Lucent Technologies
Bell Labs Innovations

INTUITY™ CONVERSANT® System

Customer Assist Technical Operations

585-313-708
Comcode 108362195
Issue 1
September 1998

Copyright © 1998, Lucent Technologies
All Rights Reserved
Printed in U.S.A.

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

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

You and your system manager are responsible for the security of your system, such as programming and configuring your equipment to prevent unauthorized use. The system manager is also responsible for reading all installation, instruction, and system administration documents provided with this product in order to fully understand the features that can introduce risk of toll fraud and the steps that can be taken to reduce that risk. Lucent Technologies does not warrant that this product is immune from or will prevent unauthorized use of common-carrier telecommunication services or facilities accessed through or connected to it. Lucent Technologies will not be responsible for any charges that result from such unauthorized use.

Lucent Corporate Security
Whether or not immediate support is required, all toll fraud incidents involving Lucent products or services should be reported to Lucent Corporate Security at 1 800 821-8235. In addition to recording the incident, Lucent Corporate Security is available for consultation on security issues, investigation support, referral to law enforcement agencies, and educational programs.

Lucent Technologies Fraud Intervention
If you *suspect that you are being victimized* by toll fraud and you need technical support or assistance, call the Lucent Technologies National Customer Care Center Toll Fraud Intervention Hotline at 1 800 643-2353.

Federal Communications Commission Statement
Part 15: Class A Statement. This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio-frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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

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

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

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

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

Canadian Department of Communications (DOC) Interference Information
This digital apparatus does not exceed the Class A limits for radio noise emissions set out in the radio interference regulations of the Canadian Department of Communications.

Le Présent Appareil Nomérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la class A préscrites dans le reglement sur le brouillage radioélectrique édicté par le ministére des Communications du Canada.

Trademarks
See the section titled "About This Book."

Ordering Information

Call:	Lucent Technologies BCS Publications Center Voice 1 800 457-1235 International Voice 317 322-6416 Fax 1 800 457-1764 International Fax 317 322-6699
Write:	Lucent Technologies BCS Publications Center 2855 N. Franklin Road Indianapolis, IN 46219
Order:	Document No. 585-313-708 Comcode 108362195 Issue 1, September 1998

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

You can be placed on a standing order list for this and other documents you may need. Standing order will enable you to automatically receive updated versions of individual documents or document sets, billed to account information that you provide. For more information on standing orders, or to be put on a list to receive future issues of this document, contact the Lucent Technologies Publications Center.

Warranty
Lucent Technologies provides a limited warranty on this product. Refer to the "Limited Use Software License Agreement" card provided with your package.

European Union Declaration of Conformity
Lucent Technologies Business Communications Systems declares that the equipment specified in this document conforms to the referenced European Union (EU) Directives and Harmonized Standards listed below:

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

Comments
To comment on this document, return the comment card at the front of the document.

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

RECYCLED PAPER

Contents

About This Document xi

- Intended Audiences xi
- How to Use This Document xi
- Organization of This Document xii
- Conventions xiii
  - Terminology xiii
  - Screen Displays xiv
  - Other Typography xiv
  - Safety and Security Alert Labels xv
- Trademarks xv
- Related Resources xv
  - UnixWare Operating System and CONVERSANT Documentation xv
  - DEFINITY G3 or ECS R5 Documentation xvi
- How to Comment on This Document xvii

1 Release Notes 1-1

- Packages In Customer Assist V7.0 1-1
  - General Availability Release Version 1-2
- Compatibility with Previous Versions 1-2
  - Software Compatibility 1-2
  - Data and Configuration Compatibility 1-3
- Features Added 1-3
- Features Changed 1-4
- Features Removed 1-4
- Summary 1-4

2 Installation and Removal 2-1

- Overview of Installation and Removal 2-1
- Installation Requirements 2-6

Contents

Software Requirements 2-6
Hardware Requirements 2-6
Supported Switches 2-7
Hard Disk Space Requirements 2-7
- Site Preparation Guide 2-7
- Installing Software 2-7
  - Installing Callback Messaging and Survey Set 2-15
  - Installing Speech Recognition 2-18
  - Installing Web Interface Server Set 2-19
  - Installing US English Language Set 2-22
- Removing Software 2-26
  - Removing Language 2-26
  - Removing Web Interface Server Set 2-27
  - Removing Speech Recognition Set 2-28
  - Removing Callback Messaging and Survey Set 2-28
  - Removing the Base Call Router Set 2-30
- Summary 2-31

3 Upgrades 3-1
- Upgrade Steps for CONVERSANT Solutions for DEFINITY Call Center 1.x and 2.x. 3-1
  - On the Existing CONVERSANT with CONVERSANT Solutions for DEFINITY Call Center 1.x or 2.x 3-2
  - On the New CONVERSANT with Customer Assist V7.0 3-5
- Upgrade Steps for CONVERSANT Solutions for DEFINITY Call Center 3.0 and 4.x. 3-12
  - On the Existing CONVERSANT with CONVERSANT Solutions for DEFINITY Call Center 3.0 or 4.x 3-12
  - On the New CONVERSANT with Customer Assist V7.0 3-18

Contents

- Upgrade Steps from Customer Assist V6.0.x to Customer Assist V7.0 3-24
  - On the Existing CONVERSANT with Customer Assist V6.0.x 3-25
  - On the CONVERSANT with Customer Assist V7.0 3-30
- Upgrade Steps from Customer Assist V6.1 to Customer Assist V7.0 3-34
  - On the Existing CONVERSANT with Customer Assist V6.1.x 3-35
  - On the CONVERSANT with Customer Assist V7.0 3-40
- Summary 3-44

4 Utilities 4-1

- Accessing Customer Assist Utilities 4-1
  - Administering Port Licenses 4-2
  - Enabling and Disabling Custom Grammars Manually 4-3
  - Moving Between ADA_CALC and EWT Actions 4-5
  - Backup/Restore Messages for Upgrade 4-6
  - Rebuild Routing Tablespace 4-7
- Summary 4-8

5 Capacity and Performance Guidelines 5-1

- Memory 5-1
- UNIX Kernel Parameters 5-1
- Hard Disk Space Requirements 5-2
  - Amount of Partition Space 5-2
  - Customer Assist Platform Management Package 5-2
  - Customer Assist Custom Call Routing 5-5
  - Customer Assist Callback Messaging 5-5
  - Speech Messages 5-7

Contents

Customer Assist Package Code 5-7
Call Logs 5-8
Speech 5-9
ORACLE Tablespace 5-12
- Voice Ports Capacity 5-13
  - Inbound Call Services 5-13
  - Return Call Capacity Requirements 5-15
- Summary 5-18

6 Technical Package Information 6-1
- Directories 6-1
  - Talkfiles 6-3
- Log and Debug Files 6-5
  - Log Files 6-6
  - Debug Files 6-6
  - Database Schema for Platform 6-6
  - Database Schema for Speech 6-9
  - Tables and Schema for Callback Messaging 6-10
  - Custom Call Routing 6-27
  - Configurations Files 6-27
  - Scripts 6-32
  - Prominent Programs 6-33
- Summary 6-35

7 Callback Messaging Configuration Guidelines 7-1
- Determining Which Callback Messaging Mailboxes to Configure 7-1
- Configuration Topics 7-2
  - Configuring for Successful Message Delivery 7-2
  - Establishing Premium Service for a Mailbox 7-5

Contents

Scheduling Callback Times 7-7

Configuring for Successful Dialing and Message Disposition 7-9

Determining the Mailbox Segments and Their Sources of Information 7-21

- Configuration in the Administrative Sequence 7-24

Global Settings for All Message Drop Mailboxes 7-25

Agent Callback Hours 7-26

Customer Callback Hours 7-26

Individual Mailbox Settings 7-26

Individual Settings for a Data Segment in a Mailbox 7-28

Individual Settings for a Recorded Segment in a Mailbox 7-29

Individual Settings for an Information Only Segment in a Mailbox 7-29

Individual Settings for a Schedule Segment in a Mailbox 7-30

- Summary 7-30

8 Troubleshooting 8-1

- Isolating and Diagnosing the Problem 8-1

General System Checks 8-1

General Customer Assist Checks 8-2

- Package Specific Diagnostics 8-3

Platform Management 8-3

Callback Messaging 8-5

Speech Recognition 8-6

Dial Pulse Recognition 8-7

Surveys 8-8

- Problems and Solutions 8-9

Voice System Functionality 8-9

DEFINITY Switch and Its Vector Functionality 8-9

Customer Assist Functionality 8-11

Contents

Platform Management 8-12
Callback Messaging 8-19
Custom Call Routing 8-25
System Administration 8-26
Speech Recognition 8-28
Dial Pulse Recognition 8-29
Web Reports 8-29
- Other Problems 8-30
- Summary 8-31

9 Logs and Error Codes 9-1
- Log Names, Locations, and Viewing 9-1
- Error Log Messages 9-1
  CONVERSANT Error Log Messages 9-2
- Summary 9-35

A Port Sizing Guidelines A-1
- General Considerations A-1
- Standard Announcement Guidelines A-1
- Dynamic Port Allocation A-2
  Callback Messaging A-2
  Custom Call Routing A-2
- Port Sizing Worksheet A-3

B Mailbox and Speech Conversion Utility B-1
- Overview B-1
  Supported Hardware/Software B-3
- Installing the Utility B-4
- Using the Utility B-6

Contents

To Back Up Mailboxes B-8

To Back Up Speech B-9

- Removing the Utility B-10

C **Interaction Between Dial Plan and Customer Assist** C-1

- Outbound Call Matrix C-1

D **Intelligent Actions and Speech Energy** D-1

- Intelligent Actions and Speech Energy D-1

IN **Index** IN-1

Contents

About This Document

This chapter introduces you to Customer Assist Care Center (Customer Assist) Version 7.0 and provides an overview of the document. It also directs you to additional related documentation.

Intended Audiences

This document is written for personnel who have the responsibility for installing, setting up, and removing the Customer Assist software.

How to Use This Document

Read Chapter 1, "Release Notes", for information about new and changed features, as well as features removed from the product. Use this document as a reference, and add in supplements as they are received. See the next section, "Organization of This Document", for an overview of each chapter in this document.

Use this document in conjunction with *INTUITY CONVERSANT System Customer Assist User Guide*, 585-313-706 and INTUITY CONVERSANT System Customer Assist Dial Plan User Guide, 585-313-707.

Organization of This Document

This document is divided into 15 chapters, including the appendices, glossary, and index.

- Chapter 1, "Release Notes", provides an overview of the product and its packages. This includes any changes such as features added, changed, or removed.
- Chapter 2, "Installation and Removal", provides the requirements and procedures for installing, setting up, and removing Customer Assist.
- Chapter 3, "Upgrades", describes the procedures for upgrading to V7.0 from previous versions of Customer Assist.
- Chapter 4, "Utilities", shows you how to set port licenses, enable custom grammars manually, switch between ADA_CALC and EWT actions, rebuild routing tables, and backup as well as restore messages for upgrade.
- Chapter 5, "Capacity and Performance Guidelines", contains information about what hardware resources are required.
- Chapter 6, "Technical Package Information", contains information about Customer Assist that can be used for troubleshooting the system.
- Chapter 7, "Callback Messaging Configuration Guidelines", shows you the best way to configure your system to meet your needs without causing load problems.
- Chapter 8, "Troubleshooting", provides suggestions and guidance to fixing problems with your system.
- Chapter 9, "Logs and Error Codes", describes the logs maintained by Customer Assist. The logs are a listing of messages generated by Customer Assist. The error codes are brief description of these events.
- Appendix A, "Port Sizing Guidelines", offers suggestions about planning for and setting up ports.
- Appendix B, "Mailbox and Speech Conversion Utility", instructs you on how to use the Mailbox and Speech Conversion utility.
- Appendix C, "Interaction Between Dial Plan and Customer Assist", describes how the Customer Assist application uses Dial Plan.
- Appendix D, "Intelligent Actions and Speech Energy", shows you what to do when the CONVERSANT cannot perform intelligent actions because it fails to detect speech energy.
- The index contains a detailed list of key terms with the page number where the information can be found.

Conventions

This section describes the terminology, typography, and symbols used in this document.

Terminology

- The word “type” means to press the key or sequence of keys specified. For example, an instruction to type the letter “y” is shown as

  Type **y** to continue.

- The word “enter” means to type a value and then press (ENTER). For example, an instruction to type the letter “y” and press (ENTER) is shown as

  Enter **y** to continue.

- The word “select” means to move the cursor to the desired menu item and then press (ENTER). For example, an instruction to move the cursor to the start test option on the Network Loop-Around Test screen and then press (ENTER) is shown as

  Select `Start Test`.

- The INTUITY CONVERSANT system displays *screens* and *menus*. Large screens both show and request system information. Smaller screens, sometimes called windows, may only request information. Menus provide a list of available selections.

- Keys that you press on your terminal or PC are represented as rounded boxes. For example, an instruction to press the enter key is shown as

  Press (ENTER).

- Two or three keys that you press at the same time on your terminal or PC (that is, you hold down the first key while pressing the second and/or third key) are represented as a series of separate rounded boxes. For example, an instruction to press and hold (ALT) while typing the letter “d” is shown as

  Press (ALT) (D)

- Function keys on your terminal, PC, or system screens, also known as soft keys, are represented as round boxes followed by the function or value of that key enclosed in parentheses. For example, an instruction to press function key 3 is shown as

  Press (F3) (Choices)

- Keys that you press on your telephone keypad are represented as square boxes. For example, an instruction to press the first key on your telephone keypad is shown as

  Press [1] to record a message.

Screen Displays

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

  Example 1:

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

  Example 2:

  ```
  Alarm Form Update was successful.

  Press <Enter> to continue.
  ```

- The sequence of menu options that you must select to display a specific screen or submenu is shown as follows:

  > Start at the INTUITY CONVERSANT Main Menu and select:

  ```
  > Voice System Administration
  ```

  > In this example, you would access the Main Menu and select Voice System Administration menu.

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

Other Typography

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

  Example 1:

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

  Example 2:

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

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

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

Safety and Security Alert Labels

This document uses the following symbols to call your attention to helpful hints, potential problems that could cause damage to equipment, loss of data, service interruptions, or breaches of toll fraud security.

NOTE:
Information in notes are helpful hints for using Customer Assist. Helpful hints may include basic theory or procedural shortcuts. Notes are indented from the main text.

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

Trademarks

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

- CONVERSANT and DEFINITY are registered trademark of Lucent Technologies.
- INTUITY is a trademark of Lucent Technologies.
- ExtraAgent is a registered trademark of Spanlink Communications Inc.
- UnixWare is a registered trademark of Santa Cruz Operations, Inc.
- UNIX is a registered trademark of UNIX Systems Laboratories, Inc.
- Novell is a registered trademark of UNIX System Laboratories, Inc.
- ORACLE is a trademark of the Oracle Corporation.
- Ethernet is a trademark of Xerox Corporation.

Related Resources

This section describes additional documentation.

UnixWare Operating System and CONVERSANT Documentation

NOTE:
The INTUITY CONVERSANT System Version 7.0 System Description, 585-313-204, contains a detailed description of all documents included in

V7.0 INTUITY CONVERSANT documentation library. Always refer to the appropriate document for specific information on planning, installing, administering, or maintaining an INTUITY CONVERSANT system.

- *SCO UnixWare Documentation Set*, 585-350-908
- *INTUITY CONVERSANT System Version 7.0 Upgrade Procedures*, 585-313-111
- *INTUITY CONVERSANT System Version 7.0 Administration*, 585-313-501
- *INTUITY CONVERSANT System Version 7.0 MAP/40 Maintenance*, 585-313-108

  or

  INTUITY CONVERSANT System Version 7.0 MAP/100 Maintenance, 585-313-109

DEFINITY G3 or ECS R5 Documentation

- *Lucent DEFINITY Communications System Generic 3 Call Vectoring/EAS Guide*, 555-230-520

  or

  Lucent DEFINITY ECS R5 Call Vectoring/EAS Guide, 555-230-521
- *Lucent DEFINITY Communications System Generic 3 Feature Description*, 555-230-204

  or

  Lucent DEFINITY ECS R5 Feature Description, 555-230-301
- *Lucent DEFINITY Communications System Generic 3i Implementation*, 555-230-650,

  Lucent DEFINITY Communications System Generic 3r Implementation, 555-230-651,

  Lucent DEFINITY Communications System Generic 3i-Global Implementation, 555-230-652,

  Lucent DEFINITY Communications System Generic 3 V2 and V3 Implementation, 555-230-653,

  Lucent DEFINITY Communications System Generic 3 V4 Implementation, 555-230-655

  or

  Lucent DEFINITY ECS R5 Implementation, 555-230-302

How to Comment on This Document

We are interested in your suggestions for improving this document. Please complete and return the reader comment card that is located at the end of the document.

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

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

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

Please mention the name and order number of this document, *INTUITY CONVERSANT System Customer Assist Technical Operations*, 585-310-703.

Release Notes

1

This chapter describes the packages contained in Customer Assist V7.0. It describes new and changed features, and features that have been removed from the product. It also addresses compatibility issues.

Packages In Customer Assist V7.0

Customer Assist V7.0 comes with the following packages:

Table 1-1. Customer Assist Packages

Package	Package Abbreviation
Base Package V7.0	cccBase
Platform Administration V7.0	cccPltAdm
Platform Runtime V7.0	cccPltRun
Platform Language Australian English — Female	cccPFNAus
Platform Language Brazilian Portuguese — Female	cccPFNPor
Platform Language French Canadian — Female	cccPFNCan
Platform Language Castilian Spanish — Female	cccPFNSpa
Platform Language Colombian Spanish — Female	cccPFNCol
Platform Language Dutch — Female	cccPFNDut
Platform Language European French — Female	cccPFNFre

Continued on next page

Table 1-1. Customer Assist Packages — *Continued*

Package	Package Abbreviation
Platform Language German — Female	cccPFNGer
Platform Language Japanese — Female	cccPFNJap
Platform Language UK English — Female	cccPFNUKE
Platform Language US English — Female	cccPFNUSE
Platform Language Italian — Female	cccPFNIta
Custom Call Routing V7.0	cccRouter
Surveys V1.0	cccSurvey
Web Reports V7.0	cccWebRpt
Windows Utilities V7.0	cccWinUtl
Speech Recognition V7.0	cccSpcRec
Dial Pulse Recognition V7.0	cccDPulse
Windows Admin V2.0.0 For 95	
Windows Admin V2.0.0 For NT	
APACHE Webserver V2.1	

General Availability Release Version

The version number for the General Availability Customer Assist V7.0 is 6. To check whether the correct build is on the CONVERSANT, enter **pkginfo -l cccBase** at the UNIX command line and check the DESC field.

Compatibility with Previous Versions

This section addresses the question of this version's compatibility with previous versions of Customer Assist.

Software Compatibility

Customer Assist V7.0 is not compatible with previous versions of Customer Assist.

- Remove previous versions of Customer Assist before installing V7.0.

- The database and configuration of previous versions can be backed up and restored on V7.0.
- Customer Assist V7.0 software can be loaded on top of itself.

Data and Configuration Compatibility

When upgrading from a previous version of Customer Assist, you must port the customer data and configurations using the standard Backup/Restore options.

Features Added

This section describes the features and languages that were added to Customer Assist for V7.0. Complete details of each feature are found elsewhere in this manual or the *INTUITY CONVERSANT System Customer Assist User Guide, 585-313-706*.

- Italian speech—Customer Assist is now available with Italian speech.
- Allow Interrupt—a new field that allows the phrases recited by the ANNOUNCE, SPEAK_NUM, DYN_ANNOU and MENU actions to be interrupted by the caller. Although the option to interrupt was available in previous versions, 7.0 is the first version in which it is administrable.
- Adjusted Schedule Date/Time to Caller's Time Zones—this menu option enables Customer Assist to make time zone adjustments. For example, if a caller in California dials into a system in Minnesota and enters 5 p.m., the system confirms the caller's entry with, "You entered 5 p.m. in your local time." This feature insures customers are called back during normal business hours in their time zone.
- Delete Messages from Mailbox—this feature enables the system administrator to delete messages from a mailbox by status or by age. This option, which is available only from UNIX administration, deletes the messages left by callers as well as the phrases created for the mailbox.

  NOTE:
  Delete messages older than one day means delete messages that are one date older than the date on the CONVERSANT.

- Backup/Restore Messages Utility—this feature enables you to backup messages from Customer Assist Care Center 6.0.3+ as well as Customer Assist Care Center 6.1 and restore them on Customer Assist V7.0.

Features Changed

This section describes the features that were changed from the previous version of Customer Assist. Complete details of each feature are found elsewhere in either this manual or the *INTUITY CONVERSANT System Customer Assist User Guide, 585-313-706*.

- Callers can now specify a time when scheduling a callback for a future date.
- Routing tables can now share tablespace, which removes the limitation of 19 routing tables. The system creates a single tablespace for all routing tables. If there is not enough space to hold more tables, the system adds another data file to the tablespace.
- The maximum number of records per table has been increased to 200,000. The maximum number of records for all the tables combined is 1,000,000.

Features Removed

This section describes the features that were removed from Customer Assist.

- The GLOBAL action was removed from Customer Assist.

Summary

While working through this chapter, you learned about the packages contained in Customer Assist V7.0. You learned about new and changed features, and the features that have been removed from the product.

- See Chapter 2, ‘‘Installation and Removal’’, for instructions on how to install Customer Assist.
- See Chapter 8, ‘‘Troubleshooting’’, for information on how to troubleshoot your system.

Installation and Removal

2

This chapter describes the procedures for installing and removing Customer Assist. See Chapter 3, ‘‘Upgrades’’, before reading this chapter if you are performing an upgrade.

Overview of Installation and Removal

To install Customer Assist, you must have the Lucent INTUITY CONVERSANT system software in place. For more information, see:

- *Lucent INTUITY CONVERSANT System Version 7.0 Maintenance*, 585-313-108 (MAP/40) or 585-313-110 (MAP/100P)
- *LUCENT INTUITY CONVERSANT System Version 7.0*, 585-313-204

Customer Assist has been bundled into several sets in order to ease installation. The Customer Assist Base Call Router Set will install all the required software packages. Optional feature and language packages can be added after the Base Call Router Set.

NOTE:
To install a single specific package that is part of a package set, enter **pkgadd -d *<device> <package abbreviation>*** at the UNIX prompt.

The following grid details the software sets and the packages that constitute the set.

Table 2-1. Customer Assist Sets

Set Name	Abbreviation	Package Name	Version	Media
Base Call Router Set	cccSet		7.0.0	cartridge tape
	SplkBase	Spanlink Base	1.1	
	DPlnBase	Dial Plan Base	1.4	
	DPlnDefUS	Dial Plan Defaults - US Definity	1.4	
	DPlnDefUK	Dial Plan Defaults - UK Definity	1.4	
	DPlnDfJpn	Dial Plan Defaults - Japan Definity	1.4	
	cccBase	Call Center Base	7.0.0	
	cccPltRun	Platform Runtime	7.0.0	
	cccPltAdm	Platform Administration	7.0.0	
	cccDPulse	Dial Pulse Recognition	7.0.0	
	cccRouter	Custom Call Routing	7.0.0	
	cccWinUtl	Call Center Utilities (Windows Adm)	7.0.0	
Callback Messaging & Survey Set	cccSetCBM		7.0.0	diskettes
	cccCbkRun	Callback Messaging Runtime	7.0.0	
	cccCbkAdm	Callback Messaging Administration	7.0.0	
	cccSurvey	Call Center Surveys	7.0.0	

Continued on next page

Table 2-1. Customer Assist Sets — *Continued*

Set Name	Abbreviation	Package Name	Version	Media
Speech Recognition	cccSpcRec	Speech Recognition	7.0.0	
Web Interface Server Set	cccSet Web		7.0.0	diskettes
	WebServer	Spanlink Apache Web Server	2.1.2	
	cccWebRpt	Call Center WebReports	7.0.0	
		Customer Assist Care Center (Windows Adm)	2.0.0	diskettes
		1.x & 2.x to CVIS 4.0 and higher Mailbox and Speech Conversion Utility	2.0	diskettes
Language: Australian English - Female	cccSetAus		7.0.0	diskette
	cccPFNAus	Platform Speech Australian English - Female	7.0.0	
	cccCFNAus	CBM Speech Australian English - Female	7.0.0	
Language: Brazilian Portuguese - Female	cccSetPor		7.0.0	diskette
	cccPFNPor	Platform Speech Brazilian Portuguese - Female	7.0.0	
	cccCFNPor	CBM Speech Brazilian Portuguese - Female	7.0.0	

Continued on next page

Table 2-1. Customer Assist Sets — *Continued*

Set Name	Abbreviation	Package Name	Version	Media
Language: Canadian French - Female	cccSetCan		7.0.0	diskette
	cccPFNCan	Platform Speech Canadian French - Female	7.0.0	
	cccCFNCan	CBM Speech Canadian French - Female	7.0.0	
Language: Colombian Spanish - Female	cccSetCol		7.0.0	diskette
	cccPFNCol	Platform Speech Colombian Spanish - Female	7.0.0	
	cccCFNCol	CBM Speech Colombian Spanish - Female	7.0.0	
Language: Dutch - Female	cccSetDut		7.0.0	diskette
	cccPFNDut	Platform Speech Dutch - Female	7.0.0	
	cccCFNDut	CBM Speech Dutch - Female	7.0.0	
Language: German - Female	cccSetGer		7.0.0	diskette
	cccPFNGer	Platform Speech German - Female	7.0.0	
	cccCFNGer	CBM Speech German - Female	7.0.0	
Language: Italian - Female	cccSetIta		7.0.0	diskette
	cccPFNIta	Platform Speech Italian - Female	7.0.0	
	cccCFNIta	CBM Speech Italian - Female	7.0.0	

Continued on next page

Table 2-1. Customer Assist Sets — *Continued*

Set Name	Abbreviation	Package Name	Version	Media
Language: Japanese - Female	cccSetJpn		7.0.0	diskette
	cccPFNJpn	Platform Speech Japanese - Female	7.0.0	
	cccCFNJpn	CBM Speech Japanese - Female	7.0.0	
Language: Standard French - Female	cccSetFre		7.0.0	diskette
	cccPFNFre	Platform Speech Standard French - Female	7.0.0	
	cccCFNFre	CBM Speech Standard French - Female	7.0.0	
Language: UK English - Female	cccSetUKE		7.0.0	diskette
	cccPFNUKE	Platform Speech UK English - Female	7.0.0	
	cccCFNUKE	CBM Speech UK English - Female	7.0.0	
Language: US English - Female	cccSetUSE		7.0.0	diskette
	cccPFNUSE	Platform Speech US English - Female	7.0.0	
	cccCFNUSE	CBM Speech US English - Female	7.0.0	

After you install your packages, you must assign the Customer Assist script, named “ccc,” to every port you plan to use. See the *CONVERSANT 7.0 Administration Guide* for more information about assigning scripts to ports.

CAUTION:
Only one pkgadd package should be installed or removed at once. Failure to do so may result in serious corruption of the system's installation information. For example, installing packages simultaneously off tape and floppy should be avoided. After installing Customer Assist, reboot the CONVERSANT system. Do not install this software on a system that is currently receiving calls.

Installation Requirements

Customer Assist requires specific hardware and software be installed on your system in order to run. Use the software and hardware lists below to insure that your system can handle Customer Assist.

Software Requirements

Customer Assist requires the following software packages:

- UnixWare V2.1
- INTUITY CONVERSANT V7.0
- ORACLE RDBMS 7.3
- CONVERSANT Logger

Hardware Requirements

Customer Assist requires the following hardware:

- MAP 5/P (120 Mhz CPU)
- MAP 40/P (120 Mhz CPU)
- MAP 100/P (120 Mhz CPU)
- One or more of the following:
  - Analog voice cards
    - IVP6
    - IVC6
    - NGTR
  - Digital voice cards
    - T1/E1
    - LST1 with SP
- SSP

Supported Switches

Customer Assist operates with the following switches:

- DEFINITY ECS R5 and R6.3, G3V2, G3V3, G3V4

Hard Disk Space Requirements

See Chapter 5, ‘‘Capacity and Performance Guidelines’’, to determine the number of megabytes of hard disk space required to operate Customer Assist.

Site Preparation Guide

Make sure to communicate with the customer before installation. The customer needs certain information to prepare the site for installation, and you will need certain information to configure the software correctly.

Installing Software

Use the following procedure to install the Customer Assist software:

1. Log into the system as root.
2. Enter **stop_vs** at the UNIX prompt to stop the voice system.
3. Insert the Base Call Router Set tape into the cartridge tape drive.
4. Enter **pkgadd -d ctape1** at the UNIX prompt.

   The system displays the list of packages.
5. Enter **cccSet** or its package number at the UNIX prompt.

   The system begins to install Customer Assist, as follows:

```
PROCESSING:

Set: LUCENT TECHNOLOGIES  Customer Assist Care Center
Base Call Router Set (cccSet) from ctape1.


LUCENT TECHNOLOGIES  Customer Assist Care Center  Base
Call Router Set

(pentium) 7.0.0

Using </> as the package base directory.


Which Default Dial Plan Configuration do you wish to
install:

1) Defaults for US Definity
```

```
2) Defaults for UK Definity

3) Defaults for Japan Definity

Enter number or [q] to quit, [ENTER] to view list again:
```

6. Enter the number that corresponds to your type of switch or press **q** to quit.

Installing Spanlink Base Package

The first package installed from the tape is the Spanlink Base Package. The system displays the following text when installing this package:

```
PROCESSING:

Set: LUCENT TECHNOLOGIES  Customer Assist Care Center
Base Call Router Set (cccSet) from ctape1.

Package: SPANLINK COMMUNICATIONS  Base (SplkBase) from
ctape1.


SPANLINK COMMUNICATIONS  Base (pentium) 1.1

Using </> as the package base directory.

## Processing package information.

## Processing system information.

## Verifying package dependencies.

## Verifying disk space requirements.


Installing SPANLINK COMMUNICATIONS  Base as <SplkBase>


## Executing preinstall script.

## Installing part 1 of 1.
```

The system lists the files it is installing. When the installation is finished, the system displays the message below:

```
Installation of SPANLINK COMMUNICATIONS  Base
(SplkBase) was successful.
```

Installing Dial Plan Base Package

The next package installed from the tape is the Dial Plan Base package. The system displays the following text when installing this package:

```
PROCESSING:

Set: LUCENT TECHNOLOGIES  Customer Assist Care Center
Base Call Router Set (cccSet) from ctape1.
```

```
Package: SPANLINK COMMUNICATIONS  Dial Plan  Base
(DPlnBase) from ctape1.


SPANLINK COMMUNICATIONS  Dial Plan  Base

(pentium) 1.4

Using </> as the package base directory.

## Processing package information.

## Processing system information.

## Verifying package dependencies.

## Verifying disk space requirements.


Installing SPANLINK COMMUNICATIONS  Dial Plan  Base as
<DPlnBase>

## Executing preinstall script.

## Installing part 1 of 2.
```

The system lists the files it is installing. When the installation is finished, the system displays the message below:

```
Installation of SPANLINK COMMUNICATIONS  Dial Plan
Base (DPlnBase) was successful.
```

Installing Dial Plan Default Packages

The next package installed from the tape is the Dial Plan Defaults package. The system displays the following text when installing this package:

```
PROCESSING:

Set: LUCENT TECHNOLOGIES  Customer Assist Care Center
Base Call Router Set (cccSet) from ctape1.

Package: SPANLINK COMMUNICATIONS  Dial Plan  Defaults
for US Definity (DPlnDefUS) from ctape1.


SPANLINK COMMUNICATIONS  Dial Plan  Defaults for US
Definity

(pentium) 1.4

Using </> as the package base directory.

## Processing package information.

## Processing system information.

## Verifying package dependencies.
```

```
## Verifying disk space requirements.

Installing SPANLINK COMMUNICATIONS  Dial Plan  Defaults
for US Definity as <DplnDefUS>

## Installing part 1 of 1.
```

The system lists the files it is installing. When the installation is finished, the system displays the message below:

```
Installation of SPANLINK COMMUNICATIONS  Dial Plan
Defaults for US

Definity (DPlnDefUS) was successful.
```

Installing Customer Assist Care Center Base Package

The next package installed from the tape is the Customer Assist Care Center Base package. The system displays the following text when installing this package:

```
PROCESSING:

Set: LUCENT TECHNOLOGIES  Customer Assist Care Center
Base Call Router Set (cccSet) from ctape1.

Package: LUCENT TECHNOLOGIES  Customer Assist Care
Center  Call Center Base (cccBase) from ctape1.


LUCENT TECHNOLOGIES  Customer Assist Care Center  Call
Center Base (pentium) 7.0.0

Using </> as the package base directory.

## Processing package information.

## Processing system information.

## Verifying package dependencies.

## Verifying disk space requirements.


Installing LUCENT TECHNOLOGIES  Customer Assist Care
Center  Call Center Base as <cccBase>


## Executing preinstall script.

## Installing part 1 of 1.
```

The system lists the files it is installing. When the installation is finished, the system displays the message below:

```
Installation of LUCENT TECHNOLOGIES  Customer Assist
Care Center Call Center Base (cccBase) was successful.
```

Installing Platform Runtime Package

The next package installed from the tape is the Platform Runtime package. The system displays the following text when installing this package:

```
PROCESSING:

Set: LUCENT TECHNOLOGIES  Customer Assist Care Center
Base Call Router Set (cccSet) from ctape1.

Package: LUCENT TECHNOLOGIES  Customer Assist Care
Center  Platform Runtime (cccPltRun) from ctape1.


LUCENT TECHNOLOGIES  Customer Assist Care Center
Platform Runtime

(pentium) 7.0.0

Using </> as the package base directory.

## Processing package information.

## Processing system information.

## Verifying package dependencies.

## Verifying disk space requirements.


Installing LUCENT TECHNOLOGIES  Customer Assist Care
Center  Platform Runtime as <cccPltRun>


## Executing preinstall script.

## Installing part 1 of 2.
```

The system lists the files and the databases it is installing. When the installation is finished, the system displays the message below:

```
Installation of LUCENT TECHNOLOGIES  Customer Assist
Care Center Platform Runtime (cccPltRun) was
successful.
```

Installing Platform Administration

The next package installed from the tape is the Platform Administration package. The system displays the following text when installing this package:

```
PROCESSING:

Set: LUCENT TECHNOLOGIES  Customer Assist Care Center
Base Call Router Set (cccSet) from ctape1.

Package: LUCENT TECHNOLOGIES  Customer Assist Care
Center  Platform Administration (cccPltAdm) from
ctape1.
```

```
LUCENT TECHNOLOGIES  Customer Assist Care Center
Platform Administration

(pentium) 7.0.0

Using </> as the package base directory.

## Processing package information.

## Processing system information.

## Verifying package dependencies.

## Verifying disk space requirements.

Installing LUCENT TECHNOLOGIES  Customer Assist Care
Center  Platform Administration as <cccPltAdm>

## Executing preinstall script.

## Installing part 1 of 1.
```

The system lists the files it is installing. When the installation is finished, the system displays the message below:

```
Installation of LUCENT TECHNOLOGIES  Customer Assist
Care Center Platform Administration (cccPltAdm) was
successful.
```

Installing Dial Pulse Recognition

The next package installed from the tape is the Dial Pulse Recognition package. The system displays the following text when installing this package:

```
PROCESSING:

Set: LUCENT TECHNOLOGIES  Customer Assist Care Center
Base Call Router Set (cccSet) from ctape1.

Package: LUCENT TECHNOLOGIES  Customer Assist Care
Center  Dial Pulse Recognition Administration
(cccDPulse) from ctape1.

LUCENT TECHNOLOGIES  Customer Assist Care Center  Dial
Pulse Recognition Administration (pentium) 7.0.0

Using </> as the package base directory.

## Processing package information.

## Processing system information.

## Verifying package dependencies.

## Verifying disk space requirements.

Installing LUCENT TECHNOLOGIES  Customer Assist Care
Center Dial Pulse Recognition Administration
(cccDPulse)
```

```
## Executing preinstall script.

## Installing part 1 of 1.
```

The system lists the files it is installing. When the installation is finished, the system displays the message below:

```
Installation of LUCENT TECHNOLOGIES  Customer Assist
Care Center Dial Pulse Recognition Administration
(cccDPulse) was successful.
```

Installing Custom Call Routing

The next package installed from the tape is the Custom Call Routing package. The system displays the following text when installing this package:

```
PROCESSING:

Set: LUCENT TECHNOLOGIES  Customer Assist Care Center
Base Call Router Set (cccSet) from ctape1.

Package: LUCENT TECHNOLOGIES  Customer Assist Care
Center  Routing Administration (cccRouter) from ctape1.

LUCENT TECHNOLOGIES  Customer Assist Care Center
Routing Administration

(pentium) 7.0.0

Using </> as the package base directory.

## Processing package information.

## Processing system information.

## Verifying package dependencies.

## Verifying disk space requirements.


Installing LUCENT TECHNOLOGIES  Customer Assist Care
Center  Routing Administration as <cccRouter>


## Executing preinstall script.

## Installing part 1 of 1.
```

The system lists the files it is installing. When the installation is finished, the system displays the message below:

```
Installation of LUCENT TECHNOLOGIES  Customer Assist
Care Center Routing Administration (cccRouter) was
successful.
```

Installing Call Center Utilities (Windows Administration)

The next package installed from the tape is the Call Center Utilities package. The system displays the following text when installing this package:

```
PROCESSING:

Set: LUCENT TECHNOLOGIES  Customer Assist Care Center
Base Call Router Set (cccSet) from ctape1.

Package: LUCENT TECHNOLOGIES  Customer Assist Care
Center  Windows Utilities (cccWinUtl) from ctape1.

LUCENT TECHNOLOGIES  Customer Assist Care Center
Windows Utilities

(pentium) 7.0.0

Using </> as the package base directory.

## Processing package information.

## Processing system information.

## Verifying package dependencies.

## Verifying disk space requirements.


Installing LUCENT TECHNOLOGIES  Customer Assist Care
Center  Windows Utilities as <cccWinUtl>


## Installing part 1 of 1.
```

The system lists the files it is installing. When the installation is finished, the system displays the message below:

```
Installation of LUCENT TECHNOLOGIES  Customer Assist
Care Center Windows Utilities (cccWinUtl) was
successful.
```

The system displays the message below to inform you it has finished installing the Base Call Router Set from tape:

```
## Executing set postinstall script.

Processing of <LUCENT TECHNOLOGIES  Customer Assist
Care Center  Base Call Router Set> is completed.
```

NOTE:
If you have finished installing all packages, reboot the machine. Otherwise, continue with the installation procedures documented below.

Installing Callback Messaging and Survey Set

The Callback Messaging & Survey Set installs Callback Messaging and Surveys.

Use the steps below to install the Callback Messaging & Survey Set:

1. Enter **stop_vs** at the UNIX prompt to stop the voice system.
2. Insert the cccSetCBM diskette into the disk drive.
3. Enter **pkgadd -d diskette** at the UNIX prompt.

   The system displays the list of packages.
4. Enter **cccSetCBM** or its package number at the UNIX prompt.

   The system begins installing the Callback Messaging & Survey Set, as follows:

```
PROCESSING:

Set: LUCENT TECHNOLOGIES  Customer Assist Care Center
Callback Messaging & Survey Set (cccSetCBM) from
diskette.

LUCENT TECHNOLOGIES  Customer Assist Care Center
Callback Messaging & Survey Set (pentium) 7.0.0

Using </> as the package base directory.

## Processing package information.

## Processing system information.

## Verifying package dependencies.

## Verifying disk space requirements.

Installing LUCENT TECHNOLOGIES  Customer Assist Care
Center  Callback Messaging & Survey Set as <cccSetCBM>

## Executing preinstall script.
```

Installing Callback Messaging Runtime

The first package installed from this diskette is Callback Messaging Runtime. The system displays the following text when installing this package:

```
PROCESSING:

Set: LUCENT TECHNOLOGIES  Customer Assist Care Center
Callback Messaging & Survey Set (cccSetCBM) from
diskette.

Package: LUCENT TECHNOLOGIES  Customer Assist Care
Center  Callback Messaging Runtime (cccCbkRun) from
diskette.

LUCENT TECHNOLOGIES  Customer Assist Care Center
Callback Messaging Runtime
```

```
(pentium) 7.0.0

Using </> as the package base directory.

## Processing package information.

## Processing system information.

## Verifying package dependencies.

## Verifying disk space requirements.

Installing LUCENT TECHNOLOGIES  Customer Assist Care
Center  Callback Messaging Runtime as <cccCbkRun>

## Executing preinstall script.

## Installing part 1 of 4.
```

The system lists the files it is installing. When the installation is finished, the system displays the message below:

```
Installation of LUCENT TECHNOLOGIES  Customer Assist
Care Center Callback Messaging Runtime (cccCbkRun) was
successful.
```

Installing Callback Messaging Administration

The next package installed from this diskette is Callback Messaging Administration. The system displays the following text when installing this package:

```
PROCESSING:

Set: LUCENT TECHNOLOGIES  Customer Assist Care Center
Callback Messaging & Survey Set (cccSetCBM) from
diskette.

Package: LUCENT TECHNOLOGIES  Customer Assist Care
Center  Callback Messaging Administration (cccCbkAdm)
from diskette.


LUCENT TECHNOLOGIES  Customer Assist Care Center
Callback Messaging Administration (pentium) 7.0.0

Using </> as the package base directory.

## Processing package information.

## Processing system information.

## Verifying package dependencies.

## Verifying disk space requirements.


Installing LUCENT TECHNOLOGIES  Customer Assist Care
Center  Callback Messaging
```

```
Administration as <cccCbkAdm>


## Executing preinstall script.

## Installing part 1 of 1.
```

The system lists the files it is installing. When the installation is finished, the system displays the message below:

```
Installation of LUCENT TECHNOLOGIES  Customer Assist
Care Center Callback Messaging Administration
(cccCbkAdm) was successful.
```

Installing Customer Assist Care Center Surveys

The next package installed from this diskette is Surveys. The system displays the following text when installing this package:

```
PROCESSING:

Set: LUCENT TECHNOLOGIES  Customer Assist Care Center
Callback Messaging & Survey Set (cccSetCBM) from
diskette.

Package: LUCENT TECHNOLOGIES  Customer Assist Care
Center  Surveys (cccSurvey) from diskette.


LUCENT TECHNOLOGIES  Customer Assist Care Center
Surveys (pentium) 7.0.0

Using </> as the package base directory.

## Processing package information.

## Processing system information.

## Verifying package dependencies.

## Verifying disk space requirements.


Installing LUCENT TECHNOLOGIES  Customer Assist Care
Center  Surveys as <cccSurvey>


## Executing preinstall script.

## Installing part 1 of 1.
```

The system lists the files it is installing. When the installation is finished, the system displays the message below:

```
Installation of LUCENT TECHNOLOGIES  Customer Assist
Care Center Surveys (cccSurvey) was successful.
```

5. If you chose to have the voice system started after the install, the system displays the following text:

   ```
   The Voice System is starting


   The Voice System is initializing cards


   The Voice System is still initializing cards
   Please wait...


   Startup of the Voice System is complete
   ```

   The system displays the message below to inform you it has finished installing the Callback Messaging & Survey Set from diskette:

   ```
   Processing of <LUCENT TECHNOLOGIES  Customer Assist
   Care Center  Callback Messaging & Survey Set> is
   completed.
   ```

6. Remove the cccSetCBM diskette from the disk drive.

Installing Speech Recognition

This diskette installs Speech Recognition.

