

TTC's Big Data for Defense Symposium Offers Insight into Air Force and Army Programs

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It's become a sure sign of autumn for me when the Technology Training Corporation's annual big data for defense and homeland security symposium rolls around in September. TTC always manages to get top-notch speakers from both government and industry and this year's symposium was no exception. The event takes up two days and is hosted at the Holiday Inn in Rosslyn, VA. These notes and comments provide a couple of highlights from the symposium.

Jeff Eggers, Chief Technology Officer in the Office of the Deputy Chief of Staff for Intelligence, Surveillance and Reconnaissance of the US Air Force (AF/A2D) began by providing an excellent overview of the Air Force's recent efforts to enable the use of big data analytics in operational/tactical environments. Stating up front that the Air Force is reviewing big data concepts and methods to dramatically change the way it processes and uses sensor intelligence, Eggers assured the audience that the goal of Air Force efforts is standardizing sensor data feeds to make all data discoverable. The standardized data will pass through automated tools and go to so-called "all source" analysts for the first stage of analysis before it is distributed to warfighters for use on the operational level. An example of such use would be identifying targets for precision fires.

Processing data quickly, however, is the key to making it usable. To that end the Air Force is dedicating funds to implement what it calls Sensing-as-a-Service. SensaaS is the concept of making all data from multiple sensors available via a single delivery platform. The sensors are embedded in a system of systems, like the Distributed Common Ground System-Air Force, and the data and analysis would be made available to users as a web-based service or via a battlespace network. SensaaS is currently in the research and development stage, but Eggers' says he's been assured the concept is workable. From an industry perspective this suggests that additional investment is coming from the Air Force to field a proof of concept prototype. Such an approach would be consistent with defense acquisition initiatives to make greater use of prototyping in procurement phases.

Lisa Shaler-Clark, the Deputy Director in Program Manager – Futures at Army Intelligence and Security Command (INSCOM), followed Mr. Eggers later in the morning with some fascinating comments on work being done to integrate Army intelligence with the Intelligence Community's IC IT Enterprise, or ICITE program. Shaler-Clark noted that Army INSCOM has made great strides moving data from stovepiped systems into an enterprise data warehouse. This warehouse provides analysts with vastly improved data access, but it has also created a deluge of data for them to deal with. The solution to that problem for INSCOM has been to host a Hadoop-based cloud analytics system to parse the data. The data is tagged in multiple ways and then made available for analysis via a number of automated tools. Data is also integrated into the ICITE and INSCOM is leveraging the NSA's cloud for additional storage.

Finally, from the sound of what's happening there, INSCOM is one of those places you'll need to visit if your company sells analytics capabilities. Be aware, though, that Shaler-Clark's office isn't interested in capabilities that duplicate what they already have. They want new capabilities that enable them to do what they cannot already do today.

TTC is planning to follow up this symposium in November with its first conference on the Internet of Things. This conference, [Internet of Things for Defense and National Security](#), will be held on November 13-14 in Arlington, Virginia. The line-up of speakers that I've seen so far looks very interesting. Hope to see you there.