How Delphix saves time and money with git + Bugzilla + Review Board

Putting git to work

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Early tools...
Moving to git

• Better than Subversion (not hard!)
• Lots of projects using it
  – It is a popularity contest!
• Easily customizable
The Stick

- Enforce integration rules
  - Comments are well-formed
  - One commit per push
  - Not using your ahl@hotmail.com email address
  - Code review approved
Hook: pre-receive

• Bash – basic formatting
  Multiple commits per push are not permitted.
  Use the following command to reset deltas:
  git recommit

• Bugzilla API integration:
  Bug summaries must match with data in Bugzilla
  - 15108 dashboard stuff that zubair whined about
  + 15108 Dashboard reports are malfunctioning

• Review Board API integration
  ERROR: review 1523 must be approved by zubair
  or
  ERROR: review 1523 has not been approved by a gatekeeper
The carrot

• Tedious tasks we used to do by hand
  – Email notification
  – Marking bugs integrated
  – Marking reviews as closed
  – Uploading diffs to Review Board
Hooks: post-receive / post-update

• post-receive:
  – `git log --pretty=...` to generate email
  – `nail` to send it to the distribution list
  – Bugzilla and Review Board to close bugs/reviews

• post-update
  – The hooks themselves are checked into our repo
  – Looks for modifications and performs self-update
From: Zubair Khan <xxx@delphix.com>
Subject: [delphix-gate] push to app (bugs 15186)

commit 3347c9674beed8b51fc0cb15079dd16665b5415c
Author: Zubair Khan <xxx@delphix.com>
Date:   Wed Feb 15 23:24:03 2012 +0000

15186 Add oracle home fails with internal error.

Modified:
appliance/server/dci/src/java/com/delphix/appliance/server/dhm/DhmService.java
appliance/server/dhm/src/groovy/com/delphix/appliance/server/dhm/impl/DhmServiceImpl.groovy
appliance/server/dhm/src/groovy/com/delphix/appliance/server/dhm/impl/util/DhmHelper.groovy
appliance/server/oms/src/groovy/com/delphix/appliance/server/oms/host/impl/HostManagerImpl.groovy
What we’ve done

• All available, BSD license, github (of course)
  – [link](https://github.com/delphix/git-hooks)
  – [link](https://github.com/adamleventhal/git-utils)

• Easily customized in .git/config

```
[gate]
name = delphix-gate
notify = allthedeveepeeps@delphix.com
shortname = app

[gate "doc"]
notify = justthedoceepeeps@delphix.com
review-check = skip
```

# global section
# who wants to know?
# exceptions for top-level directories
# different notification list for docs
# doc reviews use a different tool
Clone it. Use it. Steal from it. Happy git hooking!

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