




Introduction to Git



[+++ git](#)

[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

Table of Contents

Introduction to Git

Basic Commands

Workflow

Live demo

Where to start?





www.drivensoftware.net



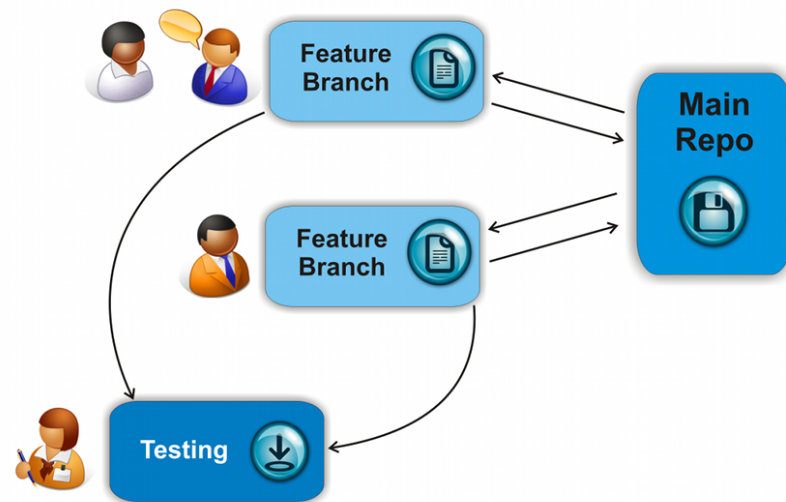
garrens@drivensoftware.net



[@garrensmith](https://twitter.com/garrensmith)



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

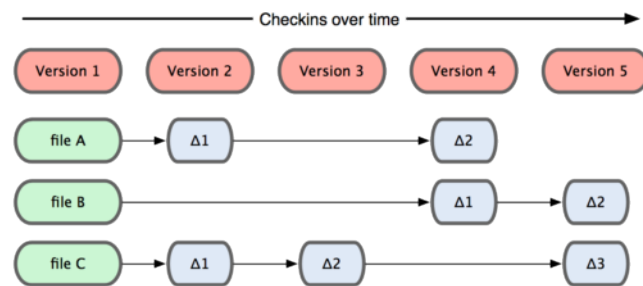
Automagical merging



How does it work?

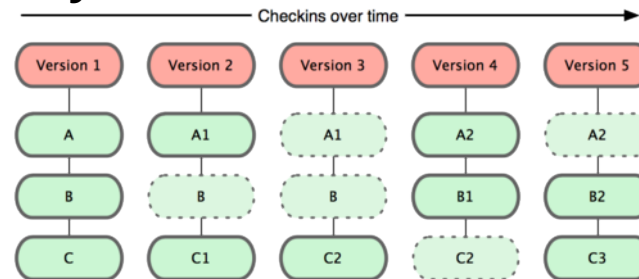


Git is a file system part 1



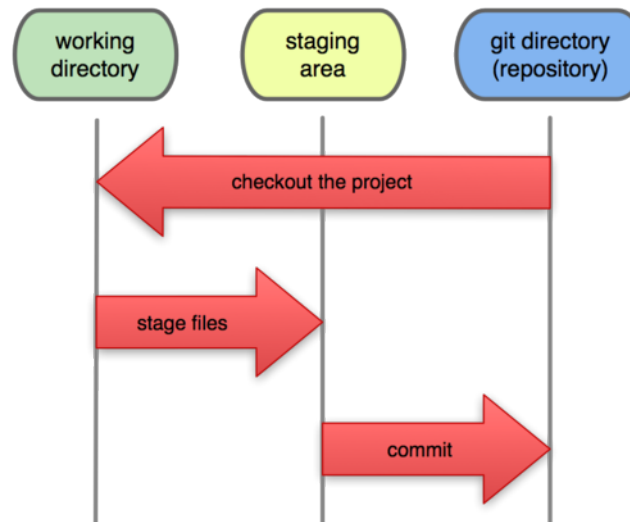
Git is a file system part 2

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
```



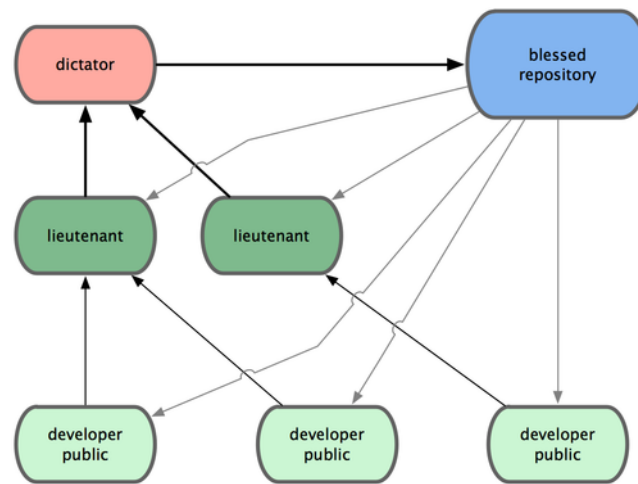
Workflow



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 1

A presentation on the basics of git

Last updated 7 minutes ago

all commits

commits by owner

52 week participation

 **RoRToDo**

Ruby <> 1 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**

Ruby <> 1 38

Forked from [rspec/rspec-rails](#)

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



Questions?





www.drivensoftware.net



garrens@drivensoftware.net



[@garrensmith](https://twitter.com/garrensmith)

