

WHITE PAPER

REALTIME CAPTIONING/CART/CAPTIONING

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INTRODUCTORY THOUGHTS

A WORD ABOUT YOUR HARD OF HEARING CONSUMER AND CAPTIONER

We've come a long way from the early days, when hard of hearing clients were grateful to get any type of communication access whatsoever. With the advent of the prevalence of broadcast captioning, the advocacy of hearing loss groups for inclusion, and finally the bringing into legislation the Accessibility for Ontarians with Disabilities Act, 2005, consumers with a hearing loss are more likely to (a) self-identify; (b) demand accessibility; and (c) expect a high degree of competent captioning services.

When dealing with a hard of hearing consumer, remember to speak clearly, to enunciate your words, and to speak a little slower if you are a quick talker. While many do lip read to some extent – and most of us do, though we don't even know it – most still need another form of communication access to get the full essence and extent of what is being said.

Your captionist is your partner in the provision of services. By working together, you collectively can provide a very positive experience for those with a hearing loss.

CART/CAPTIONING/REALTIME CAPTIONING – WHAT IS IT?

- CART = Computer Aided Realtime Transcription
- Used to be called captioning but industry wanted to distinguish between broadcast captioning (captioning) and onsite captioning (CART)
- Realtime captioning is the same as CART
- CART/Captioning/Realtime Captioning = instantaneous voice-to-text translation of the spoken word into the written word
- Started in early 1990s on some television broadcasts
- When we started in 1996 there were one or two people providing service sporadically
- Service now widely available through a number of modalities, including onsite, remote, internet, web-based and broadcast

WHO USES THE SERVICE?

- Those with a hearing loss, particularly the Late Deafened (those who became deaf later in life and cannot read sign language) and the hard of hearing community
- Those for whom English is a second language – assists in their comprehension of the spoken word
- Deaf consumers, as an additional aid to ASL (American Sign Language)
- Those with some learning disabilities – assists in their comprehension and understanding of the spoken word
- Those with other health issues such as MS and brain functioning impairments – assists in comprehension
- Those who simply like to follow along and may have missed something that was said and can “catch up”

WHO PERFORMS THE SERVICE?

- Shorthand reporters who have taken additional training in order to provide captioning services (most common)
- Voice writers – those who use voice-to-text software in a very specific way (less common)
- Voice-to-text software – frequently used in Quebec, for example, but less common in the rest of Canada, and particularly for English

HOW DOES THE CAPTIONIST DO IT?

- Training in machine shorthand – usually a two-year program where theory is taught for the first four to six months, then speed building, accuracy and all components of transcription are taught and performed by students
- Of 100 students, approximately 10-12 will actually become proficient court reporters; of that group, approximately 1-2 will go on to become captionists
- High level of skill required – like playing a concert piano – if you hit the wrong key (or note), you will not get the correct word (or sound); if you cannot “write” (play) quickly and accurately, you will not get the correct word (sound) or you will miss clumps of speech (music)
- National Court Reporters’ Association sets the standard – captionist should pass certifications such as Certified CART Provider (CCP) or Certified Broadcast Captioner (CBC) as well as provincial certification (Ontario is CSR – Chartered Shorthand Reporter). Certain speeds must be reached as well as an accuracy level of 97% or better.
- It should be noted here that captioning is a very intensive job. The captioner must sit still for long periods of time, listening to every word that is being spoken, and capturing those words accurately for viewing. It is also a very stressful job. People tend to speak very rapidly when they are presenting, and are often trying to get 45 minutes’ worth of material into 30 minutes. This makes the job of the captioner very challenging indeed. Captioners also tend to be perfectionists, and they care very deeply about

the hard of hearing people they work with. Professional captioners believe in communication access, and understand that clarity and accuracy are essential to effective voice-to-text rendition. Breaks, prep material and support are all essential elements of creating a good working environment for your captioner.

