



*Simplici*TTY®

TTY Call Management

SPECIAL NEEDS

COMPUTERS 

1-877-724-4922

TTY Call-Management for Call Centers

Receiving TTY/RTT calls from the Deaf and Hard of Hearing Community can be a real challenge for a call center.

*Simplici*TTY from NexTalk integrates with any phone system and routes TTY calls to your agents phones and computers.



Established in 1880, The National Association of the Deaf, a non-profit company based out of Silver Springs

Maryland, is the Nation's premier civil rights organization of, by, and for the deaf and hard of hearing individuals in the United States of America.



National Association of the Deaf

“48 million people in the United States need some type of assistance with hearing”

According to the NAD, there are over 48 million people in the US who need some type of assistance with hearing. These individuals are a combination of Deaf and Hard of Hearing individuals. The largest segment of which is our aging generation (baby boomers). With a US population of not quite 330 million (source, US Census Bureau) **48 million represents roughly 15%**

of the US population that needs some kind of assistance in hearing. The question is, what are you doing to make sure you can communicate with these 48 million people?.....anything?



AMERICAN SIGN LANGUAGE

It is very common to associate American Sign Language as the means by which the deaf and hard of hearing community communicate. However, assuming that the large majority of these 48 million people can sign would be a mistake. According to research from Gallaudet University, one of the nations premier universities for the deaf, based in Washington DC, the number of people who know American Sign Language is, at best, 500k. This means that of those 48 million people, the majority (47.5 million) of them do not know American Sign Language, which means they rely on text based communication like TTY to be able to communicate. **Again...ask yourself the question...what have we done to make sure we can communicate with these 47.5 million people?**

Providing Equal Access to Communication under the Americans with Disability Act (ADA)

U.S. Department of Justice
Civil Rights Division
Disability Rights Section



ADA
Requirements

Effective Communication

The Department of Justice published revised final regulations implementing the Americans with Disability Act (ADA) for title II (State and Local Government) and title III (public accommodations and commercial facilities) on September 15, 2010, the Federal Register. These requirements, or rules, clarify and refine issues that have arisen over the past 20 years and contain new, and updated, requirements, including the 2010 “Standards for Accessibility Design” (2010 Standards).

Overview

People who have vision, hearing, or speech disabilities (“communication disabilities”) use different ways to communicate. For Example, People who are blind may give and receive information audibly rather than in writing and people who are deaf may give and receive information through writing or sign language rather than through speech.

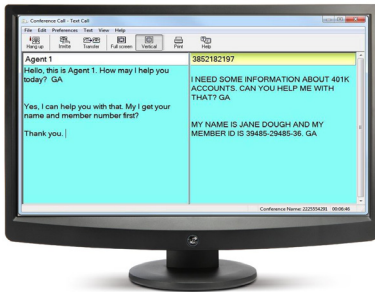
The ADA requires that title II (state and local Governments) and title III (businesses and non-profit organizations that serve the public) communicate effectively with people who have disabilities. The goal is to ensure that communication with people with disabilities is equally effective as communication with people without disabilities.

This publication is designed to help title II and title III entities (“covered entities”) understand how the rules for effective communication, including rules that went into effect on March 15, 2011 apply to them.

- The Purpose of effective communication rules is to ensure that the person with a vision, hearing or speech disability can communicate with, receive information from and convey information to, the covered entity.
- Covered entities must provide auxiliary aids and services when needed to communicate effectively with people who have disabilities.
- The key to communicating effectively is to consider the nature, length, complexity, and context of the communication and the person’s normal methods of communication.
- In addition, aids and services including a wide variety of technologies including 1) assistive listening devices; 2) open captioning, closed captioning and real-time captioning, and closed captioning decoders and devices; 3) telephone handsets with amplifiers, hearing aid compatible telephones, text telephones (TTY), videophones, captioned telephones and other voice, text and video based telecommunication products.

So what are your options when it comes to communicating with the deaf and hard of hearing?

Your options for communicating with the Deaf and Hard of Hearing are using TTY software, using an old TTY phone, or using Relay (711), let's look at the pro's and cons of each.....