Use the steps below to install Speech Recognition:

1. Insert the cccSpcRec diskette into the disk drive.
2. Enter **pkgadd -d diskette** at the UNIX prompt.

   The system displays the list of packages.
3. Enter **cccSpcRec** or its package number at the UNIX prompt.

   The system begins installing Speech Recognition, as follows:

   ```
   PROCESSING:
   Package: LUCENT TECHNOLOGIES  Customer Assist Care
   Center  Speech Recognition Administration (cccSpcRec)
   from diskette.
   LUCENT TECHNOLOGIES  Customer Assist Care Center
   Speech Recognition Administration (pentium) 7.0.0
   Using </> as the package base directory.
   Copyright (c) 1997 Lucent Technologies
   All Rights Reserved.
   ## Processing package information.
   ```

```
## Processing system information.

## Verifying package dependencies.

## Verifying disk space requirements.

Installing LUCENT TECHNOLOGIES  Customer Assist Care
Center  Speech Recognition Administration as
<cccSpcRec>

## Executing preinstall script.

## Installing part 1 of 1.
```

The system lists the files it is installing. When the installation is finished, the system displays the message below:

```
Installation of LUCENT TECHNOLOGIES  Customer Assist
Care Center Speech Recognition Administration
(cccSpcRec) was successful.
```

Installing Web Interface Server Set

The Web Interface Server Set installs the Apache Web Server and the Call Center WebReports.

Use the steps below to install the Web Interface Server Set:

1. Insert the cccSetWeb diskette into the disk drive.
2. Enter **pkgadd -d diskette** at the UNIX prompt.

   The system displays the list of packages.
3. Enter **cccSetWeb** or its package number at the UNIX prompt.

   The system begins installing the Web Interface Server Set, as follows:

```
PROCESSING:

Set: LUCENT TECHNOLOGIES  Customer Assist Care Center
Web Interface Server Set (cccSetWeb) from diskette.

LUCENT TECHNOLOGIES  Customer Assist Care Center  Web
Interface Server Set (pentium) 7.0.0

Using </> as the package base directory.

## Processing package information.

## Processing system information.

## Verifying package dependencies.

## Verifying disk space requirements.


Installing LUCENT TECHNOLOGIES  Customer Assist Care
Center  Web Interface Server Set as <cccSetWeb>
```

```
## Executing preinstall script.
```

Installing the Apache Web Server

The first package installed from the diskette is the Apache Web Server. The system displays the following text when installing this package:

```
PROCESSING:

Set: LUCENT TECHNOLOGIES  Customer Assist Care Center
Web Interface Server Set (cccSetWeb) from diskette.

Package: SPANLINK COMMUNICATIONS APACHE WEB SERVER
(WebServer) from diskette.

SPANLINK COMMUNICATIONS APACHE WEB SERVER (pentium) 2.1

Using </> as the package base directory.

## Processing package information.

## Processing system information.

## Verifying disk space requirements.

Installing SPANLINK COMMUNICATIONS APACHE WEB SERVER
as <WebServer>

## Executing preinstall script.

System Message

This utility installs the WebServer package.  Press

<delete> to abort

Strike ENTER when ready.
```

4. Press [ENTER] to install the Apache Web Server or [DELETE] to abort.

   The system adds a user webcall to the system and prompts you for a password, as follows:

   ```
   Adding user webcall to the system...

   New password:
   ```

5. Enter a password at the UNIX prompt.

   The system prompts you to confirm your entry, as follows:

   ```
   Re-enter new password:
   ```

6. Re-enter the password at the UNIX prompt.

   The system lists the files it is installing and prompts you as follows:

   ```
   Enter the domain name for access over the web,

   (for example www.customer.com):
   ```

7. Enter the domain name at the UNIX prompt.

   The system prompts you to confirm your entry, as follows:

   ```
   Please confirm the domain name is www.bianca.com (y/n):
   ```

8. Enter **y** to confirm the domain name or **n** to enter a new one.

   The system sets the domain name and prompts you as follows:

   ```
   Enter the e-mail address for administration messages,
   (for example administrator@customer.com):
   ```

9. Enter the e-mail address for administration messages at the UNIX prompt.

   The system prompts you to confirm your entry, as follows:

   ```
   postmaster@bianca.com (y/n):
   ```

10. Enter **y** to confirm administrator's email address or **n** to enter a new one.

    The system sets the administrator's email address and then determines whether another web server is installed on the system. If another web server is installed, the system displays the message below:

    ```
    Another web server has been detected on this system!
    Port 80 is most likely in use already therefore (the
    default).
    Enter a port other than 80 for web service (for example
    8000):
    ```

11. Enter the number of the port to use for web services at the UNIX prompt.

    The system prompts you to confirm your entry, as follows:

    ```
    Please confirm the port number is 8000 (y/n):
    ```

12. Enter **y** to confirm the port number or **n** to enter a new one.

    The system sets the port number and displays the messages below:

    ```
    VERY IMPORTANT NOTICE!!!
    If the Gold Systems web server is present make sure it
    resumes operation if the system is rebooted (according
    to Gold, it can be activated with
    /usr/add-on/webvru/utils/start_apache.)


    Entering web server into /etc/rc2.d directory as
    S88httpd file.
    ```

    The system lists the files it is installing. When the installation is finished, the system displays the message below:

    ```
    Installation of SPANLINK COMMUNICATIONS APACHE WEB
    SERVER (WebServer) was successful.
    ```

Installing Web Reports

The next package installed from the diskette is Web Reports. The system displays the following text when installing this package:

```
PROCESSING:

Set: LUCENT TECHNOLOGIES  Customer Assist Care Center
Web Interface Server Set (cccSetWeb) from diskette.

Package: LUCENT TECHNOLOGIES  Customer Assist Care
Center  Web Reports (cccWebRpt) from diskette.


LUCENT TECHNOLOGIES  Customer Assist Care Center  Web
Reports (pentium) 7.0.0

Using </> as the package base directory.

## Processing package information.

## Processing system information.

## Verifying package dependencies.

## Verifying disk space requirements.


Installing LUCENT TECHNOLOGIES  Customer Assist Care
Center Web Reports as <cccWebRpt>
```

The system lists the files it is installing. When the installation is finished, the system displays the message below:

```
Installation of LUCENT TECHNOLOGIES  Customer Assist
Care Center  Web Reports (cccWebRpt) was successful.
```

The system displays the message below to inform you it has finished installing the Web Interface Server Set from diskette:

```
Processing of <LUCENT TECHNOLOGIES  Customer Assist
Care Center  Web Interface Server Set> is completed.
```

13. Remove the Web Interface Server Set diskette from the disk drive.

Installing US English Language Set

The US English Language Set installs the language you selected.

Use the steps below to install the US English Language Set:

1. Insert the cccSetUSE diskette into the disk drive.
2. Enter **pkgadd -d diskette** at the UNIX prompt.

   The system displays the list of packages.
3. Enter **cccSetUSE** or its package number at the UNIX prompt.

The system begins installing the US English Language Set, as follows:

```
PROCESSING:

Set: LUCENT TECHNOLOGIES  Customer Assist Care Center
Language Set US English: US English - Female
(cccSetUSE) from diskette.

LUCENT TECHNOLOGIES  Customer Assist Care Center
Language Set US English: US English - Female (pentium)
7.0.0

Using </> as the package base directory.

## Processing package information.

## Processing system information.

## Verifying package dependencies.

## Verifying disk space requirements.

Installing LUCENT TECHNOLOGIES  Customer Assist Care
Center  Language Set US English: US English - Female as
<cccSetUSE>
```

Installing Platform Speech

The first package installed from this diskette is Platform Speech. The system displays the following text when installing this package:

```
PROCESSING:

Set: LUCENT TECHNOLOGIES  Customer Assist Care Center
Language Set

US English: US English - Female (cccSetUSE) from
diskette.

Package: LUCENT TECHNOLOGIES  Customer Assist Care
Center  Platform

Speech US English (cccPFNUSE) from diskette.


LUCENT TECHNOLOGIES  Customer Assist Care Center
Platform Speech US English (pentium) 7.0.0

Using </> as the package base directory.

## Processing package information.

## Processing system information.

## Verifying package dependencies.

## Verifying disk space requirements.
```

```
Installing LUCENT TECHNOLOGIES  Customer Assist Care
Center  Platform Speech US English as <cccPFNUSE>


## Executing preinstall script.


Checking talkfile....

This language will be the default language.

## Installing part 1 of 4.
```

The system lists the talkfiles it is installing. When the installation is finished, the system displays the message below:

```
Installation of LUCENT TECHNOLOGIES  Customer Assist
Care Center Platform Speech US English (cccPFNUSE) was
successful.
```

Installing Callback Messaging Speech

The next package installed from this diskette is Callback Messaging Speech. The system displays the following text when installing this package:

NOTE:
Callback Messaging Speech is installed only if Callback Messaging Runtime is loaded. If Callback Messaging Runtime is not loaded, the system informs you it has finished installing the US English Language Set and does not continue with the text below. The text below is displayed only when Callback Messaging Runtime is loaded.

```
PROCESSING:

Set: LUCENT TECHNOLOGIES  Customer Assist Care Center
Language Set US English: US English - Female
(cccSetUSE) from diskette.

Package: LUCENT TECHNOLOGIES  Customer Assist Care
Center  Callback Messaging Speech US English
(cccCFNUSE) from diskette.


LUCENT TECHNOLOGIES  Customer Assist Care Center
Callback Messaging Speech US English (pentium) 7.0.0

Using </> as the package base directory.

## Processing package information.

## Processing system information.

## Verifying package dependencies.

## Verifying disk space requirements.
```

```
Installing LUCENT TECHNOLOGIES  Customer Assist Care
Center  Callback Messaging Speech US English as
<cccCFNUSE>


## Executing preinstall script.


Checking talkfile....

This language will be the default language.

## Installing part 1 of 3.
```

The system lists the talkfiles it is installing. When the installation is finished, the system displays the message below:

```
Installation of LUCENT TECHNOLOGIES  Customer Assist
Care Center Callback Messaging Speech US English
(cccCFNUSE) was successful.
```

The system displays the message below to inform you it has finished installing the US English Language Set from diskette:

```
Processing of <LUCENT TECHNOLOGIES  Customer Assist
Care Center  Language Set US English: US English -
Female> is completed.
```

4. Remove the US English Language Set diskette from the disk drive.

Removing Software

The Customer Assist software should be removed in reverse order:

- cccSet<*Language*>
- cccSetWeb
- cccSetCBM
- cccSet

NOTE:
If you have more than one Language package installed, the system will not allow you to remove the base language at this time. Before removing a base language, use the CHG_LANG function to change the base language of the package.

Removing Language

Use the following procedure to remove the US English Language Set from the system:

1. Enter **pkgrm** at the UNIX prompt.

   The system displays the list of packages.

2. Enter **cccSetUSE** or its package number at the UNIX prompt.

   The system displays the name of the installed set and prompts you to confirm that you want to remove it:

   ```
   cccSetUSE       LUCENT TECHNOLOGIES  Customer Assist
   Care Center  Language Set US English: US English -
   Female (pentium) 7.0.0
   ```

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

3. Enter **y** to remove the package or **q** to quit.

   The system removes Callback Messaging Speech and then Platform Speech. It displays the following text when removing Callback Messaging Speech:

   ```
   ## Removing installed package instance <cccCFNUSE>
   ```

   ```
   ## Verifying package dependencies.
   ```

   ```
   ## Processing package information.
   ```

   ```
   ## Executing preremove script.
   ```

   ```
   ## Removing pathnames in <none> class
   ```

   The system lists the talkfiles it is removing. When it finishes removing Callback Messaging Speech, it displays the message below:

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

The system removes Platform Speech. It displays the following text when removing Platform Speech:

```
## Removing installed package instance <cccPFNUSE>
## Verifying package dependencies.
## Processing package information.
## Executing preremove script.
## Removing pathnames in <none> class
```

The system lists the talkfiles it is removing. When it finishes removing Platform Speech, it displays the message below:

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

The system displays the message below when it has finished removing the US English Language Set:

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

Removing Web Interface Server Set

Use the following procedure to remove the Web Interface Server Set from the system:

1. Enter **pkgrm** at the UNIX prompt.

   The system displays the list of packages.

2. Enter **cccSetWeb** or its package number at the UNIX prompt.

   The system displays the name of the installed set and prompts you to confirm that you want to remove it:

   ```
   cccSetWeb       LUCENT TECHNOLOGIES  Customer Assist
   Care Center  Web Interface Server Set
                        (pentium) 7.0.0
   Do you want to remove this set [y,n,?,q] y
   ```

3. Enter **y** to remove the package or **q** to quit.

   When the system finishes removing Web Reports, it displays the message below:

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

   The system removes the Web Server. It displays the following text when removing the Web Server:

   ```
   ## Removing installed package instance <WebServer>
   ## Verifying package dependencies.
   ## Processing package information.
   ## Executing preremove script.
   ```

```
## Removing pathnames in <none> class
```

The system lists the files it is removing and then prompts you to confirm you want to remove the user webcall:

```
Do you want to remove the user webcall (y/n)?
```

4. Enter **y** to remove the user webcall or **n** to abort.

   When the system finishes removing the Web Server, it displays the message below:

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

   The system displays the message below when it has finished removing the Web Interface Server Set:

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

Removing Speech Recognition Set

Use the following procedure to remove the Speech Recognition Set from the system:

1. Enter **stop_vs** at the UNIX prompt to stop the voice system.
2. Enter **pkgrm** at the UNIX prompt.

   The system displays the list of packages.

3. Enter **cccSpcRec** or its package number at the UNIX prompt.

   The system displays the name of the installed set and prompts you to confirm that you want to remove it:

   ```
   cccSpcRec      LUCENT TECHNOLOGIES Customer Assist Care
   Center  Speech Recognition Administration (pentium)
   7.0.0
   ```

   ```
   Do you want to remove this package [yes,no,?,quit]
   ```

4. Enter **y** to remove the package or **q** to quit.

   When the system finishes removing speech recognition, it displays the message below:

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

Removing Callback Messaging and Survey Set

Use the following procedure to remove the Callback Messaging & Survey Set from the system:

1. Enter **stop_vs** at the UNIX prompt to stop the voice system.
2. Enter **pkgrm** at the UNIX prompt.

   The system displays the list of packages.

3. Enter **cccSetCBM** or its package number at the UNIX prompt.

   The system displays the name of the installed set and prompts you to confirm that you want to remove it:

   ```
   cccSetCBM       LUCENT TECHNOLOGIES  Customer Assist
   Care Center  Callback Messaging & Survey Set

                       (pentium) 7.0.0

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

4. Enter **y** to remove the package or **q** to quit.

   The system begins removing Surveys. It displays the following text when removing Surveys:

   ```
   ## Removing installed package instance <cccSurvey>

   ## Verifying package dependencies.

   ## Processing package information.

   ## Executing preremove script.

   ## Removing pathnames in <none> class
   ```

   The system lists the files it is removing. When it finishes removing Surveys, it displays the message below:

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

   The system begins removing Callback Messaging Administration. It displays the following text when removing Callback Messaging Administration:

   ```
   ## Removing installed package instance <cccCbkAdm>

   ## Verifying package dependencies.

   ## Processing package information.

   ## Executing preremove script.

   ## Removing pathnames in <none> class
   ```

   The system lists the files it is removing. When it finishes removing Callback Messaging Administration, it displays the message below:

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

   The system begins removing Callback Messaging Runtime. It displays the following text when removing Callback Messaging Runtime:

   ```
   ## Removing installed package instance <cccCbkRun>

   ## Verifying package dependencies.

   ## Processing package information.

   ## Executing preremove script.
   ```

The system lists the files it is removing. When it finishes removing Callback Messaging Runtime, it displays the message below:

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

Removing the Base Call Router Set

Use the following procedure to remove the Base Call Router Set from the system:

1. Enter **pkgrm** at the UNIX prompt.

   The system displays the list of packages.

2. Enter **cccSet** or its package number at the UNIX prompt.

   The system displays the name of the installed set and prompts you to confirm that you want to remove it:

   ```
   cccSet          LUCENT TECHNOLOGIES  Customer Assist
   Care Center  Base Call Router Set

                      (pentium) 7.0.0

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

3. Enter **y** to remove the package or **q** to quit.

   The system begins removing the Call Center Utilities package. When it finishes removing the Call Center Utilities, it displays the message below:

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

   The system begins removing Custom Call Routing. When it finishes removing Custom Call Routing, it displays the message below:

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

   The system begins removing Platform Administration. When it finishes removing Platform Administration, it displays the message below:

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

   The system begins removing Platform Runtime. When it finishes removing Platform Runtime, it displays the message below:

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

   The system begins removing the Call Center Base. When it finishes removing the Call Center Base, it displays the message below:

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

   The system begins removing the Dial Plan Default package. When it finishes removing the Dial Plan Default package, it displays the message below:

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

   The system begins removing the Dial Plan Base package. When it finishes removing the Dial Plan Base package, it displays the message below:

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

The system begins removing the Spanlink Base package. When it finishes removing the Spanlink Base package, it displays the message below:

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

The system finishes removing the Base Call Router Set. When it finishes removing the Base Call Router Set, it displays the message below:

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

Summary

While working through this chapter, you learned how to install and remove Customer Assist and its packages.

Upgrades

3

This chapter describes the procedures for upgrading to V7.0 from previous versions of Customer Assist.

Previous versions of Customer Assist can be upgraded to Customer Assist V7.0 following four different paths, depending on the version of Customer Assist:

- The first path is for CONVERSANT Solutions for DEFINITY Call Center 1.x and 2.x.
- The second path is for CONVERSANT Solutions for DEFINITY Call Center 3.0 and 4.x.
- The third path is for Customer Assist 6.0.4.
- The fourth path is for Customer Assist 6.1.

Upgrade Steps for CONVERSANT Solutions for DEFINITY Call Center 1.x and 2.x.

Upgrading from CONVERSANT Solutions for DEFINITY Call Center 1.x or 2.x to Customer Assist V7.0 requires the Mailbox and Speech Conversion Utility 2.0 package. See Appendix B, ‘‘Mailbox and Speech Conversion Utility’’, for more information on that package.

Use the following steps to log in to the system:

1. If you are not already logged in, log into Customer Assist by following the instructions in “Logging In” on page 2-2 of the *INTUITY CONVERSANT System Customer Assist User Guide, 585-313-706.*
2. Start at the Customer Assist main menu and select

```
> System Administration
    > System Backup/Restore
```

On the Existing CONVERSANT with CONVERSANT Solutions for DEFINITY Call Center 1.x or 2.x

Install the Mailbox and Speech Conversion Utility 2.0 package on the CONVERSANT following the steps in Chapter 2, "Installation and Removal".

Backing up the Platform

This section describes the procedure for backing up the Platform database and configurations.

Backing up the Vector Database

Use the following steps to backup the vector database:

1. Start at the System Backup/Restore menu and select Backup Vector Database to Floppy Disk.

   The system displays the Backup Vector Database to Floppy Disk form.

2. Enter **UNIX** in the `UNIX or DOS format` field to specify the type of diskette used in the backup.
3. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

4. Insert a UNIX formatted diskette into drive 0.
5. Press SAVE (F3) to begin backing up the database.
6. Press (ENTER) when the system prompts for confirmation.
7. Once the back up is done, remove the diskette from the drive and label it accordingly.

Backing up Platform Speech

Use the following steps to backup Platform speech:

1. Start at the System Backup/Restore menu and select Backup/Restore Speech.

2. Enter **backup** in the `Backup or Restore` field. Press CHOICES (F2) to select from a list.
3. Enter **Vector Phrases** in the `Talkfile` field. Press CHOICES (F2) to select from a list.
4. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

5. Insert a UNIX formatted diskette into drive 0.
6. Press SAVE (F3) to begin backing up speech.
7. Press (ENTER) when the system prompts for confirmation.

   The system retrieves the existing data from the phrase database, converts the phrases to UNIX format, and writes the converted data to a diskette.

8. Once the backup is done, remove the diskette from the drive and label it accordingly.

Backing up the Callback Messaging Database and Configurations

This section describes the procedure for backing up the Callback Messaging Database and Configurations.

Backing up Mailbox Speech

Use the following steps to backup Mailbox speech:

1. Start at the System Backup/Restore menu and select Backup/Restore Speech.

   The system displays the Speech Backup/Restore form.

2. Enter **backup** in the `Backup or Restore` field. Press CHOICES (F2) to select from a list.
3. Enter **Mailbox Phrases** in the `Talkfile` field. Press CHOICES (F2) to select from a list.
4. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

5. Insert a UNIX formatted diskette into drive 0.
6. Press SAVE (F3) to begin backing up speech.
7. Press (ENTER) when the system prompts for confirmation.

The system retrieves the existing data from the phrase database, converts the phrases to UNIX format, and writes the converted data to a diskette.

8. Once the backup is done, remove the diskette from the drive and label it accordingly.

Backing up Mailbox Configurations

Use the following steps to backup the mailbox configurations:

1. Start at the System Backup/Restore menu and select Backup/Restore Mailbox Configuration.
2. Enter **backup** in the `Backup or Restore` field. Press CHOICES (F2) to select from a list.
3. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

4. Insert a UNIX formatted diskette into drive 0.
5. Press (ENTER) when the system prompts for confirmation.

   The system retrieves the existing data from the Callback Messaging database, converts the data into the version 2.0 format, and writes the converted data to a diskette.

6. Once the backup is done, remove the diskette from the drive and label it accordingly.
7. Press CANCEL (F6) once to return to the System Administration menu.

Backing up Mailbox Global Settings

Use the following steps to backup the Mailbox Global Settings:

1. Return to the System Administration menu and select

```
> Callback Messaging Administration
    > Mailbox Global Settings
```

2. Write down on a piece of paper the settings for the `Message Waiting Lamp Access Channel`, `Message Waiting Lamp On Code`, `Message Waiting Lamp Off Code`, `Outside Line Access Code`, `Local Area Code` and `Type transfer to caller` fields. These values have to be entered manually in the Customer Assist V7.0 because the location of these fields has moved.

If the CONVERSANT has CONVERSANT Solutions for DEFINITY Call Center 2.x loaded, you must also use the following steps:

1. Enter **cd /usr/add-on/ccc/OBJECTS**
2. Enter **cbk_menu** to access the Callback Configuration Parameters administration.
3. Write down on a piece of paper the settings for the `Post flash conference pause time`, `Pause before adding agent to call`, `Long distance access code` and `Force Press 1 for agent callback pickup` fields. These values have to be entered manually in Dial Plan Version 1.4 because the location of these fields has changed.

Backing up the Custom Call Routing

Custom Call Routing on CONVERSANT Solutions for DEFINITY Call Center 1.x and 2.x do not allow you to export routing table data. If the data in the routing tables does not exist anywhere else, use the following steps to get a list of the data for each routing table so that it can be entered manually into the routing tables in Customer Assist V7.0.

1. Start at the System Administration menu and select

```
> Report Generation
```

```
> Routing Table Report
```

2. Enter the name of an existing routing table in the `Routing Table` field.
3. Press CLOSE (F3) to generate the report.
4. Press PRINT (F3) to print the report.
5. Repeat steps 2 through 3 for each routing table.

Once the database and configuration of existing CONVERSANT Solutions packages have been backed up, the CONVERSANT Solutions packages can be removed. See “Removing the Call Center Software” on pages 10-12 of the CONVERSANT Solutions for DEFINITY Call Center manual for more information.

Now the CONVERSANT can be upgraded to CONVERSANT V7.0.

On the New CONVERSANT with Customer Assist V7.0

Install the Customer Assist V7.0 packages following the steps in Chapter 2, ‘‘Installation and Removal’’.

Restoring the Platform Database and Configurations

Use the following steps to restore the Platform database and configurations:

1. Start at the System Administration menu and select

```
> System Backup/Restore
    > Restore Data from Previous Version
        > Restore Development Vector Database
```

2. Insert a UNIX formatted diskette with the vector database into drive 0.
3. Enter **UNIX** in the `UNIX or DOS format` field to specify the type of diskette used in the backup.
4. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

5. Press SAVE (F3) to begin restoring the database.
6. Press CONT (F3) when the system prompts for confirmation.
7. Remove the diskette from the drive after the restore is done.

Restoring Platform Speech

Use the following steps to restore Platform speech:

1. Start at the System Administration menu and select

```
> System Backup/Restore
    > Restore Data from Previous Version
        > Restore Speech
```

2. Insert the diskette with the Platform speech into drive 0.
3. Enter **0** in the `Drive 0 or Drive 1` field.

NOTE:
The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

4. Enter **224** in the `Talkfile` field to restore the Vector Phrases.
5. Press SAVE (F3) to begin restoring speech.
6. Press (ENTER) when the system prompts for confirmation.
7. Remove the diskette from the drive after the restore is completed.

Restoring the Callback Messaging Database and Configurations

Use the following steps to restore the Callback Messaging Database and Configurations:

1. Start at the Customer Assist main menu and select System Administration.

Restoring Mailbox Speech

Use the following steps to restore Mailbox speech:

1. Start at the System Administration menu and select

```
> System Backup/Restore
    > Restore Data from Previous Version
        > Restore Speech
```

2. Insert the diskette with the Mailbox speech into drive 0.
3. Enter **0** in the `Drive 0 or Drive 1` field.

NOTE:
The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

4. Enter **242** in the `Talkfile` field to restore the Mailbox phrases.
5. Press SAVE (F3) to begin restoring speech.
6. Press (ENTER) when the system prompts for confirmation.
7. Remove the diskette from the drive after the restore is done.

Restoring Mailbox Configurations

Use the following steps to restore the mailbox configurations:

1. Start at the System Administration menu and select

```
> System Backup/Restore
    > Restore Data from Previous Version
        > Restore Mailbox Configuration
```

2. Insert the diskette with the mailbox configuration into drive 0.
3. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

4. Press SAVE (F3) to begin restoring of the database.
5. Press (ENTER) when the system prompts for confirmation.
6. Remove the diskette from the drive after the restore is done.
7. Press CANCEL (F6) until you return to the System Administration menu.

Restoring Mailbox Settings

Use the following steps to restore the mailbox settings:

1. Start at the System Administration menu and select

```
> Callback Messaging Administration
    > Mailbox Global Settings
```

2. Set the `Force Press 1 for agent callback pickup` field using the notes from the previous configuration.
3. Press SAVE (F3) to save the settings.
4. Select Mailbox Administration.
5. For each mailbox that does customer callback, set the `Outside line access code` field if needed from the notes of the previous configuration.

Restoring Dial Plan Configuration

The notes from the previous configuration can be used to set certain site-specific information in the Dial Plan administration. Use the following steps to restore the site-specific configuration:

1. See the *Dial Plan manual* for information on how to log in to Dial Plan.
2. Start at the Dial Plan Administration main menu and select

```
> Application Specific Settings
    > Customer Assist Care Center
```

3. Set the `Outside Access Code` and `Long Distance Access Code` fields using the notes of the previous configuration.
4. Set `Default MakeCall Type` field based on the `Type transfer to call` setting in the previous version.
5. Press CLOSE (F3) to save the new settings.
6. Press CANCEL (F6) to return to the Dial Plan Administration main menu.
7. Start at the Dial Plan Administration main menu and select

```
> Area Specific Settings
    > Area Codes and Prefixes
```

8. Set the `Local City/Area Code` field using the notes of the previous configuration.
9. Press CLOSE (F3) to save the new settings.
10. Press CANCEL (F6) to return to the Dial Plan Administration main menu.
11. Start at the Dial Plan Administration main menu and select

```
> Function Specific Settings
    > Hold Actions
```

12. Set the `Initiate Hold` field based on the `Post flash conference pause time` settings in the previous version.

13. Set the `Retrieve from Hold` field based on `Pause before adding agent to call` settings in the previous version.
14. Press CLOSE (F3) to save the new settings.
15. Select Intelligent Actions.
16. Set the `Wait for Response` field based on the `Type transfer to caller` setting in the previous version.
17. Press CLOSE (F3) to save the new settings.
18. Select Make Call Actions.
19. Set the `Intelligent Make Call` field based on the `Type transfer to caller` setting in the previous version.
20. Press CLOSE (F3) to save the new settings.
21. Select Message Waiting Lights.
22. Set the `Channel` field based on the `Message Waiting Lamp Access Channel` settings in the previous version.
23. Set the `ON Access Code` field based on the `Message Waiting Lamp On Code` settings in the previous version.
24. Set the `OFF Access Code` field based on the `Message Waiting Lamp Off Code` settings in the previous version.
25. Press CLOSE (F3) to save the new settings.

Restoring the Custom Call Routing Databases that were Printed in Reports

Use the following steps to restore the Custom Call Routing databases that were printed in Reports:

1. Start at the Customer Assist main menu and select

```
> System Administration
    > Custom Call Routing Administration
        > Routing Table Administration
            > Add Table
```

2. Enter a name for your routing table, the maximum number of records, and an optional description of the routing table.
3. Repeat step 2 for each routing table.

4. Press CANCEL (F6) to return to the Custom Call Routing Administration menu.
5. Start at the Custom Call Routing Administration menu and select

```
> Record Administration
    > Add Record
```

6. Enter the name of a routing table and values of a record as listed in the routing table report.
7. Press ADD (F3) to add the record.
8. Repeat steps 5 through 7 for each record in each of the routing tables.

Restoring the Custom Call Routing Database when the Data Exists in Other Files

Use the following steps to restore the Custom Call Routing databases when the data exists in other files:

1. Start at the Customer Assist main menu and select

```
> System Administration
    > Custom Call Routing Administration
        > Routing Table Administration
            > Add Table
```

2. Enter a name for your routing table, the maximum number of records and an optional description of the routing table.
3. Repeat step 2 for each routing table.
4. Press CANCEL (F6) to return to the Custom Call Routing Administration menu.
5. Select Import/Export Data from/to Floppy.
6. For each routing table, complete the form to import the data into the table. See "Import/Export Data from/to Diskette" on page 7-32 of the *INTUITY CONVERSANT System Customer Assist User Guide, 585-313-706* for more information.

Upgrade Steps for CONVERSANT Solutions for DEFINITY Call Center 3.0 and 4.x.

Upgrading from CONVERSANT Solutions for DEFINITY Call Center 3.0 or 4.x to Customer Assist V7.0 does not require the Mailbox and Speech Conversion Utility 2.0 package. Data that is backed up using the normal backup option in the administration can be directly converted by Customer Assist V7.0. Use the following steps to log in to the system:

1. If you are not already logged in as root, log into the CONVERSANT Solutions Administration interface by following the instructions in ''Logging In'' on page 2-2 of the *INTUITY CONVERSANT System Customer Assist User Guide*, 585-313-706.

1. Start at the Customer Assist main menu and select

```
> System Administration
```

```
> System Backup/Restore
```

On the Existing CONVERSANT with CONVERSANT Solutions for DEFINITY Call Center 3.0 or 4.x

Backing up the Platform Database and Configurations

Use the following steps to backup the Platform database and configurations:

1. Start at the Customer Assist main menu and select System Administration.

Backing up the Vector Database

Use the following steps to backup the vector database:

1. Start at the System Administration menu and select

```
> System Backup/Restore
```

```
> Backup Vector Database to Floppy Disk
```

2. Insert a UNIX formatted diskette into drive 0.

3. Enter **UNIX** in the `UNIX or DOS format` field to specify the type of diskette used in the backup.
4. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

5. Press SAVE (F3) to begin backing up the database.
6. Press (ENTER) when the system prompts for confirmation.
7. Remove the diskette from the drive after the backup is done, and label it accordingly.

Backing up Platform Speech

Use the following steps to back up Platform speech:

1. Start at the System Administration menu and select System Backup/Restore.
2. Enter **Backup** in the `Backup or Restore` field.
3. Enter **224** in the `Talkfile` field to back up the Vector Phrases.
4. Insert a UNIX formatted diskette into drive 0.
5. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

6. Press SAVE (F3) to begin backing up speech.
7. Press (ENTER) when the system prompts for confirmation.
8. Remove the diskette from the drive after the backup is done, and label it accordingly.

Backing up the Callback Messaging Database and Configurations

Use the following steps to back up the Callback Messaging database and configurations:

1. Start at the Customer Assist main menu and select System Administration.

Backing up Mailbox Speech

Use the following steps to backup Mailbox speech:

1. Start at the System Administration menu and select

```
> System Backup/Restore
```

```
> Backup/Restore Speech
```

The system displays the Speech Backup/Restore form.

2. Enter **Backup** in the `Backup or Restore` field.
3. Enter **242** in the `Talkfile` field to backup Mailbox Phrases.
4. Insert a UNIX formatted diskette into drive 0.
5. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

6. Press SAVE (F3) to begin backing up speech.
7. Press (ENTER) when the system prompts for confirmation.
8. Remove the diskette from the drive after the backup is done, and label it accordingly.

Backing up Mailbox Standard Speech

Use the following steps to backup Mailbox Standard speech:

1. Start at the System Administration menu and select System Backup/Restore.

   NOTE:
   CONVERSANT Solutions V3.0 does not have Mailbox Standard Speech.

2. Select Backup/Restore Speech.

   The system displays the Speech Backup/Restore form.

3. Enter **Backup** in the `Backup or Restore` field.
4. Enter **243** in the `Talkfile` field to backup Mailbox Standard Phrases for US English. Press CHOICES (F2) for the list of valid inputs.
5. Insert a UNIX formatted diskette into drive 0.
6. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

7. Press SAVE (F3) to begin backing up speech.
8. Press (ENTER) when the system prompts for confirmation.
9. Remove the diskette from the drive after the backup is done, and label it accordingly.

Backing up Mailbox Configurations

Use the following steps to backup the mailbox configurations:

1. Start at the System Administration and select

```
> System Backup/Restore
```

```
> Backup/Restore Mailbox Configuration
```

2. Enter **Backup** in the `Backup or Restore` field.
3. Insert a UNIX formatted diskette into drive 0.
4. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

5. Press SAVE (F3) to begin backing up the mailbox configuration.
6. Press (ENTER) when the system prompts for confirmation.
7. Remove the diskette from the drive after the backup is done, and label it accordingly.
8. Press CANCEL (F6) until you return to the System Administration menu.

Backing up Mailbox Settings

Use the following steps to backup the mailbox settings:

1. Start at the System Administration menu and select

```
> Callback Messaging Administration
```

```
> Mailbox Global Settings
```

2. Do one of the following:

- For CONVERSANT Solutions V3.0, write down on a piece of paper the settings for the `Message Waiting Lamp Access channel`, `Message Waiting Lamp On Code`, `Message Waiting Lamp Off Code`, `Outside Line Access Code`, `Local Area Code` and `Type transfer to caller` fields.
- For CONVERSANT Solutions V4.0, write down on a piece of paper the settings for the `Message Waiting Lamp Access channel`, `Message Waiting Lamp On code`, `Message Waiting Lamp Off code`, `Local area code` and `Transfer method` fields.

NOTE:
These values have to be entered manually in Dial Plan V1.4 because the location of these fields has changed.

Backing up Callback Parameters

Use the following steps to backup callback parameters:

1. Enter **cd /usr/add-on/ccc/OBJECTS**
2. Enter **cbk_menu** to access the Callback Configuration Parameters administration.
   - For CONVERSANT Solutions V3.0, write down on a piece of paper the settings for `Post flash conference pause time`, `Pause before adding agent to call`, `Long distance access code`, `Force Press 1 for agent callback pickup`, `Speak transcription segment numbers`, `Long distance suffix code` and `Play message header information` fields.
   - For CONVERSANT Solutions V4.0, write down on a piece of paper the settings for `Post flash conference pause time`, `Pause before adding agent to call`, `Callback setup and ring time`, `Long distance access code`, `Force Press 1 for agent callback pickup`, `Speak transcription segment numbers`, `Long distance suffix code`, `Play message header information` and `Number of confirmation chances` fields.

     NOTE:
     These values have to be entered manually in Dial Plan V1.4 because the location of these fields has changed.

Backing up the Custom Call Routing Tables

Use the following steps to backup the Custom Call Routing tables:

1. Start at the Customer Assist main menu and select

```
> System Administration
  > Custom Call Routing Administration
    > Import/Export Data from/to Floppy
```

2. Enter **Export** in the `Import/Export` field.
3. Enter the name of an existing routing table in the `Routing Table Name` field.
4. Insert a DOS formatted diskette into drive 0.

   NOTE:
   The same DOS diskette can be used to hold data for more than one routing table if there is sufficient space on the diskette. If not, use a different diskette.

5. Enter **A** in the `Drive A or Drive B` field.
6. If the diskette is placed in drive 1, enter **B** in this field.
7. Enter the name of the destination file where the data will be written.

   NOTE:
   A different filename should be used for each routing table.

8. Press SAVE (F3) to begin backing up the routing table data.
9. Remove the diskette from the drive after the backup is done, and label it accordingly.

   NOTE:
   If the same diskette will be used to hold data for more than one routing table, leave it in the drive until the diskette is full.

10. Repeat steps 2 through 10 for each routing table.

Once the database and configuration of existing CONVERSANT Solutions packages have been backed up, the CONVERSANT Solutions packages can be removed. See “Removing the CONVERSANT Solutions Software” on page 10-13 of the *CONVERSANT Solutions for DEFINITY Call Center* manual for more information.

Now the CONVERSANT can be upgraded to CONVERSANT V7.0.

On the New CONVERSANT with Customer Assist V7.0

Install the Customer Assist V7.0 packages following the steps in Chapter 2, ‘‘Installation and Removal’’.

Restoring the Platform Database and Configurations

Use the following steps to restore the platform database and configurations:

1. Start at the Customer Assist main menu and select System Administration.

Restoring Vector Database

Use the following steps to restore the vector database:

1. Start at the System Administration menu and select

```
> System Backup/Restore
  > Restore Data from Previous Version of
  Call Center
    > Restore Development Vector Database
```

2. Insert a UNIX formatted diskette with the vector database into drive 0.
3. Enter **UNIX** in the `UNIX or DOS format` field to specify the type of diskette used in the backup.
4. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

5. Press SAVE F3 to begin restoring the database.
6. Press CONT F3.
7. Remove the diskette from the drive after the restore is done.

Restoring Platform Speech

Use the following steps to restore the Platform speech:

1. Start at the System Backup/Restore menu and select

```
> Restore Data from Previous Version of
Call Center
```

```
> Backup/Restore Speech
```

2. Enter **Restore** in the `Backup or Restore` field.
3. Insert the diskette with the Platform speech into drive 0.
4. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

5. Enter **Vector Phrase** in the `Talkfile` field to restore the Vector Phrase. Press CHOICES (F2) to select from a list.
6. Press SAVE (F3) to begin restoring speech.
7. Press (ENTER) when the system prompts for confirmation.
8. Remove the diskette from the drive after the restore is done.

Restoring the Callback Messaging Database and Configurations

Use the following steps to restore the Callback Messaging database and configurations:

1. Start at the Customer Assist main menu and select System Administration.

Restoring Mailbox Speech

Use the following steps to restore Mailbox speech:

1. Start at the System Administration menu and select

```
> System Backup/Restore
```

```
> Restore Data from Previous Version of
Call Center
```

```
> Backup/Restore Speech
```

2. Enter **Restore** in the `Backup or Restore` field.
3. Insert the diskette with the Mailbox speech into drive 0.
4. Enter **0** in the `Drive 0 or Drive 1` field.

NOTE:
The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

5. Enter **Mailbox Phrases** in the `Talkfile` field to restore the Mailbox Phrases. Press CHOICES (F2) to select from a list.
6. Press SAVE (F3) to begin restoring speech.
7. Press (ENTER) when the system prompts for confirmation.
8. Remove the diskette from the drive after the restore is done.

Restoring Mailbox Standard Speech

Use the following steps to restore Mailbox Standard speech:

1. Start at the System Administration menu and select

```
> Backup/Restore
  > Restore Data from Previous Version of
  Call Center
    > Restore Speech
```

2. Insert the diskette with the Mailbox Standard speech into drive 0.
3. Enter **0** in the `Drive 0 or Drive 1` field.

NOTE:
The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

4. Enter **6102** in the `Talkfile` field to restore Mailbox Standard Phrases for US English. Enter **243** for Mailbox Standard Phrases from CONVERSANT Solutions V4.0. Press CHOICES (F2) for the list of valid inputs.
5. Press SAVE (F3) to begin restoring speech.
6. Press (ENTER) when the system prompts for confirmation.
7. Remove the diskette from the drive after the restore is done.