~A photo is inserted of a captioner at work~



PICTORALLY:

- The captionist writes on a shorthand machine:

~A photo of a shorthand machine is shown below~



- And produces the spoken word in “shorthand.” We use letters of the alphabet in various combinations to form words or syllables at a time (as opposed to typing letters at a time on a QWERTY keyboard). The captionist’s software, which contains his or her unique dictionary, looks to match the shorthand outline with the English equivalent as defined by the captionist.

P	RA	F							
P	RA	F							
T	H								
			EU			S			
		A			PB				
KP	A				P L				
					P L				
				F					
	P H				PB				
S	H A				PB		D		
T	P R								
		A							
ST			E		PB				
		O E							
K	AO E								
PW	AO		R				D		
	W								
	P	A	EU	P					
			E R						
				F P L T					

} (new line) >>
 this
 is
 an
 example
 of
 machine
 shorthand
 from
 a
 steno
 keyboard
 with
 paper
 (period)

- The captionist's work is then displayed on numerous modalities such as –

LCD projector and screen, laptop and monitor



Handheld devices, including BlackBerry, iPhone and Android



Tablets



CURRENT STATE OF TECHNOLOGY (2013)

- Trained steno captionists remain the best choice for the provision of services
- CART provides instantaneous voice-to-text translation (very little if any lag time) so readers are completely in-sync with spoken word
- The human ear and brain produces the spoken word in a way that is readable, clear and discernible
- The captionist can insert punctuation, thereby creating a very readable product (not just a bunch of words thrown together)
- The captionist becomes the “ears” of those with a hearing loss, including nuances such as ambient noise (i.e. knock at the door, alarm sounds, laughter, music being played, etc.)
- Captioning services are available in many, many venues – very few restrictions of where service can be provided
- Voice-to-text products still have a long way to go in being able to produce high quality transcription (cite example)
- Problems with voice-to-text technology – multi-voice - no pre-training of software, terminology is often garbled, lag in translation time, no punctuation
- CART can be displayed/received in the following ways, as shown: laptop of CART provider, separate laptops (wired and wirelessly, allowing the person(s) receiving the service a level of privacy), monitors, overlaid on video (such as in large venue presentations), handheld devices, tablets, remotely (as long as there is internet access), Jumbotrons, websites...

WHERE CAN CART BE ACCESSED?

CART can be provided in almost any setting, but a short list includes:

- School settings – universities and colleges are most common, both remotely and onsite (usually depends on location of class and difficulty of course)
- Meetings – any and all types – captioning can be provided almost invisibly where needed
- Conferences – whether in a small viewing area (on a monitor) or up on the big screen as a part of a video presentation or on a separate screen
- Training sessions
- Job interviews/reviews
- Union/Management meetings
- Counselling
- Corporate Annual General Meetings
- Weddings, funerals, etc.
- Interviews
- Client meetings
- Remote locations
- Court/Hearings

BOOKING CART SERVICES

DETERMINING IF YOU REQUIRE CART

- If the consumer uses ASL or LSQ (American or French sign language) then most likely you do not want to book CART services. Those who are capital “D” Deaf consider themselves to be culturally deaf, and sign language is their language of choice (just as English or French would be

our language of choice). CART should not be confused with ASL or LSQ; they are not at all the same service.

- If the consumer is Late Deafened, they will require CART services. Imagine if you lost your hearing today – sign language would not help you, but you could certainly read text and communicate.
- If the consumer is Hard of Hearing, they will require CART services. Most consumers will self-identify in this regard. Many HoH consumers will also use other aids such as infrared devices, listening devices (such as a PocketTalker), lip read, hearing aids and even cochlear implants. However, they often require CART in order to fully comprehend all that is being said so that they can meaningfully participate.
- If you are hosting a larger meeting, remember that not only will CART benefit those with a hearing loss, but will also aid those for whom English is a second language, learning disabilities, etc.

DETERMINING THE TYPE OF SERVICE YOU WISH TO PROVIDE

- Onsite – the CART provider will be present at the event/meeting. This is the optimal service.

Considerations for the provision of onsite:

- Location of event – are local providers available or do they need to be brought in?
 - If captionist needs to be brought in, travel expenses will be incurred, such as flight, meals, taxis, parking, mileage, etc.
 - Users of the service – are they all onsite, or will they also be offsite, in other locations? You can use an onsite CART provider who can also provide remote services at the same time using technology.
- Remote – the CART provider will be off-site and not in attendance at the event/meeting.

