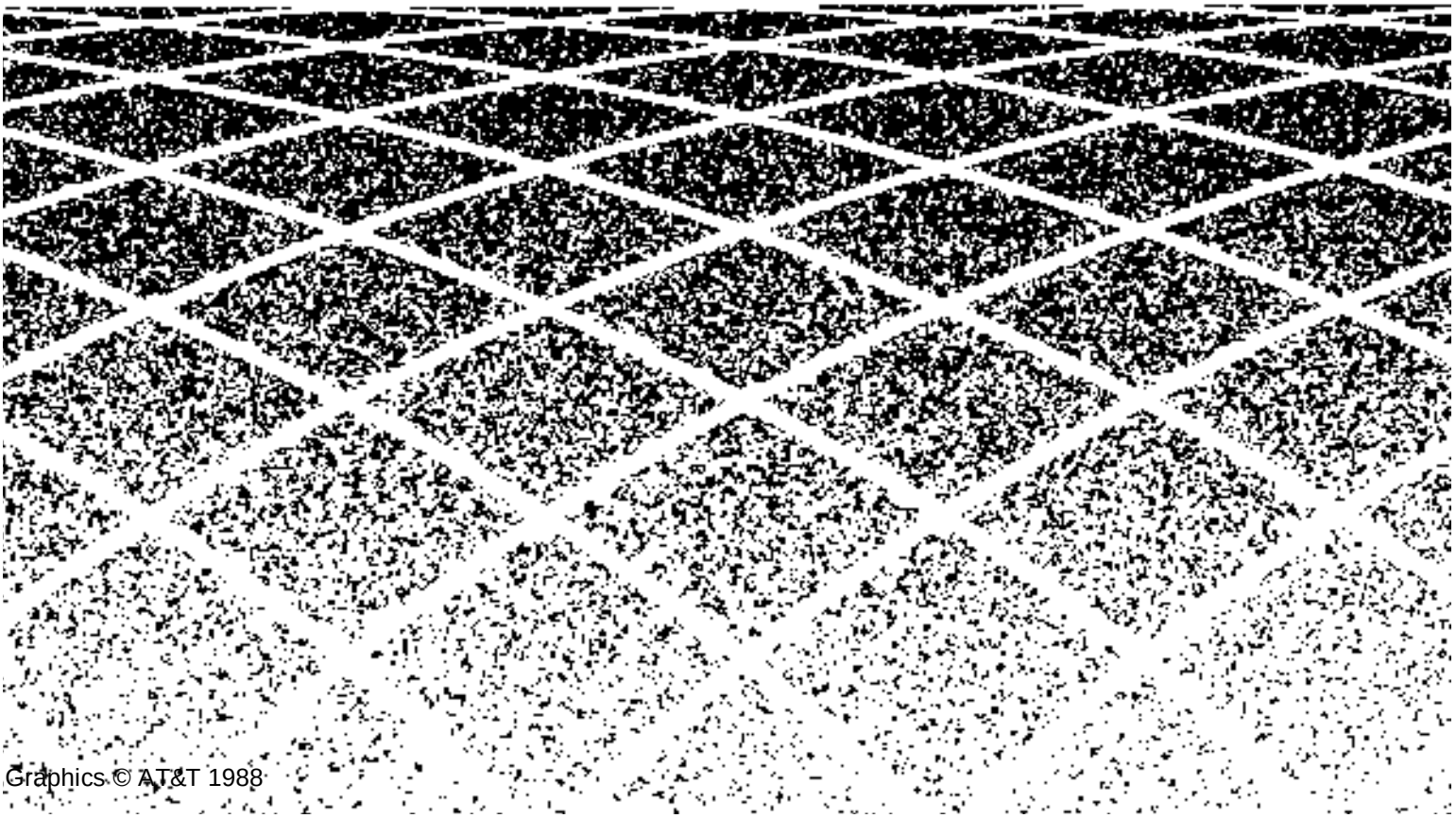
585-350-111
Issue 3
December, 1995

CONVERSANT VIS Version 4.0 Software Installation



Graphics © AT&T 1988

Blank Page

Contents

Table of Contents i

About This Book vii

- Purpose vii
- Intended Audiences vii
- How This Book Is Organized vii
- Conventions Used in This Book viii
- Related Resources viii
- Trademarks and Service Marks viii
- How to Make Comments About This Book ix

1 Installing the UNIX Operating System 1-1

- What's in This Chapter 1-1
- Partitioning the Disk 1-1
  - Disk Drive Configurations 1-2
  - ESDI Disk Drive Partitions 1-2
  - SCSI Disk Drive Partitions 1-3
  - IDE Disk Drive Partitions 1-4
- Calculating Your Own Partitions 1-4
  - File Systems 1-9
    - Root 1-9
    - Usr 1-9
    - Speech 1-9
    - Swap 1-10
    - Dump 1-10
- Installing the UNIX Operating System 1-11
  - Preparing the Disk for the UNIX Operating System 1-11
  - Installing the UNIX Operating System Software 1-15

Contents

2 Installing the Base System Software 2-1

- What's in This Chapter 2-1
- Installing the VIS Software Base 2-1

3 Installing Software for Optional Features 3-1

- What's in This Chapter 3-1
- Optional Feature Package Documentation 3-2
- Before You Install Any Optional Feature Packages 3-3
- Installing the Switch Integration Package 3-3
- Installing the Line Side T1 Package 3-5
- Installing the E1 Board Driver Package 3-6
- Installing the Dial Pulse Recognition Package 3-7
- Installing the Application Software Update Package 3-8
- Installing the E1 ATT-PRI Interface Package 3-9
- Installing the Script Builder Package 3-11
- Installing Intelligent Ports Card Driver Package 3-12
- Installing the AUDIX Voice Power Co-residency Package 3-14
  - Verifying Hard Disk Size 3-14
  - Partitioning the Disk 3-15
  - Installing the AUDIX Voice Power Application Software 3-16
  - Upgrading the AUDIX Voice Power Application 3-19
  - Restoring AUDIX Voice Power Databases 3-20
  - Installing the Voice Mail External Actions Package 3-20
- Installing the ORACLE Optional Feature Packages 3-21
  - Special Requirements 3-22
  - General Steps for Installing the ORACLE Add-On Packages 3-22
  - Installing ORACLE Toolkit V1.0.18 (OBJECT*SQL) 3-24
    - Installation Requirements 3-24
  - Installing PRO*C V1.3.15 3-24
    - Installation Requirements 3-24

Contents

Installing SQL*Forms V3.0 3-25
Installation Requirements 3-25
Installing ORACLE*Terminal V1.0 3-25
Installation Requirements 3-25
Installing SQL*Menu V5.0 3-26
Installation Requirements 3-26
Installing SQL*ReportWriter 3-26
Installation Requirements 3-26
- Installing the feature_tst Package 3-27
- Removing Software Packages 3-29

4 Verifying the Software Installation 4-1
- What's in This Chapter 4-1
- Using the feature_tst Package 4-2
Configurations for feature_tst 4-2
- Setting Up feature_tst 4-4
- Running feature_tst 4-5

ABB Abbreviations ABB-1

GL Glossary GL-1

IN Index IN-1

Contents

About This Book

Purpose

This book, *CONVERSANT VIS Version 4.0 Software Installation*, 585-350-111, describes the procedures for installing any of the CONVERSANT Voice Information System (VIS) Version 4.0 software. The procedures in this book are designed to guide you step by step through software installations.

Intended Audiences

This book is intended primarily for the following audiences:

- On-site service technician
- Customer technician personnel
- Value-added reseller

Secondary audiences include:

- Field support
- Factory assemble, load, and test (ALT) personnel

We assume that the primary users of this book have completed a Software Installation training course.

How This Book Is Organized

This book is organized into the following chapters:

- Chapter 1, "Installing the UNIX Operating System"

  This chapter describes the procedures to partition the system disks and install the UNIX operating system.

- Chapter 2, "Installing the Base System Software"

  This chapter describes the procedure to install the base CONVERSANT VIS system software, including the Configuration Program, ORACLE, and other packages included on the cartridge tape.

- Chapter 3, "Installing Software for Optional Features"

  This chapter describes the procedures to install the CONVERSANT VIS optional feature packages, including ORACLE optional packages.

- Chapter 4, "Verifying the Software Installation"

  This chapter describes the procedures to verify the software installation.

Conventions Used in This Book

The following conventions are used in this book:

Related Resources

The following books should be used in conjunction with this book:

- *CONVERSANT VIS Installation Checklists*, 585-350-113
- *MAP/100 Voice Processing Hardware Installation*, 585-350-107
- *MAP/100C Voice Processing Hardware Installation*, 585-350-108
- *MAP/40 Voice Processing Hardware Installation*, 585-350-109
- *CONVERSANT VIS Version 4.0 Maintenance*, 585-350-112
- *CONVERSANT VIS Version 4.0 Operations*, 585-350-703

Trademarks and Service Marks

The following trademarked products may be mentioned in this book:

-

How to Make Comments About This Book

A reader comment card follows the title page of this book. While we have tried to make this book fit your needs, we are interested in your suggestions for improving it and urge you to complete and return a reader comment card.

If the reader comment card has been removed from this book, please send your comments to:

AT&T
Product Documentation Development Department
Room 22-2C11
11900 North Pecos Street
Denver, Colorado 80234

Please include the name and document number of this book.

Installing the UNIX Operating System

1

What's in This Chapter

This chapter describes the procedures to partition the system disk(s) and install the UNIX operating system.

Partitioning the Disk

The system can be configured with a variety of sizes for each of the five file systems or disk slices: **root**, **usr**, **usr2** (for speech), **swap**, and **dump**. The correct sizes depend on the way the system is configured. The following four configurations are possible:

- General use configuration — Provides enough space in **root** and **usr** to develop several large applications, keep large ORACLE tables, and maintain space for personal files.
- Maximum ORACLE configuration — Provides space for large database demands for either local database tables or a large number of call data events.
- Maximum speech configuration — Use only if your system requires a large amount of speech. It provides approximately 36 hours for a 600-Mbyte system.
- Dual speech configuration — Provides maximum speech on the second disk drive.

NOTE:
Once the disks are formatted, the sizes of the partitions can only be changed by reinstalling the UNIX operating system and VIS software.

Disk Drive Configurations

Use Table 1-1 to determine which disk drive types are supported for your platform. An "X" in the row/column combination indicates support.

Table 1-1. Supported Disk/Platform Configurations

	600 Mbyte ESDI	1.2 Gbyte SCSI	200 Mbyte IDE
MAP/100	X	X	
MAP/100C	X	X	
MAP/40		X	X

Your CPU may be either a 386 or 486 with the following rules strictly applied:

- ESDI and IDE drives are supported with 386 CPUs *only*, not 486 CPUs.
- SCSI drives are supported with either 386 or 486 CPUs.

ESDI Disk Drive Partitions

All of the values in Table 1-2 are based on sole use of the 600-Mbtye disk drives. The sample file system assignments used in this section provide minimal space for UNIX file systems and maximum space for speech.

NOTE:
In a development environment, you may want to allocate less space for speech.

Table 1-2. ESDI Disk Drive Partitions

600-Mbyte Drive Partitioning (Mbyte/cylinders)

System Use	Total	Root ORACLE Blocks	Usr	Usr2	Swap	Dump
General Use	245/613	60 Mbyte = 120,000	125/313	194/485	18/45	12/30
Max ORACLE	378/946	320 Mbyte = 640,000	50/125	138/345	18/45	12/30
Max Speech	100/250	60 Mbyte = 120,000	30/75	434/1089	18/45	12/30
Dual Speech	100/250	60 Mbyte = 120,000	30/75	434/1089	18/45	12/30

SCSI Disk Drive Partitions

The SCSI disk drive partitions for 386 CPU are shown in Table 1-3. The SCSI disk drive partitions for 486 CPU are shown in Table 1-4.

Table 1-3. SCSI/386 CPU Disk Drive Partitions

1.2 Gbyte Drive Partitioning (Mbyte/cylinders)

System Use	Root Total	Root ORACLE Blocks	Usr	Usr2	Swap	Dump
General Use	545/545	60 Mbyte = 120,000	125/125	500/500	18/18	12/12
Big ORACLE	676/676	320 Mbyte = 640,000	50/50	138/138	18/18	12/12
Max ORACLE	1020/1020	960 Mbyte = 920,000	50/50	138/138	18/18	12/12
Max Speech	120/120	60 Mbyte = 120,000	50/50	1000/1000	18/18	12/12

Table 1-4. SCSI/486 CPU Disk Drive Partitions

1.2 Gbyte Drive Partitioning (Mbyte/cylinders)

System Use	Root Total	Root ORACLE Blocks	Usr	Usr2	Swap	Dump
General Use	535/535	60 Mbyte = 120,000	125/125	500/500	24/24	16/16
Big ORACLE	676/676	320 Mbyte = 640,000	50/50	128/128	24/24	16/16
Max ORACLE	1020/1020	960 Mbyte = 920,000	50/50	128/128	24/24	16/16
Max Speech	110/110	60 Mbyte = 120,000	50/50	1000/1000	24/24	16/16

IDE Disk Drive Partitions

The IDE disk drive partitions are shown in Table 1-5.

Table 1-5. IDE Disk Drive Partitions

200-Mbyte Drive Partitioning (Mbyte/cylinders)

System Use	Root Total	Root ORACLE Blocks	Usr	Usr2	Swap	Dump
General Use	102/346	40 Mbyte = 80,000	40/136	40/136	18/61	12/41
Max ORACLE	137/465	92 Mbyte = 184,000	25/85	20/68	18/61	12/41
Max Speech	65/221	20 Mbyte = 40,000	25/85	93/312	18/61	12/41

Calculating Your Own Partitions

If none of the configurations shown fit your needs, use the following guidelines and Table 1-6 and Table 1-7 to estimate space requirements.

1. Total up the additional space requirements in the **root** and **usr** slices and add them to **root** and **usr**.
2. Subtract the same amount from the **usr2** entry.
3. Ensure that the remaining space left for speech is sufficient for the number of phrase and applications planned for the system. If it is, use these numbers for partitioning the disk.

NOTE:
For 600 Mbyte hard disk drives --> 1 Mbtye = 2.5 cylinders.
For 1.2 Mbyte hard disk drives --> 1 Mbyte = 1 cylinders.
For 200 Mbyte hard disk drives --> 1 Mbyte = 3.4 cylinders.

Table 1-6. Space Requirements for UNIX and CONVERSANT VIS V4.0 Base Software

Package	root		usr	
	Blocks	Mbyte	Blocks	Mbyte
UNIX Base System – UNIX V3.2.2	10,648	5.20	10,072	4.92
UNIX System V/386 Release 3.2 Upgrade	2,200	1.07	5,000	2.44
SCSI Support Utilities – Version 2.3†	1,000	.49	300	.15
Cartridge Tape Utilities‡	1,300	.63	50	.02
C Software Development Set Version 4.1.5	3,152	1.54	4,200	2.05
Editing Version 2.0	12	.01	1,226	.60
Forms & Menu Language Interpreter	0	0	574	.28
Framed Access Command Environment V1.2.1	14	.01	5,920	2.89
Framed Access Command Environment Help V1.2.1‡	0	0	754	.36
Remote Terminal Version 2.0	0	0	1,790	.87
Extended Terminal Interface V2.0	0	0	1,850	.90
UNIX Extension – Remote File Sharing – V2.0§	2,000	.98	1,000	.49
Network Support Utility V2.0§	206	.10	540	.26
Base ORACLE DBMS 6.0.30*	8,527	4.16	8,537	4.17
Extended ORACLE DBMS 6.0.30§	19,106	9.33	19,116	9.33
CONVERSANT VIS Application Software	35,365	17.27	407	.20
Software Upgrade Assistance Package	100	.05	1,407	.69
T1 card driver	1,896	.93	1,996	.97

* Includes a 20,000 block database.

† SCSI systems only.

‡ ESDI systems only.

§ Optional.

