How do I?

Git

A collection of resources.

- rev.cs.uchicago.edu [https://rev.cs.uchicago.edu]: For faculty and staff. Sign in and then email techstaff to get your project quota raised from 0. You won't be able to use this server until your quota is raised.

External Guides

- How to Git [https://www.atlassian.com/git/tutorials/what-is-version-control]
- git - the simple guide [http://rogerdudler.github.io/git-guide/]

Bare Git Repository in your CS Home directory

Source documentation [https://git-scm.com/book/en/v2/Git-on-the-Server-Getting-Git-on-a-Server]

SSH to a CS server

```
ssh cnetid@linux.cs.uchicago.edu
```

Initialize a bare repo in your CS home directory

Note that a bare repo cannot be edited directly. You will need to checkout the repository elsewhere in your home directory.

```
$ mkdir $HOME/gitbare/myproject.git
$ cd $HOME/gitbare/myproject.git
$ git init --bare --shared
```

Check out your repository

Even if you are on one of the linux.cs servers you will need to checkout the bare repo.

```
git clone cnetid@linux.cs.uchicago.edu:~/gitbare/myproject.git
```

Example

```
laptop:~$ ssh kauffman3@linux.cs.uchicago.edu
kauffman3@linux3:~$ mkdir myproject.git
kauffman3@linux3:~$ cd myproject.git/
kauffman3@linux3:~/gitbare/myproject.git$ git init --bare --shared
Initialized empty shared Git repository in /home/kauffman3/gitbare/myproject.git/
kauffman3@linux3:~/gitbare/myproject.git$ cd
```

Clone from inside your CS home

```
kauffman3@linux3:~$ git clone kauffman3@linux.cs.uchicago.edu:~/gitbare/myproject.git
Cloning into 'myproject'...
kauffman3@linux.cs.uchicago.edu's password:
warning: You appear to have cloned an empty repository.
```

```
kauffman3@linux3:~$ cd ~/myproject
kauffman3@linux3:~/gitbare/myproject$ touch README
kauffman3@linux3:~/myproject$ git add README
kauffman3@linux3:~/myproject$ git commit -a
[master (root-commit) b549cd7] add readme
 Committer: kauffman3 <kauffman3@linux3.cs.uchicago.edu>
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 README

kauffman3@linux3:~/myproject$ git push
kauffman3@linux.cs.uchicago.edu's password:
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 212 bytes | 212.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To linux.cs.uchicago.edu:~/myproject.git
 * [new branch]      master -> master
```

Clone from your laptop or elsewhere

```
laptop:~$ git clone kauffman3@linux.cs.uchicago.edu:~/myproject.git
Cloning into 'myproject'...
kauffman3@linux.cs.uchicago.edu's password:
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0)
Receiving objects: 100% (3/3), done.

laptop:~$ ls -l myproject/
total 0
-rw-rw-r-- 1 kauffman kauffman 0 Jan 19 10:11 README
```

/var/lib/dokuwiki/data/pages/vcs/git.txt · Last modified: 2021/09/22 17:19 by ctopper