





## (left right) Command Flow

#### **Basics**

Use git help [comand] if you're stuck.

master default devel branch origin default upstream branch

HEAD current branch HEAD^ parent of HEAD

HEAD~4 great-great grandparent of HEAD foo..bar from branch foo to branch bar

#### create

init clone

#### browse

status log blame show diff

#### change

mark changes to be respected by commit: add

#### revert

reset checkout revert

#### update

pull fetch merge am

#### branch

checkout branch

#### commit

commit

#### push

push
formatpatch

#### Create

From existing files

git init git add

From existing repository

git clone ~/old ~/new
git clone git ://...
git clone ssh://...

#### View

git status
git diff [oldid newid]
git log [-p] [file|dir]
git blame file
git show id (meta data + diff)
git show id : file
git branch (shows list,\* = current)

### Revert

In Git, revert usually describes a new commit that undoes previous commits.

git reset --hard (NO UNDO)

(reset to last commit)

git revert branch

git tag -l (show list)

git commit -a --amend

(replaces prev. commit)
git checkout id file

# **Publish**

In Git, commit only respects changes that have been marketd explicity with add.

git commit [-a]

(-a add changed files
automatically)

git format-patch origin
 (create set of diffs)

git push remote

(push to origin or remote)

git tag foo

(mark current version)

# Update

git fetch [from def. upstream]

git fetch remote

git pull (= fetch & merge)

git am -3 patch.mbox

git apply patch.diff

#### Branch

git chekout branch

(switch working dir to branch)

git merge branch

(merge into current) git branch branch

(branch current)

git checkout -b new other (branch new from other and switch to it)

## Conflicts

Use add to mark files as resolved

git diff [--base]

git diff --ours

git diff --theirs

git log --merge

git --merge

#### **Useful Tools**

git archive

Create release tarball

git bisect

Binary search for defects

git cherry-pick

Take single commit from elsewhere

git fsck

Check tree

git gc

Compress metadata (performance)

git rebase

Forward-port local changes to remote branch

git remote add URL

Register a new remote repository for this tree

git stash

Temporarily set aside changes

git tag

gitk

(there's more to it)

Tk GUI for Git

# git add files git mv old new

**Tracking Files** 

git rm files git rm --cached files

(stop tracking but keep files in working dir)

## Structure Overview

