





Introduction to Git



git

the fast version control system



[Home](#) [About Git](#) [Documentation](#) [Download](#) [Tools & Hosting](#) [Wiki](#)

Git is...

Git is a **free & open source, distributed version control system** designed to handle everything from small to very large projects with speed and efficiency.

Every Git clone is a full-fledged repository with complete history and full revision tracking capabilities, not dependent on network access or a central server.

Branching and merging are fast and easy to do.

Git is used for version control of files, much like tools such as [Mercurial](#), [Bazaar](#), [Subversion](#), [CVS](#), [Perforce](#), and [Visual SourceSafe](#).

Projects using Git


- [Git](#)
- [Linux Kernel](#)
- [Perl](#)
- [Gnome](#)
- [Qt](#)
- [Ruby on Rails](#)
- [Android](#)
- [Wine](#)
- [Fedora](#)
- [Debian](#)
- [X.org](#)
- [VLC](#)

Download Git


The latest stable Git release is

v1.6.6

[release notes](#) (2009-12-23)



[tar.bz2](#) ([sign](#))



[tar.gz](#) ([sign](#))

[Other Download Options](#)
[Source and History](#)

Git Quick Start

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Introduction to Git

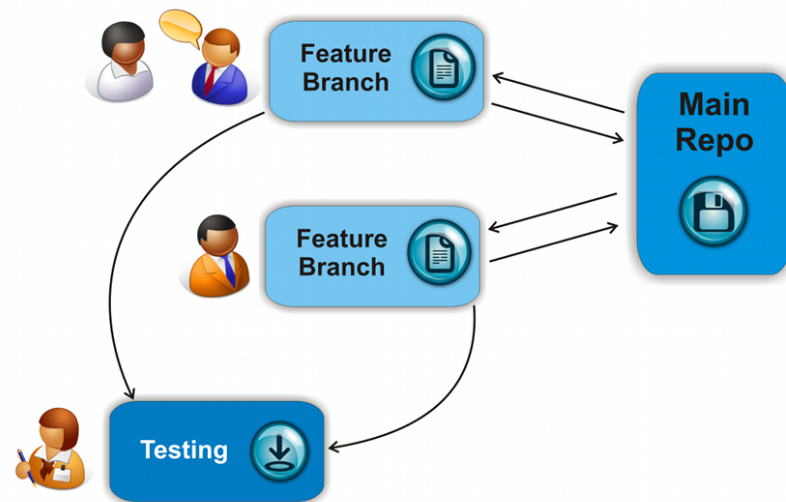
Basic Commands

Workflow

Live demo

Where to start?

Keyblade / Agile Workflow





Forget everything you know
about version control



Motivation

"The end result was that I decided I can write something better than anything out there in two weeks, and I was right."

What is it?

Fast

Distributed version control system

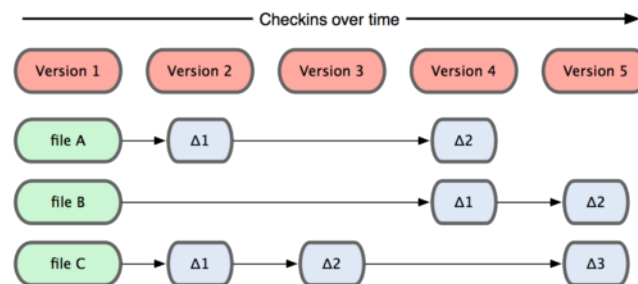
Think in changes/patches not revisions

Easy branching

Automagical merging

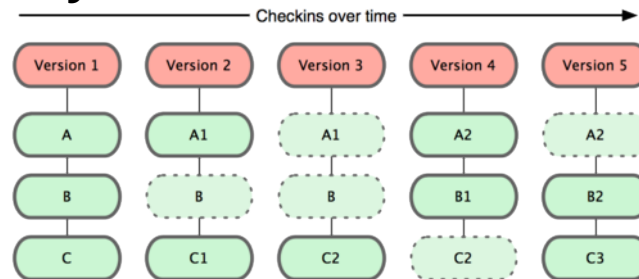
How does it work?

