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## **CONVERSANT<sup>®</sup> Voice Information System**

Solutions for DEFINITY<sup>®</sup> Call Center

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# Release Notes for Version 2.0

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This document describes new features and enhancements available with CONVERSANT Solutions for DEFINITY Call Center Version 2.0 software.

## **Feature Enhancements**

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- Mailboxes for optional Callback Messaging have been expanded to accommodate up to 15 prompts for information. The previous limit was 5 prompts per mailbox.
- The CONVERSANT Solutions system now automatically out-pulses 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. Safeguards stop the DEFINITY from accidentally dialing "1" twice.
- A new report has been added. Called the Vector Map report, it charts the paths calls can take through the CONVERSANT Solutions system.
- A new option, Audit Vector Database, has been added to the vector configuration menu. Use it to check vectors in your development database for common errors.
- The MSG-DROP action for optional Callback Messaging can now use either a mailbox number or a variable containing a valid mailbox number.
- Assorted improvements to the user interface have made the system easier to use.

## **Special Instructions for Line-Side T1 Users**

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- Before using the CONVERSE action over digital (Line-Side T1) lines, first access the Systems-Parameters Features screen on the DEFINITY switch and set the Converse First and Second Data Delay parameters to 1.
- To transfer callers over digital (Line-Side T1) lines, use a TRANSFER action preceded by at least one ANNOUNCE action.
- Before using optional Callback Messaging features, set the global parameter called "Type Transfer to Caller" to "intelligent" if all channels connecting the CONVERSANT with your PBX are analog. Set this parameter to "blind" if any of these ports are digital (Line-Side T1). Press CHOICES (F2) to toggle between these options.

During an "Intelligent" transfer to an agent, the agent's voice or "speech energy" signals the CONVERSANT to introduce a new message to transcribe. If the agent chooses to return the call, the CONVERSANT initiates a conference call and monitors the connection for a busy signal. In the absence of a busy signal, it judges the call "successful" and remains on the line for the extent of the Call Back Conference Time.

Alternatively, during a "blind" transfer to an agent, the CONVERSANT system begins prompting for an agent's input immediately after it finishes dialing. If no agent responds, the system eventually "times out" to make another attempt later. During a blind conference call, the CONVERSANT does not monitor the connection for a busy signal; if the line is busy, the agent must press \*99 and classify the call "unsuccessful."

## **Limitations of use with Line-Side T1**

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- Standard Announcements are not available over digital (Line-Side T1) lines.
- The CONVERSANT system cannot dial an agent, transfer a caller, complete a conference call, or return data to a DEFINITY vector until resources become available on the DEFINITY switch. In an analog configuration, the CONVERSANT monitors the connection for a dial tone. However, in a digital (Line-Side T1 configuration), the CONVERSANT pauses for an amount of time represented by the Dial Tone Delay parameter on the CONVERSANT system's Digital Protocols screen. Whenever the DEFINITY 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 either the Dial Tone Delay or the number of Touch Tone receivers on the DEFINITY switch.

## **Other Modifications to the Software**

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- When using the system's Speech Administration utility to add or modify phrases, press a touch tone key after answering the call to signal the system to play any speech that exists for this phrase. The utility previously required called parties to respond by speaking.
- Version 1.0 of the Callback Messaging Module sometimes records the PBX dial tone it hears after a caller leaves a message and ends the call. When transcribed, messages containing a PBX dial tone accidentally trigger the dial-tone event handler in the transcription application. Versions 1.2 and greater of the Callback Messaging Module stop recording immediately after a caller hangs up.
- Versions 1.0 and 1.1 of the Callback Message Module change the status of every message to "saved" when hourly audits of the message database reveal any "hung" messages (messages that are locked for transcription but are not being transcribed). Versions 1.2 and greater of the Callback Messaging Module change only the status of "hung" messages to "saved."
- The range of channels to use with the Agent Access Feature is among the Global Settings for Callback Messaging. This range can consist of a single channel, a list of individual channels separated by commas, a range of channels separated by a dash, or a combination of individual channels and ranges separated by commas.

If these ranges contain two-digit channel numbers (channel numbers greater than 9), versions 1.0 and 1.1 of the Callback Messaging Module erroneously drop the first digit in each two-digit number, and assign to the Agent Access Feature the channel represented by the second digit. Versions 1.2 and greater of the Callback Messaging Module interpret these ranges correctly.

## **Documentation Enhancements**

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- The User Documentation now includes a table of limits for parameters.

## **Performing the Upgrade**

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### **Backup & Removal**

Follow these steps to upgrade the CONVERSANT Call Center Solutions software Version 1.0, 1.1, or 1.2 to Version 2.0. Consult Chapter 5 during this procedure for more information about backing up and restoring vectors, talk files, and mailboxes.

1. If you have optional Callback Messaging installed, obtain the Mailbox Conversion Utility, available separately from AT&T.
2. At the system backup/restore menu, back up your runtime vectors as follows:



**NOTE:**

If you want to back up your original development vectors too, back up the development database once *before* you perform steps a. and b. below.

- a. **Restore Vector Database - from Current Runtime** (to overwrite the development database with the runtime database).
  - b. **Backup Vector Database to Floppy Disk**
3. Select **Backup/Restore Speech** from the System Backup/Restore menu and back up talk file 224 (vector phrases). If you have made changes to standard speech, back up talk file 241 (standard speech phrases) on a separate disk.
  4. If you have Callback Messaging installed:
    - a. Exit the system by choosing **Exit** at the main menu.
    - b. If you have version 1.0, 1.1, or 1.2 of Callback Messaging installed, install the Mailbox Conversion Utility.
    - c. Return to the CONVERSANT Solutions system.
    - d. Select **Backup/Restore Speech** from the System Backup/Restore menu and back up talk file 242 (mailbox phrases).
    - e. Select **Backup Mailbox Configuration for Version 2.+** from the System Backup/Restore menu.
  5. Follow the instructions in Chapter 10 to remove Callback Messaging speech and runtime.
  6. If you have Custom Call Routing installed, follow the instructions in Chapter 10 to remove it. Note that this will permanently erase your Custom Call Routing database tables.
  7. Follow the instructions in Chapter 10 to remove announcement speech, runtime, and administration.

### **Installation & Restoration**

1. Install your new release of the CONVERSANT Call Center Solutions announcement package.
2. If you removed Custom Call Routing, install your new or current release.
3. If you removed Callback Messaging, install your new or current release.

- 4 . From the system Backup/Restore menu, select **Restore Speech** and restore talk file 224 (vector phrases.) If you performed a backup of standard speech, also restore talk file 241 (standard speech phrases.)
- 5 . At the System Backup/Restore menu, restore your original runtime vectors by choosing:
  - a. **Restore Vector Database - from Floppy Disk** (to overwrite the development database with the runtime database)
  - b. **Place New Vectors in Service**



**NOTE:**

If you want to restore your original development database too, restore it from disk *after* you perform steps 5.a. and 5.b. Do not select Place New Vectors in Service a second time.

6. If you installed Custom Call Routing, recreate your Custom Call Routing database tables with the same table names you used originally. Existing vectors will recognize only those tables whose names have remained exactly the same.
7. If you installed Callback Messaging:
  - a. Select **Restore Mailbox Configuration** from the system backup/restore menu.
  - b. Select **Restore Speech** from the System Backup/Restore menu, and restore talk file 242 (mailbox phrases).



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# About This Book

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## **Purpose**

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This book describes a powerful automated call routing, announcement, storage, message retrieval, and callback system: CONVERSANT Solutions for DEFINITY Call Center, or CONVERSANT Call Center Solutions for short. It shows you how to install the three software packages on your CONVERSANT Voice Information System. It describes the steps you follow in building pathways, or vectors, for incoming calls. It demonstrates how to create your own special applications. It tells you how to generate reports and troubleshoot.

## **Intended Audience**

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This book is addressed to call center agents, system administrators, and technicians responsible for installing and maintaining the CONVERSANT Call Center Solutions.

## **Use**

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One good way to use the book is to start with the general overview in Chapter 1 and then read the summaries of the three modules. This will give you a feel for the system, and suggest how you can shape it to meet your needs. Then you might go over the sample applications to get an idea of how call-handling instructions, or CONVERSANT vectors, work in practice to channel incoming calls. Chapter 7, "Application Quick Start," provides helpful advice on port and vector allocation and worksheets that you can use in laying out your system. *It is important that you read this chapter before going on to the task of building your own applications with Chapter 5, "CONVERSANT Solutions Administration."*

## Conventions

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Keyboard keys are in all caps enclosed in round-edge boxes. Press [ENTER].

Function keys are in capitals, followed by the function key name in a square box. Press INSERT [F2].

CONVERSANT vector names are underlined. ADA start.

Variables are in italics. %v $dn$ .

Words that you type or that appear on the screen are bolded. **ccc**.

## Assumptions

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This book assumes that you have a CONVERSANT Voice Information System Version 3.1 or later running under the UNIX Operating System, and that your hardware consists of at least one MAP 40 or MAP 100 computer and the DEFINITY G3V1 or G3V2 switch.

This book also assumes that you know at least a little about call vectoring and call prompting on the DEFINITY G3V1 or G3V2 switch.

## Trademarks

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CONVERSANT® is a registered trademark of AT&T. UNIX® is a registered trademark of UNIX System Laboratories, Inc. DEFINITY® is a registered trademark of AT&T.

## Related Resources

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### UNIX System and CONVERSANT Documentation

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- *AT&T UNIX System V/386 Operations/System Administration*, D1-2874-A, especially "Tunable Parameters"
- *AT&T UNIX System V/386 FACE User's/Administrator's Guide*, D12872-A, especially Chapter 4, "Administration"
- *CONVERSANT Version 3.1 Software Installation and Upgrade*, 585-350-104

- *CONVERSANT Version 3.1 Operations*, 585-350-701, especially Appendix C, "Database Environment" and Appendix E, "Performance Information"
- *CONVERSANT Version 3.1 Maintenance*, 585-350-105

### **DEFINITY G3V2 Documentation**

- *AT&T DEFINITY Communications System, Generic 3 V2 Call Vectoring Guide*, 555-230-520
- *AT&T DEFINITY Communications System, Generic 3 V2 Feature Description*, 555-230-204
- *AT&T DEFINITY Communications System, Generic 3 V2 Implementation*, 555-230-653

Some knowledge of call vectoring and call prompting is necessary to make full use of the CONVERSANT Solutions. The most helpful document to you will probably be the call vectoring guide. If you are not familiar with call vectoring, review this book, especially its tutorial sections.

Read section 7 of the feature description for a discussion of call prompting, call vectoring, and automatic call distribution groups. Read section 3 of the implementation guide for an explanation of the forms for call prompting and vectoring. Read section 5 of this book for a treatment of the actual setup of announcements.

### **How to Make Comments**

Despite our best efforts, errors sometimes find their way into our books. We would be grateful if you would tell us about these (and how we could make the book better in general) on the enclosed card at the front of this guide so that future issues will go farther in helping users.

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# Understanding CONVERSANT Solutions for DEFINITY Call Center

# 1

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This chapter describes the main functions of the three CONVERSANT Call Center Solutions software packages and discusses the relationship between DEFINITY vectors and CONVERSANT vectors.

## **Overview of the CONVERSANT Call Center Solutions**

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The CONVERSANT Call Center Solutions consist of interactive software packages that can speak to callers, store their messages, and guide them to live agents. They may be installed in a few minutes on top of the standard CONVERSANT Voice Information System software. This CONVERSANT software, in turn, resides on top of a UNIX operating system.

Release 2.0 of the CONVERSANT Call Center Solutions consists of three integrated software modules. Each offers a set of menus, screens, and commands called “actions” you can use to build applications for your call center.

- The Announcement Package, or platform, enables you to design simple announcements to provide callers with information about their position in queue or their approximate wait time. You may also transfer callers to other extensions or start other applications to serve them.
- Callback Messaging enables you to build a path for callers to follow to leave messages for agents.
- Custom Call Routing helps you transfer callers to particular extensions and splits.

## **The CONVERSANT Vector**

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Like its counterpart on the DEFINITY G3 switch, a CONVERSANT 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 99 CONVERSANT vectors. Each can contain up to 14 individual actions.

Because of the multi-tasking power of the UNIX operating system, the CONVERSANT Solutions can serve many callers at once. Plus, you can define or edit CONVERSANT vectors while others are active without interrupting the system’s operation. This flexible design also lets you launch any certified CONVERSANT VIS application, such as AT&T’s option Script Builder tool, from the announcement platform.

## **The DEFINITY Vector**

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DEFINITY vectors reside on the DEFINITY G3 switch and resemble CONVERSANT vectors. They too consist of commands linked to place a call in queue, play a recorded message to the caller, etc. You build and launch them in much the same way as CONVERSANT vectors by using on-screen menus to enter the actions you need. (See the *DEFINITY Call Vectoring Guide*, chapters 1-4, for a full treatment of the basics of DEFINITY call vectoring.)

The DEFINITY vector has precedence over its junior partner, the CONVERSANT vector. It receives all incoming calls and governs their movement. It dictates the playing of most forced announcements. It places calls in queue according to their arrival time. It stops a message played by a CONVERSANT vector in order to direct a call to a live agent. Every CONVERSANT vector takes its direction from a DEFINITY vector.

## **The Partnership**

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Figure 1-1 shows a typical joint effort between two vectors.

1. A call comes in and is taken by a DEFINITY vector, which 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 CONVERSANT vector, which plays a standard announcement, such as a greeting and a request to the caller to wait until an agent can take the call.

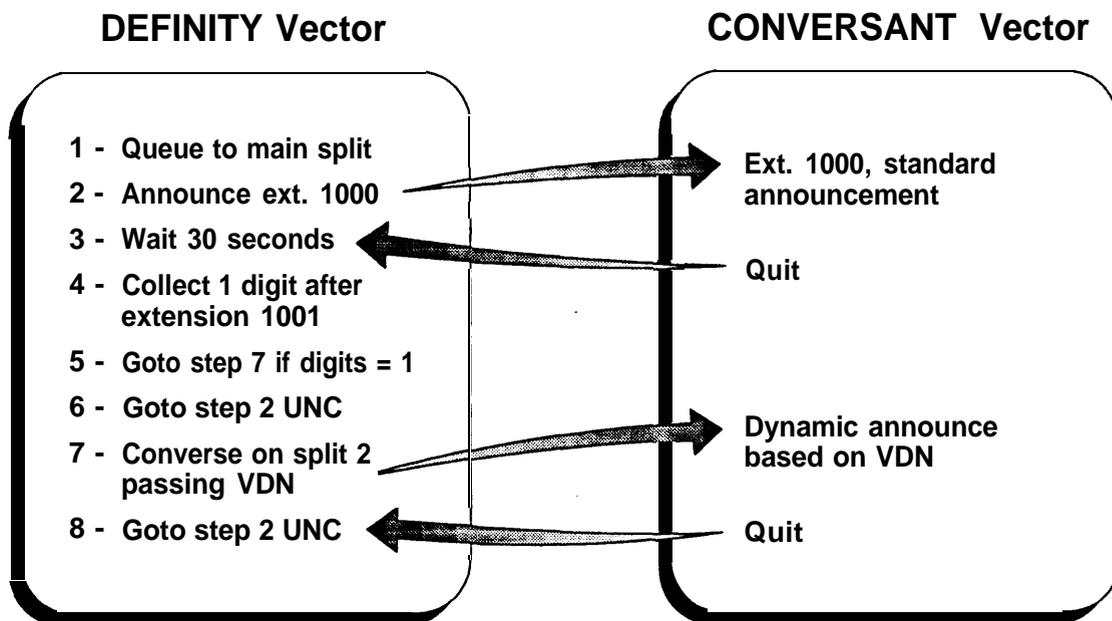


Figure 1-1. A Working Partnership

3. When the announcement ends, the QUIT action sends the call back to the DEFINITY vector, which looks again (as, in fact, it does continuously as long as the call is in queue) to see whether an agent is available.
4. If not, the vector plays music for 30 seconds.
5. Then, if all agents are still busy, it asks the caller to press a number on his touch-tone pad to hear, for instance, about a recent product update.
6. If no number is pressed, the caller is taken back to step 2.
7. If the caller presses a number, the *converse* step passes the call, together with the caller's choice, back to the CONVERSANT 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 CONVERSANT vector lies at the heart of every CONVERSANT Call Center solution.

## Supported Hardware/Software

CONVERSANT Call Center Solutions V2.0 applications are supported on these configurations:

### Switch Release

- DEFINITY G3V1 \* with ACD (Automatic Call Distribution)
  - DEFINITY G3V2 with the Call Center Plus software package
- ### Switch Software
- G3 Automatic Call Distribution (ACD)
  - G3 Basic Call Vectoring with the Converse Step (G3 V2 or later)
  - G3 Call Vectoring with Call Prompting

### CONVERSANT VIS Hardware

- MAP/40 (up to 24 incoming ports) or MAP/100 (up to 48 incoming ports)
- IVP6 analog or Line-Side T1 \*\* interface to G3
- Color monitor

### CONVERSANT VIS Software

- 3.1 CONVERSANT software (or a later version)
- Script Builder



#### **NOTE:**

Script Builder is not required to run CONVERSANT Call Center Solutions applications, but will be supported for customers wanting to develop their own interactive voice response applications.

### Peripherals:

- AT&T Printer
- AT&T Modem

\* The DEFINITY G3V2 (or a later) switch is required for all applications that use the *converse* call vectoring step to communicate with the PBX. G3V1 supports standard announcements and callback messaging only.

\*\* Standard Announcements are not available over digital (Line-Side T1) lines.

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# The CONVERSANT Announcement Platform

# 2

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This chapter describes hard and dynamically allocated ports, how DEFINITY vectors and CONVERSANT vectors guide calls to them, and 16 of the 25 actions from which CONVERSANT vectors are built.

## **Overview of the CONVERSANT Announcement Platform**

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The announcement package module, or platform, provides the tools to build and execute CONVERSANT vectors that handle incoming calls. With the platform, you can design CONVERSANT vectors to:

- Speak announcements
- Transfer callers to other extensions
- Execute other CONVERSANT vectors
- Activate interactive voice response applications
- Execute other CONVERSANT Scriptbuilder Applications

But before the system can do any of these things, a DEFINITY vector must connect the caller to a CONVERSANT Call Center Solutions port. The platform answers through a single setup vector that ushers incoming calls to other CONVERSANT vectors you have built. These vectors allow the port to respond in one of two ways, as described below.



**NOTE:**

You can build the setup vector mentioned above by using the templates described in Chapter 5. These templates automatically create vectors to perform important and common call handling tasks. Besides the setup template, the platform offers a menu template and templates for dynamic port allocation, anticipated delay announcement, and announce queue position.

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

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A hard allocated port is generally restricted to playing only one standard announcement or launching only one specific application. But it can play an announcement to a big audience, all the members of which are listening at once on their own phones, having been routed and queued to a CONVERSANT vector that contains the ANNOUNCE action. A call center in which all calls are transferred 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 lies mute when there is no demand for it, a dynamically allocated port can play a variety of different announcements or launch many different applications. But only one caller at a time can hear any given dynamic announcement.

One key element in the responsiveness of a dynamic port is, as we have seen in Chapter 1, the *converse* step. This powerful vectoring action that passes a caller's wishes, so to speak, to the CONVERSANT Call Center Solutions system plays an indispensable role in making dynamic ports efficient and economical over time.

Figure 2-1 gives an idea of the difference between hard and dynamic ports and of the vector action that channels calls to each. The announcement package, or platform, lies under a glass case that represents the CONVERSANT Solutions system.

Above and outside the case, two DEFINITY vectors pass their respective single incoming calls to two CONVERSANT setup vectors. The one on the left, unencumbered by any specific information that sets the call apart from hundreds of others, simply passes its call to a CONVERSANT vector that contains the ANNOUNCE action and plays a standard announcement.

But the one on the right receives, through the *converse* step, instructions from the caller to play a specific announcement containing information the caller requires. It passes its call to a CONVERSANT vector that contains the DYN\_ANNOU action. This action, in turn, plays the dynamic announcement. Similarly, the DYNAMIC, EXECUTE, and SWITCH actions can respond with dynamic applications or dynamic vectors, respectively.

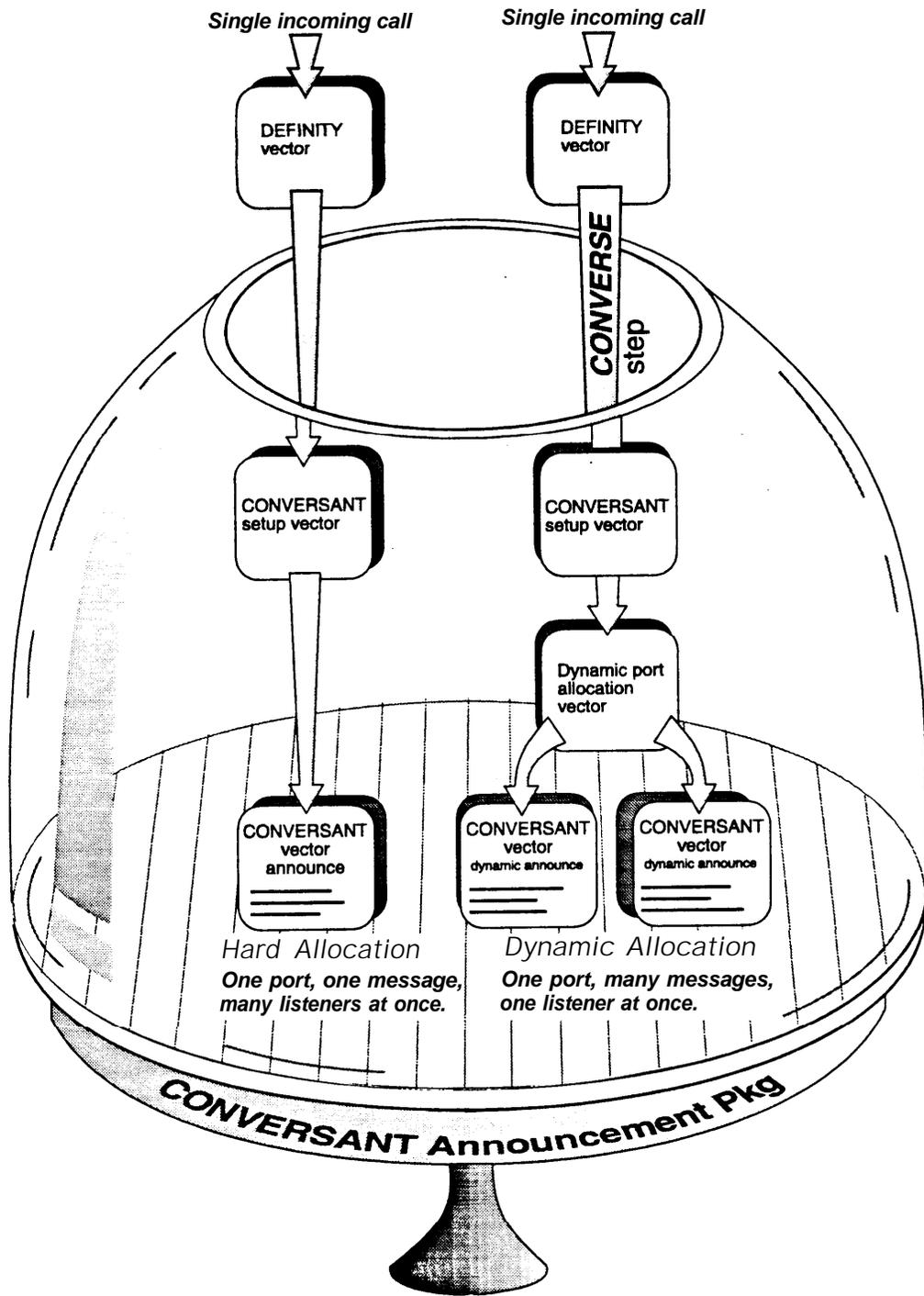


Figure 2-1. Hard Allocation vs. Dynamic Allocation (for Announcements)

## **Major CONVERSANT Vector Actions for the Platform Module**

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There are 25 actions associated with CONVERSANT vector administration on the platform. This section describes the 16 *major* ones. (For more about both major and minor actions, see Chapter 8. Also see Chapter 5 for a detailed discussion of how to administer all actions.)

### **ADA\_CALC Action**

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Approximates how long a caller will probably wait in queue and, when used with the CONVERSE, ANNOUNCE, and SPEAK\_NUM actions, informs the caller.

Use the ADA (anticipated delay announcement) template described in Chapter 5 for help in building your announcements. Another version of this template, the announce queue position template, can speak a caller's relative position in queue. ADA and queue position templates, like all those supplied with the CONVERSANT Solutions system, automatically create CONVERSANT vectors to perform important call handling tasks.

### **ANNOUNCE Action**

---

Plays a specific recorded message. You can use ANNOUNCE anywhere in a CONVERSANT vector to speak information, prompt a caller for input, or play a forced first message, called a standard announcement, to many callers at once in an ACD (Automatic Call Distribution) queue.

To provide a standard announcement, a DEFINITY vector first connects all callers in queue to an announcement extension corresponding to an analog CONVERSANT port. In turn, the CONVERSANT Call Center Solutions system takes this port off hook and launches a hard-allocated vector that you have configured with at least one ANNOUNCE action. After a single caller or group hears the recorded message, call control reverts to the DEFINITY vector.

You can record announcements by using the SPCH\_ADMN action in a CONVERSANT vector, or by pressing a function key at the CONVERSANT terminal, entering a phone extension, and pressing any touch tone key when the platform calls you. Later, you can update your phrases from any touch-tone phone by dialing a vector containing the SPCH\_ADMN action and entering a valid number and password. (See Chapter 5 for more on speech administration.)



**NOTE:**

Standard Announcements are not available over digital (Line-Side T1) lines.

### **CHAN\_ASN Action**

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Used only in the setup vector to assign existing CONVERSANT vectors to ports.



**NOTE:**

The setup vector assigns vectors to ports *within the CONVERSANT Solutions system only*. It will not respond to calls unless you assign CONVERSANT Solutions software to every port you plan to use. (See *CONVERSANT VIS Version 3.1 Operations*, 585-350-701, for more information about assigning services to channels.)

### **CONVERSE Action**

---

Accepts the one or two items of information that the DEFINITY switch can transfer along with a call. This information can include a string of touch tone digits collected through call prompting on the switch or the caller's position in queue.

It is important to distinguish between the *CONVERSE action*, which is part of the CONVERSANT Call Center Solutions system and can only receive data passed to it by the DEFINITY G3V2 switch, and the *converse step*, which resides on the DEFINITY G3V2 and makes the actual handoff to a CONVERSANT vector.

In configuring a CONVERSANT vector, you use an on-screen form to assign a variable name to each item of information you accept. Other actions can use these variables to respond to callers with announcements or other actions. (See Chapter 7, "Application Quick Start," for guidelines about using the CONVERSE action. For practical illustrations of how call center applications can benefit from this action, see Chapter 6, "Sample Applications.")

### **DATA\_RTN Action**

---

Sends information to the DEFINITY switch. Subsequently, this information can be used in CMS (Call Management System) reports, routing or removing calls from queue, and populating agents' telephone 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 to the DEFINITY vector.



**NOTE:**

The DATA\_RTN action must be preceded by the CONVERSE action in any CONVERSANT vector. This prepares a DEFINITY vector to receive information from the CONVERSANT Call Center Solutions system.

### **DYNAMIC 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). Using an on-screen form, you associate this action with a single variable name and then link three possible arguments with CONVERSANT applications to execute.

### **DYN\_ANNOU Action**

---

Plays one of many different messages to a single caller. Through the *converse* step, a DEFINITY vector can send one or two items of information about a call that a CONVERSANT vector can use to select an appropriate announcement.

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. The DEFINITY vector can then deliver callers who choose the announcement to a CONVERSANT port, along with the number they dialed. The platform uses this value to determine which message to play. When the dynamic announcement ends, call control returns to the DEFINITY vector.

DEFINITY vectors can also place callers in an ACD (Automatic Call Distribution) queue before transferring them to the CONVERSANT Call Center Solutions platform. This allows the DEFINITY vector to interrupt dynamic announcements and regain call control when agents become available.

Note that the DEFINITY G3 can direct only one caller at a time to a CONVERSANT port when the CONVERSE action 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.

### **EXECUTE Action**

---

Transfers control of a call, unconditionally, to a CONVERSANT application on the CONVERSANT platform. Thanks to the multi-tasking nature of the UNIX system, many applications can operate coresidently on the same CONVERSANT system.

### **GET\_DIGT Action**

---

Captures touch-tone input from callers. For example, by using GET\_DIGT with ANNOUNCE, you can prompt callers to choose from a menu of options in your CONVERSANT vector. You use an on-screen form to choose a variable name for the caller's response. Other actions can use this variable to make call handling decisions.

### **GOTO Action**

---

Moves call control to another vector if a specific condition is met. You enter an equation and the number of a vector. Call control will pass to this vector if the equation proves true. Each equation consists of a single variable, value, and relational operator (=, !=, <, <=, >, or >=). The GOTO action evaluates both arguments in an equation as strings if either argument is 10 characters or more in length. The resulting comparison is alphabetic, not numeric.

### **JUMP Action**

---

Moves call control, unconditionally, to another vector on the CONVERSANT platform. JUMP is similar to EXECUTE, but it launches another vector, not another CONVERSANT application.

### **QUIT Action**

---

Releases the call currently under the CONVERSANT vector's control. Control of calls released using QUIT returns to the DEFINITY switch.

### **REPORT Action**

---

Records the current value of a variable for reporting purposes. The CONVERSANT Call Center Solutions platform records the value of the specified variable at the time it encounters this action.

### **SPCH\_ADMN Action**

---

Allows you to administer, with only a touch-tone phone, the phrases defined for vectors, mailboxes, and standard speech.

When you add this action to a vector, you can also define the talk file and phrase numbers to use. Alternatively, you can leave these spaces blank to have the system prompt callers for these numbers. Although you can specify a talk file to administer without also specifying a phrase, you cannot specify a phrase without first specifying its talk file.

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 talk files, do not use this action in vectors that communicate with external callers and be sure to always use a speech administration password.*

(See Chapter 5 for more about this password and other settings you can administer from the CONVERSANT Call Center Solutions terminal.)

### **SWITCH Action**

---

Moves call control to one of up to 11 vectors, depending on current conditions. Through an on-screen form you associate the SWITCH action with a single variable name and link possible values with vectors to target. SWITCH is similar to DYNAMIC EXECUTE, but it launches vectors, not CONVERSANT applications.

### **TRANSFER Action**

---

Transfers the caller to any extension you specify. CMS reports do not document calls transferred by this action. For more accurate reporting, use the DATA\_RTN action to return an extension number to a DEFINITY vector that you configure to transfer the call.

## **Special Instructions for Line-Side T1 Users**

---

- Before using the CONVERSE action, access the Systems-Parameters Features screen on the DEFINITY switch and set the Converse First and Second Data Delay parameters to 1.
  
- Before using the TRANSFER action in a CONVERSANT vector, use the ANNOUNCE action at least once.

---

# CONVERSANT Callback Messaging

# 3

---

This chapter describes the main features of Callback Messaging and the functions of two actions, MSG\_DROP and TRANSCRIBE, in helping call center agents to handle incoming and outgoing messages. It also discusses the agent access feature.

## Overview of CONVERSANT Callback Messaging

---

The optional callback messaging module attends to callers who wish to leave a message. To review messages and return customer calls, agents can call a CONVERSANT vector that contains the TRANSCRIBE action. Or you can configure the agent access feature to search for free agents and call them automatically.

Two actions add callback messaging functions to CONVERSANT vectors:

- MSG\_DROP
- TRANSCRIBE

This section describes each. (For more about creating mailboxes and defining global parameters, see Chapter 5.)

### MSG\_DROP

This action activates a mailbox that you configure with up to fifteen prompts for information. You define each prompt by choosing a speech phrase to play and the type of information to accept. A mailbox can include any mix of prompts for touch-tone and verbal responses, plus one prompt for a telephone number to call back. After prompts for verbal input, the system uses a beep to signal callers to respond. The system will not beep after prompting for touch-tones. You can record and update prompts from any touch-tone phone.

To respond to prompts, callers can either speak into the receiver or enter touch-tone digits. The system stores their responses on the system's hard disk drive for transcription later. The number of mailboxes and the number of messages per mailbox that the system can accommodate are both limited only by disk capacity. The speech space available report and the audit mailbox, both described in Chapter 5, 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 AT&T phones (the leave word calling feature), or by calling them as directed by settings you define globally or for each mailbox.



**NOTE:**

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

## **TRANSCRIBE (TRANSRIBE)**

---

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

When agents reach this action in a CONVERSANT vector, the system prompts them for a password (if a password was assigned to the mailbox). If you have not associated the TRANSCRIBE action with a mailbox number, the system will ask for both a number and the password.

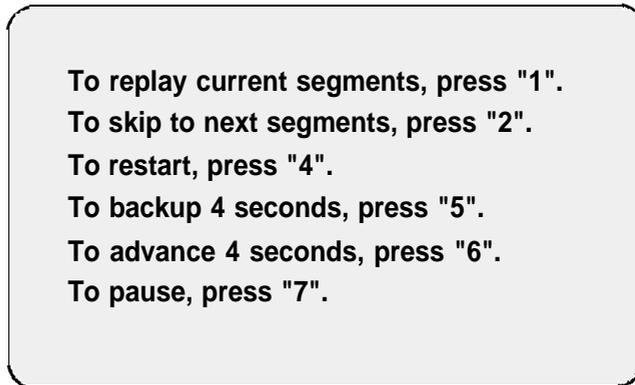
The system speaks the number of new and saved messages. This total does not include messages being transcribed or messages that were transcribed and saved during the current call. You can choose to review all new and saved messages or target specific messages. For this last option, enter the number of the message to replay.



**NOTE:**

To ensure 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 Chapter 5 for more about this password and other settings you can administer from the CONVERSANT Call Center Solutions terminal).

While listening to messages, agents can replay and skip both spoken and touch tone responses, and they can pause and advance or retreat in 4-second increments through spoken responses (Figure 3-1). The system replays spoken responses exactly and uses pre-recorded system speech to interpret touch tones. Several agents can access messages in the same mailbox, but safeguards prevent two agents from listening at once to the same message.



---

**Figure 3-1. Message Listening Options**



**NOTE:**

The Restart option (touch tone 4) continues playing back a message part after playback has been paused (touch tone 7). To replay a message part from the beginning, choose Replay Current Segments (touch tone 1).

After every 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

These relationships are shown graphically in Figure 3-2. (This graphic is the first in a series of three [the others are Figures 3-3 and 3-4] illustrating how Callback Messaging typically plays back messages to agents, launches automatic callbacks, and allows agents to classify callback attempts.)

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 the system remains on the line for an amount of time you can set from the mailbox global settings menu. When it leaves the call, it either deletes or saves the message, depending on the option you have previously chosen.

If the caller did not include his number, or if you configured the mailbox without a prompt for a telephone number to call back, the system will report that the attempt was unsuccessful. Attempts are also unsuccessful if they result in a busy signal or no answer. After an unsuccessful attempt, or if the called party hangs up before the system leaves the conference call, the system automatically offers a menu that the agent can use to reclassify the call as successful.

Alternatively, the agent can reclassify the call as unsuccessful from this menu by typing \*99 at any time until the CONVERSANT Call Center Solutions system leaves the conference call. This permits the agent to override the system's evaluation of the call's success when, for example, an answering machine is reached.

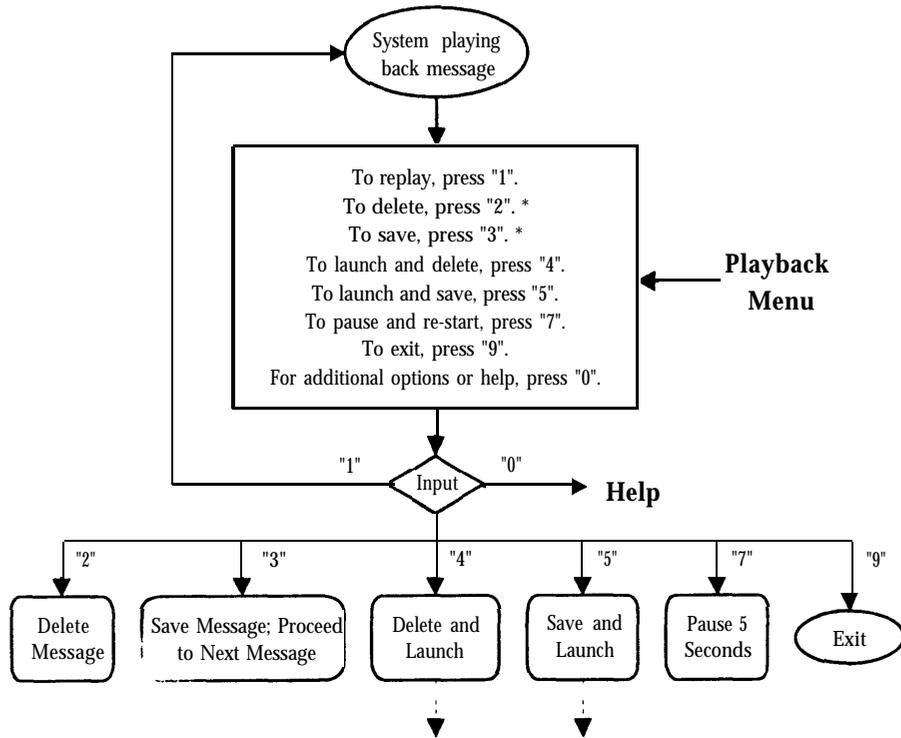


**NOTE:**

Typing any touch tone doubles the length of time that you have configured the CONVERSANT to remain on the line. Use these features selectively because called parties will hear the touch tones you press.

After agents review all messages in a mailbox's "new" or "saved" category, they return to the main menu of options. Although this menu includes an option to quit, agents can exit the system at any time simply by hanging up. Afterwards, their extensions are again eligible to accept calls from ACD (Automatic Call Distribution.)

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



\* In agent mode, the call will end after this choice.  
In transcription mode, the agent will proceed to the next message.

---

**Figure 3-2. Message Handling Options**

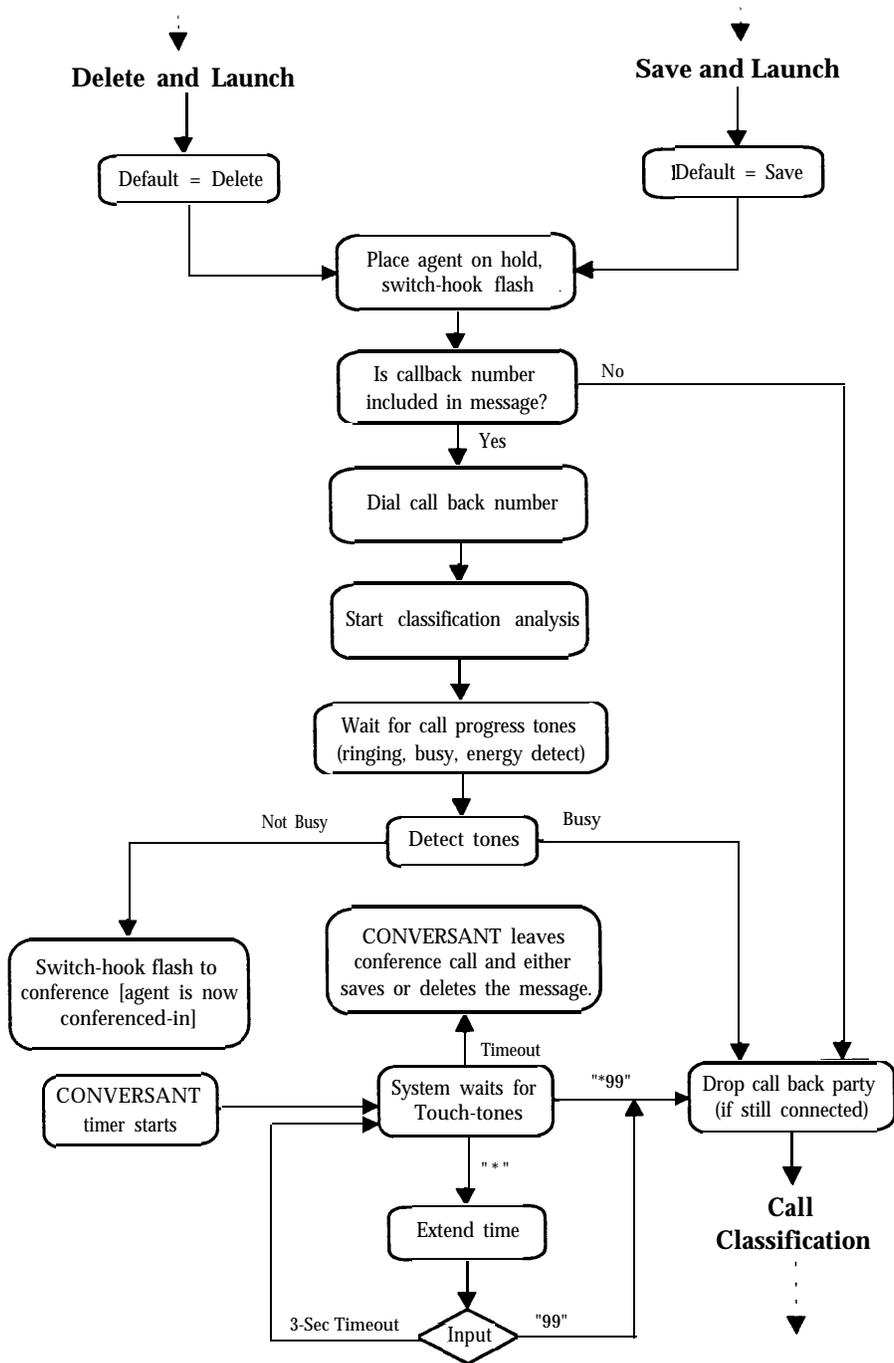
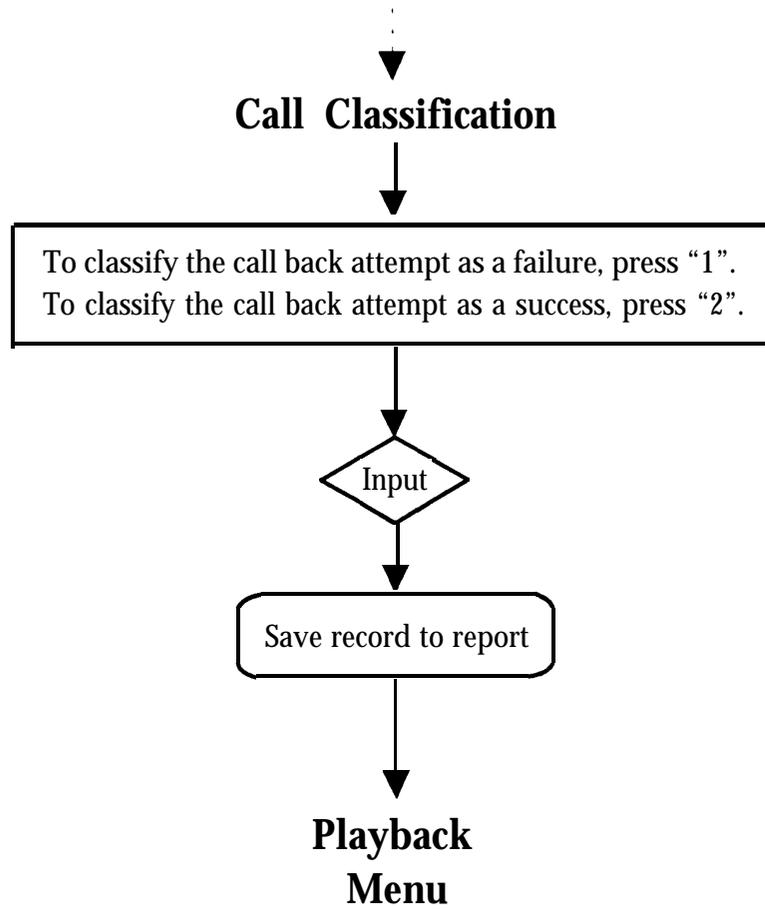


Figure 3-3. Customer Callback Tree



---

Figure 3-4. Message Handling Options after Callback

## Using the Agent Access Feature

---

The agent access feature delivers messages to agents automatically. You administer agent access by adjusting Callback Messaging parameters, not through CONVERSANT vectors.

You can direct the system to dial an extension or, alternatively, a VDN (DEFINITY vector) designed to gauge collective agent availability before attempting a callback. You must design this optional VDN to return a busy signal whenever agent activity exceeds a set threshold. (Refer to *AT&T DEFINITY Communications System Generic 3 V2 Call Vectoring Guide*, 555-230-653.)

From the mailbox global settings menu, identify the ports to use for out-dialing; from the mailbox definition form, identify the extension or VDN to dial. When no agents are available, the PBX will return a busy signal prompting the Callback module to redial later. To prevent agent access from over-using CONVERSANT ports for redialing, be sure to set a high retry interval.

When agents are available, CONVERSANT Call Center Solutions monitors the telephone connection for voice energy and, when an agent answers, 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. To review additional messages after calls conclude, agents must re-dial the system.

## Special Instructions for Line-Side T1 Users

---

- The CONVERSANT system cannot dial an agent, transfer a caller, complete a conference call, or return data to a DEFINITY vector until resources become available on the DEFINITY switch. In an analog configuration, the CONVERSANT monitors the connection for a dial tone. However, in a digital (Line-Side T1) configuration, the CONVERSANT pauses for an amount of time represented by the Dial Tone Delay parameter on the CONVERSANT system's Digital Protocols screen. Whenever the DEFINITY 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 either the Dial Tone Delay or the number of Touch Tone receivers on the DEFINITY switch.
- When used with T1 lines, the Agent Access feature continuously prompts agents to press any touch tone to invoke the TRANSCRIBE action. Conversely, the Agent Access software monitors analog connections for speech energy.

---

# CONVERSANT Custom Call Routing

# 4

---

This chapter describes the relationship between DEFINITY vectors and CONVERSANT vectors in routing calls to specific extensions based on digit strings sent to the DEFINITY switch.

## Overview of CONVERSANT Custom Call Routing

The Custom Call Routing module is an optional package that routes incoming calls to extensions or splits based on the calling party number (CPN). You can use the following actions to custom route incoming calls.

- CONVERSE
- LOOK\_UP
- DATA\_RTN



**NOTE:**

CONVERSANT Call Center Solutions templates, described in Chapter 5, automatically create vectors to perform important and common call handling tasks. Use the custom call routing template to help build vectors for custom call routing applications.

To custom route incoming calls, use the *converse* step in a DEFINITY vector to transfer each call to the CONVERSANT Call Center Solutions system, together with an identifying item of information, such as the CPN.

In order to associate this data with agent extensions, you must create a database table on the CONVERSANT Call Center Solutions system. If the CONVERSANT vector, through the LOOK\_UP action, finds an extension or split in the database to associate with the call, it sends the FAC (feature access code) for DATA\_RTN and the extension to the DEFINITY vector, which then routes the call.

Alternatively, if the CONVERSANT vector cannot find information corresponding to the identifying data of the incoming call, or if the LOOK\_UP action produces more than one match, call control is returned to the DEFINITY vector.

The custom call routing template (see Chapter 5) makes the above application easy to build. Through 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 for product information, such as the number of a given item in stock, and use the SPEAK\_NUM action to communicate this information to callers.

In short, you can use the principles of custom call routing to gain quick access to any database that you define and provide callers with special services.

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

You can also use Custom Call Routing with the DATA\_RTN action to send information to an agent's AT&T telephone display. As they respond to calls, agents can press the CALLR-INFO buttons on their telephones to view, for example, a caller's account number or account status.

To deliver information to agents along with calls, you must create a database table to associate each CPN with *two* items of information: a VDN to dial (not an agent extension) and a number to send to the agent's display. *You must also create a DEFINITY vector (VDN) for each agent extension or split you plan to use.*

Consider the following example.

1. A DEFINITY vector uses the *converse* step to deliver both a call and a CPN to a CONVERSANT vector.
2. The CONVERSANT vector, through the LOOK\_UP action, finds a record in its database corresponding to the CPN.
3. The vector then uses the DATA\_RTN action with a Feature Access Code, the VDN, and the account number to return information to the DEFINITY switch. The VDN must be a fixed number of digits (3, 4, or 5) depending on your dial plan. The account number (or other numeric data) must be specified on the next line and preceded by the field delimiter "#" (to eliminate interdigit time-out delay) if the number of digits in this number can be predicted.

