System Version 7.0 MAP/40P Maintenance*, 585-313-108
- *INTUITY™ CONVERSANT® System Version 7.0 MAP/100C Maintenance*, 585-313-109
- *INTUITY™ CONVERSANT® System Version 7.0 MAP/100P Maintenance*, 585-313-110
- *INTUITY™ CONVERSANT® System Version 7.0 MAP/5P Maintenance*, 585-313-107

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:

NOTE:
The MAP/5P does not have E1/T1 connectivity

- *INTUITY™ CONVERSANT® System Version 7.0 New System Installation*, 585-313-106

Additional Suggested Documentation

Lucent Technologies suggests 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.

Training

The following training class is recommended as a prerequisite to installing an upgrade to a V7.0 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
- Lucent Technologies customers and all others: (800) 255-8988

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 you 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, *INTUITY™ CONVERSANT® System Version 7.0 Upgrade Procedures*, 585-313-111.

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Upgrade Overview and Checklists

1

Overview

This chapter describes the staged upgrade process and contains checklists that outline this 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.

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.

This chapter contains a checklist to complete an upgrade from any of the following releases to V7.0:

- V6.0 Update 1 (also know as V6.1)
- V6.0
- V5.0
- V4.0i
- V4.0
- V3.1.1

Staged Upgrade

Upgrading an existing CONVERSANT system to V7.0 is available as a staged upgrade.

A new V7.0 system, which parallels the customer's source system in functionality, is created. The new, target system is ALTd at the factory then sent to replace the customer's existing, source system. (first stage)

When the target V7.0 system arrives at the customer site, it is installed and provisioned. Customer's data and applications are ported over to the new target system using the Data Migration Tool.

The source system continues to operate in its normal manner during the data migration. Data Migration is accomplished in three phases and discussed in Chapter 2, "Performing the Data Migration".

To Complete the Upgrade

Follow the steps listed in Table 1-1 to complete an upgrade to V7.0:

Table 1-1. Upgrades Checklist

Step	✓	Task	Where to Find the Required Information
1.		Complete the required upgrade prerequisites	*INTUITY CONVERSANT System Version 7.0 Upgrade Planning,* 585-313-601
2.		Set up the upgrade schedule with all upgrade team members via conference call	*Technical Support Center* item under *"Support Websites"*
3.		Install new target ALTd system	*INTUITY CONVERSANT System Version 7.0 New System Installation, 585-313-106*
4.		Provision the target system	*Technical Support Center* item under *"Support Websites"*
5.		Verify any optional features, application, or supplemental procedures that may need to be performed	*Appendix A, "Supplemental Procedures"*
6.		Check which files are migrated	*Appendix B, "Migrated Files"*

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Table 1-1. Upgrades Checklist — *Continued*

Step	✓	Task	Where to Find the Required Information
7.		Complete Phase 1 of the data migration **CAUTION:** *During this phase, the voice system must be stopped from 1 to 3 hours to avoid corruption of the ORACLE and speech files*	"Performing Data Migration - Phase 1" in Chapter 2, "Performing the Data Migration" **NOTE:** Voice@Work and Graphical Designer applications are flagged but not migrated. These applications must be manually migrated to the target system. Contact the ISV, SDO, or VPC for any proccess and procedures necessary to migrate these applications.
8.		Complete Phase 2 of the data migration	"Performing Data Migration - Phase 2" in Chapter 2, "Performing the Data Migration"
9.		Complete Phase 3 of the data migration	"Performing Data Migration - Phase 3" in Chapter 2, "Performing the Data Migration"
10.		Perform the post-upgrade requirements	Table 1-2 in this chapter
11.		Verify the upgrade	Chapter 3, "Verifying the Upgrade"
12.		Verify that all 3rd party application have been upgraded	See the Applications Developer
13.		Perform a backup of your upgraded system	"Backing up the INTUITY CONVERSANT System" in "Common System Procedures", in the INTUITY CONVERSANT System Reference Document, 585-313-205

To Complete the Post-Upgrade Requirements

After you complete your upgrade procedures, you must log off and log back on for the restored information to take effect after all the required data is restored.

Perform only those tasks in Table 1-2 that apply to your particular system as not all tasks listed apply to all system upgrades. Use the guidelines in Table 1-2 in conjunction with TechNote 10468.

NOTE:
Every Application Developer must verify their application is fully upgraded.

Table 1-2. Post-Upgrade Requirements Checklist

If the Source System has:	✓	Do this Task on the Target System	Notes/Comments
System-related			
Network capabilities		Re-administer the network configuration.	Use the **/etc/hosts** and **/etc/network** files, and special 'ifconfig' entries in **/etc/rc2.d/S69inet**
SMC Ethernet card, IBM Token Ring card, or both		Re-administer TCP/IP.	See "Administering TCP/IP over Ethernet and Token Ring LANs" in Appendix A, "Supplemental Procedures"
User login called "install" that you want to also use on the target system		Use **sysadm** to recreate the user login called "install". **NOTE:** This may not be necessary if installed at the factory	See "Administering Operating System Logins" in Appendix A, "Supplemental Procedures"
User files manually preserved due to their nonstandard location		Restore user files manually preserved due to their nonstandard location on the source system.	See "Restoring User Files Manually" in Appendix A, "Supplemental Procedures"
ORACLE add-on packages (such as SQL*Forms)		Restore any data or files associated with ORACLE add-on packages that you preserved from the source system.	See "Restoring User Files Manually" in Appendix A, "Supplemental Procedures"
User-defined **cron** and/or **at** jobs		Re-administer **cron** and **at** jobs.	Data is preserved in **o.*files*** in **/usr/spool/cron** directories

Continued on next page

Table 1-2. Post-Upgrade Requirements Checklist — *Continued*

If the Source System has:	✓	Do this Task on the Target System	Notes/Comments
SCSI mirroring		Re-administer SCSI mirroring.	See "Establishing Mirroring" in Chapter 3 "Replacing the Hard Disk Drive," in the maintenance book for your target system
Modified 3270 host access helper program[1]		Reapply any changes made to hostdip/helper program source code.	Use the **o.helper.c** and **<other>.c** and makefile in the **/att/ag/hostdip/helper directory**
Modem or printer capabilities		Re-administer modems and printers.	Data is preserved in the **/usr/lib/upgrade/scan.out** file. If needed, see "Peripheral Administration," in *INTUITY CONVERSANT System Version 7.0 Administration*, 585-313-501
Applications-related			
Nonstandard user and non-CONVERSANT packages and files		Restore nonstandard user and non-CONVERSANT packages and files.	For this application, see the instructions provided by your software supplier
C-language applications using **et_send** that have not previously been converted *via full conversion* to the current logging environment[2]		Complete a *full* conversion to remove all **et_send** calls from the source files.	See "Upgrading Message Handling in DIPs" in Appendix A, "Supplemental Procedures"
Native language (TAS) applications		Recompile and/or reinstall native language (TAS) applications.	See "Upgrading a TAS Application Script" and "Compiling a DIP" in Appendix A, "Supplemental Procedures"
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.

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Table 1-2. Post-Upgrade Requirements Checklist — *Continued*

If the Source System has:	✓	Do this Task on the Target System	Notes/Comments
Customer application that used a reserved name (see "Files and Data" in [Chapter 3] of the "Upgrade Planning" book)		Restore speech for applications backed up due to naming conflicts with INTUITY CONVERSANT package applications.	See "Restoring Speech for User Applications Backed up due to Naming Conflicts with Package Applications" in Appendix A, "Supplemental Procedures"
Modified messages, destinations, priorities, or message thresholding, and/or added logger messages (in APPL message class)		Install the changes on the target system.	See 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***.)
Applications developed in IRAPI		1. Search the application source files and replace the IRAPI function **irsay()** with the new version **irFDSay()**. 2. Recompile and retest the IRAPI applications.	1. Use vi or a comparable editor 2. See "Compiling and Installing IRAPI Applications" in Appendix A, "Supplemental Procedures"
Custom DIPs		Recompile and retest custom DIPs.	See "Compiling a DIP" in Appendix A, "Supplemental Procedures"
Digital-related			
Digital circuit cards		Re-administer digital parameters.	See Chapter 3, "Voice System Administration," of INTUITY CONVERSANT System Version 7.0 Administration, 585-313-501

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Table 1-2. Post-Upgrade Requirements Checklist — *Continued*

If the Source System has:	✓	Do this Task on the Target System	Notes/Comments
SP/SSP circuit cards		Re-administer speech recognition and barge-in.	See Chapter 3, "Voice System Administration," of INTUITY CONVERSANT System Version 7.0 Administration, 585-313-501
PRI		Re-administer all cards in a D-channel group to have contiguous card numbers with the D channel on the first card.	See "Administering PRI" in Appendix A, "Supplemental Procedures"
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 is located in the **/vs/switches/digital/pkgs** directory for the appropriate switch.
V4.0i system that includes an ISDN PRI package used with an ACULAB circuit card		Modify the ISDN PRI parameters	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.

1. 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.
2. 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.

Support Websites

The following websites are available to internal Lucent associates for reference, forms, and other procedures:

- Conversant Developer Support

  http://waterworks.cb.lucent.com/technotes

  This web page contains links to all TechNotes.

- Sales and Design Support Center

  http://www.bcs.lucent.com/tech_info/sdsc/

  From here select *Voice Response/Conversant* to find help articles and latest information.

- Sales and Marketing for INTUITY Conversant

  http://www.bcs.lucent.com/sales_market/mmr

  This site requires your Intraworks login and password. From here select *Upgrade Process* to get access to required forms, responsibilities, QPPCNs, etc. for Conversant upgrades.

- Technical Support Center

  http://dencnv22.bcs.lucent.com

  This is the support center web page. From here select *Conversant Provisioning and Upgrade Teams Forms.* From the teams forms page, access is provided to the Staged Upgrades Scheduling and Master Checklist forms required for V7 staged upgrades.

The following external website provides limited access to registered Development Partners:

NOTE:
This is a secure site that requires a browser which supports such security provisions.

- **https://www.lucent.com/enterprise/alliance/home**

Performing the Data Migration

2

Overview

The purpose of this chapter is to document the prompts and screens associated with the Data Migration Tool.

This chapter provides step-by-step procedures to migrate data from your existing source system to the new V7.0 target system. This includes upgrades from any of the following systems:

- V6.0 Update 1 (also known as V6.1)
- V6.0
- V5.0
- V4.0i
- V4.0
- V3.1.1

Phases of Data Migration

The following table, Table 2-1, describes the what is being performed by the data migration tool during the different phases:

Table 2-1. Data Migration Phase Descriptions

Phase	Description
1 **CAUTION:** *During this phase, voice must be stopped from 1 to 3 hours to avoid corruption of the ORACLE and speech files*	During this phase, the source system is scanned and all relevant data is collected and stored on the backup media
2	The data collected in Phase 1 is prepared to be restored to the target system.
3	Restores all data and configurations collected from the source system on the new target system. If required, data conversion will be done as part of the restore process.

Performing Data Migration - Phase 1

Procedures for this phase are performed on the source system. During this phase, the source system is scanned and data is collected and stored on the backup media. Perform the following procedure to complete phase 1 for an assisted upgrade:

1. Insert the diskette labeled “CONVERSANT Data Migration Tool” into the drive.
2. If the source system is V5, V6, or V6.1, perform Step a through Step f. If the source system is V3, V3.1.1, V4.0i, or V4, skip this step and go to Step 3.

   a. 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)
      ```

   b. Press ENTER.

      The system displays the following message:

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

      The following packages are available:
      1 icdmt     INTUITY CONVERSANT Data Migration Tool
                  (CONVERSANT) i.3.1

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

   c. Press ENTER.

      The system displays status messages during the installation and the following message when installation is complete:

      ```
      Installation of INTUITY CONVERSANT Data Migration
      Tool Package (icdmt) was successful.

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

   d. Remove the diskette from the drive.

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

      The system displays the following message:

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

   f. If the run level is 4, skip this step and go to Step 4.

If the run level is *not* 4, start the voice system. See “Starting the Voice System” in “Common System Procedures” in the System Reference Document, 585-313-205.

When you are finished go to Step 4.

3. If the source system is V3.1.1 or V4, perform Step a through Step d below.

   a. 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.
      ```

   b. Enter **f**

      The system displays the following message:

      ```
      Please insert the floppy diskette.

      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
      ```

   c. 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 data migration tool 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 Data Migration Tool is now
      complete
      ```

   d. Remove the floppy from the floppy drive.

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

The system displays instructional messages, then the following message:

```
Enter the customer name and press <enter>: [NONE]
```

5. Enter the customer name and press ENTER

   The system displays the following message:

   ```
   Does this upgrade process have full redundancy? [Y]
   ```

6. Enter **y** if this upgrade process has full redundancy as defined in Table 1-3 in Chapter 1, "Introduction to Upgrades", in "INTUITY CONVERSANT System Version 7.0 Upgrade Planning Procedures", 585-313-601.

   The system displays the following messages:

   ```
   Extracting configuration information from your current
   system.

   SCAN - Version 66

   The output of this program will be placed into file
   "scan.out" in this directory. Please wait for the
   prompt to return.

   Program is complete. Output has been written to
   scan.out.

   Scanning system for any known third-party
   applications/packages
   ```

   NOTE:
   The system also checks for any oracle database users that will not be migrated by the Data Migration Tool and list them here. Any users the system finds must be manually migrated to the target system. See "Migrating Database Tables of Users Other than STI" in Appendix A, "Supplemental Procedures" for the procedures.

   If any oracle database users that will not be migrated are identified, the system displays the following message where XXXXXX is the name of the oracle database users:

   ```
   Data of the following oracle database users will not be
   migrated by this tool:

   XXXXXX

   These users data must be manually migrated to the
   target system. Please refer to "Migrating Database
   Tables of Users Other than STI" section A of the book.

   To acknowledge this message and continue press <Enter>:

   The file "/usr/lib/upgrade/scan.out" contains the
   configuration data just gathered. You may want to refer
   to this file later on in the upgrade process.
   ```

```
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]
```

7. Enter **n**

   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]stop Voice System and continue
upgrade
```

8. Enter **1**

   The system displays the following message:

```
Stopping Voice System

The Voice System is now stopping

Initiating request to clear all calls in the next 10
seconds.
```

   The system displays the list of files to clear and could take several seconds to complete. The system then displays the following messages:

```
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.....

SQL*DBA: Release 7.0.12.2.0 - Production on Mon Jul 6
18:57:44 1998

Copyright (c) Oracle Corporation 1979, 1992. All rights
reserved.

ORACLE7 Server Release 7.0.12.2.0 - Production
With the procedural and distributed options
PL/SQL Release 2.0.14.0.1 - Production

SQLDBA> Connected.
SQLDBA> ORACLE instance shut down.
SQLDBA> SQL*DBA complete.

User Specific File Migration. To continue press
<Enter>:
```

9. Press ENTER

   The system displays the following message:

```
You will now be prompted to enter the file names or
directories, that you like to copy to the target 7.0
system. You may hit the RETURN key once done specifying
all files.

WARNING: The files specified in this section may
overwrite the files on the target 7.0 system without
warning. Use extreme caution when specifying file
names, because it WILL OVERWRITE FILES WHICH MAY RENDER
THE TARGET 7.0 SYSTEM UNUSABLE after the upgrade.

Also due to the operating system change in V7 any
executables migrated using this feature may need to be
recompiled.

It is out of the scope of this tool to detect which is a
system file and which is a users file, but the tool will
block few directories to be specified by you.


To acknowledge this message and continue press <Enter>:
```

10. Press ENTER

    The system displays the following message:

    ```
    !!!!!!!!!!!!! Use Extreme Caution!!!!!!!!!!!!!

    Type the full path of the file/directory [Done]
    ```

11. Type the complete pathname of the file/directory that you want to copy to the target 7.0 system. Follow each pathname entry with ENTER

12. Enter **done** and press ENTER when you have completed the names of all the files and directories you want to copy to the 7.0 system.

    The system displays the following message for each pathname specified and where *xxxxxx* is the pathname you specified in Step 11:

    ```
    Please verify all the entries. Answer yes or no

    Do you want to copy?
    xxxxxx. Enter [y/n] [y]
    ```

13. Enter **y** for each correct pathname you selected in Step 11.

    Upon completion of all the pathnames, 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 original versions of the files that have been
changed during this upgrade have been saved in the
/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

Determining the size of the database ...33472 blocks

You will need 3 tape(s) and at least 1 formatted floppy
(Recommend 2).

Do you have 2 formatted floppies? (y/n) [y]
```

14. Enter **y**

> **NOTE:**
> You will require approximately 2 formatted floppies that will be used to create an installable package for the Phase 2 of the upgrade.

