

SoftwareForge

*Collaborative Development & Reuse of Open
Source/DoD Community Source Software*

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Tag: #forge.mil

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Agenda

- Forge.mil 'The Big Picture'
 - Catalyst, Who's Behind Us, Mission/Vision
 - 'Properties' & Bounding
 - Community: Elements, Approach, & The Cloud
- Building Blocks of Forge.mil
- SoftwareForge: DoD Open Collaboration Environment
 - Community Building/Cultural Shifts
 - Getting Started, Challenges, Lessons
 - Community Victories
- Moving Forward
- Questions

Forge.mil Catalyst

“Software code has become central to how the war fighter is able to conduct missions... DoD must pursue an active strategy to manage its software knowledge base and foster an internal culture of open interfaces, modularity, collaboration, and reuse.”

- Open Technology Development Roadmap Plan (April 2006)
- Commissioned by Sue Payton, Asst. Sec for Air Force Acquisition

Forge.mil at 10k Feet

Vision: Enable the rapid development, test, certification, deployment & acceptance of new products & services on the GIG (Global Information Grid)

Approach: Provide a collaborative environment supporting all stakeholders through the development life-cycle & capability delivery (with partners) as cloud computing services

The Forge.mil Properties

Driving Innovation Through Collaboration



Collaborative software development and reuse - *ONLINE*



On-demand application development tools - *Early FY10*



Common test and evaluation environment *



Agile certification process *



Collaborative development of IT standards *

** Properties 'coming soon' to a forge near you ...*

Bounding the Mission & Objectives

- DoD internal collaboration workspace (public/private projects)
- Repository of reusable components/projects
- Future
 - Integrated SDLC engine (requirements, IA cert, test)

