

**Lucent Technologies**  
Bell Labs Innovations



**INTUITY™ CONVERSANT® System**  
Customer Assist User Guide

585-313-706  
Comcode 108340787  
Issue 1  
September 1998

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#### 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.

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**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

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

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EMC Directive 89/336/EEC  
Low-Voltage Directive 73/23/EEC



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.



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## About This Document

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This chapter introduces you to 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 call-center agents, technicians and system administrators responsible for using and maintaining Customer Assist.

## How to Use This Document

One good way to use the document is to start with the general overviews in Chapter 1. This will give you a feel for the system and suggest how you can configure it to for your needs. Next read and study Chapter 2, “Quick Start and Navigating Customer Assist” to follow step-by-step instructions on how to log in and navigate your new system. Then you can go over the sample applications to get an idea of how call-handling instructions, or Customer Assist vectors, work to direct incoming calls.

It is important that you read Chapter 2, “Quick Start and Navigating Customer Assist”, before going on to the task of building your own applications. Use Chapter 3, “Designing a World-Class Call Center” and Chapter 4, “Vector Administration” to understand how actions and variables work within the sample applications.

## Organization of This Document

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

- Chapter 1, “Product Introduction”, provides an overview of the product and its packages.
- Chapter 2, “Quick Start and Navigating Customer Assist”, provides a checklist, with references, for setting up your system, and then shows you how to navigate through Customer Assist screens and gives a brief overview about what each screen offers.
- Chapter 3, “Designing a World-Class Call Center”, offers step-by-step sample applications to help you setup your call center and customize it.
- Chapter 4, “Vector Administration”, shows you how to setup your vectors.
- Chapter 5, “Vector Actions”, explains the major tools, called actions, that work in Customer Assist.
- Chapter 6, “Speech Administration”, shows you how to record and administer speech phrases.
- Chapter 7, “System Administration”, serves as a reference guide for setting up your Customer Assist.
- Chapter 8, “Reports”, shows you how to generate, view, and print reports. It also tells you the advantages of each report.
- Chapter 9, “The Agent and Customer Assist”, teaches agents how to access mailboxes and perform callbacks.
- Chapter 10, “Troubleshooting”, provides suggestions and guidance to fixing problems with your system.
- Appendix A, “Maximum Values in Customer Assist Packages”, serves as a reference listing maximum values for input in Customer Assist.
- Appendix B, “Reentering Customer Assist”, explains how to enter Customer Assist from Script Builder or how to enter after returning data to the DEFINITY.
- Appendix C, “Interaction between Dial Plan and Customer Assist”, shows you how Customer Assist interacts with Dial Plan.
- The glossary contains commonly used terms.
- The index contains a detailed list of key terms with the page number where the information can be found.

## Conventions

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

### Terminology

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- 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

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- 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**

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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**

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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.
- Customer Assist Care Center is a trademark of Lucent Technologies.
- 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

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### UnixWare Operating System and CONVERSANT Documentation

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- *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

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Some knowledge of DEFINITY G3 Call Vectoring, Expert Agent Selection (EAS) and Call Prompting is necessary to make full use of Customer Assist. The most helpful document will probably be the Call Vectoring/EAS Guide. If you are not familiar with Call Vectoring, review that document, especially its tutorial sections.

- *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 Make Comments**

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Please mention the name and order number of this document, *Intuity CONVERSANT System Customer Assist User Guide*, 585-313-706.



This chapter describes the main benefits of combining a DEFINITY G3, ECS R5, or R6.3+ switch, a voice platform system, and Customer Assist V7.0. This manual stresses the value that the voice platform and Customer Assist add to the DEFINITY G3, ECS R5, or R6.3+ switch.

### Overview of Customer Assist

Call centers are the newest development in call information management, and today they are lending even more capabilities to a switching system. Customer Assist is a leading call-center queue- and resource- management tool. It provides high flexibility and ease in managing call flow and disseminating information.

A stand-alone DEFINITY G3, ECS R5, or R6.3+ switch provides the ability to queue the call, collect the calling number, and estimate a wait time; combined with Customer Assist on the voice platform, capabilities are significantly enhanced. Now you can round the wait time up or down to the nearest minute and use a factoring percentage to increase or decrease the value of the wait time. This information helps callers make informed decisions as to what they want to do next. For instance, callers can reach dynamic, self-service options while either in or out of queue, such as:

- Auto attendants
- Bulletin boards, or
- Informational announcements

They can also leave a message in a mailbox or be routed to another area for additional information.

And, Customer Assist offers you additional benefits. While it offers your customers a variety of services, it enhances the management structure of your organization and its communication. Customer Assist gives you an alternative to hiring additional people to answer calls by providing “virtual” agents to manage call flow. In addition, it helps manage busy peak times and provides automated services such as bulletin boards and delay announcements. All of these benefits have a positive effect on key call center measurements like abandon rates, as well as on call center supervisors by requiring fewer actual agents.

Customer Assist fills the main role of a call-management resource tool by helping allocate resources in a busy call center. In addition, it provides customers with added benefits of more effective and efficient customer service by tailoring it to meet their needs.

## **Customer Assist Packages**

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The Customer Assist packages are grouped into the following groups:

- Base
- Platform Management (14 packages)
  - Platform Runtime
  - Platform Administration
  - Platform Language Australian English
  - Platform Language Brazilian Portuguese
  - Platform Language Canadian French
  - Platform Language Colombian Spanish
  - Platform Language Dutch
  - Platform Language European French
  - Platform Language German
  - Platform Language Italian
  - Platform Language Japanese
  - Platform Language Castilian Spanish
  - Platform Language UK English
  - Platform Language US English
- Custom Call Routing (1 package)
- Speech Recognition (1 package)
- Dial Pulse Recognition (1 package)
- Callback Messaging (14 packages)
  - Callback Messaging Runtime

- Callback Messaging Administration
- Callback Messaging Language Australian English
- Callback Messaging Language Brazilian Portuguese
- Callback Messaging Language Canadian French
- Callback Messaging Language Colombian Spanish
- Callback Messaging Language Dutch
- Callback Messaging Language European French
- Callback Messaging Language German
- Callback Messaging Language Italian
- Callback Messaging Language Japanese
- Callback Messaging Language Castilian Spanish
- Callback Messaging Language UK English
- Callback Messaging Language US English
- Surveys
- Web Reports
- Windows Administration

## **DEFINITY and CONVERSANT Integration**

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Customer Assist V7.0 is designed to work with Lucent Technologies' DEFINITY DEFINITY G3, ECS R5, or R6.3+ switch on INTUITY CONVERSANT System V7.0. Vectors on the DEFINITY G3, ECS R5, or R6.3+ switch and the voice platform work together to send information from an incoming call to Customer Assist waiting to receive calls.

### **Customer Assist Vectors**

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Like its counterpart on the DEFINITY G3, ECS R5, or R6.3+ switch, a Customer Assist vector is a series of commands or "actions" that dictates how the system treats an incoming call and what speech the caller hears. You may define as many as 256 Customer Assist vectors. Each can contain up to 14 individual actions.

Because of the multi-tasking power of the UnixWare operating system, Customer Assist can serve many callers at once. In addition, you can define or edit Customer Assist vectors while others are active without interrupting the system's operation. This flexible design also lets you launch any CONVERSANT application from Platform Management.

## DEFINITY Vectors

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DEFINITY vectors reside on the DEFINITY G3, ECS R5, or R6.3+ switch and are similar in concept to Customer Assist vectors. They consist of commands linked together in order to perform a task or function, such as place a call in queue or play a recorded message to the caller. You build and launch them in much the same way as Customer Assist vectors by using on-screen menus to enter the actions you want.

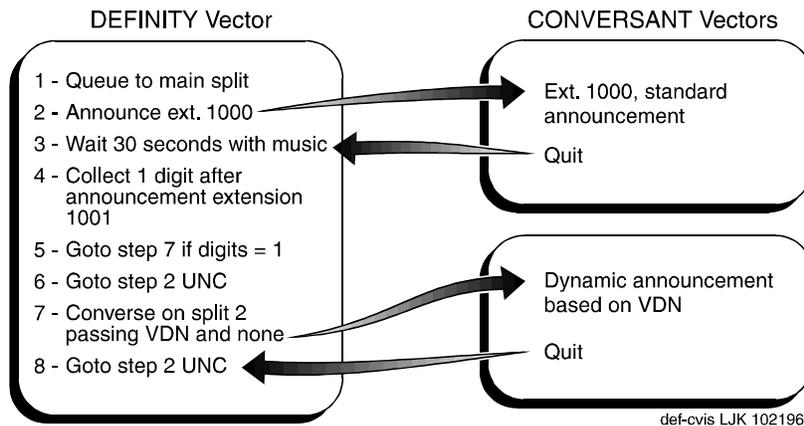
The DEFINITY vector has precedence over its junior partner, the Customer Assist vector. The DEFINITY vector receives all incoming calls and governs their movement. It dictates the playing of most forced announcements. It places calls in queue according to their priority level and arrival time. If a caller is in queue, it stops a message played by a Customer Assist vector in order to deliver the caller to a live agent.

See Chapters 1 through 4 of *Lucent DEFINITY Communications System Call Vectoring/EAS Guide*, 585-230-520 (G3) or -521 (ECS R5), or 555-230-521 (ECS R6.3) for more information on basic DEFINITY Call Vectoring.

## Their Partnership

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Figure 1-1 illustrates the DEFINITY and Customer Assist vectors working together to insure that an incoming call is treated properly.



**Figure 1-1. A Working Partnership**

1. When a call arrives, the DEFINITY vector answers it and then queues the call to a main split, or group, of agents.

2. If no agent is available, the DEFINITY vector passes the call to a Customer Assist vector, which plays a standard announcement, such as a greeting and the request to wait until an agent can answer the call.
3. When the announcement ends, the QUIT action sends the call back to the DEFINITY vector, which looks again (as, in fact, it does periodically as long as the call is in queue) to see whether an agent is available.
4. If not, Step 3 plays music for 30 seconds.
5. Then, if every agent is still busy, step 4 asks the caller to press one to hear, for instance, about a recent product update.
6. Callers who do not press one return to step 2.
7. If the caller presses a number, the Converse vector step passes the call back to the Customer Assist vector, which plays a dynamic announcement that contains the information the caller requested.
8. The QUIT action, as before, sends the call back to the DEFINITY vector.

Cooperation between the DEFINITY vector and the Customer Assist vector is fundamental to every call Customer Assist handles.

## **Customer Assist Product Highlights**

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Customer Assist offers a variety of features to meet the needs of real people and their businesses.

- Anticipated delay routing
- Routing based on customer entries, customer profile, time of day, etc.
- Anticipated delay announcements
- Automated attendants and bulletin boards
- Standard and dynamic announcements
- Message drop
- Agent delivery of messages
- Customer callback
- Speech administration
- Dynamic port allocation
- Multilingual features (up to 12 languages) in Platform Management and Callback Messaging
- Speech recognition
- Dial pulse recognition
- Surveys
- Reports on the Web
- Windows Administration

## **Overview of Customer Assist Platform Management**

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Platform Management provides the tools to build and execute Customer Assist vectors that handle incoming calls. With Platform Management, you can design Customer Assist vectors to:

- Play announcements to callers
- Forward their calls to other extensions (requires the call to be returned to the DEFINITY for routing)
- Execute other Customer Assist vectors or Script Builder applications

But before the system can perform any of these functions, a DEFINITY vector must first connect a call to a CONVERSANT port that has Customer Assist assigned. Platform Management answers through a single setup vector that ushers incoming calls to other Customer Assist vectors you have built.

**⇒ NOTE:**

You build the setup vector previously mentioned by using the template described in “Sample Application #1: The Setup Vector” on page 3-8. Templates automatically create vectors to perform important and common call-handling tasks. Besides the setup template, Platform Management provides templates for:

- Dynamic port allocation
- Anticipated delay or estimated wait time announcements
- Queue-position announcements

### **Hard and Dynamic Port Allocation and the Converse Vector Step**

A hard-allocated port is restricted to playing only one standard announcement or launching only one specific application. However, this port can play an announcement to many callers simultaneously who are each listening on their own telephones, having each been routed and queued to a Customer Assist vector containing the ANNOUNCE action. A call center where all calls are routed to a customer-service line makes heavy use of hard-allocated ports. In this kind of environment, they are very economical.

A dynamically allocated port, by contrast, has a wide repertoire. Unlike a hard-allocated port, which is likely to be an inactive port when there is no demand for it, a dynamically allocated port can play a variety of different announcements or launch many different Script Builder applications. However, only one caller can hear a given dynamic announcement or use a given application on any port simultaneously.

One key element in the responsiveness of a dynamic port is the Converse vector step from the DEFINITY G3 or ECS R5 switch. By passing a caller's choices or other information, such as the dialed number or caller's telephone number, from the switch to the voice platform, this feature plays an indispensable role in making dynamic ports efficient and economical over time.

Figure 1-2 illustrates the difference between hard and dynamic ports and of the voice platform and DEFINITY vectors that channel calls to each port. Platform Management lies under a glass case that represents Customer Assist.

Above and outside the case, two DEFINITY vectors pass an incoming call to the Customer Assist setup vector. The DEFINITY vector on the left does not carry any specific information that distinguishes the call from any others. The vector simply passes its call to a Customer Assist vector containing an ANNOUNCE action that plays a standard announcement.

The DEFINITY vector on the right receives instructions from the caller to play a specific announcement containing information tailored for the caller. It passes its call with the caller's information through the Converse vector step to a Customer

Assist vector that contains the DYN\_ANNOUN action. This action, in turn, plays the dynamic announcement.

Similarly, the DYNAMIC, EXECUTE, SWITCH, MENU, and SCHEDULE actions can respond dynamically with applications or vectors.

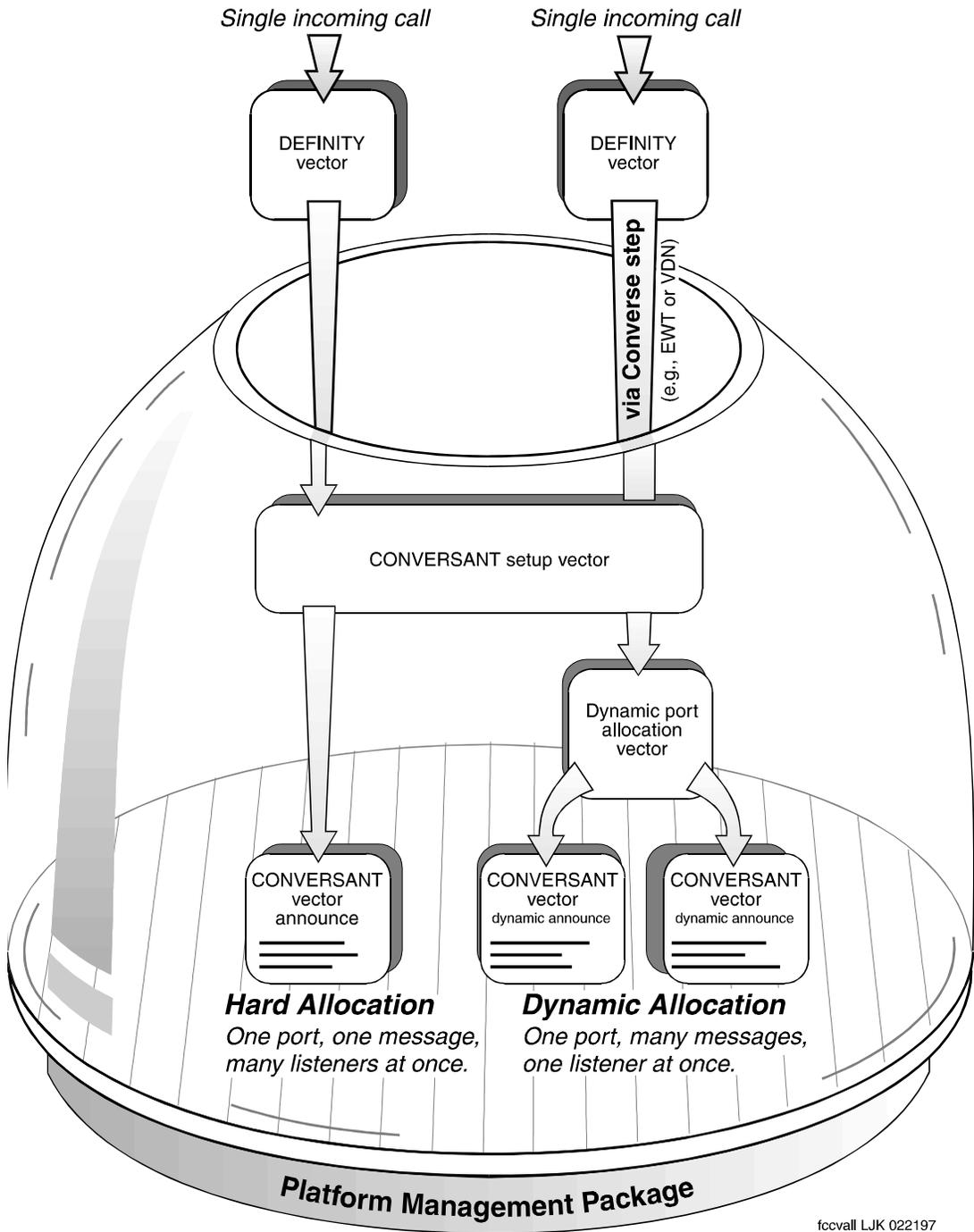


Figure 1-2. Hard Allocation vs. Dynamic Allocation (for Announcements)

## Overview of Customer Assist Callback Messaging

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The optional Callback Messaging package responds to callers who want to leave a message. To review messages and return customer calls, you can configure the Customer Assist Agent Access feature, which delivers messages to agents automatically, to:

- Act as a software agent in queue where the software sits in line for the caller and searches for the next available agent to whom it can deliver the message
- Deliver messages to agents as the agents become available
- Allow callers to schedule a callback
- Allow agents to call the voice platform to transcribe messages
- Adjusts the date and time entered by the caller to account for time zone differences

See “Using the Agent Access Feature” on page 1-21 for more information about the Agent Access feature.

Two actions add Callback Messaging functions to Customer Assist vectors:

- MSG\_DROP — takes messages
- TRANSRIBE (TRANSCRIBE) — transcribes messages

This section describes each action. (See “Mailbox Administration” on page 7-3 for more information about administering mailboxes and defining global parameters.)

### MSG\_DROP

---

This action activates a mailbox form that you configure with up to 15 prompts or questions for information. You define each question by choosing a speech phrase to play and the type of response to accept: data, schedule, record, or inform.

- Data-type response  
The system administrator enters this information on the Data Configuration form. This segment collects touch-tone, speech recognition, or dial pulse recognition information, such as an account number, ID, or callback telephone number, from the caller. Data, whose value is a passed parameter, is selected on this form by making it an argument of type A, B, or C (see “Passed Parameters” on page 1-12).
- Record-type response

The system administrator enters this information on the Record Configuration form. The record segment prompts callers to speak information, such as name, address, or reason for the call, which is recorded.

- Schedule-type response

The system administrator enters this information on the Schedule Configuration form. The schedule segment prompts callers to schedule a time to be called back by an agent.

- Inform-type response

The system administrator enters this information on the Information Configuration form. The inform segment announces a phrase to the caller to provide information without needing any response from the caller.

### Configuring Mailboxes

A mailbox can prompt the caller to enter information in several different ways, including:

- Touch-tone — callers enter information by pressing a button on a touch-tone telephone.
- Dial pulse — callers enter information using a rotary telephone.
- Speech recognition — WholeWord Recognition allows the system to recognize the verbal responses “yes” and “no” and spoken digits 1 through 9 as well as 0.

These methods allow you to collect several types of information from the caller, including:

- A telephone number to call back
- A string of touch-tones to deliver to the agent’s display telephone along with the call
- A requested time for callback

After prompting for verbal input that goes beyond spoken digits, such as the description of a technical problem, the system beeps to signal callers to respond. The system will not beep after prompting for touch-tone, dial pulse, or speech recognition input. You can record and update prompts from any touch-tone telephone.

Callers respond to prompts by speaking into the handset or pressing touch-tone digits. The system stores caller input on the system’s hard disk drive for transcription later. The Speech Space Available Report and the Audit Mailbox, both described in Chapter 8, “Reports”, can help you monitor disk space available for prompts and messages.

At your option, the system can signal agents when it receives new messages by lighting Message Waiting Lamps on their telephones.

### Passed Parameters

The Customer Assist vectors can pass variable values to a mailbox form using optional arguments. Variables are placeholders that can be populated by:

- Prompting callers for a response
- Using information obtained through integration such as Automatic Number Identification (ANI) or Dialed Number Identification Service (DNIS)
- Passing information from the DEFINITY

For example, if a passed parameter for ANI is available, the associated variable may be used to populate a mailbox with a caller's telephone number automatically (see "MSG\_DROP Action" on page 5-39.)

Once this information is collected, the MSG\_DROP action activates a mailbox that is configured beforehand and loads the ANI. The mailbox has the provisions to prompt the caller to confirm any values passed. If there are no values passed, the system assumes a data field and prompts for it using the specified phrase.

### Jump-To Vector

If the caller completes a message drop and a "jump-to" vector is defined, the system saves the message left by the caller and activates another vector. You specify the vector to activate on the MSG\_DROP action definition form.

**⇒ NOTE:**

To prevent callers from hanging up early, the first announcement in a series of prompts for a mailbox should advise callers to stay on the line for additional questions.

---

```
6 Message Drop Action, Step Number 9 for vector 1

MSG_DROP Action saves a multi-part message.

Message Drop in mailbox: _____
Optional arguments
Argument A: _____
Argument B: _____
Argument C: _____

After MSG_DROP
Jump to Vector : _____

Comment: _____
```

---

Figure 1-3. MSG\_DROP Action Definition Form

### Schedule Callback Option — Callers

Callers who leave messages can schedule a time to be called back by an agent. Prompts are provided as a part of the speech talkfiles for Mailbox Standard Speech Administration (see “Access Phrases for Vectors, Mailboxes, and Standard Speech” on page 6-3).

The system offers callers three possible options (see Figure 1-4), to be called back:

- Immediately
- Later that same day
- To schedule a date and time up to 11 months in advance

Option one, immediately, does not have any restrictions.

Option two, callback later the same day, has the following restrictions:

- The system will not speak this option if the current time is equal to or greater than 11 p.m. because the time is too close to 12 a.m. for callers to schedule a callback time for the same day.
- Callers can only enter future hours for the same day. For example, if the time is 11 a.m., the system will not accept 10 a.m. as a valid callback time.

Option three, schedule future date, has the following restriction:

- Callers can enter a future date of up to 11 months ahead. If the caller enters a date that has already passed, the system will not accept the entry.
- Callers can enter a time that is no later than 11 p.m.

You should also include in the prompts the format of the time, day, and month the system expects including the:

- Hour between 1 and 12 (A.M./P.M. format) or 0 and 23 (military format)
- Day between 1 and 31
- Month between 1 and 12

The system does not accept wrong calendar days such as February 30. The system will adjust the time or date entered by the caller to match your local time zone. This insures callbacks are made during normal business hours in the customer's time zone.

You can restrict these options by turning the prompts on or off at the Mailbox Global Settings form (see “Mailbox Global Settings” on page 7-22). If a schedule option is not provided, the default is immediate callback.

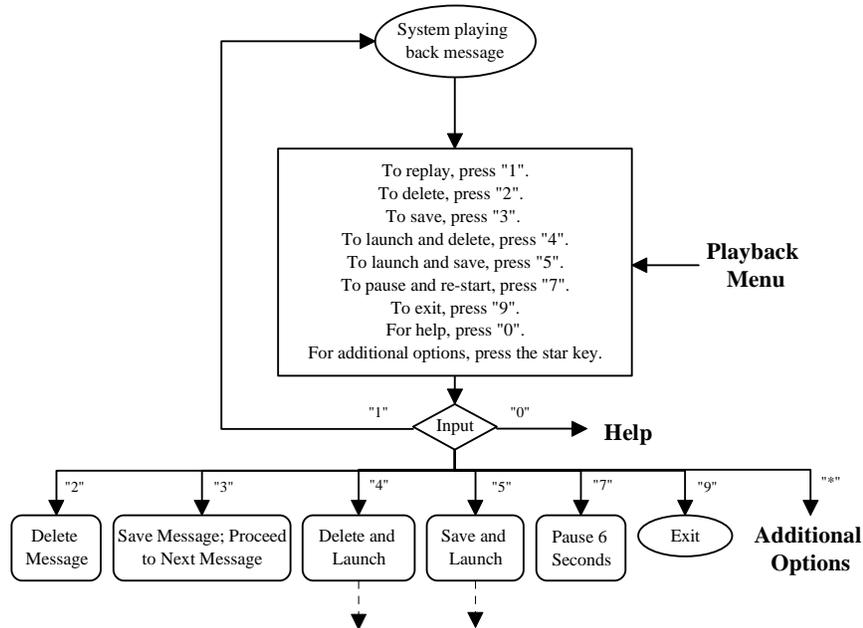
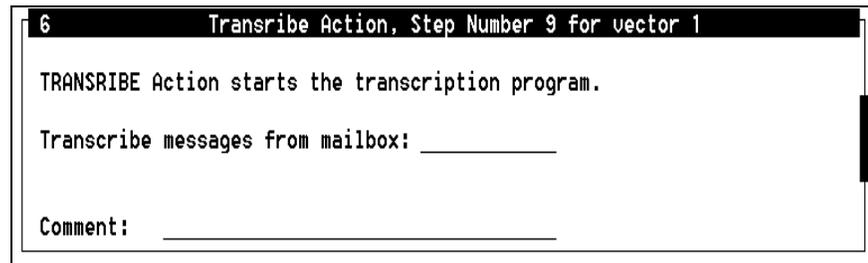


Figure 1-4. Schedule Callback Menu

### TRANSRIBE (TRANSCRIBE)

Agents use this action to access voice mailboxes and return customer calls automatically.

When agents reach this action in a Customer Assist vector, the system prompts them for a password (if a password was assigned to the mailbox). If you have not associated the TRANSRIBE action with a mailbox number on the TRANSRIBE action definition form (Figure 1-5), the system will also prompt for a mailbox number.



6 Transcribe Action, Step Number 9 for vector 1

TRANSRIBE Action starts the transcription program.

Transcribe messages from mailbox: \_\_\_\_\_

Comment: \_\_\_\_\_

**Figure 1-5. TRANSRIBE Action Definition Form**

The system then speaks the number of new messages, saved messages, and messages being transcribed for the mailbox. New messages include messages that are scheduled for a later callback. You can choose to review all new and saved messages or access specific messages. For this last option, enter the number of the message to replay.

**⚠ CAUTION:**

*To insure that only authorized users have access to messages in mailboxes, do not use this action in vectors that communicate with external callers, and be sure to configure every mailbox with a password. (See "Mailbox Administration" on page 7-3 for more about this password.)*

While listening to messages, agents can replay and skip both spoken and touch-tone responses. They can also pause and advance or retreat in 4-second increments through spoken responses (Figure 1-6). You can configure the system to replay both the prompts and responses or only the responses. In both cases, the system replays spoken responses exactly and uses prerecorded system speech to play touch-tone responses. Several agents can access messages in the same mailbox, but the system prevents two agents from listening at once to the same message.

To replay segment, press "1".  
To skip segment, press "2".  
To backup 1 segment, press "3".  
To replay message, press "4".  
To backup 4 seconds, press "5".  
To advance 4 seconds, press "6".  
To pause, press "7".  
To skip to the next message, press "8".

---

**Figure 1-6. Message Listening Options**

Pressing any key continues playing back a message part (a response to a prompt) after playback has been paused (touch-tone "7"). To replay a message part from the beginning, choose replay current segments (touch-tone "1"). To replay the message from the first message part, choose replay message (touch-tone "4").

**⇒ NOTE:**

These options are only available via spoken menu.

After each message, the system offers a playback menu of options:

- Replay
- Save
- Delete
- Launch a callback and save the message just heard
- Launch a callback and delete the message just heard
- Pause and restart
- Skip
- Exit
- Help
- Additional options: Forward, Prepend, and Schedule

**⇒ NOTE:**

When transcribing messages from mailboxes configured with automatic outdial, agents can press any touch-tone key during the prompt "Please hold for callback" to interrupt the callback process and invoke the previous menu.

These relationships, illustrated in Figure 1-7 and Figure 1-8, illustrate how Callback Messaging typically works: plays back messages to agents, launches automatic callbacks, schedules callbacks, forwards calls, and prepends messages. Agents can also reclassify callback attempts

**⇒ NOTE:**

To launch a callback, the system places the agent on hold and dials the caller's telephone number. The system uses the conference call function to return the agent to the call, and it remains on the line for the time, called Conference Time, specified in the Mailbox Global Settings form. When it leaves the call, it either deletes or saves the message, depending on the option the agent chose previously.

**⇒ NOTE:**

To launch a callback you must dial into a port that has the TRANSRIBE action assigned. A callback cannot be dynamically allocated and then launched. The other option is to use agent callback.

### Call Classification

The system reports on callback attempts as follows:

- If a caller left an incomplete telephone number, the system will abort the callback attempt and inform the agent of the reason.
- If the caller did not include a telephone number, the system will report that the attempt was unsuccessful.
- If you configured the mailbox without a prompt for a telephone number to call back, the system will report that the attempt was unsuccessful.
- If the call results in a busy signal or no answer (and your system is set up to make intelligent calls), the system will report that the attempt was unsuccessful.
- After an unsuccessful attempt, the system automatically offers the menu that the agent can use to reclassify the call.
- If the system reports the call is successful, then the agent has the option to override the system's evaluation of the call's success. For example, if an answering machine is reached the agent may want to reclassify the call as unsuccessful. To do this, press **\* 9 9** before Customer Assist leaves the conference call to bring up the menu that allows you to reclassify the call.

After a callback attempt, an agent can choose to replay, delete, save, or skip the current message.

**⇒ NOTE:**

Pressing any touch-tone key while in the conference restarts the length of time that the administrator has configured the CONVERSANT to remain on the line. This capability should be used with care because called parties will hear any touch-tones generated by keys that agents press.

After agents review all messages in a mailbox's new or saved category, they return to the main menu.

### Schedule Callback Option — Agents

From the main menu, agents can schedule a callback time in the same manner as callers do as a part of a message drop, which was explained earlier in this section. However, in this case, agents schedule a callback when transcribing a message. To schedule a time to retry a callback, agents can press **[\*]** to select the Additional Options menu. Once a scheduled time is selected, the message is saved to the message table as a "new" message until it is ready to be delivered by the system to the callback extension.

### Forward Message and Prepend Options

During a period of high-volume calling or if an agent decides that a message needs the attention of a supervisor, the system allows messages to be forwarded to another mailbox. Agents can prepend a recording as a note to an existing message before forwarding it. Prepending is also an option for messages that are not forwarded.

Prepended messages can provide details about the callback attempt for subsequent transcribers of that message. To prepend a message before forwarding, agents can press **[\*]** to select the Additional Options menu. When the forward option is selected, the system will prompt the agent for an existing mailbox number. A voice prompt will notify agents that they have 30 seconds to record a message.

#### NOTE:

Messages that are forwarded to other mailboxes are still "linked" to the original mailbox even though they cannot be retrieved from the original mailbox. Therefore, if forwarded messages exist, neither the original nor the destination mailbox should be deleted since these messages cannot be retrieved.

To prepend a message without forwarding it, agents can press **[\*]** to select the Additional Options menu and choose the Prepend option. A voice prompt will notify agents they have 30 seconds to record a message.

The main menu includes an option to quit, but agents can exit the system at any time by hanging up.

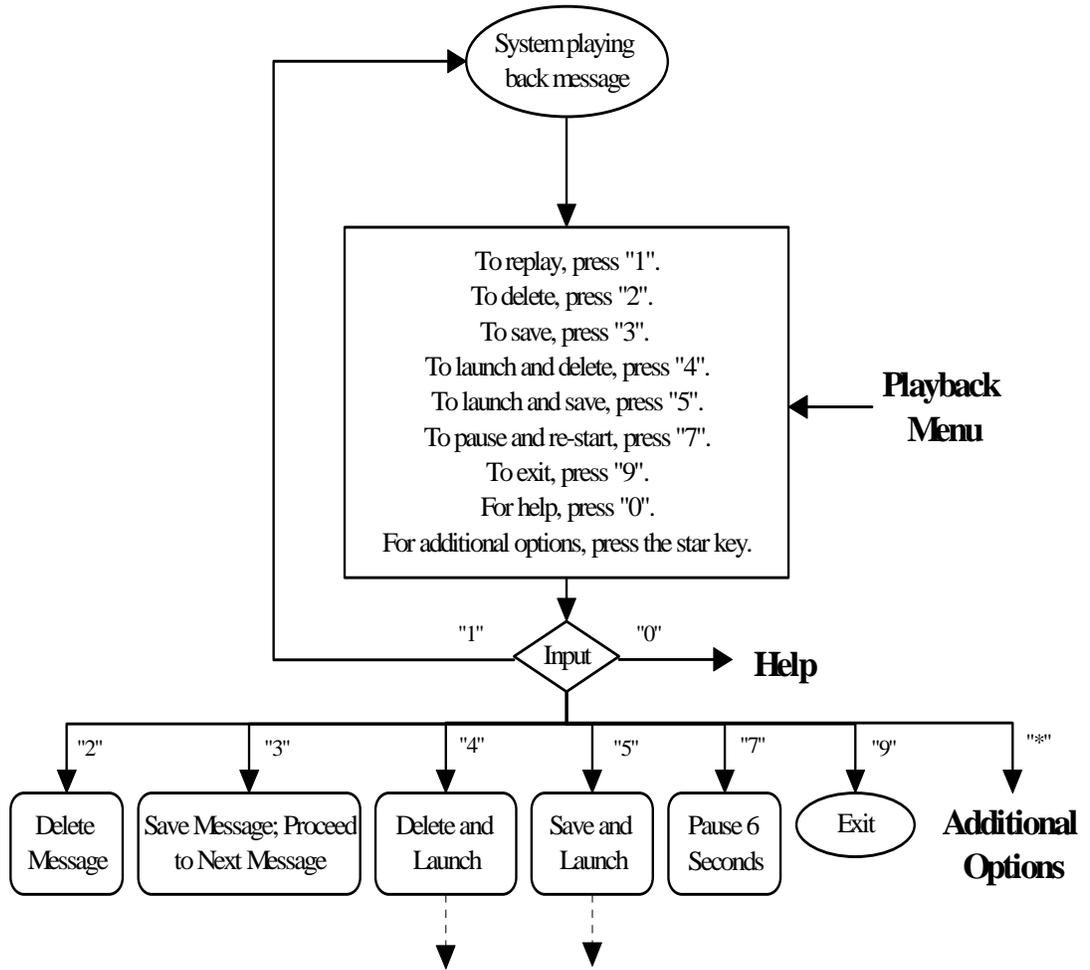
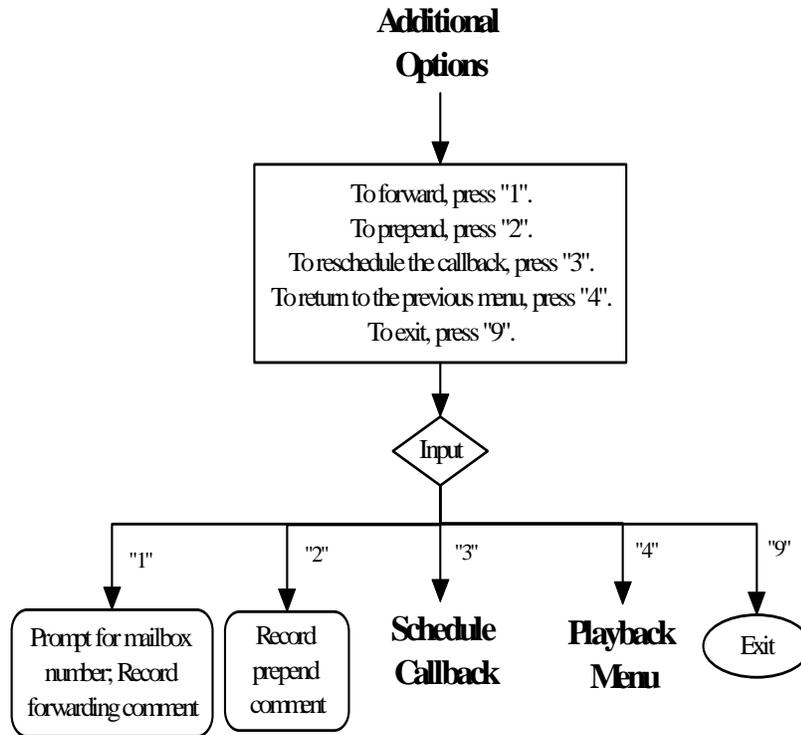


Figure 1-7. Message Handling Options



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Figure 1-8. Additional Options Menu

## Using the Agent Access Feature

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The Agent Access feature delivers messages to agents automatically. Administer Agent Access by adjusting Callback Messaging parameters, not by creating Customer Assist vectors.

You can direct the system to dial an extension or, alternatively, a VDN that accesses a DEFINITY vector designed to determine collective agent availability before attempting a callback. You may design this optional DEFINITY vector to return a busy signal whenever agent activity exceeds a set threshold. See the *Lucent DEFINITY Call Vectoring/EAS Guide*, 555-230-520 (G3), or -521 (ECS R5), or 555-230-521 (ECS R6.3) for more information.

From the Mailbox Global Settings form, identify the ports to use for out-dialing. From the Mailbox Definition form, identify the extension or VDN to dial. To prevent Agent Access from over-using CONVERSANT ports for redialing, take care not to set the Channel access time too low.

When agents are available, Customer Assist monitors the telephone connection for speech energy if configured to do so, and, when an agent answers, delivers the call and invokes a transcription routine. As previously described, this can guide agents through the components of the message in the mailbox and allow them to return calls automatically. By configuring the mailbox to prompt for data (one field per mailbox), you can also deliver a number to the DEFINITY vector along with the call. Agents can view these numbers as calls arrive by pressing the CALLER INFO button on their display telephones.

To review additional messages after calls conclude, agents must call into the system or wait for more messages to be delivered.

## Overview of Customer Assist Custom Call Routing

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The optional Custom Call Routing package routes incoming calls to extensions or splits, based on Automatic Number Identification (ANI) or other information.

The Custom Call Routing package adds one action, LOOK-UP, to Customer Assist.

This section describes LOOK\_UP and explains how to use it with CONVERSE and DATA\_RTN to custom-route incoming calls.

### NOTE:

Customer Assist templates, described under "Vector Templates" on page 4-8, automatically create vectors to perform important and common call handling tasks that can be easily modified to your call center. Use the Custom Call Routing template to help build vectors for your Custom Call Routing applications.

## **LOOK\_UP**

---

This action accesses a Customer Assist Routing Table to retrieve data values associated with a given key value. Custom call routing applications typically use LOOK\_UP to access a table of account or ANI numbers associated with agent extensions. Because you can associate up to two values with each key value in a database, your applications can also transfer information to an agent's display telephone along with each call.

## **Routing Calls**

---

To custom-route incoming calls, first use the Converse vector step in a DEFINITY vector to transfer each call to Customer Assist, together with an identifying item of information, such as ANI. ANI digits are the same as the caller's telephone number.

You must create a database table on Customer Assist to associate this data with agent extensions. If the Customer Assist vector, through the LOOK\_UP action, finds an extension or split in the database to associate with the call, it sends the feature access code (FAC) for DATA\_RTN and the extension number to the DEFINITY vector. Then, the DEFINITY vector can route the call.

Other call treatment can be defined for cases where the vector either cannot find information corresponding to the data identifying the call or finds more than one match.

A custom call-routing template, described under "Modify Custom Call Routing Template" on page 4-29, makes this type of application easy to build. Using this template, you can develop other applications that use the LOOK\_UP action in cooperation with other actions. For example, by defining a table of item numbers, you can access a local database of product information, such as the quantity of a given item in stock, and use the SPEAK\_NUM action to communicate this information to callers.

## **Populating an Agent's Telephone Display**

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You can also use Custom Call Routing with the DATA\_RTN action to send information to an agent's telephone set with display, or to a desktop computer for a screen pop using Aurora's FastCall software. As they respond to calls, agents can press the CALLER-INFO button on their telephones to view, for example, a caller's account number.

### **⇒ NOTE:**

You do not need Custom Call Routing to send information to an agent's telephone set.

To deliver information to agents along with calls, you can create a database table to associate each ANI or other look-up value with two items of information: a vector directory number (VDN) to dial (not an agent extension) and information to send to the agent's display. You must also create a DEFINITY vector (accessed using a VDN) for each agent extension or split you plan to use. Consider the following example:

1. A DEFINITY vector uses the Converse vector step to deliver both a call and its ANI information to a Customer Assist vector.
2. The Customer Assist vector, through the LOOK\_UP action, finds a record in its database, and retrieves the VDN and account number corresponding to the ANI.
3. The vector then uses the DATA\_RTN action with the FAC for Data Return to pass the VDN and the account number to the DEFINITY G3 or ECS R5 switch.



**NOTE:**

Specify the account number on the next line of the definition form for the DATA\_RTN action and follow it with the field delimiter “#” to eliminate interdigit time-out delay.

4. The DEFINITY G3 or ECS R5 switch collects the VDN from the Customer Assist vector and uses it to access a DEFINITY vector especially configured to route the call to the extension or split specified in the vector. Before transferring the call, however, this second DEFINITY vector uses a second collect step to receive the account number from the Customer Assist vector's DATA\_RTN action. An agent with a telephone display can view the digits acquired by this second collect step before answering the call.



**NOTE:**

Because this method uses an individual DEFINITY vector for each extension or split to dial, this method should be implemented for a small number of splits or individual agent extensions.

## Overview of Customer Assist Speech Recognition

---

The optional Speech Recognition package allows the recognition of spoken digits, yes and no, in both Platform Management and Callback Messaging packages.

The Speech Recognition package adds one action, GET\_SPCH, to Customer Assist.

This package uses Whole Word Speech Recognition technology to collect digits as well as yes-no spoken by callers. It will recognize the spoken input in the base language by default or the language set using the CHG\_LANG action. It requires

the appropriate CONVERSANT Whole Word Speech Recognition model to be loaded in order to work. (See the *INTUITY CONVERSANT System Version 7.0 Administration*, 585-310-591 manual for more information.)

## **GET\_SPCH**

---

This action allows the specification of up to five prompts to collect spoken input, which is then loaded into a variable. Only one prompt is needed to collect brief input. For longer input such as an account number or telephone number, the input can be collected in pieces and combined later.

## **In Callback Messaging**

---

If the Callback Messaging package is loaded, it will enable the administrator to specify whether a mailbox accepts spoken inputs for the data and schedule segments along with touch-tone inputs.

## **Overview of Customer Assist Dial Pulse Recognition**

---

The optional Dial Pulse Recognition package allows the collection of dialed input when callers use a rotary telephone in both Platform Management and Callback Messaging packages.

The Dial Pulse Recognition package adds one action, GET\_DIALP, to Customer Assist.

It also allows Dial Pulse Recognition to be used in the Callback Messaging to collect caller input.

The package uses Dial Pulse Recognition technology to collect digits dialed by callers. It requires the CONVERSANT Dial Pulse Recognition to be enabled in order to work. (Refer to *INTUITY CONVERSANT System Version 7.0 Administration*, 585-310-591 manual.)

## **GET\_DIALP**

---

This action allows the specification of up to five prompts to collect dialed input, which will then be loaded into a variable. For short input, only one prompt is needed to collect the input. For longer input such as an account number or telephone number, the input can be collected in pieces and combined later.

## Overview of Surveys

---

Callback Messaging acts as a voice form or message mailbox that collects information (either by dial pulse recognition, speech recognition, or touch-tones) from a caller using a series of prompts. The Surveys package provides you with a way to view the information Customer Assist collects.

### Examples of Surveys

---

When you configure a survey, you must specify how you want to view the data Customer Assist collects. You can view it either as a report or as a data file.

You also have the option of summarizing data. If you choose to summarize data, you see how many people responded in the same way to a specific question. If you choose not to summarize data, you see what each person entered for each question.

### Reports

This method allows you to view caller input in a table with headers identifying callers and the questions they answered. Currently you can view only single digits in this form.

#### Example of Reports

A company provides customers with a toll-free number. Callers are asked to rate their level of satisfaction with the company. The system asks a series of questions, which the customers answer on a scale from 1 through 5. "1" is highly satisfied, whereas "5" is completely unsatisfied.

The company wants to see how customers ranked them. The company can either ask an agent to listen to every mailbox and write down caller input manually, or they can generate a survey that shows caller input automatically.

**Survey Configuration.** In this scenario, caller input consists of single digits. The company decides to view the survey in report form. This provides headers to help organize the material.

The company is interested in the number of callers that were highly satisfied with the company. They are not interested in an individual caller's level of satisfaction. They should choose to summarize the report, which shows them how many callers pressed "1" to indicate they were highly satisfied with the company.

### Data File

This method allows you to view all caller input in segments. Unlike Reports, this format allows you to view exactly what the caller put into the system. It separates each entry with a delimiter, such as a comma.

### **Example of Data File**

A company provides customers with a help line. Customers call into the system and leave their telephone number so that an agent can call them back. The company wants a record of the telephone numbers.

**Survey Configuration.** In this scenario, caller input consists of several digits. The company chooses to view the survey in a data file. This insures that the company sees every digit the caller entered.

The company wants a record of the telephone numbers. They are not interested in knowing how many callers left their telephone number. Therefore, the company chooses not to summarize the data.

## **Overview of Web Reports**

---

Web Reports is an optional package that allows you to view Customer Assist management reports via your web browser. If your web browser has printing capabilities, you can print the reports directly, rather than through the voice platform.

## **Summary**

---

This chapter introduced you to the Customer Assist product and explained the packages.

---

## Quick Start and Navigating Customer Assist

# 2

---

This chapter provides a set up checklist for the first-time user, and then shows how to log in and navigate Customer Assist screens. See Chapter 8, “Reports”, for information on how to log into Web Reports.

### Getting Started

This section describes the procedures for setting up, logging in and understanding your options.

### Setting up Your System

The following checklist is a summary of all of the steps that you should take when setting up your Customer Assist system and specific applications in your call center. Additional information in pertinent chapters is referenced.

This list is intended for system administrators setting up a new call center system with the current version of Customer Assist.

1. Log into your CONVERSANT. See “Logging In” on page 2-2 for more information.
2. Assign Customer Assist to the appropriate CONVERSANT channels. See “Sample Application #1: The Setup Vector” on page 3-8.
3. Create the callflow for your current application either on paper or using a callflow software program. A callflow is a diagram that shows the interaction and options available to callers. It is helpful when planning speech and other portions of your call center application. See “Sample Application #2: Standard Announcement” on page 3-18, and “Sample Application #3: Dynamic Announcement” on page 3-31, and “Sample Application #4: Automated Attendants” on page 3-45.

4. Record all of the application speech phrases using Speech Administration in Customer Assist. See Chapter 6, “Speech Administration”, and “Sample Application #2: Standard Announcement” on page 3-18.
5. Create variables using Variable Administration and mailboxes using Callback Messaging Administration. See “Variable Administration” on page 2-25 and “Mailbox Administration” on page 7-3 for more information.
6. Record all of your mailbox speech prompts using the Speech Administration in Customer Assist. See Chapter 2, “Speech Administration”, and “Sample Application #10: Callback Messaging” on page 3-144.
7. Create routing tables that you need for your call center application. See “Routing Table Administration” on page 7-35.
8. Import or add any data into routing tables before creating vectors. See “Sample Application #8: Custom Call Routing” on page 3-125.
9. Build your application vectors. See “Sample Application #2: Standard Announcement” on page 3-18, and “Sample Application #3: Dynamic Announcement” on page 3-31, and “Sample Application #4: Automated Attendants” on page 3-45.
10. Change your setup vector to “point” to your new vectors. See “Sample Application #1: The Setup Vector” on page 3-8.
11. Place your new vectors (including the changes just made to the setup vector) “in service” so they become active. See “Sample Application #1: The Setup Vector” on page 3-8.

## Logging In

---

You must be logged in as root to administer Customer Assist. Use the following steps to log in to Customer Assist:

### CONVERSANT Administration

To log in to Customer Assist through CONVERSANT administration:

1. Start at the CONVERSANT Voice System Administration main menu and select Application Package Administration.

The system displays the Application Package Administration menu.

2. Select Customer Assist Care Center.

The system displays the Customer Assist Administration main menu, which presents the main options for administering the Customer Assist system.

### UNIX Interface

To log in to Customer Assist from UNIX:

1. Log in as root.
2. Enter the root password.
3. Enter **cd /usr/spanlink/ccc/OBJECTS**
4. Enter **ccc**

The system displays the Customer Assist Administration main menu.

### Status Line

---

While administering Customer Assist, refer to the status line at the bottom of your screen, shown in Figure 2-1, for available options at any screen. This line displays the functions assigned to the numbered function keys (F1) through (F8) on the CONVERSANT keyboard.

Instructions in this chapter will refer to these functions both by name and corresponding function key.



**NOTE:**

Not all of the following functions are available at all times.

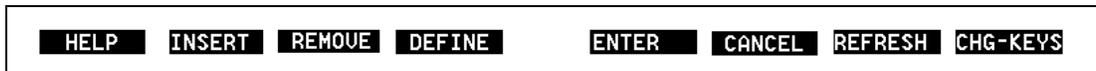


Figure 2-1. Status Line

ADD-PHR	Allows you to create a new phrase tag for ANNOUNCE, MENU, GET_SPCH, and GET_DIALP actions during vector configuration.
CANCEL	Discards all unsaved entries and returns you to the previous screen (menu or form).
CHANGE	Changes a record in a routing table.
CHG-KEYS	Offers an alternative set of functions on the status line. Pressing CHG-KEYS again recovers the previous functions.
CHOICES	Lists possible responses to a prompt for input. When three or fewer choices are available, you must repeatedly press CHOICES until the item you want appears. The status line will indicate if no choices are available.
CLOSE	Exits a definition form and saves all input. Also saves during mailbox administration.
CMD-MENU	Provides a menu of standard options, including some described in this section.

CONT	Allows you to continue to administer Customer Assist after you encounter a warning or an error.
DEFINE	Allows you to associate new parameters with actions or define message segments in the mailbox forms. Definition forms appear on-screen automatically after you choose new Customer Assist vector actions or mailbox segment types.
DELETE	Deletes a record from a routing table.
DIAL	Lets you identify the telephone and port to use to record speech phrases.
ENTER	Acts just like the RETURN key to register a menu choice or typed entry.
HELP	Provides context-sensitive on-screen help information.
INDEX	Available at the main menu, it provides context-sensitive on-screen help information by keyword.
INSERT	Inserts a new line wherever you position the cursor on the Customer Assist vector worksheet. Also allows you to insert prompts within mailbox forms.
LAUNCH	Dials the specified telephone to record speech phrases.
MARK	Selects a Customer Assist vector, phrase, mailbox, routing table, variable, or survey to delete.
NEXT-FRM	Moves your cursor forward through option frames.
NEXTPAGE	Moves your cursor forward through a single multipart definition form.
PREV-FRM	Moves your cursor to previous option frames.
PREVPAGE	Moves your cursor backwards through a single multipart definition form.
PRINT	Prints a report.
RECORD	Selects a speech phrase to record.
REFRESH	Reprints the screen after it is disordered by a faulty modem transmission or other cause.
REMOVE	Deletes an action from a vector or a message segment in the mailbox forms.
SAVE	Saves a new or changed Customer Assist vector or database table.



**CAUTION:**

*The following characters and key commands are invalid in Customer Assist administration and should not be used, as they may cause the user interface to lock up:*

- CTRL
- | (Pipe symbol)
- \ (Backslash, except as delimiter when importing data from diskette)

## Navigating the System

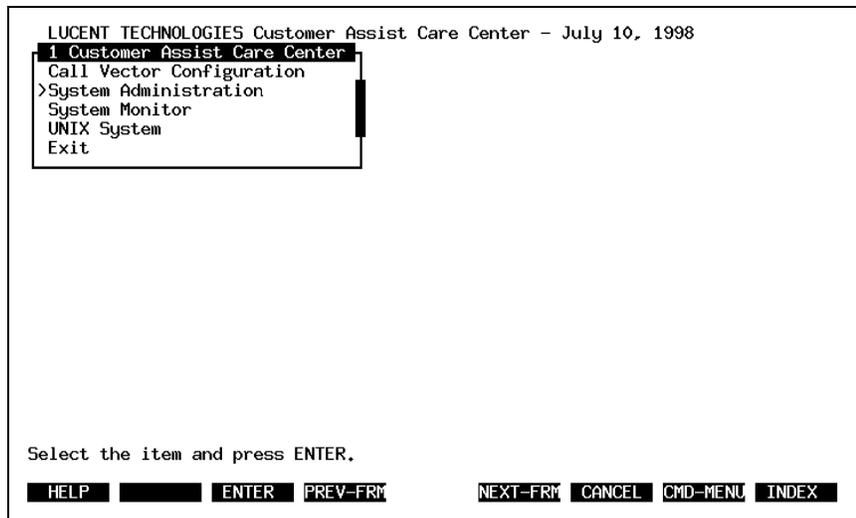
---

This section describes how to navigate the system.

### Customer Assist Main Menu

---

After you log in to Customer Assist, the main menu appears, as shown in Figure 2-2.



**Figure 2-2. Customer Assist Main Menu**

You begin all system activities by highlighting one of the following options and pressing **(ENTER)**.

- Call Vector Configuration
- System Administration
- System Monitor
- UNIX System
- Exit

**⇒ NOTE:**

If you have entered into a screen to view definitions and have not made any changes, press **CANCEL (F6)** rather than **CLOSE (F3)** or **SAVE (F3)** to return to the previous screen faster. The cursor will be left where it was rather than sent back to the top of the screen.

## Call Vector Configuration

---

Use this menu, shown in Figure 2-3, to create, delete and modify Customer Assist vectors. It also allows you to place new or modified vectors into service. A vector is a series of commands or “actions” that dictates how the system treats an incoming call and what speech the caller hears.

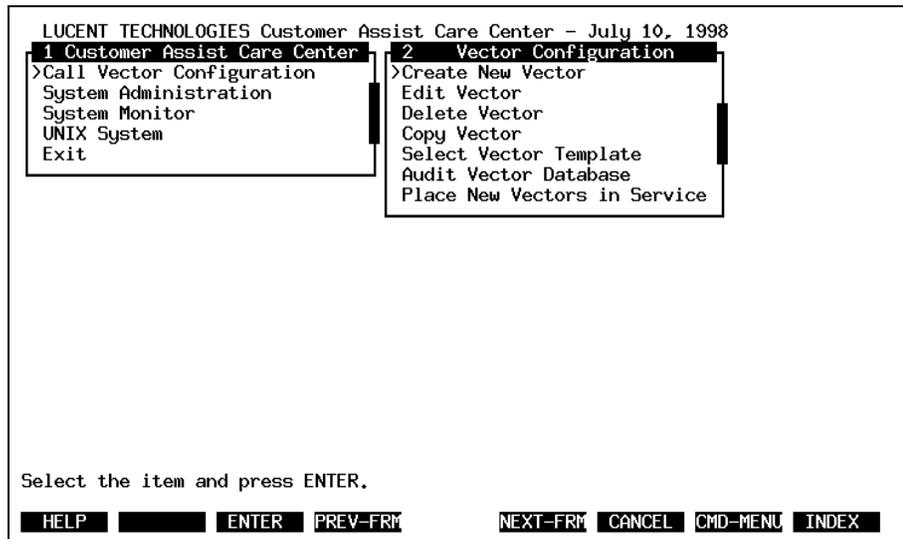


Figure 2-3. The Vector Configuration Menu

When you place new vectors in service, the system retains a copy of every vector and its parameter settings in a database used exclusively for development. This permits you to create and modify Customer Assist vectors without immediately influencing the way the system handles calls. Options at this menu are:

- Create New Vector
- Edit Vector
- Delete Vector
- Copy Vector
- Select Vector Template
- Audit Vector Database
- Place New Vectors in Service

## Create New Vector

---

This form enables you to build new vectors from scratch. Use this grid form to insert actions to build your vector.

See “Creating a New Customer Assist Vector” on page 4-1 for more information on creating new vectors.

**⇒ NOTE:**

On each empty action step, CHG-KEYS (F8) and then CHOICES (F2) will give you a list of available actions.

---

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
1 Custo 3 EDIT VECTOR NUMBER 153 STEPS
>Call Ue Vector Name: _____ Vector Number: 153
System Description: _____
System
UNIX Sy Step Action Description
Exit 1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____
8 _____
9 _____
10 _____
11 _____
12 _____
13 _____
14 _____

Enter the vector name.
HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
```

---

Figure 2-4. Create Vector Form

## Edit Vector

---

This menu shows you available vectors that can be edited. Each time you create a new vector, it will be added to this list.

See “Editing a Customer Assist Vector” on page 4-3 for more information on editing vectors.

---

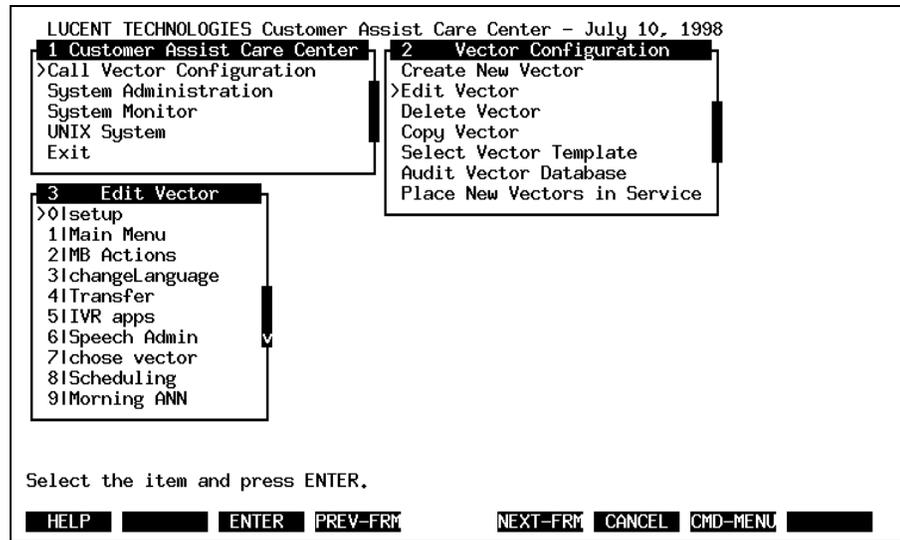


Figure 2-5. Edit Vector Menu

## Delete Vector

---

This menu gives a list of current vectors that can be deleted. Like the Edit Vector menu, any new vectors will be added to it.

See “Deleting a Customer Assist Vector” on page 4-6 for more information on deleting vectors.

---

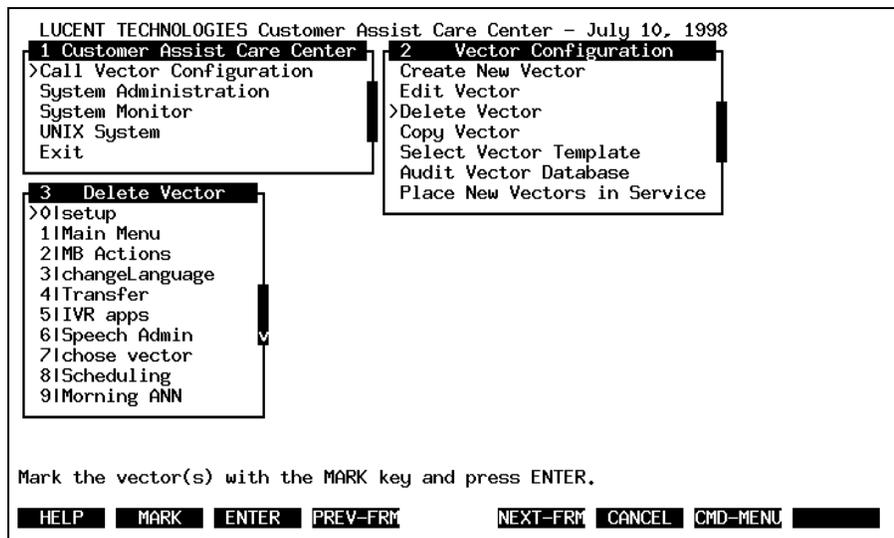


Figure 2-6. Delete Vector Menu

## Copy Vector

---

This form allows you to create a copy of a vector with a new name. Use this form to copy a vector and make changes instead of rebuilding the entire vector. You can also use the form to create a backup vector.

See "Copying a Customer Assist Vector" on page 4-7 for more information on copying vectors.

---

The screenshot shows a terminal window with the following content:

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
1 Customer Assist Care Center
>Call Vector Configuration
System Administration
System Monitor
UNIX System
Exit

2 Vector Configuration
Create New Vector
Edit Vector
Delete Vector
>Copy Vector
Select Vector Template
Audit Vector Database
Place New Vectors in Service

3 Copy Vector

Vector Num  Vector Name
Copy from Vector : 
To Vector      : 153
Description: _____

Enter the vector to copy from.

HELP CHOICES CLOSE ENTER CANCEL REFRESH
```

Figure 2-7. Copy Vector Form

## Select Vector Template

---

The Template Type menu offers choices of templates that add pre-built vectors into your call center. These templates are useful because they streamline the process of creating standard vectors like Estimated Wait Time vectors or Custom Call Routing vectors. You can make changes to the pre-built vectors generated by the templates and save them under another name or use them as is.

See “Vector Templates” on page 4-8 for more information on vector templates.

---

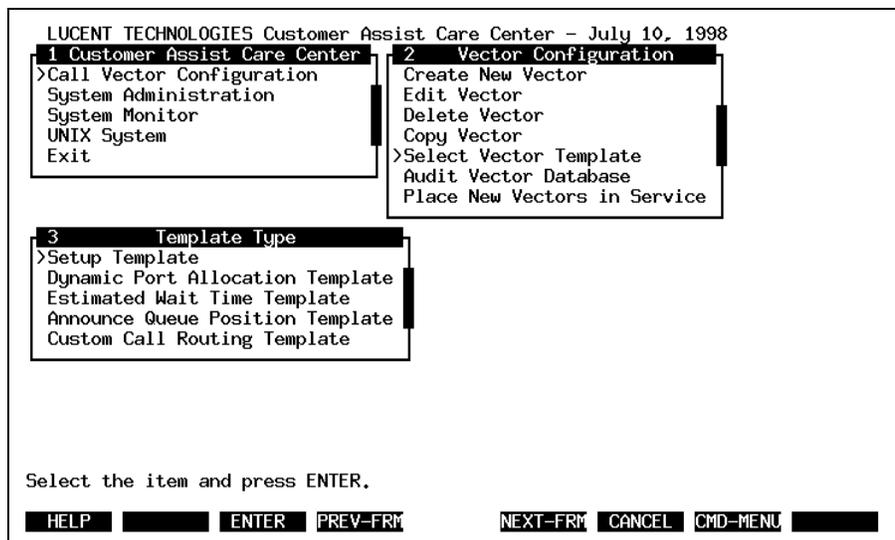


Figure 2-8. Template Type Menu

## Audit Vector Database

---

This option allows you to run an audit to determine any problems with the development vector database.

See "Audit Vector Database" on page 4-35 for more information on auditing the vector database.

---

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 10, 1998
1 Customer Assist Care Center 2 Vector Configuration
>Call Vector Configuration   Create New Vector
System Administration        Edit Vector
System Monitor               Delete Vector
UNIX System                  Copy Vector
Exit                          Select Vector Template
                              >Audit Vector Database

3 Vector Audit of Development Database

The results of the audit are as follows:

WARNING: VECTOR AUDIT FOUND THE FOLLOWING PROBLEMS:
  Vector 0 : startup service for channel 0 is not assigned to ccc.
            startup service for channel 1 is not assigned to ccc.
            startup service for channel 2 is not assigned to ccc.
            startup service for channel 3 is not assigned to ccc.
            startup service for channel 4 is not assigned to ccc.
            startup service for channel 5 is not assigned to ccc.
            channel 6 does not exist.
            channel 7 does not exist.

Press CANCEL to go back to the menu.

PREVPAGE  NEXTPAGE  CANCEL
```

Figure 2-9. Audit Vector Database Screen

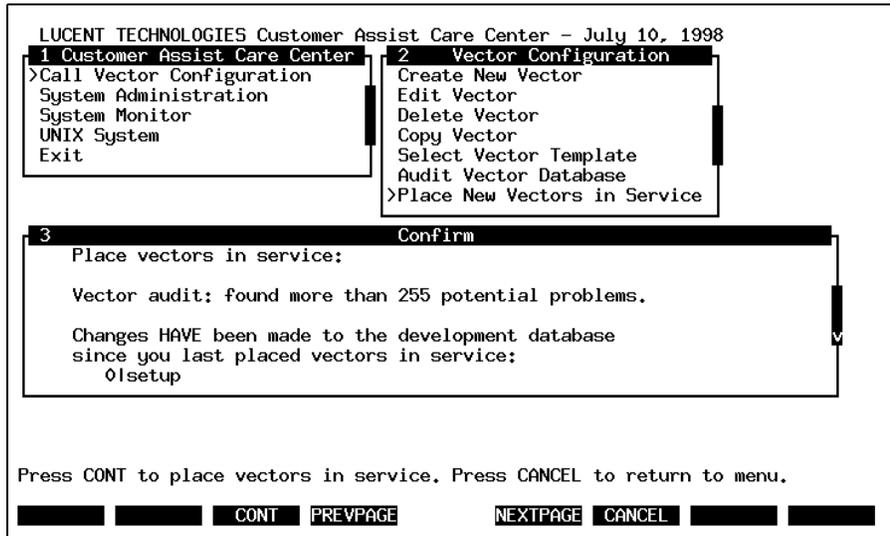
## Place New Vectors in Service

---

This option allows you to place the development vector database in service.

See “Place New Vectors in Service” on page 4-38 for more information.

---



---

Figure 2-10. Place New Vectors in Service Screen

## System Administration

---

Use this menu to set up mailboxes and callback messaging functionality, generate reports, administer custom call routing, speech, and surveys, as well as to back up/restore configurations and to work with variables.

---

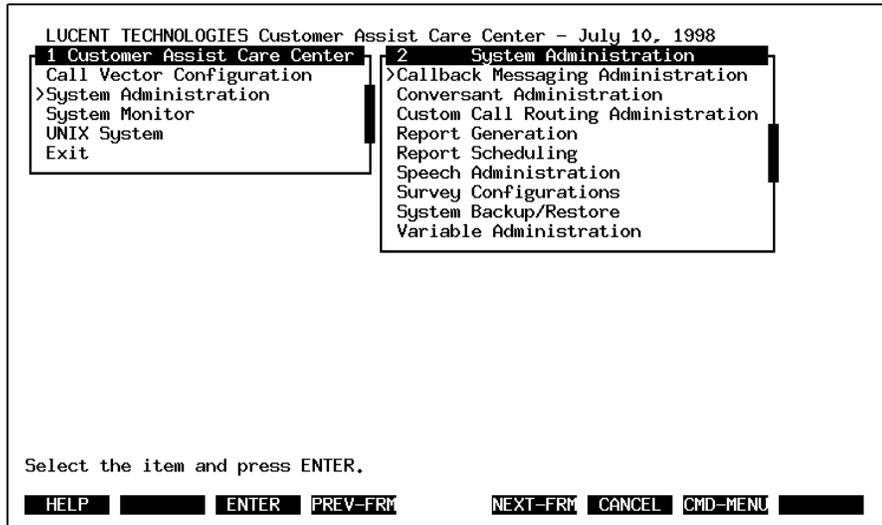


Figure 2-11. System Administration Menu

Options at this menu include:

- Callback Messaging Administration
- CONVERSANT Administration
- Custom Call Routing Administration
- Report Generation
- Report Scheduling
- Speech Administration
- Survey Configurations
- System Backup/Restore
- Variable Administration

## Callback Messaging Administration

---

Use this menu to:

- Administer mailboxes
- Set up global settings
- Set up agent callback hours
- Set up customer callback hours
- Delete messages from mailboxes
- Map country/city/area codes to time zones

These screens lead to setting up message drop and callback functionality.

See “Mailbox Administration” on page 7-3, “Mailbox Global Settings” on page 7-22, “Agent Callback Hours” on page 7-26, “Customer Callback Hours” on page 7-27, “Delete Messages from Mailbox” on page 7-28, or “Mapping Country/City/Area Codes to Time Zones” on page 7-29 for more information on how each of them work.

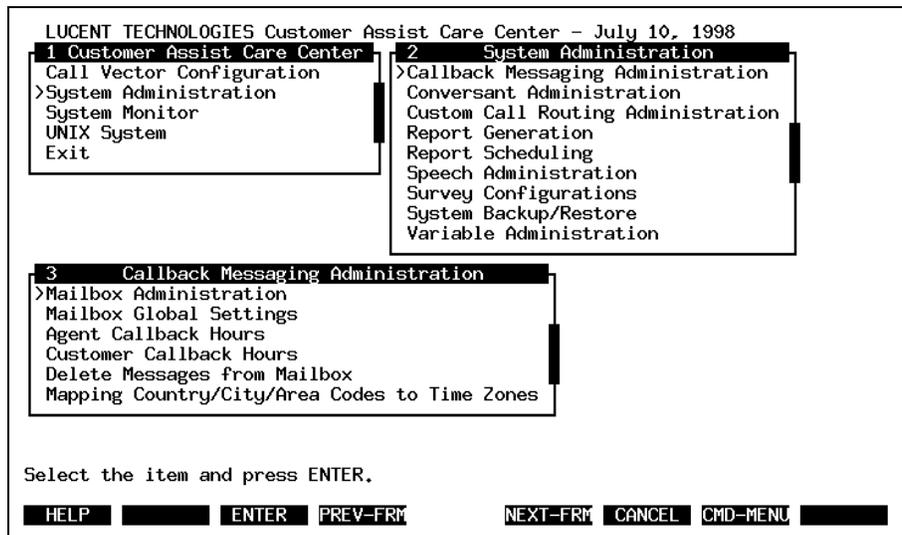


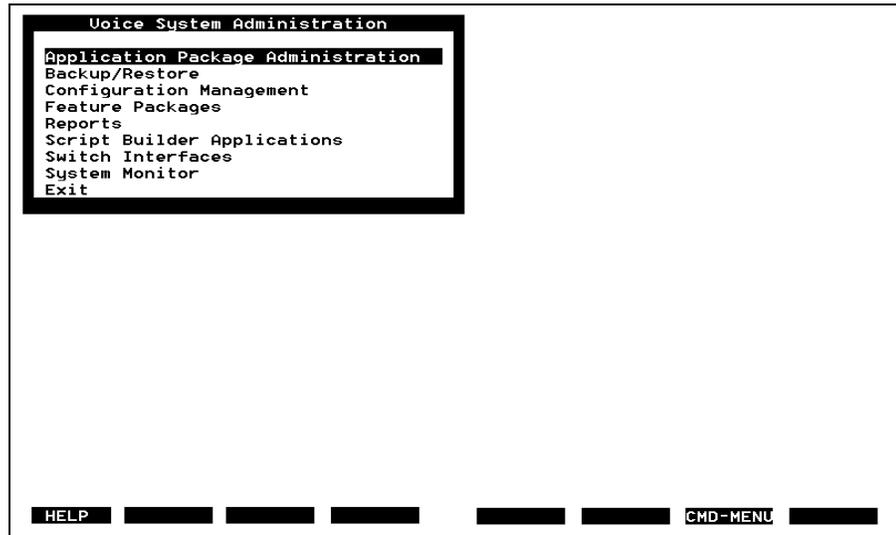
Figure 2-12. Callback Messaging Administration Menu

## CONVERSANT Administration

---

This menu allows you to access the CONVERSANT Voice System Administration. See "CONVERSANT Administration" on page 7-31 for more information.

---



---

Figure 2-13. CONVERSANT Administration Main Menu

## Custom Call Routing Administration

---

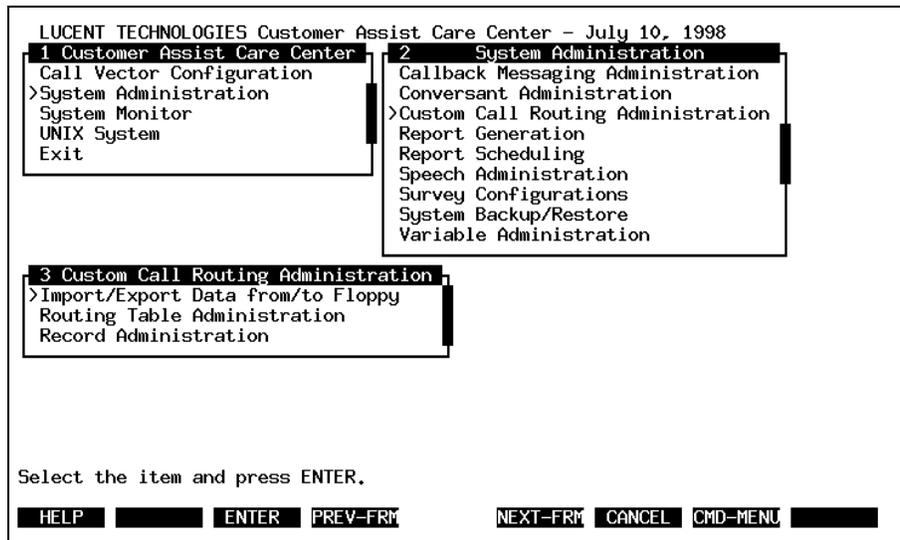
Use this menu to:

- Import or export data from a floppy diskette
- Administer the routing tables
- Administer records

These menus allow you to create and maintain routing records.

See "Custom Call Routing Administration" on page 7-31 for more information.

---



---

Figure 2-14. Custom Call Routing Administration Menu

## Report Generation (Administration)

---

This menu allows you to choose the reports to generate. For most reports, you enter criteria, such as the day or time to run the report. Each report can be viewed on screen or printed.

See "Reports Administration" on page 8-1 for more information on report administration and individual reports.

---

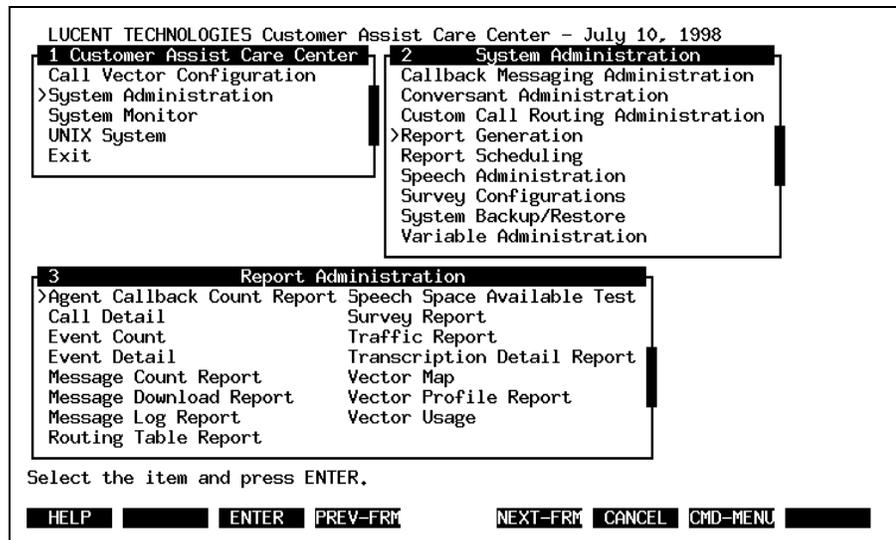


Figure 2-15. Report Generation (Administration) Menu

## Report Scheduling

This form allows you to select the reports you want to run on a scheduled basis. You can run reports at any time that is convenient.

See "Report Scheduling" on page 8-55 for more information on scheduling reports.

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
1 Customer Assist Care Center      2 System Administration
  Call Vector Configuration        Callback Messaging Administration
  >System Administration           Conversant Administration
  System Monitor                  Custom Call Routing Administration
  UNIX System                     Report Generation
3 Report Scheduling Options       ling
Time to Run Daily Reports:        stration
Number of Days to Archive Data:   urations
                                  /Restore
                                  nistration
Run Traffic Report:               yes
Run Vector Usage Report:          no
Run Event Count Report:           no
Run Event Detail Report:          no
Run Call Detail Report:           no
Run Callback Count Report:        no
Run Survey Report:                no
Print Reports Automatically:      no

Enter number of days (0-7) you want to archive data
HELP CHOICES CLOSE          ENTER CANCEL REFRESH
```

Figure 2-16. Report Scheduling Options Form

## Speech Administration

---

This menu allows you to record new speech or change existing speech phrases. Its options include:

- Vector Phrase Administration
- Mailbox Phrase Administration
- Mailbox Standard Speech Administration
- Standard Speech Phrase Administration
- Password Administration
- Generate Phrase List
- Change Base Language

The speech that is created and recorded in the above options will be used in mailboxes and other areas of your call center.

See Chapter 6, "Speech Administration", for more information in any of these areas.

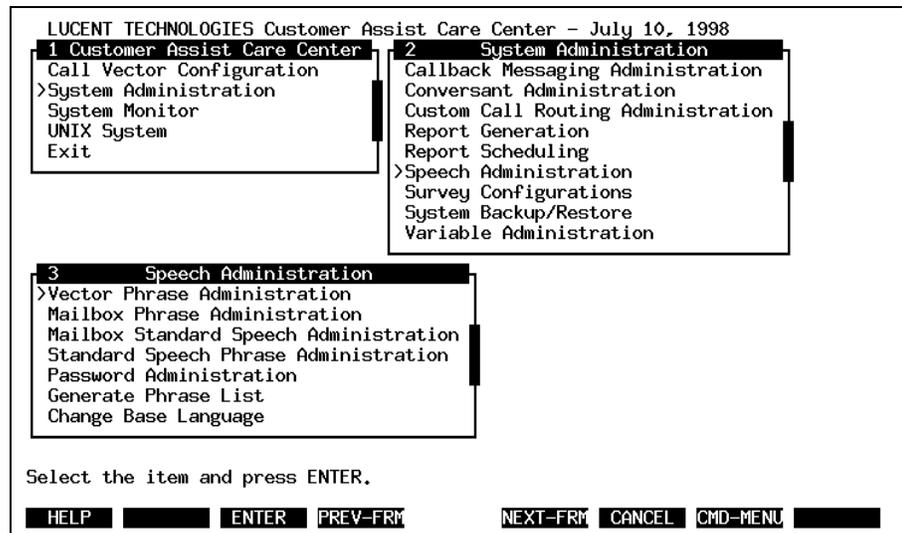


Figure 2-17. Speech Administration Menu

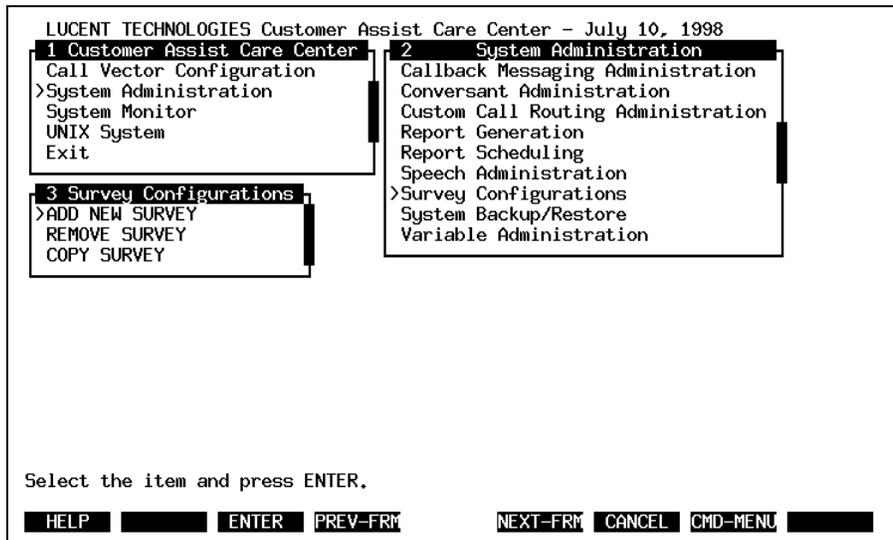
## Survey Configuration

---

This menu allows you to configure surveys so that you can see the type of input callers left in mailboxes. Use this menu to add, remove, or copy a survey.

See "Survey Configurations" on page 7-40 for more information.

---



---

Figure 2-18. Survey Configurations Menu

## **System Backup/Restore**

---

This menu allows you to back up to UNIX or DOS format or restore information from or to floppy disks with these options:



**NOTE:**

Routing tables are backed up and restored to DOS format only.

- Restore Vector Database
- Backup Vector Database to Floppy Disk
- Backup/Restore Speech
- Backup/Restore Mailbox Configuration
- Backup/Restore Time Zones Mapping
- Backup/Restore Survey Configuration
- Format Floppy Disk
- Restore Data from Previous Version of Call Center
- Backup Verification
- Copy File from/to Diskette

There is also an option that enables you to restore vectors, mailboxes, or speech from a previous version of Customer Assist. To do this, you restore information from diskettes.

See “System Backup/Restore” on page 7-45 for more information.

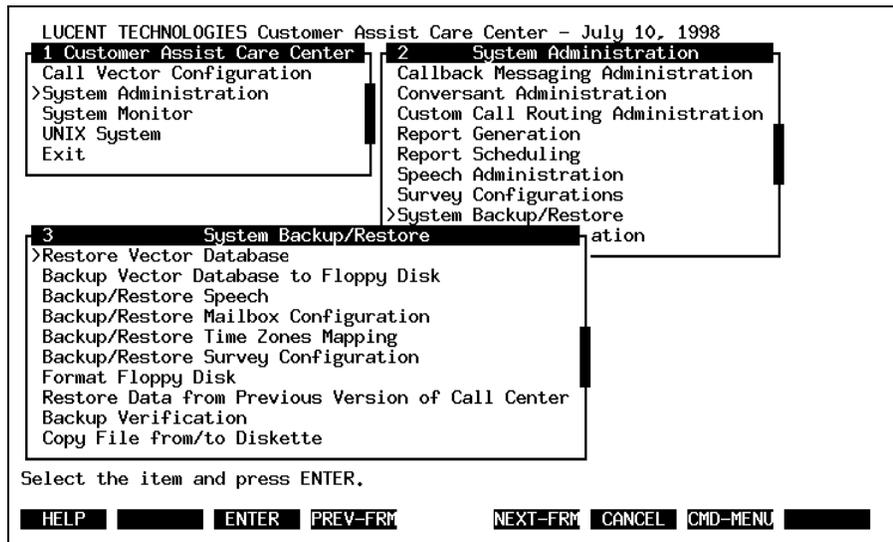


Figure 2-19. System Backup/Restore Menu

## Variable Administration

This menu allows you to add, remove, or edit variables. Variables are entities that hold information or a value to be used by the vectors. The values can be up to 24 characters long. If the variable holds a number that will be used in an arithmetic calculation, the number cannot be greater than 2 billion or less than negative 2 billion. When you add a new variable, the name can contain 2 to 9 characters.

See “Variable Administration” on page 7-63 for more information on how to create and work with variables.

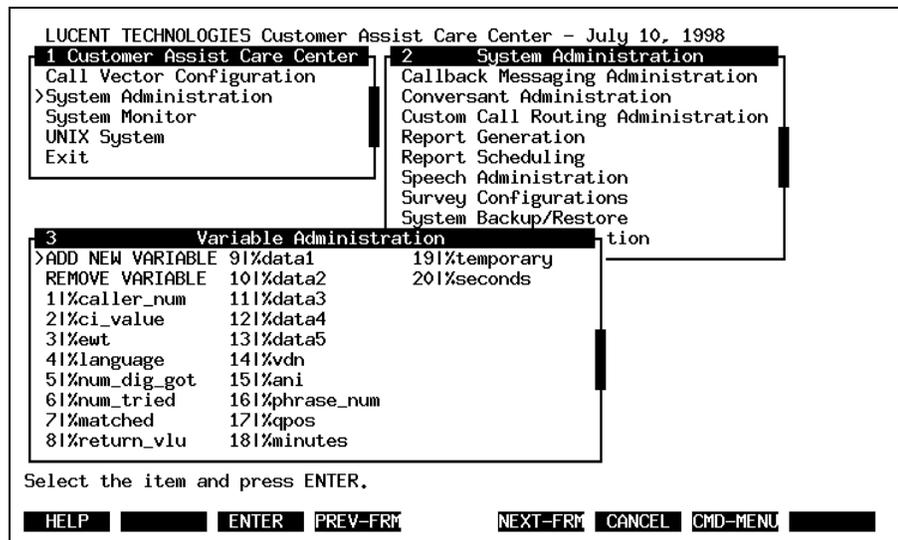


Figure 2-20. Variable Administration Menu

## System Monitor

---

The system monitor keeps track of calls coming into the call center. It shows you the number of the voice channel, how many calls were received, and the status of the script or application that is running on that channel. It also shows any touch-tone responses the caller made and any digits dialed by Customer Assist during the transfer attempts. To access the monitor, select System Monitor under the main menu.

- See the *INTUITY CONVERSANT System Version 7.0 Administration*, 585-310-591, manual for more information on the system monitor.

Channel	Calls Today	Voice Service	Service Status	Caller Input	Dialed Digits
0	0		*Foos		
1	0		*Foos		
2	0		*Foos		
3	0		*On Hook		
4	0		*Foos		
5	0		*Foos		
6v	0	BGM			

HELP PREVPAGE NEXTPAGE CANCEL CMD-MENU CHG-KEYS

Figure 2-21. System Monitor of Voice Channels

## UNIX System

---

This menu allows you direct access to the UNIX system. To access UNIX, select UNIX system under the main menu.

## Summary

---

While working through this chapter, you learned how to quick start Customer Assist and navigate the system.

This chapter provides sample applications to help you understand how to set up your system.

## **Potential Customer Assist Applications**

---

This section describes the major applications that you can build with Customer Assist.

### **Auto Attendants**

---

An Automated Attendant, or Auto Attendant as it is commonly called, provides menu-driven routing options for incoming callers. Callers are prompted with menus from which they can select routing options using either their touch-tone telephone or their voice in a speech-recognition environment.

### **Bulletin Boards**

---

Bulletin boards allow callers to hear messages through a menu and, if necessary, submenus. Instead of routing callers to an application or extension, a bulletin-board application routes callers to particular phrases. This may be through menus (for example, "Press **1** for directions, or press **2** for product information") or through other numbers that correspond to specific phrases (for example, "Enter the catalog number").

Bulletin boards provide useful information as either a supplement or a substitute to agent help by:

- Allowing callers to access frequently requested information in queue
- Minimizing direct agent assistance by providing general or dynamic announcements
- Serving as a stand-alone application

## **Caller-On-Hold Systems**

---

This section describes features of Customer Assist that help you manage callers on hold.

### **Standard/Dynamic Announcements**

Standard announcements, heard by every caller directed to a specific split, may no longer be the compelling reason to use Customer Assist. When combined with other features, Customer Assist continually provides announcement capabilities that enhance the DEFINITY G3, ECS R5 or R6.3+ in terms of both the dynamics of the announcements and the speech-storage capacity of the CONVERSANT platform, should it be needed.

With integration, dynamic announcements can be tailored for a particular caller. Another benefit of Customer Assist announcements is the system administrator can access a single administration interface for voice applications in a call center.

### **Delay Announcements and Delay Routing**

Customer Assist relays caller-specific delay announcements and helps apply appropriate automation based on ANI, DNIS, and current call-center status.

Customer Assist uses queue-position or expected wait-time data from the DEFINITY G3, ECS R5 or R6.3+. It recites this information to callers in a flexible format, providing an incentive to select automated services. Delay and wait time may be spoken to callers, or used for automatic call routing based on group-activity status.

### **Speech Recognition**

With the addition of optional Speech Recognition, Customer Assist applications such as menus, automated attendants, bulletin boards, callback messaging, prompt-based routing, and other prompting applications are available to rotary callers or any other caller who prefers vocal responses to touch-tone responses.

Furthermore, providing a speech-recognition version of vectoring allows a call center to extend the DEFINITY ECS R6.3's Call Prompting (which facilitates data

display) and Expert Agent Selection features to rotary callers using Customer Assist.

For more accurate recognition of lengthy digit strings and to simultaneously store each string in a single variable, Speech Recognition uses a series of collect segments to collect information. The combined inputs are loaded into a single input variable.

Speech Recognition also enables telephone numbers, account numbers, or other data in additional fields to be collected for use in Callback Messaging.

### **Message Delivery and Callback Messaging**

Customer Assist Callback Messaging is a package that works most effectively with anticipated delay routing and announcements to help even out the flow of traffic to agents. For example, with Callback Messaging, Customer Assist can:

- Automatically direct callers to a mailbox after hours or when call volumes exceed a specified threshold
- Provide the option for a caller to leave a message rather than wait in queue for an available agent

The Customer Assist Callback Messaging package provides the following services:

- Acts as a voice form or message mailbox that collects information (either by speech recording, speech recognition, or touch-tones) from a caller using a series of prompts. Allows agents to call in and retrieve messages for transcription.
- Allows the caller to leave a message requesting a return call and delivers the message to an agent automatically, either by monitoring the queue status for an available agent or by placing a message in queue for an available agent

Once the agent has reviewed a message, Customer Assist can automatically place a call through the switch to connect the agent with the customer. Customer Assist can provide this capability regardless of whether the message was automatically delivered to the agent or the agent dialed into the system to retrieve it.

Callback Messaging is a virtual queuing capability for customers, providing the capability for calls to be queued based on their type and priority.

If a caller wants to talk to an agent, Callback Messaging provides callers with alternatives to waiting in queue. For a call center, this can dramatically reduce abandoned calls, average hold times for callers, and associated network costs.

## Dynamic Port Allocation

Dynamic port allocation maximizes the use of ports in a multi-application environment. By using information passed from the DEFINITY switch and perhaps other databases, any port can determine the appropriate recorded message to play or other application for a given caller. Ports may be allocated for all applications. Some ports may be allocated for specific applications if required. A dedicated port is required for message waiting lights. Ports may share inbound traffic with outbound calls for callback messaging if desired.

### NOTE:

To launch a callback you must dial into a port that has the TRANSCRIBE action assigned. A callback cannot be dynamically allocated and then launched.

## Multilingual Systems

As more companies serve customers in multilingual settings, corporate call centers must keep up with this emerging trend. Customer Assist, including its speech recognition, can work with 12 different languages that are widely spoken in over 18 countries. When enabled, Customer Assist can switch between languages in real time and on a per-call basis. Agents can then transcribe messages while switching between languages.

## Other Applications

---

Customer Assist administrators can use the optional Script Builder software to create applications that can coexist with Customer Assist. These additional applications can be executed by Customer Assist and can also pass information back with calls as they return to Customer Assist. Other third-party Script Builder software packages can also be purchased.

## System Administration

---

This section describes how to administer actions, speech, and reports.

### Actions

Although some may never be needed for basic implementations, Customer Assist includes several actions that can be linked together to perform a specific function or task, such as:

- Call Prompting
- Speech recognition-enabled Call Prompting
- Check queue status — any split(s) or skill(s)
- Goto step/vector if
- Route/transfer to

- Collect digits
- Converse
- Data return
- Announce
- Concatenated and/or dynamic announcements
- Time of day/date checking and routing
- Report/route on abandon (abandoned call treatment)

## Speech

The Customer Assist speech administration services are part of the product. Customer Assist provides standard speech in a female voice for letters, digits, and the numbers needed for delay announcements, as well as a number of standard phrases used in the:

- Callback Messaging package
- Speech administration services

The system administrator and a customer-selected voice talent create all other speech through the speech-administration services.

## Reports

Customer Assist also comes with 15 reports that help measure the success of your call center. Each report is standard; configurable reports are also available. These reports can be scheduled to generate and print at regular intervals.

## Introduction to the Sample Applications

---

This chapter contains 15 sample applications that explain how a hypothetical company called Rock Coast Software can set up Customer Assist and implement its features to create an excellent call center.

### Example: Rock Coast Software

---

The Rock Coast Software company maintains a customer-service call center to handle a significant number of customer comments and questions. Agents spend most of their time answering questions about their software products, but they also occasionally announce new products and special promotions. Rock Coast Software wants to make better use of its limited human resources but recognizes the importance of giving customers the attention they deserve. Currently, its DEFINITY ECS R6.3 switch is programmed to play some standard announcements containing general information. With Customer Assist, Rock

Coast Software can add many additional capabilities to its call center. Each of the sample applications (SAs) focuses on a basic Customer Assist task or a new capability.

### Overview of Sample Applications

- “Sample Application #1: The Setup Vector” creates the Customer Assist setup vector, which is required for all applications.
- “Sample Application #2: Standard Announcement” records a speech phrase and creates a Customer Assist vector that plays the phrase as a standard announcement to callers.
- “Sample Application #3: Dynamic Announcement” creates Customer Assist vectors that play dynamic announcements with the name of the department being called and the name of the caller’s company.
- “Sample Application #4: Automated Attendants” and “Sample Application #5: Bulletin Boards” create automated attendants and bulletin boards.
- “Sample Application #6: Announce Queue Position” and “Sample Application #7: Estimated Wait Time” announce a caller’s queue position or estimated wait time.
- “Sample Application #8: Custom Call Routing” and “Sample Application #9: Estimated Wait Time Routing” route calls based on call information, such as Automatic Number Identification (ANI), or estimated wait time.
- “Sample Application #10: Callback Messaging” builds on sample application “Sample Application #9: Estimated Wait Time Routing” by setting up a Callback Messaging mailbox.
- “Sample Application #11: Bilingual Dynamic Announcements and Routing” makes sample application “Sample Application #9: Estimated Wait Time Routing” bilingual.
- “Sample Application #12: Dynamic Port Allocation and Dynamic Allocation of Applications” explains dynamic port allocation and dynamic allocation of applications.
- “Sample Application #13: Scheduling Events in a Call Center” schedules different announcements for weekends and during the holiday season.
- “Sample Application #14: Reporting and Hang Up Actions” explains the reporting and hang-up actions.
- “Sample Application #15: Speech Administration and Transcribing Messages” explains how to enable agents or supervisors to call into Customer Assist to administer speech and transcribe callback messages.

### Organization of the Sample Applications

The initial sample applications provide systematic instructions for basic tasks such as creating the setup vector and recording announcements. Each sample application builds on lessons learned in previous sample applications.

Most of the sample applications include:

- Callflow diagrams
- Examples of DEFINITY vectors
- Descriptions of the steps in Customer Assist vectors

Some of the sample applications also include Customer Assist administration topics such as recording announcements and creating mailboxes for callback messaging.

### **Callflow Diagrams**

Before every application is built, you should create a callflow diagram to insure that you completely understand what you are trying to accomplish and what callers will hear and do during calls. A callflow is a diagram that illustrates the interaction and options available to callers.

### **DEFINITY Vectors**

As a CONVERSANT application, Customer Assist takes all of its direction from a DEFINITY switch by means of DEFINITY call vectors. The DEFINITY vectors are critical to understand because they route calls to the CONVERSANT for processing by Customer Assist.

The DEFINITY vector examples in the sample applications assume you are familiar with the steps in DEFINITY vectors.

If you are not familiar with DEFINITY call vectoring, read the first few chapters of *Lucent DEFINITY Communications System Generic 3 or ECS R6.3 Call Vectoring/EAS Guide, 555-230-520 or -521*.

### **Customer Assist Vectors**

A Customer Assist vector consists of a series of steps, and each step contains one vector action. Each sample application describes the steps in all of its Customer Assist vectors. See Chapter 5, "Vector Actions", for more information on vector actions.

### **Action Forms**

The action form is the form that appears when you select a vector action. It allows you to specify certain parameters regarding the vector action. The sample applications show the action form only the first time that action appears in the vector. After that, the sample applications do not show action forms unless the vector action is used in a new way or the information on the form is important to the discussion of the application. If the action form does not appear, the description will reference the page with the action form.

## Sample Application #1: The Setup Vector

---

### Business Situation

---

The Rock Coast Software company has just purchased an INTUITY CONVERSANT system with Customer Assist V7.0 software. They have a DEFINITY G3, ECS R5 or R6.3+ switch and have already set up the switch with the correct hunt groups to route callers to the CONVERSANT when necessary.

The first step in Customer Assist administration is to direct incoming calls. You do this by using the setup vector.

### Setup Vector

The setup vector is the main traffic control point; it routes incoming CONVERSANT calls to their appropriate vectors. The setup vector is loaded automatically when Customer Assist software is installed and should be modified immediately. Later, when you have many of your vectors built and applications loaded for your call center, you can modify the setup vector.

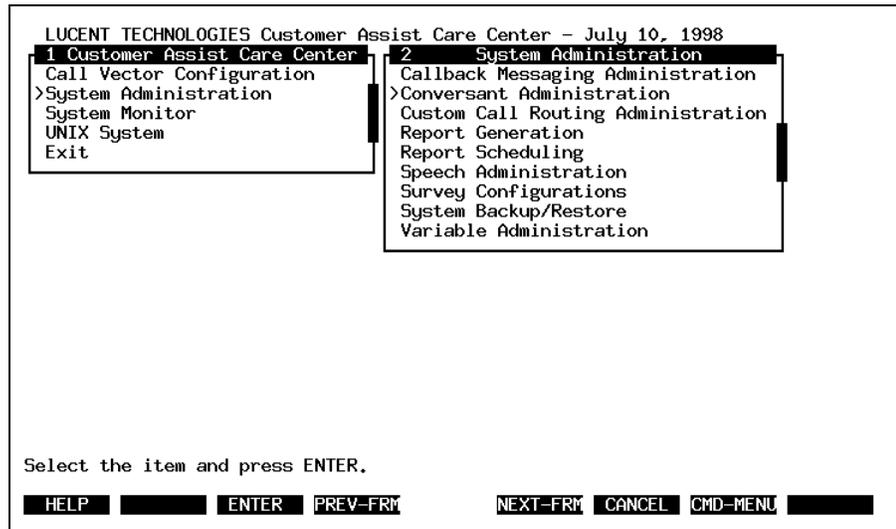
The setup vector is the first vector you will work with, and is numbered “Vector #0.” The setup vector is responsible for the following:

- Setting all global variables to null or zero for every incoming call
- Taking CONVERSANT ports off hook to receive calls
- Routing callers to the next vector in the callflows
- Quitting execution

### Procedure

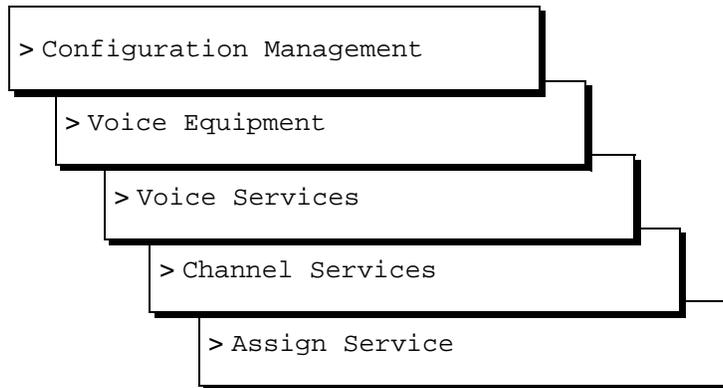
---

See Chapter 2, “Quick Start and Navigating Customer Assist”, for information about getting started with Customer Assist.



**Figure 3-1. Path to CONVERSANT Administration**

The system displays the CONVERSANT menus. Select from the menus in the following order:



The system displays the Assign Services to Channels form (Figure 3-2).

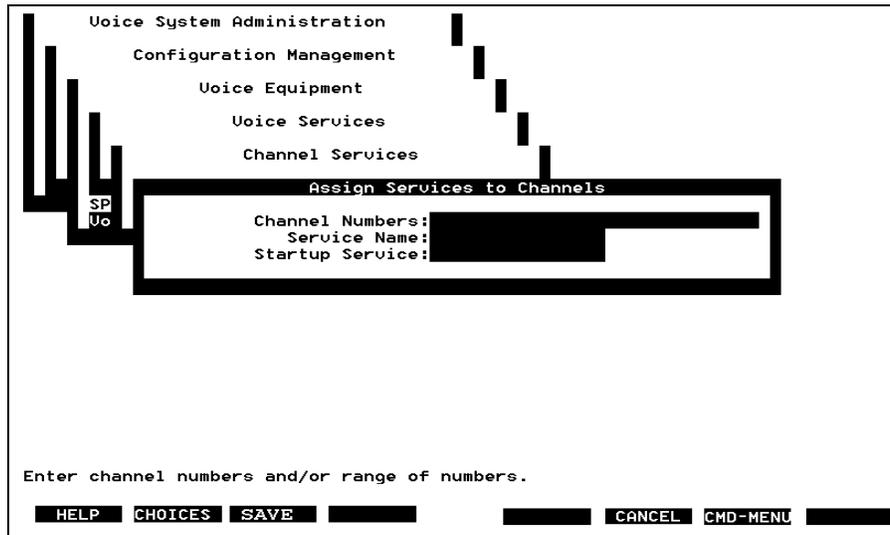


Figure 3-2. Channel Assignment Screen

5. At the Assign Services to Channels form, enter a channel number (for example, 5, 6, or 7) or a range of numbers (for example, 5-9) to represent the channels on the CONVERSANT.
6. Tab to the Service Name field and press CHOICES (F2) to see the available applications.  
The system displays a list of available services (Figure 3-3).

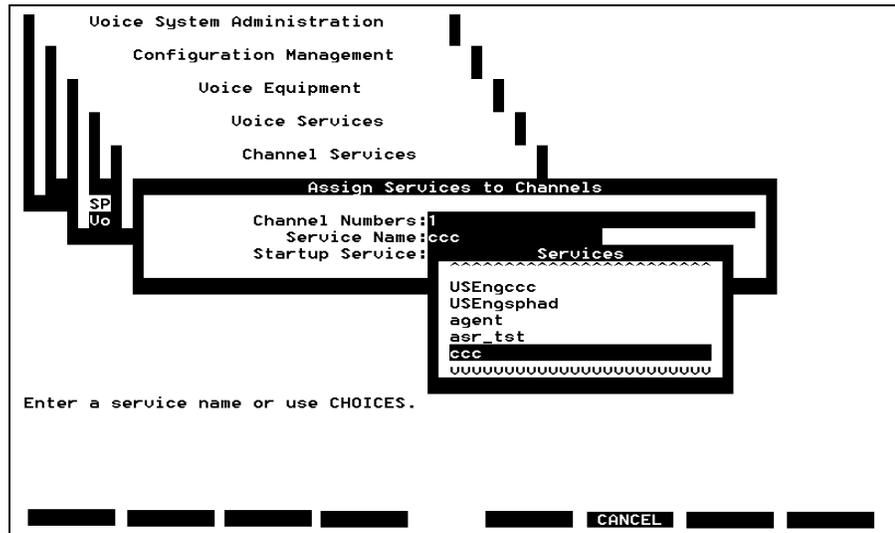


Figure 3-3. Available Services

7. Use your directional keys to move the cursor down to “ccc”.
8. Press **ENTER**, and repeat the process for the *Startup Service* field.
9. When you are finished, press **SAVE (F3)**, and verify your choices on screen.
10. Press **CANCEL (F6)** until you return to the Customer Assist main menu.

You have now assigned Customer Assist to channels on your CONVERSANT system.

### Viewing Channels Assigned to Customer Assist

1. Exit out of Customer Assist.
2. Enter **disp chan** (for display channels) at the UnixWare prompt.

#### ⇒ NOTE:

In Figure 3-4, Channels 1 and 2 are currently assigned to ccc, which is the service name for Customer Assist. One other channel is in service, but it is assigned to another application. In addition, three channels are currently not active, that is, they are in “Facility Out Of Service” mode (“FOOS”). The telephone extensions to call Customer Assist are 676 and 137.

CARD	0	STATE: Inserv	CLASS: Analog(TR)	O.S.INDEX: 0				
		NAME: AYC10	OPTIONS: master1,no tdm,tt					
		FUNCTION: TipRing						
CD.PT	CHN	STATE	STATE-CHNG-TIME	SERVICE-NAME	PHONE	GROUP	OPTS	TYPE
0.0	0	Inserv	Feb 06 08:57:02	ccc	2645	2	talk	IUC6
0.1	1	Inserv	Feb 06 08:57:02	ccc	2646	2	talk	IUC6
0.2	2	Foos	Feb 06 08:57:02	-	-	2	talk	IUC6
0.3	3	Foos	Feb 06 08:57:02	-	-	2	talk	IUC6
0.4	4	Foos	Feb 06 08:57:02	-	-	2	talk	IUC6
0.5	5	Foos	Feb 06 08:57:02	-	-	2	talk	IUC6
cpthook#								

Figure 3-4. Channels in Service

### Building the Setup Vector

The following sections describe two ways to build the setup vector:

- Resetting the current setup vector to the defaults of the template
- Modifying the automatically loaded setup vector:

Use the one with the closer relation to your current software situation and experience.

#### Resetting the Current Setup Vector to the Defaults of the Template

Use the following steps to reset the current setup vector to the defaults of the template:

1. Enter Customer Assist by following the steps in “Logging In” on page 2-2.
2. Start at the Customer Assist main menu and select

```
> Call Vector Configuration
> Select Vector Template
> Setup Template
```

This process resets your setup vector to the default settings in the software.

The system displays the Setup Template form (Figure 3-5).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
1 Custd 3 EDIT VECTOR NUMBER 0 STEPS
>Call Ue Vector Name: setup Vector Number: 0
System Description: system setup vector
System
UNIX Sy Step Action Description
Exit 1 OFF_HOOK answer the call
2 CHAN_ASN assign channels to vectors
3 CHAN_ASN assign channels to vectors
4 CHAN_ASN assign channels to vectors
5 CHAN_ASN assign channels to vectors
6 CHAN_ASN assign channels to vectors
7 CHAN_ASN assign channels to vectors
8 CHAN_ASN assign channels to vectors
9 CHAN_ASN assign channels to vectors
10 QUIT if channel is not assigned.
11 _____
12 _____
13 _____
14 _____

Enter the vector name.

HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
    
```

Figure 3-5. Setup Template Form

### Modifying the Automatically Loaded Setup Vector:

If you are just starting out with Customer Assist, the easiest way to build the setup vector is to modify the one that is already there.

Use the following steps to modify the existing setup vector:

1. Enter Customer Assist by following the steps in "Logging In" on page 2-2.
2. Start at the Customer Assist main menu and select

```

> Call Vector Configuration
> Edit Vector
    
```

The system displays the Edit Vector menu (Figure 3-6).

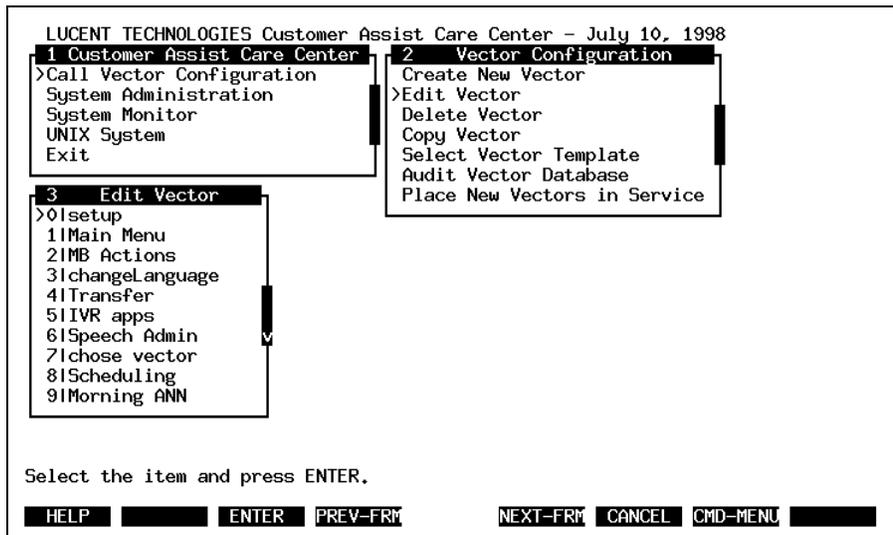


Figure 3-6. Edit Vector Menu

3. Select 0 | setup.

The system displays the Setup Vector worksheet (Figure 3-7).



**NOTE:**

Several of the steps have actions already loaded into them. In this example, you will modify one action, the CHAN\_ASN action.

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
1 Custo 4 EDIT VECTOR NUMBER 0 STEPS
>Call Use Vector Name: setup Vector Number: 0
System Description: system setup vector
System
UNIX Sy Step Action Description
Exit 1 OFF_HOOK answer the call
2 CHAN_ASN assign channels to vectors
3 Ed 3 CHAN_ASN assign channels to vectors
>0|setup 4 CHAN_ASN assign channels to vectors
1|Main 5 CHAN_ASN assign channels to vectors
2|MB Ac 6 CHAN_ASN assign channels to vectors
3|chang 7 CHAN_ASN assign channels to vectors
4|Trans 8 CHAN_ASN assign channels to vectors
5|IUR a 9 CHAN_ASN assign channels to vectors
6|Spec 10 QUIT if channel is not assigned.
7|chose 11
8|Sched 12
9|Morni 13
14

Enter the vector name.
HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
```

Figure 3-7. Setup Vector Worksheet

4. Use the directional cursors to move down to step 3 and then press DEFINE (F4).

The system displays the CHAN\_ASN action form (Figure 3-8).



6. Repeat Step 4 until all of your channels are assigned.



**NOTE:**

Each CHAN\_ASN action can assign 12 channels. The number of channels in your setup vector corresponds to the capacity of the configuration you purchased. The setup vector in Figure 3-7 on page 3-15 has a capacity of 96 channels.

7. Press CLOSE (F3) to return to the Vector Worksheet.
8. Press CHG-KEYS (F8).
9. Press SAVE (F3).

The system returns you to the Edit Vector menu.

You have now created your first vector, the setup vector, which is the main vector within Customer Assist. Any vectors that are activated by incoming calls must be referenced in the setup vector. Follow the steps in this sample application and remember to place vectors in service. See the next section, “Placing Vectors in Service”, for more information.

## Placing Vectors in Service

When you develop vectors, Customer Assist maintains them in a development database. When you place vectors in service, Customer Assist copies them into a run-time database. Customer Assist also copies vectors to an archive database when it takes them out of service.

After you place vectors in service, you can modify the copies in the development database without modifying the vectors in service (that is, in the run-time database). See “Place New Vectors in Service” on page 2-14 for more information.

Use the following steps to place vectors in service:

1. Make sure that you have created all the vectors that you listed in the VECTOR column in the CHAN\_ASN action forms in the setup vector.
2. Insure you have created all vectors that were referenced in other Customer Assist vectors.

After you have created all of your Customer Assist vectors, you are ready to place them in service.

3. Start at the Vector Configuration menu and select Place New Vectors in Service.

Customer Assist prompts you to confirm that you want to place these vectors in service (Figure 3-9).

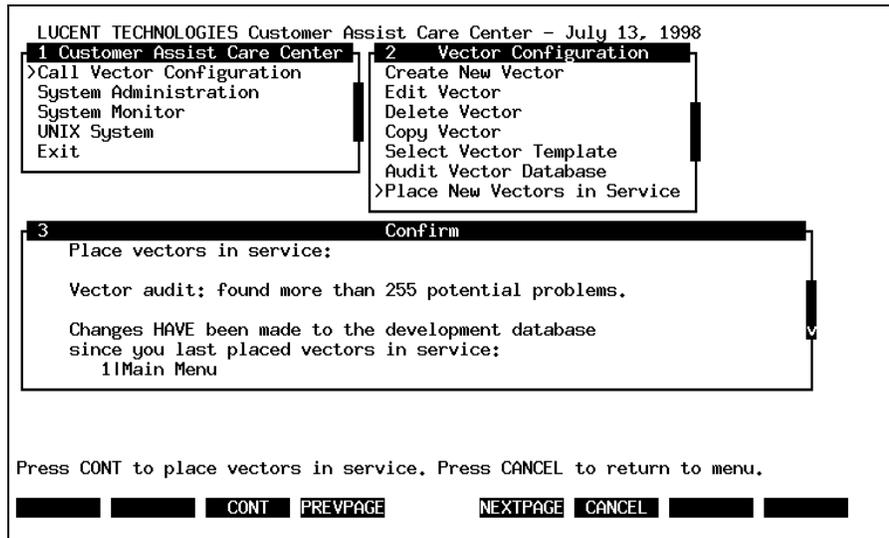


Figure 3-9. Place New Vectors in Service confirmation

4. Press CONT (F3) to confirm and continue, or CANCEL (F6) to cancel the action.

## Sample Application #2: Standard Announcement

---

### Business Situation

---

Before Rock Coast Software can design their call center, they must learn how to create standard and dynamic announcements. These announcements are building blocks for more powerful applications.

### Standard Announcements

Standard announcements can respond to callers with messages that answer common questions and maintain interest during the callers' wait. Because authorized users can record standard announcements from any touch-tone telephone, Rock Coast Software can provide the latest product information to callers. This sample application demonstrates how to create a simple call center with one standard announcement: "Thank you for calling Rock Coast Software. A representative will be with you shortly. We appreciate your patience."

## Dynamic Announcements

Dynamic announcements can respond to callers with specific announcements based on call information passed from the DEFINITY G3, ECS R5 or R6.3+ switch to Customer Assist. One example is passing a VDN, or Vector Directory Number, to Customer Assist. Customer Assist can use the VDN to play the appropriate announcement to the caller. "Sample Application #3: Dynamic Announcement" on page 3-31 demonstrates how to create a call center that uses a VDN passed from the switch and touch-tone information entered by a caller to play dynamic announcements.

## Callflow Diagram

---

Before every application is built, you should create a callflow diagram to insure that you completely understand what you are trying to accomplish and what callers will hear as well as do during calls. The following is a simple diagram for this sample application. The diagrams for the more advanced applications in this chapter are much more complicated.

### NOTE:

The ^ used in callflows designates non-speech text or an action. See "How to Read a Callflow" on page 9-3 for more information on understanding callflows.

## 2. Standard Announcement

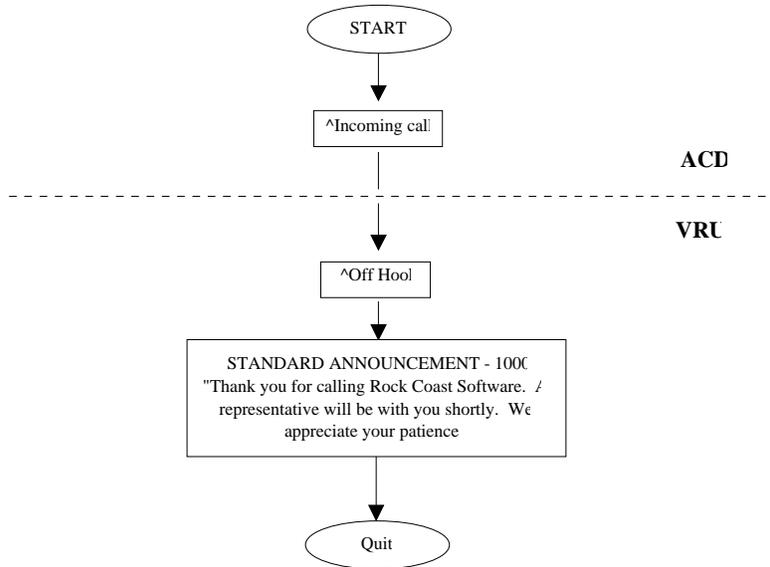


Figure 3-10. Standard Announcement Callflow

### ECS R6.3/DEFINITY Vector

---

Because Customer Assist works on the CONVERSANT system, it takes all of its direction from the DEFINITY G3, ECS R5 or R6.3+ switch. The DEFINITY vectors are critical to understand because they route callers to the CONVERSANT and Customer Assist during a call.

The following example demonstrates how the DEFINITY vector performs when passing a caller to the CONVERSANT and Customer Assist to hear a standard announcement.

Assumptions: Agent Split is 1.