Table 1-7. Space Requirements for VIS V4.0 Optional Packages Software

Package	root Blocks	usr Blocks
SP card driver	1,139	1,239
Configuration Program	1200	1200
Feature Test Script	3,224	3,224
Voice Mail External Actions	0	10
Script Builder	5,351	5,531
Form Filler Plus	2,250	2,350
Intelligent Ports Card Driver	329	21
3270 U/X Host Communications	329	21
3270 U/X Host Communications - Protocol	-	-
3270 U/X Host Communications - File Transfer Software	0	750
3270 Enhanced File Transfer	572	672
3270 Netview Alarm Interface	238	338
SQL*Menu V5.0.10 for ORACLE RDBMS 6.0.30	44	8
SCSI Mirroring Support*	1,000	300
Adjunct/Switch Application Interface	7,005	7,115
Adjunct/Switch Application Interface Library V01.01.18	3,000	3,090
Line Side T1 Interface Package - DEFINITY	323	423
Line Side T1 Interface Package - Galaxy	322	422
ISDN Primary Rate Interface	1,000	1,000
ISDN Network Primary Rate Interface	576	676
Call Classification Analysis	948	1,048
FlexWord Recognition Package	4,042	4,142
Speech Recognition - US English	2,582	2,682
Speech Collection Toolkit	1,246	1,346
Text-to-Speech	10,151	10,251
Graphical Speech Editor	403	503
Enhanced TCP/IP WIN/386 Release 3.0	2,244	1,332
Network Interface Driver R2.0†	192	510

Continued on next page

Table 1-7. Space Requirements for VIS V4.0 Optional Packages Software — *Continued*

Package	root Blocks	usr Blocks
NP600A Network Processor V3.2‡	88	808
SQL*NET TCP/IP V1.2 for ORACLE RDBMS 6.0.30	8,739	8,749
CompuLert/SCCS	329	429
External Alarms Package§	611	714
CSG Asynch Host Toolkit Version 1.0	1,200	100
AUDIX Voice Power Appl. Software R2.1.1: Speech	40	0
AUDIX Voice Power Appl. Software R2.1.1: Software	5,400	19,456
AUDIX Voice Power Appl. Software R2.1.1: Update 2	28	842
AUDIX Voice Power Switch Integration (S/I) Software R2.1.1	3,030	0
AUDIX Voice Power S/I Software R2.1.1: Update 1	0	1,522
The remainder of this table lists those optional packages that are for non-United States customers only.		
Application Software Update (11/95)	6823	6927
ATT-PRI Application Software Update	6753	6857
Configuration Program (Revision 12/94)	1200	1200
Dial Pulse Recognition Package	1000	300
E1 ATT-PRI Board Driver/Firmware	6078	6819
E1 ATT-PRI Interface Package - Germany	118	218
E1 ATT-PRI Interface Package - United Kingdom	117	217
E1/CAS Board Driver/Firmware (11/95)	1718	2960
E1/CAS P2 Interface Package - Australia (11/95)	716	816
E1/CAS R2 MFC Interface Package - Mexico	506	606
German FlexWord Toolkit	100	1,259
Global Script Builder (11/95)	5530	5530
PBX/PSTN Switch Interface Package - Australia (8/95)	140	240
PBX Switch Interface Package - Belgium (8/94)	140	240
PBX/PSTN Switch Interface Package - Germany (8/94)	126	226
PBX/PSTN Switch Interface Package - Hong Kong	136	236
PBX Switch Interface Package - Ireland (8/94)	88	138

Continued on next page

Table 1-7. Space Requirements for VIS V4.0 Optional Packages Software — *Continued*

Package	root Blocks	usr Blocks
PBX/PSTN Switch Interface Package - Japan (11/94)	88	138
PBX/PSTN Switch Interface Package - Mexico	132	232
PBX Switch Interface Package - Netherlands (8/94)	140	240
PBX/PSTN Switch Interface Package - Spain (8/94)	88	138
PBX/PSTN Switch Interface Package - UK	140	240
Spanish FlexWord Toolkit	100	807
Speech Formats - Castilian Spanish	324	324
Speech Formats - German	317	317
Speech Recognition - Australian English	1,000	1,000
Speech Recognition - Canadian French	2,440	2,540
Speech Recognition - Castilian Spanish	1,000	1,000
Speech Recognition - German	1,000	1,000
Speech Recognition - Japanese	3467	3567
Speech Recognition - Latin American Spanish	1,000	1,000
Speech Recognition - UK English	2,619	2,719
Text-to-Speech - Spanish	5500	5500
Text-to-Speech - Latin American Spanish	5500	5500

* SCSI systems only.
† For StarLan.
‡ For Interlan.
§ MAP/100C systems only.

File Systems

The **root**, **usr**, **speech**, **swap**, and **dump** file systems are described below.

Root

- There is a limit of 1024 total cylinders for **root**.
- Call data is kept in the ORACLE database in the **root** slice. It is recommended that a minimum of 4Mbyte be provided, even if only one channel is used and there are no large local databases. The default (8Mbyte, 16,000 blocks) is commonly sufficient for 36 channels of typical traffic. For more channels, heavy call-event collection, or heavier call volume, use 10 Mbyte (20,000 blocks), or 12 Mbyte (24,000 blocks). If you are not sure, the recommended amount is 10 Mbyte (20,000 blocks).
- For detailed information on estimating space for the ORACLE database, refer to Appendix C, “Database Environment” in *CONVERSANT VIS Version 4.0 Operations*, 585-350-703.
- Local database tables also reside in the **root** slice of the ORACLE database. A table consisting of three 12-byte fields per record and 10,000 records may require up to 1Mbyte of space depending on its organization.
- A large Script Builder application containing 2000 actions can be as large as 5Mbyte.

Usr

Personal files in a user’s home directory normally reside in **usr**.

Speech

- Each phrase requires a minimum of 16 Kbytes.
- A complete set of phrases with all inflections in the standard speech set requires about 6Mbyte.
- This amount is about 1Mbyte per 64 phrases (each up to 4 seconds in size).
- If are coresident with AUDIX Voice Power R2.1.1, you need to allow at least 50 Mbyte of speech usage, at most 170 Mbyte.
- Depending on your coding rate, speech phrases are stored in different sized blocks. Use the table below to estimate your speech phrase blocks.

Table 1-8. Coding Rate and Block Sizes

Coding Rate	Seconds/16K Blocks
16K	8
24K	6
32K	4
64K	2

Swap

It is generally necessary to allocate 1.5 times the amount of RAM for swap space.

Dump

The UNIX system attempts to save a copy of its memory image on a **dump** partition if the operating system crashes. After a crash, experienced UNIX users can examine the dumped image using the crash command to debug the system. The UNIX system does not normally panic, so allocating a **dump** partition is optional.

If a **dump** partition is allocated, it must be at least as big as the partition allocated to RAM. See Table 1-2, Table 1-3, Table 1-4, or Table 1-5 for the proper **dump** partitions.

Installing the UNIX Operating System

The UNIX operating system is installed in as many as two separate stages. The first stage entails booting the system with the boot floppy disk. This boot floppy prepares the system for the UNIX operating system by partitioning and formatting the disk. The second stage entails installing the UNIX operating system software from cartridge tape.

Preparing the Disk for the UNIX Operating System

The procedure described in this section and the procedure in the next section are designed to be performed sequentially.

1. Make sure the unit is turned off.
2. Insert the first floppy disk (the boot floppy) of the UNIX Base System Package into the floppy drive.
3. Turn on the unit.

   Automatic diagnostics are initiated on the hardware and the results (PASS or FAIL) are indicated on the screen. The disk is read for several seconds and then you see the following system prompt:

   ```
   Booting the UNIX System...

   Strike Enter to install the UNIX System on your hard
   disk.
   ```

4. Press ENTER.

   System response:

   ```
   WARNING: A new installation of the UNIX system will
   destroy all files currently on the system. Do you wish
   to continue (y or n)?
   ```

5. Enter **y**

   System response:

   ```
   Total hard disk is number cylinders.

   Disk partitions table

   SELECT ONE OF THE FOLLOWING:

   1. Create a partition
   2. Change Active (Boot from) partition
   3. Delete a partition
   4. Exit (Update disk configuration and exit)
   5. Cancel (Exit without updating disk configuration)

   Enter Selection:
   ```

6. Check the table on the screen to see if there are any partitions currently allocated. If there are (indicated by numbers in the table), you need to delete those partitions and create a new one. If there are no partitions currently allocated, go to Step 9.
7. Enter **3**

   System response:

   ```
   Enter the number of the partition you want to delete (or
   enter x to exit):
   ```
8. Enter the number of the partition and follow the on-screen prompts.

   System response:

   ```
   Disk partitions table

   SELECT ONE OF THE FOLLOWING:

   1. Create a partition
   2. Change Active (Boot from) partition
   3. Delete a partition
   4. Exit (Update disk configuration and exit)
   5. Cancel (Exit without updating disk configuration)

   Enter Selection:
   ```
9. Enter **1**

   System response:

   ```
   Indicate the type of partition you want to create
   (1 = UNIX System, 2 = DOS only, 3 = Other, x = Exit).
   ```
10. Enter **1**

    System response:

    ```
    The UNIX System partition must use at least 2% of the
    hard disk. Indicate the percentage (4 - 100) of the hard
    disk you want this partition to use (or enter 'c' to
    specify in cylinders):
    ```
11. Enter **100**

    System response:

    ```
    Do you want this to become the Active partition? If so,
    it will be activated each time you reset your computer
    or when you turn it on again.

    Please type 'y' or 'n'.
    ```

    NOTE:
    Once you specify a new UNIX partition at 100%, you may see that the disk partitions table displays a percent much lower than 100%, but do not be alarmed, this is normal. Your actual partitions are 98% UNIX and 2% DOS.

12. Enter **y**

    System response:

    ```
    Disk partitions table

    SELECT ONE OF THE FOLLOWING:

    1. Create a partition
    2. Change Active (Boot from) partition
    3. Delete a partition
    4. Exit (Update disk configuration and exit)
    5. Cancel (Exit without updating disk configuration)

    Enter Selection:

    Partition 1 is now the Active partition.
    ```

13. Enter **4** to exit the menu and update the partitions table.

    System response:

    ```
    Hard disk partitioning complete.
    A surface analysis will now be done.
    This will destroy all data on the hard disk.
    Strike Enter to continue or DEL to abort.
    ```

14. Press ENTER.

    The surface analysis takes approximately 25 minutes (for ESDI disks) or 10 minutes (for SCSI disks) to complete, depending on the size of the hard disk. The system then displays the default file system assignments. They will vary from system to system.

    System response:

    ```
    Is this allocation acceptable to you (y/n)?
    ```

15. Enter **n**

    NOTE:
    You will need to refer to the tables earlier in this chapter to answer the following questions properly.

    System response:

    ```
    Do you wish to have a separate root and user filesystem
    (y/n)?
    ```

16. Enter **y**

    System response:

    ```
    Do you want an additional usr2 filesystem (y/n)?
    ```

17. Enter **y**

    System response:

    ```
    Do you want to allocate a crash/dump area on your disk?
    If you do not, the swap/paging will be used to save the
    memory image in the event of a system panic (y/n)?
    ```

18. Enter **y**

    System response:

    ```
    You will now be given the opportunity to specify the
    size, in cylinders, each of the filesystem. (One
    megabyte of disk space is approximately 1 cylinders).

    How many cylinders would you like for swap/paging
    (1-1180)?
    ```

19. Enter your swap/paging amount. Refer to the information listed under "Partitioning the Disk" earlier in this chapter for partition recommendations.

    System response:

    ```
    How many cylinders would you like for a crash/dump area
    (0-1162)?
    ```

20. Enter **30** if you have a 600 Mbyte ESDI hard disk drive.

    Enter **12** if you have a 1.2 Gbyte SCSI hard disk drive with a 386 CPU.

    Enter **16** if you have a 1.2 Gbyte SCSI hard disk drive with a 486 CPU.

    Enter **41** if you have a 200 Mbyte IDE hard disk drive.

    System response:

    ```
    How many cylinders would you like for /usr (1-864)?
    ```

21. Enter your **/usr** amount.

    System response:

    ```
    How many cylinders would you like for root (1-1152)?
    ```

22. Enter your **root** amount (cannot be more than 1024 cylinders).

    System response:

    ```
    You have specified the following disk allocations:

    Disk partitions table

    Is this acceptable to you (y/n)?
    ```

23. Enter **y**

    or

    If you want to change any of the partitions given, enter **n** and you will be prompted to enter the partitions again (as in Step 15).

    System response:

    ```
    UNIX System file system(s) will now be created on your
    hard disk...

    This process take several seconds.
    ```

24. When prompted with `Reboot the system now`, make sure the disk light is off and remove the floppy disk from the drive. Press CONTROL ALT DEL.

Installing the UNIX Operating System Software

The previous section outlines preparing the disk for installation. The following procedure continues at the point that the previous procedure ends with a reboot of the system:

1. After several messages scroll on and off the screen you will see the following system response:

   ```
   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.
   ```

2. Press C.

   System response:

   ```
   Please insert the UNIX R3.2 V2 Base System Software
   cartridge tape into the integral tape drive.

   Strike ENTER when ready
   or DEL to cancel.
   ```

3. Insert the cartridge tape so that the metal plate on the tape is on the bottom, and the open tape side is to your left. Push the tape in until you hear the tape click into place. Press ENTER to start the installation.

   System response:

   ```
   Installation in progress -- do not remove the cartridge
   tape.

   The system takes some time to install the base UNIX
   operating system.
   ```

System response:

```
Enter a password for the 'root' or super-user. (Note:
This password must be kept EXTREMELY secure!)
```

4. Enter your password for root.

   System response:

   ```
   Enter a password for the 'install' or super-user.
   (Note: This password must be kept EXTREMELY secure!)
   ```

5. Enter your password for install.

   System response:

   ```
   Installing Foundation Set packages.

   Press ENTER when ready.
   ```

6. Press ENTER.

   System response:

   ```
   You will now be prompted to select the packages that you
   wish to install from this tape.

   You may select one or more packages from the menu by
   entering the number listed alongside the package name.

   Enter each package number one at a time, pressing ENTER
   after each selection. The package numbers may be
   entered in any order.

   When you have made all your selections required, strike
   ESC.

   Package available for installation:

   1. C Software Development Set 4.1.5
   2. Editing Package Version 2.0
   3. Extended Terminal Interface Package Version 2.0
   4. FMLI Version 1.2
   5. FACE Version 1.2.2
   6. FACE HELP Version 1.2
   7. Network Support Utilities Package (1.2) Version 2.0
   8. UNIX System V/386 Release 3.2 Upgrade - Version 2.2
   to 2.3
   9. Install ALL packages shown above
   10. Exit, do not install any packages
   ```

7. Enter **9**

   You are asked to confirm your selections.

8. Press ENTER to confirm or press ESC to reselect.

   The system responds with a message to inform you that some input may be required during the installation process.

9. Press ENTER.

   The system goes through each package and installs it. You will see messages similar to the following for each package being installed:

   ```
   Installing the package name – version number
   ---
   Searching for Next Package to Install -- Do not remove
   the cartridge tape.
   ---
   The installation of the package name is now complete.
   ```

   When the FACE Help package is being installed, you see the following menu:

   ```
   1. Install Office Help
   2. Install System Operations Help
   3. Install Printer Operations Help
   4. Install ALL Help
   5. Terminate installation
   ```

10. Enter **4** to install all.

    System response:

    ```
    Install FACE Help version 1.2.2 (all)
    ```

11. When you get the next prompt, enter **5** to exit FACE Help.

    System response:

    ```
    Installation of FACE Help is now complete.
    ```

    After the system has installed all the remaining packages (including Network Support Utilities), the last package to be installed from the tape is the UNIX System upgrade.

    System prompt:

    ```
    You are about to overlay UNIX System Release 3.2
    Upgrade - Version 2.2 to Version 2.3
    This package will be overlaid in parts

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

12. Press ENTER. The system goes through the procedure by upgrading FACE, Remote Terminal, and Remote File Sharing.

    System response:

    ```
    Installation of the Foundation Set is now complete.
    ```

13. If you have a SCSI system, complete Steps 13a to 13f. Otherwise, go to Step 14.

    a. System prompt:

    ```
    You will now be prompted to install the SCSI
    Support Package from diskette.

    WARNING!

    This step is ESSENTIAL to enable you to continue
    to use your UNIX System after it has been
    re-booted.

    If you do not successfully complete this step you
    may not be able to use your system and will be
    required to re-install the Foundation Set from the

    beginning.

    Strike ENTER when ready.
    ```

    b. Press ENTER. DO NOT put the floppy in at this point.

    System response:

    ```
    Please insert the SCSI Support Package diskette.
    ```

    c. Insert the floppy disk, and press ENTER.