SimpliciTTY TTY Call Management Software



Analog TTY phone



711 Relay Operator

	SimpliciTTY From NexTalk	Analog TTY Phone	Relay Service (711)
Integrates into existing phone system	Yes (on-premise or cloud based)	No, uses analog phone lines	Partially
Works with call center ACD	Yes (on-premise or cloud based)	No	No
Can store conversations (Optional)	Yes - Encrypted at rest and masked	No	No
TTY Voice mail for missed calls	Yes	No	No
Ti and SIP (VM) compatible	Yes	No	N/A
Private and secure	Yes	Yes	No, third person is on the line
Conforms with internal information security policies	Yes	Doubtful	No, third person on the call
Secure	Yes (256 AES encryption)	No	No, third person on the call
Services Agreement between parties	Yes	No	No
Scalable	Yes	Yes	N/A
Cost	Starting at \$29 per/agent, per/month. (10 users)	\$599 for analog TTY phone and 25 dollars per month for an analog phone line	Free
Pros	Works with existing call center and office phone systems, secure, keeps agents at their desk, answer calls on the computer. Average call length is shorter than TTY phone or Relay.	None	Free
Cons	Not Free	Have to install an analog phone line. Does not interact with call center or office phone equipment. Calls take longer.	Third person on line means the caller is not having a one-on-one call with your staff., no privacy, potential security risk. Calls take longer.

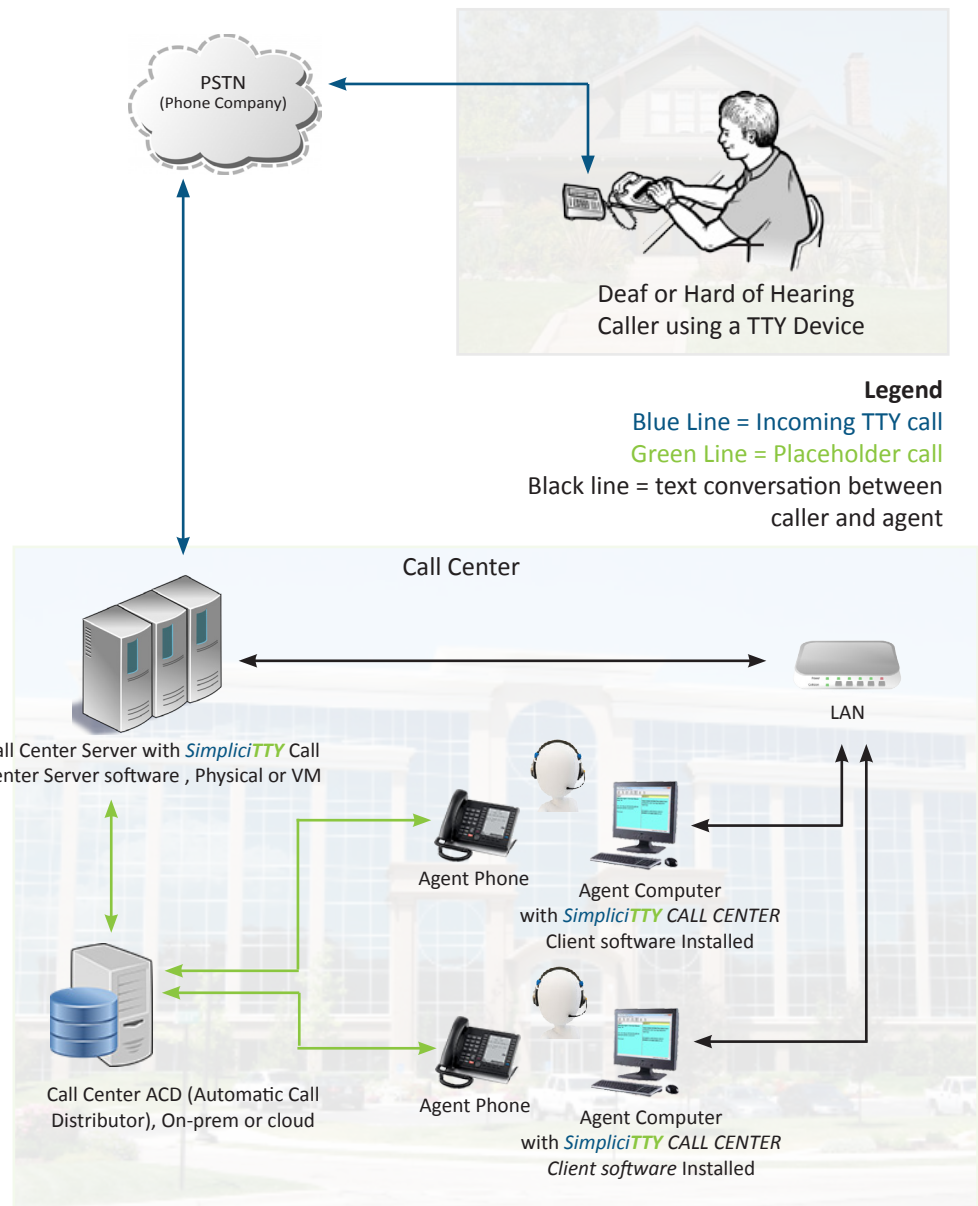
NexTalk provides a variety of options for your SimpliciTTY TTY Call-Management solution. These options include an on-premise install, a hosted install or a hosted hybrid install.