1. wait-time 2 secs hearing ringback
2. queue-to main split 1 pri m
3. announcement extension 1000
4. wait-time 2 secs hearing music

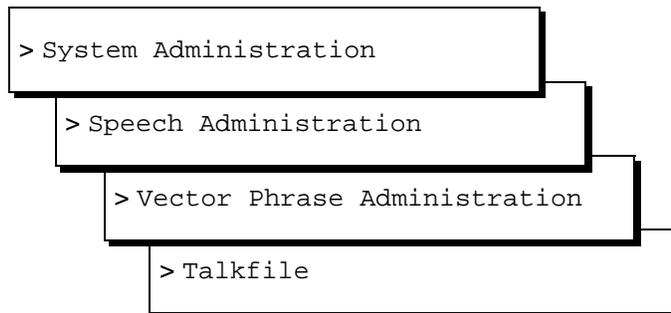
**⇒ NOTE:**

This example assumes that you are familiar with the steps in DEFINITY vectors. If you are not, read the first few chapters of the *Lucent DEFINITY Communications System Generic 3 or ECS R5 Call Vectoring/EAS Guide*, 555-230-520 or -521.

### Speech Administration

This section describes how to create a standard announcement on the CONVERSANT using Customer Assist.

1. Start at the Customer Assist main menu and select



The system displays the Select Phrase menu (Figure 3-11).

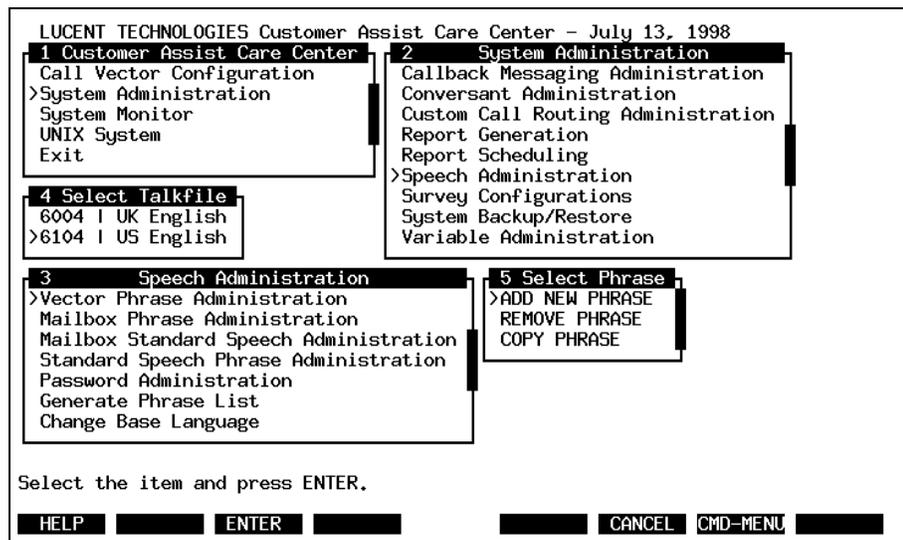


Figure 3-11. Select Phrase Menu Options

2. Select ADD NEW PHRASE.

Customer Assist automatically creates a phrase number for you.



**NOTE:**

The talkfile used when dealing with speech in vectors is #6104 for US English. Some of the talkfile numbers change depending on which language is currently selected. The following list describes 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 #6101: Mailbox Custom and Standard Phrases (for example, numbers, confirmations, customer-specific speech callers hear when leaving a message)
- Talkfile #6105: Mailbox prompt phrase

3. Enter the appropriate phrase number in the `Phrase Number` field.

4. Enter a brief description of the information conveyed with this phrase in the `Phrase Tag` field.

For example, "Rock Coast - Main Greeting".

5. Enter the exact text you want callers to hear in the `Phrase Text` field.

For example, "Thank you for calling Rock Coast Software. A representative will be with you shortly. We appreciate your patience."

The system displays the completed Add New Phrase form (Figure 3-12).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 13, 1998
1 Customer Assist Care Center      2 System Administration
Call Vector Configuration          Callback Messaging Administration
>System Administration            Conversant Administration
System Monitor                     Custom Call Routing Administration
UNIX System                        Report Generation
Exit                               Report Scheduling
6 Add New Phrase to Talkfile 6104
4 Select Talkfile                  Add a New Phrase                Recorded:
6004 I UK E                       Talkfile Number: 6104
>6104 I US E                       Phrase Number: 1000
3 System Administration            Phrase Tag: Rock Coast - Main Greeting
>Vector Phrase                     Phrase Text: Thank you for calling Rock Coast Software. A
Mailbox Phrase                     representative will be with you shortly. Thank
Mailbox Station                    you for your patience.
Standard Spelling
Password Administration
Generate Phrase
Change Base

HELP CHOICES SAVE RECORD ENTER CANCEL REFRESH
    
```

Figure 3-12. Add New Phrase Form

6. Press RECORD (F4).

Customer Assist responds by reciting “Adding phrase listing” and “Phrase listing changed.”

7. The cursor will now be blinking in the Coding Rate field. Enter the recording quality level at which Customer Assist should record your voice. You have four options:
  - **ADPCM16** — lowest recording quality (smallest size of resulting speech file)
  - **ADPCM32** — medium recording quality (medium size of resulting speech file)
  - **PCM64** — highest recording quality (largest size of resulting speech file)
  - **CELP16** — medium recording quality (small size of resulting speech file)

8. For this sample application, press CHOICES (F2) until the Coding Rate selected is **CELP16**.

Figure 3-13 shows the completed Record Phrase form.

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 13, 1998
1 Customer 7 Record Phrase Number 1000 in talkfile Number 6104
Call Vector
>System Admi Coding Rate: CELP16
System Moni Phrase Number: 1000
UNIX System Talkfile Number: 6104
Exit
Phrase Tag: Rock Coast - Main Greeting 2
4 Select Ta Phrase Text: Thank you for calling Rock Coast Software. A
6004 I UK E representative will be with you shortly. Thank
>6104 I US E you for your patience.
3 Sp
>Vector Phra Phrase Text: Thank you for calling Rock Coast Software. A
Mailbox Phr representative will be with you shortly. Thank
Mailbox Sta you for your patience.
Standard Sp
Password Ad
Generate Ph
Change Base
Enter the coding rate followed by the Return or ENTER key.
HELP CHOICES CLOSE DIAL CANCEL REFRESH
```

Figure 3-13. Record Phrase Form

9. Press DIAL (F4).
10. In the Telephone Number to Dial field, enter the extension number of the telephone you are using to record speech.
11. In the Dial out on channel field, enter a working CONVERSANT channel number.

In this example, Customer Assist will call extension 2155 using channel 2 (Figure 3-14).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 31, 1998
8 Dial Number File Number 6104
Telephone Number to Dial: 2143 d: N
Dialing out on channel: 3 Coding:
Blks:
Exit
7 Record Phrase Number 1000 in talkfile Number 6104
Coding Rate: CELP16
Phrase Number: 1000 e. A
Talkfile Number: 6104 Thank
Phrase Tag: Rock Coast - Main Greeting 2
Phrase Text: Thank you for calling Rock Coast Software. A
representative will be with you shortly. Thank
you for your patience.
Enter the telephone number followed by the Return or ENTER key.
HELP LAUNCH ENTER CANCEL REFRESH
    
```

Figure 3-14. Dial Number Form

12. Press LAUNCH (F3) to have the CONVERSANT call you at the telephone number you entered in the Telephone Number to Dial field.

Use the following steps to record speech:

- a. Press [1] to start Speech Administration.
- b. Press [1] to record the phrase (for example, Phrase 1000) exactly as it is written in the Phrase Text area on your screen.

Record your phrase by speaking into the telephone.

- Press [1] to stop recording.
- Press [2] to playback the phrase recorded.
- Press [3] to record another phrase.
- Press [\*][3] to install the phrase in Customer Assist.
- Press [9] to quit Speech Administration.

13. Press CLOSE (F3).
14. Press SAVE (F3).
15. To view the work you have done:
  - a. Press CANCEL (F6).
  - b. Highlight the phrase you just recorded (Figure 3-15).

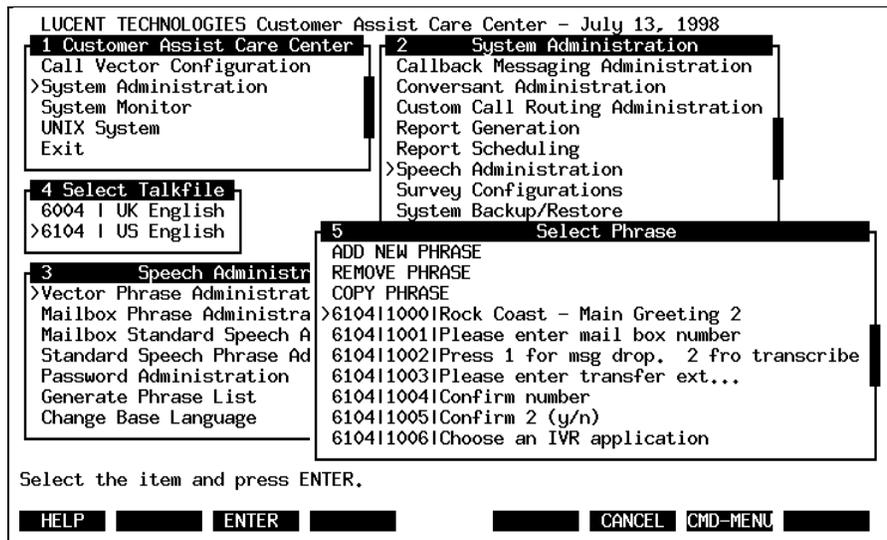


Figure 3-15. Selecting a Phrase

c. Press **ENTER**.

The system displays the Edit Phrase form (Figure 3-16).

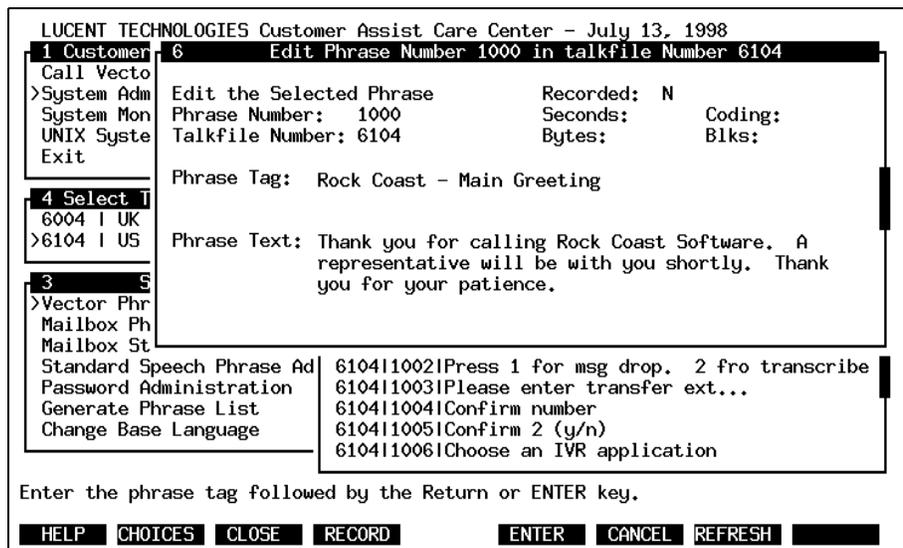


Figure 3-16. Edit Phrase Form



**NOTE:**

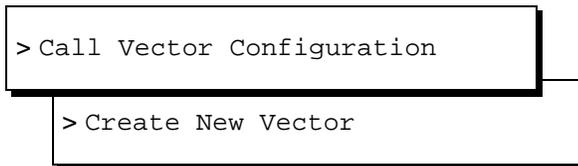
The "Y" next to *Recorded* indicates that the phrase has been recorded. The length of the recorded phrase is shown in seconds as well as the coding rate and byte size of the recorded phrase.

16. If you do not want to review the phrase you just recorded, press CANCEL four times to get back to the Customer Assist main menu.

### Customer Assist Vector

Use the following steps to create a Customer Assist vector that plays the standard announcement to callers:

1. Start at the Customer Assist main menu and select



The system displays the Create New Vector worksheet (Figure 3-17).

LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998

EDIT VECTOR NUMBER 153 STEPS

1 Custo  
>Call Ue  
System  
System  
UNIX Sy  
Exit

Vector Name: \_\_\_\_\_ Vector Number: 153  
Description: \_\_\_\_\_

Step	Action	Description
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
7	_____	_____
8	_____	_____
9	_____	_____
10	_____	_____
11	_____	_____
12	_____	_____
13	_____	_____
14	_____	_____

Enter the vector name.

HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS

Figure 3-17. Create New Vector worksheet

2. Enter a name for the vector in the `Vector Name` field.  
For example, "RC-Main Greet".
3. Enter a description of the vector in the `Description` field.  
For example, "Rock Coast - Main Greeting".
4. Tab to the first step in the vector and press `CHG-KEYS` (F8).
5. Press `CHOICES` (F2) to see the selection of vector actions.  
The system displays the `Select Action` menu (Figure 3-18).

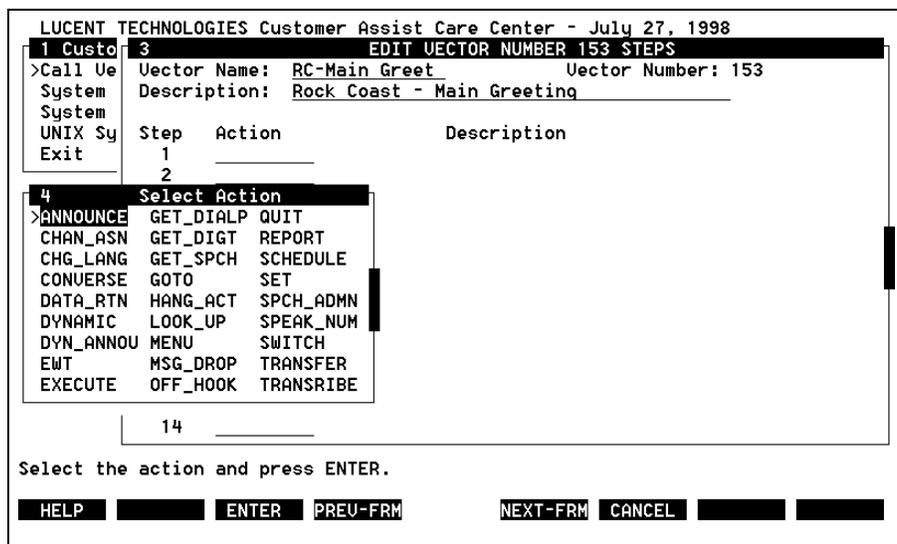


Figure 3-18. Select Action Screen

- This vector will have two steps. Each step will contain an action: ANNOUNCE and QUIT.
6. Select ANNOUNCE on the `Select Action` menu and press `ENTER`.  
The cursor will be blinking at the `Phrase Tag` field.
  7. Press `CHOICES` (F2) and select the phrase you want from the menu that appears.  
For example, select phrase number 130.

**NOTE:**

The phrase tag appears as the description of the ANNOUNCE action on the Edit Vector Steps form. See Figure 3-19 on page 3-29. The figures that illustrate this sample application are inconsistent. The phrase number shown here and the phrase number that you entered in Figure 3-11 on page 3-21 should match.

Figure 3-19 shows the completed ANNOUNCE action form.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
1 Cust 3 EDIT VECTOR NUMBER 153 STEPS
>Call Use Vector Name: RC-Main Greet Vector Number: 153
System Description: Rock Coast - Main Greeting
System
5 ANNOUNCE Action Step Number 1 for vector 153

ANNOUNCE Action step speaks a phrase to caller

Talkfile Number: 6104 US English
Allow Interrupt: Yes

Phrase Tag: Rock Coast - Main Greeting 2
Phrase Number: 1000

Phrase Text: Thank you for calling Rock Coast Software. A
representative will be with you shortly. Thank
you for your patience.

Press the CHOICES key for the list of valid phrase tags.

HELP CHOICES CLOSE ENTER CANCEL REFRESH ADD-PHR
    
```

**Figure 3-19. ANNOUNCE Action Form**

8. Press CLOSE (F3).
9. Tab to the second step in the vector.
10. Press CHG-KEYS (F8) and then CHOICES (F2) to select a vector action.
11. Select QUIT.

The system displays the QUIT action form (Figure 3-31 on page 3-44).

12. Enter the comment "Caller returns to switch" in the Comment field.
13. Press CLOSE (F3).

The system returns you to the vector worksheet (Figure 3-20).

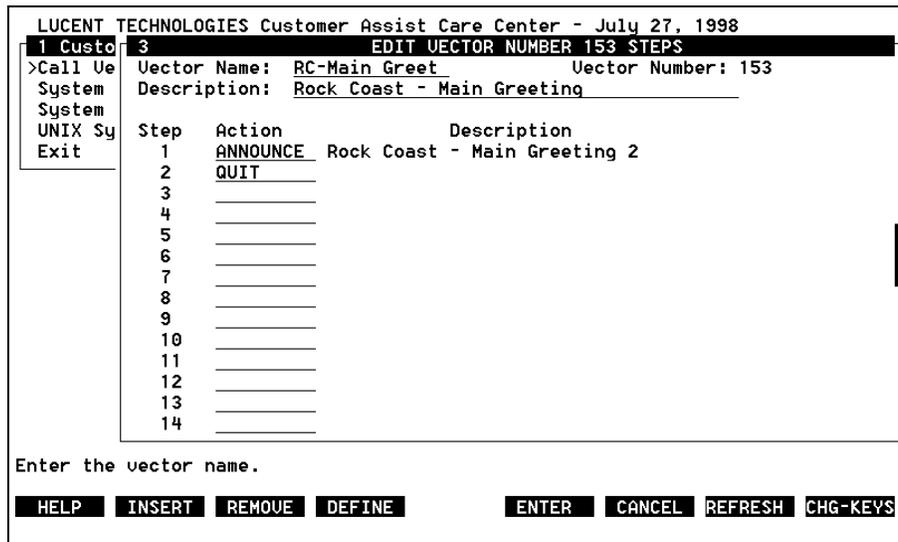


Figure 3-20. Finished Customer Assist vector

Now you have created a sample application with one vector that plays a standard announcement to all callers.

14. Put the vector into service.

See "Placing Vectors in Service" on page 3-17 for more information.

## **Sample Application #3: Dynamic Announcement**

---

### **Business Situation**

---

Reconsider the situation of Rock Coast Software. In this sample application, the company wants callers to dial a telephone number that Customer Assist associates with a specific department. Callers will be greeted with a dynamic announcement for the called department. There are two main departments: Customer Service and Technical Support.

To provide personalized customer service, Rock Coast also wants to greet callers with a dynamic announcement that mentions the name of the company where the caller is employed.

The lessons learned in earlier sample applications are background for this sample application.

### **Callflow Diagrams**

---

The following four diagrams illustrate the callflow for this sample application.

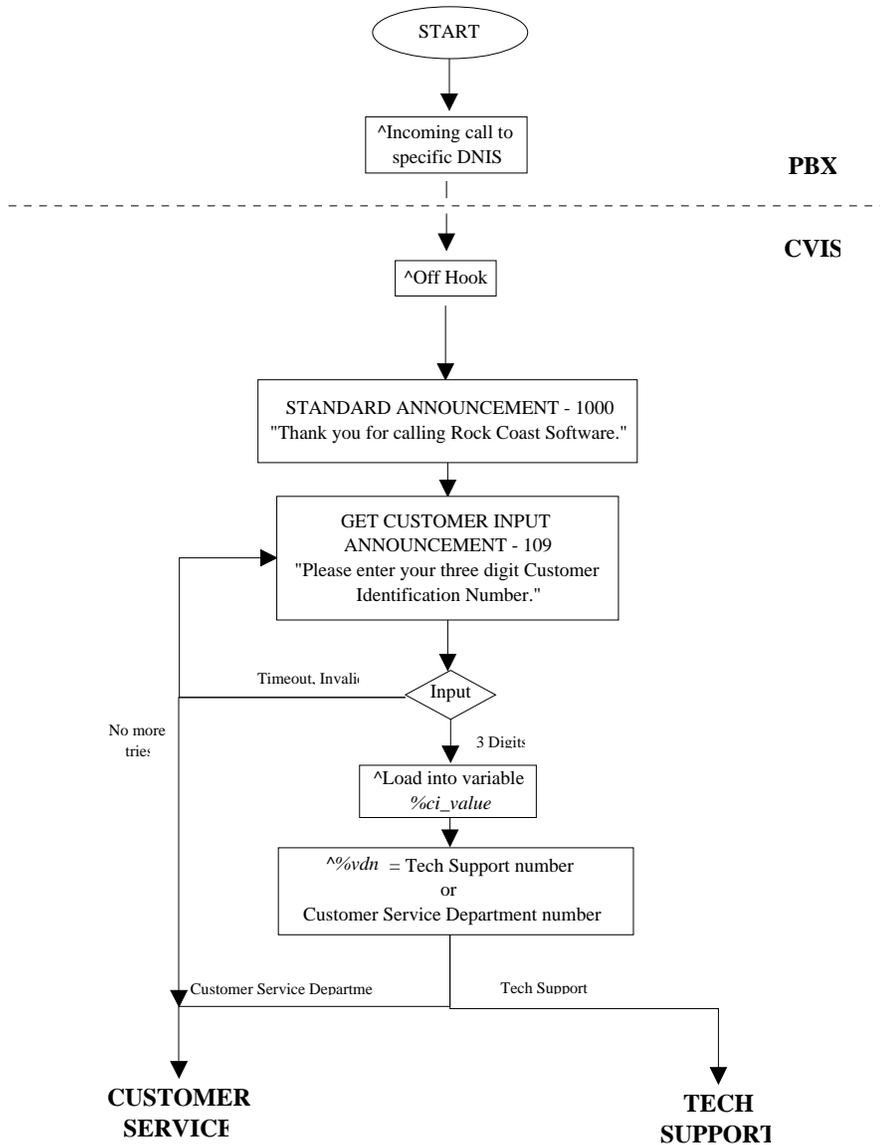
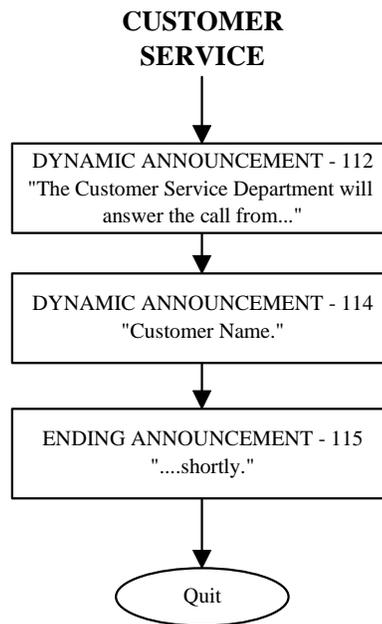


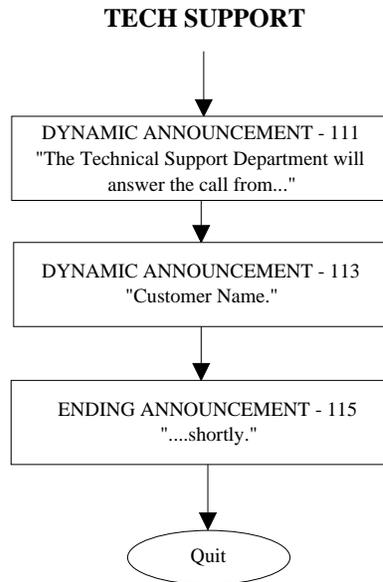
Figure 3-21. Callflow for Dynamic Announcement 1

### 3. *Dynamic Announcement*



---

Figure 3-22. Callflow for Dynamic Announcement 2



---

Figure 3-23. Callflow for Dynamic Announcement 3

### ECS R6.3/DEFINITY Vectors

---

This sample application uses two DEFINITY vectors. Both vectors use a Converse vector step to pass a caller to the CONVERSANT and Customer Assist.

Assumptions: Agent Queue Splits are 1 (Customer Service) and 3 (Technical Support). The CONVERSANT split is 2.

If you are not familiar with DEFINITY call vectoring, read the first few chapters of the *Lucent DEFINITY Communications System Generic 3 or ECS R5 Call Vectoring/EAS Guide*, 555-230-520 or -521.

### Customer Service Vector

1. wait-time 2 secs hearing ringback
2. queue-to main split 1 pri m
3. wait-time 0 secs hearing music
4. converse-on split 2 pri m passing vdn and none
5. wait-time 2 secs hearing music

### Technical Support Vector

1. wait-time 2 secs hearing ringback
2. queue-to main split 3 pri m
3. wait-time 0 secs hearing music
4. converse-on split 2 pri m passing vdn and none
5. wait-time 2 secs hearing music

### Speech Administration

---

After you diagram your callflow and create your DEFINITY vectors, record your speech phrases. Typically, it is easier to record speech before creating Customer Assist vectors.

For this sample application, you must record the following phrases: 1043, 1045, and 111-115. See the callflow for complete text. All the phrases are in Talkfile 6104.

See "Sample Application #2: Standard Announcement" on page 3-18 for information on how to create or record vector phrases.

#### NOTE:

The callflow diagrams show two phrases, 113 and 114, which announce "Customer Name." These phrases announce the name of the caller's company, such as Longhaul Trucking Company or Green Thumb Garden Center. Rock Coast must record a separate phrase for each of its customers.

## Customer Assist Vector

---

This section describes the procedures for creating a dynamic announcement using Customer Assist and the Customer Assist vectoring language. This sample application uses one Customer Assist vector, called RC-Main Greet.

Use the following steps to create a new vector or edit an existing vector:

1. Start at the Customer Assist main menu and select



```
> Call Vector Configuration
```



```
> Create New Vector (Edit Vector)
```

2. Enter each of the nine steps that will appear in the vector.  
See “Step Descriptions” below.
3. Save your vector by pressing **SAVE** (F3).  
The vector is saved to the development database.
4. When you are ready to activate your application, place the vector in service.  
See “Placing Vectors in Service” on page 3-17 for more information.  
Figure 3-24 shows the finished vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 117 STEPS
>Call Ue Vector Name: RC-Main Greet Vector Number: 117
System Description: Rock Coast Main Gree
System
UNIX Sy Step Action Description
Exit 1 CONVERSE collect 3 digits into %vdn
2 ANNOUNCE Thank you for calling
3 Ed 3 ANNOUNCE Please enter 3 digits
111|RC- 4 GET_DIGT get 3 digits and load into %ci_value
112|Que 5 GOTO Step 3 if %num_dig_got != 3
113|Que 6 DYN_ANNOU phrase in %data1
114|Get 7 DYN_ANNOU phrase in %ci_value
115|GSp 8 ANNOUNCE ...shortly.
116|GSp 9 QUIT End vector
>117|RC- 10
118|RC- 11
119|RC- 12
120|Gsp 13
14

Please enter the description

HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
    
```

Figure 3-24. Finished RC-Main Greet Vector

### Step Descriptions

The following is a systematic analysis of the nine steps in the finished vector.

#### 1. CONVERSE

Accepts the three digit VDN from the switch and places the value into the variable *%vdn*. The Customer Assist vector uses this information to recite the Customer Service or Technical Support department name.

The CONVERSE action also places the total number of digits collected into the variable *%num\_dig\_got*.

Figure 3-25 shows the CONVERSE action form.

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
1 Custo 4 EDIT VECTOR NUMBER 117 STEPS
>Call Use Vector Name: RC-Main Greet Vector Number: 117
System Description: Rock Coast Main Gree
System
UNIX Sy Step Action Description
Exit 1 CONVERSE collect 3 digits into %vdn
2 ANNOUNCE Thank you for calling
3 ANNOUNCE Please enter 3 digits
3 Ed 4 GET_D 5 CONVERSE ACTION, STEP 1 for vector 117
111|RC- 5 GOTO
112|Que 6 DYN_A Converse Step gathers TouchTones
113|Que 7 DYN_A
114|Get 8 ANNOU Number of Digits to Collect: 3
115|Gsp 9 QUIT
>117|RC- 10 _____ Load Digits into Variable: %vdn
118|RC- 11 _____
119|RC- 12 _____ Place number of digits collected into: %num_dig_got
120|Gsp 13 _____
14 _____ Comment: collect 3 digits into %vdn

HELP CHOICES CLOSE ENTER CANCEL REFRESH
```

Figure 3-25. CONVERSE Action Form

2. ANNOUNCE

Recites the opening announcement: "Thank you for calling Rock Coast Software."

Figure 3-26 shows the ANNOUNCE action form.

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 117 STEPS
>Call Use Vector Name: RC-Main Greet Vector Number: 117
System Description: Rock Coast Main Gree
System
5 ANNOUNCE Action Step Number 2 for vector 117

ANNOUNCE Action step speaks a phrase to caller

Talkfile Number: 6104 US English
Allow Interrupt: Yes

Phrase Tag: Thank you for calling
Phrase Number:
Phrase Text:

Enter the talkfile.

HELP CHOICES CLOSE ENTER CANCEL REFRESH ADD-PHR
```

Figure 3-26. ANNOUNCE Action Form

### 3. ANNOUNCE

Recites the announcement that prompts callers to enter their three digit customer identification number.

Figure 3-27 shows the ANNOUNCE action form.

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 117 STEPS
>Call Use Vector Name: RC-Main Greet Vector Number: 117
System Description: Rock Coast Main Gree
System
5 ANNOUNCE Action Step Number 3 for vector 117

ANNOUNCE Action step speaks a phrase to caller

Talkfile Number: 6104 US English
Allow Interrupt: Yes

Phrase Tag: Please enter 3 digits
Phrase Number:
Phrase Text:

Enter the talkfile.

HELP CHOICES CLOSE ENTER CANCEL REFRESH ADD-PHR
```

Figure 3-27. ANNOUNCE Action Form

#### 4. GET\_DIGT

Collects three digits from callers and places them into the variable *%ci\_value*. This step also counts the total number of digits the caller entered and places that value into the variable *%num\_dig\_got*.

Figure 3-28 shows the GET\_DIGT action form.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 117 STEPS
>Call Ue Vector Name: RC-Main Greet Vector Number: 117
System Description: Rock Coast Main Gree
System
UNIX Sy Step Action Description
Exit 1 CONVERSE collect 3 digits into %vdr
111!RC- 2 ANNOUNCE Thank you for calling
112!Que 3 ANNOUNCE Please enter 3 digits
113!Que 4 GET_DIGT get 3 digits and load into %ci_value
114!Get 5 GOTO 5 GET_DIGT ACTION STEP 4 for vector 117
115!GSp 6 DYN_A
116!GSp 7 DYN_A Get Digits Step gathers TouchTones from caller
>117!RC- 8 ANNOU
118!RC- 9 QUIT Number of Digits to Collect: 3
119!RC- 10
120!Gsp 11 Load Digits into Variable: %ci_value
12 12 Place number of digits collected into: %num_dig_got
13
14 Comment:

```

Enter the number follow by the Return or ENTER key.

HELP CHOICES CLOSE ENTER CANCEL REFRESH

Figure 3-28. GET\_DIGT Action Form

5. GOTO

Routes the caller back to Step 3 if less than three digits were not entered, that is, if the value of the variable *%num\_dig\_got* does not equal 3.

Figure 3-29 shows the GOTO action form.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custd 4 EDIT VECTOR NUMBER 117 STEPS
>Call Use Vector Name: RC-Main Greet Vector Number: 117
System Description: Rock Coast Main Gree
System
UNIX Sy Step Action Description
Exit 1 CONVERSE collect 3 digits into %vdn
2 ANNOUNCE Thank you for calling
3 Ed 3 ANNOUNCE Please enter 3 digits
111!RC- 4 GET_DIGT get 3 digits and load into %ci_value
112!Que 5 GOTO Step 3 if %num_dig_got != 3
5 GOTO Action Step Number 5 for vector 117

GOTO compares a variable with a value and routes to a vector or step.

GOTO Step 3 ANNOUNCE

IF variable %num_dig_got != 3

Comment:

Enter "Vector" or "Step" followed by the Return or ENTER key.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 3-29. GOTO Action Form

6. DYN\_ANNOU

Recites the phrase whose number corresponds to the VDN that has been passed from the switch and placed in the variable %vdn. If the DEFINITY vector passed the VDN for the Technical Support Department, this step would recite the phrase: "The Technical Support Department will answer the call from...."

For example, if the DEFINITY vector has passed 111 from the switch, there should be a vector phrase number 111 in Talkfile #6104 for the department with that VDN. In the callflow diagrams for this sample application, 111 is both the VDN and the vector phrase number for the Technical Support Department at Rock Coast Software.

Figure 3-30 shows the DYN\_ANNOU action form.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 117 STEPS
>Call Use Vector Name: RC-Main Greet Vector Number: 117
System Description: Rock Coast Main Gree
System
UNIX Sy
Exit

Step Action Description
1 CONVERSE collect 3 digits into %vsn
2 ANNOUNCE Thank you for calling
3 ANNOUNCE Please enter 3 digits
4 GET_DIGT get 3 digits and load into %ci_value
111|RC- 5 GOTO Step 3 if %num_dig_get != 3
112|Que 6 DYN_ANNOU phrase in %data1
113|Que 7 DYN_ANNOU phrase in %ci_value
114|Get 8 ANN 5 DYN_ANNOUNCEMENT Action Step Number 6 for vector 117
115|GSp 9 QUI
116|GSp
>117|RC- 10 DYNAMIC ANNOUNCE Action step speaks a phrase to caller
118|RC- 11
119|RC- 12 Talkfile Number: 6104 Allow Interrupt: Yes
120|GSp 13
14 Phrase Number: %data1

Enter "Yes" to allow the phrase to be interrupted. Otherwise enter "No".
HELP CHOICES CLOSE CANCEL REFRESH
    
```

Figure 3-30. DYN\_ANNOU Action Form

7. DYN\_ANNOU

Recites the caller's company name. This step uses the three digit number entered by the caller (variable *%ci\_value*) to identify the correct phrase in Talkfile #6104.

**NOTE:**

In this example, Rock Coast must record a phrase in order to recite the company name of each of its customers.

8. ANNOUNCE

Recites the phrase "shortly" to finish the concatenated announcement.

9. QUIT

Quits the application and returns the call to the switch unconditionally.

Figure 3-31 shows the QUIT action form.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custd 4 EDIT VECTOR NUMBER 117 STEPS
>Call Use Vector Name: RC-Main Greet Vector Number: 117
System Description: Rock Coast Main Gree
System
UNIX Sy Step Action Description
Exit 1 CONVERSE collect 3 digits into %vdn
111!RC- 2 ANNOUNCE Thank you for calling
112!Que 3 ANNOUNCE Please enter 3 digits
113!Que 4 GET_DIGT get 3 digits and load into %ci_value
114!Get 5 GOTO 5 QUIT Action Step Number 9 for vector 117
115!GSp 6 DYN_A
116!GSp 7 DYN_A QUIT Action Step Ends Call Processing
>117!RC- 8 ANNOU
118!RC- 9 QUIT
119!RC- 10
120!Gsp 11
12 12 Comment: End vector
13
14

```

HELP CLOSE CANCEL REFRESH

Figure 3-31. QUIT Action Form

## Sample Application #4: Automated Attendants

---

### Business Situation

---

An Automated Attendant, or Auto Attendant as it is commonly called, provides menu-driven routing options for incoming callers. Callers are prompted with menus from which they can select routing options using either their touch-tone keypad or their voice in a speech-recognition environment.

In this sample application, Rock Coast Software has decided that one incoming telephone line will pass callers to the Auto Attendant for routing information. Then callers will be sent back to the switch for proper routing based on information gathered in the CONVERSANT system. This Auto Attendant allows touch-tones and speech recognition. It contains five options for routing, one of which routes callers to another CONVERSANT application, a fax-on-demand system.

 **NOTE:**

Automatic Speech Recognition (ASR) for WholeWord is required on the CONVERSANT to use speech recognition. Likewise, the optional Speech Recognition package that works with Customer Assist V7.0 is also required to use speech recognition.

The lessons learned in earlier sample applications are background for this sample application.

### Callflow Diagrams

---

The following three diagrams illustrate the callflow for this sample application.

### 4. Auto Attendant

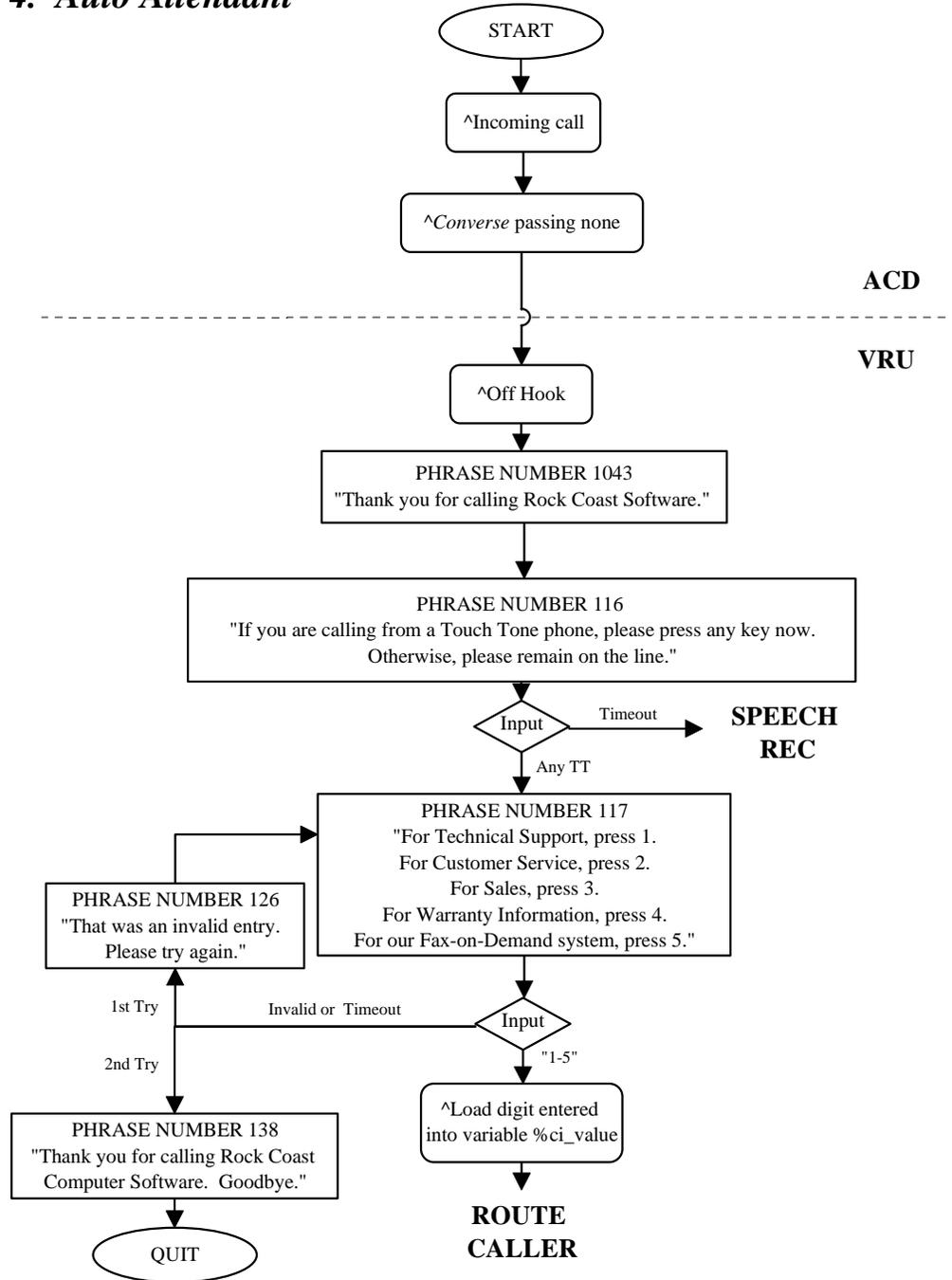


Figure 3-32. Auto Attendant Callflow 1

**4. Auto Attendant**

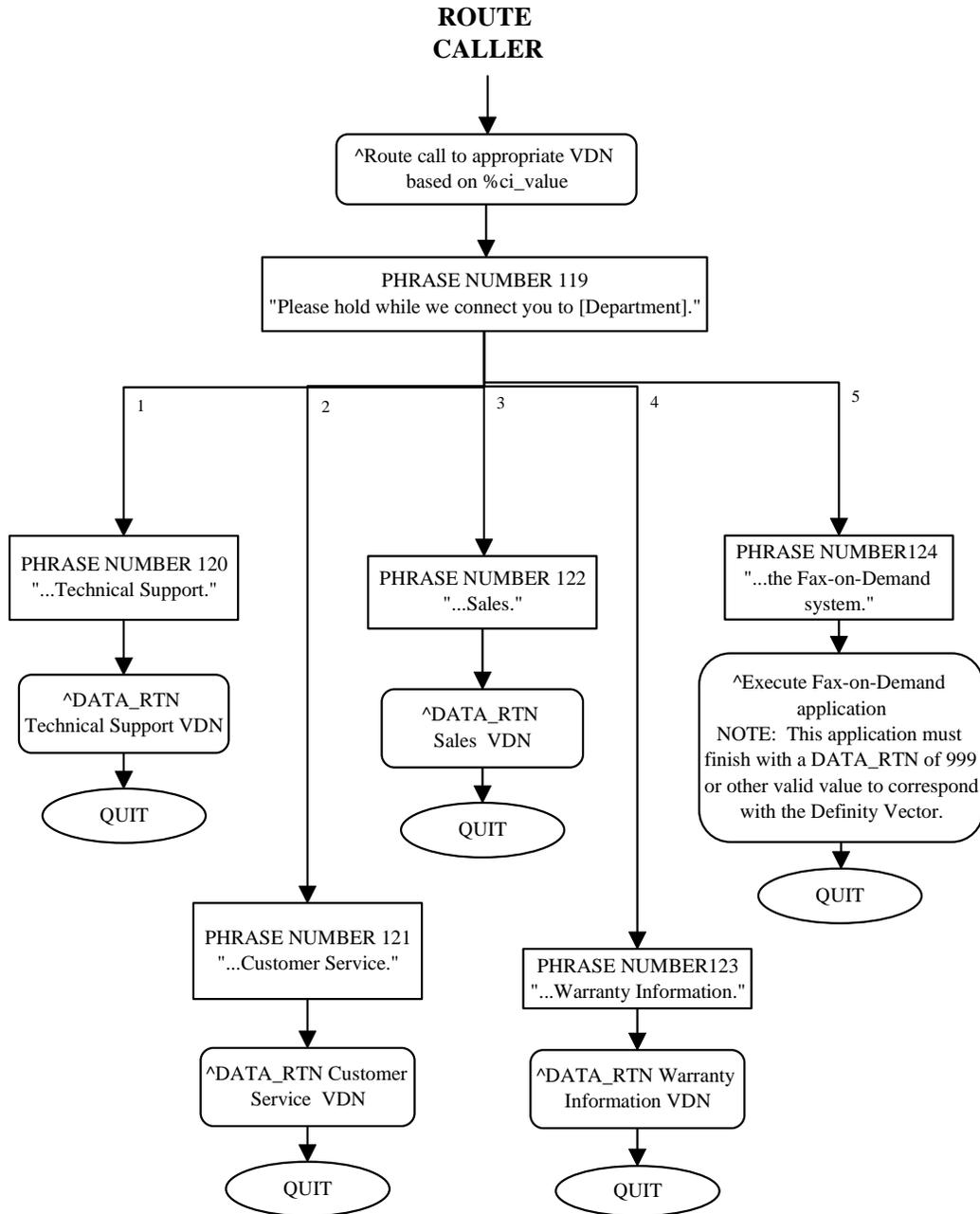
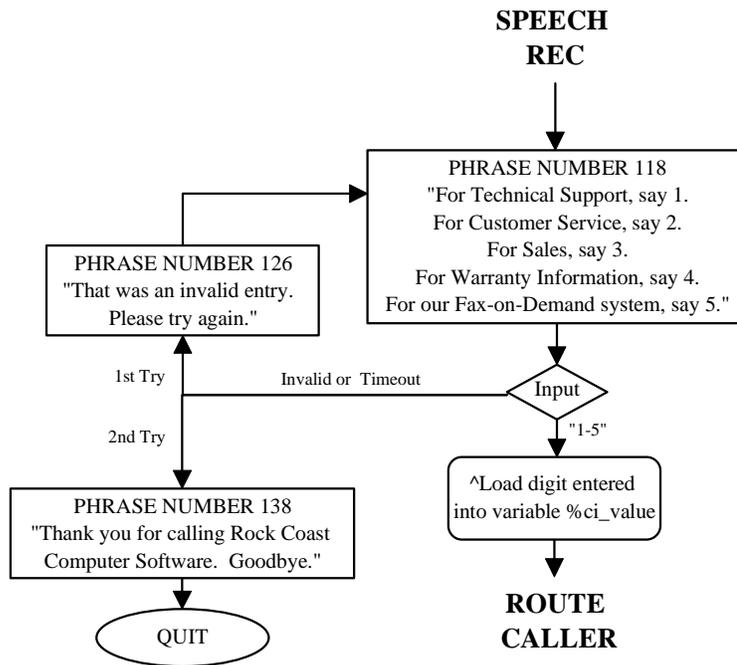


Figure 3-33. Auto Attendant Callflow 2

#### 4. Auto Attendant



---

Figure 3-34. Auto Attendant Callflow 3

### **ECS R6.3/DEFINITY Vector**

---

This sample application uses one DEFINITY vector. The vector uses a Converse vector step to pass a caller to the CONVERSANT and Customer Assist.

Assumptions: Agent Queue Splits are 1 (Customer Service) and 3 (Technical Support). The CONVERSANT split is 2.

1. wait-time 2 secs hearing ringback
2. converse on split 2 pri m passing none and none
3. collect 3 digits after announcement none
4. goto step 6 if digits = 999
5. route to digits with coverage n
6. stop

### **Speech Administration**

---

In this sample application, you must record speech for phrase numbers 1043, and 116-124, 126, and 138. See the callflow for the text of these phrases.

See "Sample Application #2: Standard Announcement" on page 3-18 for information about how to create or record vector phrases.

### **Customer Assist Vectors**

---

This AutoAttendant contains four vectors:

1. RC-AutoAttend (see "First Vector — RC-AutoAttend" on page 3-50)
2. RC-AA-TT Menu (see "Second Vector — RC-AA-TT Menu" on page 3-51)
3. RC-AA-Rotary (see "Third Vector — RC-AA-Rotary" on page 3-56)
4. Quit (see "Fourth Vector — Quit Vector" on page 3-61)

For each vector, the sample application first shows the steps in the finished vector and then describes each step.

## First Vector — RC-AutoAttend

This vector greets incoming callers and, prompts callers to identify whether they are using a touch-tone telephone, and based on the callers' responses, routes the calls to either a touch-tone or speech-recognition vector (second or third vector, respectively).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
1 Custo 4 EDIT VECTOR NUMBER 141 STEPS
>Call Use Vector Name: RC-AutoAttend Vector Number: 141
System Description: Rock Coast Software AutoAttend
System
UNIX Sy Step Action Description
Exit 1 ANNOUNCE Thank you for calling Rock Coast Software
2 ANNOUNCE If you are calling from a TouchTone phone...
3 GET_DIGT get 1 digits and load into %ci_value
4 GOTO Vector 40 if %num_dig_got = 1
5 GOTO Vector 42 unconditionally
6 QUIT
7
8
9
10
11
12
13
14

Please enter the description
HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
    
```

Figure 3-35. Finished RC-AutoAttend Vector

### Step Descriptions

1. ANNOUNCE

Recites the opening announcement: "Thank you for calling Rock Coast Software."

2. ANNOUNCE

Recites an announcement that prompts the caller to identify whether they are using a touch-tone telephone. Callers may be calling from a rotary telephone, or they may wish to use speech recognition to navigate the Auto Attendant.

3. GET\_DIGT

Collects digital input from the caller and places the value into the variable *%ci\_value*. This step also counts the total number of digits heard from the caller and places that value into the variable *%num\_dig\_got*. If *%num\_dig\_got* is equal to or greater than 1, then the caller has a touch-tone telephone.

4. GOTO

Routes callers who identified themselves as having a touch-tone telephone to the touch-tone vector. See “Second Vector — RC-AA-TT Menu” on page 3-51.



**NOTE:**

Because any touch-tone entry signifies that the customer is using a touch-tone telephone, this step looks at the value of *%num\_dig\_got*.

5. GOTO

If Customer Assist does not “hear” touch-tones (that is, if *%num\_dig\_got* = 0), it assumes the caller has a rotary telephone or is requesting the use of speech recognition. This step then routes the caller to the third Speech Recognition vector unconditionally. See “Third Vector — RC-AA-Rotary” on page 3-56.

6. QUIT

Quits the vector and returns control of the call to the DEFINITY vector.

**Second Vector — RC-AA-TT Menu**

This vector provides an AutoAttendant menu for callers using touch-tone telephones.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
1 Custo 4 EDIT VECTOR NUMBER 142 STEPS
>Call Use Vector Name: RC-AA-TT Menu Vector Number: 142
System Description: Rock Coast AutoAttendant Touch Tone Menu
System
UNIX Sy Step Action Description
Exit 1 MENU Tech Support 1. Cust Serv 2. Sales 3. Warr 4 Fax 5
2 ANNOUNCE Please hold while we connect you to...
3 Ed 3 DYN_ANNOU phrase in %data1
134|RC- 4 GOTO Step 7 if %data1 = 124
135|Rou 5 DATA_RTN to PBX with *01
136|RC- 6 EXECUTE program: FaxSystem
137|Dyn 7 QUIT
138|EWT 8
139|Que 9
140|Rou 10
141|RC- 11
>142|RC- 12
143|RC- 13
14
Enter the vector name.
HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
    
```

Figure 3-36. Finished RC-AA-TT Menu Vector

## Step Descriptions

### 1. MENU

This action recites a phrase describing five menu choices and then provides routing decisions for callers who select one of the choices with their touch-tone telephones.

The Output Value (variable *%data1*) is a three digit number.

- For the first four menu choices, this number corresponds to the VDN of the department (Technical Support, Customer Service, Sales, or Warranty Information) that has a speech phrase with the same number. For example, the VDN for Technical Support is 120. The number of the “Technical Support” speech phrase is also 120.
- For the fifth menu choice, the GOTO action in step 4 uses the Output Value (124) to route the call to step 7, which executes the fax-on-demand system. The speech phrase for “the fax-on-demand system” is 124.

The DYN\_ANNOUN action in Step 3 recites a dynamic announcement using the speech phrase specified by the value in *%data1*.

There are two screens for the MENU action. You access the second screen (shown in Figure 3-38 on page 3-53) by pressing NEXTPAGE (F5).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 31, 1998
5 MENU Action Step Number 1 for vector 142
NORMAL INPUT :
Talkfile: 6104 US English Allow Interrupt: Yes
Prompt Phrase: Tech Support 1. Cust Serv 2. Sales 3. Warr 4 Fax 5 1010
Number of digits to collect : Min 1 Max 1
Time to wait for input (sec): 1st digit 6 Next digit(s) 4
Place in Variables :
Input %ci_value Output %data1
Valid Input Output Value GOTO Vector Vector Name
1 120 CONT
2 121 CONT
3 122 CONT
4 123 CONT
5 124 CONT
Confirm Input No
Enter the talkfile.
HELP CHOICES CLOSE PREVPAGE NEXTPAGE CANCEL REFRESH ADD-PHR
    
```

Figure 3-37. MENU Action Form: Normal Input

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 31, 1998
5 MENU Action Step Number 1 for vector 142

SPECIAL CASES :
Caller's input not on list :
  Speak Phrase : _____
  Max. number of tries : 3
  Output Value : _____ GOTO Vector : CONT

Caller did not enter the 1st digit within the time allowed :
  Speak Phrase : _____
  Max. number of tries : 3
  Output Value : _____ GOTO Vector : CONT

Caller did not enter the minimum number of digits required :
  Speak Phrase : _____
  Max. number of tries : 3
  Output Value : _____ GOTO Vector : CONT

Caller has no more tries to enter valid input :
  Speak Phrase : _____

Enter the phrase tag for input not on list above.

HELP CHOICES CLOSE PREVPAGE NEXTPAGE CANCEL REFRESH ADD-PHR
```

Figure 3-38. MENU Action Form: Special Cases



**NOTE:**

The second page of the MENU action is helpful because it allows for error checking, input confirmation, and error routing.

2. ANNOUNCE

Recites a standard announcement: "Please hold while we connect you to..."

3. DYN\_ANNOU

Recites a dynamic announcement: a speech phrase identified by the value currently in the variable *%data1*. This phrase is the name of the destination where the caller is being routed, either a department (Technical Support, Customer Service, Sales, or Warranty Information) or the fax-on-demand system.

4. GOTO

Routes the caller to step 7, which executes the fax-on-demand application, if the variable *%data1* is 124. 124 is also the number of the speech phrase for "the fax-on-demand system."

5. DATA\_RTN

Delivers the VDN number (the current value of the variable *%data1*) back to the switch so that it knows where to route the caller.

The DATA\_RTN action also sends a FAC (feature access code) to the switch. The FAC instructs the switch what it should do with the passed data.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
1 Custd 4 EDIT VECTOR NUMBER 142 STEPS
>Call Ue Vector Name: RC-AA-TT Menu Vector Number: 142
System Description: Rock Coast AutoAttendant Touch Tone Menu
System
UNIX Sy Step Action
Exit 1 MENU DATA_RTN Action returns information to switch.
2 ANNOUNCE
3 Ed 3 DYN_ANNO Feature Access Code: *01
134|RC- 4 GOTO
135|Rou 5 DATA_RTN Data Return Segment 1: %data1
136|RC- 6 EXECUTE Data Return Segment 2:
137|Dyn 7 QUIT Data Return Segment 3:
138|EWT 8 Data Return Segment 4:
139|Que 9 Data Return Segment 5:
140|Rou 10 Data Return Segment 6:
141|RC- 11 Data Return Segment 7:
>142|RC- 12 Data Return Segment 8:
143|RC- 13
14 Comment:
Enter the value or variable of the data field followed by the ENTER key.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 3-39. DATA\_RTN Action Form

6. EXECUTE

Executes the fax-on-demand system.

The screen displays the EXECUTE action dialog box as well as some of the applications currently available on the CONVERSANT.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
1 Custo 4 EDIT VECTOR NUMBER 142 STEPS
>Call Use Vector Name: RC-AA-TT Menu Vector Number: 142
System D 5 EXECUTE ACTION 6 for vector 142
System S EXECUTE ACTION STARTS A NEW PROGRAM
UNIX Sy Application: FaxSystem Write Call Data Record Immed.:yes
Exit

3 Ed Argument 1: _____
134|RC- Argument 2: _____
135|Rou Argument 3: _____
136|RC- Argument 4: _____
137|Dyn Argument 5: _____
138|EWT Argument 6: _____
139|Que Argument 7: _____
140|Rou Argument 8: _____
141|RC- Argument 9: _____
>142|RC- Argument 10: _____
143|RC- Return Ualue: %return_u1u
Comment: _____

Enter the application name follow by the Return or ENTER key.

HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 3-40. EXECUTE Action Form

7. QUIT

Quits Customer Assist.

### Third Vector — RC-AA-Rotary

This vector provides an AutoAttendant menu for callers using Speech Recognition.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - August 13, 1998
1 Custo 4 EDIT VECTOR NUMBER 143 STEPS
>Call Ue Vector Name: RC-AA-Rotary Vector Number: 143
System Description: Rock Coast AutoAttendant for Rotary
System
UNIX Sy
Exit
Step Action Description
1 SET %num_tried = %num_tried = 0
2 GET_SPCH get digits and load into %ci_value
3 GOTO Step 7 if %num_dig_got = 1
4 SET %num_tried = %num_tried + 1
5 GOTO Vector 43 if %num_tried = 2
6 GOTO Step 2 unconditionally
7 SET %ci_value = %ci_value + 119
8 ANNOUNCE Please hold while we connect you to...
9 DYN_ANNOU phrase in %ci_value
>143|RC- 10 GOTO Step 13 if %ci_value = 124
144|RC- 11 DATA_RTN to PBX with *01
145|RC- 12 QUIT
146|RC- 13 EXECUTE program: test
147|RC- 14 QUIT

Press the CHOICES key for the list of available actions.

HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
    
```

Figure 3-41. Finished RC-AA-Rotary Vector

#### Step Descriptions

1. SET

Sets a counter variable, *%num\_tried*, to 0. The vector uses this variable to count the number of times that a caller tries to speak the number of a valid menu choice at the GET\_SPCH action. A caller is allowed two tries. After 2 unsuccessful tries, the GOTO action in step 5 routes the caller to the quit vector.

2. GET\_SPCH

This action recites a phrase describing five menu choices and then uses the speech-recognition package to listen to callers' voices as they make a choice.

The action:

- Collects 1 digit with a value from 1 through 5 and places the digit in the variable *%ci\_value*
- Places the number of digits collected (either 0 or 1) into the variable *%num\_dig\_got*

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
5 GET_SPCH ACTION, STEP 2 for vector 143

Get Speech Step gathers Spoken Digit(s) from caller
Comment:      Speech Recognition prompt
Consolidate responses into variable: %ci_value
Place number of digits collected into: %num_dig_got

Talkfile: 6103    US English

Phrase Tag      Number  Valid Input
SpRec Tech S 1. Cust Serv 2. Sales 3. Warr 4. Fax5      1 digit: 1-3
_____
_____
_____

Confirmation: None    Time limit per response: 6

HELP CHOICES CLOSE ENTER CANCEL REFRESH ADD-PHR
```

Figure 3-42. GET\_SPCH Action Form

3. GOTO

Allows a caller who speaks a valid number to continue in the vector.

If the value of `%num_dig_got = 1`, the GOTO action routes the call to step 7 for routing based on the caller's input.

4. SET

If the caller did not speak a valid number (that is, if `%num_dig_got = 0`), this action Increases the counter variable, `%num_tried`, by 1.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 143 STEPS
>Call Ue Vector Name: RC-AA-Rotary Vector Number: 143
System Description: Rock Coast AutoAttendant for Rotary
System
UNIX Sy Step Action Description
Exit 1 SET %num_tried = %num_tried = 0
3 Ed 2 GET_SPCH get digits and load into %ci_value
135|Rou 3 GOTO Step 7 if %num_dig_got = 1
136|RC- 4 SET %num_tried = %num_tried + 1
137|Dyn 5 GOTO 5 SET Action Step Number 4 for vector 143
138|EWT 6 GOTO
139|Que 7 SET SET Action Step Performs Operation on Variable
140|Rou 8 ANNOU
141|RC- 9 DYN_A
142|RC- 10 GOTO Variable Operator Value
>143|RC- 11 DATA %num_tried + 1
144|RC- 12 QUIT
13 Comment:
14
Enter the variable name follow by the Return or ENTER key.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 3-43. SET Action Form

5. GOTO

Routes a caller who runs out of tries to the quit vector.

Callers are allowed two tries. The GOTO action determines whether the value of the counter variable, *%num\_tried*, equals 2.

6. GOTO

Routes callers who have not run out of tries back to the GET\_SPCH action in step 2.

7. SET

Converts the caller's choice into a three digit number that is used when routing the caller to the desired department or the fax-on-demand system. The SET action adds 119 to the value in the variable *%ci\_value*.

- For the first four menu choices, the number in *%ci\_value* corresponds to the VDN of the department (Technical Support, Customer Service, Sales, or Warranty Information) that has a speech phrase with the same number. For example, the VDN for Technical Support is 120. The number of the "Technical Support" speech phrase is also 120.
- For the fifth menu choice, the GOTO action in step 10 uses the number in *%ci\_value* (124) to route the call to step 13, which executes the fax-on-demand system. The speech phrase for "the fax-on-demand system" is 124.

The DYN\_ANNOU action in step 9 speaks a dynamic announcement using the speech phrase specified by the value in *%ci\_value*.



**NOTE:**

For this routing mechanism to work, each department's VDN must equal the menu choice plus 119. The VDNs of the four departments are 120, 121, 122, and 123 and their menu choices are 1, 2, 3, and 4 respectively.

8. ANNOUNCE

Speaks a standard announcement: "Please hold while we connect you to..."

9. DYN\_ANNOU

Speaks a dynamic announcement: a speech phrase identified by the value currently in the variable *%ci\_value*. This phrase is the name of the destination where the caller is being routed, either a department (Technical Support, Customer Service, Sales, or Warranty Information) or the fax-on-demand system.

The speech phrase has the same number as the department's VDN. For example, the VDN for Technical Support is 120. The number of the "Technical Support" speech phrase is also 120.

10. GOTO

Routes the caller to step 13, which executes the fax-on-demand application, if the variable *%ci\_value* is 124. 124 is also the number of the speech phrase for "fax-on-demand system."

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 143 STEPS
>Call Use Vector Name: RC-AA-Rotary Vector Number: 143
System Description: Rock Coast AutoAttendant for Rotary
System
UNIX Sy Step Action Description
Exit 1 SET %num_tried = %num_tried = 0
2 GET_SPCH get digits and load into %ci_value
3 Ed 3 GOTO Step 7 if %num_dig_got = 1
135|Rou 4 SET %num_tried = %num_tried + 1
136|RC- 5 GOTO Vector 43 if %num_tried = 2
5 GOTO Action Step Number 10 for vector 143

GOTO compares a variable with a value and routes to a vector or step.

GOTO Step 13

IF variable %ci_value = 124

Comment: Route if caller chooses Fax

Enter "Vector" or "Step" followed by the Return or ENTER key.

HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 3-44. GOTO Action Form

11. DATA\_RTN

Sends the VDN number, which is the current value of *%ci\_value*, to the switch so it knows where to route the caller.

The DATA\_RTN action also sends a FAC (feature access code) to the switch. The FAC instructs the switch what it should do with the passed data.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 143 STEPS
>Call Use Vector Name: RC-AA-Rotary Vector Number: 143
System Description: Rock Coast AutoAttendant for Rotary
System
UNIX Sy 5 Data Return Action, Step Number 11 for vector 143
Exit Step Action
1 SET DATA_RTN Action returns information to switch.
2 GET_SPC
3 GOTO Feature Access Code: x01
4 SET
5 GOTO Data Return Segment 1: %ci_value
6 GOTO Data Return Segment 2:
135|Rou 7 SET Data Return Segment 3:
136|IRC- 8 ANNOUNC Data Return Segment 4:
137|Dyn 9 DYN_ANN Data Return Segment 5:
138|EWT 10 GOTO Data Return Segment 6:
139|Que 11 DATA_RT Data Return Segment 7:
140|Rou 12 QUIT Data Return Segment 8:
141|IRC- 13
142|IRC- 14 Comment: Sends the UDN back to the switch
>143|IRC-
144|IRC-
Enter the FAC followed by the Return or ENTER key.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 3-45. DATA\_RTN Action Form

- 12. QUIT  
Quits the Customer Assist vector and returns the call to the DEFINITY vector.
- 13. EXECUTE  
Executes the fax-on-demand system.
- 14. QUIT  
Quits the Customer Assist vector.

**Fourth Vector — Quit Vector**

This vector plays a final announcement and returns callers to the switch.

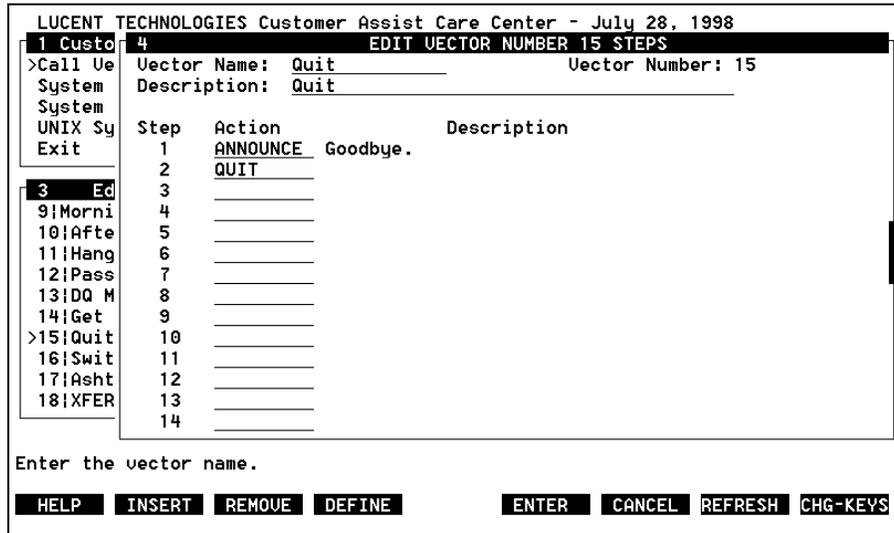


Figure 3-46. Finished QUIT Vector

### Step Descriptions

1. ANNOUNCE

Plays a standard announcement: "Thank you for calling Rock Coast Software. Goodbye."

2. QUIT

Quits the Customer Assist vector and routes the caller back to the DEFINITY vector.

## Sample Application #5: Bulletin Boards

---

### Business Situation

---

Bulletin boards are similar to auto attendants but differ by offering information “trees” rather than routing callers to specific locations.

In this example, Rock Coast Software has created an automated information line to help callers answer questions about company products, upgrade issues, addresses and telephone numbers, and employment opportunities. Rock Coast Software wants callers to be able to access this information 24 hours a day, 7 days a week. Rock Coast Software will be able to accomplish this goal with Customer Assist using bulletin boards.

Bulletin boards are created in Customer Assist using a unique combination of MENU actions, SWITCH actions, announcements, and dynamic announcements.

Similar to the auto attendant in sample application #4, this bulletin board application allows touch-tones and speech recognition.

#### NOTE:

Automatic Speech Recognition (ASR) for WholeWord is required on the CONVERSANT to use speech recognition. Likewise, the optional Speech Recognition package that works with Customer Assist V7.0 is also required to use speech recognition.

The lessons learned in earlier sample applications are background for this sample application.

### Callflow Diagrams

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The following 12 diagrams illustrate the callflow for this sample application.

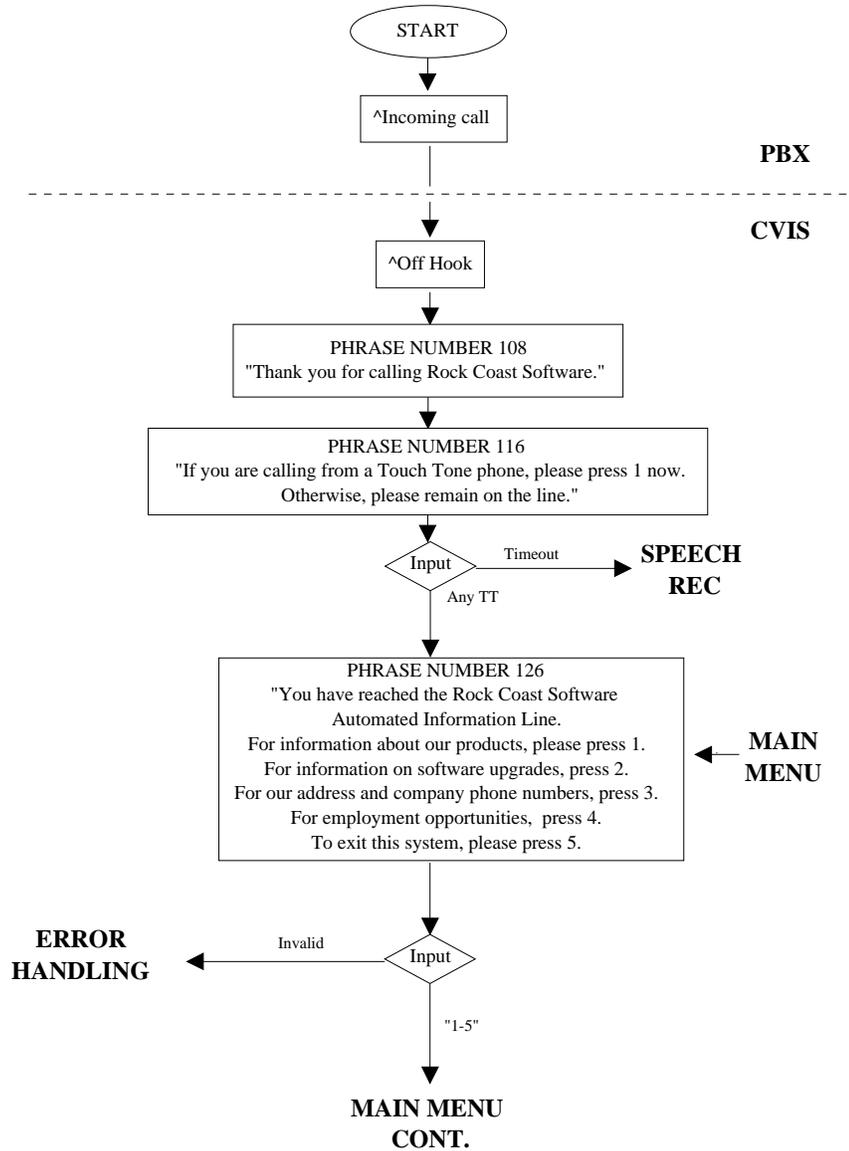


Figure 3-47. Bulletin Board Callflow 1

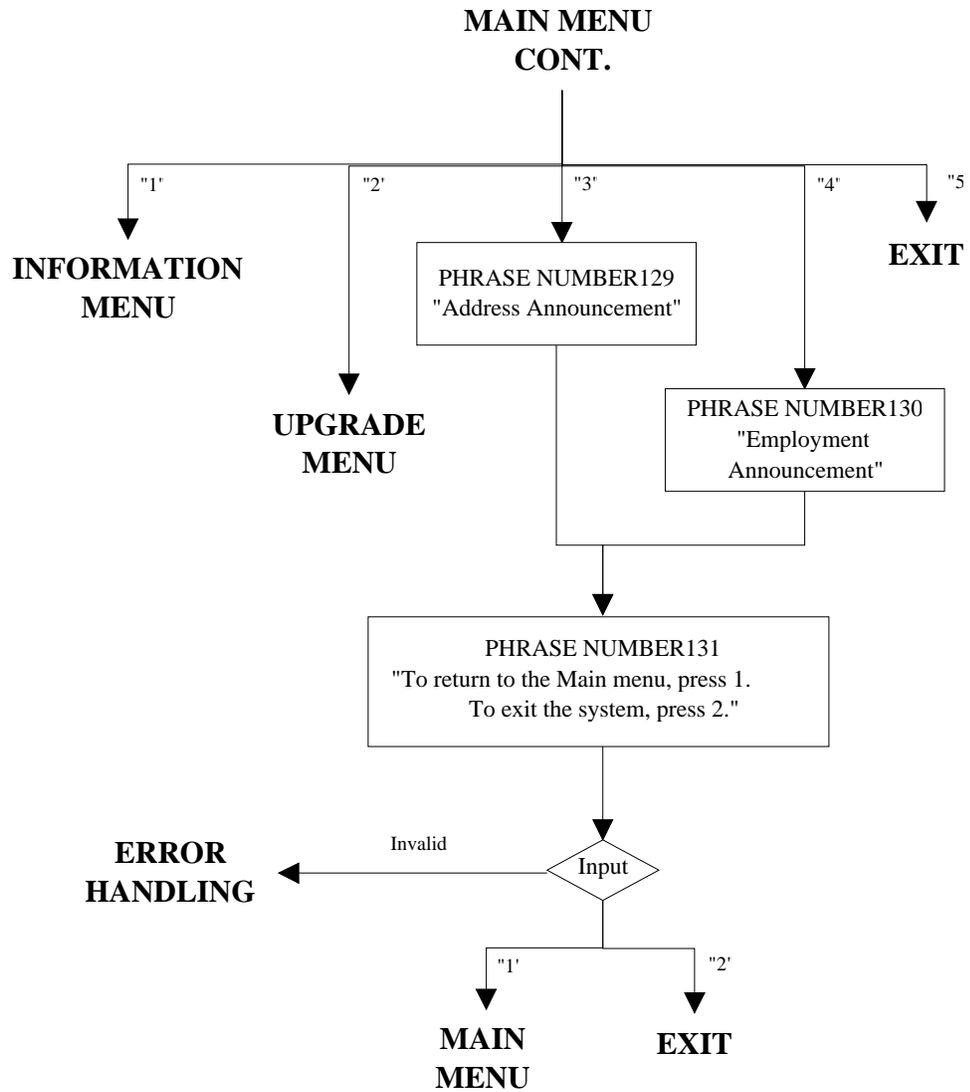


Figure 3-48. Bulletin Board Callflow 2

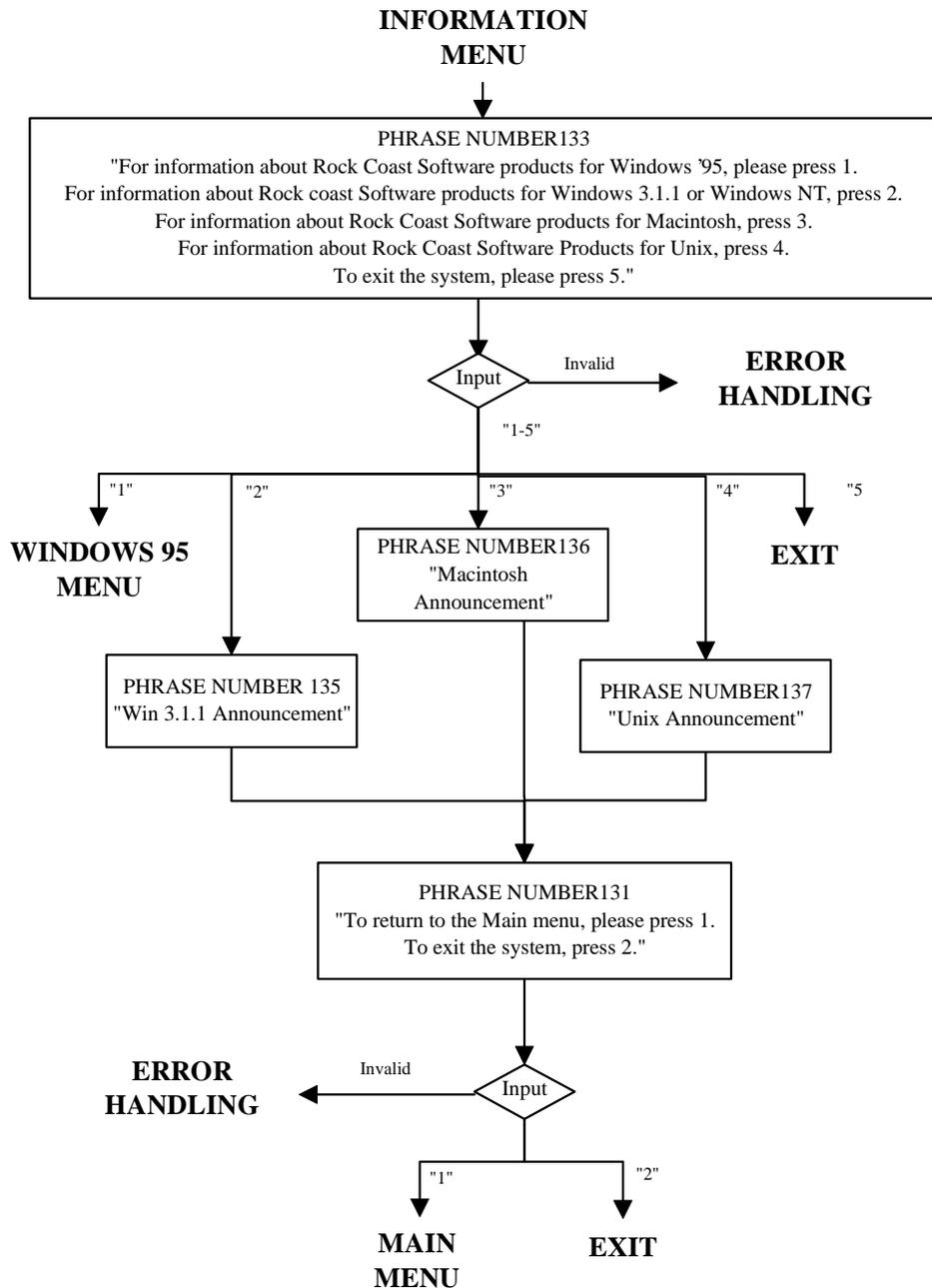


Figure 3-49. Bulletin Board Callflow 3

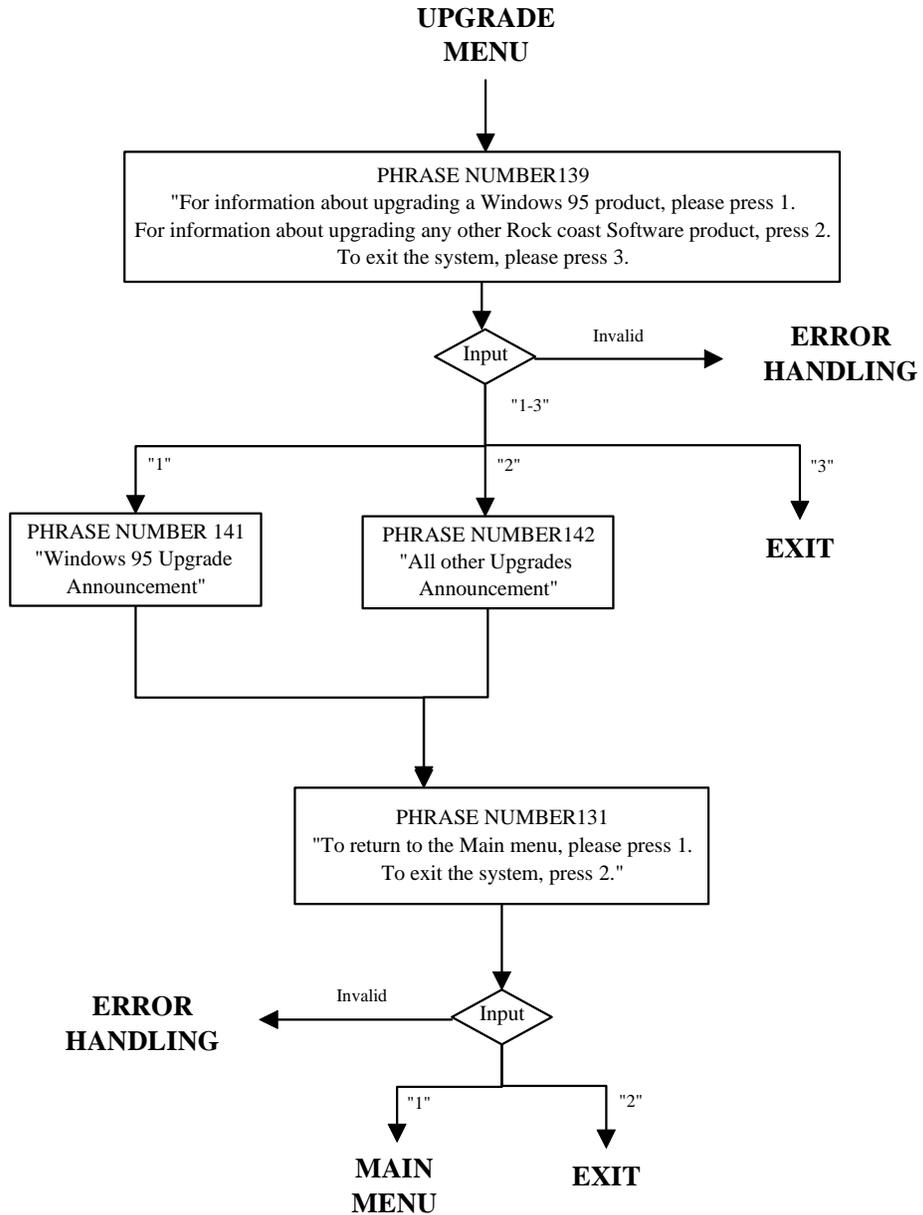


Figure 3-50. Bulletin Board Callflow 4

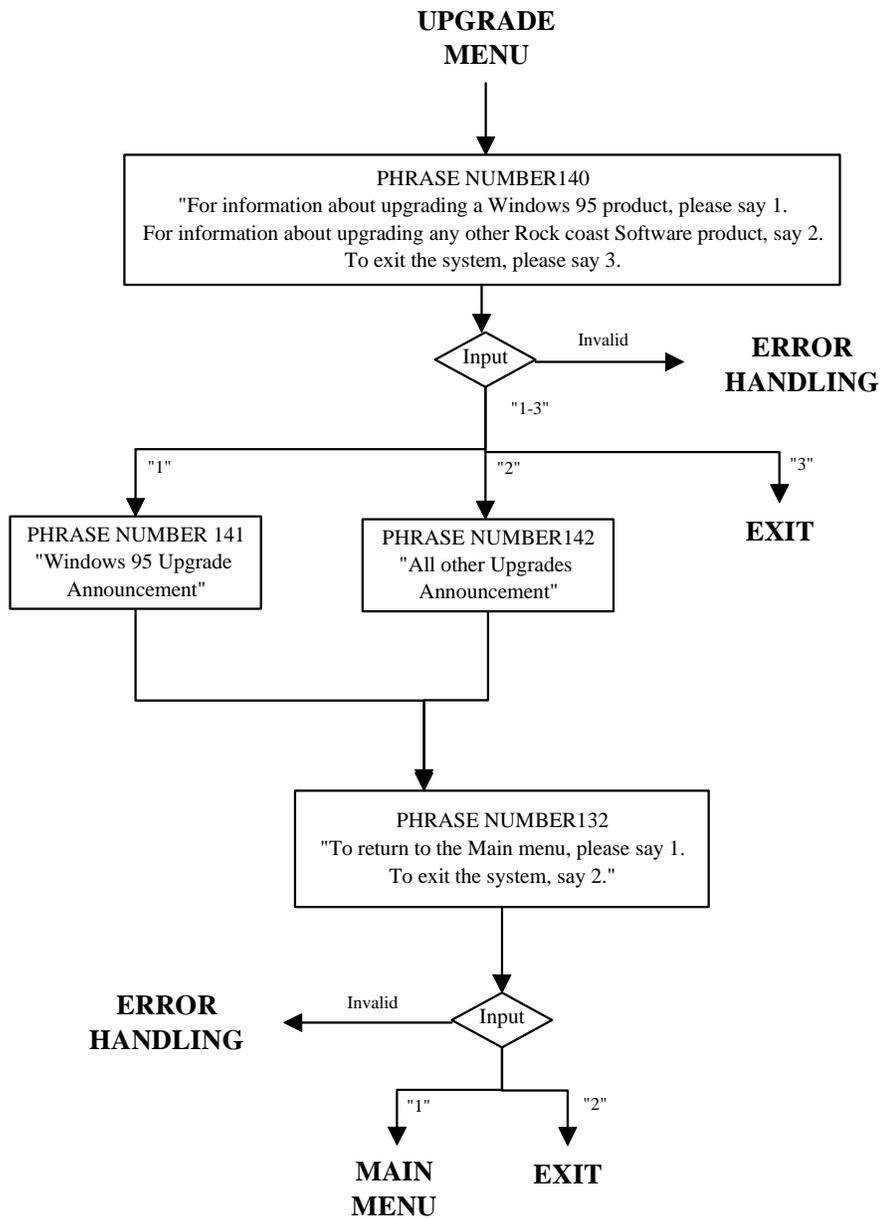
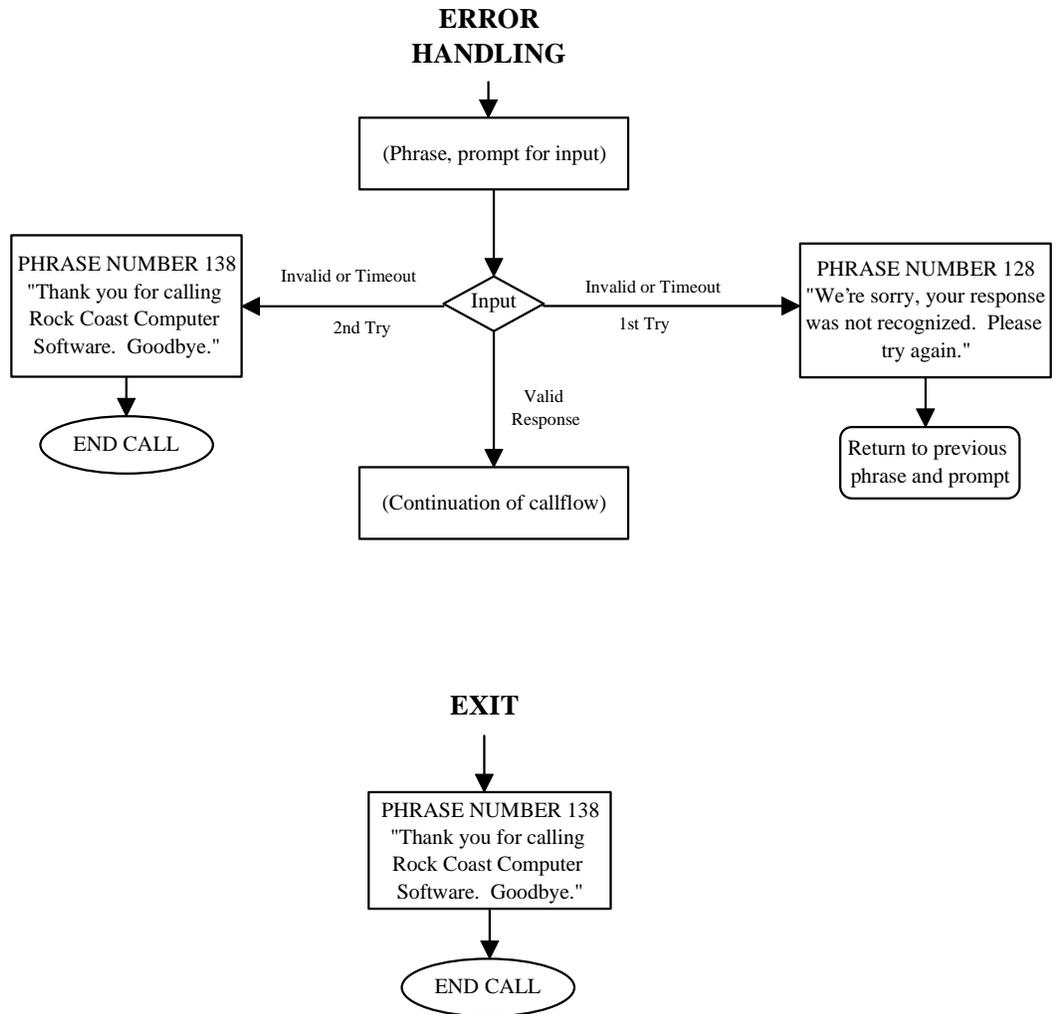
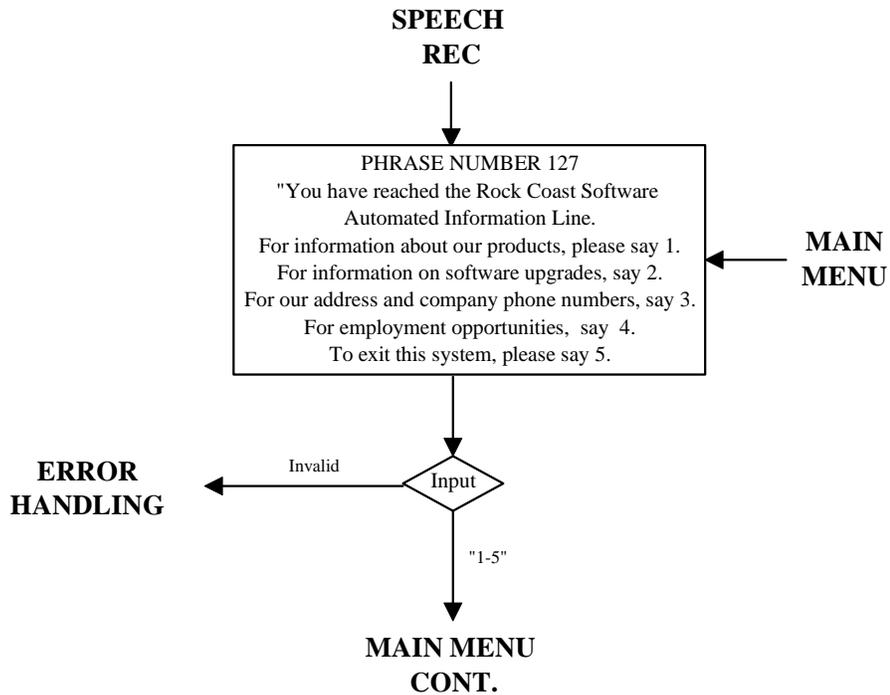


Figure 3-51. Bulletin Board Callflow 5



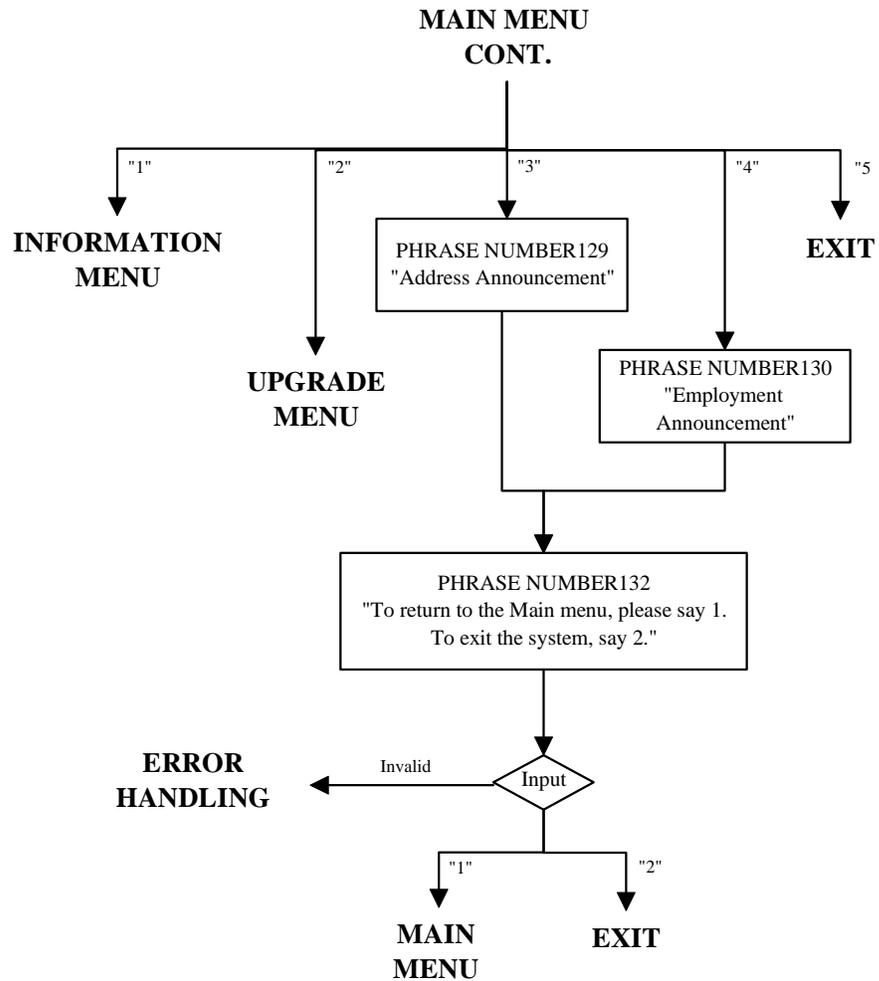
---

Figure 3-52. Bulletin Board Callflow 6



---

Figure 3-53. Bulletin Board Callflow 7



---

Figure 3-54. Bulletin Board Callflow 8

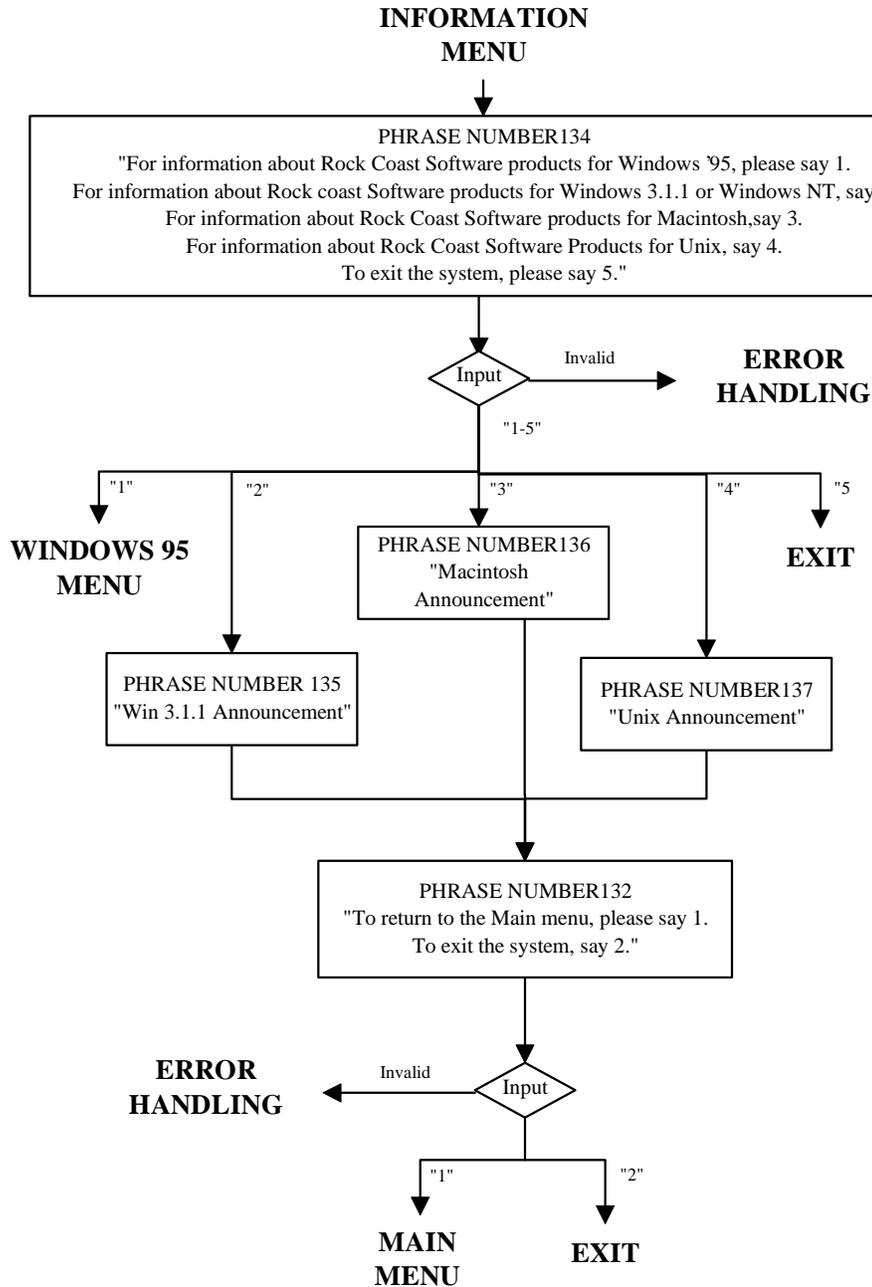


Figure 3-55. Bulletin Board Callflow 9

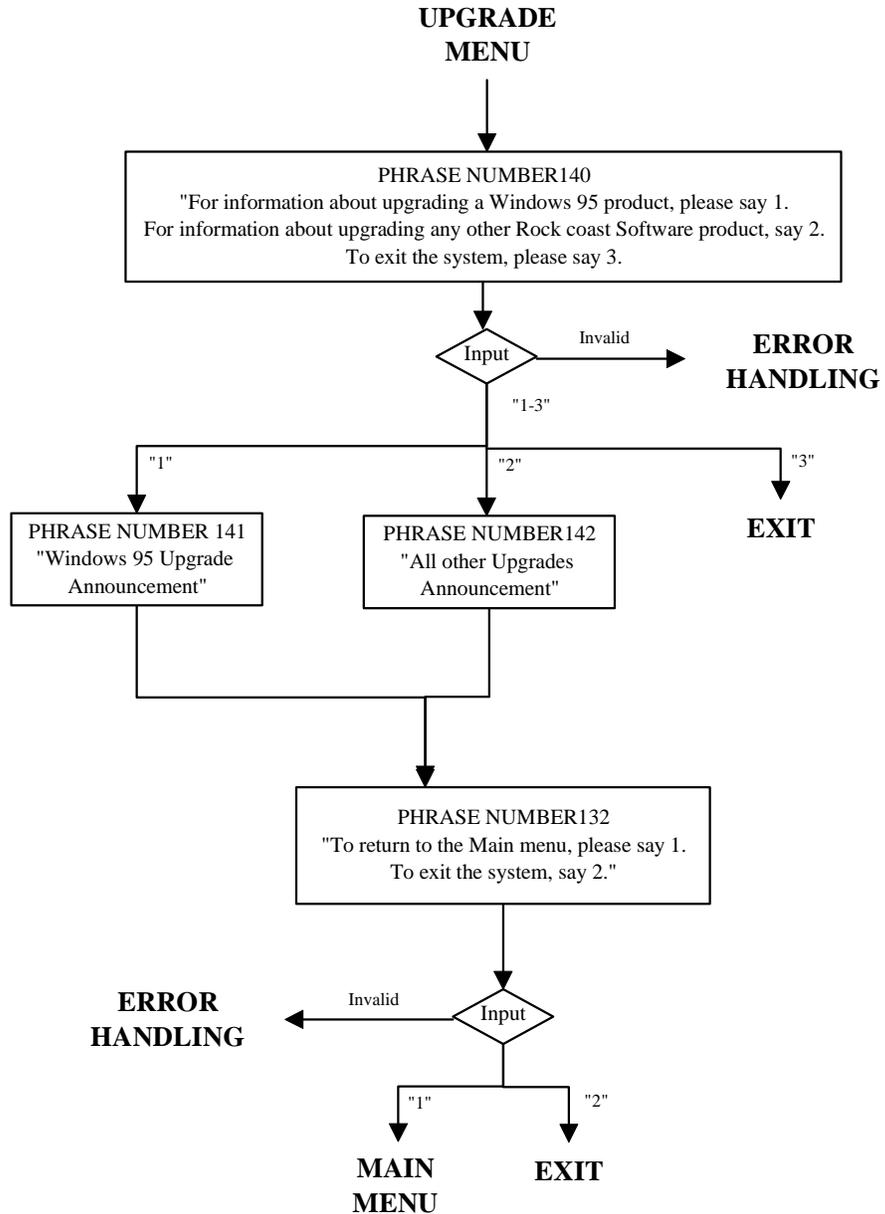
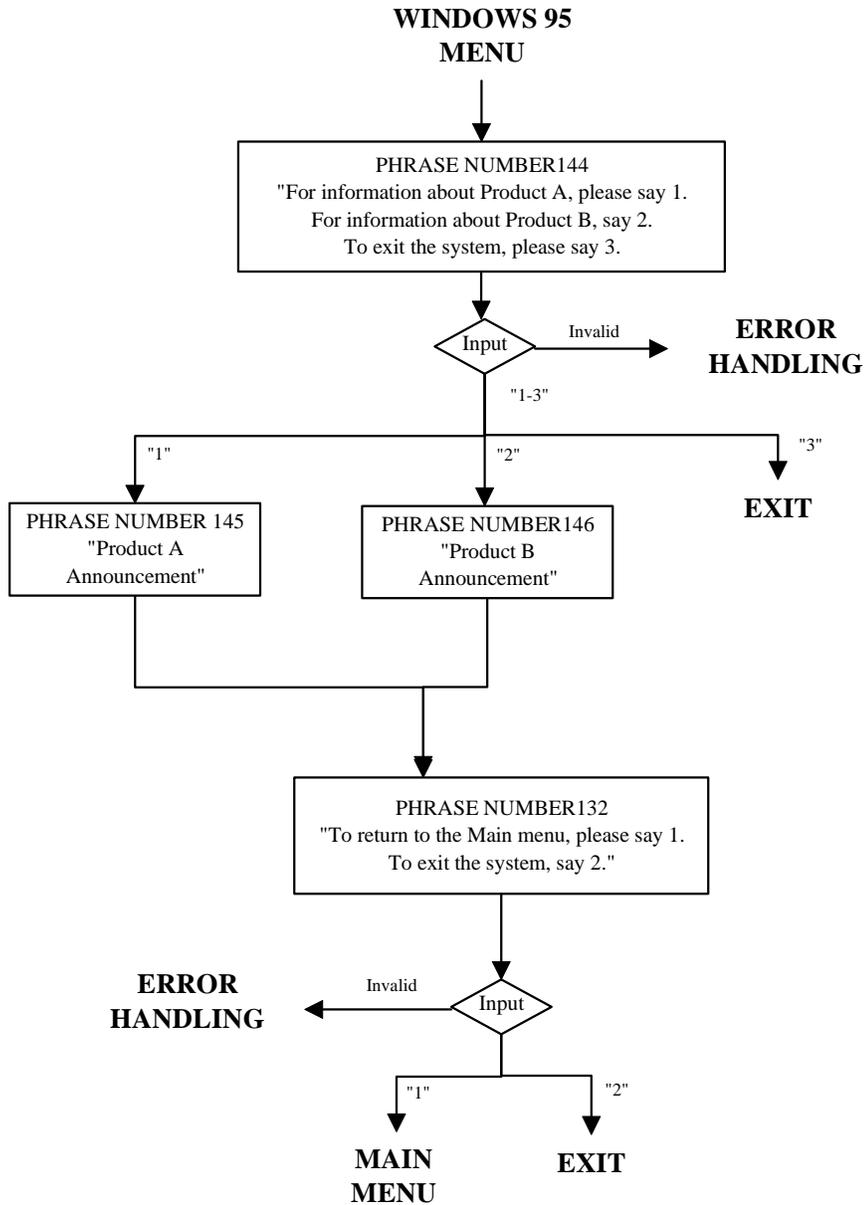
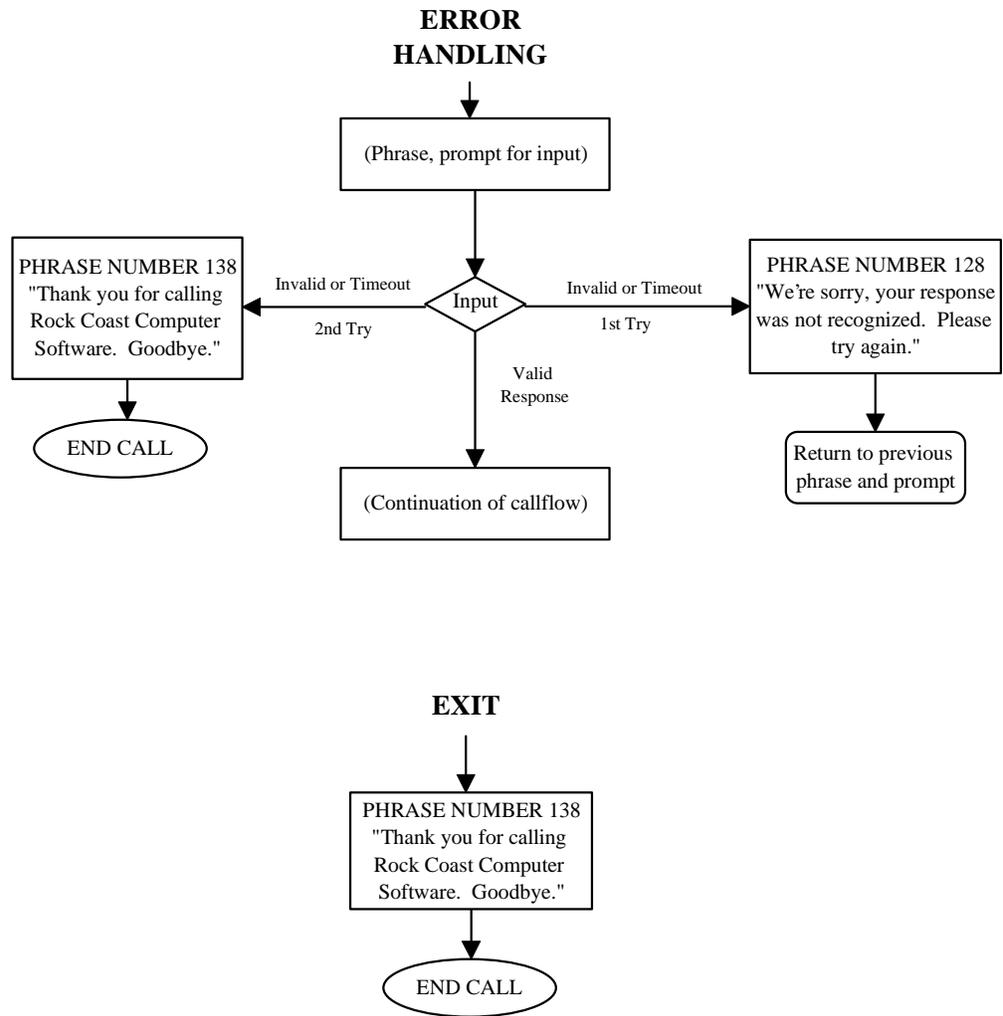


Figure 3-56. Bulletin Board Callflow 10



---

Figure 3-57. Bulletin Board Callflow 11



---

Figure 3-58. Bulletin Board Callflow 12

## Customer Assist Vectors

---

The bulletin board for Rock Coast Software has 12 vectors that implement the callflows for this sample application.

- 38:RC-BB-Main Vec (see “First Vector — RC-BB-Main Vec” on page 3-76)
- 39:RC-BB-TT Menu (see “Second Vector — RC-BB-TT Menu” on page 3-79)
- 40:RC-BB-SCR Menu (see “Third Vector — RC-BB-SR Main” on page 3-82)
- 41:RC-BB-InfoMenu (see “Third Vector — RC-BB-SR Main” on page 3-82)
- 42:RC-BB-UpgradTT (see “Fifth Vector — RC-BB-UpgradTT” on page 3-88)
- 43:RC-BB-Return? (see “Sixth Vector — RC-BB-Return?” on page 3-91)
- 44:RC-BB-SR Info (see “Seventh Vector — RC-BB-SR Info” on page 3-93)
- 45:RC-BB-SR Upgra (see “Eighth Vector — RC-BB-SR Upgr” on page 3-96)
- 46:RC-BB-SR Retur (see “Ninth Vector — RC-BB-SR Retur” on page 3-99)
- 47:RC-BB-Win95Men (see “Eighth Vector — RC-BB-SR Upgr” on page 3-96)
- 48:RC-BB-SR Win95 (not shown on the Edit Vector screen, see “Eleventh Vector — RC-BB-SR Win95” on page 3-106)
- 32:Quit (not shown on the Edit Vector screen, see “Twelfth Vector — Quit” on page 3-110)

For each vector, the sample application first shows the steps in the finished vector and then describes each step.

### First Vector — RC-BB-Main Vec

This vector greets incoming callers, prompts them to specify whether they are using a touch-tone telephone, and then routes the calls to either a touch-tone or speech-recognition vector (second or third vector, respectively).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 136 STEPS
>Call Ue Vector Name: RC-BB-Main Vec Vector Number: 136
System Description: Rock Coast Bulletin
System
UNIX Sy Step Action Description
Exit 1 ANNOUNCE Rock Coast - Main Greeting
2 ANNOUNCE Using Touch Tone?
3 Ed 3 GET_DIGT get 1 digits and load into %ci_value
131!Que 4 GOTO Vector 39 if %num_dig_got = 1
132!Rou 5 GOTO Vector 40 unconditionally
133!Que 6 QUIT
134!RC- 7
135!Rou 8
>136!RC- 9
137!Dyn 10
138!EWT 11
139!Que 12
140!Rou 13
14
Enter the vector name.
HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS

```

Figure 3-59. Finished RC-BB-Main Vec Vector

### Step Descriptions

1. ANNOUNCE

Recites the opening announcement: "Thank you for calling Rock Coast Software."

2. ANNOUNCE

Recites an announcement that prompts the caller to identify whether they are using a touch-tone telephone. Callers may be calling from a rotary telephone, or they may wish to use speech recognition to navigate the bulletin board.

3. GET\_DIGT

Collects digital input from the caller and places the value into the variable *%ci\_value*. This step also counts the total number of digits heard from the caller and places that value into the variable *%num\_dig\_got*. If *%num\_dig\_got* is equal to or greater than 1, then the caller has a touch-tone telephone.

4. GOTO

Routes callers who identified themselves as having a touch-tone telephone to the touch-tone vector. See "Second Vector — RC-BB-TT Menu" on page 3-79.



**NOTE:**

Because any touch-tone entry signifies that the customer is using a touch-tone telephone, this step looks at the value of *%num\_dig\_got*.

5. GOTO

If Customer Assist does not “hear” touch-tones (that is, if *%num\_dig\_got* = 0), it assumes the caller has a rotary telephone or is requesting the use of speech recognition. This step then routes the caller to the Speech Recognition vector unconditionally. See “Third Vector — RC-BB-SR Main” on page 3-82.

6. QUIT

Quits the vector and returns control of the call to the DEFINITY vector.

## Second Vector — RC-BB-TT Menu

This vector provides a bulletin board menu for callers using touch-tone telephones. It plays two dynamic announcements and then routes callers to other vectors depending on their selection.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 119 STEPS
>Call Use Vector Name: RC-BB-TT Menu Vector Number: 119
System Description: Rock Coast Bulletin
System
UNIX Sy Step Action Description
Exit 1 MENU RC-BB-Main Menu
2 DYN_ANNOU phrase in %data1
3 Ed 3 GOTO Vector 43 unconditionally
>119|RC- 4 QUIT
120|Gsp 5
121|RC- 6
122|RC- 7
123|RC- 8
124|RC- 9
125|RC- 10
126|Dyn 11
127|Dyn 12
128|EWT 13
14

Enter the vector name.

HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
    
```

Figure 3-60. Finished RC-BB-TT Menu Vector

Assumptions: Agent Queue Splits are 1 (Customer Service) and 3 (Technical Support). The CONVERSANT split is 2.

1. wait-time 2 secs hearing ringback

### Step Descriptions

1. MENU

Recites a phrase (number 126, as illustrated in the callflow) describing five menu choices. Callers select one of the choices with their touch-tone telephones.

Customer Assist collects the input from the caller and places the collected digits into the variable *%ci\_value*.

On the MENU action form (Figure 3-61), the *Min* and *Max* values of 1 indicate that Customer Assist is looking for no fewer than or no more than one collected digit from each caller.

Customer Assist places the output value into the variable *%data1*.

After the variable *%data1* is populated, a GOTO vector step moves the caller to the next step or to another vector in the callflow.

Specifically:

- Choices 1, 2, and 5 route callers to vectors 96, 97, and 15, respectively. See “Third Vector — RC-BB-SR Main” on page 3-82, “Fifth Vector — RC-BB-UpgradTT” on page 3-88, and “Twelfth Vector — Quit” on page 3-110.
- Choices 3 and 4 select dynamic announcements. The MENU action places a three digit output value (129 or 130, respectively) in the variable *%data1*. The DYN\_ANNOUN action in step 2 then recites a dynamic announcement using the speech phrase specified by the value in *%data1*.

There are two screens for the MENU action. You access the second screen by pressing NEXTPAGE (F5). You can return to the first page by pressing PREVPAGE (F4).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 31, 1998
5 MENU Action Step Number 1 for vector 119
NORMAL INPUT :
Talkfile: 6104      US English      Allow Interrupt: Yes
Prompt Phrase:
Number of digits to collect : Min 1      Max 1
Time to wait for input (sec): 1st digit 6      Next digit(s) 4
Place in Variables :
Input %ci_value      Output %data1
Valid Input      Output Value      GOTO Vector      Vector Name
1      _____      96      Future-Testing
2      _____      97      Future-Testing
3      _____      129      CONT
4      _____      130      CONT
5      _____      15      Quit
_____
_____
_____
_____
Confirm Input No
Enter the talkfile.
HELP CHOICES CLOSE PREVPAGE NEXTPAGE CANCEL REFRESH ADD-PHR
    
```

Figure 3-61. MENU Action Form: Normal Input

The second page of this form includes contingencies for callers who make mistakes while entering information. Use this page to speak a phrase announcement that informs callers of any errors during data entry. For example, Rock Coast Software uses phrase number 128, as illustrated in the callflows: “We’re sorry, your response was not recognized. Please try again.” The following fields contain the number of tries that a caller has to enter correct information, the output value that will be populated in *%data1*, and the GOTO vector step that routes the caller to the next step in the callflow.

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 31, 1998
5 MENU Action Step Number 1 for vector 119

SPECIAL CASES :
Caller's input not on list :
  Speak Phrase : _____
  Max. number of tries : 2
  Output Value : 999          GOTO Vector : 15 Quit

Caller did not enter the 1st digit within the time allowed :
  Speak Phrase : _____
  Max. number of tries : 2
  Output Value : 999          GOTO Vector : 15 Quit

Caller did not enter the minimum number of digits required :
  Speak Phrase : _____
  Max. number of tries : 2
  Output Value : 999          GOTO Vector : 15 Quit

Caller has no more tries to enter valid input :
  Speak Phrase : _____

Enter the phrase tag for input not on list above.

HELP CHOICES CLOSE PREV PAGE NEXT PAGE CANCEL REFRESH ADD-PHR
```

Figure 3-62. MENU Action Form: Special Cases

2. DYN\_ANNOU

If callers select choice 3 or 4, the DYN\_ANNOU action recites a dynamic announcement: a speech phrase identified by the value currently in the variable %data1. This phrase is either the "Address Announcement" (phrase number 129) or the "Employee Announcement" (phrase number 130).

3. GOTO

Routes the caller to vector 43. See "Sixth Vector — RC-BB-Return?" on page 3-91.

4. QUIT

Quits the vector and returns control of the call to the DEFINITY vector.

### Third Vector — RC-BB-SR Main

This vector provides a bulletin board menu for callers using speech recognition, plays two dynamic announcements, and routes callers to other vectors based on their choices.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custd 4 EDIT VECTOR NUMBER 144 STEPS
>Call Use Vector Name: RC-BB-SR-Main Vector Number: 144
System Description: Rock Coast Bulletin Board SpeechRec Main
System
UNIX Sy Step Action Description
Exit 1 SET %num_tried = %num_tried = 0
2 GET_SPCH get digits and load into %ci_value
3 Ed 3 GOTO Step 8 if %num_tried = 1
135!Rou 4 SET %num_tried = %num_tried + 1
136!RC- 5 GOTO Vector 32 if %num_tried = 2
137!Dyn 6 ANNOUNCE That was an invalid entry. Please try again
138!EWT 7 GOTO Step 2 unconditionally
139!Que 8 SET %ci_value = %ci_value + 144
140!Rou 9 SWITCH Routes callers to appropriate place
141!RC- 10 DYN_ANNOU phrase in %ci_value
142!RC- 11 GOTO Vector 46 unconditionally
143!RC- 12 QUIT
>144!RC- 13
14
HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
    
```

Figure 3-63. Finished RC-BB-SR Main Vector

#### Step Descriptions

1. SET

Sets a counter variable, *%num\_tried*, to 0. The vector uses this variable to count the number of times that a caller tries to speak the number of a valid menu choice at the GET\_SPCH action. A caller is allowed two tries. After two unsuccessful tries, the GOTO action in step 5 routes the caller to the quit vector.

2. GET\_SPCH

This action recites a phrase (number 127, as illustrated in the callflow) describing five menu choices and then uses the speech-recognition package to listen to callers' voices as they make a choice.

The action:

- Accepts as valid input 1 digit with a value from 1 through 5 and places the digit in the variable *%ci\_value*
- Places the number of digits collected (either 0 or 1) into the variable *%num\_dig\_got*

There will be no confirmation of the choices that the caller made using speech recognition.

3. GOTO

Allows a caller who speaks a valid number to continue in the vector.

If the value of *%num\_dig\_got = 1*, the GOTO action routes the call to step 8 for routing based on the caller's input.

4. SET

If the caller did not speak a valid number (that is, if *%num\_dig\_got = 0*), this action increases the counter variable, *%num\_tried*, by 1.

5. GOTO

Routes a caller who runs out of tries to the quit vector.

Callers have two tries. The GOTO action determines whether the value of the counter variable, *%num\_tried*, equals 2.

6. ANNOUNCE

If the caller did not speak a valid number, this step plays a standard announcement: "We're sorry, your response was not recognized. Please try again."