    System response:

    ```
    Verifying SCSI Support Package floppy.

    Searching for the size file.

    Install in progress.

    Installing the SCSI Support Package - Version 2.3

    The installation of the SCSI Support Package -
    Version 2.3 is now complete

    The UNIX Operating System will now be rebuilt.
    This will take approximately 2 minutes. Please
    wait.

    The UNIX kernel has been rebuilt.

    The UNIX System installation process is now
    complete.

    To install the Foundation Set Add-On packages,
    use the 'installpkg' command from the UNIX System
    prompt.

    Reboot the system now.
    ```

    d. Remove the floppy disk from the drive. Remove the cartridge tape from its drive.

    e. Press CONTROL ALT DEL.

f. Go to Step 15.

14. If you have an ESDI or IDE system, complete Steps 14a through 14h below to install the Cartridge Tape Utilities package from floppy disk. Otherwise go to Step 15.

    a. Enter **installpkg**

       System response:

       ```
       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. Press F.

       System response:

       ```
       Please insert the diskette.
       Strike ENTER when ready
       or DEL to cancel.
       ```

    c. Insert the Cartridge Tape Utilities floppy and press ENTER.

       System response:

       ```
       Type the interrupt number and strike the ENTER key
       or type Q to cancel installation.
       ```

       Interrupt choices are listed

    d. Enter your interrupt choice as determined by the output from the Configuration Program.

       The system asks for confirmation of your selection.

    e. Press ENTER.

       System response:

       ```
       You are installing the Cartridge Tape
       Utilities-Version 2.1 using hardware interrupt
       number and address 288 through 289. Be sure that
       these values are not in use by another add-on
       board.
       ```

    f. Press ENTER. A "complete" message is displayed on the screen. The system rebuilds for approximately two minutes. The UNIX system kernel is built and a confirmation message is displayed.

    g. When prompted with `Reboot the system now`, make sure the disk light is off and remove the floppy disk from the drive. Remove the cartridge tape from the drive by pressing inward on the front of the until you hear it click out of place. Release the tape so that it can pop out of the drive.

    h. Press CONTROL - ALT and DEL.

    i. When the system comes up again, login as root.

15. Install the Remote Terminal Package by following the steps below:

    a. Enter **installpkg**

       System response:

       ```
       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. Press F.

       System response:

       ```
       Please insert the diskette.
       Strike ENTER when ready
       or DEL to cancel.
       ```

    c. Insert the Remote Terminal Package floppy and press ENTER.

    d. Select menu item number 1 to install *terminfo* files. Enter **1**
       The system responds by scrolling a list of all the *terminfo* files. At the end of this list, you are asked to select the *terminfo* file name you want to install.

    e. Enter **all**

       The system responds again by scrolling a list of the files it is installing. At the end of the list, you are asked again to select the file name.

    f. Enter **done**

    g. Select the menu item number to terminate the installation.

    h. Remove the floppy disk.

There are additional UNIX extension packages that are not certified with our generic software and are not supported. They are included solely to complete the UNIX software package. Please be aware of this when you are using your system.

You are now ready to install your application software. Go to Chapter 2, "Installing the Base System Software" of this book.

Installing the Base System Software

2

What's in This Chapter

This chapter describes how to install the CONVERSANT VIS Version 4.0 software base from cartridge tape.

Installing the VIS Software Base

Be sure that you have run the Configuration Program and indicated all hardware that is/will be on your system. The data generated by the program is crucial in assuring that you respond correctly to the prompts in this chapter. See Chapter 4, "Running the Configuration Program" in your hardware installation book.

1. If you are not already logged in, do so now.
    a. Enter **root** at the `Welcome to the AT&T 386 UNIX System` prompt.

       System response:

       `Password:`

    b. Enter your password. The system responds by starting the UNIX system. You eventually see the UNIX system prompt #
2. Insert the tape labeled CONVERSANT VIS Version 4.0 Application Package. It will take approximately one hour.

3. Enter **installpkg**

   System response:

   ```
   Please indicate the installation medium you intend to
   use. Strike 'C' in install from CARTRIDGE TAPE or 'F' to
   install from FLOPPY DISKETTE.
   ```

4. Press C.

   System response:

   ```
   Please insert the cartridge tape.
   ```

5. Press ENTER.

   System response:

   ```
   It is recommended that you re-tension the tape before
   attempting the installation, to ensure that the tape is
   read without any errors.
   If you strike ENTER the tape will be re-tentioned.
   Strike ENTER when ready
   or ESC to stop.
   ```

6. Press ENTER.

   System response:

   ```
   This will take approximately 3 minutes.
   ```

   The next steps outline how to select the packages from the tape that you wish to install.

   System prompt:

   ```
   You will now be prompted to select the packages that you
   wish to install from this tape.

   You may select one or more packages from the menu by
   entering the number listed alongside the package name.

   Enter each package number one at a time, pressing ENTER
   after each selection. The package numbers may be
   entered in any order.
   ```

7. When prompted, press ENTER.

   System response:

   ```
   When you have made all your selections required, strike
   ESC.

   Packages available for installation:

   1. CONVERSANT VIS V4.0 Configuration Package
   2. CONVERSANT VIS V4.0 Base ORACLE DBMS 6.0.30
   3. CONVERSANT VIS V4.0 Application Software
   4. CONVERSANT VIS V4.0 T1 Board Driver
   5. CONVERSANT VIS V4.0 SP Board Driver
   6. CONVERSANT VIS V4.0 Extended ORACLE DBMS 6.0.30

   7. Install ALL packages shown above
   8. Exit, do not install any packages

   Please enter the next package number(s) to install,
   followed by ENTER.

   Press ESC when all selections have been made.
   ```

8. Enter **7** to install all the packages.
9. Once you've made the selection, press ESC.

   System response:

   ```
   Strike ENTER to confirm and continue with the
   installation or ESC to re-display the menu and
   re-select.

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

10. Press ENTER if your selections are correct. If your selections are not correct, press ESC and you can reselect packages.

    The system responds with a reminder that you may have to provide input to some prompts during the installation.

11. Press ENTER.

    The install program now goes through the installation of each package you selected above and displays a message similar to the following:

    `Installing the` *package name*

12. Configuration Program
13. Base ORACLE DBMS

    a. System prompt:

    ```
    Enter a password for oracle:
    New password:
    ```

    b. Type in your password and press ENTER.

System response:

```
Reenter new password:
```

c. Re-enter your new password and press ENTER.

System response:

```
Changing the GID of user oracle
Removing the old cdh files
Move files to the oracle home directory /oracle
 <number of blocks moved>
Setting up file permissions on files in /oracle
Setting up /usr/lbin
```

d. You are given a default name for the database file (**/oracle/dbs/dbsA.dbf**). Enter a new name or press ENTER to accept the default name.

e. You are given a default name for the redo log file 1 (**/oracle/dbs/log1A.dbf**). Enter a new name or press ENTER to accept the default name.

f. You are given a default name for the redo log file 2 (**/oracle/dbs/log2A.dbf**). Enter a new name of press ENTER to accept the default name.

g. The system prompts you to enter the size of the database. To accept the default size press ENTER. To enter your own database size, type a number signifying the database size in blocks, and then press ENTER. See the information under "Root" in the "File Systems" section of Chapter 1 of this book, and see the note below.

NOTE:
When establishing database space utilization, keep in mind the amount of call traffic on the system. Call data records can fill up the database. When the database is full, you must reconfigure the system. Refer to the Appendix C, “Database Environment,” of *CONVERSANT VIS Version 4.0 Operations*, 585-350-703, for information on how to establish database space utilization.

h. The system prompts you to enter the size of the redo log. To accept the default size press ENTER.

Several more messages are displayed as the database is configured and initialized. This may take 20 – 30 minutes (approximately half this time if you have a SCSI system).

A message is displayed when the installation is complete.

14. CONVERSANT VIS Application Software

NOTE:
During the installation of the Application Software, any error messages that occur are logged into a file **/vs/data/InstallLog**. You can check this file for more information on any errors that occur during the installation.

— You are prompted for ENABLE/DISABLE serial ports, and the parallel printer port. Refer to the output from the Configuration Program for which ports to enable/disable.

a. System response:

```
First serial port uses interrupt level 4
Second serial port uses interrupt level 3
Parallel port uses interrupt level 7

If you wish to reclaim some of these
interrupts for other devices, you may DISABLE
some of these ports. However, at least ONE
serial port must be enabled at all times.

For serial ports, would you like to:
1) ENABLE both first and second serial port.
2) ENABLE first and DISABLE second serial
port.
3) DISABLE first and ENABLE second serial
port.

Please enter your selection [1, 2 or 3]:
```

NOTE:
If you are installing a 3270 PC/XL or EMULEX card, you must disable serial port 2 (option 2 in the menu above).

b. If you enter 1, system response:

```
Serial port 1 is now ENABLED.
Serial port 2 is now ENABLED.
```

If you press 2, system response:

```
Serial port 1 is now ENABLED.
Serial port 2 is now DISABLED.
```

If you press 3, system response:

```
Serial port 1 is now DISABLED.
Serial port 2 is now ENABLED.
```

c. Now you are prompted:

```
For the parallel port (interrupt level 7)
would you like to:

1) ENABLE the parallel port.
2) DISABLE the parallel port.

Please enter your selection [1 or 2]:
```

d. If you are using a printer with your system, enter 1

System response:

```
The parallel port is now ENABLED.
```

e. If you are not using a printer with your system, enter 2

System response:

```
The parallel port is now DISABLED.
```

NOTE:
Once you install the software, to truly enable/disable serial ports, you must go through FACE. See the "Serial Ports Administration" section in Appendix A, "FACE Features," of *CONVERSANT VIS Version 4.0 Operations,* 585-350-703.

— Tip/Ring card interrupt

a. System prompt:

```
Select interrupt number for T/R boards. Press
<Enter> for default value [2] or one of [2 3 5
15] or q to quit:
```

b. Enter your interrupt selection as determined by the output from the Configuration Program.

System response:

```
Confirm - is this the selection you want?
(y/n)
```

c. Enter **y**

— Type of monitor

a. System prompt:

```
Select the monitor type:
1) Color (AT386)
2) Monochrome (AT386-M)

Enter selection:
```

b. Make your selection by entering the number (for example, enter 1 for Color). To see if your monitor is color, check the label on the back of the monitor. If the label reads "CRT 345" or "339D", it is a color monitor.

System response:

```
Confirm - is this the selection you want?
(y/n)
```

c. Enter **y**

— Time zone

a. System prompt

```
Select the timezone for this installation:
1) Eastern
2) Central
3) Mountain
4) Pacific

Enter selection:
```

b. Make your selection by entering the number (for example, enter 1 for Eastern).

System response:

```
Confirm - is this the selection you want?
(y/n)
```

c. Enter **y**

System response:

```
Is Daylight Savings ever used? y/n
```

d. Enter **y** if you are using daylight saving time. Otherwise, enter **n**

— Speech slice

a. System prompt:

```
The default speech file system allocation is:
 <a table shows the speech file system allocations>
Do you want to remove any slices from this
list? [YyNn]
```

b. Enter **n** if you wish to use all these slices for speech. Enter **y** if you have two ESDI or IDE hard disk drives and you wish to store speech only on your second disk drive.

— Bridging

a. System prompt:

```
Do you wish to activate bridging capability?
(y/n)
```

b. Enter **y**

Refer to *CONVERSANT VIS Version 4.0 Command Reference*, 585-350-209, for information on **xferdip_on** and **xferdip_off** commands. These commands can be used to turn bridging on and off.

System response:

```
The UNIX Operating System will now be
rebuilt.
This will take approximately 2 minutes.
Please wait.
```

15. T1 Driver[1]
16. SP Driver[1]
17. Extended ORACLE

NOTE:
Once the Extended ORACLE package is installed, the system displays a message informing you that if you want to install "demo", "help" and "crtins" later you need to log on to the database and use the commands demobld, helpins and crtins, respectively. See the ORACLE documentation for more information about these commands.

18. Remove the cartridge tape.

    System prompt:

    ```
    The system is down.
    Reboot the system now.
    ```

19. Press and release the reset button located on your platform.

    Once the system comes back up, you may have additional steps to perform. If you have two ESDI or IDE hard disk drives, and you are using the second disk drive to store speech, complete the following steps:

    1. Enter **addspdisk**
    2. If you have removed all speech slices from your first disk drive, enter **vsenable**
    3. Enter **start_vs**

1. These packages automatically perform a UNIX rebuild after being installed.

Installing Software for Optional Features

3

What's in This Chapter

This chapter describes the procedures to install the following CONVERSANT VIS optional feature packages:

- Switch Integration
- Line Side T1
- E1 Board Driver/Firmware
- Application Software Update
- E1 ATT-PRI Interface Package (UK/Germany, CAS)
- Dial Pulse Recognition
- Script Builder
- Intelligent Ports Card (IPC) 900 Driver Package
- AUDIX Voice Power Co-residency Package
- ORACLE optional feature packages
- *feature_tst* package

This chapter also describes the general procedure for removing software packages.

Optional Feature Package Documentation

The remaining optional feature packages are documented in other books in the CONVERSANT library. Those optional features with the reference to their respective book are listed below:

- 3270 Host Communication Package — Refer to *CONVERSANT VIS Host Interface*, 585-350-815
- 3270 Enhanced File Transfer Package — Refer to *CONVERSANT VIS Host Interface*, 585-350-815
- Call Classification Analysis Package (CCA) — Refer to *CONVERSANT VIS Call Classification Analysis*, 585-350-811
- Speech Recognition Packages for Canadian French, Mexican Spanish, UK English, and US English — Refer to *CONVERSANT VIS WholeWord Speech Recognition*, 585-350-813
- FlexWord Recognition Package — Refer to *CONVERSANT VIS WholeWord and FlexWord™ Speech Recognition*, 585-350-824
- FAX Attendant Co-residency — Refer to *CONVERSANT VIS FAX Attendant Co-residency*, 585-350-210
- Graphical Speech Editor Package — Refer to *CONVERSANT VIS Graphical Speech Editor*, 585-350-705
- Adjunct/Switch Application Interface Package (ASAI) — Refer to *CONVERSANT VIS Adjunct/Switch Application Interface*, 585-350-812
- Integrated Services Digital Network Primary Rate Interface Package (PRI) — Refer to *CONVERSANT VIS Primary Rate Interface*, 585-350-805
- Form Filler Plus Package — Refer to *CONVERSANT VIS Form Filler Plus*, 585-350-806
- Enhanced TCP/IP WIN/386 Interface Package — Refer to *CONVERSANT VIS Local Area Network*, 585-350-809
- SQL*NET TCP/IP Package — Refer to *CONVERSANT VIS Local Area Network*, 585-350-809
- Network Interface Driver R2.0 — Refer to *CONVERSANT VIS Local Area Network*, 585-350-809
- NP600A Network Processor V3.2 — Refer to *CONVERSANT VIS Local Area Network*, 585-350-809
- Text-To-Speech Package — Refer to *CONVERSANT VIS Text To Speech*, 585-350-807
- CompuLert/SCCS Package — Refer to *CONVERSANT VIS CompuLert/SCCS*, 585-350-808
- 3270 NetView Alarm Interface — Refer to *CONVERSANT VIS NetView Alarms*, 585-350-810

- SCSI Mirroring Support Package Version 2.3 — Refer to *CONVERSANT VIS SCSI Mirroring*, 585-350-204

Before You Install Any Optional Feature Packages

Make sure that you have run the Configuration Program and indicated all hardware that is or will be on your system. The data generated by the program is crucial in assuring that you respond correctly the prompts in this chapter. See Chapter 4, “Running the Configuration Program,” in your hardware installation book.

The procedures in this chapter document how to install the optional feature packages supported with CONVERSANT VIS Version 4.0 that are not documented in other books (see "Optional Feature Package Documentation"). You may not need to install all of these packages.

Installing the Switch Integration Package

Use the following procedure to install the switch integration optional feature package:

1. If you are not already logged in, do so now.
   a. Enter **root** at the `Welcome to the AT&T 386 UNIX System` prompt.

      System response:

      `Password:`

   b. Enter your password. You eventually see the UNIX system prompt #
2. Enter **installpkg**

   System response:

   ```
   Please indicate the installation medium you intend to
   use. Strike ‘C’ to install from CARTRIDGE TAPE or ‘F’ to
   install from FLOPPY DISKETTE.
   Strike ESC to stop.
   ```

3. Press F.

   If your system has two floppy drives, you see the following system response:

   ```
   This system has two floppy drives.
   Strike ENTER to install from drive 0
   or 1 to install from drive 1.
   ```

4. Select drive 0 or 1.

   System response:

   ```
   Confirm

   Please insert the floppy disk.

