



Putting git to work

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

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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
 - `mail` 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-upgrade

Email example

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/DhmServiceI
appliance/server/dhm/src/groovy/com/delphix/appliance/server/dhm/impl/util/DhmHel
appliance/server/oms/src/groovy/com/delphix/appliance/server/oms/host/impl/HostMo

What we've done

- All available, BSD license, github (of course)
 - <https://github.com/delphix/git-hooks>
 - <https://github.com/adamleventhal/git-utils>
- Easily customized in `.git/config`

```
[gate]                                # global section
    name = delphix-gate
    notify = allthedevicepeeps@delphix.com # who wants to know?
    shortname = app                       # used in the subject of push emails
[gate "doc"]                            # exceptions for top-level directories
    notify = justthedocpeeps@delphix.com # different notification list for docs
    review-check = skip                   # doc reviews use a different tool
```

**Clone it. Use it. Steal from it.
Happy git hooking!**

Delphix

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