Restoring Mailbox Configurations

Use the following steps to restore mailbox configurations:

1. Start at the System Administration menu and select

```
> System Backup/Restore
    > Restore Data from Previous Version of
    Call Center
        > Restore Mailbox Configuration
```

2. Insert the diskette with the mailbox configurations into drive 0.
3. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

4. Press SAVE (F3) to begin restoring the database.
5. Press (ENTER) when the system prompts for confirmation.
6. Remove the diskette from the drive after the restore is done.
7. Press CANCEL (F6) until you return to the System Administration menu.

Restoring Mailbox Settings

Use the following steps to restore mailbox settings:

1. Start at the System Administration menu and select

```
> Callback Messaging Administration
    > Mailbox Global Settings
```

2. From the notes of the previous configuration, set the `Force Press 1 for agent callback pickup`, `Speak transcription segment numbers` and `Play message header information` fields. If the upgrade is from CONVERSANT Solutions V4.0, set the `Number of confirmation chances` field also.
3. Press SAVE (F3) to save the settings.
4. Select Mailbox Administration.
5. For each mailbox that does customer callback, set the `Outside line access code` field if needed from the notes of the previous configuration.

   NOTE:
   This applies only if upgrading from CONVERSANT Solutions V3.0.

Restoring Dial Plan Configuration

The notes of the previous configuration can be used to set certain site-specific information in the Dial Plan administration. Use the following steps to restore site-specific configuration:

1. See the *Dial Plan manual* for information on how to log in to Dial Plan.
2. Start at the Dial Plan Administration main menu and select

```
> Application Specific Settings
    > Customer Assist
```

3. From the notes of the previous configuration, set the `Outside Access Code`, `Long Distance Access Code` and `Ending Accounting Code` fields.
4. Set the `Default MakeCall Type` field based on the `Type transfer to call Transfer method` setting in the previous version.
5. Press CLOSE (F3) to save the new settings.
6. Start at the Dial Plan Administration main menu and select

```
> Area Specific Settings
    > Area Codes and Prefixes
```

7. Set the `Local City/Area Code` field using the notes of the previous configuration.
8. Press CLOSE (F3) to save the new settings.
9. Press CANCEL (F6) to return to the Dial Plan Administration main menu.
10. Start at the Dial Plan Administration main menu and select

```
> Switch Specific Settings
    > Pre and Post Codes
```

11. Set the `Ending Accounting Code Pre` and `Ending Accounting Code Post` fields based on the `Long distance suffix code` settings in the previous version.
12. Press CLOSE (F3) to save the new settings.

13. Start at the Dial Plan Administration main menu and select

```
> Function Specific Settings
    > Hold Actions
```

14. Set the `Initiate Hold` field based on the `Post flash conference pause time` settings in the previous version.
15. Set the `Retrieve from Hold` field based on the `Pause before adding agent to call` settings in the previous version.
16. Press CLOSE (F3) to save the new settings.
17. Select Intelligent Actions.
18. Set the `Wait for Response` field based on the `Type transfer to caller/Transfer method` and `Callback setup and ring time` setting in the previous version.
19. Press CLOSE (F3) to save the new settings.
20. Select Make Call Actions.
21. Set the `Intelligent Make Call` field based on the `Type transfer to caller/Transfer method` setting in the previous version.
22. Press CLOSE (F3) to save the new settings.
23. Select Message Waiting Lights.
24. Set the `Channel` field based on the `Message Waiting Lamp Access Channel` settings in the previous version.
25. Set the `ON Access Code` field based on the `Message Waiting Lamp On Code` settings in the previous version.
26. Set the `OFF Access Code` field based on the `Message Waiting Lamp Off Code` settings in the previous version.
27. Press CLOSE (F3) to save the new settings.

Restoring the Custom Call Routing Database

Use the following steps to restore the Custom Call Routing database:

1. Start at the System Administration menu and select

```
> Custom Call Routing Administration
    > Routing Table Administration
        > Add Table
```

2. Enter a name for your routing table, the maximum number of records and an optional description of the routing table.
3. Repeat step 2 for each routing table.
4. Press CANCEL (F6) to return to the Custom Call Routing Administration menu.
5. Select Import/Export Data from/to Floppy.
6. For each routing table, complete the form to import the data into the table. See "Import/Export Data from/to Diskette" on page 7-32 of the *INTUITY CONVERSANT System Customer Assist User Guide*, 585-313-706 for more information.

Upgrade Steps from Customer Assist V6.0.x to Customer Assist V7.0

Upgrading from Customer Assist V6.0.x to the Generally Available (GA) Customer Assist V7.0 does not require the Mailbox and Speech Conversion Utility 2.0 package. The data backed up using the normal backup option in the administration can be directly converted and restored by Customer Assist. Use the following steps to log in to the system:

1. If you are not already logged in as root, log into Customer Assist by following the instructions in "Logging In" on page 2-3 of the *INTUITY CONVERSANT System Customer Assist User Guide, 585-313-706*.
2. Start at the Customer Assist main menu and select

```
> System Administration
    > System Backup/Restore
```

On the Existing CONVERSANT with Customer Assist V6.0.x

The sections below describe the procedures used to upgrade from V6.0.4 to V7.0.

Backing up the Platform Database and Configurations

Use the following steps to backup the Platform database and configurations:

1. Start at the Customer Assist main menu and select System Administration.

Backing up Vector Database

Use the following steps to backup the vector database:

1. Start at the System Administration menu and select

```
> Backup/Restore
```

```
> Backup Vector Database to Floppy Disk
```

2. Insert a UNIX formatted diskette into drive 0.
3. Enter **UNIX** in the `UNIX or DOS format` field to specify the type of diskette used in the backup.
4. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

5. Press SAVE (F3) to begin backing up the database.
6. Press (ENTER) when the system prompts for confirmation.
7. Remove the diskette from the drive after the backup is done, and label it accordingly.

Backing up Platform Speech

Use the following steps to backup Platform speech:

1. Start at the System Administration menu and select System Backup/Restore.
2. Enter **Backup** in the `Backup or Restore` field.
3. Insert a UNIX formatted diskette into drive 0.

4. Enter **Vector Phrases** in the `Talkfile` field.
5. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

6. Press SAVE (F3) to begin backing up speech.
7. Press (ENTER) when the system prompts for confirmation.
8. Remove the diskette from the drive after the backup is done, and label it accordingly.

Backing up Standard Speech

Use the following steps to backup Standard speech:

1. Start at the System Administration menu and select System Backup/Restore.

   NOTE:
   The Standard speech for each language must be backed up and restored separately.

2. Select Backup/Restore Speech.

   The system displays the Speech Backup/Restore form.

3. Enter **Backup** in the `Backup or Restore` field.
4. Insert a UNIX formatted diskette into drive 0.
5. Enter **6100** in the `Talkfile` field to backup Standard Phrases for US English. Press CHOICES (F2) for the list of valid inputs.
6. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

7. Press SAVE (F3) to begin backing up speech.
8. Press (ENTER) when the system prompts for confirmation.
9. Remove the diskette from the drive after the backup is done, and label it accordingly.
10. Repeat steps 2 through 9 for each language to backup.

Backing up the Callback Messaging Database and Configurations

Use the following steps to backup the Callback Messaging database and configurations:

1. Start at the Customer Assist main menu and select System Administration.

Backing up Mailbox Speech

Use the following steps to backup Mailbox speech:

1. Start at the System Administration menu and select

```
> Backup/Restore
```

```
> Backup/Restore Speech
```

2. Enter **Backup** in the `Backup or Restore` field.
3. Insert a UNIX formatted diskette into drive 0.
4. Enter **Mailbox Phrases** in the `Talkfile` field.
5. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

6. Press SAVE (F3) to begin backing up speech.
7. Press (ENTER) when the system prompts for confirmation.
8. Remove the diskette from the drive after the backup is done, and label it accordingly.

Backing up Mailbox Standard Speech

Use the following steps to backup Mailbox Standard speech:

1. Start at the System Administration menu and select System Backup/Restore.

   NOTE:
   The Mailbox Standard speech for each language must be backed up and restored separately.

2. Select Backup/Restore Speech.

   The system displays the Speech Backup/Restore form.

3. Enter **Backup** in the `Backup or Restore` field.

4. Insert a UNIX formatted diskette into drive 0.
5. Enter **6102** in the `Talkfile` field to backup Mailbox Standard Phrases for US English. Press CHOICES (F2) for the list of valid inputs.
6. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

7. Press SAVE (F3) to begin backing up speech.
8. Press (ENTER) when the system prompts for confirmation.
9. Remove the diskette from the drive after the backup is done, and label it accordingly.
10. Repeat steps 2 through 10 for each language to backup.

Backing up the Mailbox Configurations

Use the following steps to backup the mailbox configurations:

1. Start at the System Administration menu and select System Backup/Restore.
2. Select Backup/Restore Mailbox Configuration.
3. Insert a UNIX formatted diskette into drive 0.
4. Enter **Backup** in the `Backup or Restore` field.
5. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

6. Press SAVE (F3) to begin backing up the mailbox configuration.
7. Press (ENTER) when the system prompts for confirmation.
8. Remove the diskette from the drive after the backup is done, and label it accordingly.

Backing up the Custom Call Routing Tables

Use the following steps to backup the Custom Call Routing Tables:

1. Start at the Customer Assist main menu and select

```
> System Administration
    > Custom Call Routing Administration
        > Import/Export Data from/to Floppy
```

2. Enter **Export** in the `Import/Export` field.
3. Enter the name of an existing routing table in the `Routing Table Name` field.
4. Insert a DOS formatted diskette into drive 0.

   NOTE:
   The same DOS diskette can be used to hold data for more than one routing table if there is sufficient space on the diskette. If not, use a different diskette.

5. Enter **A** in the `Drive A or Drive B` field.

   NOTE:
   The default drive is A, but if the diskette is placed in drive B, enter **B** in this field.

6. Enter the name of the destination file the data will be written to.

   NOTE:
   Different filename should be used for each routing tables.

7. Press SAVE (F3) to begin backing up the routing table's data.
8. Remove the diskette from the drive after the backup is done, and label it accordingly.

   NOTE:
   If the same diskette will be used to hold data for more than one routing table, leave it in the drive until the diskette is full.

9. Repeat steps 3 through 8 for each routing table.

Once the database and configuration of existing Customer Assist packages have been backed up, the Customer Assist packages can be removed. See Chapter 2, "Installation and Removal", for more information.

On the CONVERSANT with Customer Assist V7.0

Install the Customer Assist V7.0 packages following the steps in Chapter 2, ‘‘Installation and Removal’’.

Restoring the Platform Database and Configurations

Use the following steps to restore the Platform database and configurations:

1. Start at the Customer Assist main menu and select System Administration.

Restoring Vector Database

Use the following steps to restore the vector database:

1. Start at the System Administration menu and select

```
> System Backup/Restore
    > Restore Vector Database
        > Restore Data from Previous Version of
        Call Center
            > Restore Development Vector Database
```

2. Insert a UNIX formatted diskette with the vector database into drive 0.
3. Enter **UNIX** in the `UNIX or DOS format` field to specify the type of diskette used in the backup.
4. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

5. Press SAVE (F3) to begin restoring the database.
6. Press CONT (F3) when the system prompts for confirmation.
7. Remove the diskette from the drive after the restore is done.

Restoring Platform Speech

Use the following steps to restore Platform speech:

1. Start at the System Administration menu and select

```
> System Backup/Restore
```

```
> Restore Data from Previous Version of
Call Center
```

2. To restore Vector Phrases, enter **Vector Phrases** in the `Talkfile` field.
3. Insert the diskette with the Platform speech into drive 0.
4. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

5. Press SAVE (F3) to begin restoring speech.
6. Press (ENTER) when the system prompts for confirmation.
7. Remove the diskette from the drive after the restore is done.

Restoring Standard Speech

Use the following steps to restore Standard speech:

1. Start at the System Administration menu and select

```
> System Backup/Restore
```

```
> Restore Data from Previous Version of
Call Center
```

```
> Restore Speech
```

2. Insert the diskette with the Standard speech into drive 0.
3. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

4. Enter **6100** in the `Talkfile` field to restore Standard Phrases for US English. Press CHOICES (F2) for the list of valid inputs.
5. Press SAVE (F3) to begin restoring speech.
6. Press (ENTER) when the system prompts for confirmation.
7. Remove the diskette from the drive after the restore is done.

Restoring the Callback Messaging Database and Configurations

Use the following steps to restore the Callback Messaging database and configurations:

1. Start at the Customer Assist main menu and select

```
> System Administration
    > System Backup/Restore
        > Restore Data from Previous Version of
        Call Center
```

2. To restore Mailbox Phrases, enter **Mailbox Phrases** in the `Talkfile` field.
3. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

4. Insert the diskette with the Mailbox speech into drive 0.
5. Press SAVE (F3) to begin restoring speech.
6. Press (ENTER) when the system prompts for confirmation.
7. Remove the diskette from the drive after the restore is done.

Restoring Mailbox Standard Speech

Use the following steps to restore Mailbox Standard Speech:

1. Start at the System Administration menu and select

```
> System Backup/Restore
    > Restore Data from Previous Version of
    Call Center
```

2. Enter **6102** in the `Talkfile` field to restore Mailbox Standard Phrases for US English. Press CHOICES (F2) for the list of valid inputs.
3. Insert the diskette with the Mailbox Standard Speech into drive 0.
4. Enter **0** in the `Drive 0 or Drive 1` field.

NOTE:
The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

5. Press SAVE (F3) to begin restoring speech.
6. Press (ENTER) when the system prompts for confirmation.
7. Remove the diskette from the drive after the restore is done.
8. Repeat steps 2 through 7 for each language to restore.

Restoring Mailbox Configurations

Use the following steps to restore mailbox configurations:

1. Start at the System Administration menu and select

```
> System Backup/Restore
```

```
> Restore Data from Previous Version of
Call Center
```

2. Insert the diskette with the mailbox configuration into drive 0.
3. Enter **0** in the `Drive 0 or Drive 1` field.

NOTE:
The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

4. Press SAVE (F3) to begin restoring the database.
5. Press (ENTER) when the system prompts for confirmation.
6. Remove the diskette from the drive after the restore is done.

Restoring Dial Plan Configuration

The notes of the previous Dial Plan configuration can be used to set certain site-specific information in the Dial Plan Administration.

See the *Dial Plan V1.4* manual for more information on how to log in to Dial Plan and restore the configuration.

Restoring the Custom Call Routing Database

Use the following steps to restore the Custom Call Routing database:

1. Start at the Customer Assist main menu and select

```
> System Administration
    > Custom Call Routing Administration
        > Routing Table Administration
            > Add Table
```

2. Enter a name for your routing table, the maximum number of records and an optional description of the routing table.
3. Repeat step 2 for each routing table.
4. Press CANCEL (F6) to return to the Custom Call Routing Administration menu.
5. Select Import/Export Data from/to Floppy.
6. For each routing table, complete the form to import the data into the table. See “Import/Export Data from/to Diskette” on page 4-80 of the *INTUITY CONVERSANT System Customer Assist User Guide, 585-313-706* for more information.

Upgrade Steps from Customer Assist V6.1 to Customer Assist V7.0

Upgrading from Customer Assist V6.1 to the Generally Available (GA) Customer Assist V7.0 does not require the Mailbox and Speech Conversion Utility 2.0 package. Data that is backed up using the normal backup option in the administration can be directly converted and restored by Customer Assist. Use the following steps to log in to the system:

1. If you are not already logged in as root, log into Customer Assist by following the instructions in “Logging In” on page 2-3 of the *INTUITY CONVERSANT System Customer Assist User Guide, 585-313-706*.
2. Start at the Customer Assist main menu and select

```
> System Administration
    > System Backup/Restore
```

On the Existing CONVERSANT with Customer Assist V6.1.x

The sections below describe the procedures used to upgrade from V6.1 to V7.0.

Backing up the Platform Database and Configurations

Use the following steps to backup the Platform database and configurations:

1. Start at the Customer Assist main menu and select System Administration.

Backing up Vector Database

Use the following steps to backup the vector database:

1. Start at the System Administration menu and select

```
> System Backup/Restore
```

```
> Backup Vector Database to Floppy Disk
```

2. Insert a UNIX formatted diskette into drive 0.
3. Enter **UNIX** in the `UNIX or DOS format` field to specify the type of diskette used in the backup.
4. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

5. Press SAVE (F3) to begin backing up the database.
6. Press (ENTER) when the system prompts for confirmation.
7. Remove the diskette from the drive after the backup is done, and label it accordingly.

Backing up Platform Speech

Use the following steps to backup Platform speech:

1. Start at the System Backup/Restore menu and select Backup/Restore Speech.

   The system displays the Speech Backup/Restore form.

2. Enter **Backup** in the `Backup or Restore` field. Press CHOICES (F2) to select from a list.

3. To backup Vector Phrases, enter **Vector Phrases** in the `Talkfile` field. Press CHOICES (F2) to select from a list.
4. Insert a UNIX formatted diskette into drive 0.
5. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

6. Press SAVE (F3) to begin backing up speech.
7. Press (ENTER) when the system prompts for confirmation.
8. Remove the diskette from the drive after the backup is done, and label it accordingly.

Backing up Standard Speech

Use the following steps to backup Standard speech:

1. Start at the System Backup/Restore menu and select Backup/Restore Speech.

   The system displays the Speech Backup/Restore form.

   NOTE:
   The Standard speech for each language must be backed up and restored separately.

2. Enter **Backup** in the `Backup or Restore` field.
3. Enter **6100** in the `Talkfile` field to backup Standard Phrases for US English. Press CHOICES (F2) for the list of valid inputs.
4. Insert a UNIX formatted diskette into drive 0.
5. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

6. Press SAVE (F3) to begin backing up speech.
7. Press (ENTER) when the system prompts for confirmation.
8. Remove the diskette from the drive after the backup is done, and label it accordingly.
9. Repeat steps 2 through 8 for each language to backup.

Backing up the Callback Messaging Database and Configurations

Use the following steps to backup the Callback Messaging database and configurations:

1. Start at the Customer Assist main menu and select System Administration.

Backing up Mailbox Speech

Use the following steps to backup Mailbox speech:

1. Start at the System Administration menu and select

```
> System Backup/Restore
```

```
> Backup/Restore Speech
```

2. Enter **Backup** in the `Backup or Restore` field.
3. Insert a UNIX formatted diskette into drive 0.
4. Enter **Mailbox Phrases** in the `Talkfile` field.
5. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

6. Press SAVE (F3) to begin backing up speech.
7. Press (ENTER) when the system prompts for confirmation.
8. Remove the diskette from the drive after the backup is done, and label it accordingly.

Backing up Mailbox Standard Speech

Use the following steps to backup Mailbox Standard speech:

1. Start at the System Backup/Restore menu and select Backup/Restore Speech.

   The system displays the Speech Backup/Restore form.

   NOTE:
   The Mailbox Standard speech for each language must be backed up and restored separately.

2. Enter **Backup** in the `Backup or Restore` field.
3. Insert a UNIX formatted diskette into drive 0.

4. Enter **6102** in the `Talkfile` field to backup Mailbox Standard Phrases for US English. Press CHOICES (F2) for the list of valid inputs.
5. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

6. Press SAVE (F3) to begin backing up speech.
7. Press (ENTER) when the system prompts for confirmation.
8. Remove the diskette from the drive after the backup is done, and label it accordingly.
9. Repeat steps 2 through 8 for each language to backup.

Backing up the Mailbox Configurations

Use the following steps to backup the mailbox configurations:

1. Start at the System Backup/Restore menu and select Backup/Restore Mailbox Configuration.
2. Insert a UNIX formatted diskette into drive 0.
3. Enter **Backup** in the `Backup or Restore` field.
4. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

5. Press SAVE (F3) to begin backing up the mailbox configuration.
6. Press (ENTER) when the system prompts for confirmation.
7. Remove the diskette from the drive after the backup is done, and label it accordingly.

Backing up the Custom Call Routing Tables

Use the following steps to backup the Custom Call Routing Tables:

1. Start at the Customer Assist main menu and select

```
> System Administration
    > Custom Call Routing Administration
        > Import/Export Data from/to Floppy
```

2. Enter **Export** in the `Import/Export` field.
3. Enter the name of an existing routing table in the `Routing Table Name` field.
4. Insert a DOS formatted diskette into drive 0.

   NOTE:
   The same DOS diskette can be used to hold data for more than one routing table if there is sufficient space on the diskette. If not, use a different diskette.

5. Enter **A** in the `Drive A or Drive B` field.

   NOTE:
   The default drive is A, but if the diskette is placed in drive B, enter **B** in this field.

6. Enter the name of the destination file the data will be written to.

   NOTE:
   Different filename should be used for each routing tables.

7. Press SAVE (F3) to begin backing up the routing table's data.
8. Remove the diskette from the drive after the backup is done, and label it accordingly.

   NOTE:
   If the same diskette will be used to hold data for more than one routing table, leave it in the drive until the diskette is full.

9. Repeat steps 3 through 8 for each routing table.

Once the database and configuration of existing Customer Assist packages have been backed up, the Customer Assist packages can be removed. See Chapter 2, "Installation and Removal", for more information.

On the CONVERSANT with Customer Assist V7.0

Install the Customer Assist V7.0 packages following the steps in Chapter 2, ‘‘Installation and Removal’’.

Restoring the Platform Database and Configurations

Use the following steps to restore the Platform database and configurations:

1. Start at the Customer Assist main menu and select System Administration.

Restoring Vector Database

Use the following steps to restore the vector database:

1. Start at the System Administration menu and select

```
> System Backup/Restore
    > Restore Vector Database
        > Restore Data from Previous Version of
        Call Center
            > Restore Development Vector Database
```

2. Insert a UNIX formatted diskette with the vector database into drive 0.
3. Enter **UNIX** in the `UNIX or DOS format` field to specify the type of diskette used in the backup.
4. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

5. Press SAVE (F3) to begin restoring the database.
6. Press CONT (F3) when the system prompts for confirmation.
7. Remove the diskette from the drive after the restore is done.

Restoring Platform Speech

Use the following steps to restore Platform speech:

1. Start at the System Administration menu and select

```
> System Backup/Restore
```

```
> Restore Data from Previous Version of
Call Center
```

2. To restore Vector Phrases, enter **Vector Phrases** in the `Talkfile` field.
3. Insert the diskette with the Platform speech into drive 0.
4. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

5. Press SAVE (F3) to begin restoring speech.
6. Press (ENTER) when the system prompts for confirmation.
7. Remove the diskette from the drive after the restore is done.

Restoring Standard Speech

Use the following steps to restore Standard speech:

1. Start at the System Administration menu and select

```
> System Backup/Restore
```

```
> Restore Data from Previous Version of
Call Center
```

```
> Restore Speech
```

2. Insert the diskette with the Standard speech into drive 0.
3. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

4. Enter **6100** in the `Talkfile` field to restore Standard Phrases for US English. Press CHOICES (F2) for the list of valid inputs.
5. Press SAVE (F3) to begin restoring speech.
6. Press (ENTER) when the system prompts for confirmation.
7. Remove the diskette from the drive after the restore is done.

Restoring the Callback Messaging Database and Configurations

Use the following steps to restore the Callback Messaging database and configurations:

1. Start at the Customer Assist main menu and select

```
> System Administration
  > System Backup/Restore
    > Restore Data from Previous Version of
    Call Center
```

2. To restore Mailbox Phrases, enter **Mailbox Phrases** in the `Talkfile` field.
3. Insert the diskette with the Mailbox speech into drive 0.
4. Enter **0** in the `Drive 0 or Drive 1` field.

   NOTE:
   The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

5. Press SAVE (F3) to begin restoring speech.
6. Press (ENTER) when the system prompts for confirmation.
7. Remove the diskette from the drive after the restore is done.

Restoring Mailbox Standard Speech

Use the following steps to restore Mailbox Standard Speech:

1. Start at the System Administration menu and select

```
> System Backup/Restore
  > Restore Data from Previous Version of
  Call Center
```

2. Enter **6102** in the `Talkfile` field to restore Mailbox Standard Phrases for US English. Press CHOICES (F2) for the list of valid inputs.
3. Insert the diskette with the Mailbox Standard Speech into drive 0.
4. Enter **0** in the `Drive 0 or Drive 1` field.

NOTE:
The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

5. Press SAVE (F3) to begin restoring speech.
6. Press (ENTER) when the system prompts for confirmation.
7. Remove the diskette from the drive after the restore is done.
8. Repeat steps 2 through 7 for each language to restore.

Restoring Mailbox Configurations

Use the following steps to restore mailbox configurations:

1. Start at the System Administration menu and select

```
> System Backup/Restore
```

```
> Restore Data from Previous Version of
Call Center
```

2. Insert the diskette with the mailbox configuration into drive 0.
3. Enter **0** in the `Drive 0 or Drive 1` field.

NOTE:
The default drive is 0, but if the diskette is placed in drive 1, enter **1** in this field.

4. Press SAVE (F3) to begin restoring the database.
5. Press (ENTER) when the system prompts for confirmation.
6. Remove the diskette from the drive after the restore is done.

Restoring Dial Plan Configuration

The notes of the previous Dial Plan configuration can be used to set certain site-specific information in the Dial Plan Administration.

See the *Dial Plan V1.4* manual for more information on how to log in to Dial Plan and restore the configuration.

Restoring the Custom Call Routing Database

Use the following steps to restore the Custom Call Routing database:

1. Start at the Customer Assist main menu and select

```
> System Administration
    > Custom Call Routing Administration
        > Routing Table Administration
            > Add Table
```

2. Enter a name for your routing table, the maximum number of records and an optional description of the routing table.
3. Repeat step 3 for each routing table.
4. Press CANCEL (F6) to return to the Custom Call Routing Administration menu.
5. Select Import/Export Data from/to Floppy.
6. For each routing table, complete the form to import the data into the table. See “Import/Export Data from/to Diskette” on page 4-80 of the *INTUITY CONVERSANT System Customer Assist User Guide, 585-313-706* for more information.

Summary

While working through this chapter, you learned how to backup and restore your system during an upgrade.

Utilities

4

This chapter familiarizes you with the Customer Assist utilities, which enable you to accomplish the following tasks:

- Administer port licenses
- Enable and disable custom speech recognition grammars manually
- Switch between ADA_CALC and EWT actions
- Backup and restore messages from the previous version of Customer Assist to the next
- Rebuild the routing tablespace

Accessing Customer Assist Utilities

This menu allows you to administer Customer Assist utilities. Use the following steps to access this menu:

1. Log into the CONVERSANT as root.
2. Enter **cvis_menu**
3. Start at the INTUITY Main Menu and select

```
> Application Package Administration
    > Customer Assist Care Center Utilities
```

The system displays the Customer Assist Call Center Utilities Administration menu (Figure 4-1).

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 24, 1998
 1 Customer Assist Care Center Utilities Administration
>Right to Use Configuration
 ADA_CALC or EWT Action Selection
 Enabling/Disabling Custom ASR Grammars
 Backup/Restore Messages for Upgrade
 Rebuild Routing Tablespace
 Exit

Select the item and press ENTER.

 HELP        ENTER  PREV-FRM        NEXT-FRM  CANCEL  CMD-MENU
```

Figure 4-1. Customer Assist Utilities Administration menu

This menu allows you to access the Customer Assist utilities.

Administering Port Licenses

A password is needed to set or change the number of licensed ports for using Customer Assist. It is assumed that the person who installs or upgrades the port license is a Lucent Technologies or Spanlink Communications field service engineer. It is the responsibility of the installer to insure that Customer Assist is enabled only for the number of ports that the customer has purchased. Do NOT give the password to unauthorized persons.

NOTE:
Under some circumstances, the number of ports licensed reverts to 1. For example, this happens when the computer's system name is changed. In these cases, use the "Setting the Ports Licensed" on page 4-2 to reset the number of licensed ports.

Setting the Ports Licensed

Use the following steps to set or upgrade the port license on a customer system:

1. Start at the Customer Assist Care Center Utilities Administration and select Right to Use Configuration.

The system prompts you to enter a password. You have three attempts to enter a valid password. After the third failed attempt, the software defaults the system to 1 port and continues with the installation. If this happens, you must set the port license again using these procedures.

2. Enter **TSDTAW** after the UNIX prompt.

   NOTE:
   Enter this password using upper case letters.

   The system prompts you for the number of ports.

3. Enter the number of ports licensed for the customer system.

   When entering the number of ports, use the highest possible value. For example, if the customer bought a 12-port platform, enter **12** for the number of ports. If the customer bought a 31- to 60-port bundle, enter **60** for the number of ports.

Enabling and Disabling Custom Grammars Manually

The Speech Recognition package contains custom grammars that are not in the standard Lucent WholeWord Speech Recognition packages. These custom grammars allow variable length numbers to be collected. When Speech Recognition is installed, it will automatically load the custom grammars for Customer Assist on the system. Although they are loaded, they are not active unless the installer enables them during the install of the Speech Recognition package or during the installation of the Customer Assist Platform Language packages.

CAUTION:
Customer Assist has a performance dependency on the INTUITY WholeWord Recognition package. If this package is installed on the CONVERSANT, the WholeWord feature must be assigned to the SSP or SP cards.

NOTE:
To save space on the SP and SSP cards, enable only the languages that are needed for speech recognition. You can add up to two languages for Speech Recognition.

Steps to Enable and Disable Speech Recognition

Use the following steps to enable or disable custom grammars:

CAUTION:
Disabling and enabling the custom grammar settings requires stopping and restarting the voice system. This should be done when the CONVERSANT is not taking calls.

1. Start at the Customer Assist Call Center Utilities Administration menu and select Enabling/Disabling Custom ASR Grammars.

   The system displays the Enabling/Disabling Custom ASR Grammars (Figure 4-2).

```
LUCENT TECHNOLOGIES Customer Assist Care Center - August 04, 1998
 1 Customer Assist Care Center Utilities Administration
 Right to Use Configuration
 ADA_CALC or EWT Action Selection
>Enabling/Disabling Custom ASR Grammars
 Backup/Restore Messages for Upgrade
 Rebuild Routing Tablespace
 Exit

 2 Enabling/Disabling Custom ASR Grammars

 Enable or disable grammar: Enable
 Language/Country:          _______

Press the CHOICES key for the list of valid inputs.
  HELP  CHOICES  CLOSE                ENTER  CANCEL  REFRESH
```

Figure 4-2. Enabling/Disabling Custom ASR Grammars

1. Enter **Enable** or **Disable** in the `Enable or disable grammar:` field to specify the action to take.
2. Enter the language or country you want to enable or disable from the list below in the `Language/Country:` field.

   Abbreviations for the Languages

   - AusEng—Australian English
   - BraPor—Brazilian Portuguese
   - CanFre—Canadian French
   - ColSpa—Colombian Spanish
   - StdDut—Dutch

- StdFre—French
- StdGer—German
- StdIta—Italian
- StdJpn—Japanese
- StdSpa—Standard Spanish
- UKEng—UK English
- USEng—US English

3. Repeat steps 1 through 2 for each language you want to enable or disable.

Placing New Vectors in Service

Once you have finished enabling and disabling the grammars, you must place the new vectors in service to notify the vector DIP that the custom grammars are available for use. See ‘‘Place New Vectors in Service’’ on page 4-38 of the *INTUITY CONVERSANT System Customer Assist User Guide*, 585-313-706. Use the steps below to place the new vectors in service:

1. Start at the Customer Assist main menu and select Call Vector Configuration.
2. Select Place New Vectors in Service.

Moving Between ADA_CALC and EWT Actions

The estimated wait time feature was added to the DEFINITY G3V4 switch. It is also available on the DEFINITY ECS R6.3. This feature provides a better estimate of the caller’s expected wait time than can be calculated from the queue position that was available in earlier switches. As a result, whether ADA_CALC or EWT actions are available in Customer Assist depends on the type of switch the customer has.

Changing the Settings After Installation

If the customer changes the version of the switch and needs to use the other action, use the following steps:

1. Start at the Customer Assist Utilities Administration menu and select ADA_CALC or EWT Action Selection.

   The system displays the ADA_CALC or EWT Action Selection form.

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 24, 1998
 1 Customer Assist Care Center Utilities Administration
 Right to Use Configuration
>ADA_CALC or EWT Action Selection
 Enabling/Disabling Custom ASR Grammars
 Backup/Restore Messages for Upgrade
 Rebuild Routing Tablespace
 Exit

 2 ADA_CALC or EWT Action Selection

 Action to use: EWT

Select either "EWT" or "ADA_CALC" action to use.

 HELP  CHOICES  CLOSE                    ENTER  CANCEL  REFRESH
```

Figure 4-3. ADA_CALC or EWT Action Selection form

2. Press CHOICES (F2) to select the action you wish to use.

   NOTE:
   If a user is in the Customer Assist's screen-based user administration, the user must exit and reenter to access the new setting.

3. Press CLOSE (F3) to save your changes.

Backup/Restore Messages for Upgrade

This menu option allows you to backup and restore messages from Customer Assist V6.0.3+ and Customer Assist V6.1 to Customer Assist V7.0.

Backing up Messages

Use the steps below to backup the messages from Customer Assist V6.0.3+ and Customer Assist V6.1:

1. Start at the Customer Assist Care Center Utilities Administration menu and select Backup/Restore Messages for Upgrade.

   The system displays the Backup/Restore Messages for Upgrade form (Figure 4-4).

```
SPANLINK COMMUNICATIONS ExtraAgent for Call Center - August 24, 1998
 1 ExtraAgent for Call Center Utilities Administration
 Right to Use Configuration
 ADA_CALC or EWT Action Selection
>Backup/Restore Messages for Upgrade
 Rebuild Routing Tablespace
 Exit

 2 Backup/Restore Messages for Upgrade

 Backup/Restore: Backup_

 HELP  CHOICES  CLOSE                ENTER  CANCEL  REFRESH
```

Figure 4-4. Backup/Restore Messages for Upgrade

2. Enter **Backup** in the `Backup/Restore:` field to backup messages or **Restore** to restore them.
3. Insert the diskette in the disk drive.
4. Press F3 to begin the backup or restore.

Rebuild Routing Tablespace

This menu option allows you to drop and recreate tablespace for routing tables. Tablespace is now shared among routing tables, which removes the 19 table limitation and creates a single tablespace for all routing tables. The maximum number of records per table has been increased to 200,000.

Use the following steps to drop and recreate the tablespace:

CAUTION:
Dropping and recreating tablespace deletes all existing routing tables from the system. Make sure to backup your routing tables before dropping and recreating tablespace.

1. Start at the Customer Assist Care Center Utilities Administration menu and select Rebuild Routing Tablespace.

   The system begins dropping and recreating tablespace for routing tables.

Summary

While working through this chapter, you learned how to set port licenses, enable custom grammars manually, move between ADA_CALC and EWT actions, backup and restore messages from the previous version of Customer Assist to the next, and rebuild the routing tablespace.

Capacity and Performance Guidelines

5

This chapter provides guidelines for capacity planning for the CONVERSANT platform when running Customer Assist services. It deals with the following types of capacity:

- Memory
- UNIX kernel parameters
- Hard disk space
- Voice port capacity
- Central Processing Unit (CPU) capacity

Memory

Customer Assist does not create any unusual conditions different from other typical CONVERSANT applications that do not have a host interface. See the CONVERSANT Voice Information System Version 7.0 guidelines for more information on memory size planning.

UNIX Kernel Parameters

Customer Assist requires tuning for the following UNIX kernel parameter:

NPROC — this parameter specifies the maximum number of processes that can run concurrently on the system. Set this parameter at a minimum of 250.

Hard Disk Space Requirements

Customer Assist requires various resources on the system, such as hard disk space, memory, and processor time. In order for Customer Assist to function properly, the system must be tuned by specifying system resources. Some of the tuning is the same on all systems, while others depend on the needs of your call center, number and type of calls received, and the Customer Assist packages installed.

When used in a busy call center environment, Customer Assist occupies a significant amount of hard disk storage space under the **/usr/spanlink** file systems.

This chapter will help you decide how much space to allocate to Customer Assist when you configure your CONVERSANT system.

See the CONVERSANT Version 7.0 Software Installation and Upgrade Manual for general disk drive partitioning guidelines.

Amount of Partition Space

Use the following information to calculate the amount of space you must include for Customer Assist when you partition your hard disk. When calculating space requirements, you must account for:

- Customer Assist packages
- Customer Assist call logs for reporting
- Call-handling data stored in the ORACLE database
- Any ORACLE database table(s) you create for the Customer Assist Custom Call Routing

Customer Assist Platform Management Package

This section describes the procedures for calculating hard disk drive space for Platform Management.

Hard Disk Drive Space Requirements

Application Software

Customer Assist Platform Management package requires approximately 3.5 Mbytes under **/root** for application files. Use these numbers when you perform calculations to determine the total space required in the **/root**, **/usr** and speech file system.

Call Logs

The Customer Assist Platform Management package stores information about each call in a call log database. This database is made up of UNIX files that are stored in the **/usr** file system. Each call creates a record of about 65 bytes. The system normally stores each record for seven days.

NOTE:
The amount of data generated per call can increase or decrease depending on how you set up your system.

To calculate the space needed in the **/usr** file system for the Customer Assist call log database, use the following equation:

- X = Number of days to keep data in the call log
- Y = Number of calls per day to the Customer Assist application

Then,

(X days) * (Y calls/day) * (65 bytes/call) * (1 megabyte/1,048,576 bytes) = The total Mbytes of space in **/usr** for call logs.

For example, a call center that receives 2,000 calls per day and stores call logs for the default seven days needs:

(7 days) * (2,000 call/day) * (65 bytes/call) * (1 megabyte/1,048,576 bytes) = 0.9 Mbytes in **/usr**.

Call-Handling Data in ORACLE

The CONVERSANT stores call handling data in the ORACLE database in the **/oracle** file system. See the *CONVERSANT Version 6.0 Operations Manual* for information on ORACLE database sizing. The database file takes space from the **/oracle** file system. Recognize this requirement when you partition **/oracle**.

For a general guideline of CONVERSANT systems with the Customer Assist packages only:

- A CONVERSANT MAP/40 that receives 10,000 calls per day needs an ORACLE database of at least 17 Mbytes. This fits in the 20-megabyte ORACLE database of the general usage partitioning for the MAP/40.
- A CONVERSANT MAP/100 that receives 30,000 calls per day needs an ORACLE database of at least 45 Mbytes. This fits in the 60-megabyte ORACLE database of the general usage partitioning for the MAP/100.

When using Customer Assist with any other application(s) or when exceeding the above parameters, see the operations manual to calculate your database's actual size requirements. Other optional Customer Assist packages may require additional ORACLE database space beyond the amount specified above.

Prompts Speech

Speech must be recorded for Customer Assist prompts, which are spoken to the callers. To insure that performance is not degraded, Customer Assist systems with more than 30 ports should not use the 64K speech-coding rate. By default, Customer Assist prompts use the 32K coding rate. At this rate, approximately 14 Mbytes of the speech partition(s) are used for each hour of speech.

For systems with fewer than 30 ports, a speech-coding rate of 64K can be used for higher speech quality, especially for Customer Assist prompts. At this rate, approximately 28 Mbytes of the speech partition(s) are used for each hour of speech. The coding rate of CELP 16 can also be used. It uses approximately 16.6 Mbytes of the speech partition for each hour of speech. This requires the SSP card.

To calculate the space needed for Customer Assist, use the following equation, where:

- X = Expected number of Platform Management package prompts
- Y = Expected average length of Platform Management package prompts in seconds
- Z = 14 Mbytes/hr (32K coding rate) or 28 Mbytes/hr (64K coding rate) for speech usage

Then,

(1 megabyte) + [(X) * (Y sec) * (Z Mbytes/hr) / 3600 sec/hr)] = The total Mbytes of space in the speech partition(s) for Customer Assist Platform Management package speech and announcements.

For example, a Customer Assist system with a total of 50 Platform prompts of 20 seconds long, each using the 32K coding rate needs:

(1 megabyte) + [(50) * (20 sec) * (14 Mbytes/hr) / (3600 sec/hr)] = 5 Mbytes of space in the UNIX operating system file system

Memory Requirements

The Platform Management package requires a minimum of 32 Mbytes of memory.

Customer Assist Custom Call Routing

Hard Disk Drive Space Requirements

Application Software

The Customer Assist Custom Call Routing package requires approximately 100 Kbytes under **/usr** for application files. Use this number when you perform calculations to determine the total space required in the **/usr** file system.

Information in ORACLE Database Tables

All Customer Assist Custom Call Routing tables use the same ORACLE tablespace. This tablespace uses requires a minimum data file of 78.7 Mbytes. If the sum of the maximum number of records specified for each routing table exceeds 500,000, Customer Assist uses an additional data file of 78.7 Mbytes to hold the remaining records.

NOTE:
Since the maximum number of records for Customer Assist is 1,000,000, you cannot have more than two data files.

The Custom Call Routing package is optional. If you will not be using it, you do not need to include additional space requirements in your calculations to define **/root**.

Calculate as follows:

For each table, sum up the maximum number of records for the table. If this total is greater than 500,000 records, you need 157.4 Mbytes of space in the **/root** partition. Otherwise, you need 78.7 Mbytes of space in the **/root** partition.

Customer Assist Callback Messaging

Hard Disk Drive Space Requirements

Application Software

The Customer Assist Callback Messaging package requires approximately 4 Mbytes under **/root** and 2.5 Mbytes under **/usr** for application files. It also requires 1.4 Mbytes for pre-recorded speech for each language loaded on the system. Use this number when you perform calculations to determine the total space required in the **/root**, **/usr** and speech file system.

Messages in ORACLE Database Tables

The Customer Assist Callback Messaging package stores the message records in ORACLE database tables that reside in the SYSTEM tablespace in the **/oracle** file system. The SYSTEM tablespace is the default place where ORACLE database tables reside in general. When ORACLE is set up, space in the **/oracle** file system is immediately allocated for the SYSTEM tablespace. Therefore, adding records will use space in the SYSTEM tablespace but will not increase the amount of space used in the **/oracle** file system beyond what is already allocated. Each message record takes about 600 bytes from the free space in the SYSTEM tablespace.

The Callback Messaging package is optional. If you will not be using it, you do not need to include additional space requirements in your calculations in the SYSTEM tablespace and the **/oracle** file system.

