NAVAL POST GRADUATE SCHOOL PANEL: “Application of an APP Store Software Model within the DoD”
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# Application of an APP Store Software Model within the DoD

**Author(s):**
Joint Program Executive Office, Joint Tactical Radio System (JTRS), 33000 Nixie Way, San Diego, CA, 92147-5110

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Joint Program Executive Office, Joint Tactical Radio System (JTRS), 33000 Nixie Way, San Diego, CA, 92147-5110

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Why do warfighters need Continuing Innovation?

- Ever-Changing Threats & Environments
- Sophisticated Adversaries with Jamming Capability
- Congested RF Spectrum
- Complexity of Interoperability
- Leaner Defense Budgets Ahead

Industry & Government Must Balance Agility-Security-Interoperability-Affordability-Competition
“We’re not going to out-Apple Apple, but we need to make sure our workforce is exposed to the same technologies and that we offer them the same technologies….We’ve adopted an app-like approach to developing capabilities because we want our workforce to be able to sit down and say, ‘This app works for me, that app works for me,’ and then plug and play right in front of them”

-Lonny Anderson
NSA CIO
Spring 2011
Why APPs are important to the military

- Information presented in a manner that users want to see
- Speed of building and deploying tools
- Community comfort with development & use of APPs
To streamline its operations in a rapidly advancing world, the Army is creating an online app marketplace in the hopes of empowering its soldiers and boosting efficiency.
DoD APPs Requirements

- An Application Suite
- Enterprise software
- Enterprise infrastructure
- Information worker
- Content Access
- Educational
- Simulation and modeling
- Media development
- Product engineering
- Command & control
- Intelligence
- Logistics
- Administration
Analogy to Commercial IT: Common Software – Multiple Hardware Vendors

- Common standards across multiple hardware environments - works across all PCs
- Developer owned IP rights of software
- Competition across hardware instantiations
- Engineered for upgradeability and software enhancements

- Common software standards across multiple hardware networking radios – interoperable!
- Government owned IP rights for software
- Promotes competition across hardware instantiations
- Engineered for upgradability and software enhancements

Statement A: Approved for public release; distribution is unlimited (17 May 2012)
We are performing these essential tasks today: sustaining joint tactical network applications, conducting quick look interoperability tests, qualifying vendors for major integration test events!
APP Development Hurdles

- Defined and published standards
- A mature agile-software tools deployment process
- A centralized systems engineering compliance and certification authority
Challenges to APP Developers

- Security
  - No current solution for authenticating applications on secure websites
- Interoperability in a cognitive (SDR) environment
- Definition of DoD standards
- DoD bureaucracy in adopting and deploying in new software
  - Current process long and arduous
  - Not standardized among Services
  - May include an NSA compliance and certification process
- Licensing and government use issues
- Cost

Given these challenges...