7. GOTO

Routes callers who have not run out of tries back to the GET\_SPCH action in step 2.

8. SET

Converts the caller's choice into a three digit number that is used when routing the caller or playing a dynamic announcement. The SET action adds 126 to the value in the variable *%ci\_value*.

9. SWITCH

Evaluates the value of the variable *%ci\_value* and routes the caller to a vector associated with the value.

- For the value 127 (GET\_SPCH choice 1), the action routes the caller to vector 44. See "Seventh Vector — RC-BB-SR Info" on page 3-93.
- For the value 128 (GET\_SPCH choice 2), the action routes the caller to vector 45. See "Eighth Vector — RC-BB-SR Upgr" on page 3-96.
- For the value 131 (GET\_SPCH choice 5), the action routes the caller to vector 32. See "Twelfth Vector — Quit" on page 3-110.

For the values 129 and 130 (GET\_SPCH choices 3 and 4), the SWITCH action does not contain routing information. Processing continues in the current vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 144 STEPS
>Call Use 5 SWITCH Action Step Number 9 for vector 144
System De
System St SWITCH evaluates variables and routes matches to vectors
UNIX Sy St Comment: Routes callers to appropriate place
Exit St Variable: %ci_value Operator: =

3 Ed
135!Rou VALUE VECTOR NUM VECTOR NAME
136!RC- 147 15 Quit
137!Dyn
138!EWT
139!Que
140!Rou
141!RC-
142!RC-
143!RC-
>144!RC-

Please enter your comments.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 3-64. SWITCH Action Form

10. DYN\_ANNOU

Speaks a dynamic announcement: a speech phrase identified by the value currently in the variable *%ci\_value*. This phrase is either the "Address Announcement" (phrase number 129) or the "Employee Announcement" (phrase number 130). These are GET\_SPCH choices 3 and 4, respectively.

11. GOTO

Routes the caller to vector 46. See "Ninth Vector — RC-BB-SR Retur" on page 3-99.

12. QUIT

Quits the Customer Assist vector and returns the call to the DEFINITY vector.

### Fourth Vector — RC-BB-InfoMenu

This vector provides the Information Menu for callers using touch-tone telephones (Figure 3-65).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custor 4 EDIT VECTOR NUMBER 123 STEPS
>Call Use Vector Name: RC-BB-InfoMenu Vector Number: 123
System Description: Rock Coast Bulletin Board Info Main Menu
System
UNIX Sy Step Action Description
Exit 1 MENU Information Main Menu - TT
3 Ed 2 DYN_ANNOU phrase in %data1
119|RC- 3 GOTO Vector 43 unconditionally
120|Gsp 4 QUIT
121|RC- 5
122|RC- 6
>123|RC- 7
124|RC- 8
125|RC- 9
126|Dyn 10
127|Dyn 11
128|EWT 12
13
14

Enter the vector name.

HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
    
```

Figure 3-65. Finished RC-BB-InfoMenu Vector

### Step Descriptions

#### 1. MENU

Recites a phrase (number 133 in the callflow) describing five menu choices. Callers select one of the choices with their touch-tone telephones.

Customer Assist collects the input from the caller and places the collected digits into the variable *%ci\_value*.

The *Min* and *Max* values of 1 indicate that Customer Assist is looking for no less than or no more than one collected digit from each caller.

Customer Assist places the output value into the variable *%data1*.

After the variable *%data1* is populated, a GOTO vector step moves the caller to the next step or to another vector in the callflow.

Specifically:

- Choices 1 and 5 route callers to vectors 121 and 113, respectively. See “Eighth Vector — RC-BB-SR Upgr” on page 3-96 and “Twelfth Vector — Quit” on page 3-110.
- Choices 2, 3, and 4 select dynamic announcements. The MENU action places a three digit output value (135, 136, or 137, respectively) in the variable %data1. The DYN\_ANNOU action in step 2 then recites a dynamic announcement using the speech phrase specified by the value in %data1.

There are two screens for the MENU action. You access the second screen by pressing NEXTPAGE (F5). You can return to the first page by pressing PREVPAGE (F4).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 31, 1998
5 MENU Action Step Number 1 for vector 123
NORMAL INPUT :
Talkfile: 6104      US English      Allow Interrupt: Yes
Prompt Phrase:
Number of digits to collect : Min 1 Max 1
Time to wait for input (sec): 1st digit 6 Next digit(s) 4
Place in Variables :
Input %ci_value   Output %data1
Valid Input      Output Value   GOTO Vector   Vector Name
1                135            CONT          RC-BB-Win95Men
2                136            CONT
3                137            CONT
4                113            CONT          Queu Pos Temp1
5
Confirm Input No
    
```

Enter the talkfile.

HELP CHOICES CLOSE PREVPAGE NEXTPAGE CANCEL REFRESH ADD-PHR

Figure 3-66. MENU Action Form: Normal Input

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 31, 1998
5 MENU Action Step Number 1 for vector 123
SPECIAL CASES :
  Caller's input not on list :
    Speak Phrase : _____
    Max. number of tries : 3
    Output Value : _____ GOTO Vector : CONT
  Caller did not enter the 1st digit within the time allowed :
    Speak Phrase : _____
    Max. number of tries : 3
    Output Value : _____ GOTO Vector : CONT
  Caller did not enter the minimum number of digits required :
    Speak Phrase : _____
    Max. number of tries : 3
    Output Value : _____ GOTO Vector : CONT
  Caller has no more tries to enter valid input :
    Speak Phrase : _____
Enter the phrase tag for input not on list above.
HELP CHOICES CLOSE PREVPAGE NEXTPAGE CANCEL REFRESH ADD-PHR
```

Figure 3-67. MENU Action Form: Special Cases

2. DYN\_ANNOU

If callers select choice 2, 3, or 4, the DYN\_ANNOU action recites a dynamic announcement: a speech phrase identified by the value currently in the variable %data1. This phrase is the "Win 3.1.1 Announcement" (phrase number 135), the "Macintosh Announcement" (phrase number 136), or the "Unix Announcement" (phrase number 137).

3. GOTO

Routes the caller to vector 43. See "Sixth Vector — RC-BB-Return?" on page 3-91.

4. QUIT

Quits the vector and returns control of the call to the DEFINITY vector.

### Fifth Vector — RC-BB-UpgradTT

This vector provides the Upgrade Menu for callers using touch-tone telephones (Figure 3-68).

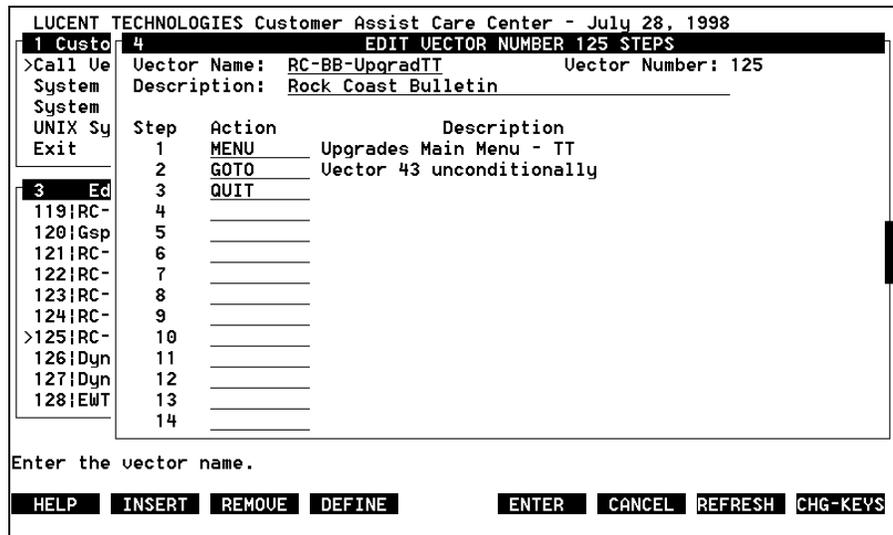


Figure 3-68. Finished RC-BB-UpgradTT Vector

#### Step Descriptions

##### 1. MENU

Recites a phrase (number 139 in the callflow) describing three menu choices. Callers select one of the choices with their touch-tone telephones.

Customer Assist collects the input from the caller and places the collected digits into the variable *%ci\_value*.

The *Min* and *Max* values of 1 indicate that Customer Assist is looking for no less than or no more than one collected digit from each caller.

Customer Assist places the output value into the variable *%data1*.

After the variable *%data1* is populated, a GOTO vector step moves the caller to the next step or to another vector in the callflow.

Specifically:

- Choices 1 and 2 select dynamic announcements. The MENU action places a three digit output value (141 or 142, respectively) in the variable %data1. The DYN\_ANNOU action in step 2 then recites a dynamic announcement using the speech phrase specified by the value in %data1.
- Choice 3 routes callers to vector 113. See “Twelfth Vector — Quit” on page 3-110.

There are two screens for the MENU action. You access the second screen by pressing NEXTPAGE (F5).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 31, 1998
5 MENU Action Step Number 1 for vector 125
NORMAL INPUT :
Talkfile: 6104 US English Allow Interrupt: Yes
Prompt Phrase: Upgrades Main Menu - TT 1013
Number of digits to collect : Min 1 Max 1
Time to wait for input (sec): 1st digit 6 Next digit(s) 4
Place in Variables :
Input %ci_value Output %data1
Valid Input Output Value GOTO Vector Vector Name
1 141 CONT
2 142 CONT
3 32 Future-Testing
Confirm Input No
Enter the talkfile.
HELP CHOICES CLOSE PREV PAGE NEXTPAGE CANCEL REFRESH ADD-PHR
    
```

Figure 3-69. MENU Action Form: Normal Input

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 31, 1998
5 MENU Action Step Number 1 for vector 125
SPECIAL CASES :
  Caller's input not on list :
    Speak Phrase : _____
    Max. number of tries : 3
    Output Value : _____ GOTO Vector : CONT
  Caller did not enter the 1st digit within the time allowed :
    Speak Phrase : _____
    Max. number of tries : 3
    Output Value : _____ GOTO Vector : CONT
  Caller did not enter the minimum number of digits required :
    Speak Phrase : _____
    Max. number of tries : 3
    Output Value : _____ GOTO Vector : CONT
  Caller has no more tries to enter valid input :
    Speak Phrase : _____

Enter the phrase tag for input not on list above.
HELP CHOICES CLOSE PREVPAGE NEXTPAGE CANCEL REFRESH ADD-PHR
```

Figure 3-70. MENU Action Form: Special Cases

2. DYN\_ANNOU

If callers select choice 1 or 2, the DYN\_ANNOU action recites a dynamic announcement: a speech phrase identified by the value currently in the variable *%data1*. This phrase is either the "Windows 95 Upgrade Announcement" (phrase number 141) or the "All other Upgrades Announcement" (phrase number 142).

3. GOTO

Routes the caller to vector 43. See "Sixth Vector — RC-BB-Return?" on page 3-91.

4. QUIT

Quits the vector and returns control of the call to the DEFINITY vector.

### Sixth Vector — RC-BB-Return?

The bulletin board routes callers to this vector whenever it plays a dynamic announcement. After callers hear the information they requested, they are routed to this vector, which enables them to return to the main menu or exit the system (Figure 3-71).

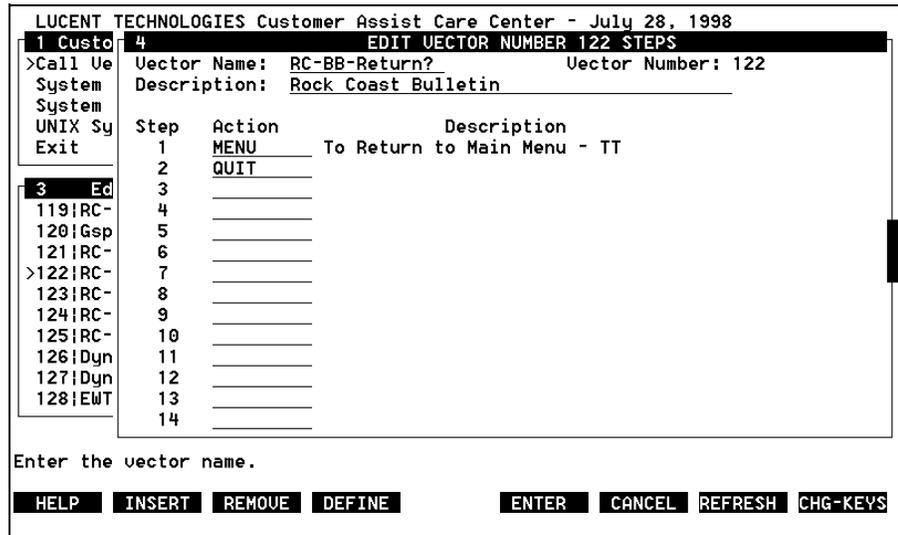


Figure 3-71. Finished RC-BB-Return? Vector

### Step Descriptions

#### 1. MENU

Recites a phrase (number 131 in the callflow) describing two menu choices. Callers select one of the choices with their touch-tone telephones.

Customer Assist collects the input from the caller and places the collected digits into the variable *%ci\_value*.

The *Min* and *Max* values of 1 indicate that Customer Assist is looking for no less than or no more than one collected digit from each caller.

Customer Assist places the output value into the variable *%data1*.

After the variable *%data1* is populated, a GOTO vector step moves the caller to the next step or to another vector in the callflow.

Choices 1 and 2 route callers to vectors 95 and 113, respectively. See “Second Vector — RC-BB-TT Menu” on page 3-79 and “Twelfth Vector — Quit” on page 3-110.

There are two screens for the MENU action. You access the second screen by pressing NEXTPAGE (F5).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 31, 1998
5 MENU Action Step Number 1 for vector 122
NORMAL INPUT :
Talkfile: 6104      US English      Allow Interrupt: Yes
Prompt Phrase: _____
Number of digits to collect : Min 1 Max 1
Time to wait for input (sec): 1st digit 6 Next digit(s) 4
Place in Variables :
Input %ci_value   Output %data1
Valid Input      Output Value  GOTO Vector  Vector Name
1                _____  95          Future-Testing
2                _____  113         Queu Pos Templ
_____
_____
_____
_____
_____
_____
Confirm Input No
Enter the talkfile.
HELP CHOICES CLOSE PREVPAGE NEXTPAGE CANCEL REFRESH ADD-PHR
    
```

Figure 3-72. MENU Action Form: Normal Input

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 31, 1998
5 MENU Action Step Number 1 for vector 122
SPECIAL CASES :
Caller's input not on list :
Speak Phrase : _____
Max. number of tries : 3
Output Value : _____ GOTO Vector : CONT

Caller did not enter the 1st digit within the time allowed :
Speak Phrase : _____
Max. number of tries : 3
Output Value : _____ GOTO Vector : CONT

Caller did not enter the minimum number of digits required :
Speak Phrase : _____
Max. number of tries : 3
Output Value : _____ GOTO Vector : CONT

Caller has no more tries to enter valid input :
Speak Phrase : _____
Enter the phrase tag for input not on list above.
HELP CHOICES CLOSE PREVPAGE NEXTPAGE CANCEL REFRESH ADD-PHR
    
```

Figure 3-73. MENU Action Form: Special Cases

2. QUIT

Quits the vector and returns control of the call to the DEFINITY vector.

Seventh Vector — RC-BB-SR Info

This vector provides the Information Menu for callers using speech recognition (Figure 3-74).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 153 STEPS
>Call Use Vector Name: RC-BB-SR-Info Vector Number: 153
System Description: Rock Coast Bulletin Board SpeechRec Info
System
UNIX Sy Step Action Description
Exit 1 SET %num_tried = %num_tried = 0
3 Ed 2 GET_SPCH get digits and load into %ci_value
148|RC- 3 GOTO Step 8 if %num_dig_got = 1
149|RC- 4 SET %num_tried = %num_tried + 1
150|RC- 5 GOTO Vector 32 if %num_tried = 2
151|C4 6 ANNOUNCE That was an invalid entry. Please try again
152|ADA 7 GOTO Step 2 unconditionally
>153|RC- 8 SET %ci_value = %ci_value + 133
200|Ash 9 SWITCH Routes callers to appropriate place
201|UK 10 DYN_ANNOU phrase in %ci_value
202|uk 11 GOTO Vector 145 unconditionally
203|uk 12 QUIT
13
14

Enter the vector name.
HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
    
```

Figure 3-74. Finished RC-BB-SR Info Vector

Step Descriptions

1. SET

Sets a counter variable, *%num\_tried*, to 0. The vector uses this variable to count the number of times that a caller tries to speak the number of a valid menu choice at the GET\_SPCH action. A caller is allowed two tries. After two unsuccessful tries, the GOTO action in step 5 routes the caller to the quit vector.

2. GET\_SPCH

This action recites a phrase (number 134, as illustrated in the callflow) describing five menu choices and then uses the speech-recognition package to listen to callers' voices as they make a choice.

The action:

- Accepts as valid input 1 digit with a value from 1 through 5 and places the digit in the variable *%ci\_value*

- Places the number of digits collected (either 0 or 1) into the variable `%num_dig_got`

There will be no confirmation of the choices that the caller made using speech recognition.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
5 GET_SPCH ACTION, STEP 2 for vector 153
Get Speech Step gathers Spoken Digit(s) from caller
Comment: Speech Recognition Prompt
Consolidate responses into variable: %ci_value
Place number of digits collected into: %num_dig_got

Talkfile: 6104 US English

Phrase Tag                               Number  Valid Input
Upgrades Main Menu - SR                   1015   1 digit:1-3
_____
_____
_____

Confirmation: None Time limit per response: 6

Please enter your comments.

HELP CHOICES CLOSE ENTER CANCEL REFRESH ADD-PHR
    
```

Figure 3-75. GET\_SPCH Action Form

3. GOTO

Allows a caller who speaks a valid number to continue in the vector. If the value of `%num_dig_got = 1`, the GOTO action routes the call to step 8 for routing based on the caller's input.

4. SET

If the caller did not speak a valid number (that is, if `%num_dig_got = 0`), this action increases the counter variable, `%num_tried`, by 1.

5. GOTO

Routes a caller who runs out of tries to the `quit` vector. Callers have two tries. The GOTO action determines whether the value of the counter variable, `%num_tried`, equals 2.

6. ANNOUNCE

If the caller did not speak a valid number, this step plays a standard announcement: "We're sorry, your response was not recognized. Please try again."

7. GOTO

Routes callers who have not run out of tries back to the GET\_SPCH action in step 2.

8. SET

Converts the caller's choice into a three digit number that is used when routing the caller or playing a dynamic announcement. The SET action adds 133 to the value in the variable *%ci\_value*.

9. SWITCH

Evaluates the value of the variable *%ci\_value* and routes the caller to a vector associated with the value.

- For the value 134 (choice 1), the action routes the caller to vector 48. See "Eleventh Vector — RC-BB-SR Win95" on page 3-106.
- For the value 138 (choice 5), the action routes the caller to vector 32. See "Twelfth Vector — Quit" on page 3-110.

For the values 135, 136, and 137 (choices 2, 3, and 4), the SWITCH action does not contain routing information. Processing continues in the vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 153 STEPS
>Call Use 5 SWITCH Action Step Number 9 for vector 153
System De
System St SWITCH evaluates variables and routes matches to vectors
UNIX Sy St Comment: Routes callers to appropriate place
Exit St Variable: %ci_value Operator: =

3 Ed
148|RC- 1 136 RC-BB-Main Vec
149|RC- 2 15 Quit
150|RC-
151|C4
152|ADA
>153|RC-
200|Ash
201|UK
202|uk
203|uk

Please enter your comments.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 3-76. SWITCH Action Form

10. DYN\_ANNOU

If callers speak 2, 3, or 4, the DYN\_ANNOU action speaks a dynamic announcement: a speech phrase identified by the value currently in the variable %data1. This phrase is the "Win 3.1.1 Announcement" (phrase number 135), the "Macintosh Announcement" (phrase number 136), or the "Unix Announcement" (phrase number 137).

11. GOTO

Routes the caller to vector 46. See "Ninth Vector — RC-BB-SR Retur" on page 3-99.

12. QUIT

Quits the Customer Assist vector and returns the call to the DEFINITY vector.

**Eighth Vector — RC-BB-SR Upgr**

This vector provides the Upgrade Menu for callers using speech recognition. (Figure 3-77).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 154 STEPS
>Call Use Vector Name: RC-BB-SR-Upgr Vector Number: 154
System Description: Rock Coast Bulletin Board SpeechRec Upgr
System
UNIX Sy
Exit
Step Action Description
1 SET %num_tried = %num_tried = 0
2 GET_SPCH get digits and load into %ci_value
3 GOTO Step 8 if %num_dig_got = 1
4 SET %num_tried = %num_tried + 1
5 GOTO Vector 32 if %num_tried = 2
6 ANNOUNCE That was an invalid entry. Please try again
7 GOTO Step 2 unconditionally
8 SET %ci_value = %ci_value + 140
9 SWITCH Routes callers to appropriate place
>154|RC- 10 DYN_ANNOU phrase in %ci_value
200|Ash 11 GOTO Vector 145 unconditionally
201|UK 12 QUIT
202|uk 13
203|uk 14

Enter the vector name.
HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
    
```

Figure 3-77. Finished RC-BB-SR Upgr Vector

**Step Descriptions**

1. SET

Sets a counter variable, *%num\_tried*, to 0. The vector uses this variable to count the number of times that a caller tries to speak the number of a valid menu choice at the GET\_SPCH action. A caller is allowed two tries. After two unsuccessful tries, the GOTO action in step 5 routes the caller to the quit vector.

2. GET\_SPCH

This action recites a phrase (number 140, as illustrated in the callflow) describing three menu choices and then uses the speech-recognition package to listen to callers' voices as they make a choice.

The action:

- Accepts as valid input 1 digit with a value from 1 through 3 and places the digit in the variable *%ci\_value*
- Places the number of digits collected (either 0 or 1) into the variable *%num\_dig\_got*

There will be no confirmation of the choices that the caller made using speech recognition.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
5 GET_SPCH ACTION, STEP 2 for vector 154
Get Speech Step gathers Spoken Digit(s) from caller
Comment:      Speech Recognition Prompt
Consolidate responses into variable: %ci_value
Place number of digits collected into: %num_dig_got
Talkfile: 6104    US English
Phrase Tag
Upgrades Main Menu - SR                Number  Ualid Input
                                         1015   1 digit:1-3
_____|_____|_____|_____|_____|_____|
_____|_____|_____|_____|_____|_____|
_____|_____|_____|_____|_____|_____|
Confirmation: None    Time limit per response: 6

Please enter your comments.
HELP CHOICES CLOSE _____ ENTER CANCEL REFRESH ADD-PHR
    
```

Figure 3-78. GET\_SPCH Action Form

3. GOTO

Allows a caller who speaks a valid number to continue in the vector. If the value of *%num\_dig\_got* = 1, the GOTO action routes the call to step 8 for routing based on the caller's input.

4. SET

If the caller did not speak a valid number (that is, if *%num\_dig\_got* = 0), this action increases the counter variable, *%num\_tried*, by 1.

5. GOTO

Routes a caller who runs out of tries to the quit vector. Callers have two tries. The GOTO action determines whether the value of the counter variable, *%num\_tried*, equals 2.

6. ANNOUNCE

If the caller did not speak a valid number, this step plays a standard announcement: "We're sorry, your response was not recognized. Please try again."

7. GOTO

Routes callers who have not run out of tries back to the GET\_SPCH action in step 2.

8. SET

Converts the caller's choice into a three digit number that is used when routing the caller or playing a dynamic announcement. The SET action adds 140 to the value in the variable *%ci\_value*.

9. SWITCH

Evaluates the value of the variable *%ci\_value* and routes the caller to a vector associated with the value.

For the value 143 (GET\_SPCH choice 3), the action routes the caller to vector 32. See "Twelfth Vector — Quit" on page 3-110.

For the values 141 and 142 (GET\_SPCH choices 1 and 2), the SWITCH action does not contain routing information. Processing continues in the current vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4
EDIT VECTOR NUMBER 154 STEPS
>Call Use 5 SWITCH Action Step Number 9 for vector 154
System De
System St SWITCH evaluates variables and routes matches to vectors
UNIX Sy Comment: Routes callers to appropriate place
Exit Variable: %ci_value Operator: =

3 Ed
149|RC- 1 136 RC-BB-Main Uec
150|RC- 2 15 Quit
151|C4
152|ADA
153|RC-
>154|RC-
200|Ash
201|UK
202|uk
203|uk

Please enter your comments.

HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 3-79. SWITCH Action Form

10. DYN\_ANNOU

If callers speak 1 or 2, the DYN\_ANNOU action speaks a dynamic announcement: a speech phrase identified by the value currently in the variable %data1. This phrase is either the "Windows 95 Upgrade Announcement" (phrase number 141) or the "All other Upgrades Announcement" (phrase number 142).

11. GOTO

Routes the caller to vector 46. See "Ninth Vector — RC-BB-SR Return" on page 3-99.

12. QUIT

Quits the Customer Assist vector and returns the call to the DEFINITY vector.

**Ninth Vector — RC-BB-SR Return**

This vector prompts callers using speech recognition to identify whether they want to return to the main menu or exit the system. The bulletin board routes callers to this vector each time it plays a dynamic announcement that provides information selected by the caller with a menu choice.

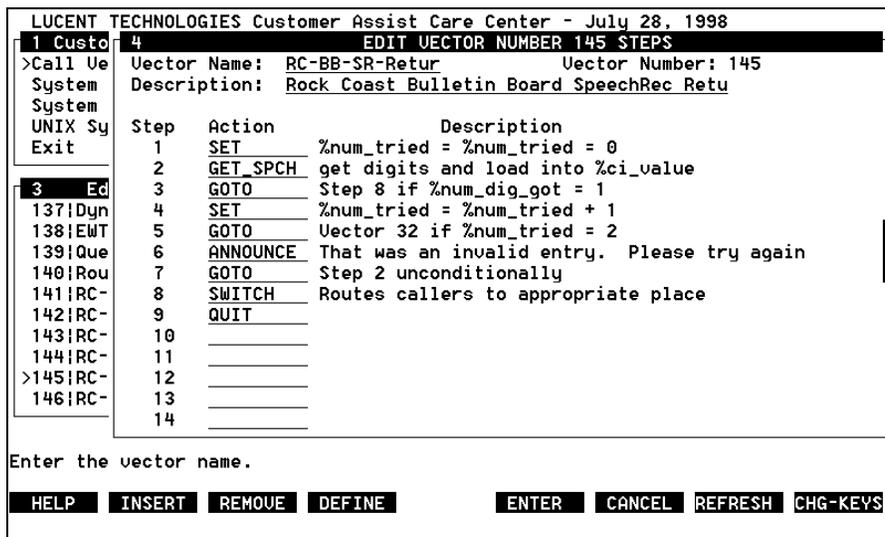


Figure 3-80. Finished RC-BB-SR Retur Vector

### Step Descriptions

1. SET

Sets a counter variable, *%num\_tried*, to 0. The vector uses this variable to count the number of times that a caller tries to speak the number of a valid menu choice at the GET\_SPCH action. A caller is allowed two tries. After two unsuccessful tries, the GOTO action in step 5 routes the caller to the quit vector.

2. GET\_SPCH

Recites a phrase (number 132, as illustrated in the callflow) describing two menu choices and then uses the speech-recognition package to listen to callers' voices as they make a choice.

The action:

- Accepts as valid input 1 digit with a value from 1 through 2 and places the digit in the variable *%ci\_value*
- Places the number of digits collected (either 0 or 1) for the variable *%ci\_value* into the variable *%num\_dig\_got*

There will be no confirmation of the choices that the caller made using speech recognition.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
5 GET_SPCH ACTION, STEP 2 for vector 145

Get Speech Step gathers Spoken Digit(s) from caller
Comment:      Speech Recognition Prompt

Consolidate responses into variable: %ci_value
Place number of digits collected into: %num_dig_got

Talkfile: 6104    US English

Phrase Tag                Number  Valid Input
Upgrades Main Menu - SR   1015   1 digit:1-3
_____
_____
_____

Confirmation: None    Time limit per response: 6

Please enter your comments.

HELP CHOICES CLOSE ENTER CANCEL REFRESH ADD-PHR
    
```

Figure 3-81. GET\_SPCH Action Form



**NOTE:**

Figure 3-81 incorrectly shows the valid input for the GET\_SPCH action as `yes-no` rather than `1 digit:1-2`. Although yes/no responses do not match the callflow or the SWITCH action step in this vector, you can use yes and no input with speech recognition. The GET\_SPCH action would place either 1 for “Yes” or 0 for “No” in the variable `%ci_value`.

**3. GOTO**

Allows a caller who speaks valid data to continue in the vector.

If the value of `%num_dig_got = 1`, the GOTO action routes the call to step 8 for routing based on the caller’s input.

**4. SET**

If the caller did not speak a valid number (that is, if `%num_dig_got = 0`), this action Increases the counter variable, `%num_tried`, by 1.

**5. GOTO**

Routes a caller who runs out of tries to the quit vector.

Callers have two tries. The GOTO action determines whether the value of the counter variable, `%num_tried`, equals 2.

**6. ANNOUNCE**

If the caller did not speak a valid number, this step plays a standard announcement: "We're sorry, your response was not recognized. Please try again."

7. GOTO

Routes callers who have not run out of tries back to the GET\_SPCH action in step 2.

8. SWITCH

Evaluates the value of the variable *%ci\_value* and routes the caller to a vector associated with the value.

For the value 1 (GET\_SPCH choice 1), the action routes the caller to vector 40. See "Third Vector — RC-BB-SR Main" on page 3-82.

For the value 2 (GET\_SPCH choice 2), the action routes the caller to vector 32. See "Twelfth Vector — Quit" on page 3-110.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custor 4
>Call Ue 5 EDIT VECTOR NUMBER 145 STEPS
System De SWITCH Action Step Number 8 for vector 145
System De
UNIX Sy St SWITCH evaluates variables and routes matches to vectors
Exit St Comment: Routes callers to appropriate place
Variable: %ci_value Operator: =

3 Ed
137|Dyn
138|EWT
139|Que
140|Rou
141|RC-
142|RC-
143|RC-
144|RC-
>145|RC-
146|RC-

VALUE VECTOR NUM VECTOR NAME
1 136 RC-BB-Main Uec
2 15 Quit

Please enter your comments.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 3-82. SWITCH Action Form

9. QUIT

Quits the Customer Assist vector and returns the call to the DEFINITY vector.

### Tenth Vector — RC-BB-Win95Men

This vector provides the Windows 95 Menu for callers using touch-tone telephones (Figure 3-83). This is the lowest level in the bulletin board.

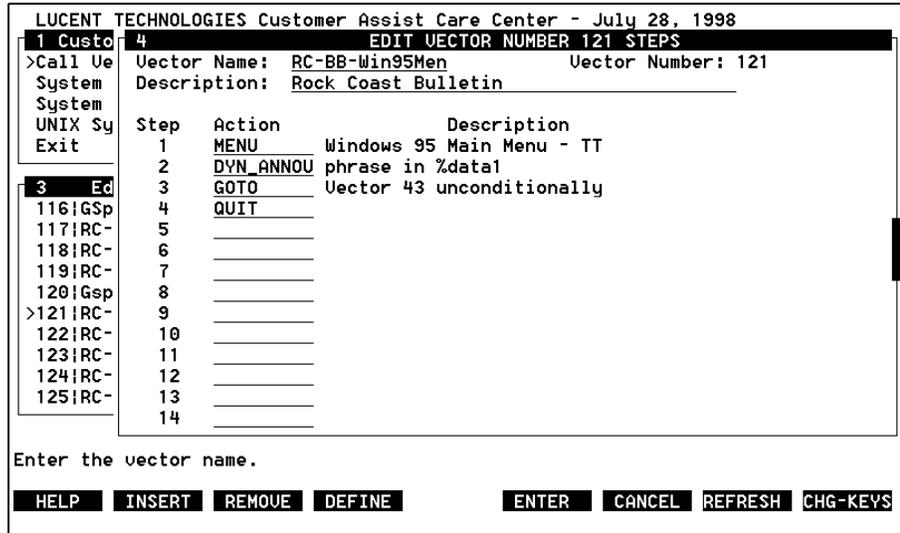


Figure 3-83. Finished RC-BB-win95Men Vector

#### Step Descriptions

##### 1. MENU

Recites a phrase (number 143 in the callflow) describing three menu choices. Callers select one of the choices with their touch-tone telephones.

Customer Assist collects the input from the caller and places the collected digits into the variable *%ci\_value*.

The *Min* and *Max* values of 1 indicate that Customer Assist is looking for no less than or no more than one collected digit from each caller.

Customer Assist places the output value into the variable *%data1*.

After the variable *%data1* is populated, a GOTO vector step moves the caller to the next step or to another vector in the callflow.

Specifically:

- Choices 1 and 2 select dynamic announcements. The MENU action places a three digit output value (145 or 146, respectively) in the variable *%data1*. The DYN\_ANNOUN action in step 2 then recites a dynamic announcement using the speech phrase specified by the value in *%data1*.
- Choice 3 routes callers to vector 113. See “Twelfth Vector — Quit” on page 3-110.

There are two screens for the MENU action. You access the second screen by pressing NEXTPAGE (F5).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 31, 1998
5 MENU Action Step Number 1 for vector 121
NORMAL INPUT :
Talkfile: 6104 US English Allow Interrupt: Yes
Prompt Phrase:
Number of digits to collect : Min 1 Max 1
Time to wait for input (sec): 1st digit 6 Next digit(s) 4
Place in Variables :
Input %ci_value Output %data1
Valid Input Output Value GOTO Vector Vector Name
1 145 CONT
2 146 CONT
3 113 Queu Pos Temp1
Confirm Input No
    
```

Enter the talkfile.

Figure 3-84. MENU Action Form: Normal Input

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 31, 1998
5 MENU Action Step Number 1 for vector 121

SPECIAL CASES :
  Caller's input not on list :
    Speak Phrase : _____
    Max. number of tries : 3
    Output Value : _____ GOTO Vector : CONT

  Caller did not enter the 1st digit within the time allowed :
    Speak Phrase : _____
    Max. number of tries : 3
    Output Value : _____ GOTO Vector : CONT

  Caller did not enter the minimum number of digits required :
    Speak Phrase : _____
    Max. number of tries : 3
    Output Value : _____ GOTO Vector : CONT

  Caller has no more tries to enter valid input :
    Speak Phrase : _____

Enter the phrase tag for input not on list above.
HELP CHOICES CLOSE PREVPAGE NEXTPAGE CANCEL REFRESH ADD-PHR
```

Figure 3-85. MENU Action Form: Special Cases

2. DYN\_ANNOU

If callers select choice 1 or 2, the DYN\_ANNOU action recites a dynamic announcement: a speech phrase identified by the value currently in the variable *%data1*. This phrase is either the "Product A Announcement" (phrase number 145) or the "Product B Announcement" (phrase number 146).

3. GOTO

Routes the caller to vector 43. See "Sixth Vector — RC-BB-Return?" on page 3-91.

4. QUIT

Quits the vector and returns control of the call to the DEFINITY vector.

## Eleventh Vector — RC-BB-SR Win95

This vector provides the Windows 95 Menu for callers using speech recognition (Figure 3-86). This is the lowest level in the bulletin board.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 144 STEPS
>Call Ve Vector Name: RC-BB-SR-Win95 Vector Number: 144
System Description: Rock Coast Bulletin Board SpeechRec Main
System
UNIX Sy Step Action Description
Exit 1 SET %num_tried = %num_tried = 0
2 GET_SPCH get digits and load into %ci_value
3 Ed 3 GOTO Step 8 if %num_tried = 1
135!Rou 4 SET %num_tried = %num_tried + 1
136!RC- 5 GOTO Vector 32 if %num_tried = 2
137!Dyn 6 ANNOUNCE That was an invalid entry. Please try again
138!EWT 7 GOTO Step 2 unconditionally
139!Que 8 SET %ci_value = %ci_value + 144
140!Rou 9 SWITCH Routes callers to appropriate place
141!RC- 10 DYN_ANNOU phrase in %ci_value
142!RC- 11 GOTO Vector 46 unconditionally
>143!RC- 12 QUIT
144!RC- 13
14
Enter the vector name.
HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
    
```

Figure 3-86. Finished RC-BB-SR Win95 Vector

### Step Descriptions

1. SET

Sets a counter variable, *%num\_tried*, to 0. The vector uses this variable to count the number of times that a caller tries to speak the number of a valid menu choice at the GET\_SPCH action. A caller is allowed two tries. After two unsuccessful tries, the GOTO action in step 5 routes the caller to the quit vector.

2. GET\_SPCH

This action recites a phrase (number 144, as illustrated in the callflow) describing three menu choices and then uses the speech-recognition package to listen to callers' voices as they make a choice.

The action:

- Accepts as valid input 1 digit with a value from 1 through 3 and places the digit in the variable *%ci\_value*
- Places the number of digits collected (either 0 or 1) into the variable *%num\_dig\_got*

There will be no confirmation of the choices that the caller made using speech recognition.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
5 GET_SPCH ACTION, STEP 2 for vector 144

Get Speech Step gathers Spoken Digit(s) from caller
Comment:      Speech Recognition Prompt

Consolidate responses into variable: %ci_value
Place number of digits collected into: %num_dig_got

Talkfile: 6104      US English

Phrase Tag                Number  Valid Input
Upgrades Main Menu - SR    1015   1 digit:1-3
_____
_____
_____

Confirmation: None      Time limit per response: 6

Please enter your comments.

HELP CHOICES CLOSE      ENTER CANCEL REFRESH ADD-PHR
    
```

Figure 3-87. GET\_SPCH Action Form

3. GOTO

Allows a caller who speaks a valid number to continue in the vector. If the value of `%num_dig_got = 1`, the GOTO action routes the call to step 8 for routing based on the caller's input.

4. SET

If the caller did not speak a valid number (that is, if `%num_dig_got = 0`), this action increases the counter variable, `%num_tried`, by 1.

5. GOTO

Routes a caller who runs out of tries to the `quit` vector. Callers have two tries. The GOTO action determines whether the value of the counter variable, `%num_tried`, equals 2.

6. ANNOUNCE

If the caller did not speak a valid number, this step plays a standard announcement: "We're sorry, your response was not recognized. Please try again."

7. GOTO

Routes callers who have not run out of tries back to the GET\_SPCH action in step 2.

8. SET

Converts the caller's choice into a three digit number that is used when routing the caller or playing a dynamic announcement. The SET action adds 144 to the value in the variable *%ci\_value*.

9. SWITCH

Evaluates the value of the variable *%ci\_value* and routes the caller to a vector associated with the value.

For the value 147 (GET\_SPCH choice 3), the action routes the caller to vector 32. See "Twelfth Vector — Quit" on page 3-110.

For the values 141 and 142 (GET\_SPCH choices 1 and 2), the SWITCH action does not contain routing information. Processing continues in the current vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 144 STEPS
>Call Ue 5 SWITCH Action Step Number 9 for vector 144
System De
System St SWITCH evaluates variables and routes matches to vectors
UNIX Sy Comment: Routes callers to appropriate place
Exit Variable: %ci_value Operator: =

3 Ed
135|Rou 147 VECTOR NUM 15 VECTOR NAME Quit
136|RC-
137|Dyn
138|EWT
139|Que
140|Rou
141|RC-
142|RC-
143|RC-
>144|RC-

Please enter your comments.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 3-88. SWITCH Action Form

10. DYN\_ANNOU

If callers speak 1 or 2, the DYN\_ANNOU action speaks a dynamic announcement: a speech phrase identified by the value currently in the variable *%data1*. This phrase is either the "Product A Announcement" (phrase number 145) or the "Product B Announcement" (phrase number 146).

11. GOTO

Routes the caller to vector 46. See "Ninth Vector — RC-BB-SR Retur" on page 3-99.

12. QUIT

Quits the Customer Assist vector and returns the call to the DEFINITY vector.

## Twelfth Vector — Quit

This vector plays a final announcement and returns callers to the switch.

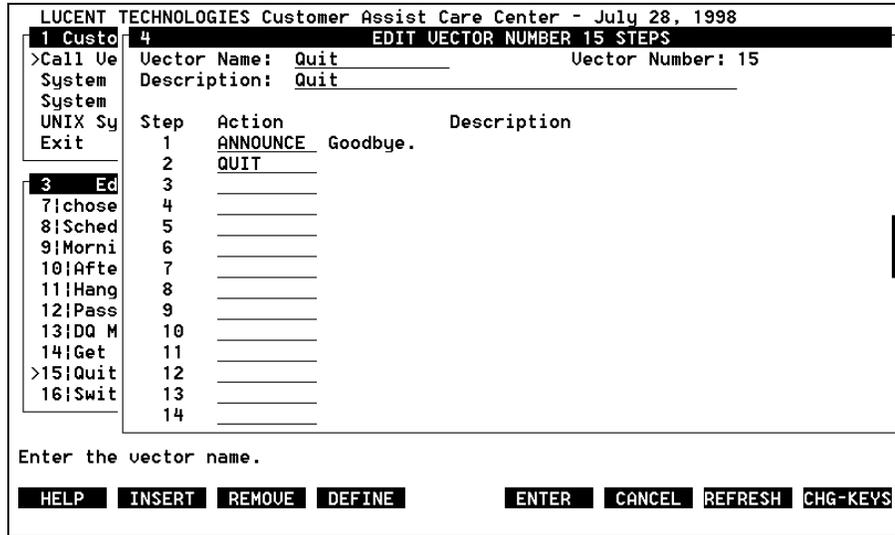


Figure 3-89. Finished Quit Vector

### Step Descriptions

1. ANNOUNCE

Plays a standard announcement: "Thank you for calling Rock Coast Computer Software. Goodbye."

2. QUIT

Quits the Customer Assist vector and routes the caller back to the DEFINITY vector.

## **Sample Application #6: Announce Queue Position**

---

### **Business Situation**

---

The Rock Coast Software Company wants to provide callers who are on hold with information about their actual queue position. For example, callers hear an announcement such as, “The Rock Coast Customer Service Department will be with you shortly. Currently, there are [number of] callers ahead of you waiting to speak with our agents. We will be with you as soon as possible.”

The delivery of their queue position is the focus of this sample application. See “Sample Application #7: Estimated Wait Time” on page 3-118 for information on how to provide callers with options, such as Estimated Wait Time, Anticipated Delay, and Queue Position, that they can select, based on queue-related information.

The lessons learned in earlier sample applications are background for this sample application.

### **Callflow Diagram**

---

The following diagram shows the callflow for this sample application.

**ROCK COAST**  
**6. ANNOUNCE QUEUE POSITION**

Call Flow,  
 1/15/97

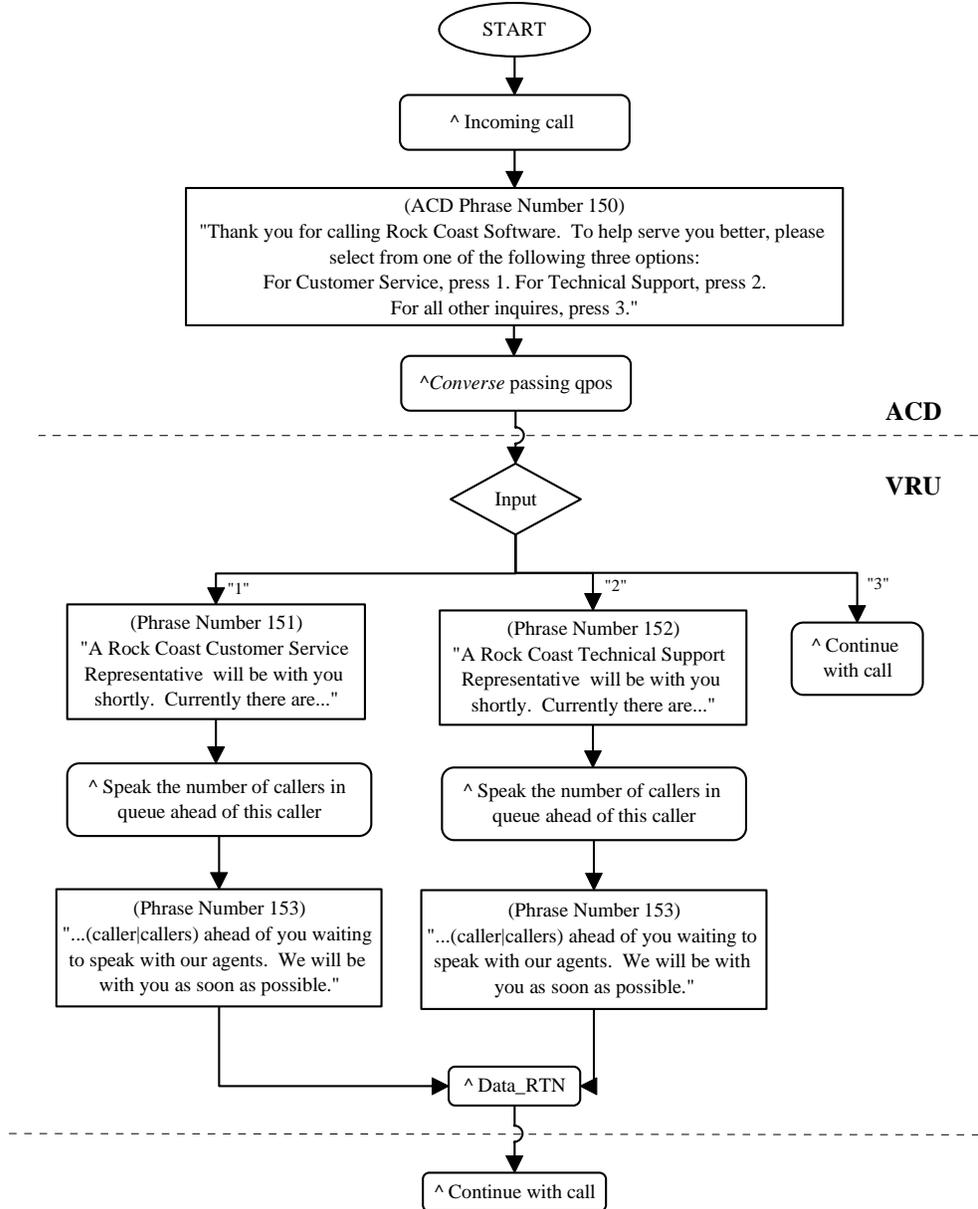


Figure 3-90. Announce Queue Position Call Flow

### **ECS R6.3/DEFINITY Vector**

---

This sample application uses one DEFINITY vector. The vector uses a Converse vector step to pass a caller to the CONVERSANT and Customer Assist.

Assumptions: Agent Queue Splits are 1 (Customer Service), 2 (Technical Support, and 3 (General Support.) The CONVERSANT split is Split 4.

1. collect 1 digits after announcement 150
2. goto step 7 if digits = 1
3. goto step 12 if digits = 2
4. queue-to main split 3 pri m
5. wait-time 60 secs hearing music
6. goto step 5 if unconditionally
7. queue-to main split 1 pri m
8. wait-time 0 secs hearing music
9. converse-on split 4 pri m passing qpos and 1
10. wait-time 60 secs hearing music
11. goto step 10 if unconditionally
12. queue-to main split 2 pri m
13. wait-time 0 secs hearing music
14. converse-on split 4 pri m passing qpos and 2
15. wait-time 60 secs hearing music
16. goto step 15 if unconditionally

### **Speech Administration**

---

In this sample application, you must record speech for phrase numbers 150-153. See the callflow for the text of these phrases.

See "Sample Application #2: Standard Announcement" on page 3-18 for information on how to create or record vector phrases.

## Customer Assist Vector

This sample application uses one Customer Assist vector, called RC-AnnQueuePos.

This vector controls the following:

- Receiving the queue position information from the switch
- Receiving the current department that the caller is in from the switch
- Converting the queue position data to the number of callers ahead of the current caller
- Reciting the converted queue position information in a concatenated announcement to the caller

Figure 3-91 shows the completed RC-AnnQueuePos vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 109 STEPS
>Call Ue Vector Name: RC-AnnQueuePos Vector Number: 109
System Description: Rock Coast - Announc
System
UNIX Sy
Exit

3 Ed
104!RC-
105!RC-
106!Res
107!RC
108!RC-
>109!RC-
110!RC-
111!RC-
112!Que
113!Que

Step Action Description
1 CONVERSE collect 3 digits into %qpos
2 CONVERSE collect 1 digits into %data1
3 GOTO Step 5 if %qpos = 1
4 SET %qpos = %qpos - 1
5 GOTO Step 10 if %data1 = 2
6 ANNOUNCE A Rock Coast Customer Service Rep will be with you
7 SPEAK_NUM in %qpos as Number
8 ANNOUNCE ...callers ahead of you waiting to speak with...
9 GOTO Step 13 unconditionally
10 ANNOUNCE A Rock Coast Technical Support Rep will be with...
11 SPEAK_NUM in %qpos as Number
12 ANNOUNCE ...callers ahead of you waiting to speak with...
13 DATA_RTN to PBX with *01
14 QUIT

Enter the vector name.

HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
    
```

Figure 3-91. Finished RC-AnnQueuePos Vector

### Step Descriptions

1. CONVERSE  
Collects the queue position information (three digits) from the switch and places it in the variable *%qpos*.
2. CONVERSE

Collects a single digit that corresponds to the department where the caller is currently queued from the switch. The CONVERSE action places the digit in the variable *%data1*.

In this example, if 1 is passed, then Customer Assist knows that the caller is in Customer Service. Likewise, if 2 is passed, then the caller is in Technical Support.



**NOTE:**

In this sample application, if the caller pressed “3” on the switch “for all other inquiries,” the caller will not hear their queue position. See Figure 3-90 on page 3-112.

3. GOTO

Routes callers to step 5 if their current queue position is 1.

This GOTO action skips step 4, which would subtract 1 from the value of the current queue position, leaving 0. The ANNOUNCE and SPEAK\_NUM actions would then announce: “There are currently 0 callers ahead of you.” Skipping step 4 insures that the announcement informs callers that there is at least one caller ahead of them in queue.

4. SET

Converts the queue position information to the number of callers ahead of the current caller by subtracting 1 from the value.

5. GOTO

Routes the caller to step 10 if they are currently queued in the Technical Support department, that is, if *%data1 = 2*.

Because callers who do not go to step 10 are currently queued in the Customer Service department, the next three steps give the Customer Service version of the queue position announcement.

6. ANNOUNCE

Recites the first part of the concatenated queue position announcement: “A Rock Coast Customer Service Representative will be with you shortly. Currently there are...”

7. SPEAK\_NUM

Recites the modified queue position (that is, the number of callers ahead of the current caller) as a number.

Figure 3-92 shows the completed SPEAK\_NUM action form.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 109 STEPS
>Call Ue Vector Name: RC-AnnQueuePos Vector Number: 109
System Description: Rock Coast - Announc
System
UNIX Sy Step Action Description
Exit 1 CONVERSE collect 3 digits into %qpos
2 CONVERSE collect 1 digits into %data1
3 Ed 3 GOTO Step 5 if %qpos = 1
104|RC- 4 SET %qpos = %qpos - 1
105|RC- 5 GOTO Step 10 if %data1 = 2
106|Res 6 5 SPEAK_NUMBER Action Step Number 7 for vector 109
107|RC- 7
108|RC- 8 SPEAK NUMBER Action step speaks number or string to caller
>109|RC- 9
110|RC- 10 Number: %qpos
111|RC- 11 Speak as Number/Character string: Number
112|Que 12 Allow Interrupt: Yes
113|Que 13
14 Note: Speaks numbers over 9 digits as characters.

Enter the number or variable, follow by the Return or ENTER key.
HELP CHOICES CLOSE CANCEL REFRESH
    
```

Figure 3-92. SPEAK\_NUM Action Form

8. ANNOUNCE

Recites the last part of the concatenated queue position announcement to the caller: "callers ahead of you waiting to speak with out agents. We will be with you as soon as possible."

9. GOTO

Routes the caller to the DATA\_RTN action at the end of the vector.

10. ANNOUNCE

Recites the first part of the concatenated queue position announcement for callers in the Technical Support department: "A Rock Coast Technical Support Representative will be with you shortly. Currently there are..."

11. SPEAK\_NUM

Recites the modified queue position (that is, the number of callers ahead of the current caller) as a number.

12. ANNOUNCE

Recites the last part of the concatenated queue position announcement to the caller.

13. DATA\_RTN

Returns the caller to the switch.

14. QUIT

Quits Customer Assist and returns control to the ECS R6.3/DEFINITY vector.

## Sample Application #7: Estimated Wait Time

---

### Business Situation

---

The Rock Coast Software Company wants to provide callers on hold with useful additional information, such as the estimated time the caller must wait to be connected to an agent. For example, Rock Coast wants to provide callers with an announcement such as, “The Rock Coast Customer Service Department will be with you shortly. You should expect to hold for approximately [estimated number of] minutes before being connected with an agent.”

Rock Coast also wants to provide its callers with additional options after they have received their Estimated Wait Time. They want to allow callers to:

- Continue holding
- Get connected to a bulletin board system
- Use a fax response system

Estimated Wait Time (EWT) announcements are messages that estimate the amount of time a caller must wait in queue. This sample application uses the Converse vector step on the G3V4+ switch to pass each call and the switch's Expected Wait Time to Customer Assist. In turn, Customer Assist uses the EWT action to:

- Increase or decrease the switch's estimate by a percentage you specify
- Round the result up, down, or to the nearest whole number
- Convert the estimate from seconds to minutes

Subsequent actions speak the revised wait estimate to the caller.

If you are using a DEFINITY G3V3 or G3V2 switch, use the Anticipated Delay Announcement (ADA\_CALC) action described in “ADA\_CALC Action” on page 5-2. This action combines your predefined estimates of staff size and average call duration with queue position information from the switch to determine how long a caller will wait.

The lessons learned in earlier sample applications are background for this sample application.

**Callflow Diagram**

The following two diagrams illustrate the callflow for this sample application.

**7. ESTIMATED WAIT TIME**

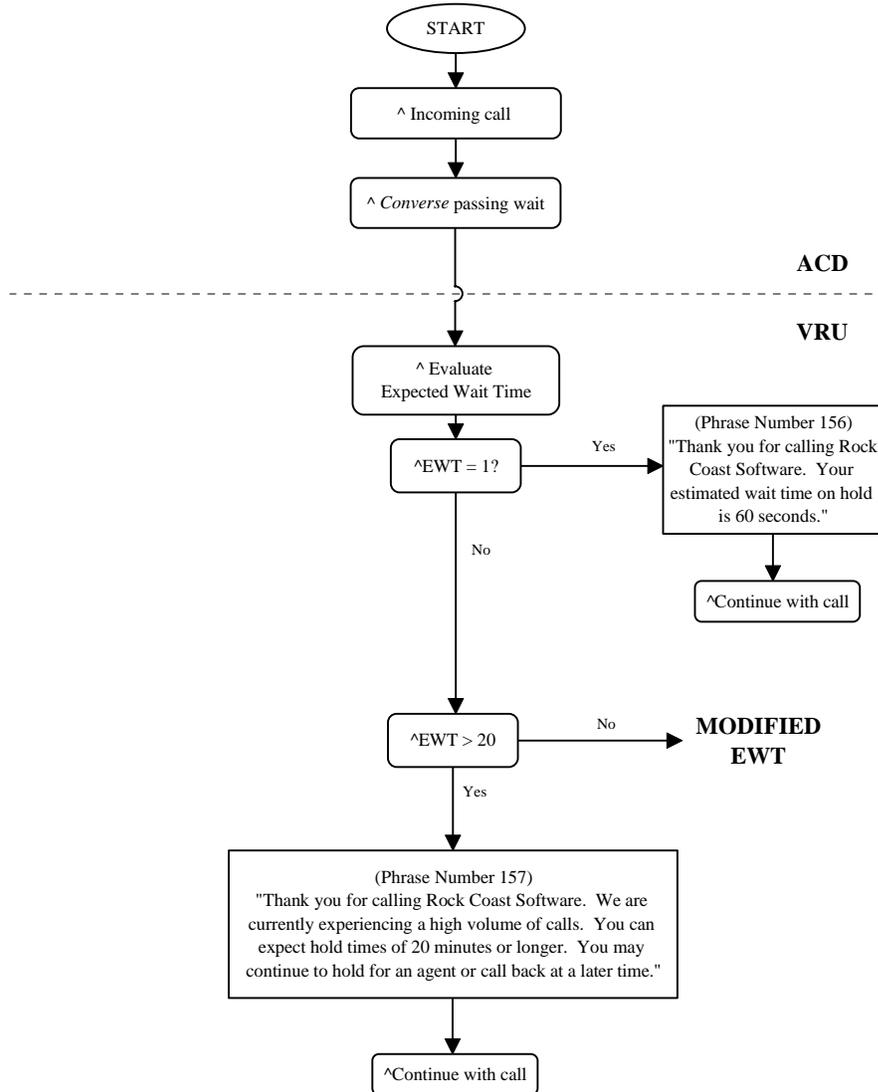
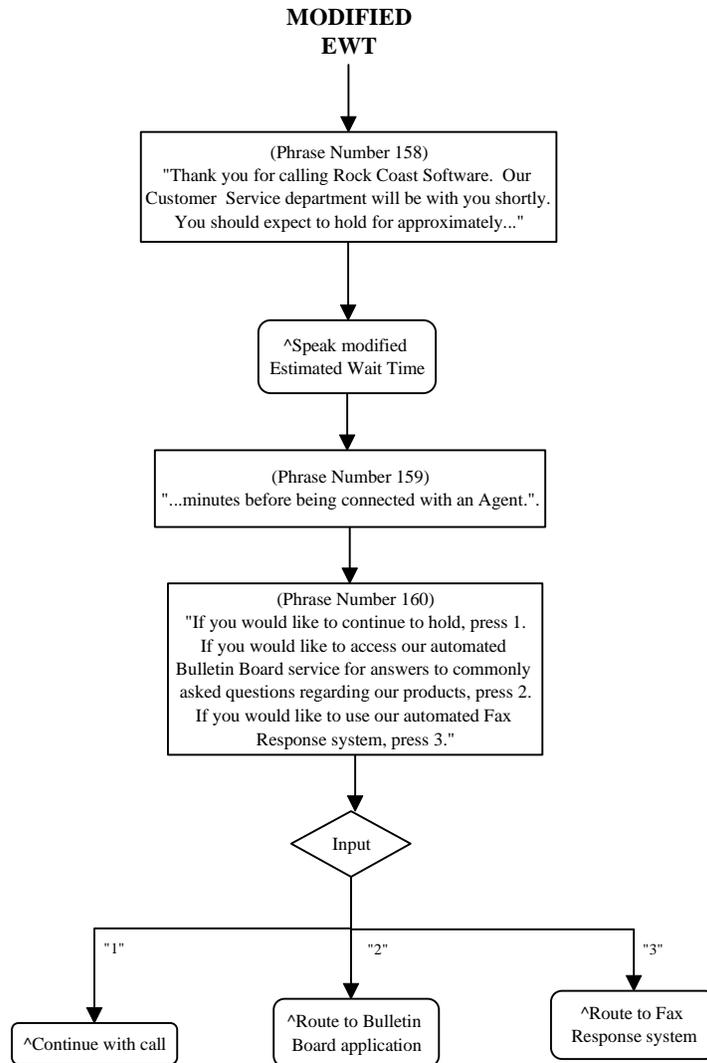


Figure 3-93. EWT Callflow 1

## 7. ESTIMATED WAIT TIME



---

Figure 3-94. EWT Callflow 2

### **ECS R6.3/DEFINITY Vector**

---

This sample application uses one DEFINITY vector. The vector uses a Converse vector step to pass a caller to the CONVERSANT and Customer Assist.

Assumptions: Agent Queue Split is 1 (Customer Service). The CONVERSANT split is Split 2.

1. wait-time 2 secs hearing ringback
2. queue-to main split 1 pri m
3. wait-time 0 secs hearing music
4. converse-on split 2 pri m passing wait and none
5. wait-time 2 secs hearing music

### **Speech Administration**

---

In this sample application, you must record speech for phrase numbers 156-160. See the callflow for the text of these phrases.

See "Sample Application #2: Standard Announcement" on page 3-18 for information on how to create or record vector phrases.

### **Customer Assist Vector**

---

This sample application uses one Customer Assist vector, called RC-EWT Announc.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 124 STEPS
>Call Use Vector Name: RC-EWT Announc Vector Number: 124
System Description: Rock Coast Estimated
System
UNIX Sy Step Action Description
Exit 1 CONVERSE collect 5 digits into %data1
2 EWT calculates the delay from %data1 into %wt
3 GOTO Step 9 if %wt = 1
4 GOTO Step 11 if %wt > 20
115!GSp 5 ANNOUNCE Your estimate wait time on hold is...
116!GSp 6 SPEAK_NUM in %wt as Number
117!RC- 7 ANNOUNCE ...minutes
118!RC- 8 GOTO Step 13 unconditionally
119!RC- 9 ANNOUNCE EWT Short Announcement
120!GSp 10 GOTO Step 14 unconditionally
121!RC- 11 ANNOUNCE EWT Short Announcement
122!RC- 12 GOTO Step 14 unconditionally
123!RC- 13 MENU Press 1 to hold, 2 for bulletin board
>124!RC- 14 QUIT Returns caller to switch

Enter the vector name.

HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
    
```

Figure 3-95. Finished RC-EWT Announc Vector

### Step Descriptions

#### 1. CONVERSE

Collects the Expected Wait Time information from the switch and places it in the variable *%data1*. Since this information is passed to the CONVERSANT in seconds, this action will collect five digits.

#### 2. EWT

Converts the Expected Wait Time information received from the DEFINITY to an Estimated Wait Time that can be spoken back to the caller.

The action rounds the value of the variable *%data1* up to the nearest minutes and places the result in the variable *%wt*. The result of this calculation is in minutes.



#### NOTE:

The Weighting Index of 100% indicates that the Estimated Wait Time provided by the switch has not been weighted in Customer Assist.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
 1 Cust 4 EDIT VECTOR NUMBER 124 STEPS
>Call Use Vector Name: RC-EWT Announc Vector Number: 124
System Description: Rock Coast Estimated
System
UNIX Sy
Exit
Step Action Description
 1 CONVERSE collect 5 digits into %data1
 2 EWT calculates the delay from %data1 into %ewt
 3 GOTO Step 9 if %ewt = 1
 4 GOTO Step 11 if %ewt > 20
 5 ANNOUNCE Your estimate wait time on hold is...
 6 SPEAK_NUM in %ewt as Number
 5 EWT ACTION STEP 2 for vector 124
ESTIMATED WAIT TIME IN QUEUE ACTION
EWT Input: %data1 Calculated Output: %ewt
Weighting Index: 100%
Resolution: Minutes Rounding: Nearest
Comment: Converts EWT to Estimated Wait Time
Enter the variable that receives estimated wait time.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 3-96. EWT Action Form

3. GOTO

If the value of the variable `%ewt = 1`, this step routes the caller to step 9, which speaks the short Estimated Wait Time announcement.

4. GOTO

If the value of the variable `%ewt > 20`, this step routes the caller to step 11, which speaks the long Estimated Wait Time announcement.

5. ANNOUNCE

Recites the first part of the standard Estimated Wait Time announcement: "Thank you for calling Rock Coast Software. Our Customer Service department will be with you shortly. You should expect to hold for approximately...."

6. SPEAK\_NUM

Recites the Estimated Wait Time to the caller as a number.

7. ANNOUNCE

Recites the last part of the standard Estimated Wait Time announcement: "minutes before being connected with an Agent."

8. GOTO

Routes the caller to step 13 where they can select their service options from a menu.

9. ANNOUNCE

Recites the short Estimated Wait Time announcement: "Thank you for calling Rock Coast Software. Your estimated wait time on hold is 60 seconds."

10. GOTO

Routes the caller to the last step in this vector, the QUIT action, which returns them to the switch.

11. ANNOUNCE

Recites the long Estimated Wait Time announcement.

12. GOTO

Routes the caller to the last step in the vector, the QUIT action, which returns them to the switch.

13. MENU

Recites a menu announcement to callers to inform callers of their options. Callers can:

- Press **[1]** to continue to hold; this routes them to the QUIT action in step 14 so that they return to the DEFINITY switch.
- Press **[2]** to connect to a bulletin board application.
- Press **[3]** to connect to Rock Coast's Fax Response application.

**⇒ NOTE:**

After pressing **[3]**, the caller is sent to another vector (not shown in this sample application) that has two action steps: EXECUTE and QUIT. To execute the fax system, see "Sample Application #4: Automated Attendants" on page 3-45.

14. QUIT

Quits Customer Assist and returns control to the ECS R6.3/DEFINITY vector.

## **Sample Application #8: Custom Call Routing**

---

### **Business Situation**

---

The Rock Coast Software Company wants to speed up the processing of its calls by shaving valuable seconds from every call. It can do this is by capturing the Automatic Number Identification (ANI) from its callers, checking that value against a database table, speaking a dynamic announcement based on their destination, and routing callers dynamically to the appropriate location.

By collecting and transferring caller information along with the call, Custom Call Routing allows the call center to chart the path of each call as it is routed to a particular split by means of:

- Automatic Number Identification (ANI)
- Dialed Number Information Service (DNIS)
- Collected Digits

These are passed from the switch to Platform Management and matched to a system-administrable routing table. In addition, information such as the customer's account number can be displayed on the agent's telephone or on their PC screen as the agent receives the call.

The lessons learned in earlier sample applications are background for this sample application.

### **Callflow Diagram**

---

The following diagram shows the callflow for this sample application.

**ROCK COAST**  
**8. CUSTOM CALL ROUTING**

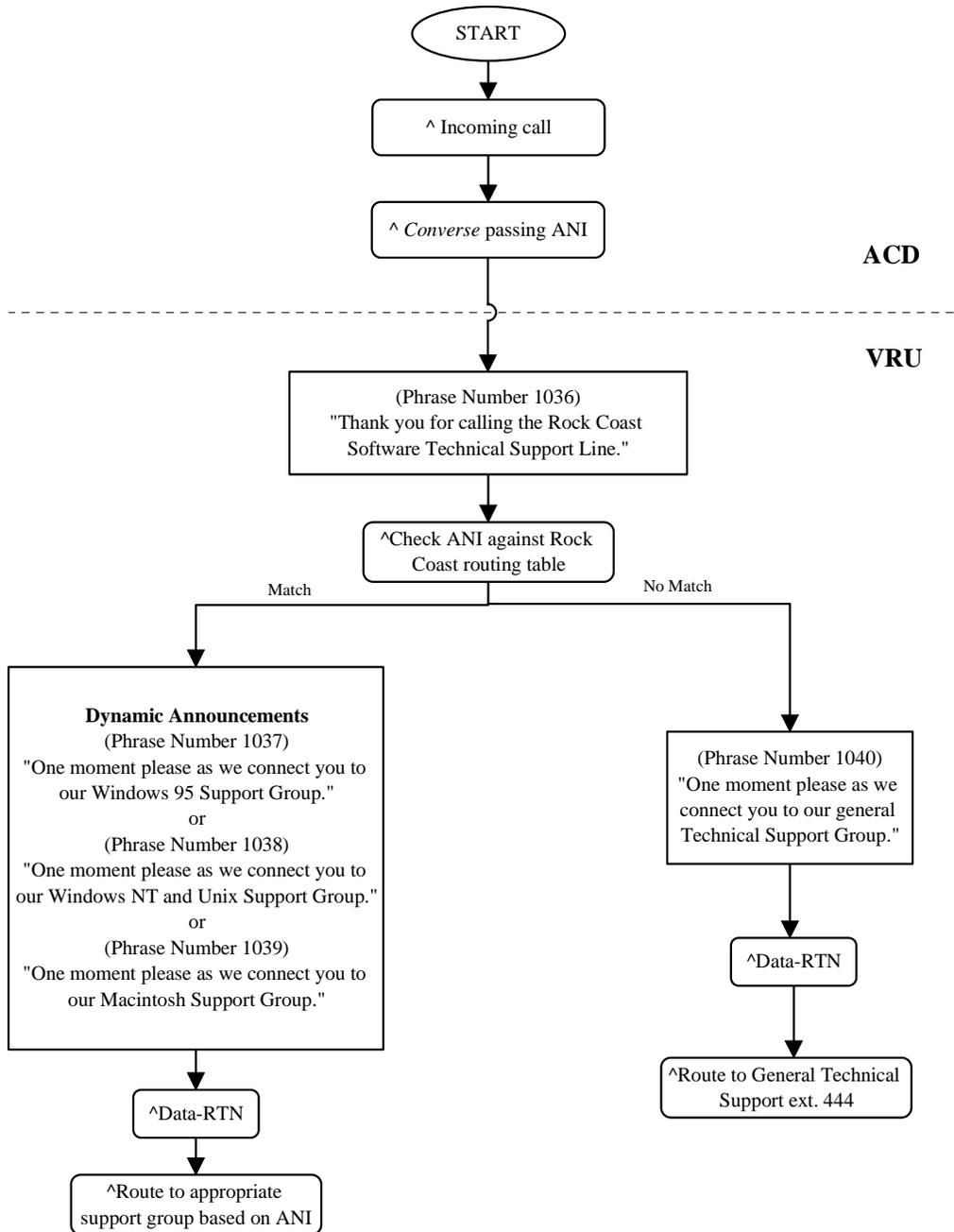


Figure 3-97. Call Routing Callflow

### ECS R6.3/DEFINITY Vector

This sample application includes one DEFINITY vector with a Converse vector step to pass a caller to the CONVERSANT and Customer Assist.

Assumptions: Agent Queue Split is 1. The CONVERSANT split is Split 2.

1. wait-time 2 secs hearing ringback
2. converse on split 2 pri m passing ani and none
3. collect 3 digits after announcement none
4. route-to digits coverage n
5. stop

### Custom Call Routing Table

The first step in creating a custom call routing application is to add a new table to Customer Assist.

### Setting Up the Routing Table

Use the following steps to add a new routing table:

1. Start at the Customer Assist main menu and select

```
> System Administration
```

```
> Custom Call Routing Administration
```

```
> Routing Table Administration
```

```
>ADD TABLE
```

The system displays the Add Table form.

2. Enter a name for your table in the `Routing Table Name` field.  
Spaces are not accepted in the table name. Use an underscore instead.
3. Enter the number of records that this table will eventually contain in the `Maximum Number of Records` field.
4. Enter the name or a brief description for the table in the `Description` field.

Figure 3-98 shows the completed Add Table form.

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Customer Assist Care Center
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit
2 System Administration
  Callback Messaging Administration
  Conversant Administration
  >Custom Call Routing Administration
  Report Generation
  Report Scheduling
  Speech Administration
  Survey Configurations
  System Backup/Restore
  Variable Administration
3 Custom Call Routing Administration
  Import/Export Data from/to Floppy
  >Routing Table Administration
  Record Administration
4 Routing Table Administration
  >Add Table
  Delete Table
5 Add Table
  Routing Table Name : _____
  Maximum Number of Records : 1000
  Description : _____
Please enter the routing table name followed by the ENTER or Return key.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
```

Figure 3-98. Add Table Form

5. Press CLOSE (F3) to save the table setup. Press CANCEL (F6) to return to the Custom Call Routing Administration menu.

### Populating the Routing Table

You can populate this routing table in two ways:

- Import data into the table, or
- Enter data directly into the table.

### Importing Data into the Table

Use the following steps to import data into the routing table:

1. Start at the Custom Call Routing Administration menu and select Import/Export Data from/to Floppy.
2. Enter the appropriate information.

The form should resemble Figure 3-99.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Customer Assist Care Center      2 System Administration
  Call Vector Configuration        Callback Messaging Administration
  >System Administration           Conversant Administration
  System Monitor                  >Custom Call Routing Administration
  UNIX System                     Report Generation
  Exit                             Report Scheduling
                                   Speech Administration
                                   Survey Configurations
4 Import/Export Routing Table
Import/Export data from/to DOS diskette
Import/Export:      Import
3 C Routing Table Name: _____
>Imp Append/Replace:  Replace
Rou Drive A or Drive B: A
Rec Path:            /
Filename:           _____
Field delimiter:   |
Filter Non-Numeric?: N

Select routing table import or export.

HELP CHOICES SAVE DIR ENTER CANCEL REFRESH
    
```

Figure 3-99. Import/Export Routing Table Form

### Entering Data into the Table Directly

Use the following steps to enter data into the table directly:

1. Start at the Custom Call Routing Administration menu and select Record Administration.
2. Select Add Record.
3. Complete the form with the first record's data.

In this example, Rock Coast Software is using the caller's Automatic Number Identification (ANI) as the Lookup Field.

Data Field #1 contains the dynamic phrase number that is spoken back to the caller.

Data Field #2 contains the extension of the switch split that is sent back to the switch at the end of all vectors.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Customer Assist Care Center
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit
4 Record Administration
  Edit/Delete Record
  >Add Record
3 Custom Call Routing Administration
  Import/Export Data from/to Floppy
  Routing Table Administration
  >Record Administration
2 System Administration
  Callback Messaging Administration
  Conversant Administration
  >Custom Call Routing Administration
  Report Generation
  Report Scheduling
  Speech Administration
  Survey Configurations
  System Backup/Restore
  Variable Administration
5 Record Administration
  Routing Table Name: Rock Coast
  Lookup Field: 555551111
  Data Field 1: 1037
  Data Field 2: 111
HELP CHOICES ADD CANCEL REFRESH
    
```

Figure 3-100. Record Administration Form

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Customer Assist Care Center
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit
4 Record Administration
  Edit/Delete Record
  >Add Record
3 Custom Call Routing Administration
  Import/Export Data from/to Floppy
  Routing Table Administration
  >Record Administration
2 System Administration
  Callback Messaging Administration
  Conversant Administration
  >Custom Call Routing Administration
  Report Generation
  Report Scheduling
  Speech Administration
  Survey Configurations
  System Backup/Restore
  Variable Administration
5 Record Administration
  Routing Table Name: Rock Coast
  Lookup Field: 555552222
  Data Field 1: 1038
  Data Field 2: 222
HELP CHOICES ADD CANCEL REFRESH
    
```

Figure 3-101. Record Administration Form

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Customer Assist Care Center
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit
2 System Administration
  Callback Messaging Administration
  Conversant Administration
  >Custom Call Routing Administration
  Report Generation
  Report Scheduling
  Speech Administration
  Survey Configurations
  System Backup/Restore
  Variable Administration
4 Record Administration
  Edit/Delete Record
  >Add Record
3 Custom Call Routing Administration
  Import/Export Data from/to Floppy
  Routing Table Administration
  >Record Administration
5 Record Administration
  Routing Table Name: Rock Coast
  Lookup Field: 555553333
  Data Field 1: 1039
  Data Field 2: 333
HELP CHOICES ADD CANCEL REFRESH
```

Figure 3-102. Record Administration Form

4. After all of the data has been entered for one record, press ADD (F3) to add the data to the Custom Call Routing table.

## Speech Administration

In this sample application, you must record speech for phrase numbers 1036-1040. See the callflow for the text of these phrases.

See "Sample Application #2: Standard Announcement" on page 3-18 for information on how to create or record vector phrases.

## Customer Assist Vector

This sample application uses one Customer Assist vector, called RC Routing.

Figure 3-103 shows the completed RC Routing vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 101 STEPS
>Call Use Vector Name: RC Routing Vector Number: 101
System Description: Rock Coast's Routing
System
UNIX Sy Step Action Description
Exit 1 CONVERSE collect 10 digits into %ani
96|Futu 2 LOOK_UP %ani in table Rock_Coast
97|Futu 3 GOTO Step 6 if %matched = 1
98|Futu 4 SET %data1 = %data1 = 1040
99|Futu 5 SET %data2 = %data2 = 444
100|Fut 6 ANNOUNCE RC-CCR-Main Greeting
>101|RC 7 DYN_ANNOU phrase in %data1
102|RC- 8 DATA_RTN to PBX with *01
103|EWT 9 QUIT Ends call unconditionally
104|RC- 10
105|RC- 11
12 12
13 13
14 14

Enter the vector name.
HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
    
```

Figure 3-103. Finished RC Routing Vector

### Step Descriptions

1. CONVERSE

Collects 10 digits that are passed from the switch (the caller's ANI) and places them into the variable *%ani*.

2. LOOK\_UP

Checks the look-up field in Rock\_Coast routing table for a value that matches the value of the variable *%ani* (that is, for a value that matches the caller's ANI).

If the LOOK\_UP action locates the ANI value, it takes the corresponding values in data field 1 and data field 2 and places them in the variables *%data1* and *%data2*.

The LOOK\_UP action records whether or not there were any matches and stores the number of matches in the variable *%matched*.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 101 STEPS
>Call Use Vector Name: RC Routing Vector Number: 101
System Description: Rock Coast's Routing
System
UNIX Sy
Exit

Step Action Description
1 5 LOOK_UP Table Action, Step Number 2 for vector 101
2
3 LOOK_UP Action looks up values in a database table.
4
5 Input Fields
6 Routing table: Rock_Coast
7 Look-up field: %ani
8 Return Fields
9 Number of Matches found: %matched
101|RC 1 Data field 1: %data1
102|RC- 1 Data field 2: %data2
103|EW
104|RC-
105|RC- 1 Comment: Look up value and return data
1 Note: The LOOK_UP action requires that the table be populated.

Enter the routing table name followed by the Return or ENTER key.

HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 3-104. LOOK\_UP Action Form

3. GOTO

Routes the caller to step 6, which recites the opening announcement if the ANI passed from the switch is in the routing table (that is, if the variable *%matched = 1*).

4. SET

“Hard-codes” the value of the variable *%data1* as 1040, which is the number of the talkfile phrase that represents the general technical support group.

Steps 4 and 5 “hard code” the numbers of the talkfile phrases because the caller’s ANI is not in the custom call routing table, and Customer Assist cannot provide custom routing to specific support groups.

5. SET

“Hard-codes” the value of the variable *%data2* as 444, which is the extension of the general technical support group. This value is sent to the switch to route the caller.

6. ANNOUNCE

Recites the opening announcement to the caller: “Thank you for calling the Rock Coast Software Technical Support Line.”

7. DYN\_ANNOU

Recites the dynamic announcement to the caller based on the value in the variable *%data1*.

In this example, the phrase is 1037 for the Windows 95 Support Group, 1038 for the Windows NT and Unix Support Group, 1039 for the Macintosh Support Group, or 1040 for the general Technical Support Group. Phrases 1027, 1038, and 1039 are from the routing table; phrase 1040 is hard-coded.

8. DATA\_RTN

Returns the value of the variable *%data2* to the switch for accurate routing. In this example, the extension is 111, 222, or 333 (from the routing table) or 444 (hard-coded).

9. QUIT

Ends the call unconditionally and returns it to the switch.



**NOTE:**

You may also use the Custom Call Routing Template provided for you in Customer Assist. See to “Selecting a Template” on page 4-10 for more information.

## **Sample Application #9: Estimated Wait Time Routing**

---

### **Business Situation**

---

The Rock Coast Software Company wants to provide callers on hold with useful additional information, such as the estimated time the caller must wait to be connected to an agent. For example, Rock Coast wants to provide callers with an announcement such as “The Rock Coast Customer Service Department will be with you shortly. You should expect to hold for approximately [estimated number of] minutes before being connected with an agent.”

Rock Coast also wants to provide callers with additional options after they have received their Estimated Wait Time. They want to allow callers to:

- Continue holding
- Get connected to a bulletin board system
- Use a fax response system

More importantly in this sample application (as compared to “Sample Application #7: Estimated Wait Time” on page 3-118), Rock Coast Software wants to automatically route callers to specific locations in their call center, based on the result of the EWT calculation. For instance, Rock Coast wants to route callers to an overflow Callback Messaging mailbox where callers who will have to wait more than 20 minutes will be “forced” to leave a message rather than wait on the telephone. This will be more user-friendly for the caller and less expensive for Rock Coast since they will not have to pay the 1-800 trunk charges to keep that caller on the line.

Other options for EWT routing include routing callers to the IVR applications such as automated attendants and bulletin boards; to specific overflow extensions or departments; to a randomized dynamic list of promotional announcements, using Custom Call Routing, and then onto a mailbox, IVR application, or department.

The lessons learned in earlier sample applications are background for this sample application.

### **Callflow Diagram**

---

The following two diagrams illustrate the callflow for this sample application.

## 9. EWT ROUTING

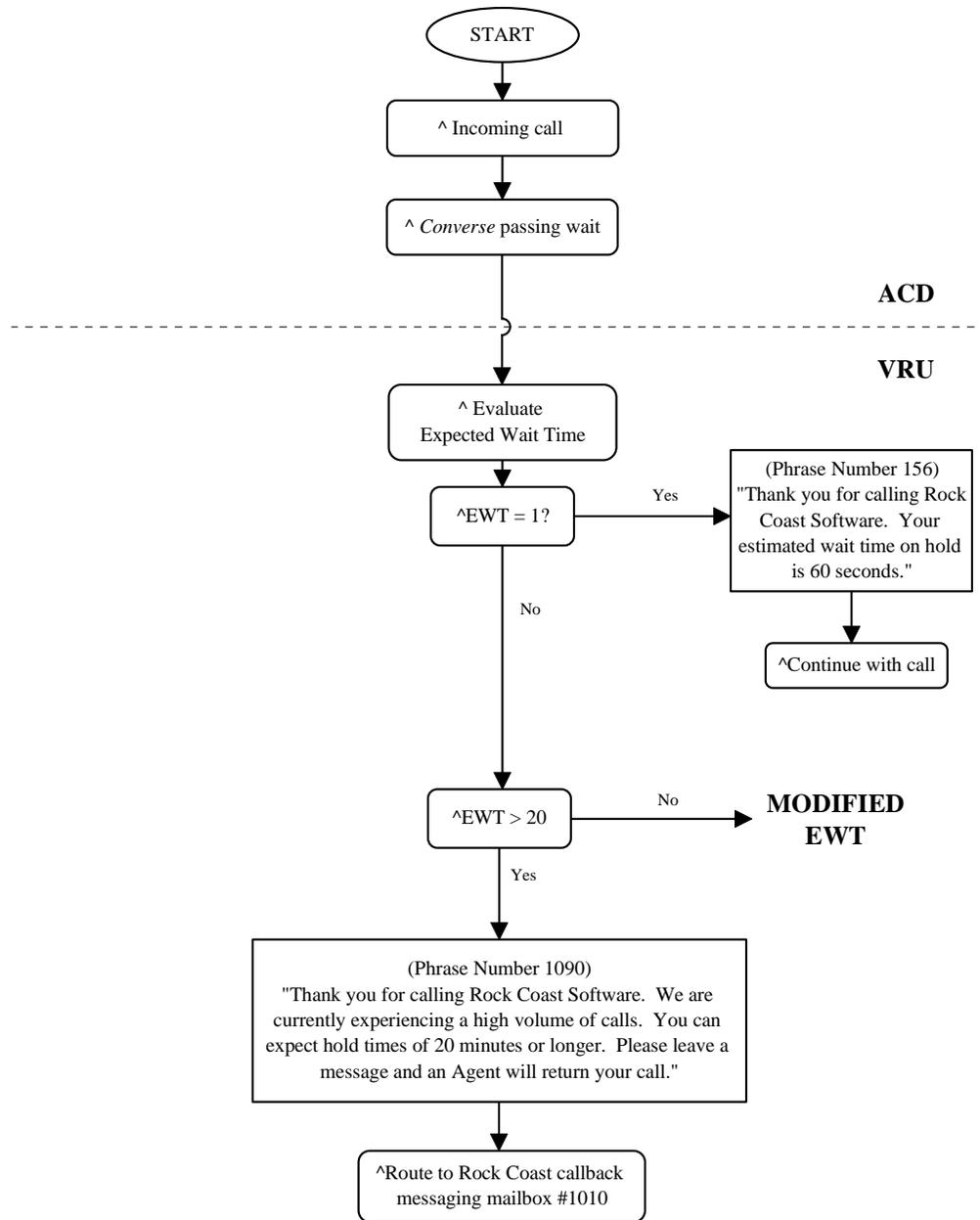
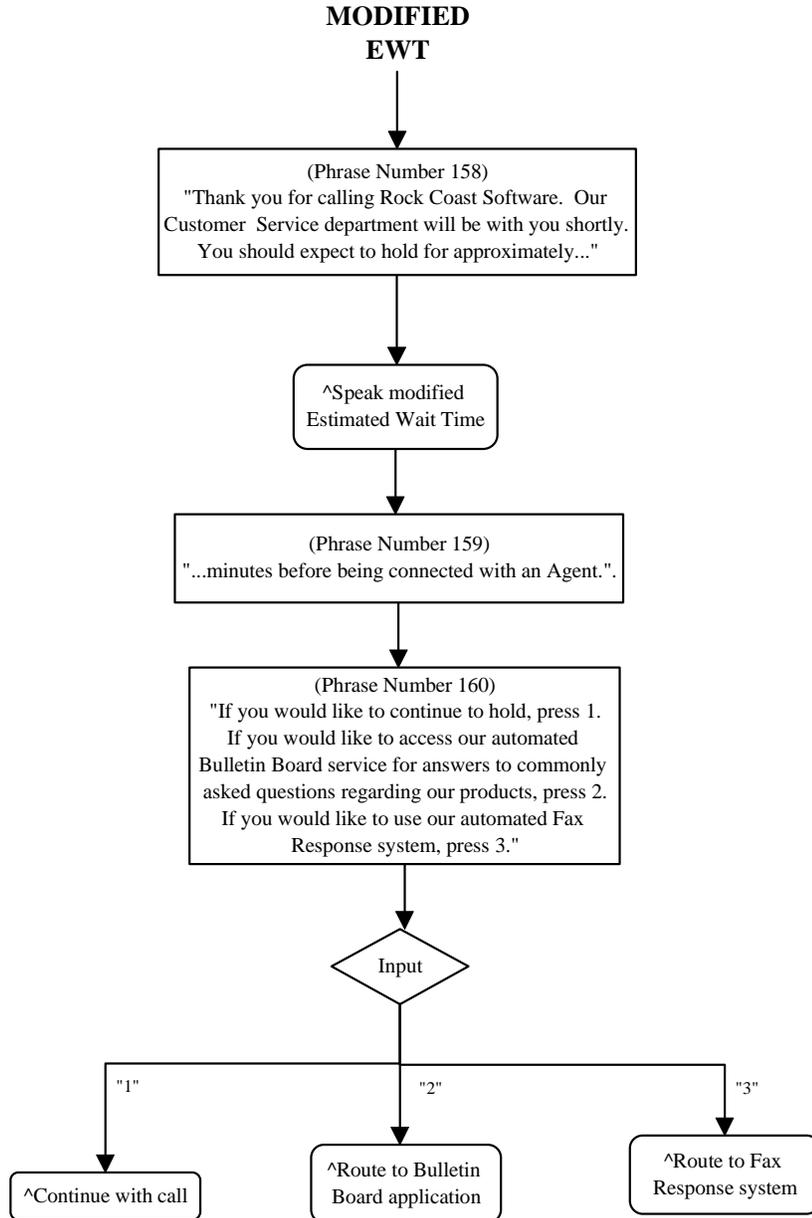


Figure 3-105. EWT Routing Callflow 1

## 9. EWT ROUTING



---

Figure 3-106. EWT Routing Callflow 2

### **ECS R6.3/DEFINITY Vector**

---

This sample application uses one DEFINITY vector. The vector uses a Converse vector step to pass a caller to the CONVERSANT and Customer Assist.

Assumption: Agent Queue split is 1 (Customer Service.) The CONVERSANT split is Split 2.

1. wait-time 2 secs hearing ringback
2. queue-to main split 1 pri m
3. wait-time 0 secs hearing music
4. converse-on split 2 pri m passing wait and none
5. collect 1 digits after announcement none
6. goto step 9 if digits = 1
7. wait-time 60 secs hearing music
8. goto step 7 if unconditionally
9. quit

### **Speech Administration**

---

In this sample application, you must record speech for phrase numbers 1090, 156, and 158-160. See the callflow for the text of these phrases.

See “Sample Application #2: Standard Announcement” on page 3-18 for information on how to create or record vector phrases.

### **Customer Assist Vectors**

---

This sample application uses three Customer Assist vectors:

- “First Vector — RC-EWT Routing” on page 3-139
- “Second Vector — RC-Msg Drop” on page 3-141
- “Third Vector — RC-Return ACD” on page 3-143

## First Vector — RC-EWT Routing

The RC-EWT Routing vector collects the expected wait time from the switch, converts it to minutes, and uses it to route callers to one of three different announcements, depending on the number of minutes the caller is expected to wait in queue (short = 1 minute; standard = 1-20 minutes; long = greater than 20 minutes). Except for step 12, this vector closely resembles the Customer Assist vector in “Sample Application #7: Estimated Wait Time” on page 3-118.

Figure 3-107 shows the finished RC-EWT routing vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 111 STEPS
>Call Use Vector Name: RC-EWT Routing Vector Number: 111
System Description: Rock Coast EWT Routing
System
UNIX Sy
Exit
Step Action Description
1 CONVERSE collect 5 digits into %data1
2 EWT calculates the delay from %data1 into %data2
3 GOTO Step 9 if %data2 = 1
4 GOTO Step 11 if %data2 > 20
5 ANNOUNCE your EWT is ...
6 SPEAK_NUM in %ewt as Number
7 ANNOUNCE ...minutes.
8 GOTO Step 13 unconditionally
9 ANNOUNCE your EWT is ...
10 GOTO Step 14 unconditionally
11 ANNOUNCE your EWT is ...
12 GOTO Vector 5 unconditionally
13 MENU Tech Support 1. Cust Serv 2. Sales 3. Warr 4 Fax 5
14 QUIT Returns caller to switch

Enter the vector name.

HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
  
```

Figure 3-107. Finished RC-EWT Routing Vector

### Step Descriptions

1. CONVERSE

Collects the Expected Wait Time information from the switch and places it in the variable *%data1*. Since this information is passed to the CONVERSANT in seconds, this action will collect five digits.

2. EWT

Converts the Expected Wait Time information received from the DEFINITY to an Estimated Wait Time that can be spoken back to the caller.

The action rounds the value of the variable *%data1* up to the nearest minutes and places the result in the variable *%ewt*. The result of this calculation is in minutes.

3. GOTO

If the value of the variable  $\%ewt = 1$ , this step routes the caller to step 9, which recites the short Estimated Wait Time announcement.

4. GOTO

If the value of the variable  $\%ewt > 20$ , this step routes the caller to step 11, which recites the long Estimated Wait Time announcement.

5. ANNOUNCE

Recites the first part of the standard Estimated Wait Time announcement.

6. SPEAK\_NUM

Recites the Estimated Wait Time to the caller as a number.

7. ANNOUNCE

Recites the last part of the standard Estimated Wait Time announcement.

8. GOTO

Routes the caller to step 13 where they can select their service options from a menu.

9. ANNOUNCE

Recites the short Estimated Wait Time announcement.

10. GOTO

Routes the caller to the last step in this vector, the QUIT action, which returns them to the switch.

11. ANNOUNCE

Recites the long Estimated Wait Time announcement.

12. GOTO

Routes the caller to the “Second Vector — RC-Msg Drop” on page 3-141. That vector allows the caller to leave a message in the Rock Coast mailbox.

13. MENU

Recites a menu announcement to callers to inform callers of their options. Callers can:

- Press **[1]** to continue to hold; this routes them to the QUIT action in step 14 so that they return to the DEFINITY switch.
- Press **[2]** to connect to a bulletin board application.
- Press **[3]** to connect to Rock Coast’s Fax Response application. After pressing **[3]**, the caller is sent to another vector (not shown in this sample application). To execute the fax application, see “Sample Application #4: Automated Attendants” on page 3-45.

14. QUIT

Quits Customer Assist and returns control to the ECS R6.3/DEFINITY vector.

### Second Vector — RC-Msg Drop

This vector allows the caller to leave a message in the Rock Coast mailbox and then routes the caller to the last vector, which routes them back to the switch to end the call.

In this example, the caller is still in queue while they are leaving a message. In some instances, you may want to return the caller to the switch to dequeue them first and then return them to the CONVERSANT to allow them to leave a message. This reduces the overall DEFINITY split length, lowers the hold times, and prevents a caller who is leaving a message from being “yanked” back to the DEFINITY if an agent becomes available. In this sample application, however, Rock Coast wants callers with wait times over 20 minutes to remain in queue so they can be connected to an agent if one should become available.

Figure 3-108 shows the completed RC-MessageDrop vector.

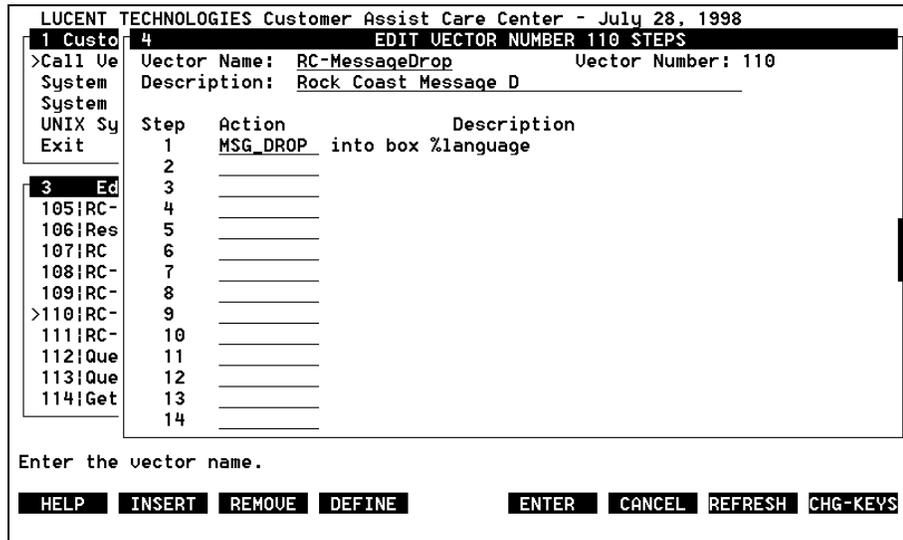


Figure 3-108. Finished RC-Msg Drop Vector

### Step Descriptions

#### 1. MSG\_DROP

Allows the caller to leave a message in a specified mailbox and then routes the caller to the RC-Return ACD vector.



**NOTE:**

In Figure 3-109, the mailbox number appears incorrectly as the variable *%language*. This variable is used in place of a mailbox number in “Sample Application #9: Estimated Wait Time Routing” on page 3-135.

Figure 3-109 shows the MSG\_Drop action form.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custd 4 EDIT VECTOR NUMBER 110 STEPS
>Call Use Vector Name: RC-MessageDrop Vector Number: 110
System Description: Rock Coast Message D
System
UNIX Sy Step Action Description
Exit
3 Ed 5 Message Drop Action, Step Number 1 for vector 110
105!RC- MSG_DROP Action saves a multi-part message.
106!Res Message Drop in mailbox: %language
107!RC Optional arguments
108!RC- Argument A:
109!RC- Argument B:
>110!RC- Argument C:
111!RC-
112!Que After MSG_DROP
113!Que Jump to Vector : 6 Speech Admin
114!Get Comment: Rock Coast Queue Mailbox

Enter the mailbox number or a variable followed by the Return or ENTER key.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 3-109. MSG\_DROP Action Form

### Third Vector — RC-Return ACD

This last vector returns the caller (if they are still on hold) to the switch to end the call.

Figure 3-110 shows the completed RC-Return ACD vector.

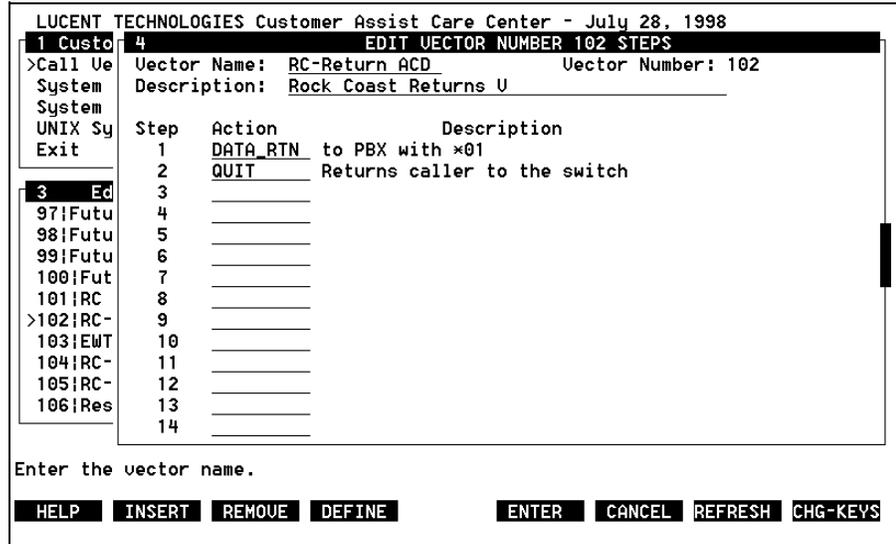


Figure 3-110. Finished RC-Return ACD Vector

#### Step Descriptions

1. DATA\_RTN  
Returns a hard-coded number 1 to the DEFINITY vector.
2. QUIT  
Quits Customer Assist and returns control to the ECS R6.3/DEFINITYswitch vector, which in turn drops the caller.

## Sample Application #10: Callback Messaging

---

### Business Situation

---

Continuing on with the work that was done in the “Sample Application #9: Estimated Wait Time Routing”, this sample application completes that exercise by showing the set up of the Callback Messaging mailbox and all of its global settings.

To review, the Rock Coast Software Company wants to provide callers on hold with useful additional information, such as the estimated time the caller must wait to be connected to an agent. For example, Rock Coast would like to provide callers with an announcement such as “The Rock Coast Customer Service Department will be with you shortly. You should expect to hold for approximately...” (estimated wait time) “...minutes before being connected to an agent.” Rock Coast would like to provide their callers with additional options after they have received their Estimated Wait Time. They want to allow callers to continue to hold, to connect to a bulletin board application, or to use a fax response application.

More importantly, Rock Coast Software would like to automatically route callers to specific locations in their call center based on the result of the EWT calculation. For instance, Rock Coast would like to route callers who will have to wait more than 20 minutes to an overflow Callback Messaging mailbox. The callers will be “forced” to leave a message. This will be more user-friendly for the caller and less expensive for Rock Coast since they will not have to pay the 1-800 or Free Phone trunk charges to keep that caller on the line.

Other options for EWT routing include routing callers to IVR applications such as Automated Attendants, Bulletin Boards; routing callers to specific overflow extensions or departments; or using Custom Call Routing to route callers to a randomized dynamic list of promotional announcements and then onto a mailbox, IVR application, or department.

The lessons learned in earlier sample applications are background for this sample application.

### Callflow Diagram

---

Use the callflow in the “Sample Application #9: Estimated Wait Time Routing” on page 3-135 as reference.

### ECS R6.3/DEFINITY Vector

---

Use the DEFINITY vector in the “Sample Application #9: Estimated Wait Time Routing” on page 3-135 as reference.

## Callback Messaging Administration

Callback Messaging administration involves:

- Agent callback hours setup
- Customer callback hours setup
- Mailbox global settings
- New mailbox setup

### Agent Callback Hours Setup

This option allows Rock Coast to set up the hours that agents will be available to return callback messages.

Use the following steps to modify agent callback hours:

1. Start at the Customer Assist main menu and select Callback Messaging Administration.
2. Select Agent Callback Hours.

The system displays the Agent Callback Hours form (Figure 3-111).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Customer Assist Care Center
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit
2 System Administration
  >Callback Messaging Administration
  Conversant Administration
  Custom Call Routing Administration
  Report Generation
  Report Scheduling
  Speech Administration
  Survey Configurations
  System Administration
  Variable Administration
3 Callback Messaging Administration
  Mailbox Administration
  Mailbox Global Settings
  >Agent Callback Hours
  Customer Callback Hours
  Delete Messages from Mailbox
  Mapping Country/City/Area Codes to Time
4 Agent Callback Hours
  Callback Hours (hours:minutes AM/PM)
  Start time      Stop time
SUN  12:00 AM    12:00 AM
MON  08:00 AM    05:00 PM
TUE  08:00 AM    05:00 PM
WED  08:00 AM    05:00 PM
THR  08:00 AM    05:00 PM
FRI  08:00 AM    05:00 PM
SAT  12:00 AM    12:00 AM
  
```

Enter the hour and press Return or the ENTER key.

HELP CHOICES CLOSE ENTER CANCEL REFRESH

Figure 3-111. Agent Callback Hours Form

## Customer Callback Hours Setup

This option allows Rock Coast to set up the hours during which Customer Assist should launch callbacks to customers.

Use the steps following steps to modify customer callback hours:

1. Start at the Customer Assist main menu and select Callback Messaging Administration.
2. Select Customer Callback Hours.

The system displays the Customer Callback Hours form (Figure 3-112).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - August 11, 1998
1 Customer Assist Care Center
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit
2 System Administration
  >Callback Messaging Administration
  Conversant Administration
  Custom Call Routing Administration
  Report Generation
  Report Scheduling
  Speech Administration
  Survey Configurations
  System Administration
  System Administration
4 Customer Callback Hours
  Callback Hours (hours:minutes AM/PM)
  Start time      Stop time
SUN  12:00 AM    12:00 AM
MON  08:00 AM    05:00 PM
TUE  08:00 AM    05:00 PM
WED  08:00 AM    05:00 PM
THR  08:00 AM    05:00 PM
FRI  08:00 AM    05:00 PM
SAT  12:00 AM    12:00 AM
3 Callback Messaging Administration
  Mailbox Administration
  Mailbox Global Settings
  Agent Callback Hours
  >Customer Callback Hours
  Delete Messages from Mailbox
  Mapping Country/City/Area Codes to Time

Enter the hour and press Return or the ENTER key.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
  
```

Figure 3-112. Customer Callback Hours form

## Mailbox Global Settings

These screens allow Rock Coast to set up global parameters regarding all Callback Messaging mailboxes. Parameters can include what agents hear upon transcription as well as the scheduling options available to callers and agents. Rock Coast has set up its system so that:

- Messages are delivered in one minute increments to agents.
- Messages are delivered to agents on channels 1-4 on their CONVERSANT.
- Agents must "Press [1]" when a message is delivered to them before it will play.
- Segment numbers and all of the message header information play upon transcription.
- Callers have two confirmation chances when leaving message segments.
- Use a 12-hour clock.
- Callers and agents can schedule callbacks.
- The CONVERSANT "listens in" for 30 seconds while the agent is connected to the caller before dropping off the line.

Figure 3-113 shows the completed Global Settings form.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 31, 1998
1 Customer Assist 4 Global Settings for All Message Drop Mailboxes
Call Vector Confi
>System Administra Specify the Global Parameters for Message Drop
System Monitor AGENT ACCESS
UNIX System Channel access time: 1
Exit Access channel(s):
Force 'Press 1' for agent callback pickup: Yes

MESSAGE PLAYBACK
Speak transcription segment numbers: Yes
Play message header information: A
Number of confirmation chances: 2
Time format: 12 hour clock.

CUSTOMER CALLBACK
Allow agents to reschedule? Yes
Scheduling options:
Immediately: Yes Later today: Yes Later date: Yes
Callback conference time: 20
Allow agents to classify callbacks? Yes

Enter "AUTO" to monitor constantly or minutes between tries in calling agents.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 3-113. Global Settings Form

## New Mailbox Setup

This setup screen allows Rock Coast to set up individual parameters for an individual mailbox. Rock Coast has set up its system so that:

- The security code on this mailbox is 192.
- The mailbox uses U.S. English.
- Messages are delivered to agents by dialing the internal VDN #20024.
- Dialing 9 is required to get an outside line to call back callers.
- The CONVERSANT is located in the United States, so the Country Code is set to 1.
- The CONVERSANT waits for 20 seconds to see if the agent picks up upon message delivery. If no agent picks up, delivery is retried every 1 minute.
- The message waiting lamp is not used.

Figure 3-114 shows the completed Edit Existing Mailbox form.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 31, 1998
5 Edit Existing Mailbox
> Mailbox name: Rock Coast Queue Mailbox Mailbox ID: 100
Mailbox password: 192 Mailbox priority: 1
Talkfile: 6105 US English

CALLBACK
Transcriber welcome phrase:
Rock Coast Queue Mailbox 1016
Agent access number: 2020 Treat as outside number? No
Outside line access code: Country code: 1
Time to wait for answer: 15 Message retry interval: 1
Use Dial Pulse Recognition: No Use Speech Recognition: No
Adjust for time zone? Yes
NOTIFICATION AND ALARMS
Message Waiting Lamp extension:
Alarm if
Message age exceeds Minutes: Hours: Days: 1
Max number of messages exceeds:
Forward messages into mailbox: 777 DJ_test

Enter the mailbox name.
HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
    
```

Figure 3-114. Edit Existing Mailbox Form

### Modify Mailbox Form

Rock Coast wants to ask callers three questions:

- Caller's Name
- Telephone Number
- Reason for calling

Each of these questions goes in a separate segment. Use the following steps to modify this mailbox form:

1. Start at the Callback Messaging Administration menu and select Mailbox Administration.
2. Select Create New Mailbox.

The system displays the Create New Mailbox form (similar to Figure 3-114).

See "Callback Messaging Administration" on page 7-2 for more information on how to administer mailboxes.

Figure 3-115, Figure 3-116, and Figure 3-117 show the segment-type forms.

---

The screenshot shows a terminal window titled "LUCENT TECHNOLOGIES Customer Assist Care Center - August 13, 1998". The main window is titled "5 Edit Existing Mailbox". It displays a "Message closing phrase:" section with "Rock Coast Mailbox - Goodbye" and a tag of "1021". Below this is a "Segments Grid" table with columns for Segment, Type, and Identity Tag. The grid contains three rows of data and several empty rows. At the bottom, there is a prompt "Select the phrase tag to play after the final mailbox prompt." and a row of function keys: HELP, INSERT, REMOVE, DEFINE, ENTER, CANCEL, REFRESH, and CHG-KEYS.

Segment	Type	Identity Tag
1	Record	Please speak your full name. 1017
2	Data	1024
3	Record	Please speak your current technical issue. 1019
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

Figure 3-115. Edit Existing Mailbox: Segments Grid

LUCENT TECHNOLOGIES Customer Assist Care Center - July 31, 1998

**6** Record configuration for mailbox 100, segment 1

MESSAGE DROP OPTIONS:

Phrase tag: Please speak your full name. 1017

Response limits: Minimum: 3 Maximum: 15

Recording quality: ADPCM32

Have caller confirm? Yes

Segment required to save message? No

TRANSCRIPTION OPTIONS:

Play back to transcriber? Yes

> 8 \_\_\_\_\_

9 \_\_\_\_\_

10 \_\_\_\_\_

11 \_\_\_\_\_

12 \_\_\_\_\_

13 \_\_\_\_\_

14 \_\_\_\_\_

15 \_\_\_\_\_

Select the phrase tag that the caller will hear.

**HELP CHOICES CLOSE** **CANCEL REFRESH**

Figure 3-116. Edit Existing Mailbox: Record Configuration for Record Segment 1

LUCENT TECHNOLOGIES Customer Assist Care Center - August 13, 1998

**5** Edit Existing Mailbox

Message closing phrase:

> Rock Coast Mailbox - Goodbye 1021

**6** Data configuration for mailbox 15, segment 2

MESSAGE DROP OPTIONS:

Phrase tag: Please enter your phone number

Response limits: Minimum: 0 Maximum: 24

Have caller confirm? No

Segment required to save message? No

TRANSCRIPTION OPTIONS:

Play back to transcriber? Yes

Display field? None

Treat as phone field? No Portion: Whole

Enable automatic launch? No Message treatment: None

INPUT OPTIONS:

Passed parameter? No Argument: -

**HELP CHOICES CLOSE** **CANCEL REFRESH**

Figure 3-117. Edit Existing Mailbox: Data Configuration for Data Segment 2

LUCENT TECHNOLOGIES Customer Assist Care Center - August 13, 1998  
6 Record configuration for mailbox 15, segment 3

MESSAGE DROP OPTIONS:  
Phrase tag: Please speak your current technical issue. 1019  
Response limits: Minimum: 3 Maximum: 300  
Recording quality: CELP16  
Have caller confirm? No  
Segment required to save message? No

TRANSCRIPTION OPTIONS:  
Play back to transcriber? Yes

> 8 \_\_\_\_\_  
9 \_\_\_\_\_  
10 \_\_\_\_\_  
11 \_\_\_\_\_  
12 \_\_\_\_\_  
13 \_\_\_\_\_  
14 \_\_\_\_\_  
15 \_\_\_\_\_

Select the phrase tag that the caller will hear.

HELP CHOICES CLOSE CANCEL REFRESH

Figure 3-118. Edit Existing Mailbox: Record Configuration for Record Segment 3

### Customer Assist Vectors

---

Use the Customer Assist vectors in the “Sample Application #9: Estimated Wait Time Routing” on page 3-135 as reference.

## Sample Application #11: Bilingual Dynamic Announcements and Routing

---

### Business Situation

---

The Rock Coast Software Company wants to enable callers to select the language in which to hear prompts and announcements. Approximately 80% of its customers speak U.S. English and the other 20 percent speak Colombian Spanish. They would like to convert their Estimated Wait Time application (“Sample Application #7: Estimated Wait Time” on page 3-118, Collects a single digit that corresponds to the department where the caller is currently queued from the switch was modified to include EWT Routing in “Sample Application #9: Estimated Wait Time Routing” on page 3-135) to have the capability to change languages “on the fly.”

The lessons learned in earlier sample applications are background for this sample application.

## **Callflow Diagram**

---

The following three diagrams illustrate the callflow for this sample application.

**11. EWT ROUTING**  
**Bi-lingual**

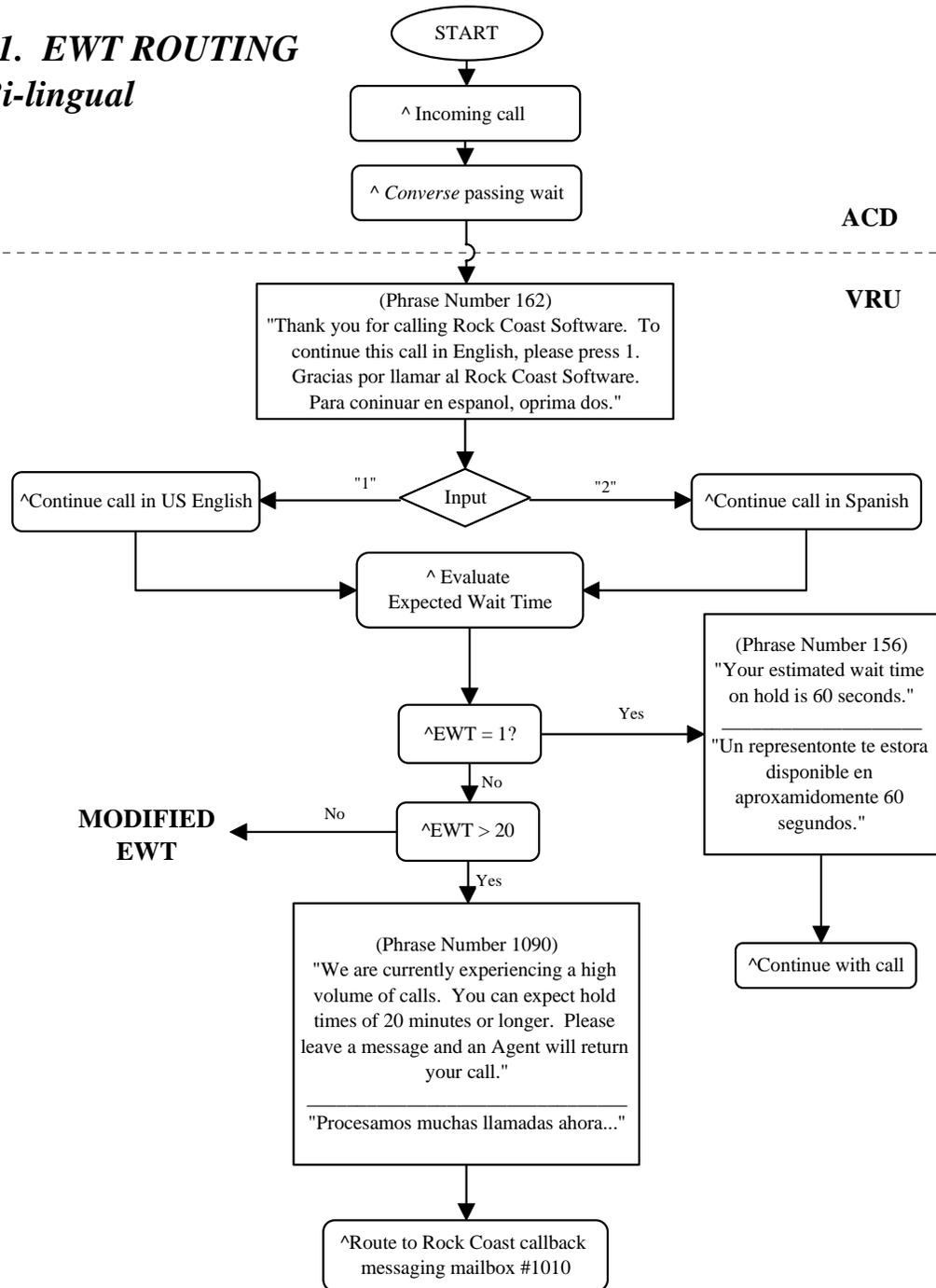


Figure 3-119. Bilingual Callflow 1

## 11. EWT ROUTING

### *Bi-lingual*

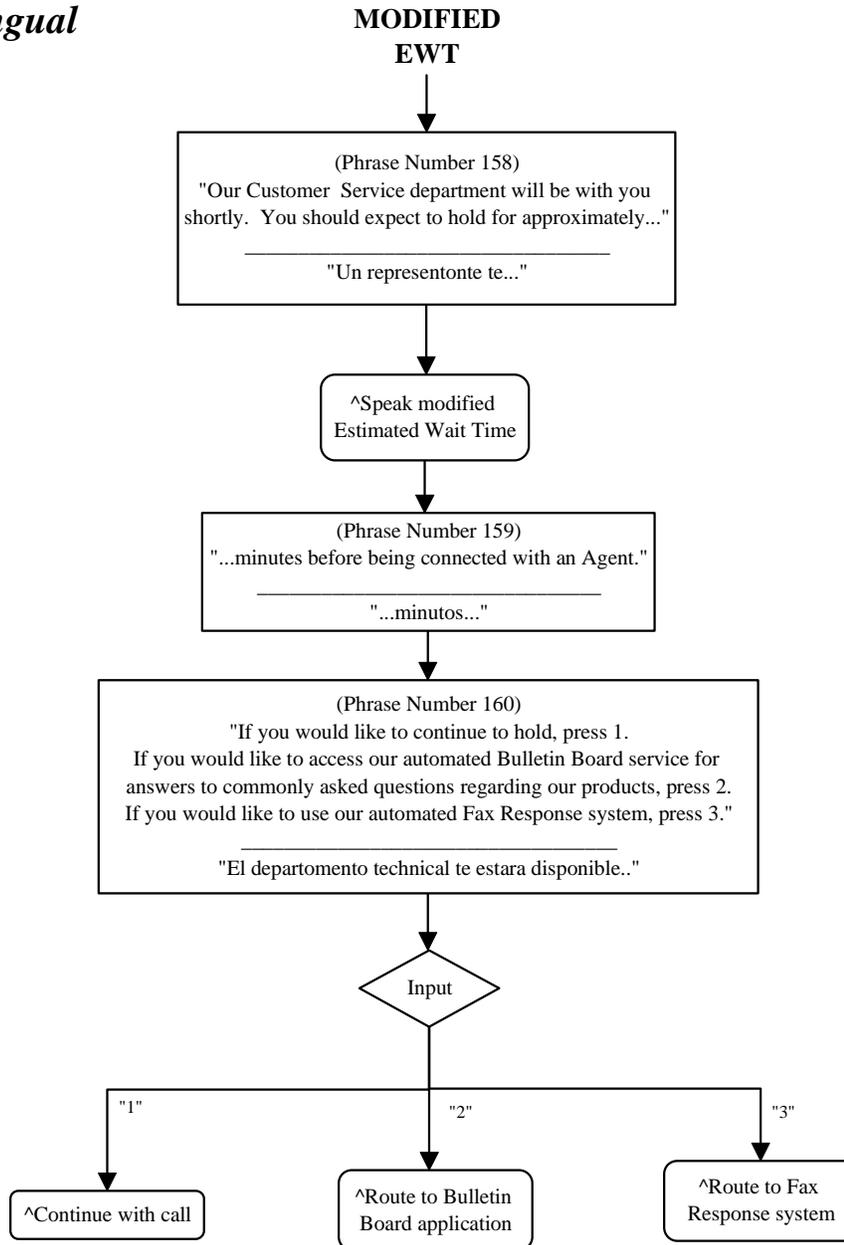


Figure 3-120. Bilingual Callflow 2

### **ECS R6.3/DEFINITY Vector**

---

This sample application uses one DEFINITY vector. The vector uses a Converse vector step to pass a caller to the CONVERSANT and Customer Assist.

Assumptions: The CONVERSANT split is Split 3.

1. wait-time 2 secs hearing ringback
2. queue-to main split 1 pri m
3. wait-time 0 secs hearing music
4. converse-on split 2 pri m passing wait and none
5. collect 1digits after announce none
6. goto step 9 if digits = 1
7. wait-time 60 secs hearing music
8. goto step 7 if unconditionally
9. stop

### **Callback Messaging Administration**

---

Callback Messaging administration involves:

- Agent callback hours setup
- Mailbox global settings
- New mailbox setup

See “Sample Application #10: Callback Messaging” on page 3-144 for instructions.

Because this sample application is bilingual, you must set up two mailboxes, one for US English and one for Colombian Spanish. In this sample application, the mailbox numbers must match the corresponding language code numbers. For example, since the language code for Colombian Spanish is 5, the mailbox number for Colombian Spanish must also be 5.

### **Speech Administration**

---

In this sample application, you must record speech for phrase numbers 1090, 156, 158-160, and 162. See the callflow for the text of these phrases.

See “Sample Application #2: Standard Announcement” on page 3-18 for information on how to create or record vector phrases.

## Customer Assist Vectors

This sample application uses five Customer Assist vectors:

- “First Vector — RC-BiLing Open” on page 3-156
- “Second Vector — RC-BiLing EWT” on page 3-159
- “Third Vector — RC-BiLing Menu” on page 3-160
- “Fourth Vector — RC-Msg Drop” on page 3-162
- “Fifth Vector — RC-Return ACD” on page 3-165

For each vector, the sample application first describes the steps in the finished vector and then describes each step.

### First Vector — RC-BiLing Open

This vector receives the estimated wait time from the switch, prompts the caller to select English or Colombian Spanish, changes the language to the caller’s request, and routes callers to the next vector, “Second Vector — RC-BiLing EWT” on page 3-159.

Figure 3-121 shows the completed RC-BiLing Open vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custd 4 EDIT VECTOR NUMBER 104 STEPS
>Call Use Vector Name: RC-BiLing Open Vector Number: 104
System Description: Rock Coast Bi-Lingua
System
UNIX Sy Step Action Description
Exit 1 CONVERSE collect 5 digits into %data1
2 EWT calculates the delay from %data1 into %ewt
3 Ed 3 MENU U.S. Spanish Menu
99!Futu 4 CHG_LANG to %language
100!Fut 5 GOTO Vector 8 unconditionally
101!RC 6
102!RC- 7
103!EWT 8
>104!RC- 9
105!RC- 10
106!Res 11
107!RC 12
108!RC- 13
14

Enter the vector name.

HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
    
```

Figure 3-121. Finished RC-BiLing Open Vector

### Step Descriptions

1. CONVERSE

Collects the Expected Wait Time information from the switch and places it in the variable *%data1*. Since this information is passed to the CONVERSANT in seconds, this action step will collect five digits.

