

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

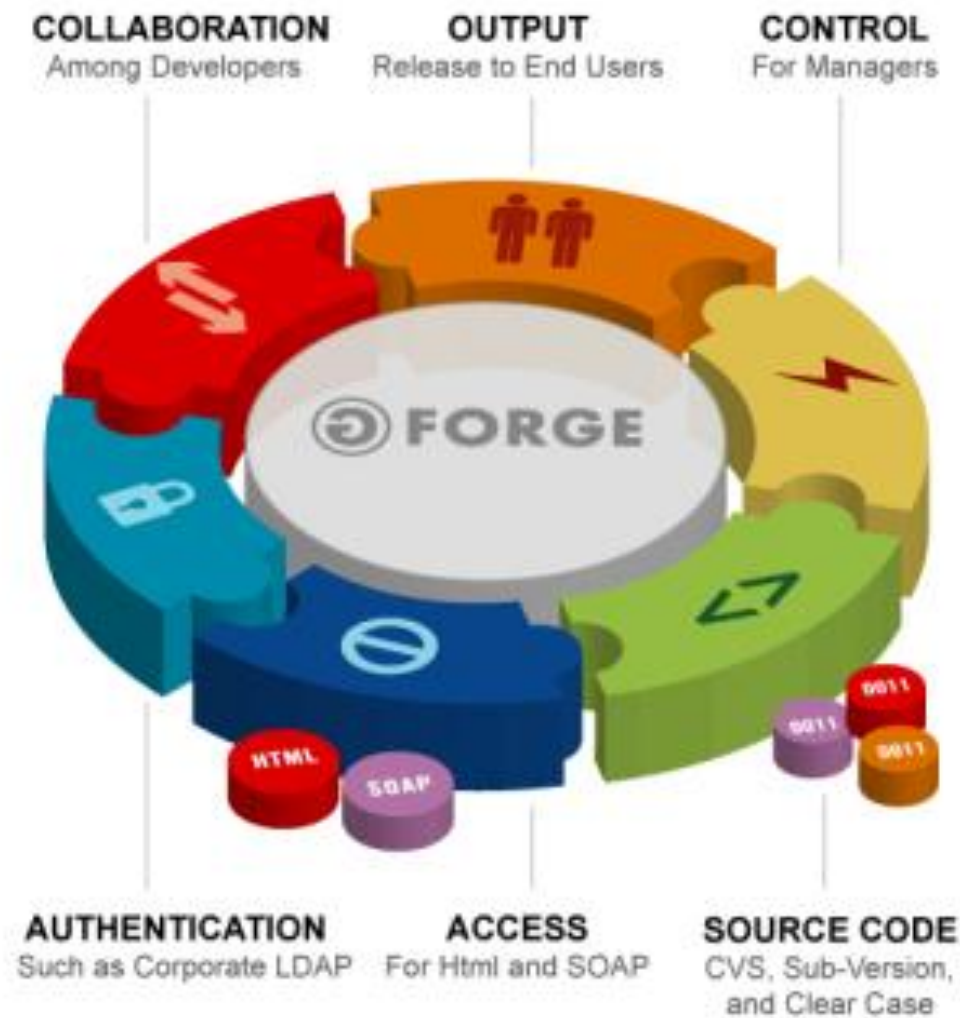
Community and Developer facets :

