



## OVERVIEW

Communications Accessibility with IP Office

# Helping Small Businesses Employ and Serve People with Disabilities



In a democracy, people have a fundamental right to access information and exchange it freely. Laws such as the Americans with Disabilities Act of 1990, Sections 251 and 255 of the Telecommunication Act of 1996, and Section 508 of the Rehabilitation Act Amendments of 1998 guarantee that right to people with disabilities. And so it is that organizations must provide equivalent communications access to employees and customers who have disabilities that affect their ability to use telecommunications systems.

The federal government has estimated that 54 million Americans have a disability. According to the U.S. Census Bureau, after age 55 the proportion of Americans who have a sensory disability doubles (as a percentage of the total number of people with disabilities). In addition, Americans with a disability have an estimated combined annual disposable income of \$175 billion.

It is clear that even if it weren't a legal requirement, providing equal access through communications is a smart idea — making available a large, loyal, and talented labor pool and an untapped customer base. Avaya offers a large portfolio of telecommunication solutions designed to provide equal access to communications for people with disabilities. These solutions enable you to offer a wider range of jobs to people who have disabilities, as well as to serve the needs of a wider range of customers.

## Messaging That Works For TTY Users

People who are deaf or hard of hearing commonly use special text terminals known as Teletypes (TTYs) to communicate over telephone lines. Keeping in mind that over half of the telephone calls to a typical organization's employees are forwarded to an automatic messaging system, what happens if the messaging system is unable to prompt callers in a TTY-compatible format? What happens if the system cannot record a TTY message? Under these conditions, the organization would be denying the TTY caller equal access to communication — not to mention losing a potential customer.

In response to this need, the Avaya IP Office VoiceMail Pro messaging system permits callers to select prompts in voice or TTY format. If a caller wants to leave a TTY-format message, the message will be recorded by the system and then stored in the same mailbox that holds the called party's voice mail. Therefore, with Avaya VoiceMail Pro, it is not necessary to provide separate call-in numbers for voice and TTY users.

Avaya VoiceMail Pro support for TTY users does not end with call-answer capabilities. TTY users have access to nearly all of the same mailbox functions that are provided to voice users via the telephone user interface, such as the ability to generate, receive, and forward messages, do directory look-ups, and return phone calls automatically.

Note that not all people who use TTYs rely on them for both transmitting and

receiving. Many TTY

users are hard of hearing but still able to speak clearly. These individuals often prefer to receive text on their TTYs and then speak in response —

a process commonly referred to as Voice Carry Over (VCO). Avaya VoiceMail Pro supports VCO operations by allowing users to record voice messages even after TTY prompting has been selected. Indeed, should they desire to do so, people may leave messages that contain both voice and TTY.

## Enabling Telephones For People Who Are Blind or Visually Impaired

Consider for a moment all of the information that sighted users can obtain by looking at a typical business telephone: caller ID (name and number), whether there is a new message waiting, whether the phone is forwarded, which lines are available and which are on hold, whether a party on hold has disconnected, and so on.

For people who are blind or visually impaired, the inability to access the same telephony information as sighted people can be a significant inconvenience. More importantly, it can be an insurmountable barrier to communication-centric jobs, such as receptionist or contact center agent, that might otherwise be ideal for people with disabilities.

In response to this need, Avaya developed IP Office Phone Status software. This software is usable with standard, unmodified Avaya telephones. The software itself is loaded onto the user's desktop PC; the status of the telephone is then monitored via a Telephone Applications Programmer Interface (TAPI) connection to the IP Office system. Information of the sort typically conveyed to sighted users by LEDs (Light Emitting Diodes) is presented automatically by voice through the PC's speakers, for example "Line three is on hold," "You have new voicemail," and "Line three has disconnected." Text information on the telephone's display, such as the caller ID information, can be voiced-out automatically, or voiced-out only when the user requests it, thereby helping to protect the privacy of the caller and of the user.



Avaya Model 8840 TTY

In addition to supporting standard telephony functions, IP Office Phone Status software can be used for many specialized applications. For example, it can voice-out the status of settings such as Do Not Disturb and Call Forwarding. Indeed, because the status of dozens of functions is available to IP Office Phone Status, the software includes a user-configurable screen that permits users to specify which functions should or should not be voiced-out.

IP Office Phone Status software may be used in conjunction with the text-to-speech capabilities that are provided with Windows XP™, and also may be used in conjunction with the assistive software commonly used by people who are blind, such as JAWS™ and Window-Eyes™. IP Office Phone Status software controls, activated from the PC keyboard, allow users to request phone status information, to request that the last announcement be repeated, and to request immediate silence. The IP Office Phone Status software configuration tool permits users to select the keys that are assigned to these functions, thereby helping to ensure that there will be no conflict with the key assignments that users may have associated with other assistive applications.

Finally, for users who may have trouble hearing their telephone ringing, IP Office Phone Status software can provide a highly animated screen pop on a user's PC to alert them when they have incoming calls.

### **The Avaya Commitment**

Avaya has a rich history of creating solutions that help individuals with disabilities participate more fully in life. Our corporate heritage and commitment predate by decades the laws that require such products. For example, our first TTY software for messaging systems was developed more than 14 years ago; our attendant console that provides many of the capabilities of our IP Office Phone Status software was developed more than 20 years ago.

**Avaya IP Office Telephones**



Many of the engineers who developed these systems are still with Avaya and working on products that demonstrate our continued commitment to the principles of equal access. The products described here are just a small sample of Avaya Accessible Solutions. With a breadth of experience, tools and technologies, Avaya Global Services delivers planning, design, implementation, integration, maintenance and management support you can trust anywhere in the world.

### **Learn More**

For more information, please contact your Avaya Authorized BusinessPartner.

### About Avaya

Avaya delivers Intelligent Communications solutions that help companies transform their businesses to achieve market-place advantage. More than 1 million businesses worldwide, including more than 90 percent of the FORTUNE 500®, use Avaya solutions for IP Telephony,

Unified Communications, Contact Centers and Communications Enabled Business Processes.

Avaya Global Services provides comprehensive service and support for companies, small to large. For more information visit the Avaya Web site: <http://www.avaya.com>.

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