



AFCEA NOVA ARMY IT DAY

Improving Network Operational Effectiveness & Security

ARMY CIO/G-6

AMERICA'S ARMY • THE STRENGTH OF THE NATION • ARMY STRONG



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2013-03-13T13:15:00Z



The Realm of the Possible



82nd Sustainment Brigade Demonstrated Single Device for Instant Messaging, Voice, Video and Data



... We Lack the 'Interstate' for Our Information Highway



Strategic Challenges



“Our military will be leaner, but the world must know the United States is going to maintain our military superiority with armed forces that are agile, flexible and ready for the full range of contingencies and threats.”

– President Obama
Defense Security Review, 5 Jan 12

“A cutting-edge, end-to-end network is essential for every Army mission; a robust, versatile, lethal force cannot exist in the 21st century environment, under tightening fiscal conditions, without a capability set management approach.”

– Secretary of the Army McHugh
Directive 2013-02





The Army of the Future

We Start from a Position of Strength with an Army of Combat Proven Leaders

Our Nation's Joint Force must operate in a complex and dangerous physical, cultural and information environment, while balancing readiness requirements and limited resources.

Adapting to the Strategic Environment by prioritizing leader development and leveraging technology to empower the Soldier.

Adapting Readiness and Training Models to better prepare units to operate in complex environments.

Empowered Soldiers & Squads, connected to the network in vehicles that increase mobility and lethality while retaining survivability.

The Army of the Future is Stronger

The Army will be optimized for a broader range of missions in support of the Joint Force.

Implementing plan to Regionally Align Forces to better support Combatant Commanders.

Reducing end strength and optimizing the force structure mix while remaining engaged in Afghanistan and adapting to meet the demands of the Defense Strategy.

The future environment requires an agile, ready Army – a precision force, capable of rapid, scalable global engagement in support of National Defense Strategy.





Network Modernization: A Key to Success



“The Army has global responsibilities that require large technological advantages to prevail decisively in combat – **“technological overmatch,”** if you will... Modernizing, especially as end strength is reduced, is the key to ensuring that the Army’s dominance continues. As I reflect upon the pace of technological change in today’s modern world and **the impact of rapid, global information exchange upon our overall security environment,** I am both inspired and encouraged by the Army’s approach to building a network able to **connect our forces at all echelons.** This remains our number one modernization priority.”

– GEN Ray Odierno, Chief of Staff of the Army, “Army Live” Blog, 7 August 2012

- ★ Retain Our Technological Overmatch
- ★ The Ability to Rapidly, Globally Exchange Information in a Secure Environment
- ★ Connect Our Forces at All Echelons

A Modernized LandWarNet Will Meet These Challenges



What Right Looks Like

The Network is Core to a Smaller, More Capable, Better Trained Expeditionary Army

- ★ We Must Train as We Fight
- ★ Deploy Little to No Notice Anytime, Anywhere in Austere Environments
- ★ Installations as a Docking Station
- ★ Modernized From Strategic Core to the Tactical Edge
- ★ Single Secure Network
- ★ Incorporate Echelons Above Army Requirements
- ★ Centralized Management and Decentralized Execution

