# GIT

### Git Access Control

#### Server side:

Step 1: create users dev1, dev2, qa1, qa2

>useradd dev1

>passwd dev1

Step 2: create two groups(devteam-'r''w' access, qateam-'r' access)

>groupadd devteam

>groupadd qateam

Step 3: add users to the groups

>useradd –G devteam –d /home/dev1 –m –s /bin/bash dev1

>useradd –G devteam –d /home/dev1 –m –s /bin/bash dev2

>useradd –G qateam –d /home/dev1 –m –s /bin/bash qa1

>useradd –G qateam –d /home/dev1 –m –s /bin/bash qa2


>groups dev1 (verify the user group)

Step 4: create a repository

>mkdir repo

>git init - -bare

Step 5:  provide 'r''w 'access to devteam for repo

>chown –R root:devteam repo

Dev0ps                                        Krishna    1

>setfacl –R –m g:devteam:rwx repo

>getfacl repo (verify access details)

Step 6: : provide 'r' access to qateam for repo

>setfacl –m g:qateam:rx repo

>getfacl repo

Step 7: create a soft link for the user

-go to user's home directory and create a soft link

>ln –s /newgit_repo /home/dev1/repo

-repeat for all users

**Client side:**

Step 1: create users dev1, dev2, qa1, qa2

>useradd dev1

>passwd dev1

Step 2: create two groups(devteam-'r''w' access, qateam-'r' access)

>groupadd devteam

>groupadd qateam

Step 3: add users to the groups

>useradd –G devteam –d /home/dev1 –m –s /bin/bash dev1

>useradd –G devteam –d /home/dev1 –m –s /bin/bash dev2

>useradd –G qateam –d /home/dev1 –m –s /bin/bash qa1

>useradd –G qateam –d /home/dev1 –m –s /bin/bash qa2

Dev0ps                                    Krishna  2

## Git Parallel strategy

**Dev1 :**

>mkdir repo

>cd repo

>git clone [dev1@192.168.242.100:/gitrepo](dev1@192.168.242.100:/gitrepo)

```
>git config --global merge.tool vimdiff
```

>touch hello.txt

>vi hello.txt

>git add hello.txt

>git commit hello.txt

>git push origin master

**Dev2:**

>mkdir repo

>cd repo

>git clone [dev2@192.168.242.100:/gitrepo](dev2@192.168.242.100:/gitrepo)

```
>git config --global merge.tool vimdiff
```

>touch hello.txt

>vi hello.txt

>git add hello.txt

>git commit hello.txt

>git push origin master

**Dev1:**

>vi hello.txt

>git add hello.txt

>git commit hello.txt

>git push origin master (PROMPTS TO USE git pull)

>git pull   ( Leads to merge conflicts)


**Resolve merge conflicts**

**Dev1:**

>git mergetool

>Enter

>opens up merge tool window and do the necessary changes

>git add

>git commit

>git push origin master