- **Purchased (on-premise) Solution** - Clients choosing the purchased solution will have all three software elements (server software, client/desktop software and database software) installed on premise. NexTalk supports both Physical servers (T1 line needed) and Virtual Servers (SIP trunk needed). Clients choosing the purchased solution will also need to provide a database program that the server version of the software can write to when archiving conversations. This database program can reside on the same server as NexTalk server software or on another server which is reachable by the NexTalk server.
- **Hosted Solution** - Clients choosing the hosted solution will have the client version of the software installed on premise, while the server version of the software and the database software will be hosted on NexTalk's servers. NexTalk will provide back-up for their account. NexTalk will provide all connectivity needs, such as T1 or SIP trunk.
- **Hosted Hybrid Solution** - Clients choosing the hosted hybrid solution will have the client version of the software and the database software installed on premise, while the server version of the software will be hosted on NexTalk's servers. NexTalk will provide server software back-up for their account. NexTalk will provide all connectivity needs, such as T1 or SIP trunk for the server software.

TTY Call-Management Solution Components

Solution Type	Server Software	Database Software	Client (desktop) Software	Servers	Telephony Connection (T1 or SIP Trunk)
Purchased	On-premise (Provided by NexTalk, installed on Client's Server)	On-Premise (Provided by Client, installed on Client's server)	On-Premise (Provided by NexTalk, installed on clients local computers)	Provided by Client	Provided by Client
Hosted	Cloud Based (Provided by NexTalk, Installed on NexTalk's Server)	Cloud Based (Provided by NexTalk and installed on NexTalk's Servers)	On-Premise (Provided by NexTalk, installed on local computers)	Provided by NexTalk (Client will have a discrete domain on the NexTalk server)	Provided by NexTalk
Hosted Hybrid	Cloud Based (Provided by NexTalk, installed on NexTalk's Servers)	On-Premise (Provided by Client and installed on Client's Server)	On-Premise (Provided by NexTalk, installed on local computers)	NexTalk Provides - Server for the server software Client Provides - Server for the database software	NexTalk will provide the telephony connection for the NexTalk server with the server software Client will provide a LAN connection to the on-premise server with the database software.