4. The DEFINITY vector collects the VDN from the CONVERSANT vector and uses it to start the DEFINITY vector especially configured to transfer the caller to the extension or split that corresponds to the VDN.
5. This second vector uses a second collect step to collect the account number from the CONVERSANT vector's DATA\_RTN action. The DEFINITY vector then transfers the call. An agent with a telephone display can view the digits captured by this second collect step before accepting the call.



**NOTE:**

Because this method relies on an individual DEFINITY vector for each extension or split to dial, it is most practical to implement it with a small number of splits or individual agent extensions.

This chapter describes in detail how to administer the CONVERSANT Call Center Solutions system. It covers logging in, configuring CONVERSANT vectors, administering speech and agent mailboxes, and generating reports.

## Getting Started

### Logging In

To begin administering your CONVERSANT Solutions system, first enter an authorized user name and password.

1. At the prompt **console login**, type **ccc** and press [ ENTER ] .
2. At the prompt **password**, type (your password) and press [ ENTER ] .

The CONVERSANT Call Center Solutions main menu will appear. It presents the main options for administering the CONVERSANT Call Center Solutions system.

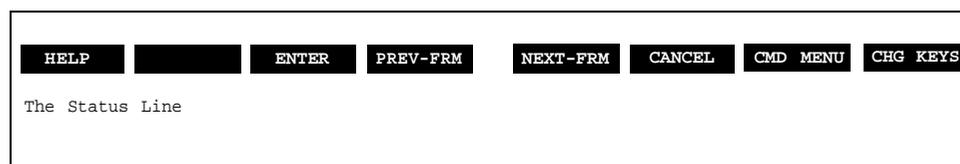
#### **NOTE:**

To ensure security, change the default password soon after you log into the system for the first time and periodically thereafter. (For instructions, refer to Chapter 4 of *AT&T UNIX System V/386 FACE User's/Administrator's Guide*, D12872-A.)

## The Status Line

While administering the CONVERSANT Solutions system, refer to the status line at the bottom of your screen, shown in Figure 5-1, for various options. 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, in parentheses. Note that not all of the functions described below are available at all times.



**Figure 5-1. The Status Line**

|          |                                                                                                                                                                                                                       |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CANCEL   | Discards all unsaved entries and returns you to the previous screen (menu or form).                                                                                                                                   |
| 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. If no choices are available, status line will indicate. |
| CLOSE    | Exits a definition form. Saves in mailbox administration.                                                                                                                                                             |
| CMD-MENU | Provides a menu of standard options, including some described above.                                                                                                                                                  |
| CONT     | Allows you to continue to administer the CONVERSANT Call Center Solutions system after you encounter a warning or error.                                                                                              |
| DEFINE   | Allows you to associate new parameters with actions. Definition forms appear on-screen automatically after you choose new CONVERSANT vector actions.                                                                  |
| DIAL     | Lets you identify the telephone and channel 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 CONVERSANT vector worksheet.                                                                   |
| LAUNCH   | Dials any telephone to record speech phrases.                                                                                                             |
| MARK     | Selects a CONVERSANT vector or phrase to delete.                                                                                                          |
| NEXT-FRM | Moves your cursor forward through option frames.                                                                                                          |
| NEXTPAGE | Moves your cursor forward through a single multi-part definition form.                                                                                    |
| PREV-FRM | Moves your cursor to previous option frames.                                                                                                              |
| PREVPAGE | Moves your cursor backwards through a single multi-part definition form.                                                                                  |
| 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 a CONVERSANT vector from a list. If used while developing or modifying a CONVERSANT vector, it deletes selected actions from a CONVERSANT vector. |
| SAVE     | Saves a new or changed CONVERSANT vector or database table.                                                                                               |
| UPDATE   | Recalculates and refreshes actions on the vector worksheet.                                                                                               |



**CAUTION:**

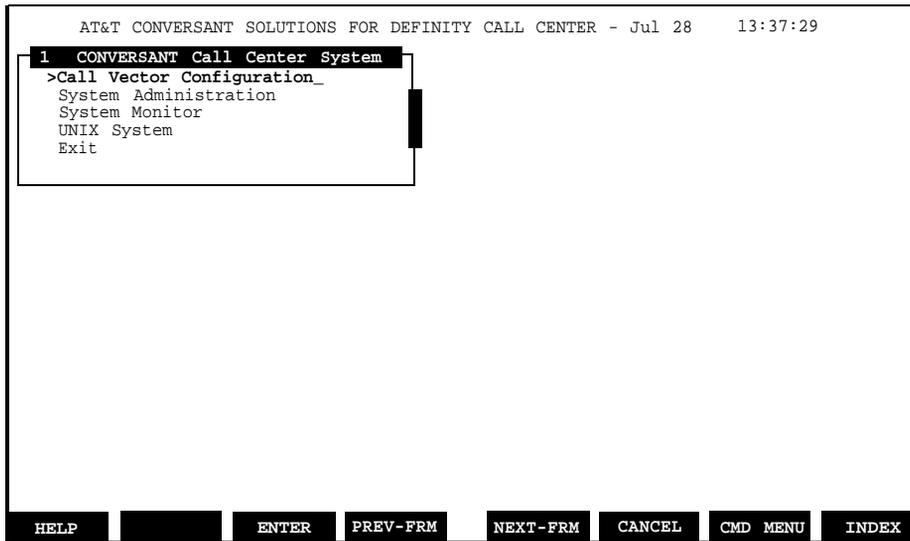
*Some characters and key commands are recognized as invalid in CONVERSANT Call Center Solutions administration and should not be used, as they may cause the menu system to lock up:*

- [ CTRL ]
- | Pipe symbol
- \ Backslash, except as delimiter when importing data from floppy disk

## The CONVERSANT Call Center Solutions Main Menu

---

After you login to the CONVERSANT Call Center Solutions system, the main menu appears, as shown in Figure 5-2.



**Figure 5-2. The CONVERSANT Call Center Solutions Main Menu**

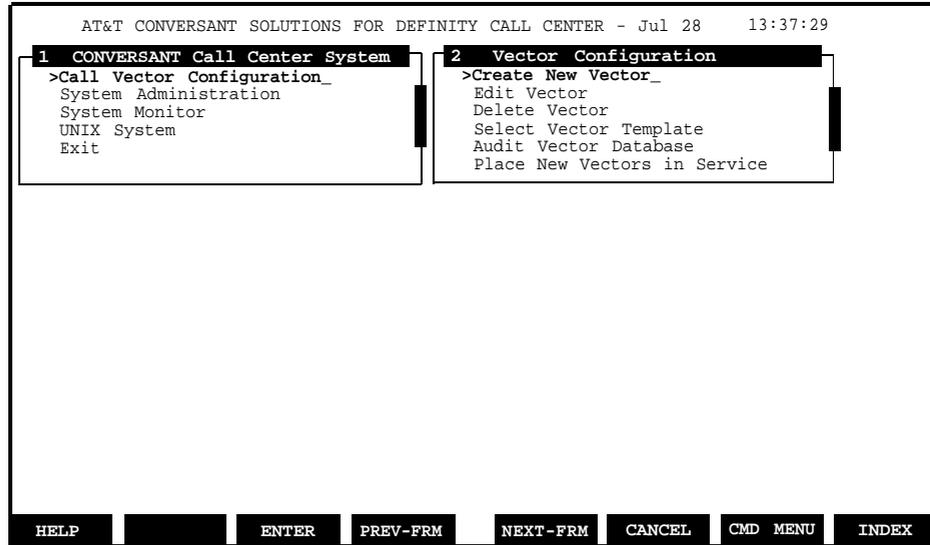
You begin all system activities by choosing from the following options:

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

## Call Vector Configuration

---

Use this menu, shown in Figure 5-3, to create, delete, and modify CONVERSANT vectors. The menu also allows you to place new or modified vectors into service.



**Figure 5-3. The Vector Configuration Menu**

The system maintains a duplicate of every active CONVERSANT vector, along with its parameter settings, in a database used exclusively for development. This permits you to configure CONVERSANT vectors without immediately changing the way the system handles calls. Options at this menu are:

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

## Creating a New CONVERSANT Vector

```

AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - Jul 28 13:37:29
1 Custo 3 EDIT VECTOR NUMBER 10 STEPS
>Call Ve
System
System
UNIX Sy
Exit
Vector Name: _____ Vector Number: 10
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 UPDATE CHG KEYS
    
```

**Figure 5-4. The CONVERSANT Vector Worksheet**

1. Select **Create New Vector** from the vector configuration menu. Press **[ENTER]**.
- A CONVERSANT vector worksheet, seen in Figure 5-4, will appear.
2. Name your vector in the vector name field. Press **[ENTER]**.
3. Enter a description of this vector in the description field, if you wish. Press **[ENTER]**.

**NOTE:**

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 first column, labeled **Step**.
5. On the first available line, press CHOICES **[F8]**, **[F2]** and select an action from the list.
6. Complete the definition form that appears.
7. Press CLOSE **[F3]**. Optionally, also press UPDATE **[F7]**.
8. Move to the next available line and repeat steps 5 - 7 for each additional action you want this vector to perform.
9. Press SAVE **[F8]**, **[F3]** to save your CONVERSANT vector.

## Editing a CONVERSANT Vector

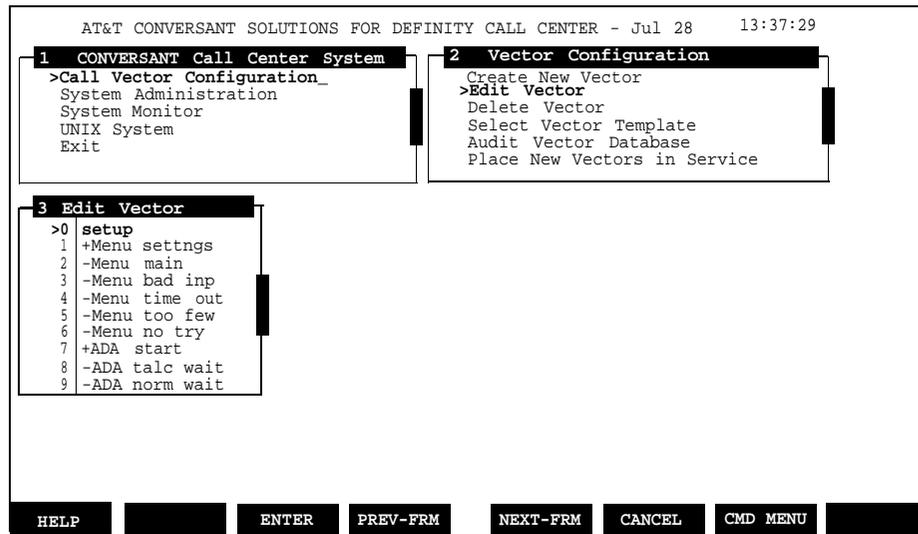


Figure 5-5. The CONVERSANT Vector Menu

1. Select **Edit Vector** at the configuration menu and press [ ENTER ].

A menu of CONVERSANT vectors, sorted by vector number, will appear, as shown in Figure 5-5.

2. Highlight the name of the vector you want to edit or enter the vector number that appears before the name.
3. Press [ ENTER ] to select the highlighted vector.

The worksheet for this vector, shown in Figure 5-6, will appear with the vector name, number, and any description entered originally.

Action step numbers appear under the first column, labeled **Step**. Corresponding action steps appear in the second column, labeled **Action**. The third column, **Description**, summarizes the parameters specified for this action.

(See Chapter 8 for more about defining actions and their parameters.)

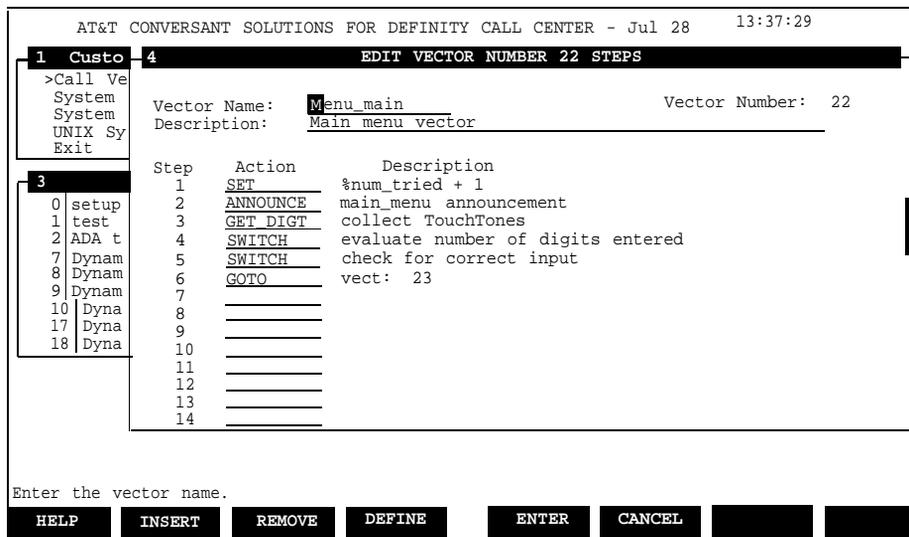


Figure 5-6. The Worksheet for Menu Main Vector

### Adding an Action Step to a CONVERSANT Vector

1. Move the cursor to the line on the vector worksheet where you want the new action to appear, if there is already an action on this line, and press INSERT [F2].



**NOTE:**

Adding an action to a line on the CONVERSANT vector worksheet that already contains an action replaces the original action with the new. Do not attempt to insert a blank line where one exists already, as you may distort the worksheet.

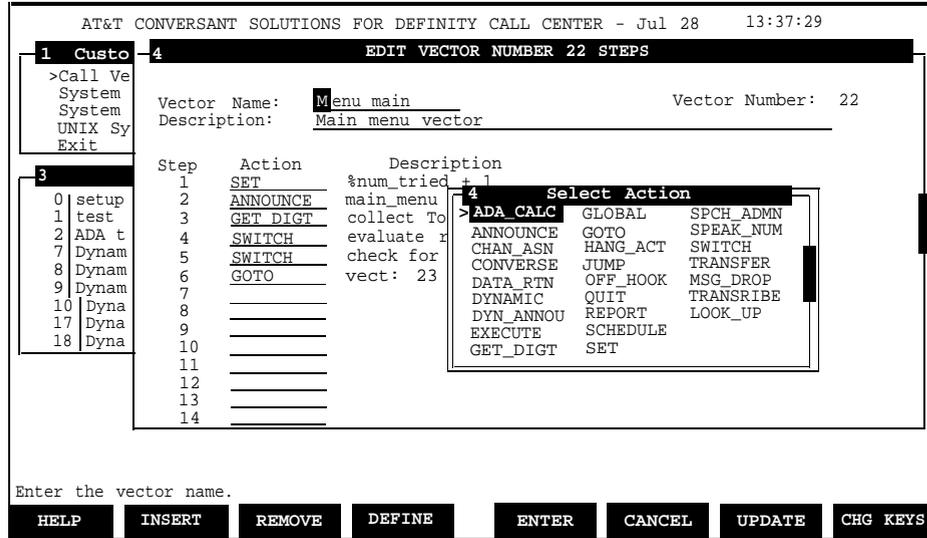
2. Press CHOICES [F8], [F2].

A list of vector actions, shown in Figure 5-7, will appear.



**NOTE:**

Before presenting its list of actions, the system evaluates the CONVERSANT vector's size and warns you if another action might exceed storage capacity. In this case, consider using the JUMP action to continue your application on a new vector worksheet. Then, either press CANCEL [F6] to return to the CONVERSANT vector worksheet, or CONT to proceed.



**Figure 5-7. The Worksheet for the Menu Main Vector and the Select Action Menu**

3. Highlight the name of the action you want to add. Press [ ENTER ], and complete the action definition form that appears.



**NOTE:**

See Chapter 8 for more about actions and action definition forms.

4. Press CLOSE [ F3 ].

If the system would exceed the CONVERSANT vector's capacity by adding this action, it will prompt you to abandon the action or reduce its size. Consider using the JUMP action to continue your application on a new vector worksheet.

5. Press UPDATE [ F7 ] to reflect this action in the vector worksheet.
6. Press SAVE [ F8 ], [ F3 ] when you have finished adding or deleting actions.



**NOTE:**

The system does not apply changes to call handling until you choose **Place New Vectors in Service** at the vector configuration menu and use the setup vector to assign new vectors to ports.

## Removing an Action Step from a CONVERSANT Vector

1. Highlight on the vector worksheet the action step you want to delete.
2. Press REMOVE [F3]. Optionally, also press UPDATE [F7].
3. Press SAVE [F8], [F3] to save this modified CONVERSANT vector when you have finished adding or deleting actions.



### NOTE:

The system does not apply changes to call handling until you choose **Place New Vectors in Service** at the vector configuration menu.

## Deleting a CONVERSANT Vector

---

1. Select **Delete Vector** from the vector configuration menu and press [ENTER].  
The menu of CONVERSANT vectors shown in Figure 5-5 will appear.
2. Highlight the name of 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 2.
4. Press [ENTER].
5. Press CANCEL [F6] to return to the previous menu.



### NOTE:

After you delete a CONVERSANT vector in this fashion, you can no longer select it for editing. However, to stop a deleted vector from handling calls, you must also choose **Place New Vectors in Service** at the vector configuration menu.

## Selecting a Vector Template

---

As an alternative to the **Create New Vector** option, you can choose one of the six vector templates supplied with the system to create partial CONVERSANT vectors that you customize to perform common call handling tasks.

Every time you use a template, the system creates a new set of CONVERSANT vectors for you to customize. Because each vector has a unique number, it can operate independently from other CONVERSANT vectors with the same name. This allows you to use the same template to build new sets of vectors for different applications.

Use this section to help you decide when to use a template as the foundation for an application, and also to determine which speech phrases to define before editing the CONVERSANT vectors that the templates create for you. Chapter 8, "Index to Actions and Variables," will also serve as a useful reference as you work with the actions these CONVERSANT vectors contain.

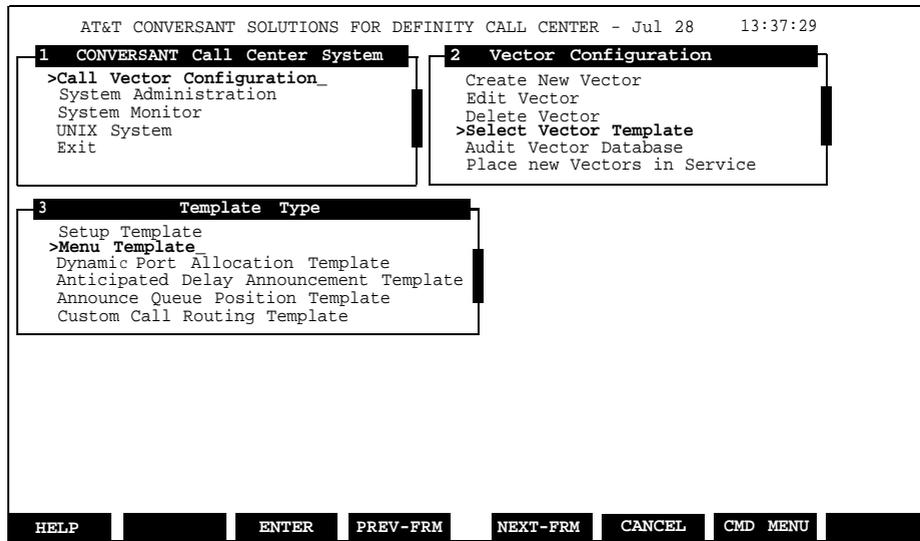
Before using a template:

- Thoroughly read the instructions for your template to decide which speech phrases you will need.
- Use the speech administration utility described later in this chapter to define tags for your speech phrases.



**NOTE:**

At this time, you do not need to record speech phrases you define. However, you must record them before you place your template vectors in service.



**Figure 5-8. The Template Type Menu**

**To use a Template:**

1. Choose **Select Vector Template** at the configuration menu and press **[ENTER]**.

A menu of templates, shown in Figure 5-8, will appear.

2. Highlight the name of the template you want or type the first few letters of the name.

3. Press [ ENTER ] to select.

The template will either (1) create and display a single vector or (2) create several related vectors and display the first in the series. When you activate this primary vector, identified by a + (plus sign) before its name, it activates secondary vectors, identified by a - (minus sign), in the group.



**NOTE:**

Do not attempt to consolidate multiple template CONVERSANT vectors into a single CONVERSANT vector; you may exceed the worksheet's capacity.

4. Consult the following template editing guidelines.

### **Using the Setup Template to Assign CONVERSANT Vectors to Ports**

This template creates the setup vector that routes all incoming calls to CONVERSANT vectors.

You configure the setup vector to take each dialed port "off hook" and launch the CONVERSANT vector assigned. Although the setup vector uses the CHAN\_ASN action to attach specific CONVERSANT vectors to ports, you can use actions such as DYNAMIC and SWITCH in these targeted vectors to respond dynamically to arguments they receive with calls.



**CAUTION:**

*You must install the set up vector before callers can use other CONVERSANT vectors because the system uses the set up vector to respond to every call. When you select the setup template, you overwrite the original automatically.*

```

CONVERSANT CUSTOMER CALL CENTER SYSTEM - Jul 28 13:37:29
1 Custo 4 EDIT VECTOR NUMBER 0 STEPS
>Call Ve
System
System
UNIX Sy
Exit
Vector Name: Set up Vector Number: 22
Description: Set-up vector

Step Action Description
1 GLOBAL global declarations
2 OFF HOOK answer the call
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 QUIT if channel is not assigned.
8
9
10
11
12
13
14

Enter the vector name.
HELP ENTER PREV-FRM NEXT-FRM CANCEL CMD MENU CHG KEYS
    
```

**Figure 5-9. The Setup Vector Worksheet**

**To assign CONVERSANT vectors to channels:**

1. Select the setup template from the template type menu shown in Figure 5-8.

The setup vector worksheet, shown in Figure 5-9, will appear. The setup vector in Figure 5-9 corresponds to a 48-port CONVERSANT Call Center Solutions configuration. (Each CHAN\_ASN action can represent 12 channels.) The number of CHAN\_ASN actions in your setup vector will correspond to the capacity of the configuration you purchased.

2. Move your cursor to the first CHAN\_ASN action and press DEFINE [F4].



## Using the Menu Template

This template's vectors speak options to callers, prompt them for input, and route them to other CONVERSANT vectors.

The system creates a new set of six menu CONVERSANT vectors, shown in Figure 5-11, each time you choose the menu template option. Simply activate the first CONVERSANT vector in the series to offer callers the power of choice and provide intelligent responses to mistakes they make.

```

AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - Jul 28 13:37:29

1 CONVERSANT Call Center System
>Call Vector Configuration
System Administration
System Monitor
UNIX System
Exit

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

3 Edit Vector
0:setup
>1:+Menu_settns
2:-Menu_main
3:-Menu_bad inpo
4:-Menu time out
5:-Menu too few
6:Menu no try

Enter the vector name.

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

**Figure 5-11. The Six Vectors in the Menu Template**

**Follow these steps to configure the Menu CONVERSANT vectors correctly:**

1. Select the menu template from the template type menu shown in Figure 5-8.

The system will generate a set of six CONVERSANT vectors, as shown in Figure 5-11. The first of these, +Menu\_settns, the worksheet for which is shown in Figure 5-12, sets the value of the variable *%num\_tried* to zero and moves the caller to the main menu vector. The variable *%num\_tried* tracks the number of unsuccessful choices a caller makes.

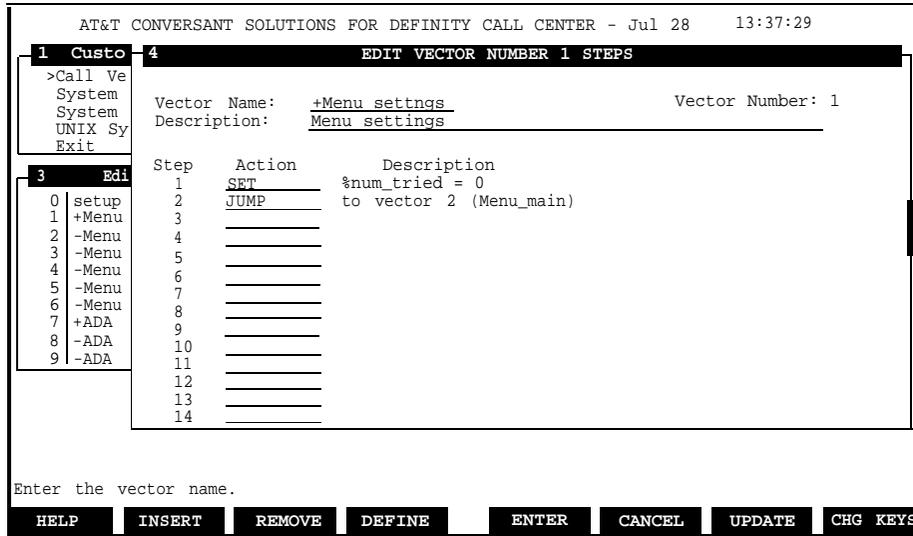


Figure 5-12. The +Menu settings Vector Worksheet

2. Make a note of the CONVERSANT vector number in the upper right portion of the worksheet.
3. Press SAVE [F8], [F3] or CANCEL [F6] to return to the vector configuration menu.

You do not need to change +Menu settings.

4. Select **Edit Vector** and select the second menu vector, -Menu main.

The worksheet for this vector, shown in Figure 5-13, will appear.

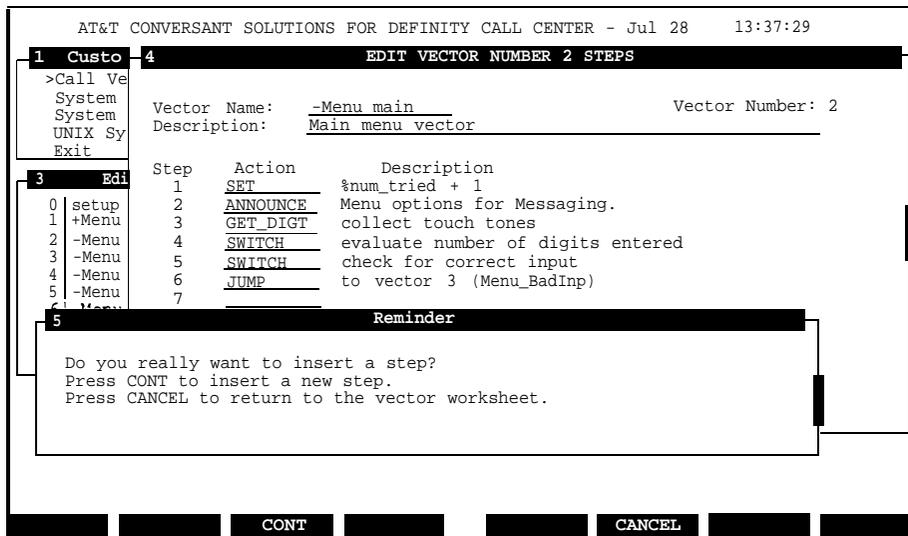


Figure 5-13. The -Menu main Vector Worksheet

Menu main announces a list of options, solicits and receives input, tests for validity, and routes callers. Make sure that the number of this CONVERSANT vector equals the number of +Menu settings plus one. For example, if the CONVERSANT vector number you noted in step 2 was "1," choose to edit vector 2.

5. Move your cursor to the ANNOUNCE action and press DEFINE [F4] to configure this CONVERSANT vector.
6. Enter in the field phrase tag the name of the speech phrase you defined to speak the menu options to callers and prompt them for input. -OR- Press CHOICES [F8], [F2] to select from a list. Highlight the phrase you want and press [ENTER].
7. Press CLOSE [F3]. Optionally, also press UPDATE [F7].
8. Move to the GET\_DIGT action and press DEFINE [F4].

The GET\_DIGT action form, shown in Figure 5-14, will appear.

AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - Jul 28 13:37:29

1 Custo 4 EDIT VECTOR NUMBER 2 STEPS

>Call Ve  
System  
System  
UNIX Sy  
Exit

Vector Name: -Menu main Vector Number: 2  
Description: Main menu vector

| Step | Action | Description                                         |
|------|--------|-----------------------------------------------------|
| 1    | SET    | %num_tried + 1                                      |
| 2    | GET    | 5 GET_DIGT ACTION, STEP 3 for vector 2              |
| 3    | SWI    |                                                     |
| 4    | SWI    | Get Digits Step gathers TouchTones from caller      |
| 5    | JUM    | Number of Digits to Collect: <u>1</u>               |
| 6    |        |                                                     |
| 7    |        |                                                     |
| 8    |        | Load Digits into Variable: %ci_value                |
| 9    |        | Place number of digits collected into: %num_dig_got |
| 10   |        |                                                     |
| 11   |        | Comment: _____                                      |
| 12   |        |                                                     |
| 13   |        |                                                     |
| 14   |        |                                                     |

3 Edi

0 setup  
1 +Menu  
2 -Menu  
3 -Menu  
4 -Menu  
5 -Menu  
6 -Menu  
7 +ADA  
8 -ADA  
9 -ADA

Enter the variable name followed by the Return or ENTER key.

HELP CHOICES CLOSE ENTER CANCEL REFRESH

Figure 5-14. The -Menu main Vector Worksheet with the GET\_DIGT Form

9. Enter the maximum number of digits to accept from the caller in response to the previous prompt.

By default, the system will associate the variable *%ci\_value* with the caller's entry. Note that the system automatically uses the variable *%num\_dig\_got* to represent the actual number of digits collected.

Enter a comment if you wish.

10. Press CLOSE [F3].
11. Move to the first SWITCH action and press DEFINE [F4].

This action routes callers to other menu vectors if they do not respond to the main menu prompt, or if they respond with too few digits. Notice that the value zero, signifying "no entry," corresponds to the CONVERSANT vector -menu time out.

On the remaining lines, use the procedure for defining SWITCH to associate -menu too few with each number less than the number of digits required. For example, if you require a three-digit response in Step 9, use separate lines to associates the values 1 and 2 with the CONVERSANT vector number of menu too few. (The CONVERSANT vector number of -Menu too few equals -Menu settings plus four.)

12. Press CLOSE [F3].
13. Move to the second switch action and press DEFINE [F4].

Here, route callers to the CONVERSANT vectors corresponding to choices at the main menu.

14. Press CLOSE [F3]
15. Press SAVE [F8], [F3] to return to the edit vector menu.
16. Select the third menu vector, -Menu bad inp. The worksheet, shown in Figure 5-15, will appear.

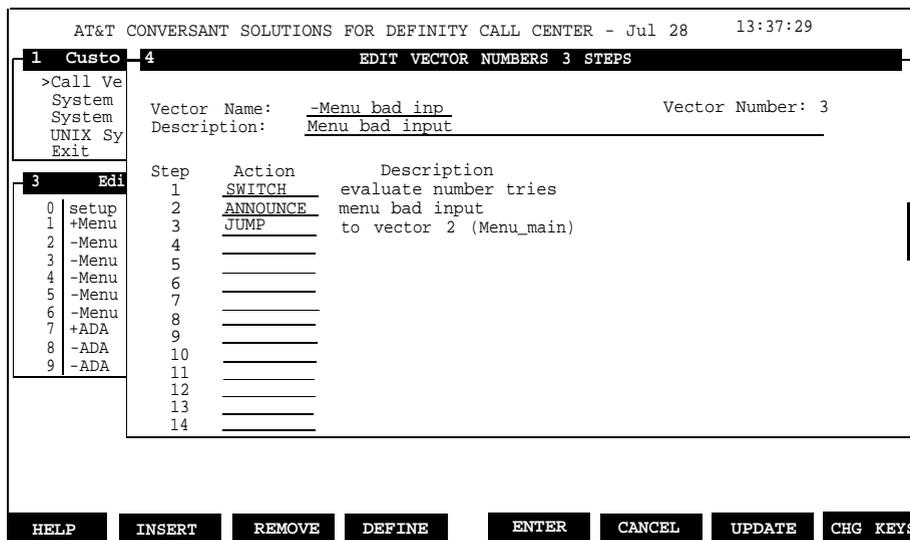


Figure 5-15. The -Menu bad inp Vector Worksheet

-Menu bad inp speaks an error message to callers who enter touch tones that do not correspond to any valid choice. Make sure that the number of this CONVERSANT vector equals the number of -Menu main plus one.

17. Move your cursor to the ANNOUNCE action and press DEFINE [F4] to configure this CONVERSANT vector correctly.

The phrase tag worksheet, shown in Figure 5-16, will appear.

```

AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - Jul 28      13:37:29
1  Custo 4  EDIT VECTOR NUMBER 3 STEPS
>Call Ve
System
System
UNIX Sy
Exit

Vector Name:  -Menu bad inp      Vector Number: 3
Description:  Menu bad input

Step  Action      Description
3  Edi 5  ANNOUNCE Action Step Number 2 for vector 3
0 | setup
1 | +Menu
2 | -Menu
3 | -Menu
> 4 | -Menu
5 | -Menu
6 | -Menu
7 | +ADA
8 | -ADA
9 | -ADA

ANNOUNCE Action step speaks a phrase to caller
Talkfile Number: 224      Allow Interrupt: yes

Phrase Tag:  comment
Phrase Number:

Phrase Text:

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

**Figure 5-16. The Phrase Tag Worksheet for the ANNOUNCE Action in the -Menu bad inp Vector**

18. Enter in the phrase tag field the name of the speech phrase you defined to notify callers that their entry does not match any valid choice. -OR- Press CHOICES [F2] to select from a list and highlight the phrase you want.
19. Press CLOSE [F3].
20. Press SAVE [F8], [F3].
21. Repeat Steps 16- 18 for CONVERSANT vectors -Menu time out, -Menu too few, and -Menu no try.

The two worksheets for the -Menu time out vector are shown in Figures 5-17 and 5-18.

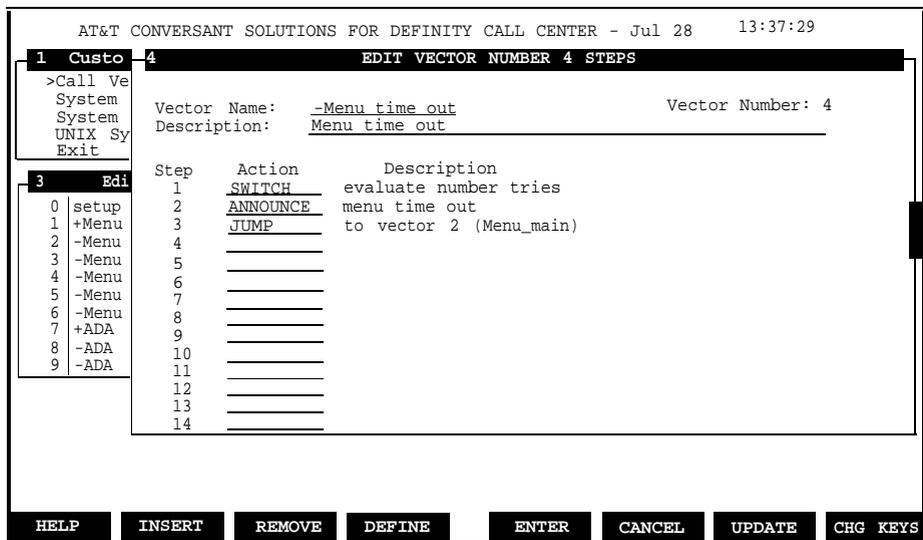


Figure 5-17. The -Menu time out Vector Worksheet

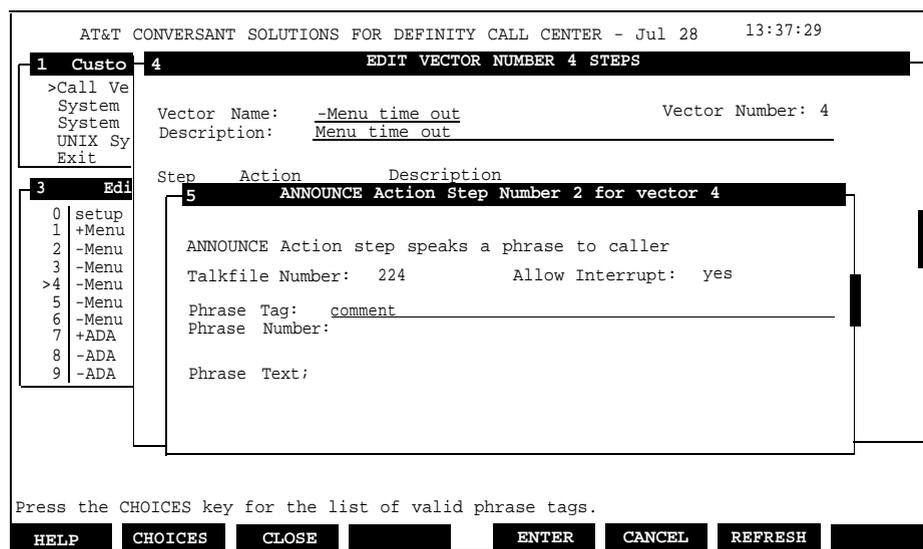


Figure 5-18. The -Menu time out Vector Worksheet with Phrase Tag Form

For your reference while recording,

- -Menu time out should speak an error message to callers who do not respond to the main menu's prompt for input.
- -Menu too few should speak an error message to callers who respond to the main menu's prompt for input with too few digits.
- -Menu no try should inform callers that they have made too many unsuccessful attempts.



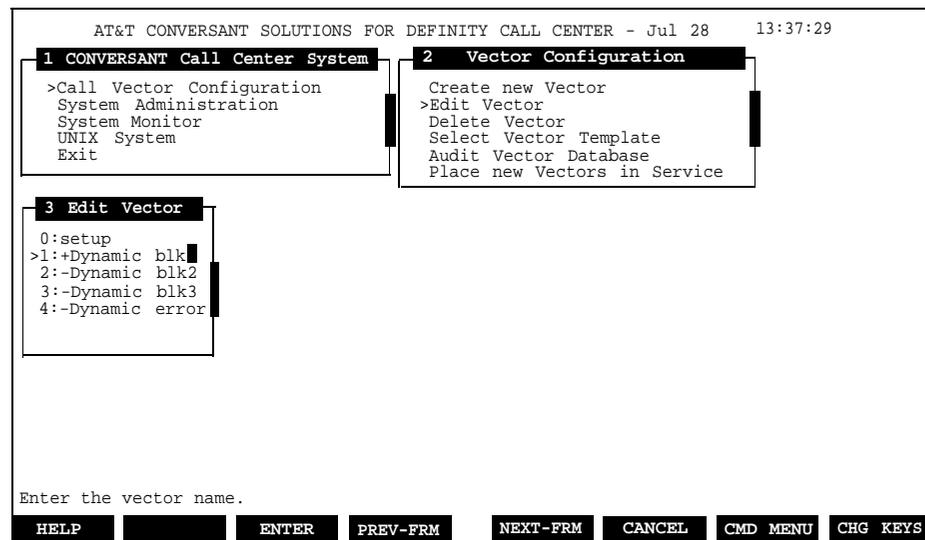
**NOTE:**

-Menu no try uses the QUIT action to end the session and return control of the call to the DEFINITY vector. Replace this action if you do not want -Menu no try to end the session.

**Using the Dynamic Port Allocation Template**

This template's vectors route callers to CONVERSANT applications, based on the value of any variable you specify.

The system will create a new set of four CONVERSANT vectors each time you select this template. Simply activate the first vector in the series to execute any CONVERSANT application from any port on the CONVERSANT Call Center Solutions system.



**Figure 5-19. The Four Vectors (1-4) of the Dynamic Port Allocation Template**

Follow these steps to configure the dynamic port allocation CONVERSANT vectors correctly:

1. Select the dynamic port allocation template from the template type menu shown in Figure 5-8.

The CONVERSANT Solutions system will generate a set of four CONVERSANT vectors, shown in Figure 5-19. +Dynamic blk1, the first of these, consists of two actions only: DYNAMIC and JUMP. The worksheet for +Dynamic blk1 is shown in Figure 5-20.

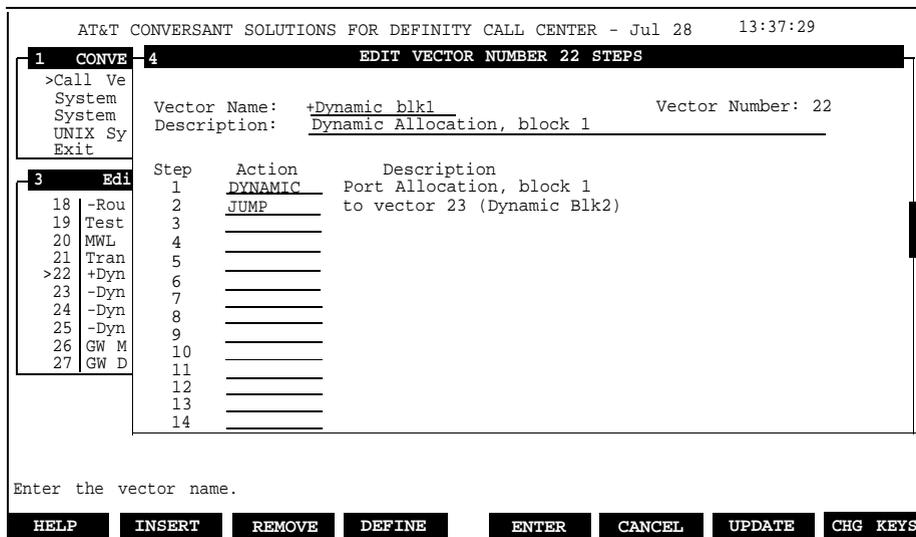


Figure 5-20. The +Dynamic blk1 Vector Worksheet

2. Move your cursor to the DYNAMIC action and press DEFINE [F4].
3. Move your cursor to the variable field and press CHOICES [F2].
4. Select a variable.

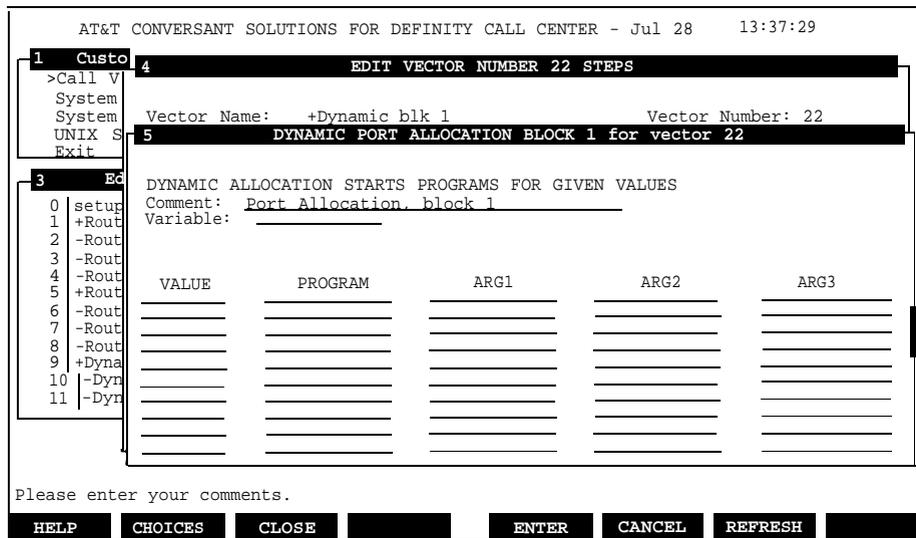


Figure 5-21. The +Dynamic blk1 Vector Worksheet of Values and Arguments

5. List on the +Dynamic blk1 vector worksheet in Figure 5-21:
  - Possible values

- Corresponding CONVERSANT applications
- Arguments to pass



**NOTE:**

The variable you select must be assigned a value before the DYNAMIC action uses it to decide which CONVERSANT application to execute. You may use the CONVERSE, SET, or GET\_DIGT actions to assign values to variables.

6. Press CLOSE [F3]. Optionally, also press UPDATE [F7].
7. Make a note of the CONVERSANT vector number in the upper right portion of the worksheet.
8. Press SAVE [F8], [F3] to return to the vector configuration menu.

If you have more CONVERSANT applications to list:

- a. Choose the **Edit Vector** option
- b. Select the second dynamic port allocation vector -Dynamic blk2.

Make sure that the number of this CONVERSANT vector equals the number of -Dynamic blk1 plus one.

Use -Dynamic blk2 and -Dynamic blk3 in the same way to accommodate additional variable names, values, and CONVERSANT applications to target, up to a maximum of 30.

9. Press SAVE [F8], [F3] to return to the edit vector menu.
10. Select the fourth dynamic port allocation vector, -Dynamic error.

The worksheet shown in Figure 5-22 will appear.

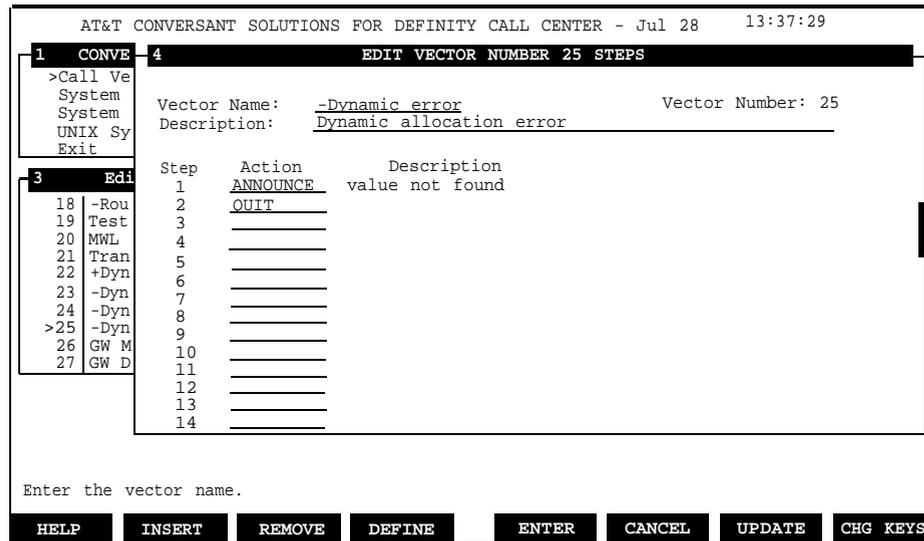


Figure 5-22. The -Dynamic error Vector Worksheet

Make sure that the number of this CONVERSANT vector equals the number of -Dynamic blk3 plus one.

-Dynamic\_error speaks an error message to callers when the variable is not associated with any valid value. To configure this CONVERSANT vector correctly:

11. Move your cursor to the ANNOUNCE action and press DEFINE [F4].

The ANNOUNCE action phrase tag form, shown in Figure 5-23, will appear.

AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - Jul 28 13:37:29

1 CONVE -4 EDIT VECTOR NUMBER 25 STEPS

>Call Ve  
System  
System  
UNIX Sy  
Exit

Vector Name: -Dynamic\_error Vector Number: 25  
Description: Dynamic allocation error

| Step | Action           | Description                           |
|------|------------------|---------------------------------------|
| 5    | ANNOUNCE         | Action Step Number 2 for vector 4     |
|      | ANNOUNCE         | Action step speaks a phrase to caller |
|      | Talkfile Number: | 224 Allow Interrupt: yes              |
|      | Phrase Tag:      |                                       |
|      | Phrase Number:   |                                       |
|      | Phrase Text:     |                                       |

18 -Rou  
19 Test  
20 MWL  
21 Tran  
22 +Dyn  
23 -Dyn  
24 -Dyn  
>25 -Dyn  
26 GW M  
27 GW D

3 Edi

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

HELP CHOICES CLOSE ENTER CANCEL REFRESH

**Figure 5-23. The -Dynamic\_error Vector Worksheet with the ANNOUNCE Action Phrase Tag Form**

12. Enter after **Phrase Tag** 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.
13. Press CLOSE [F3]. Optionally, also press UPDATE [F7].
14. Press SAVE [F8], [F3].



**NOTE:**

-Dynamic\_error uses the QUIT action to end the session and return call control to the DEFINITY vector. Replace this action if you do not want -Dynamic\_error to end the session.

## Using the Anticipated Delay Announcement Template (To Announce Approximate Waiting Times)

This template's vectors approximate how long a caller can expect to wait for an agent, and speak this information to the caller.

The system creates a new set of six CONVERSANT vectors every time you select this template. From a DEFINITY vector, activate the first CONVERSANT vector in the series to estimate and communicate an anticipated delay.

