Phabricator 538d8f2... overview

Dmitry Mikushin

(for the Bugs Course)

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What is Phabricator?

The LAMP-based web-server + command-line client for:

- peer code review
- task management
- project communication

And it's open-source
Test drive!

Browse to http://devel.kernelgen.org, login and look around
Key features

- Fancy design and glowing box-shadows
- Peer code review
- Integrated environment for request reviewing, tasks/bugs and versioning system
  - in web environment
  - in command line
- Ergonomic task interface
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Peer code review: traditional

1. RFC: Developer publishes a patch with the source and tests
2. Other developers comment on the patch issues/improvements
3. After all issues are addressed, reviewers ACK patch for commit
4. Developer himself or someone with rw rights commits the patch

Everything is over email

Relationship with **Bugs**: fixes for PRs are also reviewed this way
Peer code review: Phabricator approach

1. Developer check-ins the patch to the Phabricator over the command line (passing lint/unit tests, if any)
   
   ```
   $ arc diff .
   ```

2. Pick up the created diff sketch on the web client and complete it into review request
   - Summary
   - Test plan
   - Potential reviewers, if any (code owners can subscribe for changes in specific files (Herald))

3. System sends out mail invitations to review the diff

4. Once the patch gets accepted, developer may commit the patch from the command line, which will auto-close the review request:
   
   ```
   $ arc commit --revision D4
   ```

Project team communicates in web system, email is only for notification
Integrated environment

1. Review requests are connected to the subversion
2. Active markups for tasks, diffs, revisions, etc. (with pop-ups)
3. Drag’n’drop files
Ergonomic task interface

Bugzilla standard interface

Phabricator interface

Test-drive at http://devel.kernelgen.org
Misc features

- Integrated OAuth login: Google, Facebook, Amazon, etc.
- Code markup in almost any text box
- Integrated repository browser with cache and tracking daemon (SVN, Git, Mercurial)
- Integrated support for Amazon Storage/Mail
Other components

- Deadline timers (Countdown)
- Wiki (Phriction)
- FAQ (Ponder) with stackoverflow-like ratings
- Blogs (Phame)
- Web (Conphereence) and IRC-based chats (ChatLog)
- Design review (Pholio)
- Our own Paste!
- Democracy (Slowvote)
- ...

Test-drive at http://devel.kernelgen.org
Evaluation

- Some of components are still stubs/beta
- Wiki markup is less powerful than mediawiki
- Command line tools wrap versioning system's, limiting some functionality
- Needs more structured view of tasks, e.g. trees/graphs
Modern collaborative work systems tend to fuse code reviewing, bug tracker and developer tools into integrated social environment
Further reading

- More details, how Phabricator is used in commercial company
- Installation Guide
- Configuration Guide