



Real-Time Text Taskforce

Understanding the problem on access for people with Disabilities:

- I like to illustrate how urgent the accessibility for people with a disability is becoming
- The internet is evolving rapidly.
- Used to be text only like talk, IRC, email, etc
- Internet only for us geeks, not for everybody.
- With the invention of the “WWW” things started to change..



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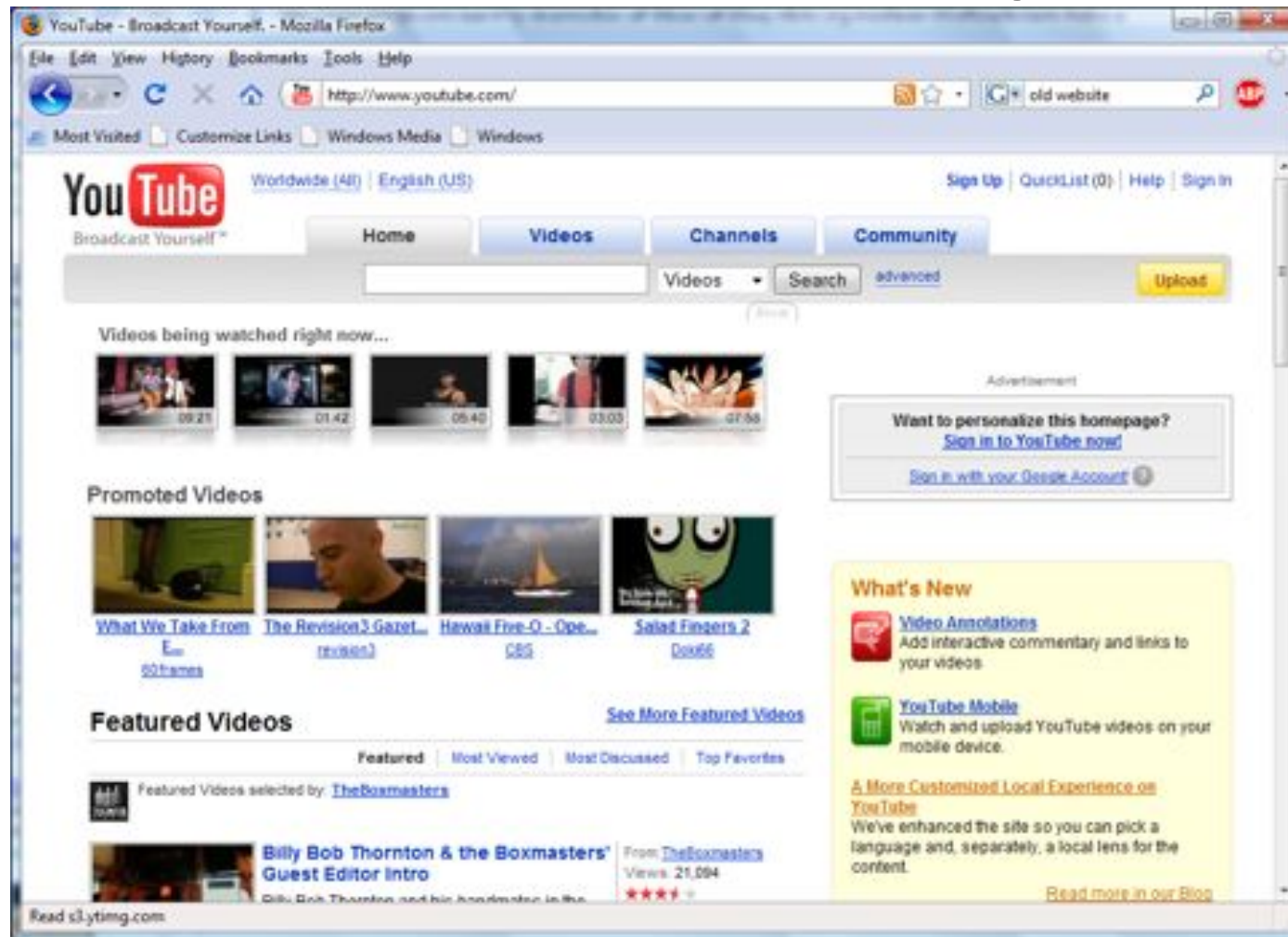
At first websites were “boring” with just text and a few pictures





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But more and more multimedia is becoming the standard





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And soon.....