Follow these steps to configure the anticipated delay announcement template correctly:

1. Select the anticipated delay announcement template from the template type menu shown in Figure 5-8.

The CONVERSANT Call Center Solutions system will generate six vectors, shown in Figure 5-24.

```

AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - Jul 28 13:37:29
1 CONVERSANT Call Center System
  >Call Vector Configuration
  System Administration
  System Monitor
  UNIX System
  Exit
2 Vector Configuration
  Create new Vector
  >Edit Vector
  Delete Vector
  Select Vector Template
  Audit Vector Database
  Place new Vectors in Service
3 Edit Vector
  2 -Menu main
  3 -Menu Bad Inp
  4 -Menu Time Out
  5 -Menu Too Few
  6 -Menu No Try
  >7 +ADA Start_
  8 -ADA talc wait
  9 -ADA norm wait
  10 -ADA shrt wait
  11 -ADA long wait
  12 -ADA no staff
HELP ENTER PREV-RFM NEXT-FRM CANCEL CMD MENU
  
```

**Figure 5-24. The Six Vectors (7-12) of the Anticipated Delay Announcement Template**

The first of these, +ADA start\_, the worksheet for which is shown in Figure 5-25, uses the CONVERSE action with the variable *%data1* to capture the caller's queue position from a *converse* step in a DEFINITY vector.

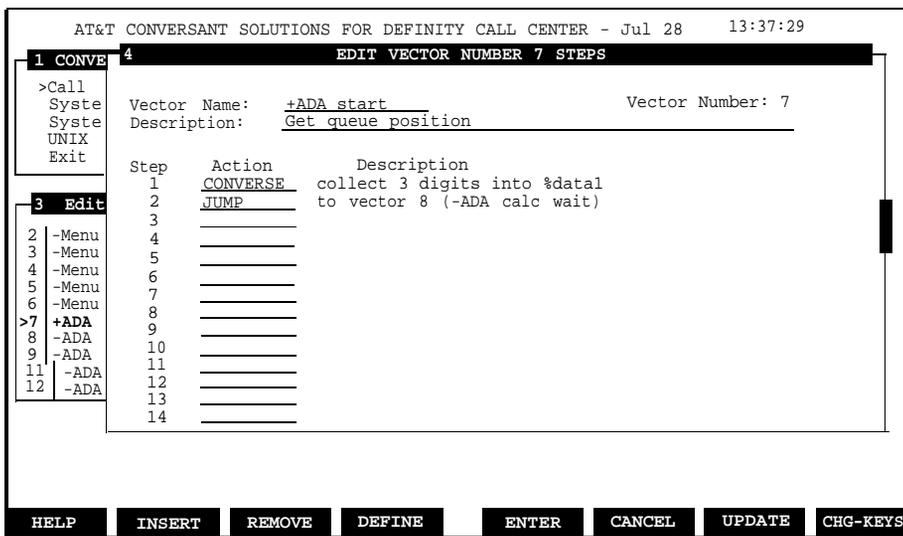


Figure 5-25. The +ADA start Vector Worksheet

2. Make a note of the CONVERSANT vector number in the upper right portion of the worksheet in Figure 5-25.

You do not have to change +ADA start.

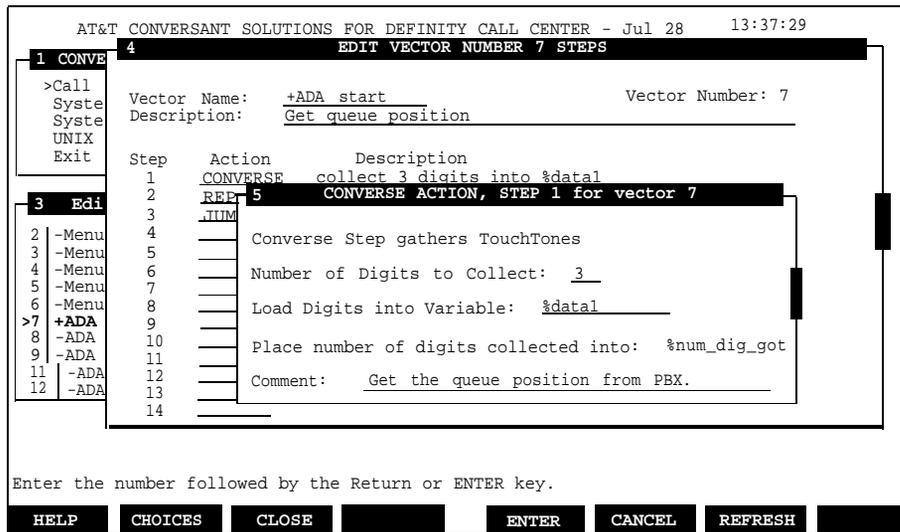


Figure 5-26. The +ADA start Vector Worksheet with CONVERSE Action Step Form

3. Press SAVE [F8], [F3] or CANCEL [F6] to return to the configuration menu.
4. Choose **Edit Vector** and select the second ADA vector, -ADA calc wait.

```

AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - Jul 28 13:37:29
1 CONVE 4 EDIT VECTOR NUMBER 8 STEPS
>Call      Vector Name:  -ADA talc wait      Vector Number: 8
System     Description:  Calculate minutes in queue
System
UNIX
Exit

Step  Action      Description
1     ADA-5      ADA_CALC Action Step Number 1 for vector 8
2     JUM
3     ADA_CALC CALCULATES THE ANTICIPATED DELAY IN QUEUE
4     Avg. Call length: 120 Queue Position: %data1
5     Result :    %data2
6     Comment:    calculate the delay into %data2
7     Number of Agents Staffed
8     SUN MON TUE WED THU FRI SAT
9     6 AM  --- 5 5 5 5 5
10    7 AM  --- 10 10 10 10 10 ---
11    8 AM  --- 20 20 20 20 20 5
12    9 AM  --- 20 20 20 20 20 5
13    10 AM --- 20 20 20 20 20 5
14    11 AM --- 20 20 20 20 20 5

3 Edit
2 -Menu
3 -Menu
4 -Menu
5 -Menu
6 -Menu
7 +ADA
8 -ADA
9 -ADA
11 -ADA
11 -ADA

HELP CHOICES CLOSE PREVPAGE NEXTPAGE CANCEL REFRESH
    
```

**Figure 5-27. The -ADA calc wait Vector Worksheet with ADA\_CALC Action Step Form**

Make sure that the number of this CONVERSANT vector equals the number of +ADA start plus one.

-ADA calc wait uses the value of %data1 and your estimates of call duration and staff size to calculate how long a caller will wait in queue. To configure this CONVERSANT vector correctly:

5. Move your cursor to the ADA\_CALC action and press DEFINE (F4).

The action step form will appear over the -ADA calc wait vector worksheet, as in Figure 5-27.

- a. Enter in the field avg. call length an estimate, in seconds, of how long each caller will remain on the line after reaching an agent.
- b. Move your cursor to the grid titled **Number of Agents Staffed**.
- c. Enter for each day of the week (found above the cursor) and each hour of the day (found to the left of the cursor) how many agents will be on duty during these hours. (Blank spaces correspond to 0 agents.)

Use PREVPAGE [F4], NEXTPAGE [F5], and the up and down arrow keys to move around this form.

Do not press CANCEL [F6] unless you want to abandon your entries.

6. Press CLOSE [F3] and SAVE [F8], [F3] to return to the edit vector menu.

7. Select the third ADA vector, -ADA norm wait.

The worksheet in Figure 5-28 will appear.

```

AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - Jul 28 13:37:29
1 CONVE 4 EDIT VECTOR NUMBER 9 STEPS
>Call
Syste Vector Name:  -ADA norm wait          Vector Number: 9
Syste Description:  Speak delay announcement and quit.
UNIX
Exit

Step  Action      Description
1     GOTO          if %data2 = 1 goto 10
2     GOTO          if %data2 > 20 goto 11
3     GOTO          if %data2 = -1 goto 12
4     ANNOUNCE     This is the leading announcement.
5     SPEAK NUM    voice the minutes in queue from %data2
6     ANNOUNCE     This is the trailer announcement.
7     QUIT         Return call to Definity PBX.
8     _____
9     _____
10    _____
11    _____
12    _____
13    _____
14    _____

3 Edit
0 setup
1 +Menu
2 -Menu
3 -Menu
4 -Menu
5 -Menu
6 -Menu
7 +ADA
8 -ADA
>9 -ADA

Enter the vector name.

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

**Figure 5-28. The -ADA norm wait Vector Worksheet**

Make sure that the number of this CONVERSANT vector equals the number of -ADA calc wait plus one.

If -ADA norm wait determines that agents are on-staff and the anticipated delay is less than 20 minutes, it communicates the anticipated delay to the caller and returns call control to the DEFINITY vector.

8. Move your cursor to the first ANNOUNCE action and press DEFINE [F4] to configure this CONVERSANT vector correctly.

The worksheet in Figure 5-29 will appear.

9. Press CHOICES [F2] for a list of available phrases.

```

AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - Jul 28 13:37:29
1 CONVE 4 EDIT VECTOR NUMBER 9 STEPS
>Call Vector Name: -ADA norm wait Vector Number: 9
System Description: Speak delay announcement and quit.
System
UNIX
Exit
Step Action Description
3 Edit 5 ANNOUNCE Action Step Number 1 for vector 9
3 -Menu ANNOUNCE Action step speaks a phrase to caller
4 -Menu
5 -Menu Talkfile Number: 224 Allow Interrupt: yes
6 -Menu
7 +ADA Phrase Tag: Thank you ADA.
8 -ADA Phrase Number: 1002
>9 -ADA
11 -ADA Phrase Text: Thank you for calling the CONVERSANT Solutions
12 -ADA for DEFINITY Call Center Support Line. All agents
13 Msg are currently assisting other customers. We
estimate your wait time to be approximately...

Press the CHOICES key for the list of valid phrase tags.
HELP CHOICES CLOSE ENTER CANCEL REFRESH

```

**Figure 5-29. The -ADA norm wait Vector Worksheet with the ANNOUNCE Action Step Form**

10. Enter in the phrase tag field the speech phrase you defined to *precede* the anticipated delay, which the vector speaks as a discrete number.  
-OR- press CHOICES [F2] to select from a list.  
For example, you might record "An agent will be available in approximately..."
11. Press CLOSE [F3]. Optionally, also press UPDATE [F7].
12. Move to the second ANNOUNCE action and press DEFINE [F4].
13. Enter in the phrase tag field the speech phrase you defined to *follow* the anticipated delay. -OR- press CHOICES [F2] to select from a list.  
For example, you might record only "...minutes."
14. Press CLOSE [F3] and SAVE [F8], [F3] to return to the edit vector menu.
15. Select the fourth ADA vector, -ADA shrt wait.  
The -ADA shrt wait vector worksheet, shown in Figure 5-30, will appear.

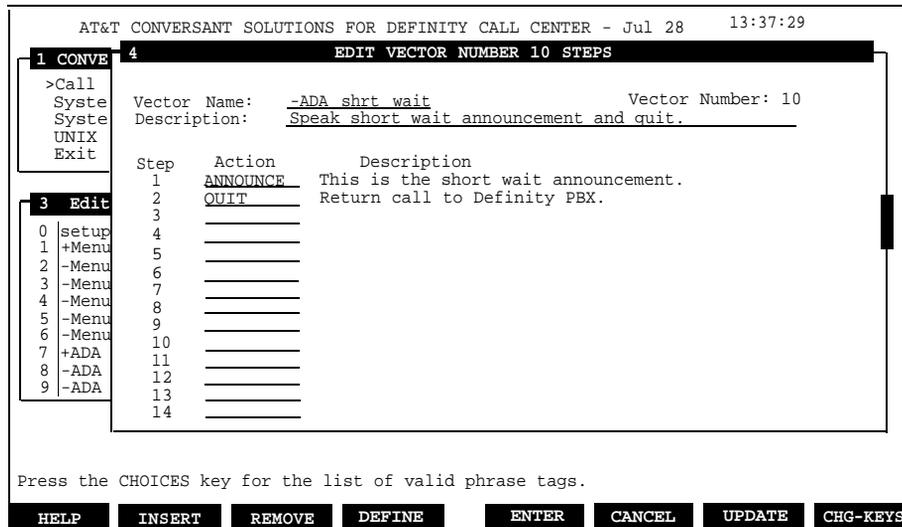


Figure 5-30. The -ADA shrt wait Vector Worksheet

Make sure that the number of the CONVERSANT vector you select equals the number of -ADA norm wait plus one.

-ADA shrt wait speaks a special message to callers facing a delay of 1 minute or less.

To configure this CONVERSANT vector correctly:

- a. Move your cursor to the ANNOUNCE action and press DEFINE [F4].
- b. Enter in the phrase tag field the name of the speech phrase you defined to notify callers that they are facing a very brief delay  
 -OR- Press CHOICES [F2] to select from a list.

16. Press CLOSE [F3] and SAVE [F8], [F3] to return to the edit vector menu.

17. Select the fifth ADA vector, -ADA long wait.

The -ADA long wait vector worksheet in Figure 5-31 will appear.

```

AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - Jul 28 13:37:29
1 CONVE 4 EDIT VECTOR NUMBER 11 STEPS
>Call Vector Name: -ADA long wait Vector Number: 11
Syste Description: Speak long delay announcement and quit.
Syste
UNIX
Exit

Step Action Description
5 ANNOUNCE Action Step Number 1 for vector 11

3 Edit
ANNOUNCE Action step speaks a phrase to caller
1 +Menu
2 -Menu Talkfile Number: 224 Allow Interrupt: yes
3 -Menu
4 -Menu
5 -Menu Phrase Tag:
6 -Menu Phrase Number:
7 +ADA
8 -ADA
9 -ADA
>11 -ADA

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

HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

**Figure 5-31. The -ADA long wait Vector Worksheet with the ANNOUNCE Action Phrase Tag Form**

Make sure that the number of this CONVERSANT vector equals the number of -ADA shrt wait plus one.

-ADA long wait speaks a special message to callers facing a delay of 20 minutes or more and returns call control to the DEFINITY vector.

To configure this CONVERSANT vector correctly:

- a. Move your cursor to the ANNOUNCE action in the vector worksheet and press DEFINE [F4].  
The ANNOUNCE action phrase tag form, shown in Figure 5-31, will appear.
- b. Enter in the phrase tag field the name of the speech phrase you defined to notify callers that they are facing an especially long delay.  
-OR- Press CHOICES [F2] to select from a list.

18. Press CLOSE [F3] and SAVE [F8], [F3].

19. Repeat steps 16-18 for the last ADA vector, -ADA no staff.

For your reference while recording, the rarely-used ADA no staff announcement should inform callers that no agents are on-staff to serve them.

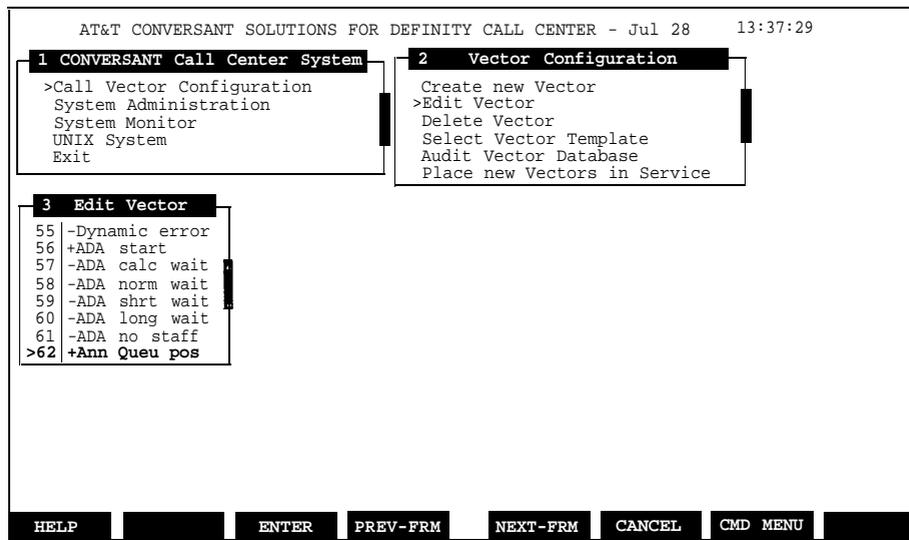
### Using the Announce Queue Position Template

This template creates a vector to tell callers their relative position in queue.

The system creates a single CONVERSANT vector every time you select this template. From a DEFINITY vector, simply launch this CONVERSANT vector to tell callers how many people precede them in queue.

Follow these steps to configure the announce queue position template correctly:

1. Select the announce queue position template from the template type menu, shown in Figure 5-32.



**Figure 5-32. The One Vector (62) in the Announce Queue Position Template**

The CONVERSANT Call Center Solutions system will generate one vector, +Ann Queu pos. This vector, the worksheet for which appears in Figure 5-32, uses the CONVERSE action with the variable *%data1* to capture the caller's queue position from a DEFINITY vector. It then announces the caller's queue position to the caller and returns call control to the DEFINITY vector.

```

AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - Jul 28 13:37:29
1 CONVE 4 EDIT VECTOR NUMBER 62 STEPS
>Call
Syste
Syste
UNIX
Exit
Vector Name: +Ann Queu pos Vector Number: 62
Description: Get queue pos from PBX & spk. announce

Step Action Description
1 CONVERSE collect 3 digits into %datal
2 ANNOUNCE Beginning part of queue pos. announce.
3 SPEAK NUM number in %datal
4 ANNOUNCE Trailing part of queue pos announce.
5 QUIT Pass call back to PBX.
6
7
8
9
10
11
12
13
14

3 Edit
55 -Dyn
56 +ADA
57 -ADA
58 -ADA
59 -ADA
60 -ADA
61 -ADA
>62 +Ann

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

Figure 5-33. The +Ann Queu pos Vector Worksheet

To configure this vector correctly:

2. Move your cursor to the first ANNOUNCE action on the worksheet and press DEFINE [F4].

The ANNOUNCE action step phrase tag worksheet in Figure 5-34 will appear.

```

AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - Jul 28 13:37:29
1 CONVE 4 EDIT VECTOR NUMBER 62 STEPS
>Call
Syste
Syste
UNIX
Exit
Vector Name: +Ann Queu pos Vector Number: 62
Description: Get queue pos from PBX & spk. announce

Step Action Description
5 ANNOUNCE Action Step Number 2 for vector 62

3 Edit
55 -Dyn
56 +ADA
57 -ADA
58 -ADA
59 -ADA
60 -ADA
61 -ADA
>62 +Ann

ANNOUNCE Action step speaks a phrase to caller
Talkfile Number: 224 Allow Interrupt: yes
Phrase Tag:
Phrase Number:
Phrase Text:

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

Figure 5-34. The +Ann Queu pos Worksheet with the ANNOUNCE Action Phrase Tag Form

3. Enter in the phrase tag field the speech phrase you defined to *precede* the queue position, which the vector speaks as a discrete number.  
-OR-Press CHOICES [F2] to select from a list.  
For example, you might record "Currently, there are..."
4. Press CLOSE [F3]. Optionally, also press UPDATE [F3].
5. Move to the second ANNOUNCE action and press DEFINE [F4].
6. Enter in the phrase tag field the speech phrase you defined to *follow* the queue position.  
-OR- press CHOICES [F2] to select from a list.  
For example, you might record only "...people waiting to speak with our agents."
7. Press CLOSE [F3] and SAVE [F8], [F3].

### Using the Custom Call Routing Template (To Route Callers Based on Information Received from the ACD)

This template's vectors use information they receive from a DEFINITY vector to route incoming calls. The CONVERSANT Call Center Solutions system creates a set of four CONVERSANT vectors every time you select this template. From a DEFINITY vector, simply transfer callers to the CONVERSANT system. Follow these steps to configure the route template correctly:

1. Select the custom call routing template from the template type menu.

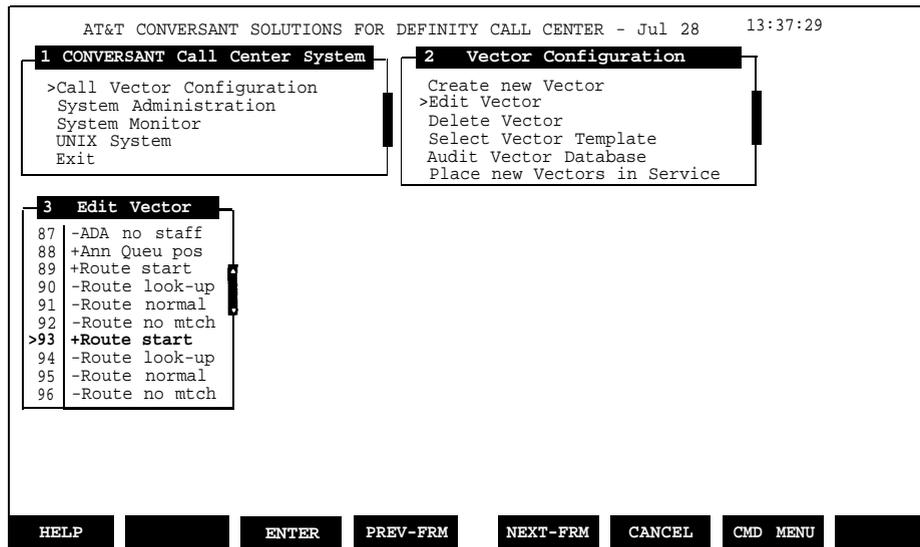


Figure 5-35. The Four Vectors (93-96) of the Custom Call Routing Template

The CONVERSANT Call Center Solutions system will generate four vectors, as shown in Figure 5-35. The first of these, +Route start, uses the CONVERSE action with the variable %ci\_value to capture information such as the caller's phone number (CPN) from the DEFINITY vector.

2. Move your cursor to the CONVERSE action and press DEFINE [F4].

```

AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - Jul 28 13:37:29
1 CONVE 4 EDIT VECTOR NUMBER 93 STEPS
>Call Vector Name: +Route_start Vector Number: 93
Syste Description: Gather digits from PBX via Converse step
Syste
UNIX
Exit

Step Action Description
1 CONVERSE collect 10 digits into %ci_value
2 JUMP 5 CONVERSE ACTION, STEP 1 for vector 93
3
4
5 Converse Step gathers TouchTones
6
7 Number of Digits to Collect: 10
8
9 Load Digits into Variable: %ci_value
10
11 Place number of digits collected into: %num_dig_got
12
13 Comment: place digits from PBX into variable
14

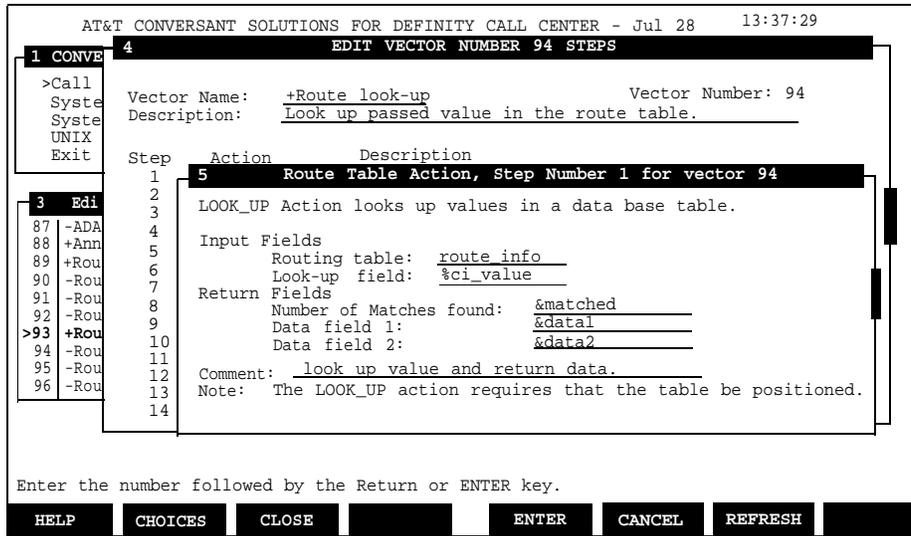
3 Edi
87 -ADA
88 +Ann
89 +Rou
90 -Rou
91 -Rou
92 -Rou
>93 +Rou
94 -Rou
95 -Rou
96 -Rou

Enter the number followed by the Return or ENTER key.
HELP CHOICES CLOSE ENTER CANCEL REFRESH

```

**Figure 5-36. The +Route start Vector Worksheet with the CONVERSE Action Step Form**

3. Enter in the number of digits to collect field the maximum number of digits to accept from the DEFINITY vector.  
For many routing applications, you will accept a 10-digit telephone number from the PBX.
4. Make a note of the CONVERSANT vector number in the upper right portion of the worksheet.
5. Press CLOSE [F3] and SAVE [F8], [F3] to return to the vector configuration menu.
6. Select **Edit Vector**.
7. Select the second routing vector, -Route look-up. The worksheet for this vector will appear.



**Figure 5-37. The -Route look up Vector Worksheet with the ROUTE TABLE Action Input and Return Form**

Make sure that the number of the CONVERSANT vector you select equals the number of +Route start plus one.

-Route look-up refers to a database table for information you associated with the variable *%ci\_value*.

8. Move your cursor to the LOOK\_UP action and press DEFINE [F4]. The ROUTE TABLE action form, shown in Figure 5-36, will appear.
9. Enter in the routing table field the name of the database table you created for Custom Call Routing.

In this example, the first column in this table must contain possible values for the variable *%ci\_value*. The second column must contain corresponding agent extensions.

If you wish, you may associate a third column of information with *%ci\_value*. The LOOK\_UP action in this CONVERSANT vector uses the variables *%data1* and *%data2* to capture information in the second and third columns, respectively.

For more about routing tables, see "Custom Call Routing Administration" later in this chapter.

10. Press CLOSE [F3] and SAVE [F8], [F3] to return to the edit vector menu.
11. Select the third route vector, -Route normal.

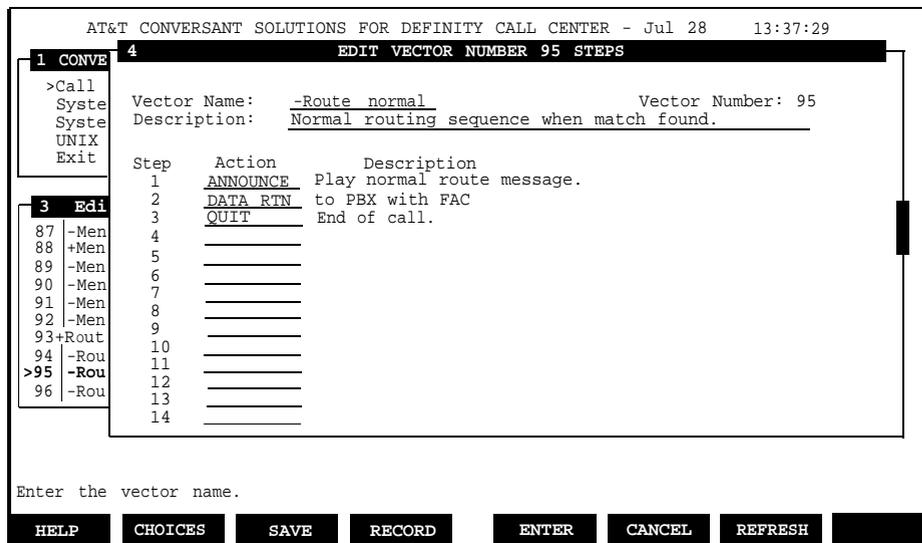


Figure 5-38. The -Route normal Vector Worksheet

Make sure that the number of this CONVERSANT vector equals the number of -Route look-up plus one.

If your routing table associates *%ci\_value* with an extension or split in its second column, *%data1*, -Route normal will speak a message and return the number of the extension or split to the DEFINITY vector you designed to transfer the caller.

To configure this vector correctly:

12. Move your cursor to the first ANNOUNCE action and press DEFINE [F4].
13. Enter in the phrase tag field the name of the speech phrase you defined to precede the transfer.

-OR- press CHOICES [F2] to select from a list.

For example, you might record "An agent will be with you shortly."

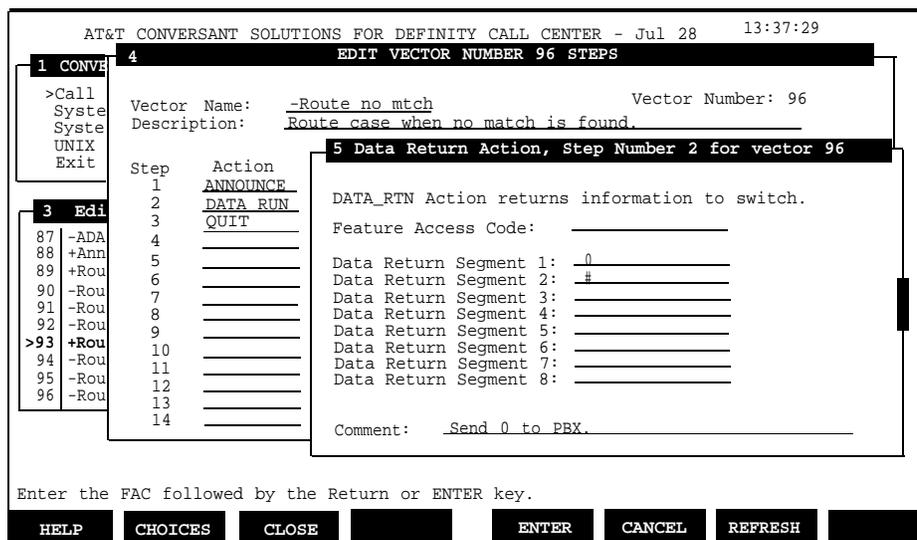
14. Press CLOSE [F3].
15. Move your cursor to the DATA\_RTN action and press DEFINE [F4].
16. Enter the feature access code (FAC) you want to transmit to the PBX prior to the value in *%data1*. Your entry must correspond to the DATA\_RTN FAC already defined on the DEFINITY switch.
17. On the lines marked **Data Return Segments** list any additional values (or variables containing values) you want to return to the DEFINITY vector, up to a combined limit of 24 characters. Every character in values you list on these lines counts toward the limit, including #, which you may use as a delimiter.



**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, will count toward the limit.

18. Press CLOSE [F3] and SAVE [F8], [F3] to return to the edit vector menu.
19. Select the fourth route vector, -Route no mtch.



**Figure 5-39. The -Route no match Vector Worksheet with the DATA RETURN Action Form**

Make sure that the number of this CONVERSANT vector equals the number of -Route normal plus one.

-Route no mtch speaks a special message to callers having no information on file. Then, it returns the number of the operator's extension to the DEFINITY vector you designed to transfer the caller.

20. Move your cursor to the ANNOUNCE action and press DEFINE [F4].
21. Enter in the phrase tag field the name of the speech phrase you defined to notify callers that they will be transferred to an agent for special help.
22. Press CLOSE [F3].
23. Move your cursor to the DATA\_RTN action and press DEFINE [F4].
24. Enter the feature access code (FAC) you want to transmit to the PBX prior to the extension number of an agent. Your entry must correspond to the DATA\_RTN FAC already defined on the DEFINITY switch.

25. To change the agent extension number that this vector will return to the DEFINITY vector (default = 0), move your cursor to field labeled Data Return Segment 1 and replace the default extension number with a new number.
26. Press CLOSE [F3] and SAVE [F8], [F3].

### Auditing the Vector Database

Choose this option to check vectors in your development database for common errors. Select this option before you place new vectors in service.

1. Select **Audit Vector Database** from the vector configuration menu. Press [ENTER].

The results of the audit will appear on the screen. Warnings include:

- 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. Refer to Chapter 8 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.
- Vector XX, Jump to Non-Existent Vector: The vector contains a SWITCH, GOTO, or JUMP action that refers to a missing vector.

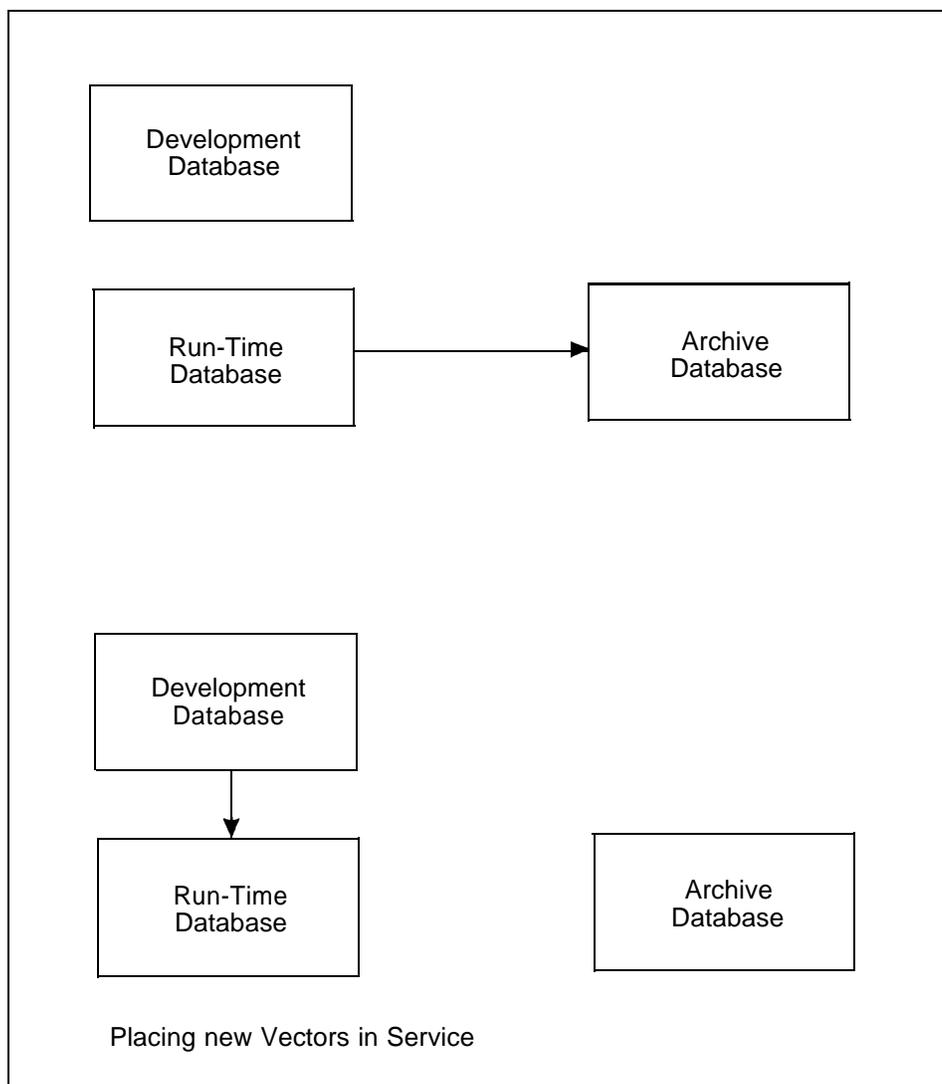
 **NOTE:**

The appearance of a warning does not necessarily indicate an error condition that will disrupt the handling of calls.

### Placing New CONVERSANT Vectors in Service

The CONVERSANT Call Center Solutions system maintains CONVERSANT vectors in three databases:

- Runtime database of active vectors
- Development database of duplicate run-time vectors that you can modify without affecting the way the system handles calls
- Archive database of previous run-time vectors



**Figure 5-40. The Three CONVERSANT Vector Databases**

When you place new vectors in service, the CONVERSANT Call Center Solutions system first compares the development database to the runtime database.

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 CONVERSANT 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.

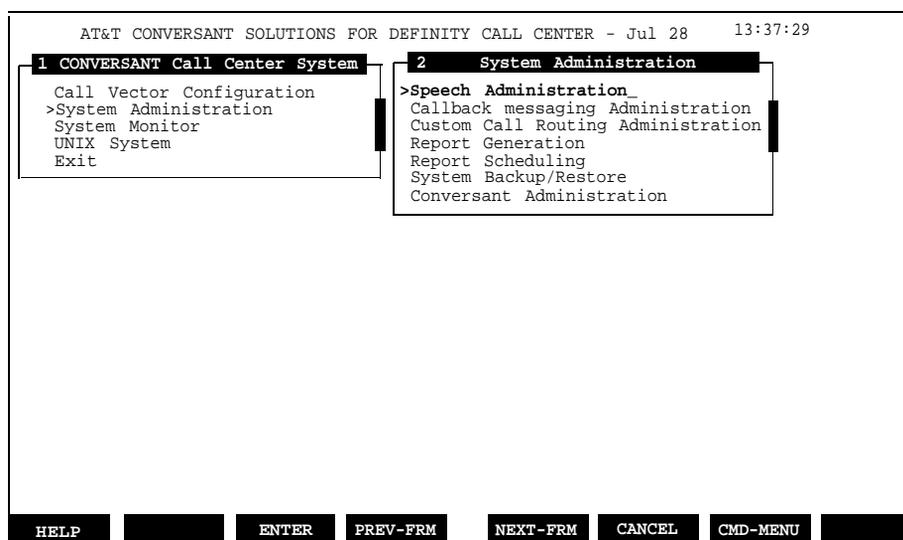
As shown in Figure 5-40, the system uses a two-step process to place new vectors in service.

1. It copies the database of current runtime vectors to an archive database.
2. It overwrites the runtime database with the development database.

To restore the previous run-time database after you replace it, choose **Restore Previous Run-Time Database** at the system backup / restore menu described later in this chapter. From this menu, you can also restore CONVERSANT vectors from floppy disk.

## System Administration

This menu, shown in Figure 5-41, allows you to create, modify, and delete speech phrases; schedule and generate reports; save and retrieve databases of CONVERSANT vectors, and administer the optional packages Callback Messaging and Custom Call Routing.



**Figure 5-41. The CONVERSANT System Administration Menu**

Options include:

- Speech Administration
- Callback Messaging Administration
- Custom Call Routing Administration
- Report Generation

- Report Scheduling
- System Backup/Restore
- CONVERSANT Administration

## Speech Administration

---

To record and document speech, choose from the following options shown in the speech administration menu in Figure 5-42:

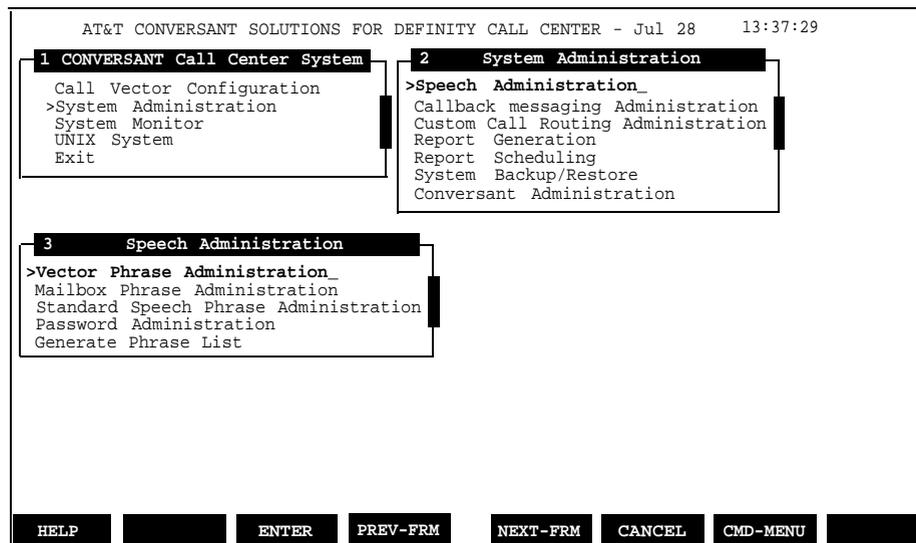


Figure 5-42. The Speech Administration Menu

- Vector Phrase Administration
- Mailbox Phrase Administration
- Standard Speech Phrase Administration
- Password Administration
- Generate Phrase List

## Administration of Phrases for Vectors, Mailboxes, and Standard Speech

The CONVERSANT Call Center Solutions system stores speech phrases for CONVERSANT vectors, message drop mailboxes, and standard speech in separate talk files. To add or edit an existing phrase, or to remove a phrase from the database of phrases, first choose one of the talk files below from the speech administration menu.

```

AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - Jul 28 13:37:29
1 CONVERSANT Call Center System
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit
2 System Administration
  >Speech Administration_
  Callback messaging Administration
  Custom Call Routing Administration
  Report Generation
  Report Scheduling
  System Backup/Restore
  Conversant Administration
3 Speech Administration
  >Vector Phrase Administration_
  Mailbox Phrase Administration
  Standard Speech Phrase Administration
  Password Administration
  Generate Phrase List
4 Select Phrase
  >ADD NEW PHRASE_
  REMOVE PHRASE_
  224 | 1000 | Menu.
  224+1001+ | Thank you standard announcement.
  224 | 1002 | Thank you ADA.
  224 | 1003 | minutes.
  224 | 1004 | Menu options for Messaging.
  224 | 1006 | Menu options for Products.
  224 | 1007 | Announcement Package Promo.
  224 | 1008 | Callback Messaging promo.
HELP ENTER PREV-FRM NEXT-FRM CANCEL CMD-MENU

```

Figure 5-43. The Select Phrase Menu

- Vector Phrase Administration (Talk file #224)
- Mailbox Phrase Administration (Talk file #242)
- Standard Speech Phrase Administration (Talk file #241)

Options after each choice, shown in Figure 5-43, include:

- Add New Phrase
- Remove Phrase
- Edit Phrase (by highlighting phrase number and pressing [ ENTER ].

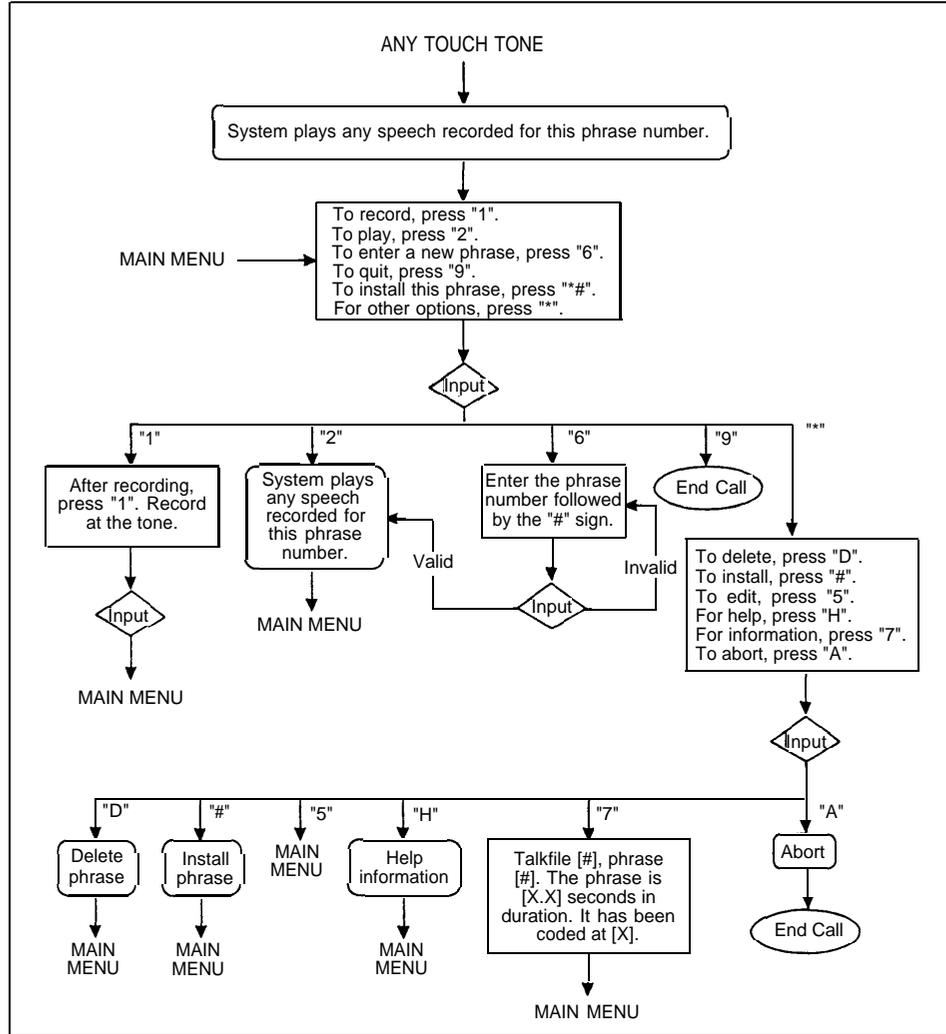


**NOTE:**

You will not need to add new phrases to Talk file #241 because all standard speech has been pre-recorded. To re-record standard speech phrases in another voice, follow instructions for editing a phrase. When re-recording standard speech, be sure to imitate the inflections that were used in the original phrases.

To review and record speech phrases over the telephone without using the CONVERSANT Call Center Solutions terminal, use the SPCH\_ADMN action in a CONVERSANT vector.

The various options and their relationships for recording, playing, and editing speech phrases are shown in Figure 5-44.



Speech Administration Utility

**Figure 5-44. Option Tree for Recording, Playing, and Editing Speech**

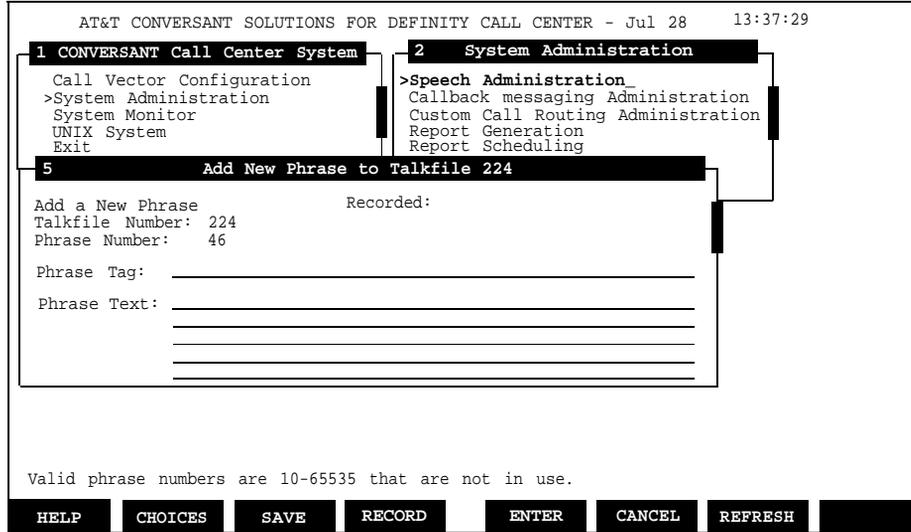
### Adding a New Phrase

1. Choose **Add New Phrase** and press [ ENTER ].

A phrase worksheet will appear, shown in Figure 5-45. Note that the CONVERSANT Call Center Solutions system allows callers to interrupt any phrase with a touch-tone entry.

The system automatically assigns a talk file number and a phrase number. To replace the system-assigned phrase number, type a new one. Valid phrase numbers are from 10 to 65535.

2. Move with the directional keys to the heading **Phrase Tag** and enter a unique name.
3. Enter in the field phrase text the exact words to be recited.



**Figure 5-45. The Add New Phrase Worksheet**

4. Press RECORD [F4] to save and record this phrase.  
A phrase recording screen, shown in Figure 5-46, will appear.
5. Press CHOICES [F2] until the coding rate you want appears.



**NOTE:**

Pulse Code Modulation at 64 KBPS (PCM64) offers the highest recording quality but demands the most hard disk memory.

