



WebRTC Disruptive Technology for Enterprise Communications

Research Group: Telecommunications Software and Systems Group (TSSG)

Address: Waterford Institute of Technology, West Campus, Carriganore, Waterford, Ireland

Authors: Brendan O'Farrell

Email: bofarrell@tssg.org

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Description:

WebRTC Disruptive Technology for Enterprise Communications. This is a newsletter from [http://www.stcconsultants.org/?page=About_Us\[STC\]](http://www.stcconsultants.org/?page=About_Us[STC]) (Society of Telecommunications Consultation) and their view on WebRTC's impact on their industry

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1. WebRTC Disruptive Technology for Enterprise Communications

The ubiquitous adoption of true peer-to-peer voice and video communications is upon us. It will be free, easy-to-use and compatible with SIP via SDP. WebRTC has been embraced by the IETF and the W3C just as SIP was 16 years ago. The ITU may have to sit this one out for a while since the architecture does not lend itself to centralized control. Which is the precise issues that contact centers and enterprises will need to address if they want to compete for the modern, smart-phone or tablet wielding consumer.

To help put WebRTC in perspective I have chosen to use some common use-cases for the technology.

Web-page initiated communications. With traditional tools there is a need to download an application that will support live communications. Multiple clicks and loading a new application on your PC is not the stuff of convenience, not to mention the enterprise security issues that come into play. HTML 5 has gone a long way to minimize the number of clicks, but it still requires the user to download the application. WebRTC is different. With WebRTC the voice/video application will be embedded in the browser (called via Java Script) so no download is necessary. The impact on the user is that a voice/video communications session can be initiated with a single click. Fast, easy-to-use and convenient and it will work the same way from a smart-phone, tablet or computer, except for Apple (more about Apple later). The simplicity of this approach will drive adoption by consumers. Imagine a LinkedIn hyperlink that connects you live with your business contacts. No more 10 digit dialing, no more phone directories and it works the same way to-and-from all of your devices. Now imagine an e-mail shipping confirmation that has embedded links for the customer service contact center. If the package does not arrive on time the customer simply clicks the hyperlink and connects with a representative to get information about the status.

The use cases are compelling for both personal and enterprise use; however, the enterprise implementation of this technology can only be described as disruptive. Traditional communication are routed through a public switched telephone network (PSTN) using rout selection based on a multi-digit, DTMF dialing plan. WebRTC communications are not. They are routed via TPC/IP and DNS. Traditional trunks are not necessary nor are traditional switches. There will be a period of years where enterprises need to support traditional and WebRTC communications. This will be a time of great transition. Should the enterprise continue to support a traditional infrastructure? Should they explore SIP switches? Are the current crop of SIP switches compatible with WebRCT? Does the web team at any given enterprise understand the engineering issues surrounding WebRTC? The result of answering any of these questions wrong could cripple a B-2-C company in a matter of months.

Consider the office products business. 12 years ago 99% of their orders came through telephone conversations of fax. Today, 70% of orders come through the web. If an order goes bad, then the

customer has to send an e-mail or talk to customer service. The later case requires that the customer picks up the phone and dial a number. Then, the customers has to identify them selves, the order and the item. This all takes time. In the WebRTC model, the confirmation e-mail can have embedded links next to each item. These links can offer options to e-mail or call customer service about the item. If a call is initiated, then information about the call (item SKU, order number, customers identifier) arrives at the contact center before the call arrives. Routing to the right agent and CTI are triggered by the associated data and the customers can solve their problems more quickly. These communications will be supported by SDP compliant, peer-to-peer signalling; however, they will not be handled by a telephony carrier, they will communicate directly with the IP enterprise infrastructure. Basically, virtual SIP-like sessions established on the enterprise Internet infrastructure. Network security folks will have a significant hand in architecting these solutions. Where to place and how to configure the SBCs, WebRTC gateways, SDP protocol conversion, firewalls, proxies, web services, user agents and/or SIP switch (ACD) will all come into play. Further, there will be a need rethink processes in terms of this new communications infrastructure. Some of the most complex processes that customer service operations support today will become automated in ways that we never imagined.

WebRTC is available today on Google's Chrome browser (Alpha) and Opera Mobile. Mozilla/Firefox has an active development project underway. Microsoft has publicly supported the effort, but they have a lot on their plate with the roll out of Win 8 later this year. Voxeo has an SDK available. Apple offers a competing solution in the form of Face Time.

Skype took nine years to acquire 700 million users and it requires a downloadable application. Without the need for a download, WebRTC has the potential to triple the number of voice end-points in the public network within two to three years. At the same time it will create an order of magnitude increase in video end-points. Ubiquitous availability of WebRTC will drive adoption at a much faster rate than Skype. Contact centers and web developers will need to collaborate more than ever to leverage this new opportunity. Chris Vitek [<http://www.stcconsultants.org/forums/posts.asp?group=&topic=417632&DGPCrPg=1&hhSearchTerms=&#Post417632>]