To calculate the space needed in the SYSTEM tablespace and the **/oracle** file system for Callback Messaging message records, use the following equation where:

- X = Expected number of end user messages

Then,

> X * (450 bytes per message) * (1 megabyte/1,048,576 bytes) = The total Mbytes of space in the SYSTEM tablespace and **/oracle** partition for the messages.

For example, a Customer Assist system that receives 2,000 message drops per day needs:

> 2,000 * (600 bytes per message) * (1 megabyte/1,048,576 bytes) = 1.1 Mbytes

Prompts Speech

Speech must be recorded for Customer Assist Callback Messaging to play the prompts to the callers. To insure that performance is not degraded, Customer Assist call-center systems with more than 30 ports should not use the 64K speech-coding rate. By default, Customer Assist Callback Messaging prompts use the 32K coding rate. At this rate, approximately 14 Mbytes of the speech partition(s) are used for each hour of speech.

For systems with fewer than 30 ports, a speech-coding rate of 64K can be used for higher speech quality, especially for Customer Assist Callback Messaging prompts. At this rate, approximately 28 Mbytes of the speech partition(s) are used for each hour of speech.

Calculating Space for Callback Messaging Speech

To calculate the space needed for Customer Assist Callback Messaging, use the following equation, where:

- X = Expected number of Callback Messaging prompts
- Y = Expected average length of Callback Messaging prompts in seconds
- Z = 14 Mbytes/hr (32K coding rate) or 28 Mbytes/hr (64K coding rate) for speech usage

Then,

(1 megabyte) + [(X) * (Y sec) * (Z Mbytes/hr) / 3600 sec/hr)] = The total Mbytes of space in the speech partition(s) for the Customer Assist Callback Messaging speech and announcements.

For example, a Customer Assist system with a total of 50 Callback Messaging prompts of 20 seconds long, each using the 32K coding rate needs:

(1 megabyte) + [(50) * (20 sec) * (14 Mbytes/hr) / (3600 sec/hr)] = 5 Mbytes of space in the UNIX operating system file system

Speech Messages

Callback Messaging messages are usually configured to be recorded using the 16K coding rate. This means that about 7 Mbytes of the speech partition(s) are used for each hour of messages stored. The system stores messages until a call center agent or system administrator removes them.

NOTE:
The Callback Messaging package is optional. If you will not use it, you do not need to include additional memory requirements in your calculations.

To calculate the space needed for Customer Assist Callback Messaging messages, use the following equation, where:

- X = Expected number of end user messages
- Y = Expected average length of end user messages in seconds

Then,

(X) * (Y sec) * (7 Mbytes/hr) / (3600 sec/hr) = The total Mbytes of space in the UNIX operating system file system for the end user messages.

For example, a Customer Assist system that stores 250 end user messages with an average length of 120 seconds each needs:

(250) * (120 sec) * (7 Mbytes/hr) / (3600 sec/hr) = 58 Mbytes of space in the speech partition(s)

Customer Assist Package Code

Table 5-1 demonstrates how much space each package requires in the **/usr** file systems.

Table 5-1. Hard disk space requirements for each package

Package	Space in /usr	Space in /vs
DPlnBase	.80	.05
DPlnDefUS	.02	
SplkBase	.80	
WebServer	.50	
cccBase	.40	.01
cccCbkCol	4.0	.5
cccCbkAdm	.30	
cccCbkRun	6	.7
cccCbkUSE	10	.75
cccCFNUSE	.1	
cccDPulse		
cccPFNUSE	.15	
cccPltCol	7.2	.15
cccPltUSE	4.75	.25
cccPltAdm	.50	
cccPltRun	.61	.31
cccRouter	76	
cccSpcRec	1	
cccSurvey	.20	
cccWebRpt	.06	
cccWinUtl	.3	

Call Logs

Customer Assist stores information about each call it handles in its own log database in the **/usr** file system. Each call requires a record of about 65 bytes. Customer Assist stores a call record for seven days before deleting the record. The way you set up applications can increase or decrease the number of bytes in each call record.

Determine Space Requirements for Call Logs

Use the following steps to determine how much log space you need:

1. Multiply the number of days Customer Assist retains a call record (7) by the number of calls it handles each day.
2. Multiply the result of Step 1 by 65 bytes per call.
3. Multiply the result of Step 2 by .000001 Mbytes per byte.

For example, a call center that receives 2,000 calls per day and stores call logs for seven days requires:

(7 days) x (2,000 calls per day) x (65 bytes per call) x (.000001 Mbytes per byte) = .9 Mbyte in **/usr**.

Speech

Customer Assist speech requires space in the **/usr** file system.

Determine Space Requirements for Speech

Use Table 5-2 to determine how much space you need for speech.

- Platform standard phrases include the standard speech phrases for numbers and characters, the phrases for the speech administration call sequence and a number of other system phrases used, for example, in the confirmation with WholeWord Speech Recognition and Dial Pulse Recognition.
- Callback Messaging standard phrases include the phrases for transcription and standard phrases, that is, phrases that Callback Messaging uses within the customer mailboxes and callback message-taking sequences.
- Vector phrases include all the custom phrases within the call scripts except for the prompts within mailboxes and callback messages.
- Mailbox phrases are the prompt phrases within the voice forms.
- Recorded message responses are the recordings callers leave in mailboxes when responding to “Record” type segment voice forms.

Table 5-2. Guidelines for speech storage space requirements

Type Phrase	Guideline
Platform standard phrases	1 Mbyte per language

Continued on next page

Table 5-2. Guidelines for speech storage space requirements — *Continued*

Type Phrase	Guideline
Callback Messaging standard phrases	1.4 Mbyte per language
Vector phrases	Establish the coding type the customer will use when recording these phrases from the options ADPCM32, ADPCM16, CELP16, or PCM64. Estimate the amount of speech in hours that the system requires for these phrases by coding type. Multiply the number of hours times the number of Mbytes storage required per hour of speech for the coding type, as shown in Table 5-3. Total the amount of storage for each coding type. (Amount of speech in hours) x (Number of Mbytes storage required per speech) = Vector phrases speech storage space requirements.
Mailbox phrases	Establish the coding type the customer will use when recording these phrases from the options ADPCM32, ADPCM16, CELP16, or PCM64. Estimate the amount of speech in hours that the system requires for these phrases by coding type. Multiply the number of hours times the number of Mbytes storage required per hour of speech for the coding type, as shown in Table 5-3. Total the amount of storage for each coding type. (Amount of speech in hours) x (Number of Mbytes storage required per speech) = Mailbox phrases speech storage space requirements.

Continued on next page

Table 5-2. Guidelines for speech storage space requirements — *Continued*

Type Phrase	Guideline
Recorded message responses	Estimate the maximum total number of messages likely to be stored at any one time. Then, estimate the amount of recorded speech time on average for each message. Multiply the maximum number of messages times the average recorded speech time. This determines the likely maximum total number of hours of recorded speech time. Establish the coding type the customer will use when recording these phrases from the options ADPCM32, ADPCM16, CELP16. Multiply the number of hours times the number of Mbytes storage required per hour of speech for the coding type, as shown in Table 5-3. (Maximum number of messages) x (Average recorded speech time) x (Number of hours) x (Number of Mbytes storage required per hour of speech) = Record message response speech storage space requirements.

Table 5-3. Approximate number of Mbytes storage required for an hour of speech of different speech-coding types

Coding Type	Storage Per Hour of Speech
PCM	29 Mbyte
ADPCM32	15 Mbyte
ADPCM16	8 Mbyte
CELP16	7 Mbyte

ORACLE Tablespace

Customer Assist requires ORACLE tablespace for Custom Call Routing tables and for maintaining information on the messages left by callers in Callback Messaging mailboxes. In addition, the voice platform call data handling saves information in ORACLE for each call handled by Customer Assist.

Call Data Handling

The voice platform holds the call data handling information in ORACLE tablespace in the **/oracle** file system. See the *CONVERSANT Version 6.0 upgrade 1 Operations Guide* for guidelines with respect to storage space for the call data handling information.

Custom Call Routing Tables

All Customer Assist Custom Call Routing tables use the same ORACLE tablespace. This tablespace uses requires a minimum data file of 78.7 Mbytes. If the sum of the maximum number of records specified for each routing table exceeds 500,000, Customer Assist uses an additional data file of 78.7 Mbytes to hold the remaining records.

NOTE:
Since the maximum number of records for Customer Assist is 1,000,000, you cannot have more than two data files.

The Custom Call Routing package is optional. If you will not be using it, you do not need to include additional space requirements in your calculations to define **/root**.

Calculate as follows:

For each table, sum up the maximum number of records for the table. If this total is greater than 500,000 records, you need 157.4 Mbytes of space in the **/root** partition. Otherwise, you need 78.7 Mbytes of space in the **/root** partition.

Information on Callback Messaging Mailbox Responses

Customer Assist holds information about the messages left by callers in Callback Messaging mailboxes in ORACLE tablespace in the **/oracle** file system. Each message requires about 600 bytes of ORACLE space.

NOTE:
This ORACLE table does not hold the recorded speech.

To determine the total ORACLE space required in **/oracle** for information on Callback Messaging mailbox responses:

1. Estimate the maximum number of messages likely to be stored at any one time
2. Calculate as follows:

   (Maximum number of messages) x (600 bytes per message) x .000001 Mbytes per byte) = ORACLE space required.

For example, an Customer Assist system that may have as many as 2,000 messages resident at a given time requires:

(2,000 messages resident at a given time) x (600 bytes per message) x (.000001 Mbytes per byte) = 1.2 in **/oracle**.

Voice Ports Capacity

This section describes the procedures for estimating voice port capacity so that you have the appropriate number of voice ports.

Inbound Call Services

The capacity analysis procedures that generally apply to inbound call traffic analysis for CONVERSANT voice port capacity also apply to inbound calls handled by Customer Assist. This analysis requires the following information for each type of call:

- Number of calls for each type during the busy hour
- Average duration on the voice port for each type of call

Estimating Inbound Voice Port Capacity Requirements

When estimating the inbound voice port capacity requirements for Customer Assist call services, the most difficult task can be estimating the capacity for callers who leave messages for a return call in Callback Messaging. You also need to plan for Platform Management, bulletin boards, auto attendants and other applications that use the voice ports. Use the following guidelines:

The typical duration for dropping a message depends upon two factors:

- The amount of information that the message drop script collects from the caller
- The number of items that it confirms with the caller

For most mailbox configurations, the amount of information the message drop script collects is not extensive. The goal is to obtain just enough information to allow the agents to be reasonably prepared for the return call. Typical message drop script call durations are under one minute. This is a reasonable value to use

for the call duration, if no specific information exists for the prospective mailbox configurations.

Estimating the Number of Callers

Estimating the number of callers who leave a message for a return call requires reasonable judgement and is not always precise. Use the following steps to perform your estimation:

1. Start with the number of calls in the busy hour, the average hold time for the hour, and the abandon rate for this period.

   Some of the callers will continue to abandon. Many callers will continue to wait. Use the number of abandon calls as a minimum estimate for the number of callers who will leave a message for a return call.

2. Use 20 percent of the calls as a maximum estimate.

   In most call center environments, having 20 percent of the busy hour callers, whose need is less urgent and whose tolerance for waiting is lower, leaving a message should reduce the busy hour load enough to make a significant decrease in the average hold time for callers who wait. This statement assumes that agents return calls during an off-peak period.

With estimates for message drop call duration and the number of callers who will elect to leave messages during the busy hour, use standard inbound capacity analysis to estimate voice port capacity requirements for the message drop activity.

Customer Assist Reports. Reports such as the Vector Usage Report or Call Detail Report can help you estimate your call load. See Chapter 8, “Reports”, in the *INTUITY CONVERSANT System Customer Assist User Guide, 585-313-706* for more information.

Return Call Capacity Requirements

The voice port capacity requirements for return calls depend upon the method used by the call center for callbacks. There are three possible methods:

- Dedicated Agents — agents handle return calls on a dedicated basis
- Software Agent in Queue — agents handle both inbound and return call activities.
- Off-peak Return Calls — agents handle both inbound and return call activities. Agents return calls during off-peak times.

NOTE:
See “Fields Critical for Successful Message Delivery” on page 7-2, and “Establishing Premium Service for a Mailbox” on page 7-5 of this manual for more information about these modes of operation.

Dedicated Agents

For this method, the system operates as follows:

1. To deliver the return call to agents, Callback Messaging dials the Vector Directory Number.
2. The DEFINITY vector enables the call to queue.

   The amount of queuing should be just enough to insure that agents receive calls to return at a steady rate.
3. When the agent answers, Callback Messaging plays back the message.

   The length of the message playback depends upon the amount of header information that the script plays at the start of the message, for example, whether the script plays the segment numbers or the amount of message information.
4. When message playback ends, Callback Messaging puts the agent on hold, dials the customer telephone number, brings the agent back into the call, and waits for the conference call time to give the agent a chance to reclassify the call if necessary.

Estimating Number of Voice Ports

The entire cycle for the voice port in a dedicated agent environment typically requires approximately two minutes. This means that in a dedicated agent environment, a voice port can handle approximately 30 calls per hour. Use the following steps to determine the number of voice ports you need in a dedicated agent environment:

1. Divide the maximum number of return calls that the call center manager wants to handle in an hour by 30 to determine the number of voice ports necessary.

   These voice ports should be dedicated to Callback Messaging to insure the agents have a steady flow of activity while messages are available.

Software Agent in Queue

For this method, the system operates in a manner similar to that for dedicated agents, however, the queuing time is longer. This is because the return call voice port must wait in queue and experience hold times similar to inbound calls. The heaviest voice port utilization occurs during the busy hour, when hold times are longer. Callers are more likely to opt for a return call. The return call demand for voice ports is part of the overall busy hour demand for voice ports.

Estimating Number of Voice Ports

Determine the number of voice ports necessary for callback in the busy hour as follows:

1. Estimate the average time that the voice port will spend in queue waiting for an agent.

   This time is similar to the average hold time for the agent groups that any caller experiences during the busy period.

2. To calculate the full cycle time for the return call voice port, add 90 seconds to the result of Step 1.

   90 seconds covers the message playback, call launching, and conference time.

3. Divide the full cycle time into 3600 seconds to calculate the number of return calls that a voice port can support during a busy hour.

4. Divide the number of calls to return in the busy hour by the per hour voice port capacity from Step 3 to determine the number of ports necessary.

   The number of return calls required is approximately the same as the number of messages taken, because the purpose of the software agent in queue method is to return the call as soon as possible after taking the message.

   Here is the formula:

   (Number of calls to return in the busy hour) / ((3600 seconds per hour) / (queue time + 90 seconds)) = Return call voice ports required.

   NOTE:
   See "Establishing Premium Service for a Mailbox" on page 7-5 of this manual for guidelines on the constructive use and cautions for the software agent in queue method.

Off-peak Return Calls

For this method, the system operates in a manner similar to that for dedicated agent, however, callback attempts occur only during off-peak times. This is because the DEFINITY vector, which controls the return call attempts to deliver the messages to agents, returns busy if an agent is not available.

As in the dedicated agents method, for the return calls at off-peak method, divide the maximum number of callback calls that the customer wants to handle in an hour by 30 to determine the number of necessary voice ports. Because the return call activity occurs at an off-peak time, the callback calls may be able to use voice port capacity, which inbound activity occupies during the busy hours. Additional voice ports may not be necessary.

Here is the formula:

(Maximum number of callbacks) / 30 = Number of necessary voice ports.

Summary

While working through this chapter, you learned how to plan so that your system has enough resources to run each application you install with Customer Assist.

Technical Package Information

6

This chapter contains technical information such as directories and files contained in Customer Assist. It is designed for personnel who need help troubleshooting after Customer Assist is installed.

Directories

Table 6-1 shows the major directories.

Table 6-1. Directories

Directories	Description
/usr/spanlink/ccc	Main Customer Assist directory
/usr/spanlink/ccc/OBJECTS	Main user interface directory, includes Vector
/usr/spanlink/ccc/OBJECTS/SPEECH	Speech user interface
/usr/spanlink/ccc/OBJECTS/REPORT	Reports user interface
/usr/spanlink/ccc/OBJECTS/ROUTER	Custom Call Routing user interface
/usr/spanlink/ccc/OBJECTS/SURVEY	Survey user interface
/usr/spanlink/ccc/OBJECTS/VARIABLE	Variable user interface
/usr/spanlink/ccc/OBJECTS/BACKUP	Backup/Restore user interface
/usr/spanlink/ccc/OBJECTS/HELP	Help files

Continued on next page

Table 6-1. Directories — *Continued*

Directories	Description
/usr/spanlink/ccc/OBJECTS/MACRO	Templates vector database
/urs/spanlink/ccc/OBJECTS/MSGDROP	Callback Messaging user interface
/usr/spanlink/ccc/bin	Executables used by the user interface
/usr/spanlink/ccc/bin/UTIL	Tools for troubleshooting
/usr/spanlink/ccc/config	Configuration files
/usr/spanlink/ccc/data	Data files
/usr/spanlink/ccc/data/RUNTIME	Contains runtime vector database
/usr/spanlink/ccc/data/ARCHIVE	Contains archive vector database
/usr/spanlink/ccc/data/TZ	Time zone files
/usr/spanlink/ccc/data/transfer	Contains files to be transferred to and from the Windows Administration
/usr/spanlink/ccc/data/survey	Data files generated by surveys
/usr/spanlink/ccc/dbs	Tablespace for Routing tables
/usr/spanlink/ccc/logs	Log files for user interface and dips
/usr/spanlink/ccc/logs/Old	Old log files for dips
/usr/spanlink/ccc/logs/archive	Previous days Platform data for reports
/usr/spanlink/ccc/logs/current	Current day's Platform data for reports
/usr/spanlink/ccc/talkfiles	Contain the talkfiles and speech used
/usr/spanlink/ccc/tmp	Temporary directory used in user interface
/usr/spanlink/www	Web main directory
/usr/spanlink/www/httpd/htdocs/cccReports	Web Reports HTML pages directory

Continued on next page

Table 6-1. Directories — *Continued*

Directories	Description
/usr/spanlink/www/httpd/cgi-bin/cccReports	Web Reports executables directory
/att/asr/custom	Contains sub-directories with custom grammars by language
/vs/trans	Contains the SB/TSM scripts
/speech/talk	Contains the pl files

Talkfiles

This list shows the US English talkfiles:

- Talkfile #6104: Vector Phrases (that is, standard announcements heard by callers)
- Talkfile #6100: Standard Speech (for example, numbers, months, days, etc.)
- Talkfile #6103: Speech Administration Phrases (that is, prompts used in the script)
- Talkfile #6101: Mailbox Custom and Standard Phrases (for example, numbers, confirmations, customer-specific speech callers hear when leaving a message)
- Talkfile #6105: Mailbox prompt phrase

Table 6-2 shows the talkfiles for all languages.

Table 6-2. Talkfiles

Language	Standard	Mailbox Pre-recorded Speech	Speech Admin	Vector Phrases	Mailbox Phrases	Message Phrases
Australian English	5100	5102	5103	5104	5105	
Brazilian Portuguese	5200	5202	5203	5204	5205	
French Candian	5300	5302	5303	5304	5305	
Castilian Spanish	5400	5402	5403	5404	5405	
Colombian Spanish	5500	5502	5503	5504	5505	
Dutch	5600	5602	5603	5604	5605	
European French	5700	5702	5703	5704	5705	
German	5800	5802	5803	5804	5805	
Japanese	5900	5902	5903	5904	5905	
UK English	6000	6002	6003	6004	6005	
US English	6100	6102	6103	6104	6105	6106
Italian	6200	6202	6203	6204	6205	

Languages Prefixes

The following list shows the language prefixes:

- AusEng—Australian English
- BraPor—Brazilian Portuguese
- CanFre—Canadian French
- ColSpa—Colombian Spanish
- StdDut—Dutch
- StdFre—European French
- StdGer—German
- StdIta—Italian
- StdJpn—Japanese
- StdSpa—Standard Spanish
- UKEng—UK English
- USEng—US English

Log and Debug Files

Log files contain information about significant events or errors that the Customer Assist's DIPs or scripts encounter. Debug files contain debugging information for Customer Assist's DIPs and scripts. See Chapter 9, ‘‘Logs and Error Codes’’, for more information about logs.

Table 6-3 shows the name of the log and debug files for each DIP.

Table 6-3. Log and Debug Files

DIP	Log File	Debug File
vectDIP	vectDIP.log	vectDIP.dbg
vrptDIP	vrptDIP.log	vrptDIP.dbg
phradmDIP	phradmDIP.log	phradmDIP.dbg
msgdrpDIP	msgdrpDIP.log	msgdrpDIP.dbg
callbackDIP	callbackDIP.log	callbackDIP.dbg

Log Files

The system stores the log files in the **/usr/spanlink/ccc/logs** directory. It moves the log files to the **/usr/spanlink/ccc/logs/Old** directory when they reach 300,000 bytes.

See "Changing Directory Size" on page 6-6 for instructions on how to either increase or decrease this number.

Debug Files

To turn on debugging for each DIP:

1. Enter **vi /usr/spanlink/ccc/config/<DIP name>.cfg** at the UNIX prompt.
2. Search for a line containing `[Debug Log]`.
3. Change the `Level` entry from 0 to a higher number. Acceptable values are 0 to 5, where 0 turns off debugging and 5 is the highest debug level.
4. Save the file.
5. Send a message to the DIP to reread its configuration file. See "adm2vect" on page 6-34 for instructions on how to do this.

Changing Directory Size

The system moves log and debug files to the **/usr/spanlink/ccc/logs/Old** directory when they reach a certain size. This size is specified in the configuration file of each DIP. For the log file, the `Size` entry under `[Program Log]` specifies the size that the system should move the file. For the debug file, the `Size` entry under `[Debug File]` specifies the size that the system should move the file.

Use the following steps to change the `Size` entry for the log or debug files:

1. Enter **vi /usr/spanlink/ccc/config/<DIP name>.cfg** at the UNIX prompt.
2. Search for a line containing `[Program File]` or `[Debug File]`.
3. Change the `Size` entry if necessary.
4. Save the file.
5. Send a message to the DIP to reread its configuration file. See "adm2vect" on page 6-34 for instructions on how to do this.

Database Schema for Platform

The vector database contains four ASCII files.

- **vect.name**
- **vect.db**

- **vectDIS.db**
- **var.list**

Customer Assist contains three vector databases:

- Development
- Runtime
- Archive

These databases have the same schema.

vect.name

This file contains the list of the vectors in the database. It is used mostly in administration and reports. It has the following schema:

- Each field is delimited by "|" delimited
- Each line corresponds to a vector

Table 6-4 defines each column that appears in the **vect.name** file.

Table 6-4. Column Descriptions for vect.name

Column Number	Description
1	Vector number
2	Vector name
3	Vector description

vect.db

This file contains the detailed arguments and the configuration layout for each vector the runtime requires to handle calls. It has the following schema:

- Each line corresponds to a vector
- Each field is delimited by "|"
- Each action is starts with an action abbreviation and terminated by a field with the entry “^ ;”
- Each vector is terminated by “||”
- The first column is always the vector number
- The number of columns depends on how the vector was configured

Table 6-5 defines each action abbreviation that may appear in the **vect.db** file.

Table 6-5. Action Abbreviations for vect.db

Abbreviation	Action Name(s)
AD	ADA_CALC
AN	ANNOUNCE, DYN_ANNOU
CL	CHG_LANG
CN	CHAN_ASN
CV	CONVERSE
DB	LOOK_UP
DR	DATA_RTN
DY	DYNAMIC
EW	EWT
EX	EXECUTE, MSG_DROP, SPCH_ ADMN, TRANSRIBE
GD	GET_DIGT
GP	GET_DIALP
GS	GET_SPCH
HU	HANG_ACT
KD	SAVE_DATA
QI	Q_INFO
QT	QUIT
RD	GET_DATA
RP	REPORT
SD	SCHEDULE
ST	SET
SW	GOTO, SWITCH
XR	TRANSFER

vectDIS.db

This file contains the description for each action of every vector. It is used only by the administration. It has the following schema:

- Each line corresponds to a vector
- Each field is delimited by "|"
- Each action is starts with an action abbreviation and terminated by a field with the entry “^ ;”
- Each vector is terminated by “||”
- The first column is always the vector number
- The number of columns depends on how the vector was configured

var.list

This file contains a list of the variables used by the Platform.

Table 6-6 defines each column that appears in the **var.list** file.

Table 6-6. Column Descriptions for var.list

Column Number	Description
1	Variable number
2	Variable name

Database Schema for Speech

This database file lists the phrases that customers can add, change, delete, or record. It has the following schema:

- Each field is delimited by "|"
- Each line corresponds to a phrase.

Table 6-7 defines each column that appears in the **phrase.db** file.

Table 6-7. Column Descriptions for phrase.db

Column Number	Description
1	Talkfile number
2	Phrase number
3	Has the phrase been recorded? Y or N.
4	Number of bytes of speech
5	Number of blocks of speech

Table 6-7. Column Descriptions for phrase.db

Column Number	Description
6	Length of recording in seconds
7	Coding rate: ADPCM16, ADPCM32, CELP16, PCM64
8	Phrase tag
9	Phrase text

Tables and Schema for Callback Messaging

MBGLOBAL

This ORACLE table contains global information that applies to all of Callback Messaging.

Table 6-8 defines each column that appears in MBGLOBAL.

Table 6-8. Field Descriptions for MBGLOBAL

Column Name	Column Type	Description
MBCBCHANS	VARCHAR2(20)	List of ports used for agent callbacks.
MBCBMETHOD	VARCHAR2(10)	Callback method - AUTO or frequency of agent callbacks in minutes
MBCBMENUOPTNS	VARCHAR2(3)	Schedule menu options where 1=immediate; 2=later today; 3=later date: 123, 12, 23, 13, or 1, 2, and 3.
MBCCBTIME	NUMBER(4)	Callback conference time in seconds
MBAGNTRESCHED	VARCHAR2(1)	Allow agents to reschedule? Y or N
MBFORCEPRESSONE	VARCHAR2(1)	Force agents to press 1 to begin transcribing callback? Y or N.

Continued on next page

Table 6-8. Field Descriptions for MBGLOBAL — *Continued*

Column Name	Column Type	Description
MBSPEAKSEGNUM	VARCHAR2(1)	Speak segment number between segments? Y or N.
MBPLAYMSGHEADER	VARCHAR2(1)	Controls how the message header is played back. A = Message#, date, and time; N = No header, spoken; M = Message # only; d = Date only; D = Message # and date; t = Time only; T = Message # and time.
MBHOURFLAG	VARCHAR2(2)	Which clock to use? 12 or 24.
MBNUMBCONFIRM	NUMBER(1)	Number of confirmation chances: 1-9
MBAGNTCLASS	VARCHAR2(2)	Allow agents to classify callback? Y or N.

MBPARAMS

This ORACLE table contains mailbox information.

Table 6-9 defines each field that appears in MBPARAMS.

Table 6-9. Column Descriptions for MBPARAMS

Column Name	Column Type	Description
MBID	VARCHAR2(6) NOT NULL	Unique mailbox id
MBMBOXNAME	VARCHAR2(24)	Mailbox name
MBPWD	VARCHAR2(6)	Mailbox password

Continued on next page

Table 6-9. Column Descriptions for MBPARAMS — *Continued*

Column Name	Column Type	Description
MBCBVDN	VARCHAR2(24)	Agent/group callback extension
MBCBRETRY	NUMBER(3)	Callback retry time for mailbox in minutes
MBMSGWTEXT	VARCHAR2(11)	MWL extension
MBOUT	VARCHAR2(10)	Outside line access code
MBNAMEPH	NUMBER(5)	Transcriber welcome phrase number
MBCLOSEPH	NUMBER(5)	Message closing phrase number
MBFORTOMB	VARCHAR2(6)	Mailbox to forward message to for overflow and old messages
MBPRIORITY	NUMBER(1)	Priority of messages in the mailbox: 0-5 where 0 is normal and 5 has the highest priority (global to mailbox)
MBMAXMSGDAYS	NUMBER(2)	Maximum age of message in days (global to mailbox)
MBMAXMSGHRS	NUMBER(2)	Maximum age of message in hours (global to mailbox)
MBMAXMSGMINS	NUMBER(2)	Maximum age of message in minutes (global to mailbox)
MBMAXNUMMSG	NUMBER(5)	Maximum number of messages allowed in a mailbox (global to mailbox)

Continued on next page

Table 6-9. Column Descriptions for MBPARAMS — *Continued*

Column Name	Column Type	Description
MBSTYPES	VARCHAR2(15)	Segment type: R = record segment; D = data segment; S = schedule segment; I = inform segment; N = no segment
MBCONFFLG	VARCHAR2(15)	Confirm caller input flags for 15 segments as string of Y and N.
MBPLAYBACKFLG	VARCHAR2(15)	Play back to transcriber flag for 15 segments as string of Y and N.
MBDISPFLDFLG	VARCHAR2(15)	Flag for treating segment as display field. Valid values include: I = internal display; E = external (caller); N = not used with this segment.
MBPHONEFLDFLG	VARCHAR2(15)	Flag for treating prompt as Phone field. Valid values include: W = whole phone number; A = area code, must also have S field; S = subscriber phone number; C = country code; I = internal number; N = not a phone field.
MBMANDATORYSEG	VARCHAR2(15)	Segment required to save message flag for 15 segments as string of Y and N.
MBPASSEDPARAM	VARCHAR2(15)	Segment is passed parameters. A = parameter A; B = parameter B; C = parameter C; N = not passed parameter.

Continued on next page

Table 6-9. Column Descriptions for MBPARAMS — *Continued*

Column Name	Column Type	Description
MBOUTCALLFLG	VARCHAR2(15)	Flags for auto outcall for 15 segments. N = none; L=ADPCM16; H = ADPCM32; C = CELP16.
MBREQQUALITYFLG	VARCHAR2(15)	Flags for recording quality for 15 segments. N = none; S = save, D = delete.
MBOUTNUMFLAG	VARCHAR2(1)	Treat MBCBVDN extension number as an outside number? Y or N.
MBCOUNTRYCODE	VARCHAR2(4)	Country code associated with mailbox.
MBDIALPULSE	VARCHAR2(3)	Is Dial Pulse used to collect caller input for the mailbox? Yes or No.
MBSPEECHREC	VARCHAR2(3)	Is Speech Recognition used to collect caller input for the mailbox? Yes or No.
MBSECSTOQUEUE	NUMBER(4)	Number of rings to queue to wait for an agent to answer.
MBTKFILE	NUMBER(5)	Mailbox talkfile number.
MBUSETZMAP	VARCHAR2(1)	Using time zone mapping? Y or N.

MBSEGMENTS

This ORACLE table contains the mailbox segments attributes.

Table 6-10 defines each field that appears in MBSEGMENTS.

Table 6-10. Column Descriptions for MBSEGMENTS

Column Name	Column Type	Description
MBSEGMBID	VARCHAR2(6) NOT NULL	Unique mailbox id
MBPR1	NUMBER (5)	Phrase number for segment 1
MBPR2	NUMBER (5)	Phrase number for segment 2
MBPR3	NUMBER (5)	Phrase number for segment 3
MBPR4	NUMBER (5)	Phrase number for segment 4
MBPR5	NUMBER (5)	Phrase number for segment 5
MBPR6	NUMBER (5)	Phrase number for segment 6
MBPR7	NUMBER (5)	Phrase number for segment 7
MBPR8	NUMBER (5)	Phrase number for segment 8
MBPR9	NUMBER (5)	Phrase number for segment 9
MBPR10	NUMBER (5)	Phrase number for segment 10
MBPR11	NUMBER (5)	Phrase number for segment 12
MBPR13	NUMBER (5)	Phrase number for segment 13
MBPR14	NUMBER (5)	Phrase number for segment 14
MBPR15	NUMBER (5)	Phrase number for segment 15
MBSZ1MAX	NUMBER (3)	Maximum number of seconds or digits for segment 1

Continued on next page

Table 6-10. Column Descriptions for MBSEGMENTS — *Continued*

Column Name	Column Type	Description
MBSZ2MAX	NUMBER (3)	Maximum number of seconds or digits for segment 2
MBSZ3MAX	NUMBER (3)	Maximum number of seconds or digits for segment 3
MBSZ4MAX	NUMBER (3)	Maximum number of seconds or digits for segment 4
MBSZ5MAX	NUMBER (3)	Maximum number of seconds or digits for segment 5
MBSZ6MAX	NUMBER (3)	Maximum number of seconds or digits for segment 6
MBSZ7MAX	NUMBER (3)	Maximum number of seconds or digits for segment 7
MBSZ8MAX	NUMBER (3)	Maximum number of seconds or digits for segment 8
MBSZ9MAX	NUMBER (3)	Maximum number of seconds or digits for segment 9
MBSZ10MAX	NUMBER (3)	Maximum number of seconds or digits for segment 10
MBSZ11MAX	NUMBER (3)	Maximum number of seconds or digits for segment 11
MBSZ12MAX	NUMBER (3)	Maximum number of seconds or digits for segment 12
MBSZ13MAX	NUMBER (3)	Maximum number of seconds or digits for segment 13

Continued on next page

Table 6-10. Column Descriptions for MBSEGMENTS — *Continued*

Column Name	Column Type	Description
MBSZ14MAX	NUMBER (3)	Maximum number of seconds or digits for segment 14
MBSZ15MAX	NUMBER (3)	Maximum number of seconds or digits for segment 15
MBSZ1MIN	NUMBER (3)	Minimum number of seconds or digits for segment 1
MBSZ2MIN	NUMBER (3)	Minimum number of seconds or digits for segment 2
MBSZ3MIN	NUMBER (3)	Minimum number of seconds or digits for segment 3
MBSZ4MIN	NUMBER (3)	Minimum number of seconds or digits for segment 4
MBSZ5MIN	NUMBER (3)	Minimum number of seconds or digits for segment 5
MBSZ6MIN	NUMBER (3)	Minimum number of seconds or digits for segment 6
MBSZ7MIN	NUMBER (3)	Minimum number of seconds or digits for segment 7
MBSZ8MIN	NUMBER (3)	Minimum number of seconds or digits for segment 8
MBSZ9MIN	NUMBER (3)	Minimum number of seconds or digits for segment 9
MBSZ10MIN	NUMBER (3)	Minimum number of seconds or digits for segment 10

Continued on next page

Table 6-10. Column Descriptions for MBSEGMENTS — *Continued*

Column Name	Column Type	Description
MBSZ11MIN	NUMBER (3)	Minimum number of seconds or digits for segment 11
MBSZ12MIN	NUMBER (3)	Minimum number of seconds or digits for segment 12
MBSZ13MIN	NUMBER (3)	Minimum number of seconds or digits for segment 13
MBSZ14MIN	NUMBER (3)	Minimum number of seconds or digits for segment 14
MBSZ15MIN	NUMBER (3)	Minimum number of seconds or digits for segment 15

MESSAGE

This ORACLE table contains information on the dropped messages. All ready, saved and locked messages are stored here. This table also contains information on deleted messages for seven days.

Table 6-11 defines each field that appears in MESSAGE.

Table 6-11. Column Descriptions for MESSAGE

Column Name	Column Type	Description
MSGMAILBOX	VARCHAR2(6)	Number of the mailbox the message is in.
MSGNUM	NUMBER(5)	Unique message number.
MSGDATE	VARCHAR2(8)	Date the message was dropped.

Continued on next page

Table 6-11. Column Descriptions for MESSAGE — *Continued*

Column Name	Column Type	Description
MSGTIME	VARCHAR2(6)	Time the message was dropped.
MSGSTATUS	VARCHAR2(6)	Status of message: READY, SAVED, DELETE, or <port number currently used for transcription>.
MSGPRIORITY	VARCHAR2(1)	Priority of the message.
MSGDELVTIME	DATE	Date/time to deliver message to agents.
MSGSCHEDFLAG	VARCHAR2(1)	Is the message scheduled for callback: Y or N.
MSGORIGMAILBOX	VARCHAR2(6)	Original mailbox number.
MSGFORWARDTIME	DATE	Date the message was forwarded to this mailbox.
MSGFORWARDINGMB	VARCHAR2(6)	The number of the mailbox that forwarded the message.
MSGFORWARDREASON	VARCHAR2(6)	The reason the message was forwarded: 0 = normal; 1 - exceeded time; 2 = overflow.
MSGFORWARDPHRNUM	NUMBEr(5)	Phrase number of prepended recording.
MSGSOURCE	VARCHAR2(1)	Source of message: P (Phone).

Continued on next page

Table 6-11. Column Descriptions for MESSAGE — *Continued*

Column Name	Column Type	Description
MSGACTIVETIME	DATE	Used in MsgAge view for determining when to do callbacks.
MSGTZNAME	VARCHAR2(24)	Name of the time zone caller
MSGTZUSE	VARCHAR2(1)	Using time zone mapping? Y or N.

Delivery time is set to the current time if the caller chooses to receive the callback immediately. The delivery time is set to Current Time + Callback retry time every time the transcriber does something to the message (except forwarding; in the case of forwarding, the delivery time is the current time). The input corresponding to prompt type "S" will be stored in the field MsgDelvTime instead of the message segment corresponding to the prompt.

- Initial MsgForwardTime = date message was left in a mailbox.
- Initial Forwarding Mailbox = Mailbox where caller leaves the message.
- Initial Original Mailbox = Mailbox where caller leaves the message.

MSGSEGMENTS

This ORACLE table contains the phrase number of callers' recording or digits input.

Table 6-12 defines each field that appears in MSGSEGMENTS.

Table 6-12. Column Descriptions for MSGSEGMENTS

Column Name	Column Type	Description
MSGMSGNUM	NUMBER(5)	Unique message number.
MSGPH1	NUMBER(5)	Phrase number of segment 1.
MSGPH2	NUMBER(5)	Phrase number of segment 2.

Continued on next page

Table 6-12. Column Descriptions for MSGSEGMENTS — *Continued*

Column Name	Column Type	Description
MSGPH3	NUMBER(5)	Phrase number of segment 3.
MSGPH4	NUMBER(5)	Phrase number of segment 4.
MSGPH5	NUMBER(5)	Phrase number of segment 5.
MSGPH6	NUMBER(5)	Phrase number of segment 6.
MSGPH7	NUMBER(5)	Phrase number of segment 7.
MSGPH8	NUMBER(5)	Phrase number of segment 8.
MSGPH9	NUMBER(5)	Phrase number of segment 9.
MSGPH10	NUMBER(5)	Phrase number of segment 10.
MSGPH11	NUMBER(5)	Phrase number of segment 11.
MSGPH12	NUMBER(5)	Phrase number of segment 12.
MSGPH13	NUMBER(5)	Phrase number of segment 13.
MSGPH14	NUMBER(5)	Phrase number of segment 14.
MSGPH15	NUMBER(5)	Phrase number of segment 15.
MSGDG1	VARCHAR2(24)	Digits input for segment 1.
MSGDG2	VARCHAR2(24)	Digits input for segment 2.
MSGDG3	VARCHAR2(24)	Digits input for segment 3.
MSGDG4	VARCHAR2(24)	Digits input for segment 4.

Continued on next page

Table 6-12. Column Descriptions for MSGSEGMENTS — *Continued*

Column Name	Column Type	Description
MSGDG5	VARCHAR2(24)	Digits input for segment 5.
MSGDG6	VARCHAR2(24)	Digits input for segment 6.
MSGDG7	VARCHAR2(24)	Digits input for segment 3.
MSGDG8	VARCHAR2(24)	Digits input for segment 8.
MSGDG9	VARCHAR2(24)	Digits input for segment 9.
MSGDG10	VARCHAR2(24)	Digits input for segment 10.
MSGDG11	VARCHAR2(24)	Digits input for segment 11.
MSGDG12	VARCHAR2(24)	Digits input for segment 12.
MSGDG13	VARCHAR2(24)	Digits input for segment 13.
MSGDG14	VARCHAR2(24)	Digits input for segment 14.
MSGDG15	VARCHAR2(24)	Digits input for segment 15.

MESGLOG

This ORACLE table contains information about agent callback attempts.

Table 6-13 defines each field that appears in the MESGLOG.

Table 6-13. Column Descriptions for MESGLOG

Column Name	Column Type	Description
MESGLOGTYPE	VARCHAR2(1)	Type of event: A = audit; M = message; B = busy; D = delete; R = receive; K = save; C = callback completed; s = callback attempted; F = callback DIPs.
MESGLOGDATE	VARCHAR2(8)	Date of event.
MESGLOGTIME	VARCHAR2(6)	Time of event.
MESGLOGMAILBOX	VARCHAR2(6)	Mailbox of message used for message drop or transcription.
MESGLOGMSGNUM	NUMBER(5)	Message number of message used for dropped or transcribed.
MESGLOGCHAN	NUMBER(2)	Voice port used to attempt callback, message drop, or transcription.
MESGLOGSTATUS	VARCHAR2(10)	Status of callback attempt: SUCCESS or FAILURE.
MESGLOGSUBSTAT	VARCHAR2(6)	Secondary status: 66 = busy; 70 = fast busy; 78 = ring no busy; -1 = internal hardware or software error or dialing error; -2 = timeout; -3 = illegal dial string passed.

CBK_LOG

The CBK_LOG ORACLE table contains information of agent activity and callback attempts.

Table 6-14. Column Descriptions for CBK_LOG

Column Name	Column Type	Description
CBK_MBOX	VARCHAR2(6)	Callback mailbox.
CBK_MSGNUM	NUMBER(5)	Callback message number.
CBK_START	DATE	Callback start date/time.
CBK_LAUNCH	DATE	Callback (Save/Delete) Launch date/time.
CBK_STOP	DATE	Callback end date/time.
CBK_CONF_EXP	VARCHAR2(1)	Flag to indicate whether the conference time has expired: Y or N.
CBK_AGENTS_ACT	VARCHAR2(1)	Agent Action: 2 = delete; 3 = save; 4 = launch and delete; 5 = launch and save; 6 = forward; 7 = schedule; 8 = skip; 9 = abandon.
CBK_DATA1	VARCHAR2(24)	First data segment transcribed.
CBK_DATA2	VARCHAR2(24)	Second data segment transcribed.
CBK_DATA3	VARCHAR2(24)	Third data segment transcribed.
CBK_DATA4	VARCHAR2(24)	Fourth data segment transcribed.
CBK_TYPE	VARCHAR2(1)	Callback type: C = callback; T = transcription.