2. EWT

Converts the Expected Wait Time information received from the DEFINITY to an Estimated Wait Time that can be spoken back to the caller.

The action rounds the value of the variable *%data1* up to the nearest minutes and places the result in the variable *%ewt*. The result of this calculation is in minutes.

3. MENU

Recites a single announcement with both U.S. English and Colombian Spanish speech. The announcement prompts the caller to select the language they want to use.

If the caller presses 1 for U.S. English, then all prompts from that point on will be spoken to the caller in U.S. English. If the caller presses 2 for Colombian Spanish, then all prompts from that point on will be spoken to the caller in Colombian Spanish. Depending on this selection, the MENU action sets the value of the variable *%language* to the talkfile reference number that is used throughout the call.

4. CHG\_LANG

Changes the current talkfile language for one specific caller to the talkfile number represented in the value in the variable *%language*. The results of this action affect only this specific caller and do not globally change the base language.

**⇒ NOTE:**

See “Changing the Base Language” on page 6-16 to globally change the base language of Customer Assist.

Figure 3-122 shows the completed CHG\_LANG action form.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 104 STEPS
>Call Ue Vector Name: RC-BiLing Open Vector Number: 104
System Description: Rock Coast Bi-Lingua
System
UNIX Sy Step Action Description
Exit 1 CONVERSE collect 5 digits into %data1
2 EWT calculates the delay from %data1 into %ewt
3 Ed 3 MENU U.S. Spanish Menu
99!Futu 4 CHG_LANG to %language
100!Fut 5 GOTO Vector 8 unconditionally
101!RC 6
102!RC- 7
103!EWT 8
>104!RC- 9
105!RC- 10
5 Change Language Action, Step Number 4 for vector 104
Change language to: %language
Comment
Enter the language or a variable.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 3-122. CHG\_LANG Action Form

5. GOTO

This action step unconditionally routes the caller to the EWT Announcement vector. See “Second Vector — RC-BiLing EWT” on page 3-159.

## Second Vector — RC-BiLing EWT

This vector uses the estimated wait time to route callers to one of three different announcements depending on the number of minutes the caller is expected wait in queue (short = 1 minute; standard = 1-20 minutes; long = greater than 20 minutes).

Figure 3-123 shows the completed RC-BiLing EWT vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - August 13, 1998
1 Customer Assist Care Center 2 Vector Configuration
>Call Use 4 EDIT VECTOR NUMBER 105 STEPS
System Vector Name: RC-BiLing EWT Vector Number: 105
System Description: Rock Coast Bi-Lingua
UNIX Sy
Exit

Step Action Description
1 GOTO Step 7 if %ewt = 1
2 GOTO Step 9 if %ewt > 20
3 DYN_ANNOU phrase in 158
4 SPEAK_NUM in %ewt as Number
5 DYN_ANNOU phrase in 159
6 GOTO Vector 9 unconditionally
7 DYN_ANNOU phrase in 156
8 QUIT Returns call to the switch
9 DYN_ANNOU phrase in 161
10 GOTO Vector 5 unconditionally
11
12
13
14

Enter the vector name.
HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
  
```

Figure 3-123. Finished RC-BiLing EWT Vector

### Step Descriptions

1. GOTO

If the value of the variable *%ewt = 1*, this step routes the caller to step 7, which speaks the short Estimated Wait Time announcement.

2. GOTO

If the value of the variable *%ewt > 20*, this step routes the caller to step 9, which speaks the long Estimated Wait Time announcement.

3. DYN\_ANNOU

Recites the first part of the standard Estimated Wait Time announcement in the language represented in the variable *%language*.

4. SPEAK\_NUM

Recites the Estimated Wait Time to the caller as a number in the language represented in the variable *%language*.

5. DYN\_ANNOU

Recites the last part of the standard Estimated Wait Time announcement in the language represented in the variable *%language*.

6. GOTO

Routes the caller to a vector that provides a menu of options in the requested language. See “Third Vector — RC-BiLing Menu” on page 3-160.

7. DYN\_ANNOU

Recites the short Estimated Wait Time announcement in the language represented in the variable *%language*.

8. QUIT

Routes the caller back to the switch.

9. DYN\_ANNOU

Recites the long Estimated Wait Time announcement in the language represented in the variable *%language*.

10. GOTO

Routes the caller to the “Fourth Vector — RC-Msg Drop” on page 3-162. That vector allows the caller to leave a message in the Rock Coast mailbox.

### **Third Vector — RC-BiLing Menu**

This vector provides a menu of options for callers in either Colombian Spanish or US English.

Figure 3-124 shows the completed RC-BiLing vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 146 STEPS
>Call Use Vector Name: RC-BiLing Menu Vector Number: 146
System Description: Rock Coast Bi-Linqual Menu
System
UNIX Sy
Exit
Step Action Description
1 GOTO Step 3 if %language = 11
2 GOTO Step 5 if %language = 5
3 Ed 3 MENU Tech Support 1. Cust Serv 2. Sales 3. Warr 4 Fax 5
141|RC- 4 QUIT Returns call to switch
142|RC- 5 MENU Tech Support 1. Cust Serv 2. Sales 3. Warr 4 Fax 5
143|RC- 6 QUIT Returns call to the switch
144|RC- 7
145|RC- 8
>146|RC- 9
147|RC- 10
148|RC- 11
149|RC- 12
150|RC- 13
14
Enter the vector name.
HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS

```

Figure 3-124. Finished RC-BiLing Menu Vector

### Step Descriptions

1. GOTO

If *%language = 11*, this action routes the caller to step 3, which provides a menu using US English prompts.

2. GOTO

If *%language = 5*, this action routes the caller to step 5, which provides a menu using Colombian Spanish prompts.

3. MENU

Recites a menu announcement in US English to callers to inform callers of their options. Callers can:

- Press [1] to continue to hold; this routes them to the QUIT action so that they return to the DEFINITY switch.
- Press [2] to connect to a bulletin board application.
- Press [3] to connect to Rock Coast’s Fax Response application.

**⇒ NOTE:**

After pressing [3], the caller is sent to another vector (not shown in this sample application). To execute the fax system, see “Sample Application #4: Automated Attendants” on page 3-45.

4. QUIT

Ends the Customer Assist session and unconditionally routes the caller back to the switch.

5. MENU

Recites a menu announcement in Colombian Spanish to callers to inform callers of their options. Callers can:

- Press **[1]** to continue to hold; this routes them to the QUIT action so that they return to the DEFINITY switch.
- Press **[2]** to connect to a bulletin board application.
- Press **[3]** to connect to Rock Coast's Fax Response application.

6. QUIT

Ends the Customer Assist session and unconditionally returns the caller to the switch.

### **Fourth Vector — RC-Msg Drop**

This vector allows the caller to leave a message in the Rock Coast mailbox using the appropriate language, and then routes the caller to the last vector, which routes them back to the switch to end the call.

In this example, the caller is still in queue while they are leaving a message. In some instances, you may want to return the caller to the switch to dequeue them first and then return them to the CONVERSANT to allow them to leave a message. This reduces the overall DEFINITY split length, lowers the hold times, and prevents a caller who is leaving a message from being “yanked” back to the DEFINITY if an agent becomes available. In this sample application, however, Rock Coast wants callers with wait times over 20 minutes to remain in queue so they can be connected to an agent if one should become available.

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 110 STEPS
>Call Ue Vector Name: RC-MessageDrop Vector Number: 110
System Description: Rock Coast Message D
System
UNIX Sy Step Action Description
Exit 1 MSG_DROP into box %language
3 Ed 2
105|RC- 3
106|Res 4
107|RC- 5
108|RC- 6
109|RC- 7
>110|RC- 8
111|RC- 9
112|Que 10
113|Que 11
114|Get 12
14
Enter the vector name.
HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
```

Figure 3-125. Finished RC-Msg Drop Vector

### Step Descriptions

#### 1. MSG\_DROP

Allows the caller to leave a message in a mailbox and then routes the caller to the "Fifth Vector — RC-Return ACD" on page 3-165.

Instead of specifying a mailbox number, the MSG\_DROP action specifies the value of the variable, *%language*. This variable is either 11 for US English or 5 for Colombian Spanish. The sample application has two Callback Messaging mailboxes:

- Mailbox number 11 prompts callers in US English
- Mailbox number 5 prompts callers in Colombian Spanish

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 110 STEPS
>Call Ue Vector Name: RC-MessageDrop Vector Number: 110
System Description: Rock Coast Message D
UNIX Sy Step Action Description
Exit 5 Message Drop Action, Step Number 1 for vector 110

3 Ed MSG_DROP Action saves a multi-part message.
105!RC- Message Drop in mailbox: %language
106!Res Optional arguments
107!RC- Argument A:
108!RC- Argument B:
109!RC- Argument C:
>110!RC-
111!RC-
112!Que After MSG_DROP
113!Que Jump to Vector : 6 Speech Admin
114!Get Comment: Rock Coast Queue Mailbox

Enter the mailbox number or a variable followed by the Return or ENTER key.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 3-126. MSG\_DROP Action Form

### Fifth Vector — RC-Return ACD

This last vector returns the caller (if they are still on hold) to the switch to end the call.

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 102 STEPS
>Call Use Vector Name: RC-Return ACD Vector Number: 102
System Description: Rock Coast Returns U
System
UNIX Sy Step Action Description
Exit 1 DATA_RTN to PBX with *01
3 Ed 2 QUIT Returns caller to the switch
97|Futu 3
98|Futu 4
99|Futu 5
100|Fut 6
101|RC 7
>102|RC- 8
103|EWT 9
104|RC- 10
105|RC- 11
106|Res 12
14

Enter the vector name.
HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
```

Figure 3-127. Finished RC-Return ACD Vector

#### Step Descriptions

1. DATA\_RTN  
Returns a hard-coded number 1 to the DEFINITY vector.
2. QUIT  
Quits Customer Assist and returns control to the ECS R6.3/DEFINITY vector, which in turn drops the caller.

## **Sample Application #12: Dynamic Port Allocation and Dynamic Allocation of Applications**

---

### **Business Situation**

---

The Rock Coast Software Company is getting close to finishing its entire call center application, but it is looking for ways to make its CONVERSANT more cost effective.

One option is to dynamically allocate ports on the CONVERSANT to run any application, as compared to statically allocating ports to just one application, such as a single announcement. A statically allocated port allows many callers to hear a single announcement. Dynamically allocated ports allow only one caller to access and hear a single announcement, but it can occur on any port. Rock Coast estimates that by dynamically allocating its ports, it can save on hardware expenses because it will not need as many ports, and at the same time dynamically provide better quality service overall to its customer base.

In the following example, Rock Coast creates a “Main Route” vector that will act as the dynamic port allocation engine to other vectors in the software. This Main Route vector routes any incoming caller’s VDN number to specific vectors or specific applications outside of the Customer Assist application.

The lessons learned in earlier sample applications are background for this sample application.

### **ECS R6.3/DEFINITY Vector**

---

This sample application uses one DEFINITY vector. The vector uses a Converse vector step to pass a caller to the CONVERSANT and Customer Assist.

Assumptions: The CONVERSANT split is Split 3.

1. wait time 2 secs hearing ringback
2. converse-on split 3 pri m passing vdn and none
3. collect 3 digits after announcement none
4. route-to digits with coverage n
5. stop

The sample application illustrates dynamic port allocation when the DEFINITY is passing VDN. However, dynamic port allocation can take place when any argument or hard-coded digit string is passed and evaluated. If the DEFINITY vector step passes nothing, however, no dynamic port allocation can take place.

## Customer Assist Vector

---

This sample application uses the RC-Main DPA vector to provide the dynamic port allocation for the other vectors in the application. These other vectors are not discussed.

---

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 147 STEPS
>Call Use Vector Name: RC-Main DPA Vector Number: 147
System Description: Rock Coast-Main Route-Dynamic Port Alloc
System
UNIX Sy Step Action Description
Exit 1 CONVERSE collect 3 digits into %data1
2 SWITCH Dynamic Port Allocation
3 Ed 3 DYNAMIC Dynamic Allocations of Applications
142|RC- 4 QUIT
143|RC- 5
144|RC- 6
145|RC- 7
146|RC- 8
>147|RC- 9
148|RC- 10
149|RC- 11
150|RC- 12
151|C4 13
14
Press the CHOICES key for the list of available actions.
HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
```

Figure 3-128. Finished RC-Main DPA Vector

### Step Descriptions

1. CONVERSE

Collects the VDN digits passed to the CONVERSANT from the DEFINITY switch and places them into the variable *%data1*.

**⇒ NOTE:**

In this example, the Customer Assist application is expecting to receive three digits. This number may be different depending on the application. There may also be a second CONVERSE step to receive a second argument passed from the DEFINITY.

2. SWITCH

Routes the caller to specific vectors in Customer Assist, depending on the VDN value in the variable *%data1*.

For example, if the VDN is 111, the SWITCH action routes the call to vector number 20, RC-AnnQueuePos.

If the VDN passed from the switch to the CONVERSANT does not appear in the SWITCH action, the Main Route vector continues to the step containing the DYNAMIC action.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Cus 4
>Call Use 5 EDIT VECTOR NUMBER 147 STEPS
System De SWITCH Action Step Number 6 for vector 147
System St SWITCH evaluates variables and routes matches to vectors
UNIX Sy Comment: Dynamic Port Allocation
Exit Variable: %data1 Operator: =

3 Ed
142|RC- 111 109 RC-AnnQueuePos
143|RC- 222 142 RC-AA-TT Menu
144|RC- 333 142 RC-AA-TT Menu
145|RC- 444 144 RC-BB-SR-Win95
146|RC- 555 145 RC-BB-SR-Retur
>147|RC- 666 146 RC-Biling Menu
148|RC- 777 147 RC-Main DPA
149|RC- 888 148 RC-Weekend
150|RC-
151|C4

Please enter your comments.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 3-129. SWITCH Action Form

### 3. DYNAMIC

Dynamically allocates another application, an automated employee payroll system called "agent," on the CONVERSANT to callers entering the Customer Assist application.

This action dynamically allocates the agent application if the VDN passed from the switch is either 999 or 000. In either case, the DYNAMIC action passes data (three arguments) out of the Customer Assist application and into the agent application sitting on the CONVERSANT. The action passes both hard-coded numbers such as 567 and variables such as %data1.

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 147 STEPS
>Call Use Vector Name: RC-Main DPA Vector Number: 147
System 5 DYNAMIC PORT ALLOCATION BLOCK 7 for vector 147
System
UNIX Sy
Exit

DYNAMIC ALLOCATION STARTS PROGRAMS FOR GIVEN VALUES
Comment: Dynamic Allocations of Applications
Variable: %data1

3 Ed
142|RC-
143|RC- 999 agent 1234 567 890
144|RC- 000 agent 1234 %data1 890
145|RC-
146|RC-
>147|RC-
148|RC-
149|RC-
150|RC-
151|C4

Please enter your comments.

HELP CHOICES CLOSE ENTER CANCEL REFRESH
```

Figure 3-130. Dynamic Port Allocation

#### 4. QUIT

If any VDN is passed other than those specified in the previous SWITCH and DYNAMIC actions, the QUIT action returns the call to the DEFINITY switch.

## Changing the Setup Vector

After Rock Coast creates the Main Route vector, it must change its setup vector so that every channel assigned to Customer Assist on the CONVERSANT points to this vector.

Figure 3-131 illustrates how a CHAN\_ASN action in the setup vector would look after all the Customer Assist channels are assigned to the Main Route vector (vector 29).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 0 STEPS
>Call Ue Vector Name: setup Vector Number: 0
System Description: system 5 CHAN_ASN Action Step Number 2 for vector 0
System
UNIX Sy Step Action
Exit 1 OFF_HOOK answ
3 Ed 2 CHAN_ASN assi
>0:setup 3 CHAN_ASN assi
1:Main 4 CHAN_ASN assi
2:MB Ac 5 CHAN_ASN assi
3:chang 6 CHAN_ASN assi
4:Trans 7 CHAN_ASN assi
5:IUR a 8 CHAN_ASN assi
6:Speec 9 CHAN_ASN assi
7:chose 10 QUIT if c
8:Sched 11
9:Morni 12
13
14
CHAN_ASN assigns vectors to channels
Comment: assign channels to vectors
CHANNEL VECTOR NAME
0 1 Main Menu
1 1 Main Menu
2 1 Main Menu
3 1 Main Menu
4 1 Main Menu
5 1 Main Menu
6 27 UTG-Menu
7 27 UTG-Menu
8 27 UTG-Menu
9 27 UTG-Menu
10 1 Main Menu
11 1 Main Menu
Please enter your comments.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 3-131. CHAN\_ASN Action Form

## **Sample Application #13: Scheduling Events in a Call Center**

---

### **Business Situation**

---

The Rock Coast Software Company would now like to create a way to give its customers specific announcements during the December holiday season as well as specific announcements during a weekend. Rock Coast can easily do this by using Customer Assist. This sample application modifies the dynamic port allocation vector created in the previous section.

The lessons learned in earlier sample applications are background for this sample application.

### **ECS R6.3/DEFINITY Vector**

---

This sample application uses one DEFINITY vector. The vector uses a Converse vector step to pass a caller to the CONVERSANT and Customer Assist.

Assumption: The CONVERSANT split is Split 3.

1. wait-time 2 secs hearing ringback
2. converse-on split 3 pri m passing vdn and none
3. collect 3 digits after announcement none
4. route-to digits with coverage n
5. stop

### **Customer Assist Vectors**

---

This sample application illustrates three Customer Assist vectors:

- “First Vector — RC-Main DPA” on page 3-178
- “Sample Application #14: Reporting and Hang Up Actions” on page 3-177
- “Third Vector — RC-Weekend” on page 3-175

Each of these vectors provides dynamic port allocation for other vectors in the application. These other vectors are not discussed.

### First Vector — RC-Main DPA

This vector receives the VDN from the switch, routes callers to different vectors based on time and date, and provides dynamic allocation of ports and applications.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Cust 4 EDIT VECTOR NUMBER 147 STEPS
>Call Use Vector Name: RC-Main DPA Vector Number: 147
System Description: Rock Coast-Main Route-Dynamic Port Alloc
System
UNIX Sy Step Action Description
Exit 1 CONVERSE collect 3 digits into %data1
3 Ed 2 SCHEDULE Holiday and Weekend Hours Announce
142|RC- 3 SWITCH Dynamic Port Allocation
143|RC- 4 DYNAMIC Dynamic Allocations of Applications
144|RC- 5 QUIT
145|RC- 6
146|RC- 7
147|RC- 8
>147|RC- 9
148|RC- 10
149|RC- 11
150|RC- 12
151|C4 13
14 14

Enter the vector name.
HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
    
```

Figure 3-132. Finished RC-Main DPA Vector

#### Step Descriptions

1. CONVERSE

Receives the three VDN digits passed to the CONVERSANT from the DEFINITY switch and places them into the variable %data1.

2. SCHEDULE

Routes callers to different vectors based on a time schedule.

In this example, the SCHEDULE action routes callers to one vector (“Second Vector — RC-Holiday” on page 3-174) in the month of December and to another vector (“Third Vector — RC-Weekend” on page 3-175) on weekends.

During the week (Monday through Friday) from January through November, processing continues in the current vector.

**⇒ NOTE:**

Create the SCHEDULE action with the “extreme” cases first and the less extreme cases later. In the example, the holiday schedule is first because it takes precedence over the weekend schedule in

December. The asterisks shown in the figure are wild cards that represent “any” or “all.” For example, an asterisk in the year column represents all years.

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 31, 1998
5 Edit Existing Mailbox
> Mailbox name:   Rock Coast Queue Mailbox   Mailbox ID:   100
  Mailbox password: 192                     Mailbox priority: 1
  Talkfile: 6105 US English

CALLBACK
Transcriber welcome phrase:
Rock Coast Queue Mailbox 1016
Agent access number: 2020 Treat as outside number? No
Outside line access code: Country code: 1
Time to wait for answer: 15 Message retry interval: 1
Use Dial Pulse Recognition: No Use Speech Recognition: No
Adjust for time zone? Yes
NOTIFICATION AND ALARMS
Message Waiting Lamp extension:
Alarm if
  Message age exceeds Minutes: Hours: Days: 1
  Max number of messages exceeds:
Forward messages into mailbox: 777 DJ_test

Enter the mailbox name.
HELP CHOICES CLOSE PREUPAGE NEXTPAGE CANCEL REFRESH
```

Figure 3-133. SCHEDULE Action Form

3. SWITCH

Routes the caller to specific vectors in Customer Assist, depending on the VDN value in the variable %data1.

For examples, see the Customer Assist vector in “Sample Application #12: Dynamic Port Allocation and Dynamic Allocation of Applications” on page 3-166.

4. DYNAMIC

Dynamically allocates another application on the CONVERSANT to callers entering the Customer Assist application.

For an example, see the Customer Assist vector in “Sample Application #12: Dynamic Port Allocation and Dynamic Allocation of Applications” on page 3-166.

5. QUIT

If any VDN is passed other than those specified in the SWITCH and DYNAMIC actions, the QUIT action returns the call to the DEFINITY switch.

## Second Vector — RC-Holiday

This vector plays a holiday announcement before routing callers.

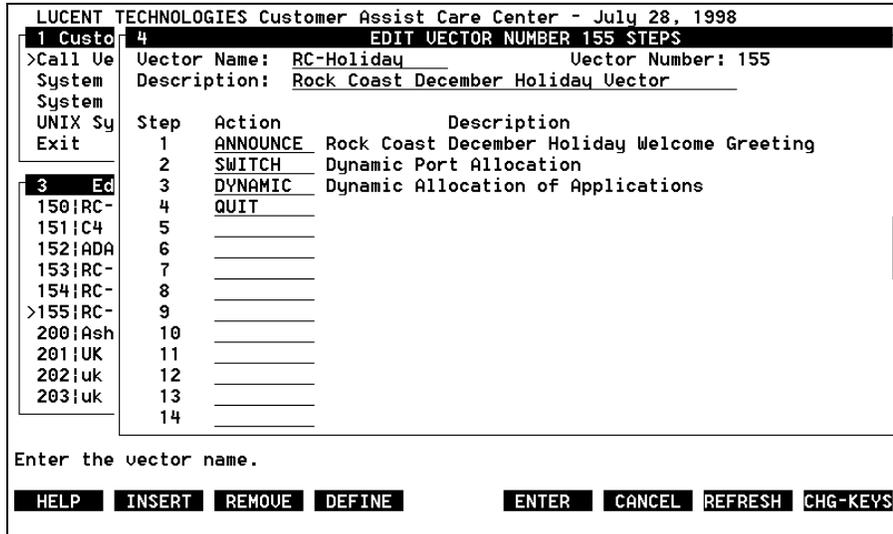


Figure 3-134. Finished RC-Holiday Vector

### Step Descriptions

1. ANNOUNCE

Plays the holiday announcement.

2. SWITCH

Routes the caller to specific vectors in Customer Assist, depending on the VDN value in the variable *%data1*.

3. DYNAMIC

Dynamically allocates another application on the CONVERSANT to callers entering the Customer Assist application.

4. QUIT

If any VDN is passed other than those specified in the SWITCH and DYNAMIC actions, the QUIT action returns the call to the DEFINITY switch.

### Third Vector — RC-Weekend

This vector plays a weekend announcement before routing callers.

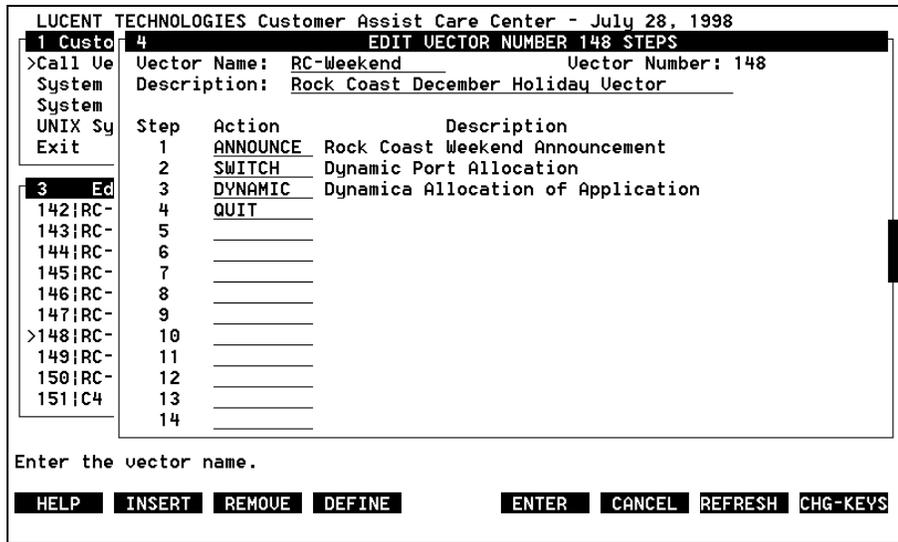


Figure 3-135. Finished RC-Weekend Vector

#### Step Descriptions

1. ANNOUNCE  
Plays the weekend announcement.
2. SWITCH  
Routes the caller to specific vectors in Customer Assist, depending on the VDN value in the variable *%data1*.
3. DYNAMIC  
Dynamically allocates another application on the CONVERSANT to callers entering the Customer Assist application.
4. QUIT  
If any VDN is passed other than those specified in the SWITCH and DYNAMIC actions, the QUIT action returns the call to the DEFINITY switch.

## Changing the Setup Vector

After Rock Coast creates its Main Route vector, it must change its setup vector so that every channel assigned to Customer Assist on the CONVERSANT points to this vector.

Figure 3-136 illustrates how a CHAN\_ASN action in the setup vector would look after all the Customer Assist channels are assigned to the Main Route vector (vector 29).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 0 STEPS
>Call Use Vector Name: setup Vector Number: 0
System Description: system 5 CHAN_ASN Action Step Number 2 for vector 0
System
UNIX Sy Step Action CHAN_ASN assigns vectors to channels
Exit 1 OFF_HOOK answ Comment: assign channels to vectors
3 Ed 2 CHAN_ASN assi CHANNEL VECTOR NAME
>0|setup 3 CHAN_ASN assi 0 1 Main Menu
1|Main 4 CHAN_ASN assi 1 1 Main Menu
2|MB Ac 5 CHAN_ASN assi 2 1 Main Menu
3|chang 6 CHAN_ASN assi 3 1 Main Menu
4|Trans 7 CHAN_ASN assi 4 1 Main Menu
5|IUR a 8 CHAN_ASN assi 5 1 Main Menu
6|Speec 9 CHAN_ASN assi 6 27 UTG-Menu
7|chose 10 QUIT if c 7 27 UTG-Menu
8|Sched 11 8 27 UTG-Menu
9|Morni 12 9 27 UTG-Menu
13 10 1 Main Menu
14 11 1 Main Menu

Please enter your comments.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 3-136. CHAN\_ASN Action Form

## **Sample Application #14: Reporting and Hang Up Actions**

---

### **Business Situation**

---

The Rock Coast Software Company feels that its call center applications are almost complete, but it wants to add some reporting features to its call center. It wants to monitor the VDNs that are passed from the DEFINITY and capture the ANI of abandoned callers. Rock Coast can put this ANI into a Callback Messaging mailbox that can deliver the abandoned ANI to an agent for a prompt callback. This option provides Rock Coast with the utmost in service — automatically calling callers back who abandoned the line while waiting in queue.

The lessons learned in earlier sample applications are background for this sample application.

### **ECS R6.3/DEFINITY Vector**

---

This sample application uses one DEFINITY vector. The vector uses a Converse vector step to pass a caller to the CONVERSANT and Customer Assist.

Assumptions: The CONVERSANT split is Split 3.

1. wait-time 2 secs hearing ringback
2. converse-on split 3 pri m passing vdn and ani
3. collect 3 digits after announcement none
4. route-to digits
5. stop

### **Customer Assist Vectors**

---

This sample application illustrates two Customer Assist vectors:

- “First Vector — RC-Main DPA” on page 3-178
- “Second Vector — RC-Hang Up” on page 3-181

As in “Sample Application #13: Scheduling Events in a Call Center” on page 3-171, this sample application consists of many different vectors. It illustrates only the two vectors that show how to use the REPORT and HANG\_ACT actions.

### First Vector — RC-Main DPA

This vector receives the VDN and ANI from the switch, reports on the ANI, routes callers to different vectors based on time and date, and provides dynamic allocation of ports and applications.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 147 STEPS
>Call Use Vector Name: RC-Main DPA Vector Number: 147
System Description: Rock Coast-Main Route-Dynamic Port Alloc
System
UNIX Sy Step Action Description
Exit 1 CONVERSE collect 3 digits into %data1
2 CONVERSE collect 10 digits into %ani
3 Ed 3 REPORT on %data1
143|RC- 4 HANG_ACT end with vector 149 (RC-Hang Up)
144|RC- 5 SCHEDULE Holiday and Weekend Hours Announce
145|RC- 6 SWITCH Dynamic Port Allocation
146|RC- 7 DYNAMIC Dynamic Allocations of Applications
>147|RC- 8 QUIT
148|RC- 9
149|RC- 10
150|RC- 11
151|C4 12
152|ADA 13
14
Enter the vector name.
HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
    
```

Figure 3-137. Finished RC-Main DPA Vector

#### Step Descriptions

1. CONVERSE  
 Receives the three VDN digits passed to the CONVERSANT from the DEFINITY switch and places them into the variable *%data1*.
2. CONVERSE  
 Receives the 10 ANI digits passed to the CONVERSANT from the DEFINITY switch and places them into the variable *%ani*.
3. REPORT  
 Instructs Customer Assist to report on the variable named *%data1*, which records the VDN that is passed from the DEFINITY switch whenever this vector is invoked.  
  
 You can see these values by running an Event Detail Report. See “Event Detail Report” on page 8-15.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custd 4 EDIT VECTOR NUMBER 147 STEPS
>Call Use Vector Name: RC-Main DPA Vector Number: 147
System Description: Rock Coast-Main Route-Dynamic Port Alloc
System
UNIX Sy Step Action Description
Exit 1 CONVERSE collect 3 digits into %data1
2 CONVERSE collect 10 digits into %ani
3 Ed 3 REPORT on %data1
143!RC- 4 HANG_ACT end with vector 149 (RC-Hang Up)
144!RC- 5 SCHED 5 REPORT Action Step Number 3 for vector 147
145!RC- 6 SWITC
146!RC- 7 DYNAM REPORT Action Step Stores Value of Variable
>147!RC- 8 QUIT
148!RC- 9 Variable to Report: %data1
149!RC- 10
150!RC- 11 Comment: Recording which UDN s are passed
151!C4 12
152!ADA 13
14 14

Enter the variable name follow by the Return or ENTER key.

HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 3-138. REPORT Action Form

#### 4. HANG\_ACT

Instructs Customer Assist to go to vector 133, RC-Hang Up, if the caller hangs up while in the CONVERSANT. See “Second Vector — RC-Hang Up” on page 3-181.

Because the HANG\_ACT action is a global setting throughout the duration of a call, you need to include it only once. Typical places to include it are in the Main Route vector or the setup vector. The HANG\_ACT action is valid for every call, no matter where the caller is in the CONVERSANT.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custor 4 EDIT VECTOR NUMBER 147 STEPS
>Call Use Vector Name: RC-Main DPA Vector Number: 147
System Description: Rock Coast-Main Route-Dynamic Port Alloc
System
UNIX Sy Step Action Description
Exit 1 CONVERSE collect 3 digits into %data1
2 CONVERSE collect 10 digits into %ani
3 Ed 3 REPORT on %data1
143|RC- 4 HANG_ACT end with vector 149 (RC-Hang Up)
144|RC- 5 SCHEDULE Holiday and Weekend Hours Announce
145|RC- 6 SWITCH Dynamic Port Allocation
5 HANG_ACT Action Step Number 4 for vector 147

HANG_ACT Action Step specifies a vector number to go to after a HANGUP.

On HANGUP go to Vector Number: 149 Name: RC-Hang Up

Comment: If caller hangs up goto this vector

Enter the vector name follow by the Return or ENTER key.

HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 3-139. HANG\_ACT Action Form

5. SCHEDULE

Routes callers to different vectors based on a time schedule.

6. SWITCH

Routes callers to specific vectors in Customer Assist depending on the VDN value in the variable *%data1*.

7. DYNAMIC

Dynamically allocates another application on the CONVERSANT to callers entering the Customer Assist application.

8. QUIT

If any VDN is passed other than those specified in the SWITCH and DYNAMIC actions, the QUIT action returns the call to the DEFINITY switch.

## Second Vector — RC-Hang Up

This vector reports on the value of the variable *%ani*. This variable collects the caller's telephone number, or ANI, from the switch. Rock Coast will use the ANI to callback the callers who have abandoned calls. The company can view the value of this variable by generating the Event Detail Report, or it can set up a vector that routes the caller's ANI to a Callback Messaging mailbox. Agents who access the mailbox can call back callers who abandon calls automatically.

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 149 STEPS
>Call Use Vector Name: RC-Hang Up Vector Number: 149
System Description: Rock Coast Hang Up Vector
System
UNIX Sy Step Action Description
Exit 1 REPORT on %ani
3 Ed 2 QUIT done
143|RC- 3
144|RC- 4
145|RC- 5
146|RC- 6
147|RC- 7
148|RC- 8
>149|RC- 9
150|RC- 10
151|C4 11
152|ADA 12
14 13
14 14
Enter the vector name.
HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
```

Figure 3-140. Finished RC-HangUp Vector

### Step Descriptions

1. REPORT

Instructs Customer Assist to report on the variable named *%ani*. This variable collects the caller's telephone number, or ANI, from the switch whenever the vector is invoked.

You can see these values by running an Event Detail Report. See "Event Detail Report" on page 8-15.

2. QUIT

Returns the call to the DEFINITY switch.

## Sample Application #15: Speech Administration and Transcribing Messages

---

### Business Situation

---

The Rock Coast Software Company can set up two utility vectors to help them with the process of creating its call center applications:

- A Speech Administration vector that allows agents or call center supervisors to call into the DEFINITY and be routed directly into Speech Administration to change or record phrases as well as administer languages, etc.
- A Transcription vector that allows agents to call into the DEFINITY and be routed directly into transcribing messages in Callback Messaging mailboxes

The lessons learned in earlier sample applications are background for this sample application.

### ECS R6.3/DEFINITY Vector

---

This sample application uses one DEFINITY vector. The vector uses a Converse vector step to pass a caller to the CONVERSANT and Customer Assist.

Assumptions: The CONVERSANT split is Split 3.

1. wait-time 2 secs hearing ringback
2. converse-on split 3 pri m passing none and none
3. stop

### Customer Assist Vectors

---

This sample application illustrates two Customer Assist vectors:

- "First Vector — RC-SpchAdmn" on page 3-183
- "Second Vector — RC-Transcript" on page 3-184

## First Vector — RC-SpchAdmn

This vector routes agents to the speech administration program to make changes to phrases in talkfiles.

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 134 STEPS
>Call Ue Vector Name: RC-SpchAdmin Vector Number: 134
System Description: Rock Coast Speech Administration
System
UNIX Sy Step Action Description
Exit 1 SPCH_ADMN talkfile 6105 , phrase 1000
2 QUIT
3 Ed 3
129|EWT 4
130|EWT 5
131|Que 6
132|Rou 7
133|Que 8
>134|RC- 9
135|Rou 10
136|RC- 11
137|Dyn 12
138|EWT 13
14

Enter the vector name.

HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
```

Figure 3-141. Finished RC-SpchAdmn Vector and SPCH\_ADMN Action Form

### Step Descriptions

#### 1. SPCH\_ADMN

Starts the speech administration program and allows agents or supervisors to make changes to speech phrases in talkfiles.

- To allow agents or supervisors to make changes to all talkfiles, leave the Specify the talkfile field blank.
- To allow agents and supervisors to make changes to all phrases within a talkfile, enter the talkfile number in the Specify the talkfile field and leave the Specify the phrase number field blank (Figure 3-141).
- To allow agents and supervisors to make changes to only one phrase in a specific talkfile, enter the talkfile number in the Specify the talkfile field and enter the phrase number in the Specify the phrase number field (Figure 3-142).

#### 2. QUIT

Returns the call to the DEFINITY switch.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 134 STEPS
>Call Ue Vector Name: RC-SpchAdmin Vector Number: 134
System Description: Rock Coast Speech Administration
System
UNIX Sy
Exit Step Action Description
1 SPCH_ADMN talkfile 6105 , phrase 1000
2 QUIT
3 Ed
129|EWT 4
130|EWT 5
131|Que 6
132|Rou 7
133|Que 8
>134|RC- 9 SPCH_ADMN Action, Step Number 1 for vector 134
135|Rou 10 SPCH_ADMN Action starts the Speech Administration program.
136|RC- 11 Specify the talkfile: 6105
137|Dyn 12 Specify the phrase number: 1000
138|EWT 13
14 Comment: Callers can only change phrase 1000

Enter the talkfile number followed by the Return or ENTER key.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 3-142. SPCH\_ADMN Action Form with Different Values

### Second Vector — RC-Transcript

This vector allows agents and supervisors to access the messages saved in the Callback Messaging mailboxes.

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custd 4 EDIT VECTOR NUMBER 150 STEPS
>Call Use Vector Name: RC-Transcript Vector Number: 150
System Description: Rock Coast Callback Messaging Transcript
System
UNIX Sy Step Action Description
Exit 1 TRANSCRIBE messages from box
2 QUIT
3 Ed 3
145|RC- 4
146|RC- 5
147|RC- 6
148|RC- 7
149|RC- 8
>150|RC- 9
151|C4 10
152|ADA 11
153|RC- 12
154|RC- 13
14

Enter the vector name.

HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
```

Figure 3-143. Finished RC-Transcript Vector

### Step Descriptions

#### 1. TRANSCRIBE

Starts the transcription program and allows agents or supervisors to transcribe messages.

- To allow agents or supervisors to transcribe messages from all mailboxes, leave the Transcribe messages from mailbox field blank (Figure 3-144).
- To agents or supervisors to transcribe messages from only one mailbox, enter the mailbox number in the Transcribe messages from mailbox field.

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 150 STEPS
>Call Use Vector Name: RC-Transcript Vector Number: 150
System Description: Rock Coast Callback Messaging Transcript
System
UNIX Sy Step Action Description
Exit 1 TRANSRIBE messages from box
2 QUIT
3 Ed 3
145|RC- 4
146|RC- 5
147|RC- 6
5 Transcribe Action, Step Number 1 for vector 150
TRANSRIBE Action starts the transcription program.
Transcribe messages from mailbox: _____
Comment: _____
Enter the mailbox number or a variable followed by the Return or ENTER key.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
```

Figure 3-144. TRANSRIBE Action Form

2. QUIT

Returns the call to the DEFINITY switch.

## Summary

---

This chapter provided planning examples to help you configure your system for your needs.

- See Chapter 5, "Vector Actions", for more information on vector actions.

This chapter describes the procedures for configuring Customer Assist vectors and placing them in service.

### Call Vector Configuration

Use this menu to create, delete, and modify Customer Assist vectors. When you place new vectors in service, the system retains a copy of every vector and its parameter settings in a database used exclusively for development. This permits you to create and modify Customer Assist vectors without immediately influencing the way the system handles calls.

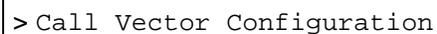
### Creating a New Customer Assist Vector

This option enables you to build vectors from scratch. Vectors are a series of actions that perform a specific or multiple tasks. (See Chapter 5, "Vector Actions" for actions to include in your vectors.)

### Access Create New Vector

Use the following steps to create a new vector:

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



> Call Vector Configuration



> Create New Vector

The system displays the Customer Assist vector worksheet (Figure 4-1).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 3 EDIT VECTOR NUMBER 156 STEPS
>Call Use Vector Name: _____ Vector Number: 156
System Description: _____
System
UNIX Sy Step Action Description
Exit 1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____
8 _____
9 _____
10 _____
11 _____
12 _____
13 _____
14 _____

Enter the vector name.

HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS

```

Figure 4-1. Customer Assist Vector Worksheet

### Modify Create New Vector

Use the following steps to create a new vector (See Chapter 5, “Vector Actions” form more information about vector actions and their parameters):

1. Enter a name for your vector in the `Vector Name` field.
2. Enter a description of your vector in the `Description` field if you wish.

Vector names and descriptions are for reference only; they do not affect the handling of calls.

3. Enter your first vector action in the `Action` column after Step 1.

The numbers in the `Step` column represent the sequential ordering of actions within this vector. The text in the `Description` column summarizes the parameters specified for each action.

#### ⇒ NOTE:

You cannot type directly onto the vector worksheet. The system will not process your entry. You must press `CHG-KEYS (F8)` and then `CHOICES (F2)` for a list of vector actions. Press `ENTER (F3)` to choose one of these. (See Chapter 5, “Vector Actions” for vector action definitions.)

4. Complete the dialog box that appears. (See Chapter 5, “Vector Actions” for more information.)
5. Finish the Customer Assist vector worksheet.

6. Save your vector. Press CHG-KEYS [F8] and then SAVE [F3].

The system returns you to the Vector Configuration menu.

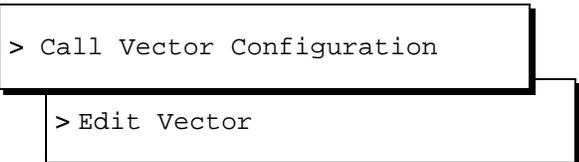
### Editing a Customer Assist Vector

This menu option allows you to edit your vectors. For example, you can add or remove an action step from an existing vector.

#### Access Edit Vector

Use the following steps to add or remove vector action from an existing vector:

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



The system displays the Edit Vector menu (Figure 4-2).

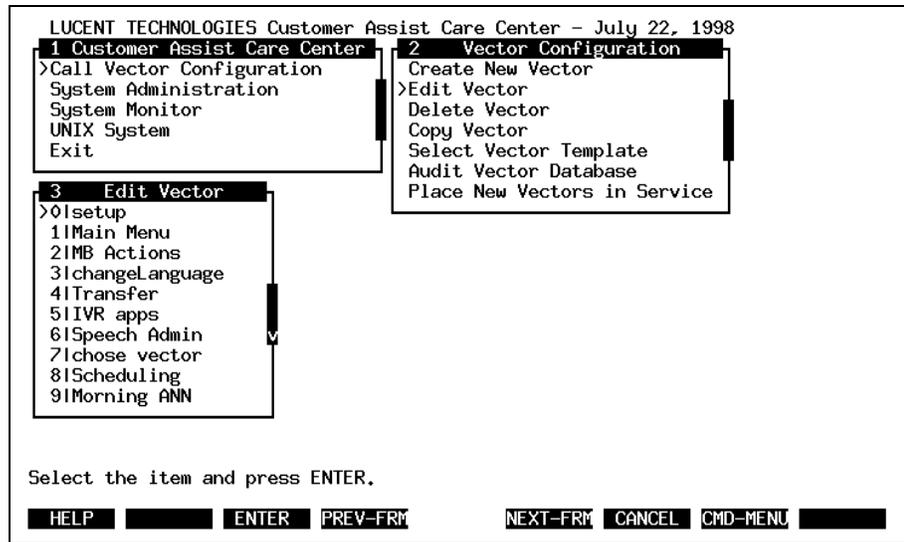


Figure 4-2. Edit Vector Menu

### Modify Edit Vector

The Edit Vector menu displays the names of the vectors you can edit. Use the following steps to select a vector:

1. Select the vector you want to edit or enter the number appearing before the vector name.

The system displays the vector worksheet (Figure 4-3).

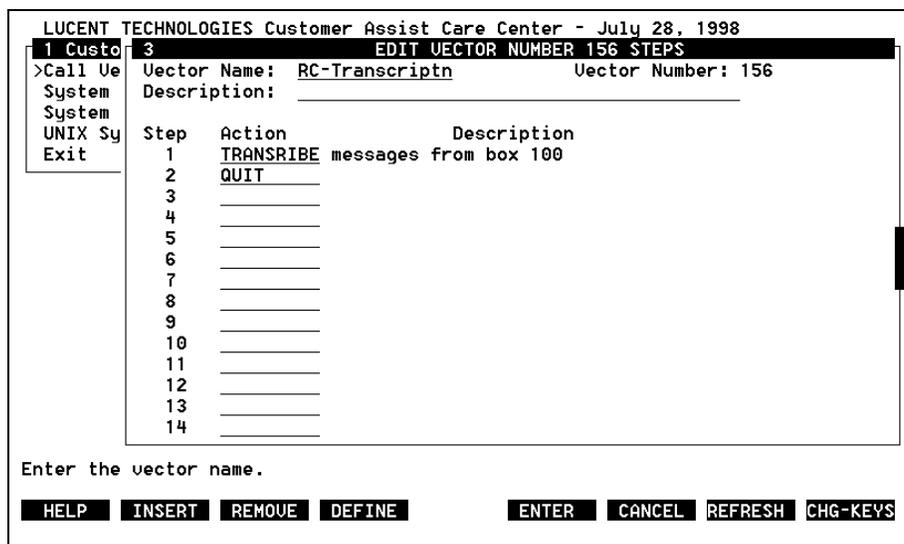


Figure 4-3. Sample Vector Worksheet

### Inserting an Action Step into a Customer Assist Vector

When you insert an action step over an existing action step, the new action step takes the place of the original action step but does NOT delete the original action step; the original action step simply moves down one line. Use the following steps to insert an action step into a Customer Assist vector:

1. Move the cursor to the line on the vector worksheet where you want the new action to appear.

**⇒ NOTE:**

In order to insert an action step, there must already be an action on this line. Do not attempt to insert a blank line where one exists already, as you may distort the worksheet.

2. Press INSERT (F2).

The system prompts you to confirm the insertion. Press CONT (F3) to proceed.

3. Return your cursor to the new line.
4. Press CHG-KEYS (F8) and CHOICES (F2).

**⇒ NOTE:**

Before presenting the list of actions, the system evaluates the Customer Assist vector's size (cannot exceed 1K). It warns you if another action might exceed its storage capacity. If you encounter this warning, consider using the GOTO action to continue your application on a new vector worksheet. Then, press either CANCEL (F6) to return to the Customer Assist vector worksheet, or CONT (F3) to proceed.

The system displays a list of vector actions (Figure 4-4).

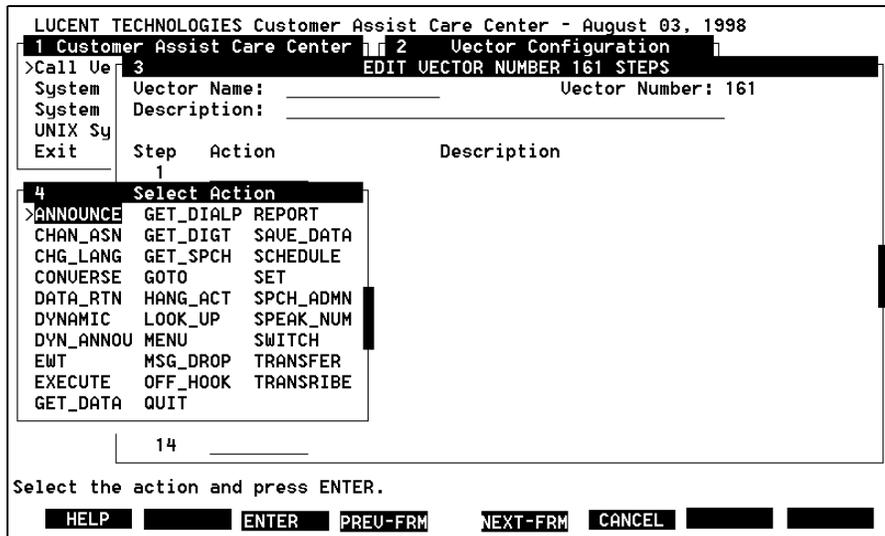


Figure 4-4. Worksheet for Sample Vector and Select Action Menu

5. Select the action you want to insert.
6. Complete the action form that appears.

**⇒ NOTE:**

See "Customer Assist Vector Actions" on page 5-1 for more information about actions and action forms.

7. Press CLOSE (F3).
8. Press CHG-KEYS (F8) and SAVE (F3) when you have finished adding or deleting actions.

**⇒ NOTE:**

The system does not apply changes to call handling until you place new vectors in service at the Vector Configuration menu. Make sure that you “Place New Vectors in Service” after you make any changes to your vectors. Otherwise, your vector changes will not go into effect.

### Removing an Action Step from a Customer Assist Vector

Use the following steps to remove an action step from a Customer Assist vector:

1. Select the action step you want to delete.
2. Press REMOVE (F3).
3. Press CONT (F3) to confirm.
4. Press CHG-KEYS (F8) and SAVE (F3) to save this modified Customer Assist vector when you have finished adding or deleting actions.

**⇒ NOTE:**

The system does not apply changes to call handling until you place new vectors in service at the Vector Configuration menu. Make sure that you “Place New Vectors in Service” after you make any changes to your vectors. Otherwise, your vector changes will not go into effect.

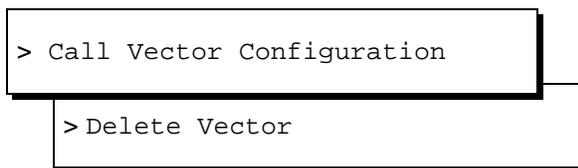
### Deleting a Customer Assist Vector

This menu gives a list of the current vectors you can delete. Like the Edit Vector menu, new vectors are added to the list.

### Access Delete Vector

Use the following steps to access the Delete Vector menu:

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



The system displays a menu of Customer Assist vectors similar to the one in Figure 4-4.

2. Select the vector you want to delete, or enter the number that appears before the name.

3. Press MARK (F2).

To remove more than one vector, return to Step 1. To unmark a vector, highlight its name and press MARK (F2) again.

4. Press (ENTER).
5. Press CONT (F3) to confirm.



**NOTE:**

After you delete a Customer Assist vector in this fashion, you can no longer select it for editing. To stop a deleted vector from handling calls, you must also place new vectors in service at the Vector Configuration menu.

### Copying a Customer Assist Vector

This menu allows you to create a copy of a vector by giving it a new name. Use this option to copy a vector and make changes instead of rebuilding the entire vector or use it to create a backup.

### Access Copy Vector

Use the following steps to access the Copy Vector menu:

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

```
> Call Vector Configuration
```

```
> Copy Vector
```

The system displays the Vector Configuration menu (Figure 4-5).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Customer Assist Care Center
>Call Vector Configuration
System Administration
System Monitor
UNIX System
Exit
2 Vector Configuration
Create New Vector
Edit Vector
Delete Vector
>Copy Vector
Select Vector Template
Audit Vector Database
Place New Vectors in Service

3 Copy Vector
Vector Num Vector Name
Copy from Vector :
To Vector : 156
Description:

Enter the vector to copy from.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 4-5. Copy Vector Form

### Copy a Vector

Use the following steps to copy a vector:

1. Enter the number of the vector you want to copy in the Copy from Vector field.  
or  
Press CHOICES (F2) for a list.
2. Enter an available vector number or use the default value that appears in the To Vector field.
3. The following fields are optional:
  - Enter a name for your new vector in the blank space after the vector number if you wish.
  - Enter a description if you wish.
4. Press CLOSE (F3).

### Vector Templates

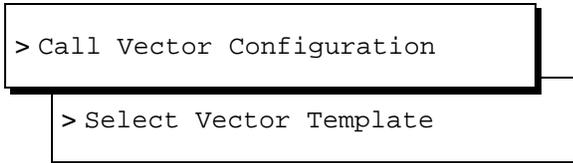
Customer Assist provides you with four vector templates. These templates load pre-built vectors into your call center application. This streamlines the process of creating standard vectors like Estimated Wait Time vectors or Custom Call Routing vectors. You can customize these templates to perform common call handling tasks.

Each time you use a template, the system creates a new Customer Assist vector for you. Because each vector (except the Setup template) has a unique number, it can operate independently from other Customer Assist vectors with the same name. This allows you to use the same template to build new vectors for different applications.

### Access Templates

Use the following steps to access the templates:

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



The system displays the Template Type menu (Figure 4-6).

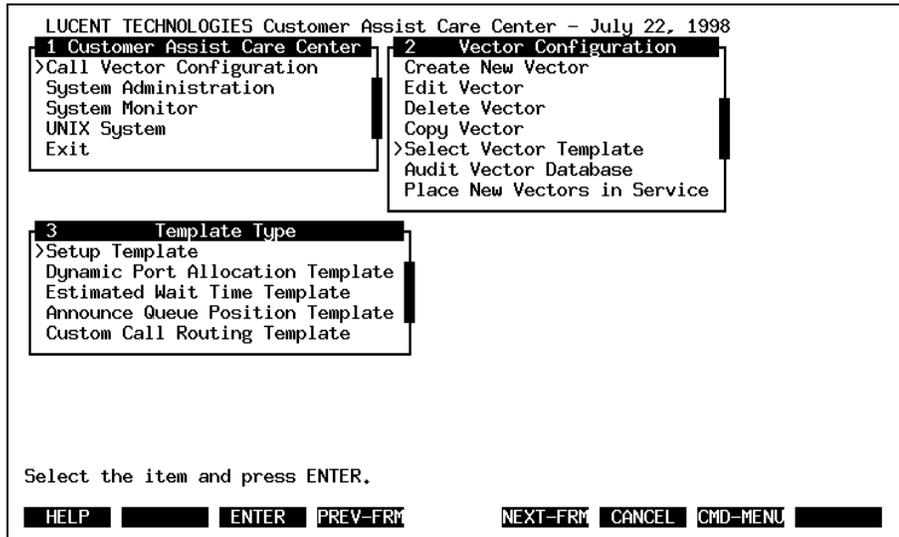


Figure 4-6. Template Type Menu

This menu includes six types of templates:

- Setup Template
- Dynamic Template
- Anticipated Delay Announcement Template
- Estimated Wait Time Template

- Announce Queue Template
- Custom Call Routing Template

### Selecting a Template

Use the following steps to use a template:

1. Select the name of the template you want, or type the first few letters of its name.

The system will create and display a single template vector. This primary vector delivers callers to other vectors as appropriate.

2. Consult the sections below for template editing guidelines.

### Setup Template

The system uses the setup vector to respond to every call. Therefore, you must configure the setup vector before callers can use other Customer Assist vectors. This template overwrites the setup vector that routes all incoming calls to Customer Assist vectors.

By default, your vector database includes a blank setup vector. You must configure this vector to take each dialed port “off hook” and launch the Customer Assist vector assigned. Although the setup vector uses the CHAN\_ASN action to attach specific Customer Assist vectors to ports, you can use actions such as DYNAMIC and SWITCH in the targeted vectors to respond dynamically to arguments they receive with calls.

### Modify Setup Template

Use the following steps to assign Customer Assist vectors to ports:

#### CAUTION:

*Selecting the Setup Template overwrites the existing setup vector. To make changes to the setup vector without overwriting it, choose the Edit Vector option instead.*

1. Start at the Template Type menu and select Setup Template.

The system displays the Setup Template (Figure 4-7).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custd 3 EDIT VECTOR NUMBER 0 STEPS
>Call Use Vector Name: setup Vector Number: 0
System Description: system setup vector
System
UNIX Sy Step Action Description
Exit 1 OFF_HOOK answer the call
2 CHAN_ASN assign channels to vectors
3 CHAN_ASN assign channels to vectors
4 CHAN_ASN assign channels to vectors
5 CHAN_ASN assign channels to vectors
6 CHAN_ASN assign channels to vectors
7 CHAN_ASN assign channels to vectors
8 CHAN_ASN assign channels to vectors
9 CHAN_ASN assign channels to vectors
10 QUIT if channel is not assigned.
11
12
13
14

Enter the vector name.

HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
    
```

Figure 4-7. Setup Vector Worksheet

2. Move your cursor to the first CHAN\_ASN action and press DEFINE (F4).

The system displays the CHAN\_ASN action form (Figure 4-8). This setup vector corresponds to a 96-port Customer Assist configuration. (Each CHAN\_ASN action can represent 12 channels.)



## Dynamic Port Allocation Template

The vector this template generates routes callers to CONVERSANT applications based on the value of any variable you specify.

The system will create a new vector each time you select this template. With this vector, called Dynamic Templ., you can execute any CONVERSANT application from any channel in Care Center.

## Modify Dynamic Port Allocation Template

Use the following steps to configure the Dynamic Port Allocation template correctly:

1. Select Dynamic Port Allocation Template from the Template Type menu.  
The system displays the Dynamic Template (Figure 4-9).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custor 4 EDIT VECTOR NUMBER 156 STEPS
>Call Use Vector Name: Dynamic Templ. Vector Number: 156
System Description: Dynamic port allocation.
System
UNIX Sy Step Action Description
Exit 1 DYNAMIC Port allocation, block 1
2 DYNAMIC Port allocation, block 2 (choose programs).
3 DYNAMIC Port allocation, block 3 (choose programs).
4 ANNOUNCE value not found (choose phrase)
5 QUIT end call.
6
7
8
9
10
11
12
13
14

Enter the vector name.

HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
    
```

Figure 4-9. Dynamic Template Vector Worksheet

2. Move your cursor to the first DYNAMIC action and press DEFINE (F4).

The system displays the Dynamic Port Allocation Definition form (Figure 4-10).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custd 4 EDIT VECTOR NUMBER 156 STEPS
>Call Use Vector Name: Dynamic Templ. Vector Number: 156
3 DYNAMIC PORT ALLOCATION BLOCK 1 for vector 156

DYNAMIC ALLOCATION STARTS PROGRAMS FOR GIVEN VALUES
Comment: Port_allocation_block 1
Variable: _____

  VALUE      PROGRAM      ARG1      ARG2      ARG3
  _____  _____  _____  _____  _____
  _____  _____  _____  _____  _____
  _____  _____  _____  _____  _____
  _____  _____  _____  _____  _____
  _____  _____  _____  _____  _____
  _____  _____  _____  _____  _____
  _____  _____  _____  _____  _____
  _____  _____  _____  _____  _____

Please enter your comments.

HELP CHOICES CLOSE ENTER CANCEL REFRESH

```

Figure 4-10. Dynamic Templ. Vector Worksheet with the DYNAMIC Action Definition Form

3. Move your cursor to the Variable field and press CHOICES (F2).
4. Select a variable.
5. Enter the following in the DYNAMIC action form:
  - Possible values
  - Corresponding CONVERSANT applications (programs)
  - Arguments to pass (such as a telephone number, account number, or customer number)



**NOTE:**

The variable you select must be assigned a value before the DYNAMIC action uses it to determine which application to execute. You may use the CONVERSE, SET, GET\_DIGT, or MENU actions earlier in the vector or the call to capture or assign values to variables. This is useful because it routes callers to the appropriate location based on their identity or selections made during the call.

6. Press CLOSE (F3).



**NOTE:**

You can use the other DYNAMIC actions in the same way to accommodate additional variable names, values, and CONVERSANT applications to target.

7. Move your cursor to the ANNOUNCE action and press DEFINE (F4).  
The system displays the ANNOUNCE action form (Figure 4-11).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 156 STEPS
>Call Use Vector Name: Dynamic Templ. Vector Number: 156
System Description: Dynamic port allocation.
System
3 ANNOUNCE Action Step Number 4 for vector 156

ANNOUNCE Action step speaks a phrase to caller

Talkfile Number: 6104 US English
Allow Interrupt: Yes

Phrase Tag: value not found (choose phrase)
Phrase Number:
Phrase Text:

Enter the talkfile.

HELP CHOICES CLOSE ENTER CANCEL REFRESH ADD-PHR
    
```

Figure 4-11. Dynamic Templ. Vector Worksheet with the ANNOUNCE Action Definition Form

8. After Talkfile Number, select the talkfile number corresponding to the language in which to recite this phrase.
9. After Phrase Tag, enter the name of the speech phrase you defined to notify callers that their entry does not match any valid choices  
or  
Press CHOICES (F2) to select from a list.

**⇒ NOTE:**

To create a new phrase tag for this action instead, press ADD-PHR (F8). A phrase definition form will appear. Use this form to define your new phrase tag and press SAVE (F3). Although you cannot record speech at this time, you can assign the phrase to your ANNOUNCE action immediately.

10. Press CLOSE (F3), CHG-KEYS (F8), and SAVE (F3) to return to the Vector Configuration menu.

**⇒ NOTE:**

Dynamic Templ. uses the QUIT action to end the CONVERSANT's involvement in the call and return call control to the DEFINITY vector.

Replace this action if you do not want Dynamic Templ. to end the CONVERSANT's involvement in the call.

### Estimated Wait Time Template (Beginning with DEFINITY G3V4)

The vector this template generates informs each caller of the wait time for an agent based on wait time estimates from the DEFINITY switch.

The system creates one new Customer Assist vector each time you select this template.

### Modify Estimated Wait Time Template

Use the following steps to configure the Estimated Wait Time template correctly:

1. Select Estimated Wait Time Template from the Template Type menu.  
The system displays the Estimate Wait Time Template (Figure 4-12).

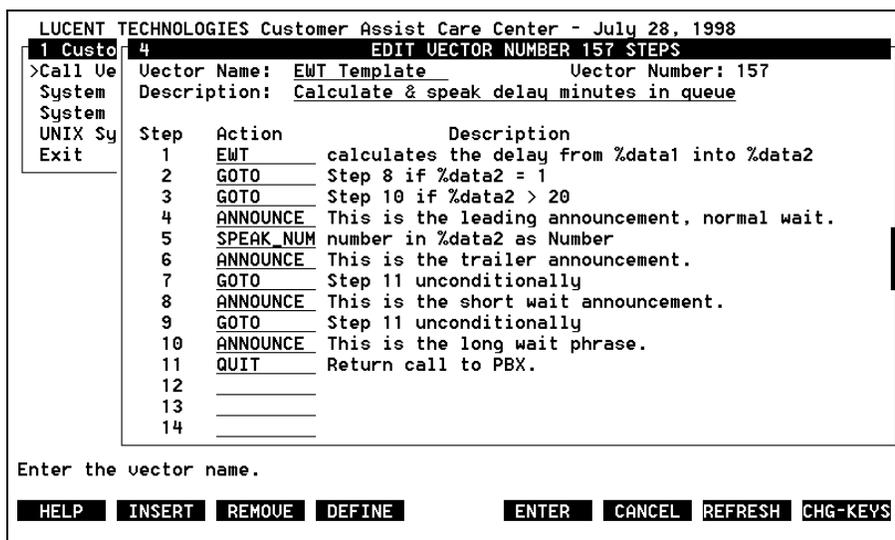


Figure 4-12. Vector Created by the Estimated Wait-Time Template

This vector uses the CONVERSE action with the variable *%data1* to acquire the expected wait time from a CONVERSE step in a DEFINITY vector. Then, it uses the EWT action to convert this estimate and the ANNOUNCE and SPEAK\_NUM actions to recite the new estimate to the caller. After each estimated wait time announcement, call control reverts to the DEFINITY vector.



**NOTE:**

The template does not automatically include the CONVERSE action in the vector it creates for you. You must create another vector that uses CONVERSE to acquire this information and GOTO to jump to the EWT vector.

Use the following steps to configure the EWT vector correctly:

1. Move your cursor to the EWT action and press DEFINE (F4).  
The system displays the EWT action form (Figure 4-13).

**Figure 4-13. EWT Template Vector Worksheet with EWT Action Definition Form**

2. Enter the variable into which the EWT was collected from the DEFINITY via CONVERSE Step (%data1) in the EWT Input field.  
or  
Press CHOICES (F2) for a list of variables.
3. Enter the name of the variable where Customer Assist should place the result of the conversion (the length the caller must wait) in the Calculated Output field.
4. The following fields are optional:
  - The Weighting Index field allows you to increase or decrease the wait time estimate from the switch. The default value of 100% leaves this estimate unchanged.

- The Resolution field allows you to specify Minutes or Seconds.
  - The Rounding field allows you to specify whether Customer Assist should round Up, Down or to the Nearest minute or second
5. Press CLOSE (F3).
  6. Move your cursor to the first ANNOUNCE action and press DEFINE (F4).  
The system displays the ANNOUNCE action form (Figure 4-14).

Figure 4-14. EWT Template Vector Worksheet with ANNOUNCE Action Form

7. Enter the speech phrase you defined to precede the wait time estimate in the Phrase Tag field.  
or  
Press CHOICES (F2) to select from a list.  
For example, you might record “An agent will be available in approximately...”
- ⇒ NOTE:**  
To create a new phrase tag for this action instead, press ADD-PHR (F8). A phrase definition form appears. Use this form to define your new phrase tag and press SAVE (F3). Although you cannot record speech at this time, you can assign the phrase to your ANNOUNCE action immediately.
8. Press CLOSE (F3).

9. Move your cursor to the SPEAK\_NUM action and press DEFINE (F4).  
The system displays the SPEAK\_NUMBER action form (Figure 4-15).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 157 STEPS
>Call Use Vector Name: EWT Template Vector Number: 157
System Description: Calculate & speak delay minutes in queue
System
UNIX Sy Step Action Description
Exit 1 EWT calculates the delay from %data1 into %data2
2 GOTO Step 8 if %data2 = 1
3 GOTO Step 10 if %data2 > 20
4 ANNOUNCE This is the leading announcement, normal wait.

3 SPEAK_NUMBER Action Step Number 5 for vector 157

SPEAK NUMBER Action step speaks number or string to caller
Number: %data2
Speak as Number/Character string: Number
Allow Interrupt: Yes

Note: Speaks numbers over 9 digits as characters.

Enter the number or variable, follow by the Return or ENTER key.

HELP CHOICES CLOSE CANCEL REFRESH
    
```

Figure 4-15. SPEAK\_NUMBER Action Form

1. Enter the variable you entered in the Calculated Output field in the EWT definition form (Figure 4-13) in the Number field.  
or  
Press CHOICES (F2) to select from a list of variables.
2. Enter **Number** or **Character** in the Speak as Number/Character field to specify how you want the action to recite the wait time to the caller.
3. Move to the second ANNOUNCE action and press DEFINE (F4).  
The system displays the ANNOUNCE action form (Figure 4-14).
4. Enter the speech phrase you defined to follow the wait time estimate in the Phrase Tag field.  
or  
Press CHOICES (F2) to select from a list.  
For example, you might record only "...minutes" or "seconds," depending on the resolution you chose in Step 2.

**⇒ NOTE:**  
To create a new phrase tag for this action instead, press ADD-PHR (F8). A phrase definition form appears. Use this form to define your

new phrase tag and press SAVE (F3). Although you cannot record speech at this time, you can assign the phrase to your ANNOUNCE action immediately.

5. Press CLOSE (F3).
6. Move to the third ANNOUNCE action and press w (F4).  
The system displays the ANNOUNCE action form (Figure 4-14).
7. Enter the speech phrase you defined to notify callers that they should expect a very brief wait.

or

Press CHOICES (F2) to select from a list.



**NOTE:**

To create a new phrase tag for this action instead, press ADD-PHR (F8). A phrase definition form appears. Use this form to define your new phrase tag and press SAVE (F3). Although you cannot record speech at this time, you can assign the phrase to your ANNOUNCE action immediately.

8. Press CLOSE (F3).
9. Move to the fourth ANNOUNCE action and press DEFINE (F4).  
The system displays the ANNOUNCE action form (Figure 4-14).
10. Enter the speech phrase you defined to notify callers that they should expect an especially long wait.

or

Press CHOICES (F2) to select from a list.



**NOTE:**

To create a new phrase tag for this action instead, press ADD-PHR (F8). A phrase definition form appears. Use this form to define your new phrase tag and press SAVE (F3). Although you cannot record speech at this time, you can assign the phrase to your ANNOUNCE action immediately.

11. Press CLOSE (F3), CHG-KEYS (F8), and SAVE (F3) to return to the Vector Configuration menu.

### **Anticipated Delay Announcement Template (before DEFINITY G3V4)**

This template creates a vector that approximates how long a caller can expect to wait for an agent. It delivers this information to the caller in spoken form.

The system creates a new Customer Assist vector each time you select this template. This template, called ADA template, uses the following factors to calculate how long a caller will wait in queue:

- Queue-position information that is acquired from the switch via the Converse step
- Your estimates of call duration and staff size

### **Anticipated Delay Announcement Template**

Use the following steps to configure the Anticipated Delay Announcement template correctly:

**⇒ NOTE:**

The template does not automatically include the CONVERSE action in the vector it creates for you. You must create another vector that uses CONVERSE to acquire this information and GOTO to jump to ADA template.

1. Start at the Template Type menu and select Anticipated Delay Announcement Template.

The system displays the ADA Template (Figure 4-16).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 158 STEPS
>Call Ue Vector Name: ADA Template Vector Number: 158
System Description: Calculate & speak delay minutes in queue
System
UNIX Sy Step Action Description
Exit 1 ADA_CALC calculate the delay into %data2
2 GOTO Step 9 if %data2 = 1
3 GOTO Step 11 if %data2 > 20
4 GOTO Step 13 if %data2 = -1
5 ANNOUNCE This is the leading announcement, normal wait.
6 SPEAK_NUM in %data2 as Number
7 ANNOUNCE This is the trailer announcement.
8 GOTO Step 14 unconditionally
9 ANNOUNCE This is the short wait announcement.
10 GOTO Step 14 unconditionally
11 ANNOUNCE This is the long wait phrase.
12 GOTO Step 14 unconditionally
13 ANNOUNCE This is the no agents avail phrase.
14 QUIT Return call to PBX.

Enter the vector name.

HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
    
```

Figure 4-16. ADA Template

- If the ADA Template determines that agents are on-duty and the anticipated delay for the caller is less than 20 minutes, it informs the caller of the anticipated delay and returns call control to the DEFINITY vector.
2. To configure this vector, move your cursor to the first ADA\_CALC action on the worksheet and press DEFINE (F4).  
The system displays the ADA\_CALC action form (Figure 4-20).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Cust 4 EDIT VECTOR NUMBER 158 STEPS
>Call Use Vector Name: ADA Template Vector Number: 158
System Description: Calculate & speak delay minutes in queue
System
UNIX Sy Step Action Description
3 ADA_CALC Action Step Number 1 for vector 158 a2

ADA_CALC CALCULATES THE ANTICIPATED DELAY IN QUEUE
Avg. Call Length: ___ Queue Position : %data1
Result : %data2 ent, normal wait.
Comment: calculate the delay into %data2 ent.
Number of Agents Staffed
SUN MON TUE WED THU FRI SAT
6 AM ___ ___ ___ ___ ___ ___ Placement.
7 AM ___ ___ ___ ___ ___ ___
8 AM ___ ___ ___ ___ ___ ___
9 AM ___ ___ ___ ___ ___ ___
10 AM ___ ___ ___ ___ ___ ___ phrase.
11 AM ___ ___ ___ ___ ___ ___

Enter the duration in seconds, followed by pressing the Return key.
HELP CHOICES CLOSE PREUPAGE NEXTPAGE CANCEL REFRESH
    
```

Figure 4-17. ADA Template Vector Worksheet with ADA\_CALC Action Form

3. Press CLOSE (F3).
4. Move your cursor to the first ANNOUNCE action and press DEFINE (F4).  
The system displays the ANNOUNCE action form (Figure 4-18).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custd 4 EDIT VECTOR NUMBER 158 STEPS
>Call Use Vector Name: ADA Template Vector Number: 158
System Description: Calculate & speak delay minutes in queue
System
3 ANNOUNCE Action Step Number 5 for vector 158

ANNOUNCE Action step speaks a phrase to caller

Talkfile Number: 6104 US English
Allow Interrupt: P_ it.

Phrase Tag: This is the leading announcement, normal wait.
Phrase Number:
Phrase Text:

Enter the talkfile.

HELP CHOICES CLOSE ENTER CANCEL REFRESH ADD-PHR
    
```

Figure 4-18. ADA Template Vector Worksheet with the ANNOUNCE Action Form

5. Enter the number of the talkfile in the `Talkfile Number` field.  
or  
Press **CHOICES** (F2) to select from a list.
6. Enter **Number** in the `Speak as a Number/Character string` field to indicate that Customer Assist should speak the anticipated delay as a number.  
or  
Press **CHOICES** (F2) to select from a list.
7. Move to the second **ANNOUNCE** action and press **DEFINE** (F4).  
The system displays the **ANNOUNCE** action form.
8. Enter the speech phrase you defined to follow the anticipated delay in the `Phrase Tag` field.  
or  
Press **CHOICES** (F2) to select from a list.  
For example, you might record only "...minutes."

**⇒ NOTE:**

To create a new phrase tag for this action instead, press ADD-PHR (F8). A phrase definition form appears. Use this form to define your new phrase tag and press SAVE (F3). Although you cannot record speech at this time, you can assign the phrase to your ANNOUNCE action immediately.

9. Press CLOSE (F3).
10. Move your cursor to the next ANNOUNCE action and press DEFINE (F4).  
The system displays the ANNOUNCE action form.
11. Enter the name of the speech phrase that informs callers the anticipated wait time is one minute or less in the `Phrase Tag` field.

or

Press CHOICES (F2) to select from a list.

**⇒ NOTE:**

To create a new phrase tag for this action instead, press ADD-PHR (F8). A phrase definition form appears. Use this form to define your new phrase tag and press SAVE (F3). Although you cannot record speech at this time, you can assign the phrase to your ANNOUNCE action immediately.

12. Press CLOSE (F3)
13. Move your cursor to the next ANNOUNCE action and press DEFINE (F4).  
The system displays the ANNOUNCE action form.
14. Enter the name of the speech phrase that informs callers the anticipated wait time is 20 minutes or more in the `Phrase Tag` field.

or

Press CHOICES (F2) to select from a list.

**⇒ NOTE:**

To create a new phrase tag for this action instead, press ADD-PHR (F8). A phrase definition form appears. Use this form to define your new phrase tag and press SAVE (F3). Although you cannot record speech at this time, you can assign the phrase to your ANNOUNCE action immediately.

15. Press CLOSE (F3)
16. Move your cursor to the last ANNOUNCE action and press DEFINE (F4).  
The system displays the ANNOUNCE action form.
17. Enter the name of the speech phrase that informs callers agents are not currently available in the `Phrase Tag` field.

or

Press CHOICES (F2) to select from a list.



**NOTE:**

To create a new phrase tag for this action instead, press ADD-PHR (F8). A phrase definition form appears. Use this form to define your new phrase tag and press SAVE (F3). Although you cannot record speech at this time, you can assign the phrase to your ANNOUNCE action immediately.

### Modify Announce Queue Position Template

This template creates a vector to inform callers of their relative position in queue.

The system creates a new Customer Assist vector each time you select this template. From a DEFINITY vector, simply launch this Customer Assist vector to inform callers of the number of callers that precede them in queue.

Use the following steps to configure the Announce Queue Position template correctly:

1. Start at the Template Type menu and select Announce Queue Position Template.

The system displays the Que Pos Templ vector worksheet (Figure 4-19).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 159 STEPS
>Call Use Vector Name: Queu Pos Templ Vector Number: 159
System Description: Get queue pos from PBX & spk. announce
System
UNIX Sy
Exit
Step Action Description
1 CONVERSE collect 3 digits into %data1
2 ANNOUNCE Beginning part of queue pos. announce.
3 SPEAK_NUM in %data1 as Number
4 ANNOUNCE Trailing part of queue pos announce.
5 QUIT Pass call back to PBX.
6
7
8
9
10
11
12
13
14
Enter the vector name.
HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
    
```

Figure 4-19. Queu Pos Templ Vector Worksheet

This worksheet creates a vector that uses the CONVERSE action with the variable *%data1* to acquire the caller's queue position from a DEFINITY vector. The vector then announces the caller's queue position to the caller and returns call control to the DEFINITY vector.

- To configure this vector, move your cursor to the CONVERSE action on the worksheet and press DEFINE (F4).

The system displays the ANNOUNCE action form (Figure 4-20).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 159 STEPS
>Call Ue Vector Name: Queu Pos Templ Vector Number: 159
System Description: Get queue pos from PBX & spk. announce
System
UNIX Sy Step Action Description
Exit 1 CONVERSE collect 3 digits into %data1
2 ANNOUNCE Beginning part of queue pos. announce.
3 SPEAK NUM in %data1 as Number

3 CONVERSE ACTION, STEP 1 for vector 159 announce.

Converse Step gathers TouchTones

Number of Digits to Collect: 3
Load Digits into Variable: %data1
Place number of digits collected into: %num_dig_got
Comment: Get digits from switch.

Enter the number followed by the Return or ENTER key.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 4-20. Queu Pos Templ Worksheet with CONVERSE Action Form

- Enter the number of digits the variable should collect in the `Number of Digits to Collect` field.
- Enter the name of the variable that should collect the digits in the `Load Digits into Variable` field.
- Enter the name of the variable where to place the number of digits collected in the `Place number of digits collected into` field.
- Enter a comment if you wish.
- Next, move your cursor to the first ANNOUNCE action on the worksheet and press DEFINE (F4).

The system displays the ANNOUNCE action form (Figure 4-20).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 159 STEPS
>Call Use Vector Name: Queu Pos Templ Vector Number: 159
System Description: Get queue pos from PBX & spk. announce
System
3 ANNOUNCE Action Step Number 2 for vector 159

ANNOUNCE Action step speaks a phrase to caller

Talkfile Number: 6104 US English
Allow Interrupt: Yes

Phrase Tag: Beginning part of queue pos. announce.
Phrase Number:
Phrase Text:

Enter the talkfile.

HELP CHOICES CLOSE ENTER CANCEL REFRESH ADD-PHR

```

Figure 4-21. Queu Pos Templ Worksheet with ANNOUNCE Action Form

8. Enter the name of the speech phrase you defined to precede the queue position, which the vector recites as a discrete number, in the `Phrase Tag` field. For example, you might record "Currently, there are..."

or

Press CHOICES (F2) to select from a list.

⇒ **NOTE:**

To create a new phrase tag for this action instead, press ADD-PHR (F8). A phrase definition form appears. Use this form to define your new phrase tag and press SAVE (F3). Although you cannot record speech at this time, you can assign the phrase to your ANNOUNCE action immediately.

9. Press CLOSE (F3).
10. Move your cursor to the `SPEAK_NUM` action and press DEFINE (F4).  
The system displays the `SPEAK_NUMBER` action form (Figure 4-15).
11. Enter the variable that corresponds to where the caller is in queue in the `Number` field.  
or  
Press CHOICES (F2) for a list of variables.
12. Enter **Number** or **Character** in the `Speak as Number/Character` field to specify how the action should recite the queue position to the caller.

13. Press CLOSE (F3).
14. Move to the second ANNOUNCE action and press DEFINE (F4).  
The system displays the ANNOUNCE action form (Figure 4-14).
15. Enter the name of the speech phrase you defined to follow the queue position in the *Phrase Tag* field.

or

Press CHOICES (F2) to select from a list.

For example, you might record only "...people waiting to speak with our agents."

 **NOTE:**

To create a new phrase tag for this action instead, press ADD-PHR (F8). A phrase definition form appears. Use this form to define your new phrase tag and press SAVE (F3). Although you cannot record speech at this time, you can assign the phrase to your ANNOUNCE action immediately.

16. Press CLOSE (F3), CHG-KEYS (F8), and SAVE (F3) to return to the Vector Configuration menu.

### Modify Custom Call Routing Template

The vector this template generates uses information it receives from a DEFINITY vector to route incoming calls.

The system creates a new Customer Assist vector each time you select this template. From a DEFINITY vector, simply launch this Customer Assist vector to route callers intelligently.

Use the following steps to configure the routing template vector correctly:

1. Start at the Template Type menu and select Custom Call Routing Template.

The system displays the Routing Tmpl vector worksheet (Figure 4-22).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custd 4 EDIT VECTOR NUMBER 160 STEPS
>Call Use Vector Name: Routing Templ. Vector Number: 160
System Description: Gather ANI from PBX & route call.
System
UNIX Sy Step Action Description
Exit 1 CONVERSE collect 10 digits into %ci_value
2 LOOK_UP %ci_value in table (choose table)
3 GOTO Step 6 if %matched = 1
4 GOTO Step 8 if %matched = 0
5 QUIT else, quit on error.
6 ANNOUNCE Play normal routing message (choose).
7 DATA_RTN to PBX with FAC (insert code here)
8 ANNOUNCE Play no match message (choose).
9 DATA_RTN to PBX with FAC (insert code here)
10 _____
11 _____
12 _____
13 _____
14 _____

Enter the vector name.

HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
    
```

Figure 4-22. Routing Templ. Worksheet

This routing template uses the CONVERSE action with the variable *%ci\_value* to acquire information such as the caller's telephone number (ANI) from the DEFINITY vector.

2. Move your cursor to the CONVERSE action and press DEFINE (F4).  
The system displays the CONVERSE action form (Figure 4-23).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custor 4 EDIT VECTOR NUMBER 160 STEPS
>Call Use Vector Name: Routing Templ. Vector Number: 160
System Description: Gather ANI from PBX & route call.
System
UNIX Sy Step Action Description
Exit 1 CONVERSE collect 10 digits into %ci_value
2 LOOK_UP %ci_value in table (choose table)
3 GOTO Step 6 if %matched = 1

3 CONVERSE ACTION, STEP 1 for vector 160

Converse Step gathers TouchTones (choose).
Number of Digits to Collect: 10 e here)
Load Digits into Variable: %ci_value se).
Place number of digits collected into: %num_dig_got e here)
Comment: collect ANI from PBX.

Enter the number followed by the Return or ENTER key.

HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 4-23. Routing Templ. Vector Worksheet with CONVERSE Action Form

3. Enter the maximum number of digits to accept from the DEFINITY vector in the Number of Digits to Collect field.

**⇒ NOTE:**

For many routing applications, you will accept a 10-digit telephone number from the PBX.

4. Press CLOSE (F3).
5. Move your cursor to the LOOK\_UP action and press DEFINE (F4).  
The system displays the LOOK\_UP action form (Figure 4-24).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 28, 1998
1 Custo 4 EDIT VECTOR NUMBER 160 STEPS
>Call Use Vector Name: Routing Templ. Vector Number: 160
System Description: Gather ANI from PBX & route call.
System
UNIX Sy Step Action Description
3 LOOK_UP Table Action. Step Number 2 for vector 160

LOOK_UP Action looks up values in a database table.

Input Fields
Routing table:
Look-up field: %ci_value
Return Fields
Number of Matches found: %matched
Data field 1: %data1
Data field 2: %data2

Comment: look up value and return data.
Note: The LOOK_UP action requires that the table be populated.

Enter the routing table name followed by the Return or ENTER key.

HELP CHOICES CLOSE ENTER CANCEL REFRESH

```

Figure 4-24. Routing Templ. Vector Worksheet with LOOK\_UP Action Form

6. Move your cursor to the `Routing table` field and press CHOICES (F2).
7. Select the name of the database table you created for Custom Call Routing from the list that appears.
8. In the `Look-up field`, specify the variable the LOOK\_UP action should compare to the records in the Custom Call Routing table you specified in Step 7.

In this example (Figure 4-24), the first column in the Custom Call Routing table must contain possible values for the variable `%ci_value`. If Customer Assist finds one such record where the `%ci_value` matches this `Look-up field` value, the Customer Assist vector continues to the first ANNOUNCE action in the vector.

**⇒ NOTE:**

You may associate a third column of information with the `%ci_value`. The LOOK\_UP action in this Customer Assist vector uses the variables `%data1` and `%data2` to acquire information in the second and third columns, respectively.

See “Custom Call Routing Administration” on page 7-31 for more information about routing tables.

9. Press CLOSE (F3).
10. Move your cursor to the first ANNOUNCE action and press DEFINE (F4).  
The system displays the ANNOUNCE action form (Figure 4-25).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Cust 4 EDIT VECTOR NUMBER 132 STEPS
>Call Use Vector Name: Routing Templ. Vector Number: 132
System Description: Gather ANI from PBX
System
5 ANNOUNCE Action Step Number 6 for vector 132

ANNOUNCE Action step speaks a phrase to caller

Talkfile Number: 6104 US English
Allow Interrupt: Yes

Phrase Tag: Play normal routing message (choose).
Phrase Number:
Phrase Text:

Enter the talkfile.

HELP CHOICES CLOSE ENTER CANCEL REFRESH ADD-PHR
    
```

Figure 4-25. Routing Templ. Vector Worksheet with ANNOUNCE Action Form

11. Enter the name of the speech phrase you defined to precede the transfer in the `Phrase Tag` field.

or

Press CHOICES (F2) to select from a list.

**⇒ NOTE:**

To create a new phrase tag for this action instead, press ADD-PHR (F8). A phrase definition form appears. Use this form to define your new phrase tag and press SAVE (F3). Although you cannot record speech at this time, you can assign the phrase to your ANNOUNCE action immediately.

12. Press CLOSE (F3).
13. Move your cursor to the first DATA\_RTN action and press DEFINE (F4).  
The system displays the DATA\_RTN action form (Figure 4-26).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custo 4 EDIT VECTOR NUMBER 132 STEPS
>Call Use Vector Name: Routing Templ. Vector Number: 132
System Description: Gather ANI from PBX
System
UNIX Sy 5 Data Return Action, Step Number 7 for vector 132
Exit
Step Action
1 CONVERSE DATA_RTN Action returns information to switch.
2 LOOK_UP
3 GOTO Feature Access Code: _____
4 GOTO
5 QUIT Data Return Segment 1: %data1
6 ANNOUNCE Data Return Segment 2: #
7 DATA_RTN Data Return Segment 3: _____
8 ANNOUNCE Data Return Segment 4: _____
9 DATA_RTN Data Return Segment 5: _____
10 Data Return Segment 6: _____
11 Data Return Segment 7: _____
12 Data Return Segment 8: _____
13
14 Comment: Return database field to PBX.

Enter the FAC followed by the Return or ENTER key.

HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 4-26. Routing Templ. Vector Worksheet with DATA\_RTN Action Form

14. Enter the feature access code (FAC) that Customer Assist should send to the switch before the first data return segment in the Feature Access Code field.

The feature access code is a series of touch-tones that informs the switch that the caller is trying to use a certain switch feature.

**⇒ NOTE:**

Your entry must be the same as the Converse Data Return FAC already specified on the DEFINITY for Data Return.

15. Enter any additional values or variables you want to return to the DEFINITY vector up to a combined limit of 24 characters in the Data Return Segment fields.

**⇒ NOTE:**

When using variables to represent values, keep in mind that the number of characters in the value, not the number of characters in the variable, count toward the limit. Every character in values you list on these lines counts toward the limit, including #, which you can use as a delimiter.

16. Press CLOSE (F3).
17. Move your cursor to the next ANNOUNCE action and press DEFINE (F4).  
The system displays the ANNOUNCE action form (Figure 4-25).

18. Enter the name of the speech phrase that notifies callers that they will be transferred to an agent in the `Phrase Tag` field.

or

Press CHOICES (F2) to select from a list.

**⇒ NOTE:**

To create a new phrase tag for this action instead, press ADD-PHR (F8). A phrase definition form appears. Use this form to define your new phrase tag and press SAVE (F3). Although you cannot record speech at this time, you can assign the phrase to your ANNOUNCE action immediately.

19. Press CLOSE (F3).
20. Move your cursor to the second `DATA_RTN` action and press DEFINE (F4).  
The system displays the `DATA_RTN` action form (Figure 4-26).
21. Enter the FAC you want to send to the PBX before the extension number of an agent.

**⇒ NOTE:**

Your entry must be the same as the Converse Data Return FAC already specified on the DEFINITY for Data Return.

22. To change the agent extension number that this vector will return to the DEFINITY vector (default = 0), move your cursor to the field labeled `Data Return Segment 1`, and replace the default extension number with the desired number.
23. Press CLOSE (F3), CHG-KEYS (F8), and SAVE (F3) to return to the Vector Configuration menu.

### Audit Vector Database

This option allows you to run an audit to determine any problems with in-service vectors. Choose this option to check vectors in your development database for common errors. Select this option before you place new vectors in service.

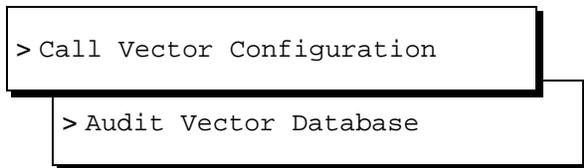
**⇒ NOTE:**

Passing this audit does not guarantee that a vector will operate as expected. This audit is not a substitute for careful vector planning and testing. Conversely, the appearance of a warning does not necessarily indicate an error condition that will disrupt the handling of calls.

### Access Audit Vector Database

Use the following steps to access the Audit Vector Database:

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



The system displays the Audit Vector Database (Figure 4-27).

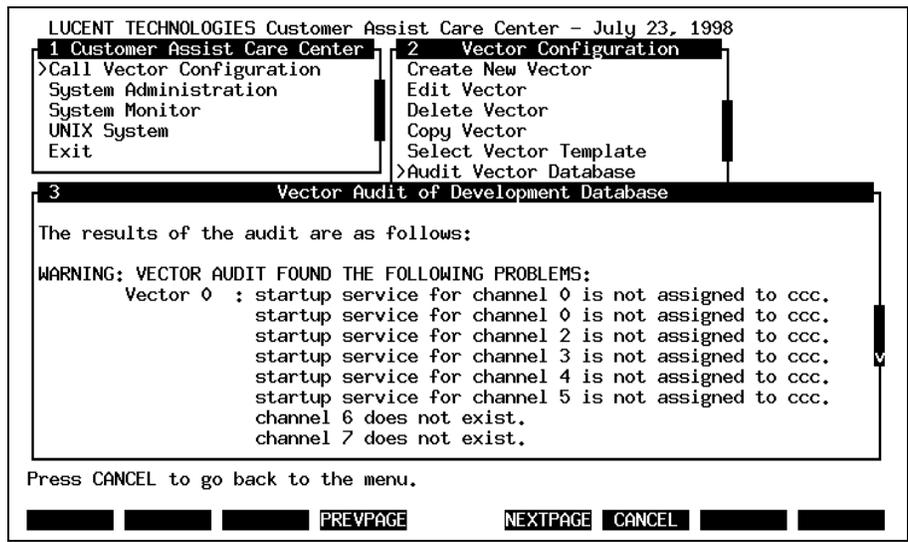


Figure 4-27. Audit Vector Database

### Field Definitions

Table 4-1 defines each field that appears in the Audit Vector Database.

**Table 4-1. Audit Vector Database Field Descriptions**

<b>Field</b>	<b>Description</b>
Vector xx, Is an Orphan:	The vector is not assigned to any channel and is not referenced by any other vector.
Vector xx, Not properly ended:	The vector does not end with a QUIT action or any other action that surrenders call control. See "Customer Assist Vector Actions" on page 5-1 for more information about actions and their properties.
Vector xx, Converse Action Ends with Transfer:	The vector contains a CONVERSE action followed by a TRANSFER action. The DEFINITY switch does not allow actions that flash the switch following a CONVERSE action. Instead, the switch is either expecting Customer Assist to return control to the DEFINITY vector via a QUIT action or is expecting digits to be returned via the Data Return feature.
Vector xx, Goto to Nonexistent Vector:	The vector contains a SWITCH, MENU, GOTO, or CHAN_ASN action that refers to a missing vector.
Vector xx is incomplete (see YY action):	The action is defined but not configured. Check that the step containing the action has been completely filled in. See "Vector Mapping Report" on page 8-45 for a key of two-letter action codes.
Channel xx is not assigned to ccc or is not in service:	Channels specified in CHAN_ASN are not assigned to ccc or contain a channel that is not currently in service.
Vector xx has undefined variable:	References orphaned variables that are used in vectors but are not defined.
Phrase xx is not in phrase database:	References orphaned phrase tags that are used in announcements or menus but are not defined.

*Continued on next page*

**Table 4-1. Audit Vector Database Field Descriptions — Continued**

Field	Description
Mailbox xx is no longer defined:	References orphaned mailboxes that are used in vectors but no longer exist.
Routing table xx is no longer defined:	References routing tables that are used in vectors but no longer exist.
GOTO step xx - step doesn't exist:	References GOTO actions that jump to steps that do not exist.
Phrase xx has not been recorded:	References phrases that have valid phrase tags, but are not recorded.
Vector xx has uninstalled language:	References vectors that require specific language vector talkfiles that are missing and/or not installed on the CONVERSANT.
GOTO action contains an endless loop:	Checks for GOTO step actions that call themselves.

### Place New Vectors in Service

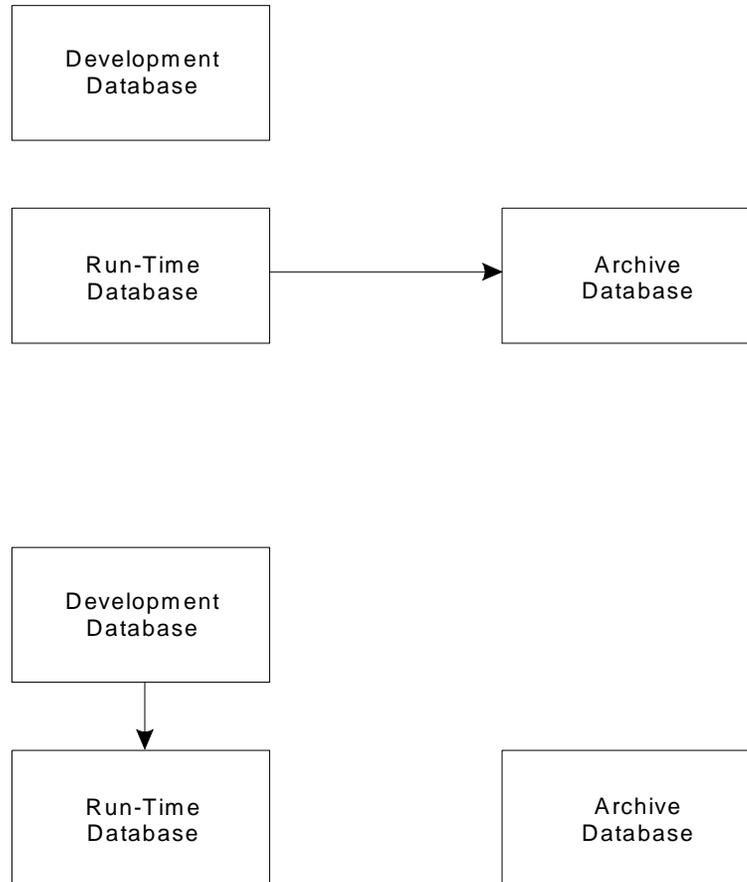
This menu allows you to place vectors in service after you have created them. Customer Assist maintains Customer Assist vectors in three separate databases:

- Runtime database — contains active vectors
- Development database — contains duplicate runtime vectors that you can modify without affecting the way the system handles calls
- Archive database — contains previous runtime vectors

When you place new vectors in service, Customer Assist compares the development database to the runtime database and does one of the following:

- If they match exactly, the system indicates that no change has been made to the development database since it was last placed in service. Press CANCEL (F6) to return to the Vector Configuration menu.
- If the two databases do not match, the system displays the name and number of each Customer Assist vector that has been added or changed. Press CONT (F3) to place these vectors in service or CANCEL (F6) to return to the Vector Configuration menu.

Figure 4-28 illustrates the two-step process the system uses to place new vectors in service.



Placing New Vectors in Service

---

**Figure 4-28. Three CONVERSANT Vector Databases**

The steps are as follows:

1. Customer Assist copies the current runtime vector database to an archive database.
2. Customer Assist overwrites the runtime database with the development database.

See "System Backup/Restore" on page 7-45 for information on backing up and restoring databases or Customer Assist vectors from diskettes.

## Summary

---

While working through this chapter, you learned how to configure vectors and place them in service.

- See Chapter 5, “Vector Actions”, for more information on vector actions and their definitions.
- See Chapter 6, “Speech Administration” for more information on how to record and document speech.

This chapter describes vectoring capabilities as well as the procedures for working with variables and actions.

### Customer Assist Vector Actions

This section describes the actions associated with Customer Assist vector administration in the Platform Management package. Figure 5-1 shows the available actions.

 **NOTE:**

Because ADA\_CALC and EWT actions apply to different DEFINITY switch versions, they will not appear under the Select Action menu simultaneously.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custo 3 EDIT VECTOR NUMBER 161 STEPS
>Call Ue Vector Name: _____ Vector Number: 161
System Description: _____
System
UNIX Sy Step Action Description
Exit 1
2
4 Select Action
>ADA_CALC GET_DIALP QUIT
ANNOUNCE GET_DIGT REPORT
CHAN_ASN GET_SPCH SCHEDULE
CHG_LANG GOTO SET
CONVERSE HANG_ACT SPCH_ADMN
DATA_RTN LOOK_UP SPEAK_NUM
DYNAMIC MENU SWITCH
DYN_ANNOU MSG_DROP TRANSFER
EXECUTE OFF_HOOK TRANSCRIBE

Select the action and press ENTER.

HELP ENTER PREV-FRM NEXT-FRM CANCEL

```

Figure 5-1. Select Action Menu

## ADA\_CALC Action

This action is used after the CONVERSE action to calculate the approximate time a caller will wait in queue.

### ⇒ NOTE:

This action is available only with DEFINITY G3V3 and earlier switches.

The ADA\_CALC action uses the factors below to calculate how long a caller must wait in queue:

- The caller's position in queue, which it receives from the switch.
- Your estimates of the average length of a call and the number of available agents.

## Calculating Anticipated Delay

To calculate this estimate, the system adds the number of callers ahead of the current caller and the number of "agents staffed" as entered in the ADA\_CALC table. It multiplies the result by the average duration of a call. Then, it divides this product by the number of agents staffed.

$$\frac{(\text{Number of Callers Ahead of Current Caller} + \text{Number of Agents Staffed}) * \text{Average Call Duration}}{\text{Number of Agents Staffed}}$$



**NOTE:**

The ADA\_CALC action truncates its calculation by the minute with a minimum of 1 minute. For example, if the calculated delay was 30 seconds, the caller would hear 1 minute. If the calculated delay was 2 minutes 30 seconds, the caller would hear 2 minutes.

Use the ADA (Anticipated Delay Announcement) template for help building your announcements. (See “Anticipated Delay Announcement Template (before DEFINITY G3V4)” on page 4-21 for more information.) Another version of this template, the Announce Queue Position template, can speak a caller's position in queue. ADA and Announce Queue Position templates, like those supplied with Customer Assist, automatically create Customer Assist vectors to perform important call handling tasks.

**Modify ADA\_CALC Action**

The ADA\_CALC action form (Figure 5-2) appears when you insert this action into a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custd 3 EDIT VECTOR NUMBER 161 STEPS
>Call Use Vector Name: _____ Vector Number: 161
System Description: _____
System
UNIX Sy Step Action Description
Exit 1 _____ 5 ADA_CALC Action Step Number 1 for vector 161
2 _____
3 _____ ADA_CALC CALCULATES THE ANTICIPATED DELAY IN QUEUE
4 _____ Avg. Call Length: _____ Queue Position : _____
5 _____ Result : _____
6 _____ Comment: _____
7 _____
8 _____ Number of Agents Staffed
9 _____ SUN MON TUE WED THU FRI SAT
10 _____ 6 AM _____
11 _____ 7 AM _____
12 _____ 8 AM _____
13 _____ 9 AM _____
14 _____ 10 AM _____
15 _____ 11 AM _____

Enter the duration in seconds, followed by pressing the Return key.
HELP CHOICES CLOSE PREUPAGE NEXTPAGE CANCEL REFRESH
    
```

**Figure 5-2. ADA\_CALC Action Form**

Use the following steps to complete the ADA\_CALC action form:

1. Enter the approximate number of seconds a caller will be connected to an agent in the Avg. Call Length field.
2. Enter the name of the variable you used with CONVERSE to obtain the caller's queue position in the Queue Position field.

3. Enter the name of the variable where ADA\_CALC should place its estimate of the number of minutes a caller will wait in the queue in the `Result` field.
4. Optionally, enter a comment to associate with the ADA\_CALC action.
5. In the `Number of Agents Staffed` grid, enter the number of agents on duty for each day of the week at each hour. Blank spaces correspond to 0 agents. Use `PREVPAGE` (F4), `NEXTPAGE` (F5), and the directional keys to move around this form.

## **ANNOUNCE Action**

---

This action plays a specific recorded message. Use the ANNOUNCE action in a Customer Assist vector to speak information, prompt a caller for input, or play a “standard announcement” to several callers simultaneously in an ACD (Automatic Call Distribution) queue up to the limits of your switch.

To provide a standard announcement, a DEFINITY vector first connects calls to an announcement extension corresponding to a CONVERSANT port. In turn, Customer Assist takes this port off-hook and launches a hard-allocated vector that you have configured with at least one ANNOUNCE action. After the recorded message finishes, the CONVERSANT hangs up and vector processing continues in the DEFINITY vector.

You can record announcements by:

- Using the `SPCH_ADMN` action in a Customer Assist vector, (see “`SPCH_ADMN` Action” on page 5-48).
- Through Speech Administration (see Chapter 6, “Speech Administration”).

Later, you can update your phrases from any touch-tone telephone by dialing a vector containing the `SPCH_ADMN` action and entering a valid number and password. (See “`SPCH_ADMN` Action” on page 5-48 or Chapter 6, “Speech Administration” for more information about speech administration.)

### **NOTE:**

Standard announcements were not available over digital (line-side T1/E1) lines until G3V4.

### **CAUTION:**

*The ANNOUNCE action, during the call, cannot be interrupted by the caller using Speech Recognition or Dial Pulse Recognition. It CAN be interrupted using a touch-tone if the `Allow Interrupt` field is set to Yes. If an ANNOUNCE action is interrupted with a touch-tone, that speech—plus any speech later in the vector—is skipped, and that tone will be used as input in the action that collects input, such as a MENU, GET\_DIALP, GET\_SPCH, or GET\_DIGT action. For example, if a vector has two ANNOUNCE actions and a MENU action (described later in this chapter) and if the caller presses a touch-tone key while listening to the first ANNOUNCE, Customer*

*Assist will skip the first ANNOUNCE action AND the second ANNOUNCE action AND the prompt used in the MENU action. Customer Assist will use the input to the touch-tone prompt as input for the MENU action.*

**⇒ NOTE:**

The proceeding paragraph does not apply when the DEFINITY vector routes callers to an announcement extension that then routes callers to a hard-allocated CONVERSANT port. Therefore, 256 callers could all hear a standard announcement on the CONVERSANT, yet that announcement would be unaffected by any of those callers pressing a touch-tone. The touch-tone entered would be used by the DEFINITY in the next collect action step in the DEFINITY vector on a per call basis.

### Modify ANNOUNCE Action Form

The system displays the ANNOUNCE action form (Figure 5-3) when you insert this action into a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custo 3 EDIT VECTOR NUMBER 161 STEPS
>Call Use Vector Name: _____ Vector Number: 161
System Description: _____
System
5 ANNOUNCE Action Step Number 1 for vector 161

ANNOUNCE Action step speaks a phrase to caller

Talkfile Number: 6104 US English
Allow Interrupt: Yes

Phrase Tag: Rock Coast - Main Greeting 2
Phrase Number: 1000

Phrase Text: Thank you for calling Rock Coast Software. A
representative will be with you shortly. Thank
you for your patience.

Press the CHOICES key for the list of valid phrase tags.

HELP CHOICES CLOSE ENTER CANCEL REFRESH ADD-PHR

```

**Figure 5-3. ANNOUNCE Action Form**

Use the following steps to modify the ANNOUNCE action form:

1. Enter the number of the vector phrase to use in the `Talkfile Number:` field; press **CHOICES** (F2) for a menu of talkfiles.
2. Enter **Yes** in the `Allow Interrupt:` field to allow the caller to interrupt the phrase recited by this action.

 **CAUTION:**

*The ANNOUNCE action, during the call, cannot be interrupted by the caller using Speech Recognition or Dial Pulse Recognition. It CAN be interrupted using a touch-tone if the `Allow Interrupt` field is set to Yes. If an ANNOUNCE action is interrupted with a touch-tone, that speech—plus any speech later in the vector—is skipped, and that tone will be used as input in the action that collects input, such as a MENU, GET\_DIALP, GET\_SPCH, or GET\_DIGT action. For example, if a vector has two ANNOUNCE actions and a MENU action (described later in this chapter) and if the caller presses a touch-tone key while listening to the first ANNOUNCE, Customer Assist will skip the first ANNOUNCE action AND the second ANNOUNCE action AND the prompt used in the MENU action. Customer Assist will use the input to the touch-tone prompt as input for the MENU action.*

 **NOTE:**

The preceding paragraph does not apply when the DEFINITY vector routes callers to an announcement extension that then routes callers to a hard-allocated CONVERSANT port. Therefore, 256 callers could all hear a standard announcement on the CONVERSANT, yet that announcement would be unaffected by any of those callers pressing a touch-tone. The touch-tone entered would be used by the DEFINITY in the next collect action step in the DEFINITY vector on a per call basis.

3. Enter the name of the speech phrase to play in the `Phrase Tag` field; press CHOICES (F2) for a menu of phrase tags.

The phrases depend on the talkfile that was chosen. The phrase number and text appear on the action form automatically after you enter the phrase tag.

 **NOTE:**

To create a new phrase tag for this action, press ADD-PHR (F8). A Phrase Definition form appears. Use this form to define your new phrase tag and press SAVE (F3). Although you cannot record speech at this time, you can assign the phrase to your ANNOUNCE action immediately. See “To Add a New Phrase” on page 6-7 for more information.

## **CHAN\_ASN Action**

---

This action is used in the setup vector to assign Customer Assist vectors to CONVERSANT ports so that incoming callers can be routed to the appropriate vectors.

## Modify CHAN\_ASN Action

The system displays the CHAN\_ASN action form (Figure 5-4) when you insert this action in a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custo 3 EDIT VECTOR NUMBER 161 STEPS
>Call Use Vector Name: Vector Number: 161
System Description: 5 CHAN_ASN Action Step Number 1 for vector 161
System
UNIX Sy Step Action CHAN_ASN assigns vectors to channels
Exit Comment:
CHANNEL VECTOR NAME
1
2
3
4
5
6
7
8
9
10
11
12
13
14
Enter the Channel number follow by the Return or ENTER key.
HELP CHOICES CLOSE ENTER CANCEL REFRESH

```

Figure 5-4. CHAN\_ASN Action Form

Use the following steps to modify the CHAN\_ASN action form:

1. Optionally, enter a brief description of the action in the `Comment :` field.
2. Enter the number of an active (in service) port in the `CHANNEL` column.
3. Enter the number of the Customer Assist vector where calls coming into the corresponding port should be routed in the `VECTOR` column; press `CHOICES (F2)` for a list.

If a specific port is listed more than once on the CHAN\_ASN form, the first occurrence will be activated.

4. Repeat Steps 2 and 3 for each active Customer Assist port for up to 12 ports. Use additional CHAN\_ASN actions in the `setup` vector to assign more than 12 ports.

### ⇒ NOTE:

The `setup` vector assigns vectors to ports within Customer Assist only. The system will not respond to calls unless you assign Customer Assist to every port you plan to use. (See *the INTUITY CONVERSANT System Version 7.0 Administration*, 585-310-591, for more information about assigning services to ports.)

## CHG\_LANG Action

This action specifies the language the caller will hear. Your choices depend on the languages installed. If the CHG\_LANG action is not used, callers will hear the application in the base language. Upon reaching the CHG\_LANG action, the callers will hear the application in the language chosen from this point on.

### Modify CHG\_LANG Action

The system displays the CHG\_LANG action form (Figure 5-5) when you insert this action in a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custo 3 EDIT VECTOR NUMBER 161 STEPS
>Call Ue Vector Name: _____ Vector Number: 161
System Description: _____
System
UNIX Sy Step Action Description
Exit 1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____
8 _____
9 _____
10 _____
5 Change Language Action, Step Number 1 for vector 161
Change language to: _____
Comment _____

Enter the language or a variable.

HELP CHOICES CLOSE ENTER CANCEL REFRESH

```

Figure 5-5. CHG\_LANG Action Form

Use the following steps to modify the CHG\_LANG action form:

1. Enter either a language or a variable corresponding to a language id to specify the language the caller will hear in the *Change language to* field; press CHOICES (F2) to select from a list.



**NOTE:**

The variable may be used if you are setting up the vector to offer a choice of languages.

 **CAUTION:**

*If the value of the variable is invalid (that is, if it is not an available option), the call will continue in the base language or the language in effect.*

2. Optionally, enter a description of the action in the `Comment` field.

### CONVERSE Action

This action accepts information that the DEFINITY G3 or ECS R5 or 6.3+ switch sends along with a call by using the DEFINITY Converse step. To send two items of information with a single call, use two CONVERSE actions. If two CONVERSE actions are being used, only the SET action or the REPORT action can be placed between them. Information can include:

- A string of touch-tone digits collected through DEFINITY Call Prompting (digits)
- The caller's position in queue (qpos)
- The switch's estimate of how long a caller will wait in queue (G3V4 and DEFINITY ECS R5 and 6.3+) (wait)
- Vector Directory Number (vdn) (which may equate to DNIS)
- Automatic Number Identification (ani) information
- Numbers (0-9), \*, or #

 **NOTE:**

The # is treated as a termination character by the CONVERSE action. It stops the collection of input from the switch.

 **NOTE:**

To report on the value of digits that are conversed to Customer Assist, you may insert a REPORT action after the CONVERSE action. See "REPORT Action" on page 5-42. It is important to distinguish between the CONVERSE action, which is part of Customer Assist and receives only data passed to it by the DEFINITY G3V2 (or greater) switch, and the Converse vector step, which is part of the DEFINITY's call vectoring feature, beginning with the DEFINITY G3V2+. The DEFINITY's Converse vector step performs the actual handoff to the Customer Assist vector.

### Modify CONVERSE Action Form

The system displays the CONVERSE action form (Figure 5-6) when you insert this action in a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custo 3 EDIT VECTOR NUMBER 161 STEPS
>Call Ue Vector Name: _____ Vector Number: 161
System Description: _____
System
UNIX Sy Step Action Description
Exit 1 _____
2 _____
3 _____
4 _____ 5 CONVERSE ACTION, STEP 1 for vector 161
5 _____
6 _____ Converse Step gathers TouchTones
7 _____
8 _____ Number of Digits to Collect: __
9 _____
10 _____ Load Digits into Variable: _____
11 _____
12 _____ Place number of digits collected into: %num_dig_got
13 _____
14 _____ Comment: _____

Enter the number followed by the Return or ENTER key.