The system displays the following message:

```
Analyzing installed software packages to determine what
needs to be upgraded...
```

The system displays several informational messages, then displays the following messages:

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

15. Press ENTER

The system displays the following message:

```
Retensioning the cartridge tape...

Saving ORACLE Database

Wait until disk/tape activity stops before removing the
tape. Set the tape aside for later and press <Enter>:
```

16. Remove the tape from the tape drive.
17. Press ENTER

The system performs several ORACLE functions, displays several messages and restarts the voice system. The system then displays the following messages.

```
Custom 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 V7.0 speech which will be loaded when
the associated CONVERSANT packages are installed.
```

```
Determining talkfiles to save, this may take a while,
please wait...

Starting speech backup. Label a tape "SPEECH Files
Backup: 1", insert tape in drive, and press <Enter>:
```

18. Label another blank cartridge tape as “Speech Files Backup: 1” and insert it into the tape drive.
19. Press ENTER

    The system displays the following message:

    ```
    Retensioning the cartridge tape...

    Please insert first tape... enter c when ready: This
    save will require 1 cartridges
    ```

20. Enter **c**

    After several minutes the system displays the following messages:

    ```
    Speech Backup done....

    Please remove the tape and label it as tape # 1

    Speech file system backup complete.

    Please remove the cartridge tape now.

    Press <Enter>:
    ```

21. Remove the cartridge tape from the tape drive and press ENTER

    The system displays the following messages:

    ```
    The Voice System is now stopping

    Initiating request to clear all calls in the next 180
    seconds.

    Orderly idling of system succeeded
    ```

    After several minutes, the voice system is stopped and the following message is displayed:

    ```
    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>:
    ```

22. Insert the cartridge tape labeled “Upgrade Save Files: 1” in the tape drive.
23. Press ENTER

    The system displays the following message:

    ```
    Retensioning the cartridge tape...

    Backup of UNIX files complete.
    ```

```
Phase I screen output appearing after the installable
floppy is created does not appear in the output.lst
file carried over to the target system.

Creating an installable floppy for next stage of
upgrade.

Insert floppy into drive.

Press <ENTER> to continue.
```

24. Remove the tape from the tape drive.
25. Insert a formatted floppy in the disk drive.
26. Press ENTER

NOTE:
If your system requires more than one floppy, you will be prompted to insert a second floppy. Please label each floppy as 1 and 2, respectively.

The system displays the following message:

```
Remove floppy and label it as "Upgrade Phase 2"

Use installpkg to install
```

NOTE:
This concludes Part 1 of the upgrade. Check off the completion of Step 2 in the checklist (Table 1-1). Continue with Step 3, "Performing Data Migration - Phase 2" below.

Performing Data Migration - Phase 2

Procedures for this phase are performed on the target system. During this phase, the data collected in Phase 1 is prepared to be restored to the target system. Sizes of the Oracle database, speech file and root file systems are checked to ensure the target system has ample room to load the data from the source system.

To perform Phase 2 of the upgrade, do the following:

1. If you are not already logged in as root, do so now.
2. Insert the first floppy created in Phase 1 into the floppy drive.
3. 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.
```

4. Enter **f**

   The system displays the following message:

```
Please insert the floppy diskette.

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
```

5. 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 data migration tool 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 Data Migration Tool is now
complete
```

6. Remove the floppy from the floppy drive.
7. Enter **/usr/lib/upgrade/bin/upg**

   NOTE:
   The system checks all file system sizes. If any file system requires attention, the Data Migration Tool will stop and direct the user to the appropriate supplemental procedure sections. Perform the appropriate supplemental procedure then continue with Step 7 above.

   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]
```

8. Press ENTER**.**

   The system displays the following message:

```
WARNING: Changing the machine name will affect the
system's feature licenses. The features provided by
these licenses will be unavailable.

Please refer to INTUITY CONVERSANT User Documentation
for more information.

The system name is set to XXXX

Do you really want to change the system's node name?
[y/n]
```

9. Enter **n**

   The system displays the following message:

```
Stopping Voice System

The Voice System is now stopping

Initiating request to clear all calls in the next 10
seconds.

Orderly idling of system succeeded

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.....

Oracle Server Manager Release 2.3.2.0.0 - Production

Copyright (c) Oracle Corporation 1994, 1995. All rights
reserved.

Oracle7 Server Release 7.3.2.3.0 - Production Release

PL/SQL Release 2.3.2.3.0 - Production

SVRMGR> Connected.
SVRMGR> ORACLE instance shut down.
SVRMGR> Server Manager complete.
```

NOTE:
If the system detects any missing packages, they are listed here and mail is sent to root.

NOTE:
This completes Phase 2 of the data migration. Check off the completion of Step 3 in the checklist (Table 1-1). Continue with Step 4, "Performing Data Migration - Phase 3" below.

Performing Data Migration - Phase 3

Procedures for this phase are performed on the target system. Activities during this phase restores all data and configurations collected from the source system onto the new target system. If required, data conversion will be done as part of the restore process.

To perform Phase 3 of the data migration, do the following:

1. Insert the tape labeled "ORACLE Backup: 1" that you created in Phase 1 into the tape drive.
2. Press ENTER

   The system displays the following message:

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

3. Press ENTER

   The system restores the ORACLE database, recreates the CDH tables, then displays the following message:

   ```
   Importation of database is complete...
   Wait until disk/tape activity stops before removing the
   tape.

   Starting speech restoration.
   ```

4. Remove the tape labeled "ORACLE Backup: 1" from the tape drive.
5. Insert the tape labeled "Speech Files Backup: 1" that you created in Phase 1 into the tape drive.
6. Press ENTER

   The system displays the following message:

   ```
   Insert the "SPEECH Files Backup: 1" tape into drive and
   press <Enter>:
   ```

7. Press ENTER

   The system displays the following message:

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

8. Press ENTER

NOTE:
The system restores the speech you saved during activities performed in Phase 1. You will be prompted to insert each speech files backup tape as required.

The system displays the following message:

```
Speech file system restoration complete.

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>:
```

9. Press ENTER

   The system loads UNIX files and processes those files that require additional changes to upgrade and/or to merge them into the new system. The system then displays the following message:

   ```
   Restoration of UNIX files complete.

   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? (y/n) [y]
   ```

10. Enter **n**

    If you have custom grammars to load, enter **y** instead.

    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] Full compatibility mode - errors
    and warnings
    ```

11. Enter **2**

12. Press ENTER

    The system starts Oracle and the voice system and proceeds to convert and verify ScriptBuilder applications. Any errors and warnings will be displayed during this process.

    The system displays the following messages:

```
Conversion completed

Errors and warnings encountered in upgrading Script
Builder applications have been written to
/usr/lib/upgrade/output.lst.

If you have applications created manually using native
script language (tas), you must re-compile and install
them manually after you have completed the assisted
upgrade.

Press <Enter>:
```

13. Press ENTER

The system displays the following messages:

```
Inittab successfully rebuilt.

Successful enable of automatic starting voice system.

You have completed the assisted portion of this upgrade
from Intuity CONVERSANT Version 6.0 to Intuity
CONVERSANT V7.0. 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 V7.0
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 V7.0 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 V7.0
Operations document.

Press <Enter>:
```

14. Press ENTER**.**

    The system displays the system prompt.

    This concludes Phase 3 of the data migration. Check off the completion of Step 4 in the upgrade checklist (Table 1-1). Continue with the remaining steps in Table 1-1 to complete the upgrade.

Verifying the Upgrade

3

Overview

This chapter describes how to verify the success of the upgrade procedures.

Completing the verification steps in this chapter will help you ensure that all facets of the upgrade have completed successfully.

Verifying the Upgrade

To verify the upgrade, complete the following tasks:

- 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 the “Upgrade Planning” book. 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.
- Check to make sure all your third-party or custom applications are listed on the Application Package Administration screen:

  1. Enter **cvis_menu**
  2. Select

     ```
     > Application Package Administration
     ```

  3. Make sure all your third-party and custom applications are listed on the menu. If any of your third-party or custom applications are not listed, contact your remote maintenance center for assistance.

- 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 LUs 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 LUs, see “Troubleshooting,” in the System Reference Document, 585-313-205, for what actions to take.

Troubleshooting

4

Overview

This chapter includes troubleshooting solutions for installation problems you may encounter. Troubleshooting information included here can help you correct known problems and common errors.

The troubleshooting information is divided into three sections:

- "Problems with Starting, Restarting, or Running the Data Migration Tool"
- "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 Data Migration Tool

This section describes problems you might encounter when starting, restarting, or running the Data Migration Tool.

You Cannot Start/Restart the Program

- *Problem*: You are at a system prompt and do not know how to get the Data Migration Tool started. (Either the system has been rebooted automatically as part of the data migration, or you entered **q** to quit in response to a question.)

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

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, <name of target system> 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 <name of
  target system> 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 Phase 2 of the Data Migration Tool.

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: **/usr/lib/upgrade/scan.out** 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/scan.out** contains information you may need to view. 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/rdsk/f0** to copy the file onto a diskette.
  3. Enter **cpio -icvBd < /dev/rdsk/f0** to copy the file on the diskette onto the other machine.

The System Fails to Prompt for the ORACLE Database

- *Problem*: The data migration 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 data migration program.

The System Fails to Prompt for the Speech Tape

- *Problem*: The data migration 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 data migration 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.)

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.

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 Speech and Signal Processor (SSP) card as follows:

  1. Enter **display card sp** and examine the output.
  2. Check the Function assigned to the SSP card in the system. At least one SSP card must be assigned function WW_RECOG or WW_ RECOG+VOICE.

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.

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 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 TechNotes website. See Conversant Developer Support in Chapter 1, "Upgrade Overview and Checklists" and consult the UnixWare documentation for commands to repair your shell scripts on the target system.

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 problem indicates that the speech was initially recorded on a V5.0 system which was missing headers. Please call yout Tier3/Tier4 support personnel for assistance.

The Network Does Not Come up

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

  Solution: See "Administering TCP/IP over Ethernet and Token Ring LANs" in Appendix A, "Supplemental Procedures" for the procedures.

Supplemental Procedures

A

Overview

This appendix provides procedures you may need to complete the upgrade as outlined in Chapter 1, "Upgrade Overview and Checklists". Whether 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.

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 V7.0 using the Data Migration Tool. 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

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 Data Migration Tool. 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 Data Migration Tool.

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                                     FILES

30000       22145   73.82   63         470       353         1         2824
```

2. Multiply the value listed in the ALLOCATED column by 2,048 to get the size of the ORACLE database in bytes.
3. The standard or default size of the ORACLE database is 65 Mbytes. Subtract this from the value you calculated in Step 2 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 "Performing Data Migration - Phase 3" in Chapter 2, "Performing the Data Migration" of the Data Migration Tool when it restores the ORACLE database. Make a note of this number so it is available when you begin the upgrade.

Increasing 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 Data Migration Tool. Before you begin the upgrade, first perform the procedures above to calculate the size of the ORACLE database on the *source* system.

To increase the size of the ORACLE database on the *target* system, do the following:

1. Login as **oracle**

   NOTE:
   If the Oracle password is unknown, login as **root** and enter command **su - oracle** then continue with Step 2 below.

2. Enter **/oracle/bin/svrmgrl**

   The system displays the SVRMGR> prompt,

3. Enter the following commands in the sequence shown:

   connect internal
   alter tablesapce users
   add datafile '/oracle/dbs/*users02A.dbf*'

   NOTE:
   users02A.dbf is the recommended filename. If this filename already exists in this directory, use filename *users03A.dbf*. If */oracle* does not have enough space for your increase, use **'/home2/users02A.dbf'** with the *add datafile* command.

   size *<number>*

   Where *<number>* is the number of bytes, determined from the calculation performed above, you want to add to the database.

   exit;

4. Enter **/vs/bin/util/dbfrag**

   The system displays the number of free database blocks. Verify the database size has increased as desired.

5. Enter **exit**

   The system displays the `Console Login:` prompt.

Determining the Size of the Voice File System

If the Data Migration Tool indicates there is not enough space in the voice file system, you will need to increase the file system size on your target system.

First you must determine the amount of speech stored on the *source* system *and* how much space is allocated to voice on the *target* system.

Determining the Amount of Speech Stored on the Source System

To calculate the amount of space used by the voice file system on the *source*, do the following:

1. Login as **root**.
2. Enter **vdf**

   The system displays a message similar to the following:

   ```
   speechFS /home2/vfs/talkfiles    8785 free blocks of
   35760 available (24% free) READWRITE
   (blocksize=16384bytes)
   ```

Interpretation: The speech file system is located at */home2/vfs/talkfiles,* 8785 blocks are available of the 35760 allocated (or 24% free), has read-write permissions, and the block size is 16384 bytes.

3. Determine the size of speech stored in bytes:

   a. Subtract the number of free blocks from the number available.

   b. Multiply the value you calculated in substep a above by the blocksize

      Using the information in the sample message from Step 2, we'd have [35760 – 8785] * 16384 = 441958400 bytes.

      NOTE:
      If the source system is V4 or V3.1.1 and the block size is not listed, substitute 16384 bytes for the blocksize.

4. Determine the size of speech in 512-byte blocks.

   Divide the number of bytes calculated in substep b above by 512.

   Continuing with the sample originated in Step 2, we'd have 441958400/512 = 863200 blocks, each block containing 512 bytes.

   Continue with "Determining Space Allocated to Voice on the Target System" below.

Determining Space Allocated to Voice on the Target System

To calculate the amount of space allocated to the voice file system on the *target* system, do the following:

1. Login as **root**.
2. Enter **vdf**

   The system displays a message similar to the following:

   ```
   speechFS /home2/vfs/talkfiles    8785 free blocks of
   35760 available (24% free) READWRITE
   (blocksize=16384bytes)
   ```

3. Determine the free space allocated for voice in bytes.

   Multiply the number of free blocks with the block size.

   Using the sample message from Step 2 above, we'd have 8785 * 16384 = 143933440 bytes.

4. Determine the free space in 512-byte blocks.

   Divide the number of bytes calculated in Step 3 above by 512.

   Continuing with our sample, we'd have 143933440/512 = 281120 blocks, each block containing 512 bytes.

Increasing the Voice File System Size on the Target System

The voice file system can be increased if there is enough unallocated space on the disk.

NOTE:
During Phase 1 activities, the Data Migration Tool specifies the amount of space by which the file system needs to increase.

If the space needed to increase the file system is not known begin with Step 1, otherwise continue with Step 2.

To increase the voice file system size on the *target* system, do the following:

1. Determine the number of 512-byte blocks by which the file system needs to increase.

   Subtract the *free space in 512 blocks* on the *target* system from the *size of speech in 512 blocks* on the *source* system that was determined above.

   Using the values calculated from our samples, we'd have 863200 – 281120 = 582080 blocks.

2. Login as **root**.

3. Enter **vdf**

   The system displays a message similar to the following:

   ```
   speechFS /home2/vfs/talkfiles    9785 free blocks of
   36760 available (26% free) READWRITE
   (blocksize=16384bytes)
   ```

4. Enter **/mtce/bin/addfs -f /voice1 *xxx* 8192**

   Where *xxx* is the number of blocks by which the voice file system needs to be increased.

5. Enter **vdf**

   The system displays a message similar to the following:

   ```
   speechFS /home2/vfs/talkfiles    9785 free blocks of
   36760 available (26% free) READWRITE
   (blocksize=16384bytes)
   ```

Migrating Database Tables of Users Other than STI

NOTE:
For more information about the export and import utilities provided by the oracle, see the ORACLE Server Utilities Users Guide.