MSGAGE

This ORACLE view lists the numbers of messages that have been in a mailbox longer than the maximum age, or time, allowed for that mailbox.

```
CREATE VIEW MsgAge
AS  SELECT MsgNum
FROM MBParams, Message
WHERE MBID = MsgMailbox
AND MBForToMB IS NOT NULL
AND (MBMaxMsgDays IS NOT NULL
OR MBMaxMsgHrs IS NOT NULL
OR MBMaxMsgMins IS NOT NULL)
AND (NVL(MBMaxMsgDays,0) +
(NVL(MBMaxMsgHrs,0) / 24) +
(NVL(MBMaxMsgMins,0) / 1440 ) +
sgActiveTime) < SysDate;
```

MSGCOUNT

MSGCOUNT is an ORACLE view that counts the number of ready messages in each of the mailboxes that have a forwarding mailbox defined.

```
CREATE VIEW MsgCount
AS  SELECT MsgMailbox vcMailbox, COUNT(MsgNum) vnCount
FROM Message, MBParams
WHERE MBID = MsgMailbox
AND MBForToMB IS NOT NULL
AND MsgStatus = 'READY'
GROUP BY MsgMailbox;
```

Indexes

MESSAGE_IX, MESSAGE_IX2, and MESSAGE_IX4 are indexes on MESSAGE and MSGSEGMENTS tables to improve the speed of the ORACLE queries.

```
CREATE UNIQUE INDEX Message_ix ON Message (MsgNum);
CREATE UNIQUE INDEX Message_ix2 ON
MsgSegments(MsgMsgNum);

CREATE UNIQUE INDEX Message_ix3 ON MBPARAMS (MBID);

CREATE INDEX Message_ix4 ON MESSAGE (MsgNum, MsgMaibox,
MsgStatus);
```

AgentCbkHrs

The system stores this file, containing the agent callback hours for the week, in the **/usr/spanlink/ccc/data** directory. It has the following schema:

- Each file is delimited by “l”

Table 6-15 defines each column that appears in the **AgentCbkHrs** file.

Table 6-15. Column Descriptions for AgentCbkHrs

Column Number	Description
1	Day of the week.
2	Start time in HH24MI format.
3	Stop time in HH24MI format.

CustCbkHrs

The system stores this file, containing the customer callback hours for the week, in the **/usr/spanlink/ccc/data** directory. It has the following schema:

- Each file is delimited by “l”

Table 6-15 defines each column that appears in the **CustCbkHrs** file.

Table 6-16. Column Descriptions for CustCbkHrs

Column Number	Description
1	Day of the week.
2	Start time in HH24MI format.
3	Stop time in HH24MI format.

Code2TimeZone.dat

This file contains the mapping of country and city/area codes to time zones. It is stored in the **/usr/spanlink/ccc/data** directory. It has the following schema:

- Each field is delimited by “l”

Table 6-17. Column Descriptions for Code2TimeZone.dat

Column Number	Description
1	Country code
2	Area/city code
3	Time zone name

Custom Call Routing

Tbl.desc

This file contains a list of all the routing tables and their configuration. It is stored in the **/usr/spanlink/ccc/data** directory. It has the following schema:

- Each field is delimited by “l”

Table 6-18 defines each column that appears in the **Tbl.desc** file.

Table 6-18. Column Descriptions for Tbl.desc

Column Number	Description
1	Routing table name.
2	Maximum number of records.
3	Table description.
4	Number of records in the table.

Configurations Files

Configuration files determine how Customer Assist behaves.

Global.cfg

This file contains general information about the Customer Assist product, such as packages installed and some configuration settings. It is stored in the **/usr/spanlink/ccc/config** directory. The text below shows the default configuration for the file:

```
# Name of company
Company=LUCENT TECHNOLOGIES
# Product name
AppName=Customer Assist
# Version of product
Version=7.0
# Is the Platform CONVERSANT?
IsCVIS=TRUE
# Message Drop Default Encoding method
MsgDrpDefCoding=CELP16
# Speech Administration Default Encoding method
SpchAdmDefCoding=CELP16
# Base language in effect
BaseLang=11
# Base language name
```

```
BaseLangName=USEng
# Is Platform loaded?
PlatformLoaded=FALSE
# Is Platform Administration loaded?
PlatformAdmLoaded=FALSE
# Is Callback Messaging loaded?
CbkMsgLoaded=FALSE
# Is Callback Messaging Administration loaded?
CbkMsgAdmLoaded=FALSE
# Is Routing loaded?
RoutingLoaded=FALSE
# Is Preview Dialing loaded?
PrevDialLoaded=FALSE
# Is Speech Recognition loaded?
SpchRecLoaded=FALSE
# Is Dial Pulse loaded?
DialPulseLoaded=FALSE
# Is Survey loaded?
SurveyLoaded=FALSE
# Is Web based reports loaded?
WebRptLoaded=FALSE
# Is Windows Administration loaded?
WinAdmLoaded=FALSE
# Is SmartLink loaded?
SmartLinkLoaded=FALSE
# Is Storage Server loaded?
Storage Server Loaded=FALSE
# Maximum number of languages that can be installed
Maximum Languages=4

# Enable ADA_CALC action?
UseADA=FALSE
# Enable EWT action?
UseEWT=TRUE
# Local Time Zone
TimeZone=-6
# Total number of records in all the tables
RouterRecUsed=0
# Total number of records allocated for all the tables
RouterRecAllocated=0
# Number of router data files created
NumRouterDataF=0
# Amount of space allocated for each data file
RouterSpaceForDataF=78643200
# Number of records available for each data file
RouterRecords for DataF=500000
# Maximum number of router records per table
MaxNumRouterRec=200000
# Maximum number of data files
MaxNumDataF=2
```

```
# Default status to change messages that one unexplainably
locked
MessageStatusConfig=READY

# Initial timeout used in Platform runtime
Initial Timeout=5
# Inter-digit timeout used in Platform runtime
Inter-Digit Timeout=5
```

language.list

This file contains a list of all the languages that have been installed and their respective talkfiles. (See Table 6-2 for information about talkfiles.) It is located in the **/usr/spanlink/ccc/config** directory. It has the following schema:

- Each file is delimited by “l”

Table 6-19 defines each column that appears in the **language.list** file.

Table 6-19. Column Descriptions for language.list

Column Number	Description
1	Language number. Valid values are 1 to 12.
2	Language name.
3	Gender of speech. Either Female or Male.
4	Language abbreviation.
5	Standard speech talkfile.
6	Mailbox custom and standard talkfile.
7	Speech administration talkfile.
8	Vector phrases talkfile.
9	Mailbox phrases talkfile.

langs.cfg

This file specifies the number of languages installed for Platform and Callback Messaging. It is stored in the **/usr/spanlink/ccc/config** directory. The text below shows the default configuration:

```
[Platform Language]
Languages Installed=0
[Callback Messaging Language]
Languages Installed=0
```

SR.cfg

The GET_SPCH action uses the **SR.cfg** configuration file in the config directory. The file lists the valid grammars that can be used in the action. It has the following schema:

- Each field is delimited by “l”

Table 6-20 defines each column that appears in the **SR.cfg** file.

Table 6-20. Column Descriptions for SR.cfg

Column Number	Description
1	Grammar name
2	Grammar number
3	Maximum number of digits it can collect

To check if custom grammars are enabled:

1. Look at **/vs/data/sr_file** and **/att/include/sr_grammar.h** files.

   These files are used by CONVERSANT to collect Speech Recognition input.

   - If the custom grammars are enabled for a language, they will be listed in both of these files.

     For example, AU_0_9VS for Australian English grammar to collect digits of 1 to 8 long.

   - If the custom grammars are not enabled for the necessary language, follow the steps in "Enabling and Disabling Custom Grammars Manually" on page 4-3 to enable custom grammars.

DP.cfg

The GET_DIALP action uses the **DP.cfg** configuration file in the config directory. The file lists the valid grammars that can be used in the action. It has the following schema:

- Each field is delimited by "l"

Table 6-21. Column Descriptions for DP.cfg

Column Numbers	Description
1	Grammar name
2	Grammar number
3	Maximum number of digits it can collect

Scripts

Table 6-22 describes each script that is used by Customer Assist.

Table 6-22. Script Descriptions

Script Name	Description
ccc	Platform script
sphad	Speech Administration script
GMDop	Message Drop script
GTStr	Transcription starting script
GTMn	Transcription main script
GTMsg	Transcription message script

Callback Messaging

Callback Messaging uses four scripts.

- GMDop
- GTStr
- GTMn
- GTMsg

The first script, GMDop, is the message drop script. It is called when customers are leaving messages for the agents.

The other three scripts together constitute transcription:

- The GTStr script initializes variables only.
- The GTMn script handles retrieving messages.
- The GTMsg script plays messages back to transcribers.

Prominent Programs

Table 6-23 describes each important program.

Table 6-23. Prominent Programs

Program Name	Program Type	BBS Name	Description
vectDIP	DIP	VECTOR	Handles all vectoring requests.
vrptDIP	DIP	VCT_RPT	Handles vector reporting.
phradmDIP	DIP	PHR_ADM	Handles speech administration requests.
callbackDIP	DIP	CALLBACK	Launches agent callbacks.
msgdrpDIP	DIP	MSGDROP	Handles message drop and transcription requests.
daily.chg	Cron		Run nightly reports and administration.
adm2vect	C	ADMIN	Sends messages to dips.
auditMsg.sh	Shell		Audits messages for orphan phrases.

daily.chg

You cannot turn on debugging for this shell program. However, **daily.chg** can be run from the command line without any arguments. Any output will be written to standard out.

adm2vect

This program is used to inform DIPs of changes in configuration so that they will reload their configurations.

- The first argument is the instance number which is normally 0.
- The second argument is the DIP name that is registered in the BBS.
- The third argument is the message number to send to the DIP.

Table 6-24 defines the arguments that are used for the various DIPs in **adm2vect**.

Table 6-24. Program Descriptions for adm2vect

Program Name	BBS Name	Message Number	Description
vectDIP	VECTOR	2	Get startup information.
vectDIP	VECTOR	4	Reload the ASR grammar configurations.
vectDIP	VECTOR	22	Reload the vector database.
vectDIP	VECTOR	23	Reset caller number to 0.
vrptDIP	VCT_RPT	22	Reload the variable configuration.
phradmDIP	PHR_ADM	7	Reload encoding configurations.
msgdrpDIP	MSGDROP	15	Reload the Callback Messaging configurations.
msgdrpDIP	MSGDROP	18	Reload the global configurations.
msgdrpDIP	MSGDROP	27	Rebuild MWL array.
msgdrpDIP	MSGDROP	29	Reload agent callback type configuration.
msgdrpDIP	MSGDROP	30	Clear MWL array.
callbackDIP	CALLBACK	7	Reload the Callback Messaging configurations.

auditMsg.sh

This program is used to audit the messages in Callback Messaging for orphan phases. Orphan phrases are recorded phrases that were for some reason not deleted with the messages.

- The first argument is the type of audit: a = audit without deleting the phrase and d = auditing and deleting the orphan phrases.

Summary

This chapter provided you with technical information such as the directory and file structure of Customer Assist.

- See Chapter 8, ‘‘Troubleshooting’’, for information on how to troubleshoot the product.

Callback Messaging Configuration Guidelines

7

This chapter describes how to configure your system for Callback Messaging.

Determining Which Callback Messaging Mailboxes to Configure

A separate mailbox is necessary for different groups of callers in each of the following circumstances:

- Different agents serve different groups of callers.

  Callback Messaging delivers the messages from a given mailbox to a specific agent group or skill.

- Agents need different information from different groups of callers to provide good return call services.

  Each Callback Messaging mailbox uses a single set of questions to obtain information from the caller.

- Messages from one group of callers receive higher priority than messages from another group of callers.

  Separate mailboxes are required even when the same agent group serves both groups of callers and requires the same information from both groups of callers. Callback Messaging requires separate mailboxes for different priority treatments.

- Callers speak different languages.

  Callback Messaging uses one language per mailbox.

- Callers are in different countries.

Customer Assist can prompt the caller for the country code. However, placing callers from different countries into different mailboxes eliminates the need for the caller to provide the country code.

Configuration Topics

This section reviews key topics for successful Callback Messaging mailbox configuration, including:

- Configuring for successful message delivery
- Establishing premium service for a mailbox
- Scheduling callback times
- Configuring for successful dialing and message disposition
- Determining the mailbox segments and their sources of information

Configuring for Successful Message Delivery

This section describes how to configure your system for successful message delivery. It is divided into three sections:

- Fields critical for successful message delivery
- Determining guidelines for successful message delivery
- Guidelines for successful message delivery

Fields Critical for Successful Message Delivery

This section lists the fields that are critical to successful delivery of Callback Messages:

In Mailbox Global Settings

- `Channel access time`
- `Access channel(s)`

In Mailbox Administration

- `Mailbox priority`
- `Time to wait for answer`
- `Message retry interval`

Determining Guidelines for Successful Message Delivery

Use the following questions to determine the guidelines that are right for your system:

- Are agents dedicated to returning the Callback Messages or do they handle both inbound and callback calls?
- Do the CONVERSANT voice ports that are assigned to Callback Messaging handle only callbacks or do they handle both inbound and callback calls?
- Will Callback Messaging use the software agent in queue method to return calls as soon as possible, or will it return calls during off peak times?

See "Establishing Premium Service for a Mailbox" on page 7-5 if Callback Messaging will use the software agent in queue method. Otherwise, apply the guidelines below.

Guidelines for Successful Message Delivery

This section explains describes the following:

- How to configure the DEFINITY vector that Callback Messaging activates when dialing to deliver a message to an agent
- The Callback Messaging parameters to deliver messages according to the manner in which you want to operate Callback Messaging in your call center

Dedicated Agents and Voice Ports

Use the following guidelines if both agents and voice ports are dedicated to callback calls:

- The DEFINITY vector should allow the call to queue.
- In Mailbox Administration:
  - Set the `Time to wait for answer` field high enough so that the voice port will remain in queue until the agent answers. Use at least 20 seconds.
  - Set the `Message retry interval` field high enough so that successive attempts to reach the outside party after a busy or "ring, no answer" result are not too frequent. An interval of 5 to 15 minutes is generally appropriate.
- In Mailbox Global Settings:
  - Set the `Channel access time` field to **AUTO**. This setting insures new messages are assigned to a voice port as soon as a voice port becomes available, as long as messages are waiting.

Dedicated Agents and Blended Voice Ports

Use the following guideline if the agents are dedicated and the voice ports handle both inbound calls and callback activity:

- Avoid this approach. No field values can insure that the agents continually have messages and the voice ports continue to handle both inbound and callback activity.
  - — A `Channel access time` setting of “AUTO” insures that the agents receive messages. However, as long as messages exist, Callback Messaging will monopolize the voice ports. The voice ports will not be available for inbound calls.
  - — With a `Channel access time` setting other than “AUTO,” the agents may not receive messages on a timely basis because inbound traffic takes an excessive share of the port capacity. An environment with dedicated agents should also include dedicated voice ports for the callback service.

Blended Agent Service and Dedicated Voice Ports

Use the following guidelines if the agents handle inbound calls as well as perform callbacks, but the voice ports are dedicated:

- The DEFINITY vector should return busy if agents are not sufficiently available.
  - — If agents should receive callback messages only when they are available, the vector should return busy unless the number of callers in queue is zero.
  - — If agents should receive callback messages when the estimated wait time for callers is below a threshold number, the vector should return busy when the estimated wait time or the number of callers in queue is above a threshold.

CAUTION:
Do not set the `Channel access time` *field to “AUTO” for this configuration. An “AUTO” setting would result in CPU intensive churning situations during peak call times (the callback service continually attempts to deliver messages, but receives busy from the vector because agents are not available).*

- In Mailbox Administration:
  - — Set the `Time to wait for answer` field high enough so that the voice port remains in the queue until the agent answers.
  - — Set the `Message retry interval` field to one minute.

- In Mailbox Global Settings:
  - Set the `Channel access time` field to one minute. This is the lowest possible access time that still insures reasonably rapid delivery of messages to available agents.

Blended Agent Service and Voice Ports

Use the following guidelines if agents as well as the voice ports will handle both inbound and callback activity:

- Follow the guidelines for blended agent service and dedicated voice ports. If the callback service consumes too much of the voice port time, then increase the `Channel access time` field entry.

Establishing Premium Service for a Mailbox

Premium service should be available only to the minority of callers who have urgent needs or are of particularly high value to the organization. Other callers should have routine, rather than premium, service.

The strongest premium service is service that immediately delivers the caller to an agent. Priority queuing on the switch and routing services enable this approach. Premium callback service is a second step when immediate delivery to an agent is not possible.

Callback Messaging offers two options for premium service mailbox:

- Software agent in queue
- Assign the mailbox a high priority

Software Agent in Queue Method

The software agent in queue method does not hold the caller's place in queue and perform a callback when the call goes to an agent. Instead, the original call ends after the caller leaves the message for the return call. If voice port capacity is available, Callback Messaging dials the agent group and places the voice port in queue until the switch delivers the call to an agent. When the agent answers, Callback Messaging gives the message to the agent and then dials the return call to the party who left the message.

Set the fields as follows to enable the software agent in queue method for a mailbox:

- The DEFINITY vector that Callback Messaging activates when it dials to deliver the message to an agent must allow the call to queue.
- In Mailbox Administration:
  - Set the `Time to wait for answer` field greater than the longest time callers can expect to wait in queue for the agents who handle the return calls.
  - Set the `Mailbox priority` field high, as described in the paragraphs on mailbox priority below.

Advantages and Disadvantages of the Software Agent in Queue Method

The software agent in queue method benefits callers who want to speak with an agent as soon as possible, but do not want to wait on hold.

However, this method has a significant disadvantage. It allows callers who might otherwise abandon and call again later to leave their service demand at the peak time through Callback Messages. In this way, it raises busy period wait times for all callers, those whose requirements are more urgent and need to wait and those who would otherwise accept service at less busy times. For this reason, the software agent in queue method should be reserved for customers requiring premium service.

Mailbox Priority

You can assign different priority levels to different mailboxes. Callback Messaging attempts to deliver messages in higher priority mailboxes before those in lower priority mailboxes. Every mailbox has a priority level.

Assigning Mailbox Priority

Use the following steps to assign mailbox priority levels:

1. Start at the Callback Messaging Administration menu and select Mailbox Administration.
2. In the `Mailbox priority` field, enter a number from “0,” lowest priority, to “5,” highest priority.

   Apply the following guidelines for setting mailbox priorities:

   - Assign a higher priority to a mailbox only if the messages in that mailbox are exceptional in terms of value or urgency. Exceptional messages should be few in number compared to the overall number of Callback Messages.
   - Keep all other mailboxes at the same priority.

If many messages are in high priority mailboxes, high priority loses its meaning. Because the messages are numerically significant, serving them will take time. The risk also exists that lower priority messages may not be served due to lack of resources, rather than simply served at a slower rate.

Scheduling Callback Times

This section lists the fields that determine whether callers and agents can schedule a time for a return call:

In Mailbox Global Settings:

- `Allow agents to reschedule`
- `Scheduling options`
- `Time format`

In Mailbox Administration

- Whether or not a segment `Type of Sched` exists for the mailbox

Allow Agents to Reschedule

This field determines whether agents can reschedule the callback time specified by a caller. If this option is enabled, agents can reschedule the callback time either at the end of a message review or when reclassifying a call. This field setting applies to all mailboxes. It cannot be enabled on a mailbox-by-mailbox basis for agents.

Enable Agents to Reschedule Callback Times

Use the following steps to enable agents to reschedule callback times:

1. Start at the Callback Messaging Administration menu and select Mailbox Global Settings.
2. In the `Allow Agents to Reschedule?` field, enter **Yes** to allow agents to reschedule. Enter **No** if you do not want agents to be able to reschedule.

Enable Callers to Reschedule

The scheduling capability can be enabled only on a mailbox-by-mailbox basis for the caller. To enable the capability for a caller, include one segment with a `Type of Sched` that is the designation for a schedule-type segment. When the system reaches this segment, it will present the caller with scheduling options, and collect the caller's response.

NOTE:
A mailbox can have either no schedule segment or one schedule segment, but not more than one.

Scheduling Options

Use this field to select the scheduling options that will be available to agents and callers. Scheduling options are global settings; they apply to both agents and callers. You cannot assign different types of scheduling options to agents and callers.

Enable Scheduling Options

Use the following steps to enable a scheduling option:

1. Start at the Customer Assist main menu and select Callback Messaging Administration.
2. Select Mailbox Global Settings.
3. In the `Scheduling options` field, enter **Yes** for each of the following options you want to enable. Enter **No** for each of the following options you do not want to enable.
   - `Immediately` — as soon as possible given the constraints of agent calling hours, the mode of callback for the mailbox, and the competition for resources.
   - `Later today` — any time later in the current day up to 11:00 P.M. in the local time for the CONVERSANT system.
   - `Later date` — any date up to 11 months into the future and time of day on that date up to 11:00 p.m.

Time Format

This field determines the format agents and callers use to enter a time for callbacks. This field applies only to callbacks scheduled for later today.

- If the `Time format` has a 12-hour clock setting, the script prompts the caller or agent successively to enter the hour, 1 through 12, and then to make a menu choice between a.m. and p.m.
- If it has a 24-hour clock setting, the script prompts the caller or agent to enter the hour, 0 through 23.

Configuring for Successful Dialing and Message Disposition

This section lists the fields that are critical to the successful dialing and disposition of return call messages:

- In Dial Plan in Function Specific Settings in Intelligent Actions
  - `Wait for Response`
- In Dial Plan in Make Call Configuration
  - `Intelligent Make Call`
  - `Outpulse Code Pre`
- In Mailbox Global Settings
  - `Force ‘Press 1’ for agent callback pickup`
  - `Allow agents to reschedule`
  - `Callback conference time`
  - `Allow agents to classify callbacks`
- In Mailbox Administration
  - `Transcriber welcome phrase`
  - `Agent access number`
  - `Treat as outside number`
  - `Outside line access code`
  - `Country code`
- In Administration for a Data-type Segment of the Message
  - `Display field`
  - `Treat as phone field`
  - `Portion`
  - `Enable automatic launch`
  - `Message treatment`

Callback Messaging dials two numbers to complete a return call:

- Number to reach an agent
- Callback number for the party who left the message

Number to Reach an Agent

Use the following steps to provide Customer Assist with agent telephone numbers:

1. Start at the Callback Messaging Administration menu and select Mailbox Administration.
2. Enter the agent extension number or Vector Directory Number in the `Agent access number` field.
3. Do one of the following:
   - If agents are local to the switch, enter **No** in the `Treat as outside number` field.

     In this case, Callback Messaging dials the `Agent access number` without adding access and accounting codes.
   - If the agents are on an outside number:
     a. Enter the complete agent telephone number (the area/city code followed by local subscriber number for the agents) in the `Agent access number` field.
     b. Enter **Yes** in the `Treat as outside number` field.

     Callback Messaging uses the appropriate Dial Plan rules to determine the string of digits to dial, including access and any accounting codes, to reach the agents.

Vector Directory Number

If the agents are local to the switch and the `Agent access number` is a Vector Directory Number, then Callback Messaging can also deliver digits from one data-type segment to the switch. The switch can accept the entry in the same manner as prompted digits on the switch. The message can include only one such segment.

Use the following steps to create a display segment:

1. Start at the Callback Messaging Administration menu and select Mailbox Administration.
2. Enter **Data** in the `Type` field corresponding to the segment.
3. In the Data Configuration form that appears, set the `Display field` to **Internal**.

4. Set the `Display field` for all other data-type segments in the message to **None**.

   If a display segment exists for the mailbox and the given message has an entry for this segment, then Callback Messaging will pause after dialing the Vector Directory Number for the duration set in the `Outpulse Code Pre` field in Dial Plan. It then dials the digits from the display data-type segment.

   The pause enables the switch to make the touch-tone recognition resources ready to capture the display digits. The default setting is usually satisfactory. The DEFINITY G3 vector captures the display digits. Through the correct collect actions in the DEFINITY vector, the display digits can appear on the agent's display and function as "caller input" for screen pop.

Callback Number for the Party who Left the Message

Use the following steps when the callback telephone numbers require an outside line access code that is different from the one set in Dial Plan Administration:

1. Start at the Callback Messaging Administration menu and select Mailbox Administration.
2. Set the `Outside line access code` field to the outside line access code required by the callback numbers in the mailbox.

Storing the Callback Telephone Number in One or Multiple Segments

Use the following questions to determine whether to collect the callback telephone number in one or multiple segments:

- Are callbacks to telephone numbers local to the switch or to outside telephone numbers?
- If the callbacks are to outside telephone numbers, are those numbers:
  - In the same country as the switch?
  - In a single country that is different from the switch?
  - In multiple countries?
- If the callbacks are to outside telephone numbers, are the telephone numbers of fixed length, such as in the U.S., where the area code is always 3 digits and the subscriber number is always 7 digits, or of variable length?
- What method is used to collect responses?
  - Dial Pulse Recognition or WholeWord Speech Recognition
  - Touch Tone

Return calls are to numbers local to the switch.

Use the following steps to configure the mailbox to collect the telephone number in a single segment:

1. In Mailbox Administration, enter **Data** in the `Type` field corresponding to the segment that collects the telephone number.
2. In the Data Configuration form that appears, set the `Portion` field to **Internal**.

   Callback Messaging dials these digits as is without access codes or other modifications.
3. In Mailbox Administration, leave the `Country code` field blank.

Return calls are to outside telephone numbers all in the same country as the switch. Numbers have a fixed length format.

Use the following steps to configure the mailbox to collect the telephone number in a single segment:

1. In Mailbox Administration, enter **Data** in the `Type` field corresponding to the segment that collects the telephone number.
2. In the Data Configuration form that appears, set the `Portion` field to **Whole**.

   Callback Messaging adjusts these digits according to Dial Plan.
3. In Mailbox Administration, leave the `Country code` field blank.

   This approach is typical in 10-digit U.S. dialing situations.

Return calls are to outside telephone numbers all in the same country as the switch. Numbers have a variable length format.

Use the following steps to configure the mailbox to collect the telephone number in two consecutive segments, the first for the area/city code and the second for the local subscriber number:

1. In Mailbox Administration, enter **Data** in the `Type` field corresponding to the segment that collects the area code.
2. In the Data Configuration form that appears, set the `Portion` field to **Area Code**.
3. Enter **Data** in the `Type` field corresponding to the segment that collects the subscriber number.
4. In the Data Configuration form that appears, set the `Portion` field to **Subscriber**.

   Callback Messaging joins the two segment entries and then adjusts the digits according to Dial Plan.
5. In Mailbox Administration, leave the `Country code` field blank.

NOTE:
This two-part approach would also produce correct results if the return calls are to outside numbers all in the same country as the switch and Dial Plan has a fixed length format. For the one segment approach in such situations, you may want the message script to collect the response using Dial Pulse Recognition or WholeWord Speech Recognition. Because it allows collecting the telephone number in two shorter strings, rather than one longer string, it delivers better recognition rates. For example, in a U.S. dialing situation, the recognition rate for a 3-digit and 7-digit string is better than for a 10-digit string.

Return calls are to outside telephone numbers that are NOT located in the same country as the switch.

Use the following steps to configure the mailbox to collect the telephone number in a single data segment.

1. In Mailbox Administration, enter **Data** in the `Type` field corresponding to the segment that collects the telephone number.
2. In the Data Configuration form that appears, set the `Portion` field to **Whole**.

Alternately in this situation, if shorter strings of digits are desirable for better recognition rates, the system can collect the number in two consecutive segments, the first for the area/city code and the second for the local subscriber number. Use the following steps to configure the mailbox to collect the telephone number in two consecutive segments:

1. In Mailbox Administration, enter **Data** in the `Type` field corresponding to the segment that collects the area code.
2. In the Data Configuration form that appears, set the `Portion` field to **Area Code**.
3. In Mailbox Administration, enter **Data** in the `Type` field corresponding to the segment that collects the subscriber number.
4. In the Data Configuration form that appears, set the `Portion` field to **Subscriber**.
5. In Mailbox Administration, set the `Country code` field to the country code for the return call telephone numbers.

   Callback Messaging uses the mailbox country code in place of the Dial Plan country code and adjusts the digits according to Dial Plan.

Return calls are to outside telephone numbers that are all located in multiple countries all different from the one where the switch resides.

Use the following steps to configure the mailbox to collect the telephone number in two consecutive segments, the first for the country code and the second for the combined area/city code and local subscriber number:

1. In Mailbox Administration, enter **Data** in the `Type` field corresponding to the segment that collects the country code.
2. In the Data Configuration form, set the `Portion` field to **Country Code**.
3. In Mailbox Administration, enter **Data** in the `Type` field corresponding to the segment that collects the telephone number.
4. In the Data Configuration form that appears, set the `Portion` field to **Whole**.

   Callback Messaging joins the two segment entries and then adjusts the digits according to Dial Plan.
5. In Mailbox Administration, leave the `Country code` setting blank.

Alternately in this situation, if shorter strings of digits are desirable for better recognition rates, the system can collect the number in three consecutive segments, the first for the country code, the second for the area/city code and the third for the local subscriber number.

Use the following steps to configure the mailbox to collect the telephone number in three consecutive segments:

1. In Mailbox Administration, enter **Data** in the `Type` field corresponding to the segment that collects the country code.
2. In the Data Configuration form that appears, set the `Portion` field to **Country Code .**
3. In Mailbox Administration, enter **Data** in the `Type` field corresponding to the segment that collects the area code.
4. In the Data Configuration form that appears, set the `Portion` field to **Area Code**.
5. In Mailbox Administration, enter **Data** in the `Type` field corresponding to the segment that collects the subscriber number.
6. In the Data Configuration form that appears, set the `Portion` field to **Subscriber**.
7. In Mailbox Administration, leave the `Country code` field blank.

   Callback Messaging uses the segment country code in place of Dial Plan country code and adjusts the digits according to Dial Plan.

Return calls are to outside telephone numbers that are all located in multiple countries including the one where the switch is located.

Use the following steps to configure the mailbox to collect the telephone number in three consecutive segments:

1. In Mailbox Administration, enter **Data** in the `Type` field corresponding to the segment that collects the country code.
2. In the Data Configuration form that appears, set the `Portion` field to **Country Code**.

3. In Mailbox Administration, enter **Data** in the `Type` field corresponding to the segment that collects the area code.
4. In the Data Configuration form that appears, set the `Portion` field to **Area Code**.
5. In Mailbox Administration, enter **Data** in the `Type` field corresponding to the segment that collects the subscriber number.
6. In the Data Configuration form that appears, set the `Portion` field to **Subscriber**.
7. In Mailbox Administration, leave the `Country code` setting blank.

   Callback Messaging uses the segment country code in place of Dial Plan country code and adjusts the digits according to Dial Plan.

Callback Messaging Modes of Dialing the Agent

Callback Messaging can dial the agent in one of two ways:

- Blind
- Intelligent

Blind Mode

For blind mode, Callback Messaging will call the agent and determine whether the result of the call is busy. If so, it ends the attempt and logs the attempt as a failure. If the result is not busy, Callback Messaging operates as follows:

- Starts the `Time to wait for an agent` timer and begins repeatedly prompting, "To begin transcription, press 1."

  See "Configuring for Successful Message Delivery" on page 7-2 of this document for instructions on how to set the `Time to wait for an agent` field.

- Continues prompting until it detects the touch-tone entry "`1`" or the `Time to wait for an agent` expires.
  - — If Callback Messaging detects a touch-tone entry, it logs the attempt as a success and begins the message review for the agent.
  - — If the timer expires, Callback Messaging ends the attempt and logs the attempt as a failure.

T1 and SP Board Based Line Side T1 Voice Ports. If the voice ports are T1 and SP Board based Line Side T1 voice ports, then Callback Messaging must use blind mode. Callback Messaging can use blind mode for other voice port configurations, in particular, if the answer detection for intelligent is not completely robust.

Enabling Blind Mode

Use the following steps to enable blind mode:

1. In Mailbox Administration, set the `Force 'Press 1' for agent callback pickup` field to **Yes**.
2. In Dial Plan, make the `Intelligent Make Call` setting in Make Call Actions in Function Specific Settings blank.

Intelligent Mode

In intelligent mode, Callback Messaging calls the agent and detects the result of the call. If the result is busy, it immediately ends the attempt and logs the attempt as a failure. If the result is not busy, Callback Messaging operates as follows:

- Starts the `Time to wait for an agent` timer and waits for speech energy.
- Callback Messaging continues waiting until it detects agent speech energy or the `Time to wait for an agent` timer expires.
  - — If Callback Messaging detects agent speech energy, it logs the attempt as a success and begins the message review for the agent.
  - — If the timer expires, Callback Messaging ends the attempt and logs the attempt as a failure.

E1/T1 and SSP Board Based Line Side T1 Ports. If the voice ports are analog ports or E1/T1 and SSP Board based Line Side T1 ports, Callback Messaging can use intelligent mode. In this case, the callback call must queue on ringing or silence, not on announcements or music. This insures Callback Messaging does not recognize the announcement or music speech energy and begin the message review before the agent is on the line. The intelligent mode is the preferred mode because it requires fewer actions on the agent's part.

Enabling Intelligent Mode. Use the following steps to enable intelligent mode:

1. In Mailbox Administration, set the `Force 'Press 1' for agent callback pickup` to **No**.
2. In Dial Plan, set the `Intelligent Make Call` field in Make Call Actions in Function Specific Settings to **W0001**.

NOTE:
See the Technote "CONVERSANT:10052" for more information on how to use DTMF Feedback on Customer Assist callbacks.

Callback Messaging Modes of Initiating Dialing for the Return Call

Callback Messaging can begin the call to the party who left the message in one of two modes:

- Automatic
- Manual

Automatic Mode

For automatic mode, Callback Messaging begins to dial as soon as the agent reaches the first segment that contains part or all of the callback telephone number during playback. The agent does not act to start the dialing. Because the

agent does not establish a disposition for the message, save or delete, before dialing begins, a default disposition is necessary in the automatic mode. Automatic mode is recommended for situations where callbacks are routine and agents require little time to retrieve and review caller information to prepare the response to the caller.

Enabling Automatic Mode. Use the following steps to enable the automatic mode:

1. In Mailbox Administration, enter **Data** in the `Type` field corresponding to the segment that collects the area code.
2. In the Data Configuration form that appears, set the `Treat as phone field` field to **Yes**.
3. Set the `Enable automatic launch` field to **Yes**.
4. Set the `Message treatment` field to the default disposition Callback Messaging should assume for the message. Enter **Save** or **Delete**, if the agent does not reclassify the message and change the disposition. Normally this setting is “Delete.”

NOTE:
For all other segments, set the `Enable automatic launch` field to **No**.

Manual Mode

For manual mode, at the end of the message review, Callback Messaging presents a menu of disposition options to the agent, including:

- Launch the callback and delete the message (if the dialing is successful)
- Launch the callback and save the message (if the dialing is successful)

To launch the callback, the agent selects one of these options. Use manual mode for situations where the agent may need more time to retrieve and review information to prepare the response to the caller.

Enabling Manual Mode. Use the following steps to enable manual mode:

1. In Mailbox Administration, enter **Data** in the `Type` field corresponding to the segment that collects the area code.
2. In the Data Configuration form that appears whenever you perform Step 1, leave the `Enable automatic launch` field as **No** and `Message treatment` field as **None**.

Callback Messaging Modes of Dialing the Return Call

Callback Messaging can call the party who left the message in one of two modes:

- Blind

- Intelligent

Blind Mode

For blind mode, Callback Messaging flashes to place the agent on hold, dials the outside party, flashes to bring the agent back into the call, and starts the `Callback conference time` timer. Callback Messaging automatically assumes the call is successful, whether or not it is successful. Therefore, the agent must have the ability to reclassify the calls. The blind mode is recommended for the DEFINITY G3 because it allows the agent to respond as soon as the caller answers.

NOTE:
For blind mode the callback conference timer is running during the call progress as well as the time after the caller answers.

Enabling Blind Mode. Use the following steps to enable blind mode:

1. In Dial Plan leave the `Wait for Response` field in Intelligent Actions in Function Specific Settings blank.
2. In the Mailbox Global Settings, set the `Allow agents to classify` callbacks field to **Yes**.

Intelligent Mode

For intelligent mode, Callback Messaging flashes to place the agent on hold, dials the outside party, and detects the result of the call. The DEFINITY G3 must provide DTMF response to the voice channel upon answer detection. The analog and Line Side T1 answer detection to calls into the network is not sufficiently robust. Customer Assist does not use full CCA services. Because the answering party may be an answering machine or voicemail and the agent may not be able to fulfill the service requirement by leaving a message, the agent should have the ability to reclassify the call, even though intelligent mode includes call result detection.

NOTE:
For intelligent mode the callback conference timer is running only after answering and the flash to bring the agent back into the call and not during the call progress.

Enabling Intelligent Mode. Use the following steps to enable intelligent mode:

1. In Dial Plan in Intelligent Actions in Function Specific Settings, set the `Wait for Response` field to **WXXXX**, where “X” is the number of ring cycles allowed before the call is considered a call with no answer.
2. In the Mailbox Global Settings, set the `Allow agents to classify callbacks` field to **Yes** (the recommended setting) to allow agents to reclassify calls. Set this field to **No** to deny agents the ability to reclassify calls.

The `Callback conference time` timer determines how long the voice port remains a party to the call after the agent is brought back into the call. The timer operates as follows:

- If the timer expires before the call ends, the voice port drops from the call and Callback Messaging disposes of the message according to the disposition set at the time it launched the return call to the outside party.
- If the call ends before the timer expires, Callback Messaging terminates the script and leaves the message in a “new” state. Callback Messaging treats the message as a message ready for delivery, as soon as the message retry interval has elapses.
- If the agent enters any touch-tone except “*99” before the timer expires, the conference timer will extend the length of time the voice port remains a party to the call by the `Callback conference time`.
- If the `Allow agents to reclassify callback` field is “Yes” and the agent enters “*99”, Callback Messaging allows the agent to reclassify the call from success to failure, if desired. If scheduling is enabled, then agents can reclassify the disposition the message, reschedule it, or leave it in status “new”.

Two constraints exist when setting the `Callback conference time`:

- If the time is too short, the agent does not have a chance to reclassify the call in the case of a "ring, no answer," or in an answered situation, where the agent cannot deliver the message. For example, the agent may reach voicemail or an answering machine and leaving a message does not represent satisfactory service. The agent may also reach a person who is not the correct person.
- If the time is too long, the agent might complete short calls, where the caller answers promptly, before the time has expired. If the agent hangs up without entering “*99” and forces a disposition through the message disposition options, then the call remains in status “new”. Callback Messaging will include the message again as a message available for delivery, as soon as its message retry interval has elapsed, even though the agent has completed the service requirement.

Use the following guidelines for setting the `Callback conference time` in Mailbox Global Settings:

- To reach the outside party during blind mode dialing, the `Callback conference time` must include time for the agent to monitor the call’s progress and to determine whether the answering party is a party to whom the agent can deliver service. Set the conference time to 20 seconds longer than the typical interval that the agents have as a standard for “ring, no answer” in calling a customer. Allow about six seconds per ring cycle. For example, if agents typically wait five ring cycles before judging the call as a “ring, no answer”, then set the `Callback conference time` to 50 seconds. If agents typically wait three ring cycles, then set the `Callback conference time` to 40 seconds.

- For intelligent mode dialing to reach the outside party, the `Callback conference time` need only include enough time to determine whether the answering party is a party to whom the agent can deliver service and need not include time to monitor call progress. Set the `Callback conference time` to 30 seconds.

Determining the Mailbox Segments and Their Sources of Information

Use the following guidelines for determining the order of the message segments:

- In Mailbox Administration, enter the segments in the `Segment` and `Type` fields in an order that is logical to the caller. The system presents the segment prompts in the order in which they appear in this screen.
- If the system collects the telephone number in multiple segments, these segments should be consecutive segments. See "Configuring for Successful Message Delivery" on page 7-2 of this document for information on the structure of the callback telephone number.
- If the mailbox configuration includes automatic launching for the return call, you must put any segment responses that the agent must hear ahead of the telephone number segments. See "Configuring for Successful Message Delivery" on page 7-2 of this document for information on the structure of the callback telephone number. For automatic launch, the system will stop at the telephone number and launch the callback.

Segment Types

Enter the appropriate `Type` for each segment next to the segment number in the `Segment` and `Type` entry screen, according to Table 7-1.

Table 7-1. Information Types

Nature of Information	Type
Telephone Number	Data
Numeric information, other than the telephone number, that the system may collect via Touch-Tone, Dial Pulse Recognition, or WholeWord Speech Recognition, or that the MSG_DROP action might pass as a parameter into the message.	Data

Table 7-1. Information Types

Nature of Information	Type
Recorded response from the caller.	Record
Scheduling choice in response to a menu prompt with the scheduling options.	Sched
A phrase with information, such as instructions, that does not require the caller to make an entry.	Inform

Schedule-Type Segment

For this segment, the system delivers the scheduling options to the caller in spoken form and collects the caller's response. Callback Messaging speaks only the scheduling options that are enabled in Mailbox Global Settings. See the "Scheduling Callback Times" section for more information.

Data-Type Segment

This segment may obtain caller information in two ways:

- The system can prompt the caller for the entry.
- The MSG_DROP action can pass entries for data-type segments into the message. Use this approach to avoid prompting the caller for the same information again. The MSG_DROP action can pass up to three numeric items, labeled in sequence "A," "B," and "C."

Use the following steps to configure the data-type segment:

1. To use the MSG_DROP action to pass entries into the message:
   a. In the segment administration, set the `Passed parameter` field to **Yes**.
   b. Use the `Argument` field to label the caller's response to this segment as "A," "B," or "C."
2. For other data-type segments for which the message script will collect the caller's input, set `Passed parameter` to **No** and leave `Argument` field blank.