Future



Reduced Costs for Data Centers and Applications



Improved Interoperability for Better Coordination and Collaboration



Improved User Satisfaction and Mission Success



Faster, More Responsive Capability Deliveries to Warfighters



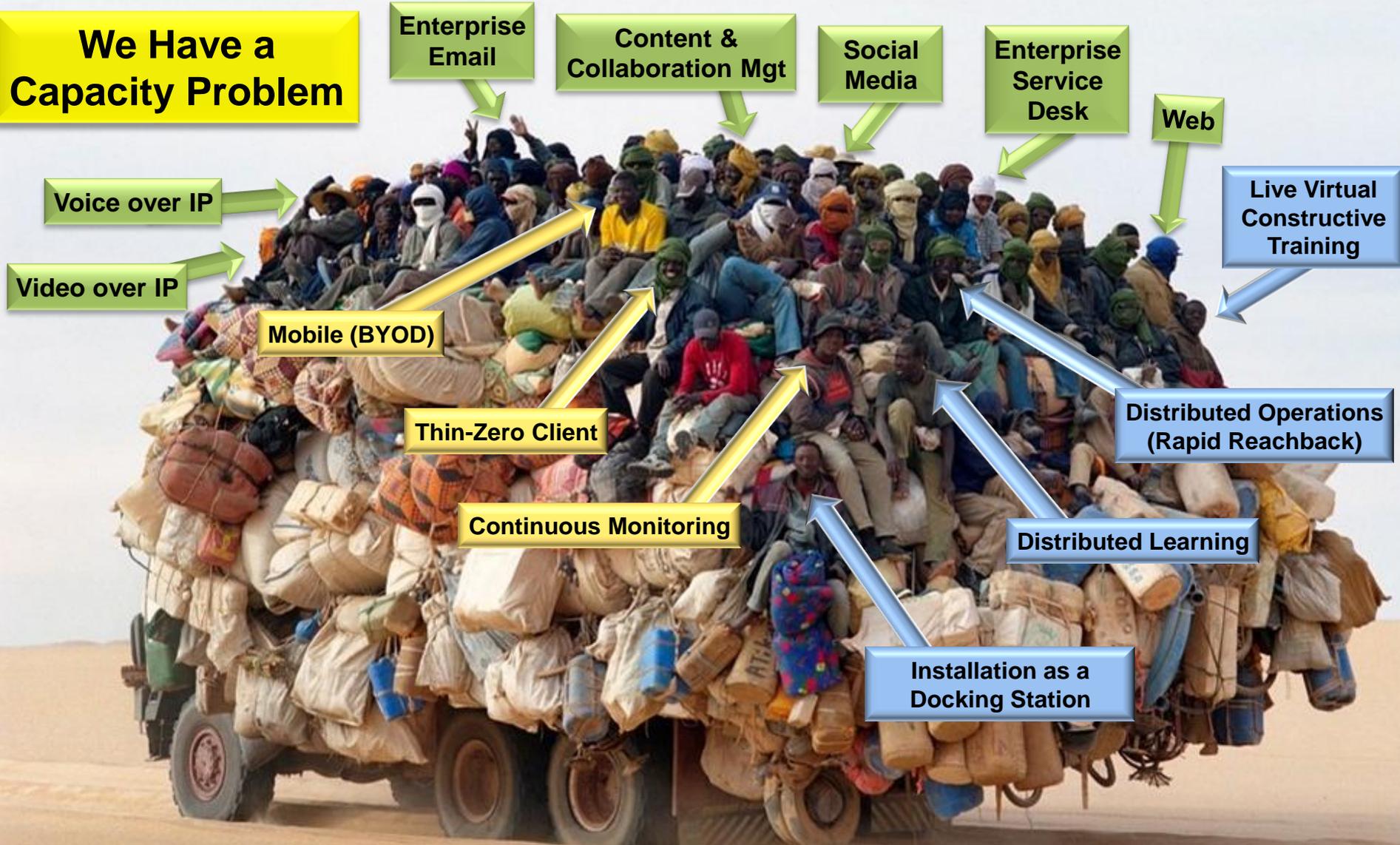
Improved Security to Reduce Cyber Threats



Faster Adoption of Commercial IT Breakthroughs

“Can You Dummy this Brief Down for Us?”