Export Procedures on the Source System

To migrate database tables of users other than STI, do the following on the *source* system:

1. Login as **root**.
2. Insert a blank cartridge tape in the tape drive.
3. Enter the following:

   exp system/manager buffer=4096 file=/dev/rmt/c0s0 owner=*username*

   Where *username* is the database user ID.

   The system displays a message similar to the following:

   ```
   Export: Release 7.0.12.2.0 - Production on Fri Jul 24
   18:46:07 1998

   Copyright (c) Oracle corporation 1979, 1992. All rights
   reserved.

   Connected to: ORACLE7 Server Release 7.0.12.2.0 -
   Production
   With the procedural and distributed options
   PL/SQL Release 2.0.14.0.1 - Production
   Volume size (<ret> for no restriction)>
   ```

4. Press ENTER

   The system displays several informational messages, then the following:

   ```
   Export terminated successfully without warnings.
   ```

5. Remove the cartridge tape from the tape drive of the *source* system.

   Continue with "Import Procedures on the Target System" below to complete the database tables migration.

Import Procedures on the Target System

To complete the migration of database tables of users other than STI, do the following on the *target* system:

1. Insert the cartridge you removed from the source system in the tape drive on the *target* system.
2. Login as **root**.
3. Enter the following:

   imp system/manager buffer=4096 file=/dev/rmt/c0s0 owner=*username*

   Where *username* is the database user ID.

The system displays a message similar to the following:

```
Export: Release 7.0.12.2.0 - Production on Fri Jul 24
18:46:07 1998

Copyright (c) Oracle corporation 1979, 1992. All rights
reserved.

Connected to: ORACLE7 Server Release 7.0.12.2.0 -
Production
With the procedural and distributed options
PL/SQL Release 2.0.14.0.1 - Production
Volume size (<ret> for no restriction)>
```

4. Press ENTER

   The system displays several informational messages, then the following:

   ```
   Import terminated successfully without warnings.
   ```

5. Remove the cartridge tape from the tape drive.

Restoring User Files Manually

The Data Migration Tool restores user files for you if they were saved from standard locations as listed in Appendix B, "Migrated Files". 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/rdsk/f0**

Upgrading Message Handling in DIPs

NOTE:
This section applies only to pre-V4.0 systems whose applications use custom log and/or err messages.

The following procedures detail how to upgrade the message handling of your native script or DIP to work in the V7.0 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 V7.0.

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 V7.0 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 V7.0 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 the following:

```
/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-V7.0 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, “Voice System Administration.”

   of *INTUITY CONVERSANT System Version V7.0 Administration,* 585-313-501.

   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, **log*XXX*.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'log`*`XXX`*`.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 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/etmsgs** 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 V7.0 environment.

Compiling the TAS Script

If you have upgraded your system to V7.0 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 V7.0 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 V7.0, 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 V7.0 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 V7.0 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 **shmemtab.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/libspp.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.

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.

ISA LAN Ethernet Circuit Cards

To administer the ISA LANs, do the following on the target system:

1. From the network administrator, determine the following:
   - Machine IP address
   - Machine node name
   - System name
   - netmask
   - Gateway IP address (if applicable)
2. Login as **root**.
3. Run the INTUITY CONVERSANT Hardware Resource Allocator to determine the resource assignments. See "Hardware Resource Allocator Operation" in Appendix A, "System Configuration" of the maintenance document for your system.

   Record the parameters listed from the Hardware Resource Allocator in Table A-1.

Table A-1. Resource Assignments

Parameter	Setting
IRQ	
ROM address	
RAM address	
I/O address	

4. Enter **niccfg**

   The system displays the following message:

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

   The system then displays the Network Interface Card Support Utility—Summary Screen (Figure A-1).

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

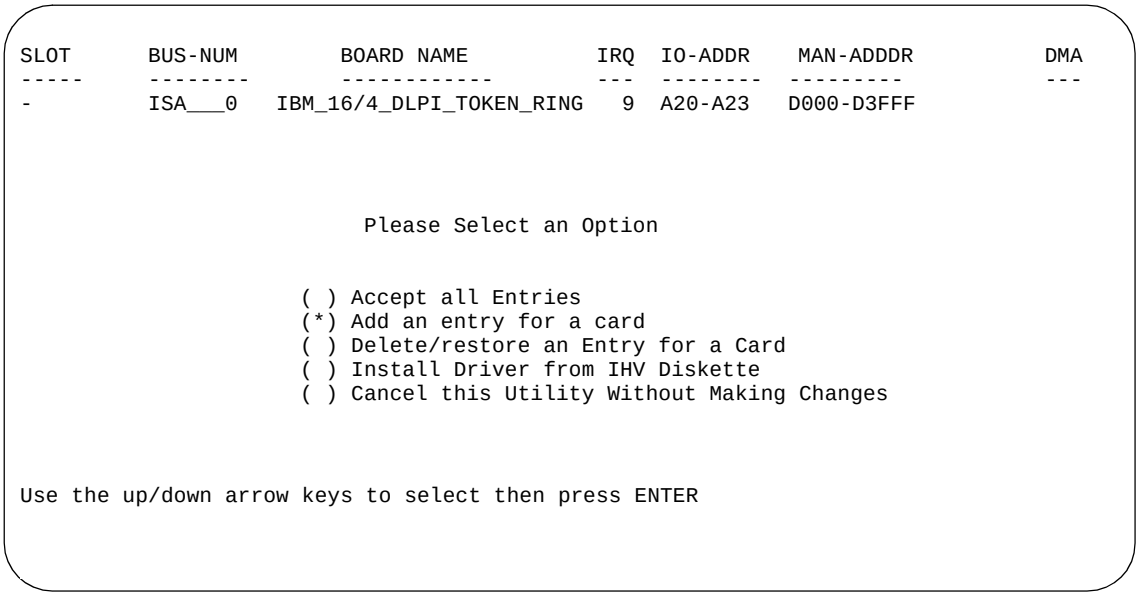


Figure A-1. Network Interface Card Support Utility—Summary Screen

5. Use the down ▼ arrow to select: `Add an entry for a card`
6. Press ENTER

   The system displays the Selection Screen (Figure A-2).

   NOTE:
   If the Selection Screen does not display, exit *niccfg*, enter the command **cd /etc/inst/nics/drivers** and restart at Step 4 above.

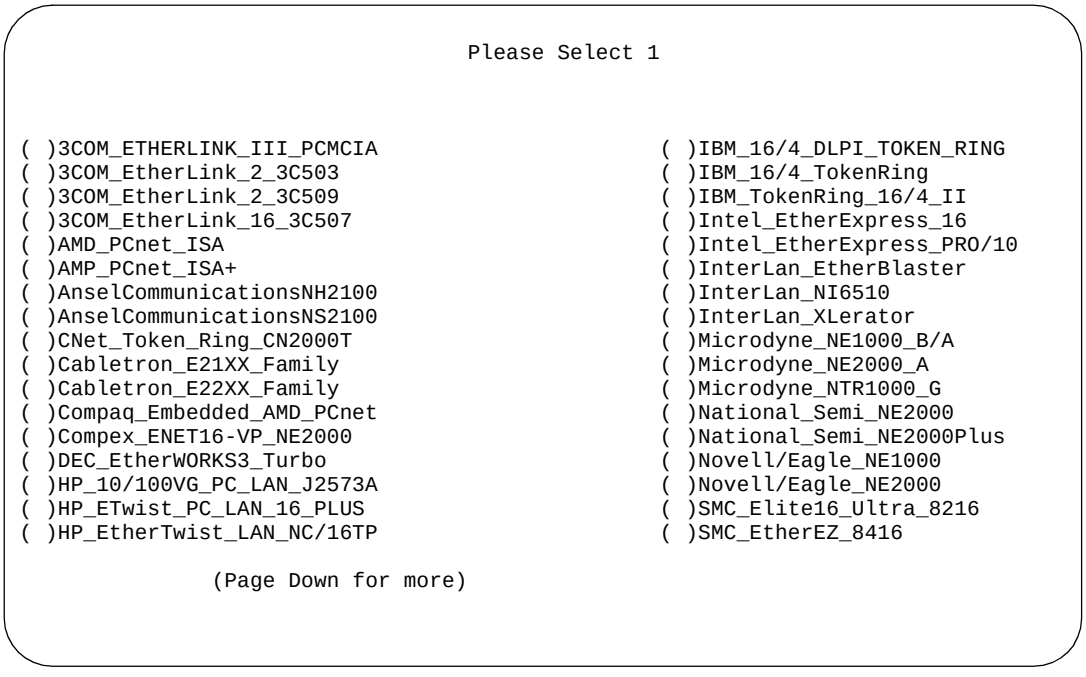


Figure A-2. Selection Screen

7. Use the left ◄, right ►, up ▲, or down ▼ arrows on your keyboard to move through the field selections.
8. Select `SMC_Elite16_Ultra_8216` for the SMC8216 circuit card.

   Select `SMC_EtherEZ_8416` for the SMC8416 circuit card.
9. Press ENTER

   The system displays the Configuration Screen (Figure A-3).

   NOTE:
   Figure A-3 shows an example of an SMC8416 circuit card being installed in the system.

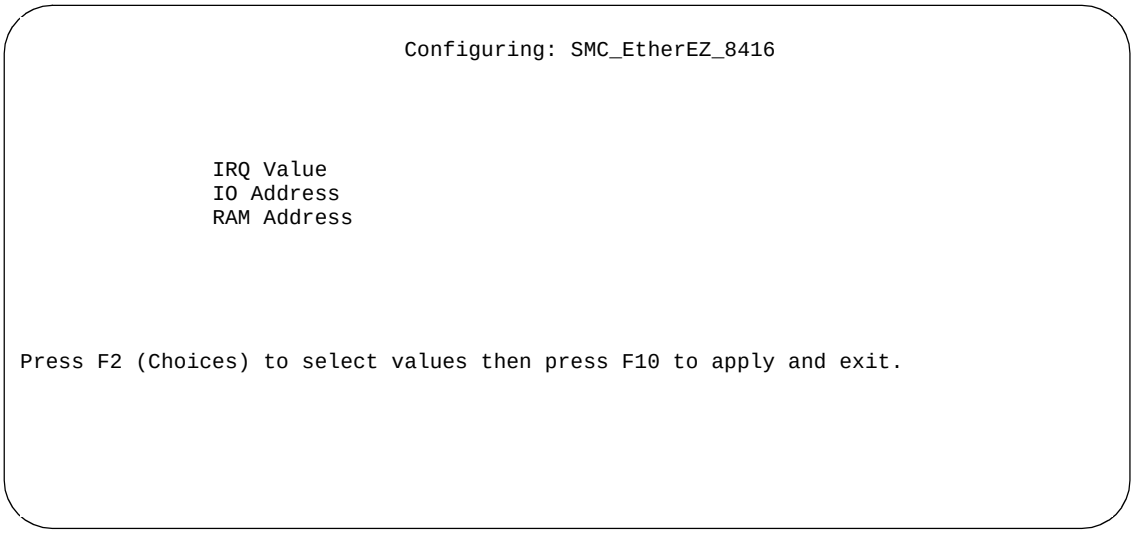


Figure A-3. Configuration Screen

10. Use F2 (Choices) to select the values for each field. Enter the following:
    - IRQ value from Table A-1.
    - I/O address from Table A-1.
    - RAM address from Table A-1.
11. Press F10 to apply the values and exit.

    The system displays the Network Interface Support Card Utility-Summary Screen (Figure A-4).

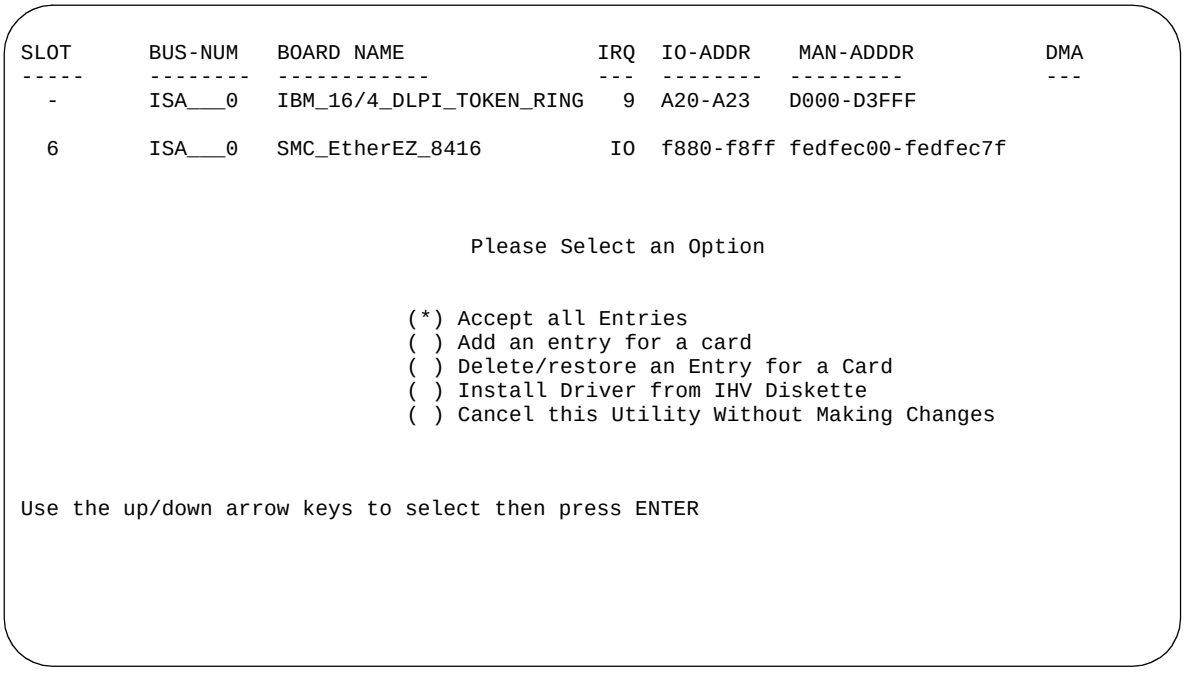


Figure A-4. Network Interface Card Support Utility—Summary Screen

12. Use the down ▼ arrow to select: `Accept All Entries`

    The system displays the following message:

    ```
    Are you sure?

        Yes
        No
    ```

13. Select **yes** and press ENTER

    The system displays the following message:

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

    When complete, the system displays the system prompt.

14. Enter **setuname -n *name*** where *name* is the machine node name.
15. Enter **setuname -s *name*** where *name* is the system name.
16. Enter **cp /etc/o.hosts /etc/ine**t
17. Enter **cd /etc/net**
18. Enter **vi */hosts**

    The system opens the first of three hosts files to be changed.

19. Enter the node names.

    NOTE:
    The node names must be entered twice and separated by a tab.

20. Enter **:w**
21. Enter **:n**

    The system opens the next file to be changed. Repeat Step 19 through Step 21 until all files have been changed.

22. Enter **:q**
23. Enter **/etc/inet/menu**

    The system displays the Inet Setup Values screen (Figure A-5).

```
                        Inet Setup Values from System Files



                Node Name

            System IP Address
             DMS domain Name
                DMA IP Address 1
                DMA IP Address 2
                DMA IP Address 3



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

Figure A-5. Inet Setup Values Screen

24. Verify the machine name is the one entered from Step 14.
25. Press F10 to apply the values and exit.
26. Enter **/etc/confnet.d/configure -i**

    The system prompts you for the interface type.

27. Select `sme_0`.

    The system prompts for the IP host name.

28. Enter the name from Step 14.

    The system prompts for the IP address.

29. Press ENTER to select the default.

    The system displays the system prompt.

30. Enter **cd /etc/inet**

31. Enter **rc.restart**

    NOTE:
    Connectivity can be verified by using the **ping** command. See Appendix A, "Summary of Commands," in INTUITY CONVERSANT System Version 7.0 Administration, 585-313-501.