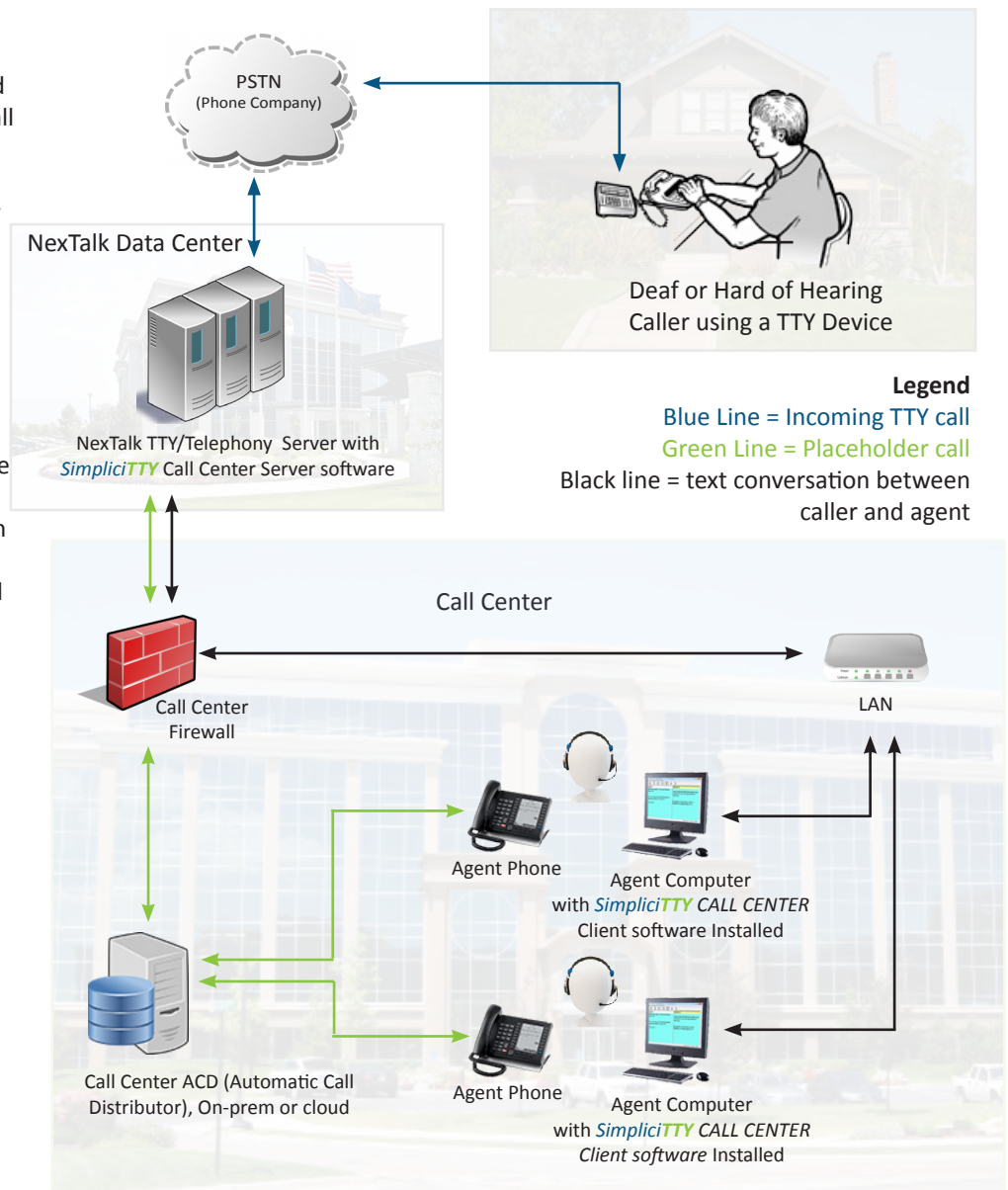
1. The TTY call gets routed to Nextalk's server at the NexTalk Data Center. The *SimpliciTTY* CALL CENTER server software verifies that the call is a TTY call, not a voice call.
2. **If the call is determined to be a voice call**, a customizable outgoing voice message is automatically send to the caller. (i.e. - "you have reached a number reserved for the deaf, please hang up and dial XXX.XXX.XXXX instead....Thank you".)
3. **If the call is determined to be a TTY call**, a script text is sent to the TTY caller informing them that their call is being routed to the next available agent.
4. The agent's computer has the Client version of the *SimpliciTTY* CALL CENTER software installed on it. When the agent started their shift, they signed into the Client version of *SimpliciTTY*. Upon doing so, the server version of *SimpliciTTY* recognizes and approves the agents login credentials and captures the "mac address" of the computer that they have sign into. Thereby, the Server version of *SimpliciTTY* knows which computer that agent is using.
5. Upon confirmation that the call is a TTY call....The NexTalk *SimpliciTTY* CALL CENTER server software generates a voice call on the deaf person's behalf and routes that call to a dedicated DID number on the call center ACD. This is called the "place holder" call. The ACD then uses "skill set" setting to determine which call center agent in the TTY skill set group is available to take the place holder call and forwards the place holder call to that agent.
6. When the agent answers the call, they hear a scripted message telling them that they have a TTY call waiting. The agent is asked to enter their agent ID so the TTY call, which is on hold, can be routed to their computer.
7. The agent enters their agent ID (DTMF) on their telephone keypad, the *SimpliciTTY* CALL CENTER Server software confirms the ID, matches it to the agents login credentials and mac address, then routes the TTY call to the Client version of the software on the computer that the agent logged into at the beginning of their shift.
8. The agent leaves the telephone receiver off the hook so that call information can be tracked, just like a voice call.
9. The agent will see a pop-up notification on their computer screen, which they use to initiate the conversation with the deaf or hard of hearing caller. A two sided screen is displayed. One side of the screen shows the text messages being send by the TTY caller and the other side is where the agent types/copy & paste their responses.
10. When the call is completed, the agent closes the dialog window and hangs up his phone. The agent leaves the software minimized making them available for another TTY call.