   If the program installation requires more than one
   floppy disk, be sure to insert the disks in the proper
   order, starting with disk number 1.
   After the first floppy disk, instructions will be
   provided for inserting the remaining floppy disks.

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

5. Insert the Switch Integration floppy and press ENTER.

   System response:

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

   Searching for the Size file

   Install in progress

   Working...

   Installing switch case
   ```

6. When the system is finished installing you see the following prompt:

   ```
   You may now remove the floppy disk.

   The installation of the CONVERSANT VIS PBX/PSTN Switch
   Interface Package - Case is now complete.
   ```

7. Make sure that the light on the floppy disk drive is off. When it is off, remove the floppy disk.

Installing the Line Side T1 Package

Use the following procedure to install this optional feature package:

1. If you are not already logged in, do so now.
   a. Enter **root** at the `Welcome to the AT&T 386 UNIX System` prompt.

      System response:

      `Password:`

   b. Enter your password. You eventually see the UNIX system prompt #
2. Enter **installpkg**

   System response:

   ```
   Please indicate the installation medium you intend to
   use. Strike 'C' to install from CARTRIDGE TAPE or 'F' to
   install from FLOPPY DISKETTE.
   Strike ESC to stop.
   ```
3. Press F.

   System response:

   ```
   Insert the floppy disk.

   Strike ENTER when ready
   or DEL to cancel.
   ```
4. Insert the Line Side T1 floppy disk and press ENTER.

   System response:

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

   The Voice System must be stopped to continue with the
   installation. Is it OK to stop the Voice System (y/n)?
   [y]
   ```
5. Enter **y**

   System response:

   ```
   The Voice System is stopped and the installation will
   proceed.

   When the system has finished installing Line Side T1,
   you receive the system response:

   The installation is now complete.
   ```
6. Make sure that the light on the floppy disk drive is off. When it is off, remove the floppy disk.

Installing the E1 Board Driver Package

Use the following procedure to install the E1 Board Driver feature package:

1. If you are not already logged in, do so now.
   a. Enter **root** at the `Welcome to the AT&T 386 UNIX System` prompt.

      System response:

      `Password:`

   b. Enter your password. You eventually see the UNIX system prompt #
2. Enter **installpkg**

   System response:

   ```
   Please indicate the installation medium you intend to
   use. Strike 'C' to install from CARTRIDGE TAPE
   or 'F' to install from FLOPPY DISKETTE.
   Strike ESC to stop.
   ```
3. Press F.

   System response:

   ```
   Insert the floppy disk.

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

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

   Strike ENTER when ready
   or ESC to stop.
   ```
4. Insert the E1 Board Driver floppy disk and press ENTER.

   System response:

   ```
   Installing E1 Board Driver.......

   Is it OK to stop the Voice System [y/n]? [y]
   ```
5. Enter **y**

   System response:

   ```
   The Voice System is now stopping.

   Initiating request to clear all calls in the next 100
   seconds.

   When the system has finished installing the E1 Board
   Driver, you receive the system response:

   The installation is now complete.
   ```

6. Make sure that the light on the floppy disk drive is off. When it is off, remove the floppy disk.

Installing the Dial Pulse Recognition Package

Use the following procedure to install the Dial Pulse Recognition optional feature package.

NOTE:
The Dial Pulse Recognition package is not coresident with any speech recognition packages.

1. If you are not already logged in, do so now.
   a. Enter **root** at the `Welcome to the AT&T 386 UNIX System` prompt.

      System response:

      `Password:`

   b. Enter your password. You eventually see the UNIX system prompt #
2. Enter **installpkg**

   System response:

   ```
   Please indicate the installation medium you intend to
   use. Strike 'C' to install from CARTRIDGE TAPE
   or 'F' to install from FLOPPY DISKETTE.
   Strike ESC to stop.
   ```
3. Press F.

   System response:

   ```
   Insert the floppy disk.

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

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

   Strike ENTER when ready
   or ESC to stop.
   ```
4. Insert the Dial Pulse Recognition floppy disk and press ENTER.

   System response:

   ```
   Installing Dial Pulse Recognition.......

   Is it OK to stop the Voice System [y/n]? [y]
   ```

5. Enter **y**

   System response:

   ```
   The Voice System is now stopping.

   Initiating request to clear all calls in the next 100
   seconds.

   When the system has finished installing Dial Pulse
   Recognition, you receive the system response:

   The installation is now complete.
   ```

6. Make sure that the light on the floppy disk drive is off. When it is off, remove the floppy disk.

Installing the Application Software Update Package

Use the following procedure to install the Application Software Update optional feature package:

1. If you are not already logged in, do so now.
   a. Enter **root** at the `Welcome to the AT&T 386 UNIX System` prompt.

      System response:

      ```
      Password:
      ```

   b. Enter your password. You eventually see the UNIX system prompt #
2. Enter **installpkg**

   System response:

   ```
   Please indicate the installation medium you intend to
   use. Strike 'C' to install from CARTRIDGE TAPE
   or 'F' to install from FLOPPY DISKETTE.
   Strike ESC to stop.
   ```

3. Press F.

   System response:

   ```
   Insert the floppy disk.

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

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

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

4. Insert the Application Software Update floppy disk and press ENTER.

   System response:

   ```
   Installing Application Software Update.......

   Is it OK to stop the Voice System [y/n]? [y]
   ```

5. Enter **y**

   System response:

   ```
   The Voice System is now stopping.

   Initiating request to clear all calls in the next 100
   seconds.

   When the system has finished installing the E1 Board
   Driver, you receive the system response:

   The installation is now complete.
   ```

6. Make sure that the light on the floppy disk drive is off. When it is off, remove the floppy disk.

Installing the E1 ATT-PRI Interface Package

Use the following procedure to install the E1 ATT-PRI Interface optional feature package:

1. If you are not already logged in, do so now.
   a. Enter **root** at the `Welcome to the AT&T 386 UNIX System` prompt.

      System response:

      ```
      Password:
      ```

   b. Enter your password. You eventually see the UNIX system prompt #
2. Enter **installpkg**

   System response:

   ```
   Please indicate the installation medium you intend to
   use. Strike 'C' to install from CARTRIDGE TAPE
   or 'F' to install from FLOPPY DISKETTE.
   Strike ESC to stop.
   ```

3. Press F.

   System response:

   ```
   Insert the floppy disk.
   ```

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

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

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

4. Insert the E1 ATT-PRI Interface floppy disk and press ENTER.

   System response:

   ```
   Installing E1 ATT-PRI.......

   Is it OK to stop the Voice System [y/n]? [y]
   ```

5. Enter **y**

   System response:

   ```
   The Voice System is now stopping.

   Initiating request to clear all calls in the next 100
   seconds.

   When the system has finished installing the E1 Board
   Driver, you receive the system response:

   The installation is now complete.
   ```

6. Make sure that the light on the floppy disk drive is off. When it is off, remove the floppy disk.

Installing the Script Builder Package

Use the following procedure to install the optional feature package for both domestic and global Script Builder:

1. If you are not already logged in, do so now.
   a. Enter **root** at the `Welcome to the AT&T 386 UNIX System` prompt.

      System response:

      `Password:`

   b. Enter your password. You eventually see the UNIX system prompt #
2. Enter **installpkg**

   System response:

   ```
   Please indicate the installation medium you intend to
   use. Strike 'C' to install from CARTRIDGE TAPE or 'F' to
   install from FLOPPY DISKETTE.
   Strike ESC to stop.
   ```
3. Press (F).

   System response:

   ```
   Insert the floppy disk.

   Strike ENTER when ready
   or DEL to cancel.
   ```
4. Insert the Script Builder floppy disk and press (ENTER).

   System response:

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

   The system will prompt you when the second floppy disk needs to be inserted.

   System prompts continue with:

   ```
   Upgrading Existing Rx.x and later applications to
   Script Builder Version 4.0...

   Compatibility conversion complete.
   ```

   When the system has finished installing Script Builder, you receive the system response:

   ```
   The installation of the Script Builder package is now
   complete.
   ```
5. Make sure that the light on the floppy disk drive is off. When it is off, remove the floppy disk.

Installing Intelligent Ports Card Driver Package

Ensure that the hardware has been loaded before proceeding. Refer to the *Voice Processing Hardware Installation* book for your hardware platform for instructions to install the hardware.

Use the following procedure to install this optional feature package:

1. If you are not already logged in, do so now.
   a. Enter **root** at the `Welcome to the AT&T 386 UNIX System` prompt.

      System response:

      `Password:`

   b. Enter your password. You eventually see the UNIX system prompt #
2. Enter **installpkg**

   System response:

   ```
   Please indicate the installation medium you intend to
   use. Strike 'C' to install from CARTRIDGE TAPE or 'F' to
   install from FLOPPY DISKETTE.

   Strike ESC to stop.
   ```
3. Press F.

   System response:

   ```
   Insert the floppy disk.

   Strike ENTER when ready
   or DEL to cancel.
   ```
4. Insert the Intelligent Port Cards floppy disk and press ENTER.

   System response:

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

   The system then prompts you to enter the number of cards you are installing.
5. Enter **1**

   The system responds with a request for the type of card.
6. Press ENTER to accept the default. The system responds with a list of interrupt settings: IRQ7, IRQ10 or IRQ12.
7. Enter the interrupt number according to output from the Configuration Program.

   System response:

The system responds with a list of I/O settings. Select the correct value for the VIS.

8. Enter the I/O address according to output from the Configuration Program.

   System response:

   The system responds with a list of memory addresses.

9. Select the correct value for the VIS.

10. Enter the RAM address according to output from the Configuration Program.

    Once all the values are entered, the system displays the values you have selected and asks you to confirm your choices.

11. Enter **y**

    System response:

    ```
    The UNIX Operating System will now be rebuilt.
    This will take approximately 2 minutes. Please wait.

    The UNIX kernel has been rebuilt.

    The UNIX System installation process is now complete.

    The system must be shutdown.
    Hit enter to continue.
    ```

12. Make sure that the light on the floppy disk drive is off. When it is off, remove the floppy disk.

13. Press ENTER.

    Refer to the section “Serial Ports Setup” in Appendix A, “FACE Features,” of the *CONVERSANT VIS Version 4.0 Operations*, 585-350-703, for further information to administer the IPC-900 serial ports.

Installing the AUDIX Voice Power Co-residency Package

The AUDIX Voice Power application on Version 3.1 consists of the following:

- AUDIX Voice Power Application Software, Release 2.1.1: Speech
- AUDIX Voice Power Application Software, Release 2.1.1: Software
- AUDIX Voice Power Switch Integration Software, Release 2.1.1

CAUTION:

AUDIX Voice Power File System Modification Software and Integrated Voice Power System Software (IVPSS) R2.0 are provided with AUDIX Voice Power. This software must NOT be installed on the VIS. Attempts to install the AUDIX Voice Power File System Modification Software may result in loss of data in the /usr and /usr2 file systems.

NOTE:

If you are using the AUDIX Voice Power System 75 Integration Package, channel mapping is required. Refer to *AUDIX Voice Power Release 2.1.1 Switch Notes for System 75 Communication System*, 585-310-010.

If you are upgrading from IVPSS R2.0 with AUDIX Voice Power R2.1.1 to CONVERSANT VIS Version 4.0 with AUDIX Voice Power R2.1.1, refer to "Upgrading the AUDIX Voice Power Application" later in this chapter.

Verifying Hard Disk Size

The amount of speech storage used by the AUDIX Voice Power application package depends on the number of voice mail messages stored on the system. In some cases, the package can use the entire speech storage area (up to 170 Mbyte). Consequently, before installing the AUDIX Voice Power application package, you must verify the size of the hard disk.

NOTE:

Version 4.0 does not provide a warning if the disk space is low.

Partitioning the Disk

To install and run the AUDIX Voice Power Application Software R2.1.1: Speech, you need approximately 8Mbyte in the /usr2 directory for approximately 850 standard prerecorded speech phrases. To install and run the AUDIX Voice Power Application Software R2.1.1: Software, you need approximately 2.7 Mbyte in root (/), 9.5 Mbyte in the /usr directory, and 0 Mbyte in the speech partition for approximately 850 standard prerecorded speech phrases.

Before installing the AUDIX Voice Power R2.1.1 System Software, you must create a login for voice administration through AT&T FACE.

1. If you are not already logged in, do so now.
   a. Enter **root** at the `Welcome to the AT&T 386 UNIX System` prompt.

      System response:

      `Password:`

   b. Enter your password. You eventually see the UNIX system prompt #
2. Enter **face**

   The system responds by displaying the AT&T FACE menu.
3. At the AT&T FACE menu, highlight System Administration and press ENTER.

   The system responds by displaying the System Administration menu.
4. At the System Administration menu, highlight User Logins and press ENTER.

   The system responds by displaying the User Logins menu.
5. At the User Logins window, highlight ADD to add a user.

   The system displays the login screen.
6. Enter **audix**

   Enter AUDIX Voice Adm for the full name.
7. Allow “audix” to have system administrative privileges by changing “No” to “Yes” in the System Administration Privileges field.
8. Press SAVE to save the data in the login screen.

   The system responds by displaying a confirmation window.
9. Press CONT to confirm.

   The system prompts you for the new password for login “audix.”
10. Enter the new password to be used for voice administration.

    The system prompts you to reenter the password.

11. Re-enter the same password.

    System response:

    ```
    Press RETURN to continue.
    ```

12. Press [ENTER].

    System response:

    ```
    User audix has been added to the system.
    ```

13. Press [CANCEL] until the main FACE menu appears.
14. Select Exit and press [ENTER]. Press [CONT] to confirm that you want to return to the UNIX system prompt.

Once you have completed this procedure, you are ready to install the application software.

Installing the AUDIX Voice Power Application Software

Use the following procedure to install this optional feature package:

1. If you are not already logged in, do so now.
   a. Enter **root** at the `Welcome to the AT&T 386 UNIX System` prompt.

      System response:

      ```
      Password:
      ```

   b. Enter your password. You eventually see the UNIX system prompt #
2. Enter **installpkg**

   System response:

   ```
   Please indicate the installation medium you intend to
   use. Strike 'C' to install from CARTRIDGE TAPE or 'F' to
   install from FLOPPY DISKETTE.
   Strike ESC to stop.
   ```

3. Press [F].

   If the voice system is running, the system responds:

   ```
   Voice system is currently running.

   Is it ok to STOP the Voice system? (y/n)
   ```

4. Enter **y**

   System response:

   ```
   Stopped

   Insert the floppy disk.