32. Write and exit the file.

Administering the PCI LAN Circuit Card

To administer the PCI LAN circuit card, do the following:

1. If you are not already logged in as root, do so now.
2. Administer the PCI INT/IRQ Binding. See, "CMOS Parameter Settings" in the "Chapter 2, Installing or Replacing Circuit Cards" in the V7.0 maintenance document for your system.
3. Enter **niccfg**

   The system displays the following message:

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

   The system then displays the Network Interface Card Support Utility—Summary Screen (Figure A-6).

```
SLOT      BUS-NUM        BOARD NAME          IRQ  IO-ADDR    MAN-ADDDR          DMA
-----     --------       ------------        ---  --------  ---------           ---
  6       PCI___0        SMC_EtherPower_9332  IO  f880-f8ff  fedfec00-fedfec7f




                            Please Select an Option


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



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

Figure A-6. Network Interface Card Support Utility—Summary Screen

4. Use the down ▼ arrow to select: `Accept all Entries`

   NOTE:
   If installing from a diskette, select:
   `Install Driver from IHV Diskette`

5. Press ENTER

   The system displays the following message:

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

   When complete, the system displays the system prompt.

6. Enter **setuname -n *name*** where *name* is the machine node name.
7. Enter **setuname -s *name*** where *name* is the system name.
8. Enter **cp /etc/o.hosts /etc/ine**t
9. Enter **cd /etc/net**
10. Enter **vi */hosts**

    The system opens the first of three hosts files to be changed.

11. Enter the node names.

    NOTE:
    The node names must be entered twice and separated by a tab.

12. Enter **:w**
13. Enter **:n**

    The system opens the next file to be changed. Repeat Step 11 through Step 13 until all files have been changed.

14. Enter **:q**
15. Enter **/etc/inet/menu**

    The system displays the Inet Setup Values screen (Figure A-7).

```
                        Inet Setup Values from System Files



                Node Name

            System IP Address
             DMS domain Name
                DMA IP Address 1
                DMA IP Address 2
                DMA IP Address 3



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

Figure A-7. Inet Setup Values Screen

16. Verify the machine name is the one entered from Step 6.
17. Press F10 to apply the values and exit.
18. Enter **/etc/confnet.d/configure -i**

    The system prompts you for the interface type.

19. Select `smpw0_0`.

    The system prompts for the IP host name.

20. Enter the name from Step 6.

    The system prompts for the IP address.

21. Press ENTER to select the default.

    The system displays the system prompt.

NOTE:
If your system has a router, continue with Step 22, otherwise skip to Step 26

22. Enter **cd /etc/inet**
23. Use the vi editor to edit the *config* file.
24. Change the line *###4c:/usr/sbin/route::n:add default default_router 1* to the following:

    4c:/usr/sbin/route::y:add default *a.b.c*.254 1 where *a.b.c* are the first three parts of your IP address. For example, IP address 135.7.50.201 would be changed to 135.7.50.254.

25. Write and exit the file.
26. Continue with "Verifying the LAN Circuit Card Administration".

Verifying the LAN Circuit Card Administration

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

1. Enter **/etc/inet/rc.restart**
2. Check the message log report for TCP/IP or LAN adapter errors. See Chapter 7, "Peripheral Administration," INTUITY CONVERSANT System Version 7.0 Administration, 585-313-501.
3. Verify that you have network connectivity using the **ping** command. See Appendix A, "Summary of Commands," in INTUITY CONVERSANT System Version 7.0 Administration, 585-313-501.

Administering the SMC9332 for 100 Mbps

NOTE:
Perform the following procedure if the SMC9332 circuit card is required to operate at 100 Mbps. If the SMC9332 circuit card is to operate at 10 Mbps, no changes are required.

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

1. Login as **root**.
2. Enter **vi /etc/inst/nics/drivers/smpw0**

3. Change the line *SMPMEDIA0 SMC_MEDIA_AMD* to **SMPMEDIA0 SMC_MEDIA_STP100_UTP100**

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

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 “Replacing or Installing 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 PCI Circuit Card Driver” in “Installing or Replacing Circuit Cards” 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 titled *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 the interface for your system.

      If this choice is accepted, skip to Step e.

      If the selection 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. Enter **yes**.

The system asks if 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. Enter **/etc/conf/bin/idbuild**
9. Enter **shutdown -y -g0 -i6**
10. Edit the **/etc/hosts** file to enter the remaining network node names for your LAN.
11. 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 the "Upgrade Planning" book), 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 **cvis_mainmenu**

   The system displays the INTUITY CONVERSANT V7.0 menu (Figure A-8).

Figure A-8. INTUITY CONVERSANT V7.0 Menu

3. Select

   > Voice System Administration

   > Script Builder Applications

   The system displays the Script Builder Applications menu (Figure A-9).

Figure A-9. 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-10).

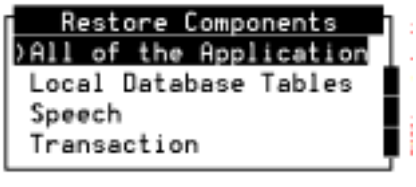


Figure A-10. Restore Components Menu

7. Select

   ```
   > Speech
   ```

   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-10).

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:

-l file	This parameter specifies the input device. Typically this is cartridge tape.
-v	This parameter is the verbose flag that gives a running commentary of the **restore** procedure.
-t	This parameter is the tape flag. It is required for restore from cartridge tape.

[talkfile <list>]	This parameter specifies the list of talkfiles to be restored as either a single digit, a range m–n, or the word **all**. The default is **all**.
[phrase <list>]	This parameter specifies the list of phrases to be restored, as either a single digit, a range m–n, or the word **all**. The default is **all**.
[listfile <list>]	This parameter specifies the list of listfiles and associated speech to be restored, for example, **listfile list.cabnt**

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 **cvis_mainmenu**

   The system displays the INTUITY CONVERSANT V7.0 menu (Figure A-8).

3. Select

> UNIX System Administration
> Network_Services
> Basic_Networking
>Add
Devices

The system displays the Adds a Device for Use by Basic Networking window (Figure A-11).

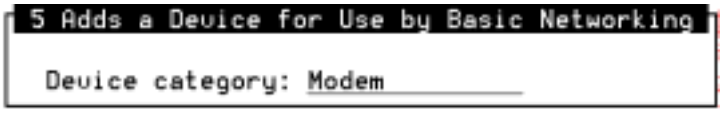


Figure A-11. Adds a Device for Use by Basic Networking Window

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-12).

Figure A-12. 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-13).

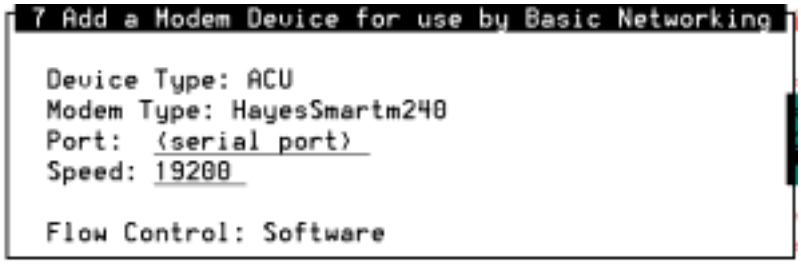


Figure A-13. Add a Modem Device for Use by Basic Networking Window

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-14).

Figure A-14. 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:

    a. 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**

    b. Execute **/etc/conf/bin/idbuild**

    c. Reboot the system.

17. To set up tty01s (COM2):

    a. Substitute tty01s for every <*serial port*> prompt in the above procedure through Step 15.

    b. In Step 16a, change the second column on the second line in the **etc/conf/sdevice.d/asyc** file from **N** to **Y**

    c. Follow Steps 16b and 16c.

Administering Printers

Figure A-15 shows the options available for printer administration. See *NOVELL UnixWare System Administration Print Service Administration* for additional information about each of these options.

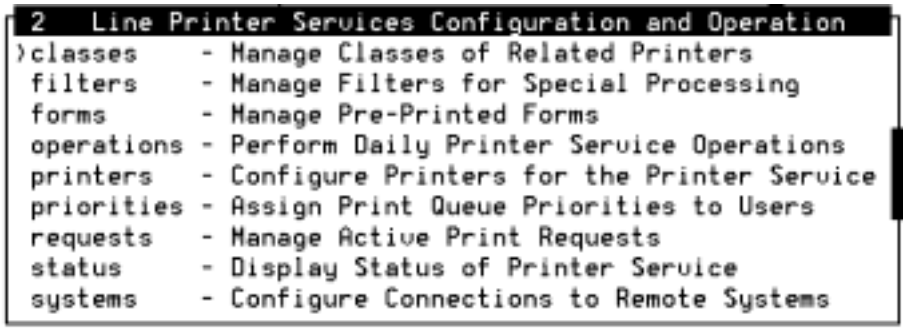


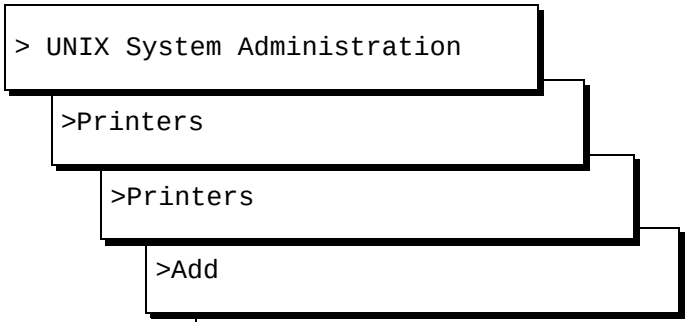
Figure A-15. Line Printer Services Configuration and Operation Menu

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 V7.0 menu (Figure A-8).
3. Select



   The system displays the Add a New Printer screen (Figure A-16).

Figure A-16. 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 -lTOOLS -llog -lprism
```

The INTUITY CONVERSANT VIS V7.0 Set contains all the necessary libraries and header files.

CAUTION:
*The IRAPI function **irsay()** has been changed to **irFDSay()** in V7.0. 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

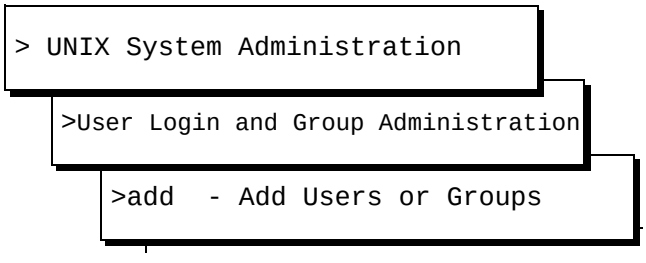
   See "**assignService**" in *INTUITY™ CONVERSANT® System Version 6.0 Administration*, 585-310-591, for more information.

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 V7.0 menu (Figure A-8).
3. Select



   The system displays the Add Users or Groups window (Figure A-17). "User" is preselected in the window.

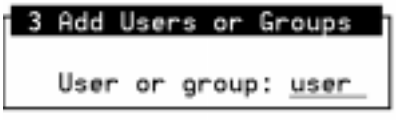


Figure A-17. Add Users or Groups Window

4. Press F3 (Save).

   The system displays the Add a User window (Figure A-18).

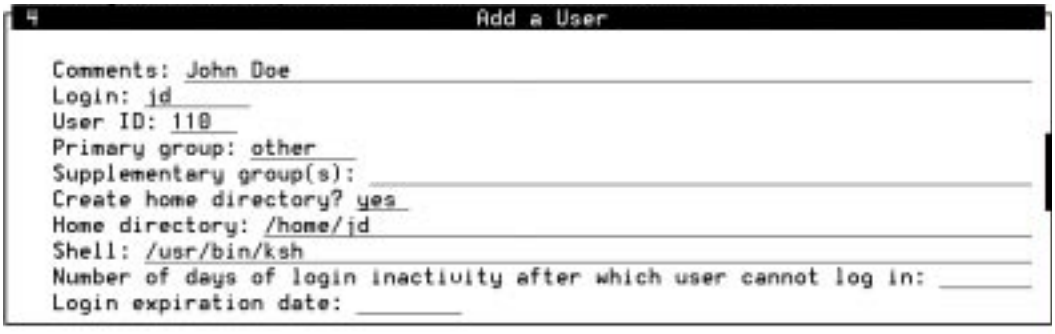


Figure A-18. Add a User Window

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-19).

Figure A-19. 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-20).

Figure A-20. 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-18).

    b. Repeat Step 9 through Step 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 Data Migration Tool. It provides a convenient way to restore your files from the location where the Data Migration Tool 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 Data Migration Tool 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 V7.0 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 re-administer SP, T1, and E1 cards as required. For additional information, see the following chapters in *INTUITY CONVERSANT System Version 7.0 Administration*, 585-313-501:

- Chapter 3, “Configuration Management”
- Chapter 5, “Switch Interface Administration”

Assigning Functions to or Changing Functions on SSP Circuit Cards

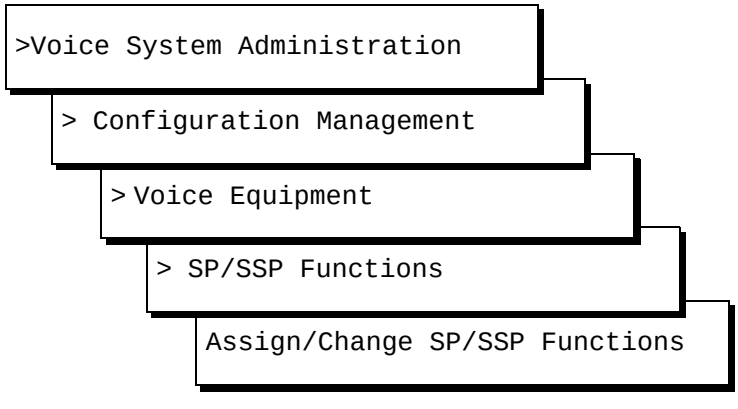
Use the Assign/Change Functions to SP/SSP Cards window to assign one of several installed pack files functions to SP/SSP circuit cards or to change the current functions assigned to SP/SSP circuit cards.

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 **cvis_menu**

   The system displays the INTUITY CONVERSANT V7.0 menu (Figure A-8).
3. Select



4. The system displays the Assign/Change Functions to SP/SSP Cards window (Figure A-21).

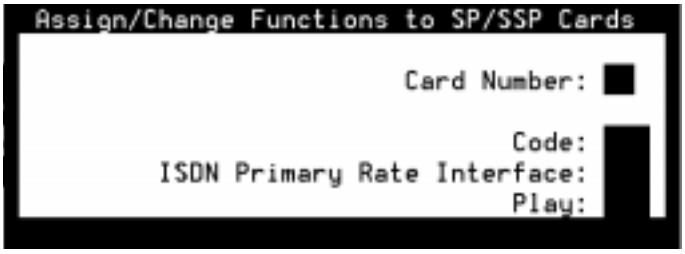


Figure A-21. Assign/Change Functions to SP/SSP Cards Window

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.

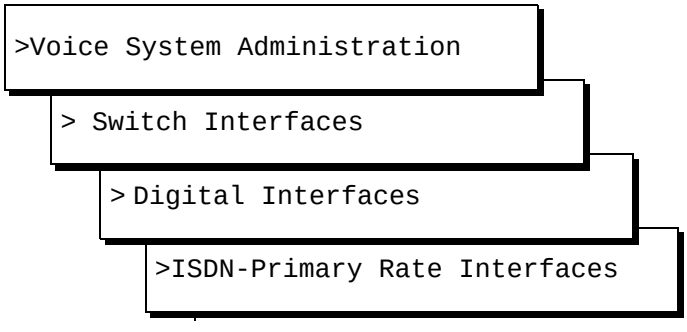
Accessing the ISDN PRI Layer 1 Menu

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 **cvis_menu**

   The system displays the INTUITY CONVERSANT V7.0 menu (Figure A-8).
3. Select



The system displays the ISDN-PRI Layer 1 menu (Figure A-22).

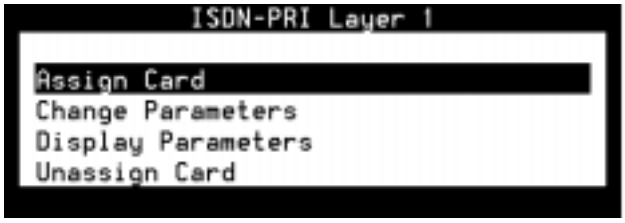


Figure A-22. ISDN-PRI Layer 1 Menu

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.

To assign an ISDN-PRI Layer 1 circuit card:

1. From the ISDN-PRI Layer 1 menu (Figure A-22) select

