

Hands on Intro - Git

Amjith Ramanujam

twitter: amjith_

blog: amjith.blogspot.com

Why Git?

Git Features

- Distributed VCS (Local)
 - Fast
 - Clones are full-backups
 - Works Offline
- Efficient Data storage - stores only deltas
- Used by Linux Kernel
- Created by Linus Torvalds

Better than sliced bread.

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Getting Started

Download <http://amjith.com/tmp/cab.tar.gz>

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- `git init`
- `git add .`
- `git commit -m "Initial Commit."`

Git Cloning

- `git clone git://github.com/amjith/Cows_and_Bulls-Game.git`

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Configuration

User Name

- `git config --global user.name "Amjith Ramanujam"`
- `git config --global user.email "amjith.r@gmail.com"`

gitignore

- `.gitignore`
- `git config --global core.excludefiles /home/amjith/.gitignore`

`~/.gitconfig`

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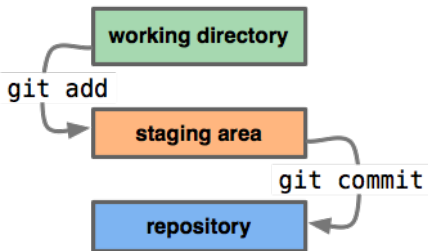
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Basic Operations

Staging

- `git commit -m` “Modification to the success and fail messages.”



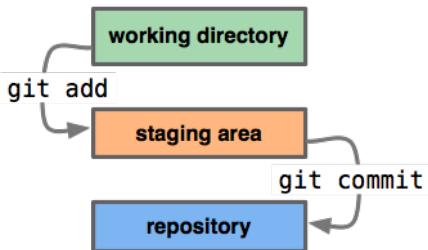
Interactive Staging

- Useful for code review.
- Partial checkins.

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Interactive Staging

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Basic Operations

- `git log`
- `git status`
- `git diff [-cached]`
- `git show`
- `git checkout`
- `git revert`

aliases

- `git config --global alias.ci commit`
- `git config --global alias.co checkout`
- `git config --global alias.st status`
- `git config --global alias.br branch`

SVN Comparison

Git vs SVN

git init	svnadmin create repo
git clone	svn checkout
git checkout	svn switch
git commit	svn commit
git pull	svn update
git push	svn commit
git log	svn log

Distributed Version Control

Advantages

- Local Branches - create/checkout/merge
- Patch/Apply - send/apply patches
- Central Repos - add origin - github
- Sharing Repos - ssh between friends

Advanced Topics

- git stash
- git rebase

References

- Git Tips: <http://www.gitready.com>
- Successful Git branching: <http://nvie.com/posts/a-successful-git-branching-model/>
- Public Repo: <http://www.kernel.org/pub/software/scm/git/docs/user-manual.html#setting-up-a-public-repository>
- Git hosting: <http://github.com>