HELP CHOICES CLOSE ENTER CANCEL REFRESH

```

Figure 5-6. CONVERSE Action Form

Use the following steps to modify the CONVERSE action form:

1. Enter the number of digits that the switch should deliver to the CONVERSE action in the `Number of Digits to Collect` field.

The maximum number of digits is 16. In this total, do not include the # key, which the DEFINITY G3 or ECS R5 or 6.3+ automatically sends to mark the end of the digit string. The system uses the variable `%num_dig_got` to represent the actual number of digits collected.

2. Enter the name of the variable where the digits the DEFINITY vector passes should be stored in the `Load Digits into Variable` field.

**⇒ NOTE:**

The system assigns the value 0 (zero) to the variable `%num_dig_got` if it does not receive any touch-tones from the DEFINITY G3 or ECS R5 or 6.3+.

3. Optionally, enter a description of the action in the `Comment :` field.

Give each item of information a variable name. Other actions can use these variables to respond to callers with announcements or other actions.



**NOTE:**

After a DEFINITY vector passes a call and information to a Customer Assist vector using a Converse vector step, the Customer Assist vector cannot invoke any action using flash-hook signals, such as transferring a call and launching a customer callback. Before using the CONVERSE action with line-side T1/E1 ports, access the Systems-Parameters Features screen on the DEFINITY G3 or ECS R5 or 6.3+ switch and set the Converse First and Second Data Delay parameter to 1 instead of 0.



**NOTE:**

When using the CONVERSE action, Customer Assist waits for in-band DTMF signals from the switch. If you are just testing this, you may use your touch-tone telephone to simulate in-band DTMF signals. This allows you to fake a Converse step from the switch. For example, create the vectors you wish to test and place them in service. Dial the CONVERSANT and after the first ring or two, start pushing the touch-tone key pad with the data that would be passed from the DEFINITY. The touch-tones will be viewed by the CONVERSANT as in-band DTMF signals. This helps debug vectors built in Customer Assist.

### **DATA\_RTN Action**

---

This action sends information to the DEFINITY G3V2+ or ECS R5 or 6.3+ switch. This information can be used to route or remove calls from queue, or to populate agents' telephone or computer displays.

The DATA\_RTN action complements the CONVERSE action by providing a way to return data to a DEFINITY vector. You specify a FAC (feature access code) and a series of variables or strings to pass. The FAC then tells the DEFINITY switch that the vector is receiving DATA\_RTN information from Customer Assist.

### **Modify DATA\_RTN Action Form**

The system displays the DATA\_RTN (Figure 5-7) action form whenever you insert this action into a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custo 3 EDIT VECTOR NUMBER 161 STEPS
>Call Ue Vector Name: _____ Vector Number: 161
System Description:
UNIX Sy Step Action
Exit 1 DATA_RTN Action returns information to switch.
2
3 Feature Access Code: _____
4
5 Data Return Segment 1: _____
6 Data Return Segment 2: _____
7 Data Return Segment 3: _____
8 Data Return Segment 4: _____
9 Data Return Segment 5: _____
10 Data Return Segment 6: _____
11 Data Return Segment 7: _____
12 Data Return Segment 8: _____
13
14 Comment: _____

Enter the FAC followed by the Return or ENTER key.

HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 5-7. DATA\_RTN Action Form

Use the following steps to modify the DATA\_RTN action form:

1. Enter the feature access code (FAC) you want to send to the switch before value in the `Feature Access Code:` field.

Your entry must be the Converse Data Return code already defined on the DEFINITY G3 or ECS R5 or 6.3+ switch.

2. Enter the values (or variables containing values) to return to the DEFINITY vector in the `Data Return Segment` fields.

The maximum number of characters is 24 characters; every character counts toward the limit, including:

- #, which you may use as a delimiter
- when using variables to represent values, the number of characters in the value (not the number of characters in the variable name)

3. Optionally, enter a description of the action in the `Comment :` field.



**CAUTION:**

*Do not use `*` because it will erase the collected digits buffer on the DEFINITY switch.*

## DYNAMIC Action

This action transfers call control to one of up to 10 CONVERSANT applications, depending on the value of a variable, such as VDN (vector directory number). Associate this action with a single variable name and then link three possible arguments with CONVERSANT applications to execute.

### Modify DYNAMIC Action Form

The system displays the DYNAMIC action form (Figure 5-8) whenever you insert this action into a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custo 3 EDIT VECTOR NUMBER 161 STEPS
>Call Use Vector Name: Vector Number: 161
System 5 DYNAMIC PORT ALLOCATION BLOCK 1 for vector 161
System
UNIX Sy
Exit

DYNAMIC ALLOCATION STARTS PROGRAMS FOR GIVEN VALUES
Comment:
Variable:

VALUE PROGRAM ARG1 ARG2 ARG3

Please enter your comments.

HELP CHOICES CLOSE ENTER CANCEL REFRESH

```

Figure 5-8. DYNAMIC Action Form

Use the following steps to modify the DYNAMIC action form:

1. Optionally, enter a description of the action in the `Comment :` field.
2. Enter the name of the variable containing the value that will determine which CONVERSANT application to execute; press **CHOICES** (F2) for a list.
3. Under the column marked `VALUE`, enter a possible value for the variable you chose.

If a specific value is repeated in the `VALUE` column, the first occurrence will be used during the call.

4. Under the column marked `PROGRAM`, enter the name of the CONVERSANT application to execute if the actual value of the variable matches the value indicated on the left; press **CHOICES** (F2) for a list.

5. Use remaining columns to specify up to three arguments (`ARG1`, `ARG2`, `ARG3`) to pass to the executed program. Valid arguments include numbers, text strings, or variables. For example, Customer Assist could pass a caller's ANI along with the caller's collected digit account number to a fax response application (outside of Customer Assist) on the CONVERSANT.
6. Repeat steps 3 through 5 for each possible variable value.

 **NOTE:**

After removing a CONVERSANT application from your hard-disk drive or restoring your Customer Assist vector to a new hard-disk drive, check that the DYNAMIC action's `PROGRAM` column still lists valid CONVERSANT applications on the hard-disk drive.

### DYN\_ANNOU Action

This action plays one of many messages to a single caller. A Converse vector step in a DEFINITY vector can send one or two items of call information that Customer Assist vector can use to select an announcement to play.

Within a DEFINITY vector, for example, you might use Call Prompting to ask callers if they would rather hear an informational message or speak with an agent. Your DEFINITY vector could then deliver callers who choose the announcement to a CONVERSANT port, along with the number they dialed. The Platform Management package, in turn, can use this value to determine the message to play. When a vector containing the dynamic announcement ends, the CONVERSANT port drops off and vector processing resumes in the DEFINITY vector.

DEFINITY vectors can also place calls in an ACD (Automatic Call Distribution) queue before connecting them to Customer Assist. This allows the DEFINITY vector to interrupt dynamic announcements and regain call control when agents become available.

 **NOTE:**

The DEFINITY G3 or ECS R5 or 6.3+ can direct only one caller at a time to a CONVERSANT port when the Converse step is used. Call centers wishing to speak forced first messages to many callers should hard allocate several CONVERSANT ports to play standard announcements. Simple call-volume calculations can help you determine the call handling capacity of dynamically allocated ports.

 **CAUTION:**

*The DYN\_ANNOU action, during the call, cannot be interrupted by the caller using Speech Recognition or Dial Pulse Recognition. It CAN be interrupted using a touch-tone if the `Allow Interrupt` field is set to Yes. If a DYN\_ANNOU action is interrupted with a touch-tone, that speech—plus any speech later in the vector—will be skipped, and that tone will be used*

*as input in the next action that collects input, such as a MENU, GET\_DIALP, GET\_SPCH, or GET\_DIGT action. For example, if a vector had two DYN\_ANNOU actions and a MENU action (described later in this chapter) and if the caller presses a touch-tone key while listening to the first DYN\_ANNOU, Customer Assist will skip the first DYN\_ANNOU action AND the second DYN\_ANNOU action AND the prompt used in the MENU action. Customer Assist will use the input to the touch-tone prompt as input for the MENU action.*

**⇒ NOTE:**

The proceeding paragraph does not apply when the DEFINITY vector routes callers to an announcement extension that then routes callers to a hard-allocated CONVERSANT port. Therefore, 256 callers could all hear a standard announcement on the CONVERSANT, yet that announcement would be unaffected by any of those callers pressing a touch-tone. The touch-tone entered would be used by the DEFINITY in the next collect action step in the DEFINITY vector on a per call basis.

### **Modify ANNOUNCE Action Form**

The system displays the ANNOUNCE action form (Figure 5-3) when you insert this action into a vector.

### **Modify DYN\_ANNOU Action Form**

The system displays the DYN\_ANNOU action form (Figure 5-9) whenever you insert this action into a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custo 3 EDIT VECTOR NUMBER 161 STEPS
>Call Ue Vector Name: _____ Vector Number: 161
System Description: _____
System
UNIX Sy Step Action Description
Exit 1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____
8 5 DYN_ANNOUNCEMENT Action Step Number 1 for vector 161
9 _____
10 DYNAMIC ANNOUNCE Action step speaks a phrase to caller
11 _____
12 Talkfile Number: 6104 Allow Interrupt: Yes
13 _____
14 Phrase Number: _____

Enter "Yes" to allow the phrase to be interrupted. Otherwise enter "No".
HELP CHOICES CLOSE CANCEL REFRESH
    
```

Figure 5-9. DYN\_ANNOU Action Form

Use the following steps to modify the DYN\_ANNOU action form:

1. Enter **Yes** in the `Allow Interrupt:` field to allow the caller to interrupt the phrase recited by this action.

**⚠ CAUTION:**

*The ANNOUNCE action, during the call, cannot be interrupted by the caller using Speech Recognition or Dial Pulse Recognition. It CAN be interrupted using a touch-tone if the `Allow Interrupt:` field is set to Yes. If an ANNOUNCE action is interrupted with a touch-tone, that speech—plus any speech later in the vector—is skipped, and that tone will be used as input in the action that collects input, such as a MENU, GET\_DIALP, GET\_SPCH, or GET\_DIGT action. For example, if a vector has two ANNOUNCE actions and a MENU action (described later in this chapter) and if the caller presses a touch-tone key while listening to the first ANNOUNCE, Customer Assist will skip the first ANNOUNCE action AND the second ANNOUNCE action AND the prompt used in the MENU action. Customer Assist will use the input to the touch-tone prompt as input for the MENU action.*

**⇒ NOTE:**

The preceding paragraph does not apply when the DEFINITY vector routes callers to an announcement extension that then routes callers to a hard-allocated CONVERSANT

port. Therefore, 256 callers could all hear a standard announcement on the CONVERSANT, yet that announcement would be unaffected by any of those callers pressing a touch-tone. The touch-tone entered would be used by the DEFINITY in the next collect action step in the DEFINITY vector on a per call basis.

2. Enter the name of the variable that contains the number of the phrase to play in the `Phrase Number:` field; press CHOICES (F2) for a list.

You may also enter a hard-coded number corresponding to a phrase number in any language that is currently loaded on the system.

 **NOTE:**

Phrases are referenced by their Phrase Number. If you assign this number as a value of a variable (such as `%data1`), you can speak these with the DYN\_ANNOUN action for dynamic announcements. For example, callers can call in to order items from a catalog where each item has a four-digit item number. You could create a phrase that speaks the name of the item and set the phrase number equal to the catalog item number. The system can play back the item name so callers can confirm they have entered the number of the item they want.

## **EWT Action**

---

This action (available only for use with the DEFINITY G3V4 or ECS R5 or 6.3+) allows you to increase or decrease the switch's estimate of how long a caller must wait for an agent by a percentage you specify; you may round the result up, down, or to the nearest whole number, and, at your option, convert it from seconds to minutes. Use the SET action after the EWT action to perform additional calculations, such as to announce the wait time in minutes and seconds. See Figure 5-11.

Use the CONVERSE action in your Customer Assist vector to obtain the switch's wait time estimate in seconds. After using the EWT action to convert this estimate to minutes, use the SET action to convert it further, or use the ANNOUNCE and SPEAK\_NUM actions to communicate it to the caller.

Use the Estimated Wait Time template, described on page 4-16, for help building your announcements. Another version of this template, the Announce Queue Position template, can speak a caller's relative position in queue (see page 4-26). Estimated Wait Time and Announce Queue Position templates, like those

supplied with Customer Assist, automatically create Customer Assist vectors to perform important call handling tasks.

### Modify EWT Action Form

The system displays the EWT action form (Figure 5-10) whenever you insert this action into a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custd 3 EDIT VECTOR NUMBER 161 STEPS
>Call Use Vector Name: _____ Vector Number: 161
System Description: _____
System
UNIX Sy Step Action Description
Exit 1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
5 EWT ACTION STEP 1 for vector 161
ESTIMATED WAIT TIME IN QUEUE ACTION
EWT Input: %data1 Calculated Output: %data2
Weighting Index: 100%
Resolution: Minutes Rounding: Nearest
Comment:
Enter the variable that receives estimated wait time.
HELP CHOICES CLOSE ENTER CANCEL REFRESH

```

Figure 5-10. EWT Action Form

Use the following steps to modify the EWT action form:

1. Enter the name of the variable you used with CONVERSE action to obtain the caller's estimated wait time in the EWT Input field; press CHOICES (F2) for a list.
2. Enter the name of the variable where you want to store the recalculated wait time in the Calculated Output field; press CHOICES (F2) for a list.
3. Enter the percentage of the switch's estimate to use in the Weighting Index: field.  
For example, to double the wait time estimate, enter 200%. (The minimum option for Weighting Index is 10% and the maximum is 300%.)
4. Enter **Minutes** or **Seconds** in the Resolution field to specify how to convert the estimate; press CHOICES (F2) for a list.
5. Enter the method to use when converting the estimate to a whole number in the Rounding field; press CHOICES (F2) for a list.

- **Nearest** — round the estimate to the nearest minute or the nearest 10 seconds, if *Resolution* has been set to **Seconds**.
- **Up** — round up to the nearest minutes or the nearest 10 seconds.
- **Down** — round down to the nearest minutes or the nearest 10 seconds.

6. Optionally, enter a description of the vector in the *Comment :* field.

**NOTE:**

The following screen shows an alternate method of calculating EWT. The vector shown captures the EWT from the DEFINITY, weights the value in seconds by 150 percent, and converts it into minutes and seconds that can be spoken back to the caller.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custo 4 EDIT VECTOR NUMBER 108 STEPS
>Call Ue Vector Name: RC-EWT Calc Vector Number: 108
System Description: Rock Coast EWT Calculation: Mins & Secs
System
UNIX Sy Step Action Description
Exit 1 CONVERSE collect 5 digits into %data1
2 EWT REPLACE THIS ACTION WITH ADA_CALC FROM CHOICES MEN
3 Ed 3 SET %minutes = %minutes = %ewt
103|EWT 4 SET %minutes = %minutes / 60
104|RC- 5 SET %temporary = %temporary = %minutes
105|RC- 6 SET %temporary = %temporary * 60
106|Res 7 SET %seconds = %seconds = %ewt
107|RC 8 SET %seconds = %seconds = %temporary
>108|RC- 9 ANNOUNCE Your estimated wait time is...
109|RC- 10 SPEAK_NUM in %minutes as Number
110|RC- 11 ANNOUNCE ...minutes and...
111|RC- 12 SPEAK_NUM in %seconds as Number
112|Que 13 ANNOUNCE ...seconds
14

Enter the vector name.
HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
    
```

Figure 5-11. Converting DEFINITY EWT into Minutes and Seconds

## EXECUTE Action

Unconditionally transfers control of a call to a CONVERSANT application.

### Modify EXECUTE Action Form

The system displays the EXECUTE action form (Figure 5-12) whenever you insert this action into a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custo 3 EDIT VECTOR NUMBER 161 STEPS
>Call Ue Vector Name: Vector Number: 161
System D 5 EXECUTE ACTION 1 for vector 161
System S EXECUTE ACTION STARTS A NEW PROGRAM
UNIX Sy Application: Write Call Data Record Immed.:yes
Exit Comment:

Argument 1:
Argument 2:
Argument 3:
Argument 4:
Argument 5:
Argument 6:
Argument 7:
Argument 8:
Argument 9:
Argument 10:
Return Value: %return_vlu
Comment:

Enter the application name follow by the Return or ENTER key.
HELP CHOICES CLOSE ENTER CANCEL REFRESH

```

Figure 5-12. EXECUTE Action Form

Use the following steps to modify the EXECUTE action form:

1. Enter the name of the CONVERSANT application to execute in the Application field; press CHOICES (F2) for a list.
2. Specify up to ten arguments to pass to the executed application. Numbers, text strings, or variables can represent valid arguments, such as collecting a caller's phone number in a variable or another number that can identify the caller.

The system automatically uses the variable *%return\_vlu* to represent any data returned by the CONVERSANT in the event of an error.

3. Optionally, enter a description of the action in the Comment : field.

#### ⇒ NOTE:

You can execute any other CONVERSANT application anywhere in a call vector by using the EXECUTE action. Likewise, any other CONVERSANT

application can launch the Customer Assist by referring to its program name, "ccc". For example, you can use the EXECUTE action to launch a Fax Back application.

### **GET\_DIALP Action**

---

This action gathers dialed digits, such as numbers dialed from a rotary telephone, from the caller. Dial Pulse Recognition is highly dependent on the quality of phone lines used for the call and the accuracy can vary from call to call. Dial Pulse Recognition only recognizes digits from 0 through 9, and it works only with SSP cards (not with SP cards).

In general, try to use the most restrictive grammar, or valid input, that can accept the desired input. That is because different grammars have different accuracy. Digits that are further from each other results in better accuracy. For example, instead of offering callers a menu to select from using 1, 2, and 3; use a Dial Pulse Recognition menu to have callers select their options using 1, 3, and 5. The GET\_DIALP action is normally used to collect a long number because it can collect the number in pieces and then combine them. Also, GET\_DIALP is used when specific grammars need to be used to provide more accurate recognition. This occurs when the input follows a pattern. For example, an input value of 1,3 and 5.

#### **⇒ NOTE:**

When using Dial Pulse Recognition the CONVERSANT tends to recognize higher numbers better than lower numbers.

### **Modify GET\_DIALP Action Form**

The system displays the GET\_DIALP action form (Figure 5-13) whenever you insert this action into a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
5 GET_DIALP ACTION, STEP 1 for vector 161

Get Dial Pulse Step gathers Dialed Digit(s) from caller
Comment: _____
Consolidate responses into variable: %ci_value
Place number of digits collected into: %num_dig_got

Talkfile: 6103 US English

Phrase Tag _____ Number Valid Input _____
_____
_____
_____

Confirmation: None Time limit per response: 6

Please enter your comments.

HELP CHOICES CLOSE ENTER CANCEL REFRESH ADD-PHR

```

Figure 5-13. GET\_DIALP Valid Input Choices

Use the following steps to modify the GET\_DIALP action form:

1. In the `Comment` field, enter information if you wish.
2. In the `Consolidate responses into variable` field, use CHOICES (F2) to select a variable to hold the input that is dialed following the prompt.
3. In the `Talkfile` field use CHOICES (F2) to choose the Vector Phrase talkfile to use.
4. In the `Phrase Tag` field, enter the short text phrase (called a Phrase Tag) that identifies the speech phrase desired.

For previously recorded speech, press CHOICES (F2). Select the phrase and press (ENTER).

⇒ NOTE:

See Chapter 6, "Speech Administration", for information on recording phrases.

5. In the `Valid Input` field, use CHOICES (F2) to choose what type of input to collect.
 

For example, select 1 digit: 1-3 in the `Valid Input` field if Customer Assist should listen for 1, 2, or 3 in response to a phrase. See Figure 5-13.
6. In the `Confirmation` field, use CHOICES (F2) to choose one of the following:
  - **Overall** – prompts for confirmation after all input is gathered

- **Field** - prompts for confirmation after each field
- **None** - does not prompt for confirmation.

7. In the *Time limit per response* field, enter the time the system will wait for caller input in seconds.

**⇒ NOTE:**

When collecting a large number of digits via Dial Pulse Recognition (for example, an international phone number), you can break the collection up into multiple prompts to increase the accuracy (for example, country code first, then area code, then phone number). To increase the accuracy, use the most restrictive grammar, or valid input, that can be used to collect the broken down input options to increase the accuracy.

### GET\_DIGT Action

This action collects touch-tone input from callers and stores it in the variable you specify. For example, by using GET\_DIGT with ANNOUNCE, you can prompt callers to choose from a menu of options in your Customer Assist vector. Other actions can use this variable to make call handling decisions.

### Modify GET\_DIGT Action Form

The system displays the GET\_DIGT action form (Figure 5-14) whenever you insert this action into a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custo 3 EDIT VECTOR NUMBER 161 STEPS
>Call Ue Vector Name: _____ Vector Number: 161
System Description: _____
System
System
UNIX Sy Step Action Description
Exit 1 _____
2 _____
3 _____
4 _____
5 GET_DIGT ACTION STEP 1 for vector 161
6 _____
7 Get Digits Step gathers TouchTones from caller
8 _____
9 Number of Digits to Collect: __
10 _____
11 Load Digits into Variable: _____
12 Place number of digits collected into: %num_dig_got
13 _____
14 Comment: _____

Enter the number follow by the Return or ENTER key.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 5-14. GET\_DIGT Action Form

Use the following steps to modify the GET\_DIGT action form:

1. Enter the maximum number of digits the caller can enter in the `Number of Digits to Collect:` field.

The maximum number of digits is 24. Every touch-tone key, including the `#` key, which callers can press to indicate that an entry is complete, counts toward this total. The variable `%num_dig_got` automatically represents the number of touch-tones actually entered, including the `#` key.

**⇒ NOTE:**

The `#` key is used as a terminator. Whenever this key is entered, it indicates to the system that the caller input is complete. This helps eliminate the interdigit timeout.

2. Enter the name of the variable where the touch-tone input should be stored in the `Load Digits into Variable` field; press CHOICES `F2` for a list. The system does not include the `#` key in this variable's value.

**⇒ NOTE:**

The system assigns the value 0 (zero) to the variable `%num_dig_got` if the caller does not enter any touch-tones.

3. Optionally, enter a description of the action in the `Comment :` field.

### GET\_SPCH Action

This action collects spoken digits from callers. This action allows caller input using speech recognition. If the optional Customer Assist speech recognition package and its custom grammars are loaded, and if the Lucent WholeWord Speech Recognition package has been purchased and is loaded, then GET\_SPCH works with any supported language in the Customer Assist package up to a limit of two per any one system. However, it is assumed that administrators and agents will have touch-tone telephones. Therefore, speech recognition is not available for Speech Administration or for transcription of messages.

At most two languages can be enabled for WholeWord Speech Recognition with Customer Assist due to the size of the speech models for the languages. If Speech Recognition is enabled for German, UK English or Japanese, no other languages can be enabled on the same system. This is because each of them takes more than half the space on the SSP card in the CONVERSANT. Standard French, Brazilian Portuguese, Dutch and Canadian French Whole Word Speech Recognition are only supported on SSP cards.

**⇒ NOTE:**

Multiple SSP boards can increase the number of ports that can use Speech Recognition but it will not increase the number of languages that can be Speech Recognition enabled.

Customer Assist adds a few more custom grammars for each of the enabled languages. These grammars allows the collection of input types that are not available with the standard Lucent WholeWord Speech Recognition packages. The custom grammars added are:

- Variable-length numbers of 1 to 24 digits long
- Variable-length numbers of 1 to 8 digits long
- Variable-length numbers of 4 to 14 digits long
- Variable-length numbers of 8 to 16 digits long
- Variable-length numbers of 1 to 2 digits long and value of 0 to 31

 **NOTE:**

When using speech recognition in the GET\_SPCH action, you can ask for caller confirmation after input is collected for each part or after collecting all the input. For example, to collect a phone number from the caller, the GET\_SPCH action can prompt the caller for the area code and then the subscriber number. It can ask for confirmation for area code and subscriber separately or after collecting the entire phone number. The GET\_DIALP action has the same capability.

### **Modify GET\_SPCH Action Form**

The system displays the GET\_SPCH action form (Figure 5-15) whenever you insert this action into a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
5 GET_SPCH ACTION, STEP 1 for vector 161

Get Speech Step gathers Spoken Digit(s) from caller
Comment: _____
Consolidate responses into variable: %ci_value
Place number of digits collected into: %num_dig_got

Talkfile: 6103 US English

Phrase Tag                                Number  Valid Input
_____  

_____  

_____  

_____

Confirmation: None  Time limit per response: 6

Please enter your comments.

HELP CHOICES CLOSE [ ] ENTER CANCEL REFRESH ADD-PHR
    
```

Figure 5-15. GET\_SPCH Valid Input Options

Use the following steps to modify the GET\_SPCH action form:

1. Optionally, enter a description of the action in the `Comment :` field.
2. In the `Consolidate responses into variable` field, use CHOICES (F2) to select a variable to hold the input that is spoken following the prompt.
3. At the `Talkfile` field, use CHOICES (F2) to choose the Vector Phrase talkfile to use.
4. In the `Phrase Tag` field, enter the Phrase Tag of the recorded speech you wish to use. For previously recorded speech, press CHOICES (F2). Select the phrase and press (ENTER).

⇒ **NOTE:**  
See Chapter 6, "Speech Administration", for information on recording phrases.

5. In the `Valid Input` field use CHOICES (F2) to choose what type of input to collect such as 1 digit:1-3 meaning that one digit will be collected between the range of 1 and 3. After selecting the type of input, press (ENTER). See Figure 5-15.

⇒ **NOTE:**  
In general, try to use the most restrictive grammar, or valid input options, that can accept the desired input because different

grammars have different accuracy. Fixed length grammars have the best accuracy. If the input is shorter, the accuracy improves. The accuracy is also affected by the language used. U.S. English has the best accuracy at over 99% per digit. The accuracy of other languages is somewhere around 95-98% per digit. The GET\_SPCH action is normally used to collect a long number because it can collect the number in pieces and then combine them. Also, GET\_SPCH is used when specific grammars provide more accurate recognition. This occurs when the input follows a pattern. For example, the input value of 1 to 5 using 1 digit: 1-5.

**⇒ NOTE:**

If the `Valid Input` of yes-no type is used, a **yes** input will result in a 1 value and a **no** input will result in a 0 value. During the confirmation of a yes-no input, the caller will hear a yes or no phrase played back.

**⇒ NOTE:**

If the phrase used in the GET\_SPCH action prompts the caller to press "1" or "2," and the `Valid Input` field is set at 1:1-3 and the caller chooses 3, the caller will fall through this GET\_SPCH action step and continue on in the current vector. If this condition is probable, then place error checking action steps, such as examining the input value or the value of `%num_dig_got` to ensure all digits were captured, after the GET\_SPCH action in the current vector to catch the number outside of the range.

6. In the `Confirmation` field use CHOICES (F2) to choose **Overall**, which prompts for confirmation after all input is gathered, **Field**, which prompts for confirmation after each field, or **None**, which does not prompt for confirmation.
7. In the `Time limit per response` field enter the time the system will wait for caller input in seconds.

**⇒ NOTE:**

To collect a large number of digits with speech recognition (e.g. an international phone number, etc.), break the collection up into multiple prompts to increase the accuracy (i.e. country code first, then area code, then phone number, etc.). Also, use the most restrictive grammar, or valid input, that can be used to collect the broken down input options to increase the accuracy.

## GOTO Action

---

This action moves call control to another vector or to another step in the current vector, either unconditionally or if a specific condition is met. Comparisons consist of a single variable, value, and a relational operator (=, !=, <, <=, >, or

>=). The GOTO action evaluates both arguments in a comparison as strings if either argument is 10 or more characters long. The resulting comparison is alphabetic, not numeric.

### Modify GOTO Action Form

The system displays the GOTO action form (Figure 5-16) whenever you insert this action into a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custo 3 EDIT VECTOR NUMBER 161 STEPS
>Call Use Vector Name: _____ Vector Number: 161
System Description: _____
System
UNIX Sy Step Action Description
Exit 1 _____
2 _____
3 _____
4 _____
5 _____

5 GOTO Action Step Number 1 for vector 161
GOTO compares a variable with a value and routes to a vector or step.
GOTO Vector _____
IF variable _____
Comment: _____

Enter "Vector" or "Step" followed by the Return or ENTER key.
HELP CHOICES CLOSE ENTER CANCEL REFRESH

```

Figure 5-16. GOTO Action Form

Use the following steps to modify the GOTO action form:

1. Enter where the call should go next in the GOTO field; press CHOICES (F2) for a list.
  - **Vector**—the default value; enter this to go to another vector.
  - **Step**—go to another action in the current vector.

If you enter a vector number and a Customer Assist vector with this number already exists, its name appears automatically. If not, no text appears.

#### ➡ NOTE:

If you enter a step number and an action has already been defined for this step, the action name will automatically appear. If not, no text appears.

2. Enter the name of the variable that holds the value in the `If variable` field.



**NOTE:**

For unconditional navigation, enter only the step or vector destination. Leave comparison positions blank.

3. Press `(ENTER)` to advance to the next position in the comparison and enter a relational operator, as follows:
  - `=` — equal to
  - `!=` — not equal to
  - `<` — less than
  - `<=` — less than or equal to
  - `>` — greater than
  - `>=` — greater than or equal to
4. Press `(ENTER)` to advance to the last position and enter the value or variable name that is being compared to the variable in Step 2.
5. Optionally, enter a description of the action in the `Comment :` field.



**CAUTION:**

*Be sure to create Customer Assist vectors for vector numbers you enter here before you place the new vectors into service. If not, when auditing the vector database, internal vectors will alarm the system and fail an integrity check.*



**CAUTION:**

*Inserting or removing actions in a vector that contains a GOTO step could result in the GOTO action routing to the wrong step.*

## **HANG\_ACT Action**

---

This action identifies the Customer Assist vector to launch if the caller leaves the call prematurely while still in vectoring in Customer Assist.

If the caller is not in vectoring (such as when using `MSG_DROP`), the `HANG_ACT` action is no longer valid. If, after the caller leaves a message using `MSG_DROP` and you want the `HANG_ACT` action to continue monitoring the call, insert another `HANG_ACT` action step in the vector and “jump to” that step after `MSG_DROP` is finished. A caller activates the `HANG_ACT` action by exiting at any point in a Customer Assist vector after the `HANG_ACT` action and before the `QUIT`, `DATA_RTN`, `TRANSFER`, `EXECUTE`, `DYNAMIC`, `SPCH_ADMN`, `MSG_DROP`, or `TRANSCRIBE` actions.

### Modify HANG\_ACT Action Form

The system displays the HANG\_ACT action form (Figure 5-17) whenever you insert this action into a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custo 3 EDIT VECTOR NUMBER 161 STEPS
>Call Ue Vector Name: _____ Vector Number: 161
System Description: _____
System
UNIX Sy Step Action Description
Exit 1 _____
2 _____
3 _____
4 _____
5 _____
6 _____

5 HANG_ACT Action Step Number 1 for vector 161
HANG_ACT Action Step specifies a vector number to go to after a HANGUP.
On HANGUP go to Vector Number: ___ Name:
Comment: _____

Enter the vector name follow by the Return or ENTER key.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 5-17. HANG\_ACT Action Form

Use the following steps to modify the HANG\_ACT action form:

1. Enter the number of the vector to launch after the caller disconnects in the On HANGUP go to Vector Number: field; press CHOICES (F2) for a list.  
If a Customer Assist vector with this number already exists, its name appears automatically. If not, no text appears.
2. Enter a description of the action in the Comment: field.

## LOOK\_UP Action

This action retrieves a record from a local database table by comparing the value of a specified variable to the values that appear in the table's index field.

### Modify LOOK\_UP Action

The system displays the LOOK\_UP action form (Figure 5-18) whenever you insert this action into a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custo 3 EDIT VECTOR NUMBER 161 STEPS
>Call Ue Vector Name: _____ Vector Number: 161
System Description: _____
System
UNIX Sy Step Action Description
Exit 1 5 LOOK_UP Table Action, Step Number 1 for vector 161
2
3 LOOK_UP Action looks up values in a database table.
4
5 Input Fields
6 Routing table: _____
7 Look-up field: _____
8 Return Fields
9 Number of Matches found: _____
1 Data field 1: _____
1 Data field 2: _____
1
1 Comment: _____
1 Note: The LOOK_UP action requires that the table be populated.

Enter the routing table name followed by the Return or ENTER key.

HELP CHOICES CLOSE ENTER CANCEL REFRESH

```

Figure 5-18. LOOK\_UP Action Form

Use the following steps to modify the LOOK\_UP action form:

1. Enter the name of the database table to search in the `Routing Table` field; press CHOICES (F2) to select from a list.
2. Enter the name of the variable containing the key value or the primary search value in the `Look-up Field` field; press CHOICES (F2) to select from a list.
3. Enter the name of the variable that will hold the number of records containing the value of the variable in the index field in the `Number of Matches Found` field; press CHOICES (F2) for a list.

#### ⇒ NOTE:

For intelligent routing applications, such as routing a telephone number to a certain greeting or department, this value must never be greater than 1 because the lookup field should be unique.

4. Enter a name for the variable that will hold the Data field 1 value for the first record in the table that has the same value for variables in both the Lookup field and index field in the Data field 1 field; press CHOICES  for a list.
5. Enter a name for the variable that will hold the Data field 2 value for the first record in the table that has the same value for variables in both the Lookup field and index field in the Data field 2 field; press CHOICES  for a list.
6. Optionally, enter a description of the action in the Comment : field.



**NOTE:**

If a LOOK\_UP action is used to search a single database table using the same key value on a single call, the LOOK\_UP action searches for the next instance of that value. If the result is not the desired result, another LOOK\_UP action must be used to find the next occurrence. If you use the action to look up a different value, the search will start from the beginning of the table. It does not retrieve the same record twice.

## **MENU Action**

---

This action prompts a caller for input and moves call control to one of up to 13 Customer Assist vectors, depending on the value of the input.

You can configure the MENU action to respond differently to callers who delay, enter too few digits, or enter values not on a list of acceptable values. Callers may have more than one attempt to enter a valid value. The MENU action can accept touch-tone, Speech Recognition or Dial Pulse Recognition input.

MENU simplifies the design of bulletin boards and automated attendants.

The system displays the MENU action form (Figure 5-19 and Figure 5-20) whenever you insert this action into a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 31, 1998
5 MENU Action Step Number 1 for vector 161
NORMAL INPUT :
Talkfile: 6104 US English Allow Interrupt: Yes
Prompt Phrase: _____
Number of digits to collect : Min 1 Max 1
Time to wait for input (sec): 1st digit 6 Next digit(s) 4
Place in Variables :
Input %ci_value Output %data1
Valid Input Output Value GOTO Vector Vector Name
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
Confirm Input No
Enter the talkfile.
HELP CHOICES CLOSE PREVPAGE NEXTPAGE CANCEL REFRESH ADD-PHR
    
```

Figure 5-19. MENU Action Form 1

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 31, 1998
5 MENU Action Step Number 1 for vector 161
SPECIAL CASES :
Caller's input not on list :
Speak Phrase : _____
Max. number of tries : 3
Output Value : _____ GOTO Vector : CONT

Caller did not enter the 1st digit within the time allowed :
Speak Phrase : _____
Max. number of tries : 3
Output Value : _____ GOTO Vector : CONT

Caller did not enter the minimum number of digits required :
Speak Phrase : _____
Max. number of tries : 3
Output Value : _____ GOTO Vector : CONT

Caller has no more tries to enter valid input :
Speak Phrase : _____
Enter the phrase tag for input not on list above.
HELP CHOICES CLOSE PREVPAGE NEXTPAGE CANCEL REFRESH ADD-PHR
    
```

Figure 5-20. MENU Action Form 2

Use the following steps to modify the MENU action form:

1. Enter the talkfile number for the desired language in the `Talkfile` field; press CHOICES (F2) to select from a list.

The selected language appears in an adjacent field that is not administrable.

2. Enter **Yes** in the `Allow Interrupt:` field to allow the caller to interrupt the phrase recited by this action.

 **CAUTION:**

*The ANNOUNCE action, during the call, cannot be interrupted by the caller using Speech Recognition or Dial Pulse Recognition. It CAN be interrupted using a touch-tone if the `Allow Interrupt:` field is set to Yes. If an ANNOUNCE action is interrupted with a touch-tone, that speech—plus any speech later in the vector—is skipped, and that tone will be used as input in the action that collects input, such as a MENU, GET\_DIALP, GET\_SPCH, or GET\_DIGT action. For example, if a vector has two ANNOUNCE actions and a MENU action (described later in this chapter) and if the caller presses a touch-tone key while listening to the first ANNOUNCE, Customer Assist will skip the first ANNOUNCE action AND the second ANNOUNCE action AND the prompt used in the MENU action. Customer Assist will use the input to the touch-tone prompt as input for the MENU action.*

 **NOTE:**

The proceeding paragraph does not apply when the DEFINITY vector routes callers to an announcement extension that then routes callers to a hard-allocated CONVERSANT port. Therefore, 256 callers could all hear a standard announcement on the CONVERSANT, yet that announcement would be unaffected by any of those callers pressing a touch-tone. The touch-tone entered would be used by the DEFINITY in the next collect action step in the DEFINITY vector on a per call basis.

3. Optionally, enter the name of an existing speech phrase to play after the prompt in the `Prompt` field; press CHOICES (F2) for a list. To create a new phrase tag for this action instead, first press ADD-PHR (F8). This phrase is the first prompt for input that callers hear.

4. Enter the minimum number of digits (including #) to accept from a caller in the `Min` field.

If a caller delays, the system can prompt the caller for the entire entry again.

5. Enter the maximum number (including #) of digits to accept in the `Max` field.

After the system has collected this number of digits, it stops waiting for additional input.

6. Enter the maximum number of seconds to wait for the first digit of a caller's response in the `1st digit` field.

This number is often called the "initial timeout." Exceeding this time limit corresponds to the second special case in step 13: "Caller did not enter the 1st digit within the time allowed."

7. Enter the maximum number of seconds to wait for each subsequent digit of a multidigit response in the `Next digit(s)` field.

This number is often called the "interdigit timeout." Exceeding this time limit before entering the minimum number of digits required corresponds to the third special case in step 13: "Caller did not enter the minimum number of digits required." However, if a caller exceeds this time limit after entering the minimum number of digits required, the system considers the entry complete.

8. Optionally, after `Input`, use the default variable `%ci_value` to hold the caller's input; press CHOICES  to select a different variable. Other vectors can use this variable's value to make call handling decisions. The system does not include the  key in this variable's value.

9. Optionally, after `Output`, use the default variable `%data1` to hold any output value you want to associate with the caller's input; press `CHOICES` (F2) to select a different variable. Other vectors can use this variable's value to make call handling decisions. For example:
  - To create an automated attendant, you can assign telephone extensions to the output variable and populate the `GOTO Vector` field, described later, with the number of a Customer Assist vector that uses the `TRANSFER` or `DATA_RTN` action to transfer callers.
  - To create a bulletin board, you can assign phrase numbers to the output variable, follow the `MENU` action in your vector with a `DYN_ANNOU` action, and enter **CONT** (or no entry) in the `GOTO Vector` field to execute the next action in the current vector.
10. Optionally, enter up to ten acceptable values in the `Valid Input` column. Most common entries will include the:
  - Standard digits **0** to **9**.
  - Touch-tone symbol **\*** (star).
  - Wild-card character, **n**, representing any single standard digit. For example, **nn** represents any 2-digit number.
  - Repeat character **r**. For example, **123r** represents "123," "1233," "12333," etc.
  - Quit character **q**. For example, **123q** represents any entry, up to the maximum allowable length, that begins with the digits "123."



**NOTE:**

Use the pattern matching feature in the `MENU` action and `SWITCH` action to do input validation. For example, specify "81nn" to allow only caller input that begins with "81" and ends with two digits as valid input.

11. Optionally, associate an output value with every value in the corresponding `Valid Input` column. The `MENU` action assigns an output value to the output variable when a caller's entry matches a valid input value. If the caller's entry matches more than one valid input value, the `MENU` action uses the output value associated with the first match in the column.
12. Optionally, after `GOTO Vector`, enter the number of a Customer Assist vector to activate if the caller's input matches a value in the corresponding `Input Value` column. Enter **CONT** (or no entry) instead of a vector number to execute the next action in the current vector.

If a Customer Assist vector with this number already exists, its name appears automatically. If no Customer Assist vector exists, no text appears.

 **CAUTION:**

*Be sure to create Customer Assist vectors for vector numbers you enter here before you place the new vectors into service. If not, when auditing the vector database, internal vectors will alarm the system and fail an integrity check.*

13. Enter **Yes** to prompt the caller to confirm the input in the `Confirm Input` field. Otherwise, enter **No**.
14. Press `NEXTPAGE` (F5) and perform Steps 14 through 17 for each of the first three “special cases.”
  - `Caller’s input not on list`: The caller’s entry does not match the acceptable values in the `Valid Input` column.
  - `Caller did not enter the 1st digit within the time allowed`: The caller did not respond to the prompt within the time allowed by the first digit parameter.
  - `Caller did not enter the minimum number of digits required`: The caller did not enter the minimum number of digits required before the `Next digit(s)` field—the interdigit time limit—expired.
15. Optionally, after `Speak Phrase`, enter the name of an existing speech phrase to play; press `CHOICES` (F2) for a list. To create a new phrase tag for this action’s special case instead, first press `ADD-PHR` (F8).

 **NOTE:**

After you use the `ADD-PHR` function to create a new phrase tag for the `MENU` action, the system returns your cursor to the beginning of the first page of the Action Definition form. Press `NEXTPAGE` (F5) to return to your previous location.

16. After `Max. number of tries`, use the default value or enter a different limit for the number of invalid entries that invokes this special case.
17. Optionally, after `Output Value`, enter the value to assign to the output variable when a caller exceeds the maximum number of tries for this special case.
18. After `GOTO Vector`, enter the number of the Customer Assist vector to activate if the caller exceeds the maximum number of tries for this special case. Enter **CONT** or no entry instead of a vector number to execute the next action in the current vector.

19. For the last instance of *Speak Phrase*, select a phrase to play when the caller exceeds the maximum number of tries for any of the three special cases. You can enter the name of an existing speech phrase to play; press CHOICES (F2) for a list. To create a new phrase tag for this action's special case instead, first press ADD-PHR (F8). After callers hear this phrase, vector processes proceeds to the vector associated with their special case, or continues in the current vector as defined.

### MSG\_DROP Action

This action sends the caller to a mailbox you previously created at the Mailbox Administration menu.

### Modify MSG\_DROP Action Form

The system displays the MSG\_DROP action form (Figure 5-21) whenever you insert this action into a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custo 3 EDIT VECTOR NUMBER 161 STEPS
>Call Use Vector Name: _____ Vector Number: 161
System Description: _____
System
UNIX Sy Step Action Description
Exit 5 Message Drop Action, Step Number 1 for vector 161

MSG_DROP Action saves a multi-part message.

Message Drop in mailbox: _____
Optional arguments
Argument A: _____
Argument B: _____
Argument C: _____

After MSG_DROP
Jump to Vector : _____

Comment: _____

HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 5-21. MSG\_DROP Action Form

Use the following steps to modify the MSG\_DROP action form:

1. After *Message Drop in mailbox*, enter the number of the mailbox to accept calls; press CHOICES (F2) to select from a list.
2. If a value (s) is to be passed to the target mailbox as an argument, enter in a valid variable name in argument fields A, B, or C.; press CHOICES (F2) to select from a list. Up to three fields can be defined. Optionally, enter a value in each field.



**NOTE:**

A variable must be assigned a value before the MSG\_DROP action can use it to decide the mailbox to activate. You may use the CONVERSE, SET, MENU, GET\_SPCH, GET\_DIALP, or GET\_DIGT actions to assign values to variable.

Argument fields A, B, or C will be used by a callback messaging mailbox only if arguments types A, B, or C are selected at the Data Configuration form defined in the target mailbox. Argument field A in the MSG\_DROP action is associated with Argument A in the Data Configuration form of a mailbox, etc.

3. After *Jump to Vector*, enter the number of the Customer Assist vector to activate after the caller leaves a message.
4. Optionally, enter a comment.

### **OFF\_HOOK Action**

---

This action is used in the setup vector to take a voice port off hook and answer a call.

### **Modify OFF\_HOOK Action Form**

The system displays the OFF\_HOOK action form (Figure 5-22) whenever you insert this action into a vector.

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custor 3 EDIT VECTOR NUMBER 161 STEPS
>Call Use Vector Name: _____ Vector Number: 161
System Description: _____
System
UNIX Sy Step Action Description
Exit 1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____
8 _____
9 _____
10 _____
11 _____
12 _____
13 _____
14 _____
5 OFF_HOOK Action Step Number 1 for vector 161
OFF_HOOK Action Step Answers Call
Comment: _____
Please enter your comments.
HELP CLOSE CANCEL REFRESH
```

Figure 5-22. OFF\_HOOK Action Form

Use the following steps to modify the OFF\_HOOK action form:

1. Optionally, enter a description of the action in the Comment : field.

### QUIT Action

This action releases the call currently under the Customer Assist vector's control. When used in conjunction with the Converse step, control of calls released using QUIT returns to the DEFINITY G3 or ECS R5 or 6.3+ switch.

### Modify QUIT Action Form

The system displays the QUIT action form (Figure 5-23) whenever you insert this action into a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custo 3 EDIT VECTOR NUMBER 161 STEPS
>Call Use Vector Name: _____ Vector Number: 161
System Description: _____
System
UNIX Sy Step Action Description
Exit 1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____
8 _____
9 _____
10 _____
11 _____
12 _____
13 _____
14 _____
5 QUIT Action Step Number 1 for vector 161
QUIT Action Step Ends Call Processing
Comment: _____

Please enter your comments.

HELP CLOSE CANCEL REFRESH
    
```

Figure 5-23. QUIT Action Form

Use the following steps to modify the QUIT action form:

1. Optionally, enter a description of the action in the `Comment :` field.

## REPORT Action

This action records, for reporting purposes, the current value of a variable. This information is important when administering and debugging your call center application. It also is useful to report on the value of specific variables for management purposes, such as the number of times a specific DNIS is called or the number of times a specific department is called.

Customer Assist records the value of a variable immediately upon encountering a REPORT action.

### Modify REPORT Action Form

The system displays the REPORT action form (Figure 5-24) whenever you insert this action into a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custo 3 EDIT VECTOR NUMBER 161 STEPS
>Call Use Vector Name: _____ Vector Number: 161
System Description: _____
System
UNIX Sy Step Action Description
Exit 1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____
8 _____
9 _____
10 _____
11 _____
12 _____
13 _____
14 _____

5 REPORT Action Step Number 1 for vector 161
REPORT Action Step Stores Value of Variable
Variable to Report: _____
Comment: _____

Enter the variable name follow by the Return or ENTER key.

HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 5-24. REPORT Action Form

Use the following steps to modify the REPORT action form:

1. Name the variable to document; press CHOICES (F2) for a list.
2. Optionally, enter a description of the action in the Comment : field.

**⇒ NOTE:**

If you want to know the value of a certain variable while a vector is executing, insert a REPORT action in the vector in question and choose the variable you wish to see in the REPORT action form. Then, run an Event Detail Report to see what the value of that variable is. You will be able to see this report on screen or by printing it to your local default printer physically attached to your CONVERSANT.

**SCHEDULE Action**

This action allows the application to take different actions according to a schedule. It compares the current date and time to a schedule that maps time periods to specific vector actions and transfers control to the vector associated with the scheduled time period.

By scheduling vectors, you can respond to calls differently on holidays, after hours, or during other periods without reassigning applications manually.

For each application you want to schedule, you enter a specific date and time, or use the asterisk (\*) as a wildcard character in combination with days or months to

indicate time periods or recurring times. You can choose to “start” routing at that time and continue for the remainder of the hour, day, week, month, or year, or you can choose to route callers only “during” the minute, hour, day, week, month, or year represented by your entry.

**⇒ NOTE:**

You can set up special holiday hours by using the SCHEDULE action. This way your incoming callers can hear different announcements during different time of the day, month, or year. It is recommended that holidays such as New Years day or other days where the call will not be handle in the normal way be set up in a separate SCHEDULE action than the normal one. This way, it would be easier to add, edit or delete entries for special handling without affecting the entries for normal handling.

By using the wildcard character or by leaving fields on the Action Definition form blank, you can easily schedule applications to run at many different times. For example, by choosing to “start” routing to a vector at 10:01 on Thursday and not specifying a specific date or year, you direct the system to route to your vector every week, from 10:01 a.m. on Thursday to 12:00 a.m. on Friday, the following day. By choosing route “during” this time instead, you would direct the system to route to your vector every Thursday, for the minute between 10:01 and 10:02 a.m.

**⇒ NOTE:**

To have holiday and other schedules to supersede your every-day schedule, use a separate SCHEDULE action and position it before any other SCHEDULE action in your vector.

### Modify SCHEDULE Action Form

The system displays the SCHEDULE action form (Figure 5-25) whenever you insert this action into a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custo 3 EDIT VECTOR NUMBER 161 STEPS
>Call Ue Vector Na 5 SCHEDULE Action Step Number 1 for vector 161
System Descripti
System
UNIX Sy
Exit

SCHEDULE CHANGES VECTORS BY TIME
Comment: _____

Step Ac Start/ GOTO
During HR:MN Day Month Year Vector Vector Name
1
2
3
4
5
6
7
8
9
10
11
12
13
14

Please enter your comments.

HELP CHOICES CLOSE PREUPAGE NEXTPAGE CANCEL REFRESH
    
```

Figure 5-25. SCHEDULE Action Form

Use the following steps to modify the SCHEDULE action form:

1. Optionally, enter a description of the action in the `Comment :` field.
2. Move your cursor to the first line in the `Start/During` column.
3. Enter **Start** to begin routing at a specific time and continue for the remainder of the hour, day, week, month, or year as represented in the following table; enter **During** to route callers only during a specific minute, hour, day, week, month, or year; press CHOICES `F2` to select from a list.

If the greatest unit in your "start" time is:	Routing will continue until the end of the:
minute	hour
hour	day
day ("M," "T," "W," etc.)	week (midnight Saturday)
date ("1," "2," "3," etc.)	month
"M-F"	week (midnight Saturday)
month	year
year	(routing continues indefinitely)

4. Under `HR`, enter an hour to begin, from 00 through 23, where 00 indicates midnight; press CHOICES `F2` for a list. Enter \* or leave the field blank to indicate all hours.

5. Under **MN**, enter a minute to begin, from 00 through 59, where 00 indicates the top of the hour; press CHOICES **F2** for a list. Enter \* or leave the field blank to indicate all minutes.
6. Under **Day**, press CHOICES **F2** and select a day of the week, "M-F," or a date from 1 to 31; press CHOICES **F2** for a list. Enter \* or leave the field blank to indicate all days.
7. Under **Month**, press CHOICES **F2** and select a month. Enter \* or leave the field blank to indicate all months.
8. Under **Year**, enter a year from 1998 through 2002; press CHOICES **F2** for a list. Enter \* or leave the field blank to indicate all years.



**NOTE:**

Dynamic choices include the current year and the next four years. This value will be updated automatically every year.

9. After **GOTO Vector**, enter the number of a Customer Assist vector to activate during the specified period; press CHOICES **F2** for a list.

If a Customer Assist vector with this number already exists, its name appears automatically. If not, no text appears.



**CAUTION:**

*Be sure to create Customer Assist vectors for vector numbers you enter here before you place the new vectors into service. If not, when auditing the vector database, internal vectors will alarm the system and fail an integrity check.*

10. Repeat steps 3 through 9 for each period you want to associate with a vector.



**NOTE:**

When multiple schedule actions are used in a callflow, if the first SCHEDULE action is used, no subsequent SCHEDULE actions are used.

## SET Action

---

This action performs a mathematical operation on the value of a numeric variable and replaces the original value with the resulting value. This can be used as a counter variable to enable error checking during vector flow. The SET action can also be used to map dynamic announcement numbers to switch VDNs that do not map on a one-to-one basis. For example, an incoming VDN of "200" can correspond to dynamic announcement number "2000" by multiplying the incoming VDN value by 10.

## Modify SET Action Form

The system displays the SET action form (Figure 5-26) whenever you insert this action into a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custo 3 EDIT VECTOR NUMBER 161 STEPS
>Call Use Vector Name: _____ Vector Number: 161
System Description: _____
System
UNIX Sy Step Action Description
Exit 1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____
8 _____
9 _____
10 _____
11 _____
12 _____
13 _____
14 _____

5 SET Action Step Number 1 for vector 161
SET Action Step Performs Operation on Variable
Variable Operator Value
_____ - _____
Comment: _____

Enter the variable name follow by the Return or ENTER key.
HELP CHOICES CLOSE ENTER CANCEL REFRESH

```

Figure 5-26. SET Action Form

Use the following steps to modify the SET action form:

1. After *Variable*, enter the name of the variable containing the value to modify; press CHOICES (F2) for a list.
2. Follow *Operator* with an arithmetic operator. Choices include:
  - + — addition
  - - — subtraction
  - \* — multiplication
  - / — division
  - = — new value
3. After *Value*, enter the operand to use with the operator just specified; press CHOICES (F2) to select from a list. You can use either a variable or a number.

### ⇒ NOTE:

Although values you assign to variables with (=) may be alphanumeric and up to 24 characters long, values you use in other operations (such as + or /) must be fewer than 10 digits. Otherwise, the integer 999,999,999,999 will result automatically to indicate an

error. In operations where both arguments are within bounds but the result falls beyond the system's limits for integers (-2,147,483,648 to 2,147,483,647), the system will yield unpredictable results.

4. Optionally, enter a description of the action in the `Comment :` field.

 **NOTE:**

To count the number of times a certain event has occurred, use a SET action to set a specific variable, like %data1, to 0 and then after the event has occurred, increase the count of that variable by 1 using a second SET command. You can then report on the value of that variable later in your vectors. An example of this is to see how many times callers move in and out of a specific area in a bulletin board application. This method is useful in measuring the effectiveness of a specific call center application as viewed by your callers.

### SPCH\_ADMN Action

This action allows you to administer phrases defined for vectors, mailboxes, and standard speech with a touch-tone telephone.

When you add this action to a vector, you can also define the talkfile and phrase numbers to use. Alternatively, you can leave these spaces blank to have the system prompt callers for these numbers.

You can also use a variable to represent a phrase number to administer. With a variable, you can administer speech dynamically the same way you can play speech dynamically with the DYN\_ANNOUN action.

 **CAUTION:**

*To protect the integrity of your talkfiles, do not use this action in vectors that communicate with external callers and be sure to always use a speech administration password. See Chapter 6, "Speech Administration", for more about this password and other settings you can administer from the administration terminal.*

### Modify SPCH\_ADMN Action Form

The system displays the SPCH\_ADMN action form (Figure 5-27) whenever you insert this action into a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custo 3 EDIT VECTOR NUMBER 161 STEPS
>Call Use Vector Name: _____ Vector Number: 161
System Description: _____
System
UNIX Sy Step Action Description
Exit 1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 5 SPCH_ADMN Action, Step Number 1 for vector 161
8
9 SPCH_ADMN Action starts the Speech Administration program.
10
11 Specify the talkfile: _____
12 Specify the phrase number: _____
13
14 Comment: _____

Enter the talkfile number followed by the Return or ENTER key.

HELP CHOICES CLOSE ENTER CANCEL REFRESH

```

Figure 5-27. SPCH\_ADMN Action Form

Use the following steps to modify the SPCH\_ADMN action form:

1. Specify the talkfile containing the phrase to record; press CHOICES (F2) for a list of talkfile numbers. Leave this space blank to prompt callers for a talkfile number.
2. Specify the number of the phrase to record or choose the variable containing this phrase by pressing CHOICES (F2) and selecting from a list. Leave this space blank to prompt callers to enter a phrase number.

**⇒ NOTE:**

Although you can specify a talkfile to administer without also specifying a phrase, you cannot specify a phrase without first specifying its talkfile.

**⇒ NOTE:**

When recording speech in SPCH\_ADMN, you can advance faster than the prompts if you know what the next phrase will be. Push (F3) to record the next phrase, enter the phrase number followed by the pound sign, and then start recording. For example, you have created a number of phrases and wish to record them. Generate and print the phrase listing. With this in front of you, launch one of the phrases that you wish to record. When recording, refer to the phrase listing that you have printed. After recording that phrase, press (F3) to select another phrase to record. Enter the next phrase number that you wish to record followed by the pound sign. You can interrupt the announcements to get to the recording faster by pressing a

touch-tone. At the beep, record the next phrase. Continue these steps until all the phrases have been recorded.

### SPEAK\_NUM Action

This action speaks a number to the caller in the default language or the last language chosen from the last CHG\_LANG action. SPEAK\_NUM will never speak a fractional value because the system removes any value to the right of a number's decimal point before it associates that number with a variable name. This works in all 12 languages supported in Customer Assist.

### Modify SPEAK\_NUM Action Form

The system displays the SPEAK\_NUM action form (Figure 5-28) whenever you insert this action into a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custo 3 EDIT VECTOR NUMBER 161 STEPS
>Call Ue Vector Name: _____ Vector Number: 161
System Description: _____
System
UNIX Sy Step Action Description
Exit 1 _____
2 _____
3 _____
4 _____
5 _____
6 5 SPEAK_NUMBER Action Step Number 1 for vector 161
7
8 SPEAK NUMBER Action step speaks number or string to caller
9
10 Number: _____
11 Speak as Number/Character string: Number
12 Allow Interrupt: Yes
13
14 Note: Speaks numbers over 9 digits as characters.

Enter the number or variable, follow by the Return or ENTER key.
HELP CHOICES CLOSE CANCEL REFRESH
    
```

Figure 5-28. SPEAK\_NUM Action Form

Use the following steps to modify the SPEAK\_NUM action form:

1. After `Number`, name the variable that will contain the value to speak, or enter a value directly; press CHOICES (F2) to select from a list.

2. After `Speak as Number/Character` string, use the default setting `Number` to speak the value as a whole number (for example, twenty-two), or press `CHOICES` (F2) and select **Character** to speak the value as a string of characters.

 **NOTE:**

The system always speaks numbers over 999,999,999 digit-by-digit. On a multilingual system, the number will be spoken back in the base language or the language set in the last `CHG_LANG` action.

3. Enter **Yes** in the `Allow Interrupt:` field to allow the caller to interrupt the phrase recited by this action.

 **CAUTION:**

*The ANNOUNCE action, during the call, cannot be interrupted by the caller using Speech Recognition or Dial Pulse Recognition. It CAN be interrupted using a touch-tone if the `Allow Interrupt:` field is set to Yes. If an ANNOUNCE action is interrupted with a touch-tone, that speech—plus any speech later in the vector—is skipped, and that tone will be used as input in the action that collects input, such as a MENU, GET\_DIALP, GET\_SPCH, or GET\_DIGT action. For example, if a vector has two ANNOUNCE actions and a MENU action (described later in this chapter) and if the caller presses a touch-tone key while listening to the first ANNOUNCE, Customer Assist will skip the first ANNOUNCE action AND the second ANNOUNCE action AND the prompt used in the MENU action. Customer Assist will use the input to the touch-tone prompt as input for the MENU action.*

 **NOTE:**

The preceding paragraph does not apply when the DEFINITY vector routes callers to an announcement extension that then routes callers to a hard-allocated CONVERSANT port. Therefore, 256 callers could all hear a standard announcement on the CONVERSANT, yet that announcement would be unaffected by any of those callers pressing a touch-tone. The touch-tone entered would be used by the DEFINITY in the next collect action step in the DEFINITY vector on a per call basis.

## **SWITCH Action**

---

Moves call control to one of up to 11 vectors, depending on the value of a specified variable. SWITCH is similar to DYNAMIC, but it launches vectors, not CONVERSANT applications.

**⇒ NOTE:**

If you have a case where a single variable may end up having multiple values, you can use the SWITCH action to direct callers to different vectors depending on the value of the variable. For example, based on the DNIS collected from the switch via the CONVERSE action, the system can evaluate the DNIS value and direct the caller to the appropriate applications using the SWITCH action.

**Modify SWITCH Action Form**

The system displays the SWITCH action form (Figure 5-29) whenever you insert this action into a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custod 3 EDIT VECTOR NUMBER 161 STEPS
>Call Use 5 SWITCH Action Step Number 1 for vector 161
System De
System St
UNIX Sy
Exit

SWITCH evaluates variables and routes matches to vectors
Comment:
Variable: _____ Operator: =

      VALUE          VECTOR NUM      VECTOR NAME
      _____      _____
      _____      _____
      _____      _____
      _____      _____
      _____      _____
      _____      _____
      _____      _____
      _____      _____
      _____      _____
      _____      _____
      _____      _____

Please enter your comments.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

**Figure 5-29. SWITCH Action Form**

Use the following steps to modify the SWITCH action form:

1. Optionally, enter a description of the action in the `Comment :` field.
2. Enter the name of the variable whose value will determine which Customer Assist vector to target. Press **CHOICES (F2)** for a list.
3. Enter up to 11 acceptable values in the `VALUE` column. Most common entries will include the:
  - Standard digits **0** to **9**.
  - Touch-tone symbol **\*** (star).

- Wild-card character, **n**, representing any single standard digit. For example, **nn** represents any 2-digit number.
  - Repeat character **r**. For example, **123r** represents “123,” “1233,” “12333,” etc.
  - Quit character **q**. For example, **123q** represents any entry, up to the maximum allowable length, that begins with the digits “123.”
4. In the corresponding VECTOR NUM column, associate each value with the number of a Customer Assist vector to activate if that value matches the caller’s entry; press CHOICES **(F2)** for a list. If a Customer Assist vector with this number already exists, its name appears automatically. If not, no text appears.
- If the variable’s value matches more than one value in this column, the SWITCH action activates the vector associated with the first match.
  - If the variable’s value does not match any value in this column, then the call “falls through” this step and continues with the current vector.



**CAUTION:**

*Be sure to create Customer Assist vectors for vector numbers you enter here before you place the new vectors into service. If not, when auditing the vector database, internal vectors will alarm the system and fail an integrity check.*

## **TRANSFER Action**

---

This action transfers the caller to any extension or VDN you specify when the call is not under DEFINITY vector control via the Converse step. This action can be used only when callers are sent to the CONVERSANT without using the Converse step.

Call Management System (CMS) reports do not document calls transferred by this action. For more accurate CMS reporting, use the DATA\_RTN action to return an extension number to a DEFINITY vector that you configure to transfer the call.



**NOTE:**

Before using the TRANSFER action with line-side T1/E1 ports, use the ANNOUNCE action or other actions that take time once in the Customer Assist vector so that the switch will not interpret the transfer as a hang-up.



**CAUTION:**

*Transfers may not follow a Converse step.*

## Modify TRANSFER Action Form

The system displays the TRANSFER action form (Figure 5-30) whenever you insert this action into a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custo 3 EDIT VECTOR NUMBER 161 STEPS
>Call Use Vector Name: _____ Vector Number: 161
System Description: _____
System
UNIX Sy Step Action Description
Exit 1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____
8 TRANSFER Action step transfers caller.
9 _____
10 Transfer call to Extension: _____
11 _____
12 Return Value: %return_vlu
13 Comment: _____
14 _____

Enter the extension number followed by the Return or ENTER key.

HELP CHOICES CLOSE ENTER CANCEL REFRESH

```

Figure 5-30. TRANSFER Action Form

Use the following steps to modify the TRANSFER action form:

1. Enter the number of the extension destination or a name of the variable representing the extension number; press CHOICES (F2) for a list.

The system automatically uses the variable `%return_vlu` to represent any data returned by the DEFINITY G3 or ECS R5 or 6.3+ in the event of an error.

Possible return values include:

- Blank = May occur on blind transfers
- 0 = Instruction Successfully Completed
- -1 = Hard/Software/Dialing Error
- -2 = Timeout Waiting for Call Progress Tones
- -3 = Illegal Dial String Passed

2. Optionally, enter a description of the action in the `Comment :` field.

## TRANSRIBE (TRANSCRIBE) Action

This action plays the contents of a Message Drop mailbox. Touch-tone options move transcribers through messages and can optionally launch return calls automatically.

### **⚠ CAUTION:**

*If an agent dials a VDN to access a TRANSRIBE vector and is conversed from the DEFINITY to the CONVERSANT, the agent cannot launch a callback. To enable this feature, route the agent's call to the CONVERSANT rather than conversing the call.*

### Modify TRANSRIBE Action Form

The system displays the TRANSRIBE action form (Figure 5-31) whenever you insert this step into a vector.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Custd 3 EDIT VECTOR NUMBER 161 STEPS
>Call Ue Vector Name: _____ Vector Number: 161
System Description: _____
System
UNIX Sy Step Action Description
Exit 1 _____
2 _____
3 _____
4 _____
5 _____
6 _____

5 Transcribe Action, Step Number 1 for vector 161

TRANSRIBE Action starts the transcription program.

Transcribe messages from mailbox: _____

Comment: _____

Enter the mailbox number or a variable followed by the Return or ENTER key.

HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 5-31. TRANSRIBE Action Form

Use the following steps to modify the TRANSRIBE action form:

1. Optionally, enter the number or variable name holding the number of the mailbox containing messages you want to transcribe; press CHOICES  for a list.



**NOTE:**

The system will prompt callers to enter a mailbox number if you do not specify one in the TRANSRIBE action. If you specify a variable, remember that the variable must be assigned a value before the TRANSRIBE action can use it to decide which mailbox to activate. You may use the CONVERSE or SET action to assign values to variables before invoking the TRANSRIBE action.

2. Optionally, enter a description of the action in the `Comment :` field.

## Summary

---

While working through this chapter, you learned how to use vector actions to build vectors. Use this chapter in conjunction with Chapter 4, “Vector Administration”.

- See Chapter 6, “Speech Administration”, for information on how to record and administer speech for your vectors.

This chapter describes how to administer speech. It shows you how to add, remove, record, or edit phrases. It also shows you how to change your password, generate a phrase list, or change the base language.

### Speech Administration

This menu provides the following options:

- Vector Phrase Administration
- Mailbox Phrase Administration
- Mailbox Standard Speech Administration
- Standard Speech Phrase Administration
- Password Administration
- Generate Phrase List
- Change Base Language (See “Customer Assist Packages” on page 1-2 for information on languages available with your system.)

## Access Speech Administration

---

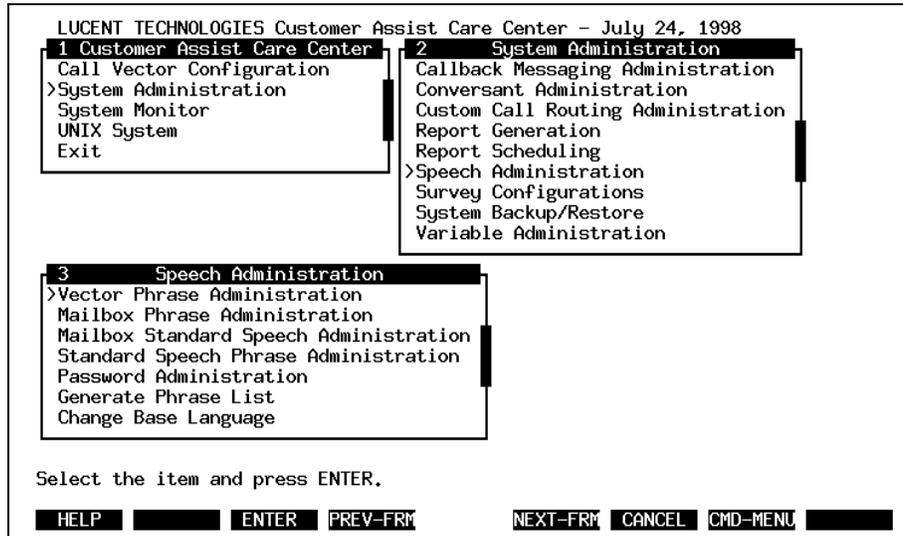
Use the following steps to access Speech Administration:

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

```
> System Administration
> Speech Administration
```

The system displays the Speech Administration menu (Figure 6-1).

---



**Figure 6-1. Speech Administration Menu**

To record and administer speech, choose from the following options shown in the Speech Administration menu in Figure 6-1:

- Vector Phrase Administration
- Mailbox Phrase Administration
- Mailbox Standard Speech Administration
- Standard Speech Phrase Administration

## Access Phrases for Vectors, Mailboxes, and Standard Speech

Customer Assist stores speech phrases for Customer Assist vectors, message-drop mailboxes, mailbox standard speech, and standard speech in separate talkfiles.

Use the following steps to add, copy, or edit an existing phrase or to remove a phrase from the database of phrases:

1. Start at the System Administration menu and select one of the following talkfiles:
  - Vector Phrase Administration (talkfile 6104 for U.S. English)
  - Mailbox Phrase Administration (talkfile 6105 for U.S. English)
  - Mailbox Standard Speech Administration (talkfile 6102 for U.S. English)
  - Standard Speech Phrase Administration (talkfile 6100 for U.S. English)



**NOTE:**

The Vector Phrases, Mailbox Phrases, Mailbox Standard Speech and Standard Speech use different talkfiles for different languages. (See Appendix A, "Maximum Values in Customer Assist Packages" for talkfile numbers for other languages.)



**NOTE:**

You can record speech for announcements by either recording directly in Speech Administration or by building a vector with the SPCH\_ADMN action in it. When you call a certain extension, just configure your setup vector to route callers who access that extension to the SPCH\_ADMN vector. That way you can access your speech at any time from any remote touch-tone telephone. For example, a newspaper company could have the vectors set up so that their reporters and editors could call in from remote locations and update phrases in their bulletin board with the latest news and information. You do not have to go into Customer Assist at the console. You can do the same for Message Transcription as well using the TRANSCRIBE action.

The system displays the Select Talkfile menu (Figure 6-2).

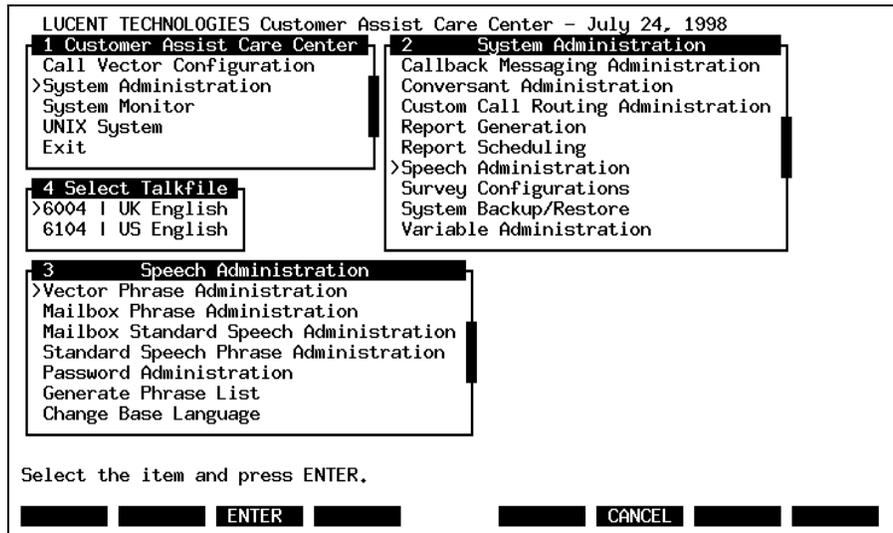


Figure 6-2. Vector Phrase Administration Select Talkfile Menu

### Modify Phrases for Vectors, Mailboxes, and Standard Speech

Use the following steps to modify phrases:

1. Select the talkfile of the phrase you want to administer.
  - Vector Phrase Administration (talkfile 6104 for U.S. English)
  - Mailbox Phrase Administration (talkfile 6105 for U.S. English)
  - Mailbox Standard Speech Administration (talkfile 6102 for U.S. English)
  - Standard Speech Phrase Administration (talkfile 6100 for U.S. English)



**NOTE:**

Each language has a set of these talkfiles.

The system displays the Select Phrase menu (Figure 6-3).

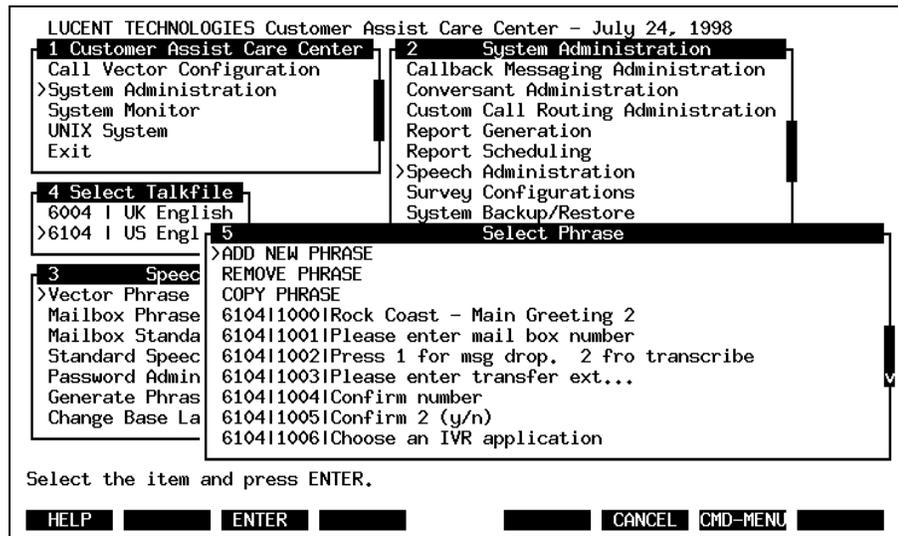


Figure 6-3. Select Phrase Menu

This menu allows you to:

- Add a new phrase
- Remove one or more phrases
- Copy a phrase
- Edit a phrase (by highlighting phrase number and pressing **(ENTER)**).

To review and record speech phrases over the telephone without sitting at the CONVERSANT console, use the SPCH\_ADMN action in a Customer Assist vector.

**⇒ NOTE:**

You cannot add, copy, or delete phrases for Standard Speech and Mailbox Standard Speech. To change standard-speech phrase tags or rerecord the phrases in another voice, follow instructions for editing a phrase in “Editing a Phrase” on page 6-13. When rerecording standard speech, be sure to imitate the inflections that were used in the original phrases. Each phrase must be at least 1 second long. If you are using a telephone, be mindful of potential quality issues that may arise when re-recording the Standard Speech provided with Customer Assist. The Customer Assist Standard Speech was professionally recorded in a soundproof studio, which provides very high quality. That recording quality may be difficult to match if you are recording these phrases using a telephone.

The various options and their relationships for recording and playing speech phrases are shown in Figure 6-1.

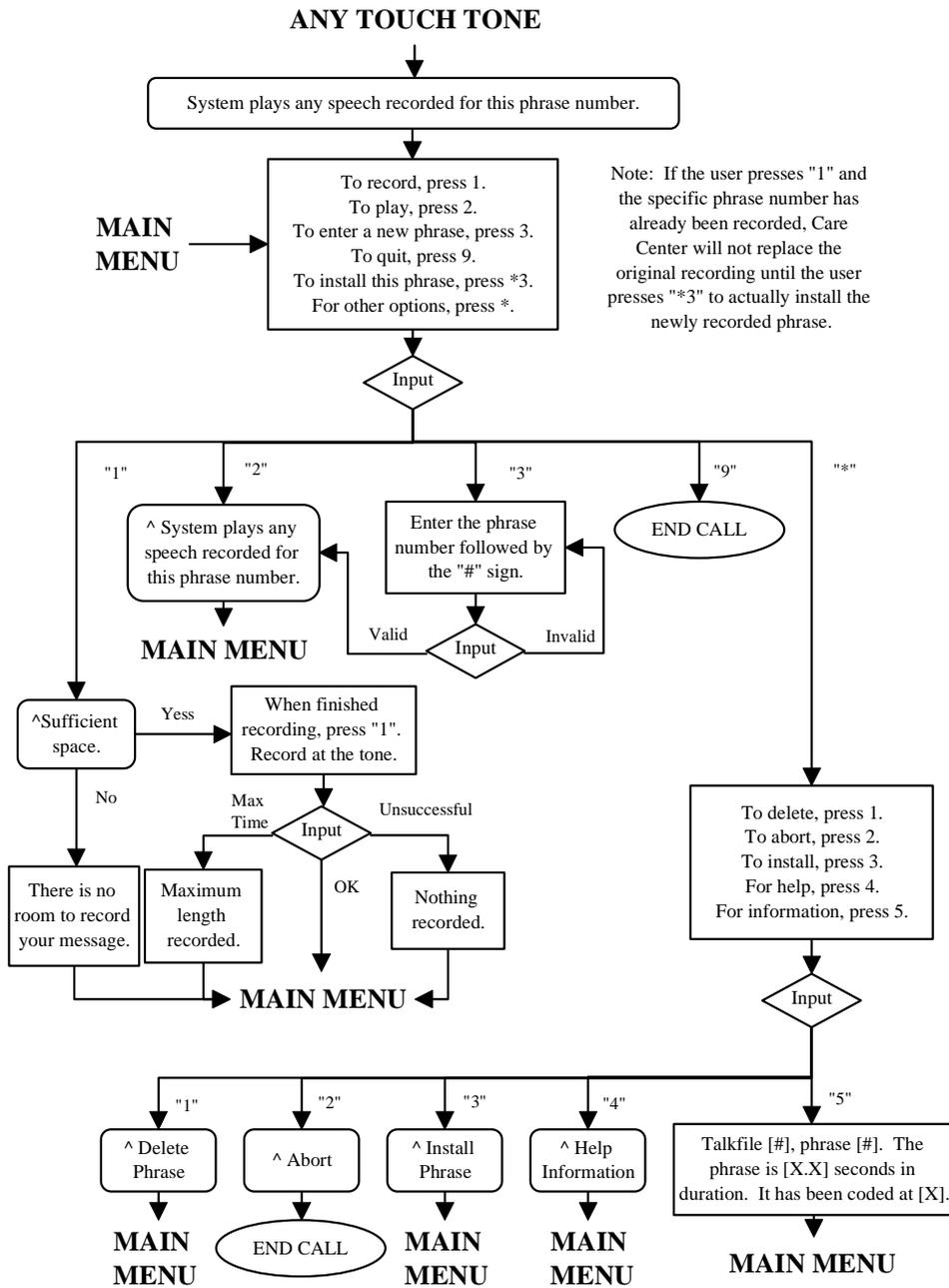


Figure 6-4. Option Tree for Recording, Playing, and Editing Speech

### To Add a New Phrase

**⇒ NOTE:**

After adding new phrases, generate the complete Phrase List before recording your speech. This way you can either view the phrases on the screen while recording or look at a printed copy.

**⇒ NOTE:**

The best way to create your applications is to create all of your phrases before you create your vectors. When you use the ANNOUNCE, MENU, GET\_SPCH and GET\_DIALP actions, if you don't have a specific phrase created yet, you can press ADD-PHR to add a new phrase right from that dialog box. Even with the best of planning, you may find that you need additional phrases as you create and edit your vectors. Rather than going to Speech Administration to add the phrases, you can use the ADD-PHR key to add the phrases on the fly.

Use the following steps to add a phrase:

1. Start at the Select Phrase menu and select ADD NEW PHRASE.  
The system displays the Add New Phrase form (Figure 6-5).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Customer 6 Add New Phrase to Talkfile 6104
Call Uector
>System Admi Add a New Phrase Recorded:
System Moni Talkfile Number: 6104
UNIX System Phrase Number: 1027
Exit
Phrase Tag: _____
4 Select Ta
6004 | UK E
>6104 | US E
Phrase Text: _____
3 Sp
>Uector Phra
Mailbox Phr
Mailbox Sta
Standard Speec 6104|1003|Please enter transfer ext...
Password Admin 6104|1004|Confirm number
Generate Phras 6104|1005|Confirm 2 (y/n)
Change Base La 6104|1006|Choose an IUR application
Valid phrase numbers are 10-65535 that are not in use.
HELP CHOICES SAVE RECORD ENTER CANCEL REFRESH
    
```

Figure 6-5. Add New Phrase Form

2. The system automatically assigns a phrase number, which appears in the `Phrase Number` field.

To replace the system-assigned phrase number, type a new one. Valid phrase numbers are from 10 to 65535.



**NOTE:**

The talkfile number cannot be changed.

3. Enter a unique name to identify the phrase in the `Phrase Tag` field.
4. Optionally, enter the exact words to be recited in the `Phrase Text` field.
5. Optionally, press RECORD (F4) to save and record this phrase.



**NOTE:**

When recording speech in SPCH\_ADMN, you can advance faster than the prompts if you know what the next phrase will be. Press [3] to record the next phrase, enter the phrase number followed by the pound sign, and then start recording. For example, you have created a number of phrases and wish to record them. Generate and print the phrase listing. With this in front of you, select the phrase that you wish to record. When recording, refer to the phrase listing that you have printed. After recording that phrase, press [3] to select another phrase to record. Enter the next phrase number that you wish to record followed by the pound sign, [#]. You can interrupt the SPCH\_ADMN announcements and record your phrase faster by pressing a touch-tone. At the beep, record the next phrase. Continue these steps until all the phrases have been recorded.

If you press RECORD, then the system displays the Phrase Recording form (Figure 6-6).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Customer 6 Add New Phrase to Talkfile 6104
Call Uector
>System Admi Add a New Phrase Recorded:
System Moni Talkfile Number: 6104
UNIX System Phrase Number: 1027
Exit
7 Record Phrase Number 1027 in talkfile Number 6104
Coding Rate: CELP16
Phrase Number: 1027
Talkfile Number: 6104
Phrase Tag: Greeting
Phrase Text: Welcome to the Customer Assist Care Center
ter
Enter the coding rate followed by the Return or ENTER key.
HELP CHOICES CLOSE DIAL CANCEL REFRESH
    
```

Figure 6-6. Phrase Recording Form

6. Enter or select the coding algorithm you use to record the phrase in the Coding Rate field. Press CHOICES (F2) for a list of coding rates.

**⇒ NOTE:**

Pulse code modulation at 64 kbps (PCM64) offers the highest recording fidelity but demands the most hard disk storage. The default is ADPCM32 (or CELP16 if the system has the appropriate hardware). Other options include ADPCM16 and CELP16. CELP16 is the newest encoding algorithm from Lucent that provides very high quality with relatively small resulting speech file sizes. This requires an SSP card from Lucent Technologies.

**Recording Phrases**

Use the following steps to record a phrase:

1. Press DIAL (F4).

The system displays the Dial Number form (Figure 6-7).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
8 Dial Number Talkfile 6104
Telephone Number to Dial: 2129
Dialing out on channel: 3

Exit
7 Record Phrase Number 1027 in talkfile Number 6104
Coding Rate: CELP16
Phrase Number: 1027
Talkfile Number: 6104
Phrase Tag: Greeting - 2
Phrase Text: Welcome to the Customer Assist Care Center

Enter the telephone number followed by the Return or ENTER key.
HELP LAUNCH ENTER CANCEL REFRESH
    
```

Figure 6-7. Dial Number Form

2. Enter the telephone number or extension that the system must dial to reach your touch-tone telephone in the Telephone Number to Dial field.

The number can be a maximum of 16 digits. Enter commas (,) or hyphens (-) to pause while dialing. Each comma corresponds to a ½ second delay, and each hyphen corresponds to a 2-second delay.



**NOTE:**

Commas and hyphens are not recognized when dialing over line-side (T1/E1) lines.



**NOTE:**

If Customer Assist is configured remotely from a computer console outside of your location, having the CONVERSANT call for recording speech may not work in instances where the outgoing call takes more than 16 digits. For example, if the number dialed is long distance (9 + area code + 7 digits) plus an accounting code of 6 digits (a total of 17 digits), then this feature will not work correctly. Remember that the telephone number or extension to dial can be up to 16 digits.

3. Enter the number of the CONVERSANT port to use while recording in the *Dialing out on channel* field.

You can use any active, or in service, port on the CONVERSANT system except those that ACD uses for standard announcements. Avoid using ports that are hard-allocated to other applications.

4. Press LAUNCH **F3** to place a call to your extension number.
5. Answer the call and press any touch-tone key.

By pressing a key, you signal the system to begin playing the phrase if it was recorded. The system then offers the option to replay, record, or rerecord, which allows you to record an existing phrase again, or to enter the phrase number of a new phrase to record. This last option permits you to record a number of phrases during the same call. Refer to your phrase listing for the phrase numbers to record and the associated speech.

**⇒ NOTE:**

Each phrase you record must be at least 1 second in duration. If during the launch an error described as "Error -500 Message queue is busy" occurs, this is typically due to some other application on the CONVERSANT doing a lot of soft seizures on ports. This situation typically rectifies itself. See Chapter 7, "System Administration", for more information.

6. Press **1** to record a phrase.

When recording speech in SPCH\_ADM, you can advance faster than the prompts if you know what the next phrase will be. To start recording your next phrase:

- a. Press **3** to select another phrase to record.
- b. Enter the next phrase number that you wish to record.
- c. Press the pound sign, **#**.

**⇒ NOTE:**

You can interrupt the announcements to get to the recording faster by pressing any touch-tone key.

- d. At the beep, record the next phrase. Continue these steps until all the phrases have been recorded.
- e. Review speech

To review and record speech phrases over the telephone without sitting at the CONVERSANT console, use the SPCH\_ADMN action in a Customer Assist vector.

7. Press **\* 3** to install phrases you record.



**NOTE:**

The Speech Administration script will be in the default language. To change this, change the base language in the Speech Administration menu. Otherwise, use the CHG\_LANG action to change the desired language before the SPCH\_ADM action.

**Copying a Phrase**

Use the following steps to copy a vector phrase:

1. Start at the Select Phrase menu and select COPY PHRASE.

The system displays the Copy Phrase form (Figure 6-8).

**Figure 6-8. Copy Phrase Form**

2. Enter the phrase tag you want to copy in the `From` field; press CHOICES (F2) for select from a list.
3. Enter a unique name that will be used to identify the phrase in the `To` field.
4. Optionally, change the phrase number from the default to an unused phrase number.  
This step allows you to give your phrase a number different than the default number.
5. Press SAVE (F3) to save the configuration.

 **NOTE:**

Copying a phrase copies both the identity of the phrase as well as the actual recorded speech.

### Editing a Phrase

Use the following steps to edit a vector phrase:

1. Start at the Select Phrase menu and select the phrase you want to administer.

The system displays the Edit Phrase form for the selected phrase.

2. Make any necessary changes to the phrase tag or phrase text.

 **NOTE:**

Phrase and talkfile numbers cannot be edited.

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

or

Press RECORD (F4) to save your changes and rerecord the speech associated with the phrase.

The system displays the Phrase Recording form. (See "Recording Phrases" on page 6-9 for more information on recording phrases.)

 **NOTE:**

Standard Speech contains phrases used primarily to speak numbers, times, estimated wait messages, and other messages to callers. Mailbox Standard Speech contains standard phrases used in Message Drop for confirmation and for scheduling callbacks. Standard Speech phrases and Mailbox Standard Speech phrases may be rerecorded by your speech talent so that every phrase your callers hear is in a consistent voice. See "Modify Phrases for Vectors, Mailboxes, and Standard Speech" on page 6-4 for more information on recording these again.

### Removing a Phrase

This option allows you to remove phrases for vectors or mailboxes.

 **CAUTION:**

*Before removing a phrase, first remove all references to the phrase from your Customer Assist vectors and mailboxes. If they are not removed, the vector will fail an integrity check during the Vector Audit or when vectors are placed in service.*

Use the following steps to remove a vector phrase:

1. Start at the Select Phrase menu and select REMOVE PHRASE.

The system displays a menu of phrases.

2. Select the phrase you want to delete.



**CAUTION:**

*You cannot recover a deleted phrase.*

3. Press MARK (F2).

To remove more than one phrase, return to step 2. To unmark a vector, highlight its name and press MARK (F2) again.

4. Press (ENTER).

The system asks you to confirm that you want to proceed with deletion.

5. Press CONT (F3) to continue or CANCEL (F6) to abort.

The system deletes the phrase.

6. Press CANCEL (F6) to return to the previous menu.

## Password Administration

---

Use the following steps to configure the system to prompt you for a password before recording speech:

1. Start at the Speech Administration menu and select Password Administration.

The system displays the Password for Speech Administration form (Figure 6-9).

LUCENT TECHNOLOGIES Customer Assist Care Center - July 24, 1998

1 Customer Assist Care Center  
 Call Vector Configuration  
 >System Administration  
 System Monitor  
 UNIX System  
 Exit

2 System Administration  
 Callback Messaging Administration  
 Conversant Administration  
 Custom Call Routing Administration  
 Report Generation  
 Report Scheduling  
 >Speech Administration  
 Survey Configurations  
 System Backup/Restore  
 Variable Administration

3 Speech Administration  
 Vector Phrase Administration  
 Mailbox Phrase Administration  
 Mailbox Standard Speech Administration  
 Standard Speech Phrase Administration  
 >Password Administration  
 Generate Phrase List  
 Change Base Language

4 Password for Speech Administration  
 Password for Speech Administration: \_\_\_\_\_

Enter the password (1-16 digits) or leave blank if password is not used

HELP SAVE CANCEL REFRESH

Figure 6-9. Password for Speech Administration Form

2. After Password for Speech Administration, enter a series of up to 16 touch-tone digits that callers must enter to access the system's speech recording utility.



**NOTE:**

To prevent the unauthorized recording of speech phrases, specify a password for Speech Administration and change it periodically.

3. Press SAVE (F3) to save the configuration.

### Generate Phrase List

The phrase list provides a script for recording speech phrases. Use the following steps to generate a phrase list:

1. Start at the Speech Administration menu and select Generate Phrase List. The system displays the Phrase List Report (Figure 6-10).

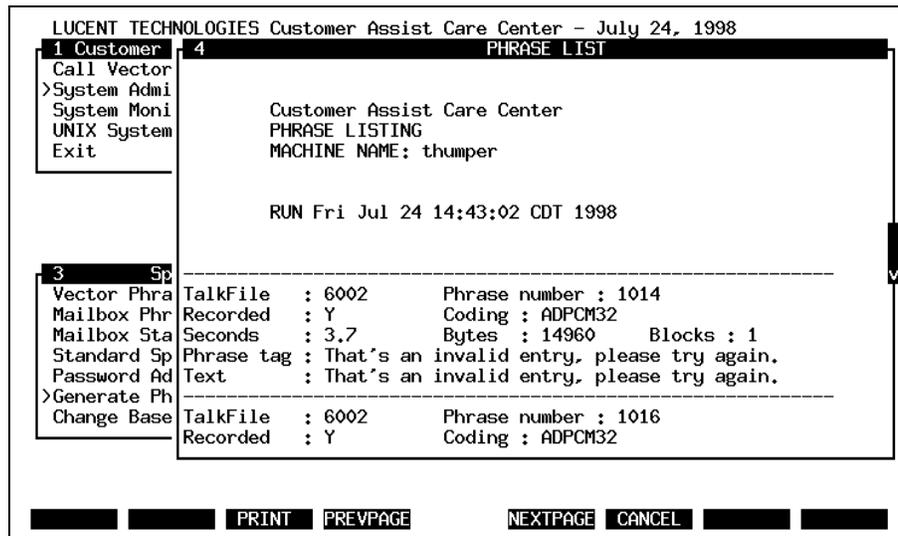


Figure 6-10. Phrase List



**NOTE:**

Generate a complete Phrase List before recording all of your speech. This way you can read the phrase text off of the screen or off of a printed copy when you record. This speeds up the process of recording your speech prompts because you do not need to exit out of speech administration multiple times. Instead, work from the Phrase List to record all phrases at once.

2. Press PRINT (F3) for a printed copy.

## Changing the Base Language

The base language is the default language used in scripts until it is changed in vectors using the CHG\_LANG action. See “Customer Assist Packages” on page 1-2 for more information on available languages.

Use the following steps to change the base language that is used by the system:

1. Start at the Speech Administration menu and select Change Base Language.

The system displays the Change Base Language form (Figure 6-11).

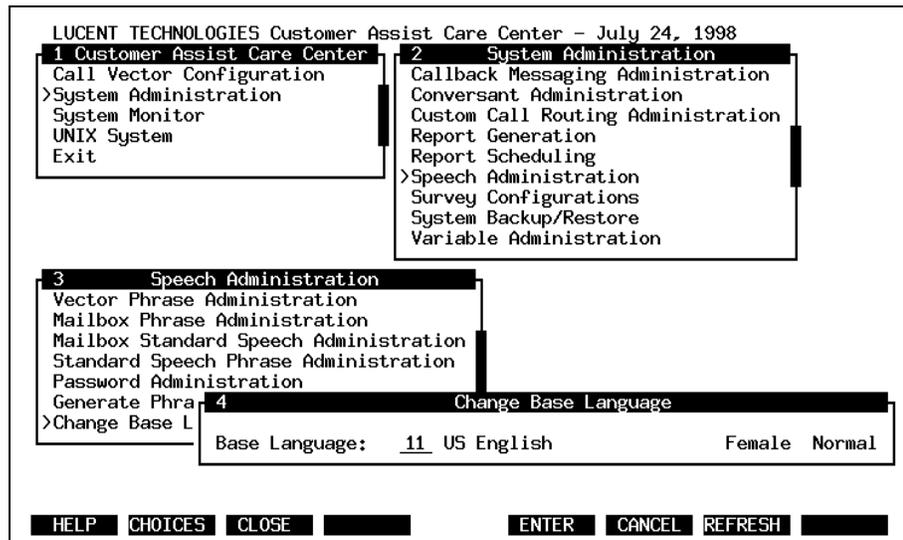


Figure 6-11. Change Base Language Form

2. Press CHOICES (F2) to select one of the installed languages as the base language.
3. Press SAVE (F3) to save the configuration.

## Summary

---

While working through this chapter, you learned how to record and document speech, change the password the system may require to administer speech, generate a phrase list, and change the base language.

- See Chapter 7, "System Administration" for more information on how to set up your system to perform a variety of tasks.
- See Appendix A, "Maximum Values in Customer Assist Packages", for more information about acceptable parameters.



This chapter describes how to administer Customer Assist. Use it as a reference for administering your system. It covers the following:

- Add, edit, and delete variables
- Schedule and generate reports
- Administer the optional Callback Messaging and Custom Call Routing packages
- Configure surveys
- Backup/restore configurations

## System Administration Menu

Use the following steps to access the System Administration menu:

1. Start at the Customer Assist main menu and select

```
> System Administration
```

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

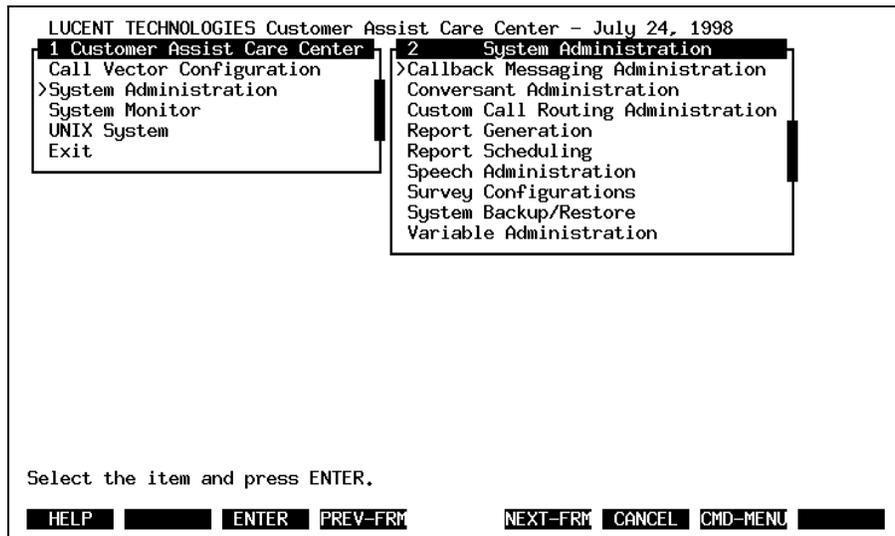


Figure 7-1. System Administration Menu

You begin all system activities by highlighting one of the following options and pressing (ENTER).

- Callback Messaging Administration
- Custom Call Routing Administration
- Report Generation
- Report Scheduling
- Speech Administration
- Survey Configurations
- System Backup/Restore
- Variable Administration

## Callback Messaging Administration

This menu allows you to create and administer mailboxes, establish parameters for accepting messages from callers, manage the way Customer Assist notifies agents of new messages, scheduling callbacks, and administering time zones. The options are categorized as follows:

- Mailbox Administration
- Mailbox Global Settings
- Agent Callback Hours

- Customer Callback Hours
- Delete Messages from Mailbox
- Mapping Country/City/Area Codes to Time Zones

### **Mailbox Administration**

---

This option allows you to add or edit a mailbox you have already created, copy an existing mailbox, and remove a mailbox from the database. It provides you with the following options:

- CREATE NEW MAILBOX
- REMOVE MAILBOX
- COPY MAILBOX
- The number of each mailbox you can edit (by highlighting mailbox number and pressing **ENTER**).

### **Access Mailbox Administration**

Use the following steps to access Mailbox Administration:

1. Start at the System Administration menu and select

```
> Callback Messaging Administration
```

```
> Mailbox Administration
```

The system displays the Select Mailbox menu (Figure 7-2).

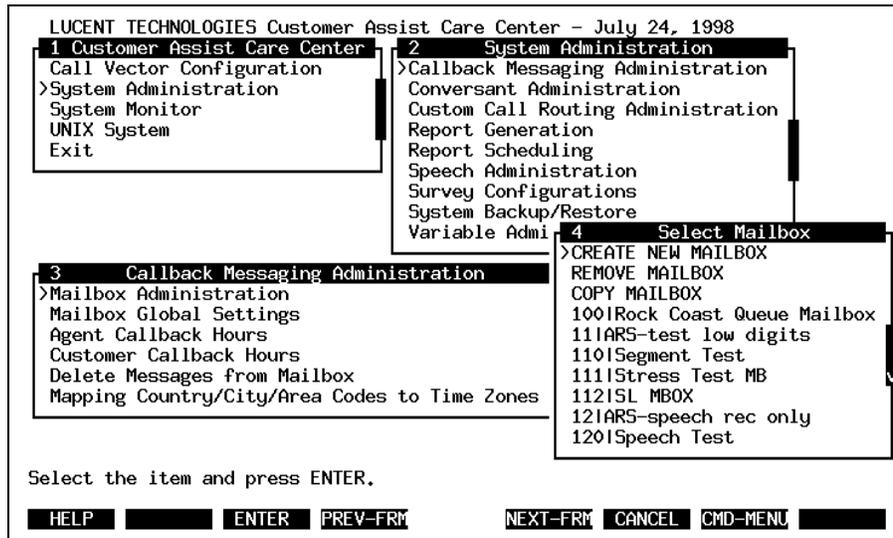


Figure 7-2. Mailbox Administration (Select Mailbox) Menu

### Creating a New Mailbox

Use this option to create a mailbox and select phrases that prompt callers for input. A single mailbox can store many messages; add new mailboxes only to:

- Prompt callers for different items of information
- Distinguish their responses from those in other mailboxes
- Send messages to different groups of agents

Use the following steps to create a new mailbox:

1. Start at the Select Mailbox menu and select CREATE NEW MAILBOX.  
The system displays the Create New Mailbox form (Figure 7-3).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 31, 1998
5 Create New Mailbox
> Mailbox name: _____ Mailbox ID: _____
Mailbox password: _____ Mailbox priority: 0
Talkfile: 6105

CALLBACK
Transcriber welcome phrase: _____

Agent access number: _____ Treat as outside number? No
Outside line access code: 9 Country code: _____
Time to wait for answer: 20 Message retry interval: 1
> Use Dial Pulse Recognition: No Use Speech Recognition: No
Adjust for time zone? Yes
NOTIFICATION AND ALARMS
Message Waiting Lamp extension: _____
Alarm if
  Message age exceeds Minutes: ___ Hours: ___ Days: ___
  Max number of messages exceeds: _____
Forward messages into mailbox: _____

Enter the mailbox name.

HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
  
```

Figure 7-3. Create New Mailbox Form

2. Enter a name for your mailbox in the `Mailbox name:` field.  
Enter any name up to 24 characters long.
3. Enter a unique number to use with the `MSG_DROP` and `TRANSCRIBE` actions to deliver callers to this mailbox in the `Mailbox ID:` field.  
Customer Assist uses this number only to identify the mailbox, it does not use this number as a telephone extension.
4. Optionally, enter the number agents must enter to transcribe the contents of this mailbox in the `Mailbox password:` field.  
Leave this field blank to disable the password access.
5. Enter a number from 0 through 5, where 5 represents the highest priority, in the `Mailbox priority:` field.  
This field determines the order in which mailboxes deliver messages to agents. Eligible messages in different mailboxes with the same priority code are given the same priority.

**⇒ NOTE:**

As long as there are messages in a mailbox with a higher priority, those messages will be delivered before all other messages in mailboxes with lower priority. Therefore, calls should only be directed to priority mailboxes if they should receive precedence over other messages.

6. Enter the language of the Mailbox Phrase talkfile that contains the prompt phrases in the `Talkfile:` field.

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

7. Enter the name of the phrase played to identify this mailbox for transcribers in the `Transcriber welcome phrase:` field.
8. Enter the extension or VDN to dial to deliver messages to agents in the `Agent access number:` field.  
If this mailbox will not perform callback, leave this field blank.
9. Enter **Yes** in the `Treat as outside number:` field to treat the agent callback number as an outside number. Otherwise, enter **No**.
10. Enter the touch-tones that the CONVERSANT must dial for a public-network dial tone (for example, "9") in the `Outside line access code:` field.

**⇒ NOTE:**

In the U.S., Customer Assist automatically sends the number "1" before long-distance numbers it dials through the switch, even if the DEFINITY switch is already configured to dial "1" before long-distance numbers. Standard safeguards stop the DEFINITY from accidentally dialing "1" twice.

11. Enter the country code for customer telephone numbers if customer callbacks will be launched to ONLY one country in the `Country code:` field. Otherwise, leave it blank.

If callers from different countries will be leaving messages, you can create one mailbox for each country and then enter the callers' country code in the `Country Code:` field for the corresponding mailbox.

**⇒ NOTE:**

This field will be overwritten by the information captured in the `Portion:` field (See "Data Configuration Form" on page 7-10). However, this field overwrites Dial Plan information.

12. Enter the number of seconds the system should wait after dialing the agent callback number for an agent to answer (assuming the DEFINITY G3 does not immediately return busy) in the `Time to wait for answer:` field.

The maximum number of seconds is 9999. If you want messages queued for an available agent, set this number to the maximum number of seconds that exceeds the average queue time of the destination split. By default, the Callback Messaging package retrieves a call from a VDN or hunt group either after a busy signal or after four ring cycles.

 **NOTE:**

Messages delivered in intelligent mode are played back for transcription when the system detects speech energy. Therefore, if you plan to direct messages to a VDN or a hunt group extension to queue for an available agent, you must administer call treatment to play ringing or silence to the queued message.

Alternatively, you can set the `Force Press 1` for agent `callback pickup` (found on the `Global Settings` form) to **Yes**, in which case the message callback waits for touch-tone input to begin transcription. In this case, music and announcement treatment in queue do not affect message delivery.

13. Enter the number of minutes the system should wait before attempting again to deliver the message to an agent in the `Message retry interval:` field.

A message retry time prevents the system from continuously presenting the same message to agents. Customer Assist begins each attempt by dialing a VDN that points to a DEFINITY vector that determines agent availability. See the *Lucent DEFINITY ECS R5 Call Vectoring/EAS Guide*, 555-230-521.

A message will be retried if its status is ready (not saved, not deleted, or not currently in transcription). A message will not be retried if the system saves or deletes it. For example, if an agent tries to “launch and delete” a message but disconnects before reaching the caller, the system will attempt to contact an agent in the number of minutes set in the `Message retry interval:` field until the agent is reached.

 **NOTE:**

If a schedule segment is used by the caller or the agent or both, the `Message retry interval` will overwrite the scheduled time for callback. The retry interval will be the time heard by the agent in transcription. To preserve the requested callback time for subsequent transcribers, agents should consider using the `Prepend` option to record the requested callback time and any information about the callback attempt.

14. Enter the telephone extension of the agent to notify of new messages in the `Use Speech Recognition:` field. Enter **Yes** to use Speech Recognition to collect input in Data and Schedule segments.

 **NOTE:**

Speech Recognition and Dial Pulse Recognition can be used concurrently. However, Speech Recognition is available only for dropping messages, not for transcription.

15. Enter **Yes** in the `Use Dial Pulse Recognition:` field to use Dial Pulse Recognition to collect input in Data and Schedule Segments.

**⇒ NOTE:**

Speech Recognition and Dial Pulse Recognition can be used concurrently. However, Dial Pulse Recognition is available only for dropping messages, not for transcription.

16. Enter **Yes** in the `Adjust for time zone?` field to have this mailbox make time zone adjustments.
17. In the `Message waiting lamp extension:` field, enter the extension number of the message waiting lamp that should be lit whenever a mailbox contains a “ready” message. Ready messages include messages set for immediate callback or scheduled for later callback. Leave this space blank to disable message waiting lamps.

**⇒ NOTE:**

Whenever a message is left in a mailbox, Customer Assist immediately lights the corresponding message waiting lamp, if defined. Whenever all messages are deleted out of a mailbox, Customer Assist immediately extinguishes the corresponding message waiting lamp, if defined. Customer Assist also does a “master check” every 30 minutes to make sure that all mailboxes have their corresponding message waiting lamps either on or off by resending the FAC to actually turn the light on or off.

18. Use the following fields to activate notification and alarms:
  - a. Enter the maximum number of days, hours, or minutes messages can be in a mailbox in the `Message Age Exceeds:` field.

After that time, messages are sent to an overflow mailbox. You can define each time element separately or together. For example, you can enter: 2 days 10 hrs 00 mins, 0 days 18 hrs 20 mins, or 0 days, 0 hours, 30 mins. If no time is specified, the alarm is turned off. Enter the numbers in the range of 0-99.
  - b. Enter the maximum number of messages that can be in a mailbox in the `Max Number of Messages Exceeds:` field.

Enter any number up to five digits. After that number of messages, the system forwards the oldest messages to an overflow mailbox.
  - c. Enter the number of the mailbox where the system should forward aged and overflow messages in the `Forward Messages into Mailbox:` field.

The system will automatically forward aged messages and overflow messages into this mailbox when the age or maximum number of messages allowed is exceeded. An alarm warning message, stating the alarm condition, is appended to the forwarded messages. You cannot administer these messages.

To create an alarm mailbox, follow the steps for creating a new mailbox. You may assign a mailbox password, a message waiting lamp extension, or callback destination. Enter the Mailbox ID number of the alarm mailbox.

19. Press the PAGEDOWN key to move to the Pieces Grid form.  
The system displays the Pieces Grid form (Figure 7-4).

Segment	Type	Identity Tag
1	_____	
2	_____	
3	_____	
4	_____	
5	_____	
6	_____	
7	_____	
8	_____	
9	_____	
10	_____	
11	_____	
12	_____	
13	_____	
14	_____	
15	_____	

Select the phrase tag to play after the final mailbox prompt.

ENTER CANCEL

Figure 7-4. Pieces Grid Form

From this form, you can set up your message segments or “prompts” for information from the caller. Up to 15 segments of information can be defined for one message.

20. Enter a valid message closing phrase in the `Message closing phrase:` field.

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

See “Access Phrases for Vectors, Mailboxes, and Standard Speech” on page 6-3 for more information about recording phrases for Callback Messaging.

21. Enter a type of response for each message segment in the `Type:` field.

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

- Data-type response — allows you to collect touch-tone, speech recognition, or dial pulse information from the caller, such as an account number, ID, or callback telephone numbers. See “Data Configuration Form” on page 7-10.
- Inform-type response — provides information to the caller without prompting for input. See “Information Configuration Form” on page 7-15.
- Schedule-type response — prompts the caller for a requested callback time, if appropriate. See “Schedule Configuration Form” on page 7-17.
- Record-type response — allows you to prompt the caller to speak information, such as name, address, or reason for call, and to record the caller’s speech. See “Record Configuration Form” on page 7-18.

### Data Configuration Form

When a data-type response is selected, the system displays the Data Configuration form (Figure 7-5). All options can be entered or selected with CHOICES (F2).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - August 12, 1998
5 Edit Existing Mailbox
> Message closing phrase:
  Rock Coast Mailbox - Goodbye 1021
6 Data configuration for mailbox 100, segment 2
MESSAGE DROP OPTIONS:
  Phrase tag: _____
  Response limits: Minimum: 1 Maximum: 10
  Have caller confirm? No
  Segment required to save message? Yes
TRANSCRIPTION OPTIONS:
  Play back to transcriber? Yes
  Display field? None
  Treat as phone field? Yes Portion: Whole
  Enable automatic launch? No Message treatment: None
INPUT OPTIONS:
  Passed parameter? Yes Argument: A
Select the phrase tag that the caller will hear.
HELP CHOICES CLOSE CANCEL REFRESH
    
```

Figure 7-5. Data Configuration Form

Enter a valid phrase that will be spoken for this segment in the `Phrase tag:` field. For example, “Enter your 12-digit account number.”

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

**⇒ NOTE:**

Select a voice prompt even if you are using a passed parameter (see Passed Parameter page 7-14).

See “Access Phrases for Vectors, Mailboxes, and Standard Speech” on page 6-3 for more information about recording phrases for Callback Messaging.

22. Enter the minimum and maximum number of digits a caller can enter in the `Response limits:` field.

You can define a maximum of 24 digits for any data-type segment, however:

- Display field — The DEFINITY vector can only accept up to 16 digits in a single collect step. Therefore, if this segment is treated as a display field, the maximum number of digits is 16.
- Telephone field — The maximum number of digits depends on the dialing plan.

The system administrator specifies the number of tries the caller has to make a valid entry; the default is three tries (See “Mailbox Global Settings” on page 7-22 for more information on the setup). On the final try, the system will either skip to the next question or not save the message, depending on how you define the `Segment required to save message:` field. For example, if the `Segment required to save message:` field is set to **Yes** and the caller does not enter the correct information by the final try, the message is not saved and the `MSG_DROP` action step continues and/or vector processing continues.

**⇒ NOTE:**

Callers cannot delay more than five seconds before entering the first digit of their touch-tone response, and they cannot delay more than five seconds between digits.

23. Enter **Yes** in the `Have caller confirm:` field to have callers confirm their input.
24. Enter **Yes** in the `Segment required to save message:` field if the caller's response must be valid for the segment to be saved.

Customer Assist saves messages only when callers successfully complete all required segments. The system prompts the caller for a valid response; if the number of tries allowed expires, the system skips to the next question or does not save the message. (See “Mailbox Global Settings” on page 7-22 for more information on the setup.)

 **NOTE:**

If Customer Assist is using speech recognition or dial pulse recognition and the caller's input for a specific data segment is not understood, Customer Assist changes its input method to recording speech and inform the caller of such action. In addition, if the caller fails in the input attempt and if the input was then recorded, Customer Assist only records for that segment. For example, if in segment one, Customer Assist prompts for the area code and the caller's speech input was not understood, Customer Assist will prompt the caller to record the spoken area code. In the next segment when Customer Assist prompts for the subscriber telephone number, it will try to collect it using speech recognition. If Customer Assist fails to gather speech or dial pulse input, it will record this segment as well.

25. Enter **Yes** in the `Play back to transcriber:` field to have the agent hear the caller's response during transcription.
26. Enter one of the following in the `Display field:` field.
  - **Internal** — touch-tone information stored in this segment is sent to a collect step in a DEFINITY vector and routed to an agent's telephone extension during callback. Agents can view this information on their telephone display by pressing the CALLER INFO button (located on the display telephone) before answering the call.
  - **External** — touch-tone information is sent to a collect step in a DEFINITY vector when the customer callback is launched. When Customer Assist detects an auto attendant on the main switch at the location of the caller who left the message, Customer Assist sends this data segment *externally* to that switch. The segment is sent as touch-tones so that the switch can connect the agent directly to the caller who left the message.

For example, the caller leaves their main switch telephone number in one data segment and also leaves their extension number. Upon callback, Customer Assist dials the caller's main switch number, and when that switch answers, Customer Assist sends the second segment, the extension number, *externally* to that caller's switch to connect the agent directly to the caller.

 **NOTE:**

You can set only one data segment's display field as **Internal** in a 15-part voice form. Likewise, you can set only one data segment's display field as **External** in a 15-part voice form.

27. Enter **Yes** in the `Treat as phone field:` field to use the number to launch an automatic callback when the agent selects a launch option in transcription or when the `Enable automatic launch` option is selected.

28. Enter the portion of the caller's telephone number that you want collected in the `Portion:` field.

- **Internal** — the switch should view the telephone number as an internal number. It will dial the number as is without any other number before or after it.
- **Subscriber** — the switch should view the telephone number as a local number.
- **Area code** — the number is an area code or city code.
- **Country code** — the number is a country code; it should be used in place of the `Country code:` field value for this mailbox for this message only.
- **Whole** — the number is a local number with or without a city/area code. This option is valid only when Dial Plan is configured for fixed-length telephone numbers. This field cannot collect the country code.



**NOTE:**

After all portions or return telephone number segments are collected, Customer Assist connects the segments to form a complete telephone number to allow agents to launch an outbound customer callback.

Combinations of Portion allowed include the following:

- Internal (alone)
- Subscriber (alone)
- Whole (alone)
- Area Code and Subscriber
- Country Code, Area Code and Subscriber
- Country Code and Subscriber
- Country Code and Whole

Any other combinations are not allowed.



**NOTE:**

Use the whole portion option for countries with fixed length telephone numbers. Fixed length format allows Dial Plan to locate the area code out of the telephone number. If the country has variable length format, the telephone number has to be collected in separate segments using subscriber, area code, and possibly country code portions. The country code portion is only needed if messages in a mailbox contain telephone numbers for different countries.

29. To have the system launch an automatic callback when it reaches this segment, enter **Yes** in the `Enable automatic launch:` field. (The segment must be a data segment with a telephone field).

 **CAUTION:**

*This feature will not work when an agent is conversed from the DEFINITY into Customer Assist. For example, if an agent dialed a VDN that conversed the agent to a Customer Assist vector with a TRANSCRIBE action to transcribe messages, this feature would not be able to automatically launch an outbound call.*

 **CAUTION:**

*Whenever a remote agent launches a callback and is connected to a caller, the CONVERSANT must always be conferenced on the call. This is done by setting the CONVERSANT call conference time as high as possible, such as one hour. If the CONVERSANT call conference time expires, both the caller and the remote agent will be dropped off the call.*

 **NOTE:**

Customer Assist can deliver messages to remote agents as well as internal agents. Any agent can also dial into a mailbox and transcribe messages directly. In either case, the agent launches the callback as “launch and save” or “launch and delete.” The message will, therefore, be saved or deleted when the CONVERSANT call conference time (the time in seconds that the CONVERSANT will be conferenced with the agent during the callback) expires. If the CONVERSANT call conference time did not expire because the call ended prematurely or if the agent did not connect with the caller, the message status remains READY unless the agent presses \*99 to classify the callback as a success or a failure.

30. Enter **Save** or **Delete** in the `Message treatment:` field to specify how the system should classify the message if the conference time expires and the `Enable automatic launch:` field is enabled.

Set this field to **None** if auto launch is not enabled.

31. Enter **Yes** in the `Passed parameter:` field if the caller input for this field should be passed into a message.

For example, you can use auto-import fields, if available, for ANI, VDN, or account numbers. You can pass up to three arguments into a callback messaging message; however, only one argument can be passed per data segment. For example, if you want to pass three arguments, you must use three data segments.

The phrase tag is not spoken when a passed parameter is used, unless the passed parameter field is null.

 **NOTE:**

Once confirmation phrases are defined for parameters A, B, and C, the system will use these phrases every time these parameters are passed. Therefore, you should select standard phrases that can be used across mailboxes. For example, you can assign parameter A to the confirmation phrase for ANI and use the phrase in all mailboxes that pass this parameter.

Optionally, enter **A** for the first argument, **B** for the second argument, or **C** for the third argument in the `Argument :` field.

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

For the mailbox to use the value, the argument letters defined here must match the argument letters in the MSG\_DROP action form. If you previously selected to have the caller confirm the message, the caller is prompted to verify the passed value (see “MSG\_DROP Action” on page 5-39.)

32. Select CLOSE (F3) to add the segment and return to the mailbox form.

### Information Configuration Form

The Information Configuration form (Figure 7-6) allows you to select an informational phrase to play for the caller.

 **NOTE:**

Use CHOICES (F2) to select a phrase for an announcement.

LUCENT TECHNOLOGIES Customer Assist Care Center - August 12, 1998

5 Create New Mailbox

Message closing phrase: \_\_\_\_\_

Segment	Type	Identity Tag
1	_____	
2	_____	
3	_____	
4	_____	
5	_____	
6	_____	
7	_____	
8	_____	
9	_____	
10	_____	
11	_____	

7 Information Configuration for mailbox 123, segment 1

MESSAGE DROP OPTIONS:  
Phrase tag: \_\_\_\_\_

Select the phrase tag that the caller will hear.

HELP CHOICES CLOSE CANCEL REFRESH

Figure 7-6. Information Configuration Form

1. Enter the phrase that will be spoken for this segment in the `Phrase tag:` field. For example, "To receive a callback immediately, Press 1. To receive a callback later today, Press 2."

