

Lucent Technologies
Bell Labs Innovations



INTUITY™ CONVERSANT® System

Version 5.0

Solutions for DEFINITY® Call Center
Release 3 EWT Enhancement

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The Estimated Wait Time Enhancement

This document supplements the *INTUITY CONVERSANT System Version 5 Solutions for DEFINITY Call Center*, 585-350-216, Issue 1. It describes the optional Estimated Wait Time (EWT) enhancement for version 3.0 of the CONVERSANT Solutions for DEFINITY Call Center software.

Overview

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:

- *INTUITY CONVERSANT Voice Information System Solutions for DEFINITY Call Center*, 585-350-216, Issue 1.

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 *INTUITY CONVERSANT Voice Information System Solutions for DEFINITY Call Center*, 585-350-216, Issue 1, 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.
4. 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:

1. Select the ADA template from the Template Type menu described in Chapter 5, *CONVERSANT Solutions Administration in INTUITY CONVERSANT Voice Information System Solutions for DEFINITY Call Center*, 585-350-216, Issue 1, 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 Use
System Vector Name: ADA norm wait Vector Number: 97
System Description: Calculate & speak minutes in queue
UNIX Sy
Exit

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 Ue
System
System
UNIX Sy
Exit
3 Edi
153|Rou
154|Rou
155|Rou
156|Rou
157|tes
158|EWT
>159|ADA
160|ADA
161|ADA
162|ADA

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%
Resolution:     Minutes     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 Use
System Vector Name: ADA norm wait Vector Number: 97
System Description: Calculate & speak minutes in queue
UNIX Sy
Exit Step Action Description
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 [F3], CHG KEY [F8], and SAVE [F3] 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 CONUE 4 EDIT VECTOR NUMBER 98 STEPS
>Call Use
System Vector Name: ADA shrt wait Vector Number: 98
System Description: Speak short wait announcement and quit.
UNIX Sy
Exit

Step Action Description
1 ANNOUNCE This is the short wait announcement.
2 QUIT 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 **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.

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 Use
System Vector Name: ADA long wait Vector Number: 99
System Description: Speak long delay announcement and quit.
UNIX Sy
Exit Step Action Description
3 Edi 1 ANNOUNCE This is the long wait announcement.
116!ADA 2 QUIT Return call to Definity PBX.
117!ADA 3 _____
118!ADA 4 _____
119!ADA 5 _____
120!ADA 6 _____
121!ADA 7 _____
122!ADA 8 _____
123!ADA 9 _____
>124!ADA 10 _____
125!ADA 11 _____
12 _____
13 _____
14 _____
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.