#### SCM & Workflow

@bear

做正确的事情 VS 正确地做事情

#### 为什么需要SCM?

- tar zcvf 20141126.zip src && cp \*.zip backup
- rm -rf src =  $\sqrt{\frac{1}{m}}$  WTF!

## 基本概念

- repo
- trunk
- branch
- revision/commit
- changeset/changelist
- tag

#### SVN vs GIT

- 操作单位是目录
- 中心服务器,连网
- 单repo,多分支
- 分支操作很重,耗时
- 普及率高,学习成本低

- 操作单位是文件
- 分布式,网络非必要
- 多repo,多分支
- 分支操作轻
- github/pullrequest
- 学习曲线略陡

#### SVN

svn co

svn cp

svn info

svn up

svn sw

svn Is

svn add

svn merge

svn st

svn mkdir

svn revert -r dir

svn resolved

• svn ci

• svn log -l 10

svn pe svn:ignore dir

• svn rm

• svn diff -r 1001

svn changelist

svn mv

svn blame bear

svn cleanup

#### GIT

• git clone

git remote add

git checkout

git rebase

• git add -A

• git merge

• git commit

git reset HEAD

• git rm

• git log --name-status

• git mv

• git diff

• git br

• git blame bear

git push

git pull

git fetch

git status

stage?

remote? rebase?

### 什么是Workflow?

- 编写代码->调试自测->提交->上线发布
  - 只关注源代码这个角度
  - 多人协作

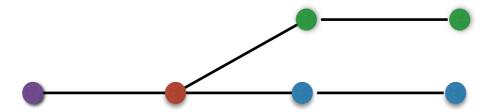
#### 几种Workflow

- trunk开发, trunk提交, trunk发布
- branch开发,merge到trunk,trunk发布
- fork repo,本地分支开发,推送到远端分支,发起 pullrequest, bless分支发布

### Free Style

- svn co http://foo.com/svn/bar/trunk
- svn up
- coding...
- svn add
- svn ci -m "fix bug"
  - 没有code review,或者事后review
  - 所有人都有权限

#### Branches

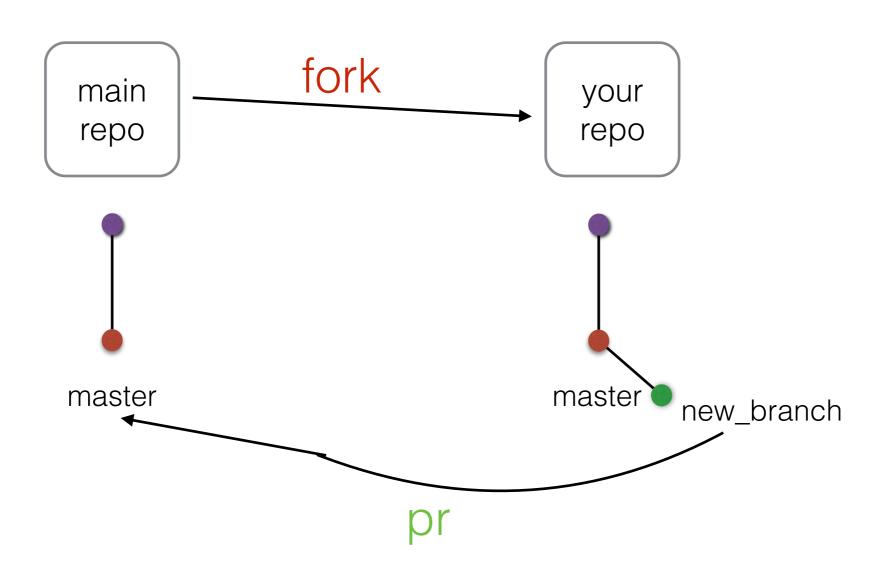


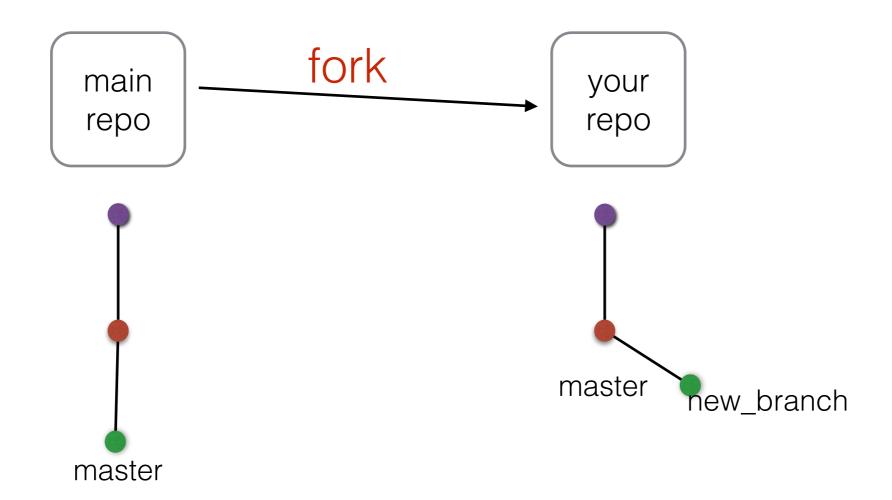
- svn co http://foo.com/svn/bar/trunk
- svn cp http://foo.com/svn/bar/trunk http://foo.com/svn/bar/branches/ new\_branch
- svn sw http://foo.com/svn/bar/branches/new\_branch
- coding...
- svn add / svn ci

部分人或全部人有权限, 但需要review通过后才能合并

- svn sw http://foo.com/svn/bar/trunk
- svn merge -r 10001:10020 http://foo.com/svn/bar/branches/new\_branch
- svn add / svn ci

- fork main\_repo your\_repo
- git clone your\_repo.git
- git remote add upstream main\_repo.git
- git branch new\_branch
- git checkout new\_branch
- git add -A.
- git commit -m "some"
- git push --set-upstream origin new\_branch
- git push
- create your pull request (your\_repo:new\_branch --> main\_repo:master)





- git fetch upstream
- git merge upstream/master
- git push
- git branch new\_branch2
- git checkout new\_branch2
- coding...

# 没有最好的只有最适合的