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

### Schedule Configuration Form

When a schedule-type response is selected, the system displays the Schedule Configuration form (Figure 7-7). All options can be entered or selected with CHOICES (F2).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - August 12, 1998
7 Schedule configuration for mailbox 123, segment 1

MESSAGE DROP OPTIONS:
  Phrase tag: _____
  Have caller confirm? No
  Segment required to save message? No

TRANSCRIPTION OPTIONS:
  Play back to transcriber? Yes

6 _____
7 _____
8 _____
9 _____
10 _____
11 _____
12 _____
13 _____
14 _____
15 _____

Select the phrase tag that the caller will hear.
HELP CHOICES CLOSE CANCEL REFRESH
  
```

Figure 7-7. Schedule Configuration Form

1. Enter the phrase that will be spoken for this segment in the `Phrase tag:` field. For example, "To receive a callback immediately, Press 1. To receive a callback later today, Press 2."

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

**⇒ NOTE:**

The options set for scheduling callbacks apply to all mailboxes and are set in the Mailbox Global Settings form. The Schedule segment prompts should reflect the global settings options.

See “Access Phrases for Vectors, Mailboxes, and Standard Speech” on page 6-3 for more information about recording phrases for Callback Messaging.

2. Enter **Yes** in the `Have caller confirm:` field to have the caller confirm the response.
3. Enter **Yes** in the `Segment required to save message:` field if the caller’s response must be valid for the segment to be saved.

If the input does not meet the criteria, the message will not be saved.

**⇒ NOTE:**

Automated scheduling of messages should not be provided as an option to the caller if call-in (and not callback) is the intended method for transcription. For call-in transcription mailboxes, consider prompting the caller to record a requested callback time instead of using scheduled callback.

4. Enter **Yes** in the `Play back to transcriber:` field to have the agent hear the caller’s response during transcription.
5. Press **CLOSE** (F3) to add the segment and return to the mailbox form.

### Record Configuration Form

When you select a record-type response, the system displays the Record form (Figure 7-8). All options can be entered or selected with the **CHOICES** (F2).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - August 12, 1998
7 Record configuration for mailbox 123, segment 1

MESSAGE DROP OPTIONS:
Phrase tag: _____
Response limits:      Minimum: 3 Maximum: 15
Recording quality:    CELP16
Have caller confirm?  No
Segment required to save message? No

TRANSCRIPTION OPTIONS:
Play back to transcriber? Yes

> 8 _____
   9 _____
  10 _____
  11 _____
  12 _____
  13 _____
  14 _____
  15 _____

Select the phrase tag that the caller will hear.

HELP CHOICES CLOSE CANCEL REFRESH
    
```

Figure 7-8. Record Configuration Form

1. Enter a valid phrase that will be spoken for this segment in the `Phrase tag:` field. For example, "Record your name and address."

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

See "Variable Administration" on page 7-63 for more information about recording phrases for Callback Messaging.

2. Enter the minimum and maximum number of seconds, up to 600, the caller can record in the `Response limits:` field.

 **NOTE:**

The system will not recognize a verbal response that is less than 1 second in duration. In addition, the caller can press "1" after responding to move to the next segment.

3. Enter the rate at which you want Customer Assist to record a spoken response in the `Recording quality:` field.

- ADPCM32 — record a spoken response at a high rate of 32-kbps ADPCM
- ADPCM16 — record a spoken response at a low rate of 16-kbps ADPCM
- CELP16 — record a spoken response at a high rate of 16-kbps CELP

4. Enter **Yes** in the `Have caller confirm:` field to have the caller confirm the recorded input. If the optional dial pulse recognition software or speech recognition software for Customer Assist is loaded, then the caller can confirm their input by using those options.

5. Enter **Yes** in the `Segment required to save message:` field if the caller's response must be valid for the segment to be saved.

If the caller must confirm this segment, the caller is informed that a valid response to this segment is required. Only those inputs that meet the criteria are acceptable. If input does not meet the criteria, the message is deleted.

6. Enter **Yes** in the `Play back to transcriber:` field to have the agent hear the caller's response during transcription.

7. Press CLOSE (F3) to add the segment and return to the mailbox form.

 **NOTE:**

The INSERT (F2) key is available to add prompts in the middle of message segments.

 **CAUTION:**

*Do not insert or delete prompts in mailboxes containing new or saved messages. Otherwise, you will not be able to recover some message segments.*

## Copying a Mailbox

Use the following steps to copy the configuration of one mailbox to a new mailbox:

1. Start at the Select Mailbox menu and select COPY MAILBOX.  
The system displays the Copy Mailbox form.
2. Enter the number of the mailbox you want to copy in the `From:` field. The system displays the name of the mailbox.  
or  
Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).
3. Enter a unique number for the mailbox in the `To:` field under the Mailbox ID column.

 **NOTE:**  
The new mailbox ID cannot already exist.

4. Enter a unique name for your mailbox in the `To:` field under the Mailbox Name column.

 **NOTE:**  
The mailbox name cannot already exist.

## Removing a Mailbox

Use this option to delete mailboxes from the system. When you delete a mailbox, you delete any messages in the mailbox, as well as any messages that were forwarded from the mailbox. If the mailbox contains messages, the system displays a warning and you can abort deletion.

 **CAUTION:**

*Forwarded messages cannot be retrieved after the mailbox where the message originated is deleted. This is because forwarded messages use the structure of the original message during transcription.*

1. Start at the Select Mailbox menu and select REMOVE MAILBOX.  
The system displays a menu of mailbox numbers.

2. Use the directional keys to highlight the number of the mailbox you want to delete or type its number.

3. Press MARK (F2).

To remove more than one mailbox, repeat step 2. To unmark a mailbox, highlight its name and press MARK (F2) again.

4. Press (ENTER).

 **NOTE:**

Before removing a mailbox, be sure to transcribe all messages in it in order to turn off the message waiting lamp on the original agent's telephone. If the mailbox has messages, Customer Assist will list the messages to allow you to cancel mailbox removal.

### Editing the AUDIT Mailbox

Callback Messaging automatically performs an hourly analysis of how much space is available on the CONVERSANT hard disk drive for message speech. Use the AUDIT mailbox to alarm an agent when available space is less than or equal to 5 percent of the space originally allotted to speech. This is important so that new messages left for agent callbacks are saved and the space on the CONVERSANT hard drive does not fill up completely.

Although the system creates this mailbox automatically, you must select it and follow the same steps for editing a mailbox to specify an agent callback number and, if you wish, a mailbox password as well as a message waiting lamp extension. To activate agent callback, you must administer global mailbox settings.

 **NOTE:**

Since the AUDIT mailbox delivers messages to agents when the available speech falls below the 5 percent threshold, be sure to also establish global mailbox settings and agent callback hours.

### Editing a Mailbox

Use the following steps to change all the various features of a mailbox, except the mailbox number:

1. Start at the Select Mailbox menu and select the name of the mailbox you want to edit.

The system displays the mailbox form.

 **CAUTION:**

*Do not insert or delete prompts in mailboxes containing new or saved messages. Otherwise, you will not be able to recover some message segments.*

- Use the directional keys to move to each item you want to change. (You cannot edit mailbox numbers.)

**⇒ NOTE:**  
The INSERT (F2) key is available to add prompts in the middle of message segments.

- Press CLOSE (F3) to save your changes.

**⇒ NOTE:**  
Before changing the extension number of a message waiting lamp, be sure to transcribe all messages in the corresponding mailbox in order to turn off the message waiting lamp for the original extension.

## Mailbox Global Settings

Use the following steps to administer mailbox settings:

- Start at the Callback Messaging Administration menu and select Mailbox Global Settings.

The system displays the Mailbox Global Settings form (Figure 7-9).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - August 12, 1998
1 Customer Assist 4 Global Settings for All Message Drop Mailboxes
Call Vector Confi
>System Administra Specify the Global Parameters for Message Drop
System Monitor AGENT ACCESS
UNIX System Channel access time: 1
Exit Access channel(s):
Force 'Press 1' for agent callback pickup: Yes

MESSAGE PLAYBACK
Speak transcription segment numbers: Yes
Play message header information: A
Number of confirmation chances: 2
Time format: 12 hour clock.

CUSTOMER CALLBACK
Allow agents to reschedule? Yes
Scheduling options:
Immediately: Yes Later today: Yes Later date: Yes
Callback conference time: 20
Allow agents to classify callbacks? Yes

Enter "AUTO" to monitor constantly or minutes between tries in calling agents.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

Figure 7-9. Mailbox Global Settings Form

- Enter the number of minutes between message delivery attempts in the Channel access time: field.

Use the default value, **1** (minute), to check the system for new messages every minute and refresh message waiting lamps every 30 seconds. You may change the default value from **1** (minute) through **999** (minutes) to extend the interval between message attempts to check for an available channel for callback. Enter **AUTO** to check after each new message is left. Please recognize that a very short retry interval may monopolize the CONVERSANT agent callback channel you assign (see next item).

**⇒ NOTE:**

If **AUTO** is selected, callback will occupy all available agent callback channels as long as there are messages in the mailboxes. Therefore, you should consider hard allocating access channels for callback and not directing inbound calls to those channels.

**⇒ NOTE:**

Whenever a message is left in a mailbox, Customer Assist lights the corresponding message waiting lamp, if defined. Whenever all messages are deleted out of a mailbox, Customer Assist extinguishes the corresponding message waiting lamp, if defined. Customer Assist also does a 'master check' every 30 minutes to make sure that each mailbox has its message waiting lamp turned on or off by resending the FAC to turn the light on or off.

3. Enter the number of the CONVERSANT channel (or range of numbers) the system uses to dial the agent callback number when delivering messages to agents in the `Access channel(s):` field.

You can use any active channels on the CONVERSANT system except those used by the ACD for standard announcements. Avoid using channels that are hard-allocated to other applications. Use commas (,) to separate numbers in a series; use hyphens (-) to separate numbers in a range.

4. Enter **Yes** in the `Force "Press 1" for agent callback:` field if blind delivery of messages to agents is used. For intelligent delivery, set this field to **Yes** if there are problems detecting speech energy.
  - Blind delivery of messages — normally used when the delivery is to an agent group, split, or VDN that has announcements or music on hold.
  - Intelligent delivery of messages — the system will playback the message as soon as it detects "speech energy," such as an announcement or music on hold.
5. Enter **Yes** in the `Speak transcription segment numbers:` field if the agent should hear the number of the segment before it is played.
6. Enter **A, M, D, d, T, t, or N** in the `Play message header information:` field to specify the information the agent will hear during message playback. See Figure 7-10 for descriptions of playback options.

```

LUCENT TECHNOLOGIES Customer Assist Care Center - August 12, 1998
1 Customer Assist 4 Global Settings for All Message Drop Mailboxes
Call Vector Confi
>System Administra Specify the Global Parameters for Message Drop
System Monitor AGENT ACCESS
UNIX System Channel access time: 1
Exit Access channel(s):
Force 'Press 1' for agent callback pickup: Yes

5 Choices
>A | All header information is played
M | Message number only is played Segment numbers: Yes
D | Date and message number are played Information: A
d | Date only is played Confirmation chances: 2
T | Time and message number are played Time format: clock.
t | Time only is played Reschedule? Yes
N | No header information is played

Delete Messages f Scheduling options:
Mapping Country/C Immediately: Yes Later today: Yes Later date: Yes
Callback conference time: 20
Allow agents to classify callbacks? Yes

Select the item and press ENTER.
ENTER CANCEL

```

Figure 7-10. Play message header information options

7. Enter the number of tries the caller has to enter the information requested in any Data, Record, or Schedule mailbox segment in the `Number of confirmation chances:` field.
  - If a segment that is not required (`Required to save:` field is set to **No**) is not confirmed, the caller will hear the next segment in the mailbox voice form.
  - If a required segment (`Required to save:` field is set to **Yes**) is not confirmed, the message is not saved, and the caller is taken out of the mailbox to continue with vector processing.
8. Enter the time format to use (12-hour or 24-hour clock) when scheduling callbacks in the `Time format:` field.
9. Enter **Yes** in the `Allow agents to reschedule:` field to allow agents to reschedule callbacks using the settings in step 10. Enter **No** in this field if you do not want agents to be able to reschedule callbacks.
10. Enter **Yes** in the `Scheduling menu options:` field to allow agents to reschedule a time for agent callback. Enter **No** in this field if you do not want agents to be able to reschedule a time for agent callback.

This option is used both by the caller and agent (during transcription). The options are to be called back:

- Immediately
- Later today
- Later date

Each option corresponds to voice prompts directing the caller to: “Press 1, to be called back immediately”; “Press 2, to schedule a callback later today”; and “Press 3, to schedule a future date.”

**⇒ NOTE:**

These prompts may be rerecorded in phrases appropriate for your Customer Assist (see Chapter 6, “Speech Administration”, for more information).

**⇒ NOTE:**

If Immediately is set to **Yes**, and Later today and Later date is set to **No**, then the caller will not hear anything unless the actual Schedule segment is set to confirm or if the segment is required to save.

11. Enter the number of seconds that the CONVERSANT should remain on the line after performing a customer callback in the `Callback conference time:` field.

Set this field to the minimum number of seconds required for agents to determine whether they reached the right person or need to classify the call. If the agent is reached via an outside call, set the conference time to the number of seconds required for the duration of the call between the customer and the agent. Due to the nature of the DEFINITY switch, a local call party to the switch is needed to maintain the conference/call. Since both the agent and the customer are outside the switch, the CONVERSANT must be in the call. Otherwise, if the CONVERSANT drops from the conference, the entire conference/call is broken, disconnecting both the agent and the customer.

During intelligent and blind transfers, the `Callback conference time` starts when the agent is brought back into the call.

- During an intelligent transfer to an agent, the agent's voice or “speech energy,” such as music on hold, signals the CONVERSANT to playback a new message for transcription.
  - If the agent wants to return the call, the CONVERSANT puts the agent on hold, launches a call to the customer, and monitors the connection for call energy tones, such as a busy signal or speech energy. If it detects busy or out of order tones, or if there is no answer within the specified time limit, the CONVERSANT drops the line to the customer and brings the agent back in on the call to inform the agent the call failed. If the CONVERSANT detects an answer or speech energy, it considers the call “successful” and conferences the agent back into the call, remaining on the line for the amount of time entered in the `Callback conference time:` field.
- During a blind transfer to an agent, the CONVERSANT system begins prompting for agent input immediately after it finishes dialing. Once an agent responds to the prompt, “Press 1 to begin

transcription,” the transcription process begins. If an agent does not respond, the system eventually “times out” and makes another attempt later.

- If the agent chooses to return the call, the CONVERSANT places the agent on hold, launches a call to the customer, and does not monitor the connection for a busy signal. Immediately after the CONVERSANT dials the customer, the agent is brought back into the conference call. If the line is busy, the agent must press **\*99**, which drops the customer, and classify the call by saving, deleting, or skipping the message.

 **NOTE:**

If a remote agent launches an outbound call during callback messaging, the CONVERSANT does not drop out of the conference when the Callback conference time expires. If the CONVERSANT drops out of the conference, the entire call is brought down—dropping both the agent and the caller.

12. Enter **Yes** in the `Allow agents to classify callbacks:` field to allow agents to reclassify the status of the callback by pressing **\*99**.
  - If the agent classifies the message as successful, the status of the current message is either saved or deleted (as controlled by the agent, or as controlled by Customer Assist in the Data segment field `Enable automatic callback`).
  - If the agent classifies the message as unsuccessful, the status of the current message is set to ready (meaning that this message will be delivered to agents as usual). This is helpful in tracking outbound calls to callers leaving messages.

## Agent Callback Hours

Use the following steps to specify the times agent callbacks can be made using the Agent Feature Access:

1. Start at the Callback Administration Messaging menu and select Agent Callback Hours.

The system displays the Agent Callback Hours form (Figure 7-11).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Customer Assist Care Center
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit
2 System Administration
  >Callback Messaging Administration
  Conversant Administration
  Custom Call Routing Administration
  Report Generation
  Report Scheduling
  Speech Administration
  Survey Configurations
  System Administration
  System Administration
3 Callback Messaging Administration
  Mailbox Administration
  Mailbox Global Settings
  >Agent Callback Hours
  Customer Callback Hours
  Delete Messages from Mailbox
  Mapping Country/City/Area Codes to Time
4 Agent Callback Hours
  Callback Hours (hours:minutes AM/PM)
  Start time Stop time
  SUN 12:00 AM 12:00 AM
  MON 08:00 AM 05:00 PM
  TUE 08:00 AM 05:00 PM
  WED 08:00 AM 05:00 PM
  THR 08:00 AM 05:00 PM
  FRI 08:00 AM 05:00 PM
  SAT 12:00 AM 12:00 AM
Enter the hour and press Return or the ENTER key.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
  
```

Figure 7-11. Agent Callback Hours Form

2. In the *Start time* column, enter the times that the system should begin delivering messages to agents automatically for each day of the week.  
Leave times at 12:00 am to suspend this feature.
3. In the *Stop time* column, enter the times that the system should stop delivering messages to agents automatically for each day of the week.  
Leave times at 12:00 am to suspend this feature.
4. Press CLOSE (F3) to save your changes.

### Customer Callback Hours

This option allows you to specify the hours during which Customer Assist can launch callbacks to customer. Use the steps below to administer the customer callback hours:

1. Start at the Callback Messaging Administration menu and select Customer Callback Hours.

The system displays the Customer Callback Hours form (Figure 7-12).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Customer Assist Care Center
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit
2 System Administration
  >Callback Messaging Administration
  Conversant Administration
  Custom Call Routing Administration
  Report Generation
  Report Scheduling
  Speech Administration
  Survey Configurations
  System Administration
  Variable Administration
3 Callback Messaging Administration
  Mailbox Administration
  Mailbox Global Settings
  Agent Callback Hours
  >Customer Callback Hours
  Delete Messages from Mailbox
  Mapping Country/City/Area Codes to Time
4 Customer Callback Hours
  Callback Hours (hours:minutes AM/PM)
  Start time      Stop time
SUN  12:00 AM    12:00 AM
MON  08:00 AM    05:00 PM
TUE  08:00 AM    05:00 PM
WED  08:00 AM    05:00 PM
THR  08:00 AM    05:00 PM
FRI  08:00 AM    05:00 PM
SAT  12:00 AM    12:00 AM
  
```

Enter the hour and press Return or the ENTER key.

HELP CHOICES CLOSE ENTER CANCEL REFRESH

Figure 7-12. Customer Callback Hours Form

2. In the *Start time* column, enter the times that the system should begin launching callbacks to customers for each day of the week.  
Leave times at 12:00 am to suspend this feature.
3. In the *Stop time* column, enter the times that the system should stop launching callbacks to customers for each day of the week.  
Leave times at 12:00 am to suspend this feature.
4. Press CLOSE (F3) to save your changes.

### Delete Messages from Mailbox

This option allows you to delete messages by status and age from a given mailbox. Use the steps below to delete messages from the mailbox:

1. Start at the Callback Messaging Administration menu and select Delete Messages from Mailbox.  
The system displays the Delete Messages from Mailbox form (Figure 7-13).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Customer Assist Care Center
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit
2 System Administration
  >Callback Messaging Administration
  Conversant Administration
  Custom Call Routing Administration
  Report Generation
  Report Scheduling
  Speech Administration
  Survey Configurations
  System Backup/Restore
  Variable Administration
3 Callback Messaging Administration
  Mailbox Administration
  Mailbox Global Settings
  Agent Callback Hours
  Customer Callback Hours
  >Delete Messages from Mailbox
  Mapping Country/City/Area C
4 Delete Messages from Mailbox
  Mailbox ID: _____
  Status: All
  Age of message: All days

Enter the id of the mailbox to delete from.

HELP CHOICES CONT CANCEL REFRESH
    
```

Figure 7-13. Delete Messages from Mailbox Form

2. Enter the number of the mailbox that contains the messages you want to delete in the Mailbox ID: field; press CHOICES (F2) to select from a list.
3. Enter **All**, **New**, or **Saved** in the Status: field to indicate the type of messages you want to delete; press CHOICES (F2) to select from a list.
4. Enter the number of days the message must have been in the mailbox in order to be deleted in the Age of message: field.  
Enter a number from one through 99.
5. Press CLOSE (F3) to delete the messages that match the criteria you entered in the Delete Messages from Mailbox form.

### Mapping Country/City/Area Codes to Time Zones

This option allows you to adjust the time entered by the caller to match your local time. This process, called mapping, insures your customers are called only during normal business hours. This menu has the following options:

- ADD MAPPING
- REMOVE MAPPING
- Edit an existing mapping

Use the steps below to add a mapping:

1. Start at the Callback Messaging Administration menu and select

```
> Mapping Country/City/Area Codes to Time Zones
```

```
> Add Mapping
```

The system displays the Add Mapping form (Figure 7-14).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Customer Assist Care 5 Add Mapping
Call Vector Configurati
>System Administration
System Monitor
UNIX System
Exit
Country code: 1
City/Area code:
Time zone:
GMT offset:

Survey Configurations
4 Mapping Country/City/Area Codes to Time Zones
>ADD MAPPING
REMOVE MAPPING
1 201 US/Eastern
1 202 US/Eastern
1 203 US/Eastern
1 205 US/Central
1 206 US/Pacific
1 207 US/Eastern
1 208 US/Mountain
1 209 US/Pacific

3 Callback Messaging A
Mailbox Administration
Mailbox Global Settings
Agent Callback Hours
Customer Callback Hours
Delete Messages from Mailbo
>Mapping Country/City/Area C

Enter the country code.
HELP CHOICES SAVE CANCEL REFRESH CHK-TIME
    
```

Figure 7-14. Add New Mapping Form

2. Enter the country code of the country you want to map in the `Country code:` field.
3. Enter the area code of the city you want to map in the `Area code:` field.
 

This field is optional; it allows the system administrator to create a “country default” time zone entry. Customer Assist uses the procedure below to determine the time zone of the caller:

  - a. Customer Assist looks at the `Country code:` field and then the `City/Area code:` field.
  - b. If the `City/Area code:` field does not have an entry, Customer Assist looks at the Country Code record.

Step b provides the system administrator with a method to:

  - Build a safety net for missing or new area codes

- Easily set up a time zone table for countries that are in a single time zone
  - c. If the “country default” is not found, Customer Assist uses the voice platform’s local time zone.
4. Enter a name for the time zone to map in the `Time zone:` field.
- The number of hours difference between your area code and the area code you are mapping appears in the `GMT offset:` field when you specify a time zone.
5. Press CLOSE (F3) to add your new mapping to Customer Assist.

## CONVERSANT Administration

Use this menu to monitor, diagnose, and control the CONVERSANT system resources. See your CONVERSANT manual for more information.

---

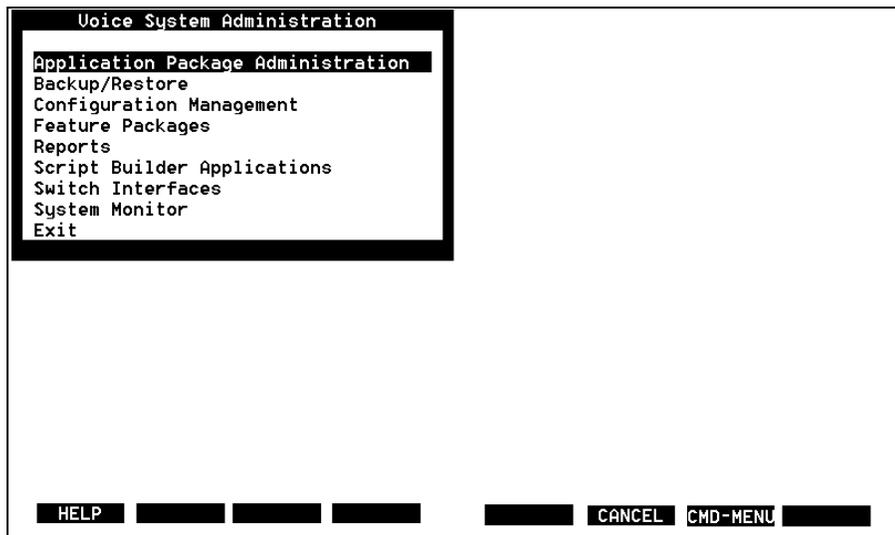


Figure 7-15. CONVERSANT Administration Main Menu

## Custom Call Routing Administration

Use this menu to create, delete, and modify tables for Custom Call Routing applications. Options include:

- Import/Export Data from/to Floppy

- Routing Table Administration
- Record Administration

Use the following steps to access the Custom Call Routing Administration menu:

1. Start at the System Administration menu and select

```
> Custom Call Routing Administration
```

The system displays the Custom Call Routing Administration menu (Figure 7-16).

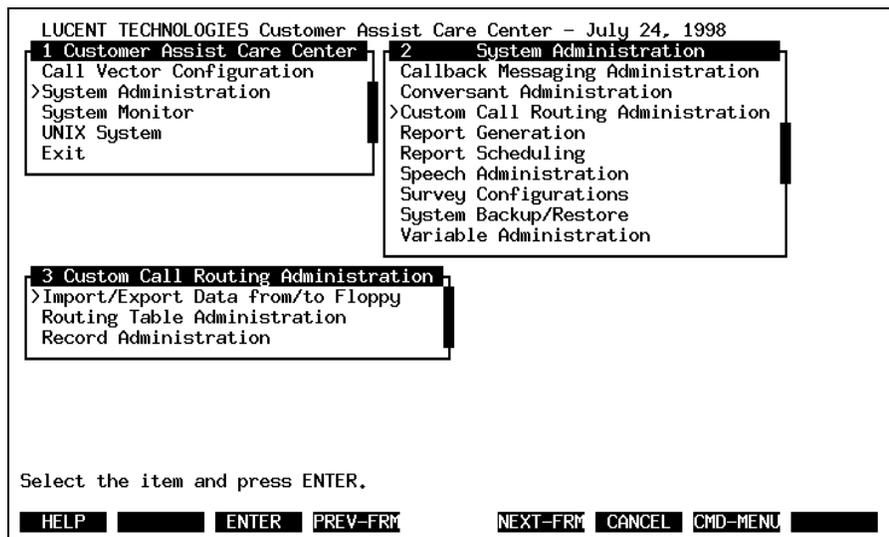


Figure 7-16. Custom Call Routing Administration Menu

### Import/Export Data from/to Diskette

---

Use these options to exchange data between Custom Call Routing tables and flat ASCII files on DOS diskettes. You can also use these options to move to a new, larger, database table if it becomes apparent that your original database is too small.

### Access Import/Export Routing Table Form

Use the following steps to access the Import/Export Routing Table form:

1. Start at the System Administration menu and select Custom Call Routing Administration.

The system displays the Import/Export Routing Table form (Figure 7-17).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Customer Assist Care Center
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit
2 System Administration
  Callback Messaging Administration
  Conversant Administration
  >Custom Call Routing Administration
  Report Generation
  Report Scheduling
  Speech Administration
  Survey Configurations
4 Import/Export Routing Table
  Import/Export data from/to DOS diskette
  Import/Export: Import
  Routing Table Name:
  Append/Replace: Replace
  Drive A or Drive B: A
  Path: /
  Filename:
  Field delimiter: |
  Filter Non-Numeric?: N
Select routing table import or export.
HELP CHOICES SAVE DIR ENTER CANCEL REFRESH
  
```

Figure 7-17. Import/Export Routing Table Form

### Modify the Import/Export Routing Table Form

Use the following steps to modify the Import/Export Routing Table form:

1. Insert the DOS-formatted diskette containing the information you want to use into disk drive 0 or 1 on the voice platform.
2. Enter the direction of the data transfer in the `Import/Export:` field.

or

Press **CHOICES** (F2) to select from a list. Use the arrow keys to make a choice and press **ENTER**.

- **Import** — data comes from a DOS-formatted diskette.
  - **Export** — specific table data is saved to a DOS-formatted diskette.
3. Enter the name of the table you want to populate in the `Routing Table Name:` field.
  4. Enter the action you wish to take in the `Append/Replace:` field.
    - **Append** — modifies the existing data.
    - **Replace** — replaces the existing data.
  5. Enter the name of the disk drive you are using in the `Drive A or Drive B:` field.

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

6. Enter the file's location on disk in the Path: field.

Do not include the file name, but be sure to begin and end the path with a forward slash (/). Use this slash also to separate the names of the directories and subdirectories in the path. If you are exporting data, be sure that this path corresponds to an existing path on your diskette.

7. Enter the name of the source file, if you are importing data, or the name of the destination file, if you are exporting data, in the Filename: field.

or

Press DIR (F4) for a directory of files on disk.

8. Enter the delimiter you use in your file to separate items of information Field delimiter: field.

Customer Assist uses this delimiter to assign information appropriately to columns 1, 2, and 3.

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

- | (pipe symbol)
- % (percentage sign)
- & (ampersand)
- - (minus sign)
- , (comma)
- : (colon)
- ; (semicolon).

9. Enter y to remove non-numeric data in the Filter Non-Numeric?: field.

or

Enter n to keep this data intact.

10. Press SAVE (F3).

 **NOTE:**

When importing a table, the data will come in on replace mode, meaning that it will replace any data that currently exists in the table in which you wish the data to populate.

## **Routing Table Administration**

---

Customer Assist routing tables can have up to three columns of information. For call routing applications, use the:

- First column to identify callers (by Calling Party Number, for example)
- Second column for the corresponding extensions or VDNs to dial
- Third column, if you wish, for information to use with the DATA\_RTN action for call accounting, or to populate the dialed agent's telephone display

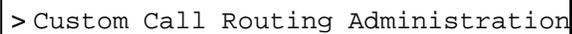
Options in the Routing Table Administration form, shown in Figure 7-18, include:

- Add Table
- Delete Table

## **Access Routing Table Administration**

Use the following steps to access the Routing Table Administration:

1. Start at the System Administration menu and select



> Custom Call Routing Administration



> Routing Table Administration

The system displays the Routing Table Administration menu (Figure 7-18).

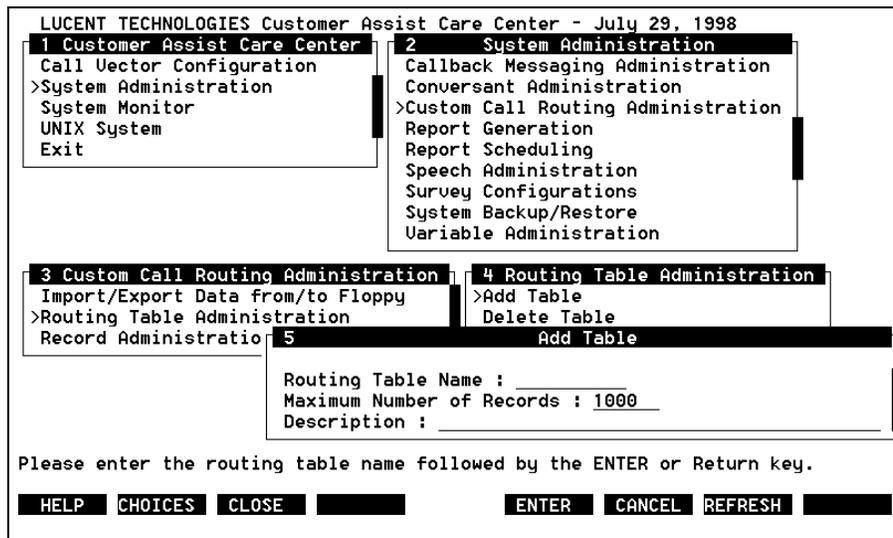


Figure 7-18. Routing Table Administration Menu

### Adding a Table

Use the following steps to add a table:

1. Start at the Routing Table Administration menu and select Add Table.  
The system displays the Add Table form.
2. Enter the name of the table you want to add in the Routing Table Name: field.
3. Enter the maximum number of records you expect this table to contain in the Maximum Number of Records (100 to 200,000): field.
4. Optionally, enter a description to associate with this table.
5. Press CLOSE (F3).

### Deleting a Table

Use the following steps to delete a table:

1. Start at the Routing Table Administration menu and select Delete Table.
2. Use the directional keys to highlight the name of the table you want to delete, or type the first few letters of its name.
3. Press MARK (F2).
4. To remove more than one table, return to step 2. To unmark a table, highlight its name and press MARK (F2) again.
5. Press (ENTER).

**! CAUTION:**

*You cannot recover deleted tables.*

### Record Administration

Use the following steps to add, modify, or delete individual records in a database table:

1. Start at the Custom Call Routing Administration menu and select Record Administration.

The system displays the Record Administration menu (Figure 7-19).

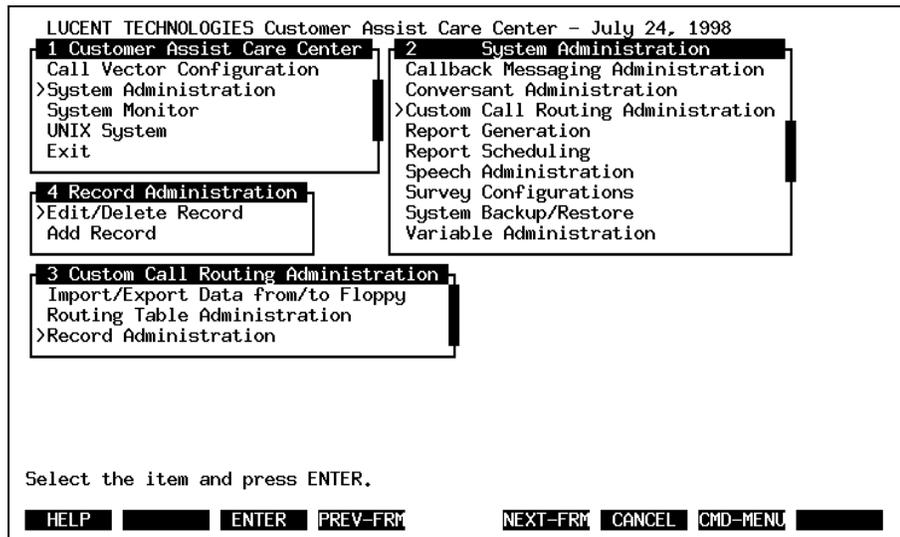


Figure 7-19. Record Administration Menu

2. Select Edit/Delete Record or Add Record.

### Editing or Deleting a Record

Use the following steps to edit or delete a record:

1. Start at the Record Administration menu and select Edit/Delete Record.  
The system displays the Edit/Delete Record form (Figure 7-21).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Customer Assist Care Center
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit

4 Record Administration
  >Edit/Delete Record
  Add Record

3 Custom Call Routing Administration
  Import/Export Data from/to Floppy
  Routing Table Administration
  >Record Administration

2 System Administration
  Callback Messaging Administration
  Conversant Administration
  >Custom Call Routing Administration
  Report Generation
  Report Scheduling
  Speech Administration
  Survey Configurations
  System Backup/Restore
  Variable Administration

5 Edit/Delete Record
  Routing Table Name: _____
  Lookup Field: _____
  Have you filled in all the fields?: Y

Please enter the routing table name followed by the Enter or Return key.

HELP CHOICES CLOSE ENTER CANCEL REFRESH
  
```

Figure 7-20. Record Administration Menu with Edit/Delete Record Form

2. Enter the name of the database table you want to administer in the Routing Table Name: field.  
or  
Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).
3. Enter the value you want to locate in the table's first column in the Lookup Field: field.
4. Enter Y in the Have you filled in all the fields?: field.



**NOTE:**

All three fields must be completed to edit or delete a record. The last field is a reminder.

5. Press CLOSE (F3).

If the table contains a match, the table name and key field will appear with the value in Data Field 1 (the first column after the key field) and the value in Data Field 2 (the second column after the key field).

- To delete this record, press DELETE (F4).
- To modify this record, enter your changes and press CHANGE (F5).
- To exit this record without making changes, press CANCEL (F6).

### Adding a Record

Use the following steps to add a record:

1. Start at the Record Administration menu and select Add Record.

The system displays the Record Administration form (Figure 7-20).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 29, 1998
1 Customer Assist Care Center
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit

2 System Administration
  Callback Messaging Administration
  Conversant Administration
  >Custom Call Routing Administration
  Report Generation
  Report Scheduling
  Speech Administration
  Survey Configurations
  System Backup/Restore
  Variable Administration

4 Record Administration
  Edit/Delete Record
  >Add Record

3 Custom Call Routing Administration
  Import/Export Data from/to Floppy
  Routing Table Administration
  >Record Administration

5 Record Administration
  Routing Table Name: _____
  Lookup Field: _____
  Data Field 1: _____
  Data Field 2: _____

Please enter the routing table name followed by the Enter or Return key.

HELP CHOICES ADD CANCEL REFRESH
    
```

Figure 7-21. Record Administration Menu with Add Record Form

2. Enter a name for the database table in the Routing Table Name: field.  
or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

3. Enter the value you want to place in the table's first column in the Lookup Field: field.
4. Enter the value you want to place in the first column after the key field in the Data Field 1: field.

5. Enter the value you want to place in the second column after the key field in the Data Field 2: field.
6. Press ADD (F3)

## Report Generation

---

This menu option allows you to choose which report to generate. For most reports, you can view criteria, such as the day or time to run the report. Each report can be printed or viewed on screen.

 **NOTE:**

See Chapter 8, "Reports", for more information on report generation.

## Report Scheduling

---

Use this form to select reports that will run on a scheduled basis as well as the time to run them. You can run reports at any time that is convenient.

 **NOTE:**

See Chapter 8, "Reports", for more information on scheduling reports.

## Speech Administration

---

Use this menu to record and document speech.

 **NOTE:**

See Chapter 6, "Speech Administration", for more information.

## Survey Configurations

---

This menu allows you to add, remove, or copy a survey. It is up to you how you want to configure the survey. (See "Overview of Surveys" on page 1-25 for more information about Surveys.)

 **NOTE:**

Before you can configure surveys, you must have a mailbox created on the system.

## Adding a Survey

---

Before you can collect and package the caller input left in a specific mailbox, you must add a survey.

To add a survey:

1. Select ADD SURVEY

The system displays the Add New Survey form (Figure 7-22).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - August 13, 1998
1 4 Add New Survey
C
>S Survey name: _____
S Mailbox ID: _____
U Output generated: Both
E
REPORT
3 Output filename: _____
>A Destination directory: /usr/spanlink/ccc/data/survey
R Summarize the data? Yes Print automatically? No
C
A DATA FILE
A Output filename: _____
A Destination directory: /usr/spanlink/ccc/data/survey
Summarize the data? Yes Delimiter: ,

Type of messages: All Include message information: Data

Delete messages older than: 14 days with status: All
Delete reports and data files older than: 14 days

Enter the unique survey name.
HELP CHOICES SAVE SEG-ADM VAL-ADM CANCEL REFRESH
    
```

Figure 7-22. Add New Survey Form

2. Enter the name in the `Survey name:` field.  
Choose a unique name for your survey.
3. Enter the number of the mailbox you want to administer in the `Mailbox ID` field.
4. Enter **Report**, **Data**, or **Both** in the `Output generated` field to indicate what type of format the survey should take.
  - **Report** — allows you to view caller input in table form. It provides headers that identify the caller and show which questions the caller answered. Currently you can view only single digits in this form.
  - **Data** — allows you to view all caller input in segments. Unlike Reports, this form allows you to view exactly what the caller put into the system. It separates each entry with a delimiter, such as a comma.
  - **Both** — generates both Report and Data file formats.
5. If you want the output to appear in a report (or both):
  - a. Decide the file where the report should be written.
  - b. Enter the file name in the `Output filename` field.

- c. You can also select whether you want the data to be summarized and printed automatically.
6. If you want the output to go to a data file (or both):
  - a. Enter the name of the file where the output should go.
  - b. Enter a delimiter (see list below) to separate the data.
    - | (pipe symbol)
    - % (percentage sign)
    - & (ampersand)
    - - (minus sign)
    - , (comma)
    - : (colon)
    - ; (semicolon)
7. Enter the type of message you want to include in your report and/or data file into the `Type of messages` field:
  - **All** — all types of messages
  - **Ready** — messages that have not been marked as saved or deleted
  - **Saved** — all messages agents marked as saved

Customer Assist uses a Callback Messaging mailbox to prompt the caller and collect the survey information. Depending on your needs, you may configure the mailbox to prompt the caller for both recorded information and digital input. A survey enables you to view the digital input, but it cannot display recorded information. Therefore, you will need to transcribe and save any messages containing recorded information.

This field allows you to select the type of messages you want to include in the report.

8. Enter the type of information you want to include in your report into the `Include message information:` field.
  - **All** — includes the message number and date
  - **Data** — does not include any additional information
  - **Date** — includes the date
  - **Msgnum** — includes the message number
9. Enter the number of days the system should wait before deleting messages into the `Delete messages older than:___` field.

Use the next field to specify the type of fields the system deletes.
10. Enter type of messages the system should delete into the `type of message after days with status:___` field.

- **All** — all types of messages
  - **Ready** — messages that have not been marked as saved or deleted
  - **Saved** — messages agents marked as saved
11. Determine how many days the system should wait before deleting reports and data files.
  12. Enter a value into the Delete reports and data files older than: \_\_ field.  
  
Enter the number of days the system should wait before deleting reports and data files.

### Removing a Survey

Use this option when you no longer want to generate a particular survey. To remove a survey:

1. Select REMOVE SURVEY.

The system displays a list of available surveys (Figure 7-23).

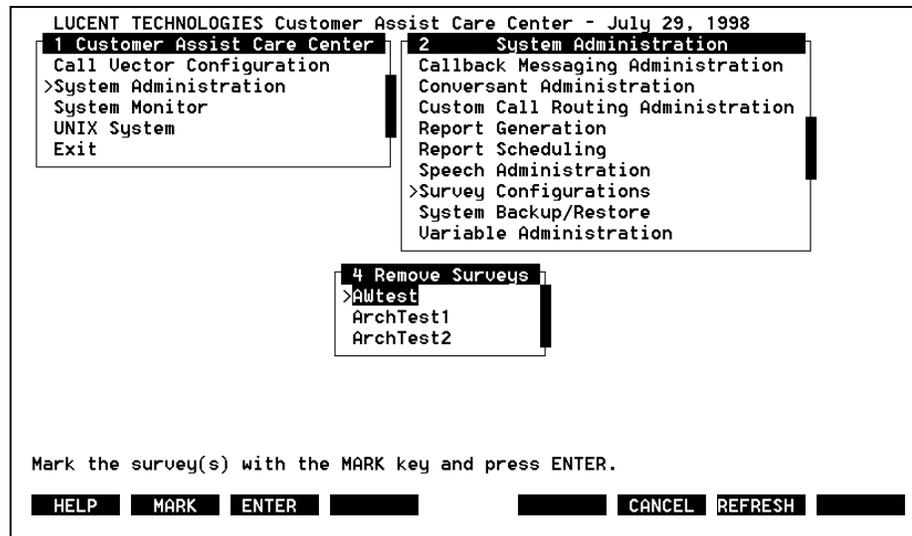


Figure 7-23. Remove Survey menu

2. Press MARK (F2) to mark the survey you wish to delete
3. Press (ENTER)

4. The software gives you the option to continue with the deletion or to abort. Press CONT (F3) to continue or CANCEL (F6) to go back to the Remove Surveys Menu.

## Copying a Survey

Each survey applies to one mailbox. You cannot assign a survey to more than one mailbox. If you want to apply a survey to a different mailbox, you can do this by creating a copy of the original survey, and then applying the duplicate survey to the new mailbox.

Use the following steps to copy a survey:

1. Select COPY SURVEY

The system displays the Copy Survey form (Figure 7-24).

Figure 7-24. Copy Survey Form

2. Enter the name of the survey you want to copy.  
Press CHOICES (F2) for a list of options.
3. Name your survey in the TO: Survey Name: field.
4. Press SAVE (F3) to save the new survey

## Editing a Survey

Use the following steps to edit an existing survey:

1. Select the survey you want to edit.
2. Make your changes.
3. To save your changes, press SAVE (F3).
4. To exit this screen without saving your changes, press CANCEL (F6).

## System Backup/Restore

Use this menu to save and retrieve sets of Customer Assist database and configurations. Options include:

- Restore Vector Database
- Backup Vector Database to Floppy Disk
- Backup/Restore Speech
- Backup/Restore Mailbox Configuration
- Backup/Restore Time Zone Mappings
- Backup/Restore Survey Configuration
- Format Floppy Disk
- Restore Data from Previous Version of Customer Assist
- Backup Verification
- Copy file from/to Diskette



**NOTE:**

See "Import/Export Data from/to Diskette" on page 7-32 for information on how to backup and restore routing tables.

Customer Assist vectors are maintained in three databases:

- Runtime database of active vectors
- Development database of duplicate runtime vectors that you can modify without instantly changing the way the system handles calls
- Archive database of previously active vectors

Speech phrases used by Customer Assist vectors are stored in talkfile 6104 (US English). Phrases used by message drop mailboxes are stored in talkfile 6105

(US English). Mailbox standard phrases are stored in talkfile 6102 (US English). Standard speech phrases are stored in talkfile 6100 (US English).

**NOTE:**

See Table A-2 on page A-3 for talkfile numbers of alternative languages.

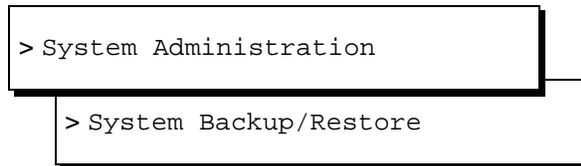
**CAUTION:**

*The system will overwrite the contents of any diskette you use to back up data. Therefore, never use the same diskette to back up more than one vector database or talkfile.*

### Access System Backup/Restore

Use the following steps to access System/Backup and Restore:

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



The system displays the System Backup/Restore menu (Figure 7-25).

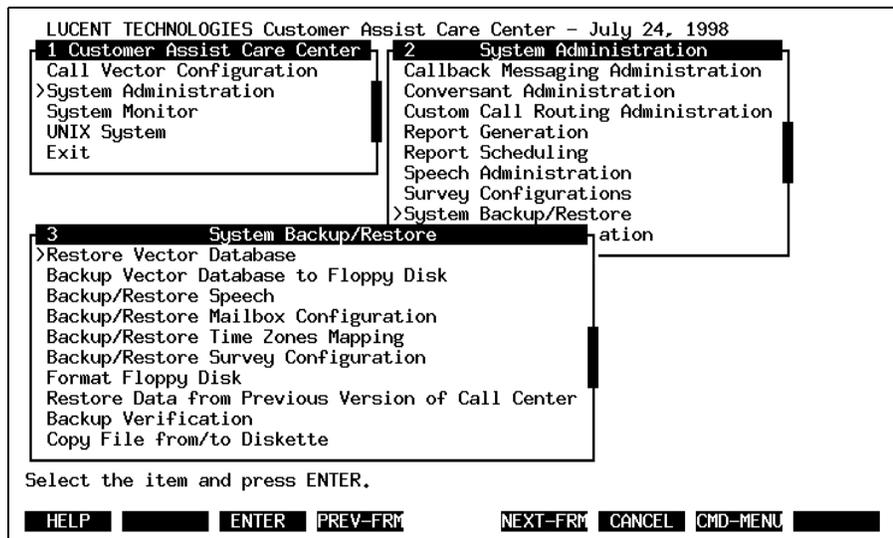


Figure 7-25. System Backup/Restore Menu

## Restore Vector Database

Use this menu to restore the previous runtime database, to replace the development database with the current runtime database, and to replace the development database with data from a diskette. Options include:

- Restore Previous Run-Time (Archive) Database
- Restore Database from Current Run-Time
- Restore Database from Diskette (Floppy Diskette)

### ⇒ NOTE:

You must place the vectors in service after you restore the vector database. See "Place New Vectors in Service" on page 4-38 for more information.

## Access Restore Vector Database

Use the following steps to access the Restore Vector Database menu:

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

The system displays the Restore Vector Database menu (Figure 7-26).

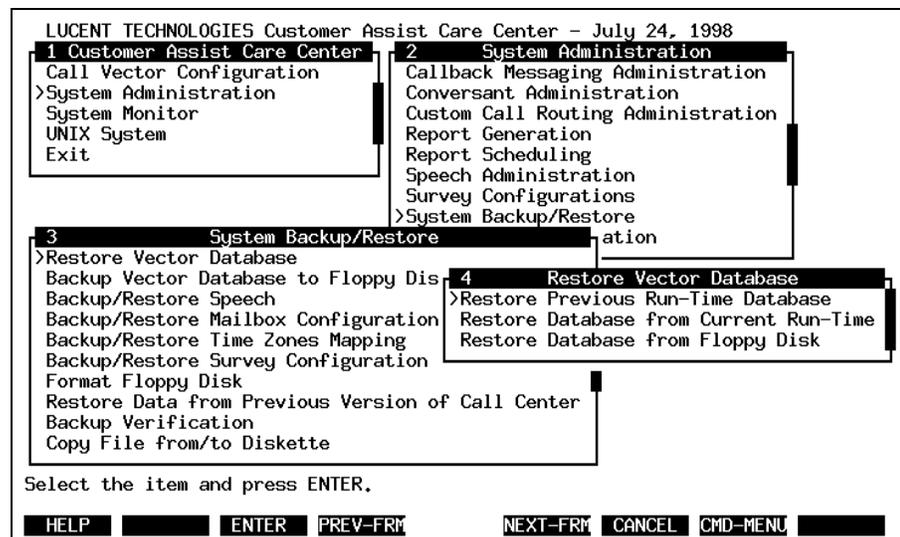


Figure 7-26. Restore Vector Database

### Restore Previous Run-Time Database

Use this option to undo the changes you made to the database of active Customer Assist vectors when you last placed new vectors in service at the Vector Configuration menu.

Use the following steps to restore the previous runtime database:

1. Start at the Restore Vector Database menu and select Restore Previous Run-Time Database.

The system prompts you for confirmation.

2. Press CONT (F3) to restore or CANCEL (F6) to abort.

### Restore Database from Current Run-Time

Use this option to undo changes you made to the development database of Customer Assist vectors when you placed new vectors in service at the Vector Configuration menu.

Use the following steps to restore the previous runtime database:

1. Start at the Restore Vector Database menu and select Restore Database from Current Run-Time.

The system prompts you for confirmation.

2. Press CONT (F3) to restore or CANCEL (F6) to abort.

### Restoring the Database from Diskette

Use this option to overwrite the contents of the development database with a database of Customer Assist vectors from diskette.

Use the following steps to restore the database from diskette:

1. Start at the Restore Vector Database menu and select Restore Database from Floppy Diskette.

The system displays the Restore Database from Floppy Diskette form.

2. Insert the diskette into disk drive 0 or 1 on the voice platform.
3. Enter **UNIX** or **DOS** in the UNIX or DOS format: field to specify the format of the diskette.

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

4. Enter **0** or **1** in the Drive 0 or Drive 1: field to specify which disk drive to use.

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

5. Press SAVE (F3).

### Back Up Vector Database to Diskette

Use this option, shown in Figure 7-27, to copy the development database of Customer Assist vectors to a diskette.

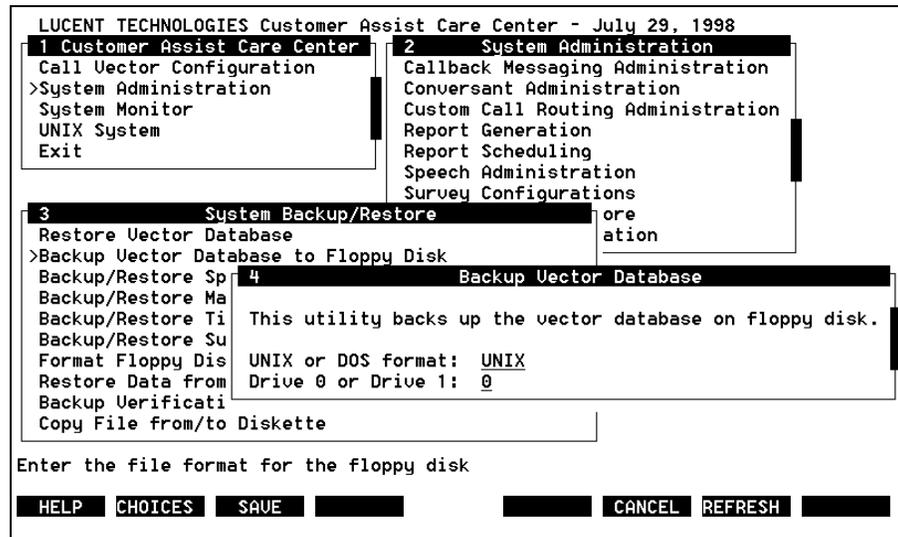


Figure 7-27. Backing Up the Development Database to a Diskette

Use the following steps to copy the development database to a diskette:

1. Start at the System Backup/Restore menu and select Backup Vector Database to Diskette.
2. Insert a diskette into disk drive 0 or 1 on the voice platform.

**⇒ NOTE:**

If you want to back up vectors, but you have not yet formatted this disk, press CANCEL (F6) to return to the previous menu and choose the Format Floppy Disk option.

3. Enter **UNIX** or **DOS** in the UNIX or DOS format: field to specify the format of the diskette.

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

4. Enter **0** or **1** in the Drive 0 or Drive 1: field to specify which disk drive to use.

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

5. Press SAVE (F3).

Follow the instructions carefully and do not insert or remove diskettes until you are prompted to do so.



**NOTE:**

To back up the runtime database:

- a. Back up the development database to diskette.
- b. Select Restore Database from Current Run-Time to overwrite the development database with the runtime database.
- c. Perform your backup on a different diskette.

### Backup/Restore Speech

Use this option, shown in Figure 7-28, to move speech phrases between talkfiles and diskettes.

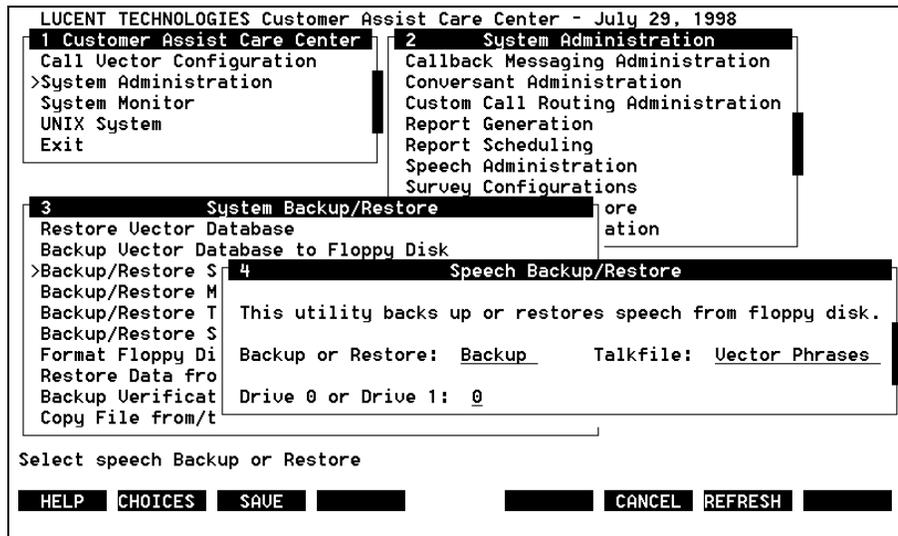


Figure 7-28. Backing Up and Restoring Speech

Use the following steps to backup and restore speech:

1. Start at the System Backup/Restore menu and select Backup/Restore Speech.
2. Enter **Backup** or **Restore** in the Backup or Restore: field to specify the activity you want to perform.

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

3. Insert a diskette into disk drive 0 or 1 on the voice platform.



**NOTE:**

If you want to back up speech, but you have not yet formatted this disk, press CANCEL (F6) to return to the previous menu and choose the Format Floppy Disk option.

4. Select one of the following four talkfiles:
  - Vector phrases (for all languages)
  - Mailbox phrases (for all languages)
  - 6100 (Standard Speech phrases for US English)
  - 6102 (Mailbox Standard Speech phrases for US English)
5. Enter **0** or **1** in the Drive 0 or Drive 1: field to specify which disk drive to use.

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

6. Press SAVE (F3).

### Backup/Restore Mailbox Configuration

Use the following steps to move data between the database of mailbox configuration settings and a diskette:



**NOTE:**

You must stop and then restart the voice system when performing this procedure.

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

The system displays the Backup/Restore Mailbox Configuration form.

2. Enter **Backup** or **Restore** in the Backup or Restore: field to specify the activity you want to perform.

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

3. Insert a diskette into drive 0 or 1 on the voice platform.



**NOTE:**

If you want to back up mailbox settings, but you have not yet formatted this disk, press CANCEL (F6) to return to the previous menu and choose the Format Diskette option.

4. Enter **0** or **1** in the Drive 0 or Drive 1: field to specify which disk drive to use.

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).



**CAUTION:**

*Restoring Mailbox Configuration will overwrite any existing mailboxes and messages on your system.*

5. Press SAVE (F3).

## **Backup/Restore Time Zones Mapping**

---

Use the following steps to backup and restore the time zone mappings:

1. Start at the System Administration menu and select



The system displays the Backup/Restore Time Zones Mapping menu (Figure 7-29).

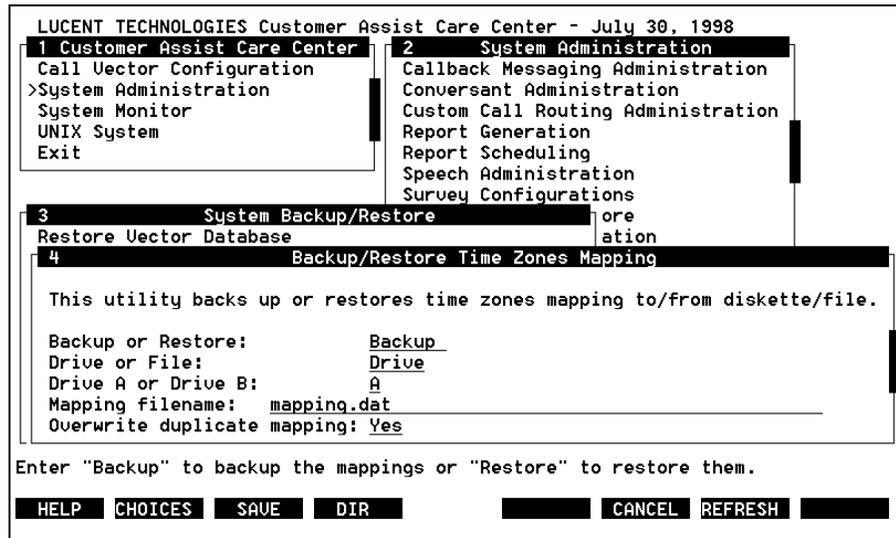


Figure 7-29. Backup/Restore Time Zones Mapping

2. Enter **Backup** or **Restore** in the Backup or Restore: field to specify the activity you want to perform.
3. Enter **Drive** or **File** in the Drive or Field: field to specify the location of the time zone mappings.  
or  
Press CHOICES (F2) to choose from a list. Use the arrow keys to make a choice and press (ENTER).
4. Enter **A** or **B** in the Drive A or Drive B field to specify the location of the diskette.
5. Enter the name of the file in the Mapping filename: field.
6. Enter **Yes** in the Overwrite duplicate mapping: field if the entries from the diskette/file should overwrite the entries with the same key fields that are currently in the database.
7. Press CLOSE (F3) to backup or restore the time zone mappings.

### Backup/Restore Survey Configuration

Use the following steps to backup and restore the survey configuration:

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

2. Select Backup/Restore Survey Configuration.

The system displays the Backup/Restore Survey Configuration menu (Figure 7-30).

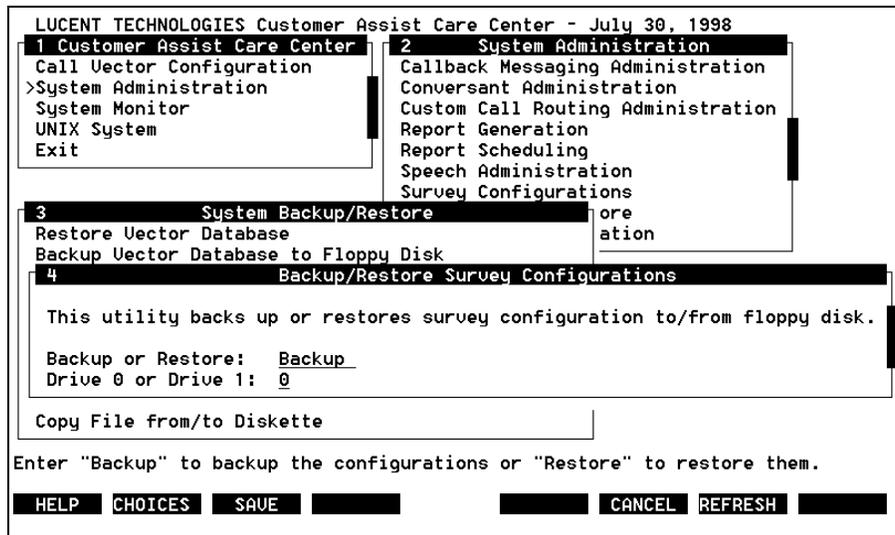


Figure 7-30. Backup/Restore Survey Configuration

3. Enter **Backup** or **Restore** in the Backup or Restore: field to specify the activity you want to perform.
4. Enter **0** or **1** in the Drive 0 or Drive 1: field to specify which disk drive to use.

or

Press CHOICES (F2) to choose from a list. Use the arrow keys to make a choice and press (ENTER).

5. Press CLOSE (F3) to backup or restore the survey configuration.

## Format Floppy Disk

---

Use this option to initialize a 3 1/2" high-density diskette that has not yet been formatted. Diskettes need to be formatted only once.

Use the following steps to format a floppy disk:

1. Start at the System Backup/Restore menu and select Format Floppy Disk.  
The system displays the Format Floppy Disk form.
2. Insert a diskette into disk drive 0 or 1 on the voice platform.

3. Enter **UNIX** or **DOS** in the UNIX or DOS format: field to specify the format of the diskette.

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

4. Enter **0** or **1** in the Drive 0 or Drive 1: field to specify which disk drive to use.

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).



**NOTE:**

Whenever you format a diskette, you permanently erase its contents.

5. Press SAVE (F3).

### Restore Data from a Previous Version of Call Center

---

Use this option to upgrade from an earlier version of Customer Assist to V7.0. Before you upgrade your system and choose to restore data from your previous version of Customer Assist, however, be sure to use your previous version to back up vectors, speech, mailbox configuration and routing table data.

Options include:

- Restore Development Vector Database
- Restore Speech
- Restore Mailbox Configuration

### Access Restore Data from a Previous Version of Call Center

Use the following steps to access this menu:

1. Start at the System Backup/Restore menu and select Restore Data from Previous Version of Call Center.

The system displays the Restore Data from Previous Version of Call Center menu.

### Restoring the Development Vector Database from a Previous Version of Call Center

Use the following steps to restore the development vector database from a previous version of Customer Assist:

1. Start at the Restore Data from Previous Version of Call Center menu and select Restore Development Vector Database.

The system displays the Restore Development Vector Database form.

2. Insert the diskette containing the data into disk drive 0 or 1 on the voice platform.
3. Enter **UNIX** or **DOS** in the `UNIX or DOS format:` field to specify the format of the diskette.

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

4. Enter **0** or **1** in the `Drive 0 or Drive 1:` field to specify which disk drive to use.

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

5. Press SAVE (F3).

### Restoring Speech from a Previous Version of Customer Assist

Use the following steps to restore speech from a previous version of Customer Assist:

1. Start at the Restore Data from Previous Version of Call Center menu and select Restore Speech.

The system displays the Restore Speech form.

2. Insert the diskette containing the data into disk drive 0 or 1 on the voice platform.
3. Enter **0** or **1** in the `Drive 0 or Drive 1:` field to specify which disk drive to use.

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

4. Enter the talkfile number corresponding to the speech you want to restore in the `Talkfile:` field.

Select one of the following talkfiles:

- 224 (Vector phrases)
- 242 (Mailbox phrases)
- 243 (Mailbox standard phrases)
- Vector Phrases

- Mailbox Phrases
- 6100 Standard Speech: US English
- 6102 Mailbox Standard: US English

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

5. Press SAVE (F3).



**NOTE:**

Phrases in talkfile 224 will be restored to talkfile 6104 and phrases in talkfiles 242 will be restored to talkfile 6105, and phrases in talkfile 243 will be restore to talkfile 6102.

### **Restoring Mailbox Configuration from a Previous Version of Customer Assist**

Use the following steps to restore the mailbox configuration from a previous version of Customer Assist:

1. Start at the Restore Data from Previous Version of Call Center menu and select Restore Mailbox Configuration.

The system displays the Restore Mailbox Configuration form.

2. Insert the diskette containing the data into disk drive 0 or 1 on the voice platform.
3. Enter **0** or **1** in the Drive 0 or Drive 1: field to specify which disk drive to use.

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

4. Press SAVE (F3).

### **Backup Verification**

---

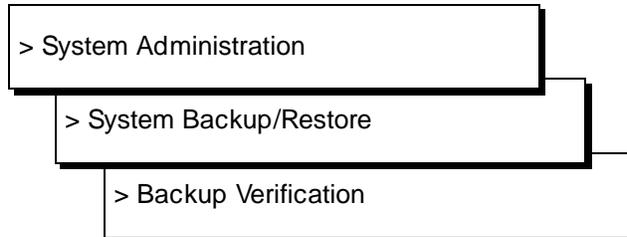
Customer Assist provides you with a utility that allows you to make sure that your backup was successful. Use this menu option to verify that you have successfully backed up the following to diskette:

- Vector
- Speech
- Routing
- Mailbox
- Surveys

### Access Backup Verification Form

Use the following steps to access the Backup Verification form:

1. Start at the Customer Assist main menu and select



The system displays the Backup Verification form (Figure 7-31).

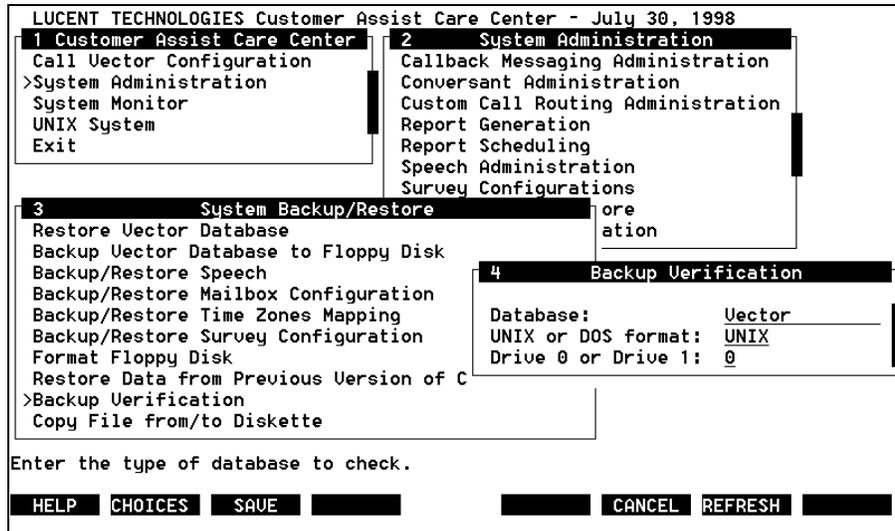


Figure 7-31. Backup Verification Form

### Modify Backup Verification Form

Use the following steps to modify the Backup Verification form:

1. Enter the type of database for which you want to verify backup in the Database: field.

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

2. Enter **UNIX** or **DOS** in the UNIX or DOS format: field to specify the format of the diskette.
3. Insert the diskette into the disk drive.
4. Enter **0** or **1** in the Drive 0 or Drive 1: field to specify which disk drive to use.



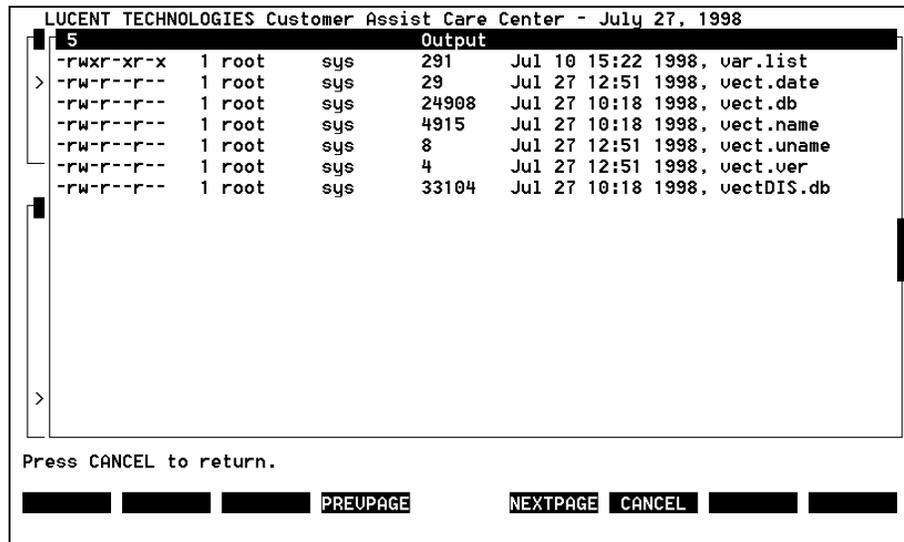
**NOTE:**

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

5. Press **CLOSE** (F3) to begin verifying the backup of the database.

### Verifying Vector Database Backups

Use the following screen capture to help determine whether your backup was successful.



**Figure 7-32. Verify Vector Backup Output**

A successful backup contains numerous files, including a **vect.db** file. If the size of the **vect.db** file is 0, the vector database that was backed up is empty.

### Verifying Speech Backups

Use the following screen capture to help determine whether your backup was successful.

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
5 Output
-rw-r--r-- 1 root sys 1892 Jul 27 13:44 1998, Speech.db
> -rw-r--r-- 1 root sys 4 Jul 27 13:44 1998, Speech.ver
-rw-r--r-- 1 root sys 29 Jul 27 13:44 1998, Speech.date
-rw-r--r-- 1 root sys 8 Jul 27 13:44 1998, Speech.uname
-rw-r--r-- 1 root sys 15 Jul 27 13:44 1998, Speech.tkfile
-rw-r--r-- 1 root sys 5 Jul 27 13:44 1998, tkfile.list

Press CANCEL to return.
PREUPAGE NEXTPAGE CANCEL
```

Figure 7-33. Verify Speech Backup Output

The output lists the contents of the diskette. The listing may be very large; the size depends upon the number of phrases in the talkfile. The file list should include five speech files and several speech phrase files. The speech phrase file format is written as two numbers separated by a forward slash (for example, 6105/1000). The number before the slash is the talkfile where the phrase resides. The number after the slash is the phrase number. The example above is for talkfile 6105 and contains several phrases.

If the backup shows 0 files fitting this format, the talkfile does not have any phrases recorded currently.

### Verifying Mailbox Configuration Backups

Use the following screen capture to help determine whether your backup was successful.

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
5 Output
-rw-r--r-- 1 root sys 98 Jul 27 13:52 1998, Mailbox.cbkhfs
> -rwxr-xr-x 1 root sys 98 Jul 27 13:52 1998,
Mailbox.ccbkhfs
-rw-r--r-- 1 root sys 9393 Jul 27 13:52 1998, Mailbox.dat
-rw-r--r-- 1 root sys 29 Jul 27 13:52 1998, Mailbox.date
-rw-r--r-- 1 root sys 42 Jul 27 13:52 1998, Mailbox.glob
-rw-r--r-- 1 root sys 8 Jul 27 13:52 1998, Mailbox.uname
-rw-r--r-- 1 root sys 4 Jul 27 13:52 1998, Mailbox.ver

Press CANCEL to return.
PREVPAGE NEXTPAGE CANCEL
```

Figure 7-34. Verify Mailbox Backup Output

The output lists the contents of the diskette. A successful backup contains numerous files, including a **mailbox.dat** file. If the **mailbox.dat** file is of size 0, no mailboxes are defined currently.

### Verifying Custom Call Routing Backups

Use the following screen capture to determine whether your backup was successful.

The file that must be on the diskette is the filename typed in at the administration menu. If the size of this file is 0, the routing table has 0 entries in it currently.

#### ⇒ NOTE:

For Custom Call Routing, you can only save a file to DOS format.

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
5 Output
Volume in drive /dev/rdisk/f0t has no label
> Directory of /dev/rdisk/f0t:/

ROCKCOAS      25   9-03-98  10:12a
      1 File(s) 1457152 bytes free

Press CANCEL to return.
PREVPAGE  NEXTPAGE  CANCEL
```

Figure 7-35. Verify Routing Table Backup Output

### Copy File from/to Diskette

---

Select this option to copy files from a diskette to your hard drive, or from your hard drive to your diskette.

Use the following steps to format a floppy disk:

1. Start at the System Backup/Restore menu and select Copy File from/to Diskette.  
The system displays the Copy File from/to Diskette form.
2. Enter **DISK\_TO\_FILE** or **FILE\_TO\_DISK** to choose the direction of the transfer.  
or  
Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).
3. Insert a diskette into disk drive 0 or 1 on the voice platform.
4. Enter the name of the file on diskette in the File name on diskette: field.

5. Enter **UNIX** or **DOS** in the UNIX or DOS format: field to specify the format of the diskette.

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

6. Enter **0** or **1** in the Drive 0 or Drive 1: field to specify which disk drive to use.

or

Press CHOICES (F2) to select from a list. Use the arrow keys to make a choice and press (ENTER).

7. Enter the name of the file on the hard drive in the File name on hard drive: field.
8. Enter the name of the directory in the Directory name: field.
9. Press SAVE (F3).

## Variable Administration

---

To add or edit a variable name or remove a variable from the list of choices, select one of the following options (shown in the Variable Administration menu in Figure 7-36):

- ADD NEW VARIABLE
- REMOVE VARIABLE
- The name of each variable you can edit (by highlighting the variable name and pressing (ENTER)).

## Access Variable Administration

---

Use the following steps to access the Vector Administration menu:

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

```
> System Administration
> Variable Administration
```

The system displays the Variable Administration menu (Figure 7-36).

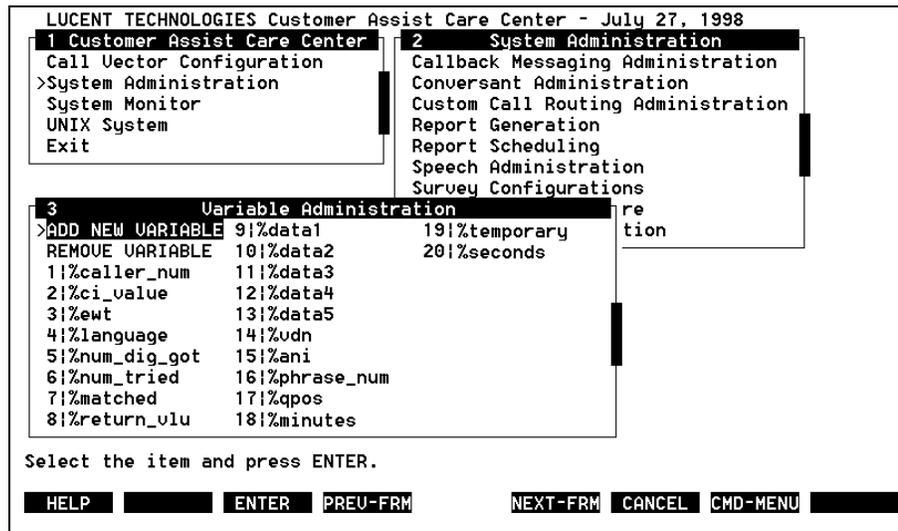


Figure 7-36. Variable Administration Menu

### Adding a Variable

Customer Assist can accommodate 42 variables. It has 13 pre-set variables, and you can add 29 custom variables with names up to 11 characters in length.

Use the following steps to add a variable name to the list:

1. Start at the Variable Administration menu and select ADD NEW VARIABLE. The system displays the Add New Variable form.
2. Enter a unique name for your variable in the Name %: field.
3. Press SAVE (F3).

### Removing a Variable

Use the following steps to delete variables from the system.

#### CAUTION:

*The first 13 variables may not be deleted because they are used in actions or templates. Before removing a variable, be sure to remove or rename every occurrence of that variable's name in your vectors; otherwise, the system will provide a warning prior to placing vectors in service. Use the Vector Detail Report to determine which variables your vectors use.*

1. Start at the Variable Administration menu and select REMOVE VARIABLE.  
The system displays a list of variables.
2. Use the directional keys to highlight the name of the variable you want to delete, or type its number.
3. Press MARK (F2).  
To remove more than one variable, return to step 2. To unmark a variable, highlight its name and press MARK (F2) again.
4. Press (ENTER).

### Editing a Variable

Use this option to change the name of a variable.

#### CAUTION:

*The first 13 variables may not be edited because they are used in actions or templates. After changing the name of a variable, be sure to replace occurrences of the old variable name in your vectors with the new variable name; otherwise, the system will provide a warning prior to placing vectors in service. Use the Vector Detail Report to determine which variables your vectors use.*

Use the following steps:

1. Start at the Variable Administration menu and select the name of the variable you want to administer.  
The system displays the Edit Variable form.
2. Type a new name.
3. Press SAVE (F3) to save your changes.

## System Monitor

---

The system monitor keeps track of calls coming into Customer Assist.

- See *INTUITY CONVERSANT System Version 7.0 Administration*, 585-310-591, for more information on the system monitor.

### Access System Monitor

---

Use the following steps to access the system monitor:

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

```
> System Monitor
```

The system displays the System Monitor (Figure 7-37).

Channel	Calls Today	Voice Service	Service Status	Caller Input	Dialed Digits
0	0		*Foos		
1	0		*Foos		
2	0		*Foos		
3	0		*On Hook		
4	0		*Foos		
5	0		*Foos		
6v	0	BGM			
7v	0				
8v	0				
9v	0				
10v	0				
11v	0				

Figure 7-37. System Monitor of Voice Channels

### Column Descriptions

Table 7-1 defines each column that appears in the System Monitor.

Table 7-1. Column Descriptions for System Monitor

Field	Description
Channel	The monitored call came in on this channel.
Calls Today	The number of calls that came in on this channel

*Continued on next page*

**Table 7-1. Column Descriptions for System Monitor — *Continued***

Field	Description
Voice Service	The name of the script or application.
Service Status	The status of the script or application, as follows: *On Hook = channel is on hook; Offhook = channel is off hook; DIP (0 -34) = Data Interface Process (DIP) is processing a transaction on a certain channel; Talking = channel is playing speech; Collect = channel is collecting caller input; Local DB = channel is accessing local database; CCA = channel is in process of call classification; Transfer = channel is transferring call; Host = channel is linked to host; Coding = channel is encoding voice; Dialing = channel is dialing digits; *Pending = channel is in a transitory state; *Diagnose = channel is being diagnosed; *MANOOS = channel is manually out of service; *FOOS = channel is in a facility out-of-service state; *Nonex = channel is non-existent; *Broken = channel is broken; *Initing = channel is being initialized at system start up; *UNKNOWN = channel is experiencing a breakdown in communication
Caller Input	Any touch-tone digits received from the caller.

## **Summary**

---

While working through this chapter, you learned how to set up mailboxes, configure surveys, administer routing tables, backup/restore your system, and perform variable administration.

- See Chapter 8, “Reports”, for information on how to generate and schedule reports.



This chapter describes each report as well as the procedures for viewing, printing, backing up, and saving them. You can view and print certain reports from your web browser. Use this chapter to learn how to administer reports.

## Reports Administration

Create Customer Assist reports from the Report Generation menu. Use these reports to view the system configuration and how customers as well as agents handle calls. For example, these reports can show how vectors are performing, the number of messages in each mailbox, and the success rate of agent callbacks.

View reports on screen or print them for your paper files. Certain reports can be saved to a specified directory.

### NOTE:

If you have the Apache Web Server and Web Based Report, you can view the following reports via the web:

- Agent Callback Count
- Event Count
- Event Detail
- Message Download
- Message Log
- Routing Table
- Speech Space Available Test

- Survey Report
- Traffic Report
- Transcription Detail
- Vector Usage

### Access UNIX-Based Reports

---

Use the following steps to access the Report Administration menu from the UNIX-based administration:

1. Start at the Customer Assist Administration menu and select

```
> System Administration
> Report Generation
```

The system displays the Report Administration menu (Figure 8-1).

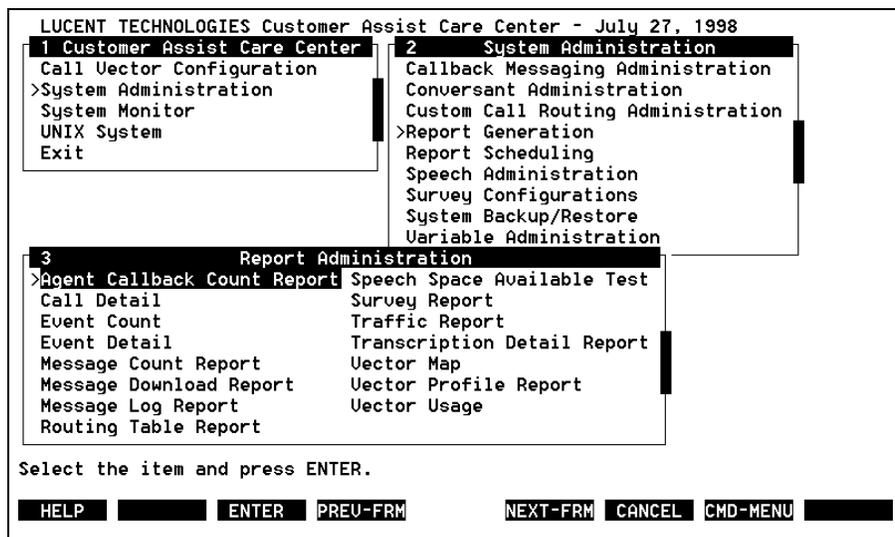


Figure 8-1. Reports Menu

Follow the instructions shown in the next sections for generating each report. Reports output to the screen and do not print automatically.



**NOTE:**

Some reports may take more than three minutes to process if you generate them during heavy traffic periods. Do not generate reports during heavy traffic or else you will slow down voice processing functions.

### Access Web-Based Reports

---

Use the following steps to access the reports from your web browser:

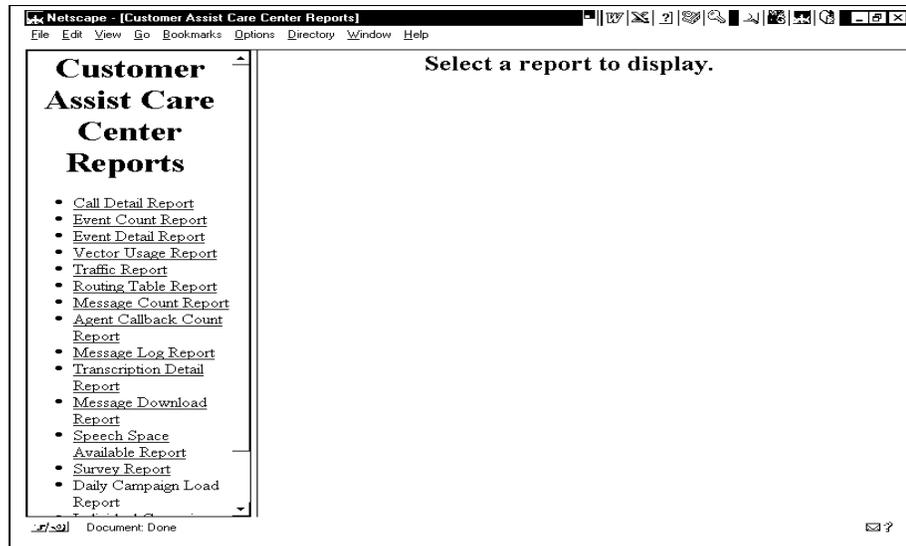
1. Start the browser.
2. Enter the following URL in the URL Locator: **http://<CONVERSANT domain name>/cgi-bin/ccrReports/ccrReports**



**NOTE:**

Replace <CONVERSANT domain name> with the domain name of your CONVERSANT.

The browser window displays the menu for web-based reports (Figure 8-2).



**Figure 8-2. Browser Window for Web-Based Reports**

## Navigating Web-Based Reports

The browser window is divided into two frames. Use the left frame to select the type of report you want to administer. Use the right frame to modify the form you have selected.

Use the following steps to navigate web-based reports:

1. Click the report you want to administer. (See specific report headings for report descriptions.)

The system prompts you to specify parameters.

2. Click the down arrow next to each field for a list of valid options.

 **NOTE:**

To modify web-based reports, use the field definitions documented for UNIX-based reports. However, use the procedures documented in this section.

3. Click Generate Reports.

The system displays the report in the right frame.

4. To print a web-based report, select the print icon or File > Print Frame.

 **NOTE:**

If your browser does not support this action, see your browser's manual for more information.

 **NOTE:**

In order to print, your printer must be attached to your computer or your computer must be configured so that all print jobs automatically go to the network printer.

## Agent Callback Count Report

The Agent Callback Count Report lists the number of attempted agent callbacks each hour as well as the number of successful and unsuccessful connections to agents. Reports can be configured to print automatically once per day in the format shown.

### Example

Use this report to determine how your agents and system are performing. For example, are agents transcribing messages promptly? Are callback attempts successful? This report can help determine whether or not your site is adequately staffed for the number of agent callbacks that must be made each day.

### Access the Agent Callback Count Report Form

Use the following steps to access the Agent Callback Count Report form:

1. Start at the Report Administration menu and select

```
> Agent Callback Count Reports
```

When you select this report, you are prompted for the following:

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
1 Customer Assist Care Center      2 System Administration
  Call Vector Configuration        Callback Messaging Administration
>System Administration            Conversant Administration
  System Monitor                  Custom Call Routing Administration
  UNIX System                      >Report Generation
  Exit                             Report Scheduling
                                     Speech Administration
                                     Survey Configurations
                                     System Backup/Restore
                                     Variable Administration
4 Agent Callback Count Report
  Day for Report: 07/26/98
>Agent Callback Count Report      Speech Space Available Test
  Call Detail                      Survey Report
  Event Count                       Traffic Report
  Event Detail                       Transcription Detail Report
  Message Count Report              Vector Map
  Message Download Report           Vector Profile Report
  Message Log Report                Vector Usage
  Routing Table Report
                                     stration

Press CHOICES for a list of valid dates.
HELP CHOICES CLOSE CANCEL REFRESH
    
```

Figure 8-3. Agent Callback Count Report Form

### Modify the Agent Callback Count Report Form

Use the following steps to modify the Agent Callback Count Report form:

1. Select the date of the report you want to modify in the Day for Report : field.

or

Press CHOICES (F2) for a list of valid dates.

2. Press CLOSE (F3) to run the report.

The system displays the Agent Callback Count Report (Figure 8-4).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
1 Customer Ass 5 AGENT CALLBACK COUNT REPORT
Call Vector Co
>System Adminis
System Monitor
UNIX System
Exit

Customer Assist Care Center
AGENT CALLBACK COUNT REPORT
MACHINE NAME: thumper
FOR DAY ENDING 07/26/98
RUN Mon Jul 27 14:35:50 CDT 1998

4 Agent Callba
Day for Report

3
>Agent Callback
Call Detail 00
Event Count 01
Event Detail 02
Message Count 03
Message Downlo 04
Message Log Re 05
Routing Table 06

Hour Attempts Successful %Success Failed Busy
-----
00 0 0 0 0 0
01 0 0 0 0 0
02 0 0 0 0 0
03 0 0 0 0 0
04 0 0 0 0 0
05 0 0 0 0 0
06 0 0 0 0 0

Press the CANCEL function key to cancel.
PRINT PREVPAGE NEXTPAGE CANCEL
    
```

Figure 8-4. Agent Callback Count Report

3. Use PREVPAGE (F4) and NEXTPAGE (F5) to scroll through the report.
4. To print press PRINT (F3).



**NOTE:**

In order to print, your printer must be attached to the CONVERSANT or the CONVERSANTAUDIX must be configured so that all print jobs automatically go to the network printer.

Table 8-1 defines each column that appears in this report.

Table 8-1. Column Descriptions for Agent Callback Count Report

Column	Description
Hour	Starting hour for the group of attempts (08 means 8:00-8:59 am)
Attempts	Number of agent callback attempts
Successful	Number of agent callback attempts that were successful

**Table 8-1. Column Descriptions for Agent Callback Count Report**

Column	Description
%Success	Percent of total agent callback attempts that were successful
Failed	Number of agent callback attempts that failed
Busy	Number of agent callback attempts that failed because the agent's telephone was busy

### Call Detail Report

This report offers an at-a-glance summary of activity by call. Customer Assist assigns Call ID numbers sequentially to incoming calls. Call ID number 1 corresponds to the first call received during the selected day.

**⇒ NOTE:**

*%caller\_num* can also be passed as an argument via the Converse step or by executing Customer Assist from other Script Builder applications, to link multiple appearances of the same call in reports. (See Appendix B, "Reentering Customer Assist" for more information about administering this capability.)

#### **Example**

Use this report when you first place vectors in service. Call the application and review your progress in the report. This verifies that your configuration is correct. Likewise, use this report to review the actual sequences your callers follow through your call logic.

### **Access the Call Detail Report Form**

Use the following steps to access the Call Detail Report form:

1. Start at the Report Administration menu and select



When you select this report, you are prompted for the following:

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
1 Customer Assist Care Center      2 System Administration
  Call Vector Configuration        Callback Messaging Administration
  >System Administration           Conversant Administration
  System Monitor                  Custom Call Routing Administration
  UNIX System                     >Report Generation
  Exit                             Report Scheduling
                                   Speech Administration
                                   Survey Configurations
                                   System Backup/Restore
                                   Variable Administration
3 Report Administration            4 Call Detail Report
  Agent Callback Count Report      Day for Report: Today
  >Call Detail                     Caller ID(s): last
  Event Count                     Include Report Event Detail: no
  Event Detail
  Message Count Report
  Message Download Report
  Message Log Report
  Routing Table Report
  Speech Space A
  Survey Report
  Traffic Report
  Transcription
  Vector Map
  Vector Profile
  Vector Usage
  
```

HELP CHOICES CLOSE ENTER CANCEL REFRESH

Figure 8-5. Call Detail Report form.

### Modify the Call Detail Report Form

Use the following steps to modify the Call Detail Report form:

1. Select the date of the report you want to modify in the `Day for Report :` field.  
 or  
 Press CHOICES (F2) for a list of valid dates.
2. Enter the type of calls you want described in the `Caller ID(s) :` field.
  - **all** — information on all calls
  - **last** — information about the most recent call
  - **summary** — a concise report of calls per port, percent of port usage, and call duration in seconds for the time period selected.

Use a hyphen (-) to separate numbers in a range.

3. Enter **yes** in the `Include Report Event Detail :` field to include a list of all CONVERSANT report events that interacted with the call in the order they were activated (See “Event Detail Report” on page 8-15 for more information).

or

Enter the default value **no** to exclude this information.

Pressing CHOICES (F2) allows you to cycle through yes and no responses.

4. Press CLOSE (F3).

The system displays the Call Detail Report (Figure 8-6).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - August 06, 1998
1 5 CALL DETAIL REPORT
C
>S
S      Customer Assist Care Center
U      CALL DETAIL REPORT
E      MACHINE NAME: thumper
        FOR DAY ENDING Today
4      FOR CALL IDs: last
        RUN Thu Aug 6 08:53:52 CDT 1998
D
C
I
-----
>C Call: 2          Channel: 3      Status: normal call
E Start: 08:50:35   Thu Aug 06, 1998
E Stop:  08:50:37   Duration: 2 sec.
M Vectors: 00011611
M
M
R
-----END OF REPORT-----

Press the CANCEL function key to cancel.

PRINT PREVPAGE  NEXTPAGE  CANCEL
    
```

Figure 8-6. Call Detail Report

5. Use PREVPAGE (F4) and NEXTPAGE (F5) to scroll through the report.
6. To print press PRINT (F3).



**NOTE:**

In order to print, your printer must be attached to the CONVERSANT or the CONVERSANT must be configured so that all print jobs automatically go to the network printer.

Table 8-2 defines each column that appears in this report.

**Table 8-2. Column Descriptions for Call Detail Report**

Column	Description
Call	Customer Assist assigns each call that comes into the system an identification number. It numbers calls sequentially. It resets automatically at midnight and starts with the number 1.
Start	Time the call began
Stop	Time the call ended
Vectors	Lists all Customer Assist vectors that were activated for the call
Channel	Number of the port the call used
Duration	The length of the call in seconds
Status	The result of the call. See Table 8-3 for possible results.
Events	Optionally, this field appears on the report when you enter <b>yes</b> in the Include Report Event Detail: field. (See "Event Detail Report" on page 8-15 for more information.)
% Occ	Optionally, this field appears when you summarize the report. It shows the percentage of time the port was occupied by callers.
SEG	<p>Optionally, this field may appear on this report. It indicates a single call hit a port, went back to the switch (or potentially another application, in which case it will come back on the same port), and then went back to the CONVERSANT on a different port.</p> <p>The Call Detail Report would classify that single call as two calls since it uses two ports. To avoid this problem, Customer Assist tracks that one call as two segments in one call. Therefore, the Call Detail Report also classifies the call as a single call.</p>

**Table 8-2. Column Descriptions for Call Detail Report — *Continued***

<b>Column</b>	<b>Description</b>
Variable	Optionally, this field appears only when you include the REPORT action in your vectors and set the Include Report Event Detail: field to <b>yes</b> . It shows the vectors where the REPORT action appeared and its value.

Table 8-3 describes the entries that can appear in the `Status` column.

**Table 8-3. Call Status Entries for Call Detail Report**

<b>Call Status</b>	<b>Description</b>
Caller hungup	The caller ended the call prematurely.
Calls exceeds license	Customer Assist could not process the call because it was already serving the maximum number of calls allowed by your software licensing agreement.
Data return to PBX	A DATA_RTN action caused call control to revert to the switch.
Endless loop failure	The call appeared to be trapped in an endless loop by passing from one vector to another more than 100 times.
Exec script failure	The vector transferred call control to a CONVERSANT application that it could not execute.
Executed another script	The vector passed call control to another voice platform application.
Internal DIP error	An internal UnixWare operating system or other problem inhibited a data interface process from responding.

*Continued on next page*

**Table 8-3. Call Status Entries for Call Detail Report — *Continued***

Call Status	Description
Missing vector	The vector used a GOTO, MENU, MSG_DROP, SCHEDULE, CHAN_ASN, or SWITCH action to pass control to a missing vector.
Mtc seized channel	The system administrator or the CONVERSANT system itself applied a diagnostic maintenance process to the channel during a call.
Normal Call	The vector terminated the call with a QUIT action.
Transfer call to PBX	A TRANSFER action caused call control to revert to the switch.
Vector error	The vector passed control to another vector that expected but did not receive arguments or the vector ended without a terminating QUIT action.

### Event Count Report

---

This report lists the values of all variables that you report on with the REPORT action.

**⇒ NOTE:**

To report the value of a variable as soon as the caller hangs up, include the HANG\_ACT actions in your application. Configure the HANG\_ACT action to move the application to a vector with the REPORT action. (See “HANG\_ACT Action” on page 5-30 for more information.)

### Example

Your system requests caller input and places it in the *%data1* variable, which is then saved in a database. This report allows you to view what each caller entered for *%data1*.

Did callers enter the correct information? If not, then your vector may not be configured correctly. Use these reports to insure your vectors are correct.

### Access the Event Count Report Form

Use the following steps to access the Event Count Report form:

1. Start at the Report Administration menu and select

```
> Event Count Report
```

When you select this report, you are prompted for the following:

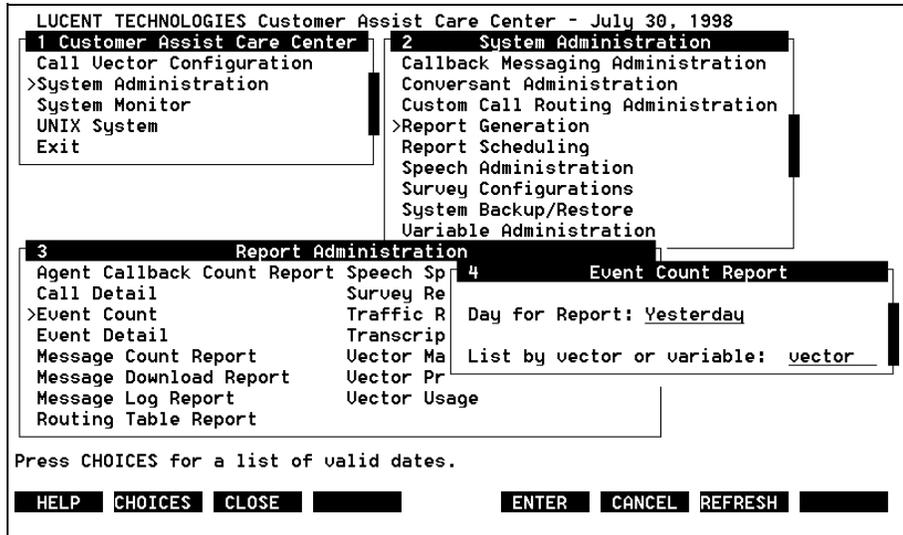


Figure 8-7. Event Count Report Form

### Modify the Event Count Report Form

Use the following steps to modify the Event Count Report form:

1. Select the date of the report you want to modify in the `Day for Report :` field.

or

Press CHOICES (F2) for a list of valid dates.

2. Enter **variable** in the `List by vector or variable:` field to list the number of times each variable held each value in any Customer Assist vector. Information in this report is not Customer Assist vector-specific. It is sorted in descending order under the Count column in the report.

or

Enter the default value **vector** to list the number of times each variable held each value in any Customer Assist vector. Information in this report is also sorted in descending order under the Count column in the report by vector number.

Pressing CHOICES (F2) allows you to cycle through vector and variable responses.

3. Press CLOSE (F3).

The system displays the Event Count Report (Figure 8-8).

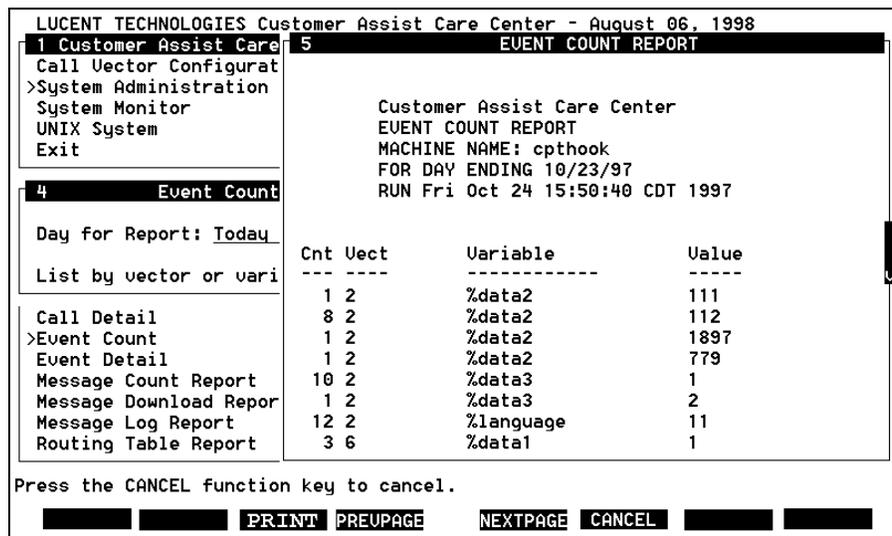


Figure 8-8. Event Count Report by Vector

4. Use PREVPAGE (F4) and NEXTPAGE (F5) to scroll through the report.

5. To print press PRINT (F3).



**NOTE:**

In order to print, your printer must be attached to the CONVERSANT or the CONVERSANT must be configured so that all print jobs automatically go to the network printer.

Table 8-4 defines each column that appears in this report.

**Table 8-4. Column Descriptions for Event Count Report**

Column	Description
Cnt	Number of times each variable was populated with that value in that vector
Vect	Vector number where this variable occurred
Variable	Name of the desired variable
Value	Populated value of this variable
Cnt	Number of times each variable was populated with that value in that vector

**Event Detail Report**

---

This report collects the following information whenever a Customer Assist vector uses the REPORT action with a variable:

- Variable name and value
- Number of the Customer Assist vector reporting
- Time of the event
- Call ID number

Unlike the Event Count Report, which groups variables with common values, the Event Detail Report documents every reported variable separately.

**Example**

These reports help you understand where callers are using your applications successfully and where you might want to improve the scripts. Use this report in conjunction with the Call Detail Report.

### Access the Event Detail Report Form

Use the following steps to access the Event Detail Report form:

1. Start at the Report Administration menu and select

```
> Event Detail Report
```

When you select this report, you are prompted for the following:

The screenshot shows a terminal window titled "LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998". It displays a multi-level menu structure:

- 1 Customer Assist Care Center**
  - Call Vector Configuration
  - >System Administration
    - System Monitor
    - UNIX System
    - Exit
- 2 System Administration**
  - Callback Messaging Administration
  - Conversant Administration
  - Custom Call Routing Administration
  - >Report Generation
    - Report Scheduling
    - Speech Administration
    - Survey Configurations
    - System Backup/Restore
    - Variable Administration
- 3 Report Administration**
  - Agent Callback Count Report
  - Call Detail
  - Event Count
  - >Event Detail
    - Message Count Report
    - Message Download Report
    - Message Log Report
    - Routing Table Report
  - Speech Space Avail
  - Survey Report
  - Traffic Report
  - Transcription Data
  - Vector Map
  - Vector Profile Report
  - Vector Usage
- 4 Event Detail Report**
  - Day for Report: Friday
  - Variable: all

At the bottom of the screen, there are several control buttons: HELP, CHOICES, CLOSE, ENTER, CANCEL, and REFRESH.

Figure 8-9. Event Detail Report Form

### Modify the Event Detail Report Form

Use the following steps to modify the Event Detail Report form:

1. Select the date of the report you want to modify in the Day for Report : field.  
or  
Press CHOICES (F2) for a list of valid dates.
2. Enter the name of the variable you want described or all in the Variable: field.  
or  
Press CHOICES (F2) for a list of variables.
3. Press CLOSE (F3).

The system displays the Event Detail Report (Figure 8-10).

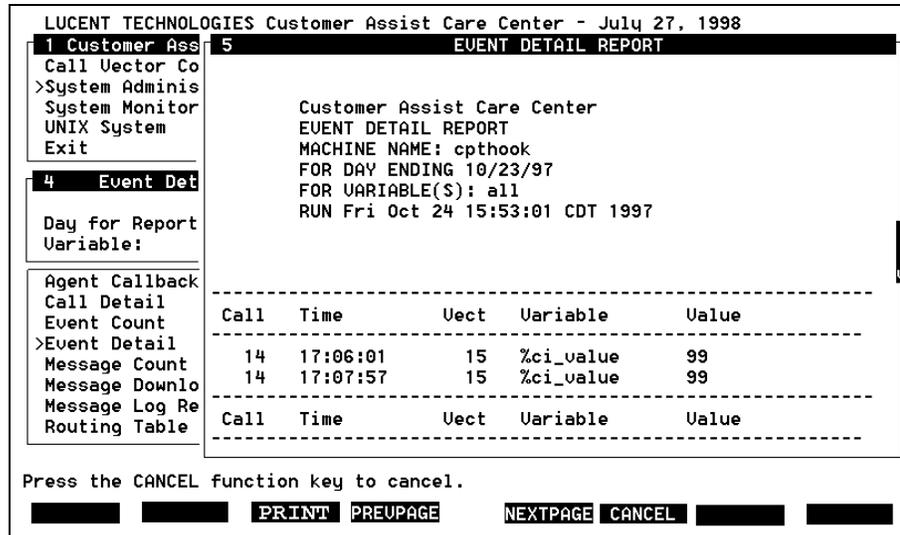


Figure 8-10. Event Detail Report

4. Use PREVPAGE (F4) and NEXTPAGE (F5) to scroll through the report.
5. To print press PRINT (F3).



**NOTE:**

In order to print, your printer must be attached to the CONVERSANT or the CONVERSANT must be configured so that all print jobs automatically go to the network printer.

Table 8-5 defines each column that appears in this report.

Table 8-5. Column Descriptions for Event Detail Report

Column	Description
Call	Identifying number of the current call
Time	Time the caller reached the REPORT action

*Continued on next page*

**Table 8-5. Column Descriptions for Event Detail Report — *Continued***

<b>Column</b>	<b>Description</b>
Vect	Number of the vector that is reporting
Variable	Name of the desired variable
Value	Value of this variable

### **Message Count Report**

This report includes the number of ready and saved messages in each mailbox. Only mailboxes containing messages are included.

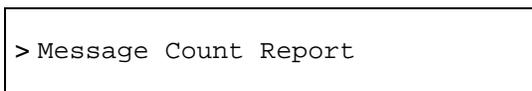
#### **Example**

This report enables you to check the number of outstanding messages, that is, the number of messages that have not been transcribed. It also reports the number of messages that have been transcribed for each mailbox.

#### **Access the Message Count Report Form**

Use the following steps to access the Message Count Report form:

1. Start at the Report Administration menu and select



When you select this report, you are prompted for the following:

```
LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
1 Customer Assist Care Center
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit
2 System Administration
  Callback Messaging Administration
  Conversant Administration
  Custom Call Routing Administration
  >Report Generation
  Report Scheduling
  Speech Administration
  Survey Configurations
  System Backup/Restore
  Variable Administration
3 Report Administration
  Agent Callback Count Report Spe
  Call Detail Sur
  Event Count Tra
  Event Detail Tra
  >Message Count Report Uec
  Message Download Report Vector Profile Report
  Message Log Report Vector Usage
  Routing Table Report
4 Message Count Report
  Mailbox: all

HELP CHOICES CLOSE CANCEL REFRESH
```

Figure 8-11. Message Count Report Form

### Modify the Message Count Report Form

Use the following steps to modify the Message Count Report form:

1. Enter the number of the mailbox you want described or **all** in the Mailbox: field.

or

Press CHOICES (F2) to select from a list.

2. Press CLOSE (F3).

The system displays the Message Count Report (Figure 8-12).

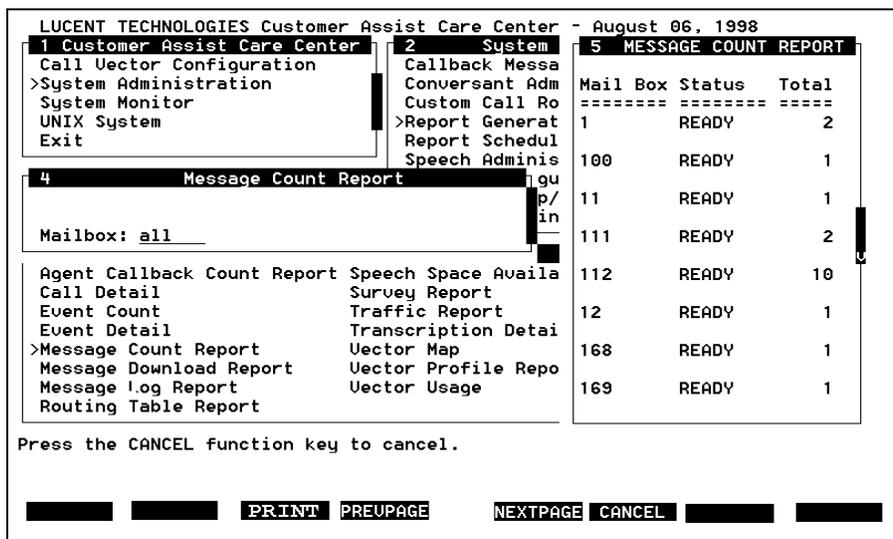


Figure 8-12. Message Count Report

3. Use PREVPAGE (F4) and NEXTPAGE (F5) to scroll through the report.
4. To print press PRINT (F3).



**NOTE:**

In order to print, your printer must be attached to the CONVERSANT or the CONVERSANT must be configured so that all print jobs automatically go to the network printer.

Table 8-6 defines each column that appears in the report.

Table 8-6. Column Descriptions for Message Count Report

Field	Description
Mailbox	Number given for mailbox identification
Status	Status of the messages in the mailbox. READY are any messages that have not been marked as SAVED. Deleted messages do not appear.
Total	Total number of messages of status in the mailbox

---

## **Message Download Report**

This report shows a representation of messages left in a mailbox and the properties they display. Only Data segments are included.

### **Example**

Use the Message Download Report to move completed form entries to another software program. For example, you can download form entries to a diskette or file and then import them into a spreadsheet such as Excel. This report lets you turn the data into meaningful records.



**NOTE:**

The Surveys Report can perform this task as well.

### **Access the Message Download Report Form**

Use the following steps to access the Message Download Report form:

1. Start at the Report Administration menu and select

> Message Download Report

When you select this report, you are prompted for the following:

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
1 Customer Assist Care Center
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit
2 System Administration
  Callback Messaging Administration
  Conversant Administration
  Custom Call Routing Administration
  >Report Generation
  Report Scheduling
  Speech Administration
  Survey Configurations
3 Report
  Agent Callback Count Re
  Call Detail
  Event Count
  Event Detail
  Message Count Report
  >Message Download Report
  Message Log Report
  Routing Table Report
4 Message Download Report
SEARCH CRITERIA:
Mailbox ID:  all
Day for report:  all
Message status:  all
DOWNLOAD SETUP:
Field delimiter:  |
Filename:  messages
Drive:  A
HELP CHOICES CLOSE DOWNLOAD CANCEL REFRESH
  
```

Figure 8-13. Message Download Report Form

### Modify the Message Download Report Form

Use the following steps to modify the Message Download Report form:

1. Enter the number of the mailbox you want to download or **all** in the Mailbox ID: field.  
 or  
 Press CHOICES (F2) for a list of valid mailboxes.
2. Enter the date of the report you want to download or **all** in the Day for Report: field.  
 or  
 Press CHOICES (F2) for a list of valid dates.
3. Enter **Ready**, **Saved**, or **all** in the Message Status: field to indicate the type of messages you want to download.  
 or  
 Press CHOICES (F2) for a list of message statuses.
4. Enter the character that will show the beginning or end of a Data segment in the downloaded data file in the Field Delimiter: field.  
 or  
 Press CHOICES (F2) for a list of delimiters.

5. Enter a name for the file containing the message data you want to save to diskette in the `Filename:` field.
6. Enter **A** for the first drive or **B** for the second drive in the `Drive:` field.
7. Press **CLOSE** (F3).

The system displays the Message Download Report (Figure 8-14).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - August 06, 1998
1 Customer 5 MESSAGE DOWNLOAD REPORT
Call Vector
>System Admi
System Moni
UNIX System
Exit
Customer Assist Care Center
MESSAGE DOWNLOAD REPORT
MACHINE NAME: cpthook
FOR PERIOD ENDING 10/24/1997
RUN Fri Oct 24 15:57:47 CDT 1997

Mailbox : 1
3 Message number: 2
Agent Callb Message date : 10-21-1997 11:22:34
Call Detail Message status: DELETE
Event Count Segment 1 :
Event Detai Segment 2 :
Message Cou Segment 3 :
>Message Dow Segment 4 :
Message Log Segment 5 :
Routing Tab Segment 6 :

Press the CANCEL function key to cancel.
PRINT PREVPAGE NEXTPAGE CANCEL
    
```

Figure 8-14. Message Download Report

8. Use **PREVPAGE** (F4) and **NEXTPAGE** (F5) to scroll through the report.
9. To print press **PRINT** (F3).



**NOTE:**

In order to print, your printer must be attached to the **CONVERSANT** or the **CONVERSANT** must be configured so that all print jobs automatically go to the network printer.

Use the following steps to download the Message Download Report:

1. Start at the Message Download Report form (Figure 8-13) and press **DOWNLOAD** (F4).

Table 8-7 defines each column that appears in this report.

**Table 8-7. Column Descriptions for Message Download Report**

<b>Column</b>	<b>Description</b>
Mailbox	Name given for mailbox identification
Message number	Number to identify a specific mailbox
Message date	Date and time the message was left
Message Status	Whether or not the message is ready to be transcribed (Ready, Saved, or Deleted)
Segment 1-15	What was entered in the corresponding message segments

### **Message Log Report**

---

This report includes chronological information regarding Callback Messaging activity. Enter the date, the mailbox, and the type of information to include in the report, and Customer Assist responds with a chronological listing of each time it:

- Received a message dropped by a caller
- An agent saved a message
- An agent deleted a message

### **Example**

Use this report to find out how callers and agents are using Customer Assist.

### **Access the Message Log Report Form**

Use the following steps to access the Message Log Report form:

1. Start at the Report Administration menu and select



When you select this report, you are prompted for the following:

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
1 Customer Assist Care Center
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit
2 System Administration
  Callback Messaging Administration
  Conversant Administration
  Custom Call Routing Administration
  >Report Generation
  Report Scheduling
  Speech Administration
  Survey Configurations
  System Backup/Restore
  Variable Administration
3 Report Administration
  Agent Callback Count Report Spe
  Call Detail Sur
  Event Count Tra
  Event Detail Tra
  Message Count Report Uec
  Message Download Report Uec
  >Message Log Report Vector Usage
  Routing Table Report
4 Message Log Report
  Day for Report: 07/26/98
  Mailbox: all
  Enter type of data to report: all

HELP CHOICES CLOSE CANCEL REFRESH
  
```

Figure 8-15. Message Log Report Form

### Modify the Message Log Report Form

Use the following steps to modify the Message Log Report form:

1. Enter the date you want described in mm/dd/yy format in the `Day for Report:` field.  
or  
Press CHOICES (F2) for a list.
2. Enter the number of the mailbox you want described or **all** in the `Mailbox:` field.  
or  
Press CHOICES (F2) to select from a list.
3. Enter the status of the messages you want described in the `Enter type of data to report:` field.
  - **Message** — messages left by callers
  - **Saved** — messages saved by agents
  - **Deleted** — messages deleted by agents
  - **all** — all data types
 or  
Press CHOICES (F2) to select from list.
4. Press CLOSE (F3).

The system displays the Message Log Report (Figure 8-16).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - August 06, 1998
1 Customer Ass 5 MESSAGE LOG REPORT
Call Vector Co
>System Adminis
System Monitor
UNIX System
Exit
Customer Assist Care Center
MESSAGE LOG REPORT
MACHINE NAME: cpthook
FOR DAY ENDING 10/23/97
FOR MAILBOX: all, TYPE: all
RUN Fri Oct 24 15:59:26 CDT 1997

4
Day for Report
Mailbox: all
Enter type of

Call Detail      Type      Time      MailBx  Msg#  Chan
-----
Event Count     Message   08:33:03 am  111    20    00
Event Detail
Message Count   Message   09:22:43 am  112    21    01
Message Downlo Message   09:47:56 am  112    22    00
>Message Log Re Message   09:50:03 am  112    23    00
Routing Table   Deleted   09:52:29 am  112    13    01

Press the CANCEL function key to cancel.
PRINT PREVPAGE NEXTPAGE CANCEL
    
```

Figure 8-16. Message Log Report

5. Use PREVPAGE (F4) and NEXTPAGE (F5) to scroll through the report.
6. To print press PRINT (F3).



**NOTE:**

In order to print, your printer must be attached to the CONVERSANT or the CONVERSANT must be configured so that all print jobs automatically go to the network printer.

Table 8-8 defines each column that appears in this report.

**Table 8-8. Column Descriptions for Message Log Report**

Column	Description
Chan	Port where this message was active
MailBx	Number given for mailbox identification
Msg #	Number given for message identification. Messages are numbered sequentially. The system skips over numbers that are in use until it reaches the maximum number allowed. It then restarts numbering at two.
Time	Time message was dropped, deleted, or saved
Type	Type of event that occurred for each message in the specified mailbox. Event types include <i>Message</i> for message drop, <i>Deleted</i> for message deleted, and <i>Saved</i> for message saved.

### **Routing Table Report**

---

This report displays the contents of a single routing table. Enter the name of the routing table you want described and Customer Assist responds with a numerical listing of:

- Values in the lookup (key) field with corresponding values in Data Field 1 and Data Field 2.

### **Example**

Your system is routing calls to the wrong extension; it is not making the correct associations. Look at the routing table to determine whether you have entered the correct data.

### **Access the Routing Table Report**

Use the following steps to access the Routing Table Report:

1. Start at the Report Administration menu and select

> Routing Table Report

When you select this report, you are prompted for the following:

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
1 Customer Assist Care Center      2 System Administration
  Call Vector Configuration        Callback Messaging Administration
  >System Administration           Conversant Administration
  System Monitor                   Custom Call Routing Administration
  UNIX System                       >Report Generation
  Exit                              Report Scheduling
                                     Speech Administration
4 Routing Table Report             Survey Configurations
  Routing Table Name : _____  System Backup/Restore
                                     Variable Administration
                                     ation
Agent Callback Count Report       Speech Space Available Test
Call Detail                       Survey Report
Event Count                       Traffic Report
Event Detail                      Transcription Detail Report
Message Count Report              Vector Map
Message Download Report           Vector Profile Report
Message Log Report                Vector Usage
>Routing Table Report

Please enter the routing table name followed by the Enter or Return key.

HELP CHOICES CLOSE ENTER CANCEL REFRESH
  
```

Figure 8-17. Routing Table Report Form

### Modify the Routing Table Report Form

Use the following steps to modify the Routing Table Report form:

1. Enter the name of the routing table you want described in the Routing Table Name: field.

or

Press CHOICES (F2) for a list of valid table names.