Recorded-Type Segment

- To determine what method the message script uses to collect caller input for schedule and data-type segments:
  — For Dial Pulse Recognition, set the Use Dial Pulse Recognition field in Mailbox Administration to Yes.
  — For WholeWorld Speech Recognition, set the Use Speech Recognition field to Yes.

Both parameters can be set to “Yes” concurrently. Callers can respond via touch-tone, even when Dial Pulse Recognition and WholeWord Speech Recognition are active.

For a recorded-type segment, the system prompts the caller to speak a response and records the caller’s spoken entry.

Information-Type Segment

For an information-type segment, the system speaks information, but does not collect a response from the caller.

Segment Requirements

The system can require the caller to complete any data, recorded, or schedule-type segment in order for Callback Messaging to retain the message as a valid callback request.

- Required segments — if the caller fails to complete any required segment, Callback Messaging does not accept the message and instead discards the input. In general, required segments should be only those critical to serve the caller successfully on the return call, for example, the callback telephone number.
- Non-required segments — if the caller fails to complete successfully a non-required segment, but completes all the required fields, then Callback Messaging retains the request.

For required segments:

1. In segment administration, set the `Segment required to save message` field to **Yes**.

For non-required segments:

1. In segment administration, set the `Segment required to save message` field to **No**.

The system can require the caller to confirm any data, recorded, or schedule-type segment entry, including data-type entries passed by the MSG_DROP action. The `Number of confirmation chances` field in Mailbox Global Settings determines the number of tries a caller has to enter and confirm a response. Because confirmation takes time, limit confirmation to those entries critical to successful service on the return call.

Use the following steps to require the caller to confirm the entry for a segment:

— In the segment administration, set `Have caller confirm` to **Yes** when confirmation is necessary.

— Set `Have caller confirm` to **No** when confirmation is not necessary.

The agent does not necessarily have to hear all the entries during the message review. Cases where the agent may not need to hear the entry include the following:

— The callback telephone number, because Callback Messaging automatically dials the number.

— The display data-type segment, because it appears on the agents display or in a screen pop solution.

— The schedule choice, because Callback Messaging automatically manages the scheduling.

Use the following steps to designate what an agent should hear:

— In the segment administration, set `Playback to transcriber` to **Yes** if an agent needs to hear the entry.

— Set `Playback to transcriber` to **No** if an agent does not need to hear the entry.

Configuration in the Administrative Sequence

This section describes the configuration fields relevant to Callback Messaging:

- Global settings for all message drop mailboxes
- Agent callback hours
- Customer callback hours
- Mapping country/city/area codes to time zones
- Individual mailbox settings
- Individual settings for a data segment in a mailbox
- Individual settings for a recorded segment in a mailbox
- Individual settings for an information only segment in a mailbox
- Individual settings for a schedule segment in a mailbox

The fields are listed in the order they appear in the administration screens.

Global Settings for All Message Drop Mailboxes

Use the following guidelines for setting the mailbox global settings:

- `Channel access time:` See "Configuring for Successful Message Delivery" on page 7-2 of this document.
- `Access channel(s):` Enter the CONVERSANT voice port numbers in this field. See "Voice Ports Capacity" on page 5-13 of this document.
- `Force 'Press 1' for agent callback pickup:` See "Configuring for Successful Dialing and Message Disposition" on page 7-9 of this document.
- `Speak transcription segment numbers:` See "Determining the Mailbox Segments and Their Sources of Information" on page 7-21 of this document.
- `Play message header information:` The agent may hear header information at the start of the message review. Hearing this information makes the review process more time consuming. For this field, enter a setting other than "N" only if hearing this information benefits the agent when serving the caller.
  - "A" for message identification number and the date and time caller left message.
  - "M" for message identification number only.
  - "D" for message identification number and date caller left message.
  - "d" for date caller left message only.
  - "T" for message identification number and time caller left message.
  - "t" for only the time caller left message.
  - "N" for none.
- `Number of confirmation chances:` See "Determining the Mailbox Segments and Their Sources of Information" on page 7-21.
- `Time format:` See "Scheduling Callback Times" on page 7-7.
- `Allow agents to reschedule:` See"Scheduling Callback Times" on page 7-7 of this document.
- `Scheduling options:` See "Scheduling Callback Times" on page 7-7
- `Callback conference time:` See "Configuring for Successful Dialing and Message Disposition" on page 7-9 of this document.
- `Allow agents to classify callbacks:` See "Configuring for Successful Dialing and Message Disposition" on page 7-9 of this document.

Agent Callback Hours

Use the following guidelines for setting the agent callback hours:

- `Start time:` Set the `Start time` to the first time during the day, when agents should begin returning calls.
- `Stop time:` Set the `Stop time` to the last time during the day, when agent should place return calls.

Callback Messaging will restrict return call dialing for a day to the period between the start and stop times for the day. If the agents can return calls for the full day, then enter a `Start time` of 12:00 A.M. and a `Stop time` of 11:59 P.M. If the agents can not return calls at any time during the day, enter a `Start time` and a `Stop time` of 12:00 A.M.

Customer Callback Hours

Use the following guidelines to set the customer callback hours:

- `Start time:` Set the `Start time` to the first time during the day in terms of the caller's local time when agents should begin returning calls.
- `End time:` Set the `End time` to the last time during the day in terms of the caller's local time when agents should place return calls.

If the `Adjust for time zone:` field for the mailbox is set to Yes, Callback Messaging adjusts the current system time to the caller's local time based on the Country code/city/area code to time zone mapping record relevant to the return telephone call. The system delivers the message to an agent only if the adjusted time falls within the customer callback hours. If customers are willing to receive calls at any time during the day, then enter a `Start time` of 12:00 a.m. and a `Stop time` of 11:59 p.m.

Individual Mailbox Settings

Use the following guidelines for the mailbox settings:

- `Mailbox name`: Enter a name up to 24 characters describing the type of callers.
- `Mailbox ID`: Enter a numeric identifier up to six digits that is unique from the identifier for all other mailboxes.
- `Mailbox password`: Enter a numeric password up to six digits. Agents who call into the mailbox to retrieve messages must enter this password. Leave this field blank, if password protection for the mailbox is not necessary.
- `Mailbox priority:` See "Establishing Premium Service for a Mailbox" on page 7-5 of this document.

- `Talkfile:` Enter the talkfile corresponding to the language that the callers speak.
- `Transcriber welcome phrase:` The transcriber welcome phrase plays for the agent at the beginning of the message review process. If the agent handles messages from different mailboxes, it can help the agent identify the mailbox where the message came from. If the agent performs both inbound and callback activity, the welcome phrase informs the agent that the call is a Callback Messaging call. To have the agent hear the transcriber welcome phrase, enter the phrase tag corresponding to the welcome phrase in the `Transcriber welcome phrase` field. Otherwise, leave the field blank.
- `Agent access number:` See the "Configuring for Successful Message Delivery" on page 7-2 of this document.
- `Treat as outside number:` See "Configuring for Successful Message Delivery" on page 7-2 of this document.
- `Outside line access code:` See "Configuring for Successful Dialing and Message Disposition" on page 7-9 of this document.
- `Country code:` See "Configuring for Successful Dialing and Message Disposition" on page 7-9 of this document.
- `Time to wait for answer:` See "Configuring for Successful Message Delivery" on page 7-2 of this document.
- `Message retry interval:` See "Configuring for Successful Message Delivery" on page 7-2 of this document.
- `Use Dial Pulse Recognition:` See "Determining the Mailbox Segments and Their Sources of Information" on page 7-21 of this document.
- `Use Speech Recognition:` See "Determining the Mailbox Segments and Their Sources of Information" on page 7-21 of this document.
- `Adjust for time zone:` Enter **Yes** if Callback Messaging should adjust the system time to the caller's local time and check whether the adjusted time is within the customer callback hours before dialing. Otherwise, enter **No**.
- `Message Waiting Lamp extension:` If Callback Messaging should illuminate a message waiting lamp when new messages exist in the mailbox, enter the extension number for the message waiting lamp. Otherwise, leave the field blank.
- `Alarm if:`
  - — `Message age exceeds:` If the mailbox should alarm when the age of any message in the mailbox exceeds a threshold age, then enter the threshold value for `Message age exceeds`. Otherwise, leave `Message age exceeds` blank.

— `Max number of messages exceeds:` If the mailbox should alarm when the number of messages in the mailbox exceeds a threshold number, enter the threshold value in the `Max number of messages exceeds` field. Otherwise, leave `Max number of messages exceeds` blank.

- `Forward messages into mailbox:` If the mailbox should alarm when the age of a message exceeds the age set in `Message age exceeds` or the number of messages exceeds the number set in `Max number of messages exceeds` or both, enter the identification number of the mailbox where messages should overflow. Otherwise, leave the entry blank.
- `Message closing phrase:` If the mailbox will play a closing phrase to callers, enter the phrase number for the phrase corresponding to the verbiage.
- `Segment Type:` See "Determining the Mailbox Segments and Their Sources of Information" on page 7-21 of this document.

Individual Settings for a Data Segment in a Mailbox

Use the following guidelines for data segment settings:

- `Phrase tag:` Enter the phrase tag corresponding to the prompt spoken to the caller to request information for this segment. If this segment obtains its value from a parameter, a phrase tag is still desirable in case the parameter is not available or is of an incorrect length. If the segment obtains its value from a parameter, the system will prompt the caller for an entry only in situations where the passed parameter is missing or has an invalid length.
- `Response limits:` In the `Minimum` field, enter the minimum number of digits that the script should accept from the caller for a valid response to the segment. In the `Maximum` field, enter the maximum number of digits that the script should accept.
- `Have caller confirm:` See "Determining the Mailbox Segments and Their Sources of Information" on page 7-21 of this document.
- `Segment required to save message:` See "Determining the Mailbox Segments and Their Sources of Information" on page 7-21 of this document.
- `Play back to transcriber:` See "Determining the Mailbox Segments and Their Sources of Information" on page 7-21 of this document.
- `Display field:` Enter **Yes** if the digits on this field should appear on the agent's telephone display when the call goes to an agent. Otherwise, enter **No**. When this field is set to **Yes**, a message can have none or one segment, but not multiple segments when this field is set to **Yes**.

- `Treat as phone field:` See "Configuring for Successful Dialing and Message Disposition" on page 7-9 of this document.
- `Enable automatic launch:` See"Determining the Mailbox Segments and Their Sources of Information" on page 7-21 of this document and "Configuring for Successful Dialing and Message Disposition" on page 7-9 of this document.
- `Message treatment:` If the Enable automatic launch field is No, enter **None** in this field. If the Enable automatic launch field is **Yes**, enter **Delete** or **Save** in this field to specify whether Callback Messaging should delete or save the message if the delivery attempt to the customer is successful.
- `Passed parameter` and `Argument`: See "Determining the Mailbox Segments and Their Sources of Information" on page 7-21 of this document.

Individual Settings for a Recorded Segment in a Mailbox

Use the following guidelines for recorded segment settings:

- `Phrase tag:` Enter the phrase tag corresponding to the prompt spoken to the caller to request the information for this segment.
- `Response limits:` In the `Minimum` field, enter the minimum number of seconds of speech that the script should accept from the caller for a valid response to the segment. In the `Maximum` field, enter the maximum number of seconds that the script should accept.
- `Recording quality:` To record the caller's response in higher quality 32-kbps ADPCM, enter **ADPCM32**. To record the caller's response in lower quality 16-kbps ADPCM, enter **ADPCM16**. Another option is **CELP16**. Unless disk storage space is at a premium, use the higher quality recording, as it is more desirable for the agents.
- `Have caller confirm:` See "Determining the Mailbox Segments and Their Sources of Information" on page 7-21 of this document.
- `Segment required to save message:` See "Determining the Mailbox Segments and Their Sources of Information" on page 7-21 of this document.
- `Play back to transcriber:` See "Determining the Mailbox Segments and Their Sources of Information" on page 7-21 of this document.

Individual Settings for an Information Only Segment in a Mailbox

Use the following guideline for information-type segment settings:

- `Phrase tag:` Enter the phrase tag corresponding to the phrase for this segment. This phrase should provide the caller with information only; it should not prompt for a response. An information-type segment does not collect a response from the caller.

Individual Settings for a Schedule Segment in a Mailbox

Use the following guidelines to configure the individual schedule segments:

- `Phrase tag:` Enter the phrase tag corresponding to any instructions that the callers might need. For example, instructions on how to adjust their input to accommodate for different time zones, or instructions on the call center hours. This phrase should not speak the menu choices for the scheduling options. The system informs the caller of the enabled scheduling options automatically.
- `Have caller confirm:` See "Determining the Mailbox Segments and Their Sources of Information" on page 7-21 of this document.
- `Segment required to save message:` See "Determining the Mailbox Segments and Their Sources of Information" on page 7-21 of this document.
- `Play back to transcriber:` See "Determining the Mailbox Segments and Their Sources of Information" on page 7-21 of this document.

Summary

While working through this chapter, you learned how to configure Callback Messaging for your needs.

Troubleshooting

8

This chapter describes the steps procedures to isolate, diagnose, and correct common problems encountered in Customer Assist. A problem will typically fall under one of three general areas in which functionality should be verified: the INTUITY CONVERSANT system, DEFINITY vectors, and Customer Assist.

Isolating and Diagnosing the Problem

The most common problems with Customer Assist are due to configuration errors. Use the sections below to isolate and diagnose the different levels of configuration errors.

General System Checks

Use the following steps to troubleshoot for configuration errors:

1. Enter **who -r** at the UNIX prompt.

   The number after `run-level` is the current run level; the current run level must be set to 4. This number indicates that the voice system is up, and the system handles calls only when the voice system is up.

   a. If the number is not 4, enter **start_vs** at the UNIX prompt to change the run level to 4.

2. Verify that all the telephone lines to the CONVERSANT are securely plugged into the voice cards. Otherwise, callers may hear busy or out-of-order tones, and other types of problems may occur.

3. Enter **display card** at the UNIX prompt.

Verify that all the voice cards and ports are in service. Calls can be handled only when the voice cards or ports are in service. Calls directed to voice cards or ports that are not in service will get busy or out-of-order tones.

4. Enter **dfspace** at the UNIX prompt.

   Verify that the system is not out of space for any of the disk partitions. Without sufficient disk space, the system may not be able to process calls properly and problems will occur in user administration. If there is insufficient disk space, remove unnecessary files.

5. Enter **sar** at the UNIX prompt.

   The numbers that appear in the `%idle` column indicate how busy the system is. The system is less busy when the numbers in the `%idle` column are higher. If the system is too busy, then this could account for slowness in response and possibly timeouts. Use the following steps to check whether other processes are using abnormally high amounts of the CPU time:

   a. Enter **top** at the UNIX prompt.

      The system displays the top users of the CPU.

      or

   a. Enter **ps -ef | more** at the UNIX prompt.

      The system displays the amount of time the processor has used since it started under the `TIME` column. The system displays the time the processor started under the `STIME TTY` column.

6. Check the CONVERSANT error log to see if CONVERSANT or Customer Assist problems exist. (See Chapter 9, "Logs and Error Codes" for more information.)

General Customer Assist Checks

Use the following steps to insure that all required Customer Assist packages are installed on your system:

1. Enter **pkginfo -l *<package name>*** at the UNIX prompt.

   Verify that all appropriate packages have been installed correctly and are the correct version. Insure the system displays `completely installed` in the `STATUS` field. Otherwise, remove the package and reinstall it.

   a. Enter **pkginfo** at the UNIX prompt.

      Compare the list the system displays to "Packages In Customer Assist V7.0" on page 1-1. Insure the system lists all packages that were bought and supposed to be installed.

b. Enter **pkginfo -l cccBase** at the UNIX prompt.

Make sure that the system returns `completely installed` in the STATUS field. If the Customer Assist Base package is not installed, you must install it.

2. Enter **ls /vs/trans** at the UNIX prompt.

   Verify that all the relevant Customer Assist scripts in the list of prominent programs found in "Prominent Programs" on page 6-33 exist in the **/vs/trans** directory.

3. Enter **ls /usr/spanlink/ccc/bin** at the UNIX prompt.

   Verify that all the relevant Customer Assist DIPs in the list of prominent programs found in "Prominent Programs" on page 6-33 exist in the **/usr/spanlink/ccc/bin** directory.

4. Enter **ps -ef | grep *<DIP name>*** at the UNIX prompt.

   Verify that all applicable Customer Assist DIPs in the list of prominent programs found in "Prominent Programs" on page 6-33 appear in the process table.

Package Specific Diagnostics

The following sections include procedures that will either point towards the source of the problem or eliminate areas as the cause of the problems. In addition to the following steps, look at the CONVERSANT Error Log as well as the debug files, and trace the port.

Platform Management

Use the following steps to isolate and diagnose problems that may occur in Platform Management:

1. Enter **pkginfo -l *<package name>*** at the UNIX prompt.

   Verify that the correct Platform Language and Runtime package is installed.

2. Verify that the customer has a valid licensed number of ports. On entering the user interface, you will see the number of port licenses displayed in the splash screen.

   NOTE:
   The number of callers that can be in Platform Management at the same time depends on the value of the licensed number of ports.

NOTE:
A license of -1 means a license file is missing or you are not a super user. A license of -2 means the license file is corrupted. In either case, you must become a superuser and reset the port license. If the license file is missing, see "Changing the Settings After Installation" on page 4-5 for more information. If the license file as been corrupted, see "Setting the Ports Licensed" on page 4-2 for instructions on how to reset the license.

3. Check the base language in administration. Start Customer Assist Administration and select each option below to check it:
   - System Administration
   - Speech Administration
   - Change Base Language

   If the language in effect is not the desired one, see "Changing the Base Language" on page 6-17 of the *INTUITY CONVERSANT System Customer Assist User Guide, 585-313-706*, for instructions on how to change it.
4. Run the Vector Profile and Audit Vector Database reports to verify that the vectors are set up correctly. See Chapter 8, "Reports", of the User's Manual for more information on generating reports.
5. Run the Generate Phrase List report to verify that all phrases have been recorded. Callers will hear silence if the phrase was not recorded. See "Generate Phrase List" on page 6-16 of the *INTUITY CONVERSANT System Customer Assist User Guide, 585-313-706*, for more information on recorded phrases.
6. If you have a problem with speech, enter **list phrase *<phrase number>* in talkfile *<talkfile number>*** at the UNIX prompt.

   The system displays the problem phrase. Verify that the correct speech files exist in the appropriate talkfile by calling into Speech Administration and playing the phrase. See Appendix A in the *INTUITY CONVERSANT System Customer Assist User Guide, 585-313-706*, for the list of talkfiles.
7. Generate any report that may provide more information about the problem. See Chapter 8, "Reports", of the *INTUITY CONVERSANT System Customer Assist User Guide, 585-313-706*, for more information about the reports available.
8. Try to place the development vector database in service. See "Place New Vectors in Service" on page 4-34 *INTUITY CONVERSANT System Customer Assist User Guide, 585-313-706*, for more information.

   Make sure the vectors in the development database are the same as those in the runtime database. The system informs you if changes have been made to the database since the last time the vectors were placed in service. If there are changes, that means that the vectors in service are different from those you see in the administration and behave differently. You can use the Restore from Current Runtime Database option to see

what the current runtime vectors are performing. See Chapter 4, “Vector Administration”, of the *INTUITY CONVERSANT System Customer Assist User Guide, 585-313-706*, for more information.

9. Check the Dial Plan configuration if any problems develop with transfers. (See the "Troubleshooting" chapter in the *Dial Plan* manual for more information.)
10. Duplicate any problems encountered while watching the System Monitor with a refresh rate of 1 second by entering **sysmon 1** at the UNIX prompt.

    The system displays the scripts that are running and what they are doing at the time of the problem. It also displays the DIPs it uses, the digits entered by callers, and the digits dialed by the system (such as for transfers).
11. Use the REPORT action to check on variable values to insure the caller is being routed to the correct vector. See Chapter 8, “Reports”, of the *INTUITY CONVERSANT System Customer Assist User Guide, 585-313-706*, for more information on using the Call Detail and Event Detail Reports.

Callback Messaging

Use the following steps to isolate and diagnose problems that may occur in Callback Messaging:

1. Enter **pkginfo -l *<package name>*** at the UNIX prompt.

   Verify that the correct Callback Messaging Language and Runtime package is installed.
2. Check the base language in administration. Start Customer Assist Administration and select each option below to check it:
   - System Administration
   - Speech Administration
   - Change Base Language

   If the language in effect is not the desired one, then see “Changing the Base Language” on page 6-17 of the *INTUITY CONVERSANT System Customer Assist User Guide, 585-313-706*, for instructions on how to change it.
3. Verify that the mailbox is configured appropriately in the administration. See “Mailbox Administration” on page 7-3 of the *INTUITY CONVERSANT System Customer Assist User Guide, 585-313-706*, for more information.
4. If your system performs agent callbacks, verify the Agent Callback Hours in the administration. See “Agent Callback Hours” on page 7-25 of the *INTUITY CONVERSANT System Customer Assist User Guide, 585-313-706*, for more information.

5. Verify the Global Settings in the administration. See “Mailbox Global Settings” on page 7-21 of the *INTUITY CONVERSANT System Customer Assist User Guide, 585-313-706*, for more information.
6. If you have a problem with speech, enter **list phrase *<phrase number>* in talkfile *<talkfile number>*** at the UNIX prompt.

   The system displays the problem phrase. Verify that the correct speech files exist in the appropriate talkfile by calling into Speech Administration and playing the phrase. See ‘‘Talkfiles’’ on page 6-3 for the list of talkfiles used by Customer Assist.
7. Check the Dial Plan configuration if any problems develop with either agent or customer callbacks or message waiting lights. See the "Troubleshooting" chapter in the *Dial Plan* manual for more information.
8. Generate any report that may provide more information about the problem. See Chapter 8, “Reports”, of the *INTUITY CONVERSANT System Customer Assist User Guide, 585-313-706*, for more information.
9. Duplicate any problems encountered while watching the System Monitor with a refresh rate of 1 second by typing **sysmon 1** at the UNIX prompt.

   The system displays the scripts that are running and what they are doing at the time of the problem. It also shows the DIPs it uses, the digits entered by callers, and the digits dialed by the system (such as for transfers).

Speech Recognition

Use the following steps to isolate and diagnose problems that may occur in Speech Recognition:

1. Enter **pkginfo -l *<package name>*** at the UNIX prompt.

   Verify that INTUITY WholeWord Recognition - Base is installed.

   Verify that INTUITY WholeWord Recognition - *<Language>* for each of the desired language is installed.

   Verify that Customer Assist Speech Recognition is installed.
2. Enter **display card** at the UNIX prompt.

   Verify that SP or SSP cards are installed and configured for WholeWord Speech Recognition. The SP or SSP card must have `ww` on the `x` line.

   NOTE:
   Some languages must use SSP cards.
3. What is the Feature License value for WholeWord Recognition set to in CONVERSANT Administration? It must be sufficient for the number of callers on the system. See ‘‘Administering Port Licenses’’ on page 4-2 for more information.

4. Does the call volume exceeds the resources that can be provided by the number of SP or SSP cards installed? See Chapter 5, "Capacity and Performance Guidelines", for more information on how to calculate whether or not the call volume exceeds your resources.
5. Verify that the GET_SPCH and MENU actions are configured properly.
6. If the custom grammars are used, insure they have been enabled for the language used. See "SR.cfg" on page 6-30 for more information.
7. Make sure the vectors in the development database are the same as those in the runtime database by trying to place it in service. It will inform you if there has been changes to the database.
8. Verify that the mailboxes have the `Enable Speech Recognition` field set to **Yes**.
9. In the trace, GET_SPCH action is denoted by GS and MENU action by MN. Search for Speech Recognition words when tracing the ports.
10. For GET_SPCH action and Data segment, is the best grammar used to collect the input? Try to use the most restrictive grammar that could collect the user input to increase the accuracy.

Dial Pulse Recognition

Use the following steps to isolate and diagnose problems that may occur in Dial Pulse Recognition:

1. Enter **pkginfo -l *<package name>*** at the UNIX prompt.

   Verify that INTUITY Dial-Pulse Recognition package is installed.

   Verify that Customer Assist Dial Pulse Recognition is installed.
2. Enter **display card** at the UNIX prompt.

   Verify that the SSP card are installed and configured for Dial Pulse Recognition. The SSP card must have `ww` on the `x` line.

   NOTE:
   Only SSP cards can be used for Dial Pulse Recognition.

3. What is the Feature License value for Dial Pulse Recognition set to in CONVERSANT Administration? It must be sufficient for the number of callers on the system. See "Administering Port Licenses" on page 4-2 for more information.
4. Does the call volume exceeds the resources that can be provided by the number of SSP cards installed? See Chapter 5, "Capacity and Performance Guidelines" for more information on how to calculate whether or not the call volume exceeds your resources.
5. Verify that the GET_DIALP and MENU actions are configured properly.

6. Make sure the vectors in the development database are the same as those in the runtime database by tying to place it in service. It will inform you if there has been changes to the database.
7. Verify that the mailboxes have the `Enable Dial Pulse Recognition` field set to **Yes**.
8. In the trace, GET_DIALP action is denoted by GD and MENU action by MN. Search for Dial Pulse Recognition words in the trace.
9. For GET_DIALP action, is the best grammar used to collect the input? Try to use the most restrictive grammar that could collect the user input to increase the accuracy.
10. If the accuracy problem occurs only in certain areas of the country, check whether Lucent can tweak the grammar. The problem could be caused by a bad line connection from that area of the country. Note that no custom grammars were added for Dial Pulse Recognition.

Surveys

Use the following steps to isolate and diagnose problems that can occur in Surveys:

1. Verify that the survey is configured appropriately by checking it in administration. See ‘‘Survey Configurations’’ on page 7-40 of the *INTUITY CONVERSANT System Customer Assist User Guide*, 585-313-706 for more information.
2. Compare the survey configuration to the mailbox it reports on to insure discrepancies do not exist between the configurations. For example, if one has more segments than the other, then the segments are used for different purposes between mailbox and surveys. See Chapter 7, ‘‘System Administration’’, of the *INTUITY CONVERSANT System Customer Assist User Guide*, 585-313-706 for more information.
3. Run any of the Callback Messaging reports that you think will provide more information about the problem and to verify the survey reports. See Chapter 8, ‘‘Reports’’, of the *INTUITY CONVERSANT System Customer Assist User Guide*, 585-313-706 for more information.
4. Duplicate any problems encountered while watching the System Monitor with a refresh rate of 1 second by typing **sysmon 1** at the UNIX prompt.

   This shows you which scripts are running and what they are doing at the time of the problem. It also shows the DIPs it uses as well as digits entered by callers and digits dialed by the system such as for transfers.

Problems and Solutions

Voice System Functionality

Table 8-1. Voice System Functionality

Problem	Cause and Possible Remedy
System is not taking calls. Port rings no answer.	The voice system is not running. Verify that the analog stations on the switch and voice board are functioning. Verify that the call is being presented to the CONVERSANT system on the system monitor.

DEFINITY Switch and Its Vector Functionality

Table 8-2. DEFINITY Switch and Its Vector Functionality

Problem	Cause and Possible Remedy
System is not taking calls. Port rings, no answer.	Either the switch vector process that routes calls to a CONVERSANT system has failed, or the switch vector is not passing the correct information. Check this route-to process, and check the sanity of the switch vector.
Port answers but hangs up.	The switch vector is not sending the correct value or information to the CONVERSANT system. Use the system monitor or trace utility to see what is passed to the CONVERSANT system. Try calling the CONVERSANT system and entering touch-tone digits manually.

Continued on next page

Table 8-2. DEFINITY Switch and Its Vector Functionality — *Continued*

Problem	Cause and Possible Remedy
	No vectors are defined and/or placed in service.
The CONVERSANT system cannot dial an agent, transfer a caller, or complete a conference call via line-side T1/E1.	Whenever the switch cannot respond with resources in time (during a period of high call volume, for example) the CONVERSANT's attempt will fail. Remedies include increasing the dial-tone delay or increasing the number of touch-tone receivers on the switch.
Outbound calls fail or get busy/out-of-order tones for some calls.	There may be insufficient lines from the switch to the outside telephone network.

Customer Assist Functionality

Table 8-3. Customer Assist Functionality

Problem	Cause and Possible Remedy
Port answers but hangs up.	The Customer Assist phrase that answers the call has not been recorded.
	The CONVERSE action on the Customer Assist vector has not been administered correctly, or does not exist.
	The number of digits sent by the DEFINITY CONVERSE step is different from the number configured in the CONVERSE actions in the Customer Assist vector.
	A Customer Assist vector has not been assigned to a port under CHAN_ASN on the setup vector.
	Customer Assist vectors have not been placed in service.
	Customer Assist vectors have been assigned to the wrong port under CHAN_ ASN on the setup vector.
	Call is coming in on an active port used for Message Waiting Lamp notification, which requires a dedicated CONVERSANT port.
Port rings no answer.	The voice system is not running. The application ccc has not been assigned to a voice port, or startup service is not blank.
	Make sure the **vectDIP** and **vrptDIP** processes are in the process table. Reinstalling Platform Language and Runtime package may be necessary. Contact your support representative.
A change made to a vector is not there.	The change was not saved and/or placed in service.
The system could not execute a program.	The program is no longer a valid program.

Continued on next page

Table 8-3. Customer Assist Functionality — *Continued*

Problem	Cause and Possible Remedy
	The program is not a Script Builder or TSM program.
The system could not execute Customer Assist from another program.	The vector was not set up correctly for the port executing Customer Assist. Check CHAN_ASN to insure that a vector is mapped to the port.
The system could not execute Customer Assist from another program for a specified vector.	The vector does not exist in Customer Assist or is improperly set up. EXECUTE action in Script Builder is missing an argument for the vector to pass to Customer Assist.

Platform Management

Table 8-4. Platform Management

Problem	Cause and Possible Remedy
Incorrect phrase played.	Restored speech overwrote the correct phrase.
	Wrong phrase selected. Check the ANNOUNCE, DYN_ ANNOU, MENU, GET_SPCH, or GET_DIALP actions to insure that the correct phrase has been selected.
	Phrase not installed when rerecorded. Listen to the selected phrase in Speech Administration to insure that the proper phrase corresponds. If not, rerecord and install the phrase using [*][3].
No phrase played.	Restored speech overwrote the phrase.
Phrase tag disappeared.	Restored speech overwrote the phrase.

Continued on next page

Table 8-4. Platform — *Continued* Management

Problem	Cause and Possible Remedy
Anticipated delay announcement not spoken.	Switch not passing queue position. Check DEFINITY vectors to insure that a CONVERSE vector step is defined and passing the correct information.
	Variable for the EWT action not defined. Check the EWT action to insure you have selected the variable where to load the queue position.
	Variable for the queue position on Platform Management does not match that used for ADA_CALC. Check both actions to insure the same variable is used.
	ADA_CALC action missing from vector series.
	SPEAK_NUM action missing from vector series. Check your vectors to insure that this action is defined, and the variable corresponding to the `ADA_CALC result` field is selected.
	Elements are not defined for ADA_CALC action, such as average call duration or variables for queue position and result, or the number of agents staffed is at zero and no “no agents staffed” contingency message is defined.
Expected wait time not spoken.	Switch not passing EWT. Check the DEFINITY vectors to insure that a Converse vector step is defined and passing the correct information.
Expected wait time not spoken.	Variable for the EWT action is not defined. Check the EWT action to insure you have selected a variable in which to load EWT.
	Variable for EWT in CONVERSE action on Platform Management does not match that used for EWT action. Check both actions to insure that the same variable is used.
	SPEAK_NUM action missing from vector series. Check your vectors to insure that this action is defined, and the variable corresponding to the `EWT Action output` field is selected.
Incorrect delay announcement spoken (wait time consistently low).	CONVERSE action set to collect too few digits in Platform Management. Check the CONVERSE action to insure the `Number of digits to collect` field allows for the greatest possible number of digits to accept from the switch.

Continued on next page

Table 8-4. Platform — *Continued* Management

Problem	Cause and Possible Remedy
Caller's queue position not spoken.	Switch is not passing queue position. Check DEFINITY vectors to insure that a Converse vector step is defined and passing the correct information.
	Variable for the CONVERSE action is not defined. Check your Customer Assist vectors to insure that you have selected and defined a CONVERSE action and variable to load.
	Variable for queue position in Platform Management does not match that used for SPEAK_NUM.
Caller hears "no agents staffed" message at a time when agents are staffed.	The table for ADA_CALC is incorrectly set up for that day and time. Return to the ADA_CALC action to insure that all staffed times hold a value.
	The clock on the CONVERSANT is wrong.
	The wrong phrase is assigned to ANNOUNCE for Anticipated Delay. Check the ANNOUNCE action to insure that the correct phrase has been selected.
Vector size warning message.	The vector size exceeds the maximum size allowed for software. This is likely to occur if you attempt to add many actions to a vector containing ADA_CALC or SCHEDULE. Utilize a GOTO step to define actions and continue Customer Assist vector processing on a subsequent Customer Assist vector.
Speech administration not calling your telephone when you select LAUNCH.	The port selected during the execution of the DIAL step is busy.
	Invalid port selected. Check the DIAL step in Speech Administration to insure that you are using a port that is in service.
	Port is disabled for soft_szr. Check your CONVERSANT manual for information about enabling ports.
	Incorrect extension or telephone number defined. Check the DIAL step in Speech Administration to insure that you have defined the correct telephone number or extension.
Speech administration calls but does not acknowledge answer.	You did not activate Speech administration. The utility is touch-tone activated. Press 1 when answering telephone.
Speech administration calls but does not accept touch tones.	Port is configured as standard announcement port on the DEFINITY ECS R6.3. Do not call out on standard announcement ports.

Continued on next page

Table 8-4. Platform — *Continued* Management

Problem	Cause and Possible Remedy
Speech administration will not let you record short phrases.	The minimum phrase length for recorded speech is one second. Certain numbers and short phrases may not normally be that length; stretch phrases to fill the one-second minimum.
Unable to create a vector or a template vector.	Attempt exceeds the 256 vector limit. Delete old and unused vectors.
Unable to back up vectors or speech to diskette.	Diskette not formatted properly (UNIX or DOS) or is not formatted at all.
Dynamic port allocation application not executing applications.	Switch not passing the argument (VDN, digits, etc.) used for selecting applications. Check DEFINITY vectors to insure that a Converse vector step is defined.
	CONVERSE, MENU, GET_DIGT, GET_SPCH, or GET_DIALP action needed to load the variable used for dynamic port allocation not defined. Check your Customer Assist vectors to insure that you have selected and defined a CONVERSE, MENU, GET_DIGT, GET_SPCH, or GET_DIALP action and variable that precedes the dynamic port allocation vector.
Dynamic port allocation application not executing applications.	CONVERSE, MENU, GET_DIGT, GET_SPCH, or GET_DIALP action used to collect the argument variable in does not match that used for DYNAMIC action. Check both actions to insure the same variable has been selected.
	Executed application is missing or faulty.
New vector applications defined, but not heard.	New vectors have not been placed in service.
	Speech has not been recorded for the phrases that the vector applications use.
Converse vector step does not work with line-side T1/E1.	Settings on the DEFINITY ECS R6.3 are incorrect. Access the System-Parameters Features screen on the DEFINITY ECS R6.3 switch and set the Converse First and Second Data Delay parameters to 1.
Actions that are typed in and not selected from CHOICES F2 not saved on the vector worksheet.	Typed in actions must be defined to be saved. Check that the vector contains actions that have been defined.

Continued on next page

Table 8-4. Platform — *Continued* Management

Problem	Cause and Possible Remedy
"Place New Vectors in Service" option gives vector update failed message.	The voice system is not running. Check that the voice system is running and that it is at run level "4."
Could not restore vector database.	The database was backed up using UNIX and the restore was from DOS diskettes or vice versa.
	The vector database was backed up in a previous version and must be restored using the option "Restore Data from Previous Version of Call Center."
	There is no diskette in the drive.
Could not back up vector database, speech, mailbox configuration, or routing data.	There is no diskette in the drive.
	The diskette is write protected.
Caller goes to an incorrect vector.	Error in the vector logic, such as a GOTO action to the wrong vector.
	A new vector database is placed in service and the vector where the caller should go next is in the new vector database but is used for another purpose.
Caller is dropped unexpectedly during a call.	Error in the way the Customer Assist vectors are set up. Check the end of every vector to insure each one specifies where a call should go, especially when non-standard conditions are encountered.
	The voice system has been shut down, such as when mailbox configurations are restored.
	A new vector database is placed in service and the call is sent to a vector that no longer exists.
Wrong numbers spoken back in Speech Administration, ADA announcement or queue position.	Numbers rerecorded incorrectly in Speech Administration. Check all likely number phrases in standard Speech Administration to insure that they contain speech.
	The language in effect is different from the expected one.
"Error-500 Message queue is busy" when launching call in Speech Administration	The CONVERSANT is doing soft seizures on the port and the message should clear up on its own. If not, contact your service representative.

Continued on next page

Table 8-4. Platform — *Continued* Management

Problem	Cause and Possible Remedy
Incorrect phrase played for DYNAMIC ANNOUNCEMENT.	VDN passed not corresponding to the correct phrase. Check the mapping of switch VDN passed and phrase numbers on Platform Management.
	The language in effect is different from the expected one.
No phrase played for DYNAMIC ANNOUNCEMENT.	VDN passed not corresponding to a phrase. Check the mapping of switch VDN passed and phrase numbers on Platform Management.
	Phrase not installed when recorded. Listen to the selected phrase in Speech Administration to insure that the proper phrase corresponds. If not, rerecord and install the phrase using [*] [3].
	Switch not passing VDN. Check DEFINITY vectors to insure that a Converse vector step is defined and passing the correct information.
	Variable for the DYN_ANNOU action not defined. Check DEFINITY vectors to insure that a Converse vector step is defined.
Call Management System (CMS) reports show abandons for all calls using the TRANSFER action.	A call routed by means of the TRANSFER action will be classified as an abandon. Consider using the DATA_RTN action for routing through the DEFINITY ECS R6.3 switch instead.
Collect Digits step in DEFINITY vector does not appear to accept DATA_RTN digits.	Use a Wait step just before the Collect Digits step in the DEFINITY vector as a caution in case DEFINITY resources are busy.
Call is not routed to vector defined in CHAN_ ASN.	Call is coming over a different port. Verify using system monitor.
	Port is assigned to multiple vectors in CHAN_ASN. The system will use the first definition and ignore the rest.
Scheduled events (as defined by the SCHEDULE action) do not start.	The SCHEDULE action processes events from top to bottom. A higher event has taken precedence.

Continued on next page

Table 8-4. Platform — *Continued* Management

Problem	Cause and Possible Remedy
Scheduled events (as defined by the SCHEDULE action) will not stop.	Use the “during” choice for events that last for a certain period.
	Define a subsequent start event to redirect the course of the SCHEDULE action.
Scheduled events stop prematurely.	Events that start for a given time period last from the beginning of the time period until the end of it. For example, if an event is to start at hour 7 it will last until the hour resets to 0 at midnight.
Inbound calls collide with outbound Callback Messaging and the inbound caller hears transcription scripts.	An empty vector database was placed in service.
	The OFF_HOOK action was deleted from the set up vector.
	Consider allocating ports to callback only and do not direct inbound calls to any or all of the agent access ports defined.
The vector database contains missing actions, configuration errors, or is otherwise corrupted.	Restore from previous runtime was executed before installation of Customer Assist was completed, or before new vectors were placed in service on a new system (meaning previous runtime database was blank.)

Callback Messaging

Table 8-5. Callback Messaging

Problem	Cause and Possible Remedy
Prompts not playing for Callback Messaging.	Phrases have not been recorded. Listen for the selected phrase in Speech Administration to insure that the phrase exists. If it does not, record and install the phrase using [*] [3].
	Phrases have not been selected/defined for the mailbox. Check Mailbox Administration to insure that the correct phrase has been selected.
Message segments are blank.	Field was not defined as “Required to Save Message,” and the caller did not respond with an input.
	Field was not defined as “Required to Save Message,” and the caller did not respond with at least the minimum defined input.
	A passed parameter is not sent (not available, not properly defined, etc.) and the segment does not include a prompt to collect the missing data.
Caller hears “We're sorry. That is an invalid mailbox.”	Mailbox not defined. You must first create a mailbox and assign phrases in Mailbox Administration.
	Mailbox not selected by vector. Check that the MSG_ DROP action in your Customer Assist vector uses a valid mailbox number or a variable that contains a valid mailbox number.
Mailbox disappeared.	Mailbox configuration was overwritten during a restore.
Messages were lost.	Mailbox was removed.
	Mailbox configuration was overwritten during a restore.
	A message was forwarded at the same time a mailbox was deleted by the system administrator.
Some or all message segments cannot be retrieved from a mailbox.	Segments were inserted, changed, or deleted from a mailbox containing existing messages.

Continued on next page

Table 8-5. Callback Messaging — *Continued*

Problem	Cause and Possible Remedy
Message Waiting Lamp is not lit although messages await.	Message Waiting Lamp extension missing or incorrect. On the CONVERSANT system, check this value on the Mailbox Definition form; insure that it corresponds to the extension of the agent to notify of new messages.
	Check that the Message Waiting Lights function is configured correctly in Dial Plan.
	The port used to light or extinguish the Message Waiting Lamp is constantly being used by other scripts.
	The port used to light or extinguish the Message Waiting Lamp is disabled for soft_szr. See your CONVERSANT manual for information about enabling ports.
	Another program (for example, INTUITY AUDIX) has illuminated the lamp.
Announcement not played prior to mailbox information for automatic agent access transcription.	Phrases have not been recorded. Listen for the selected phrase in Speech Administration to insure that the phrase exists. If it does not, record and install the phrase using [*] [3].
	Phrase not installed when rerecorded. Listen for the selected phrase in Speech Administration to insure that the proper phrase corresponds. If not, rerecord and install the phrase using [*] [3].
	Phrase not assigned. Check Mailbox Administration to insure that a phrase has been selected.