```
> Assign Card
```

   The system displays the Assign Card: ISDN-PRI Layer 1 window (Figure A-23).

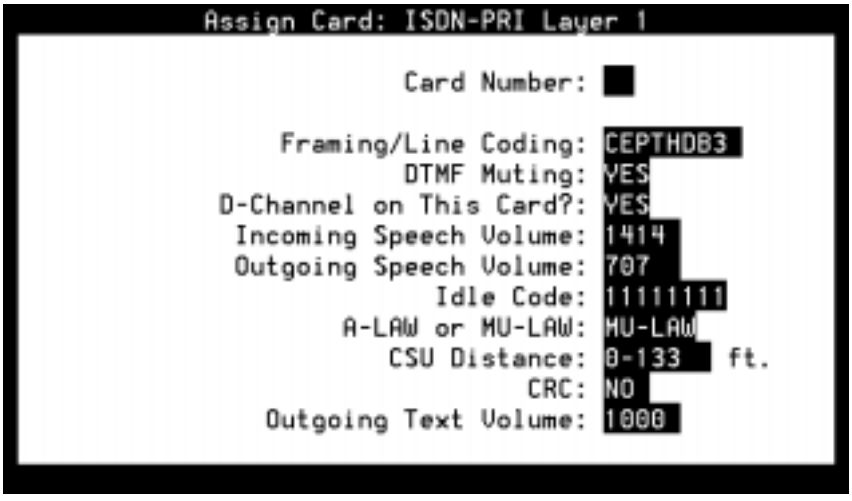


Figure A-23. Assign Card: ISDN-PRI Layer 1 Window

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
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.

7. 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.

8. (E1 only) In the `Idle Code:` field, enter the 8-bit code that will be generated when the channel is idle.
9. (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.
10. (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.
11. (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-3 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-2. 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-3. 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 **cvis_menu**

   The system displays the INTUITY CONVERSANT V7.0 menu (Figure A-8).

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-24).

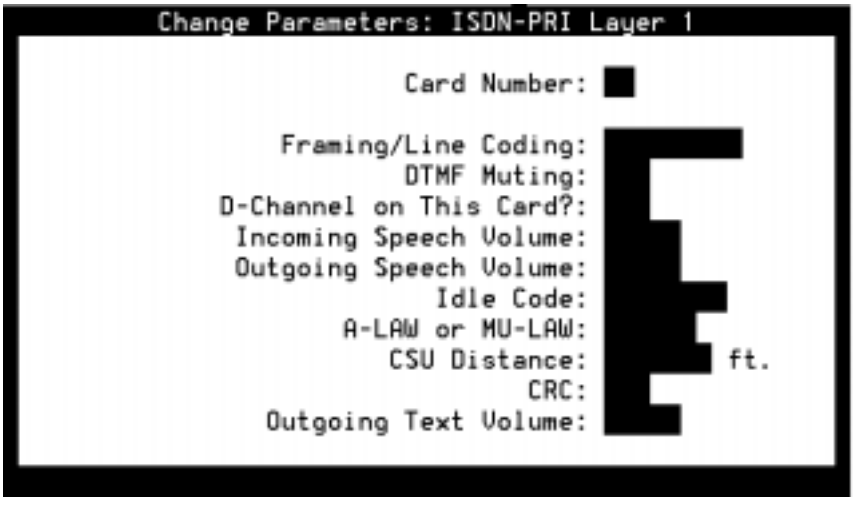


Figure A-24. Change Parameters: ISDN-PRI Layer 1 Window

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 **cvis_menu**

   The system displays the INTUITY CONVERSANT V7.0 menu (Figure A-8).
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-25).

Figure A-25. 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 be 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 **cvis_menu**

   The system displays the INTUITY CONVERSANT V7.0 menu (Figure A-8).

3. Select

