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Explore Changes in Enterprise Communications

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WebRTC Standards and Regulatory Update for Business

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Speakers

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Standards Update

- Primary WebRTC standards organizations
- Overall status
- MTI Video Codec
- ORTC and track-level info
- Screen sharing



Primary WebRTC Standards Organizations

• W3C

- Creator of HTML
- WebRTC WG creating JavaScript APIs
- ORTC CG (non standards track) creating extensions

IETF

- Creator of HTTP, FTP, email standards
- RTCWEB WG defining what the browsers do (protocols)





Overall Status

BORING! (this is good news)



MTI Video Codec

- Which video codecs (H.264, VP8, others) MUST be supported?
 - IETF wants interoperability
 - -H.264
 - Proponents claim intellectual property status is well known
 - Opponents claim its known fee is barrier to full adoption
 - VP8
 - Proponents claim it is royalty-free
 - Opponents claim it is not





MTI Video Codec (cont.)

- Deadlock for 3 years around choosing one MTI
- New proposal last Thursday to require BOTH
 - Notable support expressed by Google, Mozilla, Cisco
 - Notable objections expressed by Microsoft, Blackberry, Apple
 - IETF declared rough consensus
- BOTH requirement is for browsers (JS supporters)
- If no JS, then one or the other MUST be supported



ORTC and Track-level Info

- Object RTC
 - Originally positioned as competitor to WebRTC by creators
 - But now intended to be fully compatible as add-ons to 1.0
- RTCRtpSender/Receiver objects from ORTC
 - Proposed to WebRTC WG, working through standards process now



Screen Sharing

- After track info, most requested feature
- Preliminary implementations by Google, Mozilla
- Standardization work has begun
- But, very tricky to get right



WebRTC A Quick Legal Perspective

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4 Key Questions

- · How does WebRTC impact existing telcos?
- For companies looking to offer WebRTC based communications solutions, what triggers regulatory oversight?
- We hat are the ramifications relative to WebRTC and peer to peer?
- · Should 911 be a consideration for WebRTC developers?



How does WebRTC impact existing telcos?

- · It does and it doesn't...
 - Practically it does.
 - Legally it doesn't.



"It seems to me I've heard that song before..."



Regulatory Oversight Trigger





Definitions

- "telecommunications carriers" v."information service providers"
- · "basic service" or "enhanced service"



dessert topping or floor wax?





Case Law

National Cable & Telecommunications Association v. Brand X Internet Services

545 U.S. 967 (2005)

 Cable companies that sell broadband Internet services do not "offer" telecommunications services and therefore are not subject to regulation as common carriers of telecommunications services.





But...



The Net Neutrality Battle





In Context...

 When the FCC developed these rules, it distinguished between:



(POTS)

and





(service that required some computer processing)



and...

Both basic and enhanced services were—and continue to be--defined in terms of how the consumer perceived/s the service(s) being offered.



While cable companies use telecommunications to provide internet service...

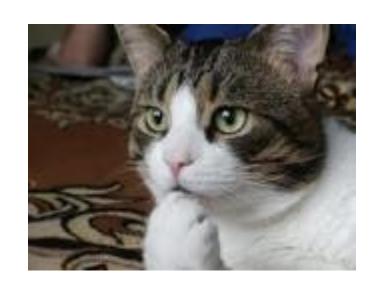
 "...as provided to the end-user, the telecommunications is part and parcel of cable modem service and is integral to its other capabilities."



Js WebRTC a "telecommunications service?"

Yes.

No.

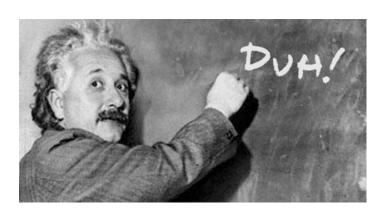




Yes!

 It is, because it allows people to speak with each other.

- This is a practical answer.





No!!

- · Because as defined, it doesn't meet the criteria of a "telecommunication service."
 - However you look at it, it's an enhanced service.
 - It is part and parcel of another service being delivered.
 - This is a legal answer (duh).