Considerations for the provision of offsite:

- Is there a good internet connection at the meeting/event?

- Can you provide good audio for the off-site captioner? If the captioner can't hear, she/he can't caption.
- Can you provide a laptop at the event? This will be required to receive the captions.
- Do you have other technical support at your meeting such as an AV service? If so, the AV provider can usually set up an excellent audio connection for the captioner.
- How do you want to display the captions? On an overhead projector, on your website, by private internet display?
- If you wish to display on your website, be sure to allow time for the captioner and your IT department to interface and set up the infrastructure required to allow this functionality.
- Onsite and Remote – the CART provider is onsite and providing services to those locally, as well as transmitting the captioning to remote locations as well.

Considerations for the provision of both services:

- Onsite captioner will require a good internet connection in order to send the captions out to the remote participants.
- If you have a set number of remote participants, their email addresses will be required in advance so an “invitation to join the meeting” can be sent to them in advance, and they are able to test their browser before the meeting to ensure connectivity (more on that later) – See Appendix A.
- If you wish to webcast, the captioner and your web/IT provider will need to set up the webcast in advance, as a third party streaming provider will be required in order to get the captions from the captioner to display onto your website.

BOOKING A SERVICE PROVIDER

- There are captioners available in British Columbia, Alberta, Saskatchewan, Ontario and Quebec. There are no captioners resident in the other provinces and territories. You will find captioners willing to travel, however.
- Most CART services are provided by a select number of court reporting firms and as well by some individuals who work out of their homes. Bear in mind your requirements – if you book a captionist who is self-employed, should illness or another emergency arise, make sure there is a backup in place; if not, you may want to consider using a captioning-CART firm/agency.
- Contact the captionist or firm as soon as possible. If you are unsure that you will require captioning but think you might, it is best to tentatively book the date and time required. Be sure to inquire about the cancellation policy so you have time to make any changes you might need.
- You will need to provide immediately upon booking: the name of your meeting/event, date(s), time needed, location and contact information.
- Depending on the size of your event, a contract may be required by the firm you are booking, or your own employer may require same. Allow enough time for contract to be prepared, exchanged and signed by all parties.
- At least two weeks before your event, the following should be in place:
 - ✓ Setup requirements for the captioner (if onsite – table, chair, electrical powerbar, light, headphones if AV is available)
 - ✓ Decisions made as to how the captioning will be displayed and ensure equipment will be available for the event

- ✓ If remote captioning, email addresses of those who are to receive the invitations to attend the meeting
- ✓ Requests of speakers and presenters for their bios, notes, etc.
- Be sure to receive a written confirmation of your booking from the captioner or firm. It is the general practice of firms to confirm your booking two business days prior to the event.
- At least 48 hours (the more, the better!) before your event/meeting, you should provide the captionist/firm with the following information:
 - ✓ Agenda
 - ✓ List of presenters/speakers and their bios, if they will be referred to
 - ✓ Any PowerPoint presentations, notes or documents that will be referred to
 - ✓ List of acronyms, names, etc. that are unique to your group
 - ✓ Contact information of someone onsite at the meeting that can be reached on short notice
 - ✓ Any other instructions

QUESTIONS TO ASK

CART providers are like any other service – some are excellent, some are very good and, unfortunately, some people should not be providing the service at all. Rates, minimum booking times and other things will vary from place-to-place. Like anything else, cheaper isn't always better. To determine who can best serve the needs of those consumers with a hearing loss, here are some questions/investigations you may wish to consider before booking a particular captioner or firm.

- How long have they been in business?

