

## Supporting TTY Callers

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Use the following tools in your Avaya Communication Manager system to support Teletypewriter device (TTY) callers:

- Announcements that play TTY recordings
- Hunt groups set up specifically for TTY callers
- Vectors that can process TTY callers as well as voice caller

### Announcements for TTY Callers

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You record announcements for Tele-typewriter device (TTY) callers in the same way as you record voice announcements. However, instead of recording from the handset of your telephone, you record from a TTY device. The device is attached to your phone either by using an acoustic coupler into which you place the telephone handset or by plugging the TTY device directly into the back, if it is a digital phone. After calling the announcement extension, and pressing **1** to record, you simply type the announcement using the TTY device.

Using an acoustic coupler to connect your phone for recording allows you to record TTY and voice into a single announcement. In this case, when you press **1** to record, you can type the TTY message, then immediately pick up the handset to record the voice message. For this type of recording, digital phones also offer the option to press **#** to complete the recording, which eliminates any extraneous noise at the end of the recording. Unfortunately, using this method for combined TTY and voice recordings is likely to create extraneous noise in the middle of your announcements.

As a better alternative to recording with your phone, as with voice recordings, you can create .WAV files on other recording applications and then copy and save the .WAV files to your announcement board (see “Moving announcements to a VAL circuit pack or to another LAN device” in *Administrator’s Guide for Avaya Communication Manager*, 555-233-506). In this case, the announcement files must meet the same criteria as voice recordings (see “Announcement file format requirements” in *Administrator’s Guide for Avaya Communication Manager*, 555-233-506).

#### **NOTE:**

TTY is also known as TDD (Telecommunications Device for the Deaf).

### Setting up hunt groups for TTY callers

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Several laws, such as the Americans with Disabilities Act (ADA) of 1990 and Section 255 of the Telecommunications Act of 1996, require that “reasonable accommodation” be provided for people with disabilities. For this reason, your

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company may choose to offer support for callers who use TTYs. (These devices are also known as TDDs -- “Telecommunication Device for the Deaf” -- but the term TTY is generally preferred, in part because many users of these devices are hearing-impaired, but not deaf.)

TTY callers can be accommodated by creating a hunt group that includes TTY-equipped agents. The TTY itself looks a little like a laptop computer, except that it has a one- or two-line alphanumeric display instead of a computer screen. The cost of a typical TTY is approximately three hundred dollars. Although many TTYs can connect directly with the telephone network via analog RJ-11 jacks, Avaya recommends that agents be equipped with TTYs that include an acoustic coupler that can accommodate a standard telephone handset. One reason for this recommendation is that a large proportion of TTY users are hearing impaired, but still speak clearly. These individuals often prefer to receive calls on their TTYs and then speak in response. This requires the call center agent to alternate between listening on the phone and then typing on the TTY, a process made considerably easier with an acoustically coupled configuration.

**⇒ NOTE:**

Although TTY-emulation software packages are available for PCs, most of these do not have the ability to intermix voice and TTY on the same call.

For a TTY hunt group, you can record TTY announcements and use them for the hunt group queue. To record announcements for TTY, simply follow the same steps as with voice recordings from your telephone (see Chapter 13, Managing Announcements). However, instead of speaking into your phone to record, you type the announcement with the TTY device.

**⇒ NOTE:**

For an alternative to simply creating a TTY hunt group, you can use vectors to process TTY calls. With vectors, you can allow TTY callers and voice callers to use the same phone number. In this case, you can also record a single announcement that contains both TTY signaling and a voice recording. See “Handling TTY calls with vectors”.

## **Handling TTY calls with vectors**

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Unlike fax machines and computer modems, a Tele-typewriter device (TTY) has no handshake tone and no carrier tone. A TTY is silent when not transmitting. This is why systems cannot identify TTY callers automatically. However, the absence of these special tones also means that voice and TTY tones can be intermixed in pre-recorded announcements. The ability to provide a hybrid voice-and-TTY announcement, when combined with the auto-attendant vectoring capability, can permit a single phone number to accommodate both voice and TTY callers.

The sample vector that follows allows TTY callers to access a TTY agent. It begins with a step that plays a TTY announcement combined with a voice announcement. The announcement tells the TTY caller to enter a digit that will direct them to a TTY support person. The vector then processes the digit entered to connect the TTY caller to the TTY split (or hunt group). For more information on recording TTY announcements, see Chapter 13, “Managing Announcements.”

In the following example, split 47 (hunt group 47) has already been established and consists of TTY-enabled agents.

If a TTY caller calls the number that connects to vector 33, the following occurs:

1. After a short burst of ringing, a quick burst of TTY tones is sent to the caller telling the caller to hold, “HD”. Then, a voice announcement follows for callers using a normal telephone connection. The announcement tells them to stay on the line. Finally, another burst of TTY tones is sent to the TTY caller which displays on the caller’s TTY device as, “Dial 1.”

The TTY caller won’t hear the voice announcement, but because the step collects digits, it allows the caller to enter **1** on his or her touchtone phone.

**⇒ NOTE:**

For voice callers, the burst of TTY tones lasts about one second and sounds like a bird chirping.

2. In vector step 3, since the TTY caller entered **1** in vector step 2, the TTY caller is sent to vector step 8, at which point the caller is put in queue for a TTY-enabled agent in split 47.

**⇒ NOTE:**

The voice caller is sent to vector step 3 also, but a voice caller does not go to vector step 8 because the caller did not enter **1** at vector step 2. Instead, voice callers continue on to vector step 4, where they connect to split 48.

3. While the TTY caller waits in queue, he or she hears silence from vector step 9, then the announcement in vector step 10, and is then looped back to wait with silence by vector step 11.

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                                CALL VECTOR
Number: 33      Name: main number  calls _____ Multimedia? n      Lock? n

Basic? y      EAS? n      G3V4 Enhanced? n      ANI/II-Digits? n      ASAI Routing? n
Prompting? y  LAI? n      G3V4 Adv Route? n      CINFO? n      BSR? n

01 wait 0 seconds hearing ringing
02 collect 1 digits after announcement 4002 ([in TTY] HD [in voice] Thank you for calling Acme Corp. If
you are calling on a TTY, please press 1. Otherwise, stay on the line. [in TTY] Dial 1 )
03 goto step 8 if digits = 1
04 queue-to split 48 pri 1
05 wait-time 60 secs hearing music
06 announcement 4001 ([in voice] Your call is important to us. Please, stay on the line, and an agent will be with
you soon.)
07 goto step 4 if unconditionally
08 queue-to split 47 pri 1
09 wait-time 30 secs hearing silence
10 announcement 4003 ([in TTY] Thank you for waiting. An agent will be with you shortly.)
11 goto step 8 if unconditionally
12 stop

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