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DoD COI Newsletter

DoD CIO Information Policy & Integration Directorate

Announcements

Upcoming COI Forums
- 13 January 2009
- 8 April 2009
- 15 July 2009

COI/Data Sharing/ Training
- 7-8 January 2009
- 5-6 May 2009
- 21-22 July 2009
- 22-23 September 2009
- For registration e-mail: COI_HelpDesk@osd.mil

NET-CENTRIC INFORMATION SHARING

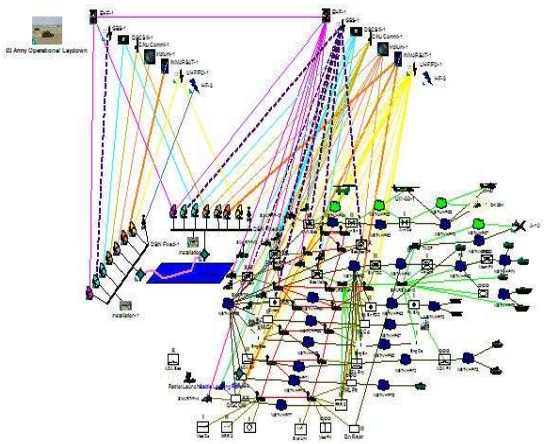
Net-Centric Information Sharing is an emerging capability that promises to significantly improve the combat power of the Department

This capability will do that by making everybody more aware, everybody smarter, everybody able to cooperate and gang up in solving problems whether they're problems encountered in combat or problems encountered in the headquarters.

The technology to bring this capability to the service of the Department is pretty simple and it already exists. Two major impediments stand in the way of bringing this marvelous capability on board.

One is the cultural barrier of "need to know"—it's my information and you can't have it unless you can convince me that you have a need to see it. The words of the 911 commission are instructive in this regard:

> What all these stories have in common is a system that requires a demonstrated "need to know" before sharing. This approach assumes it is possible to know, in advance, who will need to use the information. Such a system implicitly assumes that the risk of inadvertent disclosure outweighs the benefits of wider sharing. Those Cold War assumptions are no longer appropriate.



> The culture of agencies feeling they own the information they gathered at taxpayer expense must be replaced by a culture in which the agencies instead feel they have a duty to the information—to repay the taxpayers' investment by making that information available.

Today, we have to purposefully chip away at the culture of "need to know' by showing how data can be safely shared with authorized users across traditional and confining boundaries and to suggest some examples of how doing so will greatly improve the capability of the Department in all of its dimensions, not the least of which will be its ability to fight and win in combat.

The second impediment is that it has been our experience that when we use the phrase "net-centric information sharing", most people in the defense community think "networks" or maybe "network-centric warfare". As a consequence of this unhappy similarity in terms, the new approach sounds a whole lot like the current approach, so people think they already know and understand it. But, in most cases, they don't.

What they do understand is—our current world of networks composed of point-to-point connections. The figure on the left, is a diagram of a current Army Brigade Combat Team. The graphic on the top of the next page is what we're targeting—a net-centric information sharing environment which has NO point-to-point system connections and which is characterized by data, applications, and services to connect and manipulate them. Each system or data asset is individually connected to a network backbone—and there are no point to point system connections. As a Department, we've got some "unlearning" to do. We probably need to listen to what Alvin Toffler has to say: *The illiterate of the 21st century will not be those who cannot read and write, but those*

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Net-Centric Information Sharing (continued)

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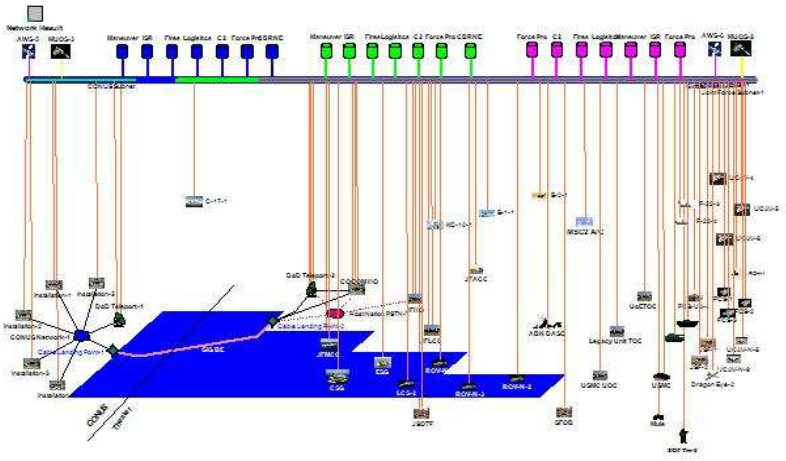

who cannot learn, unlearn, and relearn.

So, if this is an uncertain world today, is it likely to be more or less uncertain in the future? Certainly, there's no evidence that things are going to settle down any time soon. So what is the answer to uncertainty?

Agility

To change a point to point system is hard. You have the famous n-squared problem, and to add a new point requires engineering, time, and dollars. There is little capability to accommodate the unanticipated user. And you're stuck with a COP—Common Operating Picture—which has the same problems as the network: adding a new data source takes engineering, time, and dollars.

Compare that to the net-centric information sharing environment. Adding a new data source, a new application, a new value-added service, or an unanticipated user requires a single connection. And instead of a fixed-menu COP, you get a UDOP—User-Defined Operating Picture—which can display a new data source as soon as it is connected to the network and on a wide variety of graphic presentation tools.
Another reaction we encounter is the understandable reaction from "operators" who say "What do you mean, share my data? I'm not going to willy-nilly share my data with anyone."

Of course not, part of the net-centric information sharing approach is to enable operators to dynamically control with whom they are willing to share data. An approach called ABAC—Attribute-Based Access Control—will enable users to define a wide variety of attributes with respect to the individual, the data, and the environment—are you in a SCIF or a foxhole—and dynamically adjust access based on local conditions as they inevitably change over time.

Please understand that we're talking about ~~is~~ pioneering and breaking new ground in the Department. We're trying to do something in the Department that's never been done in the Department before. So, in many respects, we're figuring it out as we go. However, we live in a defense community that doesn't tolerate uncertainty very well, so there's a constant pressure to make net-centric information sharing fit the legacy template. It doesn't and it won't, so please be mindful of that.

Finally, don't look at "what is": rather, look at "what might be". I am convinced that what's going to put this approach over the top is to get it into the hands of the kids. They will end up using it to do things we've never dreamed o**f.**

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