- What is their technical expertise in helping you achieve your requirements?
- Are there any references available?
- What are their rates? Ask for minimum booking times, prep times, out of town rates (if applicable), onsite rate v. offsite/remote rate, cancellation policies and how you are billed, i.e. if you book services from 10 am to 2 pm but only go to 10:30, what happens?
- Is there backup available should your booked captioner become ill or experience an emergency?
- Are they Canadian providers? Many remote captioners are actually providing services from the United States. They may be working for Canadian entities, but their captioners are, therefore, American. If your employer has a “Canadian” requirement, you need to ask this question.
- Request a captioner that has experience and certifications – this is one of the only independent ways you can try to assure quality.
- If you are interested in receiving a rough draft transcript of the event, inquire as to its availability and cost, if any.

REMEMBER – THE PEOPLE YOU ARE TRYING TO SERVE ARE RELYING ON THE CAPTIONING FOR THEIR COMMUNICATION ACCESS. BAD CAPTIONING IS TANTAMOUNT TO NO ACCESS AT ALL!

RUNNING A SUCCESSFUL MEETING WITH CART

If you think about good manners in conversation, use that as a guidepost to conducting a meeting where you have a CART service provider. These same tips apply equally to meetings where an ASL/LSQ provider is present.

- Speak one at a time
- Speak in a measured, paced way – don't fly through presentations and speeches
- Breathe!
- Watch the captions from time to time – if it appears the captioner is struggling, slow the pace of the meeting down
- Allow for breaks at least every hour and a half
- For full day meetings, a one hour lunch break is essential
- Put up name cards in front of panels, speaker tables, etc. so the captioner can identify who is speaking
- Follow the agenda as closely as you can
- When remote captioning is involved, have the person identify who they are before they speak – remember, the captioner cannot see who is talking

ONE, TWO OR THREE CAPTIONERS?

- As a rule of thumb, a captioner can write up to about seven hours comfortably assuming there is a morning break, a one hour lunch, and an afternoon break (the breaks should be 15 minutes or more). If you have an agenda where you have a lunch speaker and you may run later into the day, then often two captioners will be required. For large scale conferences where multiple captioning events are taking place at the same time, then several captioners may be required for the event.
- Generally speaking, if you have three captioners at your event for the day, you will be paying for three captioners' full time there, even if they are writing at sporadic intervals. You must rely to a large extent on the experience of the captioning firm to organize the captioners in such a way

so as to maximize the captioners' time onsite, but with regard to the technicality of the meetings, the types of speakers, and the amount of movement from room to room which may be required.

- If your event is in a space where there is a lot of movement from room to room, please bear in mind that your captioner requires at least 10 minutes to take down, move, and re-set up in a different room. This should not be during the captionist's break. It is always stressful moving equipment and setting up again – because there's always the chance something may not work. Where you are able, provide a second set of hands to the captioner for movement between rooms – less takedown means less time in between sessions that will be required.

WHAT CAN GO WRONG?

- Captioners rely on their computers, software, the internet and their shorthand machinery to work. In between all these devices are cords and connectors of various types that also need to work. We've all had situations where our computer has conked out on us, or when the internet connection has failed, or when a cable just stops working. None of us can predict when or where this will happen. If any of these things don't work, the captioning may not happen.
- With onsite captioning, very little – other than mentioned above – goes wrong. Assuming all the captioner's equipment is functioning, the last point of contact to “worry” about is the viewing device. If the LCD projector's bulb is burned out, obviously it's not going to work. Therefore it's a good idea to check all ancillary equipment that you, as the client, are required to provide. Generally speaking, if an IT or AV person is available to meet with the captioner about a half an hour before the meeting is to start, that usually deals with any issues or problems. Clearly the captioner needs to hear what is being said, so the positioning of the captioner may be important if you are not providing her with an audio feed in a headset. As well, sightlines are important as body language is a part of our communication process, and captioners do read lips!

- Remote captioning is probably the place with the most difficulties. There are many more interfaces to get through to ensure successful captioning.

Listed below are the common issues we see:

Internet connectivity is poor or non-existent – some buildings simply do not allow any wireless connection at all, and have no hard wiring the captioner can plug into.

SOLUTION: Use hard wiring for remote captioning whenever possible.

The captioner cannot hear the audio – many devices that are used to provide audio, such as a telephone on speaker phone, conference calls, Skype, cell phones, etc. fail to provide adequate audio for the captioner at the other end. If the captioner can't hear, she can't provide the service and there's nothing she can do about it.