Continued on next page

Table 8-5. Callback Messaging — *Continued*

Problem	Cause and Possible Remedy
Agent callback not working.	A working port has not been assigned for callback.
	The port used to call agents is disabled for soft_szr. See your CONVERSANT manual for information about enabling ports.
	The port assigned for callback is busy or has been set up as an announcement station on the DEFINITY ECS R6.3 switch.
	Incorrect agent extension or VDN defined. Check Mailbox Administration to insure that a valid VDN or extension for agent access has been defined.
	Make sure **callbackDIP** and **msgdrpDIP** are in the process table.
	The retry interval or agent callback hours have not been administered correctly.
	The VDN threshold on the switch is not allowing messages to be sent. Check the threshold level set on the DEFINITY ECS R6.3 switch.
	Ports are busy with other calls. Try dedicating a port to agent callback.
	Calls intended for agents are being answered in a queue with a recorded announcement or music on hold.
Agent callback not working for a specific mailbox.	No new messages exist in the mailbox.
	No or invalid agent access number is specified for the mailbox.
	Messages are being forwarded to another mailbox.
	There are many messages with higher priority than this mailbox. Messages in this mailbox are not given a chance to be launched to agents.
Messages are not being delivered quickly enough to agents.	Agent access ports are busy with incoming calls.
	Insufficient agent access ports exist to handle the callback volumes.
	Port access time is set at too high of an interval.
Agents are bombarded with callback messages.	Port access time is set on AUTO or on too low of an interval.

Continued on next page

Table 8-5. Callback Messaging — *Continued*

Problem	Cause and Possible Remedy
After reaching an answering machine, the agent cannot reach the Message menu.	Agents must disconnect from AUDIX or AUDIX Voice Power before they can access the After Callback menu. Press [*] [*] [9] to exit a mailbox; then press [*] [9] [9] to reenter the Message menu.
Message Waiting Lamps, agent access, and automatic call launching do not work with line-side T1/E1.	Whenever the DEFINITY ECS R6.3 switch cannot respond with resources in time (during a period of high call volume, for example) Callback Messaging will fail. Increase the Dial Tone Delay parameter on the CONVERSANT system's digital protocol screen or increase the number of touch-tone receivers on the DEFINITY ECS R6.3 switch.
Parts of messages are not spoken back.	The `Playback to Transcriber` field is set to **No**.
	The message segments are blank.
Fragmented message received by agent in Callback Messaging.	Caller hung up during Message Drop. No resolution required.
	The recording has reached the maximum recording length set for the segment. Increase it as needed.
Messages are not being kept even though callers leave them.	`Segment required to save message` segment is not being completed by the callers.
Customer callback not working.	The mailbox does not include a Data type segment with `Treat as a phone` field set to **Yes**.
	Outside line access code not specified or incorrect for this mailbox.
	Customer's telephone number is a long distance number, which, for this system, require an accounting code.(See your service representative for configuration).
	DEFINITY ECS R6.3 port configuration is incorrect. Check to see that conference call transfer and outside line access are enabled.
	DEFINITY ECS R6.3 port is restricted from making toll calls.
	Caller left an incomplete telephone number in the Data segment.
Automatic launch on telephone numbers does not work.	Caller left an incomplete telephone number in the Data segment.
	callback is not configured correctly.

Continued on next page

Table 8-5. Callback Messaging — *Continued*

Problem	Cause and Possible Remedy
Calls are not being saved or deleted after being launched for customer callback.	Callback conference time has not expired. Calls terminated before the conference time expires will revert to their original status.
Agent is permanently placed on soft hold when initiating outcall. Consequently, outcall fails.	ARS setting in DEFINITY ECS R6.3 dial plan set incorrectly. Must be set to “No.” Dialing initial digit “1” not required. Retry interval should be reduced.
	The Intelligent Action in Dial Plan is set to wait for too long in Intelligent mode an caller did not answer.
Messages are not being delivered to agents in a time equivalent to the estimated wait time.	Port access time is not set to AUTO.
	There are insufficient agent access ports defined. As many ports are required as there are possible messages to be “queued” in order to achieve this service.
	The `Time to wait for an agent` is insufficient to queue messages for an available agent. The callback process is timing out.
	Consider setting mailboxes that require this service at the highest priority.
The same message is repeatedly sent to agents.	Callback attempt fails or is aborted. Try saving the message to retry later.
Data fields do not work with agent callback; displays are not filled.	Callers are not entering the field requested in the message.
	DEFINITY vector not set up properly with Collect and Route steps. Test the DEFINITY vector with a plain telephone.
	There is no Call Classification circuit pack in the DEFINITY ECS R6.3 switch. Touch-tone recognition in the Collect step within a DEFINITY vector requires this circuit pack.
Important messages are being delivered for certain mailboxes but not for others.	Mailboxes have different priority settings. Mailboxes with higher priority will have all ready messages delivered to agents before delivering messages for mailboxes with lower priority.
Messages are getting backed up in a single mailbox.	Transcribe the messages in the mailbox.
	Add more callback ports.
	Send overflow messages to a forwarding mailbox.

Continued on next page

Table 8-5. Callback Messaging — *Continued*

Problem	Cause and Possible Remedy
Ready messages are sitting in a certain mailbox for too long.	Send old messages to a forwarding mailbox.
Callback does not occur when a caller schedules it.	Agents are busy with other calls.
	Agent hours are off when the callback is to occur.
Callback does not occur when a caller schedules it.	CONVERSANT callback ports are not available.
	Confusion exists over the time zone difference. Times are schedule for call center's local time, not the caller's time.
The telephone number field (or other passed parameter) is not being automatically filled from ANI (or other variable) in callback message.	ANI (or other value) is not being sent with the call.
	The parameter is not defined properly in MSG_DROP and is therefore not being sent from Platform Management.
	The parameter is not defined properly in the Data segment of the mailbox.

Custom Call Routing

Table 8-6. Custom Call Routing

Problem	Cause and Possible Remedy
Application hangs up.	No match in the table and a “no match found” alternative is not defined. Check your Customer Assist vector to insure that a message or transfer pattern for “no match found” is included (for instance, transfer to an operator).
	Table is not populated. Check Custom Call Routing Administration to insure that records exist in your table. If not, populate your table either from DOS-formatted diskette or from on-screen administration.
	Converse vector step not passing digits. Check DEFINITY vectors to insure that a Converse vector step is defined and passing the correct information.
	Data return FAC code on the CONVERSANT does not match the code on the DEFINITY switch.
	Use a Wait step just before the Collect Digits step in the DEFINITY vector as a caution in case DEFINITY resources are busy.
Caller routed to the wrong destination.	Error in routing table data. Use add/delete records in Custom Call Routing Administration to check that the record in your table is defined correctly. If not, it can be changed via on-screen administration.
	The Collect Digits step in the DEFINITY switch is not properly assigned. Check DEFINITY administration to verify that the DEFINITY switch is routing to the destination’s address digits, and not to the other parameter’s digits passed by the same DATA_RTN command.
	DATA_RTN action is in wrong location of the Customer Assist vector. The DATA_RTN command passing destination’s address should correspond to the Collect Digits step immediately preceding the Route-To step in the DEFINITY vector. Check the switch and Platform Management to verify.

Continued on next page

Table 8-6. Custom Call Routing — *Continued*

Problem	Cause and Possible Remedy
Unable to load data to a routing table.	Not a DOS-formatted diskette. Table must be loaded from a DOS-formatted diskette.
	Wrong file or path specified.
	Table not created. Must create a routing table in Custom Call Routing Administration first.
	Incorrect delimiters used. Check the documentation and on-screen help for a list of valid options.

System Administration

Table 8-7. System Administration

Problem	Cause and Possible Remedy
No data in reports–General	No calls were received during selected day.
	There are too many lines in the report to display.
No data in reports—Call Detail	Activated vectors did not include a REPORT action.
No data in reports—Event Summary Detail	Activated vectors did not include a REPORT action.
No data in reports—Message Log	No messages were left during selected day.
No data in reports—Traffic Report	Cannot report on current day's activity; reports only past days' activity.
Reports will not print.	Printer is not configured properly.
Printed reports jumbled.	Printer is not compatible.
Back up to diskette failed.	Diskette is incorrectly formatted.
	Diskette is write protected.
More than 42 variables are included in the Event Detail and Event Count reports.	A variable was renamed in the time interval for which the report was run.

Continued on next page

Table 8-7. System Administration — *Continued*

Problem	Cause and Possible Remedy
A previously valid variable is not valid as an entry in the Event Detail report.	Renamed or deleted variables are not recognized as valid. Choose **all** in the Event Detail report to retrieve data for a variable that was deleted or renamed in the current reporting interval.
AUDIT shows in invalid variable that you did not intend to create as a variable.	A % sign was erroneously entered before a value in one of the Action fields.
Restore from diskette failed.	Diskette was overwritten or damaged. Diskette is write-protected.
There may be insufficient free processes to administer this package warning message encountered at program startup.	Check the UNIX system's NPROC tunable parameter.
There may be too many files open to administer this package warning message encountered at program startup.	Check the UNIX system's NFILE tunable parameter.
There may be insufficient free i-nodes to administer this package warning message encountered at program startup.	Check the UNIX system's NINODE, NS5INODE, and NFILE tunable parameters to determine if they can be increased.
There may be insufficient disk space under **/spanlink** to administer this package error encountered at program startup.	Delete unnecessary files from the disk. Consider adding disk storage.

Speech Recognition

Table 8-8. Speech Recognition

Problem	Cause and Possible Remedy
The GET_SPCH and MENU actions do not wait for caller input but immediately reprompt the caller.	INTUITY WholeWord Recognition - Base and/ or INTUITY WholeWord Recognition - Language was not loaded.
	WholeWord Recognition was not assigned to the SP or SSP card.
	The custom grammars for the language were not enabled.
	Insufficient number of port licenses for Dial Pulse Recognition.
The GET_SPCH and MENU actions hang forever after the initial prompt or until a touch tone is entered.	INTUITY WholeWord Recognition - Base and/ or INTUITY WholeWord Recognition - Language was not loaded.
	WholeWord Recognition was not assigned to the SP or SSP card.
	The custom grammars for the language were not enabled.
	Insufficient number of port licenses for Dial Pulse Recognition.
Spoken caller input is not recognized or is recognized as the wrong value.	To improve the accuracy of the recognition, use the most restrictive grammar possible that can collect all possible caller input.

Dial Pulse Recognition

Table 8-9. Dial Pulse Recognition

Problem	Cause and Possible Remedy
The GET_DIALP and MENU actions do not wait for caller input but repromt the caller immediately.	INTUITY Dial Pulse Recognition was not loaded.
	Dial Pulse Recognition was not assigned to the SP or SSP card.
	Insufficient number of port licenses for Dial Pulse Recognition.
The GET_SPCH and MENU actions hang forever after initial prompt or until a touch tone is entered.	INTUITY Dial Pulse Recognition was not loaded.
	Dial Pulse Recognition was not assigned to the SP or SSP card.
Rotary caller input is not recognized or is recognized as the wrong value.	To improve the accuracy of the recognition, use the most restrictive grammar possible that can collect all possible caller input.

Web Reports

Table 8-10. Web Reports

Problem	Cause and Possible Remedy
When attempting to start Web Reports, the system displays “File not found.”	The CONVERSANT is not on the network.
	The Apache Web Server was not configured properly for the network.
	The URL specified was incorrect.
The report is empty.	Check that there were calls for that specified day and setup.

Continued on next page

Other Problems

Due to the structure of Customer Assist, a single problem can sometimes have any one of a number of causes and remedies. The following section presents a broad selection of problems that can be addressed by any of the remedies given.

Problem:

System operates improperly or database(s) have become corrupted. Specifically:

- `can't open file: file does not exist` error encountered.
- System does not write data to fields.
- System does not write to fields that it normally populates after the user enters information elsewhere on the form.
- Error is encountered when attempting to save, close, or cancel a form or text entry.
- The save operation (that is, CHG-KEYS F8 and SAVE F3) appears to work, but user finds information missing after reentering form.
- Function keys, such as REMOVE F3 and DELETE F4, do not work.
- System will not place new vectors in service.
- System will not record speech.
- System will not input, export, back up, or restore databases.
- Vector, phrase, mailbox, and routing databases become corrupted.
- System dumps core.
- System monitor does not become activated.
- Access to UnixWare operating system is denied.
- Terminal freezes.
- Form accepts invalid input or rejects valid input.
- System routinely gives warning messages when starting Customer Assist.

Cause and Possible Remedy:

System is improperly tuned or configured. Check for:

- Free disk space under **/usr/spanlink**
- Console system messages
- Invalid UnixWare operating system parameters
- Faulty hardware in all key components
- **TERM** or **SMTERM** environmental variable is not set to the user's terminal type.

NOTE:
If one of the databases has been corrupted, follow the previous recommendations to correct the underlying problem, and then restore the database from a backup on diskette. If a backup is not available, restore as follows:

Vector database: Check every action in each vector to verify that they are correct. Change actions as necessary and save the vector.

Phrase database: Check each phrase to verify that all tags and texts are correct. Change and save phrases as necessary.

Mailbox database: Check each mailbox to verify that every form and setting is correct. Change and save settings as necessary.

Routing tables: Consider removing and adding these tables. If databases cannot be restored or rebuilt, call your support representative.

CAUTION:
Do not save a form if you think it might corrupt your database.

Summary

While working through this chapter, you learned how to troubleshoot the product.

Logs and Error Codes

9

This chapter describes the logs and error codes maintained by Customer Assist. The logs contain the set of events generated by Customer Assist. These events may represent actions taken by Customer Assist, implications of a user-defined configuration setting, or limitations of the hardware (that is, disk space, ports free). The error codes are brief descriptions of the events.

Each log is defined and describes how to view its contents. For each error code, a detailed definition is given along with possible corrective actions.

Log Names, Locations, and Viewing

Customer Assist logs are stored in the following directory:

/usr/spanlink/ccc/logs

View logs using the **vi** editor.

See “Log and Debug Files” on page 6-5 for more information.

Error Log Messages

System messages alert you to problems or potential problems that may occur within Customer Assist.

CONVERSANT Error Log Messages

The following error messages are for the data interface processes (DIPs) that support Customer Assist. These messages are found in the CONVERSANT error log. See INTUITY CONVERSANT System Version 7.0 Alarms and Log messages, 585-310-182, for information about the error log.

The message priorities and their definitions are:

- FATAL

  There is a problem severe enough to cause the program to end prematurely.

- CRITICAL

  There is a problem that needs to be addressed immediately.

- MAJOR

  There is a problem that is significantly affecting the functionality of the program and needs to be addressed.

- MINOR

  There is a problem that is affecting the functionality of the program and needs to be addressed.

- INFO

  This is for information only.

The source of the error messages reported by Customer Assist are:

- **vectDIP**
- **vrptDIP**
- **phradmDIP**
- **msgdrpDIP**
- **callbackDIP**

The error message numbers are grouped into specific ranges indicating the type or cause of events that generated the message.

001 - 100: UNIX errors

101 - 200: CONVERSANT errors

201 - 300: ORACLE errors

301 - 400: Miscellaneous errors

401 - 500: Platform errors

501 - 600: Speech Administration errors

601 - 700: Callback Messaging errors

UNIX Errors

CC001-- -- --- <program|function> : Could not get current time.

- Message priority:

  MAJOR

- Description and effect:

  The <program|function > could not access the system clock. The CONVERSANT system clock may not be functioning properly.

- Repair procedure:

  — Check that the system clock is functioning properly.

CC002-- -- --- <program>: failed to run system. Ret code (<return code>).

- Message priority:

  MAJOR

- Description and effect:

  The <program> script could not be **soft_szr**. If the <return code> value is 2, the script could not run because there were too many **soft_szr** requests for the CONVERSANT application manager to handle. If the value is a negative number, the program could not make a system call. The work done by the <program> will not be done.

- Repair procedure:

  — If the <return code> value is 2, no corrective action is necessary.

  — If the value is a negative number, the maximum number of simultaneous processes running may be too low. If so, increase it.

CC003-- -- --- Could not open <file name> file.

- Message priority:

  MAJOR

- Description and effect:

  Failed to open the <file name> file. Generally, files opened by DIPs are configuration files. If a configuration file cannot be read, certain DIP features may not be functioning properly.

- Repair procedure:

  — Verify that the <file name> file exists. If not, the package where the DIP appears must be reinstalled.

  — If the file exists, verify that it has read permissions for all. If not, change it so anyone can read it.

  — Restart the DIP.

CC004-- -- --- <program|function>: Unable to allocate memory.

- Message priority:

MAJOR

- Description and effect:

  The DIP failed to dynamically allocate memory for data structures.

- Repair procedure:

  — Use the **kill** command to restart the DIP.

  — Reboot the system.

CC005-- -- --- Cannot fork first child

- Message priority:

  MAJOR

- Description and effect:

  The DIP cannot fork a child process.

- Repair procedure:

  — The maximum number of simultaneous processes running may be too low. If so, increase it.

  — Use the **kill** command to restart the DIP.

  — Reboot the system.

CC006-- -- --- Cannot change process group

- Message priority:

  MAJOR

- Description and effect:

  The child process cannot change its process group.

- Repair procedure:

  — Use the **kill** command to restart the DIP.

  — Reboot the system.

CC007-- -- --- Cannot fork second child

- Message priority:

  MAJOR

- Description and effect:

  The DIP cannot fork a child process during the second try.

- Repair procedure:

  — The maximum number of simultaneous processes running might be too low. If so, increase it.

  — Use the **kill** command to restart the DIP.

  — Reboot the system.

CONVERSANT Errors

CC101-- -- --- Could not get Qkey for <DIP name> dip. Ret code (<return code>).

- Message priority:

  FATAL

- Description and effect:

  The <DIP name> failed to get the queue key on initialization. Without the queue key, the DIP cannot receive messages from CONVERSANT or other DIPs.

- Repair procedure:

  The <return code> value of

  — -300 — no Bulletin Board Slots available for posting process.

  — -500 — another process with the same <DIP name> and instance is running already.

  — -600 — cannot attach the Bulletin Board shared memory.

  NOTE:
  See INTUITY CONVERSANT System Version 7.0 Application Development for information about other VSstartup errors.

  — Verify that the DIP is in the right directory with executable permissions for all.

  — Check in the BBS to see if the DIP name has already been registered by another process.

  — Check the message queues for possible problems.

  — Use the **kill** command to restart the DIP.

CC102-- -- --- VSstartup error: <error description >

- Message priority:

  CRITICAL

- Description and effect:

  An error occurred while attempting to register the DIP on the Bulletin Board. As a result, the DIP failed to get the queue key on initialization. Without the queue key, the DIP cannot receive messages from CONVERSANT or other DIPs.

- Repair procedure:

  — Correct the problem indicated by <error description>.

  — Verify that the DIP is in the right directory with executable permissions for all.

— Check in the BBS to see if the DIP name has already been registered by another process.

— Check the message queues for possible problems.

— Use the **kill** command to restart the DIP.

CC103-- -- --- Wholeword not enabled

- Message priority:

  MAJOR

- Description and effect:

  A request to use WholeWord speech recognition when it is not enabled. The request will fail.

- Repair procedure:

  — Load WholeWord packages, set an appropriate value in Feature Licensing and enable it on the SP or SSP card.

  — Do not use WholeWord in the application.

CC104-- -- --- Out of SP Resources

- Message priority:

  MAJOR

- Description and effect:

  A request to use WholeWord speech recognition when there are insufficient resources on the SP or SSP card. The request will fail.

- Repair procedure:

  — Increase the number of SP or SSP cards.

  — Reduce the number of ports that use WholeWord speech recognition concurrently.

CC105-- -- --- VStoqkey() error: <error description> for <DIP name> dip.

- Message priority:

  MAJOR

- Description and effect:

  Could not get the queue key for <DIP name>. As a result, the source DIP cannot send a message to <DIP name>.

- Repair procedure:

  — Verify that both of the DIPs are in the right directory with executable permissions for all.

  — Check in the BBS to see if the DIP name has already been registered by another process.

  — Check the message queues for possible problems.

— Use the **kill** command to restart the DIP.

CC106-- -- --- Message receive error <return code>

- Message priority:

  MINOR

- Description and effect:

  An error occurred while blocking to receive a message.

- Repair procedure:

  — Use the **kill** command to restart the DIP.

  — Reboot the system.

CC107-- -- --- Could not send msg to <DIP name> dip, <# try> try. Ret code (<return code>).

- Message priority:

  MINOR

- Description and effect:

  Failed to send a message from source DIP to <DIP name> on the <# try> try. The <return code> is the return code from **mesgsnd**.

- Repair procedure:

  — Verify that both of the DIPs are in the right directory with executable permissions for all.

  — Check in the BBS to see if the DIP name has already been registered by another process.

  — Check the message queues for possible problems.

  — Use the **kill** command to restart the DIP.

CC108-- -- --- Unknown morig <Originating DIP number>

- Message priority:

  INFO

- Description and effect:

  The DIP received an unexpected message from <Originating DIP number>. It ignored the message. The <Originating DIP number> DIP is mistakenly sending messages to the source DIP.

- Repair procedure:

  — Notification only — no action necessary.

CC109-- -- --- Unknown mcont <message number>

- Message priority:

  INFO

- Description and effect:

  The DIP received a message number it did not recognize. It will ignore the message.

- Repair procedure:

  — Notification only — no action necessary.

CC110-- -- --- Clearing message off queue <DIP number>

- Message priority:

  INFO

- Description and effect:

  The DIP is removing old, irrelevant messages from its queue before using it.

- Repair procedure:

  — Notification only — no action necessary.

CC111-- -- --- <DIP name> queue key is <DIP number>.

- Message priority:

  INFO

- Description and effect:

  The <DIP name> is using queue key <DIP number>.

- Repair procedure:

  — Notification only — no action necessary.

CC112-- -- --- Starting <DIP name> DIP.

- Message priority:

  INFO

- Description and effect:

  Notification that the DIP is starting.

- Repair procedure:

  — Notification only — no action necessary.

ORACLE Errors

CC201-- -- --- ORACLE login failed, will exit.

- Message priority:

  FATAL

- Description and effect:

  The DIP failed to log into ORACLE using username **sti** with password **sti** and must abort.

- Repair procedure:
  - Verify that there is a user **sti** with password **sti** in the ORACLE database. If not, the user must be added.
  - Verify that the ORACLE database is not corrupted.

CC202-- -- --- ORACLE logout failed.

- Message priority:

  MAJOR

- Description and effect:

  The DIP failed to log out of ORACLE and must abort.

- Repair procedure:
  - The DIP will log out of ORACLE only if another problem occurred earlier. The initial problem could be causing the ORACLE log out problem. This problem will not occur once the initial problem is solved.

CC203-- -- --- <program|function> : Cannot read <table name> table.

- Message priority:

  MAJOR

- Description and effect:

  The <program|function> cannot read from ORACLE <table name> table. Without the information from the table, the function will fail or the DIP may have to exit.

- Repair procedure:
  - The program could not read from the table because either there is no record in the table or the table does not exist.
  - To determine the reason for the problem, describe the table in **sqlplus**. If the table exists, select from the table.
  - If the table does not exist, reinstall the package where the DIP appears.
  - If the record does not exist, the severity of the problem depends on the type of table. If the table contains configuration information, try to load the configuration again through the administration, if possible. If the table contains caller data and the problem occurs frequently, stop and restart the voice system. If the problem still persists, reinstall the package.

CC204-- -- --- <program|function>: ORACLE error <ORACLE error number> : <error description>

- Message priority:

  MINOR

- Description and effect:

  The <program|function> encountered the ORACLE error <ORACLE error number> described by <error description>. The effects depend on the error. Look at the error messages surrounding the DIP to find out the effects.

- Repair procedure:

  — Refer to the ORACLE error codes manual for more details on the ORACLE error, and refer to the other DIP error messages for information on how to solve the problem.

CC205-- -- --- ORACLE login successful.

- Message priority:

  INFO

- Description and effect:

  On DIP startup, the DIP successfully logged into the ORACLE database.

- Repair procedure:

  — Notification only — no action necessary.

CC206-- -- --- ORACLE logout successful.

- Message priority:

  INFO

- Description and effect:

  On DIP exit, the DIP successfully logged out of the ORACLE database.

- Repair procedure:

  — Notification only — no action necessary.

Miscellaneous Errors

None.

Platform Errors

CC401-- -- --- No <script name> script.

- Message priority:

  MAJOR

- Description and effect:

  It failed to start <script name>, the Platform script that handles vectoring for the selected language. The call handling continues in the current or default language.

- Repair procedure:

— The Platform Runtime package must be installed.

— The CHG_LANG action cannot change to a language that is not loaded.

— If the Platform script is being started from another script, the language specified must be an existing language.

— Verify that the script exists in **/vs/trans** directory.

CC402-- -- --- Vector <vector number> out of range (0-255).

- Message priority:

  MAJOR

- Description and effect:

  A <vector number> was specified in an action that is outside the range of valid vector numbers. It will not route the caller to that invalid vector number. It will exit instead.

- Repair procedure:

  — Check your actions for a hard coded number or a variable containing that invalid vector number.

  — Use the Vector Map and Vector Audit to search for invalid, hard-coded vector numbers.

  — Use REPORT actions to narrow down the variable and the location of the problem.

CC403-- -- --- Step <step number> out of range (1-14).

- Message priority:

  MAJOR

- Description and effect:

  An invalid <step number> was specified in a GOTO action. It will continue to the next action in the current vector.

- Repair procedure:

  — Locate the GOTO action with the problem and change the value to a valid step number.

  — Use the Vector Map and Vector Audit to help locate the GOTO action.

CC404-- -- --- Missing vector <vector number>.

- Message priority:

  MAJOR

- Description and effect:

  A <vector number> was specified that was not defined. It will not route the caller to that invalid vector number but will exit instead.

- Repair procedure:
  - Check your actions for a hard coded number or a variable containing that vector number.
  - Use the Vector Map and Vector Audit to search for that vector number.
  - Use REPORT actions to narrow down the variable and the location of the problem.

CC405-- -- --- Vector <vector number>: missing step <step number>.

- Message priority:

  MAJOR

- Description and effect:

  In vector <vector number>, there is a GOTO action to step <step number> that is not defined. It will continue to the next action in the current vector.

- Repair procedure:
  - Locate the problem GOTO action and change the value to a valid step number or define an action for that step.
  - Use the Vector Map and Vector Audit to help locate the GOTO action.

CC406-- -- --- Vector <vector number> exceeds size limit of <# bytes> bytes.

- Message priority:

  MAJOR

- Description and effect:

  The vector <vector number> was defined with actions that take more than <# bytes> bytes of space. That vector cannot be processed correctly by the runtime. It will exit instead.

- Repair procedure:
  - Reduce the vector size by moving some of the actions to another vector or redefining some of the actions to take less space.

CC407-- -- --- Load grammar flags failed.

- Message priority:

  MAJOR

- Description and effect:

  The DIP could not get the listing of ASR grammars enabled on the system. No speech recognition request will be supported.

- Repair procedure:

— Verify that the **/att/include/sr_grammar.h** file exists. It must exist if speech recognition packages are loaded.

— Use the **kill** command to restart the DIP.

— Reboot the system.

CC408-- -- --- Read grammar flags failed.

- Message priority:

  MAJOR

- Description and effect:

  The Platform script attempted to determine the enabled WholeWord speech recognition grammar that failed because the DIP does not have the information. This could happen if the DIP encountered problem CC407.

- Repair procedure:

  — Verify that the **/att/include/sr_grammar.h** file exists. It must exist if speech recognition packages are loaded.

  — Use the **kill** command to restart the DIP.

  — Reboot the system.

CC409-- -- --- Variable <variable number> not defined.

- Message priority:

  MINOR

- Description and effect:

  The variable <variable number> has not been defined in the current variable administration.

- Repair procedure:

  — Check the action and change references to the variable or add the variable name through variable administration.

CC410-- -- --- Call number <call number> is a duplicate.

- Message priority:

  MINOR

- Description and effect:

  The system was reporting on a call number already used. <call number> is the number assigned to the call that has already been used.

- Repair procedure:

  — Verify that the file **/usr/spanlink/ccc/logs/current/log_stat** exists.

CC411-- -- --- Caller reference <call number> is >= to caller number <current call number>.

- Message priority:

  MINOR

- Description and effect:

  The system has a request to log a cross-referenced call <call number> that has an ID number greater than that of the current call number <current call number>. This cross-referenced number is probably invalid.

- Repair procedure:

  — Verify that the Platform script is passing the call number to the executed application.

  — Verify that the call number is being read by the executed application.

  — Verify that the executed application is passing the correct call number back to the Platform script.

CC412-- -- --- Invalid action <action>.

- Message priority:

  MINOR

- Description and effect:

  An invalid action, <action>, was passed to the Platform runtime. It will ignore the invalid action and continue to the next action in the vector.

- Repair procedure:

  — Locate the invalid action and remove it.

CC413-- -- --- Bad language number <language number>.

- Message priority:

  MINOR

- Description and effect:

  The requested language change was to an invalid <language number>. It will not change the language. It will continue running with the current language or default language.

- Repair procedure:

  — Valid language numbers are from 1 to 11.

  — The CHG_LANG action must not change to a language that is not loaded.

  — If the Platform script is being started from another script, the language specified must be an existing language.

CC414-- -- --- Bad goto option <goto option>.

- Message priority:

  MINOR

- Description and effect:

  An invalid option <goto option> was specified in the vector. This could be a corruption in the database. It will ignore the action and go to the next action.

- Repair procedure:

  — Verify that the GOTO actions are correct.

CC415-- -- --- Reloading vector db.

- Message priority:

  INFO

- Description and effect:

  The user has placed vectors in service.

- Repair procedure:

  — Notification only — no action necessary.

CC416-- -- --- No log_stat file.

- Message priority:

  INFO

- Description and effect:

  The **log_stat** file does not exist in the **/usr/spanlink/ccc/logs/current** directory. This message is written for the first call for the day.

- Repair procedure:

  — Notification only — no action necessary.

CC417-- -- --- Invalid command line, usage is: <usage string>

- Message priority:

  FATAL

- Description and effect:

  The DIP was started with the wrong arguments. Check the <usage string> for valid arguments.

- Repair procedure:

  — The inittab entry for starting the DIP may be incorrect.

  — Compare the DIP's inittab entry in /etc/inittab file to the one in /usr/spanlink/regdir/cccPlt/registration/process file.

  — If they are different, enter export PKG=cccPltRun

  — Enter /mtce/bin/register /usr/spanlink/regdir/cccPltRun/registration

Speech Administration Errors

None.

Callback Messaging Errors

CC601-- -- --- Invalid command line, usage is: <usage string>

- Message priority:

  FATAL

- Description and effect:

  The DIP program was executed with the wrong command line options. The program will not run.

- Repair procedure:

  — The inittab entry for starting the DIP may be incorrect.

  — Compare the DIP inittab entry in the /etc/inittab file to the one in /usr/spanlink/regdir/cccCbkRun/registration/process file.

  — If they are different, enter export PKG=cccCbkRun

  — Enter /mtce/bin/register /usr/spanlink/regdir/cccCbkRun/registration

CC602-- -- --- <program|function> : Failed to locate mailbox <mailbox ID>.

- Message priority:

  MAJOR

- Description and effect:

  The DIP could not find the mailbox <mailbox ID> in ORACLE. The messages cannot be dropped or transcribed to/from this mailbox.

- Repair procedure:

  — In the Callback Messaging administration, check the mailbox configuration.

  — Verify that ORACLE is operating correctly.

  — Kill the DIP.

CC603-- -- --- <program|function>: Msg # <message number> in mbox <mailbox ID> not found.

- Message priority:

  MAJOR

- Description and effect:

  The DIP could not find message <message number> in mailbox <mailbox ID>. The message cannot be transcribed.

- Repair procedure:

- — Use the Message Download Report on the mailbox to verify that the message exists and if so, the message state.
- — If the problem happens rarely, ignore it. Otherwise, proceed as follows:
  a. In the Callback Messaging administration, check the mailbox configuration.
  b. Verify that ORACLE is operating correctly.
  c. Kill the DIP

CC604-- -- --- <program|function>: NULL forward phrnum value passed.

- Message priority:

  MAJOR

- Description and effect:

  The script passed a NULL forwarding phrase number to the <program|function>. The function will not be performed.

- Repair procedure:
  - — Check the message queue to see if there are any abnormally long queues.
  - — Trace the port to verify that the script is passing a value to the DIP.
  - — Turn on the debugging for the DIP to see what is received from the script.
  - — Kill the DIP.

CC605-- -- --- <program|function>: NULL forward to mbx value passed.

- Message priority:

  MAJOR

- Description and effect:

  The script passed a NULL forward to mailbox number to the <program|function>. The function will not be performed.

- Repair procedure:
  - — Check the message queue to see if there are any abnormally long queues.
  - — Trace the port to verify that the script is passing a value to the DIP.
  - — Turn on debugging for the DIP to see what is received from the script.
  - — Kill the DIP.

CC606-- -- --- <program|function>: NULL forwarding mbx value passed.

- Message priority:

MAJOR

- Description and effect:

  The script passed a NULL forwarding mailbox number to the <program|function>. The function will not be performed.

- Repair procedure:

  — Check the message queue to see if there are any abnormally long queues.

  — Trace the port to verify that the script is passing a value to the DIP.

  — Turn on debugging for the DIP to see what is received from the script.

  — Kill the DIP.

CC607-- -- --- <program|function>: NULL mailbox value passed.

- Message priority:

  MAJOR

- Description and effect:

  — The script passed a NULL mailbox number to the <program|function>. The function will not be performed.

- Repair procedure:

  — Check the message queue to see if there are any abnormally long queues.

  — Trace the port to verify that the script is passing a value to the DIP.

  — Turn on debugging for the DIP to see what is received from the script.

  — Kill the DIP.

CC608-- -- --- <program|function>: NULL msg date value passed.

- Message priority:

  MAJOR

- Description and effect:

  The script passed a NULL message date to the <program|function>. The function will not be performed.

- Repair procedure:

  — Check the message queue to see if there are any abnormally long queues.

  — Trace the port to verify that the script is passing a value to the DIP.

  — Turn on debugging for the DIP to see what is received from the script.

— Kill the DIP.

CC609-- -- --- <program|function>: NULL msg deliverytime value passed.

- Message priority:

  MAJOR

- Description and effect:

  The script passed a NULL message delivery time to the <program|function>. The function will not be performed.

- Repair procedure:

  — Check the message queue to see if there are any abnormally long queues.

  — Trace the port to verify that the script is passing a value to the DIP.

  — Turn on debugging for the DIP to see what is received from the script.

  — Kill the DIP.

CC610 -- -- --- <program|function>: NULL msg forwardphrnum value passed.

- Message priority:

  MAJOR

- Description and effect:

  The script passed a NULL message forwarding phrase number to the <program|function>. The function will not be performed.

- Repair procedure:

  — Check the message queue to see if there are any abnormally long queues.

  — Trace the port to verify that the script is passing a value to the DIP.

  — Turn on debugging for the DIP to see what is received from the script.

  — Kill the DIP.

CC611 -- -- --- <program|function>: NULL msg forwardreason value passed.

- Message priority:

  MAJOR

- Description and effect:

  The script passed a NULL message forwarding reason to the <program|function>. The function will not be performed.

- Repair procedure:

  — Check the message queue to see if there are any abnormally long queues.

— Trace the port to verify that the script is passing a value to the DIP.

— Turn on debugging for the DIP to see what is received from the script.

— Kill the DIP.

CC612 -- -- --- <program|function>: NULL msg priority value passed.

- Message priority:

  MAJOR

- Description and effect:

  The script passed a NULL message priority to the <program|function>. The function will not be performed.

- Repair procedure:

  — Check the message queue to see if there are any abnormally long queues.

  — Trace the port to verify that the script is passing a value to the DIP.

  — Turn on debugging for the DIP to see what is received from the script.

  — Kill the DIP.

CC613 -- -- --- <program|function>: NULL msg schedflag value passed.

- Message priority:

  MAJOR

- Description and effect:

  The script passed a NULL message schedule flag to the <program|function>. The function will not be performed.

- Repair procedure:

  — Check the message queue to see if there are any abnormally long queues.

  — Trace the port to verify that the script is passing a value to the DIP.

  — Turn on debugging for the DIP to see what is received from the script.

  — Kill the DIP.

CC614 -- -- --- <program|function>: NULL msg status value passed.

- Message priority:

  MAJOR

- Description and effect:

  The script passed a NULL message status to the <program|function>. The function will not be performed.

- Repair procedure:
  - — Check the message queue to see if there are any abnormally long queues.
  - — Trace the port to verify that the script is passing a value to the DIP.
  - — Turn on debugging for the DIP to see what is received from the script.
  - — Kill the DIP.

CC615 -- -- --- <program|function>: NULL msg time value passed.

- Message priority:

  MAJOR
- Description and effect:

  The script passed a NULL message time to the <program|function>. The function will not be performed.
- Repair procedure:
  - — Check the message queue to see if there are any abnormally long queues.
  - — Trace the port to verify that the script is passing a value to the DIP.
  - — Turn on debugging for the DIP to see what is received from the script.
  - — Kill the DIP.

CC616 -- -- --- ForwardOldMsg : SQL error during forwarding.

- Message priority:

  MAJOR
- Description and effect:

  The DIP encounter a problem forwarding messages from one mailbox to another. The problem is caused by the error message close to this message.
- Repair procedure:
  - — Fix the problem indicated by the ORACLE message close to this message.

CC617 -- -- --- Get_Glob_Params: No global record found.

- Message priority:

  MAJOR
- Description and effect:

  The DIP could not find Global Settings record in ORACLE. Message drop and callbacks cannot be performed.

- Repair procedure:
  - In the Callback Messaging administration, enter the Global Settings Configuration form, set it correctly and save it.
  - Verify ORACLE is operating correctly.
  - Kill the DIP.

CC618 -- -- --- MessageNum array out of range.

- Message priority:

  INFO
- Description and effect:

  The DIP has reach the maximum message number and will wrap back to message number 2.
- Repair procedure:
  - Notification only — no action necessary.

CC619 -- -- --- Request for negative or 0 msg numbers : <number>.

- Message priority:

  MAJOR
- Description and effect:

  Invalid number of unused message numbers requested. The DIP will not process the request.
- Repair procedure:
  - Kill the DIP.

CC620 -- -- --- <program|function> : Cannot fill message cache.

- Message priority:

  MINOR
- Description and effect:

  The DIP cannot fill the cache with messages to be launched.
- Repair procedure:
  - Verify ORACLE is operating correctly.
  - Kill the DIP.

CC621 -- -- --- <program|function>: Failed to initialize MWL in SplkDPlanDip.

- Message priority:

  MINOR
- Description and effect:

  The Dial Plan DIP could not set the message waiting lights for the mailboxes.

- Repair procedure:
  - Verify that Dial Plan is configured properly for Message Waiting Lights.
  - Kill **SplkDPlanDip** and **msgdrpDIP**.
  - Reboot the system if killing the DIPs failed.

CC622 -- -- --- <program|function>: NULL agentsact value passed.

- Message priority:

  MINOR
- Description and effect:

  The script passed a NULL agent action flag to the <program|function>. The function will not be performed. The Transcription Detail Report will have nothing under Agent Action for this message.
- Repair procedure:
  - Check the message queue to see if there are any abnormally long queues.
  - Trace the port to verify that the script is passing a value to the DIP.
  - Turn on debugging for the DIP to see what is received from the script.
  - Kill the DIP.

CC623 -- -- --- <program|function>: NULL confexp value passed.

- Message priority:

  MINOR
- Description and effect:

  The script passed a NULL conference time expired flag to the <program|function>. The function will not be performed. The Transcription Detail Report will have nothing under Conference Time Expired for this message.
- Repair procedure:
  - Check the message queue to see if there are any abnormally long queues.
  - Trace the port to verify that the script is passing a value to the DIP.
  - Turn on debugging for the DIP to see what is received from the script.
  - Kill the DIP.

CC624 -- -- --- <program|function>: NULL mesglogdate value passed.

- Message priority:

  MINOR

- Description and effect:

  The script passed a NULL date for message logging to the <program|function>. The function will not be performed. The Agent Callback Count will not include this message.

- Repair procedure:

  — Check the message queue to see if there are any abnormally long queues.

  — Trace the port to verify that the script is passing a value to the DIP.

  — Turn on debugging for the DIP to see what is received from the script.

  — Kill the DIP.

CC625 -- -- --- <program|function>: NULL mesglogmailbox value passed.

- Message priority:

  MINOR

- Description and effect:

  The script passed a NULL mailbox for message logging to the <program|function>. The function will not be performed. The Agent Callback Count will not include this message.

- Repair procedure:

  — Check the message queue to see if there are any abnormally long queues.

  — Trace the port to verify that the script is passing a value to the DIP.

  — Turn on debugging for the DIP to see what is received from the script.

  — Kill the DIP.

CC626 -- -- --- <program|function>: NULL mesglogmsgnum value passed.

- Message priority:

  MINOR

- Description and effect:

  The script passed a NULL message number for message logging to the <program|function>. The function will not be performed. The Agent Callback Count will not include this message.

- Repair procedure:

  — Check the message queue to see if there are any abnormally long queues.

  — Trace the port to verify that the script is passing a value to the DIP.

— Turn on debugging for the DIP to see what is received from the script.

— Kill the DIP.

CC627 -- -- --- <program|function>: NULL mesglogtime value passed.

- Message priority:

  MINOR

- Description and effect:

  The script passed a NULL time for message logging to the <program|function>. The function will not be performed. The Agent Callback Count will not include this message.

- Repair procedure:

  — Check the message queue to see if there are any abnormally long queues.

  — Trace the port to verify that the script is passing a value to the DIP.

  — Turn on debugging for the DIP to see what is received from the script.

  — Kill the DIP.

CC628 -- -- --- <program|function>: NULL mesglogtype value passed.

- Message priority:

  MINOR

- Description and effect:

  The script passed a NULL type for message logging to the <program|function>. The function will not be performed. The Agent Callback Count will not include this message.

- Repair procedure:

  — Check the message queue to see if there are any abnormally long queues.

  — Trace the port to verify that the script is passing a value to the DIP.