   Strike ENTER when ready
   or DEL to cancel.
   ```

5. Insert the first AUDIX Voice Power Applications Software R2.1.1: Speech floppy disk and press ENTER.

   System response:

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

   The system will prompt you when you need to insert the remaining speech diskettes, one at a time.

   ```
   When the system has finished installing the package,
   you receive the system response:

   The installation of AUDIX Voice Power Application
   Software R2.1.1: Speech is now complete.
   ```

6. Insert the first AUDIX Voice Power Applications Software R2.1.1: Software floppy disk and press ENTER.

   System response:

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

   The system will prompt you when you need to insert the remaining software diskettes, one at a time.

   You are then prompted to enter the login ID of the Voice System Administrator.

7. Enter **audix**

   The system asks you to confirm.

8. Enter **y**

   A series of file names that are being moved will scroll on the screen.

9. Remove the last diskette from the disk drive. An installation confirmation message appears:

   ```
   The installation of AUDIX Voice Power Application
   Software R2.1.1: Software is now complete.
   ```

10. Insert the first AUDIX Voice Power Switch Integration Software R2.1.1 floppy disk and press ENTER.

    System response:

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

    If you are installing the switch integration software for the AT&T System 75 PBX/ AT&T DEFINITY G1 PBX, you will be asked which version of the switch you are using. If so, indicate the version of the switch and press ENTER.

    Files are listed on the screen as they are moved to the hard disk. When the system has finished installing the package, you receive the system response:

    ```
    The installation of AUDIX Voice Power Switch
    Integration Software R2.1.1 is now complete.
    ```

    (The system response here depends on the switch integration package you are installing.)

11. Make sure that the light on the floppy disk drive is off. When it is off, remove the floppy disk.

    You are prompted to shutdown the system unless you install the System 25 Switch Integration package.

12. Press ENTER to shutdown the system.

There may be additional update packages that need to be installed at this point. These may be updates to both AUDIX Voice Power and AUDIX Voice Power Switch Integration software. Install these packages using the installpkg command.

Once all the software is installed, the AUDIX Voice Power system is not operational until AUDIX Voice Power and the switch are administered. Refer to the following AUDIX Voice Power books:

- *AUDIX Voice Power Release 2.1.1 Installation and Maintenance Guide*, 585-310-108
- *AUDIX Voice Power Release 2.1.1 Switch Notes for System 75 Communications System*, 585-310-010

OR

- *AUDIX Voice Power Release 2.1.1 Switch Notes for System 25 Communications System*, 585-310-012
- *AUDIX Voice Power Release 2.1.1 System Manager's Guide*, 585-350-520

Upgrading the AUDIX Voice Power Application

The procedure for upgrading from IVPSS 2.0 with AUDIX Voice Power R2.1.1 to CONVERSANT VIS Version 4.0 with AUDIX Voice Power R2.1.1 is outlined below. The exact procedure for each step is included in the step or described elsewhere, either in this book or other VIS books or the AUDIX Voice Power R2.1.1 books.

When performing an upgrade form IVPSS 2.0 to VIS Version 4.0, a platform migration is involved. It is possible to reuse some of your existing hardware. Make sure you have run the Configuration Program, as described in Chapter 4 of your hardware installation book, and have specified the proper hardware pieces. Other than minimal hardware reuse, you probably want to save your AUDIX Voice Power data to move to the new platform. Do this by following the procedure below:

NOTE:
The system will not accept calls during the upgrade procedure.

1. Refer to “Backing Up Administrative Files” section in Chapter 5, “Upgrade Procedures,” in *AUDIX Voice Power R2.1.1 Installation and Maintenance Guide*, 585-310-108, for information on backing up all files in the following directories:
   - **/usr/vmdb**
   - **/usr/ocdb**
   - **/avp/data**
   - **/gendb**
2. Refer to “Backing Up Speech Files” section in Chapter 5, “Upgrade Procedures,” in *AUDIX Voice Power R2.1.1 Installation and Maintenance Guide*, 585-310-108, for information on backing up the following speech files:
   - **talkfile 40 phrase all**
   - **talkfile 46 phrase all**
   - **talkfile 47 phrase all**
3. Install the UNIX Operating System. Refer to Chapter 1 of this book for information on installing the UNIX Operating System.
4. Install the CONVERSANT VIS software. Refer to Chapter 2 of this book for information on installing CONVERSANT VIS software.
5. Install the AUDIX Voice Power software. Refer to the Chapter 3, “Software Installation” in *AUDIX Voice R2.1.1 Power Installation and Maintenance Guide*, 585-310-108, for information on installing AUDIX Voice Power software. You can also refer to "Installing the AUDIX Voice Power Application Software" found in this chapter.

Restoring AUDIX Voice Power Databases

1. Refer to “Restoring Administrative Files” in Chapter 6, “Recovery from System Failures,” in *AUDIX Voice Power R2.1.1 Installation and Maintenance Guide*, 585-310-108, for information to restore following directories:
   - **/usr/vmdb**
   - **/usr/ocdb**
   - **/avp/data**
   - **/gendb**
2. Refer to “Restoring Speech Files” in Chapter 6, “Recovery from System Failures,” in *AUDIX Voice Power R2.1.1 Installation and Maintenance Guide*, 585-310-108, for information to restore the following speech files:
   - **talkfile 40 phrase all**
   - **talkfile 46 phrase all**
   - **talkfile 47 phrase all**

Installing the Voice Mail External Actions Package

During installation, this package checks to verify that you have a running version of the CONVERSANT VIS with Script Builder software installed. In addition, the package checks to verify that AUDIX Voice Power Application Software R2.1.1 is installed on the system. If this software is not installed, then the Voice Mail External Actions installation aborts.

1. If you are not already logged in, do so now.
   a. Enter **root** at the `Welcome to the AT&T 386 UNIX System` prompt.

      System response:

      `Password:`

   b. Enter your password. You eventually see the UNIX system prompt #
2. Enter **installpkg**

   System response:

   ```
   Please indicate the installation medium you intend to
   use. Strike ‘C’ to install from CARTRIDGE TAPE or ‘F’ to
   install from FLOPPY DISKETTE.
   Strike ESC to stop.
   ```

3. Press F.

   If the voice system is running, the system responds:

   ```
   Voice system is currently running.

   Is it ok to STOP the Voice system ? (y/n)
   ```

4. Enter **y**

   System response:

   ```
   Stopped

   Insert the floppy disk.

   Strike ENTER when ready
   or DEL to cancel.
   ```

5. Insert the Voice Mail External Actions R2.1.1 floppy disk and press ENTER.

   System response:

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

   When the system has finished installing the package, you receive the system response:

   ```
   The installation of the Voice Mail External Actions
   package Version 4.0 is now complete.
   ```

6. Make sure that the light on the floppy disk drive is off. When it is off, remove the floppy disk.

Installing the ORACLE Optional Feature Packages

ORACLE provides many packages that are not required to support the CONVERSANT VIS operation. CONVERSANT VIS refers to these packages as “ORACLE add-on packages,” and six of these add-ons can be purchased through CONVERSANT. CONVERSANT does not manipulate or repackage these packages. Instead, these packages are passed on to customers in the original forms received from the ORACLE Corporation.

This section briefly describes the installation and removal procedures for each add-on package and the dependencies among the packages. For detailed installation and removal information, customers should refer to the *ORACLE for AT&T UNIX System V/386 Installation and User Guide*, 585-350-902.

This section is only intended to give a quick review of the procedures and special requirements imposed by CONVERSANT VIS. Read the "Special Requirements" section below before installing any add-on packages.

Special Requirements

The CONVERSANT VIS Base ORACLE DBMS 6.0.30 package and CONVERSANT VIS Extended ORACLE DBMS 6.0.30 package are required in the installed state before any ORACLE add-on package is installed. Installing the Base ORACLE DBMS package and Extended ORACLE DBMS packages is documented in "Installing the ORACLE Optional Feature Packages" found in this chapter.

NOTE:
"Extended ORACLE" is a name created by CONVERSANT to capture those packages that are not included with what CONVERSANT terms "Base ORACLE." The term Extended ORACLE is *not* found in any of the ORACLE documentation.

The CONVERSANT VIS modified script file, **/oracle/install/oracle.install**, allows add-on packages to be installed one at a time. Users should always provide a product name, for example, "c" for PRO*C, after invoking the oracle.install script.

NOTE:
ORACLE add-on packages are not displayed on the screen by using the **displaypkg** command. In order to determine what ORACLE packages are installed on your machine, you need to read the **/oracle/install/oracle.key** file. For each ORACLE product installed on the system, a corresponding entry containing the ORACLE product name will be created in this file.

Finally, you must remove the old versions of the add-on packages before installing new ones.

General Steps for Installing the ORACLE Add-On Packages

All add-on packages have the following installation procedures in common. For step-by-step instructions, please refer to the *ORACLE for AT&T UNIX System V/386 Installation and User Guide*, 585-350-902.

1. If you are not already logged in, do so now.
   a. Enter **root** at the `Welcome to the AT&T 386 UNIX System` prompt.

      System response:

      `Password:`

   b. Enter your password. You eventually see the UNIX system prompt #
2. Enter **installpkg**

   System response:

```
Please indicate the installation medium you intend to
use. Strike 'C' to install from CARTRIDGE TAPE or 'F' to
install from FLOPPY DISKETTE.
Strike ESC to stop.
```

3. Press F.

   System response:

   ```
   Insert the floppy disk.

   Strike ENTER when ready
   or DEL to cancel.
   ```

4. Insert the floppy disk for the package you are installing and press ENTER. You get several prompts. Press ENTER for all the prompts until you see the following system response:

   ```
    !! WARNING !!

   The /oracle/ directory is not empty!
   The install process will overwrite any files in
   /oracle which happen to have the same
   name as files contained on the release diskettes.
   Type 'y' if this is permissible. [n]:
   ```

5. Enter **y** to continue.

   System response:

   ```
   The database is up.
   Type [y] if you want to continue. [n]:
   ```

6. Enter **y** to continue.

7. Remove the disk when the install script instructs you to do so. A message Installation Completed Successfully will be displayed on the screen. But the software is simply read into the disk, and is not actually installed at this time.

8. Enter **cd /oracle**

9. Enter **install/oracle.install *xxx*** to actually install the package (*xxx* is the package name that you can find in each of the package sections in this chapter; for example the ORACLE Toolkit section explains to use "orakit" in this entry).

   You see several prompts. Press ENTER for all the prompts until you see the following system response:

   ```
   Run ROOT install? [Y]:
   ```

10. Enter **n**

    Depending on the package you are installing, you may need to provide more information during the prompts.

11. Once you have finished installing the package, you may want to read the **/oracle/install/install.log** file to make sure there were no errors during the installation.

Installing ORACLE Toolkit V1.0.18 (OBJECT*SQL)

The installation of the ORACLE Toolkit package is required prior to the installation of some of the add-on packages, such as SQL*Form, SQL*Menu, and ORACLE*Terminal.

Installation Requirements

The basic requirements for installing ORACLE Toolkit are:

- CONVERSANT VIS Base ORACLE DBMS 6.0.30 package is installed.
- CONVERSANT VIS Extended ORACLE DBMS 6.0.30 package is installed.
- The state of the ORACLE database is up during the installation.

Follow the "General Steps for Installing the ORACLE Add-On Packages" in this chapter for the common installation procedures to install the ORACLE Toolkit package. When you get to Step 9, use the package name “orakit” in the place of *xxx*.

Installing PRO*C V1.3.15

PRO*C is an ORACLE Precompiler, a programming tool that allows you to embed SQL statements in a C-language source program.

Installation Requirements

The basic requirements for installing PRO*C are as the following:

- UNIX Editing package is installed (found in Chapter 1, "Installing the UNIX Operating System" in this book).
- UNIX C Software Development Set package is installed (found in Chapter 1, "Installing the UNIX Operating System" in this book).
- CONVERSANT VIS Base ORACLE DBMS 6.0.30 package is installed.
- CONVERSANT VIS Extended ORACLE DBMS 6.0.30 package is installed.

Follow the "General Steps for Installing the ORACLE Add-On Packages" in this chapter for the common installation procedures to install the PRO*C package. When you get to Step 9, use the package name “c” in the place of *xxx*.

NOTE:
There is a software bug in the installation of this package. You will have to perform the following steps to complete the installation.

1. Enter **cd /oracle/c/lib**
2. Enter **make -f proc.mk install**

The C precompiler pcc is re-linked with the correct library after the above steps.

Installing SQL*Forms V3.0

SQL*Forms lets you design custom forms appropriate for any business setting from accounts payable to order entry. These forms provide fast and easy data entry, updates, deletions, and queries to an ORACLE database. A data entry clerk needs not to know the SQL language once the forms have been designed.

Installation Requirements

The basic requirements for installing SQL*Forms are as the following:

- CONVERSANT VIS Base ORACLE DBMS 6.0.30 package is installed.
- CONVERSANT VIS Extended ORACLE DBMS 6.0.30 package is installed.
- ORACLE Toolkit package (orakit) is installed.
- The state of the ORACLE database is up during the installation.
- An sqlplus user ID of “scott” with password of “tiger” is added.

Follow the "General Steps for Installing the ORACLE Add-On Packages" in this chapter for the common installation procedures to install the SQL*Forms package. When you get to Step 9, use the package name “forms30” in the place of *xxx*.

SQL*Forms V3.0 requires ORACLE*Terminal package. You will have to install the ORACLE*Terminal package to complete the installation of the SQL*Form V3.0 package. Note the installation of ORACLE*Terminal has to happen after the installation of SQL*Forms.

Installing ORACLE*Terminal V1.0

The ORACLE*Terminal product is used to create and modify device definition, keyboard mappings, and video attributes for some add-on packages, such as SQL*Forms V3 and SQL*Menu V5.

Installation Requirements

The basic requirements for installing ORACLE*Terminal are as the following:

- CONVERSANT VIS Base ORACLE DBMS 6.0.30 package is installed.
- CONVERSANT VIS Extended ORACLE DBMS 6.0.30 package is installed.
- ORACLE Toolkit (orakit) is package installed.

- ORACLE SQL*Form V3.0 (sqlforms30) is installed.

Follow the "General Steps for Installing the ORACLE Add-On Packages" in this chapter for the common installation procedures to install the ORACLE Terminal package. When you get to Step 9, use the package name “oraterm” in the place of *xxx*.

Installing SQL*Menu V5.0

SQL*Menu lets you present the selection of tasks on one or more menus. A menu is a list of choices. These choices either run software programs or call other menus. With SQL*Menu you can create a menu tree from which you can carry out practically all of your data processing needs.

Installation Requirements

The basic requirements for installing SQL*Menu are as the following:

- CONVERSANT VIS Base ORACLE DBMS 6.0.30 package is installed.
- CONVERSANT VIS Extended ORACLE DBMS 6.0.30 package is installed.
- SQL*Forms V3.0 (sqlforms30) is installed.
- ORACLE*Terminal V1.0 (oraterm) is installed.
- The state of the ORACLE database is up during the installation.

Follow the "General Steps for Installing the ORACLE Add-On Packages" in this chapter for the common installation procedures to install the SQL*Menu package. When you get to Step 9, use the package name “menu5” in the place of *xxx*.

Installing SQL*ReportWriter

SQL*ReportWriter lets you design and generate customized reports.

Installation Requirements

The basic requirements for installing SQL*ReportWriter are as the following:

- CONVERSANT VIS Base ORACLE DBMS 6.0.30 package is installed.
- CONVERSANT VIS Extended ORACLE DBMS 6.0.30 package is installed.
- The state of the ORACLE database is up during the installation.

Follow the "General Steps for Installing the ORACLE Add-On Packages" in this chapter for the common installation procedures to install the SQL*ReportWriter package. When you get to Step 9, use the package name “sqlreport” in the place of *xxx*.

Installing the feature_tst Package

Use the following procedure to install this optional feature package ONLY AFTER all the other optional feature packages have been installed:

1. The VIS must be running. To determine if the VIS is running, enter the command **who -r**

   The VIS is running if the run-level is 4. If the VIS is not running, execute the **start_vs** command.

2. Enter **installpkg**

   System response:

   ```
   Please indicate the installation medium you intend to
   use. Strike 'C' to install from CARTRIDGE TAPE or 'F' to
   install from FLOPPY DISKETTE.
   Strike ESC to stop.
   ```

3. Press F.

   System response:

   ```
   Insert the floppy disk.

   Strike ENTER when ready
   or DEL to cancel.
   ```

4. Insert the feature_tst floppy disk and press ENTER.

   System response:

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

        To be able to install this package you need:

             1.56MB available in /usr
             0.12MB available in /

        After installation, this package will consume:

             < 0.01MB in /usr
               0.12MB in /

        Type q to quit the installation or hit return to
        continue.
   ```

   If you think this package takes up too much space, you can quit out of the installation by pressing Q. Otherwise, press ENTER to continue.

System response:

```
The feature_tst script only works for features that are
installed on your machine. The answers to the following
questions will determine what optional features can be
tested by feature_tst. If you later want to change the
features that can be tested, re-install this package.
This package will also need to be reinstalled if the
SWITCH INTERFACES are changed.

Hit return to continue.
```

5. Press ENTER to continue.

   You will be asked a series of questions regarding those features you would like to test. You can only test features that have been installed on your VIS. Answer yes (Y) ONLY if you want to test that feature and the appropriate package(s) has been installed on you VIS. Otherwise, answer no (N).

   The system prompts:

   ```
   Do you want to include the ASR test? [y/n]
   Do you want to include the CCA test? [y/n]
   Do you want to include the ASAI test? [y/n]
   ```

   NOTE:
   If you answer yes to any of the above questions, and that package has not been installed on you VIS, the system tells you and you are given an opportunity to cancel the installation. The following is an example for Full CCA.

