DoD COI Newsletter

DoD CIO Information Policy & Integration Directorate

Announcements

Upcoming COI Forums
-   8 April 2009
-   15 July 2009

COI/Data Sharing/ Training
-   5-6 May 2009
-   21-22 July 2009
-   22-23 September 2009
-   For registration e-mail: COI_HelpDesk@osd.mil

Strike COI – A Planning Force Multiplier

Is it possible to conduct Operational Planning without the use of PowerPoint?

Absolutely! Net-centric data strategies are the key to helping our collaborative information environments reach their full potential.

The CDRSTRATCOM data exposure pilot spawned the Strike COI. Spiral 1 focused on making the services' blue force data visible, accessible, and understandable to any warfighter who needed the data. The Universal Core (UCore) schema turned out to be the critical factor allowing Strike COI to succeed in getting data to decision makers.

The next step for Strike COI was to get critical targeting data to the warfighters for planning. A time sensitive planning scenario provided the opportunity to leverage Spiral 1 and add the next dimension of data.

The Strike COI, Spiral 2, is utilizing the UCore 2.0 schema with extensions to develop web services for machine to machine information sharing during the Course of Action Development step at a Combatant Command Headquarters. Joint Force Commanders will be able to share planning information with their components' planning systems, machine to machine versus PowerPoint slides.

Strike COI has leveraged current enterprise capabilities to enhance their risk mitigation strategy. Integrating these capabilities enables the participants to implement the DoD Net-Centric Data Strategy and focus limited resources on delivering new capabilities.

Clouds on DoD's Horizon?

Cloud Computing is powering the web's next revolution - Web 3.0. Web 3.0 empowers users to solve complex information-centric problems in record time from almost anywhere, while at the same time helping users leverage their collective knowledge and dramatically reduce their local information technology (IT) requirements. As Nicholas Carr has pointed out in his recent book, *The Big Switch*, Cloud Computing makes the power of peta-scale information factories available to individual users as a service. These kinds of capabilities are becoming evermore important to the Department of Defense (DoD) as its forces are increasingly expeditionary in complex environments.

Forrester and other IT analysis groups view cloud computing as a disruptive innovation. It integrates recent advances in IT management, computing, user interfaces, services-based architectures, and commodity hardware to drive yet another example of Bell's Law - every decade a new, lower-priced computer class combines with new software, network, and interface technology resulting in a new IT usage and industry model. Virtualization and real-time systems management and provisioning technologies are allowing providers like Amazon Web Services (AWS), Google App Engine, and AT&T's Synaptic Hosting to leverage millions of commodity processors and storage devices to let users provision and configure hundreds of virtualized computers in minutes. These services are referred to as *Infrastructure-as-a-Service (IaaS)*. Cloud-based software application services or *Software-as-a-Service (SaaS)*, such as Salesforce.com, Zoho, Google Apps, CUBiT, CODA and Innocentive, enable almost completely cloud-based small to mid-sized business operations, requiring no business-owned IT other than cloud access devices like laptops, netbooks and smart phones. On-line data services, like Google Analytics, AWS

Strike Community of Interest – Spiral 2 cont.

Strike COI's successes are a direct result of continuous support from users and a variety of programs. A "coalition of the willing" taking on the data sharing challenge. While each member of a COI brings a slightly different perspective, each one has a vested interest to succeed because of the long term value to their program and synergies for COCOMs and Services.

Coalition partners bring another dimension to the Strike COI efforts. Sharing situational awareness and targeting information among coalition partners has always been a challenge, but new opportunities present themselves through net-centric data strategies. Strike COI is working with coalition partners to maximize data sharing and provide planning agility at all levels.

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Clouds on DoD's Horizon? cont.

Public Data Sets, Swivel and GeoCommons, make petabytes of data and high-powered analytic tools and processing services, referred to as *Data-as-a-Service (DaaS)*, available from almost anywhere. IaaS allows problem owners to provision and configure infrastructure capacity in minutes instead of the typical weeks, and only requires those resources be held and paid for for the problem's duration. SaaS further removes the time needed to procure and configure problem-related software applications, and DaaS removes the time needed to collect and index information so it can be applied to a problem. IaaS, SaaS and DaaS also allow resources to be scaled and downsized in minutes due to changing problem needs. These benefits are amplified by network effects that increase as cloud usage grows. For example, IaaS costs per user are driven down as the number of users grows allowing usage to be interleaved on the same physical hardware. SaaS costs can be driven down as the licensee pool grows, and SaaS performance is improved with increased usage as multiple users collectively drive out software issues and drive in new features. Similarly, DaaS performance and utility are enhanced with increased usage as users collectively tag, link and index information, and as they drive in new analytic capabilities.

The number and breadth of cloud computing services are growing quickly, and some, such as Gartner, have suggested that cloud computing is at a tipping point in terms of industry support and everyday user adoption. A September 2008, *PEW Internet and American Life Project Report* found that 69% of all internet users have either stored data online or used a web-based software application and that 87% of internet users aged 18-29 have done so.

The DoD and its partners in the Intelligence Community (IC) have begun taking first steps toward cloud-based capabilities. The Defense Information Systems Agency (DISA) has established an IaaS-based test environment called Rapid Access Computing Environment (RACE), and its Defense Knowledge Online (DKO) provides both Portal and SaaS social software capabilities. The IC has established a SaaS social software environment for its analytic community called A-Space and a general-purpose SaaS social software environment called Intelink, and has begun to establish DaaS clouds as they realize their *DNI Vision 2015* to "develop a common "cloud" based on a single backbone network and clusters of servers in scalable, distributed centers where data is stored, processed and managed." Although it's too early to say if cloud computing and its potential benefits will fully engulf the DoD and IC, the first wave has begun to roll in, and based on the rapidly growing commercial use of cloud computing, it appears the long-term forecast is happily "mostly cloudy."