SOLUTION: Where possible, have the AV person set up the audio for the remote captioner – that is almost always failproof. Short of that, a land line telephone is fairly stable, save for the person who is 40 feet away from the telephone and making a comment – most likely the captioner won't hear that. If the chair of the meeting repeats the comments of those far away, that is one way to ensure that the captioner can hear and provide the text.

There are many new users of the remote software who do not take the time to test their browser prior to the event. All third party streaming providers allow you to test from their websites.

SOLUTION: It is absolutely essential that the user ensure their Java software is up to date. <http://www.java.com/en/download/index.jsp>

We often hear “it’s not working.” The way the remote streaming is generated allows the captioner to view the captioning on the web, thus ensuring that indeed the captions are being sent and being received at the third party streaming site.

SOLUTION: It’s a problem on the user’s end – whether an internet connectivity issue, a firewall issue (take note, this is an issue for many firms and government offices!), or they have not updated their browser or connected to the link sent to them.

- First time remote internet users should always ensure there are no firewall issues. Captioners rely on their client and the captioner’s third party streaming provider to problem solve firewall issues. Captioners are generally not capable of resolving this very technical issue.
- Some words are coming out in steno, or are in English but don’t make any sense! This is one of the reasons why providing the captioner with prep material in advance is so important. Let’s say one of your speakers is Enzo Papadopolous. If the captioner hasn’t defined this person’s name in their dictionary, one of two things could happen:

1. STENO: EPB/STKPWOE PAP/TKOP/LOUS

Believe it or not, Enzo Papadoplous is actually there...but it’s in shorthand and needs to be placed in the captioner’s job dictionary.

2. FUNNY ENGLISH: Enzoo pap dope lus

All the “strokes” that the captioner wrote may individually mean words, such as “pap” or “dope,” but taken together become different words all together. The captioner needs to capture those individual steno outlines, put them together appropriately, and redefine them as the proper,

appropriate English words that should appear. Again, what the captioner wrote is correct – in shorthand – but needs to be realigned.

Thus the importance of the time the captioner spends before the meeting inputting names, etc. as discussed above. It makes for a much more readable, accurate rendition of the spoken word.

A NICE BY-PRODUCT OF CART: A ROUGH DRAFT TRANSCRIPT

This topic brings us full circle from the beginnings of becoming a captioner – first one becomes a court reporter, and a court reporter is all about creating a written record of proceedings.

The difference between a court reporter and a captioner is this: a court reporter creates a verbatim record of what is said, oftentimes in a legal setting. A captioner provides communication access for those with a hearing loss. While the methods by which both professionals carry out their task is the same, the end product is quite different.

The following charge outlines the differences:

Court Reporter

Takes down in shorthand what is said

Majority of court reporters do not display their work to others in the room during hearing

Makes a verbatim rendering of what is said; not allowed to make any changes to the transcript

Proofreads the transcript over a given period of time

Certifies the transcript as accurate

Transcript is produced in hard copy and billed to client

Paid low rate for attendance time and earns main income from page rates

Captionist

Takes down in shorthand what is said

Displays voice-to-text translation of the spoken word on various screens during event

Tries to provide a verbatim record, but has the right to use other words with the same meaning if clarity will be accomplished

Spot checks the transcript for shorthand untranslates, inappropriate English and corrects

Does not certify the transcript as accurate

Transcript is never produced in hard copy and is not billed to client unless contracted for

Paid higher rate for time captioning and minimal (or nothing) for pages created as rough draft

If you think you would like to have a rough draft transcript, be aware of the following:

- In advance of your event, ascertain if a rough draft transcript is available from the captioner/firm.
- Negotiate where you can to have it included in the cost of services; otherwise, ascertain the cost of the rough draft transcript.
- Be sure that your event's speakers will not claim any intellectual property ownership over their talk – it is the client's responsibility to ensure they have a right to use the rough draft transcript.
- Never use a rough draft transcript in place of a certified transcript. If you require a certified transcript, then let your provider know that you require captioning and a certified transcript as well. Some captioners are trained to be able to provide both services. Note: additional charges will apply to a final, certified transcript.
- Use caution in the distribution of a rough draft transcript. Generally it should be used as an aid for notetaking and the like. A rough draft transcript cannot be relied upon for accuracy.