```
>Voice System Administration
    >Switch Interfaces
        > Digital Interfaces
            >ISDN-Primary Rate Interfaces
                >Unassign Card
```

The system displays the The Unassign Card: ISDN-PRI Layer 1 window (Figure A-26).

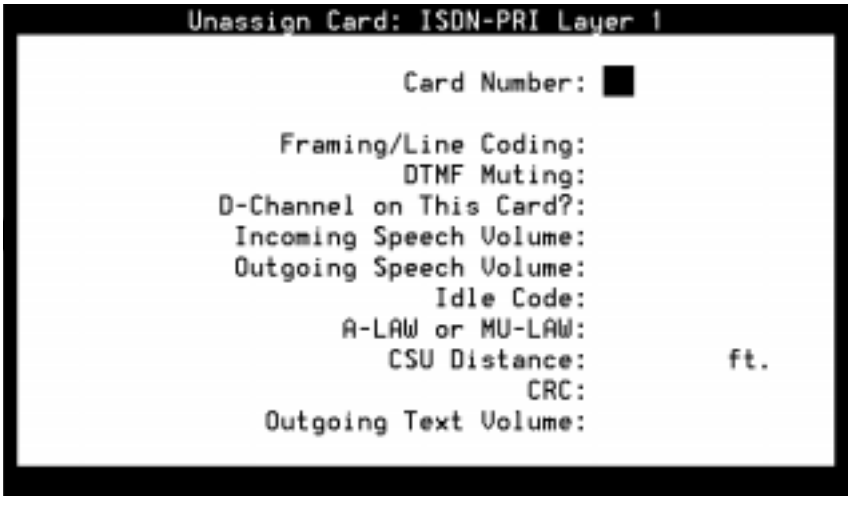


Figure A-26. Unassign Card: ISDN-PRI Layer 1 Window

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. V7.0 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 in Figure A-27.

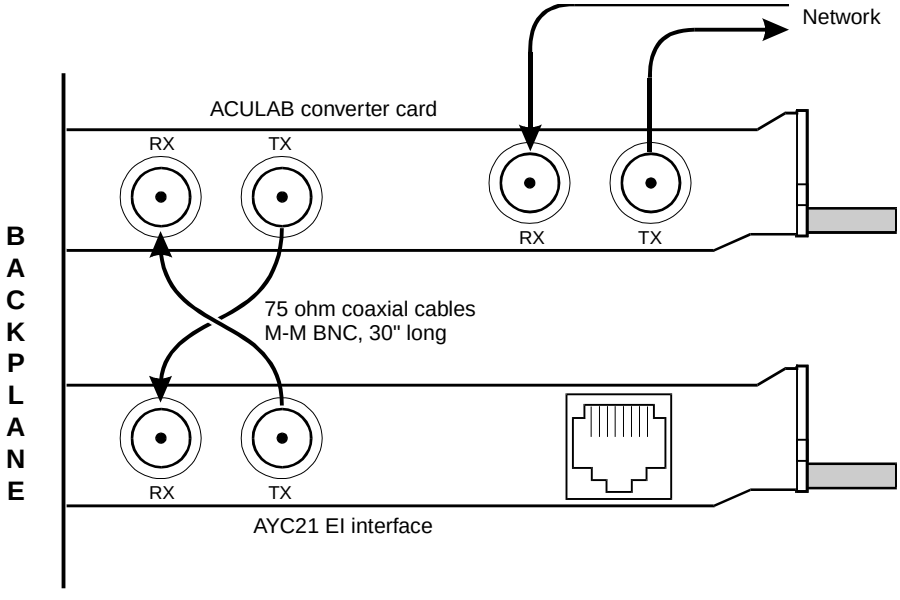


Figure A-27. ACULAB Protocol Converter

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 Data Migration Tool.

Digital Protocol Parameters

Table A-4 and Table A-5 show the field ranges and the field default values for digital protocols.

Table A-4. T1 Digital Protocol Parameters, Ranges, and Defaults

Protocol	Parameter Range/Value	ISDN PRI Layer 1
Framing/Line Coding	D4ZCS, ESFB8ZS	CEPTHDB3
DTMF Muting	Yes, No	Yes
CSU Distance	0–666 ft	0–133 ft
Wink Time[1]	10–2550 msec	N/A
Post Wink Time[1]	10–2550 msec	N/A
Max. Digits in Called Number[1]	0–16	N/A
D-channel on This Card?	Yes, No	Yes
Wink Disconnect Interval[2]	10–2550 msec	N/A
Dial Tone Delay	20–5100 msec	N/A
Switch Hook Flash Duration[2]	10–2550 msec	N/A
Incoming Speech Volume	0–32000 (-30 to +30 dB)	1414
Outgoing Speech Volume	0–32000 (-30 to +30 dB)	707
Outgoing Text Volume[3]	0–32000 (-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-5. E1 Digital Protocol Parameters, Ranges, and Defaults

Protocol	Parameter Range/Value	E1 PRI	ISDN PRI LAYER 1 (with ACULAB)
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
Outgoing Text Volume[1]	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.

Migrated Files

B

Overview

This appendix lists the files and directories that, if found on the source system, the upgrade assistance tool 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.

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 3, "Upgrade Planning and Prerequisites", of *INTUITY CONVERSANT System Version 7.0 Upgrade Planning*, 585-313-601, 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.
- CvtTsmrc — 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. Once converted, the file is renamed as a **o.*file*** on the target 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 V7.0
- Table B-2. Specific Files Migrated in Upgrades from V4.0 to V7.0

Table B-1. Files Migrated in All Upgrades to V6.0

Comment	Operation	File or Directory
Inittab entries	MergeCONV	**/vs/data/CONVERSANT**
Alarms	SvAsOld	**/vs/data/alarms/alarm[1-6]**
	NoChange	**/vs/data/alarms/masks**
# for NetView	MergeAFlags	**/vs/data/alarm_flags**
# 3.0+ source systems;	CvtAsaiTbls	**/vs/data/asai/chantbl**
ASAI information		**/vs/data/asai/domaintbl**
ASAI Parameters	NoChange	**/vs/data/asai/Parameters**
# options for display-type # screens in cvis_menu	NoChange	**/vs/data/cadm/cca.opts**
	NoChange	**/vs/data/cadm/cd.opts**
	NoChange	**/vs/data/cadm/cdsum.opts**
	NoChange	**/vs/data/cadm/evlog.opts**
	NoChange	**/vs/data/cadm/shutwait**
	NoChange	**/vs/data/cadm/traf.opts**
	NoChange	**/vs/data/cadm/voicedspopt**
	NoChange	**/vs/data/cadm/waittime**
# parameters for IRAPI	CvtTsmrc	**/vs/data/tsm.rc** **/vs/data/o.irAPI.rc**
# for SCCS	NoChange	**/vs/data/console_stat**
# etStub msg conversion # files 3.1 or later	MergeEtStub	**/vs/data/etStub.rules**
# Form Filler Records	SvNotFiles	**/vs/data/ff**
# File Transfer # Configuration	NoChange	**/vs/data/fts_config**

Continued on next page

Table B-1. Files Migrated in All Upgrades to V6.0 — *Continued*

Comment	Operation	File or Directory
# CLEO LINKix	UpgHostSvc	**/vs/data/hostsvc**
# replaces trtune_file in # V4.0	NoChange	**/vs/data/trhypot**
# new in V4.0	NoChange	**/vs/data/mtc.rc**
# database dip # information	NoChange	**/vs/data/sb_databases**
	SvAsOld	**/vs/data/spchconfig**
# for V3.0, LST1+V5.0 # changes; for V4.0, V5.0 # changes 5 T1s	MergeT1cfg	**/vs/data/t1_config**
# parameters for irAPI	SvAsOld	**/vs/data/irAPI.rc**
# for Text-to-Speech	NoChange	**/vs/data/tts_file**
# for SCCS	NoChange	**/vs/data/wdogOff**
	NoChange	**/vs/data/Aru_tty**
	NoChange	**/vs/data/Machname**
	NoChange	**/vs/data/Sccs_tty**
# driving rules for iCk # 3.1 or later	SvAsOld	**/vs/etc/iCk.rules**
# iCk configuration # settings	SvAsOld	**/vs/etc/default/iCk**
# alerter configuration # settings	SvAsOld	**/vs/etc/default/alerter**
# pre-3.1 custom # error/explain	NoChange	**/gendb/data/datafile**
	NoChange	**/gendb/data/message_file**
	NoChange	**/gendb/data/errors**
	NoChange	**/gendb/data/appl.explain**
# msgID to explain src # mapping	MergeTransl	**/gendb/data/explain/translateLst**
# important binary config/setup info; # will require version- # specific conversions	SvAsOld	**/gendb/shmem/devtbl**

Continued on next page

Table B-1. Files Migrated in All Upgrades to V6.0 — *Continued*

Comment	Operation	File or Directory
# services -> channel # assignments; may # require # version-specific # conversions	SvAsOld	**/gendb/shmem/transconfig**
	SvAsOld	**/vs/data/ad_channel_table**
	SvAsOld	**/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 # be merged into new # version; # may be other user src in # this directory	SvAsOld	**/att/ag/hostdip/helper/*.c**
	SvAsOld	**/att/ag/hostdip/helper/makefile**
	SvAsOld	**/att/asr/findbest.c**
# custom et error # 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**
	UpgHostCfg	**/usr/lib/linkix/com.cfg**
	NoChange	**/usr/lib/cleo/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**
	SvAsOld	**/usr/spool/log/head/logAPPL.h**
	SvNotFiles	**/usr/spool/log/head/log[A-Z]*.h**

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Table B-1. Files Migrated in All Upgrades to V6.0 — *Continued*

Comment	Operation	File or Directory
	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**
	SvAsOld	**/usr/spool/oldLog** **/vs/spool/oldLog**
	SvNotFiles	**/att/ag/hostdip/helper/*.c**
	SvNotFiles	**/att/include**
# AVP pkg phrase list	NoSave	**/speech/talk/list.avp**
# fax attendant pkg phrase list	NoSave	**/speech/talk/list.fax**
# 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 # pkg	NoSave	**/speech/talk/dc_sample.pl**
	NoSave	**/speech/talk/monitor.pl**
# phrase lists for # applications	NoChange	**/speech/talk/*.pl**
# sb applications src; use # sb_conv when restoring # to get them upgraded	SvNotFiles	**/att/trans/sb**
# AVP and FAX files;	NoSave	**/usr/ocdb**
# preserve if disk changes	NoSave	**/usr/vmdb**
# AVP files; preserve if disk changes	NoSave	**/avp/data**

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Table B-1. Files Migrated in All Upgrades to V6.0 — *Continued*

Comment	Operation	File or Directory
# FAX files; preserve if disk changes	NoSave	**/usr/faxdb**
# FAX channel configiuration data	NoSave	**/etc/fax/faxconfig.cfg**
# 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**
# system-wide profile	SvAsOld	**/etc/profile**
	SvAsOld	**/etc/rc[023].d**
	SvAsOld	**/oracle/dbs/initA.ora**
# preserve if not in Files	SvNotFiles	**/vs/bin/ag/eaforms**
	SvNotFiles	**/vs/bin/ag/eascripts**
# preserve if not in Files # SB external functions	SvNotFiles	**/vs/bin/ag/lib**
	SvAsOld	**/vs/data/conf_data**
# user login information	SvAsOld	**/etc/passwd**
# password file for logins	SvAsOld	**/etc/shadow**
# getty terminal behavior # replaced by vfstab # in UnixWare	SvAsOld	**/etc/gettydefs**
# LAN network hosts	SvAsOld	**/etc/hosts**
# LAN networks known	SvAsOld	**/etc/networks**
	NoSave	**/usr/add-on/ksh**
	SvNotFiles	**/usr/add-on**
# LAN router info	SvAsOld	**/etc/inet/rc.inet**
	SvAsOld	**/etc/confnet.d/inet/interface**
# lp spooler configuration	NoChange	**/usr/spool/lp**
# cron & at jobs	SvAsOld	**/usr/spool/cron**

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Table B-1. Files Migrated in All Upgrades to V6.0 — *Continued*

Comment	Operation	File or Directory
# uucp log files, etc.	NoChange	**/usr/spool/uucp**
# files from uucp	NoChange	**/usr/spool/uucppublic**
# files controlling uucp	SvAsOld	**/usr/lib/uucp/[DMPS]***
# root .profile	SvAsOld	**/.profile**
# root .env	SvAsOld	**/.env**
# root .aliases	SvAsOld	**/.alias***
# root .*rc	SvAsOld	**/*.rc**
# V5 and later speech fs	NoChange	**/home2/vfs**
# FlexWord files	FlexWordC	**/att/asr/wordlists**
# o.<dir> from dirsList file # on target systems	NoChange	**$ (homeDirs)**

Table B-2. Specific Files Migrated in Upgrades from V4.0 to V7.0

Comment	Operation	File or Directory
# custom grammars	NoChange	**/vs/data/sr_file**
# database dip parameters	NoChange	**/vs/data/ldbdip.rc**
# custom grammars	NoChange	**/vs/pack/cmp.seg**
	NoChange	**/att/include/sr_grammar.h**
# FlexWord wordlists	MvDirToNew	**/att/asr/wordlists/** **/att/asr/wordlists/active/**
# Flexword	NoChange	**/att/asr/sr_files/sr_file.sw**

Package Mapping

C

Overview

This appendix includes tables that map the names of software packages in INTUITY™ CONVERSANT® releases V3.1.1, 4.0, 5.0, and 6.0 to their equivalents in V7.0.

This appendix is provided to help you verify that your V7.0 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 V3.1.1 to V7.0

V3.1.1 Package	V7.0 Replacement Packages(s)
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	LUCENT TECHNOLOGIES CALLVISOR PC Software
CONVERSANT Intro Application Support Software R1.0	None
CONVERSANT Intelligent Ports Card (AT&T IPC-802) Version 3.1	Equinox Megaport/Megaplex STREAMS Device Driver
CONVERSANT Intro Advanced Application Toolkit R1.0	None
CONVERSANT Call Classification Analysis Package Version 3.1	INTUITY Call Classification Analysis Package
CONVERSANT Chantst Speech Package Version 3.1	INTUITY 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	INTUITY Form Filler Application
CONVERSANT VIS Application Software Version 3.1	INTUITY CONVERSANT VIS V7.0 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	Equinox Megaport/Megaplex STREAMS Device Driver
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	INTUITY ISDN Primary Rate Interface Package

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Table C-1. Package Mapping from V3.1.1 to V7.0 — *Continued*

V3.1.1 Package	V7.0 Replacement Packages(s)
CONVERSANT Speech Recognition Package Version 3.1	INTUITY WholeWord Recognition Package - Base INTUITY WholeWord Recognition Package - US English
CONVERSANT Script Builder Version 3.1	INTUITY Script Builder
CONVERSANT SP Board Driver Version 3.1	INTUITY ASP Driver Package
CONVERSANT T1 Board Driver Version 3.1	INTUITY T1/E1 Board Driver INTUITY 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	INTUITY Text To Speech Package
Voice Mail External Actions Package Version 3.1	None
CONVERSANT Configuration Package Version 3.1	INTUITY 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	INTUITY External Alarms Package
CONVERSANT VIS 3270 Enhanced File Transfer Version 3.1	INTUITY 3270 Enhanced File Transfer Package
CONVERSANT AYC11 Upgrade Package for T1 E&M, Issue 1	INTUITY 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	None
3270 NetView Alarm Interface Version 3.1	INTUITY 3270 Netview Alarm Interface Package

Table C-2. Package Mapping from V4.0 to V7.0

V4.0 Package	V7.0 Replacement Package(s)
CONVERSANT Intro Advanced DBMS Software R1.0	None
CONVERSANT VIS V4.0 Adjunct/Switch Application Interface Package	LUCENT TECHNOLOGIES CALLVISOR PC Software
CONVERSANT Intro Application Support Software R1.0	None
CONVERSANT Intelligent Ports Card (AT&T IPC-802)	Equinox Megaport/Megaplex STREAMS Device Driver
CONVERSANT Intro Advanced Application Toolkit R1.0	None
CONVERSANT AYC11 Upgrade Package for T1 E&M, Issue 1	INTUITY 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	INTUITY 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	INTUITY Form Filler Application
CONVERSANT VIS V4.0 Application Software	INTUITY CONVERSANT VIS V7.0 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)	Equinox Megaport/Megaplex STREAMS Device Driver
CONVERSANT VIS V4.0 Performance Test Analysis Tools	None

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Table C-2. Package Mapping from V4.0 to V7.0 — *Continued*

V4.0 Package	V7.0 Replacement Package(s)
CONVERSANT VIS V4.0 Performance Test Tools	None
CONVERSANT VIS V4.0 ISDN Primary Rate Interface Package	INTUITY ISDN Primary Rate Interface Package
CONVERSANT VIS V4.0 Script Builder	INTUITY Script Builder
CONVERSANT VIS V4.0 SP Board Driver	INTUITY ASP Driver Package
CONVERSANT VIS V4.0 T1 Board Driver	INTUITY T1/E1 Board Driver INTUITY 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	INTUITY Line Side T1 Package - Galaxy
CONVERSANT VIS V4.0 Line Side T1 Interface Package - DEFINITY	INTUITY Line Side T1 Package - Definity
CONVERSANT VIS V4.0 Text To Speech Package	INTUITY Text To Speech Package
CONVERSANT VIS V4.0 Voice Mail External Actions Package	None
CONVERSANT VIS V4.0 Speech Collection Toolkit	INTUITY 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	INTUITY Hardware Resource Allocator
CONVERSANT VIS V4.0 External Alarm Interface Package	INTUITY External Alarms Package
CONVERSANT VIS V4.0 3270 Enhanced File Transfer	INTUITY 3270 Enhanced File Transfer Package
CONVERSANT VIS V4.0 Compulert/SCCS Interface Package	None
CONVERSANT VIS V4.0 3270 NetView Alarm Interface	INTUITY 3270 Netview Alarm Interface Package
CONVERSANT VIS V4.0 FlexWord Recognition Package (AT&T D1390)	INTUITY FlexWord Recognition - Base

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Table C-2. Package Mapping from V4.0 to V7.0 — *Continued*

V4.0 Package	V7.0 Replacement Package(s)
CONVERSANT VIS V4.0 Speech Recognition Package - US English	INTUITY WholeWord Recognition Package - Base INTUITY WholeWord Recognition Package - US English
CONVERSANT VIS V4.0 Speech Recognition Package - UK English	INTUITY WholeWord Recognition Package - Base INTUITY WholeWord Recognition Package - UK English
CONVERSANT VIS V4.0 Speech Recognition Package - Canadian French	INTUITY WholeWord Recognition Package - Base INTUITY WholeWord Recognition Package - Canadian French
CONVERSANT VIS V4.0 Speech Recognition Package - Mexican Spanish	INTUITY WholeWord Recognition Package - Base INTUITY WholeWord Recognition Package - Latin American Spanish
CONVERSANT VIS V4.0 PBX/PSTN Switch Interface Package - Hong Kong	INTUITY Analog Switch Interface Package -- Hong Kong
CONVERSANT VIS V4.0 PBX/PSTN Switch Interface Package - Mexico	INTUITY Analog Switch Interface Package -- Mexico
CONVERSANT VIS V4.0 PBX/PSTN Switch Interface Package - UK	INTUITY Analog Switch Interface Package -- UK
CONVERSANT VIS Line Side T1 Interface Package - Galaxy	INTUITY Line Side T1 Package - Galaxy
CONVERSANT VIS Line Side T1 Interface Package - DEFINITY	INTUITY Line Side T1 Package - Definity
CONVERSANT VIS V4.0 Graphical Speech Editor Package	INTUITY Graphical Speech Editor
CONVERSANT VIS V4.0 Software Upgrade Assistance Package	None

Table C-3. Package Mapping from V5.0 to V7.0

V5.0 Package	V7.0 Replacement Package(s)
UnixWare for INTUITY Emergency Boot Floppy	None
CONVERSANT Intro Application Support Software R1.0	None
CONVERSANT Intelligent Ports Card (AT&T IPC-802)	Equinox Megaport/Megaplex STREAMS Device Driver
CONVERSANT AYC11 Upgrade Package for T1 E&M, Issue 1	INTUITY T1 E&M Interface Package
CONVERSANT AYC11 Upgrade Package, Issue 1	None
CONVERSANT AYC11 Upgrade Package for ISDN-PRI, Issue 1	None
INTUITY CONVERSANT VIS V5.0 Call Classification Analysis Package	INTUITY 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
INTUITY CONVERSANT VIS V5.0 Speech Collection Toolkit	INTUITY Data Collection Toolkit
Fax Attendant R2.5 Script Builder FAX Actions	None
INTUITY CONVERSANT VIS V5.0 Form Filler Plus Package	INTUITY Form Filler Application
INTUITY CONVERSANT VIS V5.0 Intelligent Ports Card	Equinox Megaport/Megaplex STREAMS Device Driver
INTUITY CONVERSANT VIS V5.0 Intro Application Software	INTUITY CONVERSANT VIS V7.0 Set
INTUITY CONVERSANT VIS V5.0 Application Software	INTUITY CONVERSANT VIS V7.0 Set
CONVERSANT Intro Application Development Software R1.0	None
Integrated Voice Power System Software R2.0	None

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Table C-3. Package Mapping from V5.0 to V7.0 — *Continued*

V5.0 Package	V7.0 Replacement Package(s)
CONVERSANT VIS Intelligent Ports Card (AT&T IPC-900)	Equinox Megaport/Megaplex STREAMS Device Driver
INTUITY CONVERSANT VIS V5.0 3270 NetView Alarm Interface	INTUITY 3270 Netview Alarm Interface Package
INTUITY CONVERSANT VIS V5.0 Performance Test Analysis Tools	None
INTUITY CONVERSANT VIS V5.0 Performance Test Tools	None
INTUITY CONVERSANT VIS V5.0 ISDN Primary Rate Interface Package	INTUITY ISDN Primary Rate Interface Package
INTUITY CONVERSANT VIS V5.0 Script Builder	INTUITY Script Builder
INTUITY CONVERSANT VIS V5.0 SP Board Driver	INTUITY ASP Driver Package
INTUITY CONVERSANT VIS V5.0 SQL*NET TCP/IP for ORACLE 7.0.12	SQL*NET TCP/IP V2 for ORACLE 7.3.2
INTUITY CONVERSANT VIS V5.0 FlexWord Recognition Package	INTUITY FlexWord Recognition - Base
INTUITY CONVERSANT VIS V5.0 T1 Board Driver	INTUITY T1/E1 Board Driver INTUITY T1 E&M Interface Package
CONVERSANT VIS T1 A/B Robbed-bit E&M Interface Package	None
INTUITY CONVERSANT VIS V5.0 Line Side T1 Interface Package - Galaxy	INTUITY Line Side T1 Package - Galaxy
INTUITY CONVERSANT VIS V5.0 Line Side T1 Interface Package - DEFINITY	INTUITY Line Side T1 Package - DEFINITY
INTUITY CONVERSANT VIS V5.0 Tip/Ring Board Driver	INTUITY Tip/Ring Board Driver
INTUITY CONVERSANT VIS V5.0 Text To Speech Package	INTUITY Text To Speech Package
INTUITY CONVERSANT VIS V5.0 Voice Mail External Actions Package	None
INTUITY CONVERSANT VIS V5.0 Network Primary Rate Interface Package	Available as a custom package only

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Table C-3. Package Mapping from V5.0 to V7.0 — *Continued*

V5.0 Package	V7.0 Replacement Package(s)
INTUITY CONVERSANT VIS V5.0 Line Side T1 Interface Package - Galaxy	INTUITY Line Side T1 Package - Galaxy
CONVERSANT VIS Line Side T1 Interface Package - DEFINITY	INTUITY Line Side T1 Package - Definity
INTUITY CONVERSANT VIS V5.0 Speech Recognition Package - US English	INTUITY WholeWord Recognition Package - Base INTUITY WholeWord Recognition Package - US English
CONVERSANT VIS Speech Recognition Package - UK English	INTUITY WholeWord Recognition Package - Base INTUITY WholeWord Recognition Package - UK English
INTUITY CONVERSANT VIS V5.0 Speech Recognition Package - Canadian French	INTUITY WholeWord Recognition Package - Base INTUITY WholeWord Recognition Package - Canadian French
INTUITY CONVERSANT VIS V5.0 Speech Recognition Package - Mexican Spanish	INTUITY WholeWord Recognition Package - Base INTUITY WholeWord Recognition Package - Latin American Spanish
INTUITY CONVERSANT VIS V5.0 Configuration Package	INTUITY Hardware Resource Allocator
INTUITY CONVERSANT VIS V5.0 External Alarms Package	INTUITY External Alarms Package
INTUITY CONVERSANT VIS V5.0 3270 Enhanced File Transfer	INTUITY 3270 Enhanced File Transfer Package
INTUITY CONVERSANT VIS V5.0 Compulert/SCCS Interface Package	None
CONVERSANT VIS PBX/PSTN Switch Interface Package - Hong Kong	INTUITY Analog Switch Interface Package -- Hong Kong