We Have a Capacity Problem



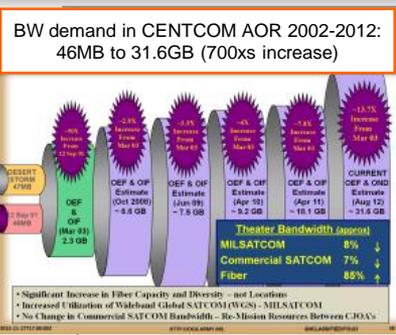
Network Demand is Outpacing Capacity



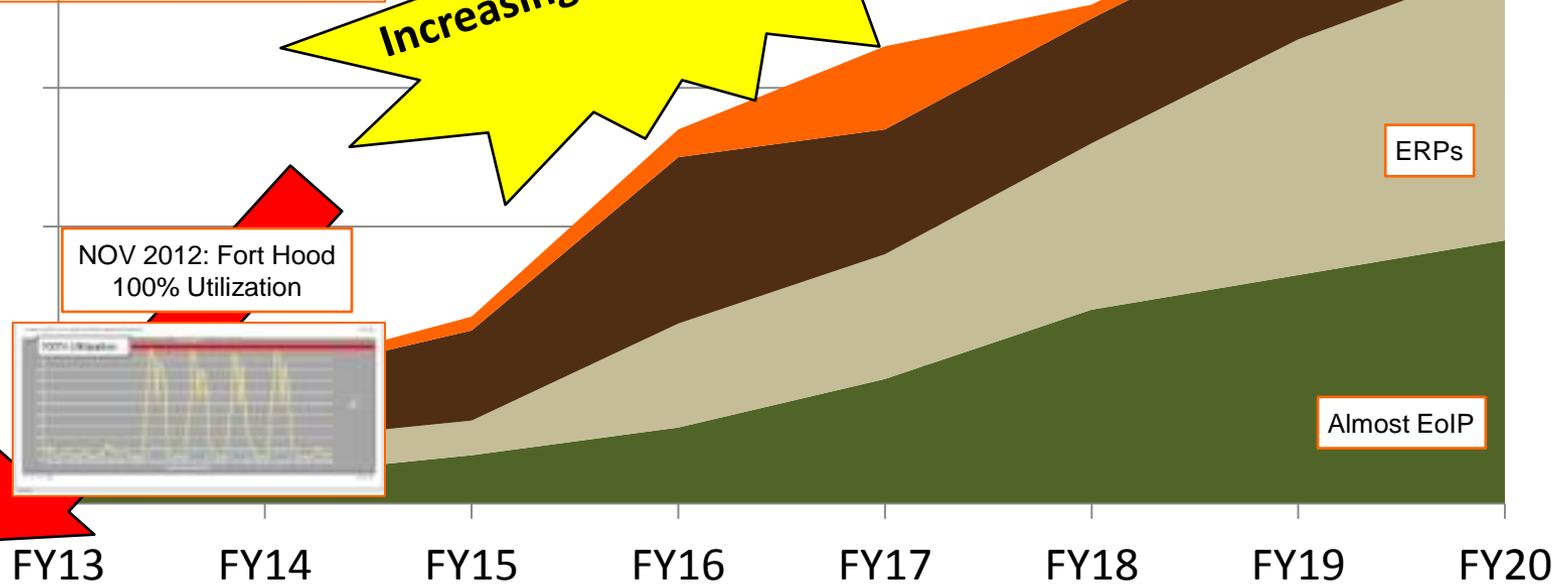
Facts Bearing on the Problem: Network Demand

Demand for Capacity, Security, and Services

Represented by # of anticipated users in increments of 1500



The Trend Indicates Increasing Network Demand



“The Network is Often a Constraint and is Costly to Upgrade, But Planners Need to Prepare for a Massive Increase in Bandwidth Consumption”

- Gartner Report: IT Market Clock for Enterprise Networking Infrastructure, 14 MAR 2012



Network 2020 & Beyond Lines of Effort

Lines of Effort	1: Build Capacity	2: Improve Security	3: Enterprise Services to the Edge
	← 4: Standardize the Network (NetOps) →		
Why they are Important	<u>CONNECT & OPERATE</u>	<u>ACCESS & DEFEND</u>	<u>SHARE</u>
	Network MUST Support Joint & Coalition Operations with Network Extended to Home Station to Enable “Train as We Fight”	Army MUST Increase Ability to Control Individual Access to Data & Services as well as Simplify the Network Infrastructure	Network MUST Assure Availability of Information to all Authorized Users