The Call Flow of *SimpliciTTY*[®]

Hosted Solution

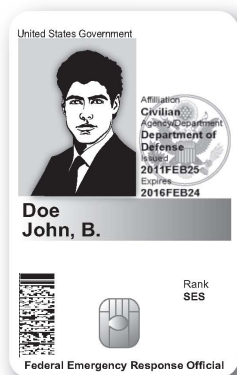
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Now that we have illustrated the technology advantages of SimpliciTTY, lets talk security....

PHI and Personal information

Clients can choose whether or not they want to save (archive) conversations with their Deaf and Hard of Hearing customers. If they choose not to save, there is no data saved or archived at either the local or server level. If they choose to save the conversation, the data is written to the database software install on NexTalk's Servers (Hosted Options or on the Clients Servers (On-premise and Hosted-Hybrid option).



PIV Card and Single sign-on/Federation Capabilities

SimpliciTTY offers user the ability to do single login using a PIV Card or other common sign-on methods. This greatly simplifies the process and adds an extra layer to security by conforming to native security procedures used by other applications.

Encryption and At-rest Masking

When the client does choose to save the data from a call with a Deaf or Hard of Hearing person, that data is written to a database. NexTalk uses 256 AES Encryption to protect that data in-transit and while at rest.

Additionally, NexTalk can mask specific data after it has been written to the database, (i.e. account numbers, social security numbers, birth dates, email addresses, addresses, etc.) Protecting the information when the data is read at a later date.

Hi, this is Eric White, my social security number is [REDACTED].

I am calling to ask about the balance of my retirement account. My account number is [REDACTED]. Can you tell me how much is in my account? GA

Thanks for calling Eric, your account balance is \$ [REDACTED] GA

Server Software

Server requirements for Server Version Software – Physical and Virtual

- Operating System – W2008, W2012, W2014, W2016 (must be 64 bit version)
- CPU – Intel i7 processor or better
- RAM – 6GB or more
- Hard Drive – 60 GB or more
- NIC – 10/100 Mbps
- PCI - One x1, x4, x8 or x16 PCIe slot (If using a Telephony board, not required with SIP)
- Video – SVGA (1024x768 or better)

Server requirements specific to Virtual Server

- A USB dongle will be provided for the SIP port licenses. This dongle must be plugged into a USB port that has been assigned to the VM.
- NexTalk also offers Remote SIP Licenses if your VM does not support a USB dongle.

Supported Databases

- Oracle 9x or better
- SQL 2005 or better
- Free database engine supported:
 - o Oracle 10G XE or better
 - o SQL Express 2010 or better
- SQL authentication is preferred for MS SQL sever

Firewall Settings

- We recommend turning off Windows Firewall protection on all Servers
- Allow NexTalk client connections on port 2591 (TCP)
- For a Hosted or Hosted-Hybrid system, please open the above port to 52.176.3.208, 13.89.188.691 and 40.69.190.208