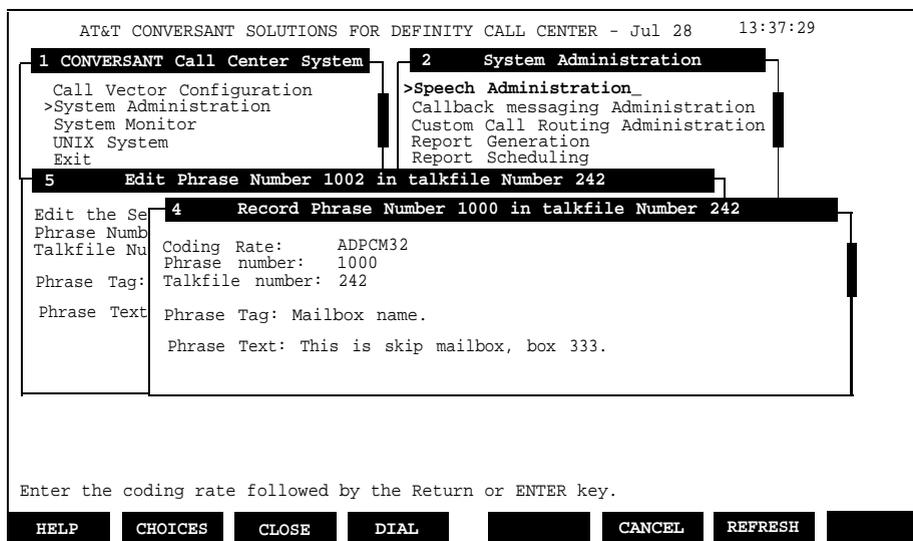
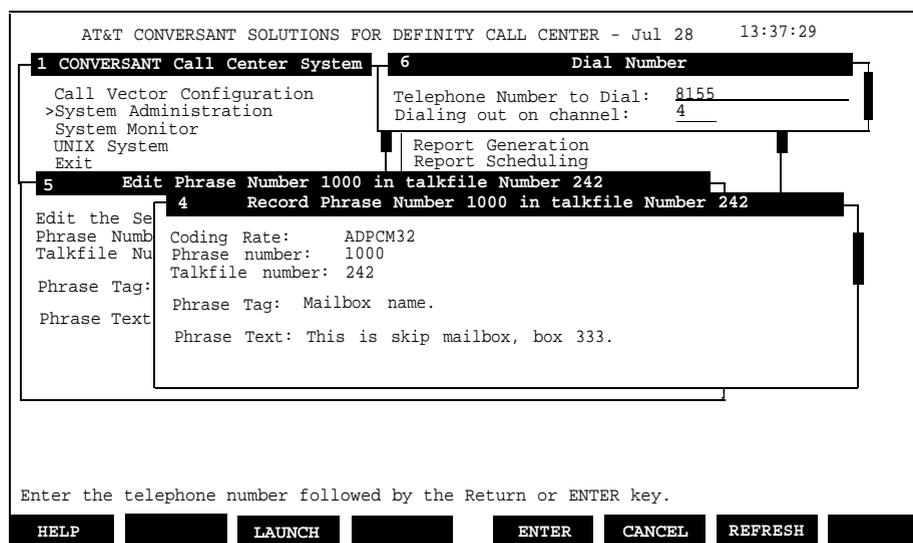


Figure 5-46. The Phrase Recording Screen and Coding Rate Tag

6. Press DIAL [F4].

The dial number form, shown in Figure 5-47, appears.

- a. Enter in the field telephone number to dial the telephone number or extension, up to 16 digits, that the system must dial to reach your touch-tone telephone.
- b. Enter in the field dial out on channel the number of the CONVERSANT port to use while recording.





4. Press CLOSE [F3] to save your changes -OR-

Press RECORD [F4] to save your changes and re-record the speech associated with the phrase.

A phrase recording screen appears. Follow steps 6-8 under “Adding a new phrase.”

## Removing a Phrase



### NOTE:

Before removing a phrase, first remove all references to the phrase from your CONVERSANT Vectors.

1. Select **Remove Phrase** at the select phrase menu in Figure 5-43.  
A menu of CONVERSANT vector names will appear.
2. Move with the directional keys to highlight the name of the phrase you want to delete.
3. Press MARK [F2].
4. Return to Step 2 to remove more than one phrase. -OR-  
press [ENTER].
5. Press CANCEL [F6] to return to the previous menu.



### CAUTION:

*You cannot recover a phrase that you delete in this fashion.*

## Password Administration

To configure the system to prompt you for a password before recording system speech:

1. Select Password Administration from the speech administration menu and press [ENTER].  
The password for speech administration form, shown in Figure 5-49, will appear.
2. Enter a series of up to 16 touch-tone digits that callers must enter exactly to access the system’s speech recording utility.

```
AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - Jul 28 13:37:29

1 CONVERSANT Call Center System      2 System Administration
  Call Vector Configuration          >Speech Administration
>System Administration              Callback messaging Administration
  System Monitor                     Custom Call Routing Administration
  UNIX System                         Report Generation
  Exit                                Report Scheduling
                                       System Backup/Restore
                                       Conversant Administration

3 Speech Administration
  Vector Phrase Administration
  Mailbox Phrase Administration
  Standard Speech Phrase Administration
>Password Administration
  Generate Phrase List

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 5-49. The Password for Speech Administration Form



**NOTE:**

To prevent the unauthorized recording of speech phrases, specify a password for speech administration and change it periodically.

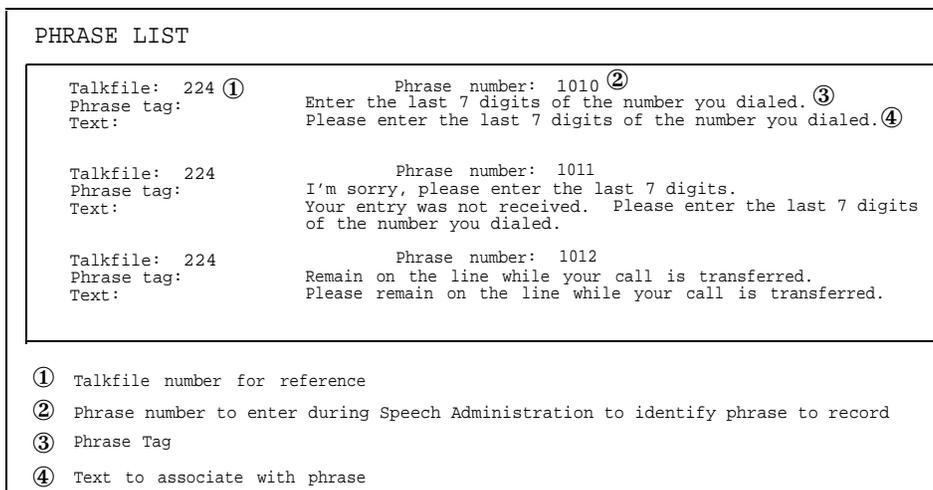
### Generate Phrase List

The phrase list provides a script for recording speech phrases.

1. Select **Generate Phrase List** at the speech administration menu to generate the phrase list report.

Optionally, also press PRINT [F3] for hard copy.

The phrase list report appears in Figure 5-50.



---

**Figure 5-50. The Phrase List**

## **Callback Messaging Administration**

---

This menu, shown in Figure 5-51, provides options for creating and administering mailboxes, establishing parameters for accepting messages from callers, and managing the way the CONVERSANT Call Center Solutions system notifies agents of new messages. The options fall under three general categories:

- Mailbox Administration
- Mailbox Global Settings
- Agent Callback Hours

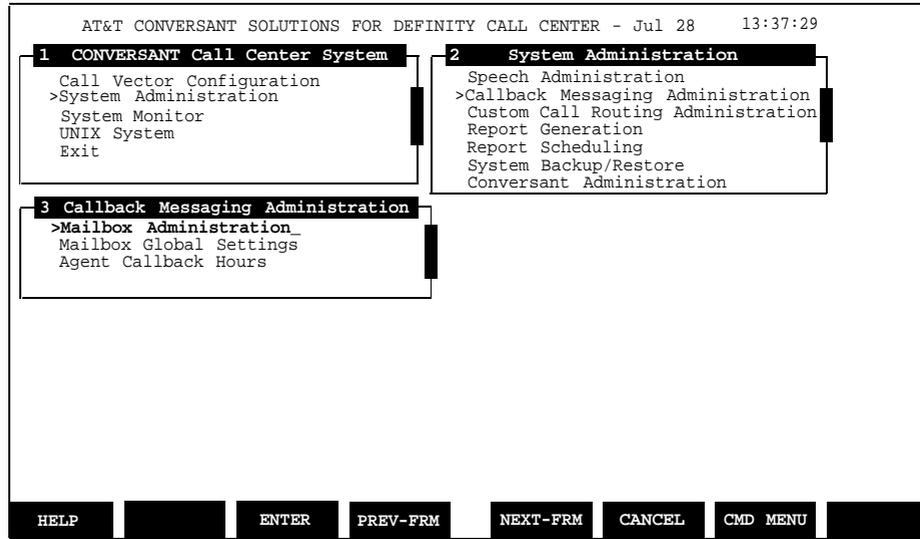


Figure 5-51. The Callback Messaging Administration Menu

### Mailbox Administration

To add or edit a mailbox you have already created, or to remove a mailbox from the database, choose from the following options, shown in the mailbox administration menu in Figure 5-52:

- Create New Mailbox
- Remove Mailbox
- Audit Mailbox
- Edit Mailbox (by highlighting mailbox number and pressing [ENTER]).

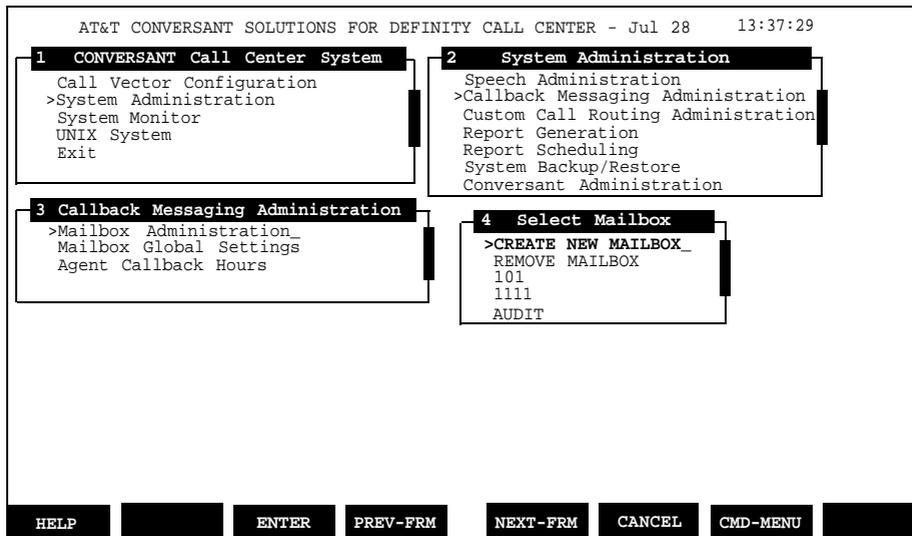


Figure 5-52. The Mailbox Administration Menu

### Creating a New Mailbox

Use this option to create a mailbox and choose phrases to prompt callers for input. Because a single mailbox can store many messages, add new mailboxes only in order to prompt callers for different items of information or to distinguish their responses from those in other mailboxes.

1. Each time you create a mailbox, specify the following in the mailbox definition form, shown in Figure 5-53, which appears when you select **Create New Mailbox**:
  - **Mailbox ID:** A unique number to use with the MSG\_DROP and TRANSCRIBE actions to deliver callers to this mailbox. The CONVERSANT Call Center Solutions system uses this number only as a name for the mailbox you define, not as a telephone extension.
  - **Mailbox Password:** Any number that callers must enter before they can transcribe the contents of this mailbox. Leave this space blank to disable the password requirement.
  - **Agent Access Number:** The extension to dial for an agent or the VDN that gauges agent availability. Leave this space blank to disable the Callback Messaging Module's agent access feature. (See Chapter 3 for more about this feature.)

```

AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - Jul 28 13:37:29

1 CONVERSANT Call Center System
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit

2 System Administration
  Speech Administration
  >Callback Messaging Administration
  Custom Call Routing Administration
  Report Generation
  Report Scheduling
  System Backup/Restore
  Conversant Administration

3 Callback Messaging Administration
  >Mailbox Administration
  Mailbox Global
  Agent Callback

5 Edit 101 Mailbox Definition

Specify the Individual Parameters for Message Drop Mailbox
Mailbox ID: 101
Mailbox Password: 101
Agent Access Number: 8182
Message Waiting Light Extension:
Mailbox Transcription Name Phrase
This is test MB 101 1006

Enter the 1-6 digit password to access this mailbox during transcription.

HELP CHOICE CLOSE PREVPAGE NEXTPAGE CANCEL REFRESH
  
```

Figure 5-53. The Mailbox Definition Form

- **Message Waiting Lamp Extension:** The telephone extension of the agent to notify of new messages. The CONVERSANT Call Center Solutions system will light the message waiting lamp on the AT&T telephone associated with this extension. Leave this space blank to disable the message waiting lamp feature.
  - **Mailbox Transcription Name Phrase:** Enter the name of the phrase to play to identify this mailbox to transcribers.
2. Press NEXTPAGE [F5] to move to the grid titled **Form Pieces**, shown in Figure 5-54, and define up to fifteen prompts for information.



Note that callers cannot delay more than 6 seconds before entering the first digit of their touch-tone response, or delay more than 4 seconds between digits.

5. Press CHOICES [F2] for a list of phrases you defined for Callback Messaging.
6. Enter under **Caller Good-bye Message** the name of the phrase to play after a caller leaves a message in the mailbox.
7. Press CLOSE [F3].

### Removing a Mailbox

Use this option to delete from the system those mailboxes that you no longer need.

1. Move your cursor to **Remove Mailbox** in the mailbox administration menu in Figure 5-52 and press [ENTER]. A menu of mailbox numbers will appear.
2. Use the directional keys to highlight the number of the mailbox you want to delete or type its number. Press MARK [F2].
3. Return to step 2 to remove more than one mailbox. -OR-  
Press [ENTER].



**NOTE:**

Before removing a mailbox, be sure to transcribe its messages completely in order to turn off the message waiting lamp on the original agent's telephone.

### Editing the AUDIT Mailbox

Callback Messaging automatically performs an hourly analysis of space on the hard disk drive available for speech. Use the AUDIT Mailbox to contact an agent when available space is less than or equal to 5% of the space originally allotted to speech.

Although the system creates this mailbox automatically, you must select it and follow the same steps for creating a new mailbox to specify an agent access number and, if you wish, a mailbox password and a message waiting lamp extension. To activate the agent access feature, you must administer global mailbox settings.



**NOTE:**

Since the AUDIT mailbox relies on the agent access feature to contact agents when available speech falls below the 5% threshold, be sure to administer global mailbox settings and agent callback hours.

### Editing a Mailbox

Use this option to change all the various features of a mailbox, except the mailbox number.

1. Highlight at the select mailbox menu the mailbox you want tot edit and press [ENTER].
2. Use the directional keys to move to each item you want to change. (Note that you cannot edit mailbox numbers.)
3. Press CLOSE [F3] to save your changes.



**NOTE:**

Before changing a mailbox’s agent access number, be sure to transcribe its messages completely in order to turn off the message waiting lamp on the original agent’s telephone.

### Mailbox Global Settings

Use this screen, shown in Figure 5-55, to stipulate how the system should notify agents of messages and how long it should remain on calls returned to customers (to monitor their progress).

```

AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - Jul 28 13:37:29
1  CONVERSANT Call Center System
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit
2  System Administration
  Speech Administration
  >Callback Messaging Administration
  Custom Call Routing Administration
  Report Generation
3  Callback Messaging Administr
  Mailbox Administration
  >Mailbox Global Settings
  Agent Callback Hours
4  Global Setting for All Message Drop Mailboxes
  Specify the Global Parameters for Message Drop
  AGENT CALLBACK
  Talkfile number: 242
  Retry Interval: 1
  Agent Access Channel(s): 4
  MESSAGE WAITING LAMP
  Message Waiting Lamp Access Channel: 4
  Message Waiting Lamp On Code: *4
  Message Waiting Lamp Off Code: #4
  CUSTOMER CALL BACK
  Outside Line Access Code: 9
  Local Area Code: 612
  Call Back Conference Time: 60
  Type transfer to caller: Intelligent

Enter the time in minutes between tries in calling agents.
HELP CHOICES CLOSE ENTER CANCEL REFRESH
    
```

**Figure 5-55. The Mailbox Global Settings Form**

1. Choose **Mailbox Global Settings** at the callback messaging administration menu.

A list of parameters, shown in Figure 5-55, will appear.

2. The number of the talk file that contains phrases for Callback Messaging is assigned by the system and cannot be changed. However, you may change all other parameters including:

- **Retry Interval:** The interval, in minutes, between attempts to contact agents with new messages. At your option, the system begins each attempt by dialing an extension or a DEFINITY Vector (VDN) that gauges agent availability. Please recognize that a very short retry interval may monopolize the CONVERSANT agent access channels you assign. (See below).
- **Agent Access Channels:** The number or number range of the channels to use to dial extensions or VDNs, connect with agents, and return calls. You can use any active ports on the CONVERSANT system except those used by ACD for standard announcements. Avoid using ports that are hard-allocated to other applications.
- **Message Waiting Lamp Access Channel** (for Leave Word Calling): The number of the channel to use with an agent's extension number and a PBX Feature Access Code to activate or de-activate the message waiting lamp on the agent's AT&T telephone. Do not use this channel for other purposes.



**NOTE:**

The CONVERSANT system must use the same Message Waiting Lamp Access Channel to activate and de-activate a Message Waiting Lamp. Before you change or delete the Message Waiting Lamp Access Channel, transcribe all messages in all mailboxes to de-activate all Message Waiting Lamps this channel lit originally.

- **Message Waiting Lamp On Code** (for Leave Word Calling): The PBX Feature Access Code to transmit in combination with an agent's telephone extension to activate the message waiting lamp on the agent's AT&T telephone.
- **Message Waiting Lamp Off Code** (for Leave Word Calling): The PBX Feature Access Code to transmit in combination with an agent's telephone extension to de-activate the message waiting lamp on the agent's AT&T telephone.
- **Outside Line Access Code:** The touch-tone(s) that the CONVERSANT must dial for a public network dial tone (for example, "9").



**NOTE:**

The CONVERSANT Solutions system automatically out-pulses 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.

- **Local Area Code:** The area code for your local calling area. The system will not dial this area code when it returns local calls even if callers include it in their callback telephone numbers.
- **Call Back Conference Time:** The length of time, in seconds, that the CONVERSANT should remain on the line after it returns a call. During this time, agents can re-categorize call attempts as successful or unsuccessful. During an intelligent transfer, the Call Back Conference Time begins when the party answers; during a blind transfer, the Call Back Conference Time begins immediately after the system finishes dialing. See the following bullet point for more information about Transfer Types.
- **Type Transfer to Caller:** Instructions for monitoring a call's progress. Choose "intelligent" if all channels connecting the CONVERSANT with your PBX are analog; choose "blind" if any of these ports are digital (Line-Side T1). Press CHOICES [F2] to toggle between responses.

During an "Intelligent" transfer to an agent, the agent's voice or "speech energy" signals the CONVERSANT to introduce a new message to transcribe. If the agent chooses to return the call, the CONVERSANT initiates a conference call and monitors the connection for a busy signal. In the absence of a busy signal, it judges the call "successful" and remains on the line for the extent of the Call Back Conference Time.

Alternatively, during a "blind" transfer to an agent, the CONVERSANT system begins prompting for an agent's input immediately after it finishes dialing. If no agent responds, the system eventually "times out" to make another attempt later. During a blind conference call, the CONVERSANT does not monitor the connection for a busy signal; if the line is busy, the agent must press \*99 and classify the call "unsuccessful."

(See Chapter 3 for more about the callback feature.)

 **NOTE:**

Before choosing the intelligent transfer method, be sure that any VDNs assigned as Agent Access Numbers will not respond with "music on hold" or with other sounds that the CONVERSANT system might mistake for "speech energy." (See Chapter 3 for more about Agent Access Numbers.)

## Agent Callback Hours

Highlight this option from the callback messaging administration menu to administer the agent access feature. The Agent Callback Hours form, shown in Figure 5-56, will appear.

```
AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - Jul 28 13:37:29
```

|                                                                                                                                        |                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1 CONVERSANT Call Center System</b><br>Call Vector Configuration<br>>System Administration<br>System Monitor<br>UNIX System<br>Exit | <b>2 System Administration</b><br>Speech Administration<br>>Callback Messaging Administration<br>Custom Call Routing Administration<br>Report Generation<br>Report Scheduling<br>System Backup/Restore<br>Conversant Administration |
| <b>3 Callback Messaging Administration</b><br>Mailbox Administration<br>Mailbox Global Settings<br>>Agent Callback Hours               | <b>4 Agent Callback Hours</b><br>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 5-56. The Agent Callback Hours Form

1. Enter to the left of the cursor times for each day of the week to begin and to stop contacting agents with messages automatically.  
Leave lines blank to suspend this feature.
2. Press CLOSE [F3] to save your changes.

### Custom Call Routing Administration

Use this menu, shown in Figure 5-57, to create, delete, and modify tables for Custom Call Routing applications. Options include:

- Import Data from Floppy
- Routing Table Administration
- Record Administration

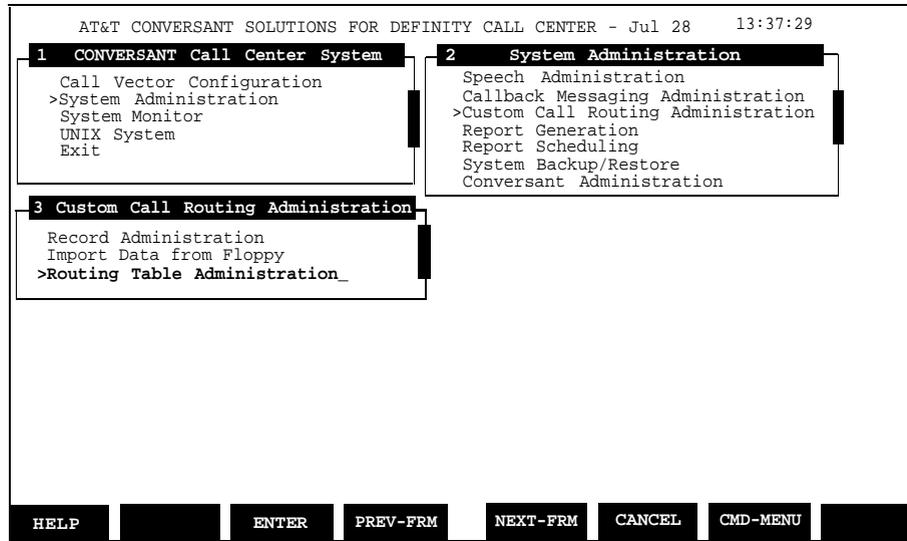


Figure 5-57. Custom Call Routing Administration Menu

### Import Data from Floppy

Use this option to populate a database table with information from a DOS file on floppy disk.

1. Insert the DOS floppy disk containing the information you want to use into disk drive 0 or 1 on the CONVERSANT platform.
2. Press CHOICES [F2] for a list of database table names.
3. Enter in the fill table form, shown in Figure 5-58, the name of the table you want to populate.
4. Identify the disk drive you are using by entering **A** or **B** -OR- Press CHOICES [F2] to select your response.
5. Enter the path to the file's location on disk.  
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.
6. Press DIR [F4] for a directory of files on disk.

```

AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - Jul 28      13:37:29
1 CONVERSANT Call Center System                                2 System Administration
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit
  Speech Administration
  >Callback Messaging Administration
  Custom Call Routing Administration
  Report Generation
  Report Scheduling
  System Backup/Restore
  Conversant Administration
3 Custom Call Routing Administration
  Record Administration
  >Import Data from File
  Routing Table Administration
4 Fill Table
  Filling from DOS diskette
  Routing Table Name : _____
  Drive A or Drive B :  A
  Path : /_____
  Filename : _____
  Field delimiter :  |
  Filter Non-Numeric? :  N
Please enter the routing table name followed by the Enter or Return key.
HELP CHOICES SAVE DIR ENTER CANCEL REFRESH

```

**Figure 5-58. The Fill Table Form**

7. Enter the file name.
8. Press CHOICES [F2] and identify the delimiter you use in your file to separate items of information.

The CONVERSANT Call Center Solutions system will use this delimiter to assign information appropriately to columns 1, 2, and 3. Valid delimiters include:

- | (pipe symbol)
  - % (percentage sign)
  - & (ampersand)
  - - (minus sign)
  - , (comma)
  - : (colon)
  - ; (semicolon).
9. Enter **Y** after **Filter Non-Numeric?** to remove non-numeric data -OR- Enter **N** to keep this data intact.
  10. Press SAVE [F3].

## Routing Table Administration

Database tables on the CONVERSANT Call Center Solutions system can consist of 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 5-59, include:

- Add Table
- Delete Table

```

AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - Jul 28 13:37:29

1 CONVERSANT Call Center System
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit

2 System Administration
  Speech Administration
  >Callback Messaging Administration
  Custom Call Routing Administration
  Report Generation
  Report Scheduling
  System Backup/Restore
  Conversant Administration

3 Custom Call Routing Administration
  Record Administration
  Import Data from Floppy
  >Routing Table Administration

4 Routing Table Administration
  >Add Table
  Delete Table

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

Figure 5-59. The Routing Table Administration Form

### Adding a Table

1. Name the table you want to create.
2. Enter a description to associate with this table.
3. Press CLOSE [F3].

### Deleting a Table

1. Use the directional keys to highlight the name of the table you want to delete, or type the first few letters of its name. Press MARK [F2].
2. Return to Step 1 to remove more than one table. -OR-  
Press [ENTER].

3. Press CANCEL [F6] to return to the previous menu.

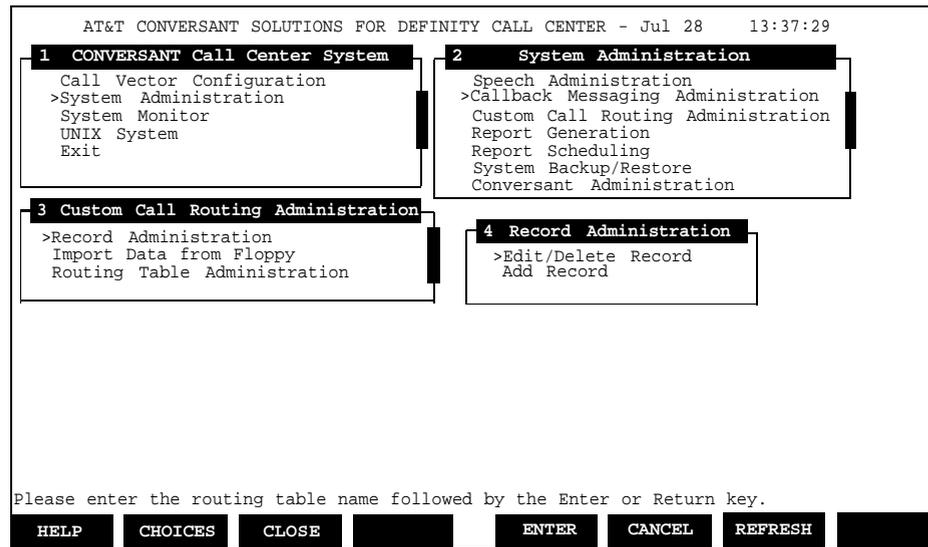
**NOTE:**

You cannot recover a table that you delete in this fashion.

## Record Administration

To add, modify, or delete individual records in a database table, choose from the following options, as shown in Figure 5-60.

- Edit/Delete Record
- Add Record



**Figure 5-60. The Record Administration Menu**

## Editing or Deleting a Record

1. Press CHOICES [F2] for a list of administrable database tables.
2. Enter after **Routing Table Name** in the Edit/Delete record, shown in Figure 5-61, the name of the database table you want to administer.
3. Enter after **Lookup Field** the value you want to locate in the table's index (first column) and press [ENTER].
4. Move your cursor to the prompt **Have you filled in all the fields?** and enter either **y** or **n**.
5. Press CLOSE [F3].

If the table contains a match, the table name and key field will appear with the value in **Datafield 1** (the first column after the index) and the value in **Datafield 2** (the second column after the index).

6. Press DELETE [F4] to delete this record. -OR-  
 To modify this record, enter your changes and press CHANGE [F5].  
 To exit this record without making changes, press CANCEL [F6].

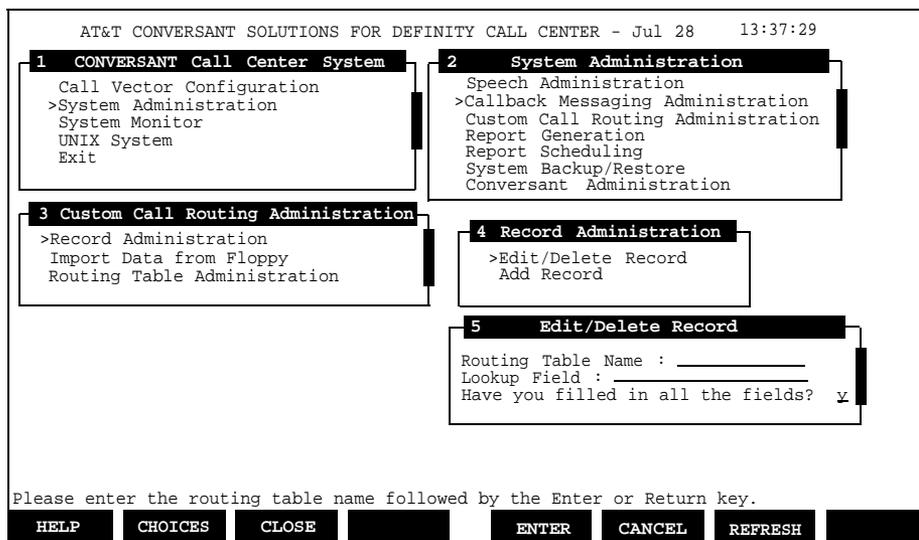


Figure 5-61. The Record Administration Menu with the Edit/Delete Record



**NOTE:**

Before pressing CHANGE [F5], be sure to respond to the prompt **Have you filled in all the fields?**

**Adding a Record**

1. Press CHOICES [F2] for a list of administerable database tables.
2. Enter after **Routing Table Name** in the Edit/Delete record the name of the database table you want to administer.
3. Enter after **Lookup Field** the value you want to place in the table's index (first column).
4. Enter after **Data Field 1** the value you want to place in the first column after the index.
5. Enter after **Data Field 2** the value you want to place in the second column after the index.
6. Press ADD [F3].

```

AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - Jul 28 13:37:29
1  CONVERSANT Call Center System
  Call Vector Configuration
  >System Administration
  System Monitor
  UNIX System
  Exit
2  System Administration
  Speech Administration
  >Callback Messaging Administration
  Custom Call Routing Administration
  Report Generation
  Report Scheduling
  System Backup/Restore
  Conversant Administration
3  Custom Call Routing Administration
  >Record Administration
  Import Data from Floppy
  Routing Table Administration
4  Record Administration
  Edit/Delete Record
  >Add Record
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 5-62. The Record Administration Menu with the Add Record Form**

## Report Generation

You can create 10 CONVERSANT Call Center Solutions system reports from the report generation menu. They include:

- Call Detail
- Vector Usage
- Event Count
- Event Detail
- Traffic Report
- Vector Profile Report
- Vector Map Report
- Routing Table Report
- Message Count Report
- Message Log Report
- Speech Space Available Test

To generate a report:

1. Select it from the menu of options.  
A definition form will appear.

2. Enter after **Day for Report** the day of the week you want described for call detail, vector usage, event count, event detail, traffic report, and message log report. -OR-  
Press CHOICES [F2] to select from a list.
3. Follow the instructions below for generating each report. Reports output to screen and do not print automatically.



**NOTE:**

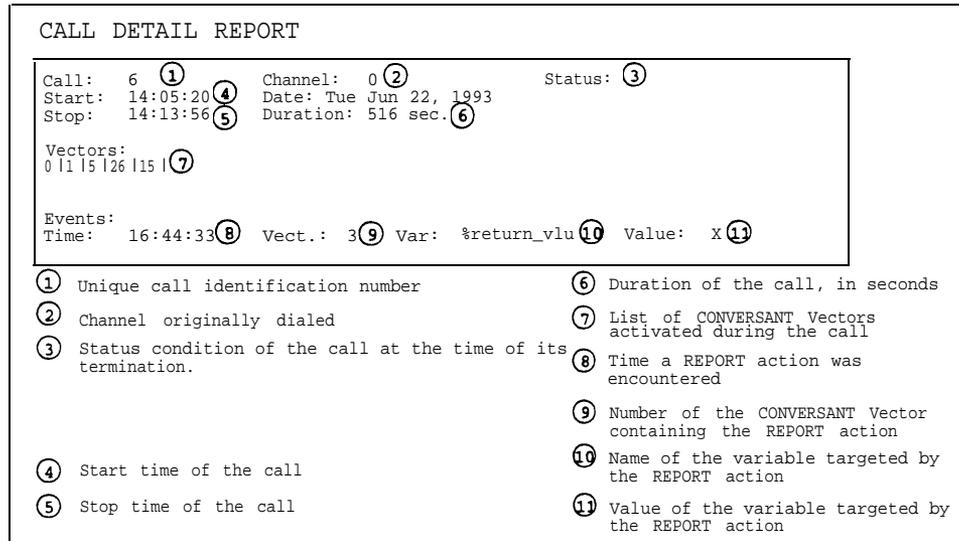
Some reports may take more than three minutes to process if you run reports during heavy traffic periods.

### The Call Detail Report

This report, shown in Figure 5-63, offers an at-a-glance summary of activity by call. The CONVERSANT Call Center Solutions system assigns ID numbers sequentially to incoming calls. Caller ID #1 corresponds to the first call received during the day selected.

Identify the calls you want described by entering their numbers. The system responds with:

- Channel number dialed
- The Call's status: The system returns the value 0 (normal) if the vector terminates the call with a QUIT action; 1 (hang-up) if callers hang-up prematurely; 3 (loop failure) if the call appears to be trapped in an endless loop by passing from one vector to another more than 100 times; 4 (MTC-seized channel) if the system administrator or the CONVERSANT system itself applies a diagnostic maintenance process to the channel during a call; 5 (executed another script) if the vector passes call control to another CONVERSANT application; 6 (vector error) if the vector passes control to another vector that expects but does not receive arguments or if the vector ends without a terminating QUIT action; 8 (missing vector) if the vector uses a JUMP, GOTO, or SWITCH action to pass control to a missing vector; 9 (DIP error) if internal UNIX or other problems inhibit a Data Interface Process from responding, 10 (execute failure) if the vector transfers call control to a CONVERSANT application that it cannot execute, and 11 (exceeds license) if the CONVERSANT Call Center Solutions system cannot process the call because it is already serving the maximum number of calls allowed by your software licensing agreement. Status codes 2 and 7 are not used.
- Start and stop times of the call
- Call's duration in seconds
- Optionally, the values of any variables that you archive with the CONVERSANT vector action Report
- List of CONVERSANT vectors that were activated.



**Figure 5-63. The Call Detail Report**

1. Enter after **Caller ID(s)** the number of the call you want described, **last**, or **all**.

Enter **last** for information about the most recent call.

Use a dash (-) to separate numbers in a range.

2. Type **yes** after **Include Report Event Detail** to include a list of all CONVERSANT report events that interacted with the caller in the order they were activated.

-OR-

Press **no** to exclude this information.

Pressing CHOICES [F2] allows you to toggle between yes and no responses.

3. Press CLOSE [F3].

The report will be displayed on the screen.

If you wish, press PRINT [F3].

### The Vector Usage Report

This report, shown in Figure 5-64, lists, by CONVERSANT vector number, the number of times each vector was used during the day you specify. Simply identify the vectors you want described by entering their unique identification numbers. The CONVERSANT Call Center Solutions system responds with the vector name and number, and the number of times the vector was activated.

VECTOR USAGE REPORT

| vect | name          | count |
|------|---------------|-------|
| ① 00 | setup         | 175 ③ |
| 01   | Dynamic Blk1  | 80    |
| 05   | Menu_settings | 40    |
| 10   | Menu_NoTry    | 8     |
| 11   | Op Transfer   | 8     |
| 12   | dynamic test  | 0     |
| 13   | dynamic tst   | 0     |
| 14   | Dynamic Blk1  | 9     |
| 15   | Dynamic Blk2  | 1     |
| 16   | Dynamic Blk3  | 0     |
| 17   | Dynamic Error | 1     |

① Number of CONVERSANT Vector  
 ② Name of CONVERSANT Vector  
 ③ Number of times the CONVERSANT Vector was used during day selected

**Figure 5-64. The Vector Usage Report**

1. Enter after **Vector(s)** the number of the CONVERSANT vector you want described, a range of numbers, or **all**.

Use a dash (-) to separate numbers in a range.

2. Press CLOSE [F3].

The report will be displayed on the screen.

If you wish, press PRINT [F3].

### The Event Count Report

This report, shown in Figure 5-65, lists the values of all variables that you archive with the REPORT action. Enter the day you want described and choose a sorting method. The CONVERSANT Call Center Solutions system responds by listing:

- Each variable name and value
- Number of the CONVERSANT vector that reported the value
- Number of times the variable equaled the value in the CONVERSANT vector when the vector performed the REPORT action.

| EVENT COUNT REPORT |      |          |       |
|--------------------|------|----------|-------|
| Cnt                | Vect | Variable | Value |
| 17                 | ③    | 2        | ④     |
| 17                 | ③    | 2        | ④     |
| 17                 | ③    | 2        | ④     |
| 17                 | ③    | 2        | ④     |
| 9                  |      | 6        |       |
| 9                  |      | 6        |       |
| 9                  |      | 6        |       |
| 9                  |      | 6        |       |
| 6                  |      | 6        |       |
| 5                  |      | 6        |       |
| 4                  |      | 6        |       |
| 4                  |      | 6        |       |
| 3                  |      | 6        |       |

|   |                                                                         |
|---|-------------------------------------------------------------------------|
| ① | Variable Name                                                           |
| ② | Variable Value                                                          |
| ③ | Number of times this variable held this value in this CONVERSANT Vector |
| ④ | CONVERSANT Vector Number                                                |

**Figure 5-65. The Event Count Report by Vector**

1. Type **vector** after **List by Vector or Variable** to list the number of times each variable held each value *in each CONVERSANT vector*.

*Information in this report is sorted in descending order under **Count**.*

-OR-

2. Enter **variable** after **List by Vector or Variable** to generate an event count report by variable instead.

This will list the number of times a variable held each value *in any CONVERSANT vector*. Information in this report is not CONVERSANT vector-specific. It is also sorted in descending order under **Count**.

3. Press CLOSE [F3].

The report will be displayed on the screen.

If you wish, press PRINT [F3].

### The Event Detail Report

Each time a CONVERSANT vector uses the REPORT action with a variable, the event detail report, shown in Figure 5-66, collects the:

- Variable name and value
- Number of the CONVERSANT vector reporting
- Time of the event
- Number of the current call

Unlike the event count report, which groups variables with common values, the event detail report documents every reported variable separately.

EVENT DETAIL REPORT

| Call | Time       | Vect | Var      | Value       |
|------|------------|------|----------|-------------|
| 23 ① | 17:02:42 ② | 3 ③  | %data1 ④ | 075500807 ⑤ |
| 24   | 17:02:49   | 3    | %data1   | 075500807   |
| 25   | 17:02:55   | 3    | %data1   | 075500807   |
| Call | Time       | Vect | Var      | Value       |
| 23   | 17:02:43   | 3    | %data2   | 6123768112  |
| 24   | 17:02:49   | 3    | %data2   | 6123768112  |
| 25   | 17:02:55   | 3    | %data2   | 6123768112  |
| Call | Time       | Vect | Var      | Value       |
| 23   | 17:02:42   | 3    | %matched | 1           |
| 24   | 17:02:49   | 3    | %matched | 1           |
| 25   | 17:02:55   | 3    | %matched | 1           |

① Unique call identification number  
 ② Time a report action was encountered  
 ③ Number of CONVERSANT Vector  
 ④ Variable name  
 ⑤ Variable value

**Figure 5-66. The Event Detail Report**

1. Press CHOICES [F2] for a list of variables and enter after **Variable** the name of the variable you want described or **all**.
2. Press CLOSE [F3].  
 The report will be displayed on the screen.  
 If you wish, press PRINT [F3].

**The Traffic Report**

This standard CONVERSANT Call Center Solutions report, shown in Figure 5-67 documents, by channel, the number of calls handled and their length. You identify the period of time you want described. The CONVERSANT Call Center Solutions system responds with:

- Channel
- Hourly period
- Number of calls (to all CONVERSANT applications)
- Average hold time
- Percentage of total port capacity used

| TRAFFIC REPORT |                             |       |                   |       |  |
|----------------|-----------------------------|-------|-------------------|-------|--|
| Channel        | Period                      | Calls | Average Hold Time | % Occ |  |
| ① 0            | ② 11:00pm - 12:00am (06/14) | ③ 119 | ④ 0:02            | ⑤ 7   |  |
| 0              | 03:00pm - 04:00pm (06/14)   | 1     | 13:01             | 21    |  |
| 2              | 02:00am - 03:00am (08/11)   | 1     | 0:19              | 0     |  |
| 47             | 11:00am - 12:00pm (08/11)   | 2     | 1:36              | 2     |  |
| 47             | 09:00am - 10:00am (08/11)   | 1     | 3:22              | 11    |  |
| Totals:        |                             | 8357  | 0:51              | 15    |  |

① Channel Number  
 ② Hourly period with activity  
 ③ Total number of calls  
 ④ Average length of call  
 ⑤ Percentage of port capacity used

**Figure 5-67. The Traffic Report**

1. Enter the date in mm/dd/yy format you want described -OR-  
Press CHOICES [F2] for a list.
2. Enter after **Hours** the hour of the day you want described, a range of hours, or **all**.  
Use a dash (-) to separate hours in a range.
3. Type **yes** after **Summarize Data** to include an activity summary -OR-  
Press **no** to exclude this information.  
Pressing CHOICES [F2] allows you to toggle between yes and no responses.
4. Press CLOSE [F3].  
The report will be displayed on the screen.  
If you wish, press PRINT [F3].

### The Vector Profile Report

This report, shown in Figure 5-68, displays the contents of CONVERSANT vectors. Enter the number of the vector you want described. The CONVERSANT Call Center Solutions system responds by listing:

- CONVERSANT vector actions
- Comments and arguments associated with them.

| VECTOR PROFILE                  |                                                                               |
|---------------------------------|-------------------------------------------------------------------------------|
| Vector: 2 ①                     | Name: -Menu main ②                                                            |
| Description: Main menu vector ③ |                                                                               |
| vector 2 steps:                 |                                                                               |
| ④                               | Step 1: SET %num_tried + 1<br>increment attempt counter. ⑤                    |
|                                 | Step 2: ANNOUNCE main menu announcement<br>comment                            |
|                                 | Step 3: GET_DIGT collect TouchTones                                           |
|                                 | Step 4: SWITCH evaluate number of digits entered                              |
|                                 | Step 5: SWITCH check for correct input                                        |
|                                 | Step 6: Jump to vector 3 (Menu_Badlnp)<br>Menu_Badlnp<br>case else, bad input |
| ⑥ vector 2 arguments:           |                                                                               |
|                                 | Step 1: ST %num_tried + 1                                                     |
|                                 | Step 2: AN                                                                    |
|                                 | Step 3: GD 10 %ci_value                                                       |
|                                 | Step 4: SW %num_dig_got = 0 4                                                 |
|                                 | Step 5: SW %ci_value =                                                        |
|                                 | Step 6: GO 3                                                                  |
| ①                               | CONVERSANT Vector number                                                      |
| ②                               | CONVERSANT Vector name                                                        |
| ③                               | CONVERSANT Vector description                                                 |
| ④                               | Action, by action step number                                                 |
| ⑤                               | Comment                                                                       |
| ⑥                               | Argument, by step number                                                      |

**Figure 5-68. The Vector Profile Report**

1. Select **no** after **Include Vector Descriptions** if you want to exclude any comments associated with actions.
2. Type **no** after **Include Vector Steps** if you do not want to list the actions CONVERSANT vectors contain.
3. Type **no** after **Include Vector Arguments** if you do not want to list the arguments associated with CONVERSANT vector actions.
4. Enter after **Vector(s)** the number of the CONVERSANT vector(s) you want described, a range of numbers, or **all**.

5. Press CHOICES [F2] after **Database** until the name of the database containing these vectors appears.

Valid databases include development, runtime, and previous runtime.

6. Press CLOSE [F3].

The report will be displayed on the screen.

If you wish, press PRINT [F3].



**NOTE:**

Valid Vector Action codes include: AD (ADA\_CALC), AN (ANNOUNCE, DYN\_ANNOU), CN (CHAN\_ASN), CV (CONVERSE), DR (DATA\_RTN), DY (DYNAMIC), EX (EXECUTE, MSG\_DROP, SPCH\_ADMN, TRANSCRIBE), GD (GET\_DIGT), GB (GLOBAL), SW (GOTO, SWITCH), HU (HANG\_ACT), GO (JUMP), DB (LOOK\_UP), OH (OFF\_HOOK), QT (QUIT), RP (REPORT), SD (SCHEDULE), ST (SET), NM (SPEAK\_NUM), XR (TRANSFER)

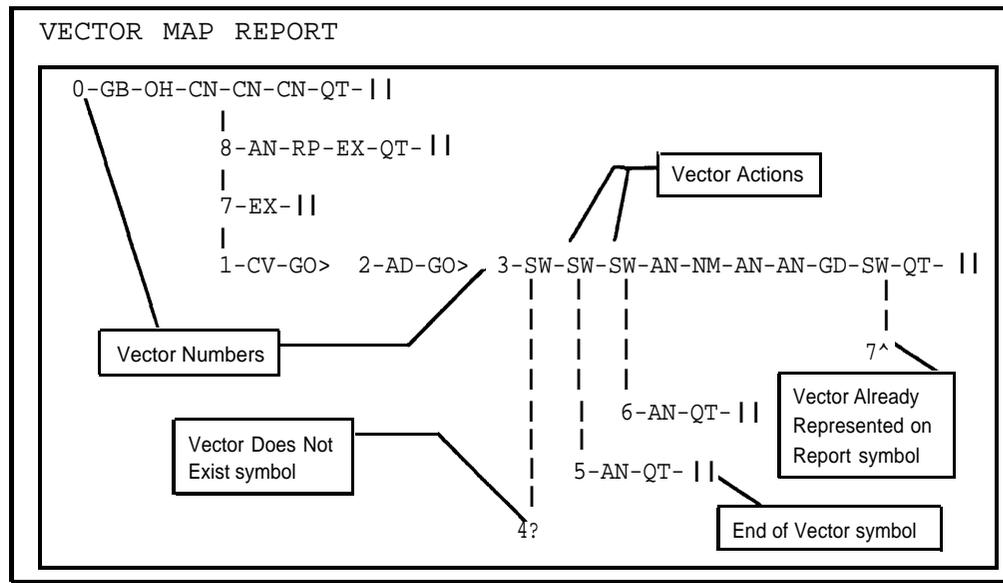
## The Vector Map Report

This report, shown in Figure 5-69, serves as a troubleshooting tool by charting the paths calls can take through the CONVERSANT Solutions system. You choose where to begin your trace by choosing a specific vector, port, or VDN. The system responds with a road map of vector actions and paths to other vectors. Before you place your development database of vectors into service, use this report to forecast the integrity of vectors, the way channels will respond to calls, and the way the system will handle calls from specific VDNs.

1. Repeatedly press CHOICES [F2] for valid selection criteria. After **Choose Selection Criteria**, select **vector** to chart possible paths from a vector, select **channel** to trace the path from a port, or select **vdn** to scan the vector database for references to a specific vdn.
2. Enter after **Selection Argument** the vector number, channel number, or vdn you want to use or enter **all**.
3. After Database, repeatedly press CHOICES [F2] for valid database names. Choose **DEVELOPMENT**, **RUNTIME**, or **PREV\_RUNTIME**.
4. Press CLOSE [F3].

The report will be displayed on the screen. Refer to the Vector Profile Report description for a key to the vector action codes.

If you wish, press PRINT [F3].



**Figure 5-69. The Vector Map Report**

In the example above, the setup vector (vector 0) uses the CHAN\_ASN action to decide which of three CONVERSANT vectors to activate: vector 8 plays a standard announcement and delivers the caller to a voice mailbox; vector 7 executes a Script Builder application; vector 1 collects information via CONVERSE and uses JUMP to move control of the call to vector 2 which, in turn, speaks an anticipated delay message and moves call control to vector 3. Vector 3 associates three conditional GOTO actions with vectors 4, 5, 6, respectively. The remaining actions in vector 3 serve callers who do not meet the conditions in any of the three GOTO actions.

### The Routing Table Report

This report, shown in Figure 5-70, displays the contents of a single routing table. Enter a routing table name. The CONVERSANT Call Center Solutions system responds by listing, numerically, values in the lookup (key) field with corresponding values in Datafield1 and Datafield2.

1. Name the routing table you want described -OR-  
Press CHOICES [F2] for a list.
2. Press CLOSE [F3]. The report will be displayed on the screen.  
If you wish, press PRINT [F3].

ROUTING TABLE