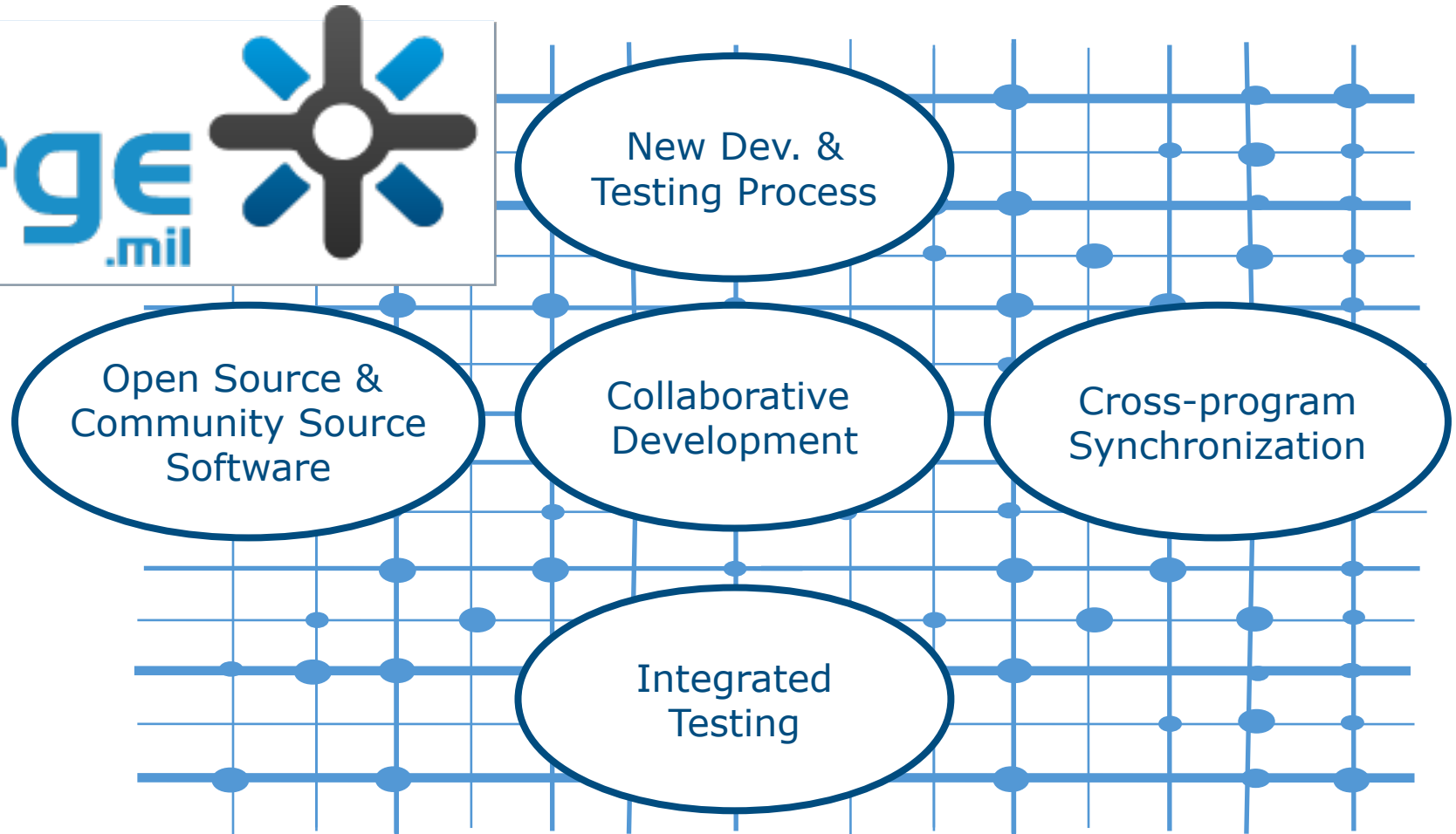


***Forge.mil
Properties***

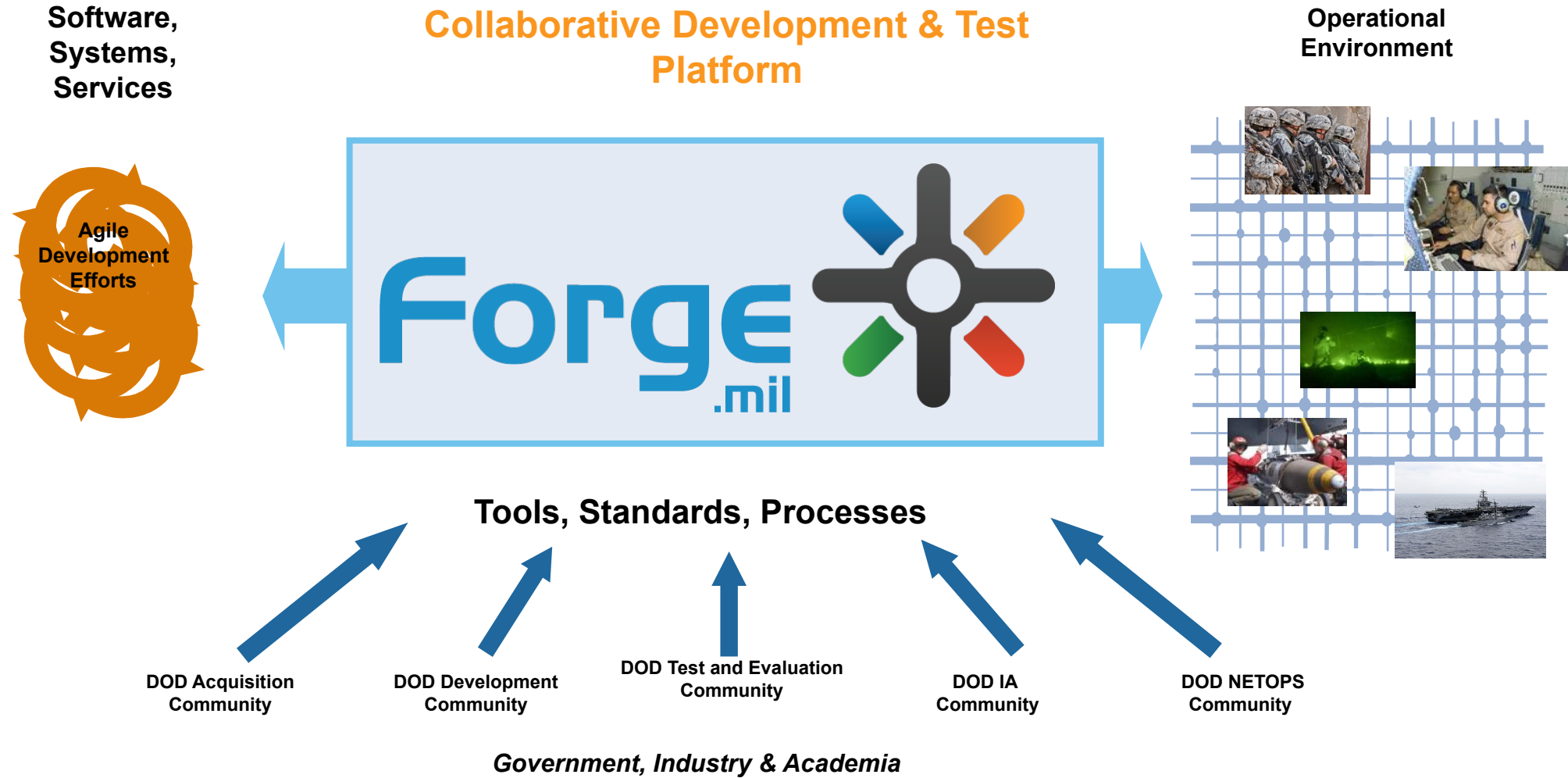


- Public General Purpose Open collaboration environment
- Required for all new programs