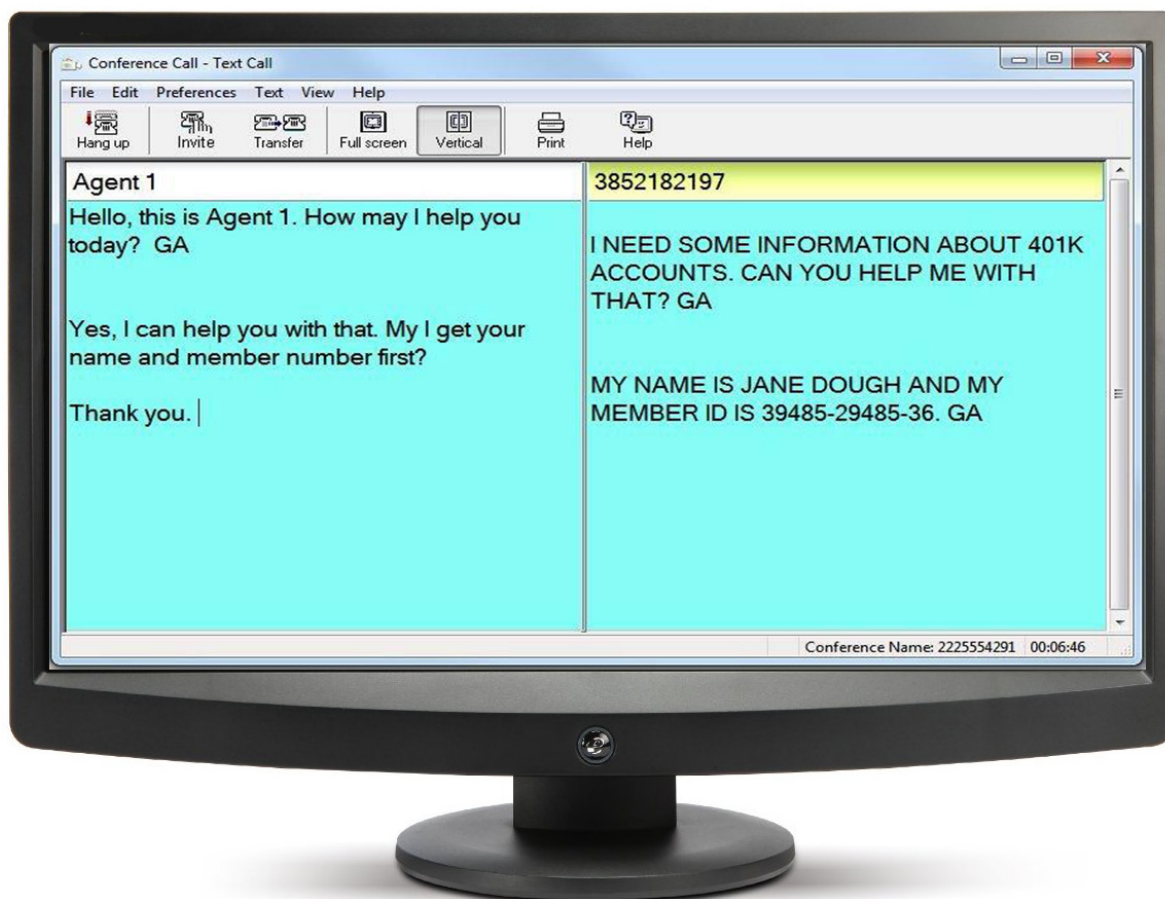
Client (desktop) Software

- Operating System – W7, W8, W10 (32 or 64 bit)
- CPU – Pentium 4 and above
- RAM – 512 MB or Higher
- Hard Disk Space – 100MB
- NIC – 10/100 Mbps
- Video – SVGA (1024x768 or better)
- *2 Mega Pixel or better Camera
- *Speakers

* This solution also has the ability to send and receive video calls

The Advantages of *SimpliciTTY*[®]

SimpliciTTY from NexTalk is a TTY Call-Management Software Program that simplifies communicating with the deaf and hard of hearing. Designed for both office and call center applications, *SimpliciTTY* integrates with existing office or call center equipment to receive, verify and route TTY and RTT calls. When calls are received, they are routed in the same manner as a voice call with no special computers or phones needed.



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Communication Software for the Deaf, Hard of Hearing and non-English Speaking