```

CONVERSANT CALL CENTER SYSTEM
ROUTING TABLE Kristen ①
MACHINE NAME: splkccc

RUN Wed Oct 6 11:03:28 CDT 1993

Total number of records: 10 ②

```

| Lookup Field | Data 1 Field | Data 2 Field |
|--------------|--------------|--------------|
| 507 ③        | 8147 ④       | 123456789 ⑤  |
| 612          | 8147         | 123456789    |
| 908          | 8112         | 123456789    |
| 1001         | 8171         | 123456789    |
| 1002         | 4            | 4            |
| 1005         | 2            | 3            |
| 2010         | 3            | 4            |
| 2020         | 4            | 5            |
| 2021         | 5            | 6            |
| 2022         | 7            | 8            |

① Routing table name  
 ② Total number of records in this table  
 ③ Value in the table's key field  
 ④ Corresponding value in Datafield1  
 ⑤ Corresponding value in Datafield2

Figure 5-70. The Routing Table Report

### The Message Count Report

This report provides a count of messages, by mailbox. When you identify the mailbox you want described, the system responds with the number of messages in each of two categories: "Ready," and "Saved." Only mailboxes containing messages are included.

1. Enter after **Mailbox** the number of the mailbox you want described or **all**.  
 --OR--  
 Press CHOICES [F2] to select from a list.
2. Press CLOSE [F3].  
 The report will be displayed on the screen.  
 If you wish, press PRINT [F3].

### The Message Log Report

This report, shown in Figure 5-71, documents Callback Messaging activity. Choose a date, a mailbox and the type of information you want reported. The CONVERSANT Call Center Solutions system responds by listing, chronologically, each time it:

- Received a message
- Attempted to access an agent
- Attempted to return a call

■ Deleted a message

MESSAGE LOG

```

CONVERSANT CALL CENTER SYSTEM
MESSAGE LOG REPORT
MACHINE NAME: splkcc
FOR DAY ENDING 10/05/93
FOR TYPE: ALL
RUN Wed Oct 6 10:54:48 CDT 1993
  
```

| Type | Time     | MailBx | Msg# | Chan | Status  | CB Stat      |
|------|----------|--------|------|------|---------|--------------|
| M ①  | 115720 ② | 1001 ③ | 1 ④  | 01 ⑤ | READY ⑥ |              |
| S    | 120000   | 1001   | 1    | 03   | READY   |              |
| C    | 120105   | 1001   | 1    | 03   | SAVED   | SUCCESSFUL ⑦ |

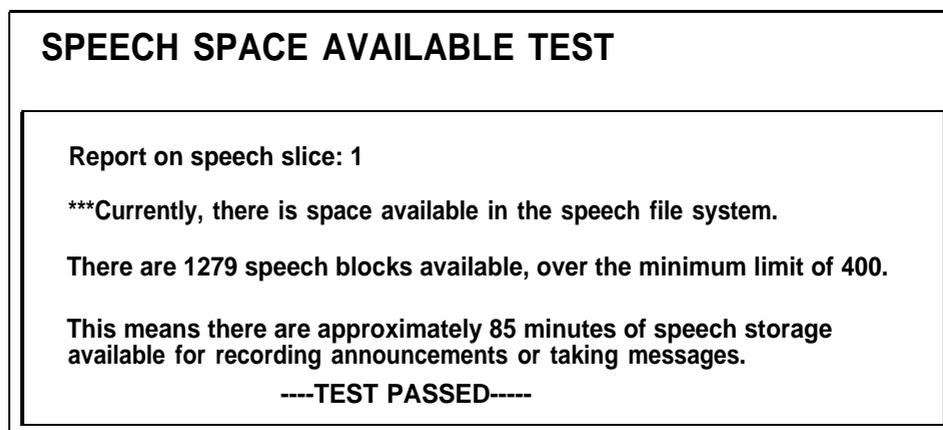
① Type of activity. M=message, S=startup (agent access attempt), C=callback attempt  
 ② Time of event  
 ③ Mailbox number  
 ④ Message number, by mailbox  
 ⑤ Channel number  
 ⑥ Status. Ready=new message, Saved=saved message.  
 ⑦ Callback Status (See Chapter 3 for more information)

**Figure 5-71. The Message Log Report**

1. Enter in mm/dd/yy format the date you want described -OR-  
 Press CHOICES [F2] for a list.
2. Enter after **Mailbox** the number of the mailbox you want described or **all**.  
 -OR-  
 Press CHOICES [F2] to select from a list.
3. Select the type of data to report -OR-  
 Press CHOICES [F2] for a list.
4. Enter **all** -OR-
  - **Message** to list messages left by callers
  - **Deleted** to list messages deleted by agents
  - **Startup** to list the system's attempts to call agents with new messages
  - **Callback** to list agents' attempts to return calls automatically
5. Press CLOSE [F3].  
 The report will be displayed on the screen.  
 If you wish, press PRINT [F3].

### Speech Space Available Test

This report, shown in Figure 5-72, gives the disk drive's storage capacity.



---

**Figure 5-72. The Speech Space Available Test Report**

The test measures the amount of speech utilized by every application on your CONVERSANT Call Center Solutions system. Upon failing this test, enter these applications and delete unnecessary speech.

### Report Scheduling

---

Use this option to select reports to generate automatically and to define the number of days to save information for reporting. Selected reports generate daily at midnight.

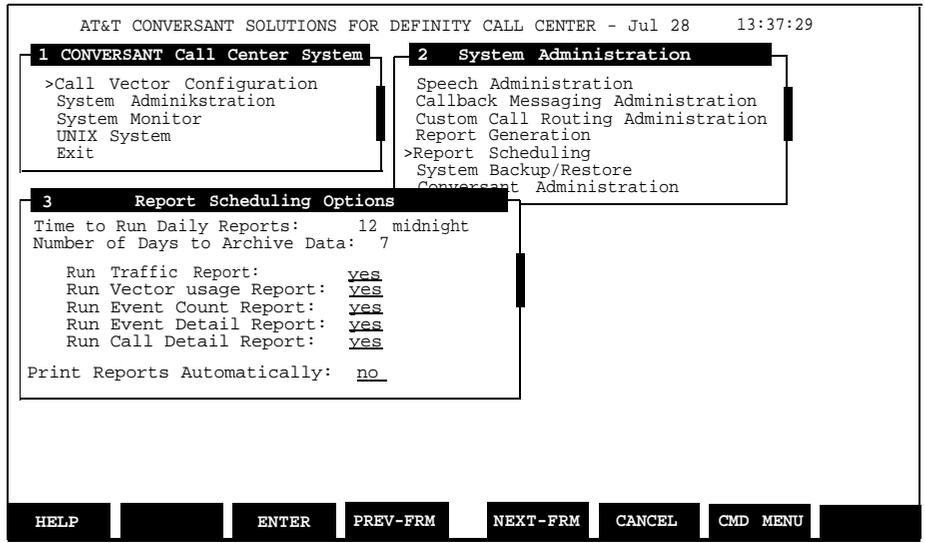


Figure 5-73. The Report Scheduling Options Menu

To schedule reports:

1. Select **Report Scheduling** at the system administration menu.  
The report scheduling options menu, shown in Figure 5-73, will appear.
2. Enter beside **Number of Days to Archive Data** the number of days to save information collected for reporting before deleting it from the disk.
3. Enter **yes** after each report choice to generate the report automatically, or **no** to avoid generating the report automatically.  
Press CHOICES [F2] to toggle between yes and no responses.
4. Enter **yes** to print these reports automatically at midnight.  
The report will be displayed on the screen.  
If you wish, press PRINT [F3].

**System Backup / Restore**

Use this menu to save and retrieve sets of CONVERSANT vectors and speech phrases. Options include:

- Restore Vector Database
- Backup Vector Database to Floppy Disk

- Backup/Restore Speech
- Backup/Restore Mailbox Configuration
- Format Floppy Disk

The CONVERSANT Call Center Solutions system maintains CONVERSANT vectors in three databases:

- Runtime database of active vectors
- Development database of duplicate run-time vectors that you can modify without instantly changing the way the system handles calls
- Archive database of previously active vectors

Speech phrases used by CONVERSANT vectors are stored in talk file 224. Phrases used by message drop mailboxes are stored in talk file 242. Standard speech phrases are stored in talk file 241.



**CAUTION:**

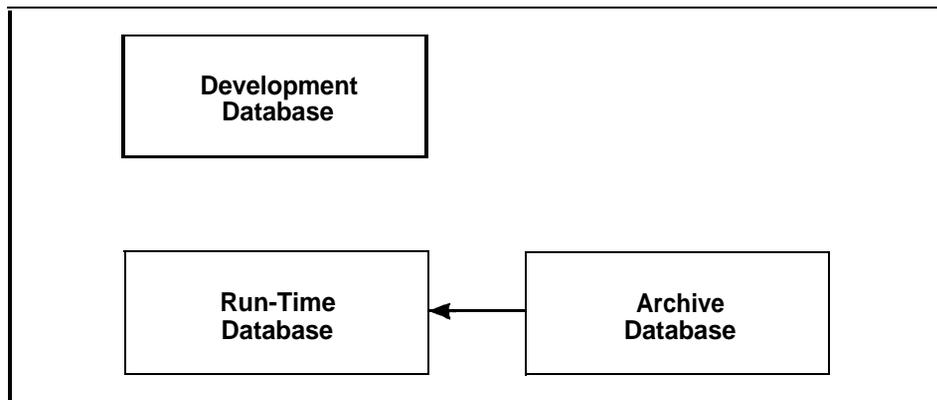
*The system will overwrite the contents of any floppy disk you use to back up data. Therefore, never use the same floppy disk to back up more than one vector database or talk file.*

### **Restore Vector Database**

Use this menu to restore the previous run-time database, to replace the development database with the current run-time database, and to replace the development database with data from a floppy disk. Menu options include:

- Restore Previous Runtime (Archive) Database
- Restore Database from Current Run-Time
- Restore Database from Floppy Disk

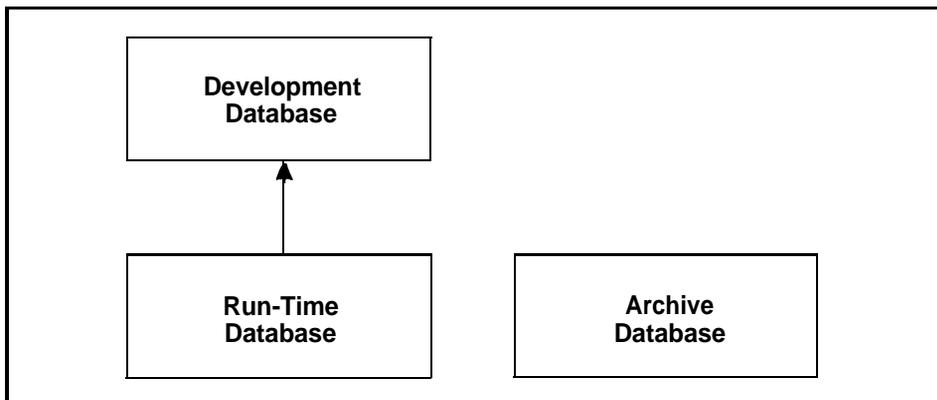
### Restoring the Previous Runtime Database



**Figure 5-74. Restoring the Previous Runtime (Archive) Database**

Use this option, shown in Figure 5-74, to undo the changes you made to the database of active CONVERSANT vectors when you last chose to place new vectors in service at the vector configuration menu.

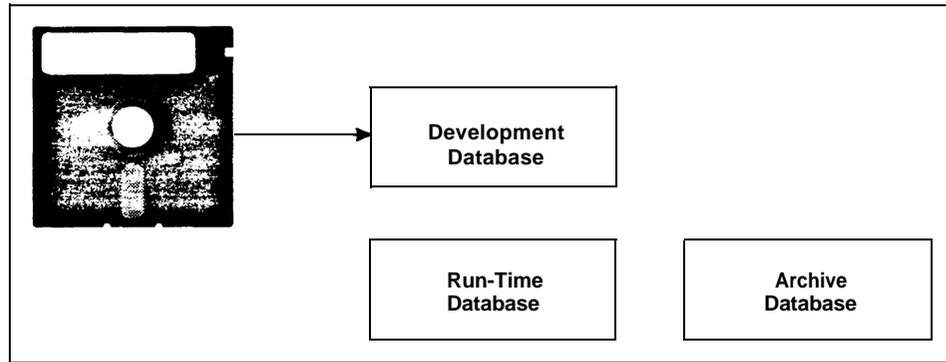
### Restoring the Database from Current Runtime



**Figure 5-74. Restoring the Database from Current Run-Time**

Use this option, shown in Figure 5-75, to undo changes you made to the development database of CONVERSANT vectors since you chose to place new vectors in service at the configuration menu.

### Restoring the Database from Floppy Disk



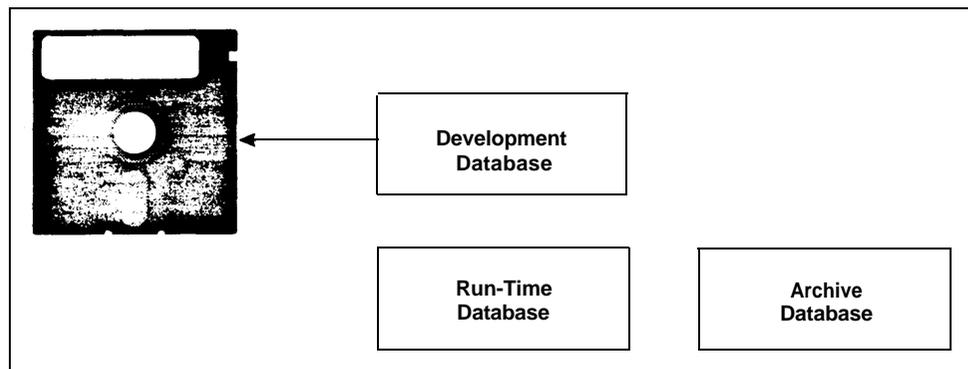
**Figure 5-75. Restoring the Database from Floppy Disk**

Use this option, shown in Figure 5-76, to overwrite the contents of the development database with a database of CONVERSANT vectors from floppy disk.

1. Insert the floppy disk into disk drive 0 or 1 in your MAP 40 or 100.
2. Enter **UNIX** or **DOS** to specify the floppy disk's format. -OR-  
Press CHOICES [F2] to toggle between responses.
3. Enter **0** or **1** to identify the disk drive you are using, -OR-  
Press CHOICES [F2] to toggle between responses.
4. Press SAVE [F3].

### Back Up Vector Database to Floppy Disk

Use this option, shown in Figure 5-77, to copy the development database of CONVERSANT vectors to a floppy disk.



**Figure 5-76. Backing Up the Development Database to a Floppy Disk**

1. Insert a floppy disk into disk drive 0 or 1 on the CONVERSANT platform.  
If you have not yet formatted this disk, press CANCEL [F6] to return to the previous menu and choose the **Format Floppy Disk** option.
2. Enter **UNIX** or **DOS** to specify the floppy disk's format. -OR-  
Press CHOICES [F2] to toggle between responses.
3. Enter **0** or **1** to identify the disk drive you are using. -OR-  
Press CHOICES [F2] to toggle between responses.
4. Press SAVE [F3].

The system will display the number of disks and the approximate number of minutes this backup will require. Follow the instructions carefully and do not insert or remove floppy disks until you are prompted to do so.

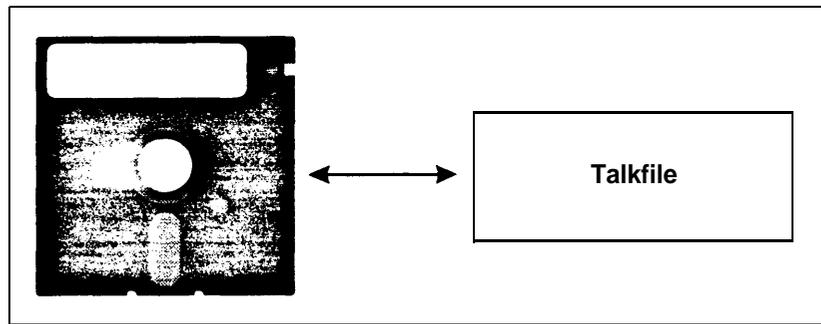


**NOTE:**

To back up the runtime database:

1. Back up the development database.
2. Select Restore Database from Current Runtime to overwrite the development database with the run-time database.
3. Perform your backup.
4. Select Restore Database from Floppy Disk to restore the original vectors to the development database.

## Back Up/Restore Speech



---

**Figure 5-77. Backing Up and Restoring Speech**

Use this option, shown in Figure 5-78, to move speech phrases between talk files and floppy disks.

1. Choose the activity you want to perform. Enter **Backup** or **Restore**  
-OR- Press CHOICES [F2] to toggle between responses.
2. Insert a floppy disk into disk drive 0 or 1 on the CONVERSANT Call Center Solutions 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.

3. Select one of the following 3 talk files:
  - 224 (Vector phrases)
  - 242 (Mailbox phrases)
  - 241 (Standard Speech phrases)
4. Enter **0** or **1** to identify the disk drive you are using. -OR-  
Press CHOICES [F2] to toggle between responses.
5. Press SAVE [F3].

## Back Up/Restore Mailbox Configuration

Use this option to move data between the database of mailbox configuration and a floppy disk.

1. Enter **Backup** or **Restore** -OR-  
Press CHOICES [F2] to toggle between responses.
2. Insert a floppy disk into drive 0 or 1 on the CONVERSANT Call Center Solutions platform.

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 Floppy Disk** option.

3. Enter **0** or **1** to identify the disk drive you are using -OR-  
Press CHOICES [F2] to toggle between responses.
4. Press SAVE [F3].

### **Format Floppy Disk**

Use this option to initialize a 3 1/2" high density floppy disk that has not yet been formatted. Floppy disks need only to be formatted once.

1. Insert a floppy disk into disk drive 0 or 1 on the CONVERSANT Call Center Solutions platform.
2. Enter **UNIX** or **DOS** to choose a format. -OR-  
Press CHOICES [F2] to toggle between responses.
3. Enter **0** or **1** to identify the disk drive you are using. -OR-  
Press CHOICES [F2] to toggle between responses.
4. Press SAVE [F3].



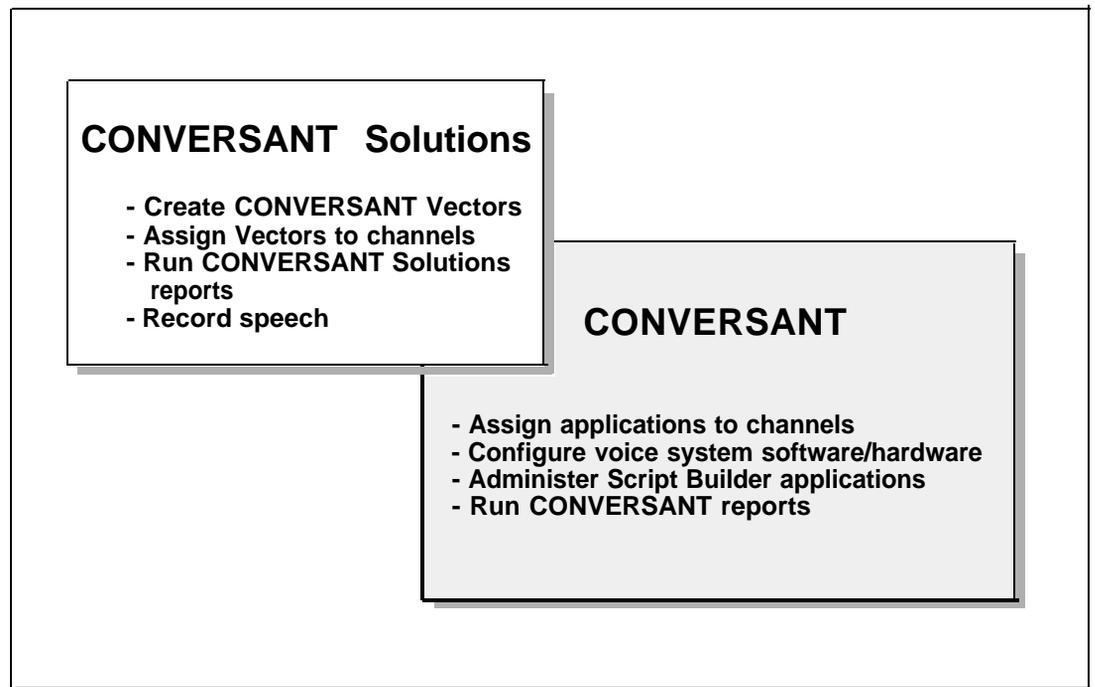
#### **CAUTION:**

*Whenever you format a floppy disk, you permanently erase its contents.*

### **CONVERSANT Administration**

---

Use this option to return to the CONVERSANT VIS Version 3 window system.



---

**Figure 5-78. The CONVERSANT VIS and CONVERSANT Call Center Solutions Windows**

---

This chapter describes a number of specific sample applications and how to build the CONVERSANT vectors for each.

### Standard Announcement Application

#### Current Situation

Company A maintains a customer service call center to handle a significant number of customer comments and questions. Agents spend most of their time responding to questions about flagship products, but they also occasionally announce new products and special promotions. Company A wants to make better use of its limited human resources, but recognizes the importance of giving customers the attention they deserve. Currently, its DEFINITY G3 is programmed to play some announcements, but these are difficult to update and administer.

#### CONVERSANT Solutions

Standard announcements can respond to callers with different messages designed both to answer their most common questions and maintain their interest during their wait in queue. And, because authorized users can record standard announcements from any touch-tone telephone, Company A can provide the latest product information to callers.

## CONVERSANT Vector

### Add Phrase

1. Highlight **System Administration** at the main menu and press [ENTER].
2. Highlight **Speech Administration** and press [ENTER].
3. Highlight **Vector Phrase Administration** and press [ENTER].
4. Highlight **Add New Phrase** and press [ENTER].

The system will automatically create a phrase number.

5. Input a phrase tag to identify the speech phrase to play and press [ENTER].
6. Input phrase text if you wish.

Create and record a phrase for each announcement you desire. (See Chapter 6 for more about defining and recording phrases.)

7. Press SAVE [F3].
8. Press CANCEL [F6] to return to the main menu.

### Vector A — Standard Announcement



#### NOTE:

Standard Announcements are not available over digital (Line-Side T1) lines.

1. Highlight **Call Vector Configuration** and press [ENTER].
2. Highlight **Create New Vector** and press [ENTER].  
A vector worksheet will appear.
3. Input any appropriate name and corresponding description and press [ENTER].  
The description field is for information only.
4. Press CHOICES [F8], [F2] for a list of valid choices in the action field.
5. Highlight **Announce** and press [ENTER].
6. Press CHOICES [F2] for a list of existing phrases. Highlight the phrase tag desired and press [ENTER].
7. Press CLOSE [F3] to save the announcement definition.
8. Select QUIT as the last action in your CONVERSANT vector.

9. Press SAVE [F8], [F3] again to save the vector itself.

Repeat this procedure (steps 2 through 9) for each individual announcement.

10. Use the setup vector to put each vector in service on the appropriate channels. (See Chapter 5 for step-by-step instructions.)



**NOTE:**

Remember to place new vectors in service.

### **DEFINITY Vector**



**NOTE:**

If the following language is unfamiliar to you, read the first few chapters of the *AT&T DEFINITY Communications System, Generic 3 V2 Call Vectoring Guide*, 555-230-520.

Assumptions: Agent Split is 1, Announcement Extensions are 1000, 1001, 1002 and 1003.

1. queue to main split 1 priority medium
2. wait time 10 seconds hearing ringback
3. announcement extension 1000 (CONVERSANT Call Center Solutions Standard Announcement) "Thank you for calling [company]. A representative will be with you shortly. Thank you for your patience."
4. announcement extension 1001 (CONVERSANT Call Center Solutions Standard Announcement) *New Product Info Announcement*
5. wait time 30 seconds hearing music
6. announcement extension 1002 (CONVERSANT Call Center Solutions Standard Announcement) "Thank you for continuing to hold..."
7. wait time 30 seconds hearing music
8. announcement extension 1003 (CONVERSANT Call Center Solutions Standard Announcement) "We appreciate your patience..."
9. wait time 30 seconds hearing music
10. goto step 5, if unconditionally

## **Dynamic Announcements**

---

### **Current Situation**

---

For many of its products, Company B provides a unique telephone number to call for support. Customers frequently need to call agents for information, but they do not enjoy waiting for service for long periods. In order to respond to their most frequently asked questions, Company B wants to offer a number of product or service-specific announcements, not just general information. Fortunately, the CONVERSANT Solutions system can greatly expand the speech storage capacity of the DEFINITY G3.

### **CONVERSANT Solutions**

---

Dynamic announcements can respond to callers with specific announcements based on call information passed from the DEFINITY G3 to the CONVERSANT Call Center Solutions platform. Each product line or service has a corresponding DNIS number. This number is passed as a VDN to the CONVERSANT Call Center Solutions platform, which processes the VDN and plays the appropriate announcement.

### **CONVERSANT Vector**

#### **Add Phrase**

1. Highlight **System Administration** at the main menu and press [ENTER].
2. Highlight **Speech Administration** and press [ENTER].
3. Highlight **Vector Phrase Administration** and press [ENTER].
4. Highlight **Add New Phrase** and press [ENTER].

The system will automatically create a phrase number.

5. Change it to the VDN number that the CONVERSANT Call Center Solutions platform will receive via the *converse* step.

Keep in mind that the phrase number will be passed to CONVERSANT Call Center Solutions by the DEFINITY switch. This information tells the system which announcement to play. You may also record your phrase at this time. (See Chapter 5 for more about defining and recording phrases.)

6. Input a phrase tag and press [ENTER].
7. Input a phrase description in the description field if you wish.
8. Press SAVE [F3].
9. Press CANCEL [F6] to return to the main menu.

### Vector A — Dynamic Announcement

1. Highlight **Call Vector Configuration** and press [ENTER].
2. Highlight **Create New Vector** and press [ENTER].
3. Input any appropriate name and description and press [ENTER].  
The description field is for information only.
4. Press CHOICES [F8], [F2] for a list of valid choices in the action field.
5. Highlight **CONVERSE** and press [ENTER].
6. Enter the number of digits to collect via the CONVERSE action (4 for this application.)
7. Press CHOICES [F2] for a list of valid entries for the variable field.  
The recommended variable for this action is *%vdn*.
8. Highlight *%vdn* and press [ENTER].
9. Press CLOSE [F3] to close the CONVERSE action.
10. Move the cursor to Step 2 and press CHOICES [F8], [F2] for a list of valid actions.
11. Highlight **DYN\_ANNOU** and press [ENTER].
12. Define the phrase to play by selecting *%vdn*.
13. Press CLOSE [F3] to save the dynamic announce definition.
14. Select QUIT as the last action in your vector.
15. Press SAVE [F8], [F3] to save the vector itself.
16. Use the setup vector to assign the dynamic announcement vector to appropriate CONVERSANT Call Center Solutions channels. (See Chapter 5 for step-by-step instructions.)

### DEFINITY Vector

Assumptions: Agent Split is 1, Announcement Extensions are 1000 and 1001, CONVERSANT Call Center Solutions split is 2, 15 agents are staffed on average.

1. queue to main split 1 priority medium
2. go to step 8 if oldest call waiting in split 1 > 120 seconds
3. go to step 8 if calls queued in split 1 > 4
4. wait time 10 seconds hearing ringback
5. announcement extension 1000 (short announcement on Integrated Announcement Board or CONVERSANT Call Center Solutions standard announcement) "Thank you for calling COMPANY. A representative will be with you shortly. Thank you for your patience."
6. wait time 30 seconds hearing music
7. goto step 5, if unconditionally

8. wait time 10 seconds hearing ring back
9. converse on split 2 passing VDN (must match phrase # on CONVERSANT Call Center Solutions system)
10. goto step 5, if unconditionally

### **Comments**

The DEFINITY vector first checks the status of the agent split, based on oldest call in queue and total number of calls in queue. If the call volume is under a given level, as defined by the DEFINITY vector, the call is simply queued to the split. If the call volume is over the specified level, a dynamic announcement residing on the CONVERSANT platform is played.

At this point, coordinated interaction between the DEFINITY switch and the CONVERSANT Call Center Solutions is important. As previously described, the CONVERSANT vector creates phrase numbers for each announcement. The DEFINITY vector, through the *converse* vector step, passes a number, such as VDN, to the CONVERSANT platform. The CONVERSANT vector uses this number to pinpoint the message to play, and it plays that message over one port to the one caller only. With this type of application, any CONVERSANT Call Center Solutions port can play any dynamic announcement on the system.

## **Anticipated Delay Announcement Application**

---

### **Current Situation**

---

The C Company experiences peak call volume between the hours of 12:00 and 2:00 each weekday. During this time, callers commonly wait more than 15 minutes in a queue for an agent, angering many. Company C cannot justify the cost of adding staff to accept more calls during these hours, but seeks a solution that will smooth peaks in call volume and handle a portion of calls when overall call volume is low.

### **CONVERSANT Call Center Solutions**

---

Anticipated delay announcements are messages estimating a caller's wait time in queue. This sample application uses the *converse* vectoring step on the G3V2 switch to pass each call and its queue position to the CONVERSANT announcement platform. There, your pre-defined estimates of staff size and average call duration are combined to determine how long the caller will wait and an appropriate delay message is played.

## CONVERSANT Vector

### Add Phrase

1. Highlight **System Administration** at the main menu and press [ENTER].
2. Highlight **Speech Administration** and press [ENTER].
3. Highlight **Vector Phrase Administration** and press [ENTER].
4. Highlight **Add New Phrase** and press [ENTER].

The system will automatically create a phrase number.

- a. Input a phrase tag.  
This is a description field that identifies the speech phrase.
  - b. Press [ENTER].
  - c. Input a phrase description and press [ENTER].
  - d. Press SAVE [F3].
5. Repeat steps a., b., c., and d. for each phrase you wish to create. For the application outlined here, you would need to record 3 phrases:
    - a. A standard announcement (corresponding to step 5 in the DEFINITY vector below)
    - b. A lead phrase for the anticipated delay announcement: "Thank you for calling...wait to be approximately"
    - c. A tag phrase for the anticipated delay announcement: "minutes"
  6. Press CANCEL [F6] to return to the main menu.



#### NOTE:

To provide the calculated wait, the SPEAK\_NUM action uses standard speech that does not need to be recorded. However, you can re-record this standard speech to provide one consistent voice when speaking an ADA announcement to callers. (See Chapter 6 for more about re-recording standard speech.)

For this application, create a series of four CONVERSANT vectors, as well as a dynamic vector to dynamically allocate vectors to CONVERSANT Call Center Solutions channels, as described below:

### VECTOR A — Standard Announcement



#### NOTE:

Standard Announcements are not available over digital (Line-Side T1) lines.

1. Highlight **Create New Vector** and press [ENTER].

2. Input any appropriate name and corresponding description into each field and press [ENTER].  
The vector name and fields are for information purposes only.
3. Press CHOICES [F8], [F2] for a list of valid entries in the action field.
4. Highlight **ANNOUNCE** and press [ENTER].
5. Press CHOICES [F2] for a listing of existing phrases.
6. Highlight the phrase tag desired and press [ENTER].
7. Press CLOSE [F3] to save the announcement definition.
8. Select **QUIT** as the last action in your CONVERSANT vector.
9. Press SAVE [F8], [F3] again to save the vector itself.

### **VECTOR B — Collect Queue Position**

1. Highlight **Create New Vector** and press [ENTER].
2. Input any appropriate name and corresponding description into each field and press [ENTER].
3. Press CHOICES [F8], [F2] for a list of valid entries in the action field.
4. Highlight **CONVERSE** and press [ENTER].
5. Press CHOICES [F2] for a list of valid entries in the number of digits to collect field. Highlight **3** and press [ENTER].
6. The recommended choice for this application is *%data1* for queue position.
7. Press CHOICES [F2].
8. Highlight *%data1* and press [ENTER].
9. Move your cursor to the next available line.
10. Select and define JUMP in the list of valid actions and press [ENTER].  
JUMP moves control of the call to the next vector in the series. For this application, pass control of the vector to the anticipated delay calculation outlined below.
11. Press SAVE [F8], [F3] again to save the vector.

### **VECTOR C — Anticipated Delay Calculation**

1. Highlight **Create New Vector** and press [ENTER].
2. Input any appropriate name and corresponding description and press [ENTER].
3. Press CHOICES [F8], [F2] for a list of valid entries in the action field.

4. Highlight **ADA\_CALC** and press [ ENTER ].
5. Select and define the fields for average call length, queue position (*%data1*), and result (*%data2*).
6. Fill in the table for the number of agents staffed over the course of the week.  
  
It is not necessary to enter zeros to represent times when there are no agents staffed.
7. Press CLOSE [ F3 ] to save the action.
8. Move your cursor to the next available line and define JUMP as the next action.  
  
JUMP moves control of the call to the next vector in the series. For this application, pass control of the vector to the anticipated delay announcements outlined below.
6. Press SAVE [ F8 ], [ F3 ] again to save the vector.

#### **VECTOR D — Anticipated Delay Announcements**

1. Highlight **Create New Vector** and press [ ENTER ].
2. Input any appropriate name and corresponding description and press [ ENTER ].
3. Press CHOICES [ F8 ], [ F2 ] for a list of valid entries in the action field.
4. Highlight **ANNOUNCE** and press [ ENTER ].
5. Press CHOICES [ F2 ] for a list of existing phrases.
6. Highlight the ADA lead phrase tag and press [ ENTER ].
7. Press CLOSE [ F3 ] to save the announcement definition.
8. Move your cursor to the next available line and press CHOICES [ F8 ], [ F2 ] for a list of valid actions to define.
9. Select **SPEAK\_NUM** from the menu and press [ ENTER ].
10. Press CHOICES [ F2 ] for a list of variables.
11. Highlight *%data2* and press [ ENTER ].
12. Press CLOSE [ F3 ] to save the action.
13. Repeat steps 3 through 7 to define the anticipated delay announcement tag phrase.
14. Select and define QUIT as the last action.
15. Press SAVE [ F8 ], [ F3 ] again to save the vector.

## VECTOR — DYNAMIC

(Routes calls to vectors dynamically, based on VDN passed.)

1. Highlight **Call Vector Configuration** and press [ENTER].
2. Highlight **Create New Vector** and press [ENTER].
3. Input any appropriate name and corresponding description and press [ENTER].
4. Press CHOICES [F8], [F2] for a list of valid entries in the action field.
5. Highlight **CONVERSE** and press [ENTER].
6. Press CHOICES [F2] for a list of valid entries in the field number of digits to collect.
7. Highlight **4** and press [ENTER].
8. Press CHOICES [F2]. The recommended variable choice for this dynamic vector allocation is *%vdn*.
9. Highlight *%vdn* and press [RETURN].
10. Press CLOSE [F3] to save the action.
11. Move your cursor to the next available line.
12. Select and define a SWITCH action to send call control to the collect queue position vector, based on receipt of the corresponding VDN.  
  
Other VDNs and corresponding CONVERSANT vectors may also be defined here to assign CONVERSANT vector applications to CONVERSANT Call Center Solutions channels, based on VDNs passed by the DEFINITY switch.
13. Select and define QUIT as the last action.
14. Press SAVE [F8], [F3] again to save the vector.
15. Use the setup vector to assign the dynamic vector and standard announcement vector to the appropriate CONVERSANT channels.

## DEFINITY Vector

Assumptions: Agent split is 1, Announcement Extension is 1000, CONVERSANT Call Center Solutions split is 2.

1. queue to main split 1 priority medium
2. goto step 8 if oldest call waiting in split 1 > 120 seconds
3. goto step 8 if calls queued in split 1 > 4
4. wait time 10 seconds rearing ringback

5. announcement extension 1000

(hear short announcement on Integrated Announcement Board or CONVERSANT Solutions Standard Announcement) "Thank you for calling the C Company. At the present time, all of our representatives are busy assisting other customers. Please hold. A representative will be with you shortly."

6. wait 30 seconds hearing music

7. goto step 4 if unconditionally

8. converse on split 2 priority medium passing \* and *qpos*.

(hear announcement on CONVERSANT Call Center Solutions Platform)  
"Thank you for calling the C Company. We estimate your wait to be approximately X minutes."

9. wait 30 seconds hearing music

10. goto step 5 if unconditionally

 **NOTE:**

VDN will be used to dynamically allocate an anticipated delay announcement vector within a series of ports.

### **Comments**

This application has been outlined to describe one possible call scenario for the anticipated delay announcement application. If this series of vectors meets your needs for anticipated delay announcements, use the anticipated delay announcement template as the basis for anticipated delay announcement applications.

## **Custom Call Routing Application**

### **Current Situation**

Agents in the circulation department at D Company provide national coverage for service requests, complaints, and billing inquiries for a variety of daily and weekly publications. For this reason, call handling is prolonged when an agent accepts a call from a customer needing information or service that no agent can readily provide. The D Company seeks a solution that would allow agents to provide more specialized and responsive service to customers.

## **CONVERSANT Solutions**

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By collecting and transferring information about the caller along with the call, Custom Call Routing software allows the call center to chart the path of each call as it is routed to extensions by means of ANI (automatic number identification), DNIS (dialed number information service), or collected digits passed from the switch to the CONVERSANT Call Center Solutions platform and matched to a system administrable routing table. In addition, such information as a customer account number can be displayed on the agent's telephone as the call is being received.

## **CONVERSANT Vector**

### **Add Table**

1. Highlight **System Administration** and press [ENTER].
2. Highlight **Custom Call Routing Administration** and press [ENTER].
3. Highlight **Routing Table Administration** and press [ENTER].
4. Select **Add Table** and press [ENTER].
5. Populate the fields for table name and, if you wish, description.
6. Press CLOSE [F3] to save the table name.
7. Select **Import from Floppy** to populate your call routing table.
8. Insert the DOS floppy disk containing the information you want to use into disk drive 0 or 1 on the CONVERSANT Call Center Solutions platform.
9. Enter the routing table name -OR-  
Press CHOICES [F2] to select from a list.
10. Identify the disk drive you are using. Enter either **A** or **B** or press CHOICES [F2] to select your response.
11. Enter the path to the file's location on disk. Do not include the file name, but be sure to begin and end the path with a forward slash (/).
12. Press DIR [F4] for a directory of files on disk and enter the file name.
13. Identify the delimiter you use in your file to separate items of information. The CONVERSANT Call Center Solutions system will use this delimiter to assign information appropriately to columns 1, 2, and 3.
14. Press SAVE [F3] to import data.
15. Press CANCEL [F6] to return to the main menu.

### **VECTOR — DYNAMIC**

1. Highlight **Call Vector Configuration** and press [ENTER].
2. Highlight **Create New Vector** and press [ENTER].

3. Input any appropriate name and corresponding description and press [ENTER].
4. Press CHOICES [F8], [F2] for a list of valid entries in the action field.
5. Highlight **CONVERSE** and press [ENTER].
6. Press CHOICES [F2] for a list of valid entries in the number of digits to collect field.
7. Highlight **4** and press [ENTER].

The recommended variable for this dynamic vector allocation is *%vdn*.
8. Press CHOICES [F2].
9. Highlight *%vdn* and press [RETURN].
10. Press CLOSE [F3] to save the action.
11. Move your cursor to the next available line and select and define the SWITCH action to send call control to the appropriate Custom Call Routing vector based receipt of the corresponding VDN.

For example, this routing application could be defined in the same dynamic vector as previously defined for the ADA application, in order to dynamically allocate the routing or ADA application to a CONVERSANT Call Center Solutions channel based on the VDN passed.
12. Press SAVE [F8], [F3] again to save the vector.
13. Use the setup vector to assign the dynamic vector to the appropriate CONVERSANT Call Center Solutions channels. (See Chapter 5 for step-by step instructions.)

### Vector A — Routing

1. Highlight **Call Vector Configuration** and press [ENTER].
2. Highlight **Create New Vector** and press [ENTER].
3. Input any appropriate name and corresponding description and press [ENTER].
4. Press CHOICES [F8], [F2] for a list of valid entries in the action field.
5. Choose **CONVERSE** and press [ENTER].

The fields to define are *number of digits* and *load into variable*. The recommended choices for this application are *10* digits and the variable *%ani* to collect ANI.
6. Enter **10** digits and highlight *%ani* and press [ENTER].
7. Move your cursor to the next available line and select and define the LOOK\_UP action to map the ANI passed via the *converse* step to the appropriate agent extension.
8. Press CHOICES [F2] for a list of valid entries in the table field.

9. Select the name of the table you created for this application and press [ENTER].
10. Press CHOICES [F8], [F2] for a list of valid field entries.
11. Select *%ani* and press [ENTER].  
Continue to define the files as follows:
  - # of matches (recommend *%matched*)
  - *%data 1* (recommend *%data1* for holding the extension matched to ANI provided)
  - *%data 2* (recommend *%data2* to pass an account number back to the switch).
12. Press CLOSE [F3] to save the action.
13. Move your cursor to the next available line and select and define the DATA\_RTN action.
14. Enter a Feature Access Code that the DATA\_RTN action prompts you for.  
This code must match that defined on the switch for DATA\_RTN to pass the digits held in the variable *%data1* (containing the routing destination) and *%data2* (containing the digits for the agent's display.)
15. Select and define QUIT as the last action.
16. Press SAVE [F8], [F3] again to save the vector.  
Repeat these steps for each routing table you wish to define.

## DEFINITY Vectors

Assumptions: CONVERSANT Call Center Solutions split is 2.

### DEFINITY Vector 1000

1. converse on split 2 priority med passing vdn and ani
2. collect 4 digits after announcement none
3. route to digits with coverage y

### DEFINITY Vector 1001

1. collect 10 digits after announcement of extension
2. queue to main split 2 priority high



**NOTE:**

VDN would be used to dynamically allocate multiple Custom Call Routing vectors and mapping calls to appropriate CONVERSANT vectors based on VDN.

### Comments

This application has been outlined to describe one possible call scenario for the Custom Call Routing package. If this series of vectors meets your application needs for Custom Call Routing, use the custom call routing template as the basis for Custom Call Routing applications.

## Callback Messaging

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### Current Situation

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The C Company has already implemented anticipated delay announcements to tell callers how long they can expect to wait in queue. Now, it wants to offer callers the ability to leave a message to request a callback when agents are available, or simply to place a request that does not require an agent's assistance.

### CONVERSANT Solutions

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This Callback Messaging application provides an alternative for the caller who faces a long wait for an agent. The application allows the call center to define and administer a series of prompts for touch tone and voice information about the caller's identity and needs. Global settings may be adjusted to contact available agents with messages automatically. Or, agents may call in to transcribe messages when they find that their message waiting lamps have been activated. Agents can return calls by commanding the system to dial the touch-tone telephone numbers callers leave with their messages.

### CONVERSANT Vector

Assumptions: Speech and vectors for the anticipated delay announcement application have already been defined, recorded, and assigned.

#### Add Phrase

1. Highlight **System Administration** at the main menu and press [ENTER].
2. Highlight **Speech Administration** and press [ENTER].
3. Highlight **Vector Phrase Administration** and press [ENTER].
4. Highlight **Add New Phrase** and press [ENTER].  
The system will automatically create a phrase number.
5. Input a phrase tag to identify the speech phrase to play and press [ENTER].
6. Input a phrase description, if you wish, and press [ENTER].
7. Press SAVE [F3].

For the application outlined here, you would need to record a phrase to prompt the caller to choose to leave a message, or wait in queue for an available agent, such as: "If you wish to leave a message for callback, press 1. If you wish to continue to hold, press 2." (See the Phrase Administration Section for help while recording and saving phrases.)

8. Press CANCEL [F6] to return to the speech administration menu.
9. Highlight **Mailbox Phrase Administration** and press [ENTER].
10. Highlight **Add New Phrase** and press [ENTER].

The system will automatically create a phrase number.

11. Input a phrase tag to identify the speech phrase to play and press [ENTER].
12. Enter a phrase description, if you wish, and press [ENTER].
13. Press SAVE [F3].

Repeat steps 10 through 13 for each phrase you wish to create. For the application outlined here, you would need to record 7 phrases:

- Informational announcement for transcription: "The following message has been left in your mailbox."
- Prompt for caller name: "Please speak your first name and spell your last name."
- Prompt for callback telephone number: "Please enter your 10 digit callback number."
- Prompt for request: "Please tell us how we can help you today. You will have 30 seconds to state your request."
- Closing phrase: "Thank you for leaving a message. We will make every effort to return your call within the next three hours."
- Invalid input: "That was an invalid entry. Please try again."
- No digits received: "We have not received your touch-tone input."

(See the phrase administration section in Chapter 5 for assistance in recording and saving phrases.)

14. Press CANCEL [F6] to return to the main menu.

### Mailbox Administration

1. Highlight **System Administration** at the main menu and press [ENTER].
2. Highlight **Callback Messaging Administration** and press [ENTER].
3. Highlight **Mailbox Administration** and press [ENTER].
4. Select **Create a New Mailbox**.

You will need to define the following parameters for each mailbox. You may use the CHOICES key to select the appropriate phrases:

- Mailbox ID: enter 111 (or appropriate VDN).
  - Mailbox password for security in transcription: enter 111
  - Agent access number: enter 2008 (or corresponding DEFINITY VDN)
  - Message waiting light extension: enter transcriber's extension
  - Transcription name phrase: choose the first phrase you defined in the preceding section
5. Press NEXTPAGE [F5] to define the messaging prompts for your mailbox.
  6. Enter in the first column **H** (high quality for voice, **L** (lower quality for voice), **T** (Touch-Tone), or **P** (Callback Phone Number) to identify the type of input to expect after each prompt.
  7. Select the appropriate phrases in the second column with the CHOICES key.
  8. Enter in the third column:
    - Number of digits for touch-tone and CPN
    - Length of the message in seconds for voice input
    - Closing phrase: Choose the last phrase you defined in the preceding section.
  9. Press CLOSE [F3] to return to the callback administration menu.
  10. Highlight **Mailbox Global Settings** and press [ENTER].

You will need to define the following global parameters:

    - Retry interval: enter 2 minutes
    - Agent access channels: enter 0-1
    - Message waiting lamp access channel: enter the number of a port that you can dedicate to this function.
    - Message waiting lamp access ON: enter the feature access code corresponding to your switch
    - Message waiting lamp access OFF: enter the feature access code corresponding to your switch
    - Outside line access: enter a number if required
    - Local area code: enter your local area code
    - Callback conference time: enter 120 seconds
    - Type transfer to caller: Choose "intelligent" if all channels connecting the CONVERSANT with your PBX are analog; choose "blind" if any of these ports are digital (Line-Side T1).
  11. Press CLOSE [F3] to return to the callback administration menu.
  12. Highlight **Agent Callback Hours** and press [ENTER].

13. Fill in the table to indicate that you would like agent callback to be attempted between the hours of 2:00 PM and 4:00 PM.
14. Press CLOSE [F3] to return to the callback administration menu.
15. Press CANCEL [F6] to return to the main menu.

For the vectors in this Callback Messaging application,

1. Use the vectors (A, B, and C) described in the anticipated delay announcement sample application just as they are.
2. Use vector D, but change Step 13 in the documentation by changing QUIT to the action JUMP, so that call control can be passed to the next vector in the series, the +menu settings vector (E) you will create, as described in steps a. — c. below.
3. Create vectors F, G, H, and I as described in steps d. — t. on the next pages.
4. Create a dynamic vector as described in steps a.— k in the section titled VECTOR-DYNAMIC.

By way of review, here are the four vectors in the previous sample application. Remember to use the JUMP action in Step 13 of vector D to move call control to the +menu settings vector, the next in the series.

- VECTOR A — Standard announcement (See standard announcement CONVERSANT vector for ADA application.)
- VECTOR B — Collect queue position (See collect queue position CONVERSANT vector for ADA application.)
- VECTOR C — Anticipated delay calculation (See anticipated delay calculation CONVERSANT vector for ADA application.)
- VECTOR D — Anticipated delay announcement (See anticipated delay calculation CONVERSANT vector for ADA application.)

Next, create vectors E, F, G, H, and I as follows.

- a. Highlight **Select Vector Template** and press [ENTER].
- b. Highlight **Menu Template** and press [ENTER].  
The first vector in this template series will be +menu settings (E). You will not need to define anything in this CONVERSANT vector.
- c. Make a note of the CONVERSANT vector number in the upper right hand corner of the screen, and press SAVE [F8], [F3] to save the vector.
- d. Highlight **Edit Vector** and press [ENTER].

- e. Select the next vector in the template series.  
For example, if the menu setting vector number was 4, select vector number 5 from the edit vector menu. The title of this vector will be -menu main (F).
- f. Highlight action step 2, **ANNOUNCE**, at the main menu vector and press DEFINE [F4].
- g. Press CHOICES [F2] and select the phrase you previously recorded for the message drop option menu (described in the add phrase section earlier in this chapter.)
- h. Press CLOSE [F3] to save the action.
- i. Highlight action step 3, **GET\_DIG**, and press DEFINE [F4].  
The fields you will need to define are:
  - Number of digits to collect from the caller
  - Variable to load with the collected digit.For this application, we will collect a single digit.
- j. Enter **1** in the first field.
- k. Use the variable *%ci\_value* to capture the digit from the caller.
- l. Select CLOSE [F3] to save the action.  
Actions 4 and 5 are SWITCH actions. You will not need to modify the first SWITCH action, which monitors the *%num\_dig\_got* variable (loaded automatically in the application) and sends the call to vectors -menu time out or -menu too few if the caller enters nothing or too few digits.
- m. Highlight the second SWITCH action and press CHOICES [F8], [F3] to select a new action.
- n. Select **DATA\_RTN** to replace the SWITCH action with a data return function.
- o. Define the feature access code and data segment as *%ci\_value*.
- p. Press CLOSE [F3] to save this action.

For this application, we will send the digits collected to the DEFINITY for evaluation as to whether the caller wishes to remain in queue, or leave a message for callback. This makes it possible to take the call out of queue should the caller choose to leave a message.

This is accomplished by routing the caller to a DEFINITY vector that accesses the message drop vector in a status that is not queued to an agent.

DEFINITY vector steps 9 - 11 describe how to collect the digits from the CONVERSANT DATA\_RTN action. The DEFINITY vector then evaluates these digits to determine how to route the call. (1 = message drop vector. 2 = remain in queue)

- q. Remove the final JUMP action from this vector by pressing REMOVE [F3].
- r. Select CONT [F3] when prompted for verification of the remove action.
- s. Press SAVE [F8], [F3] again to save the vector.
- t. There are three remaining vectors in this template series: -menu bad input (G); -menu time out (H); and -menu too few (I). You will need to edit each template's ANNOUNCE step as follows:

- Menu bad inp - Choose the invalid input announcement you recorded earlier
- Menu time out - Choose the input not received announcement you recorded earlier
- Menu too few - Choose the invalid input announcement you recorded earlier

Repeat Steps 6 through 8 in this section for assistance in editing these three vectors and announcements. Remember to save each vector as you exit.

#### VECTOR J — Message Drop

- a. Highlight **Create a New Vector** and press [ENTER].
- b. Input any appropriate name and corresponding description and press ENTER after entering data into each field.  
The vector description is for information only.
- c. Press CHOICES [F8], [F2] for a list of valid entries in the action field.
- d. Highlight **MSG\_DROP** and press [ENTER].
- e. Press CHOICES [F2] for a list of existing mailbox numbers and valid variable names.



**NOTE:**

Because the MSG\_DROP action can use the value of a variable instead of a specific number to determine which mailbox to activate, you could also create separate mailboxes for a number of possible vdn values. By first using these vdn values as the numbers for new mailboxes and then by using the variable %vdn in a MSG\_DROP action, you could allocate mailboxes dynamically.

- f. Highlight the number of the mailbox you want to use and press [ENTER].
- g. Press CLOSE [F3] to save the mailbox definition.

- h. Select **QUIT** as the last action in your vector.
- i. Press SAVE [F8], [F3] again to save the vector itself.

#### VECTOR K — Transcribe

- a. Highlight **Create a New Vector** and press [ENTER].
- b. Input any appropriate name and corresponding description and press [ENTER] after entering data into each field.  
The vector name and fields are for information purposes only.
- c. Press CHOICES [F8], [F2] for a list of valid entries in the action field.
- d. Highlight **TRANSRIBE** and press [ENTER].
- e. Do not enter a mailbox number to use. By leaving this field, blank, you instruct the system to prompt the agent for a value.

#### **NOTE:**

You must also leave the TRANSRIBE action blank if use the variable %vdn to activate mailboxes dynamically. Alternatively, you create a Transcribe vector for each mailbox and hard-allocate these vectors to ports.

- f. Press CLOSE [F3] to save the transcribe definition.
- g. Select **QUIT** as the last action in your vector.
- h. Press SAVE [F8], [F3] again to save the vector itself.

#### VECTOR — DYNAMIC

- a. Highlight **Call Vector Configuration** at the main menu and press [ENTER].
- b. Highlight **Create New Vector** and press [ENTER].
- c. Input any appropriate name and corresponding description and press [ENTER] after entering data into each field.
- d. Press CHOICES [F8], [F2] for a list of valid entries in the action field.
- e. Highlight **CONVERSE** and press [ENTER].  
The first field to define is number of digits to collect.
- f. Enter **4**.
- g. Press CHOICES [F2] and choose a variable.  
The recommended choice for this dynamic vector allocation is %vdn.
- h. Highlight **%vdn** and press [ENTER].  
The next action to define is SWITCH, which moves control of the call depending upon the value of the variable.
- i. Select and define SWITCH to send call control to:

- ADA if 2006 is accepted
- Message Drop if 2007 is accepted



**NOTE:**

Because the MSG\_DROP action can use the value of a variable instead of a specific number to determine which mailbox to activate, you could create separate mailboxes for a number of possible vdn values. By first using these vdn values as the numbers for new mailboxes and then by using the variable %vdn in a MSG\_DROP action, you could allocate mailboxes dynamically.

- j. Press SAVE [F8], [F3] again to save the vector.
- k. Use the setup vector to assign the dynamic vector, transcribe vector, and standard announcement vector to the appropriate CONVERSANT Call Center Solutions channels. (See Chapter 5 for step-by-step instructions.)

### **DEFINITY Vector**

Assumptions: CONVERSANT Solutions split for the dynamic vector is 2; the CONVERSANT hunt group for transcription is 3.

Anticipated Delay Announcement Vector (VDN 2006)

1. queue to main split 1 priority medium
2. wait 10 seconds hearing ringback
3. goto step 8 if oldest call waiting in split 1 > 120 seconds
4. goto step 8 if calls queued in split 1 > 4
5. announcement extension 1000  
(hear short announcement on Integrated Announcement Board or CONVERSANT Solutions Standard Announcement) "Thank you for calling the C Company. At the present time, all of our representatives are busy assisting other customers. Please hold. A representative will be with you shortly."
6. wait 30 seconds hearing music
7. goto step 5 if unconditionally
8. converse on split 2 priority medium passing VDN and qpos (hear announcement on CONVERSANT Call Center Solutions Platform) "Thank you for calling the C Company. We estimate your wait to be approximately (EWT) minutes. To leave a message for callback, press 1. To continue to hold for an agent, press 2."
9. collect 1 digits after announcement none
10. route to number 2007 if digit equals 1

11. goto step 5 if digit equals 2

### Message Drop Vector (VDN 2007)

1. wait 2 seconds hearing ringback
2. converse on split 2 priority m passing vdn

### Agent Access Number (VDN 2008)

1. go to step 4 if calls queued in split 10 is > 1
2. queue to main split 10
3. stop
4. busy
5. disconnect

### Transcribe Vector (VDN 2009)

1. wait 2 seconds hearing ringback
2. route to number 3 if unconditionally



#### **NOTE:**

VDN would be used to dynamically allocate multiple callback messaging vectors, mapping calls to appropriate CONVERSANT vectors based on VDNs. When defining the DEFINITY VDN for the anticipated delay announcement vector, you must enable the override VDN 2006 in order to pass the unique VDN for the message drop vector.

### **Comments**

In this scenario, an agent access VDN (2008) has been established to gauge collective agent availability before delivering messages to agents. A message waiting lamp will be lit on the telephone of transcribers to notify them of messages.

The system has been administered to allow agents two minutes to tell whether or not the correct party has been reached when a callback is launched automatically. With ample time to make this determination, agents would likely use the launch and delete message option from the playback menu when automatically launching a callback, as they would be able to override the message delete default selected. For those callbacks that are not successful, the agent would be able to save the message and jot down its number in order to access it and retry the callback at a later time.

(See Chapter 3 for a callback call flow, call launching options, and default administration options.)



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This chapter presents some checklists to help you in setting up your CONVERSANT vectors and allocating ports for your announcements.

## Overview of Application Quick Start

Before you begin to set up any application, read this user's guide, as well as the material suggested in "About this Book."

When you sit down in front of the system administration screen to write your application, it may help to keep the following points in mind:

1. Define the basic call flow.
  - Define how you want the application to sound to the caller.
  - Identify all phrases required.
  - Define every phrase in speech administration.
  - Record all phrases (phrases must be defined but not recorded before they are assigned to CONVERSANT vectors)
2. Decide how your ports will be allocated on the call center platform. Calculate the number needed for:
  - Hard allocated vectors playing standard announcements
  - Other hard allocated vectors
  - Dynamic vectors

Remember, applications may be directly assigned to a particular channel on the CONVERSANT platform, meaning all calls directed to that port will initiate the same announcement or application. These are referred to as hard allocated channels. All standard announcements must be hard allocated to ports because they are treated as announcement extensions of the PBX.

Ports may also be allocated dynamically, meaning that all calls directed to that port will initiate an application that corresponds with the value of an argument sent to the PBX using the *converse* step.

Each of the following checklists assumes that CONVERSANT vectors will be hard allocated to channels on the CONVERSANT Call Center Solutions system.

3. Identify the information required to pass via the *converse* step to your CONVERSANT application. For example:
  - ADA or Speak Queue Position requires queue position.
  - Message Drop may use VDN.
  - Dynamic vector allocation requires VDN or prompted digits (although prompting may also be done on the CONVERSANT platform).
  - Dynamic port allocation requires VDN or prompted digits (although prompting may also be done on the CONVERSANT platform).
  - Routing requires an argument such as ANI, prompted digits, or VDN.

Consider carefully the number and order of arguments to be passed.

Remember that any CONVERSANT vectors you set up that will be accepting information via the *converse* step should include the CONVERSE action as the first action within the vector. If you will be allocating vectors dynamically, VDN (or the argument for allocation) should be the first argument sent via the *converse* step.

4. Filling in the following checklist forms and worksheets manually may also help you in defining your application prior to system set-up. See also the sample applications (Chapter 6) and the administration section (Chapter 5) for specific call scenarios for setting up applications and recording phrases.
5. Follow the steps outlined in Chapter 5 for recording and assigning announcements to CONVERSANT vectors.

Photocopy the following blank CONVERSANT vector worksheet in Figure 7-1 for assistance in drafting applications on paper prior to administration at the screen.

## Standard Announcement Checklist

---