   ```
   Displaypkg shows that Full CCA is not installed.
   You will not be able to test Full CCA with this script.
   Type q to quit or return to continue.
   ```

   The system continues with:

   ```
   Adding phrases to talkfile 1
   The script feature_tst is now installed and is
   available for use.
   ```

6. When the prompt returns, the installation is complete.

Removing Software Packages

If, for any reason, you wish to remove a software package from your system, you can do so by using the **removepkg** command. Refer to the *CONVERSANT VIS Version 4.0 Command Reference*, 585-350-209, book for more information on this command.

There are some issues you need to be aware of when removing software from your system:

- IMPORTANT - make sure you remove all services, functions, or card assignments before removing any software packages. Refer to Chapter 3, "Configuration Management," in *CONVERSANT VIS Version 4.0 Operations,* 585-350-703.
- When removing the CONVERSANT VIS application package, you will be asked if you want to remove speech file systems. Answer *no* to this prompt.
- During an initial installation of the Base ORACLE DBMS package, a user called "oracle" is created. This user is NOT removed when the Base ORACLE DBMS package is removed. You need not worry about the existence of this "oracle" user. Once all the base and add-on ORACLE packages have been removed, if you want to remove the "oracle" user, do so through FACE. See "System Administration" in Appendix A, "FACE Features," in *CONVERSANT VIS Version 4.0 Operations,* 585-350-703.

To remove the software packages installed on your system, complete the following steps:

1. Enter **displaypkg** at the UNIX system prompt #. The system responds by displaying on the screen all the packages installed on your system.
2. Once you have determined the packages to be removed, enter **removepkg**

   At the prompt, enter the number (as it appears on the screen) beside the package you want to remove.
3. Repeat Step 2 until you have removed all the software packages that you wish to remove.

Verifying the Software Installation

4

What's in This Chapter

This chapter provides information on using **feature_tst**, including the following:

- Prerequisites for **feature_tst**
- Setting up **feature_tst**
- Using **feature_tst**

The tests must be performed with the factory-provided software installed in the system. Before performing any tests, verify that the required local central-office connections are installed and activated and that the system is configured. These procedures are discussed in Chapter 1 of your hardware installation book.

If at any time you install additional optional feature packages to your system, you need to remove **feature_tst** and reinstall it.

Using the feature_tst Package

Use **feature_tst** to verify the following features and capabilities of VIS Version 4.0:

- Call Classification Analysis (CCA)
- Speech Recognition
- Adjunct/Switch Application Interface (ASAI)
- Playback and coding
- Chantst

This script works on tip/ring (T/R), T1, E1, and PRI channels.

Configurations for feature_tst

The following lists the VIS and PBX configurations necessary to test the specified features. All lines from the PBX must be configured and operational before running **feature_tst**. It should be noted that the ASAI test requires a T/R channel. The remaining tests (Speech Recognition, chantst, CCA, and coding/playback) require at least one T/R channel, T1 channel, E1 channel, and/or PRI channel (except for CCA, which requires at least 2 channels).

- Call Classification Analysis
  - — The CCA package must be installed
  - — Call bridging capability must have been enabled during the installation of the VIS generic software
  - — For call bridging, some channels must be assigned to equipment group 2 via the Configuration Management-Voice Equipment window
  - — For Full CCA, at least 1 Signal Processor (SP) board must be installed with the functionality of CCA assigned to it (via the Configuration Management-Voice Equipment window)
  - — The SPs must be in the INSERV state

  Refer to the hardware installation book for the platform you are installing to ensure that your T/R lines are configured properly.

  NOTE:
  Do not use T1 lines to perform transfer with CCA. T1 lines cause a greater risk of being dropped from the **feature_tst** script.

- Speech Recognition
  - The Speech Recognition package must be installed on the VIS
  - An SP card must exist that has either RECOG or RECOG+voice functionality assigned to it (via the Configuration Management-Voice System window)
  - A Companion (CMP) card and the associated bus must be installed
  - The SP and CMP cards must be in the INSERV state
- Playback and coding
  - There must be room on the speech disk slice to store a 45-second phrase
  - T/R or T1 or E1 lines must be in the INSERV state
- Chantst
  - At least one T/R or T1 or E1 card and associated cabling must be installed
  - T/R or T1 or E1 lines must be in the INSERV state
  - Terminating resistors must exist only on cards at each end of the bus ribbon cable. All T/R cards that are not on the bus ribbon cable must not contain terminators resistors
- Transfer test
  - At least one T/R or T1 or E1 card and associated cabling must be installed
  - T/R or T1 or E1 lines must be in the INSERV state
  - Terminating resistors must exist only on cards at each end of the bus ribbon cable. All T/R cards that are not on the bus ribbon cable must not contain terminators resistors
  - The lines coming from the switch or PBX must be configured for both incoming and outgoing calls

Setting Up feature_tst

1. Enter **cvis_menu** at the UNIX prompt #

   The system responds by displaying the CONVERSANT VIS Version 4.0 menu.

2. Highlight the Configuration Management line and press ENTER.

   The Configuration Management window appears.

3. Highlight Voice Equipment and press ENTER.

   You see a window displaying the voice equipment (Figure 4-1).

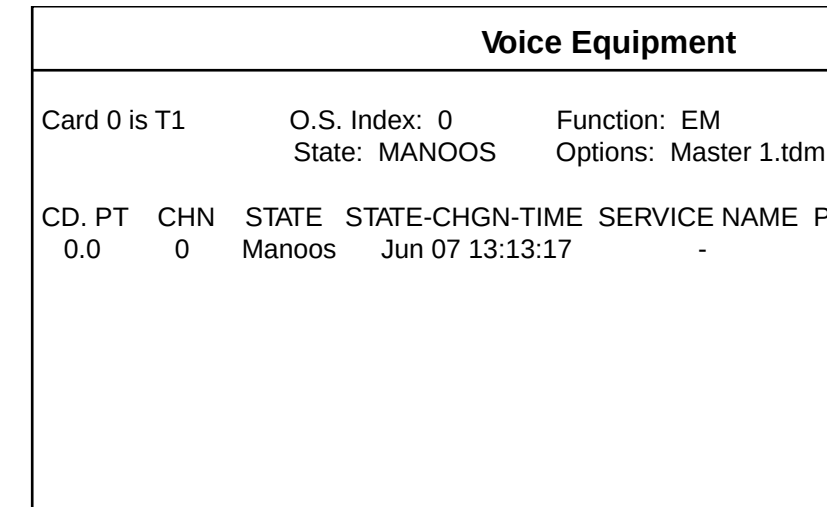


Figure 4-1. Voice Equipment Window

4. Press NEXTPAGE (F3) until you find a channel that has a state of INSERV. Write down this number.

   If no channels are INSERV, press CHG-KEYS and then press CHG-STATE. Specify INSERV for those channels you wish to test.

5. Press CHG-KEYS (F8). The boxes at the bottom of the screen will change.

6. Press ASSIGN (F3).

7. Highlight Services to Channels and press ENTER.

   You see a window called Assign Service to Voice Channel.

8. With the cursor on the top input line, enter **feature_tst**
   The words “feature_tst” should now occupy the first input line.

9. Enter the number of the INSERV channel that you wrote down earlier.

10. Press SAVE (F3).
11. Press CANCEL (F6) to return to the Voice Equipment window.
12. Check the Voice Equipment window for the channel you just assigned. Make sure that “feature_tst” appears in the SERVICE NAME column. If it doesn’t, repeat steps 8 through 10.
13. Press CANCEL three times.

Running feature_tst

NOTE:
Refer to "Configurations for feature_tst" section before using feature_tst.

1. Highlight the System Monitor window and press ENTER.
2. Dial the phone number associated with the assigned channel. Remember that the touch tones on the phone are used to access **feature_tst**.

   “feature_tst” appears under the VOICE SERVICE column and you hear the following system response:

   “Follow all touchtone entries with pound. Continue testing.
   To quit the script, enter 0 pound.”

   The voice then lists the features with the appropriate number to enter to test each one.
3. To begin testing a feature, choose a feature and press *number* (where *number* is the associated number) then #. Follow the prompts to complete the desired test.

Abbreviations

A

AC
Alternating current

ACD
Automatic call distributor

ADPCM
Adaptive differential pulse code modulation

ANI
Automatic number identification

ARU
Alarm relay unit

ASAI
Adjunct/Switch Application Interface

ASCII
American Standard Code for Information Interchange

ASI
Analog switch integration

B

BB
Bulletin board

bps
Bits per second

BSC
Binary synchronous communication

C

CCA
Call classification analysis

CDH
Call data handler

CICS
Customer Information Control System

CMP
Companion circuit card

CMS
Call Management System

CO
Central office

CPE
Customer provided equipment or customer premise equipment

CPU
Central processing unit

CSU
Channel service unit

D

dB
Decibels

DB
Database

DBMS
Database management system

DC
Direct current

DCE
Data communications equipment

DCP
Digital communications protocol

DIO
Disk input and output process

DIP
Data interface process

DMA
Direct memory access

DNIS
Dialed number identification service

DSP
Digital signal processor

DTE
Data terminal equipment

DTMF
Dual tone multi-frequency

E

EBCDIC
Extended Binary Coded Decimal Interexchange Code

EIA
Electronic Industries Association

EISA
Extended Industry Standard Architecture

EMI
Electromagnetic interference

ESD
Electrostatic discharge

ESDI
Extended Serial Data Interface

ESS
Electronic Switching System

F

FACE
Framed Access Command Environment Interface

FCC
Federal Communications Commission

FDD
Floppy disk drive

FIFO
First-in-first-out processing order

foos
Facility out-of-service state

G

GSE
Graphical Speech Editor

GUI
Graphical user interface

H

HDD
Hard disk drive

hwoos
Hardware out-of-service state

Hz
Hertz

I

IBM
International Business Machines

ICK
Integrity checking process message class

ID
Identification

IE
Information element

inserv
In-service state

IPC
Interprocess communication

IPC
Intelligent Ports Card (IPC-900)

IPCI
Integrated personal computer interface

IRQ
Interrupt request

ISA
Industry Standard Architecture

ISDN
Integrated Services Digital Network

ISV
Independent Software Vendor

ITAC
International Technical Assistance Center

IVP4
Integrated Voice Processing card with 4 analog channels

IVP6
Integrated Voice Processing card with 6 analog channels

IVPSS
Integrated Voice Processing System Software

K

Kbps
Kilobites per second

Kbyte
Kilobyte

L

LAN
Local area network

LDB
Local database

LED
Light-emitting diode

LN
Load number

LU
Logical unit

M

manoos
Manually out-of-service state

MAP/100
Multi-Application Platform 100

MAP/100C
Multi-Application Platform 100C

MAP/40
Multi-Application Platform 40

Mbps
Megabits per second

Mbyte
Megabyte

ms
Millisecond

msec
Millisecond

MHz
Megahertz

MTC
Maintenance process

N

NCP
Network Control Program

NEBS
Network Equipment Building Standards

NEMA
National Electrical Manufacturers Association

netoos
Network out-of-service state

nonex
Nonexistent state

NRZ
Non Return to Zero

NRZI
Non Return to Zero Inverted

O

OEM
Original equipment manufacturer

P

PBX
Private branch exchange

PC
Personal computer

PCB
Printed circuit board

PCM
Pulse code modulation

PEC
Price element code

PRI
Primary rate interface

PSTN
Public switch telephone network

PS&BM
Power supply and battery module

R

RAM
Random access memory

RECOG
Speech recognition feature message class

RDBMS
ORACLE relational database management system

REN
Ringer equivalence number

RFS
Remote file sharing

RM
Resource manager

RMB
Remote maintenance board

RTS
Request to send

S

SBC
Sub-band coding

SCCS
Switching Control Center System

SCSI
Small Computer System Interface

SDLC
Synchronous Data Link Control

SIMM
Single inline memory module

SNA
Systems Network Architecture

SP
Signal processor circuit card

SPIP
Signal processor interface process

SPPLIB
Speech processing library

SQL
Structured Query Language

sysgen
System generation

T

TCC
Technology Control Center

TCP/IP
Transmission control protocol/internet protocol

TDM
Time division multiplexing

TE
Terminal emulator

TLP
Transmission level plan

T/R
Tip/Ring circuit card

TRIP
Tip/Ring interface process

TSC
AT&T Technical Services Center

TSO
Technical Service Organization

TSO
Time Share Operation

TSM
Transaction state machine process

TTS
Text-to-Speech

TWIP
T1 interface process

U

UK
United Kingdom

USOC
Universal service ordering code

UVL
Unified Voice Library

V

VDC
Video display controller

VIS
Intuity CONVERSANT Voice Information System

VPC
Voice processing comarketer

VRU
Voice response unit

VROP
Voice response output process

Glossary

Numerics

3270 interface
A link between one or more CONVERSANT Voice Information System (VIS) machines and a host mainframe. In CONVERSANT VIS documentation, the 3270 interface means the link between one or more VIS machines and an IBM host mainframe.

4ESS
A large AT&T central office switch used to route calls through AT&T's telephone network.

A

ACD
See "automatic call distributor."

ADPCM
See "adaptive differential pulse code modulation."

adaptive differential pulse code modulation
A means of encoding analog voice signals into digital signals by adaptively predicting future encoded voice signals. This adaptive modulation method reduces the number of bits required to encode voice. See also "pulse code modulation."

adjunct products
Products (for example, Adjunct/Switch Application Interface) that the VIS administers via cut-through access to the inherent management capabilities of the product itself; this is in opposition to CONVERSANT VIS's ability to administer the switch directly.

Adjunct/Switch Application Interface
An optional feature package that provides an Integrated Services Digital Network-based interface between AT&T PBX's and adjunct processors.

affiliate
A business organization that AT&T controls or which with AT&T is in partnership.

alarm relay unit
A unit used in central office telecommunication arrangements that transmits warning indicators from telephone communications equipment (like the CONVERSANT VIS) to audio.

alerter
A system process that responds to patterns of events logged by the "logdaemon" process.

analog
An analog signal, such as voice or music, that varies in a continuous manner. An analog signal may be contrasted with a digital signal, which represents only discrete states.

application
Made of several components that provide an automated version of the communication between a caller and an attendant. The CONVERSANT VIS provides several methods for creating applications, including Script Builder and transaction state machine (TSM) script language.

application administration
The component of the CONVERSANT VIS that provides access to the applications currently available on your system and helps you to manage and administer them.

application installation
A two-step process in which the CONVERSANT VIS invokes the TSM script assembler for the specific application name and files are moved to the appropriate directories.

application verification
A process in which the CONVERSANT VIS verifies that all the components needed by an application are complete.

ASCII
An acronym for American Standard Code for Information Interchange, a standard for data representation. ASCII code represents alphanumeric characters as binary numbers. The code includes 128 upper- and lowercase letters, numerals, and special characters. Each alphanumeric and special character has an ASCII code (binary) equivalent that is 1 byte long.

asynchronous communication
A method of data transmission in which bits or characters are sent at irregular intervals and are spaced by start and stop bits and not by time. See also “synchronous communication.”

asynchronous data unit
An electronic communications device that allows computer systems to communicate over asynchronous lines more than 50 feet in length.

AUDIX Voice Power
A complete voice-mail messaging system accessed and operated by touch-tone telephones and integrated with a switch or “Private Branch Exchange.”

automatic call distributor
A telephone system that recognizes and answers incoming calls and completes these calls based on a set of instructions contained in a database. The Automatic Call Distributor can send the call to an operator or group of operators as soon as the operator has completed a previous call or after the system has played a message to the caller.

automatic number identification
A method of identifying the calling party by automatically receiving a string of digits that identifies the calling station of a particular customer.

B

back up
The preservation of the information in a file in a different location, so that the data is not lost in the event of hardware or system failure.

backing up an application
A utility that makes an archive copy of a completed application or makes an interim copy of an application in progress. The backup copy can be restored to the VIS if the online version is damaged, or if you make revisions and wish to go back to the previous version.

barge-in
A capability provided by WholeWord speech recognition that allow callers to speak their responses to the VIS prompt and have those responses recognized before the prompt has finished playing.

batch file
A file containing one or more lines, each of which is a command executable by the UNIX shell.

binary synchronous communications
A character-oriented synchronous link protocol.

blind transfer protocol
A protocol in which a call is completed as soon as the extension is dialed, without having to wait to see if the telephone is busy or if the caller answered.

bridging
The process of connecting one telephone network connection to another telephone network connection over the CONVERSANT VIS TDM bus. Bridging decreases the processing load on the system since an active bridge does not require speech processing, database access, host activity, etc., for the transaction.