  — Turn on debugging for the DIP to see what is received from the script.

  — Kill the DIP.

CC629 -- -- --- MWL_Call: MWL call failed.

- Message priority:

  MINOR

- Description and effect:

  A problem was encountered while turning the message waiting lights on or off.

- Repair procedure:
  - Check that Dial Plan is configured properly for Message Waiting Lights.
  - Kill **SplkDPlanDip** and **msgdrpDIP**.
  - Reboot the system if killing the DIPs failed.

CC630 -- -- --- Request for more than MAX_BLK_MSG_NUM: <number>.

- Message priority:

  MINOR
- Description and effect:

  The DIP received a request for a higher number of unused message numbers than allowed. The DIP will return the highest number of unused message numbers allowed instead of the number requested.
- Repair procedure:
  - No effect on this DIP. The DIP that made the request might need to be changed to ask for a reasonable number of message.

CC631 -- -- --- Return from refresh unsuccessful.

- Message priority:

  MAJOR
- Description and effect:

  The attempt to reload the cache with free message numbers failed. The message cannot be saved.
- Repair procedure:
  - Make sure that the number of messages on the system has not reach the maximum allowed. If so, delete some messages.
  - Verify ORACLE is operating correctly.
  - Kill the DIP.

CC632 -- -- --- rebuild_MWL_array: Orphan messages for <mailbox ID> mailbox.

- Message priority:

  MINOR
- Description and effect:

  An orphan message was left behind from deletion of mailbox <mailbox ID> or the cache was not properly updated with mailbox IDs. It will not light or extinguish message waiting lights for this message.
- Repair procedure:
  - Kill the DIP and see if the problem reoccurs.

CC633 -- -- --- usrForwardMsg: MWLarray <number> lookup failed.

- Message priority:

  MINOR

- Description and effect:

  The attempt to locate the mailbox in the cache for a message to be forwarded was unsuccessful. Either the message is an orphan message or the cache was not properly updated with mailbox IDs. It will not light or extinguish message waiting lights for this message.

- Repair procedure:

  — Kill the DIP and see if the problem reoccurs.

CC634 -- -- --- AUDIT UPDATE in Message table locked <number of messages>

- Message priority:

  INFO

- Description and effect:

  The audit process has found <number of messages> that were locked incorrectly and changed them to saved.

- Repair procedure:

  — Notification only — no action necessary.

CC635 -- -- --- Message array refreshed.

- Message priority:

  INFO

- Description and effect:

  The message cache has been refreshed successfully.

- Repair procedure:

  — Notification only — no action necessary.

CC636 -- -- --- ScriptTerm: Current time after interval.

- Message priority:

  INFO

- Description and effect:

  Alert that the script terminated after the end of the last interval check.

- Repair procedure:

  — Notification only — no action necessary.

CC637 -- -- --- ScriptTerm: Current time outside interval.

- Message priority:

  INFO

- Description and effect:

Alert that the script terminated outside the last interval check.

- Repair procedure:
  - Notification only — no action necessary.

CC638 -- -- --- rebuild_MWL_array: No mailboxes.

- Message priority:

  INFO
- Description and effect:

  There are no mailboxes created for Callback Messaging.
- Repair procedure:
  - Notification only — no action necessary.

CC639 -- -- --- In <script name> Error from add_message

- Message priority:

  MAJOR
- Description and effect:

  The <script name> failed to save a message.
- Repair procedure:
  - Check that ORACLE is functioning properly.
  - Check that **msgdrpDIP** is running.
  - Check the **msgdrpDIP** logs for problems.
  - Turn on debugging for the **msgdrpDIP**.

CC640 -- -- --- In <script name> Caller disconnect during xfer.

- Message priority:

  MINOR
- Description and effect:

  In <script name>, the called party hung up while or shortly after receiving the call.
- Repair procedure:
  - Train agents to answer calls correctly.

CC641 -- -- --- In <script name> Error from SFormString

- Message priority:

  MAJOR
- Description and effect:

  An error occurred while trying to build a dial string to call. The call is not made.

- Repair procedure:
  - Verify that the Dial Plan DIP is running.
  - Verify that the phone number is configured properly in Callback Messaging administration.
  - Verify that the specification on handling phone numbers in Dial Plan administration is configured properly.
  - Trace the port to view the dial string information that is being passed to the Dial Plan DIP.

CC642 -- -- --- In <script name> Error from add_cbk_log

- Message priority:

  MINOR
- Description and effect:

  An error occurred while trying to log the events during the transcription of a message. The Transcription Detail Report will not include information about this message.
- Repair procedure:
  - Check that ORACLE is functioning properly.
  - Check that **msgdrpDIP** is running.
  - Check the **msgdrpDIP** logs for problems.
  - Turn on debugging for the **msgdrpDIP**.
  - Trace the port to view the information that is being passed to the **msgdrpDIP**.

CC643 -- -- --- In <script name> Error from add_custcb

- Message priority:

  MINOR
- Description and effect:

  An error occurred while trying to log a customer callback. The Agent Callback Count Report will not include information about this message.
- Repair procedure:
  - Verify that ORACLE is functioning properly.
  - Verify that **msgdrpDIP** is running.
  - Check the **msgdrpDIP** logs for problems.
  - Turn on debugging for the **msgdrpDIP**.
  - Trace the port to view the information that is being passed to the msgdrpDIP.

CC644 -- -- --- In <script name> Error from cnt_messages

- Message priority:

  MINOR

- Description and effect:

  An error occurred while counting the number of messages in each state for a mailbox. The information spoken back to the transcriber will be inaccurate.

- Repair procedure:

  — Verify that ORACLE is functioning properly.

  — Verify that **msgdrpDIP** is running.

  — Check the **msgdrpDIP** logs for problems.

  — Turn on debugging for the **msgdrpDIP**.

  — Trace the port to view the information that is being passed from the msgdrpDIP.

CC645 -- -- --- In <script name> Error from del_message

- Message priority:

  MAJOR

- Description and effect:

  An error occurred while attempting to delete a message. The message will not be deleted.

- Repair procedure:

  — Verify that ORACLE is functioning properly.

  — Verify that **msgdrpDIP** is running.

  — Check the **msgdrpDIP** logs for problems.

  — Turn on debugging for the **msgdrpDIP**.

  — Trace the port to view the information that is being passed to the msgdrpDIP.

CC646 -- -- --- In <script name> Error from forward_msg

- Message priority:

  MINOR

- Description and effect:

  An error occurred while attempting to forward a message. The message will not be forwarded.

- Repair procedure:

  — Verify that ORACLE is functioning properly.

  — Verify that **msgdrpDIP** is running.

— Verify the **msgdrpDIP** logs for problems.

— Turn on debugging for the **msgdrpDIP**.

— Trace the port to view the information that is being passed to the msgdrpDIP.

CC647 -- -- --- In <script name> Error from get_global

- Message priority:

  MAJOR

- Description and effect:

  An error occurred while attempting to retrieve the Global Settings. The script will terminate.

- Repair procedure:

  — Check the Global Settings in the administration. Save the values again.

  — Verify that ORACLE is functioning properly.

  Check that **msgdrpDIP** is running.

  — Check the **msgdrpDIP** logs for problems.

  — Turn on debugging for the **msgdrpDIP**.

  — Trace the port to view the information that is being passed to the msgdrpDIP.

CC648 -- -- --- In <script name> Error from get_message

- Message priority:

  MAJOR

- Description and effect:

  An error occurred while attempting to retrieve a message. The script will terminate.

- Repair procedure:

  — Verify that the message exists.

  — Verify that ORACLE is functioning properly.

  — Verify that **msgdrpDIP** is running.

  — Check the **msgdrpDIP** logs for problems.

  — Turn on debugging for the **msgdrpDIP**.

  — Trace the port to view the information that is being passed to the **msgdrpDIP**.

CC649 -- -- --- In <script name> Error from log_msgevent

- Message priority:

MINOR

- Description and effect:

  An error occurred while trying to log an event during message drop or transcription. The Agent Callback Count Report will not include information about this message.

- Repair procedure:
  - Verify that ORACLE is functioning properly.
  - Verify that **msgdrpDIP** is running.
  - Check the **msgdrpDIP** logs for problems.
  - Turn on debugging for the **msgdrpDIP**.
  - Trace the port to view the information that is being passed to the **msgdrpDIP**.

CC650 -- -- --- In <script name> Error from prepend_msg

- Message priority:

  MINOR

- Description and effect:

  An error occurred while trying to prepend a phrase to a message. The prepending phrase will be lost.

- Repair procedure:
  - Verify that ORACLE is functioning properly.
  - Verify that **msgdrpDIP** is running.
  - Check the **msgdrpDIP** logs for problems.
  - Turn on debugging for the **msgdrpDIP**.
  - Trace the port to view the information that is being passed to the **msgdrpDIP**.

CC651 -- -- --- In <script name> Error from read_mailbox

- Message priority:

  MAJOR

- Description and effect:

  An error occurred while attempting to retrieve the mailbox configuration information. The script will terminate.

- Repair procedure:
  - Verify that ORACLE is functioning properly.
  - Verify that **msgdrpDIP** is running.
  - Check the **msgdrpDIP** logs for problems.

— Turn on debugging for the **msgdrpDIP**.

— Trace the port to view the information that is being passed to the **msgdrpDIP**.

CC652 -- -- --- In <script name> Error from read_message

- Message priority:

  MAJOR

- Description and effect:

  An error occurred while attempting to retrieve the message information. The script will terminate.

- Repair procedure:

  — Verify that ORACLE is functioning properly.

  — Verify that **msgdrpDIP** is running.

  — Check the **msgdrpDIP** logs for problems.

  — Turn on debugging for the **msgdrpDIP**.

  — Trace the port to view the information that is being passed to the msgdrpDIP.

CC653 -- -- --- In <script name> Error from remove_phr

- Message priority:

  MINOR

- Description and effect:

  An error occurred while attempting to remove a phrase from the message. The phrase will remain in the talkfile as an orphan phrase.

- Repair procedure:

  — Verify that the phrase exists in the talkfile.

  — Verify that the permissions to read and write to talkfile 6106 and that phrase is correct.

  — Verify that the phrase number was not used in more than 1 message.

CC654 -- -- --- In <script name> Error from updt_message

- Message priority:

  MAJOR

- Description and effect:

  An error occurred while attempting to update the status of the message. The message will remain in a locked state.

- Repair procedure:

  — Verify that ORACLE is functioning properly.

- — Verify that **msgdrpDIP** is running.
- — Check the **msgdrpDIP** logs for problems.
- — Turn on debugging for the **msgdrpDIP**.
- — Trace the port to view the information that is being passed to the **msgdrpDIP**.

CC655 -- -- --- In <script name> Intercepted tone heard.

- Message priority:

  MINOR

- Description and effect:

  When dialing a phone number, an error tone was detected.

- Repair procedure:
  - — Verify that the phone number is a valid by dialing it.
  - — If it is a valid number, configure the Dial Plan to make blind calls so you can hear what the CONVERSANT is hearing.

CC656 -- -- --- UpdateCache : Discard msg from msgdrpDIP.

- Message priority:

  INFO

- Description and effect:

  The DIP was notified of a message dropped but since agent callback for that message is not needed, it can be discarded from consideration.

- Repair procedure:
  - — Notification only — no action necessary.

CC657 -- -- --- usrUpdateMessage : msgstatus value is invalid.

- Message priority:

  MAJOR

- Description and effect:

  The message status to change to is invalid. The function will not be processed.

- Repair procedure:
  - — Check the message queue to see if there are any abnormally long queues.
  - — Trace the port to verify that the script is passing a value to the DIP.
  - — Turn on debugging for the DIP to see what is received from the script.
  - — Kill the DIP.

CC658 -- -- --- <program|function> : NULL msgnum value passed.

- Message priority:

  MAJOR

- Description and effect:

  The script passed a NULL message number to the <program|function>. The function will not be performed.

- Repair procedure:

  — Check the message queue to see if there are any abnormally long queues.

  — Trace the port to verify that the script is passing a value to the DIP.

  — Turn on debugging for the DIP to see what is received from the script.

  — Kill the DIP.

Summary

While working through this chapter, you learned how to use logs and error codes to diagnose possible problems.

- See Chapter 8, ‘‘Troubleshooting’’, for information on how to solve the problem.

Port Sizing Guidelines

A

General Considerations

Use the following forms to help estimate the number of analog ports required for various CONVERSANT vector applications created on Customer Assist Platform Management.

You can set up your switch vector to direct calls to any available CONVERSANT port by assigning all CONVERSANT ports to a single hunt group. Or, you can create groups of hard and dynamically allocated ports by segregating particular CONVERSANT ports within multiple DEFINITY hunt groups.

Refer to standard ERLANG B engineering tables in *INTUITY* CONVERSANT *System Version 7.0 Administration*, 585-313-501, for assistance in sizing ports for each Customer Assist application.

Standard Announcement Guidelines

CONVERSANT ports must be assigned as dedicated announcement extensions in Customer Assist. You must allow one hard-allocated port for each standard announcement. Therefore, port requirements must be calculated on a per announcement basis.

Dynamic Port Allocation

You can allocate ports in Customer Assist dynamically to provide efficient port utilization. All CONVERSANT vector applications other than standard announcements may be allocated dynamically across CONVERSANT ports.

Dynamically allocated ports receive arguments from the PBX and start CONVERSANT vectors based on the values of those arguments. For example, a single call directed to a Customer Assist channel 0 may pass VDN 2000 to execute an ADA or EWT vector, whereas the next call directed to channel 0 may pass 3000 to hear a Custom Call Routing application.

Callback Messaging

As a rule, it is sufficient to calculate port requirements for only incoming calls because other Callback Messaging activities, such as agent callback, transcription, and automatic callback, occur on the same ports at non-peak times when agents and ports are readily available.

However, some call centers may require ports dedicated to transcription. These call centers should hard allocate one port per transcriber.

NOTE:
If you wish to provide the option for callers to drop a message to “wait in queue” in place of the caller, you must allocate a number of ports that is equal to the number of callers/messages that are required to be queued to achieve this service. For example, if the wait time for the caller is estimated at five minutes, and you wish to provide the option for the caller to receive a callback in approximately five minutes, you must have as many ports available as you expect to have callers select this option for any given group. Otherwise, messages will be held back in the messaging queue, and not in queue for agents, and will thereby not reserve agent availability over inbound calls.

Custom Call Routing

On the average, you can budget fewer than ten seconds for lookup and call routing. Remember that the average call duration does not include post-routing call activity. The overall call duration for Custom Call Routing will vary according to the length and the number of announcements that play before the system routes the call, the time used for prompting in Customer Assist, the string length of the lookup field, and the size of the database.

Port Sizing Worksheet

Use the following worksheet to calculate the number of ports required for each application on Customer Assist Platform Management:

No. of Ports Required

- **Standard Announcements**

  Total number of standard announcements = _____

- **Dynamic Announcements**

  Number of calls in the busy hour

  Average call duration

  Grade of service

  Result from standard ERLANG tables = _____

- **Anticipated Delay/Queue Position Announcements**

  Number of calls in the busy hour

  Average call duration

  Grade of service

  Result from standard ERLANG tables = _____

- **Script Builder Applications Executed from Care Center**

  Number of calls in the busy hour

  Average call duration

  Grade of service

  Result from standard ERLANG tables = _____

- **Callback Messaging/Incoming Calls**

  Number of calls in the busy hour

  Average call duration

  Grade of service

  Result from standard ERLANG tables = _____

- **Callback Messaging/Dedicated Transcription**

  Number of simultaneous transcribers in the busy hour = _____

- **Custom Call Routing**

  Number of calls in the busy hour

  Average call duration

  Grade of service

  Result from standard ERLANG tables = _____

You may be able to minimize the number of ports required on your Customer Assist system if you dynamically allocate groups of applications to a particular hunt group(s) of CONVERSANT channels. This is particularly effective if peak times vary from application to application because several applications do not compete for resources within the same group of ports.

Use the following form to allocate multiple applications dynamically across CONVERSANT ports.

Remember that standard announcements and ports dedicated for Callback Messaging transcription still require hard-allocated ports.

- **Customer Assist Application Group A:**

  Number of calls in the busy hour

  Average call duration

  Grade of service

  Result from standard ERLANG tables = _____

- **Customer Assist Application Group B:**

  Number of calls in the busy hour

  Average call duration

  Grade of service

  Result from standard ERLANG tables = _____

- **Customer Assist Application Group C:**

  Number of calls in the busy hour

  Average call duration

  Grade of service

  Result from standard ERLANG tables = _____

- **Customer Assist Application Group D:**

  Number of calls in the busy hour

  Average call duration

  Grade of service

  Result from standard ERLANG tables = _____

- **Customer Assist Application Group E:**

  Number of calls in the busy hour

  Average call duration

  Grade of service

  Result from standard ERLANG tables = _____

- **Customer Assist Application Group F:**

  Number of calls in the busy hour

  Average call duration

  Grade of service

  Result from standard ERLANG tables = _____

- **Standard Announcements**

  Total number of standard announcements = _____

- **Callback Messaging/Dedicated Transcription**

  Number of simultaneous transcribers in

  the busy hour = _____

Mailbox and Speech Conversion Utility

B

This chapter describes the Mailbox and Speech Conversion utility, an accessory for versions 1.0, 1.1, 1.2, and 2.0 of the CONVERSANT Solutions for DEFINITY Call Center software. Install this utility on the voice platform where the older version of the software is installed.

Overview

The Mailbox and Speech Conversion utility enables you to transfer Callback Messaging mailbox settings and recorded speech from version 1.0, 1.1, 1.2, or 2.0 of the CONVERSANT Solutions for DEFINITY software to version 3.0 or greater.

The utility enhances the CONVERSANT Solutions software by adding two options to the System Backup/Restore menu:

- Backup Mailbox Configuration
- Backup Speech for 6.0+.

By using these to backup your Mailbox Configuration, you can preserve the parameters you established for Callback Messaging before you replace your CONVERSANT Solutions software with a newer version. In the same way, you can backup speech phrases for use in a newer version of the software.

Use this utility once, before you upgrade your system, or anytime you want to transfer a mailbox configuration from 1.X or 2.X+ and speech from 1.X and 2.X to 6.0+.

Table B-1. Conversion Overview Table

From Version:	To Version:	Equipment	Steps on Previous Version	Steps on V7.0
CCC V1.X	CACC V7.0	CVIS 7.0; CACC 7.0; Mailbox and Speech Conversion Utility V2.0 Disk	V1.X - Install utility - Backup speech and mailbox using utility	Restore speech and mailboxes from the “Restore Data from Previous Version of Call Center” menu on V7.0
CCC V2.X	CACC V7.0	CVIS 7.0; CACC 7.0; Mailbox and Speech Conversion Utility V2.0 Disk	V2.X - Install Utility - Backup speech with utility - Backup mailboxes using backup menu of V2.X	Restore speech and mailboxes from the “Restore Data from Previous Version of Call Center” menu on V7.0
CCC V3.0 CCC V4.0	CACC V7.0	CVIS 7.0 CACC V7.0	Backup speech and mailboxes from backup speech and mailbox menus of V3.0 or V4.0	Restore speech and mailboxes from the “Restore Data from Previous Version of Call Center” menu on V7.0

Supported Hardware/Software

The Mailbox and Speech Conversion utility for CONVERSANT Solutions for DEFINITY Call Center is supported on these configurations:

CONVERSANT System Hardware

- MAP/40 (up to 24 incoming ports) or MAP/100 (up to 48 incoming ports)
- IVP6 analog interface to G3

CONVERSANT System Software

- 3.1 or 4.0 CONVERSANT software
- 1.0, 1.1, 1.2, or 2.0 CONVERSANT Solutions for DEFINITY Call Center software

CONVERSANT Solutions for DEFINITY Call Center software requires additional hardware and system software. See "Installation Requirements" on page 2-6 for more information.

Installing the Utility

To install the Mailbox and Speech Conversion utility, you must have Version 3.1 or 4.0 of the CONVERSANT system software in place and already be using version 1.0, 1.1, 1.2 or 2.0 of the CONVERSANT Solutions for DEFINITY Call Center software.

NOTE:
When converting from 1.2 or 2.0 the speech needs to be converted. If you are already using 2.0 or a greater version of the CONVERSANT Solutions software, you do not need to install this utility for converting mailboxes. Use it for backing up speech phrases.

NOTE:
Although installing this utility will not disrupt call handling, you should avoid installing this or any other software package during periods of very high call activity.

Use the following steps to install the Mailbox and Speech Conversion utility:

1. Log into the system as **root**.
2. Enter **installpkg** at the UNIX prompt.

   The system responds:

   ```
   Confirm

   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**.
4. If the system prompts you to identify the disk drive you want to use, enter **0** or **1**, as appropriate.

   The system responds:

   ```
   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 Mailbox and Speech Conversion utility diskette and press [ENTER].

   The system responds:

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

   Searching for the Size file

   Install in progress

   Transfer in progress - Do not remove the floppy disk.

   It is safe to remove the floppy disk.

   Copying files...

   Installation of CONVERSANT SOLUTIONS 1.X and 2.X to 6.0
   Mailbox and Speech Conversion Utility is complete.

   The installation of the CONVERSANT SOLUTIONS 1.X and
   2.X to 6.0 Mailbox and Speech Conversion Utility
   Version 2.0 is now complete.
   ```

6. Remove the diskette.

   You have successfully installed the Mailbox and Speech Conversion utility.

Using the Utility

After you install the Mailbox and Speech Conversion utility, you can copy your mailbox configuration to a diskette in a format suitable for use with the latest version of the CONVERSANT Solutions for DEFINITY Call Center software.

Use the following steps to copy your mailbox configuration to a diskette:

1. Log into the CONVERSANT Solutions Administration interface by following the instructions in the User's Manual.

   The system displays the CONVERSANT Solutions Administration interface (Figure B-1).

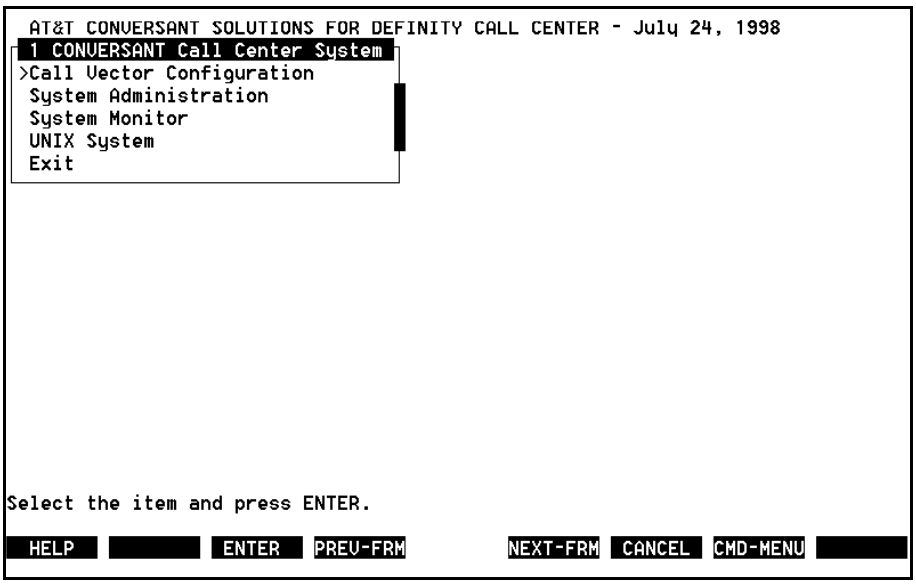

Figure B-1. Main Menu

2. Select System Administration.

   The system displays the System Administration menu (Figure B-2).

```
AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - July 24, 1998
 1 CONVERSANT Call Center System      2      System Administration
 Call Vector Configuration           >Speech Administration
>System Administration                Callback Messaging Administration
 System Monitor                       Custom Call Routing Administration
 UNIX System                          Report Generation
 Exit                                 Report Scheduling
                                      System Backup/Restore
                                      Conversant Administration

Select the item and press ENTER.

 HELP          ENTER  PREV-FRM        NEXT-FRM  CANCEL  CMD-MENU
```

Figure B-2. System Administration Menu

3. Select System Backup/Restore.

   The system displays the System Backup/Restore menu (Figure B-3).

```
AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - July 24, 1998
 1 CONVERSANT Call Center System      2      System Administration
 Call Vector Configuration            Speech Administration
>System Administration                Callback Messaging Administration
 System Monitor                       Custom Call Routing Administration
 UNIX System                          Report Generation
 Exit                                 Report Scheduling
                                     >System Backup/Restore
                                      Conversant Administration

 3        System Backup/Restore
>Restore Vector Database
 Backup Vector Database to Floppy Disk
 Backup/Restore Speech
 Backup/Restore Mailbox Configuration
 Backup Mailbox Config for Version 2.0+
 Backup Speech for Version 6.0+
 Format Floppy Disk

HELP        ENTER   PREV-FRM        NEXT-FRM  CANCEL  CMD-MENU
```

Figure B-3. System Backup/Restore Menu

To Back Up Mailboxes

Use the following steps to back up the mailboxes:

1. Insert a diskette into drive 0 and select Backup Mailbox Config for Version 2.0+.
2. When prompted, press (ENTER).

   The system will:

   - Acquire the existing data from the Callback Messaging database
   - Convert the data into the version 2.0 format
   - Write the converted data to a diskette.
3. Load the Callback Messaging data onto your upgraded system by choosing Backup/Restore Mailbox Configuration from the System Backup/Restore menu.

   See "Callback Messaging Administration" on page 7-2 of the *INTUITY CONVERSANT System Customer Assist User Guide*, 585-313-706 for more information.

To Back Up Speech

Use the following steps to back up speech:

1. Insert a diskette into drive 0 and select Backup Speech for Version 6.0+.
2. Select the correct talkfile numbers.
3. When prompted, press ENTER.

   The system will:

   - Acquire the existing data from the phrase database
   - Convert the phrases to a UNIX file format
   - Write the converted data to a diskette.
4. Load the data on the diskette into your current system following directions in "Callback Messaging Administration" on page 7-2 of the *INTUITY CONVERSANT System Customer Assist User Guide*, 585-313-706.

Removing the Utility

If you decide to remove the CONVERSANT Solutions for DEFINITY Call Center software from your system, follow these instructions to remove the Mailbox and Speech Conversion utility too.

If you plan to replace the software with an upgraded version, first be sure to backup your vectors, speech, and mailbox configuration settings by following the instructions in this appendix and "Callback Messaging Administration" on page 7-2 of the *INTUITY CONVERSANT System Customer Assist User Guide,* 585-313-706.

Although you must remove the components of Callback Messaging, Custom Call Routing, and the Announcement Platform in a specific order, you can remove the Mailbox and Speech Conversion utility at any time by following these instructions:

1. If you are not already logged in, log into the system as **root**.
2. Enter **removepkg** at the UNIX prompt.

   The system will display a list of installed UNIX operating system packages numbered 1 to *n.*
3. Enter the number of the CONVERSANT SOLUTIONS 1.X to 2.0 Mailbox and Speech Conversion Utility Version 2.0

   The system responds:

   ```
   Confirm
   ```

   ```
   Do you really want to remove CONVERSANT SOLUTIONS  1.X
   and 2.X to 6.0 Mailbox and Speech Conversion Utility
   Version 1.0?
   ```

   ```
   Strike ENTER when ready or ESC to stop.
   ```
4. Press [ENTER].

   The system responds:

   ```
   Removal of CONVERSANT SOLUTIONS 1.X and 2.X to 6.0
   Mailbox and Speech Conversion Utility is complete.
   ```

   ```
   The CONVERSANT SOLUTIONS  1.X and 2.X to 6.0 Mailbox and
   Speech Conversion Utility Version 2.0 is now removed.
   ```
5. You have successfully removed the Mailbox and Speech Conversion Utility.

Interaction Between Dial Plan and Customer Assist

C

This chapter describes how Customer Assist uses Dial Plan.

Outbound Call Matrix

Table C-1 provides a matrix of valid outbound call types.

Table C-1. Dial Plan Configuration

Phone Number Portion in Callback Message	Phone Number Format: Fixed (F) Always Include City/Area Code: No	Phone Number Format: Fixed (F) Always Include City/Area Code: Yes	Phone Number Format: Variable (V) Always Include City/Area Code: No	Phone Number Format: Variable (V)) Always Include City/Area Code: Yes
Internal	Dialed as is	Dialed as is	Dialed as is	Dialed as is

Continued on next page

Table C-1. Dial Plan Configuration

Phone Number Portion in Callback Message	Phone Number Format: Fixed (F) Always Include City/Area Code: No	Phone Number Format: Fixed (F) Always Include City/Area Code: Yes	Phone Number Format: Variable (V) Always Include City/Area Code: No	Phone Number Format: Variable (V)) Always Include City/Area Code: Yes
Whole	Cannot make International calls. Checks Area Code or uses default. If different, dials as long distance, otherwise, checks prefix and dials intra-lata or as a Local Call.	Cannot make International Calls. Always dials as long distance.	Cannot make International Calls. Cannot make Long Distance Calls. Always dials the number as a Local Call.	Cannot make International Calls. Cannot make Local Calls. Always dials the number as Long Distance.
Whole + Country Code	If the Country Code is different, dials International Call. Checks Area Code or uses default. If different, dials as Long Distance, otherwise, checks prefix and dials intra-lata or as a Local Call.	If the Country Code is different, dials as an International Call. Otherwise, dials as Long Distance.	If the Country Code is different, dials as an International Call. Cannot make Long Distance Calls. Always dials as a Local Number.	If the Country Code is different, dials as an International Call. Cannot make Local Calls. Always dials the number as Long Distance.

Continued on next page

Table C-1. Dial Plan Configuration

Phone Number Portion in Callback Message	Phone Number Format: Fixed (F) Always Include City/Area Code: No	Phone Number Format: Fixed (F) Always Include City/Area Code: Yes	Phone Number Format: Variable (V) Always Include City/Area Code: No	Phone Number Format: Variable (V)) Always Include City/Area Code: Yes
Subscriber	Cannot make International calls. Checks Area Code or uses default. If different, dials as Long Distance, otherwise, checks prefix and dials intra-lata or as a Local Call.	Cannot make International Calls. Checks Area Code or uses default. Always dials Long Distance.	Cannot make International Calls. Cannot make Long Distance Calls. Always dials the number as a Local Call.	Cannot make International Calls. Cannot make Local Calls. Always dials the number as Long Distance.
Subscriber + City/Area Code	Cannot make International calls. Checks Area Code or uses default. If different, dials as Long Distance, otherwise, checks prefix and dials intra-lata or as a Local Call.	If Country Code is different, dials as International Call. Otherwise, dials as Long Distance.	Cannot make International Calls. If City/Area Code is different, dials as Long Distance. Otherwise, dials as Local Call.	Cannot make International Calls. Cannot make Local Calls. Always dials the number as Long Distance.

Continued on next page

Table C-1. Dial Plan Configuration

Phone Number Portion in Callback Message	Phone Number Format: Fixed (F) Always Include City/Area Code: No	Phone Number Format: Fixed (F) Always Include City/Area Code: Yes	Phone Number Format: Variable (V) Always Include City/Area Code: No	Phone Number Format: Variable (V)) Always Include City/Area Code: Yes
Subscriber + Country Code	If Country Code is different, dials as International Call. Checks Area Code or uses default. If different, dials as Long Distance, otherwise, checks prefix and dials intra-lata or as a Local Call.	If Country Code is different, dials as International Call. Otherwise, dials as Long Distance.	If Country Code is different, dials as International Call. Cannot make Long Distance Calls. Always dials the number as a Local Call.	If Country Code is different, dials as International Call. Cannot make Local Calls. Always dials the number as Long Distance.
Subscriber + City/Area Code + Country Code	If Country Code is different, dials as International Call. If Area Code is different, dials as Long Distance, otherwise, checks prefix and dials intra-lata or as a Local Call.	If Country Code is different, dials as International Call. Otherwise, dials as Long Distance.	If Country Code is different, dials as International Call. If City/Area Code is different, dials as Long Distance. Otherwise, dials as a Local Call.	If Country Code is different, dials as International Call. Cannot make Local Calls. Always dials the number as Long Distance.

The following table provides a matrix with examples of call inputs in phone data segments and the dial string that will be dialed. US and UK phone numbers are used in the matrix to show the behavior with fixed and variable length phone numbers. Use this table in conjunction with Table C-1, “Dial Plan Configuration.”

To simplify the example, the accounting codes, equal access codes, termination codes, and intra-lata phone numbers are not included. The following table assumes the call center is at a US location with an area code of 612 for the US example and at a UK location with an area code of 12 for the UK example. It also assumes the `Subscriber Number Minimum Length` is set to 7 for US and 6 for UK.

Table C-2. Examples of Phone Number in US and UK

	Phone Number Anatomy						
Country	**Outside Line Access Code**	**Long Distance Access Code**	**Int'l Access Code**	**Country Code**	**Area/City Code**	**Prefix**	**Subscriber**
US	9	1	011	1	612	971	2000
US	9	1	011	1	303	830	4300
UK	9	1	00	44	12	3456789	
UK	9	1	00	44	555	856099	

Intelligent Actions and Speech Energy

D

This appendix addresses advanced troubleshooting. It shows you what to do when the CONVERSANT cannot perform intelligent actions because it fails to detect speech energy.

Intelligent Actions and Speech Energy

The speech energy detection algorithm is intended primarily for detecting speech energy associated with answering the telephone. It may fail to detect short or quiet responses, however, because the person answering the telephone may not have sufficiently differentiated their voice from the background noise. Speech energy must be above a minimum level (expressed in dB) and below a maximum reference level for a continuous period of time (expressed in milliseconds). The default configuration for an AYC21 card is set to approximately the middle of the sensitivity range. If the CONVERSANT is experiencing poor speech energy detection performance, the AYC21 card has two parameters that control the sensitivity of these parameters. Use the following procedure to adjust the parameters:

1. If you are not already logged in, log into your system as root.
2. Enter **cd /vs/switches/digital/pkgs/t1def**

   Each country supported by the package has a subdirectory.
3. Change to the directory for the country of the customer (For example, in the US, enter **cd US**).
4. Enter **vi d1Parms**
5. Modify the D1_E_THRESH parameter as needed.

NOTE:
This parameter controls the minimum volume of qualified speech energy.

D1_E_THRESH=-30	(less sensitive)
D1_E_THRESH=-36	(default setting)
D1_E_THRESH=-42	(more sensitive)

6. Modify the D1_E_MINTIME parameter as needed.

NOTE:
This parameter controls the minimum duration of qualified speech energy.

D1_E_MINTIME=500	(less sensitive)
D1_E_MINTIME=350	(default setting)
D1_E_MINTIME=200	(more sensitive)

7. Save the changes to the file.
8. Reload the AYC21 card with the new configuration.
9. Enter **cvis_menu** and select

> Switch Interfaces
> > Digital Interfaces
> > > Line Side Definity

10. Change both parameters to the more sensitive settings.
11. Test the settings by making several calls to different people in the environment the customer will be using.

NOTE:
You may need to try several different values to find the best combination.

Index

A

abbreviations
  languages, 4-4
  packages, 1-1
adm2vect, 6-34
Agent Callback Hours, 7-26
AgentCbkHrs, 6-25
Allow Interrupt, 1-3
analog ports
  estimating number required, A-1
auditMsg.sh, 6-35

B

Backup/Restore Messages Utility
  overview, 1-3

C

Call Management System
  reports, TRANSFER actions, 8-17
Callback Messaging Package
  error log messages, 9-16
  relevant configuration fields, 7-24
  scripts, 6-32
  troubleshooting, 8-19
callbacks
  scheduling for future dates and times, 1-4
  scheduling times, 7-7
capacity planning
  call logs, 5-8
  Callback Messaging Package, 5-5
  inbound call services, 5-13
  memory, 5-1
  Oracle table space, 5-12
  partition space, 5-2
  Platform Management Package, 5-2
  return call, 5-15
  speech, 5-9
  speech messages, 5-7
  voice ports, 5-13
CBK_LOG, 6-24
changed features, 1-4
Code2TimeZone.dat, 6-26
compatibility
  database and configuration, 1-3
  with previous versions, 1-2
configurations files, 6-27
conventions, xiii
CONVERSANT
  documentation, xv
CONVERSANT documentation, xv
CustCbkHrs, 6-26
Custom Call Routing Package, 6-27
  troubleshooting, 8-25
custom grammars
  determining if enabled, 6-31
  enabling, 4-3
Customer Assist
  interaction with Dial Plan, C-1
  troubleshooting, 8-11
Customer Assist packages, 1-1
Customer Assist Utilities
  accessing
  administering, 4-1, 4-8
Customer Callback Hours, 7-26

D

daily.chg, 6-33
database and configuration, compatibility with previous versions, 1-3
database schemata
  platform, 6-6
  speech, 6-9
databases
  corrupted, 8-30
debug files
  changing directory size, 6-6
  overview, 6-5
  turning on debugging, 6-6
DEFINITY
  documentation, xvi
Delete Messages from Mailbox
  overview, 1-3
delivery time, 6-20
Dial Plan
  parameters, 7-9
Dial Plan Administration Package
  interaction with Customer Assist, C-1
Dial Pulse Recognition
  troubleshooting, 8-29
document
  audiences, xi
  organization, xii
documentation
  CONVERSANT, xv
  DEFINITY, xvi
  UnixWare operating system, xv
DOS disk formatting problems, 8-15
DP.cfg, 6-31

Lucent Technologies -- PROPRIETARY
Use pursuant to Company Instructions

E

error log messages
AUDIX, 9-5
Callback Messaging Package, 9-16
Oracle, 9-8
Platform Management Package, 9-10
error logs
UNIX, 9-3
estimated wait time, 4-5

F

features
added, 1-3
changed, 1-4
removed, 1-4

G

General Availability version number, 1-2
GLOBAL action, 1-4
Global Settings
Callback Messaging guidelines, 7-2
Global Settings Administration, 7-9
Global.cfg, 6-27
guidelines, 7-26

H

hard disk drive space requirements, 5-5
hardware
Mailbox Conversion Utility, B-3

I

indexes, 6-25
installing
Mailbox Conversion Utility, B-4
requirements, 2-6
site preparation, 2-7
Italian speech, 1-3

K

kernel
tuning, 5-1

L

languages
abbreviations, 4-4
licenses
See port licenses
log files
changing directory size, 6-6
directory, 6-6, 9-1
maximum size, 6-6
overview, 6-5
viewing, 9-1

M

Mailbox Conversion Utility
description, B-1
hardware supported, B-3
installation, B-4
removing, B-10
software supported, B-3
using, B-6
mailbox custom and standard phrases
talkfile, 6-3
mailboxes
configuring, 7-1
determining segment type, 7-21
Global Settings, 7-25
individual settings, 7-26
data segment, 7-28
information only segment, 7-29
recorded segment, 7-29
premium service, 7-5
schedule segment
individual settings, 7-30
main menu, B-6
MBGLOBAL, 6-10
MBPARAMS, 6-11
MBSEGMENTS, 6-14
menus
main, B-6
System Administration, B-7
System Backup/Restore, B-8
MESGLOG, 6-22
MESSAGE, 6-18
messages
backing up and restoring, 1-3

Lucent Technologies -- PROPRIETARY
Use pursuant to Company Instructions

MSGAGE, 6-25
MSGCOUNT, 6-25
MSGSEGMENTS, 6-20

N

new features, 1-3
NPROC, 5-1

P

package abbreviations, 1-1
parameters
    Dial Plan, 7-9
    dialing and message disposition, 7-9
    message delivery, 7-2
    UnixWare operating system, 8-31
phrase.db, 6-9
Platform Management Package
    error log messages, 9-10
    troubleshooting, 8-12
port licenses
    administering, 4-2
    reverting to 1, 4-2
port sizing guidelines
    Callback Messaging, A-2
    Custom Call Routing, A-2
    dynamic port allocation, A-2
    general considerations, A-1
    standard announcement, A-1
    worksheet, A-3
prominent programs, 6-33

R

records
    maximum number of, 1-4
removed features, 1-4
removing
    Mailbox Conversion Utility, B-10
    software, B-10
reports
    Call Management System, 8-17
routing tables
    directory, 6-27
    sharing tablespace, 1-4

S

screen displays, xiv
scripts, 6-32
    assigning Customer Assist (ccc) script, 2-5
    Callback Messaging Package, 6-32
software
    Mailbox Conversion Utility, B-3
speech energy
    detecting, D-1
speech energy detection algorithm, D-1
Speech Recognition
    enabling, 4-3
    troubleshooting, 8-28
SR.cfg, 6-30, 6-31
standard speech
    talkfiles, 6-3
switches
    supported, 2-7
system administration
    troubleshooting, 8-26
System Administration menu, B-7
System Backup/Restore menu, B-8

T

tablespace, shared, 1-4
talkfiles
    mailbox custom and standard phrases, 6-3
    standard speech, 6-3
    vector phrases, 6-3
Tbl.desc, 6-27
telephone number
    anatomy of, C-5
time zone adjustments
    overview, 1-3
trademarks, xv
troubleshooting
    Callback Messaging Package, 8-19
    Custom Call Routing Package, 8-25
    Customer Assist, 8-11
    databases, 8-30
    Dial Pulse Recognition, 8-29
    Platform Management Package, 8-12
    speech energy, D-1
    Speech Recognition, 8-28
    system administration, 8-26
    voice system, 8-9

U

UNIX kernel
    parameters, 5-5
UNIX kernel parameters
    tuning, 5-1
UnixWare operating system
    access denied, 8-30

Lucent Technologies -- PROPRIETARY
Use pursuant to Company Instructions

denied access, 8-30
disk formatting problems, 8-15
documentation, xv
parameters, 8-31
removing software, B-10
upgrading
CONVERSANT Solutions for DEFINITY Call Center 1.x or 2.x to Customer Assist V7.0, 3-1
utilities
See Customer Assist Utilities

V

var.list, 6-9
vect.db, 6-7
vect.name, 6-7
vectDIS.db, 6-8
vector databases
ASCII files, 6-6
vector phrases
talkfile, 6-3
version number
General Availability, 1-2
voice system
troubleshooting, 8-9