```
CONVERSANT CALL CENTER SYSTEM - December 17, 1993
1 CONVE 3 EDIT VECTOR NUMBER 29 STEPS
>Call Ve
System
System
UNIX Sy
Exit
Vector Name: _____ Vector Number: 29
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 UPDATE CHG-KEYS
```

**Figure 7-1. The CONVERSE Vector Worksheet**

(See Chapter 8, "Index of Actions and Variables," for a complete list of available actions and parameters for CONVERSANT applications.)

To make worksheets for the template vectors, create the template vectors you wish to define. Then print them by choosing report administration from the system administration menu, selecting vector profile report, and choosing the print option.

Refer to your DEFINITY vectoring guide for a listing of actions and parameters for the DEFINITY vectors.

## Standard Announcement Checklist

---

Photocopy the following blank standard announcement checklist, a table of vectors for which appears in Figure 7-1, for assistance in drafting, defining, and archiving administration parameters of your DEFINITY and CONVERSANT vectors.



**NOTE:**

Standard Announcements are not available over digital (Line-Side T1) lines.

### Standard Announcement Checklist

1. Script the phrase(s) you will need to record for standard announcements. \_\_\_\_
2. Follow the steps outlined in the documentation for recording and assigning announcements to CONVERSANT vectors. \_\_\_\_
3. Make a note of the CONVERSANT vector number(s) that will be used for standard announcements. These will need to be assigned in the setup vector to assign particular announcements to particular announcement extensions. \_\_\_\_
4. Make sure that the CONVERSANT channels that will be used for standard announcements are set up as announcement extensions on the PBX. Use the following table of CONVERSANT vectors and channels to map ports for your application. \_\_\_\_

**Table 7-1. CONVERSANT Vectors and Channels**

---

|             |              |              |                |
|-------------|--------------|--------------|----------------|
| Vector ____ | Phrase _____ | Channel ____ | Extension ____ |
| Vector ____ | Phrase _____ | Channel ____ | Extension ____ |
| Vector ____ | Phrase _____ | Channel ____ | Extension ____ |
| Vector ____ | Phrase _____ | Channel ____ | Extension ____ |
| Vector ____ | Phrase _____ | Channel ____ | Extension ____ |
| Vector ____ | Phrase _____ | Channel ____ | Extension ____ |
| Vector ____ | Phrase _____ | Channel ____ | Extension ____ |
| Vector ____ | Phrase _____ | Channel ____ | Extension ____ |
| Vector ____ | Phrase _____ | Channel ____ | Extension ____ |
| Vector ____ | Phrase _____ | Channel ____ | Extension ____ |

---

5. Assign standard announcements to extensions with the setup vector. Remember that CONVERSANT Call Center Solutions channels that are assigned as announcement extensions cannot be dynamically allocated for other CONVERSANT applications, nor can they be used for speech administration. \_\_\_\_
6. Complete all CONVERSANT vectors before setting up your DEFINITY vector to access these standard announcements. Place new vectors into service to cut over these new announcements. \_\_\_\_

## **Dynamic Announcement Checklist**

Photocopy the following blank dynamic announcement checklist (a table of VDNs and phrase numbers appears in Table 7-2), for assistance in drafting, defining, and archiving administration parameters of your DEFINITY and CONVERSANT vectors.

### **Dynamic Announcement Checklist**

1. Script the phrase(s) you will need to record for dynamic announcements. \_\_\_\_
2. Make sure that the VDN on the switch matches the phrase numbers on the CONVERSANT Call Center Solutions system for dynamic announcements. (Although phrase numbers are assigned automatically in speech administration, they may be changed manually to match the corresponding VDN for that phrase.) Dynamic announcements use the *converse* step to pass VDN to the CONVERSANT platform to play announcements dynamically. \_\_\_\_
3. Follow the steps in Chapter 5 to record and set up dynamic announcements. Make sure your CONVERSANT vector includes a CONVERSE action to gather VDN from the DEFINITY switch and that the corresponding DEFINITY vector includes a *converse* step to pass VDN. \_\_\_\_

Use the following table to map VDN to phrase numbers.

**Table 7-2. VDNs and Phrase Numbers**

---

|          |     |       |                                 |       |
|----------|-----|-------|---------------------------------|-------|
| VDN ____ | for | _____ | Announcement; Matching Phrase # | _____ |
| VDN ____ | for | _____ | Announcement; Matching Phrase # | _____ |
| VDN ____ | for | _____ | Announcement; Matching Phrase # | _____ |
| VDN ____ | for | _____ | Announcement; Matching Phrase # | _____ |
| VDN ____ | for | _____ | Announcement; Matching Phrase # | _____ |
| VDN ____ | for | _____ | Announcement; Matching Phrase # | _____ |
| VDN ____ | for | _____ | Announcement; Matching Phrase # | _____ |
| VDN ____ | for | _____ | Announcement; Matching Phrase # | _____ |
| VDN ____ | for | _____ | Announcement; Matching Phrase # | _____ |
| VDN ____ | for | _____ | Announcement; Matching Phrase # | _____ |

---

4. Make a note of the CONVERSANT vector number(s) that will be used for dynamic announcements. These will need to be assigned in the setup vector to allocate announcements dynamically.

The DEFINITY vector must *converse* on a split (hunt group) containing the channels assigned to dynamic announcements on the CONVERSANT platform. Use the following table of CONVERSANT vectors (Table 7-3) to map ports for your application:

**Table 7-3. CONVERSANT Vectors, Channels, and Splits**

---

|              |                |             |
|--------------|----------------|-------------|
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |

---

5. Use the setup vector to assign dynamic announcements to an extension(s). \_\_\_\_
6. Complete all CONVERSANT vectors before setting up your DEFINITY vector to access these dynamic announcements. Place new vectors in service to cut over your dynamic announcements. \_\_\_\_

## **Anticipated Delay or Queue Position Announcement Checklist**

---

Photocopy the following blank anticipated delay or queue position announcement checklist for assistance in drafting, defining, and archiving administration parameters of your DEFINITY and CONVERSANT vectors.

### **Anticipated Delay or Queue Position Announcement Checklist**

1. Script the phrase(s) you will need to record for anticipated delay announcements. Remember to define and record phrases for call instances such as no agents staffed, as well as alternative announcements you may wish to play in the event that the wait time is very long. In this case, you may wish to place the caller directly into a mailbox, or suggest an alternative time to call, rather than provide an option to wait in queue. Conversely, if waiting time is very short, you may not wish to give them the option to leave a message. \_\_\_\_

2. Anticipated delay and queue position announcements use the *converse* step to pass queue position from the DEFINITY switch to the CONVERSANT Call Center Solutions system so that it can calculate about how long a caller can expect to wait and inform the caller. Make sure your DEFINITY vector is set up to pass, and your CONVERSANT vector to receive, queue position. \_\_\_\_

If you will be allocating ports for ADA or queue position dynamically, you will also need to pass VDN or prompted digits via the *converse* step. VDN must precede queue position. (See the section of this chapter for dynamic vector allocation for assistance in setting up this vector.)

3. Note the average call length for the call center, and the number of agents staffed for each given hour of the week. Gather this information prior to setting up your CONVERSANT vectors. \_\_\_\_
4. Note the CONVERSANT vector number(s) of the first CONVERSANT vector that will be used for anticipated delay or queue position announcements. This is the vector that contains the *converse* step to gather queue position from the PBX. This vector will need to be assigned in the setup vector. \_\_\_\_

The DEFINITY vector must *converse* on a split (hunt group) containing the channels assigned to ADA or queue position announcements on the CONVERSANT system. Use Table 7-4 to map ports for your application:

**Table 7-4. CONVERSANT Vectors, Channels, and Splits for Anticipated Delay Announcements**

---

|              |                |             |
|--------------|----------------|-------------|
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |

---

5. Use the setup vector to assign the anticipated delay announcement vectors to an extension(s). (See the section of this chapter on dynamic vector allocation for assigning these vectors dynamically.) \_\_\_\_
6. Complete all CONVERSANT vectors before setting up your DEFINITY vector to access these ADA or queue position announcements. Place new vectors in service to cut over the ADA application.

## **Callback Messaging Checklist**

Photocopy the following blank Callback Messaging Checklist for assistance in drafting, defining, and archiving administration parameters of your DEFINITY and CONVERSANT vectors.

1. Script the phrase(s) you will need to record for Callback Messaging. You may consider the following phrases (to be defined and recorded in vector phrase administration):
  - Menu option for leaving a message
  - Messages in case the caller makes an invalid selection

Script the phrases for prompting information you will need from the caller and whether this information will be gathered using touch tone or voice input. You may consider the following phrases (which you will define and record in mailbox phrase administration):

- Name (defined as a voice field)
  - Account number (defined as a touch-tone field)
  - Telephone number (defined as a callback phone field)
  - Reason for call (defined as a voice field)
  - Others...
2. Evaluate how your call center will likely transcribe messages. The following guidelines should help to decide how to direct your agents to launch callback attempts, when to save and delete messages, and how long to administer the CONVERSANT Call Center Solutions system to stay conferenced with the agent and the call destination party. In brief, all callback messages can, after being launched, be either saved or deleted, depending on how the transcriber documents them.

- Transcribe when first heard.

If your agents will be transcribing all messages when they are first heard, these messages could always be launched and deleted. Each agent will then have responsibility for all follow-up for unsuccessful callback attempts. Alternatively, these messages could be launched and saved if you prefer to allow your agents to be able to call into transcribe at a later time, enter the message number, and invoke the auto-launch capability from the pool of saved messages.

CONVERSANT conference time can be set at an interval sufficient to determine whether a party reached is the correct party. You know best for your call center. Because they are transcribing messages, agents have all the information necessary to follow up with the caller, even in the event that the conference time expires before the correct party is identified.

- Transcribe only if callback attempt is unsuccessful.

If your agents will not be transcribing messages unless a callback attempt is unsuccessful, these messages should probably be launched and saved. This will allow your agents to call in at a later time to transcribe messages or attempt another callback in the event that the correct party is not identified within the CONVERSANT conference time, and therefore, the agent cannot access a menu for transcription immediately following the callback attempt.

CONVERSANT conference time can be set at an interval sufficient to determine whether a party reached is the correct party. You know best for your call center. All messages will be saved in the event that a callback is unsuccessful and the agent is unable to identify the correct party within the CONVERSANT conference time.

Alternatively, if you wish to ensure that the agent has access to a menu to save or delete these messages, or transcribe information after the callback is attempted, set the CONVERSANT conference time to accommodate the longest possible call duration.



**NOTE:**

This will tie up a CONVERSANT port for the entire duration of the call and limit traffic capacity.

- No agent transcription

If your agents will not be transcribing messages at all, or if an attempt is unsuccessful, these messages should always be launched and saved to allow your transcribers to call in and transcribe unsuccessfully launched calls at a later time. However, your agents should keep a tally of message numbers for callbacks that were unsuccessful. This will provide an accurate account of those messages that have been handled, and those that still require follow-up. Agents or transcribers will then be responsible for emptying the saved messages mailbox.

CONVERSANT conference time can be set at an interval (you will know best for your call center) sufficient to determine whether a party reached is the correct party. All messages will be saved in the event that a callback is unsuccessful.

- Call-in transcription only

If your call center will be calling in only for transcription, and not using the agent callback feature, set CONVERSANT conference time to accommodate the longest possible call duration. In this instance, you will be tying up one CONVERSANT port for each transcriber for the entire time that transcription and callback attempts are taking place.

If this traffic limitation is not acceptable, set the CONVERSANT conference time at a lower interval and instruct agents to save every message before attempting to launch a callback. However, the transcriber will then have to recall the transcription application to access each message if the automatic callback is being utilized, and the CONVERSANT exits the call prior to completion on any attempt.

3. Make a note of the CONVERSANT vector number(s) of the CONVERSANT vector for MESSAGE DROP and for TRANSCRIBE. They will need to be assigned in the setup vector.

 **NOTE:**

If your call center will not be doing direct call in for transcription, there is no need to setup a transcribe vector.

The DEFINITY vector must *converse* on a split (hunt group) containing the channels assigned to Message Drop and/or Transcription on the CONVERSANT Call Center Solutions system. Use the following to map ports for your application:

**Table 7-5. CONVERSANT Vectors, Channels, and Splits for Callback Messaging**

---

|              |                |             |
|--------------|----------------|-------------|
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |

---

If the caller chooses to leave a message, it is recommended that you de-queue the call prior to allowing access to the message drop function. This can be done by returning an argument to the PBX to be collected using a *collect digits* step in your DEFINITY vector, and routing the call to another DEFINITY vector to take the call out of queue. That second DEFINITY vector queues the call to the CONVERSANT split assigned to Message Drop, or may pass VDN via the *converse* step to dynamically allocate Message Drop to any port in that split.

4. Use the setup vector to assign the message drop and transcribe vectors to an extension(s). (See the section in this chapter on dynamic vector allocation for assigning these vectors dynamically.) \_\_\_\_
5. Complete all CONVERSANT vectors and place new vectors in service before setting up your DEFINITY vector to access these Message Drop transcription applications. Place new vectors in service to cut over your Message Drop application. \_\_\_\_

## Custom Call Routing Checklist

Photocopy the following blank Custom Call Routing Checklist for assistance in drafting, defining, and archiving administration parameters of your DEFINITY and CONVERSANT vectors.

### Custom Call Routing Checklist

1. Script any phrase(s) you will need to record for Custom Call Routing. \_\_\_\_
2. Identify the criteria on which you will route callers (for instance, ANI, VDN, collected digits). This must be passed to the CONVERSANT platform via the *converse* step. \_\_\_\_

If you will be allocating ports for Custom Call Routing dynamically, you will also need to pass VDN or prompted digits via the *converse* step. VDN must precede the routing argument. (See the section in this chapter on dynamic vector allocation for assistance in setting up this vector.)

3. Identify the routing destination type (for instance, extension, split, VDN).



**NOTE:**

VDN is suggested for routing in conjunction with digits (such as account number) sent to an agent display. Set up a DEFINITY VDN corresponding to each split or extension to which callers will be routed.

4. Use a delimiter in the DATA\_RTN action if the length of the digit string you will be passing (for instance, account numbers) will vary.
5. Make a note of the CONVERSANT vector number of the first CONVERSANT vector that will be used for Custom Call Routing. This is the vector that contains the *converse* step to gather the routing argument from the PBX. This vector will need to be assigned in the setup vector.

The DEFINITY vector must *converse* on a split (hunt group) containing the channels assigned to Custom Call Routing CONVERSANT calls.

Use the following table to map ports for your application:

**Table 7-6. CONVERSANT Vectors, Channels, and Splits for Custom Call Routing**

---

|              |                |             |
|--------------|----------------|-------------|
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |

---

6. Use the setup vector to assign the Custom Call Routing vectors to an extension(s). (See the Quick Start for dynamic vector allocation for assigning these vectors dynamically.) \_\_\_\_\_
7. Complete all CONVERSANT vectors before setting up your DEFINITY vector to access the Custom Call Routing application. Place new vectors in service to cut over your routing application.

## **Dynamic Vector Allocation Checklist**

Photocopy the following blank dynamic vector allocation checklist for assistance in drafting, defining, and archiving administration parameters of your DEFINITY and CONVERSANT vectors.

### **Dynamic Vector Allocation Checklist**

1. Make sure that the VDN or the prompted digits precedes any other arguments passed by means of the *converse* step.

 **NOTE:**

This dynamic allocation vector is used to dynamically allocate vectors to CONVERSANT ports. If you will be allocating ports to CONVERSANT vectors dynamically, you will need to pass VDN or prompted digits via the *converse* step.

2. Create a new vector and assign the following actions:

- CONVERSE — to collect the dynamic allocation argument (such as VDN) from the DEFINITY switch. \_\_\_\_
- SWITCH — to map CONVERSANT vectors to values passed from the PBX. \_\_\_\_

Use the following chart to draft and archive arguments to vectors \_\_\_\_

**Table 7-7. VDNs and CONVERSANT Vectors for Arguments**

---

|                       |              |
|-----------------------|--------------|
| VDN/Digit Value _____ | Vector _____ |

---

3. Make a note of the CONVERSANT vector number(s) that will be used for dynamic vector allocation. These will need to be assigned in the setup vector to allocate CONVERSANT vectors dynamically. \_\_\_\_

The DEFINITY vector must *converse* on a split (hunt group) containing the channels assigned to the dynamic vector allocation application on the CONVERSANT.

Use the following table to map ports to your application:

**Table 7-8. Vectors, Channels, and Splits for Assigning Dynamic Vectors to Ports**

---

|              |                |             |
|--------------|----------------|-------------|
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |
| Vector _____ | Channels _____ | Split _____ |

---

4. Use the setup vector to assign the dynamic vector allocation vector to an extension(s). Remember to place new vectors in service to cut over your applications.

This chapter defines every action and variable in the CONVERSANT Call Center Solutions system.

## Actions

There are twenty-five actions associated with CONVERSANT vectors. Eight of these, listed in bold, cause a CONVERSANT vector to surrender call control.

Generally, DEFINITY vectors should not place callers in queue before transferring them to CONVERSANT vectors that contain these bolded actions. DEFINITY vectors will interrupt calls queued prior to transfer when an agent becomes available.

- |                   |                     |
|-------------------|---------------------|
| ■ ADA_CALC        | ■ LOOK_UP           |
| ■ ANNOUNCE        | ■ <b>MSG_DROP</b>   |
| ■ CHAN_ASN        | ■ OFF_HOOK          |
| ■ CONVERSE        | ■ <b>QUIT</b>       |
| ■ <b>DATA_RTN</b> | ■ REPORT            |
| ■ <b>DYNAMIC</b>  | ■ SCHEDULE          |
| ■ DYN_ANNOU       | ■ SET               |
| ■ <b>EXECUTE</b>  | ■ SPEAK_NUM         |
| ■ GET_DIGT        | ■ <b>SPCH_ADMN</b>  |
| ■ GLOBAL          | ■ SWITCH            |
| ■ GOTO            | ■ <b>TRANSCRIBE</b> |
| ■ HANG_ACT        | ■ <b>TRANSFER</b>   |
| ■ JUMP            |                     |

Nearly every action is associated with a definition form that you complete to define parameter settings. To reflect changes in the vector worksheet, press UPDATE [F7] after adding or modifying an action.

To select variables correctly:

1. Press CHOICES [F2] for a list.
2. Highlight your choice.
3. Press [ENTER].



**NOTE:**

After any bolded action, choose other actions to handle calls in the event the bolded action encounters an error and fails.

## ADA\_CALC

Used after the CONVERSE action to approximate how long a caller will wait in queue.

1. Follow **Avg. Call Length** in the vector configuration menu with an estimate, in seconds, of how long each caller will remain on the line after exiting the queue.
2. Follow **Queue Position** with the name of the variable you used with CONVERSE to capture the caller's relative queue position.
3. Follow **Result** with the name of the variable ADA\_CALC should use to return its estimate, in minutes, of how long this caller will wait in the queue.

To calculate this estimate, the system multiplies the average duration of a call by the number of callers ahead of the current caller (including those currently being served by agents). Then, it divides this product by the number of agents staffed.

$$\frac{(\text{Caller's Queue Position} + \text{Number of Agents Staffed}) * \text{Average Call Duration}}{\text{Number of Agents Staffed}}$$

4. Optionally, enter a comment to associate with the ADA\_CALC action.
5. Move your cursor to the grid titled **Number of Agents Staffed**. For each day of the week (found above the cursor) and each hour of the day (found to the left of the cursor), estimate how many agents will be staffed. Blank spaces correspond to "0 agents." Use PREVPAGE [F4], NEXTPAGE [F5], and the directional keys to move around this form.

*Do not press CANCEL [F6] unless you want to abandon your entries.*

## **ANNOUNCE**

---

Speaks a pre-recorded phrase to the caller.

1. Follow **Phrase Tag** with the name of the speech phrase to play or press CHOICES [F2] for a menu of phrase tags. Notice that the text of the phrase to play appears on the action definition form automatically along with the phrase number after you enter its phrase tag.

## **CHAN\_ASN**

---

Used only in the setup vector to assign CONVERSANT vectors to ports on the CONVERSANT Call Center Solutions system.

1. Enter a comment, if you wish.
2. Move your cursor to an available line under the column marked **Channel**, type the number of an active channel, and press [ENTER].
3. In the column marked **Vector**, type the number of the CONVERSANT vector to associate with calls to this channel.
4. Press [ENTER]

Pause for the name of the CONVERSANT vector you chose to appear automatically under the column marked **Name**.

Repeat steps 2 through 4 for every active port on your CONVERSANT Call Center Solutions system up to a total of 12 ports. Use several CHAN\_ASN actions in a CONVERSANT vector to assign more than 12 ports.

## **CONVERSE**

---

Gathers touch tones communicated to a CONVERSANT vector by a DEFINITY vector using the *converse* call vectoring step. The CONVERSE action receives, the *converse* step sends, data from the DEFINITY switch. One or two items of information can be captured per call. Each can consist of up to 16 digits.

1. After **Number of Digits to Collect**, enter the number of digits to expect from the DEFINITY, up to a limit of 16. In this total, do not include the # key, which the DEFINITY uses automatically to mark the end of the variable string. The system will automatically use the variable *%num\_dig\_got* to represent the actual number of digits collected.

2. After **Load Digits into Variable**, name the variable to associate with the value from the DEFINITY vector.

You may use the CONVERSE action again to receive a second value from the DEFINITY vector.

3. Enter a comment, if you wish.



**NOTE:**

After a DEFINITY vector passes a call and information to a CONVERSANT vector through the *converse* step, the DEFINITY vector cannot recognize a flash hook signal. This inhibits the CONVERSANT vector from performing, until the next call, flash hook functions, including transferring a call and launching a customer callback.



**NOTE:**

Before using the CONVERSE action with Line-Side T1 channels, access the Systems-Parameters Features screen on the DEFINITY switch and set the Converse First Data Delay parameter to 1 instead of zero.

## DATA\_RTN

Returns information for call control to the DEFINITY switch, from where it can be used for CMS reports or to populate an agent's telephone display with information about a caller.

1. Enter the feature access code (FAC) you want to transmit to the PBX prior to the value. Your entry must correspond to the DATA\_RTN FAC already defined on the DEFINITY switch.
2. On the lines marked **Data Return Segments** list the values (or variables containing values), up to a combined limit of 24 characters, to return to the DEFINITY vector.

Every character in values you list on these lines counts toward the limit, including #, which you may use as a delimiter.



**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, will count toward the limit.

3. Enter a comment, if you wish.

## **DYNAMIC**

Transfers call control to one of up to 10 CONVERSANT applications, depending on the value of a variable.

1. Enter a comment, if you wish.
2. Enter the name of the variable whose value will determine which CONVERSANT application to execute.
3. Under the column marked **Value**, enter a possible value for the variable you chose.
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 at 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.
6. Repeat steps 2-5 for each possible variable value.



### **NOTE:**

After removing a CONVERSANT application from your hard disk drive or restoring your CONVERSANT 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. You must delete and replace each DYNAMIC action that refers to a missing application. You cannot edit these actions.

## **DYN\_ANNOU**

Generally used with CONVERSE to respond to callers with a vector phrase you specify.

1. Name the variable that will contain the number of the phrase to play.

## **EXECUTE**

Transfers control of a call, unconditionally, to a CONVERSANT application on the CONVERSANT Call Center Solutions platform and communicates information for reporting to CONVERSANT's Call Data Handler (CDH).

1. Follow **Application** with the name of the program to execute.
2. Specify up to ten arguments to pass to the executed program. Numbers, text strings, or variables can represent valid arguments.

The system will automatically use the variable *%return\_vlu* to represent any data returned by the DEFINITY in the event of an error, for example.

3. Enter a comment, if you wish.

## GET\_DIGT

Gathers touch tones from callers. This action typically follows an announcement that prompts the caller for input.

1. After **Number of Digits to Collect**, enter the maximum number of digits the caller can press, up to a limit of 16.  
  
All touch tone keys, including the # key, which callers can use to indicate that an entry is complete, count toward this total. The variable *%num\_dig\_got* will automatically represent the number of touch tones actually entered, including the # key.
2. After **Load Digits into Variable**, name the variable to associate with the caller's touch tones. The # key will not be included in this variable's value.
3. Enter a comment, if you wish.

## GLOBAL

Appears in the setup vector to initialize CONVERSANT Call Center Solutions system variables and establish global parameters.

## GOTO

Moves call control to another CONVERSANT vector if a relational equation you enter tests true. The GOTO action evaluates both arguments in an equation as strings if either argument is 10 characters or more in length. The resulting comparison is alphabetic, not numeric.

1. After **GOTO vector**, enter the number of the CONVERSANT vector to launch if conditions are met.
2. After **If variable**, enter a variable name.
3. Press [ENTER] to advance to the next position in the equation and enter a relational operator. Choices include:

|                            |    |
|----------------------------|----|
| "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 in the equation and enter a value or variable name. Press CHOICES [ F2 ] for a list.
5. Optionally, enter a comment.



**NOTE:**

Be sure to create CONVERSANT vectors for vector numbers you enter before you place new vectors into service. The CONVERSANT Call Center Solutions system assigns numbers to vectors sequentially.

## **HANG\_ACT**

---

Identifies a CONVERSANT vector to launch if the caller leaves the call prematurely.

1. Enter the number of the vector to launch after the caller disconnects.  
If a CONVERSANT vector with this number already exists, its name will appear automatically. To select from a list, press CHOICES [ F2 ]. If no CONVERSANT vector exists, no text will appear.
2. Enter a comment, if you wish.



**NOTE:**

A caller activates the HANG\_ACT action by exiting at any point in a CONVERSANT vector that is after the HANG\_ACT action and before the QUIT action.

## **JUMP**

---

Moves call control, unconditionally, to another CONVERSANT vector on the CONVERSANT Call Center Solutions platform.

1. Follow **Jump to Vector Number** with the number of the CONVERSANT vector to execute.  
If a CONVERSANT vector with this number already exists, its name will appear automatically. If no CONVERSANT vector exists, no text will appear.
2. Enter a comment, if you wish.



**NOTE:**

Be sure to create CONVERSANT vectors for vector numbers you enter before you place new vectors into service. The CONVERSANT Call Center Solutions system assigns numbers to vectors sequentially.

## LOOK\_UP

Refers to an internal database table for values associated with a key value you specify.

1. After **Routing Table**, enter the name of the database table you want to search.  
-OR- Press CHOICES [F2] to select from a list.
2. After **Look-up Field**, name the variable containing the "key" value you want to use in your search.  
-OR- Press CHOICES [F2] to select from a list.
3. After **Number of Matches Found**, name a variable to represent the number of times the Routing Table lists this value in its index (first column).  
For intelligent routing applications, this value must never be greater than 1.
4. After **Data Field 1**, name a variable to represent the first value that the Routing Table associates (in its second column) with the key value.
5. After **Data Field 2**, name a variable to represent the second value that the Routing Table associates (in its third column) with the key value.
6. Enter a comment, if you wish.

## MSG\_DROP

Sends the caller to a mailbox you previously created at the message drop administration menu.

1. Enter the number of the mailbox to accept calls or press CHOICES [F2] and select from a list of valid mailboxes and variables.



**NOTE:**

A variable must be assigned a value before the MSG\_DROP action can use it to decide which mailbox to activate. You may use the CONVERSE, SET, or GET\_DIGT actions to assign values to variables.

2. Enter a comment, if you wish.

## OFF\_HOOK

Used in the setup vector to take a voice port off hook and answer a call.

1. Enter a comment, if you wish.

## **QUIT**

---

Releases the call currently under the CONVERSANT vector's control. Control of calls released using QUIT returns to the DEFINITY G3.

1. Enter a comment, if you wish.

## **REPORT**

---

Records the current value of a variable for reporting purposes along with the time, caller number, and CONVERSANT Vector number.

1. Name the variable to document.
2. Enter a comment, if you wish.

## **SCHEDULE**

---

Transfers call control to another CONVERSANT vector associated with the time of day and day of week.

1. Enter a comment, if you wish.
2. Move your cursor to the grid titled **Vector by Time of Day**.
3. Enter for each day of the week (listed above the cursor) and each hour of the day (listed to the left of the cursor) the number of the CONVERSANT vector to target.

Use PREVPAGE [F4], NEXTPAGE [F5], and the up and down keys to move around this form.

*Do not press CANCEL [F6] unless you want to abandon your entries.*



**NOTE:**

CONVERSANT vectors bypass the SCHEDULE action at times for which no CONVERSANT vector has been scheduled.

## **SET**

---

Performs a mathematical operation on the value of a numeric variable and replaces the original value with the resulting value.

1. Follow **Variable** with the name of the variable containing the value to modify.  
-OR- Press CHOICES [F2] to select from a list.

2. Follow **Operator** with an arithmetic operator. Choices include:

|                |   |
|----------------|---|
| addition       | + |
| subtraction    | - |
| multiplication | * |
| division       | / |
| new value      | = |

3. Follow **Value** with the operand to use with the operator just defined.

-OR- Press CHOICES [F2] to select from a list. You can use either a variable or a number.

4. Enter a comment, if you wish.



**NOTE:**

Although values you assign to variables with the new value operator (=) may be alphanumeric and up to 16 characters long, values you use in other operations must be fewer than 10 characters. 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.

## SPEAK\_NUM

Speaks the value of a numeric variable.

1. Name the variable that will contain the value to speak, or enter a value directly.

-OR- Press CHOICES [F2] to select from a list.



**NOTE:**

Numbers over 999,999,999 are spoken digit by digit.

## SPCH\_ADMN

Starts the speech administration utility. This action allows authorized users to review and record speech phrases over the telephone without using the CONVERSANT Call Center Solutions terminal.

1. Specify the talk file containing the phrase to record. Press CHOICES [F2] for a list of talk file numbers. Leave this space blank to prompt callers for a talk file 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:**

You cannot specify a phrase number without specifying a talk file number.

## **SWITCH**

---

Moves call control to one of up to 11 CONVERSANT vectors, depending on the value of a variable. SWITCH is similar to DYNAMIC EXECUTE, but it launches CONVERSANT vectors, not CONVERSANT applications.

1. Enter a comment, if you wish.
2. Enter the name of the variable whose value will determine which CONVERSANT vector to target.  
-OR- Press CHOICES [F2] for a list.
3. Under the column marked **Value**, enter a possible value for the variable you chose.
4. Under the column marked **Vector num**, enter the number of the CONVERSANT vector to operate if the actual value of the variable matches the value you entered.

If a CONVERSANT vector with this number already exists, its name will appear automatically. If no CONVERSANT vector exists, no text will appear.



**NOTE:**

Be sure to create CONVERSANT vectors for vector numbers you enter before you place new vectors into service. The CONVERSANT Call Center Solutions system assigns numbers to vectors sequentially.

## **TRANSCRIBE (TRANSRIBE)**

---

Plays the contents of a Message Drop mailbox. Touch tone options, documented in Chapter 3, move transcribers through messages and launch return calls automatically.

1. Optionally, enter the number of the mailbox containing messages you want to transcribe.



**NOTE:**

The system will prompt the caller to enter a mailbox number if you do not specify one in the TRANSCRIBE action. If you specify a variable, remember that the variable must be assigned a value before the TRANSCRIBE action can use it to decide which mailbox to activate. You may use the CONVERSE or SET actions to assign values to variables for the TRANSCRIBE action.

2. Enter a comment, if you wish.

## **TRANSFER**

---

Performs a flash hook transfer to a DEFINITY G3 extension.

1. Enter the number of the extension to target or a name of the variable representing the extension number.

The system will automatically use the variable *&rtn\_value* to represent any data returned by the DEFINITY in the event of an error, for example.

2. Enter a comment, if you wish.



**NOTE:**

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 channels, use the ANNOUNCE action at least once in the CONVERSANT vector.

## Variables

Variables are used in CONVERSANT vectors to pass information from one action to another. They act as place holders for values they receive during calls.

For example, the variable *%vdn* can be used in a call center application to gather the value of VDN when it is passed from the DEFINITY switch to a CONVERSANT vector containing the CONVERSE action. The CONVERSANT vector can then use the same *%vdn* variable to pinpoint and speak an appropriate dynamic announcement. The variable must be assigned a value before it can be used for call handling decisions.

A variable retains its value for the life of an individual call across all CONVERSANT vectors in the database. Each new call has its own independent set of variables. Variables in different calls will not share their values.

Each of the 12 variables available has an input limit of 16 characters (if a string) or 9 digits (if a number). Valid numeric results include any integer from -2,147,483,648 to +2,147,483,647. The system determines variable type (number or character) in consideration of how the value will be manipulated, and converts it into a number or character string based on the requirements of the associated vector action. Examples of actions that use numeric operators include SET and GOTO.

Variables are named to suggest their use and, with the exception of *%caller\_num*, they have no intrinsic or system-defined values. Typically, no restrictions apply to the use of variables in vector actions although some actions do have variables predefine to receive certain values.

For example, the GET\_DIGT action, which gathers touch tone input from the caller, places the number of digits entered into the variable *%num\_dig\_got*, while it can use any variable to hold the actual digits entered by the caller. The definition form for GET\_DIGT is designed to let you choose the variable to store the caller input, but it automatically places the number of digits gathered in the variable *%num\_dig\_got*. Below is a list of the 12 variables, together with suggestions on how to use them.

| <b>Name</b>        | <b>Possible Use</b>                                                                 |
|--------------------|-------------------------------------------------------------------------------------|
| <i>%caller_num</i> | System-defined. The number of callers that day. (First caller is 1, second 2, etc.) |
| <i>%vdn</i>        | Variable for storing extension number or vdn sent between the switch and CONVERSANT |
| <i>%ani</i>        | Variable for Automatic Number Identification, Calling Party Number, or caller id.   |

| <b>Name</b>         | <b>Possible Use</b>                                     |
|---------------------|---------------------------------------------------------|
| <i>%data1</i>       | Generic variable data element 1                         |
| <i>%data2</i>       | Generic variable data element 2                         |
| <i>%data3</i>       | Generic variable data element 3                         |
| <i>%matched</i>     | Variable for storing number of look-up matches          |
| <i>%phrase_num</i>  | Variable for storing speech phrase number               |
| <i>%ci_value</i>    | Variable for storing caller input value                 |
| <i>%num_dig_got</i> | Variable for storing number of digits entered by caller |
| <i>%num_tried</i>   | Variable for saving number of caller attempts           |
| <i>%return_vlu</i>  | Variable for storing results of an action               |

These are only suggestions; all variables are interchangeable. In using variables in vectors:

- Consider how a variable will be assigned its initial value.
- Determine how the variable will be used in subsequent actions.
- Match the variable name with the intended use of the variable.
- Limit the length of the value to 16 characters or 9 digits if mathematical operations will be performed on the variable.
- Use the REPORT action to record the final or intermediate value of the variable. Values saved from calls can be retrieved and reported by the event detail or call detail reports.

For example, if you were writing a vector that asked the caller to enter a home telephone number, consider using *%ani* in the GET\_DIGT action that collects touch tones. Then follow this action with the REPORT action to store the number entered.

This chapter documents the steps necessary to solve any problems with CONVERSANT Call Center Solutions software. A problem will typically fall under one of three general areas in which functionality should be verified: the CONVERSANT Voice Information System, DEFINITY vectors, and the CONVERSANT Solutions Call Center platform.

## **Voice System Functionality**

---

### **Problem**

System is not taking calls.  
Port rings no answer.

### **Cause and Possible Remedy**

The voice system is not running. Verify functioning of analog stations on the PBX and the functioning of the voice board. Check to see that the call is being presented to the CONVERSANT system on the system monitor.

## **DEFINITY Switch and DEFINITY Vector Functionality**

---

### **Problem**

System is not taking calls.  
Port rings no answer.

### **Cause and Possible Remedy**

Either the steps by which the DEFINITY switch routes the call to the CONVERSANT system has failed, or the DEFINITY vector is not passing the correct information. Verify the route to the CONVERSANT system and check the sanity of the DEFINITY vector.

| <b>Problem</b>                                                                                                                                  | <b>Cause and Possible Remedy</b>                                                                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port answers but hangs up                                                                                                                       | <p>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.</p> <p>No vectors are defined and/or placed in service.</p> |
| The CONVERSANT system cannot dial an agent, transfer a caller, complete a conference call, or return data to a DEFINITY vector via Line-Side T1 | Whenever the DEFINITY 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 switch.                                              |

## **CONVERSANT Call Center Solutions Functionality**

---

| <b>Problem</b>            | <b>Cause and Possible Remedy</b>                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port answers but hangs up | <p>The CONVERSANT Call Center Solutions phrase that answers the call has not been recorded.</p> <p>The CONVERSE action on the CONVERSANT vector has not been administered correctly, or is not there.</p> <p>A CONVERSANT vector has not been assigned to a port under CHAN_ASN on the setup vector.</p> <p>CONVERSANT vectors have not been placed in service.</p> <p>CONVERSANT vectors have been assigned to the wrong extensions under CHAN_ASN on the setup vector.</p> |
| Port answers but hangs up | Call is coming in on an active port used for message waiting lamp notification, which requires a dedicated CONVERSANT channel.                                                                                                                                                                                                                                                                                                                                               |
| Port rings no answer      | <p>The voice system is not running.</p> <p>The application ccc has not been assigned to a voice channel.</p>                                                                                                                                                                                                                                                                                                                                                                 |

**Problem**

**Cause and Possible Remedy**

A change made to a vector  
is not there

Make sure the vectDIP and vrptDIP processes  
are in the process table. Reinstalling Platform  
Runtime maybe necessary. Contact your AT&T  
support representative.

The change was not saved and/or placed in  
service.

**Platform**

---

**Problem**

**Cause and Possible Remedy**

Incorrect phrase played

Wrong phrase selected. Check the ANNOUNCE  
action to ensure that the correct phrase has  
been selected.

Phrase not installed when re-recorded. Listen to  
the selected phrase in speech administration to  
ensure that the proper phrase corresponds. If  
not, re-record and be sure to install the phrase  
using \*#.

Standard Announcements  
do not work with Line-Side  
T1

Standard Announcements are not supported by  
Line-Side T1.

| <b>Problem</b>                                                   | <b>Cause and Possible Remedy</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Anticipated delay announcement not spoken                        | <p>Switch not passing queue position. Check DEFINITY vectors to ensure that a <i>converse</i> step is defined and passing the correct information.</p> <p>Variable for the CONVERSANT action not defined. Check the CONVERSANT action to be sure you have selected a variable in which to load queue position.</p> <p>CONVERSANT action variable for queue position on CONVERSANT platform does not match that used for ADA_CALC. Check both actions to be sure the same variable has been selected.</p> <p>ADA_CALC action missing from vector series.</p> <p>SPEAK_NUM action missing from vector series. Check your vectors to make sure 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 no "no agents staffed" contingency message is defined.</p> |
| Incorrect delay announcement spoken (wait time consistently low) | <p>CONVERSE action set to collect too few digits on CONVERSANT platform. Check the CONVERSE action to make sure the number of digits to collect field allows for the greatest possible number of digits to accept from the PBX.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

| <b>Problem</b>                                                                     | <b>Cause and Possible Remedy</b>                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Callers queue position not spoken                                                  | <p>Switch not passing queue position. Check DEFINITY vectors to ensure that a <i>converse</i> step is defined and passing the correct information.</p> <p>Variable for the CONVERSE action not defined. Check your CONVERSANT vectors to ensure that you have selected and defined a CONVERSE action and variable to load.</p> <p>CONVERSE action variable for queue position on CONVERSANT platform does not match that used for SPEAK_NUM.</p> |
| Caller hears "no agents staffed" message at a time when agents are staffed         | <p>Table for ADA_CALC incorrectly set up for that day and time. Return to the ADA_CALC action to ensure that all staffed times hold a value.</p> <p>Wrong phrase assigned to ANNOUNCE for Anticipated Delay. Check the CONVERSANT action to ensure that the correct phrase has been selected.</p>                                                                                                                                                |
| Blanks appear in vector worksheet, although actions have been selected and defined | <p>You have not selected UPDATE [<u>F7</u>] to refresh the worksheet. Select UPDATE [<u>F7</u>] and CONTINUE [<u>F3</u>] each time you wish to refresh your vector worksheet.</p>                                                                                                                                                                                                                                                                |
| Vector size warning message                                                        | <p>Vector size exceeds maximum allowed for software. Likely to occur if you attempt to add many actions to a vector containing ADA_CALC or SCHEDULE. Utilize a JUMP step to define actions and continue CONVERSANT vector processing on a subsequent CONVERSANT vector.</p>                                                                                                                                                                      |

| <b>Problem</b>                                                          | <b>Cause and Possible Remedy</b>                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Speech administration not calling your telephone when you select LAUNCH | <p>The port selected during the execution of the DIAL step is busy.</p> <p>Invalid channel selected. Check the DIAL step of speech administration to ensure that you are using a channel assigned for the CONVERSANT system.</p> <p>Incorrect extension or telephone number defined. Check the DIAL step in speech administration to ensure that you have defined the correct telephone number or extension.</p> |
| Speech administration calls but does not acknowledge answer             | <p>You did not activate Speech administration. The utility is touch tone activated. Press '1' when answering phone.</p>                                                                                                                                                                                                                                                                                          |
| Speech administration calls but does not accept touch tones             | <p>Port is configured as standard announcement port on the DEFINITY. Do not call out on standard announcement ports.</p>                                                                                                                                                                                                                                                                                         |
| Unable to create a vector or a template vector                          | <p>Attempt exceeds the 99 vector limit. You must delete old and unused vectors.</p> <p>The system cannot assign consecutive numbers to the template vectors. You must delete old and unused vectors to free a series of vector numbers equal to the number of vectors this template creates.</p>                                                                                                                 |
| Unable to assign a vector to a channel in CHAN_ASN                      | <p>Vector does not exist. Press CHOICES [<u>F2</u>] for a list of valid options.</p>                                                                                                                                                                                                                                                                                                                             |
| Unable to backup vectors or speech to floppy                            | <p>Disk not formatted properly (UNIX operating system or DOS) or is not formatted at all.</p>                                                                                                                                                                                                                                                                                                                    |

**Problem**

**Cause and Possible Remedy**

Dynamic port allocation application not executing applications

Switch not passing the argument (VDN, digits, etc.) Check DEFINITY vectors to ensure that a *converse* step is defined.

CONVERSE or GET\_DIG action needed to load the variable used for dynamic port allocation not defined. Check your CONVERSANT vectors to ensure that you have selected and defined a CONVERSE or GET\_DIG action and variable that precedes the dynamic port allocation vector.

CONVERSE action or GET\_DIG variable used to collect the argument does not match that used for DYNAMIC EXECUTE. Check both actions to be sure the same variable has been selected.

Executed application is missing or faulty.

New vector applications defined, but not heard

New vectors have not been placed in service.

CONVERSE step does not work with Line-Side T1

Settings on the DEFINITY are incorrect. Access the System-Parameters Features screen on the DEFINITY switch and set the Converse First and Second Data Delay parameters to 1.

Actions that are typed in and not selected from CHOICES 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.

| Problem                                                                                 | Cause and Possible Remedy                                                                                                                                                                              |
|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Wrong numbers spoken back in speech administration, ADA announcement or queue position  | Numbers re-recorded incorrectly in speech administration. Check all likely number phrases in standard speech administration to ensure that they contain speech.                                        |
| Incorrect phrase played for DYNAMIC ANNOUNCEMENT                                        | VDN passed not corresponding to the correct phrase. Check the mapping of PBX VDN passed and phrase numbers on the CONVERSANT platform.                                                                 |
| No phrase played for DYNAMIC ANNOUNCEMENT                                               | VDN passed not corresponding to a phrase. Check the mapping of PBX VDN passed and phrase numbers on the CONVERSANT Platform.                                                                           |
|                                                                                         | Phrase not installed when recorded. Listen to the selected phrase in speech administration to ensure that the proper phrase corresponds. If not, re-record and be sure to install the phrase using *#. |
|                                                                                         | Switch not passing VDN. Check DEFINITY vectors to ensure that a <i>converse</i> step is defined and passing the correct information.                                                                   |
|                                                                                         | Variable for the CONVERSANT action not defined. Check DEFINITY vectors to ensure that a <i>converse</i> step is defined.                                                                               |
| 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 switch instead.                                             |
| <i>Collect digits</i> command on the DEFINITY does not appear to accept DATA_RTN digits | Use a <i>wait</i> command just before the <i>collect digits</i> command in the DEFINITY vector as a caution in case DEFINITY resources are busy.                                                       |

## Callback Messaging

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| Problem                                                       | Cause and Possible Remedy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Prompts not playing for<br>Callback Messaging                 | Phrases have not been recorded. Listen for the selected phrase in Callback Messaging phrase administration to ensure that the phrase exists. If it does not, record and be sure to install the phrase using *#.<br><br>Phrases have not been selected/defined for the mailbox. Check mailbox administration to be sure that the correct phrase has been selected.                                                                                                                                                                                                                                                                                                                                                          |
| Caller hears "We're sorry.<br>That is an invalid mailbox."    | Mailbox not defined. You must first create a mailbox and assign phrases in mailbox administration.<br><br>Mailbox not selected by vector. Check that the MSG_DROP action in your CONVERSANT vector uses a valid mailbox number or a variable that contains a valid mailbox number.                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Message waiting lamp is<br>not lit although messages<br>await | Message waiting lamp extension missing or incorrect. On the CONVERSANT system, check this value on the Mailbox Definition form; ensure that it corresponds to the extension of the agent to notify of new messages.<br><br>Message waiting lamp FAC missing or incorrect. On the CONVERSANT system, check the Message Waiting Lamp On Code on the Global Mailbox Administration form; ensure that it corresponds to the feature access code for lighting a message waiting lamp. On the DEFINITY, check that the 'Leave Word Calling Send A Message' field contains the same value.<br><br>Message Waiting Lamp Access Channel not defined. On the CONVERSANT, check this field on the Global Mailbox Administration form. |

**Problem**

**Cause and Possible Remedy**

Message waiting lamp not turned off although mailbox is empty

'Leave Word Calling Activation' is not active for the DEFINITY station corresponding to the Message Waiting Lamp extension you defined for this mailbox. On the DEFINITY, make sure that 'Leave Word Calling Activation' for this station is set to 'y.'

'Leave Word Calling Activation' is not active for the DEFINITY station representing the channel that the CONVERSANT uses to activate message waiting lamps. On the DEFINITY, make sure that 'Leave Word Calling Activation' for this station is set to 'y.'

The 'Leave Word Calling Reception' parameter is incorrect for the DEFINITY station representing the channel that the CONVERSANT uses to activate message waiting lamps. On the DEFINITY, make sure that 'LWC Reception' for this channel is set to 'y.'

Mailbox has been deleted or re-assigned to a different extension before the mailbox was cleared of new messages. Manually turn off the light on the switch, or temporarily assign an empty mailbox to the old extension.

Message waiting lamp extension missing or incorrect. On the CONVERSANT system, check this value on the Mailbox Definition form; ensure that it corresponds to the extension of the agent to notify of new messages.

Message waiting lamp FAC missing or incorrect. On the CONVERSANT system, check the Message Waiting Lamp Off Code on the Global Mailbox Administration form; ensure that it corresponds to the feature access code for turning a message waiting lamp off. On the DEFINITY, check that the 'Leave Word Calling Cancel A Message' field contains the same value.

**Problem**

**Cause and Possible Remedy**

Announcement not played prior to mailbox information for automatic agent access transcription

Message Waiting Lamp Access Channel changed prematurely. The CONVERSANT system must use the same Message Waiting Lamp Access Channel to activate and deactivate a Message Waiting Lamp. Replace the Message Waiting Lamp Access Channel with the channel originally used to light this lamp or manually turn this lamp off on the switch.

Another program (for example, AUDIX Voice Power) has illuminated the lamp.

Phrases have not been recorded. Listen for the selected phrase in callback messaging phrase administration to ensure that the phrase exists. If it does not, record and be sure to install the phrase using \*#.

Phrase not installed when re-recorded. Listen for the selected phrase in speech administration to ensure that the proper phrase corresponds. If not, re-record and be sure to install the phrase using \*#.

Phrase not assigned. Check mailbox administration to be sure that a phrase has been selected.

Agent callback not working

A working port has not been assigned for callback.

The port assigned for callback is busy or has been set up as an announcement station on the DEFINITY switch.

Incorrect agent extension or VDN defined. Check mailbox administration to ensure that a valid VDN or extension for agent access has been defined.

The retry interval agent or callback hours have not been administered correctly.

| <b>Problem</b>                                                                                                    | <b>Cause and Possible Remedy</b>                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                   | <p>VDN threshold on PBX not allowing messages to be sent. Check the threshold level set on the DEFINITY switch.</p> <p>Channels are busy with other calls. Try dedicating a channel to agent callback.</p> <p>Calls intended for agents are being answered in a queue with a recorded announcement or music on hold.</p>                        |
| After reaching a voice mailbox, the agent cannot reach the After Callback menu to reclassify the Callback Attempt | Agents must disconnect from Audix or Audix Voice Power before they can access the After Callback menu. Press **9 to exit a mailbox; then press *99 to reclassify the callback attempt.                                                                                                                                                          |
| Message waiting lamps, agent access, and automatic call launching do not work with Line-Side T1.                  | Whenever the DEFINITY 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 switch.                            |
| Fragmented message received by agent in Callback Messaging                                                        | Caller hung up during Message Drop. No resolution required.                                                                                                                                                                                                                                                                                     |
| Customer Callback not working                                                                                     | <p>The mailbox does not include a prompt for a telephone number to call back (type P).</p> <p>Outside line access code not specified or incorrect.</p> <p>DEFINITY port configuration incorrect. Check to see that conference call transfer and outside line access are enabled.</p> <p>DEFINITY port is restricted from making toll calls.</p> |
| Agent is permanently placed on soft hold when initiating outcall. Consequently, outcall fails                     | ARS setting in DEFINITY dial plan set incorrectly. Must be set to "No." Dialing initial digit "1" not required.                                                                                                                                                                                                                                 |

| <b>Problem</b>                                | <b>Cause and Possible Remedy</b>                                             |
|-----------------------------------------------|------------------------------------------------------------------------------|
|                                               | Retry interval should be reduced                                             |
| The same message is repeatedly sent to agents | Callback attempt fails or is aborted. Try saving the message to retry later. |

### **Custom Call Routing**

---

| <b>Problem</b>       | <b>Cause and Possible Remedy</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Application hangs up | <p>No match in the table and a "no match found" alternative is not defined. Check your CONVERSANT vector to ensure that a message or transfer pattern for "no match found" is included (for instance, transfer to an operator).</p> <p>Table not populated. Check custom call routing administration to ensure that records exist in your table. If not, populate your table from DOS floppy, or from on-screen administration.</p> <p><i>Converse</i> step not passing digits. Check DEFINITY vectors to ensure that a <i>converse</i> step is defined and passing the correct information.</p> <p>Data return FAC code on CONVERSANT does not match the code on the DEFINITY switch.</p> <p>Use a <i>wait</i> command just before the <i>collect digits</i> command on the DEFINITY switch as a caution in case DEFINITY resources are busy.</p> |

| <b>Problem</b>                                | <b>Cause and Possible Remedy</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Caller routed to the wrong destination</p> | <p>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.</p> <p><i>Collect digits</i> command on the DEFINITY switch out of order. Check the DEFINITY setup to be sure that the DEFINITY switch is routing on the destination, and not other digits passed via DATA_RTN.</p> <p>DATA_RTN action in the wrong place on the CONVERSANT vector. DATA_RTN passing destination should correspond to the DEFINITY <i>collect digits</i> command immediately preceding the <i>route</i> command on the DEFINITY vector. Check the switch and the CONVERSANT platform to verify.</p> |
| <p>Unable to load data to a routing table</p> | <p>Not a DOS floppy. Table must be loaded from a DOS floppy.</p> <p>Table not created. Must create a routing table in custom call routing administration first.</p> <p>Incorrect delimiters used. Check the documentation and on-screen help for a list of valid options.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

### **System Administration**

---

| <b>Problem</b>                | <b>Cause and Possible Remedy</b>                         |
|-------------------------------|----------------------------------------------------------|
| <p>No data in reports</p>     |                                                          |
| <p>    General</p>            | <p>No calls received during selected day</p>             |
| <p>    Call Event Detail</p>  | <p>Activated vectors did not include a REPORT action</p> |
| <p>    Call Event Summary</p> | <p>Activated vectors did not include a REPORT action</p> |
| <p>    Message Log</p>        | <p>No messages left during selected day</p>              |

| <b>Problem</b>                                                                                                            | <b>Cause and Possible Remedy</b>                                                                           |
|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Reports will not print                                                                                                    | Printer not configured properly                                                                            |
| Printed reports jumbled                                                                                                   | Printer not compatible                                                                                     |
| Back up to floppy failed                                                                                                  | Floppy disk incorrectly formatted<br>Floppy disk is write-protected                                        |
| Restore from floppy failed                                                                                                | Floppy disk has been overwritten or damaged                                                                |
| <b>There may be insufficient free processes to administer this package</b> warning message encountered at program startup | Check the NPROC UNIX System tunable parameter                                                              |
| <b>There may be too many files open to administer this package</b> warning message encountered at program startup         | Check the NFILE UNIX System tunable parameter                                                              |
| <b>There may be insufficient free i-nodes to administer this package</b> warning message encountered at program startup   | Check the NINODE, NS5INODE, and NFILE UNIX System tunable parameters to determine if they may be increased |
| <b>There may be insufficient disk space under /usr to administer this package</b> error encountered at program startup    | Delete unnecessary files from the disk<br>Consider adding disk storage                                     |

## **Other Problems**

---

Because of the structure of the CONVERSANT Call Center Solutions system, a single problem can sometimes have any one of a number of causes and remedies. The following section presents a broad selection of problems that may be addressed by any of the remedies given.

### **Problem:**

System operates improperly or database(s) have become corrupted. Specifically:

- Can't open file: file does not exist error encountered
- System does not write data to fields
- System does not write to fields that it normally populates after the user enters information elsewhere on the form
- Error encountered when attempting to save, close, or cancel a form or text entry
- SAVE appears to work, but user finds information missing after re-entering form
- Function keys, such as REMOVE and DIR do not work
- System will not place new vectors in service
- System will not record speech
- System will not input, export, back up, or restore databases
- Vector, phrase, mailbox, and routing databases become corrupted
- System dumps core
- System monitor does not become activated
- Access to UNIX operating system denied
- Terminal freezes
- Form accepts invalid input or rejects valid input

### **Cause and Possible Remedy:**

System is improperly tuned or configured. Check:

- Free disk space under /usr
- Console system messages
- Tunable UNIX System parameters
- The hardware may be faulty. Check all key components.

 **NOTE:**

If one of the databases has been corrupted, follow the recommendations above to correct the underlying problem and then restore the database from a backup on floppy disk. If a backup is not available, restore as follows:

Vector database: Check each action in each vector to verify that each is 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 all forms and settings are 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. Do not save a form if you think it may corrupt your database.

---

# Installing and Removing CONVERSANT Call Center Solutions Software

# 10

---

This chapter describes the specific steps to follow when you install and remove the CONVERSANT Call Center Solutions software.

## **Overview of Installation and Removal of CONVERSANT Call Center Solutions Software**

---

This chapter explains how to install and remove the Conversant Call Center Solutions platform and optional modules on the system. To install the CONVERSANT Call Center Solutions software, you must have the CONVERSANT VIS Version 3.1 or greater application software in place. (See the *CONVERSANT Voice Information System Software Installation and Upgrade* manual, Chapters 2 and 3, for more information.)

The three packages you must install are:

- Announcement Administration
- Announcement Runtime
- Announcement Speech Administration

The optional packages are:

- Custom Call Routing
- Callback Messaging Runtime and Speech

After you install your packages, you must assign the CONVERSANT Call Center Solutions service, named ccc, to every port you plan to use. Refer to the CONVERSANT 3.1 operations guide for more information about assigning service to channels.



**NOTE:**

When the CONVERSANT Call Center Solutions packages are installed, the CONVERSANT system needs to be rebooted. Do not install this software on a system that is receiving calls.

## Installing Announcement Administration

When installing the CONVERSANT Call Center Solutions Announcement platform, you must install the announcement administration package first. Use the following procedure:

1. Log into the system as root.
2. At the UNIX system prompt, **#**, enter **installpkg**

System response:

Confirm

Please indicate the installation medium you intend to use.

Strike "C" to install from CARTRIDGE TAPE

or "F" to install from FLOPPY DISKETTE.

Strike ESC to stop.

3. Press **f**

System response:

Confirm

Please insert the floppy disk.

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

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

Strike ENTER when ready

or ESC to stop.

4. Insert the Announcement Administration floppy disk and press [ENTER].

System response:

```
Installation is in progress -- do not remove the floppy disk.
Searching for the Size file
      Install in progress
```

```
Transfer in progress - Do not remove the floppy disk.
It is safe to remove the floppy disk.
```

System Message

```
This utility installs the CONVERSANT SOLUTIONS Announcement
Platform: Administration package. It creates directories
and changes configuration files. Press <DELETE> to abort.
```

Strike ENTER when ready.

5. Press [ENTER].

System response:

```
Checking space in filesystem....Space is available.
Copying files....
Adding user ccc to the system...
Enter a password for ccc:
New password:
```

6. You can use any password, for example, "ccc." Enter **ccc**.

System response:

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

7. Enter **ccc**.

System response:

```
Checking speech talkfile availability...
Installing crontab entries.
Installation of CONVERSANT SOLUTIONS Announcement Platform:
      Administration is complete.

The installation of the CONVERSANT SOLUTIONS Announcement
Administration Version 2.0, XX Ports is now complete.
```

8. Make sure that the light on the floppy disk drive is off. When it is off, remove the floppy disk.
9. You have completed this procedure. Please continue with the installation of the Announcement Runtime package.

## Installing Announcement Runtime

When installing the CONVERSANT Call Center Solutions announcement platform, you must install the Announcement Runtime package after Announcement Administration.

Use the following procedure:

1. If you are not already logged in, log into the system as root.
2. At the UNIX system prompt, #, enter **installpkg**.

System response:

Confirm

Please indicate the installation medium you intend to use.

Strike "C" to install from CARTRIDGE TAPE

or "F" to install from FLOPPY DISKETTE.

Strike ESC to stop.

3. Press **f**.

System response:

Confirm

Please insert the floppy disk.

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

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

Strike ENTER when ready

or ESC to stop.

4. Insert the Announcement Runtime floppy disk and press [ENTER].

System response:

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

Searching for the Size file

Install in progress

Transfer in progress -Do not remove the floppy disk.

It is safe to remove the floppy disk.

System Message

This script installs the CONVERSANT Solutions Announcement Runtime package. It creates directories and changes configuration files. Press <DELETE> to abort.

Strike ENTER when ready.

5. Press [ENTER].

System response:

Checking space in file system...Space is available.

Copying files....

Installing script....

Adding standard speech...

(Phrases being added will scroll on the screen.)

Configuring error logs....

Installing DIPS....

Installing inittab entries.

Reconfigure the UNIX kernel (Y/N)

(Type <Y> to continue, <N> to skip step):y

6. Enter **y**.

System response:

Setting kernel parameters....

Tuneable Parameter "NCALL" is currently set to 90.  
Is it OK to change it to 200? (y/n)

The UNIX Operating System will now be rebuilt.

This will take approximately 2 minutes. Please wait.

The UNIX Kernel has been rebuilt.

Installation of CONVERSANT Solutions Announcement Runtime is  
complete.

Confirm

To complete the install/remove process a shutdown is now being  
initiated automatically.

Make sure your floppy drive is empty. If you are  
installing or removing controller boards, you may power  
down the system after the shutdown has completed.

Strike ENTER when ready  
or ESC to stop.

7. Enter **y**.

System response:

The UNIX Operating System will now be rebuilt.

This will take approximately 2 minutes. Please wait.

The UNIX Kernel has been rebuilt.

Installation of CONVERSANT Solutions Announcement Runtime is complete.

Confirm

To complete the install/remove process a shutdown is now being initiated automatically.

Make sure your floppy drive is empty. If you are installing or removing controller boards, you may power down the system after the shutdown has completed.

Strike ENTER when ready  
or ESC to stop.

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

9. Press [ENTER] to run the shutdown. Reboot the system when prompted.

10. You have completed this procedure. Continue with the installation of Announcement Speech Administration.

## **Installing Announcement Speech Administration**

---

When installing the CONVERSANT Call Center Solutions announcement platform, you must install the Announcement Speech Administration package after Announcement Administration and Announcement Runtime. Use the following procedure:

1. If you are not already logged in, log into the system as root.

2. At the UNIX system prompt, **#**, enter **installpkg**.

System response:

Confirm

Please indicate the installation medium you intend to use.

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

Strike ESC to stop.

3. Press **f**.

System response:

Confirm

Please insert the floppy disk.

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

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

Strike ENTER when ready  
or ESC to stop.

4. Insert the Announcement Speech Administration floppy disk and press [ENTER].

System response:

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

Searching for the Size file

Install in progress

Transfer in progress - Do not remove the floppy disk.

It is safe to remove the floppy disk.

System Message

This utility installs the CONVERSANT SOLUTIONS Announcement Platform: Speech Administration package. It creates directories and changes configuration files. Press <DELETE> to abort.

Strike ENTER when ready.

5. Press [ENTER].

System response:

Copying files....

Adding speech...

(Phrases being added will scroll on the screen.)

Installing script...

Installing DIPS...

Installation of CONVERSANT SOLUTIONS Announcement Platform:  
Speech Administration is complete.

The installation of the CONVERSANT SOLUTIONS Announcement Platform: Speech Administration Version 2.0 is now complete.

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

You have completed the installation of the announcement platform. If you will be installing the optional modules, continue with the next procedures.

## Installing Custom Call Routing

Before installing CONVERSANT Call Center Solutions Custom Call Routing, you must first install the Announcement Administration, Announcement Runtime and Announcement Speech Administration packages. Use the following procedure to install Custom Call Routing:

1. If you are not already logged in, log into the system as root.
2. At the UNIX system prompt, **#**, enter **installpkg**.

System response:

Confirm

Please indicate the installation medium you intend to use.

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

Strike ESC to stop.

3. Press **f**.

System response:

Confirm

Please insert the floppy disk.

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

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

Strike ENTER when ready  
or ESC to stop.

4. Insert the Custom Call Routing floppy disk and press [ENTER].

System response:

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

Searching for the Size file

Install in progress

Transfer in progress - Do not remove the floppy disk.

It is safe to remove the floppy disk.

System Message

This utility installs the CONVERSANT SOLUTIONS Custom Call Routing package. It creates directories and changes configuration files. Press <DELETE> to abort.

Strike ENTER when ready.

5. Press [ENTER].

System response:

Copying files....

Creating temporary tablespace....

Installation of CONVERSANT SOLUTIONS Custom Call Routing is complete.

The installation of the CONVERSANT SOLUTIONS Custom Call Routing Version 2.0 is now complete.

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

You have completed the installation of Custom Call Routing.

## Installing Callback Messaging

Before installing CONVERSANT Call Center Solutions Callback Messaging, you must first install the Announcement Administration, Announcement Runtime, and Announcement Speech Administration packages. Also, when installing the Callback Messaging software, you should install Callback Messaging Runtime before Callback Messaging Speech. Use the following procedure to install these packages:

1. If you are not already logged in, log into the system as root.

2. At the UNIX system prompt, #, enter **installpkg**.

System response:

Confirm

Please indicate the installation medium you intend to use.

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

Strike ESC to stop.

3. Press **f**.

System response:

Confirm

Please insert the floppy disk.

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

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

Strike ENTER when ready  
or ESC to stop.

4. Insert the Callback Messaging Runtime floppy disk and press [ENTER].

System response:

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

Searching for the Size file

Install in progress

Transfer in progress - Do not remove the floppy disk.

It is safe to remove the floppy disk.

System Message

This script installs the CONVERSANT SOLUTIONS Callback Messaging: Runtime package. It creates directories and changes configuration files. Press <DELETE> to abort.

Strike ENTER when ready.

5. Press [ENTER].

System response:

Copying files....

Installing scripts....

Installing CALLBACK daemon...

Installing MSGDROP dip...

Installing inittab entries.

Inittab successfully rebuilt

Installing Oracle Tables...

Table created.

Table created.

Table created.

Index created.

Table created.

Phrase 1000 added to talk file 242 from file /usr/add-on/ccc/OBJECTS/MSGDROP/data/audit.mbx

Stop and restart voice system to allow database update (Y/N):y

### 6. Press **y**.

The CONVERSANT Call Center Solutions system will stop, then start, the voice system. After several status messages, you will see:

```
Installation of CONVERSANT SOLUTIONS Callback Messaging:  
Runtime is complete.
```

```
The installation of the CONVERSANT SOLUTIONS Callback  
Messaging Runtime Version 2.0 is now complete.
```

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

You have completed the installation of Callback Messaging Runtime.

Next, install Callback Messaging Speech:

1. If you are not already logged in, log into the system as root.
2. At the UNIX system prompt, **#**, enter **installpkg**.

System response:

Confirm

Please indicate the installation medium you intend to use.

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

Strike ESC to stop.

### 3. Press **f**.

System response:

Confirm

Please insert the floppy disk.

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

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

Strike ENTER when ready  
or ESC to stop.

4. Insert the Callback Messaging Speech floppy disk and press [ENTER].

System response:

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

```
Searching for the Size file
```

```
    Install in progress
```

```
Transfer in progress - Do not remove the floppy disk.
```

```
It is safe to remove the floppy disk.
```

System Message

```
This script installs the CONVERSANT SOLUTIONS Callback  
Messaging: Speech package. It creates directories and  
changes configuration files. Press <DELETE> to abort.  
Strike ENTER when ready.
```

5. Press [ENTER].

System response:

```
Copying files....
```

```
Adding speech...
```

```
**** DIRECTORY: /speech/talk/Mailbox.pl ****
```

```
XXXX blocks
```

```
**** DIRECTORY: /speech/talk/cccstd.pl ****
```

```
Installation of CONVERSANT SOLUTIONS Callback Messaging:  
Speech is complete.
```

```
The installation of the CONVERSANT SOLUTIONS Callback  
Messaging Speech Version 2.0 is now complete.
```

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

You have completed the installation of the Callback Messaging Speech Administration software.

You have completed the installation of the CONVERSANT Callback Messaging Package.

## Removing the CONVERSANT Call Center Solutions Software

---

The CONVERSANT Call Center Solutions packages should be removed in reverse order. Therefore, you should remove the optional packages first:

- Callback Messaging Speech and Runtime
- Custom Call Routing

Then you should remove the announcement packages:

- Announcement Speech Administration
- Announcement Runtime
- Announcement Administration

This procedure will also remove all standard speech phrases in talk file #241.

### Removing CONVERSANT Call Center Solutions Callback Messaging Speech

---

To remove CONVERSANT Callback Messaging Speech, do the following:

1. If you are not already logged in, log into the system as root.
2. At the UNIX system prompt, **#**, enter **removepkg**.

The system displays a list of installed UNIX packages numbered 1 to *n*.

3. Enter the number of the CONVERSANT Solutions Callback Messaging Speech Version 2.0.

The system displays the following message:

Confirm

Do you really want to remove CONVERSANT SOLUTIONS Callback Messaging Speech Version 2.0?

Strike ENTER when ready

or ESC to stop.

4. Press [**ENTER**].

System response:

Removing speech for Call Back Messaging administration,  
talkfile 240

Answer 'y' to remove speech from the speech file system

Are you sure you want to erase ALL phrases from talkfile 240?  
(y/n)

5. Press **y**.

System response:

(Phrases being deleted will scroll on the screen)

```
Removing speech for Call Back messages, talkfile 242
Answer 'y' to remove speech from the speech file system
Are you sure you want to erase ALL phrases from talkfile 242?
(y/n)
```

6. Press **y**.

System response:

(Phrases being deleted will scroll on the screen)

```
Removal of CONVERSANT SOLUTIONS Callback Messaging Speech is
complete.
```

```
The CONVERSANT SOLUTIONS Callback Messaging Speech
Version 2.0 is now removed.
```

## Removing Callback Messaging Runtime

To remove Callback Messaging Runtime, follow this procedure:

1. If you are not already logged in, log into the system as root.
2. At the UNIX system prompt, **#**, enter **removepkg**.

The system displays a list of installed UNIX packages numbered 1 to *n*.

3. Enter the number of the CONVERSANT Solutions Callback Messaging Runtime Version 2.0.

The system displays the following message:

Confirm

```
Do you really want to remove CONVERSANT SOLUTIONS Callback
Messaging Runtime Version 2.0?
```

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

4. Press [**ENTER**].

System response:

```
Removing the CONVERSANT SOLUTIONS CallBack Messaging Runtime
Package...
```

```
The voice system must be stopped in order to remove the Callback
Messaging package. Press y or Y followed by ENTER to stop the
voice system and remove the package. Press any other key to stop.
```

5. Press **y** or **Y**.

System response:

The Voice System is now stopping  
Initiating request to clear all calls in the next 180 seconds.  
Orderly idling of system succeeded

(The system will display several status messages)

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

Please wait...  
Removing the inittab entries . . .  
Inittab successfully rebuilt  
Removing the callback daemon . . .  
Change to state 2 has been completed.  
Removing the msgdrop dip . . .

x rows deleted.

Table dropped.

Restarting the voice system...  
Inittab changed. Re-building the inittab  
Inittab successfully rebuilt

(The current date and time displays on screen.)

Checking files in /vs/data/fslist

```
Checking file /dev/rdisk/0s4
    Checking Super Block
    Super Block passes checks
    File system Partition contains 5890 blocks with 5499
(93%) unused
ORACLE RDBMS is already started

The Voice System is starting

INIT: New run level: 4

Startup of the Voice System is complete

Removal of CONVERSANT SOLUTIONS CallBack Messaging Runtime is
complete.

The CONVERSANT SOLUTIONS Callback Messaging Runtime
Version 2.0 is now removed.
```

### **Removing Custom Call Routing**

To remove the CONVERSANT Call Center Solutions Custom Call Routing package, follow this procedure:

1. If you are not already logged in, log into the system as root.
2. At the UNIX system prompt, **#**, enter **removepkg**.  
The system displays a list of installed UNIX packages numbered 1 to *n*
3. Enter the number of the CONVERSANT Call Center Solutions Custom Call Routing Version 2.0.

The system displays the following message:

```
Confirm
```

```
Do you really want to remove CONVERSANT Solutions Custom
Call Routing Version 2.0?
```

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

4. Press [**ENTER**].

System response:

```
The voice system must be stopped in order to remove the Router
package. Press y or Y followed by ENTER to stop the voice system
and remove the package. Press any other key to stop.
```

5. Press **y** or **Y**.

The CONVERSANT Call Center Solutions system will stop, then start, the voice system. After several status messages, you will see:

```
Removal of CONVERSANT SOLUTIONS Custom Call Routing is complete.
The CONVERSANT SOLUTIONS Custom Call Routing Version 2.0
is now removed.
```

### Removing Announcement Speech Administration

To remove the CONVERSANT Call Center Solutions Announcement Speech Administration package, follow this procedure:

1. If you are not already logged in, log into the system as root.

2. At the UNIX system prompt, **#**, enter **removepkg**.

The system displays a list of installed UNIX packages numbered 1 to *n*.

3. Enter the number of the Announcement Speech Administration package.

The system displays the following message:

```
Confirm
```

```
Do you really want to remove CONVERSANT Solutions
Announcement Platform: Speech Administration Version 2.0?
```

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

4. Press [**ENTER**].

System response:

```
Removing the CONVERSANT Call Center Speech Administration
package....
```

```
Removing speech for Speech Administration, talkfile 201.
Answer y' to remove this speech from the speech file system
```

```
Are you sure you want to erase ALL phrases from
talkfile 201? (Y/N)
```

5. Press **y**.

System response:

(Phrases being removed will scroll on the screen.)

```
Removing the DIP...
```

```
Removal of CONVERSANT Call Center Speech Administration is
complete.
```

```
The CONVERSANT Solutions Announcement Platform: Speech
Administration Version 2.0 is now removed.
```

## Removing Announcement Runtime

To remove the CONVERSANT Call Center Solutions Runtime package, follow this procedure:

1. If you are not already logged in, log into the system as root.
2. At the UNIX system prompt, **#**, enter **removepkg**.

The system displays a list of installed UNIX packages numbered 1 to *n*.

3. Enter the number of the CONVERSANT Call Center Solutions Announcement Runtime package.

The system displays the following message:

Confirm

Do you really want to remove CONVERSANT SOLUTIONS  
Announcement Runtime Version 2.0, XX ports?

Strike ENTER when ready

or ESC to stop.

4. Press [ENTER].

System response:

```
Removing the CONVERSANT Call Center Platform Run-Time package..  
Removing speech for standard Call Center phrases, talkfile 241  
Answer "y" to remove this speech from the speech file system. Are  
you sure you want to erase ALL phrases from talkfile 241 ?  
(y/n)
```

5. Press **y**.

System response:

(Phrases being removed will scroll on the screen.)