Virtual 3D worlds for websites, telephone, tv and services.

Opens opportunities as well hurdles for people with a disability





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Understanding the problem on access for people with Disabilities:

- Websites first only affecting people with a visual disability
- But with websites offering videoclips, podcasts, missed TV shows, video on demand, internet radio affects people with a hearing disability as well.
- More and more internet services will be run from web portals (is it still a website then?)
- The internet becomes more and more important in daily life
 - News, banking, passports and visas, travelling and entertainment
 - Telephony: VoIP
 - TV: Streaming TV, IPTV



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Understanding the problem on access for people with Disabilities:

- Internet is not on PC only, but also found on e.g. setup boxes, TVs, fridge, mirrors with (touch) screen, remote health monitoring.
- So, the Internet is everywhere! And that will only increase. The limited Access goes from a minor issue to a big everyday and profound problem.

The move to IPTV and Telephony also disadvantages

- *TTYs (text telephones) do not work anymore*
 - *Sending PSTN text telephony over IP as audio does not work*
- *Subtitling/closed captions often not possible or forgotten to design in protocols for TV and Video.*



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Now we tackle IP Telephony:

- The solution must be mainstream, no special solution for a special needs group → island forming
- easy to implement, do what users really want and will use!!
RFC3351 shows the insight.

- Real-Time Text is designed around the ITU-T T.140 real-time text presentation layer protocol.
- T.140 allows real-time editing of text
- Based on the ISO 10646-1 character set and uses the UTF-8 format.
(see RTT example www.realtimetext.org home)





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RFC4103 and RFC5194:

- Transport of Real-Time Text uses the same Real-time Transport Protocol (RTP) as VoIP and Video-over-IP. The text is encoded according to IETF RFC 4103 “RTP Payload for Text Conversation”. And is also called Text-over-IP (ToIP)
- Control of ToIP sessions has been defined using the standard Session Initiation Protocol (SIP) ([RFC 3261](#)) and the Session Description Protocol (SDP) (RFC [4566](#)) protocols.
 - SIP is used without any alteration.
 - Real-time text encoding is identified by using the SDP media definition 'm=text'.
 - The 3GPP IMS defines the features of SDP that ToIP uses in 3GPP TS 26.114 v7.4.0 A5



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RFC4103 and RFC5194:

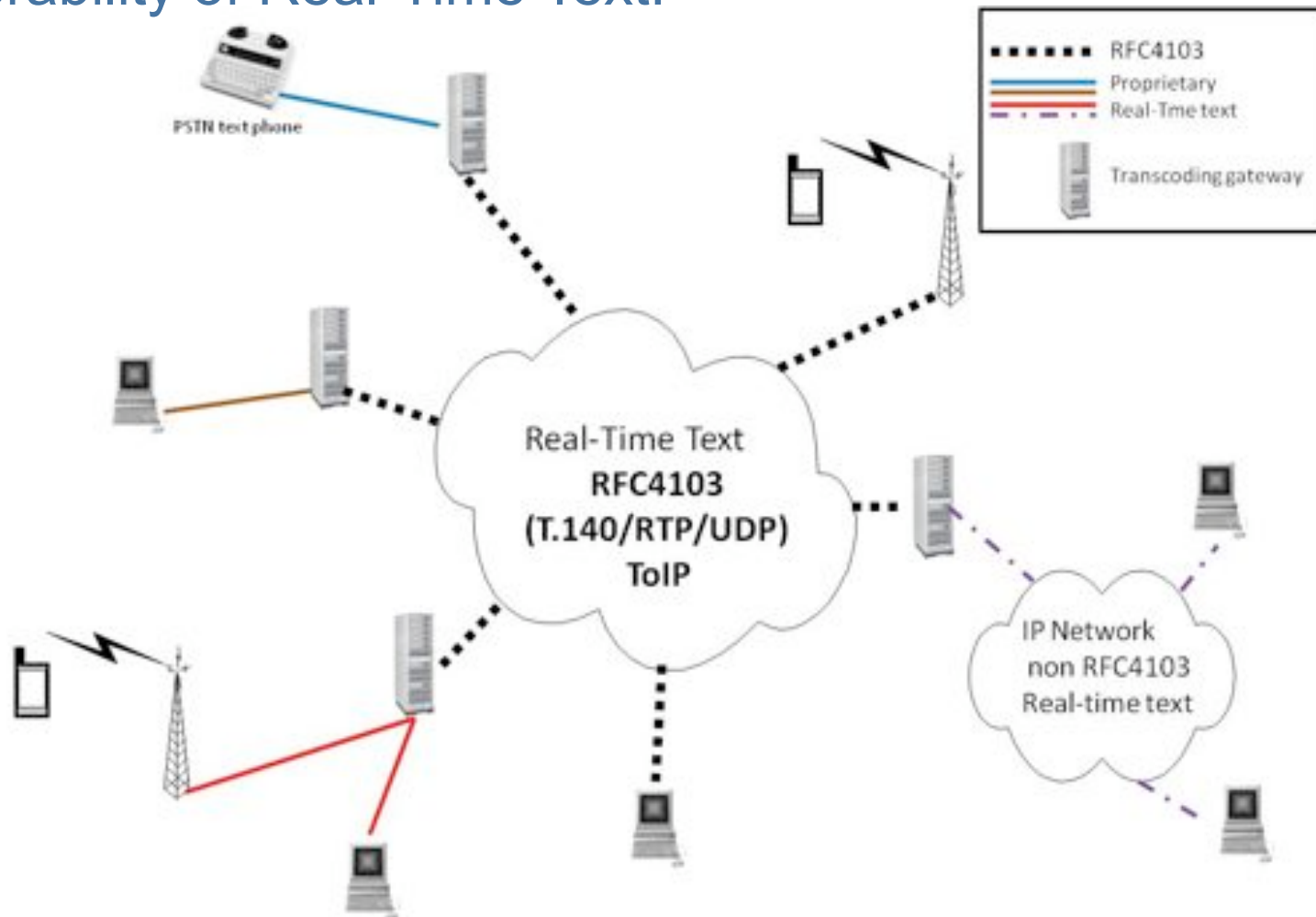
IETF [RFC 5194](#) “Framework for real-time text over IP using the Session Initiation Protocol (SIP)”.

- requirements for real-time text (RFC3351 and more)
- requirements for ToIP interworking
- description of ToIP implementation using SIP and RTP
- description of ToIP interworking with other text services for interoperability of Real-Time Text.



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Interoperability of Real-Time Text:





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ISOC and Disability

- [ISOC's "Enabling Access Initiative"](#) aims to address some of the fundamental hurdles to Internet growth and usability.
- One aspect of the initiative focuses on advancing the development of technologies, business cases, and policy environments for improving the use and experience of the Internet by people with disabilities.
- As part of this effort, ISOC is serving as an “incubator” of the R3TF, by providing coordination assistance, technical expertise, and implementation support for the Taskforce.
- R3TF website: www.realtimetext.org



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- Stand-alone taskforce, only link with IETF are the standards and several people who help improving the world for us all.

Goal of the R3TF:

ensure that Real-Time Text is as readily available for all users as voice is.

To achieve the Goal, the R3TF will create and maintain a Roadmap that will provide the basis for the full deployment, seamless inter-operability and the future development and evolution of Real-Time Text as a mainstream feature/service.



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- R3TF will promote the interoperability of Real-Time Text implementations with RFC4103 (ToIP). (allows evolution!)
- R3TF will help facilitate the development of interworking test beds that will allow implementers to test how well their solutions comply with RFC5194.
- R3TF will also distribute information on the technology, its user requirements, and implementation and act as an educator on related issues.
- And is an open forum for engineers, motivated individuals, experts, companies and organisations that wish to help test, implement, and advance the widespread adoption of the Real-Time Text framework.



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- We need you! We need programmers and resources for:
- Open source clients using RFC4103 with RFC5194 compliance.
- Gateways and services should be created with RFC4103 to allow people to experience Real-Time Text
- Add RFC4103 to existing Video clients and Voice clients and IM clients.
- If a different Real-Time Text protocol is used: Ensure interoperability with RFC4103 with RFC5194 compliance.
- RFC4103 web client to allow direct user support for websites and lower barriers to call with Real-Time Text
- Be part of R3TF and contribute to Forum and website.



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Help ISOC and the ISOC Chapters to make the Internet for Everyone!
(that is also you!).

Thank you

Questions?

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