End-to-End Network Enterprise Capabilities Is Critical to Army Mission Success



Types of Army Installations

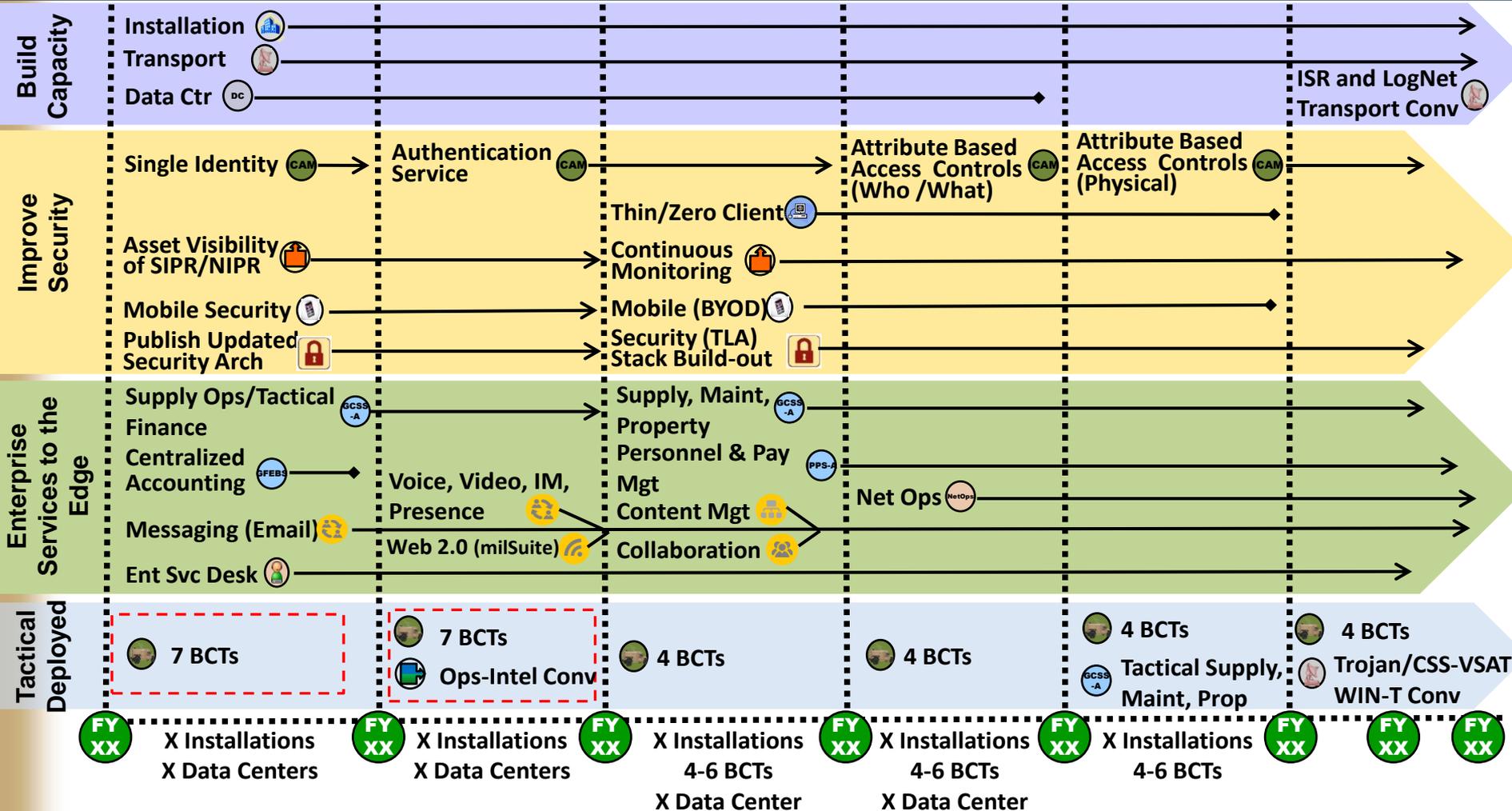
Installation Role	Requirement	Mission Enhancement
<p>Generating Forces at Post/Camp/Stations</p> <p><i>Ex: Army Forces Command, Army Reserves, Army National Guard</i></p>	<ul style="list-style-type: none"> • Battlefield Systems & Software at Home Station • Live/Virtual/ Constructive Training • Enterprise Resource Planning (ERP) at Home Station 	<ul style="list-style-type: none"> • Installation as a Docking Stations • Train-as-You-Fight • Less Satellite Bandwidth Need in Garrison
<p>Industrial Base</p> <p><i>Ex: Army Material Command, Rock Island Arsenal</i></p>	<ul style="list-style-type: none"> • Reset Battlefield Equipment to Fully Mission Capable Status • Enterprise Resource Planning (ERP) at Home Station 	<ul style="list-style-type: none"> • Increases Data Exchange Capacity with Resource Planning Systems • Enables Logistics Planning and Projections for Return of Platforms
<p>Training, Education, & Labs</p> <p><i>Ex: Army Training & Doctrine Command</i></p>	<ul style="list-style-type: none"> • Distance Learning and Live/Virtual/Constructive training • Connect with .edu Partners • Enterprise Resource Planning (ERP) at Home Station 	<ul style="list-style-type: none"> • Use Schoolhouse Training at Home Station to Gain and Maintain Proficiency