```
Removing the inittab entries...
```

```
Inittab successfully rebuilt
```

```
Removing the DIPS....
```

```
Removing the DIP logging messages
```

```
re-make -f formats.mk in /usr/spool/log/head/
```

```
Removal of message files complete.
```

```
Removal of CONVERSANT Solutions Announcement Runtime is  
complete.
```

```
The CONVERSANT SOLUTIONS Announcement Runtime Version  
2.0, XX Ports in now removed.
```

## Removing the Announcement Administration

To remove the CONVERSANT Call Center Solutions Announcement Administration package, follow this procedure:

1. If you are not already logged in, log into the system as root.
2. At the UNIX system prompt, **#**, enter **removepkg**.

The system displays a list of installed UNIX packages numbered 1 to *n*.

3. Enter the number CONVERSANT Announcement Administration.

The system displays the following message:

Confirm

Do you really want to remove the CONVERSANT Solutions  
Announcement Administration Version 2.0, XX Ports?

Strike ENTER when ready

or ESC to stop.

4. Press [ENTER].

System response:

Do you want to save the current vector configuration (y/n)?

5. To save your current vector configuration to a file, which can be restored by re-installing the Platform Administration package, press **y**.

To remove the vector configuration, press **n**.

System response:

Removing speech for Call Center Announcements, talkfile 224 Answer  
"y" to remove this speech from the speech file system. Are you  
sure you want to erase ALL phrases from talkfile 224? (y/n)

6. Press **y**.

System response:

(Phrases being removed will scroll on the screen.)

Removal of CONVERSANT Solutions Announcement Administration  
is complete.

The CONVERSANT Solutions Announcement Administration  
Version 2.0, XX Ports is now removed.

## Performing Upgrades

---

### The Announcement Package

---

Follow these steps to upgrade the call handling capacity of your CONVERSANT Call Center Solutions announcement package. Upgrades are available separately from AT&T.



**NOTE:**

These instructions apply only to expanding the number of ports your version of the software can support; not to upgrading the current release of your software to a more recent release.

1. At the system backup/restore menu, back up your runtime vectors by selecting:
  - a. **Restore Vector Database - from Current Runtime** (to overwrite the development database with the runtime database).
  - b. **Backup Vector Database to Floppy Disk**



**NOTE:**

If you want to back up your original development vectors too, back up the development database once *before* you perform steps a. and b.

2. Back up talk file 224 (vector phrases). If you have made changes to standard speech, back up talk file 241 (standard speech phrases) on a separate disk.
3. If you have Callback Messaging installed:
  - a. Back up talk file 242 (mailbox phrases).
  - b. At the system backup/restore menu, select **Backup Mailbox Configuration**.
  - c. Follow the instructions in this chapter to remove callback messaging speech and runtime.
4. If you have Custom Call Routing installed, follow the instructions in this chapter to remove it. Note that this will permanently erase your Custom Call Routing database tables.
5. Follow the instructions in this chapter to remove announcement speech, runtime, and administration.
6. Install your new CONVERSANT Call Center Solutions announcement package.
7. If you removed Custom Call Routing, re-install it.
8. If you removed Callback Messaging:
  - a. Re-install it.
  - b. Select **Restore Mailbox Configuration** at the system backup/restore menu.
  - c. Select **Restore Speech** at the system backup/restore menu, and restore talk file 242 (mailbox phrases).

9. At the system backup/restore menu, restore your original runtime vectors by choosing:

- a. **Restore Vector Database - from Floppy Disk** (to overwrite the development database with the runtime database).
- b. **Place New Vectors in Service**



**NOTE:**

If you want to restore your original development database too, restore it from disk *after* you perform steps 9.a. and 9.b. Do not select **Place New Vectors in Service** a second time.

10. At the system backup/restore menu, select **Restore Speech** and restore talk file 224 (vector phrases.) If you performed a backup of standard speech, also restore talk file 241 (standard speech phrases).



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# Hard Disk Drive Space Requirements



---

## Overview

When used in a busy call center environment, the CONVERSANT Call Center Solutions software occupies a significant amount of hard disk storage space under the /root, /usr and speech file systems. This appendix will help you decide how much space to allocate to the CONVERSANT Call Center Solutions package when you configure your CONVERSANT system.

For general disk drive partitioning guidelines, refer to Chapter 2 of the manual *CONVERSANT Version 3.1 Software Installation and Upgrade*, 585-350-104. When using the CONVERSANT Call Center Solutions software as the *only* application on a CONVERSANT system, it is typically safe to use the partitions for general usage this manual recommends. These partitions apply to:

- MAP/40 systems that receive 10,000 or fewer calls per day, need fewer than 1.4 hours of speech storage, and have under 4 call routing tables.
- MAP/100 systems that receive 30,000 or fewer calls per day, need fewer than 7 hours of speech storage, and have under 20 call routing tables.

If you will use the CONVERSANT Call Center Solutions software with any other application(s) or exceed the parameters above, use the following information to calculate the amount of space you must include for CONVERSANT Solutions when you partition your hard disk.

 **NOTE:**

In making your calculations, remember that one caller making a single call to the switch may generate several separate calls on the CONVERSANT Call Center Solutions platform. For example, one caller may receive a standard announcement *and* an anticipated delay announcement *and* leave a message in the Callback Messaging module.

## **The /root and /usr file systems**

When gauging space requirements, you must account for:

- CONVERSANT Call Center Solutions application software
- CONVERSANT Call Center Solutions call logs for reporting
- Call handling data stored in the ORACLE database
- Any ORACLE database table(s) you create for the CONVERSANT Call Center Solutions Custom Call Routing

### **CONVERSANT Call Center Solutions Software**

Initially, the CONVERSANT Call Center Solutions package requires approximately 1.8 MBytes under /root and 1.8 MBytes under /usr for application files. Include these figures in your calculations to define the total space required in the /root and /usr file systems.

### **Call Logs**

The CONVERSANT Call Center Solutions system stores information about each call in its own call log database, a UNIX file under /usr . Each call creates a record of about 65 bytes that is normally stored in the call log for 7 days.

Keep in mind that one call by one caller to the DEFINITY switch can generate many calls to the CONVERSANT Call Center Solutions system. Your database must be able to accommodate information about each of these events. For example, to provide a standard announcement, an anticipated delay announcement, and an opportunity to leave a message in the Callback Messaging module, a DEFINITY vector calls the CONVERSANT Call Center Solutions platform 3 times.

To calculate the space needed in the /usr file system for the CONVERSANT Call Center Solutions call log database, use the following equation where:

- X = number of days to keep data in the call log
- Y = number of calls per day to the CONVERSANT Call Center Solutions application

Then,

$(X \text{ days}) * (Y \text{ calls/day}) * (65 \text{ bytes/call}) * (1 \text{ MByte}/1,000,000 \text{ bytes}) =$   
the total Mbytes of space in /usr for call logs.

For example, a call center that receives 10,000 calls per day and stores call logs for the default 7 days needs:

$$(7 \text{ days}) * (10,000 \text{ call/day}) * (65 \text{ bytes/call}) * (1 \text{ MByte}/1,000,000 \text{ bytes}) = 4.6 \text{ MBytes in /usr.}$$

### **Call Handling Data in ORACLE**

The CONVERSANT VIS stores call handling data in the ORACLE database in the /root file system. For ORACLE database sizing, refer to Appendix C, "Database Environment," in the manual *CONVERSANT Version 3.1 Operations*, 585-350-701.



**NOTE:**

The database file takes space from the /root file system. Recognize this requirement when you partition /root.

For a general guideline of CONVERSANT systems with the CONVERSANT Call Center Solutions software only:

A CONVERSANT MAP/40 that receives 10,000 calls per day needs an ORACLE database of at least 17 MBytes. This fits in the 20 MBytes ORACLE database of the general usage partitioning for the MAP/40.

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

When using the CONVERSANT Call Center Solutions software with any other application(s) or when exceeding the above parameters, see the database sizing section of Appendix C of the operations manual to calculate your database's actual size requirements.

### **CONVERSANT Call Center Solutions Custom Call Routing Information in ORACLE Database Tables**

When using the CONVERSANT Call Center Solutions Custom Call Routing module, you will create an ORACLE database table in the /usr file system for each call routing application. Each ORACLE database table requires 2.5 MBytes. Therefore, you must add to your calculations for hard drive partitioning 2.5 MBytes of space in the /usr file system for each call routing table you will define.



**NOTE:**

The routing module is optional. If you will not be using it, you do not need to include additional space requirements in your calculations to define /usr.

To calculate the space needed in the /usr file system for the custom call routing database tables, use the following equation where:

X = expected number of custom call routing database tables

Then,

$X * (2.5 \text{ MBytes})$  = the total MBytes of space in the /usr partition for the custom call routing database tables.

For example, a CONVERSANT Call Center Solutions system with 2 call routing database tables needs:

$2 * (2.5 \text{ MBytes}) = 5 \text{ MBytes}$  of space in the /usr partition.

### **The Speech File System**

---

In this file system(s), you must account for:

- CONVERSANT Call Center Solutions system speech and announcements and Callback Messaging prompts
- CONVERSANT Call Center Solutions Message Drop messages

To estimate the space required for the speech partition(s), refer to Chapter 2, "Installing the UNIX Operating System," in *CONVERSANT Version 3.1 Software Installation and Upgrade*, 585-350-104.

### **CONVERSANT Call Center Solutions System Speech**

System speech comes standard with the CONVERSANT Call Center Solutions application and uses 1 Mbyte of space from the speech slice.

To ensure that performance is not degraded, CONVERSANT systems with more than 30 ports should not use the 64K speech coding rate. By default, CONVERSANT Call Center Solutions announcements and Callback Messaging prompts use the 32K coding rate. At this rate, approximately 14 MBytes of the speech partition(s) are used for each hour of announcement speech.

For systems with fewer than 30 ports, a speech coding rate of 64K can be used for higher speech quality, especially for CONVERSANT Call Center Solutions announcements and Callback Messaging prompts. At this rate, approximately 28 MBytes of the speech partition(s) are used for each hour of announcement speech. Include the requirements of system speech, announcements and Callback Messaging prompts in your calculations to define speech partition(s).

To calculate the space needed for CONVERSANT Call Center Solutions system speech, announcements, and Callback Messaging prompts, use the following equation, where:

X = expected number of announcements and Callback Messaging prompts

Y = expected average length of announcements and Callback Messaging prompts in seconds

Z = 14 MBytes/hr (32K coding rate) or 28 MBytes/hr (64K coding rate) for speech usage

Then,

$$(1 \text{ Mbyte}) + [(X) * (Y \text{ sec}) * (Z \text{ MBytes/hr}) / 3600 \text{ sec/hr}] =$$

the total MBytes of space in the speech partition(s) for the CONVERSANT Call Center Solutions System speech and announcements

For example, a CONVERSANT Call Center Solutions system with a total of 50 announcements and Callback Messaging prompts of 20 seconds long, each using the 32K coding rate needs:

$$(1 \text{ Mbyte}) + [(50) * (20 \text{ sec}) * (14 \text{ MBytes/hr}) / (3600 \text{ sec/hr})] =$$

5 MBytes of space in the speech partition(s)

### **CONVERSANT Call Center Solutions Callback Messaging Messages**

All Callback Messaging messages are coded using the 16K coding rate. This means that about 7 MBytes of the speech partition(s) are used for each hour of messages stored. Messages are stored until a call center agent or system administrator removes them.

Note that the Callback Messaging module is optional. If you will not use it, you do not need to include additional memory requirements in your calculations.

To calculate the space needed for CONVERSANT Call Center Solutions callback messaging messages, use the following equation, where:

X = expected number of end user messages

Y = expected average length of end user messages in seconds

Then,

$$(X) * (Y \text{ sec}) * (7 \text{ MBytes/hr}) / (3600 \text{ sec/hr}) =$$

the total Mbytes of space in the speech partition(s) for the end user messages.

For example, a CONVERSANT Call Center Solutions system that stores 250 end user messages with an average length of 120 seconds each needs:

$$(250) * (120 \text{ sec}) * (7 \text{ MBytes/hr}) / (3600 \text{ sec/hr}) =$$

58 Mbytes of space in the speech partition(s)

Therefore, a system with 50 announcements, each 20 seconds long; and also 250 end-user messages, each 120 seconds long, requires:

5 MBytes for system speech and announcements +  
58 Mbytes for messages =  
a total of 63 MBytes in the speech partition(s) for CONVERSANT Call Center Solutions speech.

### **Example Summary**

---

Using the above examples, a CONVERSANT Call Center Solutions system having:

- CONVERSANT Call Center Solutions application software
- 7 days of CONVERSANT Solutions call log data
- 10,000 calls/day
- 2 Custom Call Routing database tables
- 50 announcements and Callback Messaging prompts of 20 seconds long, each using the 32K coding rate
- 250 end user messages with an average length of 120 seconds each

Would require for:

- /root
  - 1.8 MBytes for CONVERSANT Call Center Solutions application software
- /usr
  - 1.8 MBytes for CONVERSANT Call Center Solutions application software
  - 4.6 MBytes for CONVERSANT Call Center Solutions call logs
  - 5 MBytes for CONVERSANT Call Center Solutions Custom Call Routing tables

- the ORACLE database
  - 17 MBytes for call handler data in /root
- speech
  - 5 Mbytes for the CONVERSANT Call Center Solutions system speech, announcements, and Callback Messaging prompts
  - 58 MBytes for Callback Messaging messages

---

# Port Sizing Guidelines

# B

---

## General Considerations

Use the following forms to help estimate the number of analog ports required for various CONVERSANT vector applications created on the CONVERSANT Call Center Solutions platform.

You can set up your DEFINITY vector to direct all calls to any available CONVERSANT port by assigning all CONVERSANT ports to a single hunt group. Or, you may define groups of hard and dynamically allocated ports by segregating particular CONVERSANT ports within multiple DEFINITY hunt groups.

Refer to standard ERLANG B engineering tables in the *CONVERSANT Version 3.1 Operations* guide, 585-350-701, for assistance in sizing ports for each CONVERSANT Call Center Solutions application.

## Application Considerations

### Standard Announcement Guidelines

CONVERSANT ports must be set up as dedicated announcement extensions on the CONVERSANT Call Center Solutions platform. You must allow one hard allocated port for each standard announcement. Therefore, ports must be calculated on a per-announcement basis.

## **Dynamic Port Allocation**

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### **General Observations**

---

Ports on the CONVERSANT Call Center Solutions platform may be dynamically allocated to provide efficient port utilization. All CONVERSANT vector applications other than standard announcements may be allocated dynamically across CONVERSANT ports.

This means that ports on the CONVERSANT Call Center Solutions platform receive arguments from the PBX and start the appropriate CONVERSANT vector based on the value of the argument. For example, a single call directed to a CONVERSANT Call Center Solutions channel 0 may pass VDN 2000 to execute an ADA vector, whereas the next call directed to channel 0, passing VDN 3000, may hear a Custom Call Routing application.

### **Callback Messaging**

---

As a rule, calculation of port requirements for incoming calls will be sufficient because other Callback Messaging activities, such as agent callback, transcription, and automatic callback, will occur on the same ports at non-peak times, when agents and ports are available.

However, there may be call centers that will require dedicated ports for transcription. In this case, you will want to hard allocate one port per transcriber for this function.

### **Custom Call Routing**

---

On the average, you can assume less than ten seconds for lookup and call routing. Remember that the average call duration does not include post-routing call activity. Overall call duration for Custom Call Routing will vary according to the length and number of announcements prior to routing the call and time used for prompting in the CONVERSANT Call Center Solutions system, and will also depend upon the string length of the lookup field and the size of the database.

## **Port Sizing Worksheet**

Use the following worksheet to calculate the number of ports required for each application on the CONVERSANT Call Center Solutions platform:

*No. of Ports Required*

- Standard Announcements  
Total number of standard announcements = \_\_\_\_\_
  
- Dynamic Announcements  
Number of calls in the busy hour  
Average call duration  
Grade of service  
Result from standard ERLANG tables = \_\_\_\_\_
  
- Anticipated Delay/Queue Position Announcements  
Number of calls in the busy hour  
Average call duration  
Grade of service  
Result from standard ERLANG tables = \_\_\_\_\_
  
- Script Builder Applications Executed from CONVERSANT Call Center Solutions  
Number of calls in the busy hour  
Average call duration  
Grade of service  
Result from standard ERLANG tables = \_\_\_\_\_
  
- Callback Messaging/Incoming Calls  
Number of calls in the busy hour  
Average call duration  
Grade of service  
Result from standard ERLANG tables = \_\_\_\_\_

- Callback Messaging/Dedicated Transcription  
Number of simultaneous transcribers in the busy hour = \_\_\_\_\_
  
- Custom Call Routing  
Number of calls in the busy hour  
Average call duration  
Grade of service  
Result from standard ERLANG tables = \_\_\_\_\_

You may be able to minimize the number of ports required on your CONVERSANT Call Center Solutions system if you dynamically allocate groups of applications to a particular hunt group(s) of CONVERSANT channels. This is particularly effective if peak times vary from application to application because several applications will not be competing for resources in the same group of ports.

Use the following form to allocate multiple applications dynamically across CONVERSANT ports.

Remember that standard announcements and ports dedicated for Callback Messaging transcription will still require hard allocated ports.

- CONVERSANT Call Center Solutions Application Group A:  
Number of calls in the busy hour  
Average call duration  
Grade of service  
Result from standard ERLANG tables = \_\_\_\_\_
  
- CONVERSANT Call Center Solutions Application Group B:  
Number of calls in the busy hour  
Average call duration  
Grade of service  
Result from standard ERLANG tables = \_\_\_\_\_
  
- CONVERSANT Call Center Solutions Application Group C:  
Number of calls in the busy hour  
Average call duration  
Grade of service  
Result from standard ERLANG tables = \_\_\_\_\_

- **CONVERSANT Call Center Solutions Application Group D:**
  - Number of calls in the busy hour
  - Average call duration
  - Grade of service
  - Result from standard ERLANG tables = \_\_\_\_\_
  
- **CONVERSANT Call Center Solutions Application Group E:**
  - Number of calls in the busy hour
  - Average call duration
  - Grade of service
  - Result from standard ERLANG tables = \_\_\_\_\_
  
- **CONVERSANT Call Center Solutions Application Group F:**
  - Number of calls in the busy hour
  - Average call duration
  - Grade of service
  - Result from standard ERLANG tables = \_\_\_\_\_
  
- **Standard Announcements**
  - Total number of standard announcements = \_\_\_\_\_
  
- **Callback Messaging/Dedicated Transcription**
  - Number of simultaneous transcribers in the busy hour = \_\_\_\_\_

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# The Mailbox Conversion Utility



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This appendix describes the Mailbox Conversion Utility, an accessory for versions 1.0, 1.1, and 1.2 of the CONVERSANT Solutions for DEFINITY Call Center software.

## **Overview**

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The Mailbox Conversion Utility helps you transfer Callback Messaging mailbox settings from version 1.0, 1.1, or 1.2 of the CONVERSANT Solutions software to version 2.0 or greater.

The utility enhances the CONVERSANT Solutions system by adding an option to the System Backup/Restore menu. By using this option to backup your Mailbox Configuration, you can preserve parameters you established for Callback Messaging before you replaced your CONVERSANT Solutions software with a newer version.

Use this utility once, before you upgrade your system, or anytime you want to transfer a mailbox configuration from a 1.X system to a 2.X system.

## **Supported Hardware/Software**

---

The Mailbox Conversion Utility for CONVERSANT Solutions for DEFINITY Call Center is supported on these configurations:

### **CONVERSANT VIS Hardware**

- MAP/40 (up to 24 incoming ports) or MAP/100 (up to 48 incoming ports)
- IVP6 analog interface to G3
- Color monitor

## CONVERSANT VIS Software

- 3.1 CONVERSANT software (or a later version)
- 1.0, 1.1, or 1.2 CONVERSANT Solutions for DEFINITY Call Center software (or a later version)

### Peripherals:

- AT&T Printer
- AT&T Modem

CONVERSANT Solutions for DEFINITY Call Center software requires additional hardware and system software. Refer to your user documentation for details.

### Related Resources

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This appendix is intended to supplement your existing user documentation:

AT&T CONVERSANT Voice Information System Solutions for DEFINITY Call Center, 585-350-214, especially pp. 3-1 - 3-7 and 5-79 - 5-84

## Installing the Utility

---

To install the Mailbox Conversion Utility, you must have 3.1 or a greater version of the CONVERSANT VIS software in place and already be using version 1.0, 1.1, or 1.2 of the CONVERSANT Solutions for DEFINITY Call Center software. If you are already using 2.0 or a greater version of the CONVERSANT Solutions software, you do not need to install this utility.



### NOTE:

Although installing this utility will not disrupt call handling, you should avoid installing this or any other software package during periods of very high call activity.

Use the following procedure:

1. Log into the system as root.
2. At the UNIX system prompt, **#**, enter **installpkg**

System response:

Confirm

Please indicate the installation medium you intend to use.

Strike "C" to install from CARTRIDGE TAPE

or "F" to install from FLOPPY DISKETTE.

Strike ESC to stop.

3. Press **f**. If the system prompts you to identify the disk drive you want to use, enter **0** or **1**, as appropriate.

System response:

Confirm

Please insert the floppy disk.

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

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

Strike ENTER when ready  
or ESC to stop.

4. Insert the Mailbox Conversion Utility floppy disk and press [Enter].

System response:

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

Searching for the Size file

Install in progress

Transfer in progress - Do not remove the floppy disk.

It is safe to remove the floppy disk.

Copying files...

Installation of CONVERSANT SOLUTIONS 1.X to 2.0 Mailbox Conversion Utility is complete.

The installation of the CONVERSANT SOLUTIONS 1.X to 2.0 Mailbox Conversion Utility Version 1.0 is now complete.

5. Remove the floppy disk.
6. You have successfully installed the Mailbox Conversion Utility.

## **Using the Utility**

After you install the Mailbox Conversion Utility, you can copy your mailbox configuration to a floppy disk, in a format suitable for use with the latest version of the CONVERSANT Solutions for DEFINITY Call Center software.

1. Login to the CONVERSANT Solutions Administration interface by following the instructions in Chapter 5 of your user documentation. The main menu will appear (figure 1.1)

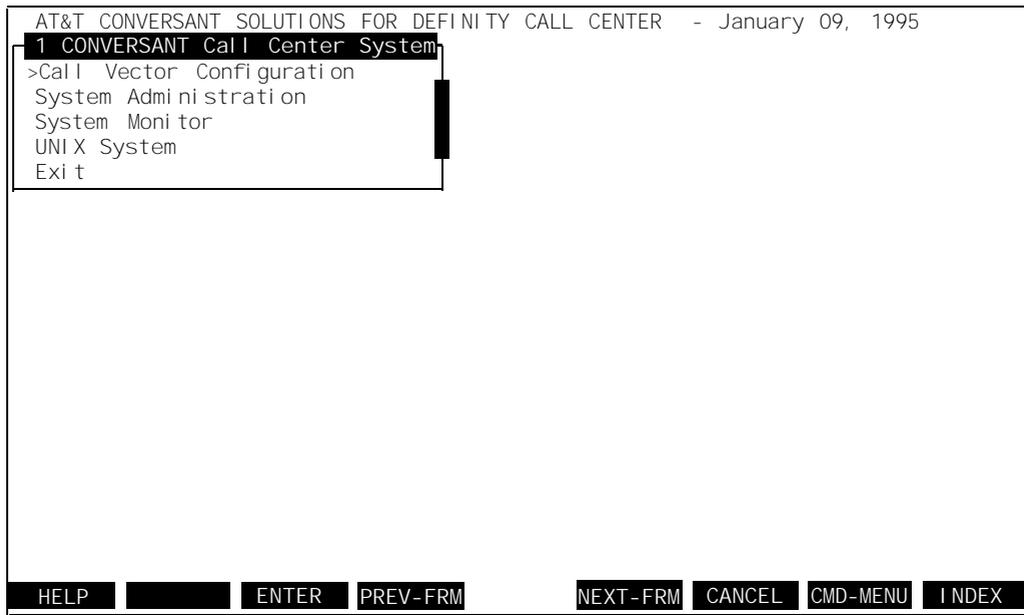


Figure 1.1: The Main Menu

2. Select **System Administration**. The System Administration menu will appear (figure 1.2)

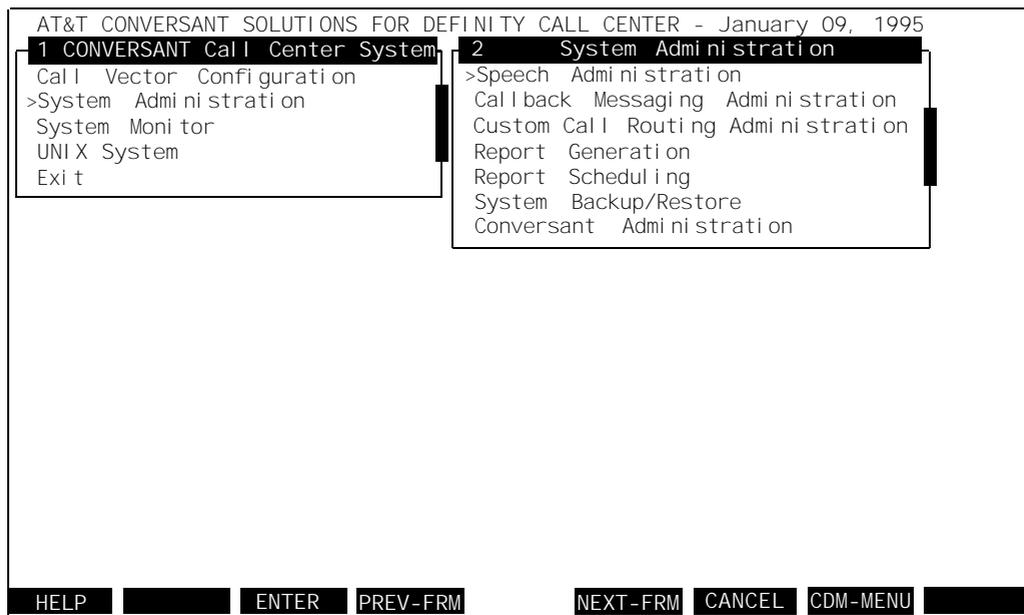
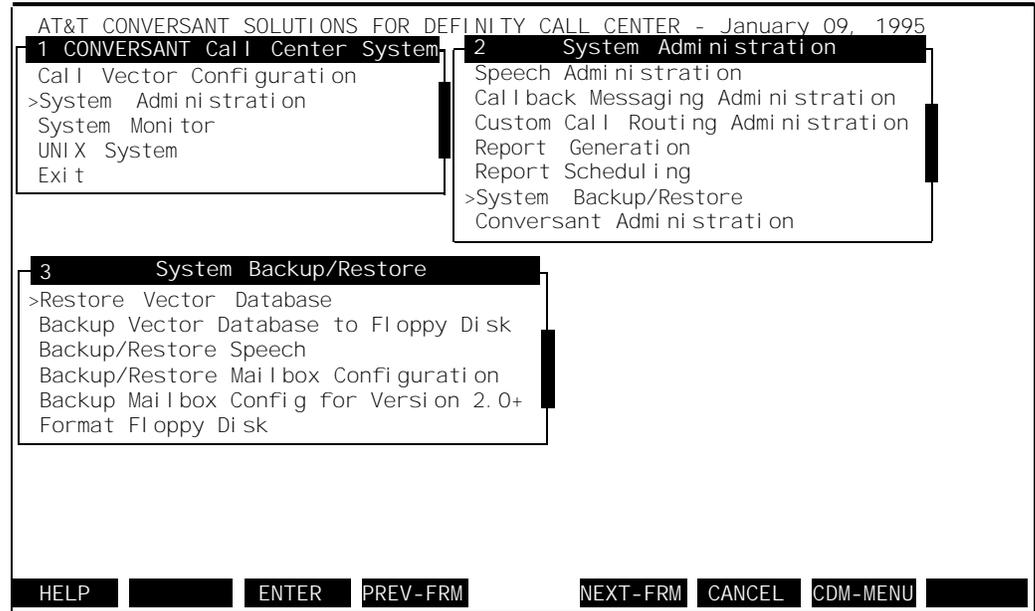


Figure 1.2: System Administration menu

3. Select System Backup/Restore. The System Backup/Restore menu will appear (figure 1.3).



**Figure 1.3: System Backup/Restore menu**

4. Insert a floppy disk into drive 0 and select **Backup Mailbox Config for Version 2.0+**.
5. When prompted, press [Enter]. The system will:
  - capture the existing data from the Callback Messaging database
  - convert the data into the version 2.0 format
  - write the converted data to a floppy disk.
6. Load the Callback Messaging data onto your upgraded system by choosing Backup/Restore Mailbox Configuration from the System Backup/Restore menu. Refer to Chapter 5 of your user documentation for step-by-step instructions.

## Removing the Utility

If you decide to remove the CONVERSANT Solutions for DEFINITY Call Center software from your system, follow these instructions to remove the Mailbox Conversion Utility too.

If you plan to replace the software with an upgraded version, first be sure to backup your vectors, speech, and mailbox configuration settings by following the instructions in this document and in Chapter 5 of your user documentation.

Although you must remove the components of Callback Messaging, Custom Call Routing, and the Announcement Platform in a specific order, you can remove the Mailbox Conversion Utility at any time by following these instructions:

1. If you are not already logged in, log into the system as root.
2. At the UNIX system prompt, **#**, enter **removepkg**.

The system will display a list of installed UNIX packages numbered 1 to *n*

3. Enter the number of the CONVERSANT SOLUTIONS 1.X to 2.0 Mailbox Conversion Utility Version 1.0

System response:

Confirm

Do you really want to remove CONVERSANT SOLUTIONS  
1.X to 2.0 Mailbox Conversion Utility Version  
1.0?

Strike ENTER when ready or ESC to stop.

4. Press [Enter].

System response:

Removal of CONVERSANT SOLUTIONS 1.X to 2.0 Mailbox  
Conversion Utility is complete.

The CONVERSANT SOLUTIONS 1.X to 2.0 Mailbox  
Conversion Utility Version 1.0 is now removed.

5. You have successfully removed the Mailbox Conversion Utility.

---

# MAXIMUM LIMITS OF VALUES IN CALL CENTER PACKAGES

# D

---

## General Administration

|                                                                               |                                                                       |
|-------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| Maximum number of concurrent calls per system                                 | 12, 24, or 48                                                         |
| Maximum number of concurrent administrators                                   | 1                                                                     |
| Maximum length of each variable value                                         | 16 characters (if used as a string) or 9 digits (if used as a number) |
| Maximum number of administerable vectors per system                           | 100                                                                   |
| Maximum length of each vector                                                 | 14 steps                                                              |
| Maximum number of mailboxes for Callback Messaging                            | 500                                                                   |
| Maximum number of mailboxes performing the callback function at the same time | 15                                                                    |
| Maximum number of records per Custom Call Routing table                       | 25,000                                                                |
| Maximum number of routing tables                                              | limited only by hard disk capacity                                    |
| Maximum number of lines of a report that may be displayed on screen           | 2000; however, the entire report can be printed.                      |

- The platform uses 22 actions, 2 additional actions for callback messaging and 1 additional action for custom call routing
- The platform uses 3 talkfiles for recorded speech:
  - Talkfile 224 for vector phrases
  - Talkfile 241 for standard speech phrases
  - Talkfile 242 for mailbox phrases
- Each talkfile is limited to 65525 discrete phrase numbers.

 **NOTE:**

Actual number of phrases that can be created is also limited by the size of the speech slice on the hard disk.

| • <b>KEY TO CODES IN THE FOLLOWING TABLES:</b> |                          |                       |
|------------------------------------------------|--------------------------|-----------------------|
| 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 to 99)             |
| ANY                                            | Any input except I and \ |                       |
| VAR                                            | Variables                |                       |
| ACT                                            | Actions                  |                       |
| D                                              | Day of week              |                       |
| MM/DD/YY                                       | Month/Day/Year           |                       |
| PHR                                            | Phrase Tag               |                       |
| E                                              | Existing                 |                       |
| NE                                             | Not Existing             |                       |

**Actions**

|          |                              | <b>Valid inputs</b> | <b>Max. length</b> | <b>Comments</b>                              |
|----------|------------------------------|---------------------|--------------------|----------------------------------------------|
| ADA_CALC | Average call length:         | NUM                 | 3                  |                                              |
|          | Queue position:              | VAR, NUM            | 12                 |                                              |
|          | Result:                      | VAR                 | 12                 |                                              |
|          | Number of agents per hour:   | NUM                 | 3                  | (Total of 168 of this field.)                |
| ANNOUNCE | Phrase Tag                   | PHR (E)             | 50                 |                                              |
| CHAN_ASN | Channel number:              | 0 to 47             | 2                  |                                              |
|          | Vector number:               | VEC (E)             | 2                  | (Total of 12 pairs of the above two fields.) |
| CONVERSE | Number of digits to collect: | 1 to 16             | 2                  |                                              |
|          | Load digits into variable:   | VAR                 | 12                 |                                              |
| DATA_RTN | Feature Access Code:         | TT                  | 10                 |                                              |

|            |                              |                |    |                                                                                                                    |
|------------|------------------------------|----------------|----|--------------------------------------------------------------------------------------------------------------------|
|            | Data return segment:         | VAR, TT        | 16 | (Total of 8 of these fields. The number of characters in all fixed and variable values combined cannot exceed 24). |
| DYNAMIC    | Variable:                    | VAR            | 12 |                                                                                                                    |
|            | Value:                       | NUM, -NUM      | 10 |                                                                                                                    |
|            | Program:                     | AN (E)         | 12 | (Existing Script Builder programs only).                                                                           |
|            | Arg 1,2,3:                   | VAR, ANY       | 12 | (Total of 10 sets of the Value, Program and Arg fields.)                                                           |
| DYN_ANNOUN | Phrase number:               | VAR, NUM (E)   | 12 |                                                                                                                    |
| EXECUTE    | Application:                 | AN (E)         | 12 | (Existing Script Builder programs only).                                                                           |
|            | Arguments:                   | ANY, VAR       | 12 | (Total of 10 arguments.)                                                                                           |
| GET_DIGT   | Number of digits to collect: | 1 to 16        | 2  |                                                                                                                    |
|            | Load digits into variable:   | VAR            | 12 |                                                                                                                    |
| GOTO       | Vector:                      | VEC            | 2  |                                                                                                                    |
|            | Variable:                    | VAR            | 12 |                                                                                                                    |
|            | Operator:                    | C              | 2  |                                                                                                                    |
|            | Value:                       | NUM, -NUM, VAR | 12 |                                                                                                                    |
| HANG_ACT   | Vector number:               | VEC (E)        | 2  |                                                                                                                    |
| JUMP       | Vector number:               | VEC            | 2  |                                                                                                                    |
| LOOK_UP    | Routing table name:          | AN (E)         | 10 | (Existing Routing table names only).                                                                               |
|            | Lookup field:                | ANY, VAR       | 16 |                                                                                                                    |
|            | Number of matches found:     | VAR            | 12 |                                                                                                                    |
|            | Data field 1:                | VAR            | 12 |                                                                                                                    |
|            | Data field 2:                | VAR            | 12 |                                                                                                                    |
| MSG_DROP   | Mailbox:                     | VAR, NUM (E)   | 12 | (NUM must represent an existing mailbox number).                                                                   |
| REPORT     | Variable:                    | VAR            | 12 |                                                                                                                    |
| SCHEDULE   | Vector:                      | VEC (E)        | 2  | (Total of 168 of these fields.)                                                                                    |
| SET        | Variable:                    | VAR            | 12 |                                                                                                                    |
|            | Operator:                    | O              | 1  |                                                                                                                    |
|            | Value:                       | ANY, VAR       | 16 |                                                                                                                    |

|            |                |                  |    |                                                           |
|------------|----------------|------------------|----|-----------------------------------------------------------|
| SPCH_ADM   | Talkfile:      | 224, 241, 242    | 3  |                                                           |
|            | Phrase number: | VAR, 10 to 65535 | 12 |                                                           |
| SPEAK_NUM  | Number:        | VAR, NUM         | 12 |                                                           |
| SWITCH     | Variable:      | VAR              | 12 |                                                           |
|            | Value:         | ANY              | 16 |                                                           |
|            | Vector number: | VEC              | 2  | (Total of 11 sets of the Value and Vector number fields.) |
| TRANSFER   | Extension:     | NUM, VAR         | 16 |                                                           |
| TRANSCRIBE | Mailbox:       | VAR, NUM (E)     | 12 | (NUM must represent an existing mailbox number).          |

## Vector Administration

|                  |                |     |    |                       |
|------------------|----------------|-----|----|-----------------------|
| VECTOR WORKSHEET | Vector name:   | ANY | 14 |                       |
|                  | Description:   | ANY | 40 |                       |
|                  | Action:        | ACT | 9  | (Total of 14 fields.) |
| HELP INDEX       | Help key word: | ANY | 25 |                       |

## Speech Administration

|                                    |                   |                         |        |                              |
|------------------------------------|-------------------|-------------------------|--------|------------------------------|
| ADD NEW PHRASE                     | Phrase number:    | 10 to 65535, (NE)       | 5      | (Unused phrase number only). |
|                                    | Phrase tag:       | PHR (NE)                | 50     | (Unused phrase tag only).    |
|                                    | Phrase text:      | ANY                     | 50 X 5 |                              |
| EDIT PHRASE                        | Phrase tag:       | PHR (NE)                | 50     | (Unused phrase tag only).    |
|                                    | Phrase text:      | ANY                     | 50 X 5 |                              |
| RECORD PHRASE                      | Code rate:        | ADPCM16, ADPCM32, PCM64 | 7      |                              |
| DIAL NUMBER                        | Telephone number: | NUM                     | 16     |                              |
|                                    | Channel:          | 0 to 47                 | 2      |                              |
| PASSWORD FOR SPEECH ADMINISTRATION | Password:         | TT                      | 16     |                              |

## Report Generation

|                |                     |                                          |    |                                     |
|----------------|---------------------|------------------------------------------|----|-------------------------------------|
| CALL DETAIL    | Day:                | D                                        | 9  |                                     |
|                | Caller ID:          | all, last, 1 to 32768                    | 5  |                                     |
| EVENT COUNT    | Day:                | D                                        | 9  |                                     |
|                | List by:            | vector, variable                         | 8  |                                     |
| EVENT DETAIL   | Day:                | D                                        | 9  |                                     |
|                | Variable:           | VAR, all                                 | 12 |                                     |
| MESSAGE COUNT  | Mailbox ID:         | AN (E), all                              | 6  | (Existing mailbox ID only).         |
| MESSAGE LOG    | Day:                | MM/DD/YY (E), Today, Yesterday           | 9  |                                     |
|                | Mailbox ID:         | AN (E), all                              | 6  | (Existing mailbox ID only).         |
|                | Type:               | MESSAGE, STARTUP, CALLBACK, all, DELETED | 8  |                                     |
| VECTOR PROFILE | Vector:             | VEC, all, 0                              | 3  |                                     |
|                | Database:           | DEVELOPMENT, RUNTIME, PREV_RUNTIME       | 12 |                                     |
| VECTOR MAP     | Selection Criteria  | vector, channel, vdn                     | 7  |                                     |
|                | Selection Argument  | 0-99999, all                             | 5  |                                     |
|                | Database            | DEVELOPMENT, RUNTIME, PREV_RUNTIME       | 12 |                                     |
| ROUTING TABLE  | Routing table name: | AN (E)                                   | 10 | (Existing routing table name only). |
| TRAFFIC REPORT | Day:                | MM/DD/YY (E), Today, Yesterday           | 9  |                                     |
|                | Hours:              | 0 to 23, all                             | 5  |                                     |
| VECTOR USAGE   | Day:                | D                                        | 9  |                                     |
|                | Vector:             | 0, VEC, all                              | 5  |                                     |

## Report Scheduling

|                              |                               |        |   |  |
|------------------------------|-------------------------------|--------|---|--|
| REPORT SCHEDULING<br>OPTIONS | Number of days to<br>archive: | 0 to 7 | 1 |  |
|------------------------------|-------------------------------|--------|---|--|

## Callback Messaging Administration

|                                                      |                          |                                                 |    |                                                                     |
|------------------------------------------------------|--------------------------|-------------------------------------------------|----|---------------------------------------------------------------------|
| CREATE MAILBOX                                       | Mailbox Id:              | NUM (NE) (0<br>not allowed)                     | 6  | (Unused mailbox<br>number only).                                    |
|                                                      | Password:                | NUM                                             | 6  |                                                                     |
|                                                      | Agent access<br>number:  | NUM                                             | 10 |                                                                     |
|                                                      | MWL Extension:           | NUM                                             | 10 |                                                                     |
|                                                      | Name phrase:             | PHR (E)                                         | 50 |                                                                     |
|                                                      | Type:                    | H, L, T, P                                      | 1  |                                                                     |
|                                                      | Phrase tag:              | PHR (E)                                         | 50 |                                                                     |
|                                                      | Limit:                   | for H & L: 0<br>to 600<br>for P & T: 1 to<br>20 | 3  | (Total of 15 sets of<br>the Type, Phrase tag,<br>and Limit fields.) |
|                                                      |                          |                                                 | 2  |                                                                     |
| Caller goodbye<br>message:                           | PHR (E)                  | 50                                              |    |                                                                     |
| EDIT MAILBOX                                         | Password:                | NUM                                             | 6  |                                                                     |
|                                                      | Agent access<br>number:  | NUM                                             | 10 |                                                                     |
|                                                      | MWL Extension:           | NUM                                             | 10 |                                                                     |
|                                                      | Name phrase:             | PHR (E)                                         | 50 |                                                                     |
|                                                      | Type:                    | H, L, T, P                                      | 1  |                                                                     |
|                                                      | Phrase tag:              | PHR (E)                                         | 50 |                                                                     |
|                                                      | Limit:                   | for H & L: 0<br>to 600<br>for P & T: 1 to<br>20 | 3  | (Total of 15 sets of<br>the Type, Phrase tag,<br>and Limit fields.) |
|                                                      |                          |                                                 | 2  |                                                                     |
| Caller goodbye<br>message:                           | PHR (E)                  | 50                                              |    |                                                                     |
| GLOBAL SETTINGS FOR<br>ALL MESSAGE DROP<br>MAILBOXES | Retry interval:          | 1 to 999                                        | 3  |                                                                     |
|                                                      | Agent access<br>channel: | 0 to 47                                         | 20 |                                                                     |
|                                                      | MWL access<br>channel:   | 0 to 47                                         | 2  |                                                                     |
|                                                      | MWL on code:             | TT                                              | 4  |                                                                     |
|                                                      | MWL off code:            | TT                                              | 4  |                                                                     |

|                      |                           |                    |                 |                                          |
|----------------------|---------------------------|--------------------|-----------------|------------------------------------------|
|                      | Outside line access code: | TT                 | 10              |                                          |
|                      | Local area code:          | NUM                | 3 (max and min) |                                          |
|                      | Call back conference time | NUM                | 4               |                                          |
|                      | Transfer type             | Intelligent, Blind | 11              |                                          |
| AGENT CALLBACK HOURS | Hours:                    | 01 to 12           | 2               |                                          |
|                      | Minutes:                  | 00 to 59           | 2               |                                          |
|                      | Indicator:                | AM, PM             | 2               | (Total of 14 of the above three fields.) |

### Custom Call Routing

|                         |                     |                     |    |                                     |
|-------------------------|---------------------|---------------------|----|-------------------------------------|
| ADD TABLE               | Routing table name: | AN (NE)             | 10 | (Unused Routing table name only).   |
|                         | Description:        | ANY                 | 40 |                                     |
| FILL TABLE              | Routing table name: | AN (E)              | 10 | (Existing Routing table name only). |
|                         | Drive:              | A, B                | 1  |                                     |
|                         | Path:               | AN, /, .            | 50 |                                     |
|                         | Filename:           | AN,-, .             | 12 |                                     |
|                         | Field delimiter:    | !, %, &, -, , , ; ; | 1  |                                     |
|                         | Filter non-numeric: | Y, N                | 1  |                                     |
| RECORD ADMINISTRATION   | Routing table name: | AN (E)              | 10 | (Existing routing table name only). |
|                         | Lookup field:       | ANY (NE)            | 16 |                                     |
|                         | Data field 1:       | ANY                 | 16 |                                     |
|                         | Data field 2:       | ANY                 | 16 |                                     |
| EDIT/DELETE RECORD      | Routing table name: | AN (E)              | 10 | (Existing routing table name only). |
|                         | Lookup field:       | ANY (E)             | 16 |                                     |
| RECORD IN ROUTING TABLE | Data field 1:       | ANY                 | 16 |                                     |
|                         | Data field 2:       | ANY                 | 16 |                                     |

---

# Abbreviations

---

## A

### ACD

Automatic Call Distribution

### ADA

Anticipated Delay Announcement

### ANI

Automatic Number Identification

---

## C

### CPN

Calling Party Number

---

## D

### DNIS

Dialed Number Identification Service

---

## G

### G3V2

DEFINITY G3 Switch, version 2

---

## I

### IVP

Interactive Voice Processing

### IVR

Interactive Voice Response

---

## M

### MAP

Multiple Application Package

---

## P

### PBX

Private Branch Exchange

---

## U

### UCD

Uniform Call Distribution

---

## V

### VDN

Vector Directory Number

### VIS

Voice Information System

---

# Glossary

---

---

## A

### Action

A command within a CONVERSANT vector

### Automatic Call Distribution

A feature that automatically connects incoming calls to agents who have been administered by algorithm into splits.

### Anticipated Delay Announcement

A CONVERSANT announcement on the platform module that estimates the delay before an agent can speak to a caller, then plays an announcement to the caller giving the approximate time of the wait.

### Automatic Number Identification

The process of tagging, for future referral, the number of a calling party.

---

## C

### Call Classification Analysis

A CONVERSANT VIS feature that allows developers to classify the disposition of originated and transferred calls.

### Callback Messaging

A software module that enables the user to build paths for callers to follow in order to leave messages for agents.

### Calling Party Number

The number, assigned by the system, of the calling party.

### Conditional

Subject to qualification. When call control is transferred *conditionally* from one vector to another, the first vector may regain control, if a certain qualification is met.

### CONVERSANT Voice Information System

An interactive voice response system for automated telephone transactions that uses recorded or synthesized speech to request and obtain information from callers. It consists of at least one MAP minicomputer running on the UNIX operating system, a DEFINITY G3V1 (or later) switch, and the VIS software.

### Custom Call Routing

A software module that enables the user to transfer callers to particular extensions and splits.

---

## D

### DEFINITY G3V1 or G3V2

A private branch exchange that switches and manages the flow of information between computers.

### Dialed Number Identification Service

Network service from which a CONVERSANT vector can secure a number that acts as a vector directory number, and is displayed on an agent terminal.

---

## P

### Platform Administration

The first of the three software packages that make up the CONVERSANT Call Center Solutions.

### Port

A connection between a MAP minicomputer and the DEFINITY G3 switch. At the discretion of the administrator, the port may be allocated "hard" (able to play only one standard announcement) or "dynamic" (able to play several).

---

## S

### Split

An administered group of agents in a call center.

### Status line

The line at the bottom of your screen where you enter key commands in building your applications.

---

## T

### Template

A partial CONVERSANT vector used in building common call handling tasks.

---

## V

### Vector

A series of linked commands that govern the handling of an incoming call. There are two kinds. DEFINITY vectors reside on the G3 switch. The ones discussed in this book are CONVERSANT vectors.

---

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System  
Solutions for DEFINITY® Call Center  
Addendum

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#### Federal Communications Commission Statement

**Part 15: Class B Statement.** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio-frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving television or radio antenna where this may be done safely.
- To the extent possible, relocate the receiver with respect to the telephone equipment.
- Where the telephone equipment requires ac power, plug the telephone into a different ac outlet so that the telephone equipment and receiver are on different branch circuits.

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

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

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

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

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#### Acknowledgment

This document was prepared by the GBCS Product Documentation Development group, AT&T Bell Laboratories, Denver, CO 80234-2703.



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# The Estimated Wait Time Enhancement

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This addendum supplements the document *CONVERSANT Voice Information System (VIS) Solutions for DEFINITY Call Center*, 585-350-214. It describes the optional Estimated Wait Time (EWT) enhancement for version 3.0 of the CONVERSANT Solutions for DEFINITY Call Center software.

## Overview

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By installing the EWT software, you add a vector action called "EWT" to your CONVERSANT Solutions system. You can then replace ADA\_CALC actions in your vectors with EWT actions to provide callers with more accurate estimates of waiting times for available agents.

The EWT action converts the switch's wait-time estimates into a different format for presentation to calling parties. EWT software, provided only for CONVERSANT conventions to DEFINITY G3V4 systems, can:

- Increase or decrease the system's estimate by a specified percentage
- Round the result up, down, or to the nearest whole number
- Optionally, convert the result from seconds to minutes

First, use the CONVERSE action in your CONVERSANT vector to acquire the system's wait-time estimate in seconds. Then, after using the EWT action to convert this estimate, either use the:

- SET action to adjust it
- ANNOUNCE or SPEAK\_NUM action to communicate it to the caller

## Supported Hardware/Software

The EWT option is supported on these configurations.

CONVERSANT VIS Hardware:

- MAP/40 (up to 48 incoming ports)
- or
- MAP/100 (up to 96 Incoming ports)
- IVP6 analog interface to G3
- Color monitor

CONVERSANT VIS Software:

- 5.0 CONVERSANT VIS software
- 3.0 CONVERSANT Solutions for DEFINITY Call Center software

Peripherals:

- AT&T printer
- AT&T modem

CONVERSANT Solutions for DEFINITY Call Center software requires additional hardware and system software. Refer to the following documentation for details.

## Related Resources

This document is intended to supplement your existing user documentation:

- *AT&T CONVERSANT Voice Information System Solutions for DEFINITY Call Center, 585-350-214.*

## Installing the Utility

To install the EWT enhancement, you must have version 5.0 of the CONVERSANT VIS software in place and already be using version 3.0 of the CONVERSANT Solutions for DEFINITY Call Center software.



### **CAUTION:**

*Although successful installation of this utility will not disrupt call handling, you should avoid installing this or any other software package during periods of high call activity.*

Use the following procedure:

1. Log into the system as **root**.
2. At the UnixWare Operating System prompt (#) enter **installpkg**.

The system responds:

Confirm

Please indicate the installation medium you intend to use.

Strike "C" to install from CARTRIDGE TAPE

or "F" to install from FLOPPY DISKETTE.

Strike ESC to stop.

3. Press **f**. If the system prompts you to identify the disk drive you want to use, enter **0** or **1**, as appropriate.

The system responds:

Confirm

Please insert the floppy disk.

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

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

Strike ENTER when ready

or ESC to stop.

4. Insert the EWT floppy disk and press [ENTER].

The system responds:

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

Searching for the Size file

Install in progress

Transfer in progress - Do not remove the floppy disk.

It is safe to remove the floppy disk.

Copying files...

Installation of CONVERSANT SOLUTIONS Estimated Wait Time option is complete.

5. Remove the floppy disk.

The procedure is complete.

## Using the EWT Action

The EWT action converts the switch's wait-time estimates into a different format for presentation to calling parties.

**⇒ NOTE:**

Remember, before using EWT you must use CONVERSE to acquire a wait-time estimate (EWT) from a DEFINITY vector.

1. Access the CONVERSANT vector worksheet for the vector you want to create or edit. Refer to Chapter 5, *CONVERSANT Solutions Administration in AT&T CONVERSANT Voice Information System Solutions for DEFINITY Call Center*, 585-350-214, for more information about adding and editing vectors.
2. Move to the column marked *Action*.  
Action step numbers appear under the first column, labeled *Step*.
3. On the first available line, press CHG\_KEYS [F8] and CHOICES [F2], and select EWT from the list. The action-definition form below will appear:

| 5                                   |                | EWT ACTION STEP 2 for vector 21 |                |
|-------------------------------------|----------------|---------------------------------|----------------|
| ESTIMATED WAIT TIME IN QUEUE ACTION |                |                                 |                |
| EWT Input:                          | <u>%data1</u>  | Calculated Output:              | <u>%data2</u>  |
| Weighting Index:                    | <u>100%</u>    |                                 |                |
| Resolution:                         | <u>Minutes</u> | Rounding:                       | <u>Nearest</u> |
| Comment:                            | <u></u>        |                                 |                |

**Figure 1. The Estimated Wait Time Action Definition Form**

- In the *EWT Input* field, enter the name of the variable you used with CONVERSE to acquire the caller's estimated wait time.
- Follow *Calculated Output* with the name of the variable to represent the converted wait time.
- Follow *Weighting Index* with the percentage of this original estimate to use (for example, to double the wait time estimate, specify 200%).
- After *Resolution*, use the default setting "Minutes" to convert the estimate to minutes; otherwise, enter "Seconds." Press CHOICES [F2] to toggle between responses.
- After *Rounding*, use the default setting "Nearest" to round the estimate to either the nearest minute or the nearest 10 seconds (if "resolution" has been set to seconds) or enter "Up" or "Down." Press CHOICES [F2] to cycle through responses.
- Optionally, enter a comment.

- When you have finished adding actions, press CHG\_KEYS [F8] and SAVE [F3] to save your CONVERSANT vector.

## Modifying the ADA Template for use with EWT

By modifying the Anticipated Delay Announcement (ADA) template's vectors, you can tell each caller how long to expect to wait for an agent, based on wait-time estimates from the G3V4 switch.

The system creates a new set of four CONVERSANT vectors each time you select the ADA template. Follow these steps to configure the ADA template vectors to use EWT information from the switch.

Follow these steps to configure the ADA template correctly:

- Select the ADA template from the Template Type menu described in Chapter 5, *CONVERSANT Solutions Administration in AT&T CONVERSANT Voice Information System Solutions for DEFINITY Call Center*, 585-350-214, for more information about adding and editing vectors.

The CONVERSANT Solutions system will generate four vectors and present the vector worksheet for the first of these vectors, ADA norm wait (Figure 2).

Normally, if ADA norm wait determines that agents are staffed and the anticipated delay to the caller is less than 20 minutes, it communicates the anticipated delay to the caller and returns call control to the DEFINITY vector.

```

AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - May 10, 1995
1 CONVE 4 EDIT VECTOR NUMBER 97 STEPS
>Call Ve
System
System
UNIX Sy
Exit
Vector Name: ADA_norm_wai_t Vector Number: 97
Description: Calculate & speak minutes in queue
Step Action Description
1 CONVERSE collect 3 digits into %qpos
2 ADA_CALC calculate the delay into %data2
3 GOTO if %data2 = 1 goto 98
4 GOTO if %data2 > 20 goto 99
5 GOTO if %data2 = -1 goto 100
6 ANNOUNCE This is the leading announcement.
7 SPEAK_NUM voice the minutes in queue from %data2
8 ANNOUNCE This is the trailer announcement.
9 QUIT Return call to Definity PBX.
10
11
12
13
14
Enter the vector name.
HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS
    
```

Figure 2. The ADA norm wait Vector Worksheet

To reconfigure this CONVERSANT vector for EWT:

2. Move your cursor to the CONVERSE action, and press DEFINE [F4].
3. Press CHOICES [F2] for a list of valid entries for the Number of Digits to Collect field.
4. Highlight 5 (for values up to 99999) and press [ENTER].
5. Move your cursor to the Load Digits into Variable field, and press CHOICES [F2].
6. Highlight %data1 and press [ENTER].
7. Press CLOSE [F3] to save the action.
8. Move your cursor to the ADA\_CALC action and press CHG\_KEYS [F8] and CHOICES [F2].
9. Select the EWT action. After you press CONT [F3] to confirm your choice, the EWT definition form will appear as shown in Figure 3.
  - a. Optionally, increase or decrease the estimated wait-time estimate from the switch by adjusting the Weighting Index. The default value of 100% leaves this estimate unchanged.
  - b. Optionally, change Resolution from "Minutes" to "Seconds."
  - c. Optionally, change Rounding from "Nearest" to "Up" or "Down."

AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - May 10, 1995

1 CONVE 4 EDIT VECTOR NUMBER 97 STEPS

>Call Ve  
System  
System  
UNI X Sy  
Exit

Vector Name: ADA\_norm\_wait Vector Number: 159  
Description: Calculate & speak minutes in queue

| Step | Action                          | Description                       |
|------|---------------------------------|-----------------------------------|
| 1    | CONVERSE                        | collect 5 digits into %caller num |
| 5    | EWT ACTION STEP 2 for vector 97 |                                   |

ESTIMATED WAIT TIME IN QUEUE ACTION

EWT Input: %data1 Calculated Output: %data2  
 Weighting Index: 100%  
 Resoluti on: Mi nutes Rounding: Nearest  
 Comment: \_\_\_\_\_

11 \_\_\_\_\_  
 12 \_\_\_\_\_  
 13 \_\_\_\_\_  
 14 \_\_\_\_\_

Enter the variable that receives estimated wait time.

HELP CHOICES CLOSE ENTER CANCEL REFRESH

**Figure 3. The ADA\_norm\_wait Vector Worksheet with the EWT Action Definition Form**

10. Press CLOSE [F3].

11. Move your cursor to the first ANNOUNCE action and press DEFINE [F4]. The ANNOUNCE Action Definition form will appear, as shown in Figure 4.
12. Enter after Phrase Tag the speech phrase you defined to precede the anticipated delay, which the vector speaks as a discrete number

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 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.

13. Press CLOSE [F3].

AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - May 10, 1995

1 CONVE 4 EDIT VECTOR NUMBER 97 STEPS

>Call Ve Vector Name: ADA norm wait Vector Number: 97  
 System Description: Calculate & speak minutes in queue  
 System  
 UNIX Sy Step Action Description  
 Exit

3 ANNOUNCE Action Step Number 6 for vector 97

ANNOUNCE Action step speaks a phrase to caller

TalkFile Number: 224 Allow Interrupt: yes

Phrase Tag: This is the leading announcement.

Phrase Number:

Phrase Text:

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

HELP CHOICES CLOSE ENTER CANCEL REFRESH ADD-PHR

**Figure 4. The ADA norm wait Vector Worksheet with the ANNOUNCE Action Definition Form**

14. Move to the second ANNOUNCE action and press DEFINE [F4].
15. Enter after Phrase Tag the speech phrase you defined to follow the anticipated delay

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 will appear.

16. Press CLOSE [E3], CHG KEY [E8], and SAVE [E3] to return to the Edit Vector menu.
17. Select the second ADA vector, ADA shrt wait. The ADA shrt wait vector worksheet, shown in Figure 5, will appear.

AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - May 10, 1995

1 CONVE 4 EDIT VECTOR NUMBER 98 STEPS

>Call Ve  
System  
System  
UNIX Sy  
Exit

Vector Name: ADA shrt wait Vector Number: 98  
Description: Speak short wait announcement and quit.

| Step | Action          | Description                          |
|------|-----------------|--------------------------------------|
| 1    | <u>ANNOUNCE</u> | This is the short wait announcement. |
| 2    | <u>QUIT</u>     | Return call to Definity PBX.         |
| 3    | _____           | _____                                |
| 4    | _____           | _____                                |
| 5    | _____           | _____                                |
| 6    | _____           | _____                                |
| 7    | _____           | _____                                |
| 8    | _____           | _____                                |
| 9    | _____           | _____                                |
| 10   | _____           | _____                                |
| 11   | _____           | _____                                |
| 12   | _____           | _____                                |
| 13   | _____           | _____                                |
| 14   | _____           | _____                                |

3 Edi  
116|ADA  
117|ADA  
118|ADA  
119|ADA  
120|ADA  
121|ADA  
122|ADA  
>123|ADA  
124|ADA  
125|ADA

Enter the vector name.

HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS

**Figure 5. The ADA shrt wait Vector Worksheet**

Make sure that the number of the CONVERSANT vector you select equals the number of ADA norm wait plus one.

ADA shrt wait speaks a special message to callers who are likely to wait less than 1 minute..

To configure this CONVERSANT vector correctly:

18. Move your cursor to the ANNOUNCE action and press DEFINE [F4]. An action-definition form like the one in Figure 4 will appear.
19. Enter after Phrase Tag the name of the speech phrase you defined to notify callers that they should encounter a brief delay

**or**

Press CHOICES [E2] 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.

20. Press CLOSE [F3], CHG\_KEYS [F8], and SAVE [F3] to return to the Edit Vector menu.

21. Select the third ADA vector, ADA long wait.

The ADA long wait vector worksheet in Figure 6 will appear.

AT&T CONVERSANT SOLUTIONS FOR DEFINITY CALL CENTER - May 10, 1995

1 CONVE 4 EDIT VECTOR NUMBER 99 STEPS

>Call Ve Vector Name: ADA Long wait Vector Number: 99  
 System Description: Speak long delay announcement and quit.  
 System  
 UNIX Sy  
 Exit

| Step | Action          | Description                         |
|------|-----------------|-------------------------------------|
| 1    | <u>ANNOUNCE</u> | This is the long wait announcement. |
| 2    | <u>QUIT</u>     | Return call to Definity PBX.        |
| 3    | _____           | _____                               |
| 4    | _____           | _____                               |
| 5    | _____           | _____                               |
| 6    | _____           | _____                               |
| 7    | _____           | _____                               |
| 8    | _____           | _____                               |
| 9    | _____           | _____                               |
| 10   | _____           | _____                               |
| 11   | _____           | _____                               |
| 12   | _____           | _____                               |
| 13   | _____           | _____                               |
| 14   | _____           | _____                               |

3 Edi

116|ADA  
 117|ADA  
 118|ADA  
 119|ADA  
 120|ADA  
 121|ADA  
 122|ADA  
 123|ADA  
 >124|ADA  
 125|ADA

Enter the vector name.

HELP INSERT REMOVE DEFINE ENTER CANCEL REFRESH CHG-KEYS

**Figure 6. The ADA long wait Vector Worksheet**

Make sure that the number of this CONVERSANT vector equals the number of ADA shrt wait plus one.

ADA long wait speaks a special message to callers who are likely to wait 20 minutes or more and returns call control to the DEFINITY vector.

To configure this CONVERSANT vector correctly:

22. Move your cursor to the ANNOUNCE action and press DEFINE [F4]. An action-definition form like the one in Figure 4 will appear.

23. Enter after *Phrase Tag* the name of the speech phrase you defined to notify callers that they are facing a long delay

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.

24. Press CLOSE [F3], CHG\_KEYS [F8], and SAVE [F3] to return to the Edit Vector menu.

**⇒ NOTE:**

The last ADA vector, ADA no staff is not used with EWT.