2. Press CLOSE (F3).

The system displays the Routing Table Report (Figure 8-18).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
5
ROUTING TABLE REPORT

Customer Assist Care Center
ROUTING TABLE RockCst
MACHINE NAME: cpthook

RUN Fri Mar 13 14:24:14 CST 1998

Total number of records : 5

LOOKUP FIELD          DATA 1 FIELD          DATA 2 FIELD
-----
      Andrews          2155
      Beart            2121
      Carts            2176
      Rodgers          2190
      Smith            2789

Report is truncated to fit screen. Press the CANCEL function key to cancel.
PRINT PREVPAGE NEXTPAGE CANCEL
    
```

Figure 8-18. Routing Table Report

3. Use PREVPAGE (F4) and NEXTPAGE (F5) to scroll through the report.
4. To print press PRINT (F3)



**NOTE:**

In order to print, your printer must be attached to the CONVERSANT or the CONVERSANT must be configured so that all print jobs automatically go to the network printer.

Table 8-9 defines each column that appears in this report.

Table 8-9. Column Descriptions for Routing Table Report

Column	Description
Lookup Field	Value you assigned to this field.
Data 1 Field	Value you assigned to this field.
Data 2 Field	Value you assigned to this field.

**Speech Space Available Test Report**

This report gives the hard drive's storage capacity for speech.

### Example

Use the Speech Space Available Test to determine whether adequate disk storage space remains for all types of recorded speech.

### Access the Speech Space Available Test Report

Use the following steps to access the Speech Space Available Test Report:

1. Start at the Report Administration menu and select

```

> Speech Space Available Test
    
```

The system displays the Speech Space Available Test (Figure 8-19).

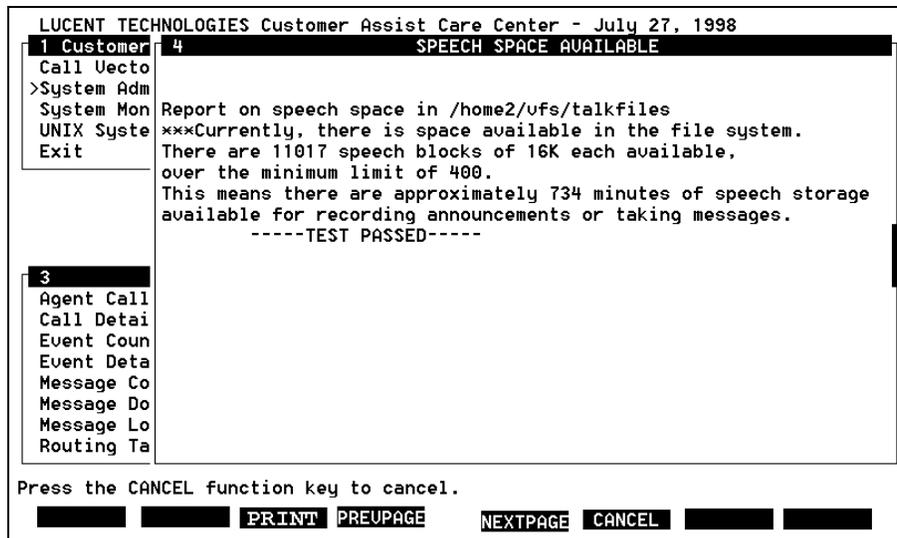


Figure 8-19. Speech Space Available Test Report

If the screen displays -- TEST FAILED --, you must delete unnecessary speech. Use the following steps to delete unnecessary speech:

- a. Check every application for unnecessary speech. Delete any unnecessary phrases using Speech Administration.
  - b. Delete any unnecessary messages.
2. To print press PRINT (F3).



**NOTE:**

In order to print, your printer must be attached to the CONVERSANT or the CONVERSANT must be configured so that all print jobs automatically go to the network printer.

## **Survey Report**

---

This report provides information on the type of input callers left in mailboxes. (See "Overview of Surveys" on page 1-25 for more information.)

### **Example**

You want to view the data information callers leave in mailboxes. The report provides you with an interface that makes the data readily accessible.

### **Access the Survey Report**

Use the following steps to access the Survey Report:

1. Start at the Report Administration menu and select



```
> Survey Report
```

When you select this report, you are prompted for the following:

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
1 Customer Assist Care Center
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit
2 System Administration
  Callback Messaging Administration
  Conversant Administration
  Custom Call Routing Administration
  >Report Generation
  Report Scheduling
  Speech Administration
  Survey Configurations
  System Backup/Restore
  Variable Administration
3 Report Administration
  Agent Callback Count
  Call Detail
  Event Count
  Event Detail
  Message Count Report
  Message Download Repo
  Message Log Report
  Routing Table Report
4 Survey Report
  Survey name:
  Date: Today
  Display Report or Data file: Report
  NOTE: The output will be placed in
  /usr/spanlink/ccc/OBJECTS/REPORT/data/survey file
Enter the survey name.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
  
```

Figure 8-20. Survey Report Form.

### Modify the Survey Report Form

Use the following steps to modify the Survey Report form:

1. Enter the name of the survey you want described in the `Survey Name` : field.  
 Press CHOICES (F2) for a list of valid survey names.
2. Enter the date you want described in the `Date` : field.  
 Press CHOICES (F2) for a list of valid days.
3. Enter **Report** or **Data** in the `Display Report or Data File`: field to indicate how the report should display.  
 Press CHOICES (F2) to cycle through responses. The next two sections explain the difference between the report format and the data file format. (See "Examples of Surveys" on page 1-25 for more information about survey types.)
4. Press CLOSE (F3).

### Report Format

If you choose **Report**, the report displays as follows:

```

LUCENT TECHNOLOGIES Customer Assist Care Center - September 09, 2000
1 Custome 5 Report
Call Uect
>System Ad
System Mo
UNIX Syst
Exit
Customer Assist Care Center
Survey ExampleSurvey
MACHINE NAME: UNIX_SU
RUN Sat Sep 09 14:28:20 CDT 2000

Pleased w/ URU      Very Pleased   Satisfied     Unsatisfied
                    6              2             2

3
Agent Cal
Call Deta Pleased w/ Service  Very Pleased   Satisfied     Unsatisfied
                    5              3             2
Event Cou
Message C Agent Knowledge    Very Pleased   Satisfied     Unsatisfied
                    5              5             0
Message D
Message L
Routing T Overall          Very Pleased   Satisfied     Unsatisfied
                    5              4             1
    
```

Press the CANCEL function key to cancel.

PRINT PREVPAGE NEXTPAGE CANCEL

Figure 8-21. Survey Report, Report format

Use PREVPAGE (F4) and NEXTPAGE (F5) to scroll through the report.

5. To print press PRINT (F3).



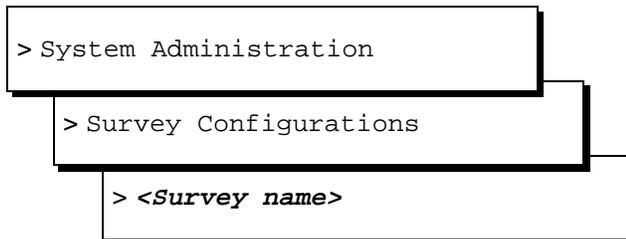
**NOTE:**

In order to print, your printer must be attached to the CONVERSANT or the CONVERSANT must be configured so that all print jobs automatically go to the network printer.

**Data File Format**

Read the section below that corresponds to the Summarize the data?: field setting to determine how your data file will appear. Use the steps below to determine the Summarize the data?: field setting:

1. Start at the Customer Assist main menu and select



2. Read the entry that appears in the Data File section for the Summarize the data?: field.
  - If this field is set to “Yes,” see “Summarize the Data?: Field is Set to “Yes”” on page 8-34.
  - If this field is set to “No,” see “Summarize the Data?: Field is Set to “No”” on page 8-35.

**Summarize the Data?: Field is Set to “Yes”.** Read this section if the Summarize the data?: field setting is “Yes.”

Read the first bullet below for more information on how to read a data file. Next, read the bullet that corresponds to the Include Message Information?: field setting to determine how your particular data file will appear. Use the steps in “Data File Format” on page 8-33 to determine the Include Message Information?: field setting.

■ **Include Message Information?: field is set to “Data”**

When this field is set to “Data,” the data file appears as follows:

```
1,2,1,2,,,,,,,,,,,,,
2,1,2,1,,,,,,,,,,,,,
```

Each record (or horizontal row) has 15 values that correspond one-to-one with the message segments (the maximum number of segments a message can have is 15). Each value is data entered by the caller. In the example above, the last 11 values are empty. Each value in a record is separated by the delimiter defined in the Survey Configurations. An empty record means:

- The segment is not used for that mailbox
- The segments is not defined as a data segment
- The caller did not enter a value for that segment

■ **Include Message Information?: field is set to “Date”**

When this field is set to “Date,” the data file appears as follows:

```
20000903,111500,1,2,1,2,,,,,,,,,,,,,
20000903,120020,2,1,2,1,,,,,,,,,,,,,
```

Each record (or horizontal row) has 17 different values. The first value is the date, which appears in YYYYMMDD (year-month-day) format, and the second value is the time that the message was dropped, which appears in HH24MISS (time in 24-hour format-minute-second) format. The remaining 15 values are data entered by the caller.

■ **Include Message Information?: field is set to “MsgNum”**

When this field is set to “MsgNum,” the data file appears as follows:

```
1003,1,2,1,2,,,,,,,,,,,,,
1004,2,1,2,1,,,,,,,,,,,,,
```

Each record (or horizontal row) has 16 different values. The first value is the message number. The remaining 15 values are data entered by the caller.

■ **Include Message Information?: field is set to "All"**

When this field is set to "All," the data file appears as follows:

```
1003,20000903,111500,1,2,1,2,,,,,,,,,,,,,
1004,20000903,120020,2,1,2,1,,,,,,,,,,,,,
```

Each record has 18 different values. The first value is the message number. The second value is the date, which appears in YYYYMMDD (year-month-day) format, and the third value is the time that the message was dropped, which appears in HH24MISS (time in 24-hour format-minute-second). The remaining 15 values are data entered by the caller.

**Summarize the Data?: Field is Set to "No".** Read this section if the Summarize the data?: field setting is "No."

If this field is set to "No," Customer Assist does not use the Include Message Information?: field to determine the layout the data file. Instead, the report appears as follows:

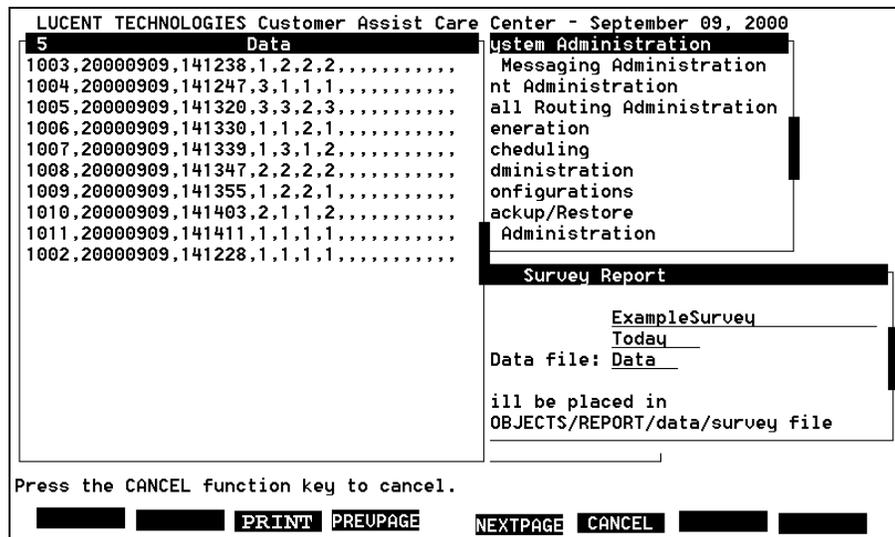


Figure 8-22. Survey Report, Data format

**Summarize the Data?: Field is Set to "Yes".** Read this section if the `Summarize the data?:` field setting is "Yes."

When the `Summarize the data?:` field is set to "Yes," Customer Assist can only display single digit entries that are from 0 through 9. For example, Customer Assist views a telephone number as a single number, and, because the telephone number is greater than 9, it cannot be displayed. This report shows you the data entered by the caller for segments 1 through 15.

### Traffic Report

---

This standard CONVERSANT report documents, by channel, the number of calls handled and their length. Enter the period of time you want described and Customer Assist responds with:

- Channel
- Hourly period
- Number of calls (to all CONVERSANT applications)
- Average hold time
- Percentage of total channel capacity used

### Example

This report provides voice channel traffic analysis to let you view the number of people who accessed your system.

### Access the Traffic Report

Use the following steps to access the Traffic Report:

1. Start at the Report Administration menu and select

```
> Traffic Report
```

When you select this report, you are prompted for the following:

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
1 Customer Assist Care Center
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit
2 System Administration
  Callback Messaging Administration
  Conversant Administration
  Custom Call Routing Administration
  >Report Generation
  Report Scheduling
  Speech Administration
  Survey Configurations
  System Backup/Restore
  Variable Administration
3 Report Administration
  Agent Callback Count Report
  Call Detail
  Event Count
  Event Detail
  Message Count Report
  Message Download Report
  Message Log Report
  Routing Table Report
  Speech Space Availabl
  Survey Report
  >Traffic Report
  Transcription Detail
  Vector Map
  Vector Profile Report
  Vector Usage
4 Traffic Report
  Day for Report: 07/26/98
  Hours: all
  Summarize Data: no

HELP CHOICES CLOSE ENTER CANCEL REFRESH
  
```

Figure 8-23. Traffic Report Form

### Modify the Traffic Report Form

Use the following steps to modify the Traffic Report form:

1. Enter the date you want described in mm/dd/yy format in the Day for Report: field.

or

Press CHOICES (F2) for a list.

#### ⇒ NOTE:

Because the Traffic Report provides a summary of a full day's activities, this report option is not available until after midnight for any day. **Today** is not a valid option.

2. Enter the hour of the day you want described, a range of hours, or **all** in the Hours: field.

Use a hyphen (-) to separate hours in a range.

3. Enter **yes** to summarize the data or **no** to exclude this information in the Summarize Data: field.

or

Press CHOICES (F2) to cycle through yes and no responses.

4. Press CLOSE (F3).

The system displays the Traffic Report (Figure 8-24).

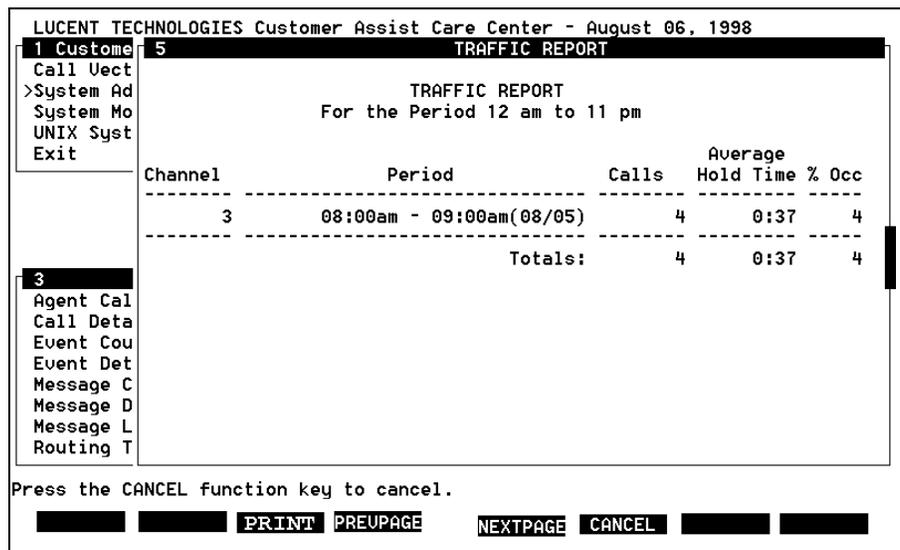


Figure 8-24. Traffic Report

5. Use PREVPAGE (F4) and NEXTPAGE (F5) to scroll through the report.
6. To print press PRINT (F3).



**NOTE:**

In order to print, your printer must be attached to the CONVERSANT or the CONVERSANT must be configured so that all print jobs automatically go to the network printer.

Table 8-10 defines each column that appears in this report.

Table 8-10. Column Descriptions for Traffic Report

Column	Description
Average Hold Time	Average time the application was active on the channel for that period
Calls	Number of calls to all CONVERSANT applications during the specified period for the port
Channel	Specific port call came through on
% Occ	Percentage of time that the port was occupied by callers
Period	Hourly period reported

## Transcription Detail Report

This report lists all callbacks received by agents and/or transcription by agents. It gives detailed information about attempts to deliver callback messages and to retrieve messages for transcription.

### Example

Use this report to determine the reason callback activity is not as timely as you desire or callback or voice form transcription activity is not as efficient as you desire. Use this report to determine whether the times your agents are able to return calls are consistent with those you desire.

### Access the Transcription Detail Report

Use the following steps to access the Transcription Detail Report:

1. Start at the Report Administration menu and select

> Transcription Detail Report

When you select this report, you are prompted for the following:

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
4 Transcription Detail Report
Report Name : TRANSCRIPTION DETAIL REPORT      Print Automatically : N
Description : Report for Transcription Detail
Day for Report : Today

COLUMN DISPLAY
Type          Title          Display Col Width  Format
Mailbox       Mailbox         0      8      LEFT JUSTIFY
Message Number MesgNum         1      4      RIGHT JUSTIFY
Start Time    Start Time      2      8      HH24:MI:SS
Launch Time   Launch Time     3      8      HH24:MI:SS
Stop Time     Stop Time       4      8      HH24:MI:SS
Data 1        Data 1          5      10     LEFT JUSTIFY
Data 2        Data 2          6      10     LEFT JUSTIFY
Data 3        Data 3          7      8      LEFT JUSTIFY
Data 4        Data 4          N      10     LEFT JUSTIFY
Conf Time Expired CTE            9      3      LEFT JUSTIFY
Agent Action  AqtAct         10     3      LEFT JUSTIFY
Type         Type           11     4      LEFT JUSTIFY

PRINT  PREPAGE  NEXTPAGE  CANCEL
    
```

Figure 8-25. Transcription Detail Report Form

2. Press NEXTPAGE (F5) and PREVPAGE (F4) to scroll through the pages.

### Modify the Transcription Detail Report Form

Use the following steps to modify the Transcription Detail Report form:

1. Use Table 8-11 to complete the Transcription Detail Report form.

For field names with an asterisk (\*), you can press CHOICES (F2) for a list of valid choices. On the CHOICES list, highlight your choice and press (ENTER) to fill in the field automatically.

**Table 8-11. Transcription Detail Report Form Fields**

Field	Description	Valid Inputs	Default
Report Name	Name of the report	Up to 30 characters	TRANSCRIPTION DETAIL REPORT
Print Automatically*	Y to generate and print the report automatically once each day, N to generate and print manually only	Y or N	Y
Description	Description of report	Up to 50 characters	Report for Transcription Detail
Day for Report*	Date of report to generate	Today or date within the last 7 days in MM/DD/YY format or leave blank	Current date
Column Title (12 fields)	Title for each column type. The titles you enter here will appear at the top of each column in the report. Two lines are available for titles.	Up to 20 characters	

*Continued on next page*

**Table 8-11. Transcription Detail Report Form Fields — Continued**

Field	Description	Valid Inputs	Default
Column Display* (12 fields)	Controls how the column will be displayed.  (N) Column will not display  (0) Column title will appear above a group of records with the same value for that column  (1-12) Display order	N, 0-12	
Column Width	The width of the column in the report. (NOTE: If the number of characters in the column title is greater than twice the value in this field, then the excess will be truncated.)	Two digits	
Column Format*	The display format for the column in the report.	Refer to Display Format list (press CHOICES <b>F2</b> ).	
Sorting Conditions*	Enter up to six column types (not titles) by which to sort the columns. The report will sort first by the first type you list here, second by the second type, etc. Valid column types appear under COLUMN DISPLAY: Type on the first page of the Transcription Detail Report form. You can also press CHOICES <b>F2</b> for a list of valid column types.	Valid column types are:  Mailbox, Message Number, Start Time, Launch Time, Stop Time, Data 1, Data 2, Data 3, Data 4, Conf time exp, Agent action, Type	Mailbox Start Time

*Continued on next page*

**Table 8-11. Transcription Detail Report Form Fields — Continued**

Field	Description	Valid Inputs	Default
Sorting Format*	Enter the sort Conversion Format. For example, to sort by Start Time hours, use HH24.	Refer to Conversion Format list (press CHOICES (F2)).	None
Range Selection Column Type*	Using the Range Selection fields, you can select a set of values to view for particular columns. Enter the column type (not title) here. You can enter a column type more than once to view a range of values. For example, to view all message numbers between 200 and 300, enter Message Number > 200 and Message Number < 300	Valid column types are:  Mailbox, Message Number, Start Time, Launch Time, Stop Time, Data 1, Data 2, Data 3, Data 4, Conf time exp, Agent action, Type	None
Range Selection Operator*	Enter the operand expressing the relation to the value.	!= (equal to); < (less than); > (greater than); <= (less than or equal to); >= (greater than or equal to)	None
Range Selection Value	Enter a value corresponding to the column type.	Up to 20 characters (NOTE: Agent action values must be expressed in digits. See Agent Action in Table 8-6.)	None
Range Selection Format*	Enter the range selection value conversion format. For example: Start Time >= 08:00 HH24:MI selects records whose start time is at or after 8 a.m.	Refer to Conversion Format list (press CHOICES (F2)).	None

- When you finish the Transcription Detail form or import a saved version of the form, press VIEW (F8).

The system displays the Transcription Detail Report (Figure 8-26).

LUCENT TECHNOLOGIES Customer Assist Care Center - November 13, 1997

5 Transcription

Customer Assist Care Center  
 TRANSCRIPTION DETAIL REPORT  
 MACHINE NAME : cpthook  
 RUN Thu Nov 13 10:46:27 CST 1997

Mesg Num	Start Time	Launch Time	Stop Time	Data 1	Data 2	Data 3	CTE	Agt	Type
Mailbox : 112									
190	10:21:55		10:25:23	9712175			No	Abn	Trn
190	10:26:15		10:27:28	9712175			No	Abn	Trn
190	17:11:43		17:13:24	9712175			No	Abn	Trn
190	17:21:45		17:22:36	9712175			No	Abn	Trn
Mailbox : 168									
196	10:30:22		10:37:10	9712175			No	Skp	Trn
196	10:37:59		10:40:28	9712175			No	Skp	Trn
Mailbox : 201									
197	10:41:46		10:42:22	2175			No	Skp	Trn
Mailbox : 4									

Report is truncated to fit screen. Press the CANCEL function key to cancel.

PRINT PREU-FRM NEXT-FRM CANCEL

Figure 8-26. Transcription Detail Report

- To print press PRINT (F3).



**NOTE:**

In order to print, your printer must be attached to the CONVERSANT or the CONVERSANT must be configured so that all print jobs automatically go to the network printer.

Table 8-12 defines each column that can appear in the Transcription Detail Report (configurable).

**Table 8-12. Column Descriptions for Transcription Report**

<b>Field</b>	<b>Description</b>
Mailbox	Name given for mailbox identification
Message Number	Number given for mailbox identification
Start Time	Date and time agent received callback
Launch Time	Time agent launched call (blank if no call launched)
Stop Time	Time the system released the call or the time the agent hung up (if agent hangs up before the system releases the call). To determine whether the system or agent released the call, check the <code>Conference Time</code> entry.
Data Field 1	First data field  If callers error out of a data segment to a record segment, the relationship of the data fields to the segment in the report may not be the same for different messages in the same mailbox.
Data Field 2	Second data field
Data Field 3	Third data field
Data Field 4	Fourth data field
Conference Time Expired (CTE)	<b>Y</b> if the agent remained on the line until the system released the call.  <b>N</b> if the agent hung up before the system released the call or if the agent pressed *99 to classify the call.
Agent action (Agt Act)	The action taken by the agent: 2 (Deleted); 3 (Saved); 4 (Launched & Deleted); 5 (Launched & Saved); 6 (Forward); 7 (Schedule); 8 (Skip); or 9 (Abandoned, Agent hung up).
Type	How agent got to the message: C (Callback); T (Transcription).

You can specify a number of formatting elements in the report, including:

- Report name
- Column width
- Report description
- Column display format
- Column titles
- Sorting conditions
- Column order
- Range selection

In addition, you can set the report to print automatically once per day (Y or N) or run reports manually by selecting the date you want described.

These options appear in the Transcription Detail Report form (Figure 8-25 on page 8-39) that appears when you select the Transcription Detail Report from the Report Generation menu.

If the report is set to be generated automatically every night, then it is generated based on the range selection. However, if a date range selection is not specified, the system will use the date from across multiple days. To generate a report for the current date:

1. Set the `Column Type` to a date column type.
2. Set the `Operator` to `=`.
3. Set `Value` to **sysdate**.

**⇒ NOTE:**

The previous day can be obtained using **sysdate - <number of days>**. For example, yesterday would be **sysdate - 1**.

## Vector Mapping Report

This report serves as a troubleshooting tool by charting the paths calls can take through Customer Assist. Enter the specific vector, channel, or VDN where the trace should begin, and Customer Assist responds with:

- Road map of vector actions and paths to other vectors

### Example

Before you place your development database vectors into service, use this report to forecast the integrity of vectors, such as how channels will respond to calls or how the system will handle calls from specific VDNs.

### Access the Vector Mapping Report

Use the following steps to access the Vector Mapping Report:

1. Start at the Report Administration menu and select

```
> Vector Mapping Report
```

When you select this report, you are prompted for the following:

The screenshot shows a terminal window with the following content:

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
1 Customer Assist Care Center
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit
2 System Administration
  Callback Messaging Administration
  Conversant Administration
  Custom Call Routing Administration
  >Report Generation
  Report Scheduling
  Speech Administration
  Survey Configurations
  System Backup/Restore
  Variable Administration
3 Report Administration
  Agent Callback Count Report Speech
  Call Detail Survey
  Event Count Traffic
  Event Detail Transcr
  Message Count Report >Vector
  Message Download Report Vector
  Message Log Report Vector Usage
  Routing Table Report
4 Vector Map
  Choose selection Criteria: vector
  Selection argument: 0
  Database: DEVELOPMENT
HELP CHOICES CLOSE ENTER CANCEL REFRESH
  
```

Figure 8-27. Vector Map Report Form

### Modify the Vector Mapping Report

Use the following steps to modify the Vector Mapping Report form:

1. Enter **Vector**, **Channel**, or **vdn** in the Choose Selection Criteria: field to indicate the type of information to chart.
  - **Vector** — charts possible paths from a vector
  - **Channel** — traces the path from a channel
  - **vdn** — scans the vector database for references to a specific VDN

or

Press CHOICES (F2) to select from a list of choices.

2. Enter the vector number, port number, or VDN you want to use, or **all** in the Selection Argument: field.

3. Enter **DEVELOPMENT**, **RUNTIME**, or **PREV\_RUNTIME** in the Database: field to indicate the type of database that should be included in the report. (See "Audit Vector Database" on page 4-35 for more information.)

- **DEVELOPMENT** — vectors currently being worked on
- **RUNTIME** — in-service vectors
- **PREV\_RUNTIME** — vectors from the archive database

or

Press CHOICES (F2) to select from a list.

4. Press CLOSE (F3).

See "Vector Profile Report" on page 8-48 for more information on vector action codes.

The system displays the Vector Mapping Report (Figure 8-28).

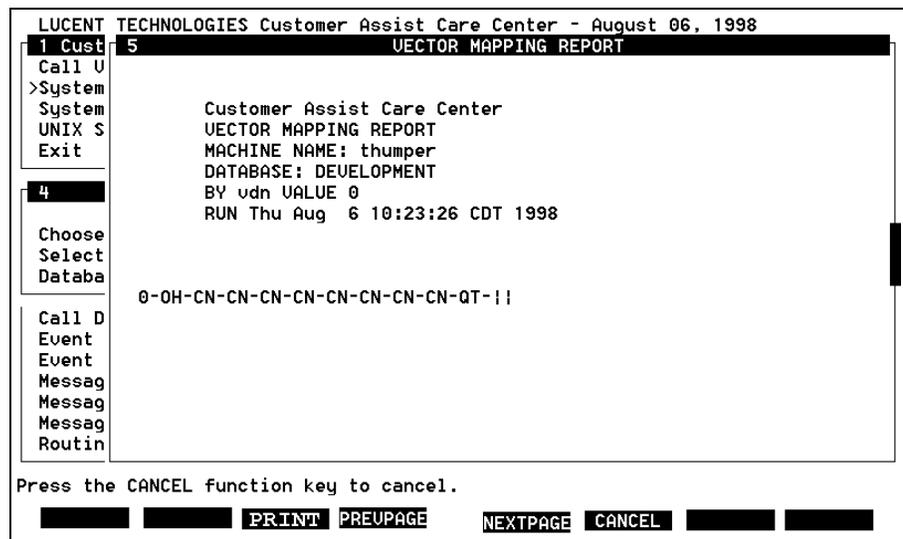


Figure 8-28. Vector Mapping Report

5. Use PREVPAGE (F4) and NEXTPAGE (F5) to scroll through the report.
6. To print press PRINT (F3).

**NOTE:**

In order to print, your printer must be attached to the CONVERSANT or the CONVERSANT must be configured so that all print jobs automatically go to the network printer.

In the example shown in Figure 8-28, the `setup` vector (vector 0) uses the GLOBAL action to reset all variables and prepare Customer Assist for the incoming call. It uses the OFF\_HOOK action to receive the incoming call. It uses several CHAN\_ASN actions to determine which Customer Assist vector to activate.

- Vector 87 sends information to the switch and then quits.

### **Vector Profile Report**

---

This report displays the contents of Customer Assist vectors. Enter the number of the vector you want described and Customer Assist responds with:

- Customer Assist vector actions
- Comments and arguments associated with them

### **Example**

Calls are not taking the correct path through vectors; callers are sent to the wrong mailbox. Use this report to see how your vectors are performing and where they are routing callers. This report allows you to review the contents and interrelationships of the vectors.

### **Access the Vector Profile Report**

Use the following steps to access the Vector Profile Report:

1. Start at the Report Administration menu and select

```
> Vector Profile Report
```

When you select this report, you are prompted for the following:

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
1 Customer Assist Care Center
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit
2 System Administration
  Callback Messaging Administration
  Conversant Administration
  Custom Call Routing Administration
  >Report Generation
  Report Scheduling
  Speech Administration
  Survey Configurations
  System Backup/Restore
  Variable Administration
3 Report Administration
  Agent Callback Count Report Speec
  Call Detail Surve
  Event Count Traff
  Event Detail Trans
  Message Count Report Vecto
  Message Download Report >Vecto
  Message Log Report Vecto
  Routing Table Report
4 Vector Profile Report
  Include Vector Descriptions: yes
  Include Vector Steps: yes
  Include Vector Arguments: yes
  Vector(s): all
  Database: DEVELOPMENT
HELP CHOICES CLOSE ENTER CANCEL REFRESH
  
```

Figure 8-29. Vector Profile Report Form

### Modify the Vector Profile Report Form

Use the following steps to modify the Vector Profile Report form:

1. Enter **yes** in the `Include Vector Descriptions:` field to include any comments associated with actions.
2. Enter **no** in the `Include Vector Steps:` field if you do not want to list the actions Customer Assist vectors contain.
3. Enter **no** in the `Include Vector Arguments:` field if you do not want to list the arguments associated with Customer Assist vector actions.
4. Enter the number of the Customer Assist vector you want described or **all** in the `Vector(s):` field.
5. Enter **DEVELOPMENT**, **RUNTIME**, or **PREV\_RUNTIME** in the `Database:` field to indicate the type of database that should be included in the report. (See "Audit Vector Database" on page 4-35 for more information.)
  - **DEVELOPMENT** — vectors currently being worked on
  - **RUNTIME** — in-service vectors
  - **PREV\_RUNTIME** — vectors from the archive database

or

Press CHOICES (F2) to select from a list.

6. Press CLOSE (F3).

The system displays the Vector Profile Report (Figure 8-30).



**NOTE:**

If the system displays an error message informing you the report contains too many lines to display, run the report for each vector instead of **ALL** vectors.

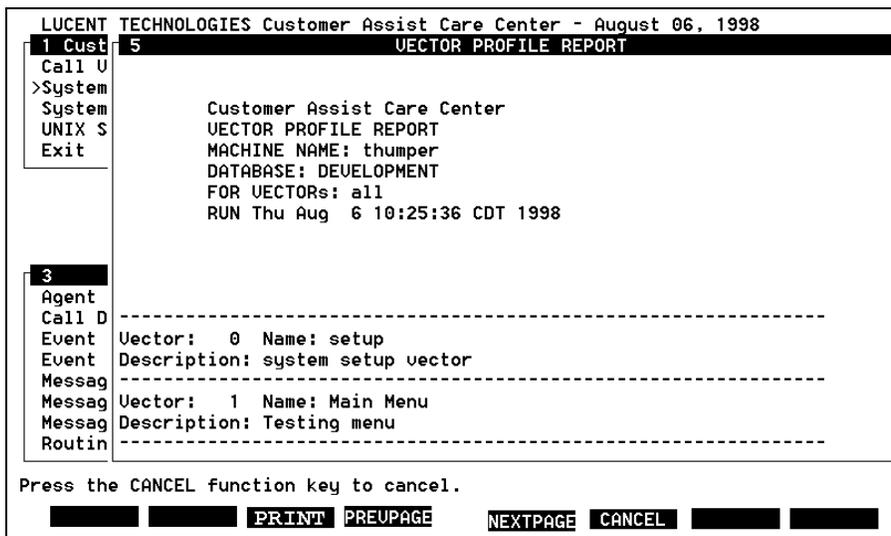


Figure 8-30. Vector Profile Report

Use PREVPAGE (F4) and NEXTPAGE (F5) to scroll through the report.

Table 8-13 defines each column that appears in this report.

Table 8-13. Column Descriptions for Vector Profile Report

Field	Description
Description	Optionally, a description of the vector
Step 1	Path the vector took
Vector	Number given to identify the vector

7. To print press PRINT (F3).



**NOTE:**

In order to print, your printer must be attached to the CONVERSANT or the CONVERSANT must be configured so that all print jobs automatically go to the network printer.

Table 8-14 defines vector action codes.

**Table 8-14. Valid Vector Action Codes**

Vector Action Code	Vector Action
AD	ADA_CALC
AN	ANNOUNCE, DYN_ANNOU
CL	CHG_LANG
CN	CHAN_ASN
CV	CONVERSE
DR	DATA_RTN
DY	DYNAMIC
EW	EWT
EX	EXECUTE, MSG_DROP, SPCH_ADMN, TRANSCRIBE
GD	GET_DIGT
GB	GLOBAL
GP	GET_DIALP
GS	GET_SPCH
SW	GOTO, SWITCH
HU	HANG_ACT
DB	LOOK_UP
MN	MENU
OH	OFF_HOOK
QT	QUIT
RP	REPORT
SD	SCHEDULE
ST	SET
NM	SPEAK_NUM
XR	TRANSFER

## **Vector Usage Report**

---

This report lists, by Customer Assist vector number, the number of times each vector was used during the day you specify. Enter the identification numbers of the vectors you want described and Customer Assist responds with:

- Vector name and number
- Number of times the vector was activated

### **Example**

Use this report to determine how much callers use each service. For example, you can track the number of times callers hear given messages in your voice bulletin boards or the number of times callers leave messages for return calls by mailboxes.

### **Access the Vector Usage Report Form**

Use the following steps to access the Vector Usage Report form:

1. Start at the Report Administration menu and select

```
> Vector Usage Report
```

When you select this report, you are prompted for the following:

```

LUCENT TECHNOLOGIES Customer Assist Care Center - July 27, 1998
1 Customer Assist Care Center
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit
2 System Administration
  Callback Messaging Administration
  Conversant Administration
  Custom Call Routing Administration
  >Report Generation
  Report Scheduling
  Speech Administration
  Survey Configurations
  System Backup/Restore
  Variable Administration
3 Report Administration
  Agent Callback Count Report
  Call Detail
  Event Count
  Event Detail
  Message Count Report
  Message Download Report
  Message Log Report
  Routing Table Report
  Speech Space Available
  Survey Report
  Traffic Report
  Transcription Detail
  Vector Map
  Vector Profile Report
  >Vector Usage
4 Vector Usage Report
  Day for Report: Yesterday
  Vector(s): all
HELP CHOICES CLOSE ENTER CANCEL REFRESH
  
```

Figure 8-31. Vector Usage Report Form

### Modify the Vector Usage Report Form

Use the following steps to modify the Vector Usage Report form:

1. Enter the date of the report you want to view in the `Day for Report:` field.
2. Enter the number of the Customer Assist vector you want described, a range of numbers, or **all** in the `Vector(s):` field.  
Use a hyphen (-) to separate numbers in a range.
3. Press **CLOSE** (F3).

The system displays the Vector Usage Report (Figure 8-32).

```

LUCENT TECHNOLOGIES Customer Assist Care Center - August 06, 1998
1 Customer Ass 5 VECTOR USAGE REPORT
Call Vector Co
>System Adminis
System Monitor
UNIX System
Exit
4 Vector Usa
Day for Report
Vector(s): al

Customer Assist Care Center
VECTOR USAGE REPORT
MACHINE NAME: thumper
FOR DAY ENDING 08/05/98
FOR VECTORS: all
RUN Thu Aug 6 10:27:06 CDT 1998

Agent Callback   Vect   Name           Count
Call Detail     ----   ----           ----
Event Count      0      setup           2
Event Detail     1      Main Menu      0
Message Count    2      MB Actions     0
Message Downlo   3      changeLanguage 0
Message Log Re   4      Transfer       0
Routing Table    5      IUR apps       0

Press the CANCEL function key to cancel.
PRINT PREVPAGE NEXTPAGE CANCEL
    
```

Figure 8-32. Vector Usage Report

4. Use PREVPAGE (F4) and NEXTPAGE (F5) to scroll through the report.
5. To print press PRINT (F3).



**NOTE:**

In order to print, your printer must be attached to the CONVERSANT or the CONVERSANT must be configured so that all print jobs automatically go to the network printer.

Table 8-15 defines each column that appears in this report.

Table 8-15. Column Descriptions for Vector Usage Report

Column	Description
Vect	Number given to identify the vector
Name	Vector name in the application
Count	Number of times a vector was used during the specified day

## Report Scheduling

Use this option to select reports to generate automatically and to define the number of days to save information for reporting. Customer Assist generates selected reports daily at midnight.

Although you may define specific parameters for reports generated on demand, scheduled reports are generated using the standard settings shown in Table 8-16.

**Table 8-16. Report Scheduling Field Settings**

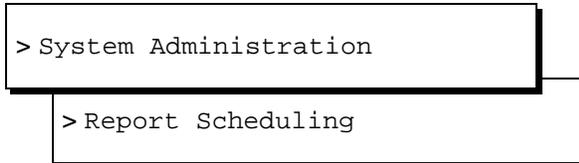
Report	Setting
Agent Callback Count	Included. No setting to define.
Call Detail	Caller ID(s): setting is <b>summary</b> Include Report Event Detail: setting is <b>no</b>
Vector Usage	Vectors: setting is <b>all</b>
Event Count	List by Vector or Variable: setting is <b>vector</b>
Event Detail	Variable: setting is <b>all</b>
Message Count	Cannot be scheduled
Message Log	Cannot be scheduled
Routing Table	Cannot be scheduled
Speech Space Available Test	Not included in scheduled reports
Survey Report	Scheduled report is administered from each Survey administration.
Traffic	Day for Report: setting is <b>Yesterday</b> Hours: setting is <b>all</b> Summarize Data: setting is <b>no</b>
Transcription Detail	Scheduled report is administered from the Transcription Detail menu
Vector Profile	Not included in scheduled reports
Vector Map	Not included in scheduled reports

### Access Report Scheduler Form

---

Use the following steps to access the Report Scheduler form:

1. Start at the Customer Assist Administration menu and select



The system displays the Report Scheduling Options form (Figure 8-33).

---

Figure 8-33. Report Scheduling Options Form

### Modify Report Scheduling Form

Use the following steps to modify the Report Scheduling form:

1. Enter the time of day you want to generate reports in the Time to Run Daily Reports: field.
2. Enter the number of days to save information collected for reporting before deleting it from the disk in the Number of Days to Archive Data: field.

3. Enter **yes** in the `Print Reports Automatically:` field after each report that should be generated automatically.

or

Press CHOICES (F2) to cycle through yes and no responses.

 **NOTE:**

When the system generates the Traffic Report automatically, it uses the previous day's data. For example, a Traffic Report generated at 11:50 pm on Tuesday contains information about calls received between 12:00 am and 11:59 pm on Monday. The reports will print to your default printer.

These reports print to the default printer physically attached to the CONVERSANT with Customer Assist loaded. Customer Assist can print these reports across a LAN. Check with your network administrator.

4. Press CLOSE (F3).

This saves your changes and returns you to the System Administration menu.

## Summary

---

Reports contain information that influences many business decisions. Use Customer Assist reports to help manage your call center. While working through this chapter, you learned about the reports generated by Customer Assist.



This chapter instructs agents how to perform transcription and callbacks. It includes callflows and a cheat sheet to help agents visualize the process.

### Call Center Concepts

This section describes the meaning of transcription and callbacks.

### Dial In Transcription

Transcription is the act of calling into the system and processing messages left by callers. “Transcription” on page 9-6 describes the procedures for retrieving messages left by callers in mailboxes for transcription.

### Callbacks

Depending on your set up, your system may perform the following types of callbacks:

- Agent callbacks — the system delivers messages left by callers to agents automatically.
- Customer callbacks — the system may either put you on hold and return the customer’s call automatically, or recite the customer’s telephone number so you can enter it manually.

“Callbacks” on page 9-66 describes the procedures for performing callbacks.

## **Understanding This Chapter**

---

This chapter provides the following three tools to help you understand transcription and callbacks:

- Callflows appear on the left-hand side and illustrate what you will hear when you call into the system or the system delivers callback messages to you. They also illustrate how to respond when the system prompts you to enter touch-tone information.
- Text appears on the right-hand side and is marked with numbered circles that correspond to the numbered circles in the callflows. Use the text and callflows simultaneously to understand how to perform transcription or callbacks.
- A cheat sheet is located at the back of this chapter; it provides a condensed view of the options available while in transcription and callback mode.

## How to Read a Callflow

Start at the top of the callflow and work your way down to the bottom.



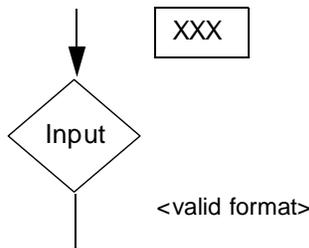
This symbol indicates the callflow is beginning. For example, you have called into the system for transcription or the system has called you to deliver a callback message.



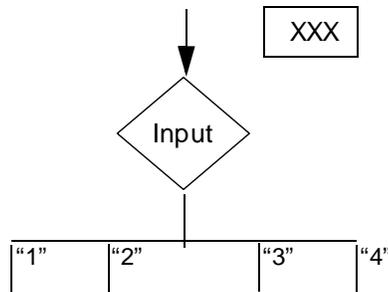
This symbol indicates the call is finished.

**LABEL**

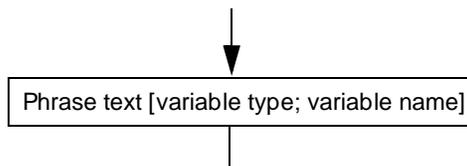
The text replacing "LABEL" indicates the name of a new callflow that exists within the current callflow, or where the call is going next.



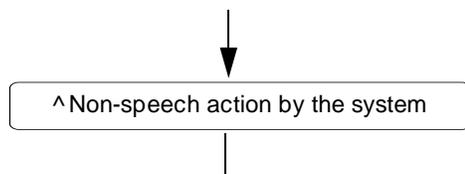
This symbol indicates the system is waiting for your touch-tone input. If you know what you must enter, you may bypass the announcement or prompt by entering the information. XXX represents the type of activity that will take place if you make an invalid entry. <valid format> indicates the format you must use to make your entry. See Figure 9-24 for more information.



This symbol indicates the system is waiting for your touch-tone input. The numbered options show where the system routes you for each entry. If you know what you must enter, you may bypass the announcement or prompt by entering the information. XXX represents the type of activity that will take place if you make an invalid entry. See Figure 9-24 for more information.



This symbol indicates speech. The text that replaces "Phrase text" is spoken to you. The bracketed information is also spoken to you; however, it is variable information, such as the date or time.



This symbol indicates the action performed by the system. For example, retrieving messages.

## Terminology

This section defines the terminology that appears in this chapter.

- Agent — A person who interacts with customers who are calling into the call center or are called by the system.
- Conference call — The connection of three or more people (or the system) into one phone conversation.
- Hold — The system temporarily takes the agent out of the call without disconnecting while it performs a callback to the customer.
- Mailbox — A mailbox is a folder within the system that stores messages left by callers.
- Message — A recording left by a caller in a mailbox.
- Segment — A message is divided into segments that collect information or deliver information to callers. There are four types of segments: Data, Recorded, Inform, and Scheduled. See “Segment Type” on page 9-21 for more information.
- System administrator — The person responsible for setting up and maintaining the system.
- Timeout — The maximum amount of time that the application waits for the caller to enter input. You have five seconds to enter your first digit and five seconds between each additional digit.

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## Transcription

This section describes the transcription process through text and callflows.

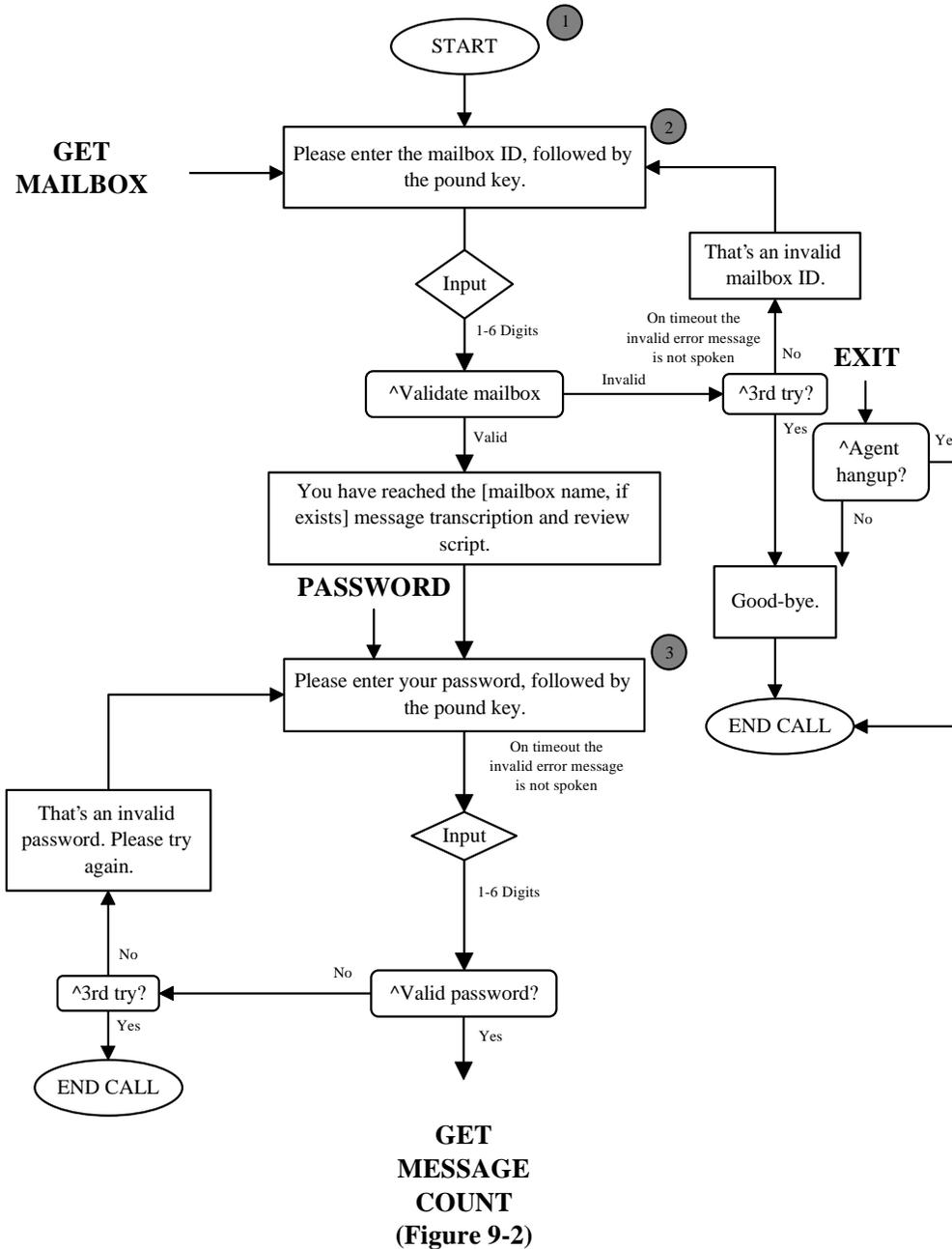


Figure 9-1. Start Transcription Callflow

## Understanding Start Transcription Callflow (Figure 9-1)

---

The headings in this section correspond to the numbered circles in Figure 9-1. This callflow illustrates how to get started with transcription.

### ① Accessing Transcription

Dial the system telephone number. See your system administrator for this number.

### ② Enter the Mailbox ID

The system will either prompt you for the mailbox ID or place you in a specific mailbox. If it prompts you for the mailbox ID, enter the number of the mailbox you want to transcribe. Your entry must be one to six digits in length, followed by #. The system attempts to verify that you entered a valid mailbox ID.

- If your entry is valid, you hear the name of the mailbox. You may continue with the callflow.
- If your entry is invalid, you are prompted to try again. You have three tries to enter a valid number. After three invalid entries, the system ends the call.
- If you do not respond before the system times-out, you are prompted to try again. You have three tries to enter a valid number. After three invalid entries, the system ends the call.

### ③ Enter the Password

The system will either prompt you for a password or place you in a specific mailbox. If it prompts you for a password, enter the mailbox password. Your entry must be one to six digits in length, followed by #.

#### NOTE:

Each mailbox may have a different password.

After you enter the password, the system attempts to verify that you entered a valid password.

- If your entry is valid, you may continue with the callflow (Figure 9-2).
- If your entry is invalid, you are prompted to try again. You have three tries to enter a valid number. After three invalid entries, the system ends the call.

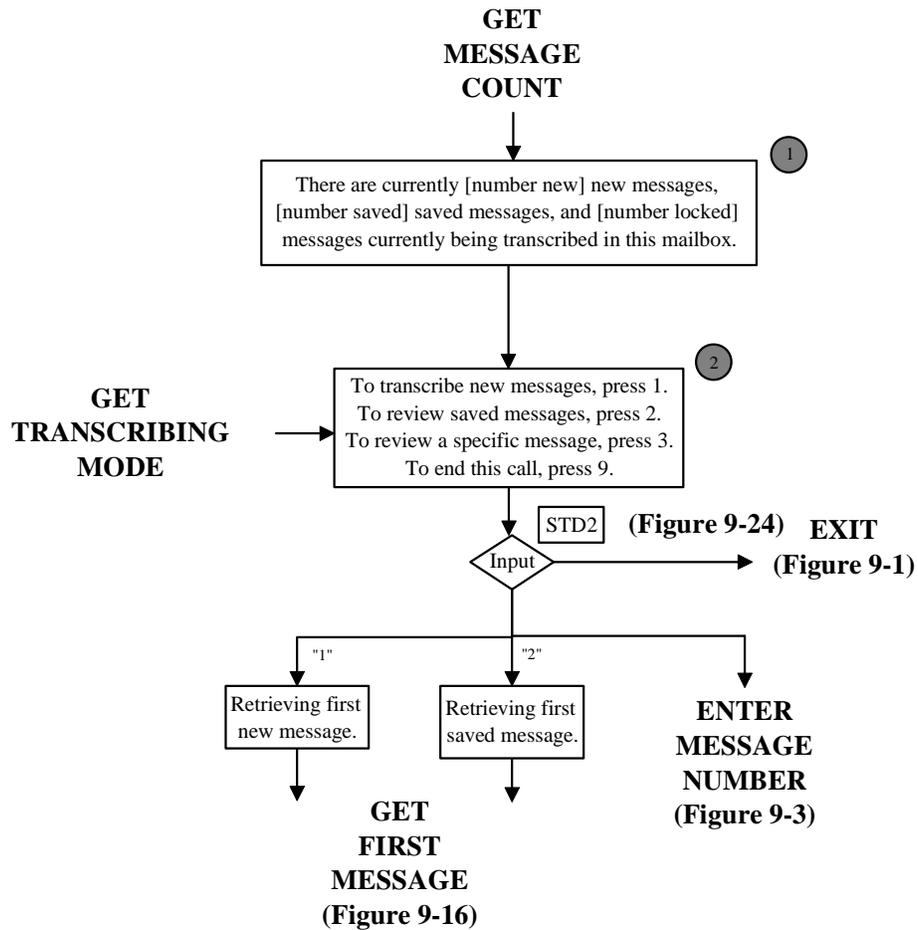


Figure 9-2. Get Message Count Callflow

## Understanding Get Message Count Callflow (Figure 9-2)

---

The headings in this section correspond to the numbered circles in Figure 9-2. This callflow illustrates the procedures for selecting the type of message you want to transcribe.

### ① Message Count

The system recites the number of new, saved, or locked messages.

#### New Messages

A new message is a message that has not been saved or deleted, is not currently being transcribed by another agent, and is not currently being used by the system to launch an agent callback.

#### Saved Messages

A saved message is any message that is marked as saved by an agent either during transcription or after a successful launch and save callback to a customer.

#### Locked Messages

A message is locked to you when another agent is transcribing it or when the system is using it to launch an agent callback.

### ② Type of Message

You can choose to listen to new messages, saved messages, or a specific message if you know the message number. Calls that come into the system are numbered sequentially. Each message is given a unique message number, which can be used to retrieve a specific message from any mailbox.

Enter the type of message you want to transcribe by pressing the appropriate touch-tone key:

1 New messages; select this option to retrieve only new messages (Figure 9-10).

2 Saved messages; select this option to retrieve only saved messages (Figure 9-10).

3 Enter message number; select this option to choose a message from any mailbox by entering its message number (Figure 9-3).

9 End call; select this option to end the call (Figure 9-1).

#### ⇒ NOTE:

You can end a call at any time by hanging up the telephone.

The system retrieves the selected message type, whether new or saved, in oldest to newest order. For example, a message left yesterday will be retrieved before a message left today. However, the oldest message may not have been the first dropped in the mailbox. Whenever a message is accessed by an agent or the system, it is time-stamped to the current time plus the retry time. The retry time is the number of minutes the system waits before attempting to redeliver a message it was unable to deliver to an agent (See your system administrator for the retry time). For example, a caller leaves a message at 10:00 am and the agent listens to it at noon. The new time for the message is 12:00 pm (the current time) plus 30 minutes (the retry time) = 12:30 pm.

If you enter a specific message number, you will hear that message only.

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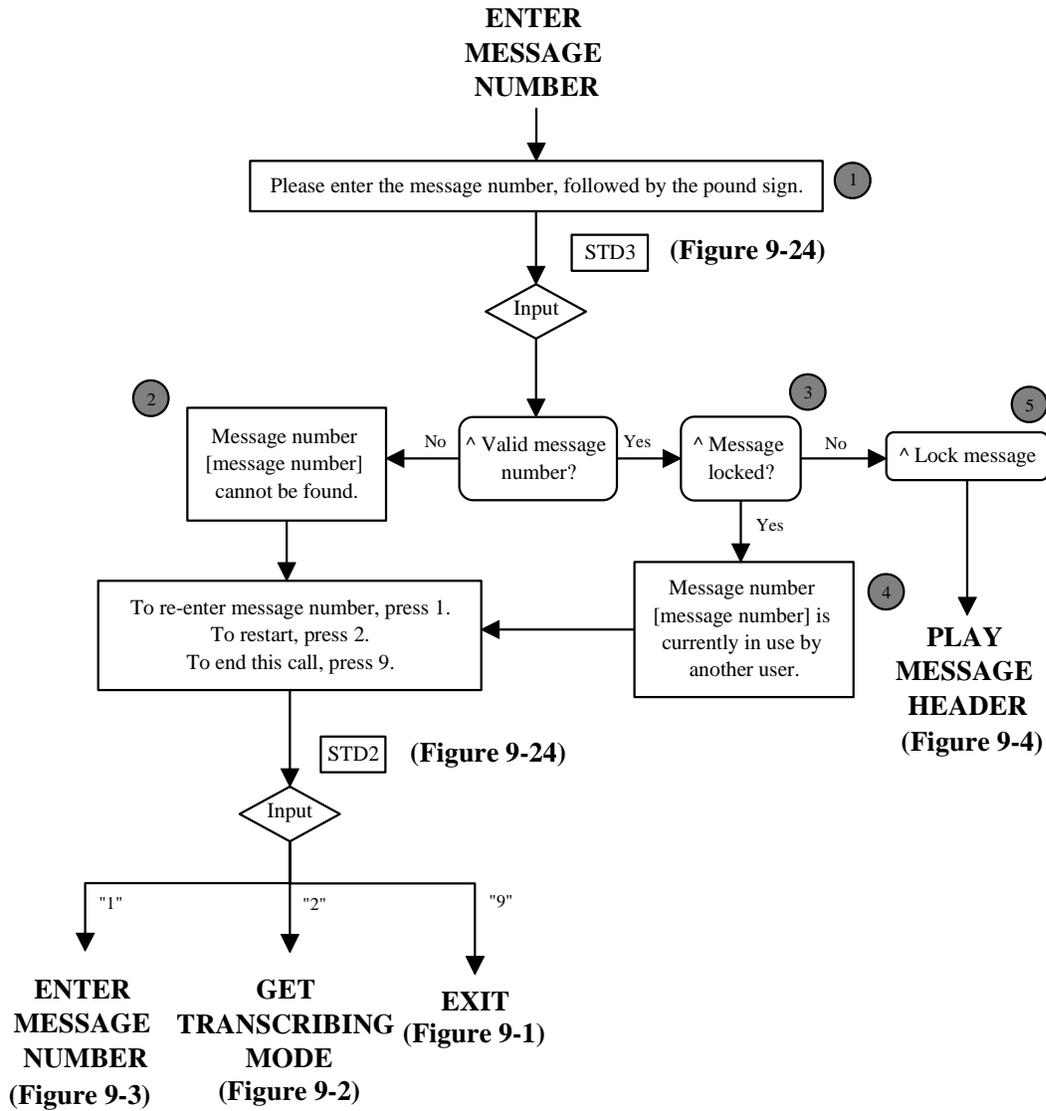


Figure 9-3. Enter Message Number Callflow

## Understanding Enter Message Number Callflow (Figure 9-3)

---

The headings in this section correspond to the numbered circles in Figure 9-3. This callflow illustrates what happens when you select messages based on the message number. The message will be new or saved; deleted messages cannot be retrieved.

### ① Enter Message Number

To listen to a specific message, enter the message number. The message number is one to six digits in length, followed by [#]. The system attempts to verify that you entered a valid message number.

### ② Invalid Numbers

If your entry is invalid, the system informs you the message cannot be found. You have the following options:

① Re-enter message number; select this option to enter a new message number (Figure 9-3).

② Restart; select this option to choose a new type of message to transcribe (Figure 9-2).

⑨ End call; select this option to end the call (Figure 9-1).

#### NOTE:

You can end a call at any time by hanging up the telephone.

### ③ Valid Numbers

If your entry is valid, the system determines whether the message is locked to prevent multiple agents from transcribing it. A message is locked to you when another agent is transcribing it or when the system is using it to launch an agent callback.

### ④ Locked Messages

The system will inform you if a message is locked. You cannot access locked messages until the agent finishes transcribing it or the system releases it. If the message is locked, you have the following options:

① Re-enter message number; select this option to enter a new message number (Figure 9-3).

② Restart; select this option to choose a new type of message to transcribe (Figure 9-2).

⑨ End call; select this option to end the call (Figure 9-1).

 **NOTE:**

You can end a call at any time by hanging up the telephone.

**5 Unlocked Messages**

When you access an unlocked message, the system locks it immediately. This insures that another party, such as an agent or the system, does not transcribe or use this message to launch a callback until you are finished. Depending on how your system is set up, you may hear the message number as well as the time and the date the message was delivered (Figure 9-4).

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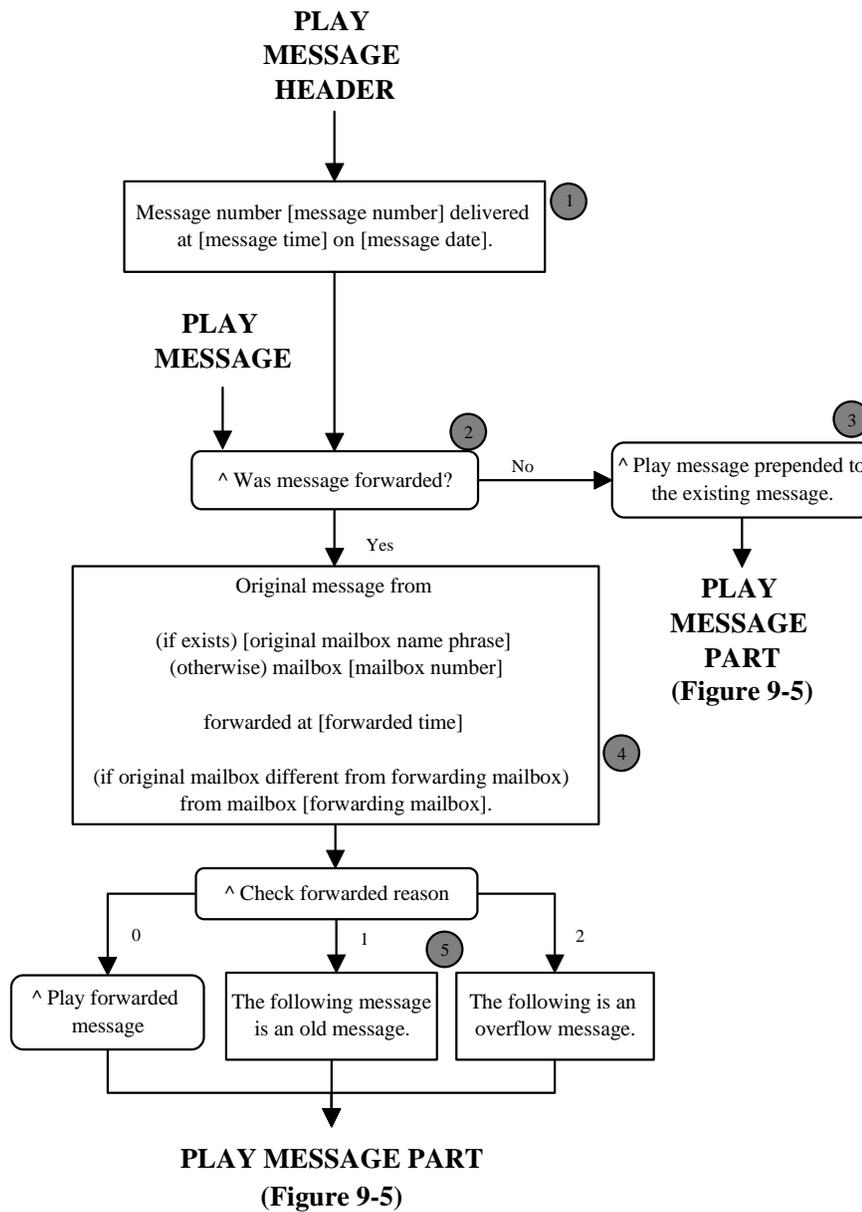


Figure 9-4. Play Message Header Callflow

## Understanding Play Message Header Callflow (Figure 9-4)

---

The headings in this section correspond to the numbered circles in Figure 9-4. This callflow illustrates the message header information the agent may hear as well as the method in which the system delivers forwarded messages.

### ① Message Header

Before message playback, you may hear the number of the message you are about to listen to as well as the date and time the message was delivered, depending on how your system is set up.

#### ⇒ NOTE:

Messages are reset to the current time plus the retry time whenever they are accessed by an agent or the system (See your system administrator for the retry time).

### ② Message Playback

The system determines whether or not the message was forwarded.

### ③ Prepended Messages

A prepended message is an agent recording that is attached to the original message. You hear the prepended message before you hear the original message (Figure 9-5).

### ④ Forwarded Messages

When you listen to a forwarded message, you hear the time the message was forwarded and one of the following:

- Name phrase of the mailbox where the message was originally left
- Number of the mailbox where the message was originally left

The forwarding mailbox can be different from the mailbox where the message originated. If so, you hear one of the following:

- Name phrase of the forwarding mailbox
- Number of the forwarding mailbox

The system determines the reason the message was forwarded and operates as follows:

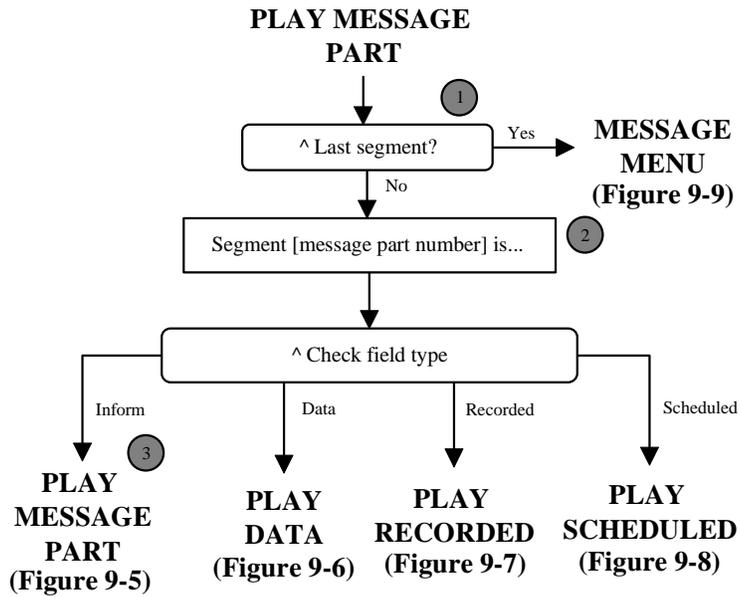
- If an agent forwarded it, message play begins immediately.
- If the system forwarded it automatically, the system recites the message type (old or overflow) and begins message play (Figure 9-5).

## **5 Old and Overflow Messages**

Your system may automatically forward the following message types:

- Old messages — messages forwarded because they have been in a certain mailbox for too long. The maximum amount of time a message can be in a mailbox is determined by your system administrator. See your system administrator for more information.
- Overflow messages — messages forwarded because there are too many messages in a certain mailbox. The maximum number of messages that can be in a mailbox is determined by your system administrator. See your system administrator for more information.

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---

Figure 9-5. Play Message Part Callflow

## Understanding Play Message Part Callflow (Figure 9-5)

---

The headings in this section correspond to the numbered circles in Figure 9-5. This callflow illustrates the message part (segment) you hear. Each type of segment behaves differently; a mailbox may have a combination of segments or several of the same segments. This callflow directs you to callflows that show the behavior for each type of segment.

### ① Last Segment

The system determines whether or not you have reached the last segment in the message.

- If so, you hear the message menu (Figure 9-9).
- If not, you hear the number of the segment that will now play.

### ② Segment Type

The system administrator sets up your system so that you hear a specific type(s) of segment during transcription. The system recites the message part number and then determines the type(s) of segment you are supposed to hear. Each segment type recites and may collect different information from the caller.

- Inform — recites information to the caller but does not collect information. For example, the system greets the caller. You will not hear this segment (Figure 9-5).
- Data — collects numeric information, such as a telephone number, from the caller using touch-tone recognition, speech recognition, or dial pulse recognition (Figure 9-6).
- Recorded — records the caller's spoken information, such as the name, address, or reason for the call (Figure 9-7).
- Scheduled — prompts the caller to enter a time or date to receive a callback (Figure 9-8).

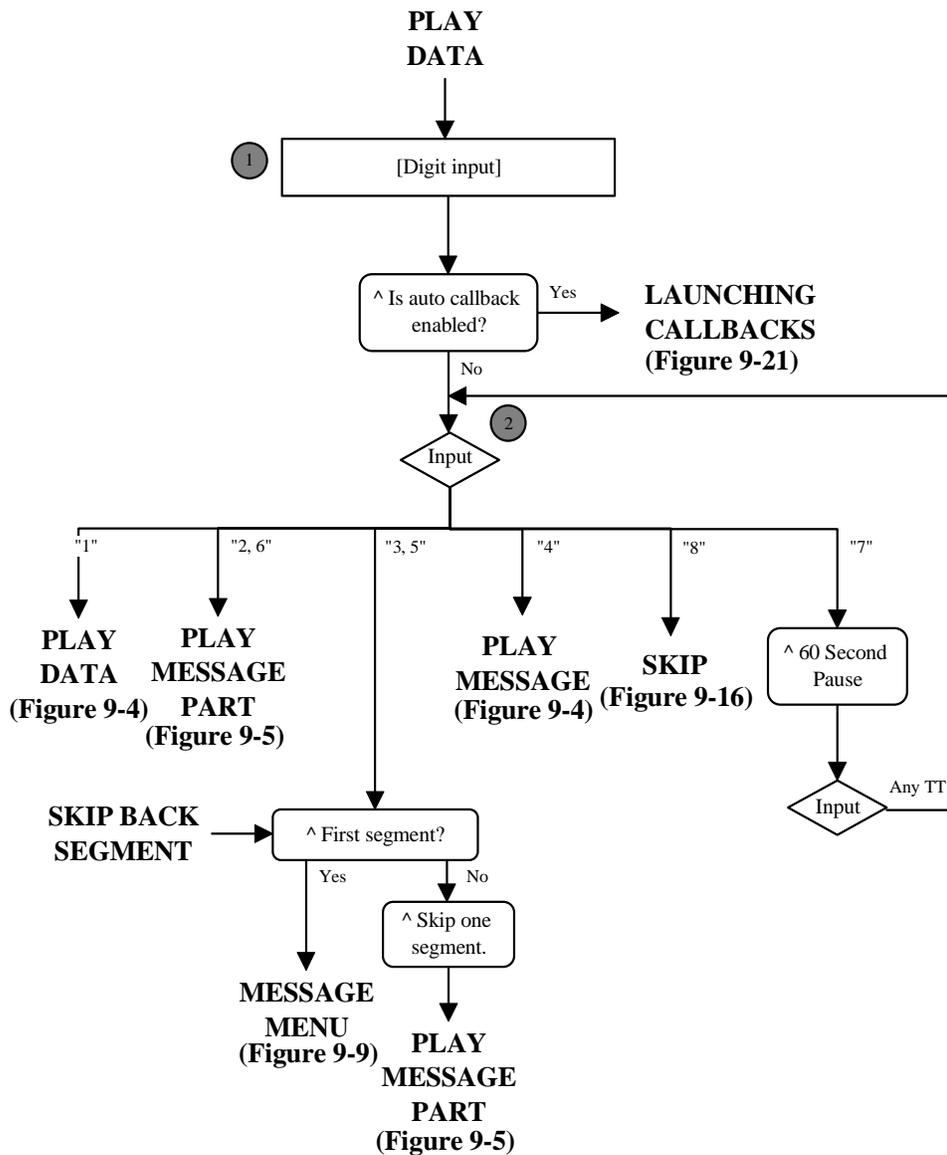


Figure 9-6. Data Segment Callflow

## Understanding Data Segment Callflow (Figure 9-6)

---

The headings in this section correspond to the numbered circles in Figure 9-6. This callflow illustrates what you hear for a data segment.

### ① Data Segment

The data segment collects numeric information from the caller using touch-tone recognition, speech recognition, or dial pulse recognition. For example, the system may prompt the caller to enter a telephone number. When you reach this segment, the system may put you on hold and return the customer's call automatically, or may recite the customer's telephone number so that you can enter it manually.

### ② Instructions Menu

The instructions menu is a hidden menu; it is not recited unless you access it through the help menu (Figure 9-11). It enables you to interrupt message playback at any time and navigate from segment to segment. The instructions menu is valid only during message playback; you access it by pressing any of the following touch-tone keys:

#### ⇒ NOTE:

You are not required to make an entry; interject these commands at your discretion. If you do not interrupt playback by pressing a touch-tone key, the system continues playback until the message is finished and then returns you to the message menu (Figure 9-9).

① Replay segment; select this option to hear this segment again (Figure 9-6).

② or ⑥ Skip segment; select this option to hear the next segment (Figure 9-5).

③ or ⑤ Backup one segment; select this option to hear the previous segment (Figure 9-6).

④ Replay message; select this option to go back to the start of the message (Figure 9-4).

⑦ Pause; select this option to pause for up to 60 seconds and then restart by pressing any touch-tone key. After 60 seconds, the message restarts automatically.

⑧ Skip to the next message; select this option to go to the next message. The message time is reset to the current time plus the retry time but the status is not changed (Figure 9-16).

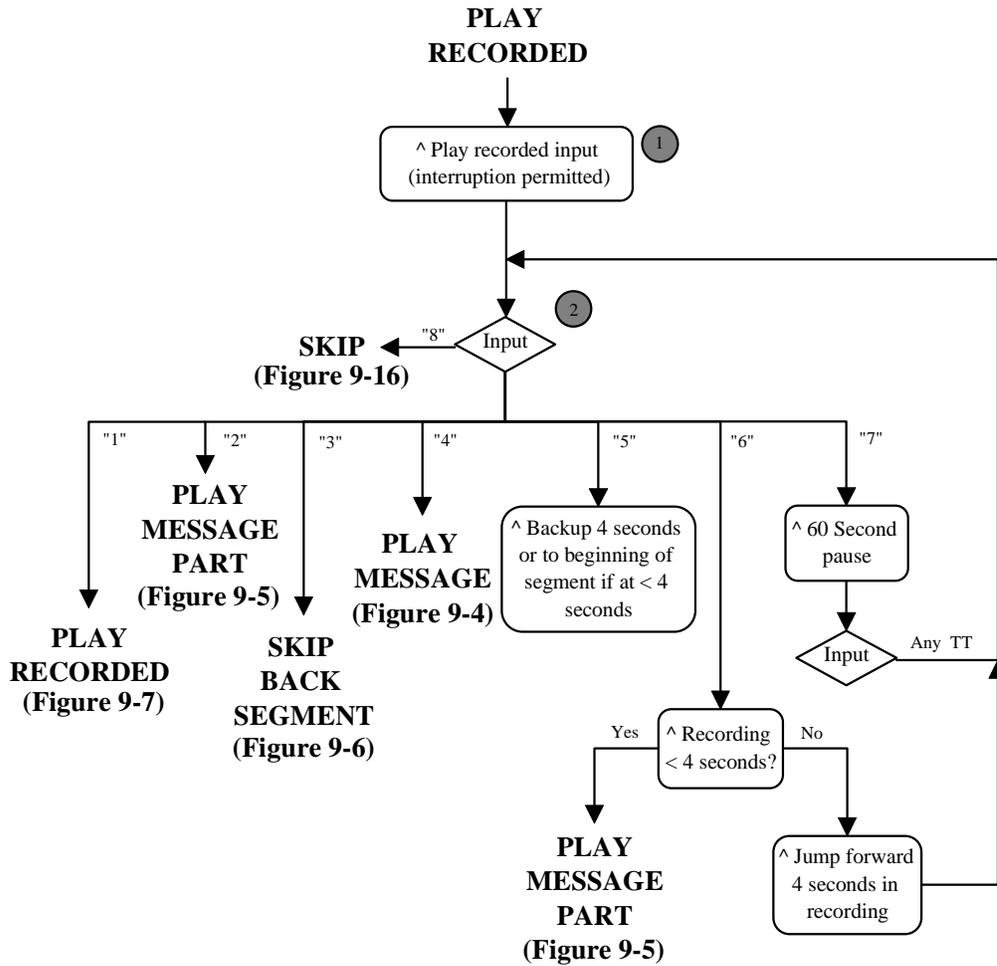


Figure 9-7. Recorded Segment Callflow

## Understanding Recorded Segment Callflow (Figure 9-7)

---

The headings in this section correspond to the numbered circles in Figure 9-7. This callflow illustrates what you hear during a recorded segment.

### ① Recorded Segment

The recorded segment records the caller's spoken information. For example, the system may prompt a caller to speak his name, address, and reason for calling. The system plays the recording to the agent.

### ② Instructions Menu

The instructions menu is a hidden menu; it is not recited unless you access it through the help menu (Figure 9-11). It enables you to interrupt message playback at any time and navigate from segment to segment. The instructions menu is available whenever you are in message playback; you access it by pressing any of the following touch-tone keys:

#### ⇒ NOTE:

You are not required to make an entry; interject these commands at your discretion. If you do not interrupt playback by pressing a touch-tone key, the system continues playback until the message is finished and then returns you to the message menu (Figure 9-9).

① Replay segment; select this option to hear this segment again (Figure 9-7).

② Skip segment; select this option to hear the next segment of this type (Figure 9-5).

③ Backup one segment; select this option to hear the previous segment in this message.

④ Replay message; select this option to go back to the start of the message (Figure 9-4).

⑤ Backup four seconds; select this option to back up four seconds in the recording. If you are less than four seconds into this segment, you will back up to the start of the segment.

⑥ Advance four seconds; select this option to advance four seconds in the recording. If there are not four seconds left in this segment, you advance to the end of the segment.

⑦ Pause; select this option to pause for up to 60 seconds and then restart by pressing any touch-tone key. After 60 seconds, the message restarts automatically.

⑧ Skip to the next message; select this option to go to the next message. The message time is reset to the current time plus the retry time but the status is not changed (Figure 9-16).

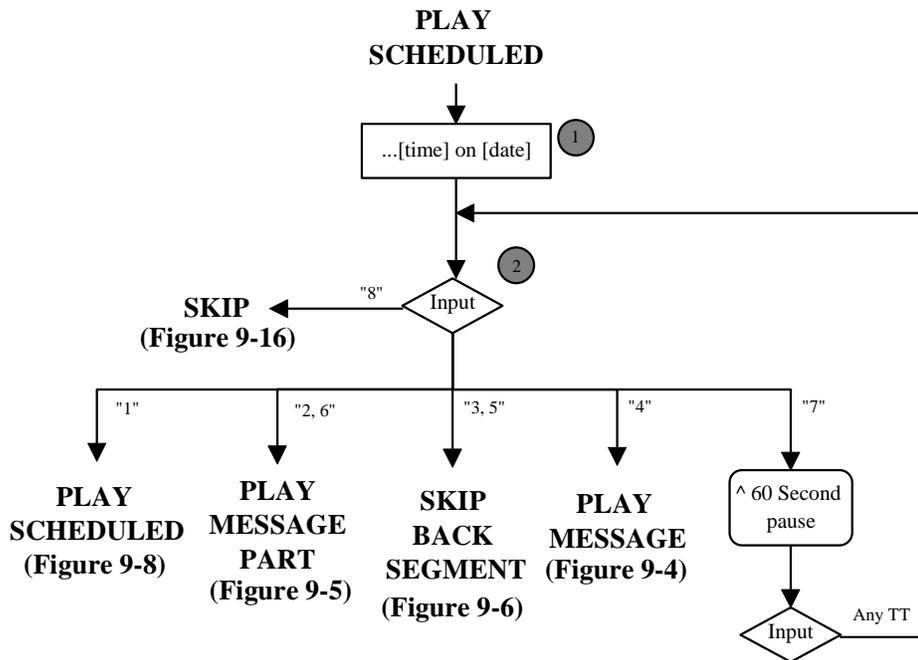


Figure 9-8. Scheduled Segment Callflow

## Understanding Scheduled Segment Callflow (Figure 9-8)

---

The headings in this section correspond to the numbered circles in Figure 9-8. This callflow illustrates what you hear during a scheduled segment.

### ① Scheduled Segment

The scheduled segment collects the time or date for callback from the caller using touch-tone recognition, speech recognition, and dial pulse recognition. The system recites this information during transcription.

### ② Instructions Menu

The instructions menu is a hidden menu; it is not recited unless you access it through the help menu (Figure 9-11). It enables you to interrupt message playback at any time and navigate from segment to segment. The instructions menu is available whenever you are in message playback; you access it by pressing any of the following touch-tone keys:

#### NOTE:

You are not required to make an entry; interject these commands at your discretion. If you do not interrupt playback by pressing a touch-tone key, the system continues playback until the message is finished and then returns you to the message menu (Figure 9-9).

1 Replay segment; select this option to hear this segment again (Figure 9-8).

2 or  6 Skip segment; select this option to hear the next segment in this message (Figure 9-5).

3 or  5 Backup one segment; select this option to hear the previous segment in this message (Figure 9-6).

4 Replay message; select this option to go back to the start of the message (Figure 9-4).

7 Pause; select this option to pause for up to 60 seconds and then restart by pressing any touch-tone key. After 60 seconds, the message restarts automatically.

8 Skip to the next message; select this option to go to the next message. The message time is reset to the current time plus the retry time but the status is not changed (Figure 9-16).

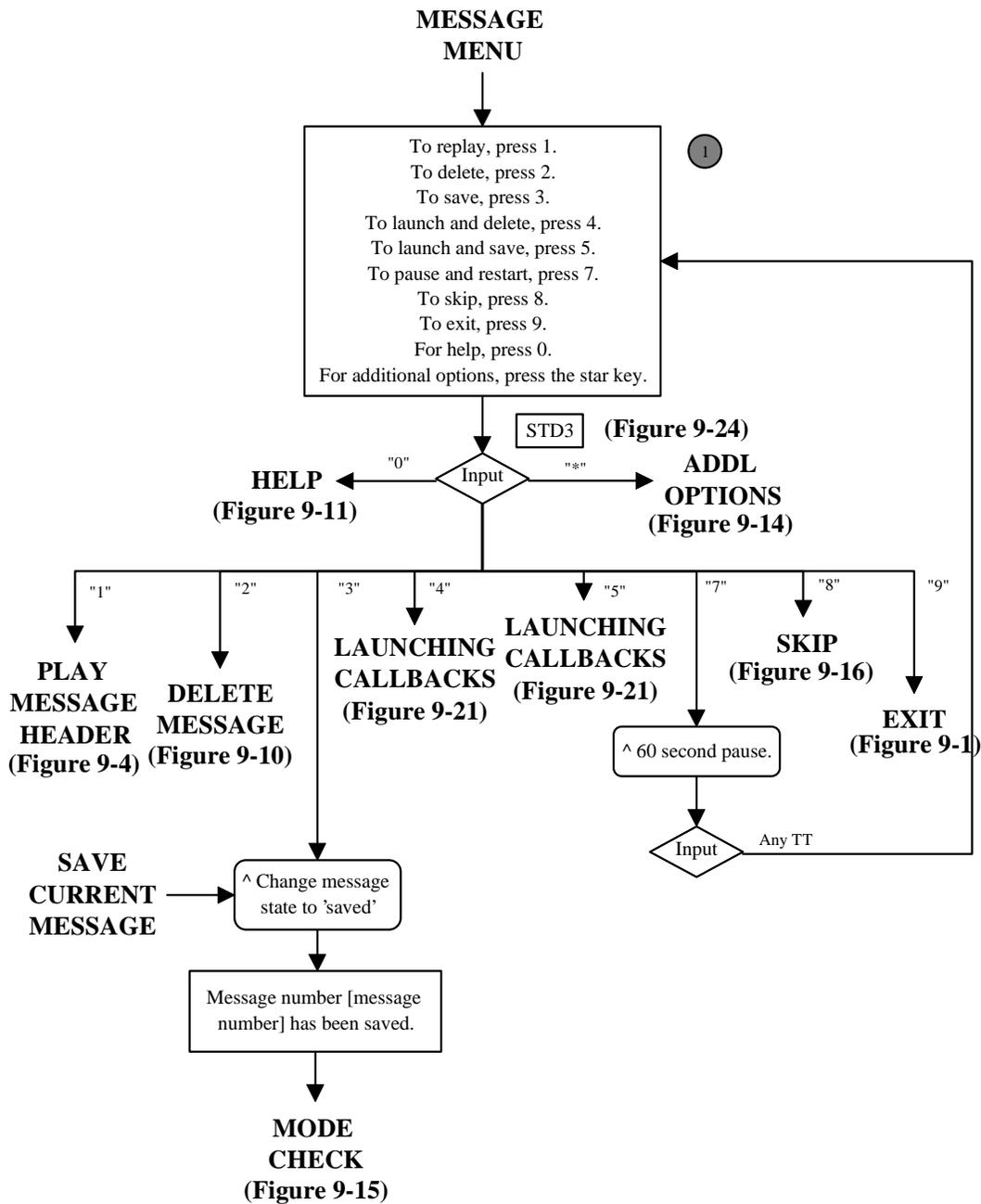


Figure 9-9. Message Menu Callflow

## Understanding Message Menu Callflow (Figure 9-9)

---

The heading in this section corresponds to the numbered circle in Figure 9-9. This callflow illustrates your options when you access the message menu.

### ① Message Menu

Enter the touch-tone digit that corresponds to the action you wish to take:

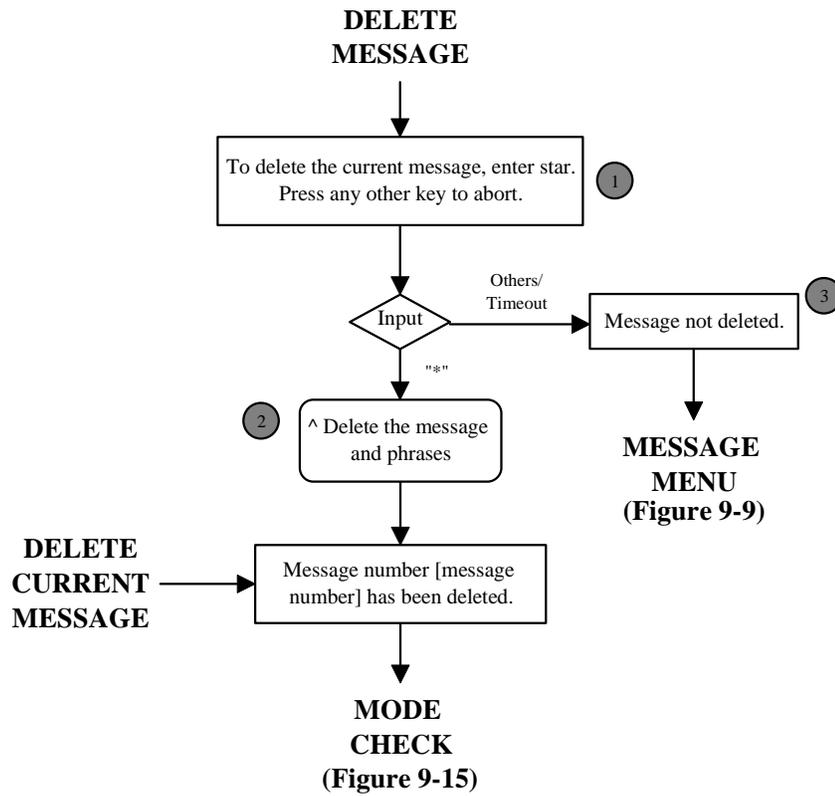
- ① Replay; select this option to replay the entire message (Figure 9-4).
- ② Delete; select this option to delete the entire message. Any recordings associated with it will be deleted as well (Figure 9-10).
- ③ Save; select this option to reclassify the message status as saved. The system recites the number of the message that has been saved (Figure 9-15).
- ④ Launch and delete; select this option to launch a customer callback and delete the message if the callback is successful (Figure 9-21).
- ⑤ Launch and save; select this option to launch a customer callback and save the message if the callback is successful (Figure 9-21).
- ⑦ Pause; select this option to pause for up to 60 seconds and then restart by pressing any touch-tone key. After 60 seconds, the message starts automatically.
- ⑧ Skip; select this option to go to the next message without changing the current message (Figure 9-16).
- ⑨ End call; select this option to end the call (Figure 9-1).



**NOTE:**

You can end a call at any time by hanging up the telephone.

- ⑩ Help; select this option to hear the help menu (Figure 9-11).
- \* Additional options; select this option to hear additional options (Figure 9-14).



---

Figure 9-10. Delete Message Callflow

## Understanding Delete Message Callflow (Figure 9-10)

---

The headings in this section correspond to the numbered circles in Figure 9-10. This callflow illustrates the procedure for deleting messages.



### **CAUTION:**

*Deleted messages cannot be retrieved.*

#### **① Delete Message**

Deleted messages are erased from the system and cannot be retrieved. You must confirm that you want to delete this message, as follows:

- Press \* to confirm that you want to delete this message.
- Press any other key if you do not want to delete this message.

#### **② Confirm Deletion**

When you delete a message, you also delete any phrase associated with it. For example, if you delete a message with a record segment, you also delete the caller's spoken information. After you delete the message, you hear the number of the message you deleted (Figure 9-15).

#### **③ Abort Deletion**

If you choose to abort or do not respond within five seconds, the system informs you that the message has not been deleted. The message status is not changed; you return to the message menu and remain in the current message (Figure 9-9).

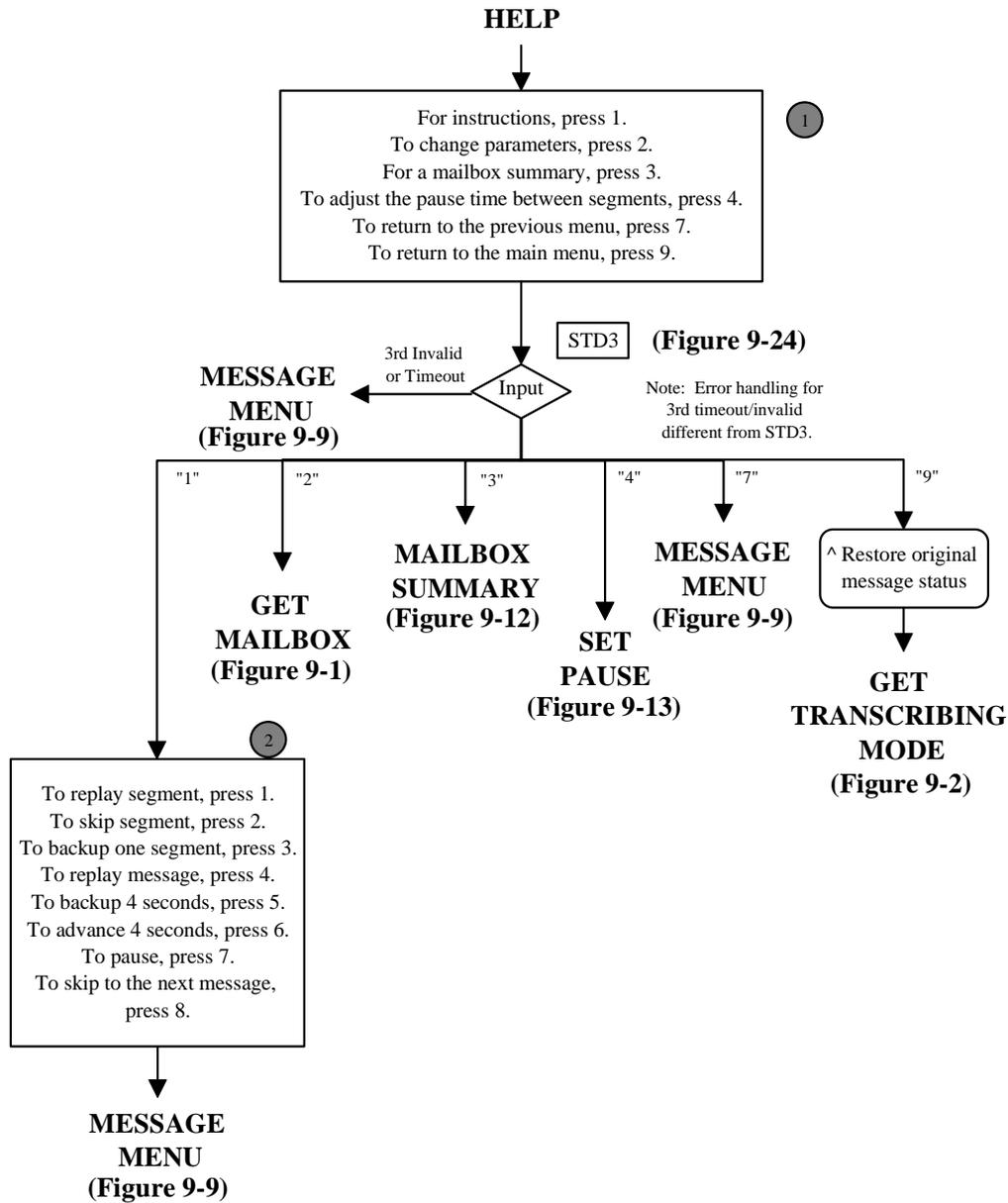


Figure 9-11. Help Menu Callflow

## Understanding Help Menu Callflow (Figure 9-11)

---

The headings in this section correspond to the numbered circles in Figure 9-11. This callflow illustrates how to use help during transcription.

### ① Help Menu

The system recites this menu when you select help from the message menu. Enter the touch-tone digit that corresponds to the action you wish to take:

- ① Instructions; select this option for instructions on how to navigate within the segments.
- ② Change parameters; select this option to enter a new mailbox number and change mailboxes (Figure 9-1).
- ③ Mailbox summary; select this option to listen to the number of messages in the mailbox according to message status (Figure 9-12).
- ④ Adjust the pause time between segments; select this option to adjust the length of the pause between playback of segment information (Figure 9-13).



**NOTE:**

This does not change the length of the pause that stops transcription.

- ⑦ Return to the previous menu; select this option to return to the message menu (Figure 9-9).
- ⑨ Return to the main menu; select this option to choose a new type of message to transcribe (Figure 9-2).

If you make an invalid entry, you are prompted to try again. You have three tries to enter a valid number. After three invalid entries, you are returned to the message menu.

### ② Instructions

These options belong to a hidden menu (instructions menu) that is valid ONLY during segment playback. It enables you to interrupt message playback at any time and navigate from segment to segment. At this point, any touch-tone entry will return you to the message menu. The system recites the instructions menu to familiarize you with your options during segment playback. You have the following options during segment playback:

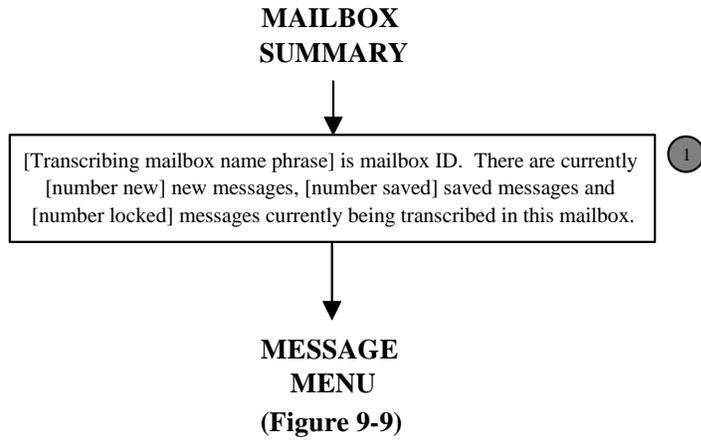


**NOTE:**

If you do not interrupt playback by pressing a touch-tone key, the system continues playback until the message is finished and then returns you to the message menu (Figure 9-9).

- 1 Replay segment; use this option in segment playback to hear the current segment again.
- 2 Skip segment; use this option in segment playback to hear the next segment (Figure 9-5).
- 3 Backup one segment; use this option in segment playback to hear the previous segment (Figure 9-6).
- 4 Replay message; use this option in segment playback to go back to the start of the message (Figure 9-4).
- 5 Backup four seconds; use this option in segment playback to back up four seconds in the recording. If you are less than four seconds into this segment, you back up to the start of the segment.
- 6 Advance four seconds; use this option in segment playback to advance four seconds in the recording. If there are not four seconds left in this segment, you advance to the end of the segment.
- 7 Pause; use this option in segment playback to pause for up to 60 seconds and restart by pressing any touch-tone key. After 60 seconds, the message restarts automatically.
- 8 Skip to the next message; select this option to go to the next message. The message time is reset to the current time plus the retry time but the status is not changed (Figure 9-16).

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Figure 9-12. Mailbox Summary Callflow

## **Understanding Mailbox Summary Callflow (Figure 9-12)**

---

The heading in this section corresponds to the numbered circle in Figure 9-12. This callflow illustrates the type of information you hear regarding mailboxes.

### **① Mailbox Summary**

Mailbox summary identifies the mailbox and recites the number of new messages, saved messages, and locked messages.

#### **New Messages**

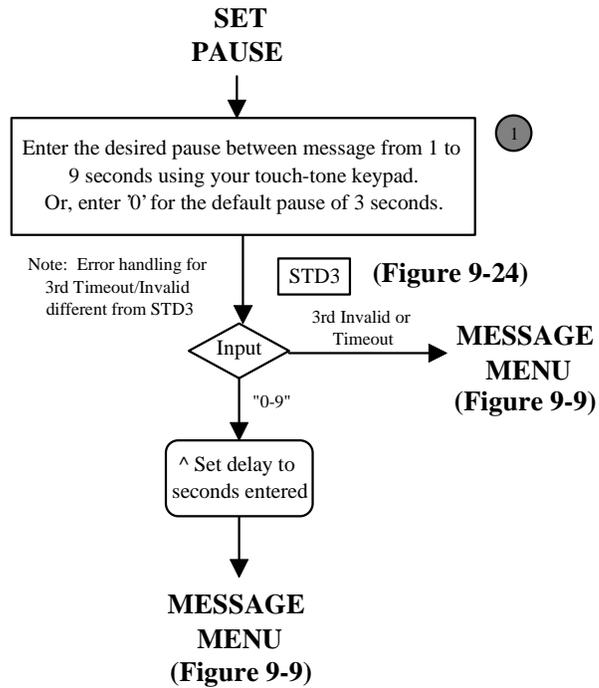
A new message is a message that has not been saved or deleted, is not currently being transcribed by another agent, and is not currently being used by the system to launch an agent callback.

#### **Saved Messages**

A saved message is any message that is marked as saved by an agent either during transcription or after a successful launch and save callback to a customer.

#### **Locked Messages**

A message is locked to you when another agent is transcribing it or when the system is using it to launch an agent callback.



---

Figure 9-13. Set Pause Callflow

## Understanding Set Pause Callflow (Figure 9-13)

---

The heading in this section corresponds to the numbered circle in Figure 9-13. This callflow illustrates the procedures for setting the pause between the playback of segment information.

### ① Set Pause

You may need more time to write between the playback of segments. The pause allows you to adjust the length of the pause between segments.

Enter any touch-tone digit from one to nine to indicate the number of seconds you want to pause between segments. The system sets the delay time and returns you to the message menu.

Default pause of three seconds



#### NOTE:

When this call is over, the length of the pause between the playback of segments will return to the default value of three seconds.

If your entry is invalid, you are prompted to try again. You have three tries to enter a valid number. After three invalid entries, you are transferred to the message menu (Figure 9-9).

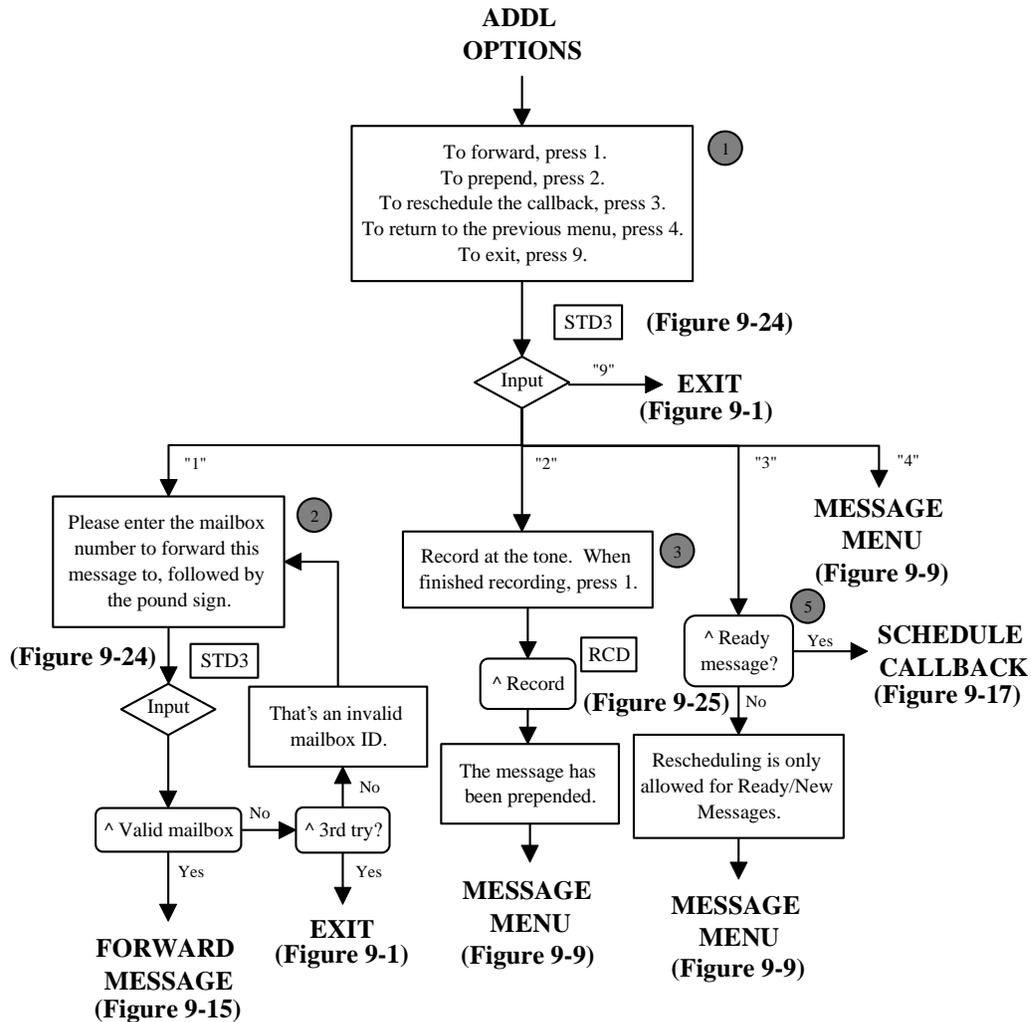


Figure 9-14. Additional Options Callflow

## Understanding Additional Options Callflow (Figure 9-14)

---

The headings in this section correspond to the numbered circles in Figure 9-14. This callflow illustrates the type of additional options that are available to you during transcription.

### ① Additional Information

Enter the touch-tone key that corresponds to the action you wish to take:

- ① Forward; select this option to forward the message to another mailbox (Figure 9-15).
- ② Prepend; select this option to record a segment and attach it to this message (Figure 9-14).
- ③ Reschedule the callback; select this option to enter a new date or time for the callback (Figure 9-17).
- ④ Return to the previous menu; select this option to return to the message menu (Figure 9-9).
- ⑨ Exit; select this option to end the call (Figure 9-1).

### ② Forward Messages

Use this option to forward this message to a new mailbox. For example, a message may need the attention of a supervisor. Enter the number of the mailbox where you want to forward this message, followed by #.

- If your entry is valid, you may continue with the callflow (Figure 9-15).
- If your entry is invalid, you are prompted to try again. You have three tries to enter a valid number. After three invalid entries, the system ends the call.

### ③ Prepend Messages

A prepended message is an agent recording that is attached to the original message. When the original message is accessed, the prepended message plays as well. Use this option to provide the next transcriber with additional information, such as the best time to call the customer. Once you finish recording, the system informs you the message has been prepended and returns you to the message menu (Figure 9-9).

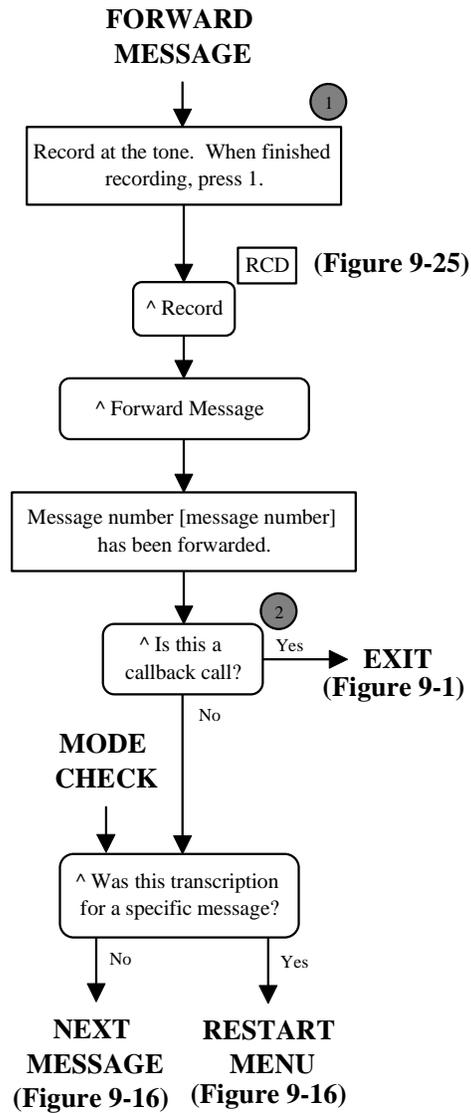
#### ⇒ NOTE:

Your prepended message is overwritten if you or another transcriber forward the original message or if another transcriber prepends to the message.

#### **4 Reschedule the Callback**

Depending on how your system is set up, you may be able to reschedule the date or time the system retries the agent callback. Rescheduling is allowed only for new messages; if the message is not new, the system informs you that callback cannot be rescheduled for this message. See Figure 9-17 for information on scheduling callbacks.

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Figure 9-15. Forward Message Callflow

## **Understanding Forward Message Callflow (Figure 9-15)**

---

The headings in this section correspond to the numbered circles in Figure 9-15. This callflow illustrates what happens when you choose to forward a message.

### **① Forwarding Messages**

You must record a message that will be prepended to the message you want to forward. For example, you may want to give instructions to the next person who will be listening to it. After you record, the message is forwarded. The system will recite the number of the message that was forwarded.

### **② Specific Message**

The system operates differently for transcription and callbacks.

- **Callbacks** — You can administer only the message that was delivered to you. If you received this message through callback, the system will end the callflow (Figure 9-1).
- **Transcription** — If you selected a message based on its message number, you hear the restart menu (Figure 9-16). If you selected a message based on type, the system retrieves the next message in the mailbox of that type (Figure 9-2).

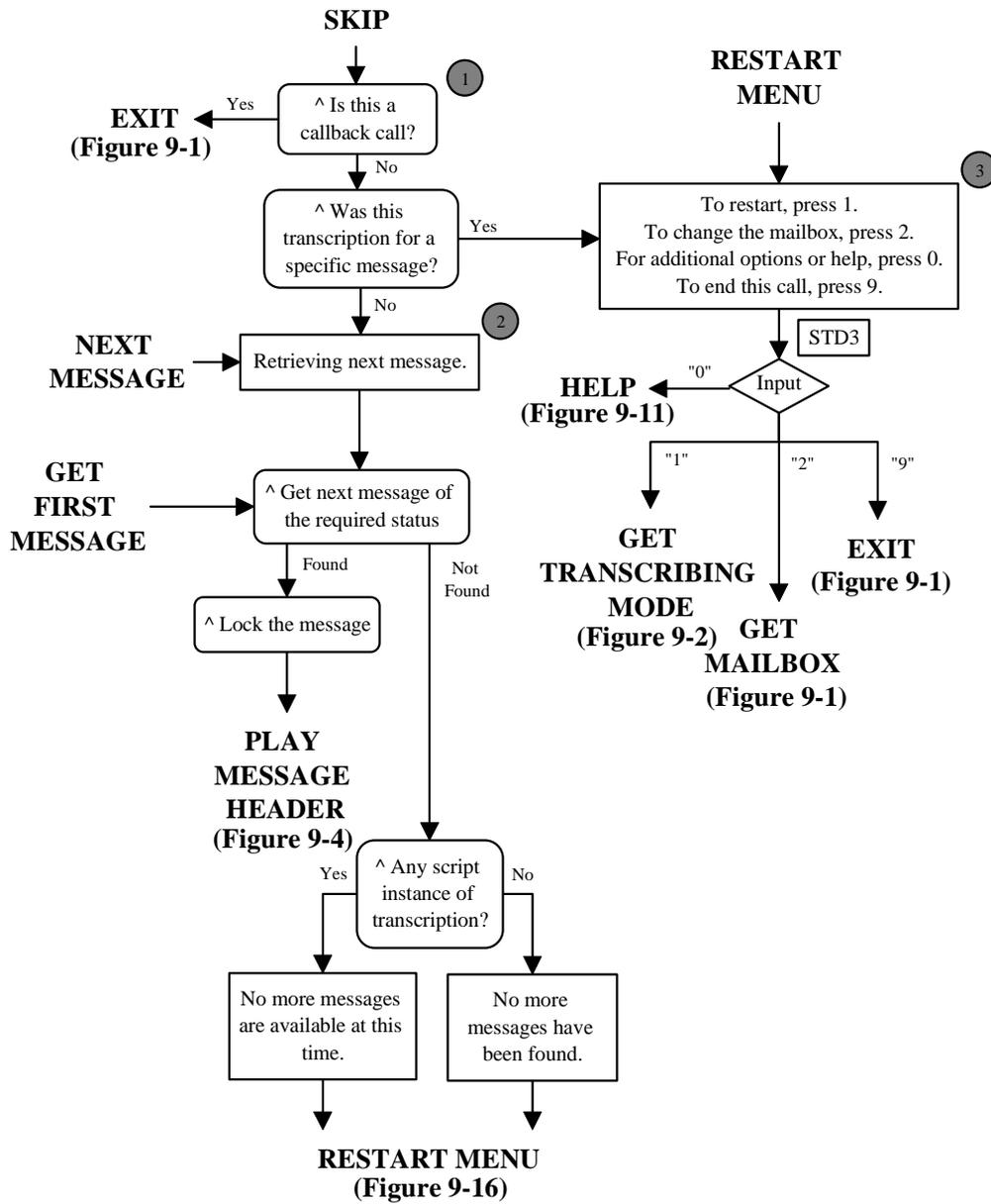


Figure 9-16. Skip Callflow and Restart Menu Callflow

## Understanding Skip Callflow and Restart Menu Callflow (Figure 9-16)

---

The headings in this section correspond to the numbered circles in Figure 9-16. This callflow illustrates what happens when you choose to skip to the next message.

### ① Skip

The skip option operates differently for callbacks and transcription.

- Callbacks — You cannot skip forward if you are in callback mode. You can administer only the message that was delivered to you. If you received this message through callback, the system ends the call (Figure 9-1).
- Transcription — If you selected a message based on its message number, you hear the restart menu (Figure 9-16). If you selected a message based on type, the system continues with the callflow.

### ② Retrieving Next Message

The system searches for the next message of the required status, that is, the type of message you selected at the start of transcription.

- If a message is found, the system locks the message so you can transcribe it, and begins playback (Figure 9-4).
- If a message is not found, the system determines whether a message of the required status is currently being used by the system to launch a callback or another agent is transcribing it.
  - If so, the system informs you that no more messages are available at this time and returns you to the restart menu (Figure 9-16).
  - If not, the system informs you no more messages have been found and returns you to the restart menu (Figure 9-16).

### ③ Restart Menu

Enter the touch-tone key corresponding to the action you wish to take:

- ① Restart; select this option to choose a new type of message to transcribe (Figure 9-2).
- ② Change the mailbox; select this option to enter a new mailbox number (Figure 9-1).
- ⑩ Additional options or help; select this option for additional options or to hear the help menu (Figure 9-11).
- ⑨ End call; select this option to end the call (Figure 9-1).

#### ⇒ NOTE:

You can end a call at any time by hanging up the telephone.

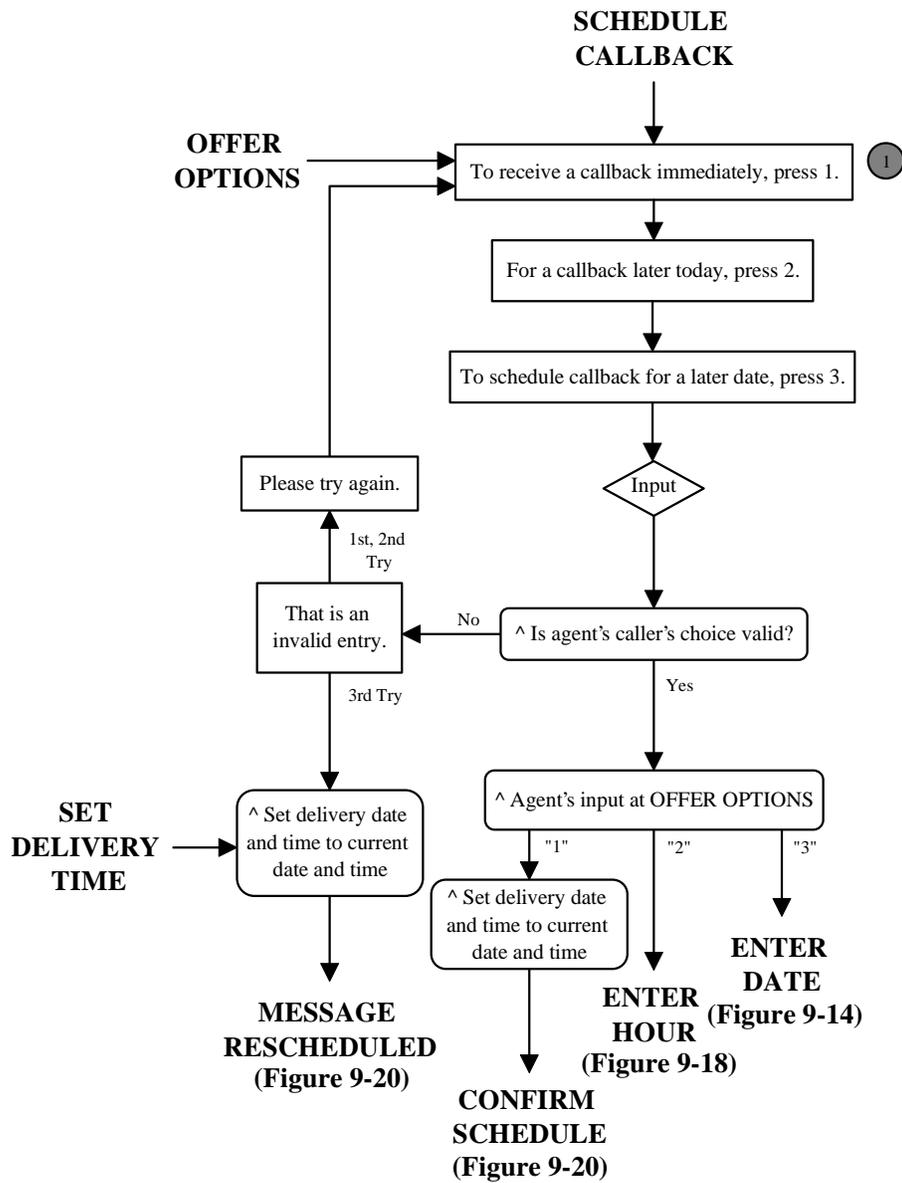


Figure 9-17. Schedule Callback Callflow

## Understanding Schedule Callback Callflow (Figure 9-17)

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The headings in this section correspond to the numbered circles in Figure 9-17. This callflow illustrates the procedures for scheduling customer callbacks.

### ① Scheduling a Callback

Ask your system administrator if callbacks are set up on your system. If not, you will not be able to perform callbacks.

A callback is a two-step process. The system delivers the message to an agent (agent callback) who then launches a callback to the customer (customer callback). Depending on how your system is set up, you may schedule the callback, as follows:

- ① Receive a callback immediately; select this option to receive an agent callback immediately (Figure 9-20).
- ② Receive a callback later today; select this option to enter the hour to receive the agent callback today (Figure 9-18).
- ③ Schedule a callback for a later date; select this option to enter the date to receive the agent callback (Figure 9-19).

If your entry is invalid, you are prompted to try again. You have three tries to make a valid entry. After three invalid entries, the system schedules the callback for the current time and date.