- 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

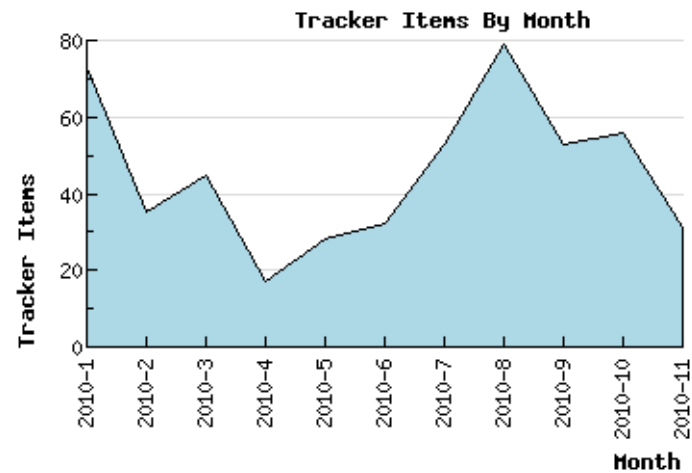
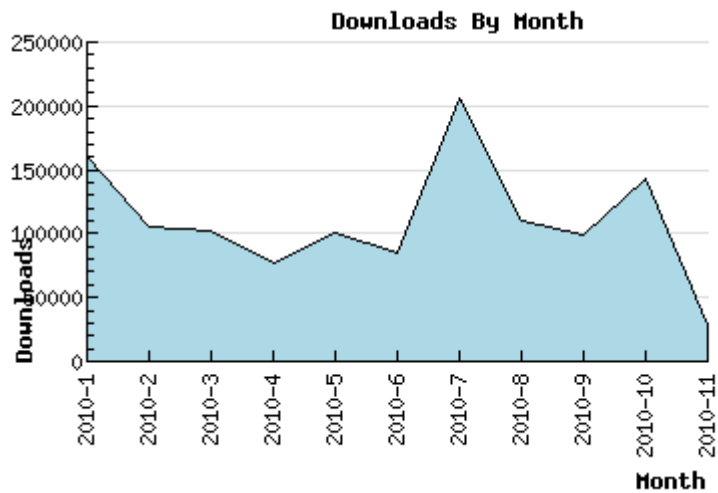
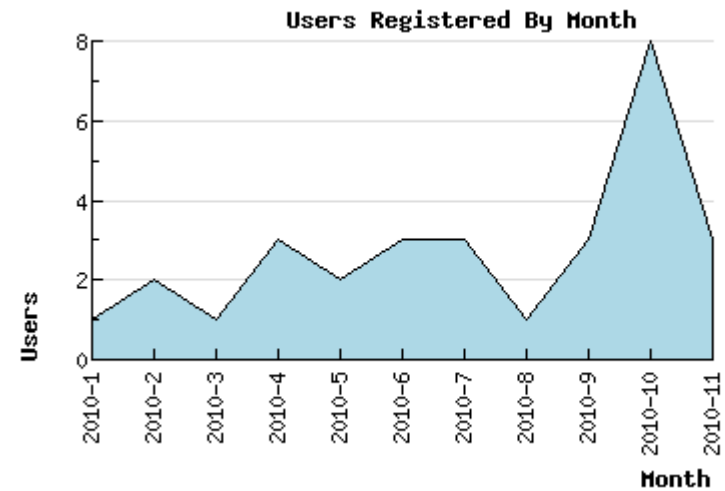
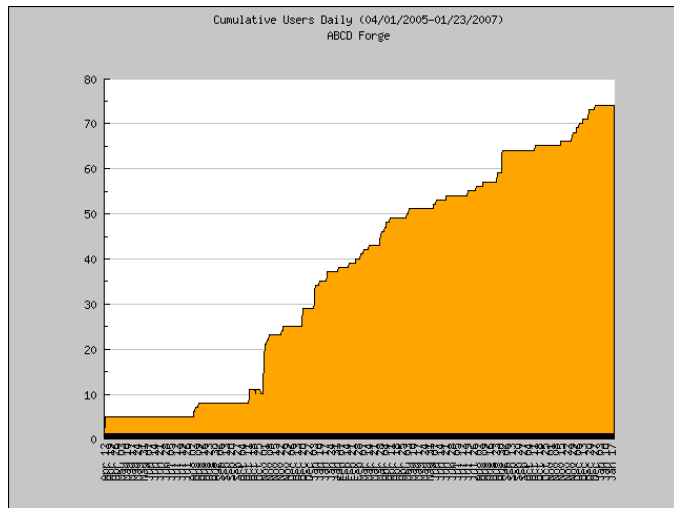
- **Users**

- 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.

Growth



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

- VA SourceForge (<http://www.vasoftware.com/>)
- GForge Enterprise (<http://gforgegroup.com/>)
- PVCS, MS SourceSafe etc

Open Source

- GNU Savannah (<http://savannah.gnu.org/>)
- BerliOS (<http://www.berlios.de/>)
- Google Code (<http://code.google.com>)
- GForge (<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