

git

Because we like silly names

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Red Hat

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What is git?

A programs that remembers the changes in your file(s)



[illegible]

- Mercurial(hg)
- Subversion Control(svn)
- bazaar(bzr)



Why should I use git?

- Once you get familiar it will be a part of you life.
- Cleaner approach to file management



[illegible][illegible]

[illegible]

Figure 1: life of a file

[illegible]

```
1  # RHEL/Fedora
2  sudo dnf install git
3  # or
4  sudo yum install git
5
6  # Ubuntu
7  sudo apt-get install git
```



Basic setup

```
1  # Your name
2  git config --global user.name "Sachin"
3
4  # Your Email
5  git config --global user.email "psachin@redhat.com"
```



Create a project

```
1  git init octo
2
3  # Check status of project
4  cd octo
5  git status
```

Add file to the project

```
1  # Create file
2  echo "git -- a version control tool" > introduction.txt
3
4  # Add file
5  git add introduction.txt
6
7  # or add everything within current directory
8  git add .
9
10 # or add files using wild card entries
11 git add *.txt
```



Check status of your project

```
git status
```



Commit if you are happy :D

```
git commit -m "My message"
```



Make changes to file

```
echo "I use it to manage project" >> introduction.txt
```



See changes w.r.t last commit

```
1  git diff
2  # or
3  git diff introduction.txt
```



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```
1  # to update already committed file
2  git add -u
   (do some more commits)
```



View commits

```
git log
```

```
# Each commit on single line
```

```
git log --oneline
```

```
# A more decorated view. Looks great when working with branch
```

```
git log --graph --decorate --oneline
```



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Built for developers

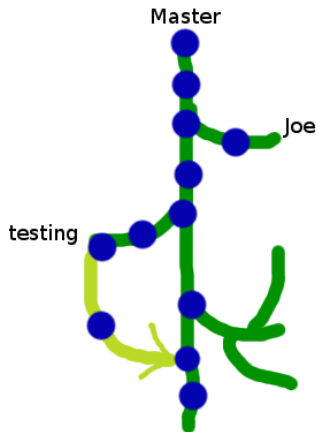
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Use at least one letter, one numeral, and seven characters.

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Git branch?



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```
1  # Create new branch from master  
2  git branch new-feature  
3  
4  # Change from master branch to new-feature branch  
5  git checkout new-feature  
6  
7  # Or perform above steps in one go  
8  git checkout -b new-feature
```



Git remote

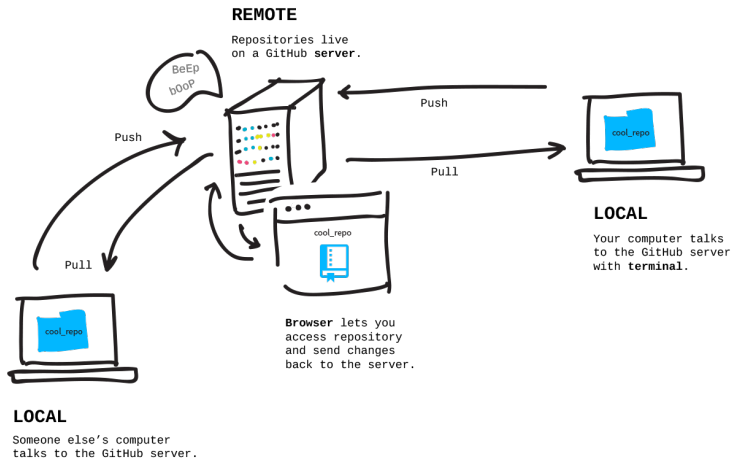


Image source: http://jlord.us/git-it/challenges/remote_control.html **redhat.**



Git remote

```
1  # Display remote host
2  git remote
3  # Or add verbosity
4  git remote -v
5
6  # Syntax: Add remote hosts
7  git remote add <REMOTE_NAME> <REMOTE_URL>
8
9  # Example
10 git remote add origin https://github.com/psachin/octo.git
```

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git pull/push

```
1  # Syntax: Push commit for the first time
2  git push -u <REMOTE_NAME> <BRANCH_NAME>
3
4  # Example
5  git push -u origin master
6
7  # You can use 'git push' afterwards
8
9  # To download latest changes from current branch
10 # (assuming remote is added)
11 git pull
```

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- github.com
- gitlab.com
- bitbucket.org
- sourceforge.net



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<https://git-scm.com/book/en/v2>



Thanks

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