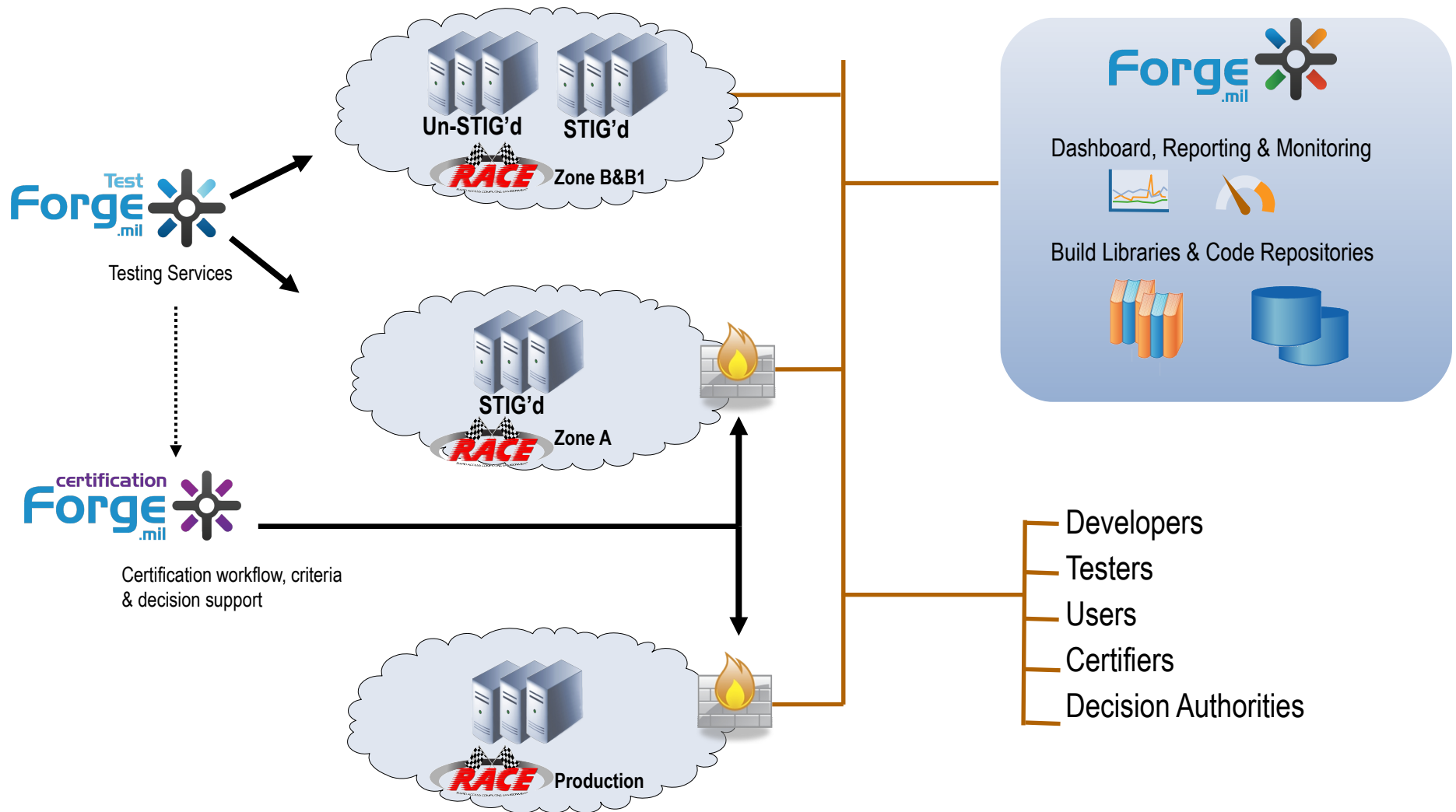
Community Components



Community Approach



Promote To Production: Cloud Computing



What Runs Forge.mil

- RHEL5
- Jboss 3.2
- Apache 2.2
- Tomcat4
- PostgreSQL 8.2
- Nagios 3.2
- Subversion 1.5
- mod_security
- Eclipse 3.2
- CTF 5.2
- VMWare4
- James Mail
- Lucene



redhat®

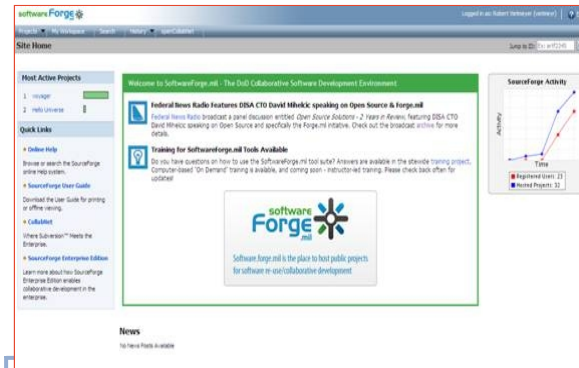


Nagios®



SoftwareForge Property

Initial Operational Capability



Find Software

- Open Source
- DoD Community Source

Develop Software

Project Workspaces



- Source code management
- Track bugs, requirements
- Tasking & alerts
- Release management
- Real-time reporting
- Discussion forums
- Project wiki
- Document management

Getting Started

- Access requires DoD CAC or ECA certificate
- Open Community Approach
 - Allow broad participation (developer role)
 - 'Committer' role sponsors developer proposed changes
 - Mentor developers to become committers
 - Project position determined by value of contributions

Getting Started

Investigate

Have a question about the site? Try the [FAQ](#) to see if it is already answered.

Experiment

Want to test the system before deciding to use it? Try the [Sandbox-1](#) or [Sandbox-2](#) projects.

Participate

Find projects to use or participate in with the [category view](#).

Create

When ready, you can [request](#) your own project.

Community Overview

- Enabling 'DoD-internal' public & private collaboration
- Leveraging 'Open Community Approach'
- Driving re-use of common functionality
- Building cross-DoD collaboration
 - Focus on knowledge sharing (not just code)
 - Incentives to programs to encourage sharing



SoftwareForge Community

- Modeled after 'Internal Forge' industry concept
 - (Motorola, Sun, etc.)
- Utilizes best practices from Open Source
 - Publicly viewable project artifacts (code, bugs, docs)
 - Meritocratic contribution model
- Self-sustaining community of internal DoD & contractors
 - Encourage/enable community to evolve & grow



Community Challenges

- Hierarchical, mission-driven culture
- Strong risk management (hard to 'fail fast')
- CAC/ECA auth model limits external community interaction
- Project adjudication seen as a barrier to entry
- Skepticism of new processes/tools



Community Lessons Learned

- Government community building is a 'contact sport'
- Be careful of marketing/hyperbole around capabilities
- External OSS community interaction desirable
 - Simplified auth model required
- Education/explanation of project adjudication needed
 - Cornerstone of useful 'consumer' community
- “You can’t forklift a revolution...”