The RIGHT Network Infrastructure for the RIGHT Installation for the RIGHT Mission



LandWarNet 2020 and Beyond Modernization Through Capability Sets (Initial Strategy)

Balance Modernization & Sustainment – Flexibility Through Capabilities



Capability Sets Ensures Synchronization

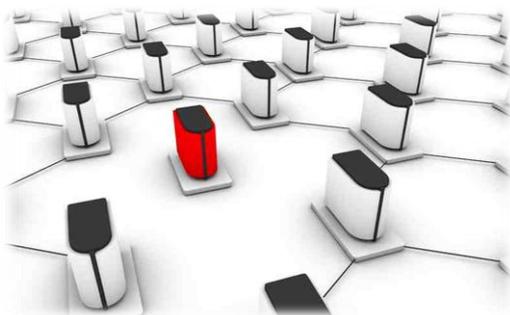


Accomplishments in FY12



DoD Enterprise Email – 1 Million + Users

It's Not About Email – It is About Providing Network Access Anywhere, Anytime Through a Single Identity



Army Data Center Closures – 84

*700 Server Efficiencies
800 Application Efficiencies*



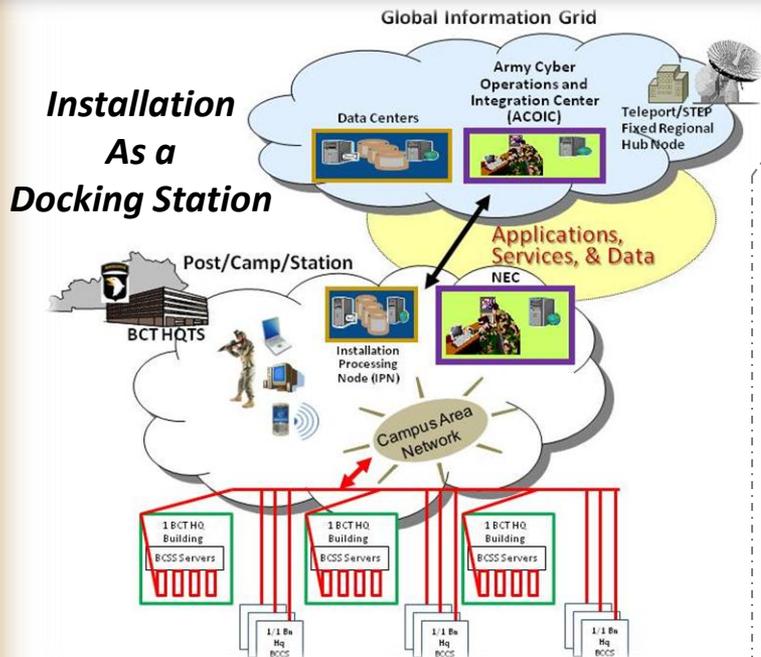
Commander's Risk Reduction Dashboard (CCRD)



