



Introduction to Git

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What is Version Control?

“Version control is a system that records changes to a file or set of files over time so that you can recall specific versions later.”

<http://git-scm.com/book/en/Getting-Started-About-Version-Control>

What is Version Control?

- Many of us constantly create something, save it, change it, then save it again
- Version (or revision) control is a means of managing this process in a reliable and efficient way
- Especially important when collaborating with others

http://en.wikipedia.org/wiki/Revision_control

What is Git?

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

<http://git-scm.com/>

What is Git?

- Created by the same people who developed Linux
- The most popular implementation of version control today
- Everything is stored in local repositories on your computer
- Operated from the command line

<http://git-scm.com/book/en/Getting-Started-A-Short-History-of-Git>

Download Git

- Go to the following website and click on the download link for your operating system (Mac, Windows, Linux, etc):

<http://git-scm.com/downloads>



Install Git

- Once the file is done downloading, open it up to begin the Git installation



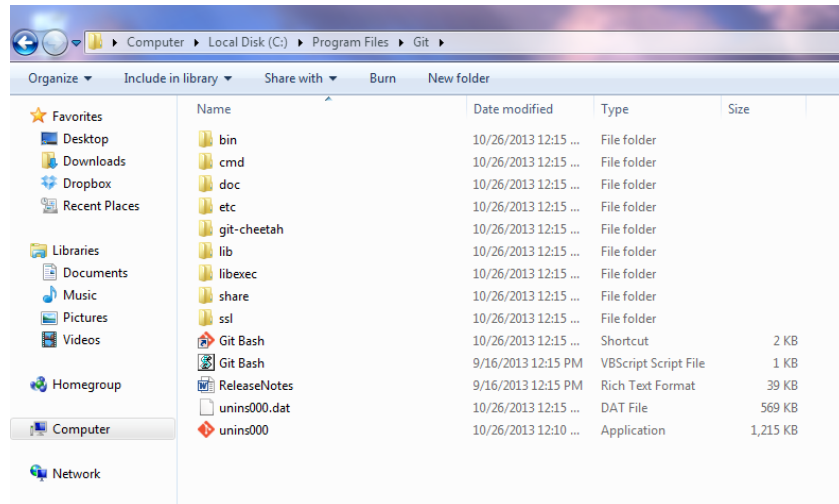
Install Git

- Unless you really know what you are doing, just go with the default options at each step of the installation
- Once the install is complete, hit the "Finish" button (you may want to uncheck the box next to "Review ReleaseNotes.rtf")



Open Git Bash

- Find a program called Git Bash, which is the command line environment for interacting with Git
- It should be located in the directory into which Git was installed (or, for Windows users, in the Start Menu)



Open Git Bash

- Once Git Bash opens, you'll see a short welcome message followed by the name of your computer and a dollar sign on the next line
- The dollar sign means that it's your turn to type a command

```
Welcome to Git (version 1.8.4-preview20130916)

Run 'git help git' to display the help index.
Run 'git help <command>' to display help for specific commands.

Nick@NICK-PC ~
$
```

Configure Username and Email

- Each commit to a Git repository will be "tagged" with the username of the person who made the commit
- Enter the following commands in Git Bash, one at a time, to set your username and email:

```
$ git config --global user.name "Your Name Here"  
$ git config --global user.email "your_email@example.com"
```

- You'll only have to do this once, but you can always change these down the road using the same commands

Configure Username and Email

- Now type the following to confirm your changes (they may be listed toward the bottom):

```
$ git config --list
```

```
Nick@NICK-PC ~  
$ git config --global user.name "John Doe"  
  
Nick@NICK-PC ~  
$ git config --global user.email "john@gmail.com"  
  
Nick@NICK-PC ~  
$ git config --list  
core.symlinks=false  
core.autocrlf=true  
color.diff=auto  
color.status=auto  
color.branch=auto  
color.interactive=true  
pack.packsizelimit=2g  
help.format=html  
http.sslcainfo=/bin/curl-ca-bundle.crt  
sendemail.smtpserver=/bin/msmtp.exe  
diff.astextplain.textconv=astextplain  
rebase.autosquash=true  
user.name=John Doe  
user.email=john@gmail.com  
  
Nick@NICK-PC ~  
$ _
```

What's Next?

- Go ahead and close Git Bash with following command:

```
$ exit
```

- Now that Git is set up on your computer, we're ready to move on to GitHub, which is a web-based platform that lets you do some pretty cool stuff
- Once GitHub is up and running, we'll show you how to start using these tools to your benefit