SPECIAL CONSIDERATIONS: USING CART IN A LEGAL PROCEEDING

Voice-to-text services may be required by any number of participants in a legal proceedings – whether for a hard of hearing judge, lawyer, plaintiff, defendant, accused or witness. The following are considerations that should be taken into account when using CART in a court room or hearing room:

- Remember that your CART provider is not acting as a court reporter. CART providers are akin to interpreters – it is important that the person using the service can clearly read as much as possible of the proceedings. CART providers may replace one word with another similar word, for example, if they know that word will appear in English for the consumer, as opposed to shorthand or non-contextual English (usually because the particular word may not be in the captionist’s dictionary). While CART providers strive to be as verbatim as possible, their role is that of the provision of communication access.
- Consider what type of viewing is best for your room. Possible scenarios include:
 - Sitting beside the person requiring service and having that person read the captionist’s computer screen
 - Providing a separate laptop for viewing by the person requiring access
 - Projecting the captioning via LCD projection or large scale monitor for a larger audience
 - Providing multiple laptops for viewing by any number of people in the hearing
 - Streaming the voice-to-text via the internet to another location
- Prep material is key to successful communication access. Helpful material includes any of the following: pleadings, indictment, witness statements, names of all counsel and whom they represent, name of judge, hearing/court room number and location, contact at hearing, and anything

else you think your service provider should know, such as the type of hearing (i.e. of a sensitive nature) and the nature of the matter to be heard.

- Engage the rules for running a good meeting – speak slowly and clearly, allowing the captioner to write what you say and the hard of hearing person the ability to read same; do not speak on top of one another; do not interrupt someone when they are speaking; keep extraneous noise down to a minimum; and ensure the captionist has an excellent spot to sit for the best audio quality possible.
- Discuss with the captioning firm beforehand whether the person requiring the service will need a rough draft transcript for further review at a later time. If the parties wish to have access to the rough draft transcript, this should also be canvassed in advance of the hearing. Understand that this transcript is not the official record.

APPENDIX “A”