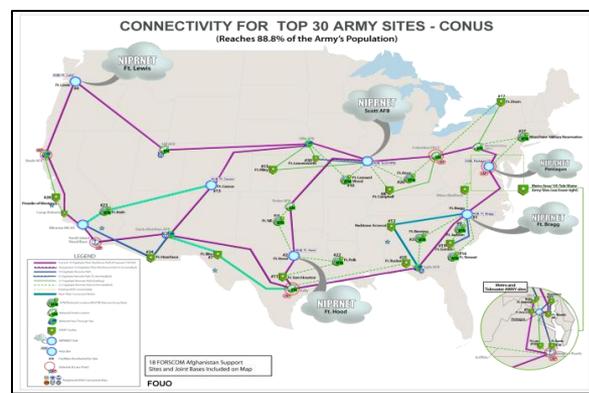
Enforcing Two-Factor Authentication



Accomplishment FY12



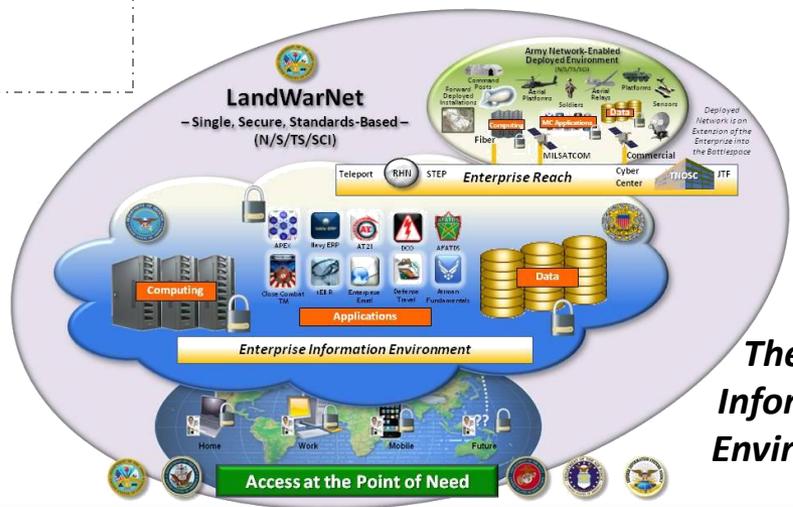
Enterprise License Agreements



**Year End Switch Buy
Modernizing Backbone Capacity**

Current Unclassified Mobile Pilot Devices			
iPhone 4S	Samsung Galaxy Tablet	Motorola Raza	iPad3

DoD Mobile Computing Pilot



The Joint Information Environment



Way Ahead

- ★ Army is Aligned with DoD Strategy & Helping Lead the Joint Information Environment
- ★ Army Must Modernize LandWarNet as an End-to-End Platform
 - We Must Train as We Fight
 - Deploy Little to No Notice Anytime, Anywhere in Austere Environments
 - Installations as a Docking Station
 - Modernized From Post/Camp/Stations to the Tactical Edge
 - Single Secure Network
 - Incorporate Echelons Above Army Requirements
 - Centralized Management and Decentralized Execution

***When You Behave as an Enterprise – You Architect as an Enterprise –
and You Create an Infrastructure that is Inherently
Less Vulnerable, More Efficient and More Effective***



Where I Need Your Help

- ★ Be Good Stewards/Partners – Work with Us on New Enterprise License Agreements (ELA); Don't let Us Write Stupid Requirements
- ★ Focus on 'Open Systems' and Common Operating Environment (COE) vs. Proprietary Interface Designs and Approaches
- ★ Spectrum – Don't Utilize Spectrum for "Stovepiped" Battlefield Systems; Ensure Bandwidth is Available to All the Network
- ★ Participate in our Network Integration Evaluation (NIE)

The Network is Core to a Smaller, More Capable, Better Trained Expeditionary Army



— Thank You —



**Together – As a Team – We Will Achieve A Single, Secure,
Standards-Based Joint Network that Powers America's
Army, Making it the Most Capable Force in History.**



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BACKUPS



Army IT Accomplishments in FY12

- ★ DoD Enterprise Email – Over 1 Million Joint and Army Users / Saving \$75M per Year
- ★ Army Data Center Consolidation – 84 Closed to Date; On Target to Close 185 by FY15
- ★ Enterprise License Agreements (ELAs):
 - Over 7K Separate Contracts into a Single Army Agreement; Projected Cost Avoidance of ~\$150M Over 5 Years
 - Cost Reduction of 88%, Increasing Security by Upgrading Software Across the Army
- ★ Participating with DISA on Mobile Computing Pilot (Android/iPad)
- ★ Providing Technical Oversight and Assistance for Commander's Risk Reduction Dashboard (CRRD), Integrated Disability Evaluation System (IDES) and Digital Training Management System (DTMS)
- ★ Year End Switch Buy – Modernizing Backbone Capacity 10-Fold for 88% of CONUS; for a total of \$22M (a Savings of 80% of the List Cost)
- ★ Transition of AKO – Saving \$13.4M with \$9M in Potential Savings w/ New Method for Managing Password Resets
- ★ Leading the Services in Shaping DoD's Joint Information Environment (JIE)