CONVERSANT VIS PBX/PSTN Switch Interface Package - Mexico	INTUITY Analog Switch Interface Package -- Mexico
CONVERSANT VIS PBX/PSTN Switch Interface Package - UK	INTUITY Analog Switch Interface Package -- UK

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Table C-3. Package Mapping from V5.0 to V7.0 — *Continued*

V5.0 Package	V7.0 Replacement Package(s)
INTUITY CONVERSANT VIS V5.0 Graphical Speech Editor Package	INTUITY Graphical Speech Editor
INTUITY CONVERSANT VIS V5.0 Software Upgrade Assistance Package	None
CGS Asynchronous Host Toolkit Version 1.0	None
FAX Attendant R2.5 Script Builder FAX Actions - SBFAX_demo Backup Transactions	None
FAX Attendant R2.5 Script Builder FAX Actions - SBFAX_demo Backup Speech	None
INTUITY CONVERSANT VIS V5.0 Feature Test Script Package	INTUITY Feature Test Script Package
INTUITY CONVERSANT VIS V5.0 Adjunct/Switch Application Interface Package	LUCENT TECHNOLOGIES CALLVISOR PC Software
AUDIX Voice Power Release 2.5 - Speech	None
AUDIX Voice Power Release 2.5 - Speech	None
AUDIX Voice Power Release 2.5 - Software	None
AUDIX Voice Power Release 2.5 - Software	None
AVP R2.5 Switch Integration Software for S75/DEFINITY G1/G3 PBX	None
AVP R2.5 Switch Integration Software for S25 PBX	None
FAX Attendant Release 2.5 (For Use With AVP)	None
FAX Attendant Release 2.5 (For Use Without AVP)	None
FAX Attendant R2.5 Switch Integration Software for S75/DEFINITY G1/G3 (For Use Without AVP)	None
FAX Attendant R2.5 Switch Integration Software for S85/DEFINITY G2 (For Use Without AVP)	None

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Table C-3. Package Mapping from V5.0 to V7.0 — *Continued*

V5.0 Package	V7.0 Replacement Package(s)
FAX Attendant R2.5 Switch Integration Software for S75/DEFINITY G1/G3 (For Use With AVP)	None
FAX Attendant R2.5 Switch Integration Software for S25 (For Use With AVP)	None
INTUITY CONVERSANT VIS V5.0 Synchronous Host Interface Package	INTUITY Synchronous Host Interface Package
INTUITY CONVERSANT VIS V5.0 FlexWord Toolkit	INTUITY FlexWord Toolkit
INTUITY CONVERSANT VIS V5.0 CALLVISOR PC ASAI Package	LUCENT TECHNOLOGIES CALLVISOR PC ASAI Package
INTUITY CONVERSANT VIS V5.0 CALLVISOR PC ISDN Package	LUCENT TECHNOLOGIES CALLVISOR PC ISDN Package
linkix_coproc, Link Level (3.0.2.1)	None
linkix_sib, Link Level (3.0.2.1)	cleo_sib, Link Level (4.1.2.0)
linkix_tkrn, Link Level (3.0.2.5)	cleo_tkrn, Link Level (4.1.2.0)
linkix_sna_128lu, SNA Level (3.0.3.0)	cleo_sna_128lu, SNA Level (4.1.2.0)
linkix_3270, Feature Level 1 (3.0.2.3)	cleo_3270, Feature Level 1 (4.1.2.0)
linkix_hte, Feature Level 2 (3.0.2.7)	cleo_hte, Feature Level 2 (4.1.2.0)
linkix_mgmt, Feature Level 1 (3.0.2.3)	cleo_mgmt, Feature Level 1 (4.1.2.0)
linkix_netman, Feature Level 1 (3.0.2.0)	cleo_netman, Feature Level 1 (4.1.2.0)
linkix_coproc, Link Level, Supplement 04	None
linkix_3270, Feature Level 1, Supplement 03	None
linkix_hte, Feature Level 2, Supplement 02	None
linkix_sib, Link Level, Supplement 02	None
linkix_sna, Link Level, Supplement 01	None

Table C-4. Package Mapping from V6.0 to V7.0

V6.0 Package	V7.0 Replacement Package(s)
Equinox Megaport/Megaplex STREAMS Device Driver (ISA/EISA)	Equinox Megaport/Megaplex STREAMS Device Driver
INTUITY Intelligent Ports Card (gemini)	Equinox Megaport/Megaplex STREAMS Device Driver
INTUITY Call Classification Analysis Package	INTUITY Call Classification Analysis Package
CONVERSANT Chantst Speech Package	(embedded in) INTUITY Feature Test Script Package
INTUITY Data Collection Toolkit	INTUITY Data Collection Toolkit
INTUITY Form Filler Application	INTUITY Form Filler Application
INTUITY CONVERSANT VIS V6.0 UnixWare for INTUITY 1.1.2	UnixWare for INTUITY (with VERITAS)
INTUITY 3270 Netview Alarm Interface Package	INTUITY 3270 Netview Alarm Interface Package
INTUITY ISDN Primary Rate Interface Package	INTUITY ISDN Primary Rate Interface Package
INTUITY Script Builder	INTUITY Script Builder
INTUITY ASP Driver Package	INTUITY ASP Driver Package
INTUITY SQL*NET TCP/IP V1/V2 for ORACLE 7.1.3	SQL*NET TCP/IP V2 for ORACLE 7.3.2
INTUITY FlexWord Recognition - Base	INTUITY FlexWord Recognition - Base
INTUITY T1/E1 Board Driver	INTUITY T1/E1 Board Driver
INTUITY T1 E&M Interface Package	INTUITY T1 E&M Interface Package
INTUITY Line Side T1 Package - Galaxy	INTUITY Line Side T1 Package - Galaxy
INTUITY Line Side T1 Package - DEFINITY	INTUITY Line Side T1 Package - DEFINITY
INTUITY Tip/Ring Board Driver	INTUITY Tip/Ring Board Driver
INTUITY Text To Speech Package	INTUITY Text To Speech Package
INTUITY CONVERSANT VIS V5.0 Network Primary Rate Interface Package	INTUITY Advanced PRI Package
INTUITY WholeWord Recognition Package - Base	INTUITY WholeWord Recognition Package - Base

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Table C-4. Package Mapping from V6.0 to V7.0 — *Continued*

V6.0 Package	V7.0 Replacement Package(s)
INTUITY WholeWord Recognition Package - US English	INTUITY WholeWord Recognition Package - US English
INTUITY WholeWord Recognition Package - UK English (not listed in i.2.1/pkg)	INTUITY WholeWord Recognition Package - UK English
INTUITY WholeWord Recognition Package - Canadian French	INTUITY WholeWord Recognition Package - Canadian French
INTUITY WholeWord Recognition Package - Latin American Spanish	INTUITY WholeWord Recognition Package - Latin American Spanish
INTUITY Hardware Resource Allocator	INTUITY Hardware Resource Allocator
INTUITY External Alarms Package	INTUITY External Alarms Package
INTUITY 3270 Enhanced File Transfer Package	INTUITY 3270 Enhanced File Transfer Package
INTUITY Compulert/SCCS Interface Package	None
Analog Switch Interface Package -- Hong Kong (not listed in i.2.1/pkg)	INTUITY Analog Switch Interface Package -- Hong Kong
Analog Switch Interface Package -- Mexico (not listed in i.2.1/pkg)	INTUITY Analog Switch Interface Package -- Mexico
Analog Switch Interface Package -- UK (not listed in i.2.1/pkg)	INTUITY Analog Switch Interface Package -- UK
INTUITY Graphical Speech Editor	INTUITY Graphical Speech Editor
INTUITY CSG Asynchronous Host Toolkit	INTUITY CSG Asynchronous Host Toolkit
INTUITY Script Builder FAX Actions	INTUITY Script Builder FAX Actions for Lucent Technologies cards
INTUITY Feature Test Script Package	INTUITY Feature Test Script Package
INTUITY Adjunct/Switch Application Interface Package	LUCENT TECHNOLOGIES CALLVISOR PC Software
AVP R2.5 Switch Integration Software for S75/DEFINITY G1/G3 PBX	None
AVP R2.5 Switch Integration Software for S25 PBX	None
FAX Attendant Release 2.5 (For Use With AVP)	None

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Table C-4. Package Mapping from V6.0 to V7.0 — *Continued*

V6.0 Package	V7.0 Replacement Package(s)
FAX Attendant Release 2.5 (For Use Without AVP)	None
FAX Attendant R2.5 Switch Integration Software for S75/DEFINITY G1/G3 (For Use Without AVP)	None
FAX Attendant R2.5 Switch Integration Software for S85/DEFINITY G2 (For Use Without AVP)	None
FAX Attendant R2.5 Switch Integration Software for S75/DEFINITY G1/G3 (For Use With AVP)	None
FAX Attendant R2.5 Switch Integration Software for S25 (For Use With AVP)	None
INTUITY Synchronous Host Interface Package	INTUITY Synchronous Host Interface Package
INTUITY FlexWord Toolkit	INTUITY FlexWord Toolkit
LUCENT TECHNOLOGIES CALLVISOR PC ASAI Package	LUCENT TECHNOLOGIES CALLVISOR PC ASAI Package
LUCENT TECHNOLOGIES CALLVISOR PC ISDN Package	LUCENT TECHNOLOGIES CALLVISOR PC ISDN Package
linkix_coproc, Link Level (3.0.2.1)	None
linkix_sib, Link Level (3.0.2.1)	cleo_sib, Link Level (4.1.2.0)
linkix_tkrn, Link Level (3.0.2.5)	cleo_tkrn, Link Level (4.1.2.0)
linkix_sna_128lu, SNA Level (3.0.3.0)	cleo_sna_128lu, SNA Level (4.1.2.0)
linkix_3270, Feature Level 1 (3.0.2.3)	cleo_3270, Feature Level 1 (4.1.2.0)
linkix_hte, Feature Level 2 (3.0.2.7)	cleo_hte, Feature Level 2 (4.1.2.0)
linkix_mgmt, Feature Level 1 (3.0.2.3)	cleo_mgmt, Feature Level 1 (4.1.2.0)
linkix_netman, Feature Level 1 (3.0.2.0)	cleo_netman, Feature Level 1 (4.1.2.0)
linkix_coproc, Link Level, Supplement 05	None (not required)
linkix_3270, Feature Level 1, Supplement 05	None (not required)
linkix_hte, Feature Level 2, Supplement 03	None (not required)
linkix_sib, Link Level, Supplement 09	None (not required)

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Table C-4. Package Mapping from V6.0 to V7.0 — *Continued*

V6.0 Package	V7.0 Replacement Package(s)
linkix_sna, Link Level, Supplement 03	None (not required)
linkix_tkrn, Link Level, Supplement 02	None (not required)
INTUITY Dial Pulse Recognition Package	INTUITY Dial Pulse Recognition Package
Enhanced Basic Speech - US_English-Female	Enhanced Basic Speech - US_English-Female
INTUITY Advanced PRI Package	INTUITY Advanced PRI Package
INTUITY FlexWord Recognition - US English	INTUITY FlexWord Recognition - US English
SMC LAN Adapter Setup Program	not required
INTUITY Backup/Restore Utilities	INTUITY Backup/Restore Utilities
INTUITY Call Bridge Application Package	INTUITY Call Bridge Application Package
INTUITY ASYNC_TEST Transaction SB Backup	ASYNC_TEST Transaction Script Builder Backup
INTUITY Unix Management Screens Package	INTUITY Unix Management Screens Package
LUCENT TECHNOLOGIES Callvisor PC LAN Gateway	LUCENT TECHNOLOGIES CALLVISOR PC LAN GATEWAY
INTUITY Analog Switch Interface Package - US	INTUITY Analog Switch Interface Package - US
SMC Ethernet Device Driver ISA Release 3.07	(embedded in) UnixWare System
SMC Ethernet Device Driver PCI Release 3.07	(embedded in) UnixWare System
INTUITY CONVERSANT VIS V6 Set	INTUITY CONVERSANT VIS V7.0 Set
INTUITY Platform CCS Set	None
INTUITY Platform CONVERSANT Tuning	INTUITY Platform CONVERSANT Tuning
INTUITY UnixWare 1.1.2 Enhancement Set	None
INTUITY IVC6 Device Interface for softFAX	(embedded in) INTUITY CONVERSANT FAXset
INTUITY Transaction State Machine Package	(embedded in) INTUITY CONVERSANT VIS V7.0 Set
INTUITY CDH Stub Package	None

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Table C-4. Package Mapping from V6.0 to V7.0 — *Continued*

V6.0 Package	V7.0 Replacement Package(s)
INTUITY Administration Screens Package	(embedded in) INTUITY CONVERSANT VIS V7.0 Set
Enhanced Basic Speech - US_English - Male	Enhanced Basic Speech - US_English - Male
INTUITY FAX Integration Package	(embedded in) INTUITY CONVERSANT FAXset
INTUITY Graphical Designer Integration Package	None
Installit utility for INTUITY	(embedded) UnixWare
INTUITY UnixWare 1.1.2 Platform Enhancements Extension	None
INTUITY Line Side E1 Package - Definity	INTUITY Line Side E1 Package - Definity
INTUITY AUDIX Logger Package	(embedded in) INTUITY CONVERSANT VIS V7.0 Set
INTUITY Maintenance Package	(embedded in) INTUITY CONVERSANT VIS V7.0 Set
INTUITY MAP40 Platform Upgrade Package	None
Memory driver edition C (CMemdrvr) from Microport	(embedded) UnixWare
INTUITY Utilities Package	(embedded in) INTUITY CONVERSANT VIS V7.0 Set
INTUITY Base ORACLE RDBMS 7.1.3	(embedded in) INTUITY CONVERSANT VIS V7.0 Set
INTUITY Extended ORACLE RDBMS 7.1.3	None
INTUITY ORACLE 7 Integration Package	(embedded in) INTUITY CONVERSANT VIS V7.0 Set
INTUITY Platform Upgrade Assistance Package	INTUITY Platform Upgrade Assistance Package
INTUITY Logger/Alerter Package	(embedded in) INTUITY CONVERSANT VIS V7.0 Set
Process driver V1 from Microport	(embedded) UnixWare
Remote Maintenance Board Package (Kickstart 3)	None

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Table C-4. Package Mapping from V6.0 to V7.0 — *Continued*

V6.0 Package	V7.0 Replacement Package(s)
Remote Maintenance Board Package (AYC54/55) [rmb2]	Remote Maintenance Board Package (AYC54/55)
Remote Maintenance Board Package (AYC54/55) [rmb2_1.3.10]	None
INTUITY RMB Integration Software Version 1.0	None
INTUITY RMB Integration Software Version 2.0	INTUITY RMB Integration Software Version 2.0
softFAX(r) Facsimile System	(embedded in) INTUITY CONVERSANT FAXset
INTUITY Switch Utilities Package	(embedded in) INTUITY CONVERSANT VIS V7.0 Set
Token Ring Hardware Support	(embedded) UnixWare
Token Ring Hardware Support Update 1 [tok+a]	(embedded) UnixWare
Token Ring Hardware Support Update 1 [tok+b]	(embedded) UnixWare
INTUITY License Modification Package	(embedded in) INTUITY CONVERSANT VIS V7.0 Set
INTUITY Platform Upgrade Evaluation Tool	None
INTUITY Runtime Processing Package	(embedded in) INTUITY CONVERSANT VIS V7.0 Set
VERITAS File System	(embedded) UnixWare
Year 2000 updates for Unixware for INTUITY	erg 710324 - Year 2000+ Update for UnixWare 1.1.2 and 2.1.2 Version

Glossary

5ESS Switch
A central office switch manufactured by Lucent that can be integrated with the Lucent INTUITY system.

A

adjunct
A separate system closely integrated with a switch, such as an Lucent INTUITY system or a call management system (CMS).

administration
The process of setting up a system (such as a switch or a messaging system) to function as desired. Options and defaults are normally set up (translated) by the system administrator or service personnel.

ALT
See *assemble, load, and test.*

antistatic
A treatment for material to prevent the build-up of static electricity.

application
A computer software program.

application developer
The person or group who is responsible for developing a customer's application(s).

assemble, load, and test (ALT)
The Lucent factory process that preloads software, installs hardware, and tests the system prior to shipping.

B

backup
A duplicate copy of files and directories saved on a removable medium such as floppy diskette or tape. The back-up filesystem can be copied back (restored) if the active version is damaged (corrupted) or lost.

basic input/output system (BIOS)
A system that contains the buffers for sending information from a program to the actual hardware device for which the information is intended.

baud
A unit of measurement that describes the speed of transferred information.

baud rate
Transmission signaling speed.

BIOS
See *basic input/output system*.

boot
The operation to start a computer system by loading programs from disk to main memory (part of system initialization). Booting is typically accomplished by physically turning on or restarting the system. Also called *reboot*.

boot filesystem
The filesystem from which the system loads its initial programs.

C

card cage
An area within the Lucent INTUITY hardware 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 is to be removed from the system and stored as a backup.

central processing unit (CPU)
The component of the computer that manipulates data and processes instructions coming from software.

channel
A telecommunications transmission path for voice and/or data.

channel capacity
A measure of the maximum bit rate through a channel.

comcode
A numbering system for telecommunications equipment used by Lucent. Each comcode is a nine-digit number that represents a specific piece of hardware, software, or documentation.

command
An instruction or request given by the user to the software to perform a particular function. An entire command consists of the command name and options. Also, one- or two-key touch tones that control a mailbox activity or function.

configuration
The particular combination of hardware and software components selected for a system, including external connections, internal options, and peripheral equipment.

D

database
A structured set of files, records, or tables. Also, a collection of filesystems and files in disk memory that store the voice and nonvoice (program data) necessary for Lucent INTUITY system operation.

data link
A term used to describe the communications link used for data transmission from a source to a destination, for example, a telephone line for data transmission.

default
A value that is automatically supplied by the system if no other value is specified.

DIP switch
See *dual in-line package switch*.

display terminal
A data terminal with a screen and keyboard used for displaying Lucent INTUITY screens and performing maintenance or administration activities.

dual in-line package (DIP) switch
A small switch, usually attached to a printed circuit card, in which there are only two settings: on or off (or 0 or 1). DIP switches are used to configure the card in a semipermanent way.

E

EIA interface
A set of standards developed by the Electrical Industries Association (EIA) that specifies various electrical and mechanical characteristics for interfaces between electronic devices such as computers, terminals, and modems. Also known as *RS-232*.

electrostatic discharge (ESD)
Discharge of a static charge on a surface or body through a conductive path to ground. ESD can be damaging to integrated circuits.

electronic mail
See *e-mail*.

e-mail
The transfer of a wide variety of message types across a computer network (LAN or WAN). E-mail messages may be text messages containing only ASCII or may be complex multimedia messages containing embedded voice messages, software files, and images.

enabled/disabled
The state of a hardware device that indicates whether it is available for use by the Lucent INTUITY system. Devices must be equipped before they can be enabled (made active). See also *equipped/unequipped*.

equipped/unequipped
The state of a networking channel that indicates whether Lucent INTUITY software has recognized it. Devices must be equipped before they can be enabled (made active). See also *enabled/disabled*.

error message
A message on the screen indicating that something is wrong and possibly suggesting how to correct it.

errors
Problems detected by the system during operation and recorded in the maintenance log. Errors can produce an alarm if they exceed a threshold.

ESD
See *electrostatic discharge*.

F

facility out-of-service
State of operation during which the current channel is not receiving a dial tone and is not functioning.

field
An area on a screen, menu, or report where information can be typed or displayed.

field engineer
This person works at the customer site and with the UE to perform upgrade procedures. Also known as field technician.

FIFO
See *first-in/first-out*.

file
A collection of data treated as a basic unit of storage.

filename
Alphanumeric characters used to identify a particular file.

file redundancy
See *mirroring*.

file system
A collection of related files (programs or data) stored on disk that are required to initialize a Lucent INTUITY system.

F key
See *function key*.

FOOS
See *facility out-of-service*.

format
To set up a disk, floppy diskette, or tape with a predetermined arrangement of characters so that the system can read the information on it.

function key (F key)
A key on a computer keyboard programmed to perform a defined function when pressed. The user interface for the Lucent INTUITY system defines keys F1 through F8.

G

Generic 1, 2, or 3
Lucent switch system software releases, designed for serving large communities of System 75 and System 85 users.

generic tape
A copy of the standard software and stand-alone tape utilities that is shipped with a new Lucent INTUITY system.

H

hard disk drive