#### NOTE:

Listen to the system's prompt to understand the digit you need to push to access your option. Even though you schedule the callback, you may not be the agent to receive it.

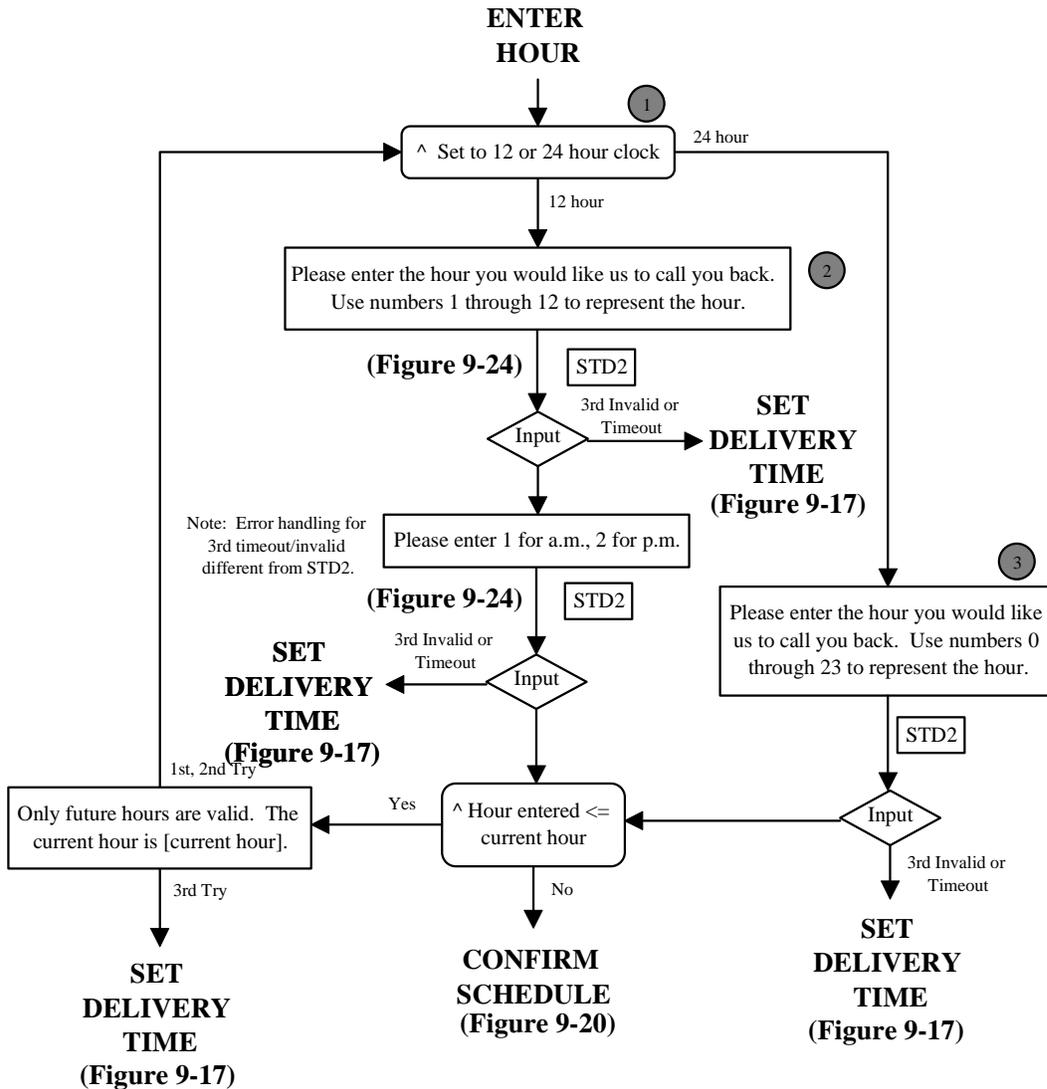


Figure 9-18. Enter Hour for Callback Callflow

## **Understanding Enter Hour for Callback Callflow (Figure 9-18)**

---

The headings in this section correspond to the numbered circles in Figure 9-18. This callflow illustrates how to enter a time that the system should call you back.

### **① Time Format**

Ask your system administrator whether your system is based on a 12-hour or 24-hour time format.

### **② 12 Hour Clock**

Entering the time in a 12-hour format is a two-step process:

- Enter the hour using your touch-tone telephone
- Enter  for a.m. or  for p.m.

If your entry is invalid, you are prompted to try again. You have three tries to enter a valid number. After three invalid entries, the system schedules the callback for the current date and time (Figure 9-17). You must enter a future time within the current day.

### **③ 24 Hour Clock**

Enter the time in 24-hour format. Using your touch-tone telephone, enter a number from 0 through 23 to indicate the hour.

If your entry is invalid, you are prompted to try again. You have three tries to enter a valid number. After three invalid entries, the system schedules the callback for the current date and time (Figure 9-17). You must enter a future time within the current day.

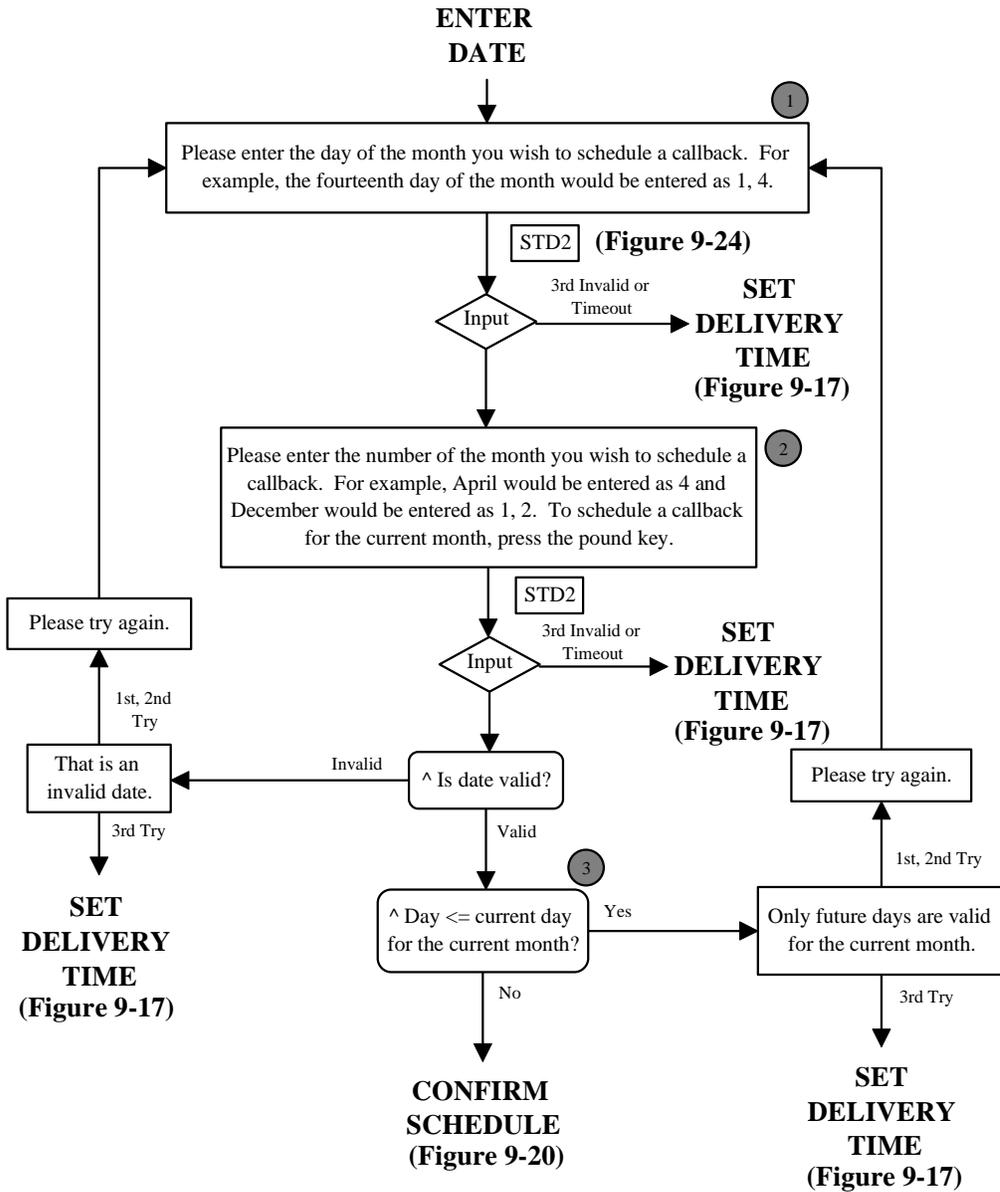


Figure 9-19. Enter Date for Callback Callflow

## **Understanding Enter Date for Callback Callflow (Figure 9-19)**

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The headings in this section correspond to the numbered circles in Figure 9-19. This callflow illustrates how to enter a date for callback.

### **① Scheduling a Day of the Month**

To schedule a callback, you must enter the day of the month you want to receive the callback. For example, for the fourteenth of the month, press  and then . You have three tries to enter valid input. When you enter incorrect input, or if the system times-out before you enter input, you are informed of your error. The system prompts you again for the information. After the third incorrect entry, the system schedules the callback for the current date and time (Figure 9-17).

### **② Scheduling a Number of the Month**

To schedule a callback, you must enter the number of the month you want to receive the callback. Enter the month as a number; for example, for April, press . You have three tries to enter valid input. When you enter incorrect input, or if the system times-out before you enter your input, you are informed of your error. The system prompts you again for the information. After the third incorrect entry, the delivery date and time is set to the current date and time (Figure 9-17).

### **③ Current or Future Date?**

You must enter a future date for callback. Otherwise, your input is not valid.

- If your input is valid, you continue with the callflow (Figure 9-20).
- If your input is not valid, the system schedules the callback for the current date and time (Figure 9-17).

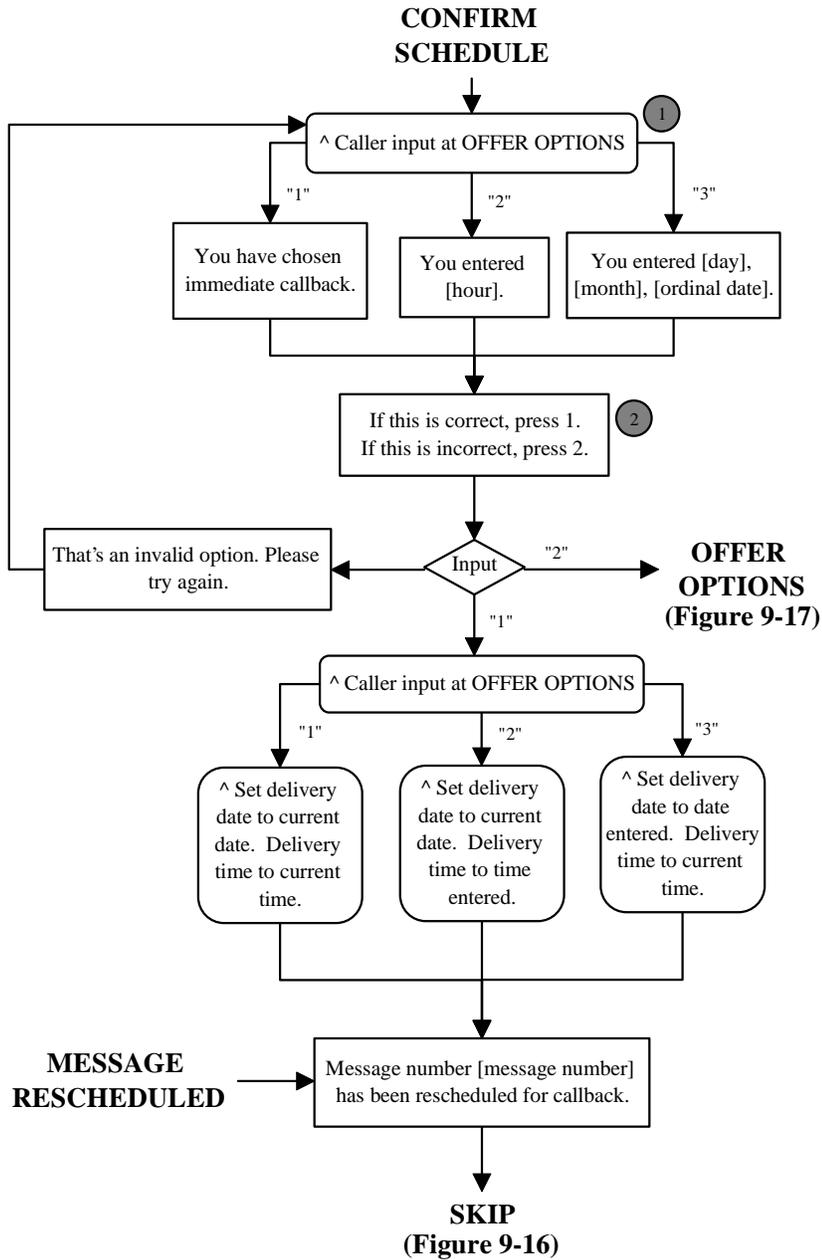


Figure 9-20. Confirm Schedule Callback Callflow

## Understanding Confirm Schedule Callback Callflow (Figure 9-20)

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The headings in this section correspond to the numbered circles in Figure 9-20. This callflow illustrates the procedures for confirming the date or time scheduled for callback.

### ① Confirming Callback Schedule

The system informs you that the callback will be scheduled for one of the following times:

- Immediately
- The hour you entered
- The day and month you entered, plus the year



**NOTE:**

The system calculates the year automatically.

### ② Correct or Incorrect

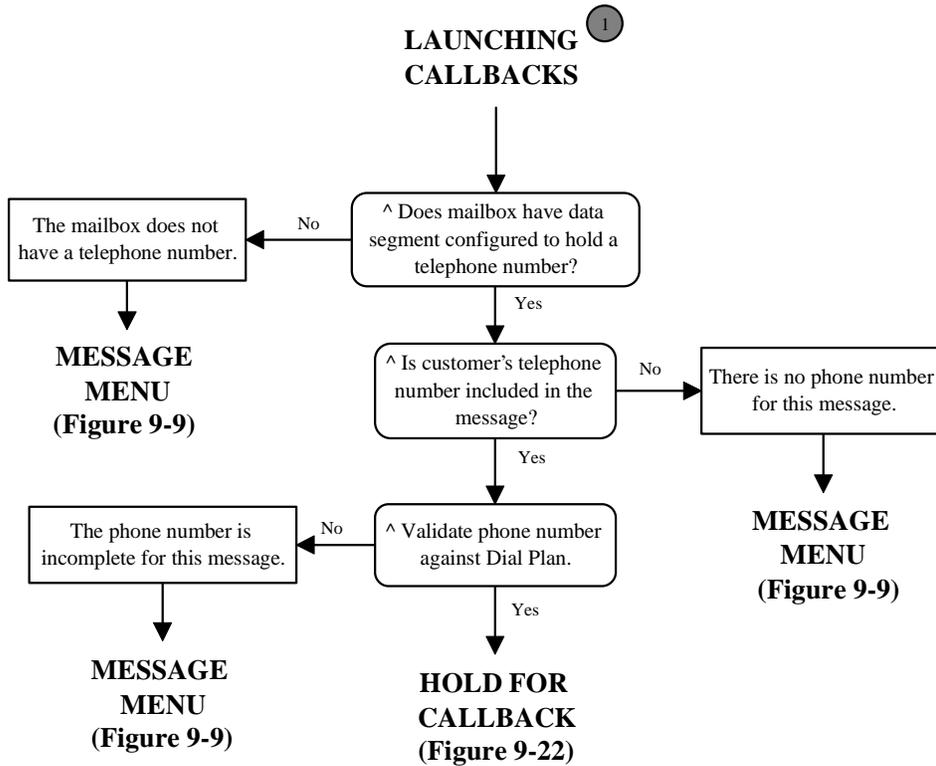
Before the system schedules the callback, you must verify that the date or time scheduled for callback is correct. Enter the touch-tone key that corresponds to the accuracy of this information:

Correct; select this option if the date or times the system recites is correct.

Incorrect; select this option if the date or time the system recites is incorrect.

The system operates as follows:

- If you confirm, the system schedules the callback and recites the number of the scheduled message (Figure 9-16).
- If the information is not correct, you are prompted to re-enter the information (Figure 9-17).



---

Figure 9-21. Launching Callbacks Callflow

## **Understanding Launching Callbacks Callflow (Figure 9-21)**

---

The headings in this section correspond to the numbered circles in Figure 9-21. This callflow illustrates what happens when you choose to either launch a call and save the message or to launch a call and delete the message.

### **① Launching Callbacks**

To launch a callback, the system must have the telephone number where the caller can be reached. The system takes three steps to validate the telephone number:

1. Is the mailbox set up with a data segment to collect telephone numbers?

To collect telephone numbers, the system administrator must set up the mailbox with a data segment. If the mailbox does not contain a data segment, the system informs you that the mailbox does not contain a telephone number and returns you to the message menu (Figure 9-9).

2. Has the data segment collected the customer telephone number?

If not, the system informs you that the message does not contain a telephone number and returns you to the message menu (Figure 9-9).

3. Does the telephone number have enough digits?

If not, the system informs you that the telephone number is incomplete and returns you to the message menu (Figure 9-9).

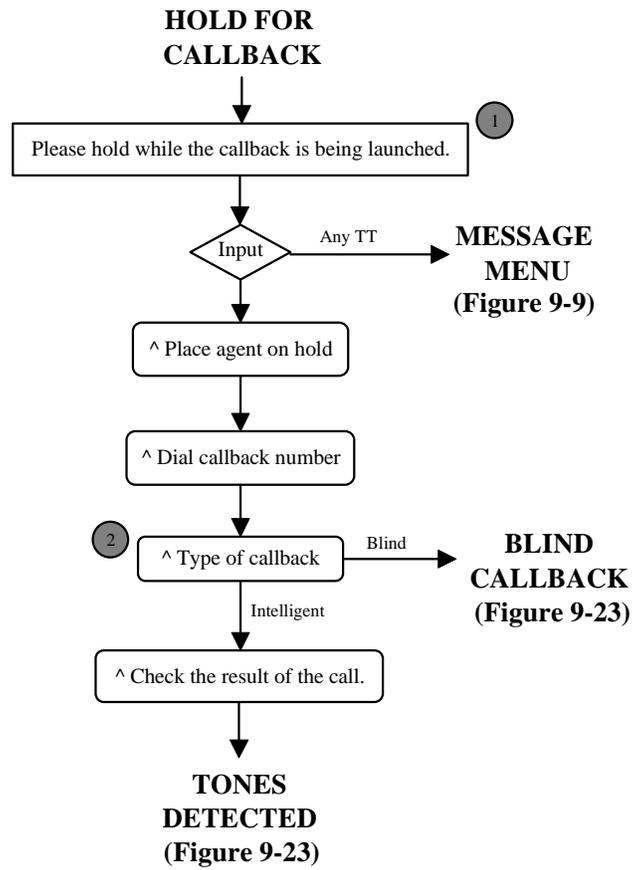
If the answer for each step is yes, you are put on hold as the system prepares to launch a callback (Figure 9-22).

#### **Launch and Save**

This option will save the message once you have launched a successful callback. You do have the option to reclassify the call as unsuccessful and attempt another launch.

#### **Launch and Delete**

This option will delete the message once you have launched a successful callback. You do have the option to reclassify the call as unsuccessful and attempt another launch.



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Figure 9-22. Hold for Callback Callflow

## **Understanding Hold for Callback Callflow (Figure 9-22)**

---

The headings in this section correspond to the numbered circles in Figure 9-22. This callflow illustrates what happens when you perform a customer callback.

### **① Callback**

The system informs you that you will be placed on hold. You are placed on hold before the system dials the callback number. Press any touch-tone during this announcement to abort the callback and go to the message menu (Figure 9-9). Otherwise, the system dials the customer callback number.

### **② Callback Type**

The system determines whether the call is blind or intelligent, which affects how your call is handled. Ask your system administrator whether your system makes blind or intelligent calls.

#### **Blind**

During a blind call, the system does not determine the result of the call, that is, whether it was successful. If the call is blind, you will be brought back into the call after the system dials the telephone number, regardless of the result of the call (Figure 9-23).

#### **Intelligent**

During an intelligent call, the system determines the result of the call, that is, whether it was successful. If the call is intelligent, you will be brought back into the call only if the system detects speech energy or touch-tone entries (Figure 9-23).

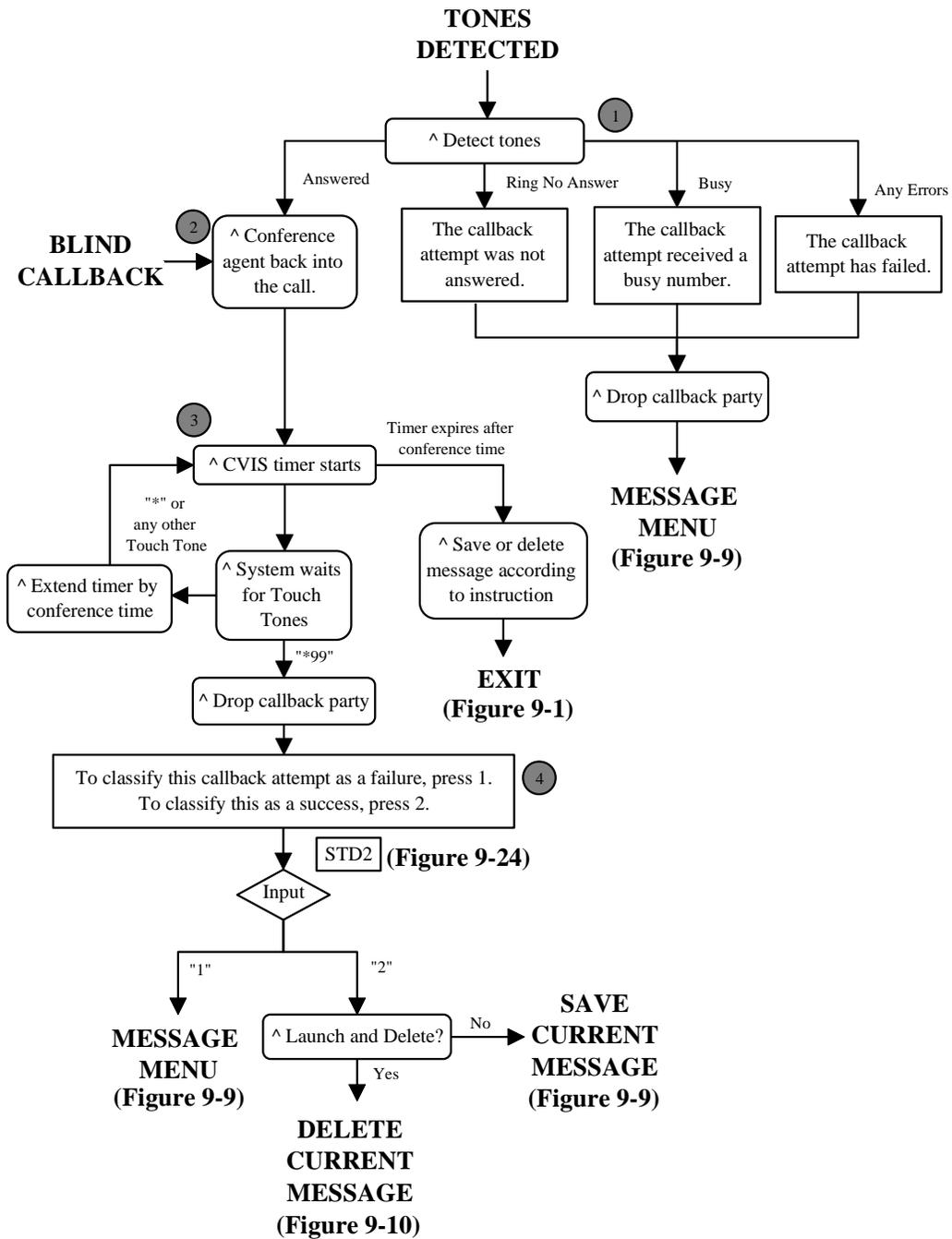


Figure 9-23. Tone Detection Callflow

## Understanding Tone Detection Callflow (Figure 9-23)

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The headings in this section correspond to the numbered circles in Figure 9-23. This callback illustrates how the system reacts to the result of the call.

### Blind or Intelligent

#### ① Intelligent Calls

For intelligent calls, the system will not bring the customer line back into the call if it hears the following types of call progress tones:

- Ring No Answer
- Busy
- Any Errors

If it hears any of these call progress tones, it will end the call to the customer and return you to the message menu (Figure 9-9). If the system detects speech energy or touch-tone, it will conference the customer to you and continue with the callflow.

#### ② Blind Calls

If the call is blind, you will be brought back into the call after the system dials the telephone number, regardless of the result of the call.

#### ③ System Timer

Once you are brought back into the conference call, the system timer starts. The timer waits for you to make a touch-tone entry, as follows:

\* or any other touch-tone key extends the timer

\* 9 9 Drops the callback party and allows you to classify the callback attempt

If you do not respond before the timer expires, the system will either save or delete the message (depending on how your system is set up and the message menu option you selected).

#### ④ Classifying Callback Attempts

You may classify the call as either a success or failure. An example of a failure could be the system reaching an answering machine. Classify the call as follows:

1 Classify attempt as a failure; select this option to classify the attempt as a failure and return to the message menu (Figure 9-9).

2 Classify attempt as success; select this option to classify this callback attempt as a success and delete the message (Figure 9-10).

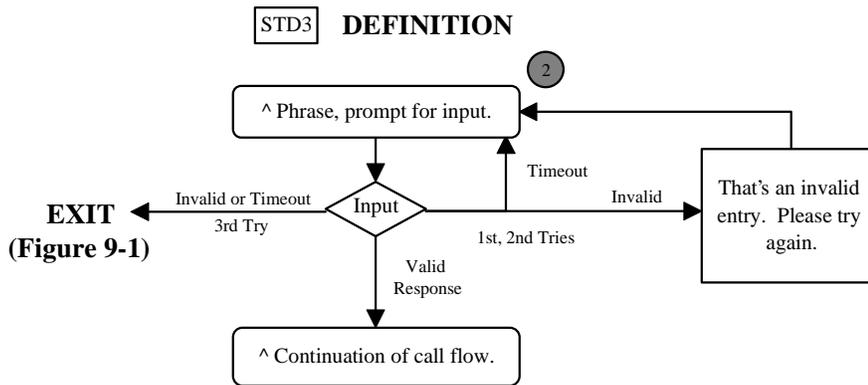
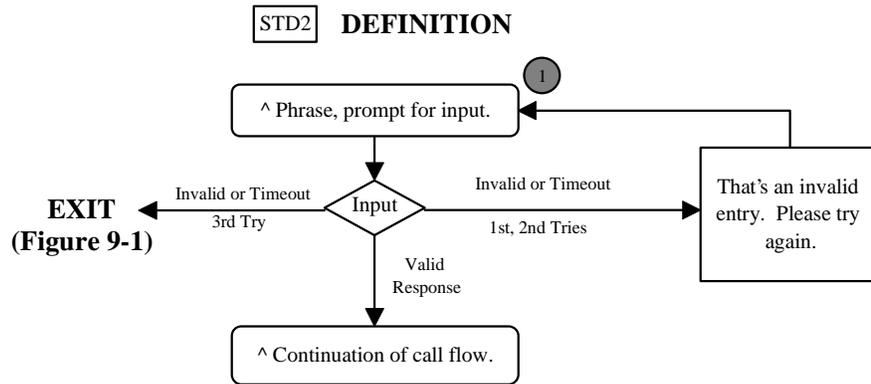


Figure 9-24. STD3 Callflow and STD2 Callflow

## **Understanding STD3 and STD2 Callflows (Figure 9-24)**

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The headings in this section correspond to the numbered circles in Figure 9-24. These callflows illustrates the procedures for time-outs, that is, the maximum amount of time the system waits for the agent to enter input.

### **① STD2**

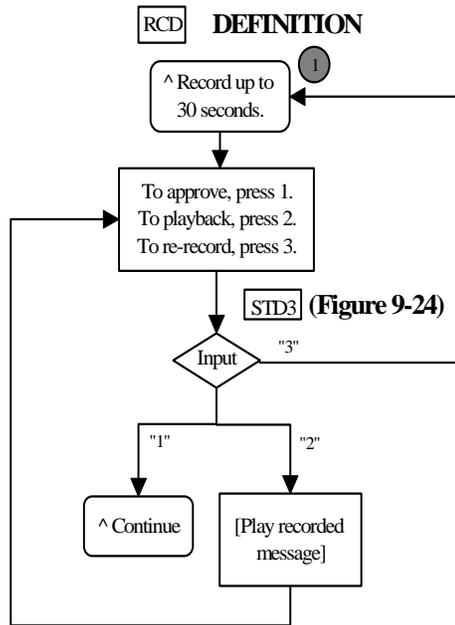
You have three tries to enter valid input. When you enter incorrect input, or if the system times-out before you enter input or complete your input, you are informed of your error. The system prompts you again for the information. After the third incorrect entry, the system drops the call.

Once you enter the correct data, the callflow continues.

### **② STD3**

You have three tries to enter valid input. When you enter incorrect input, you are informed of your error. The system prompts you again for the information. If the system times-out before you enter input or complete your input, you will not be informed of your error but you will be prompted to enter the information again. After the third incorrect entry, the system drops the call.

Once you enter the correct data, the callflow continues.



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Figure 9-25. RCD Callflow

## Understanding RCD Callflow (Figure 9-25)

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The headings in this section correspond to the numbered circles in Figure 9-25. This callflow illustrates the procedures for recording messages.

### ① Recording Messages

The recording option allows you to preappend messages. A preappended message is a message that you record and attach to the original message. When the original message is accessed, your preappended message will play as well. Use this option to provide the next transcriber with additional information, such as the best time to call the customer.

Enter the touch-tone key corresponding to the action you wish to take:

- ① Approve; select this option to approve the message you recorded and continue with the callflow.
- ② Playback; select this option to listen to the message you recorded and then hear the record menu again.
- ③ Re-record; select this option to re-record your message and then hear the record menu again (Figure 9-25).

## Callbacks

This section contains one callflow that illustrates how the system calls the agent to deliver callback messages. Transcription and callbacks share similar procedures for navigating the system and administering messages. However, during callback, you are allowed to administer only the message that was delivered to you.

This callflow directs you to the transcription callflows. Use the text corresponding to the callflows to understand where the procedures differ for transcription and callbacks.

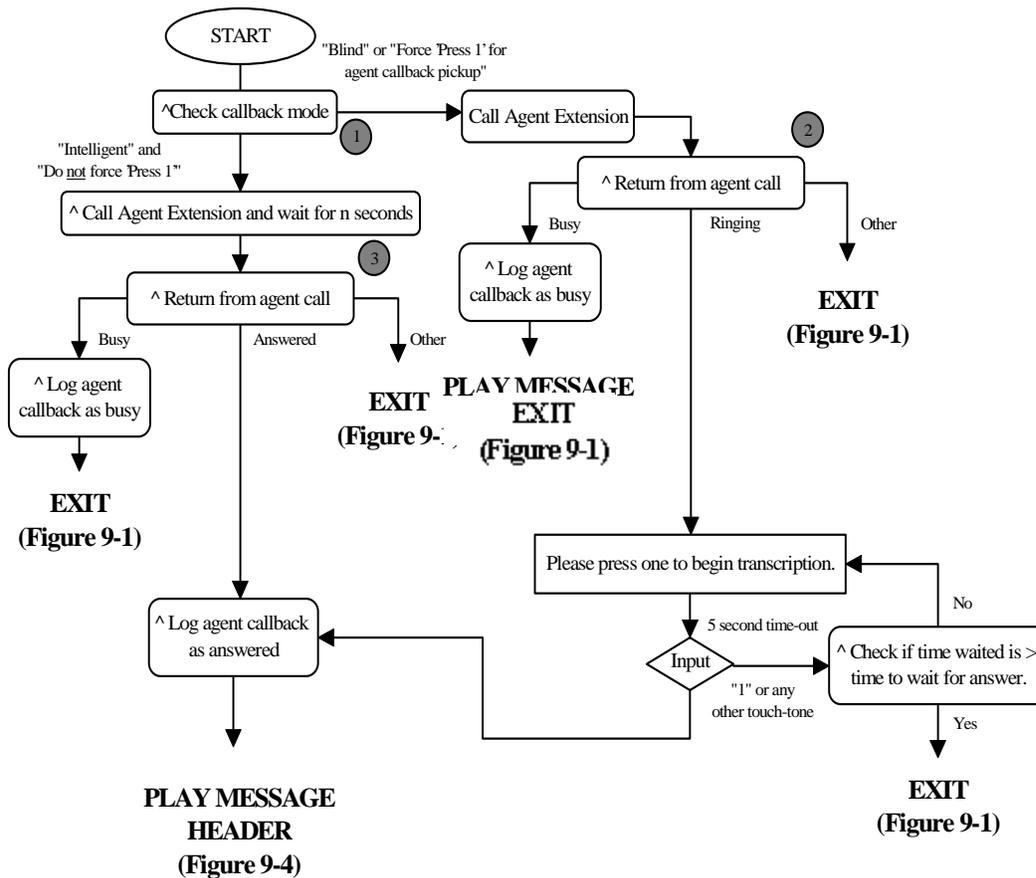


Figure 9-26. Agent Callback Callflow

## Understanding Agent Callback Callflow (Figure 9-26)

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The headings in this section correspond to the numbered circles in Figure 9-26. This callflow illustrates how the system performs agent callbacks.

### ① Check Callback Mode

Before the system calls you, it determines whether it should dial in blind or intelligent mode. Ask your system administrator which mode your system uses to perform agent callbacks.

### ② Blind Calls

The system determines the result of the call and operates as follows:

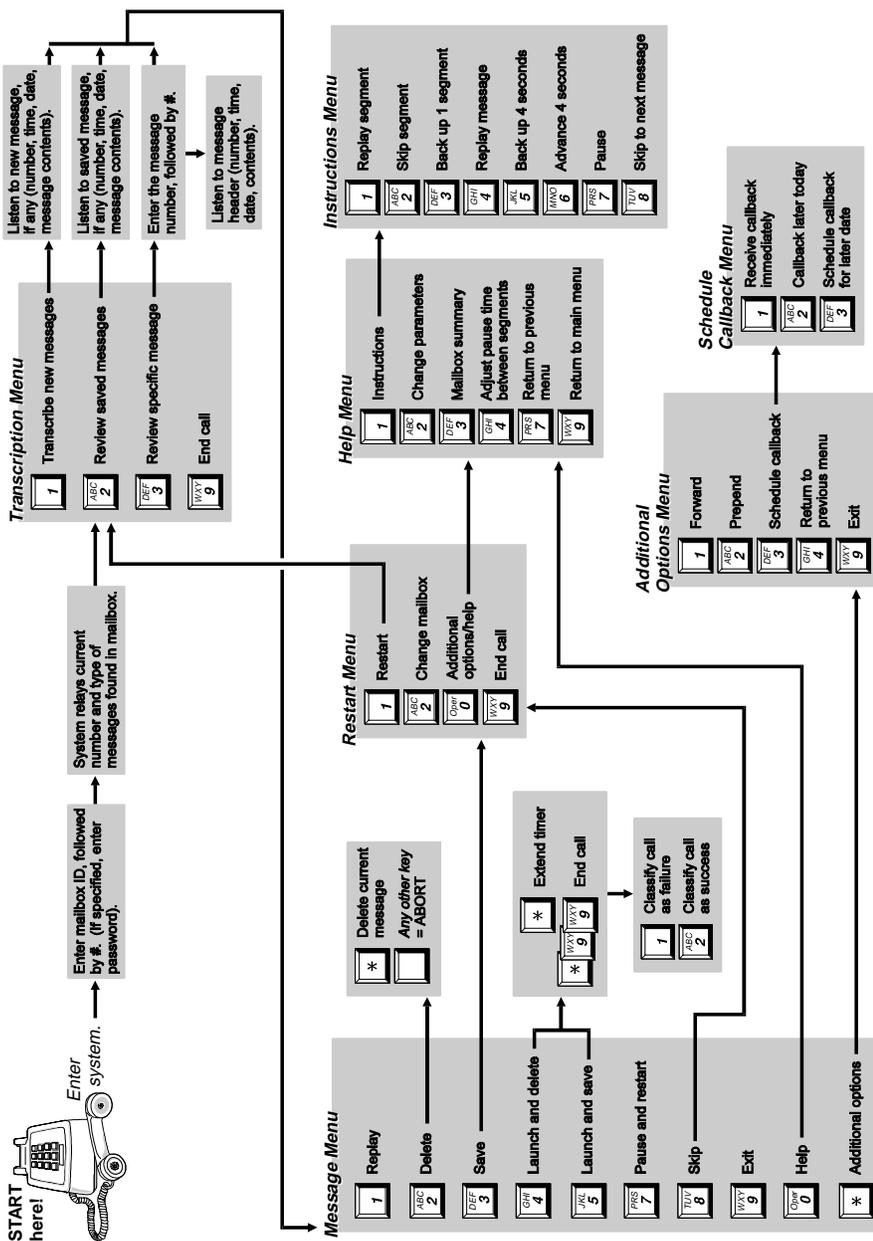
- If the system detects a busy signal or other non-answer tones, it ends the call (Figure 9-1).
- If the system detects ringing, it begins to prompt you to press  to start transcription. Once you make your touch-tone entry, the system plays the message header or begins message playback, depending on how your system is set up (Figure 9-4).

### ③ Intelligent Calls

The system determines the result of the call and operates as follows:

- If the system detects a busy signal or other non-answer tones, it ends the call (Figure 9-1).
- If the system detects speech energy, it plays the message header or begins message playback, depending on how your system is set up (Figure 9-4).

# CALL CENTER TRANSCRIPTION FLOW



This chapter describes the procedures to isolate, diagnose and correct possible problems encountered in Customer Assist. If a problem is not documented in this chapter, please contact the technical support personnel for help. 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.

## **Problems and Solutions**

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The tables below show problems that can occur as well as their cause and possible remedies.

### **CONVERSANT Functionality**

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**Table 10-1. CONVERSANT System Functionality**

<b>Problem</b>	<b>Cause and Possible Remedy</b>
System is not taking calls. Port rings, no answer.	The voice system is not running. Verify functioning of analog stations on the switch and the functioning of the voice board. Verify the call is being presented to the CONVERSANT system on the system monitor.

---

## DEFINITY Switch and Its Vector Functionality

**Table 10-2. Vector Functionality**

<b>Problem</b>	<b>Cause and Possible Remedy</b>
System is not taking calls. Port rings, no answer.	Either the DEFINITY vector process that routes calls to a CONVERSANT system has failed, or the DEFINITY vector is not passing the correct information. Verify this route-to process, and check the sanity of the DEFINITY vector.
Port answers but hangs up.	The DEFINITY 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.
	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 DEFINITY ECS R6.3 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 DEFINITY ECS R6.3 switch.
Outbound calls fail or get busy/out-of-order tones for some calls.	There may be insufficient lines from the DEFINITY switch to the outside telephone network.

## Customer Assist Functionality

Table 10-3. 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 is not there.
	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.
	Insure the <b>vectDIP</b> and <b>vrptDIP</b> processes are in the process table. Reinstalling Platform Runtime package may be necessary. Contact your Lucent Technologies support representative.

*Continued on next page*

**Table 10-3. Customer Assist Functionality — Continued**

<b>Problem</b>	<b>Cause and Possible Remedy</b>
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.
The system could not execute Customer Assist from another program.	Vector 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.	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 10-4. Platform Management**

<b>Problem</b>	<b>Cause and Possible Remedy</b>
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 was 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 <input type="checkbox"/> 3.
No phrase played.	Restored speech overwrote the phrase.
	The phrase was configured to allow interrupt and a caller input interrupted it before it could be played.
Phrase tag disappeared.	Restored speech overwrote the phrase.

*Continued on next page*

**Table 10-4. Platform — Continued Management**

Problem	Cause and Possible Remedy
<p>Anticipated delay announcement not spoken.</p>	<p>Switch not passing queue position. Check DEFINITY vectors to insure that a Converse vector step is defined and passing the correct information.</p>
	<p>Variable for the EWT action not defined. Check the EWT action to insure you have selected a variable in which to load queue position.</p>
	<p>Variable for queue position on Platform Management does not match that used for ADA_CALC. Check both actions to insure the same variable was selected.</p>
	<p>ADA_CALC action missing from vector series.</p>
	<p>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.</p>
	<p>Elements not defined for ADA_CALC action, such as average call duration, variables for queue position and result, or number of agents staffed is at zero and the “no agents staffed” contingency message is not defined.</p>
	<p>The phrase was configured to allow interrupt and a caller input interrupted it before it could be played.</p>
<p>Expected wait time not spoken.</p>	<p>Switch not passing EWT. Check DEFINITY vectors to insure that a Converse vector step is defined and passing the correct information.</p>
	<p>The phrase was configured to allow interrupt and a caller input interrupted it before it could be played.</p>
<p>Expected wait time not spoken.</p>	<p>Variable for the EWT action not defined. Check the EWT action to insure you have selected a variable in which to load EWT.</p>
	<p>Variable for EWT in CONVERSE action on Platform Management does not match that used for EWT action. Check both actions to insure the same variable was selected.</p>
	<p>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.</p>
	<p>The phrase was configured to allow interrupt and a caller input interrupted it before it could be played.</p>

*Continued on next page*

**Table 10-4. Platform — Continued Management**

Problem	Cause and Possible Remedy
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 <code>Number of digits to collect</code> field allows for the greatest possible number of digits to accept from the switch.
Caller input was not collected.	Caller entered input before or during the playing of a phrase that was configured not to allow interruption.
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 <code>SPEAK_NUM</code> .
	The phrase was configured to allow interrupt and a caller input interrupted it before it could be played.
Caller hears "no agents staffed" message at a time when agents are staffed.	The table for <code>ADA_CALC</code> is incorrectly set up for that day and time. Return to the <code>ADA_CALC</code> action to insure that all staffed times hold a value.
	The clock on the <code>CONVERSANT</code> is wrong.
	The wrong phrase is assigned to <code>ANNOUNCE</code> for Anticipated Delay. Check the <code>ANNOUNCE</code> action to insure that the correct phrase was 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 <code>ADA_CALC</code> or <code>SCHEDULE</code> . Utilize a <code>GOTO</code> 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 <code>LAUNCH</code> .	The port selected during the execution of the <code>DIAL</code> step is busy.
	Invalid port selected. Check the <code>DIAL</code> step in Speech Administration to insure that you are using an in-service port.
	Port is disabled for <code>soft_szr</code> . Check your <code>CONVERSANT</code> manual for information about enabling ports.

*Continued on next page*

Table 10-4. Platform — Continued Management

Problem	Cause and Possible Remedy
	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 <input type="checkbox"/> 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.
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 as well as the variable proceeding 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 does not match that used for DYNAMIC action. Check both actions to insure the same variable was selected.
	Executed application is missing or faulty.
New vector applications defined, but not heard.	New vectors have not been placed in service.

*Continued on next page*

**Table 10-4. Platform — Continued Management**

Problem	Cause and Possible Remedy
	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.
"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 you attempted to restore 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, survey 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 call 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 next, especially when non-standard conditions are encountered.
	The voice system was shut down, such as when mailbox configurations are restored.

*Continued on next page*

Table 10-4. Platform — *Continued* Management

Problem	Cause and Possible Remedy
	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.	<p>Numbers rerecorded incorrectly in Speech Administration. Check all likely number phrases in standard Speech Administration to insure that they contain speech.</p> <p>The language in effect is different from the expected one.</p>
"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 a Lucent Technologies support representative.
Incorrect phrase played for DYNAMIC ANNOUNCEMENT.	<p>VDN passed not corresponding to the correct phrase. Check the mapping of switch VDN passed and phrase numbers on Platform Management.</p> <p>The language in effect is different from the expected one.</p>
No phrase played for DYNAMIC ANNOUNCEMENT.	<p>VDN passed not corresponding to a phrase. Check the mapping of switch VDN passed and phrase numbers on Platform Management.</p> <p>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 <input type="checkbox"/> <input type="checkbox"/>.</p> <p>Switch not passing VDN. Check DEFINITY vectors to insure that a Converse vector step is defined and passing the correct information.</p> <p>Variable for the DYN_ANNOUN action not defined. Check DEFINITY vectors to insure that a Converse vector step is defined.</p> <p>The phrase was configured to allow interrupt and a caller input interrupted it before it could be played.</p>
Call Management System (CMS) reports show abandons for all calls using the TRANSFER action.	A call routed by means of the TRANSFER action will show as an abandon. Consider using the DATA_RTN action for routing through the DEFINITY ECS R6.3 switch instead.

*Continued on next page*

**Table 10-4. Platform — Continued Management**

Problem	Cause and Possible Remedy
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.
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 through that time period until that time period cycles. 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 10-5. Callback Messaging**

<b>Problem</b>	<b>Cause and Possible Remedy</b>
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 <input type="checkbox"/> [3].
	Phrases have not been selected/defined for the mailbox. Check mailbox administration to insure that the correct phrase was 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.

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Table 10-5. Callback Messaging — *Continued*

Problem	Cause and Possible Remedy
<p>Message Waiting Lamp is not lit although messages await.</p>	<p>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.</p>
	<p>Check that the Message Waiting Lights function is configured correctly in Dial Plan.</p>
	<p>The port used to light or extinguish the Message Waiting Lamp is constantly being used by other scripts.</p>
	<p>The port used to light or extinguish the Message Waiting Lamp is disabled for <b>soft_szm</b>. See your CONVERSANT manual for information about enabling ports.</p>
	<p>Another program has illuminated the lamp.</p>
<p>Announcement not played prior to mailbox information for automatic agent access transcription.</p>	<p>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].</p>
	<p>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].</p>
	<p>Phrase not assigned. Check mailbox administration to insure that a phrase was selected.</p>
<p>Agent callback not working.</p>	<p>A working port has not been assigned for callback.</p>
	<p>The port used to call agents is disabled for <b>soft_szm</b>. See your CONVERSANT manual for information about enabling ports.</p>
	<p>The port assigned for callback is busy or was set up as an announcement station on the DEFINITY ECS R6.3 switch.</p>
	<p>Incorrect agent extension or VDN defined. Check mailbox administration to insure that a valid VDN or extension for agent access was defined.</p>

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**Table 10-5. Callback Messaging — Continued**

Problem	Cause and Possible Remedy
	Insure the <b>callbackDIP</b> and the <b>MsgDrpDIP</b> 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 to agents quickly enough.	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 another interval that is too low.
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 <b>* * 9</b> to exit a mailbox; then press <b>* 9 9</b> to reenter the Message menu.

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Table 10-5. Callback Messaging — *Continued*

Problem	Cause and Possible Remedy
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 <b>No</b> . 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 if you feel it is appropriate.
Messages are not being kept even though callers leave them.	A required 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 <b>Yes</b> . The outside line access code not specified or incorrect for this mailbox. The customer's telephone number is a long distance number and the system requires an accounting code for long distance calls.(See your Lucent Technologies 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. Customer callback is not configured correctly.

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**Table 10-5. Callback Messaging — *Continued***

<b>Problem</b>	<b>Cause and Possible Remedy</b>
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 and the 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. To achieve this service, you must have as many ports as you will possible messages to be "queued."
	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 is 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.

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**Table 10-5. Callback Messaging — *Continued***

Problem	Cause and Possible Remedy
	Add more callback ports.
	Send overflow messages to a forwarding mailbox.
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.	<p>Agents are busy with other calls.</p> <p>The time scheduled was not during the customer callback hours specified in the administration.</p> <p>Agent hours are off when the callback is to occur.</p> <p>CONVERSANT callback ports are not available.</p> <p>Confusion exists over the time zone difference. Times are scheduled for the CONVERSANT's local time, not the caller's time if the mailbox has the <code>Adjust for Time Zone</code>: field set to <code>No</code>.</p>
The telephone number field (or other passed parameter) is not being automatically filled from ANI (or other variable) in callback message.	<p>ANI (or other value) is not being sent with the call.</p> <p>The parameter is not defined properly in <code>MSG_DROP</code> and is therefore not being sent from Platform Management.</p> <p>The parameter is not defined properly in the Data segment of the mailbox.</p>

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## Custom Call Routing

**Table 10-6. 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 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 may 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.
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.

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**Table 10-6. Custom Call Routing — Continued**

Problem	Cause and Possible Remedy
	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.
	The number of records in the data file exceeds the maximum number allowed in the table.

## System Administration

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**Table 10-7. 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.

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**Table 10-7. System Administration — Continued**

<b>Problem</b>	<b>Cause and Possible Remedy</b>
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 <b>all</b> in the Event Detail Report to retrieve data for a variable that was deleted or renamed in the current reporting interval.
AUDIT shows an 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.
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 <b>/usr/spanlink</b> to administer this package error encountered at program startup.	Delete unnecessary files from the disk. Consider adding disk storage.

## Speech Recognition

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**Table 10-8. 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 WholeWorld Speech Recognition.
The GET_DIALP 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 WholeWorld Speech 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

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**Table 10-9. Dial Pulse Recognition**

<b>Problem</b>	<b>Cause and Possible Remedy</b>
The GET_DIALP and MENU actions do not wait for caller input but reprompt the caller immediately.	INTUITY Dial Pulse Recognition was not loaded. Dial Pulse Recognition was not assigned to the SP or SSP card.
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.

## Surveys

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**Table 10-10. Surveys**

<b>Problem</b>	<b>Cause and Possible Remedy</b>
The report is empty.	Check that the configuration is correct and messages were dropped for that day. Check that the mailbox used by the survey still exists and that it matches the survey configurations.
The report or data file was not generated.	Check the directory and filename specified in the configuration. Make sure you have enough drive space. Check that the mailbox used by the survey still exists and that it matches the survey configurations.

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## Web Reports

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**Table 10-11. 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.
	Web Reports was not successfully loaded on the CONVERSANT.
	The user has accessed a web server that is different from the one used by Customer Assist.
	The URL specified was incorrect.
"No response" message on browser	The URL specified was incorrect.
	The CONVERSANT is not on the network.
	Apache Web Server for Customer Assist was not successfully loaded on the CONVERSANT.
The Apache Web Server for Customer Assist is not running on the CONVERSANT.	The Apache Web Server for Customer Assist is not running on the CONVERSANT.
	The URL specified was incorrect.
Prompted for user name or password. (By default, the Apache Web Server for Customer Assist does not require a password.)	The user has accessed a web server that is different from the one used by Customer Assist.
	Insure calls exist for that day and setup.
The report is empty.	

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## Other Problems

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Due to the structure of Customer Assist, a single problem can sometimes have any one of a number of causes and solutions. The following section describes common problems and their solutions.

### Common Problem

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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 import, export, back up, or restore databases.
- Vector, phrase, mailbox, survey, 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.

### Causes and Possible Solutions

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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 was 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.

Survey database: Check each survey to verify that every form and setting is correct. Change and save settings as necessary.



**CAUTION:**

*Do not save a form if you think it may corrupt your database.*

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## Maximum Values in Customer Assist Packages



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This appendix provides the maximum values for the Customer Assist packages.

### General Administration

Table A-1 contains the maximum values for general administration.

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**Table A-1. Maximum Values for General Administration**

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Description	Maximum Value
Maximum number of concurrent calls per system	6, 12, 13-30, 31-60, 60-96
Maximum number of concurrent administrators	1
Maximum length of each variable value	24 characters (if used as a string) or 9 digits (if used as a number)
Maximum number of administrable vectors per system	256
Maximum length of each vector	14 steps
Maximum number of mailboxes for Callback Messaging	999,999 (recommended limit is 500)
Maximum number of messages for Callback Messaging	99,999

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**Table A-1. Maximum Values for General Administration — *Continued***

Description	Maximum Value
Maximum number of mailboxes performing the callback function at the same time	15 (recommended limit)
Maximum number of records per Custom Call Routing table	200,000 (Can easily link multiple tables together)
Maximum number of routing tables	Limited by disk space
Maximum number of routing table records on the system	1,000,000
Maximum number of lines of a report that may be displayed on screen	2000 (However, you can print the entire report)

- The Platform uses 24 actions, two additional actions for Callback Messaging, one additional action for Custom Call Routing, one additional action for Speech Recognition, and one additional action for Dial Pulse Recognition.
- The platform uses five talkfiles for recorded speech:
  - Talkfile 6104 (US English) for vector phrases
  - Talkfile 6100 (US English) for standard speech phrases
  - Talkfile 6105 (US English) for mailbox phrases
  - Talkfile 6102 (US English) for standard mailbox phrases
  - Talkfile 6106 for message phrases
- Each talkfile is limited to 65525 discrete phrase numbers.



**NOTE:**

The actual number of phrases that can be created is limited by the size of the speech slice and **/root** disk partition on the hard disk. For each additional language used, another five talkfiles are used.

Table A-2. Talkfile Table

Language	Female/ Male & Normal/ Expert	Standard	Mailbox prerecor ded speech	Speech Admin	Vector Phrases	Mailbox Phrases	Message Phrases
Australian English	Female N	5100	5102	5103	5104	5105	6106
Brazilian Portuguese	Female N	5200	5202	5203	5204	5205	6106
French Canadian	Female N	5300	5302	5303	5304	5305	6106
Castilian Spanish	Female N	5400	5402	5403	5404	5405	6106
Colombian Spanish	Female N	5500	5502	5503	5504	5505	6106
Dutch	Female N	5600	5602	5603	5604	5605	6106
European French	Female N	5700	5702	5703	5704	5705	6106
German	Female N	5800	5802	5803	5804	5805	6106
Japanese	Female N	5900	5902	5903	5904	5905	6106
UK English	Female N	6000	6002	6003	6004	6005	6106
US English	Female N	6100	6102	6103	6104	6105	6106
Italian	Female N	6200	6202	6203	6204	6205	6106

## Actions

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This section provides the maximum values for actions. It also contains the key for codes that are used in the Maximum Value for Actions table.

## Key to Codes

Table A-3 defines each code that appears in Table A-4 on page A-10.

**Table A-3. Key to Codes in the Following Table**

Code	Meaning	Format	Notes
NUM	Numeric Only	(0-9)	
AN	Alphanumeric	(a-z, A-Z, 0-9)	
TT	Touch-tones	(0-9, *, #)	
C	Comparison	(=, !=, <, <=, >, >=)	
O	Operators	(+, -, *, /, =)	
VEC	Vector numbers	(1 to256)	
ANY	Any input except   and /		
VAR	Variables		
ACT	Actions		
D	Day of the Week		
MONTH	JAN,...,DEC		
MM/DD/YY	Month/Day/Year		
PHR	Phrase Tag		
E	Existing		
NE	Not Existing		
R	Input Required		
NR	Input Optional (not required)		
CT	Column Type		Name of Transcription Detail column type

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**Table A-3. Key to Codes in the Following Table — *Continued***

<b>Code</b>	<b>Meaning</b>	<b>Format</b>	<b>Notes</b>
DF	Display Format	Left Justify- Data	
		Right Justify- Numbers	
		YYYYMMDDHH24M ISS	(e.g.) 19951107081530
		YYYYMMDD	(e.g.) 19951107
		YYYY	(e.g.) 1995
		YYMMDD	(e.g.) 951107
		YYMM	(e.g.) 9511

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**Table A-3. Key to Codes in the Following Table — *Continued***

<b>Code</b>	<b>Meaning</b>	<b>Format</b>	<b>Notes</b>
		YY	(e.g.) 95
		MMDD	(e.g.) 1107
		MM	(e.g.) 11
		DD	(e.g.) 07
		DD-MM-YYYY	(e.g.) 07-11-1995
		DD-MM-YY	(e.g.) 07-11-95
		DD-MON-YYYY	(e.g.) 07-NOV-1995
		DD-MON-YY	(e.g.) 07-NOV-95
		DD-MONTH-YYYY	(e.g.) 07-NOVEMBER-1995
		DD-MONTH-YY	(e.g.) 07-NOVEMBER-95
		DD/MM/YYYY	(e.g.) 07/11/1995
		DD/MM/YY	(e.g.) 07/11/95
		DD/MON/YYYY	(e.g.) 07/NOV/1995
		DD/MON/YY	(e.g.) 07/NOV/95
		DD/MONTH/YYYY	(e.g.) 07/NOVEMBER/1995
		DD/MONTH/YY	(e.g.) 07/NOVEMBER/95
		MM-DD-YYYY	(e.g.) 11-07-1995

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**Table A-3. Key to Codes in the Following Table — *Continued***

<b>Code</b>	<b>Meaning</b>	<b>Format</b>	<b>Notes</b>
DF		MM-DD-YY	(e.g.) 11-07-95
		MON-DD-YYYY	(e.g.) NOV-07-1995
		MON-DD-YY	(e.g.) NOV-07-95
		MONTH-DD-YYYY	(e.g.) NOVEMBER-07-1995
		MONTH-DD-YY	(e.g.) NOVEMBER-07-95
		MON/DD/YYYY	(e.g.) NOV/07/1995
		MON/DD/YY	(e.g.) NOV/07/95
		MONTH/DD/YYYY	(e.g.) NOVEMBER/07/1995
		MONTH/DD/YY	NOVEMBER/07/95
		D	day of week (1 = Sun,...7 = Sat)
		DAY	day of the week (Sunday,...Saturday)
		DY	abbreviate day of wk (Sun,...Sat)
		HH24:MI:SS	(e.g.) 08:15:30
		HH24:MI	(e.g.) 08:15
		HH24	(e.g.) 08
	HH:MI:SS AM	(e.g.) 08:15:30 AM	
	HH:MI AM	(e.g.) 08:15 AM	
	HH AM	(e.g.) 08 AM	

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**Table A-3. Key to Codes in the Following Table — *Continued***

Code	Meaning	Format	Notes
CF	Convert Format (Sort by):	Character - Data	
		Number - Numbers	
		YYYYMMDDHH24M ISS	(e.g.) 19951107081530
		YYYYMMDD	(e.g.) 19951107
		YYYY	(e.g.) 1995
		YYMMDD	(e.g.) 951107
		YYMM	(e.g.) 9511
		YY	(e.g.) 95
		MMDD	(e.g.) 1107
		MM	(e.g.) 11
		DD	(e.g.) 07
		DD-MM-YYYY	(e.g.) 07-11-1995
		DD-MM-YY	(e.g.) 07-11-95
		DD-MON-YYYY	(e.g.) 07-NOV-1995
		DD-MON-YY	(e.g.) 07-NOV-95
		DD-MONTH-YYYY	(e.g.) 07-NOVEMBER-1995
		DD-MONTH-YY	(e.g.) 07-NOVEMBER-95
		DD/MM/YYYY	(e.g.) 07/11/1995
		DD/MM/YY	(e.g.) 07/11/95
		DD/MON/YYYY	(e.g.) 07/NOV/1995
DD/MON/YY	(e.g.) 07/NOV/95		
DD/MONTH/YYYY	(e.g.) 07/NOVEMBER/1995		
DD/MONTH/YY	(e.g.) 07/NOVEMBER/95		

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**Table A-3. Key to Codes in the Following Table — *Continued***

<b>Code</b>	<b>Meaning</b>	<b>Format</b>	<b>Notes</b>
		MM-DD-YYYY	(e.g.) 11-07-1995
		MM-DD-YY	(e.g.) 11-07-95
		MON-DD-YYYY	(e.g.) NOV-07-1995
		MON-DD-YY	(e.g.) NOV-07-95
		MONTH-DD-YYYY	(e.g.) NOVEMBER-07-1995
		MONTH-DD-YY	(e.g.) NOVEMBER-07-95
		MON/DD/YYYY	(e.g.) NOV/07/1995
		MON/DD/YY	(e.g.) NOV/07/95
		MONTH/DD/YYYY	(e.g.) NOVEMBER/07/1995
		MONTH/DD/YY	NOVEMBER/07/95
CF		D	day of week (1 = Sun,...7 = Sat)
		DAY	day of the week (Sunday,...Saturday)
		DY	abbreviate day of wk (Sun,...,Sat)
		HH24:MI:SS	(e.g.) 08:15:30
		HH24:MI	(e.g.) 08:15
		HH24	(e.g.) 08
		HH:MI:SS AM	(e.g.) 08:15:30 AM
		HH:MI AM	(e.g.) 08:15 AM
		HH AM	(e.g.) 08 AM
TK	Talkfile	Talkfile of languages installed. See Table A-2.	

**Actions**

Table A-4 contains the maximum values for actions.

**Table A-4. Maximum Values for Actions**

		Valid Inputs	Max. length	Comments
ADA_CALC	Average call length:	NUM, R	3	
	Queue position:	VAR, NUM, R	12	
	Result:	VAR, R	12	
	Number of Agents per Hour:	NUM, NR	3	
ANNOUNCE	Talkfile	TKF (E), R	4	
	Phrase Tag:	PHR (E), R	50	
CHAN_ASN	Channel number:	0 to 99, NR	2	
	Vector number	VEC, NR	3	(Total of 12 pairs of the above two fields)
CHG_LANG	Change language to:	VAR, Valid Installed Language (R)	12	Language can be any installed language or a variable
CONVERSE	Number of digits to collect:	1 to 16, R	2	
	Load digits into variable:	VAR, R	12	
DATA_RTN	Feature Access Code:	TT, R	10	
	Data return segment:	VAR, TT, NR	24	(Total of 8 of these fields. The number of characters in all fixed and variable values combined cannot exceed 24).

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**Table A-4. Maximum Values for Actions — *Continued***

		Valid Inputs	Max. length	Comments
DYNAMIC	Variable:	VAR, R	12	
	Value:	NUM, -NUM, NR	10	
	Program:	AN (E), NR	12	(Existing Script Builder programs only).
	Arg 1, 2, 3:	VAR, ANY, NR	12	(Total of 10 sets of the Value, Program and Arg fields).
DYN_ANNOU	Phrase number:	VAR, NUM (E), R	12	
EWT	EWT Input:	VAR, NUM, R	12	
	Calculated Output	VAR, R	12	
	Weighting Index:	10 to 300, R	3	
	Resolution:	Minutes, Second, R	7	
	Rounding:	Nearest, Up, Down, R	7	
EXECUTE	Application:	AN (E), R	12	(Existing Script Builder programs only).
	Arguments:	ANY, VAR, NR	24	(Total of 10 arguments).

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Table A-4. Maximum Values for Actions — *Continued*

		Valid Inputs	Max. length	Comments
GET_DIALP	Consolidate responses into variable	VAR, R	12	
	Talkfile	Vector Phrases See Table A-2. (E), R	4	Choice of valid talkfiles depending on installed languages
	Phrase Tag	PHR(E), R	50	
	Valid Input:	1 digit: 2, 5, 8 1 digit: 1,4,7,0 1 digit: 1-3 1 digit: 1-5 1-3 digits: 0-9 1-5 digits: 0-9 Touch Tones, R		(Total of 5 sets of Phrase Tag and Valid Input fields)
	Confirmation:	Field, Overall, None, R	7	
	Time limit per response	1-99, R	2	
	GET_DIGT	Number of digits to collect:	1 to 24, R	2
	Load digits into variable:	VAR,R	12	
GET_SPCH	Consolidate responses into variable	VAR, R	12	
	Talkfile:	Vector Phrases See Table A-2. (E), R	4	Choice of valid talkfiles depends on installed languages

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**Table A-4. Maximum Values for Actions — *Continued***

		Valid Inputs	Max. length	Comments
GET_SPCH	Phrase Tag	PHR(E), R	50	
	Valid Input:	yes-no		yes returns a value of 1
		1 digit:1-3		
		1 digit:1-5		no returns a value of 0
		1 digit:0-9		(Total of 5 sets of Phrase Tag and Valid Input fields)
		2 digits:exact		
		3 digits:exact		
		4 digits:exact		
		5 digits:exact		
		6 digits:exact		
		7 digits:exact		
		8 digits:exact		
		9 digits:exact		
		1-3 digits:0-9		
	1-5 digits:0-9			
	Touch Tones, R			
	Confirmation:	Field, Overall, None, R	7	
	Time limit per response	1-99, R	2	
GOTO	Vector/Step:	Vector, Step, R	6	
	Vector/Step#:	VEC, VAR, R	12	
	Variable:	VAR, R	12	
	Operator:	C, R	2	
	Value:	NUM, -NUM, VAR, R	24	
HANG_ACT	Vector number:	VEC (E), R	3	

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**Table A-4. Maximum Values for Actions — *Continued***

		<b>Valid Inputs</b>	<b>Max. length</b>	<b>Comments</b>
LOOK_UP	Routing table name:	AN (E), R	10	(Existing Routing table names only).
	Lookup field:	VAR, R	12	
	Number of matches found:	VAR, NR	12	
	Data field 1:	VAR, NR	12	
	Data field 2:	VAR, NR	12	

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**Table A-4. Maximum Values for Actions — *Continued***

		<b>Valid Inputs</b>	<b>Max. length</b>	<b>Comments</b>
MENU	Prompt Phrase	PHR (E), NR	50	
	Talkfile	TKF(E), R Vector Phrases See Table A-2.	4	Choice of valid talkfiles depending on installed languages
	Num digits to collect: Min	1 to 24, R	2	
	Num digits to collect: Max	1 to 24, R	2	
	Time to wait for input: 1st digit	NUM, R	2	
	Time to wait for input: Next digit(s)	NUM, R	2	
	Input Variable	VAR, NR	12	
	Output Variable	VAR, NR	12	
	Valid Input	NUM, *, A, B, C, D, n, s, e, t, r, q, NR	16	
	Output Value	ANY	16	
	Goto Vector	VEC, CONT, NR	4	10 sets of input, output vectors, & goto vector sets.
	Confirm input	Yes, No, R	3	
	Input not on list phrase	PHR (E), NR	50	

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Table A-4. Maximum Values for Actions — *Continued*

		Valid Inputs	Max. length	Comments
MENU	Input not on list Max # of tries	1 to 99, R	2	
	Input not on list output value	ANY, NR	16	
	Input not on list Goto Vector	VEC, CONT, R	4	
	Initial timeout phrase	PHR (E), NR	50	
	Max # of tries	1 to 99,R	2	
	Output value	ANY, NR	16	
	Goto Vector	VEC, CONT, R	4	
	Too few digits phrase	PHR (E), NR	50	
	Max# of tries	1 to 99, R	2	
	Output value	ANY, NR	16	
	Goto Vector	VEC,CONT,R	4	
	No more tries phrase	PHR (E), NR	50	
MSG_DROP	Mailbox:	VAR, NUM (E), R	12	(NUM must represent an existing mailbox number).
	Argument A:	ANY, NR	24	
	Argument B:	ANY, NR	24	
	Argument C:	ANY, NR	24	
	Goto Vector	VAR, VEC, NR	12	
OFF_HOOK	Non-configurable			
QUIT	Non-configurable			
REPORT	Variable	VAR, R	12	

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**Table A-4. Maximum Values for Actions — *Continued***

		Valid Inputs	Max. length	Comments
SCHEDULE	Start/During	Start,During, NR	6	Required if using the row
	HR	00 to 23, *, NR	2	
	MN	00 to 59, *, NR	2	
	Day	Mon,Tue,Wed, Thu,Fri,Sat, Sun,M-F, 1 to 31, *, NR	3	
	Month	*,MONTH, NR	3	
	Year	NUM, *, NR	4	Current year and the next 4 years
	Vector	VEC, NR	3	Required if using the row
SET	Variable:	VAR, R	12	
	Operator:	O, R	1	
	Value:	ANY, VAR, R	24	
SPCH_ADM	Talkfile:	6100, 6104, 6105	4	These talkfile numbers change per language  See Table A-2.
	Phrase number:	VAR, 10 to 65535, NR	12	
SPEAK_NUM	Number:	VAR, NUM, R	24	
	Speak as:	Number, Character, R	9	
SWITCH	Variable:	VAR, R	12	
	Value:	ANY, NR	24	
	Vector number:	VEC, NR	3	(Total of 11 sets of the Value and Vector number fields).

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**Table A-4. Maximum Values for Actions — *Continued***

		<b>Valid Inputs</b>	<b>Max. length</b>	<b>Comments</b>
TRANSFER	Extension:	NUM, VAR, R	24	
TRANSCRIBE (Transcribe)	Mailbox:	VAR, NUM (E), NR	12	(NUM must represent an existing mailbox number).

## Vector Administration

Table A-5 contains the maximum values for Vector Administration.

**Table A-5. Maximum Values for Vector Administration**

		Valid Inputs	Max. length	Comments
Vector Worksheet	Vector name:	ANY, NR	14	
	Description:	ANY, NR	40	
	Action:	ACT, NR	9	(Total of 14 fields).
Help Index	Help key word:	ANY, NR	25	
Copy Vector	Copy from Vector	VEC (E), R	3	
	To Vector	VEC (NE), R	3	
	Vector Name	ANY, NR	14	
	Description	ANY, NR	40	

## Speech Administration

Table A-6 contains the maximum values for Speech Administration.

**Table A-6. Maximum Values for Speech Administration**

		Valid Inputs	Max. length	Comments
Add New Phrase	Phrase number:	10 to 65535 (NE), R	5	(Unused phrase number only).
	Phrase tag:	PHR (NE), R	50	(Unused phrase tag only).
	Phrase text:	ANY, NR	50 x 5 lines	
Change Base Language	Base language	TKF (E), R	2	Any <i>installed</i> language
Edit Phrase	Phrase tag:	PHR (NE), R	50	(Unused phrase tag only).
	Phrase text:	ANY	50 x 5 lines	
Copy Phrase	From Phrase Tag	PHR (E) ,R	50	
	To Phrase Tag	PHR (NE) ,R	50	
	To Phrase Number	10 to 65535, (NE) ,R	5	
Record Phrase	Code rate:	ADPCM16, ADPCM32, PCM64, CELP16, R	7	

*Continued on next page*

**Table A-6. Maximum Values for Speech Administration — *Continued***

		Valid Inputs	Max. length	Comments
Dial Number	Telephone number:	NUM, -, R	24	
	Channel:	0 to 99, R	2	
Password for Speech Administration	Password	TT, NR	16	
Add New Phrase to Talkfile	(Same as Add New Phrase)	(Same as Add New Phrase)	(Same as Add New Phrase)	Activated by pressing the ADD-PHR key while defining the ANNOUNCE, GET_DIALP, GET_SPCH or MENU action.

## Report Generation

Table A-7 contains the maximum values for Report Generation.

**Table A-7. Maximum Values for Report Generation**

		Valid Inputs	Max. length	Comments
Call Detail	Day:	D, R	9	
	Caller ID:	all, last, summary, 1 to 32768, R	5	
Event Count	Day:	D, R	9	
	List by:	vector, variable, R	8	
Event Detail	Day:	D, R	9	
	Variable:	VAR, all, R	12	
Message Count	Mailbox ID:	AN (E), all, R	6	(Existing mailbox ID only).
Message Download	Mailbox ID:	AN (E), all, R		
Message Log	Day:	MM/DD/YY (E), Today, Yesterday, R	9	
	Mailbox ID:	AN (E), all, R	6	(Existing mailbox ID only).
	Type:	MESSAGE, SAVED, all, DELETED, R	8	
Vector Profile	Vector:	VEC, all, 0, R	3	
	Database:	DEVELOPMENT RUNTIME PREV_ RUNTIME, R	12	

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**Table A-7. Maximum Values for Report Generation — *Continued***

		Valid Inputs	Max. length	Comments
Vector Map	Selection Criteria:	vector, channel, VDN, R	7	
	Selection Argument:	0-99999, all, R	5	
	Database:	DEVELOPMENT RUNTIME PREV_ RUNTIME, R	12	
Routing Table	Routing table name:	AN (E), R	10	(Existing routing table name only).
Traffic Report	Day:	MM/DD/YY (E), Today, Yesterday, R	9	
	Hours:	0 to 23, all, R	5	
Vector Usage	Day:	D, R	9	
	Vector:	0, VEC, All, R	7	
Agent Callback Count	Day For Report	MM/DD/YY (E), Today, R	9	
Survey Report	Survey name:	AN, R	10	(Existing survey name only).
	Date:	MM/DD/YY (E), Today, R		
	Display Report or Data File:	Report, Data		

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**Table A-7. Maximum Values for Report Generation — *Continued***

		Valid Inputs	Max. length	Comments
Transcription Detail	Report Name	AN, R	30	
	Print Automatically	Y, N, R	1	
	Description	AN, NR	50	
	Day For Report	MM/DD/YY (E), Today, NR	9	
	Title	AN, NR	20	12 sets of Title, Display, Column Width and Format
	Display	0 to 12, N, R	2	
	Column Width	1 to 99, R	2	
	Format	DF, R	16	
	Type	CT, NR	18	6 sets of Type and Format
	Format	CF, NR	16	
	Column Type	CT, NR	18	7 sets of Column Type, Operator, Value, and Format
	Operator	C, NR	2	
	Value	ANY, NR	20	
Format	CF, NR	16		

## **Report Scheduling**

Table A-8 contains the maximum values for Report Scheduling.

**Table A-8. Maximum Values for Report Scheduling**

		<b>Valid Inputs</b>	<b>Max. length</b>	<b>Comments</b>
Report Scheduling Options	Number of days to archive:	0 to 7, R	1	

## **Callback Messaging Administration**

Table A-9 contains the maximum values for Callback Messaging Administration.

**Table A-9. Maximum Values for Callback Messaging Administration**

		<b>Valid Inputs</b>	<b>Max. length</b>	<b>Comments</b>
Create Mailbox	Mailbox Name	ANY, NR	24	
	Mailbox ID:	NUM (NE) (0 not allowed) R	6	(Unused mailbox number only).
	Password:	NUM, R	6	
	Mailbox Priority	0 to 5,R	1	
	Talkfile	TKF(E), R  Message Phrases  See Table A-2.	4	Choice of valid talkfiles depending on installed languages
	Transcriber Welcome Phrase	PHR (E), NR	50	
	Agent access number:	TT,NR	10	
	Treat as outside number	Yes, No, R	3	
	Outside Line Access Code	TT, NR	10	
	Country code	NUM, NR	4	
	Time to wait for answer	NUM, R	4	
	Message Retry Interval	1 to 999, R	3	
	Use Dial Pulse Recognition	Yes, No, R	3	
	Use Speech Recognition	Yes, No, R	3	
Adjust for time zone?	Yes, No, R	3		

*Continued on next page*

**Table A-9. Maximum Values for Callback Messaging Administration — *Continued***

		Valid Inputs	Max. length	Comments
	MWL Extension:	NUM, NR	10	
	Minutes	1 to 99, NR	2	
	Hours	1 to 99, NR	2	
	Days	1 to 99, NR	2	
	Max Messages	NUM, NR	5	
	Forward Messages into Mailbox	AN (E), NR	6	(Existing mailbox ID only)
	Caller goodbye message	PHR (E), NR	50	
	Type:	Data, Record, Sched, NR	6	
Data Configuration	Phrase Tag	PHR (E), NR	50	
	Response Limits Minimum	0 to 24, R	2	
	Response Limits Maximum	0 to 24, R	2	

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**Table A-9. Maximum Values for Callback Messaging Administration — *Continued***

		Valid Inputs	Max. length	Comments
	Have Caller Confirm?	Yes, No, R	3	
	Segment Required to Save Message?	Yes, No, R	3	
	Playback to transcriber?	Yes, No, R	3	
	Treat as Display Field?	Yes, No, R	3	
	Treat as Phone Field?	Yes, No, R	3	
	Portion	Internal Area code Subscriber Country Code (R)	12	
	Enable Automatic Launch?	Yes, No, R	3	
	Message Treatment	None, Delete, Save, R	6	
	Passed Parameter?	Yes, No, R	3	
	Argument	A, B, C, NR	1	
Record Configuration	Phrase Tag	PHR (E), NR	50	
	Response Limits Minimum	0 to 600 ,R	3	
	Response Limits Maximum	0 to 600, R	3	
	Recording Quality	CELP16, ADPCM16, ADPCM32	4	

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**Table A-9. Maximum Values for Callback Messaging Administration — Continued**

		Valid Inputs	Max. length	Comments
	Have Caller Confirm?	Yes, No, R	3	
	Segment Required to Save Message?	Yes, No, R	3	
	Playback to Transcriber?	Yes, No, R	3	
Inform Configuration	Phrase Tag	PHR (E), R		
Schedule Configuration	Phrase Tag	PHR (E), NR	50	
	Have Caller Confirm?	Yes, No, R	3	
	Segment Required to Save Message?	Yes, No, R	3	
	Playback to Transcriber?	Yes, No, R	3	
Copy Mailbox	From Mailbox ID	NUM (E), R	6	(Existing Mailbox ID)
	To Mailbox ID	NUM (NE), R	6	(Not existing Mailbox ID)
	Mailbox Name	ANY, NR	24	
Edit Mailbox	Mailbox Name	ANY, NR	24	
	Password:	NUM, NR	6	
	Mailbox Priority	0 to 5,R	1	
	Talkfile	Message Phrases See Table A-2.	4	Choice of valid talkfiles depending on installed languages

*Continued on next page*

**Table A-9. Maximum Values for Callback Messaging Administration — *Continued***

	Valid Inputs	Max. length	Comments
Transcriber Welcome Phrase	PHR (E), NR	50	
Agent access number:	TT,NR	10	
Treat as outside number:	Yes, No, R	3	
Outside Line Access Code	TT, NR	10	
Time to Wait For Answer	NUM, R	4	
Message Retry Interval	1 to 999, R	3	
Use Dial Pulse Recognition	Yes, No, R	3	
Use Speech Recognition	Yes, No, R	3	
Adjust for time zone?	Yes, No, R	3	
MWL Extension:	NUM, NR	10	
Minutes	1 to 99, NR	2	
Hours	1 to 99, NR	2	
Days	1 to 99, NR	2	
Max Messages	NUM, NR	5	
Country code	NUM, NR	4	
Forward Messages into Mailbox	AN (E), NR	6	(Existing mailbox ID only)
Caller goodbye message	PHR (E), NR	50	
Type:	Data, Record, Sched, NR	6	

*Continued on next page*

**Table A-9. Maximum Values for Callback Messaging Administration — *Continued***

		Valid Inputs	Max. length	Comments
Global Settings for All Message Drop Mailboxes	Channel Access Time	1 to 999, AUTO, R	4	
	Agent Access Channel:	0 to 99, NR	20	
	Force 'Press 1" for agent callback pickup	Yes, No, R	3	
	Speak transcription segment number	Yes, No, R	3	
	Play message header information	A, M, D, d, T, E, N (R)	1	
	Number of confirmation chances	NUM, R	1	
	Time format	12, 24 (R)	2	12- or 24-hour clock
	Allow agents to reschedule	Yes, No, R	3	
	Immediately	Yes, No, R	3	
	Later Today	Yes, No, R	3	
	Later Date	Yes, No, R	3	
	Callback Conference Time	NUM, NR	4	
Allow agents to classify callbacks	Yes, No, R	3		

*Continued on next page*

**Table A-9. Maximum Values for Callback Messaging Administration — *Continued***

		Valid Inputs	Max. length	Comments
Agent Callback Hours	Hours:	01 to 12, R	2	
	Minutes:	00 to 59, R	2	
	Indicator:	AM, PM, R	2	(Total of 14 of the above three fields).
Customer Callback Hours	Hours:	01 to 12, R	2	
	Minutes:	00 to 59, R	2	
	Indicator:	AM, PM, R	2	(Total of 14 of the above three fields).
Delete Messages from Mailbox	Mailbox ID:	NUM (E), R		
	Status:	All, New, Saved		
	Age of Message:	1-99		
Mapping Country/City/Area Code to Time Zone	Country code:	NUM, R	4	
	City/Area code:	NUM, NR	8	
	Time zone:	AN, R	24	

## **Custom Call Routing**

Table A-10 contains the maximum values for Custom Call Routing.

**Table A-10. Maximum Values for Custom Call Routing**

		Valid Inputs	Max. length	Comments
Add Table	Routing table name:	AN (NE), R	10	(Unused Routing table name only).
	Approx. Max.# of Records	100-25000, R	5	
	Description:	ANY	40	
Import/Export Routing Table	Import/Export	Import, Export, R	6	
	Routing table name:	AN (E), R	10	(Existing routing table name only)
	Append/Replace	Append, Replace	7	
	Drive:	A, B, R	1	
	Path:	AN, /, ., R	50	
	Filename:	AN, -, ., R	12	
	Field delimiter:	, %, &, -, , , : , ; , R	1	
	Filter non-numeric:	Y, N, R	1	
Record Administration	Routing table name:	AN (E), R	10	(Existing routing table name only).
	Lookup field:	ANY (NE), R	24	
	Data field 1:	ANY,NR	24	
	Data field 2:	ANY, NR	24	
Edit/Delete Record	Routing table name:	AN (E), R	10	(Existing routing table name only).
	Lookup field:	ANY (E), NR	24	
Record in Routing Table	Data field 1:	ANY, NR	24	
	Data field 2:	ANY, NR	24	

## Survey Configurations

Table A-11 contains the maximum values for Survey Configurations.

**Table A-11. Maximum Values for Survey Configurations**

		Valid Inputs	Max. length	Comments
Surveys	Survey name:	AN, R	10	
	Mailbox ID:	NUM (E), R	6	
	Output filename:	AN, -, ., R	12	
	Destination directory:	AN, /, ., R	50	
	Summarize the data?	Y, N, R	1	
	Print automatically?	Y, N, R	1	
	Output filename	AN, -, ., R	12	
	Destination directory	AN, /, ., R	50	
	Summarize the data?	Y, N, R	1	
	Delimiter	1, %, &, -, ,, ;, ;, R	1	
	Type of messages	All, Ready, Saved	5	
	Include message information	Data, Date, MsgNum, All	6	
	Delete messages older than	1-14	2	
	Status	All, Ready, Saved	5	
Delete reports and data files older than	1-99	2		

## System Backup/Restore

Table A-12 contains the maximum values for System Backup/Restore.

**Table A-12. Maximum Values for System Backup/Restore**

		Valid Inputs	Max. length	Comments
Restore Vector Database	UNIX or DOS Format	UNIX, DOS, R	4	
	Drive	0, 1, R	1	
Backup Vector DataBase	UNIX or DOS Format	UNIX, DOS, R	4	
	Drive	0, 1, R	1	
Speech Backup/Restore	Backup or Restore	Backup, Restore, R	7	
	Talkfile	Vector Phrases, Mailbox Phrases, TKF (E), R	3	Choice of valid talkfiles depends on installed languages
	Drive	0, 1, R	1	
Mailbox Configuration Backup/Restore	Backup or Restore	Backup, Restore	7	
	Drive	0, 1, R	1	
Survey Backup/Restore	Backup or Restore	Backup, Restore	7	
	Drive	0, 1, R	1	
Format Floppy Disk	UNIX or DOS Format	UNIX, DOS, R	4	
	Drive	0, 1, R	1	

*Continued on next page*

**Table A-12. Maximum Values for System Backup/Restore — Continued**

		Valid Inputs	Max. length	Comments
Restore Development Vector Database	UNIX or DOS Format	UNIX, DOS, R	4	
	Drive	0,1,R	1	
	Restore Phrase Database Also?	Y, N, R	1	
Restore Speech	Drive	0,1,R	1	
	Talkfile	6104, 6105, R	3	These talkfile numbers change per language
Restore Mailbox Configuration	Drive	0, 1, R	1	
Copy file to/from diskette	Copy:	DISK-TO-FILE, FILE-TO-DISK, R	12	
	File name on diskette	AN,-,.,R	20	
	DOS or UNIX format	DOS, UNIX, R	4	
	Drive 0 or 1	0,1,R	1	
	Filename on hard drive	AN,-,.,R	20	
	Directory name	AN,1,.,R	50	
Backup Verification	Database:	Vector, Speech, Mailbox, Routing, Survey, R	14	
	DOS or UNIX format	DOS, UNIX, R	4	
	Drive 0 or 1	0,1,R	1	

## Variable Administration

---

Table A-13 contains the maximum values for Variable Administration.

**Table A-13. Maximum Values for Variable Administration**

		Valid Inputs	Max. length	Comments
Add New Variable	Variable Name	AN, _, (NE), R	11	
Edit Variable	Variable Name	AN, _, (NE), R	11	



---

## Reentering Customer Assist

# B

---

This appendix describes the procedures for reentering Customer Assist after executing a Script Builder application.

### **Reentering Customer Assist After Executing a Script Builder Application**

---

Customer Assist accepts up to eight variable arguments with each call it receives from another voice platform application if the application was created with Script Builder, Lucent's application-development tool. By passing arguments concurrently with call control, you can dictate how Customer Assist responds to callers who have already performed other activities on the platform.

#### **Valid Arguments**

---

Arguments can include: vector number, caller number, language, and five other items of information. The first three arguments perform specific functions, while the remaining five pass general information. Specifically:

- Argument 1: (vector number) enables a call to bypass the setup vector and activate a particular vector right away.
- Argument 2: (caller number) enables Customer Assist reports to track a call as it passes between Customer Assist vectors and Script Builder applications.

- Arguments 3: (language) allows Customer Assist to respond in the specified language. The following are the values passed for the languages:

**Table B-1. Language values**

Value	Language
01	Australian English
02	Brazilian Portuguese
03	Canadian French
04	Castilian Spanish
05	Colombian Spanish
06	Dutch
07	European French
08	German
09	Japanese
10	UK English
11	US English
12	Italian

**⇒ NOTE:**

If the language is not passed back to the Customer Assist or if it is invalid, the base language will be used.

- 4 to 8: (%data1 to %data5) allows you to pass information to the Customer Assist variables %data1, %data2, %data3, %data4, and %data5.

**Example**

The following example illustrates how to:

- Start a Script Builder application from Customer Assist
- Pass caller information to the Script Builder application
- Return call control to Customer Assist when the Script Builder application concludes.

**STEP 1: Set Up the EXECUTE Action to Invoke a Script Builder Application**

With the EXECUTE action, a Customer Assist vector can transfer call control to any Script Builder application installed on the system. By passing the caller number to the Script Builder application along with the call, Customer Assist can

track the caller's activities on a single report. Passing the language value ensures the call is continually handled in the chosen language.

1. Start at the Vector Configuration menu and select Create New Vector.  
A Customer Assist vector worksheet appears.
2. Enter a name for your vector in the `Vector Name` field.
3. Optionally, enter a description of this vector in the `Description` field.  
Press `ENTER`.



**NOTE:**

Vector names and descriptions are for reference only; they do not affect the handling of calls.

4. Move to the column marked `Action`.  
Action step numbers appear under the `Step` column.
5. On the first available line, press `CHG-KEYS` `F8` and `CHOICES` `F2`.
6. Select EXECUTE from the list.
7. Complete the definition form that appears. Use the following parameters:
  - `Program`: <name of Script Builder program> (Program name is any valid and installed Script Builder program).
  - `Argument 1`: `%caller_num` (Caller\_num is the optional Customer Assist system-generated caller serial number used when reentering Customer Assist to link reporting information to the original call. Passing the wrong caller number will affect the accuracy of Customer Assist reports).
  - `Argument 3`: `%language` (Language is the optional Customer Assist value used to determine the language being used. Passing the incorrect language will cause the system to respond to the caller in the incorrect language or the base language.)
  - `Return Value`: `%return_vlu` (Return value is the value set if the execute fails. The system sets this value to 1 if no application with the given name is installed; it sets this value to 2 if there is not enough space to fill all arguments.)
8. Press `CLOSE` `F3`.
9. Press `CHG-KEYS` `F8` and `SAVE` `F3` to save your Customer Assist vector.

## **STEP 2: Modify a Script Builder Application to Accept Arguments from Customer Assist**

Any Script Builder application can be modified to accept a caller number and other arguments when it is activated by Customer Assist. The following Script Builder program fragment illustrates how to modify a Script Builder application.

You do not need to modify the Script Builder application if callers will not be reentering Customer Assist.

**start:**

**1. External Function**

**Function Name: getarg**

**Use Arguments: 2 caller\_num 25**

**2. External Function**

**Function Name: getarg**

**Use Arguments 3 language 25**

**### body of program ###**

- Number of arguments being passed: 2 (for caller\_num) or 3 (for language)
- Address the argument should be placed: caller\_num (can use any valid Script Builder variable name)
- Number of bytes to gather: 25 (25 = 24 bytes for variable + 1 bytes for overhead).



**NOTE:**

getarg is a standard Script Builder external function that captures arguments from the passed space from tsm 'exec' function.

### **STEP 3: Modify the Script Builder Application to Execute Customer Assist**

Any Script Builder application can be modified to execute Customer Assist when the Script Builder application ends. If you want Customer Assist to respond with a specific Customer Assist vector, send the vector number as an argument. If Customer Assist started the Script Builder application and passed a caller number to it originally, you must pass the caller number back to Customer Assist so that its reports can classify the caller as a returning caller, rather than as a new caller. If the language value is passed to the Script Builder application, it should be passed back to ensure that the same language is used. Optionally, use the variables *%data1* - *%data5* to pass additional values to Customer Assist.

Each time Customer Assist starts, it determines whether or not it was "exec'ed" by another application. If it was, it checks to see which of the 8 parameters, listed as arguments below, has a value. If a parameter has a value, then Customer Assist assigns the value to the appropriate variable. This operation occurs automatically and does not require any additional setup, configuration, or programming.

The following Script Builder program fragment illustrates how to modify a Script Builder application to execute a Customer Assist vector:

```
20. Set Field Value
    Field: vector_number = 10
21. External Action: Execute
    Application_Name: "ccc"
    Write_Call_Data_Record: "yes"
    Argument_1: vector_number
    Argument_2: caller_num
    Argument_3: language
    Argument_4: data1
    Argument_5: data2
    Argument_6: data3
    Argument_7: data4
    Argument_8: data5
End External Action
```

- External Action: Use the standard EXECUTE action.
- Application Name: Use "ccc" for Customer Assist.
- Write\_Call\_Data\_Record: "yes" or "no" based on preference.
- Argument\_1: the number of the vector you wish to start when Customer Assist starts. Without this argument, Customer Assist starts with vector 0 and routes to the vector designated for the current channel in CHAN\_ASN.
- Argument\_2: the caller number Customer Assist originally passed to the Script Builder application (if applicable). By returning this value, you direct Customer Assist to cross-reference the new call with the original call.
- Argument\_3: the language the Customer Assist passed to the Script Builder application originally. (if applicable)
- Argument\_4 - Argument\_8: optional values to pass. The arguments are specified by a Script Builder field name or a string enclosed in quotation marks. Customer Assist fills the variables %data1, %data2, %data3, %data4 or %data5 with these values based solely on the order it receives them; specifically, it places Argument\_8 in the %data5 variable, Argument\_7 in %data4, etc. The application passes empty or unspecified arguments that precede a non-empty argument as empty (null) strings, while it does not pass empty arguments following the last non-zero entry.

 **NOTE:**

In the preceding example, Set Field Value is used to demonstrate how to identify a Customer Assist vector to activate. Any variable name can be used, but the order in which this argument and the other arguments are received is fixed.

 **CAUTION:**

*There is a limit to the size of a Customer Assist variable of 24 characters. Passing variables longer than 24 characters may corrupt the application's data space.*

## **Reentering Customer Assist After Returning Data to the DEFINITY**

---

### **Valid Arguments**

---

Customer Assist provides the ability to load a value into the variable *%caller\_num* (Caller Number). This allows Customer Assist reports to trace a call as it passes between DEFINITY and Customer Assist vectors.

### **Example**

The following example illustrates how to:

- Start a call-center application from Customer Assist
- Pass caller information to the DEFINITY vector
- Return call control via the Converse step to a Customer Assist vector

This technique might be used in applications that require more than one call appearance on the CONVERSANT during a single call. Consider the following cases:

- CASE A: The caller hears a delay announcement in the CONVERSANT and chooses to leave a message for callback. The caller is then returned to DEFINITY vector control, de-queued, and returned to the CONVERSANT for a Message Drop.
- CASE B: The caller hears a series of Dynamic Announcements during the course of being in queue under DEFINITY vector control.

### **Step 1: Customer Assist Assigns a Caller Number (*%caller\_num*) During the First Appearance of a Call to the CONVERSANT**

The system automatically assigns a caller number to a call when the call first appears on the CONVERSANT system. The system uses this caller number for reporting purposes only, not for call handling.

### Step 2: Complete your Customer Assist Vector Series with a Data Return to the DEFINITY Vector

With the DATA\_RTN action, a Customer Assist vector can transfer call control, along with several items of information, back to the initiating DEFINITY. By passing the caller number to the DEFINITY vector along with the call, Customer Assist can track the caller's activities on a single report if the call is subsequently sent back to the CONVERSANT. For Case A above:

1. The next-to-last step in your Customer Assist vector should be a MENU action that prompts the caller to select the way to proceed (for example, 1 to remain in queue, 2 to leave a message for callback loaded into %data 1).
2. Define DATA\_RTN as the final action in your vector as follows:
  - Feature Access Code: to match the PBX
  - Series of Return Values (for this example): %data1 (caller response) and %caller\_num (system-assigned caller number)Use delimiters if you expect variable length arguments.

### Step 3: Append your DEFINITY Vector to Collect the Data Returned from the CONVERSANT

1. Most likely, the last step in your DEFINITY vector was a Converse step that passed VDN and queue position information to the Customer Assist vector (VDN to identify the application, and queue position to calculate the caller's anticipated delay). Include a Wait step immediately following this Converse step (for example, wait 0 seconds hearing silence).
2. Define *collect* as the next step in the DEFINITY vector to collect the response to the Customer Assist vector's menu of call treatment options. (i.e. collect 1 digit after announcement extension none).
3. Define a *route* step to handle requests for callback messaging (for example, route to VDN (other) if digits equal 2).
4. Define additional steps in the DEFINITY vector to serve callers who want to remain in queue. For example, you might define a series of announcements and Wait steps with music, etc.
5. Create a new DEFINITY vector (VDN Other) that will send the caller back to the CONVERSANT to drop a message. Set up this new vector to collect caller number from the CONVERSANT and pass the call back to CONVERSANT to drop a message as follows:
  - wait 0 seconds hearing silence**
  - collect X digits after announcement extension none** (X must equal the maximum digit length of caller number expected)
  - converse on CONVERSANT Split passing vdn** (new vdn indicating message drop) **and digits** (which holds caller number)

#### Step 4: Create a Customer Assist Vector that Accepts VDN from the DEFINITY

**⇒ NOTE:**

You may already have created a vector to activate other applications based on VDN. If so, simply include the VDN for message drop in its SWITCH action.

6. Select `Create New Vector` from the Vector Configuration Menu. Press `(ENTER)`. A Customer Assist vector worksheet will appear.
7. Name your vector in the `Vector Name` field and press `(ENTER)`.
8. Optionally, enter a description of this vector in the `Description` field. Press `(ENTER)`.
9. Move to the column marked `Action`.
10. On the first available line, press `CHG-KEYS (F3)` and `CHOICES (F2)`, and select `CONVERSE` from the list.
11. Complete the definition form that appears with the following:
  - `Number of digits`: the number of digits expected for VDN
  - `Variable`: a variable (`%vdn`) to hold the value of VDN
12. On the next available line, press `CHG-KEYS (F8)` and `CHOICES (F2)`, and select `SWITCH` from the list.
13. Complete the definition form that appears with the following:
  - `Variable`: select the variable holding the value of VDN (`%vdn`)
  - `Value: / Vector`: In the spaces provided, define the vectors to initiate based on a VDN received

#### Step 5: Create a Customer Assist Vector that Accepts Caller Number as an Argument

1. Select `Create New Vector` from the Vector Configuration menu. Press `(ENTER)`. A Customer Assist vector worksheet will appear.
2. Name your vector in the `Vector Name` field and press `(ENTER)`.
3. Optionally, enter a description of this vector in the `Description` field. Press `(ENTER)`.
4. Move to the column marked `Action`.
5. On the first available line, press `CHG-KEYS (F8)` and `CHOICES (F2)`, and select `CONVERSE` from the list.
6. Complete the definition form that appears with the following:
  - `Number of digits`: the number of digits expected for caller number

- *Variable*: a variable (*%caller\_num*) to hold the value of caller number
7. On the next available line, press CHG-KEYS (F8) and CHOICES (F2), and select MSG\_DROP from the list.
  8. Complete the definition form that appears with the following:
    - *Mailbox Number*: the number or the variable (for example, *%vdn*)
    - *Vector to Jump to* (optional): the number of a vector to continue call processing should the caller opt to do so following the message drop

Because the caller number is retained, the system administrator can use reports, including the Call Detail report, to track a single caller's activity through multiple call appearances. Multiple call appearances, however, are also represented on reports by new caller numbers assigned each time the call returns to the CONVERSANT.



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## Interaction between Dial Plan and Customer Assist

# C

---

This appendix describes how Customer Assist uses Dial Plan.

### Outbound Call Matrix

The following table provides a matrix of valid outbound call types.

**Table C-1. Dial Plan Configuration**

	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
Phone Number Portion in Callback Message				
Internal	Dialed as is	Dialed as is	Dialed as is	Dialed as is

*Continued on next page*

**Table C-1. Dial Plan Configuration — Continued**

<b>Phone Number Portion in Callback Message</b>	<b>Phone Number Format: Fixed (F) Always Include City/Area Code: No</b>	<b>Phone Number Format: Fixed (F) Always Include City/Area Code: Yes</b>	<b>Phone Number Format: Variable (V) Always Include City/Area Code: No</b>	<b>Phone Number Format: Variable (V) Always Include City/Area Code: Yes</b>
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 — *Continued***

<b>Phone Number Portion in Callback Message</b>	<b>Phone Number Format: Fixed (F) Always Include City/Area Code: No</b>	<b>Phone Number Format: Fixed (F) Always Include City/Area Code: Yes</b>	<b>Phone Number Format: Variable (V) Always Include City/Area Code: No</b>	<b>Phone Number Format: Variable (V) Always Include City/Area Code: Yes</b>
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 — *Continued*

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.

See your *Dial Plan* manual for more information about dial strings.

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# Abbreviations

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## A

### ACD

Automatic Call Distribution

### ADPCM16

Adaptive Differential Pulse Code Modulation at 16 kbps

### ADPCM32

Adaptive Differential Pulse Code Modulation at 32 kbps

### ARS

Automatic Route Selection

### ASAI

Adjunct/Switch Application Interface

### ASCII

American Standard Code for Information Interchange

### AUDIX

Audio Information Exchange

---

## B

### BRI

basic rate interface

### BTU

British thermal unit

---

## C

### CAP

cable access panel

### CAS

Centralized Attendant Service

### CCITT

Consultative Committee for International Telephone and Telegraph

### CCMS

common channel message set

### CCS

hundred call seconds

### CCSA

common control switching arrangement

### CELP16

Code Excited Linear Prediction at 16 kbps

### CDAP

call detail acquisition and processing

### CDM

channel division multiplexing

### CDRR

Call Detail Recording and Reporting

### CDRU

call detail recording utility

### CEM

channel expansion multiplexing

### CI

clock input

### CMDR

centralized message detail recorder

### CMS

Call Management System

### CO

central office

### COR

class of restriction

### COS

class of service

### CP

circuit pack

### CPE

customer premises equipment

### CPN/BN

calling party numbers/billing number

### CR

customer ring

### CRC

cyclical redundancy checking

### CSA

Customer Software Administration or Canadian Safety Association

**CSD**  
customer service document

**CSM**  
Centralized System Management

**CSS**  
center stage switch

**CSSO**  
Customer Software Support Organization

**CSU**  
channel service unit

**CT**  
customer tip

---

**D**

**DC**  
direct current

**DCE**  
data communications equipment

**DCP**  
digital communications protocol

**DCS**  
Distributed Communications System

**DDC**  
Direct Department Calling

**DDD**  
direct distance dialing

**DID**  
Direct Inward Dialing

**DLDM**  
data line data module

**DMI**  
digital multiplexed interface

**DND**  
do not disturb

**DNIS**  
Dialed Number Identification Service

**DOD**  
Direct Outward Dialing

**DOT**  
duplication-option terminal

**DOSS**  
delivery operations support system

**DRAM**  
dynamic random access memory

**DS1**  
Digital Service 1

**DS1C**  
Digital Service 1 converter

**DSI**  
digital service interface

**DSU**  
data service unit

**DTDM**  
digital terminal data module

**DTE**  
data terminal equipment

**DTMF**  
dual tone multifrequency

**DTS**  
disk/tape system

**DUPN**  
duplication interface

**DXS**  
Direct Extension Selection

---

**E**

**E&M**  
ear and mouth (Receive and Transmit)

**EBCDIC**  
Extended Binary Coded Decimal Interexchange Code

**EFS**  
enhanced feature set

**EI**  
expansion interface

**EIA**  
Electronic Industries Association

**EMI**  
electromagnetic interference

**EPN**  
expansion port network

**EPROM**  
erasable programmable read only memory

**EPSCS**  
Enhanced Private Switched Communications Services

**ESF**  
extended superframe format

**ETN**  
electronic tandem network

---

**F**

**FAC**  
feature access code

**FAS**  
facility-associated signaling

**FCC**  
Federal Communications Commission

**FIC**  
facility interface codes

**FNPA**  
foreign numbering plan area

**FRL**  
Facilities Restriction Level

**FSAC**  
field support administration center

**FX**  
foreign exchange

---

**G**

**GPTR**  
general purpose tone receiver

**GRS**  
Generalized Route Selection

---

**H**

**HCMR**  
high-capacity minirecorder

**HNPA**  
home numbering plan area

**HTML**  
HyperText Markup Language

**HTTP**  
HyperText Transport Protocol

---

**I**

**IAS**  
Inter-PBX Attendant Service

**IC**  
intercabinet

**ICC**  
intercarrier cable

**ICI**  
incoming call identifier

**ICM**  
Inbound Call Management

**ID**  
identification

**IDDD**  
international direct distance dialing

**IE**  
information element

**INADS**  
Initialization and Administration System

**INS**  
ISDN network service

**INWATS**  
inward Wide Area Telecommunications Service

**ISDN**  
Integrated Services Digital Network

**ISN**  
Information Systems Network

**ITP**  
installation test procedure

**IXC**  
interexchange carrier

---

**K**

**KBPS**  
kilobits per second

**KHz**  
kilohertz

---

**L**

**LAN**  
local area network

**LAPD**  
link-access protocol D

**LDN**  
listed directory number

**LED**  
light-emitting diode

**LSU**  
local storage unit

**LWC**  
Leave Word Calling

---

**M**

**MA-UUI**  
message-associated user-to-user signaling

**M-Bus**  
memory bus

**MBPS**  
megabits per second

**MCC**  
multicarrier cabinet

**MCS**  
Message Center Service

**MDM**

**modular data module**

**MDR**  
message detail record

**MET**  
multibutton electronic telephone

**MHz**  
megahertz

**MIS**  
management information system

**MISCID**  
miscellaneous identification

**MMS**  
Material Management Services

**MOS**  
message-oriented signaling

**MPDM**  
modular processor data module

**MS**  
Message Server

**MSA**  
message service adjunct

**MSL**  
material stocking location

**MSS**  
mass storage system

**MTDM**  
modular trunk data module

**MTP**  
maintenance tape processor

**MTT**  
multitasking terminal

**MWL**  
message waiting lamp

---

**N**

**NAU**  
network access unit

**NCOSS**  
Network Control Operations Support Center

**NCSO**  
National Customer Support Organization

**NFAS**  
nonfacility-associated signaling

**NID**  
network inward dialing

**NPA**  
numbering plan area

**NPE**  
network processing element

**NQC**  
number of queued calls

**NSE**  
night service extension

**NSU**  
network sharing unit

**NTSO**  
National Technical Service Organization

**NXX**  
public network office code

---

**O**

**OCM**  
Outbound Call Management

**OPS**  
Off-Premises Station

**OQT**  
oldest queued time

**OSHA**  
Occupational Safety and Health Act

**OSS**  
operations support system

---

**P**

**PBX**  
private branch exchange

**PC**  
personal computer

**PCM64**  
Pulse Code Modulation at 64 kbps

**PCOL**  
Personal Central Office Line

**PCOLG**  
Personal Central Office Line group

**PCM**  
pulse code modulated

**PCS**  
Permanent Switched Calls

**PDM**  
processor data module

**PDS**  
premises distribution system

**PE**  
processing element

**PEC**  
price element code

**PGN**  
partitioned group number

**PIB**  
processor interface board

**PL**  
private line

**PMS**  
Property Management System

**PN**  
port network

**PNC**  
port-network control

**PPM**  
periodic pulse metering

**PPN**  
processor port network

**PRI**  
primary rate interface

**PSC**  
premises service consultant

**PSDN**

packet-switched public data network

**PT**

personal terminal

---

**Q**

**QPPCN**

quality protection plan change notice

---

**R**

**RAM**

random access memory

**RBOC**

regional Bell operating company

**RCL**

restricted call list

**RHNPA**

remote home numbering plan area

**RISC**

reduced instruction set computer

**RLT**

release link trunk

**RMSS**

removable mass storage subsystem

**RNX**

private network location code

**ROM**

read only memory

**RPN**

routing plan number

**RS**

recommended standard

**RSC**

regional support center

**RX**

receive

---

**S**

**SAKI**

sanity and control interface

**SCC**

single-carrier cabinet

**SCI**

Switch Communications Interface

**SCO**

System Control Office

**SCSI**

small computer system interface

**SDN**

Software Defined Network

**SDDN**

Software Defined Data Network

**SID**

station identification number

**SIT**

special information tones

**SMDR**

Station Message Detail Recording

**SN**

switch node

**SNI**

switch node interface

**SPE**

switch processing element

**SPID**

service profile identifier

**SSI**

standard serial interface

**STARLAN**

Star-Based Local Area Network

**STS**

Software Technical Support

**ST3**

Stratum 3 clock board

---

**T**

**TAAS**

Trunk Answer From Any Station

**TAC**

trunk access code

**TC**

technical consultant

**TCM**

traveling class mark

**TDM**

time-division multiplexed or trunk data module

**TEG**

Terminating Extension Groups

**TOD**

time of day

**TOPs**

task-oriented protocol

**TRACS**

Translations Recovery, Additions, and Conversions System

**TSC**

Technical Service Center

**TTL**

transistor-transistor logic

**TTTN**

tandem tie-trunk network

**TTY**

teletypewriter

**TX**

transmit

---

**U**

**UAP**

usage allocation plan

**UCD**

Uniform Call Distribution

**UCL**

unrestricted call list

**UDP**

Uniform Dial Plan

**UPS**

uninterruptible power supply

**URL**

Universal Resource Locations

---

**V**

**VM**

voltmeter

---

**W**

**WATS**

Wide Area Telecommunications Service



---

# Glossary

---

## A

### **access codes**

Application-specific codes that are required to get access to local, long distance, international lines, and any other codes that must be dialed before or after a number.

### **accounting code**

A code attached to phone numbers for billing purposes.

### **action**

An act of dialing or the act of asking the switch to perform a function.

### **agent**

An agent is the person who interacts with customers who are calling into the call center or whom the agent called. Generally the agent answers customer questions or in telemarketing cases, sells products or services.

### **analog**

The representation of information by means of continuously variable physical quantities such as amplitude, frequency, and phase.

### **application**

An application is a collection of vectors, mailboxes, routing tables, switch configurations, Script Builder programs and anything that is needed to provide a service to users, for example, bulletin boards or auto attendants.

### **application ID**

An application ID allows different access codes to be used for different applications on the same computer if needed.

### **area code**

A three-digit code designating a "toll" center in the United States, Canada and Mexico. This is also called an NPA, Numbering Plan Area.

### **Automatic Number Identification (ANI)**

The number of the phone that is calling that is delivered along with the call. This is an optional service.

---

## B

### **blind transfer**

Transfer of the call to another extension without checking whether the transfer was successful.

## C

### **call control**

The setting up, monitoring and tearing down of telephone calls.

### **call progress tone**

A tone sent from the telephone switch to tell the caller of the progress of the call.

### **caller information**

Information about the caller or input entered by the caller. For example, ANI or caller's account number.

### **caller-on-hold**

Callers that are in queue and waiting for an agent to become free to handle their call.

### **central office (CO)**

The location housing telephone switching equipment that provides local telephone service and access to toll facilities for long-distance calling.

### **city code**

City code is the equivalent to area code in some countries. In some countries, it is a fixed length while in others it is of variable length.

### **computer telephony integration (CTI)**

Connection of a computer with a telephone switch which allows the computer to issue switch commands to move calls around.

### **conference**

Connecting 3 or more people into one phone conversation.

### **configuration**

The hardware and software arrangement that defines the system, product, package or application and thus determines what it will do.

### **connection**

A path between telephones that allows the transmission of speech and other signals.

### **console**

The monitor and keyboard of the CONVERSANT.

### **CONVERSANT**

The Lucent Technologies product, which includes both hardware and software, that allows CTI applications to be made.

### **CONVERSANT Administration**

The administration of the CONVERSANT product.

### **CONVERSANT application**

A Script Builder, TSM or IRAPI application that runs on the CONVERSANT. Normally, this term refers to Script Builder applications.

### **CONVERSANT Error Log**

A logging system for problems encountered during the running of CONVERSANT or CONVERSANT applications.

### **country code**

The one to four digits code that, in the world numbering plan, uniquely identifies each country or integrated numbering plan in the world.

---

## D

### **Data Interface Process (DIP)**

A daemon (continuously running program) that provides Script Builder and TSM with access to databases and the UNIX operating system.

### **database**

A collection of data structured and organized in a disciplined fashion so that information of interest can be accessed quickly.

### **DEFINITY Enterprise Communications Server (ECS)**

A Lucent Technologies switch.

### **DEFINITY G3**

A Lucent Technologies switch.

### **dial plan**

A description of the dialing arrangements for customer use on a network. It is also known as the dialing plan.

### **Dial String**

The digits that need to be dialed to complete a call.

### **dial tone**

The sound that is heard when you pick up a telephone receiver.

### **Dialed Number Information Service (DNIS)**

DNIS is a feature of 800 and 900 lines that provides the number the caller dialed to reach the attached computer telephony system.

### **digital**

Use of binary code to represent information.

### **disconnect**

The breaking or release of a circuit connecting two telephones or data devices. When a caller is disconnected, it means that the computer hung up on the caller.

---

## E

### **Enterprise Communications Server (ECS), DEFINITY**

A Lucent Technologies switch.

### **error message**

A message on the screen indicating that something is wrong with a possible suggestion of how to correct it.

### **extension**

An additional telephone connected to a line, typically with a switch. Switches typically have many extensions for internal use and some lines to the public network for calls to phone numbers outside the switch.

### **external caller**

Caller calling in from a phone that is not directly connected to the company's switch.

---

## F

### **feature**

A capability of a product to do one or many tasks. For example, transfer calls, play standard announcements, collect speech recognition input and so on.

### **feature access code (FAC)**

A series of touch-tones that tells the switch that the caller is trying to use a certain switch feature. Examples of FAC include lighting/extinguishing Message Waiting Lamps and logging into an agent group.

### **first party**

The party that initiates the call.

### **flash hook**

The little button on the telephone that the receiver is placed on. When this is pushed quickly, it will signal the switch at the other end (central office or PBX) to do something, such as placing the current call on hold. This is also referred to as switch hook.

### **function code**

Each switch may require different flash patterns or pauses to execute different functions. These flash patterns or pauses are called the function code.

### **function key**

One of 8 keys on the computer keyboard labeled with the letter F followed by a number. The effect of pressing a particular function key depends on the menu, form or screen you are in.

---

## I

### **intelligent transfer**

Transfer of the call to another extension after checking that the destination extension is answered.

### **interactive voice response (IVR)**

The use of a computer to interact verbally via a phone with a caller. The computer will play announcements and questions to the caller. The caller can enter input using touch-tones, dialing using a rotary phone or with speech. See VRU.

### **Inter-lata**

A call placed within one LATA (Local Access Transport Area) and received in a different LATA. These calls are currently carried by a long distance company.

### **internal caller**

Caller calling in from a phone that is directly connected to the company's switch.

### **internal extension**

A number within the switch.

### **international number**

A phone number outside the country.

### **intra-lata number**

Telecommunications services that originate and end in the same Local Access and Transport Area.

**INTUITY**

A Lucent Technologies voice/fax mail product.

---

**L**

**line**

Depending on the context, this word can mean different things. It can mean the physical line between the phone company's central office to a subscriber, the line from the central office to the PBX or the line from the PBX to an extension/phone.

**line side E1**

A digital method of interfacing an INTUITY CONVERSANT system to a PBX or "switch" using E1-related hardware and software.

**line side T1**

A digital method of interfacing an INTUITY CONVERSANT system to a PBX or "switch" using T1-related hardware and software.

**local number**

A phone number within the same area code.

**long distance number**

A phone number outside the area code.

---

**M**

**Multi Application Platform (MAP)**

The Lucent Technologies hardware platform.

**Message Waiting Lights**

A light on the phone which indicates that there are one or more messages for the owner of the phone.

---

**O**

**off hook**

When the handset of the phone is lifted from its cradle (off hook), it signals the switch that someone is ready to do something, like make or answer a call.

**on hold**

The caller or agent is placed in a waiting state, where they will hear music or silence, until connected again with someone.

**on hook**

When the phone handset is resting in its cradle. The phone is not connected to any particular line.

**operating system**

A software program which manages the basic operations of a computer system. For example, UNIX or MS-DOS.

**outgoing call**

Call from within the switch to outside the switch.

**outside line access code**

The access code or series of touch-tones which tells the switch that the following numbers are for a phone number outside the switch.

---

**P**

**package**

One or more diskettes or tapes that installs software onto a computer.

**partition**

A division of a hard disk. Each partition behaves as a distinct hard disk.

**port**

A physical point of entrance to or point of exit from a network.

**private branch exchange (PBX)**

A smaller version of the phone company's larger central switching office. In most cases it is a privately owned switch. PBX basically routes callers to other locations. When enhanced with ACD capabilities, PBX can become powerful enhancements to call centers.

**product**

A marketing term for a collection of packages designed to provide certain services.

**program**

Instructions given to a computer to perform certain tasks. For example, a Script Builder program.

**public-network**

A network operated by common carriers or telecommunications administrations for the provision of circuit switched, packet switched and leased-line circuits to the public.

---

**R**

**return value**

A value used to indicate the status of the last process started. This is commonly used to indicate whether the last task such as a transfer was successful.

**ring cycle**

The pattern of ringing. In North America, it is typically six seconds long, two of ringing, four of silence, then repeated.

**rotary phone**

A phone with the circular dial. As it returns to its normal position after being turned, it opens and closes the electrical loop connected to the central office. Rotary dial telephones momentarily break the DC circuit to represent the digits dialed.

## S

**script**

The set of instructions for the voice system to follow during a transaction.

**Script Builder**

A fourth generation application generator that uses forms and menus to write IVR programs.

**Script Builder application**

A program written using Script Builder.

**second party**

The party receiving the call.

**signal**

The result of a call. It can be an answer, busy, no answer or re-order signal.

**software**

The set or sets of programs that instruct the computer hardware to perform a task or series of tasks.

**speech energy**

The frequency pattern which typically indicates human speech.

**subscriber number**

The number that permits a user to reach a subscriber in the same local network or numbering area (same as Directory Number or DN).

**switch**

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

**switch codes**

Each switch may require different flash patterns or pauses before and after access codes. These flash patterns or pauses make up the switch code.

**switch integration**

The integration of a voice system such as CONVERSANT with a switch to pass information between them.

**system**

An organized assembly of hardware, software, procedures and other facilities designed to perform a specific function or set of functions. Note that different systems may overlap one another. For example: the CONVERSANT system that is built on top of the UNIX operating system. A system can include multiple products also.

**system administrator**

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

---

## T

**termination code**

The touch-tone code that signals the end of a Dial String. It eliminates the time out on the switch for collecting the phone number.

**touch-tone**

A generic term for push button telephones.

**trace**

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

**transfer**

A telephone switch feature which provides the ability to move a call from one extension to another.

---

## V

**voice platform**

The hardware and software system that applies computer intelligence to telecommunications.

**voice platform application**

Software that runs on the voice platform.

**Voice Response Unit (VRU)**

The use of a computer to interact verbally via a phone with a caller. The computer will play announcements and questions to the caller. The caller can enter input using touch-tones, dialing using a rotary phone or with speech. See IVR.

**voice system**

See Voice Response Unit.

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