No Longer the Bottom Line

 WebRTC will be regulated like any other nontraditional voice service

...FOR NOW

Regulation may not, at this time, be derived from FCC rules



But the times, they are a changin'

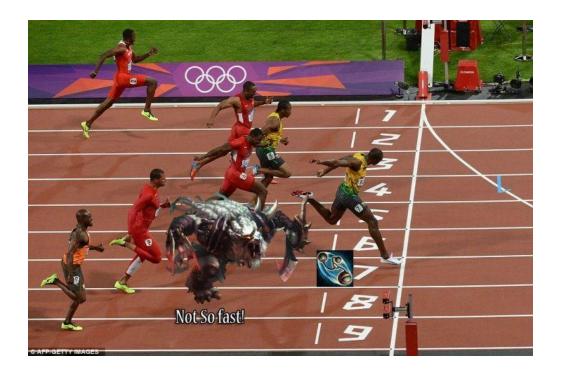




The outcome of the pending Net Neutrality decision, and the litigation that follows could have a significant impact on the regulation of services like WebRTC

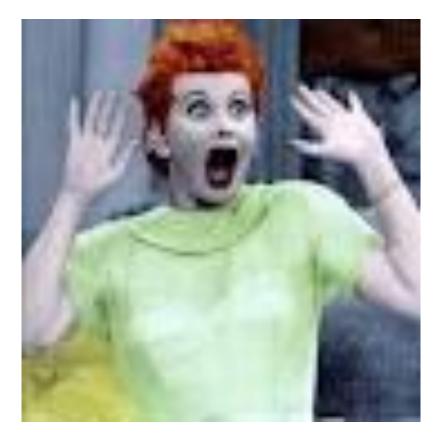


Under the current regulatory scheme, are WebRTC providers exempt from all requirements that apply to traditional carriers?





Absolutely NOT!!!





Huh?

- Federal, state and local laws still apply
 - Law Enforcement
 - Employment
 - Public Safety
 - Tax
 - Other



CALEA

- Communications Assistance for Law Enforcement Act
 - CALEA requires "telecommunications carriers" to meet certain accessibility standards.

 WebRTC offerings do not qualify as those of a "telecommunications carrier"

but...



CALEA's intent

· to preserve the ability of law enforcement agencies to conduct electronic surveillance by requiring that telecommunications carriers and manufacturers of telecommunications equipment modify and design their equipment, facilities, and services to ensure that they have the necessary surveillance capabilities as communications network technologies evolve.



For the past 8 years...

- In May 2006, in its Second Report and Order, the FCC required
 - facilities-based broadband Internet access providers and providers of interconnected Voice over Internet Protocol (VoJP) service to come into compliance with CALEA obligations no later than <u>May 14, 2007</u>.



 All facilities-based broadband Internet access providers and providers of interconnected VoJP service must ensure that their services comply with CALEA upon launch.



Technology Concerns

How this is accomplished is just shy of irrelevant

That it is accomplished is critical



Does this apply?

- VoIP isn't "telecommunications service" either, and its providers must meet CALEA standards
- Bottom Line: WebRTC developers need to be aware of the requirements CALEA has imposed upon earlier technologies



For more information...

• http://www.fcc.gov/encyclopedia/communication-s-assistance-law-enforcement-act

· http://ashcalea.fbi.gov/



911

WebRTC developers must also be aware of obligations that employers have to employees to provide a safe workplace which includes access to accurate 911 service.



911

If WebRTC-based products are being as a replacement to traditional telephone service (desktop device)--then reliable 911 access must not only be addressed, but must be functional.



Employee Safety Is Paramount

- Employers have an absolute obligation to provide a safe workplace for employees.
 - The underlying technology is irrelevant.
 - Access to emergency services is critical.

Period.



Mobility

- The underlying technology is irrelevant.
 - (seen this statement before?)



 While the service itself may not be heavily regulated, developers and customers must remain acutely aware of enterprise obligations to others (employees, contractors, guests).



Bottom Line

- The technology is cool and sexy.
- Whether imposed by the FCC, FTC, FBI, NSA, or any other agency, absent specific rules that apply directly to WebRTC, developers and customers still have specific obligations to end users and others.



Questions?

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Thank You

Please remember to complete an evaluation of today's sessions