BSC
See “binary synchronous communication.”

bundle
In the context of the Enhanced File Transfer package, this term is used to denote a single file, a group of files (package), or a combination of both.

byte
A unit of storage in the computer. On many systems, a byte is 8 bits (binary digits), the equivalent of one character of text.

C

call classification analysis
An optional feature package that allows application developers to classify the disposition of originated and transferred calls.

call data event
A parameter that specifies a list of variables that are appended to a call data record at the end of each call.

call data handler process
A software process that accumulates generic call statistics and application events.

called party number
The number dialed by someone making a telephone call. It can be used by telephone switching equipment to selectively route an incoming call to a particular department or agent.

caller
The party that calls for a service, gets connected to the CONVERSANT VIS, and interacts with the system. As the CONVERSANT VIS is also capable of making outbound calls for service, the caller can also be the person who responds to those outbound calls.

call progress tones
Standard telephony sounds that indicate the status of the call. These sounds include busy, fast busy, ringback, reorder, etc.

card cage
An area within a CONVERSANT VIS platform that contains and secures all of the standard and optional circuit cards used in the system.

cartridge tape drive
A high-capacity data storage/retrieval device that can be used to transfer large amounts of information onto high-density magnetic cartridge tape based on a predetermined format. This tape can be removed from the system and stored as a backup, or used on another system.

caution
An admonishment used when there is a possibility of a service interruption or a loss of data.

CCA
See “call classification analysis.”

CDH
See “call data handler process.”

central office
An office or location in which large telecommunication machines such as telephone switches and network access facilities are maintained. These locations follow strict installation and operation requirements.

central processing unit
A component of the CONVERSANT VIS that is based on either the Multi-Application Platform 100 (MAP/100), MAP/40, or MAP/100C.

channel
See “port.”

CICS
See "Customer Information Control System."

circuit card upgrade
A new circuit card that replaces an existing one in the platform. Usually the replacement is an updated version of the other card, and the replacement is designed to deal with technology made obsolete by industry trends or a new VIS release.

cluster controller
A bisynchronous interface that provides a means of handling remote communication processing.

command
An instruction or request given by the user to the VIS software to perform a particular function. An entire command consists of the command name and options.

CompuLert/SCCS interface
An optional feature that enables remote or console monitoring of error messages generated from the CONVERSANT VIS. CompuLert is a centralized maintenance system for monitoring minicomputers, computer mainframes, etc. The Switching Control Center System (SCCS) is similar to the CompuLert system, but is used to support 4ESS local switching systems.

configuration
The arrangement of the software and hardware of a computer system or network. The CONVERSANT VIS configuration includes either a standard or custom processor, peripheral equipment (for example, printers, modems), and software applications. Configuration also refers to the way the switch network is set up; that is, the types of products that are in the network and how those products communicate.

configuration management
The component of the VIS that allows you to manage the current configuration of voice channels, host sessions, and database connections, assign scripts to run on specific voice channels or host sessions assign functionality to SP and T1 cards, and perform various maintenance functions.

Converse Data Return (conv_data)
A Script Builder action that supports the DEFINITY call vectoring (routing) feature by enabling the switch to retain control of vector processing in the VIS environment. It supports the DEFINITY "converse" vector command to establish a two-way routing mechanism between the switch and the VIS to facilitate data passing and return.

controller circuit card
A circuit card used on a computer system that controls its basic functionality and makes the system operational. These cards are used to control magnetic peripherals, video monitors, and basic system communications.

copying an application
A utility in which information from a source application is directed into the destination application.

coresidency
The ability of two products or services to operate and interact with each other on a single hardware platform. An example of this is the use of AUDIX Voice Power along with CONVERSANT on the same VIS platform.

CPU
See "central processing unit."

crash
An interactive utility for examining the operating system core and for determining if system parameters are being exceeded.

custom speech
Unique words or phrases to be used in CONVERSANT VIS voice prompts that AT&T records for a customer on a custom basis.

custom vocabulary
A specialized package of unique words or phrased created on a per-customer basis and used by WholeWord or FlexWord speech recognition.

Customer Information Control System
Part of the operating system that manages resources for running applications (for example, IND$FILE). Note that TSO and CMS provide analogous functionality in other host environments.

D

danger
An admonishment used when there is a possibility of personal injury.

data interface process
A software process that communicates with Script Builder applications.

database
A structured set of files, records, or tables.

database field
A field used to extract values from a local database and form the structure upon which a database is built.

database table
A structure, made up of columns and rows, that holds information in a database. Database tables provide a means of storing information that changes too often to "hard-code," or permanently store, in the transaction outline.

debug
The process of locating and correcting errors in computer programs. This process is also referred to as "troubleshooting."

default
The way a computer performs a task in the absence of other instructions.

diagnose
The process of performing diagnostics on Tip/Ring, T1, or SP circuit cards or a bus.

dialed number identification service
A service that allows incoming calls to contain information about the telephone number for which it is destined.

directory
A type of file used to group and organize other files or directories.

DNIS
See "dialed number identification service."

DIP
See "data interface process."

display errdata
A command that displays system errors sent to the logger.

DSO
Digital Service Level (64,000 bps).

DTMF
See “dual tone multi-frequency.”

dual 3270 links
A feature that provides an additional physical unit (PU) to allow a cost-effective means of connecting to two host computers. The customer can connect a VIS to two separate FEPs or to a single FEP shared by one or more host computers. Each link supports a maximum of 32 LUs.

dual tone multi-frequency
A touch tone.

dump space
An area of the disk that is fixed in size and should equal the amount of RAM on the system. The operating system “dumps” an image of core memory upon system crashes. The dump can be fetched after rebooting for analysis of what may have caused the crash.

E

Earth recall
A method of call transfer used by some PBXs outside of the U.S. Special considerations must be taken when identifying and tuning some communication protocol parameters before attempting to interface another machine to a system that uses this method of call transfer.

editor system
A system that allows speech phrases to be displayed and edited by a user. See “Graphical Speech Editor.”

Enhanced File Transfer
A feature that allows the transferring of files automatically between the CONVERSANT VIS and a synchronous host processor on a designated logical unit.

Enhanced Serial Data Interface
A software- and hardware-controlled method used to store data on magnetic peripherals.

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

Error Tracker process
See “etStub.”

Ethernet
A name for a local area network that uses 10BASE5 or 10BASE2 coaxial cable and InterLAN signaling techniques.

etStub
A system process that processes pre-Version 3.1 error message logging requests. These requests are transformed and passed on to the “logdaemon” process.

event
The notification given to an application when some condition occurs.

external actions
Specific tasks and interfaces controlled by CONVERSANT VIS software that allow a Script Builder application script to invoke processes and interact with other products or services. For example, a CONVERSANT VIS application script can invoke AUDIX Voice Power functionality through the used of an external action within an application script.

F

FACE
See “Framed Access Command Environment.”

feature
A function or capability of a product or an application within the CONVERSANT VIS.

feature package
An optionally purchased package that may contain both hardware and software resources, which provides additional functionality to a standard system.

feature_tst script package
A standard CONVERSANT VIS software program that allows a VIS user to perform self-tests of critical hardware and software functionality.

field
A “slot” in a VIS window that holds one column of information in a row.

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

file transfer
An option that allows you to transfer files interactively or directly to and from UNIX using the File Transfer System.

filename
Alphabetic characters used to identify a particular file.

FlexWord speech recognition
A type of speech recognition based on subword technology that recognizes phonemes or parts of words of American English vocabularies. See “subword technology.”

Form Filler Plus
An optional feature package that provides the capability for application scripts to record caller’s responses to prompts for later transcription and review.

Framed Access Command Environment
An interface that enables you to execute a variety of administrative procedures including disk operations, user login setup, and peripherals setup.

function key
A key, labeled F1 through F8, on your keyboard to which the CONVERSANT VIS software gives special properties for manipulating the user interface.

G

Graphical Speech Editor
A window-driven, X Windows/Motif based, graphical user interface (GUI) that can be accessed to perform different functions associated with the creation and editing of speech files to be used by VIS applications.

H

hard disk drive
A high-capacity data storage/retrieval device that is located inside a computer platform. A hard disk drive stores data on nonremovable high-density magnetic media based on a predetermined format for retrieval by the system at a later date.

hardware
The physical components of a computer system. The central processing unit, disks, tape and floppy drives, etc., are all hardware.

hardware upgrade
Replacement of one or more fundamental platform hardware components (for example, the CPU or hard disk drive), but the existing platform and other existing optional circuit cards remain.

host computer
A computer linked to a network providing a range of services, such as database access and computation. The host computer operates in a time-sharing manner with other computers linked to it via the network.

I

iCk
The system integrity checking process.

idle channel
A channel that either has no owner or is owned by its default owner and is onhook.

IND$FILE
The standard SNA file transfer utility that runs as an application under CICS, TSO, and CMS. IND$FILE is independent of link-level protocols such as BISYNC and SDLC.

indexed table
A table that, unlike a nonindexed table, can be searched via a field name that has been indexed.

initialize
To start up the system for the first time.

Integrated Services Digital Network
A network that provides end-to-end digital connectivity to support a wide range of voice and data services.

Integrated Voice Processing circuit card
The IVP4 or IVP6 circuit card.

intelligent transfer protocol
A transfer protocol that monitors the line after dialing is complete to determine whether a busy, reorder (fast busy), or other failure has been encountered. It also recognizes when the extension is answered or if the extension is not answered after a specified number of rings.

interface
The access point of a system. With respect to the CONVERSANT VIS, the interface is designed to provide you with easy access to the software's capabilities.

ipcs
A command that reports interprocess communication facilities status.

ISDN
See "Integrated Services Digital Network."

K

keyboard mapping
In emulation mode, this feature enables the keyboard to send 3270 keyboard codes to the host according to a configuration table set up during installation.

keyword spotting
A capability provided by WholeWord Speech Recognition that allows the VIS to recognize a single word in the middle of an entire phrase spoken by a caller in response to a prompt.

L

LAN
See "local area network."

line side T1
A digital method of interfacing a CONVERSANT VIS to a PBX or switch using T1-related hardware and software.

listfile
An ASCII catalog that lists the contents of one or more talkfiles. Each application script is typically associated with a separate listfile. The listfile maps speech phrase strings used by application scripts into speech phrase numbers.

local area network
A data communications network in a limited geographical area. The local area network provides communications between computers and peripherals.

local database
A database residing on the CONVERSANT VIS.

logical unit
A type of SNA Network Addressable Unit.

logdaemon
System information and error logging process.

logger
See “logdaemon.”

logging on/off
Entering or exiting the CONVERSANT VIS software.

LU
See “logical unit.”

M

magnetic peripherals
Data storage devices that use magnetic media to store information. Such devices include hard disk drives, floppy disk drives, and cartridge tape drives.

main screen
The CONVERSANT VIS VERSION 4.0 screen from which you are able to enter System Administration or Voice System Administration.

maintenance process
A software process that runs temporary diagnostics.

Manual Configurator Program
A software program that resolves or blocks the allocation of CPU and memory resources for controlling and optional circuit cards.

master
A board that provides clock information to the TDM bus.

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

Microsoft
A company that manufactures software products, primarily for IBM-compatible computers.

mirroring
A method of data backup that allows all of the data transactions to the primary hard disk drive to be copied and maintained on a second identical drive in near real time. If the primary disk drive crashes or becomes disabled, all of the data stored on it (up to 1.2 billion bytes of information) is accessible on the second mirrored disk drive.

MS-DOS
A personal computer disk operating system developed by the Microsoft Corporation.

MTC
See “maintenance process.”

N

NetView
An optional feature package that transmits high-priority (major or critical) messages to the host as Operator-Generated Alerts (OGAs) over the 3270 host link. The NetView Alarm feature package does not require a dedicated LU.

nonindexed table
A table that may be searched only in a sequential manner and that cannot be searched via a field name.

null value
An entry containing no value. A field containing a null value is normally displayed as blank and is different from a field containing a value of zero.

O

on-line help
Messages or information that appear on the user's screen when a "function key" (F1 through F8) is pressed.

Operator Generated Alerts
System monitoring messages transmitted from the CONVERSANT VIS or other computer system to an IBM host computer that are classified as critical or major.

option
An argument used in a command line to modify program output by modifying the execution of a command. When you do not specify any options, the command will execute according to its default options.

ORACLE
A company that produces Relational Database Management software. It is also used as a generic term that identifies a database residing on a local or remote system that is created and maintained using an ORACLE RDBMS product.

P

PBX
See "private branch exchange."

PCM
See "pulse code modulation."

peripheral (device)
Equipment such as printers or terminals that is in addition to the basic processor.

phoneme
A single basic sound of particular spoken language. The English language contains 40 phonemes that represent all basic sounds used with the language. As an example, the word “one” can be represented with three phonemes, “w” - “uh” - “n.” Phonemes vary between languages because of guttural and nasal inflections and syllable constructs.

phrase tag
A string of up to 50 characters that identifies the contents of a speech phrase used by an application script.

platform migration
See “platform upgrade.”

platform upgrade
The process of replacing the existing platform with a new platform.

poll
A message sent from a central controller to an individual station on a multipoint network inviting that station to send if it has any traffic to send.

polling
A network arrangement whereby a central computer asks each remote location whether they wish to send information. This arrangement enables each user or remote data terminal to transmit and receive information on shared facilities.

Primary Rate Interface
An optional feature package that provides a digital interface capable both of receiving and originating telephone calls directly from/to an AT&T 4ESS switch.

private branch exchange
A private switching system, either manual or automatic, usually serving an organization, such as a business or government agency, and usually located on the customer’s premises.

processor
In CONVERSANT VIS documentation, the computer on which UNIX and CONVERSANT VIS software runs. In general, the part of the computer system that processes the data. Also known as the “central processing unit.”

ps
A command that shows active processes. This command displays the process table and can be used to determine which processes are consuming large amounts of system resources, such as CPU time.

pseudo driver
A driver that does not control any hardware.

pulse code modulation
A digital modulation method of encoding voice signals into digital signals. See also “adaptive differential pulse code modulation.”

R

raw mode
Conveys data from a terminal to a user without processing the data.

recovery
The process of using copies of the VIS software to reconstruct files that have been lost or damaged. See also “restore.”

remote database
The component of the VIS that provides access to information not currently on the VIS.

remote maintenance board
A CONVERSANT VIS board that is equipped standard on all new MAP/100 and MAP/40 platform purchases. This card, available with a built-in modem, allows remote personnel (for example, field support) to access all CONVERSANT VIS machines with a standard simplified process.

reports administration
The component of the VIS that provides access to system reports, including VIS call classification reports, call data detail reports, call data summary reports, message log reports, and traffic reports. In addition, if AUDIX Voice Power R2.1.1 is installed on your system, the reports administration component gives you access to AUDIX Voice Power reports.

restore
The process of recovering lost or damaged files by retrieving them from available backup tapes or from another disk device. See also “recovery.”

restore application
A utility that replaces a damaged application or restores an older version of an application.

reuse
The concept of reusing an existing system component after a software upgrade or platform migration.

roll back
To cancel changes to a database since the point at which changes were last committed.

rollback segment
A portion of the database that records actions that should be undone under certain circumstances. Rollback segments are used to provide transaction rollback, read consistency, and recovery.

S

sar
A command that is associated with the system activity report package.

screen pop
A method of delivering a screen of information to a telephone operator at the same time a telephone call is delivered. This is accomplished by a complex chain of tasks that include identifying the calling party number, using that information to access a local or remote ORACLE database, and pulling a "form" full of information from the database using an ORACLE database utility package.

script
The set of instructions for the CONVERSANT VIS to follow during a transaction.

Script Builder
An optional software package that provides a menu-oriented interface designed to assist in the development of custom voice response applications on the VIS.

SCSI
See "Small Computer System Interface."

shared database table
A database table that is used in more than one application.

shared speech
Speech that is a part of more than one application.

shared speech pools
A parameter that allows the user of a voice application to share speech components with other applications.

Single Inline Memory Modules
A method of containing random access memory (RAM) chips on narrow circuit card strips that attach directly to sockets on the CPU circuit card. Multiple SIMMs are sometimes installed on a single CPU circuit card.

slave
A circuit card that depends on the TDM bus for clock information.