A high-capacity data storage/retrieval device that is located inside a computer. 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 are all hardware.

help
A command run by pressing HELP or CTRL ? on a Lucent INTUITY display terminal to show the options available at your current screen position. In the INTUITY AUDIX system, press * H on the telephone keypad to get a list of options. See also *on-line help*.

hertz (Hz)
A measurement of frequency in cycles per second. A hertz is 1 cycle per second.

host switch
The switch directly connected to the Lucent INTUITY system over the data link. Also, the physical link connecting a Lucent INTUITY system to a distributed communications system (DCS) network.

Hz
See *hertz*.

I

I/O
Input/output.

initialization
The process of bringing a system to a predetermined operational state. The start-up procedure tests hardware; loads the boot filesystem programs; locates, mounts, and opens other required filesystems; and starts normal service.

initialize
To start up the system for the first time.

input
A signal fed into a circuit or channel.

integrated voice processing CELP (IVC6) card
A computer circuit card that supports both fax processing and voice processing capabilities. It provides two analog ports to support six analog channels. All telephone calls to and from the Lucent INTUITY system are processed through the IVC6 card.

interface
The device or software that forms the boundary between two devices or parts of a system, allowing them to work together. See also *user interface*.

interrupt request (IRQ)
Within a PC, a signal sent from a device to the CPU to temporarily suspend normal processing and transfer control to an interrupt handling routine.

I/O address
input/output address.

IRQ
See *interrupt request*.

ISV
Independent Software Vendor.

IVC6
See *integrated voice processing CELP (IVC6) card.*

J

jumper
Pairs or sets of small prongs or pins on circuit cards and mother boards the placement of which determines the particular operation the computer selects. When two pins are covered, an electrical circuit is completed. When the jumper is uncovered, the connection is not made. The computer interprets these electrical connections as configuration information.

K

Kbps
Kilobits per second; one thousand bits per second.

Kbyte
Kilobytes per second; 1024 thousand bytes per second.

L

label
The name assigned to a disk device (either a removable tape cartridge or permanent drive) through software. Cartridge labels may have a generic name (such as 3:3) to show the software release, or a descriptive name if for back-up copies (such as back01). Disk drive labels usually indicate the disk position (such as disk00 or disk02).

LAN
See *local area network*.

LCD
See *liquid crystal display*.

LED
See *light emitting diode*.

light emitting diode (LED)
A light on the hardware platform that shows the status of operations.

lliquid crystal display (LCD)
The 10-character alphanumeric display that shows the status of the system, including alarms.

load
The process of reading software from external storage (such as disk) and placing a copy in system memory.

local area network (LAN)
A network of PCs that communicate with each other and that normally share the resources of one or more servers. Operation of Lucent INTUITY Message Manager requires that the INTUITY AUDIX system and the users' PCs be on a LAN.

local installation
A switch, adjunct, or peripheral installed physically near the host switch or system. See also *collocated*.

login
A unique code a user must enter to gain approved access to the Lucent INTUITY system. See also *password*.

M

maintenance
The process of identifying system errors and correcting them, or taking steps to prevent problems from occurring.

major alarm
An alarm detected by Lucent INTUITY software that affects at least one fourth of the INTUITY ports in service. Often a major alarm indicates that service is affected.

MANOOS
See *manually out-of-service*.

manually out-of-service
State of operation during which a unit has been intentionally taken out of service.

MAP
See *multi-application platform*.

mean time between failures
The average time a manufacturer estimates will elapse before a failure occurs in a component or system.

media type
The form a message takes. The media types supported by the Lucent INTUITY system are voice, text, file attachments, and fax.

megabyte
A unit of memory equal to 1,048,576 bytes (1024 x 1024). It is often rounded to 1 million.

memory
A device that stores logic states such that data can be accessed and retrieved. Memory may be temporary (such as system RAM) or permanent (such as disk).

menu
A list of options displayed on a computer terminal screen or spoken by a voice processing system. Users choose the option that reflects what action they want the system to take.

migration
1. An installation that moves data to the Lucent INTUITY system from another type of Lucent messaging system, for example, from AUDIX R1, DEFINITY AUDIX, or AUDIX Voice Power. 2. During an upgrade, moves data from the source system to the target system; see also Data Migration Tool.

minor alarm
An alarm detected by maintenance software that affects less than one fourth of the Lucent INTUITY ports in service, but has exceeded error thresholds or may impact service.

mirroring
A Lucent INTUITY system feature that allows data from crucial filesystems to be continuously copied to back-up (mirror) filesystems while the system is running. If the system has some problem where an original filesystem cannot be used, the backup filesystem is placed in service automatically.

modem
A device that converts data from a form that is compatible with data processing equipment (digital) to a form compatible with transmission facilities (analog), and vice-vera.

modular
A term that describes equipment made of plug-in units that can be added together to make the system larger, improve its capabilities, or expand its size.

MTBF
See *mean time between failures*.

multi-application platform (MAP)
The computer hardware platform used by the Lucent INTUITY system.

N

networking prefix
A set of digits that identifies a Lucent INTUITY machine.

O

on-line help
A Lucent INTUITY system feature that provides information about user interface windows, screens, and menus by pressing a predetermined key. See also *help*.

open systems interconnection (OSI)
An internationally accepted framework of standards for communication between systems made by different vendors.

operating system (OS)
The set of software programs that runs the hardware and interprets software commands.

option
A choice selected from a menu, or an argument used in a command line to specify program output by modifying the execution of a command. When you do not specify any options, the command executes according to its default options.

OS
See *operating system*.

OSI
See *open systems interconnection*.

P

parallel transmission
The transmission of several bits of data at the same time over different wires. Parallel transmission of data is usually faster than serial transmission.

password
1. A word or character string recognized automatically by the Lucent INTUITY system that allows a user access to his/her mailbox or a system administrator access to the system data base. 2. An alphanumeric string assigned to local and remote networked machines to identify the machines or the network. See also *login.*

PBX
See *private branch exchange*.

PC
See *power converter*.

PEC
See *price element code*.

peripheral device
Equipment such as a printer or terminal that is external to the Lucent INTUITY cabinet but necessary for full operation and maintenance of the system. Also called a *peripheral*.

pinouts
The signal description per pin number for a particular connector.

PM
See *project manager*

PMS
See *property management system*.

port
A connection or link between two devices that allows information to travel to a desired location. For example, a switch port connects to a Lucent INTUITY voice port to allow a caller to leave a message.

POST
See *power-on self test*.

power on self test (POST)
A set of diagnostics stored in ROM that tests components such as disk drives, keyboard, and memory each time the system is booted. If problems are identified, a message is sent to the screen.

private branch exchange (PBX)
An analog, digital, or electronic telephone switching system where data and voice transmissions are not confined to fixed communications paths, but are routed among available ports or channels. See also *switch*.

processor interface (PI)
A System 75, Generic 1, Generic 3i, Generic 3s, and Generic 3vs switch data link. Also called *processor interface board (PIB)*.

programmed function key
See *function key*.

project manager
The person with the overall responsibility, beginning-to-end, for a customer's CONVERSANT upgrade.

protocol
A set of conventions or rules governing the format and timing of message exchanges (signals) to control data movement and the detection and possible correction of errors.

R

RAM
See *random access memory*.

random access memory (RAM)
The memory used in most computers to store the results of ongoing work and to provide space to store the operating system and applications that are actually running at any given moment.

read-only memory (ROM)
A form of computer memory that allows values to be stored only once; after the data is initially recorded, the computer can only read the contents. ROM is used to supply constant code elements such as bootstrap loaders, network addresses, and other more or less unvarying programs or instructions.

reboot
See *boot*.

remote access
Sending and receiving data to and from a computer or controlling a computer with terminals or PCs connected through communications (that is, telephone) links.

remote installation
A system, site, or piece of peripheral equipment that is installed in a different location from the host switch or system.

remote maintenance
The ability of Lucent personnel to interact with a remote computer through a telephone line or LAN connection to perform diagnostics and some system repairs. See also *remote service center*.

remote network
A network in which the systems are integrated with more than one switch.

remote service center
A Lucent or Lucent-certified organization that provides remote support to Lucent INTUITY customers. Depending upon the terms of the maintenance contract, your remote service center may be notified of all major and minor alarms and have the ability to remotely log in to your system and remedy problems. See also *remote maintenance.*

remote terminal
A terminal connected to a computer over a telephone line.

REN
See *ringer equivalence number*.

restore
The process of recovering lost or damaged files by retrieving them from available back-up tapes, floppy diskette, or another disk device.

right-to-use (RTU) fee
A charge to the customer to access certain functions or capacities that are otherwise restricted, for example, additional voice or networking ports or hours of speech storage. Lucent personnel can update RTU parameters either at the customer's site or remotely via a modem.

ringer equivalence number (REN)
A number required in the United States for registering your telephone equipment with a service provider.

ROM
See *read-only memory.*

RS-232
See *EIA interface.*

RTS
See *request to send*.

S

SCA
See *switch communications adapter*.

scan
To automatically play mail messages, headers, or both.

screen
That portion of the Lucent INTUITY user interface through which most administrative tasks are performed. Lucent INTUITY screens request user input in the form of a command from the `enter command:` prompt.

SCSI
See *small computer system interface*.

SDO
Solution Delivery Organization.

serial transmission
The transmission of one bit at a time over a single wire.

server
A computer that processes and stores data that is used by other smaller computers. For Lucent INTUITY Message Manager, INTUITY AUDIX is the server. See also *client*.

shielded cables
Cables that are protected from interference with metallic braid or foil.

SID
See *switch integration device*.

SIMM
See *single in-line memory module*.

simplified message service interface (SMSI)
Type of data link connection to an integrated 1A ESS or 5ESS switch in the Lucent INTUITY system.

single in-line memory module (SIMM)
A method of containing random access memory (RAM) chips on narrow strips that attach directly to sockets on the CPU circuit card. Multiple SIMMs are sometimes installed on a single CPU circuit card.

small computer systems interface (SCSI)
An interface standard defining the physical, logical, and electrical connections to computer system peripherals such as tape and disk drives.

SMSI
See *simplified message service interface*.

source system
The customer's existing V3.1.1, V4.0, V5.0, V6.0, and V6.0 Update 1 system currently in operation at the customer site.

surge
A sudden rise and fall of voltage in an electrical circuit.

surge protector
A device that plugs into the telephone system and the commercial AC power outlet to protect the telephone system from damaging high-voltage surges.

SW
See *switch integration*.

switch
An automatic telephone exchange that allows the transmission of calls to and from the public telephone network. See also *private branch exchange (PBX)*.

switched access
A connection made from one endpoint to another through switch port cards. This allows the endpoint (such as a terminal) to be used for several applications.

switch hook
The device at the top of most telephones which is depressed when the handset is resting in the cradle (that is, when the telephone is *on hook*). This device is raised when the handset is picked up (that is, 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 integration
Sharing of information between a messaging system and a switch to provide a seamless interface to callers and system users. A fully integrated INTUITY AUDIX system, for example, answers each incoming telephone call with information taken directly from the switch. Such information includes the number being called and the circumstances under which the call was sent to it, for example, covered from a busy or unanswered extension.

switch integration device (SID)
A combination of hardware and software that passes information from the switch to the Lucent INTUITY system thus allowing it to share information with non-Lucent switches. The operation of a SID is unique to the particular switch with which it interfaces.

switch network
Two or more interconnected 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. See also *asynchronous communication*.

synchronous transmission
A type of data transmission where the data characters and bits are exchanged at a fixed rate with the transmitter and receiver synchronized. This allows greater efficiency and supports more powerful protocols.

system configuration
See *configuration*.

T

T.30
The standard for Group III fax machines that covers the protocol used to manage a fax session and negotiate the capabilities supported by each fax endpoint.

tape cartridge
One or more spare removable cartridges required to back up system information.

tape drive
The physical unit that holds, reads, and writes to magnetic tape.

target system
The new/replacement platform received from the factory with the appropriate hardware and software configuration for a customer's system being upgraded.

TCP/IP
See *transmission control protocol/internet program*.

TDD
See *telecommunications device for the deaf*.

TDM
See *time division multiplexing*.

telecommunications device for the deaf (TDD)
A device with a keyboard and display unit that connects to or substitutes for a telephone. The TDD allows a deaf or hearing-impaired person to communicate over the telephone lines with other people who have TDDs. It also allows a deaf person to communicate with the INTUITY AUDIX system.

terminal
See *display terminal*.

terminal type
A number indicating the type of terminal from which a user is logging in to the Lucent INTUITY system. Terminal type is the last required entry before gaining access to the Lucent INTUITY display screens.

terminating resistor
A grounding resistor placed at the end of a bus, line, or cable to prevent signals from being reflected or echoed.

time division multiplexing (TDM)
A method of serving multiple channels simultaneously 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
A term used to denote the analog telecommunications interface.

tone generator
A device acoustically coupled to a rotary telephone used to produce touch-tone sounds.

traffic
The flow of attempts, calls, and messages across a telecommunications network.

translations
Software assignments that tell a system what to expect on a certain voice port or the data link, or how to handle incoming data. Translations customize the Lucent INTUITY system and switch features for users.

transmission control protocol/internet protocol (TCP/IP)
A suite of protocols that allow disparate hosts to connect over a network. Transmission control protocol (TCP) organizes data on both ends of a connection and ensures that the data that arrives matches that which was sent. Internet protocol (IP) ensures that a message passes through all the necessary routers to the proper destination.

T/R
See *tip/ring*.

troubleshooting
The process of locating and correcting errors in computer programs (also called *debugging)* or systems.

U

UE
See *upgrade engineer.*

Unequipped
See *equipped/unequipped*.

uninterruptable power supply (UPS)
An auxiliary power unit that provides continuous power in cases where commercial power is lost.

UNIX operating system
A multi-user, multi-tasking computer operating system.

upgrade
An installation that moves a Lucent INTUITY system to a newer release.

upgrade engineer
The person works from a remote location and with the on-site Lucent technician to perform upgrade procedures.

UPS
See *uninterruptable power supply.*

U. S. 123
An alternate announcement set in U. S. English whose prompts use numbers, not letters, to identify telephone keypad presses. For example, a prompt might say, “Press star three,” instead of, “Press star D.”

user population
A combination of different types of users on which Lucent INTUITY configuration guidelines are based.

V

vector
A customized program in the switch for processing incoming calls.

volt
The unit of electromotive force required to produce a current of 1 ampere through a resistance of 1 ohm.

VPC
Voice-Processing Co-Marketer.

W

WAN
See *wide area network*.

watt
The unit of electrical power required to maintain a current of 1 amp under the pressure of 1 volt.

wide area network (WAN)
A data network typically extending a local area network (LAN) over telephone lines to link with LANS in other buildings and/or geographic locations.

window
That portion of the Lucent INTUITY user interface through which you can view system information or status.

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