Git is a file system part 1



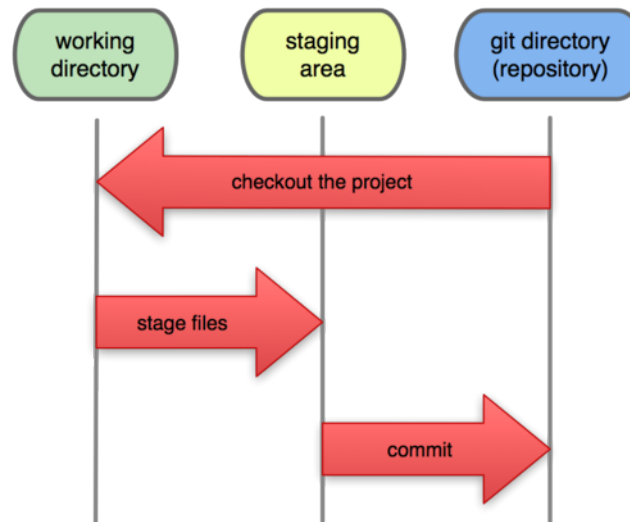
Git is a file system part 2

Snapshot of system each time a change is c



How it works

Local Operations



Commands

```
$ git init
create git repository in folder
$ git status
lists current status of repo eg.
On branch master
Changed but not updated:
  (use "git add <file>..." to update what will be c
  (use "git checkout -- <file>..." to discard chang

    modified:   lib/ToDoItem.rb
    modified:   spec/lib/spec_ToDoItem.rb

$ git add <file name>
adds file to staging area
$ git commit -m "MY MESSAGE"
commits changes
$ git checkout -b new_branch
creates a new branch
$ git checkout new_branch
switches to new branch
$ git pull --rebase
get latest from trunk
$ git push origin master
push changes to server
```

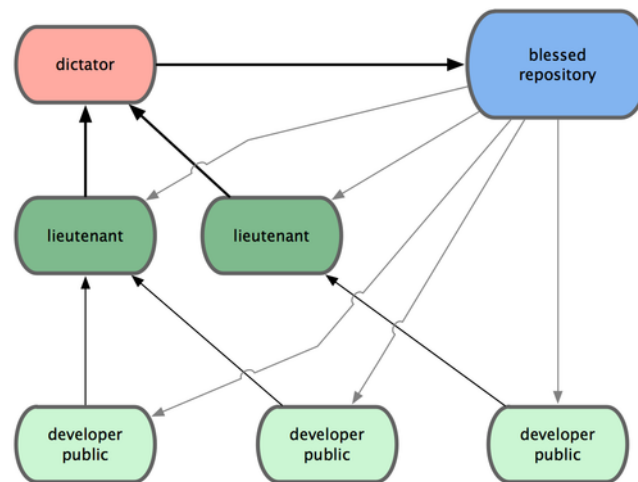
Workflow



G I T

What you gon' do with all that junk?
All that junk inside your trunk?

Linux Kernel



DEMO

Advantages

local system

branching

fast

distributed

disadvantages

steep learning curve

where to from here?

github

SOCIAL CODING

garrensmith

Dashboard

Inbox 0

Account Settings

Log Out

Explore GitHub

Gist

Blog

Help

Search...

garrensmith (garren smith)

This is you!

Edit Your Profile

Name

garren smith

Email

garren.smith@gmail.com

Website/Blog

http://garrens.drivensoftware.net

Company

Driven Software

Location

Johannesburg, South Africa

Member Since

Jan 10, 2010 (7 months)

9

public repos

1

follower

Following 10 coders and watching 30 repositories

view all →

Public Repositories (9)

Filter repositories...

git_intro_presentation

JavaScript

1

A presentation on the basics of git

Last updated 7 minutes ago

all commits

commits by owner

52 week participation

RoRToDo

Ruby

1

A little demo todo app to learn Ruby on Rails

Last updated 4 days ago

all commits

commits by owner

52 week participation

rspec-rails

Forked from rspec/rspec-rails

Ruby

1

38

Public Activity

garrensmith pushed to master at garrensmith/git_intro_presentation

7 minutes ago

70bf034 created readme

garrensmith created branch master at garrensmith/git_intro_presentation

10 minutes ago

New branch is at garrensmith/git_intro_presentation/tree/master

garrensmith created repository git_intro_presentation

11 minutes ago

A presentation on the basics of git

garrensmith started watching stffn/declarative_authorization

3 days ago

declarative_authorization's description:

An authorization Rails plugin using a declarative DSL for specifying

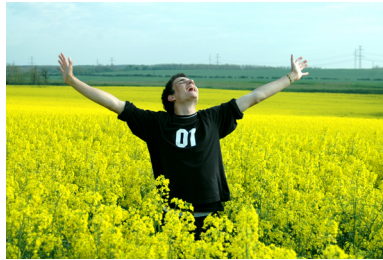
www.github.com

Help

<http://gitref.org/>

email:

garrens@drivensoftware.net



Be free and
Spread the word