Small Computer System Interface
A disk drive control technology in which a single SCSI adapter card plugged into a PC slot is capable of controlling as many as seven different hard disks, optical disks, tape drives, etc.

software
The set or sets of programs that instruct the computer hardware to perform a task or series of tasks — for example, UNIX software and the CONVERSANT VIS Version 4.0 software.

software upgrade
The installation of a new version of software. The existing platform and circuit cards are kept.

source system
The system from which you are upgrading (that is, your system as it exists *before* you upgrade).

speech energy
The amount of energy in an audio signal. Literally translated, it is the output level of the sound in every phonetic utterance.

speech envelope
The linear representation of voltage on a line. It reflects the sound wave amplitude at different intervals of time. This envelope can be plotted on a graph to represent the oscillation of an audio signal between the positive and negative extremes.

speech file
A file containing an encoded speech phrase.

speech filesystem
A collection of several talkfiles. The filesystem is organized into 16-Kbyte blocks for efficient management and retrieval of talkfiles. The CONVERSANT VIS speech filesystem is not consistent with standard UNIX filesystems, and can not be referenced with standard UNIX commands such as **ls**, **cat**, etc.

speech modeling
Creating WholeWord speech recognition algorithms by collecting thousands of different speech samples of a single word and comparing them all to obtain a statistical average of the word. This average is then used by a WholeWord speech recognition program to recognize a single spoken word.

speech phrase
A continuous speech segment encoded into a digital string.

speech space
An area that contains all digitized speech used for playback in the applications loaded on the system.

standard speech
The speech package containing simple words and phrases produced by AT&T for use with an CONVERSANT VIS. This package includes digits, numbers, days of the week, and months, each spoken with initial, medial, and falling inflection. The speech is in digitized files stored on the hard disk to be used in the voice prompts played by the VIS.

standard vocabulary
A standard package of simple word speech models provided by AT&T and used for WholeWord speech recognition purposes. These phrases include the digits “zero” through “nine,” “yes,” “no,” and “oh.”

string
A contiguous sequence of characters treated as a unit. Strings are normally bounded by white spaces, tabs, or a character designated as a separator. A string value is a specified group of characters symbolized by a variable.

Structured Query Language
A standard data programming language used with data storage and data query applications.

subword technology
A method of speech recognition that recognizes phonemes or parts of words of American English vocabularies. See “whole-word technology.”

switch
A software and hardware device that controls and directs voice and data traffic. A customer-based switch is known as a “private branch exchange.”

switch hook
The device at the top of most telephones that is depressed when the handset is resting in the cradle (on hook). The device is raised when the handset is picked up (the telephone is off hook).

switch hook flash
A signaling technique in which the signal is originated by momentarily depressing the "switch hook."

switch interface administration
The component of the VIS that enables you to define the interaction between the VIS and switches by allowing you to establish and modify switch interface parameters and protocol options for both analog and digital interfaces.

switch network
Two or more interconnected 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."

System 75
An advanced digital switch supporting up to 800 lines that provides voice and data communications for its users.

System 85
An advanced digital switch supporting up to 3000 lines that provides voice and data communications for its users.

system administrator
The person assigned the responsibility of monitoring all VIS software processing, performing daily system operations and preventive maintenance, and troubleshooting errors as required.

system architecture
The manner in which the CONVERSANT VIS software is structured.

system message
An event or alarm generated by either a VIS or end-user process.

system monitor
A component of the VIS in which tests are performed to verify that each incoming telephone line and its associated tip/ring or T1 card is functional. Through the "System Monitor" component, you are able to see displays of the Voice Channel and Host Session Monitors.

T

T1
A digital transmission link with a capacity of 1.544 Mbps.

table
A collection of records that are logically grouped together.

talkfile
An ASCII file that contains the speech phrase tags and phrase tag numbers for all the phrases of a specific application. The speech phrases are organized and stored in groups. Each talkfile can contain up to 65,535 phrases and the speech filesystem can contain multiple talkfiles.

target system
The system to which you are upgrading (that is, your system as you expect it to exist *after* you upgrade).

TDM
See “time-division multiplex.”

telephone network connection
The point at which a telephone network connection terminates on a CONVERSANT VIS. Supported telephone connections are Tip/Ring, T1, and E1.

Terminal Emulator
Software that allows the VIS to temporarily transform itself into a “look alike” of an IBM 3270 terminal. In addition to providing full 3270 functionality, the Terminal Emulator enables you to transfer files to and from UNIX.

Text-to-Speech
An optional feature that allows an application to play speech directly from ASCII text by converting that text to synthesized speech. The text can be used for prompts or for text retrieved from a database or host, and can be spoken in an application with prerecorded speech. Text-to-Speech application development is supported through Script Builder.

ThickNet
A 10-millimeter (10BASE5) coaxial cable used to provide InterLAN communications.

ThinNet
A 5-millimeter (10BASE2) coaxial cable used to provide InterLAN communications.

time-division multiplex
A method of serving a number of simultaneous channels over a common transmission path by assigning the transmission path sequentially to the channels, with each assignment being for a discrete time interval.

Tip/Ring
A term used to denote analog telecommunications using four-wire media.

trace
A command that can be used to monitor the execution of a script.

traffic
The flow of information or messages through a communications network for voice, data, or audio services.

transaction
Comprised of the exchanges between the caller and the voice system. A transaction can involve one or more telephone network connections and voice responses from the CONVERSANT VIS. It can also involve one or more of the VIS optional features, such as speech recognition, 3270 host interface, FAX response, etc.

transient process
A process that is created dynamically only when needed.

troubleshoot
The process of locating and correcting errors in computer programs. This process is also referred to as debugging.

TSM
See “transaction state machine process.”

TTS
See “Text-to-Speech.”

U

UNIX Operating System
A multiuser, multitasking computer operating system developed by the Bell Telephone Laboratories division of AT&T.

UNIX shell
The command language that provides a user interface to the UNIX operating system.

upgrade scenario
The particular combination of current hardware, software, application and target hardware, software, applications, etc.

V

vi editor
A screen editor used by the CONVERSANT VIS to create and change electronic files.

virtual channel
A channel that is not associated with an interface to the telephone network (Tip/Ring, T1, or PRI). Virtual channels are intended to run "data only" applications which do not interact with callers but may interact with DIPs. Voice or network functions (for example, coding or playing speech, call answer, origination, or transfer) will not work on a virtual channel. Virtual channel applications may be initiated only by a "virtual seizure" request to TSM from a DIP.

VIS
See "Voice Information System."

vocabulary
A collection of words that a VIS is able to recognize using either WholeWord or FlexWord speech recognition.

voice channel
A channel that is associated with an interface to the telephone network (Tip/Ring, T1, or PRI). Any CONVERSANT VIS application can run on a voice channel. Voice channel applications may be initiated by being assigned to particular voice channels or dialed numbers to handle incoming calls or by a "soft seizure" request to TSM from a data interface process (DIP) or the **soft_szr** command.

Voice Information System
A computer connected to a telephone network that handles touch-tone input, voice response, and line transfer. The Voice Information System uses a screen-based, menu-driven user interface to interact with the system operator or administrator.

voice processing co-marketer
A company licensed to purchase voice processing equipment, such as the CONVERSANT VIS, to market and sell based on their own marketing strategies.

voice response output process
A software process that transfers digitized speech between system hardware (for example, Tip/Ring and SP cards) and data storage devices (that is, hard disk, etc.)

Voice System Administration
The means by which you are able to administer both voice- and nonvoice-related aspects of the system.

VROP
See “voice response output process.”

W

warning
An admonishment used when there is a possibility of equipment damage.

WholeWord speech recognition
An optional feature based on whole-word technology that provides speaker independence, connected digit recognition, key word spotting, prompt interrupt, and DTMF support functionality. See “whole-word technology.”

whole-word technology
The ability to recognize an entire word, not the phoneme or a part of a word. See “subword technology.”

wink signal
An interruption of current to a busy lamp indicating that there is a line on hold.

word
A unique utterance understood by the recognizer.

word spotting
The ability to search past extraneous speech during a recognition.

Index

Numerics

3270 enhanced file transfer, installing, 3-2
3270 host communications, installing, 3-2
3270 Netview alarm, installing, 3-2

A

Adjunct/Switch Application Interface (ASAI), 3-2
Application software, installing, 2-1, 2-5
Audience, book, vii
AUDIX Voice Power
  disk partition, 3-15
  hard disk size, 3-14
  installation, 3-14
  restoring databases, 3-20
  upgrade, 3-19
  Voice Mail external actions, 3-20
AVP, see AUDIX Voice Power

B

Bilingual recognition, see WholeWord speech recognition
Book
  audience, vii
  commenting on, ix
  conventions, viii
  design, vii
  organization, vii
  purpose, vii
  related resources, viii
  trademarks in, viii
  when to use, viii
Boot floppy disk, see Disk preparation

C

Calculating partitions, 1-4
Call classification analysis, installing, 3-2
Canadian French, see WholeWord speech recognition
Cartridge tape utilities, 1-19
Central processing unit
  386, 1-2
  486, 1-2
Chantst, see feature_tst
Chapter content, vii
Coding rate, estimating, 1-9
Comments to this book, ix
CompuLert/SCCS, 3-2
Configuration program, installing, 2-3
Configurations, supported, 1-2
Conventions used in book, viii
Co-resident software
  AUDIX Voice Power, 3-14
  FAX Attendant, 3-2
CPU, see Central processing unit
Crash area, see Dump file systems
Create a new partition, see Partitions

D

Database file names, 2-4
Database size, 2-4
Disabling serial ports, 2-5
Disk configurations, 1-2
Disk mirroring, see SCSI mirroring
Disk partitions, 1-1
  AUDIX Voice Power, 3-15
  ESDI, 1-2
  IDE, 1-4
  SCSI, 1-3
Disk preparation, 1-11
Driver installation
  intelligent ports card, 3-12
  SP, see SP driver
  T1, see T1 driver
Dump file systems, 1-10

E

Enabling serial ports, 2-5
Enhanced, 3-2
Enhanced file transfer, see 3270 enhanced file transfer
ESDI disk drive partitions, 1-2

F

FACE Help, answering prompts, 1-17
FAX Attendant, 3-2
feature_tst
  installing, 3-27
  running the program, 4-5
  set up, 4-4
  using, 4-2
File systems, 1-9
  dump, 1-10
  root, 1-9
  speech, 1-9
  swap, 1-10

usr, 1-9
File transfer, see 3270 enhanced file transfer
FlexWord recognition, 3-2
Form filler, 3-2

G

Glossary, GL-1
Graphical speech editor, 3-2
GSE, see Graphical speech editor

H

Hard disk partitions, 1-1
ESDI, 1-2
IDE, 1-4
SCSI, 1-3
Hard disk preparation, 1-11
Host software, see 3270 host communications

I

IDE disk drive partitions, 1-4
Install password, 1-16
Installation training, vii
Installing Intelligent Ports Card Driver Package, 3-12
Installing software
3270 enhanced file transfer, 3-2
3270 enhanced file transfer package, 3-2
3270 host communciations, 3-2
3270 Netview alarm, 3-2
ASAI, 3-2
AUDIX Voice Power, 3-14
call classification analysis package, 3-2
cartridge tape utilities, 1-19
CompuLert/SCCS, 3-2
configuration program, 2-3
Extended ORACLE, 2-8
FACE help, 1-17
FAX Attendant, 3-2
feature_tst, 3-27
FlexWord recognition, 3-2
form filler, 3-2
graphical speech editor, 3-2
intelligent ports card driver, 3-12
line side T1, 3-5
Network interface, 3-2
NP600A network, 3-2
ORACLE database, 2-3
ORACLE optional features, 3-21
PRI, 3-2
remote terminal, 1-20
script builder, 3-11
SCSI mirroring, 3-3
SCSI support, 1-18
SP driver, 2-8
SQL*NET, 3-2
switch integration, 3-3
T1 driver, 2-8
TCP/IP LAN, 3-2
Text to Speech, 3-2
UNIX operating system, 1-11, 1-15
VIS base packages, 2-1, 2-5
VIS optional features, 3-3
WholeWord speech recognition, 3-2
Intelligent ports card driver, installing, 3-12
IPC, see Intelligent port card

L

LAN packages
Network interface, 3-2
NP600A network processor, 3-2
SQL*NET, 3-2
TCP/IP, 3-2
Line side T1, installing, 3-5

M

Mexican Spanish, see WholeWord speech recognition
Mirroring, see SCSI mirroring

N

Names
database files, 2-4
redo log file 1, 2-4
redo log file 2, 2-4
Netview alarm, see 3270 Netview alarm
Network interface, 3-2
NP600A network, 3-2

O

Operating system, UNIX, 1-11
Optional features
CONVERSANT VIS, 3-3
ORACLE, 3-21
ORACLE
database size, 2-4
optional features, 3-22
ORACLE toolkit, 3-24

ORACLE*Terminal, 3-25
PRO*C, 3-24
SQL*Forms, 3-25
SQL*Menu, 3-26
SQL*ReportWriter, 3-26
password, 2-3
ORACLE database
base software installation, 2-3
extended software installation, 2-8
ORACLE toolkit, installing, 3-24
ORACLE*Terminal, installing, 3-25
Organization of book
chapter content, vii

P

Partitions
calculating your own, 1-4
creating new, 1-12
recommended disk, 1-1
see also Disk partitions
Password
install, 1-16
ORACLE, 2-3
root, 1-16
Preparing your disk, see Disk preparation
Primary Rate Interface (PRI), 3-2
PRO*C, installing, 3-24
Purpose, book, vii

R

Recources to use with this book, viii
Redo log file name, 2-4
Remote terminal, installing, 1-20
removepkg, 3-29
Removing functions to cards, 3-29
Removing service to channels, 3-29
Removing services from packages, 3-29
Removing software, 3-29
Root file systems, 1-9
Root password, 1-16

S

SCCS, see CompuLert/SCCS
Script builder, installing, 3-11
SCSI disk drive partitions, 1-3
SCSI mirroring, 3-3
SCSI support, 1-18
SCSI support utilities, see SCSI support
Serial ports
disabling, 2-5
enabling, 2-5
Service Marks, viii
Software installation
3270 enhanced file transfer, 3-2
3270 host communications, 3-2
3270 Netview alarm, 3-2
ASAI, 3-2
AUDIX Voice Power, 3-14
call classification analysis, 3-2
cartridge tape utilities, 1-19
CompuLert/SCCS, 3-2
configuration program, 2-3
Extended ORACLE, 2-8
FACE help, 1-17
FAX Attendant, 3-2
feature_tst, 3-27
FlexWord recognition, 3-2
form filler, 3-2
graphical speech editor, 3-2
intelligent ports card driver, 3-12
line side T1, 3-5
Network interface, 3-2
NP600A network, 3-2
ORACLE database, 2-3
ORACLE optional features, 3-21
PRI, 3-2
remote terminal, 1-20
script builder, 3-11
SCSI mirroring, 3-3
SCSI support, 1-18
SP driver, 2-8
SQL*NET, 3-2
switch integration, 3-3
T1 driver, 2-8
TCP/IP LAN, 3-2
Text to Speech, 3-2
UNIX operating system, 1-11, 1-15
VIS base packages, 2-1, 2-5
VIS optional features, 3-3
WholeWord speech recognition, 3-2
Software, removing, 3-29
SP driver, installation, 2-8
Space requirements
base software packages, 1-5
optional software packages, 1-6
Speech editor, see Graphical speech editor
Speech file systems, 1-9
Speech recognition
FlexWord, 3-2
WholeWord, 3-2
SQL*Forms, installing, 3-25
SQL*Menu, installing, 3-26
SQL*NET, 3-2
SQL*ReportWriter, installing, 3-26
Streaming tape utilities, see Cartridge tape utilities
Subword recognition, see FlexWord recognition

Supported configurations, see Configurations
Swap file systems, 1-10
Switch integration, installing, 3-3

T

T1 driver, installation, 2-8
TCP/IP LAN, 3-2
Text to Speech, 3-2
Trademarks, viii
Training, installation, vii
Transfer test, see feature_tst

U

UK English, see WholeWord speech recognition
UNIX operating system, 1-11
  preparing your disk, 1-11
  software installation, 1-15
  upgrade package, 1-17
UNIX partition
  allocation, 1-12
  size, 1-12
US English, see WholeWord speech recognition
Usr file systems, 1-9

V

VIS software, installing, 2-1, 2-5
Voice mail, 3-20

W

WholeWord speech recognition, 3-2