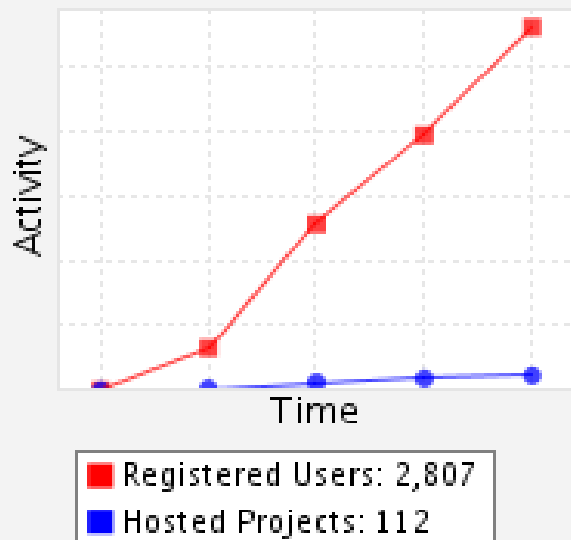
Community Lessons Learned

- Don't assume inquisitiveness
- FAQ lists are important (even if not read the 1st time)
- Seek out, support, & encourage community leaders
- Grow community efforts around existing programs/tech
- Have realistic expectations



Community Victories

SoftwareForge Activity



01 SEPT 2009

SoftwareForge

Initial Forge.mil capability (April 2009) supporting collaborative software development & reuse

Over 300 software releases available for download (9/1/09)

Sample Hosted Projects

Army

- **Battle Command Innovation Platform:** A system targeting emergent innovation within the battle-space
- **Active Directory:** a collaborative space for code related to Active Directory management.

Navy

- **Gargoyle:** a network activity monitoring and analysis system
- **ACE:** a testbed for SSC-LANT's Advanced Compose-able Environment (ACE)

Air Force

- **AF EIM:** code supporting Air Force's Enterprise Information Management,
- **UAS TSPI Server:** a common network interface to multiple UAS ground-stations for sensors requiring real-time telemetry source

Marine Corps

- **NECC C2 Alerting CM:** NECC Capability Module for C2 Alerting
- **MAGTF C2:** Marine Air Ground Task Force Command and Control

Joint Chiefs & DISA

- **NSLDSS:** National Senior Leader Decision Support Service
- **CommunityCAC:** CAC Utilities/Firefox plugin
- **DODBastille:** RHEL STIG lockdown utilities

Forge.mil Awards

- Government Computer News Awards 2009 Agency Honoree
- Government Computer News 2009 Top 10 Federal Websites
- Slashdot - For Better and Worse :)
- Federal Computer Week – Top 10 .GOV Sites That Get It Right



Moving Forward

- Solve public access issue for OSS community engagement
- Recruit SMEs to decentralize project adjudication
- Improve community metrics/analytics
- Customize 'getting started' training
- Evangelize, Educate, Engage



Summary

Key Benefits:

- Project Teams/Developers
 - Eliminate Silos to Improve Collaboration
 - Centrally Share, Manage, & Reuse Assets
- Leadership
 - Consolidate & Unify
 - Gain Visibility/Predictability
 - Drive Innovation

User Thoughts:

- “I can't believe this site exists. Tell me I'm not dreaming.”
- Priam Kanealii (US Army)
- “Forge.mil is just what I always wanted... Now we can finally collaborate easily.”
- Frank Hale (US Army)

Campgrounds

- Campground 2 - Wednesday, Sept 2nd – 5pm
 - Getting RedHat into Government Compliance: Open Source and Government Source Tools
- Campground 2 - Thursday, Sept 3rd – 3pm
 - Chatting with the Forge.mil Community Managers: A Forge.mil Followup



QUESTIONS?

**TELL US WHAT YOU THINK:
REDHAT.COM/SUMMIT-SURVEY**

Learn More:

- Forge.mil public information: <http://www.forge.mil>
- Forge.mil in action: <https://software.forge.mil>
 - CAC or ECA Certificate Required
- Forge.mil Webinar: <https://connect.dco.dod.mil/p15484032/>
- E-Mail: webmaster@forge.mil