

GITOLITE

1.To create the “gitolite server”

- **login as root**

Gitolite manages its configuration through git! To set this up properly, we'll create a operating system user whose sole function is to interact with gitolite.

The operating system user will be called **gitolite_server** to make it easy for our collaborators to remember.

```
$ adduser --system --group --shell /bin/bash --disabled-password gitolite_server
$ passwd gitolite_server
    enter the password for gitolite_server
```

2.To login to the gitolite_server

```
$ su - gitolite_server
$ passwd gitolite_server : 123456
```

3. Configure SSH Keys for Git Administration

On your **local** host i.e. **gitolite-admin** host, which you will be using to administor git and gitolite, you need to create an SSH key pair if you have not done so already.

Note: If you already have a key pair created, you skip this command to avoid overwriting your SSH keys

- **Go to ssh directory**

```
$ cd ~/.ssh
```

- **Type the below commands to generate ssh keypair**

```
$ ssh-keygen
    file_name :leave empty
    passphrase :leave empty
```

- **Go back to home directory and send the generated key to gitolite server by typing the below cmd**

```
$ scp ~/.ssh/id_rsa.pub
    gitolite\_server@192.168.4.30:/home/head\_server/admin.pub
```

- **Intsall git and gitolite on local host**

```
$ sudo apt-get-install gitolite3
$ sudo apt-get install git-core
```

4.To Configure Gitolite on the Gitolite server

Switch to Gitolite server terminal

- Clone gitolite repository from the Github repo

```
$ git clone https://github.com/sitaramc/gitolite.git
```

Once cloned gitolite-admin to your gitolite server

- Make a bin directory

```
$ mkdir -p $HOME/bin
```

- Install gitolite

```
$ gitolite/install -to $HOME/bin
```

- Set the Admin key sent from your local host to server

```
$ gitolite setup -pk admin.pub
```

5.How To Make as Gitolite Administrator

Switch to local host terminal

- make a temp dir to have gitolite-admin

```
$ mkdir tmp
```

- Change to temp directory

```
$ cd tmp
```

- Clone gitolite admin from gitolite server

```
$ git clone gitolite_server@192.168.4.30:gitolite:admin
```

- Now gitolite-admin directory cloned to your temp directory from server

6.Add New Users to Gitolite

- Switch to any User host

Note: If you already have a key pair created, you skip this command to avoid overwriting your SSH keys

- Go to ssh directory

```
$ cd ~/.ssh
```

- **Type the below commands to generate ssh keypair**

```
$ ssh-keygen
```

```
file_name :leave empty
```

```
passphrase :leave empty
```

Go back to home directory and send the generated key to gitolite server bnt typing the below cmd

```
$ cd ~
```

```
$ scp ~/.ssh/id_rsa.pub
```

```
gitolite\_admin@192.168.4.30:~/tmp/gitolite-admin/keydir/"username.pub"
```

7. Give configuration to the user according to the priority

Switch to local-host (gitolite-admin)

- **Go to the gitolite-admin dir**

```
$ cd tmp/gitolite-admin
```

```
$ cd conf
```

```
$ vi gitolite.conf
```

add a repo and give the read, write push, pull permissions to the added users

repo foo

```
RW+      =  alice
```

```
RW       =  bob
```

```
R        =  carol
```

- **Once you have made these changes, add and push the changes to server :**

```
git add conf
```

```
git add keydir
```

```
git commit -m "added foo, gave access to alice, bob, carol"
```

```
git push
```

8. To clone the created repo to the users

```
$ git clone gitolite_server@192.168.4.30:"repo_name"
```

9. To delete server

```
>> $ userdel git_server
```

```
>> $ sudo rm -rf/home/git_server
```