The Harvard ABCD Forge
https://forge.abcd.harvard.edu

Project Management and Software Development Best Practices
11/11 at 11am

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What is ABCD?
Why Forge?
Multiple Problems, One Solution

Community and Developer facets:

- Stop reinventing the wheel
- A One Stop Shop for users
- Single source for all of Harvard's code
- Improve feedback and outreach

Security and Management:

- Public vs Private
- Enable Project Managers
- Manage all projects and teams centrally
- Tasks manager with Gantt charts
The Forge Lifecycle
Project Lifespan

- **2004+**: Community Discussion
- **Jan/Feb 2005**: UIS/ABCD Assessment and Negotiation
- **March 2005**: Hardware provisioning
- **April 2005**: Software Implementation
- **May-June 2005**: Pilot
- **Aug 2005**: Announcement
- **October 2005**: Launch
- **Jan 2008**: Move to Virtual Hardware and GFAS
- **June 2010**: Hosting and Funding Changes
Adoption Overview

- **Groups**
  - SEAS
  - Harvard-MIT
  - Law School
  - KSG
  - Many others

- **Users**
  - Faculty
  - Students
  - ABCD Members
  - External

- **Projects Hosted currently**
  - Software Development: Code Repository & Collaboration
  - Scientific/Statistical: Team & Project Management
  - Outreach: Communication & Feedback
  - Many others: Bandwidth offload etc.
Why Adopt?

State of the Art hosting
- 24x7 Monitoring
- Daily Backup

Preconfigured Features
- Mailing Lists
- Discussion Forums
- Bug Tracking
- Task Delegation
- Surveys
- Wikis

Documentation
- User’s manuals
- Build instructions
- Installation instructions
- Development roadmap

Supporting Files
- Binary distributions
- SourceCode Repositories

Security
- RBAC
- Monitoring
How to Register

1) Browse to https://forge.abcd.harvard.edu
2) Create an account: https://forge.abcd.harvard.edu/account/register.php
3) Create a Project: https://forge.abcd.harvard.edu/register/

4) Email the admins with any questions!

(abcd-forge@abcd.harvard.edu)
How to Adopt

- How do I start?
  - CVS import *or* tar up an existing repository
    - Some names may change
- What is a Project and what is a Module?
  - Users within a project have similar access
- How should I organize my files?
Plans

- ABCD-SoftDev Presentation Spring 2011
- SSL Mandate Winter 2010
- Gforge Advanced Server 5.7
  - Project hierarchies
  - MS Project and Visual Studio Integration
  - Eclipse Plugin
  - SVN
  - Improved Statistics
Alternatives

Commercial
• GForge Enterprise ([http://gforgegroup.com/](http://gforgegroup.com/))
• PVCS, MS SourceSafe etc

Open Source
• BerliOS ([http://www.berlios.de/](http://www.berlios.de/))
• Google Code ([http://code.google.com](http://code.google.com))
• GForge ([http://gforge.org/](http://gforge.org/))
Lessons Learned

- Support is key to success
- Security must be baked in
- SLAs don’t guarantee uptime
- Virtualization makes hosting transparent
- CrowdSourcing is Hard
Summary

- ABCD Forge provides not only robust source control, but a full suite of management tools to help with software development and deployment.
- Centralizing the development efforts of the Harvard Community benefits the developers and the Harvard community
- As a remote but trusted Harvard server with a host of preconfigured features, Forge offloads a host of sysadmin and management headaches!
Q&A