Secure Real Time Communications

Soldier Modernisation talks to Jon Doyle, Vice President of European Operations and Corporate Development, CommuniGate Systems

Jon Doyle is Executive Vice President of European Operations and Corporate Development at CommuniGate Systems.

CommuniGate Systems provides industry leading, world class Unified Communication products for business and military applications. CommuniGate’s vision is to provide scalable, reliable, and feature-rich solutions to meet the demanding communication needs of today’s warfighter.

Q: Texting, messaging, sharing rich content – are not only part of “social media,” they have become major productivity tools for business and industry. The military sector also has the need for these kinds of solutions, but of course issues of security, speed, etc. come into play in these environments. Can you explain the differences between “enterprise messaging” and “military messaging?”

A: Military Message Handling Systems typically had a silo approach, in terms of not fully leveraging the standards that the Internet embraced for messaging. That has changed over time because the usage models dictated things like compatibility or federation, and users demanded more features that they are “used to” in both their academic years and personal lives before entering the military ecosystem; which also spans contractors and research organizations that must inner-operate. However, traditional Enterprise messaging systems can have limitations, often in the areas of security, and lightweight tools that can work across network topologies that are in the field and have high latencies than the corporate LAN.

Leading the front of some of this change is Secure Instant Messaging, leveraging the XMPP (Jabber) protocol that lends itself quite well to the demand for innerop, with rich features, while having appropriate security capabilities.

Q: So as you see it what are the greatest challenges for providers relating to messaging and “real time” communications for military and military contractors, and what is CommuniGate doing to surmount those challenges?

A: Identity management is the problem to solve. We have exhausted the username and password capacities some time ago, and see on a daily basis the security breaches in the media. Multi-factor authentication is a break-fix that is already popping at the seams. Computer systems need to know who they are dealing with as much as the human user needs to be sure they are speaking to the right program, and more importantly when data is at rest, that data will maintain its integrity. The challenge here is more about how to combine the opposing demands, where more features and mobile flexibility are pushing in one direction, and the needs for security demand another. Sensor based equipment, with biometrics are obviously a big growth area, that will encompass messaging tools that will not only help military organizations, but it would also be great for many of us civilians to not have to remember to take the iPhone every time we stand up.
Q: What about bandwidth and rich content such as video?
I can see where sharing this kind of data in “real time”
can be very critical to military operations, and/or projects
involving military contractors. How are you addressing
these challenges?
A: Video absolutely is one of the more powerful tools for both real-
time and recorded communications effectiveness. Having the ability
to stream video and upload later is one way to deal with in-the-field
constraints over bandwidth, but also better compression abilities
that we have integrated into our technologies with variable bit-rate
capabilities that adjust on the fly. We also have seen a demand
from some of our larger military contractor partners that need to
set up ways to collect video streams for analysis and collaboration
across many organizations as R&D demands span multi-system and
country sessions.

Q: Within what you are at liberty to discuss of course, can
you tell me where some of your secure real time solutions
are being leveraged? And what kind of feedback have you
have gotten from users?
A: Since early 2012 Web and Mobile communications have
surpassed the traditional “desktop client” model and the trend
towards mobility is not slowing down. This of course has spilled
over very fast into the Military sector from the civilian world
because of the nature of the “military workforce” already being quite
mobile, and typically not deployed with “desktops”. What is quite
interesting is that we see hybrid systems; whereby a platform like
MS Exchange might be used in one area, and then a technology like
ours is used to create private clouds, with Web and mobile access to
things like secure Instant Messaging, email and VoIP. Chat rooms
are in particular demand that can span multiple organizational
systems. Some of our partners like Lockheed Martin, NASA, and the
National Labs require rich communications between agencies and
often times academic research labs. We can quickly build private
communities that leverage our HTML5 technology, while having the
ability interface to internal authentication and messaging systems.

Q: What is it that is unique about your solutions and your
company? What is that separates ComuniGate from your
competitors?
A: We like to say, it is the reliability and quality of the products
that sets us apart from the “pack,” and our customers tend to agree! I
think it is also important to say that we have been doing Internet
Communications for 22 years, and that knowledge and down to the
wire expertise lends a lot of credibility when it comes to creating
secure web and mobile messaging systems.

Q: Without revealing anything proprietary, what
do you think is next in Secure Communications for
Military Applications, in general, and specifically for
ComuniGate as it relates to meeting the needs of the
Modern Soldier or Military Contractor/Researcher?
A: As computing devices shrink, the efficiencies of our software
will enable new “user wearable” devices. It is really hard to look
out ten years. I remind myself of this by looking back in 5 years
jumps in the technology world. But, I fully believe that we will see
in the near term uniforms and equipment being closer to standard
issue, whether that be from the military side or from the local GAP
store.

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