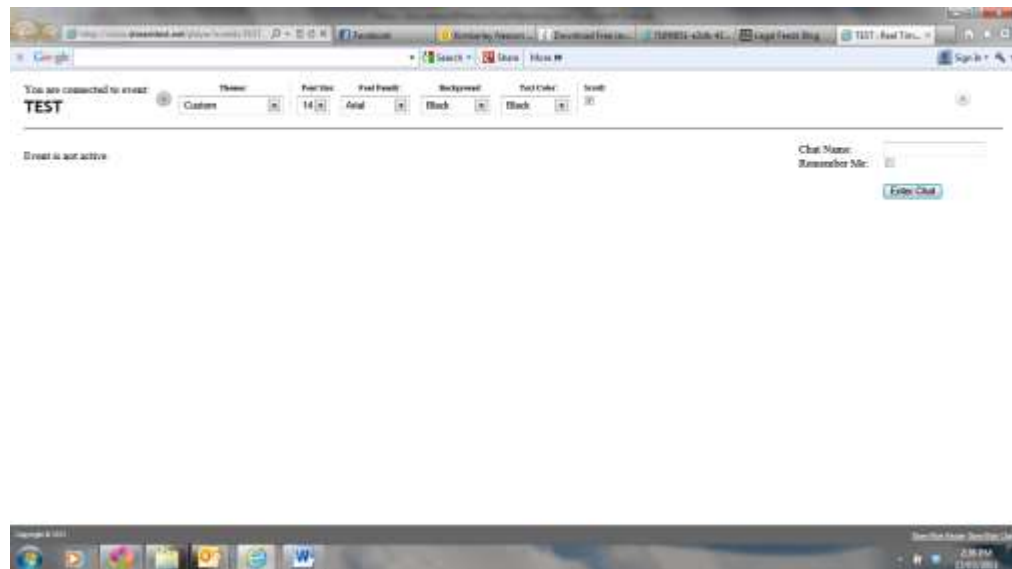
SAMPLES

SAMPLE INVITATION TO JOIN A REMOTE CAPTIONING EVENT

BY EMAIL

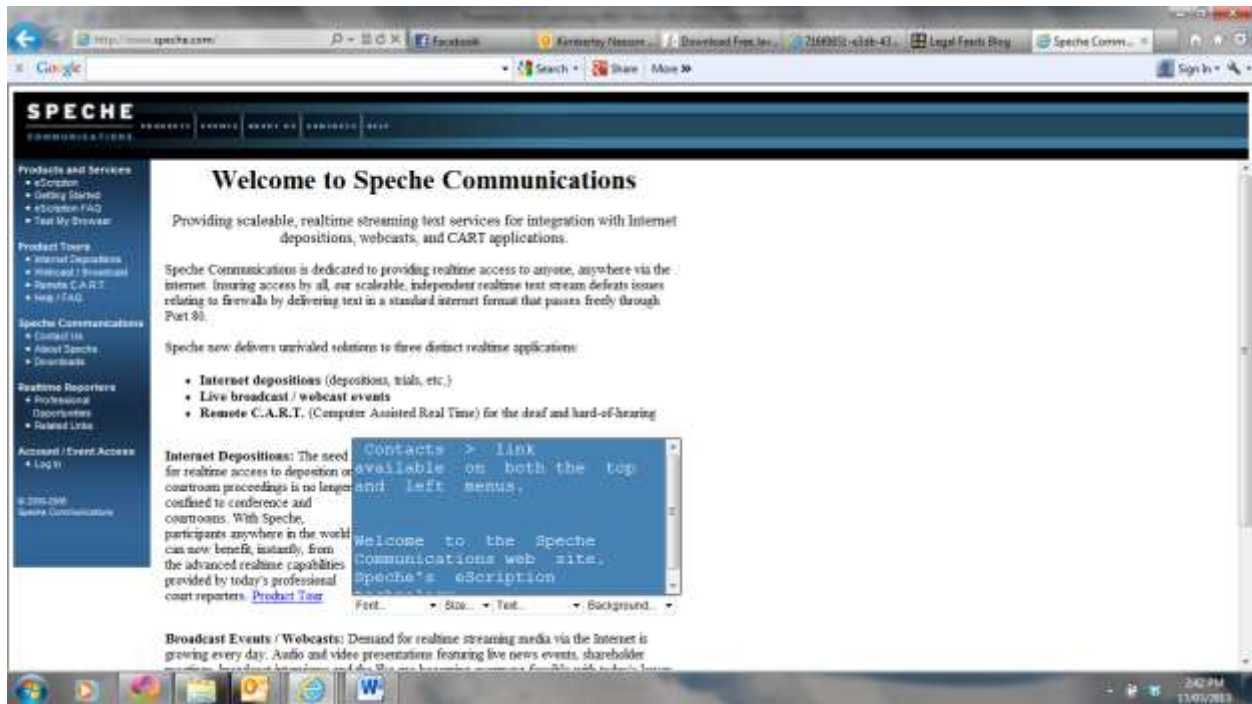
- This is a confirmation that an event has been scheduled for you. The following is the information that pertains to your event:
-
- Date/Time of Event: 3/13/2013 2:40 PM
- Captionist: Helen Smith
- URL of Event: www.streamtext.net/text.aspx?event=TEST

SAMPLE OF STREAMTEXT REMOTE CAPTIONING WINDOW AT CONSUMER’S LAPTOP



Note: The user can adjust the size of the font, the colour of the font, the background colour and text colour to their preference. Even if they join the event late, all text submitted to the streaming text will be saved and can be reviewed at any time. A chat box is also provided. This applies to all streaming software.

SAMPLE OF SPECHE COMMUNICATIONS HOME PAGE – “Test My Browser” is on the left-hand side of the page and can be accessed at any time by any user.



Speche “Test My Browser” Troubleshooting Screen

