# Checking for existing SSH keys

devesh@DESKTOP-9T1HQF7 MINGW64 /c/Working/Git/GitTest (master)

$ ls -al ~/.ssh

ls: cannot access '/c/Users/deves/.ssh': No such file or directory

# Generating a new SSH key and adding it to the ssh-agent

devesh@DESKTOP-9T1HQF7 MINGW64 /c/Working/Git/GitTest (master)

$ ssh-keygen -t rsa -b 4096 -C "devesh.ase@gmail.com"

Generating public/private rsa key pair.

Enter file in which to save the key (/c/Users/deves/.ssh/id\_rsa):

Created directory '/c/Users/deves/.ssh'.

Enter passphrase (empty for no passphrase):

Enter same passphrase again:

Your identification has been saved in /c/Users/deves/.ssh/id\_rsa.

Your public key has been saved in /c/Users/deves/.ssh/id\_rsa.pub.

The key fingerprint is:

SHA256:9SUvR2+SO+xvzbcgQfuZJLxtwJWzT+zA9qw2crIYB30 devesh.ase@gmail.com

The key's randomart image is:

+---[RSA 4096]----+

| |

| . |

| ...+o |

| .=.+=+o |

| S. OoE=oo|

| . @+X+ |

| . + B+\*.|

| +oo=o.=|

| . .\*.o++|

+----[SHA256]-----+

Adding your SSH key to the ssh-agent

devesh@DESKTOP-9T1HQF7 MINGW64 /c/Working/Git/GitTest (master)

$ eval $(ssh-agent -s)

Agent pid 1596

devesh@DESKTOP-9T1HQF7 MINGW64 /c/Working/Git/GitTest (master)

$ ssh-add ~/.ssh/id\_rsa

Enter passphrase for /c/Users/deves/.ssh/id\_rsa:

Identity added: /c/Users/deves/.ssh/id\_rsa (/c/Users/deves/.ssh/id\_rsa)

devesh@DESKTOP-9T1HQF7 MINGW64 /c/Working/Git/GitTest (master)

$

# Adding a new SSH key to your GitHub account

Copy the SSH key to your clipboard.

devesh@DESKTOP-9T1HQF7 MINGW64 /c/Working/Git/GitTest (master)

$ clip < ~/.ssh/id\_rsa.pub

Testing your SSH connection

devesh@DESKTOP-9T1HQF7 MINGW64 /c/Working/Git/GitTest (master)

$ ssh -T git@github.com

The authenticity of host 'github.com (192.30.253.113)' can't be established.

RSA key fingerprint is SHA256:nThbg6kXUpJWGl7E1IGOCspRomTxdCARLviKw6E5SY8.

Are you sure you want to continue connecting (yes/no)? yes

Warning: Permanently added 'github.com,192.30.253.113' (RSA) to the list of known hosts.

Hi deveshase! You've successfully authenticated, but GitHub does not provide shell access.

Connect local repo to github

[git@github.com:deveshase/GitTest.git](mailto:git@github.com:deveshase/GitTest.git)

devesh@DESKTOP-9T1HQF7 MINGW64 /c/Working/Git/GitTest (master)

$ git init

Initialized empty Git repository in C:/Working/Git/GitTest/.git/

devesh@DESKTOP-9T1HQF7 MINGW64 /c/Working/Git/GitTest (master)

$ git status

On branch master

Initial commit

nothing to commit (create/copy files and use "git add" to track)

devesh@DESKTOP-9T1HQF7 MINGW64 /c/Working/Git/GitTest (master)

$ git commit -m "Initial Version"

[master (root-commit) 86dba20] Initial Version

1 file changed, 1 insertion(+)

create mode 100644 File1.txt

devesh@DESKTOP-9T1HQF7 MINGW64 /c/Working/Git/GitTest (master)

$ git commit -a

On branch master

nothing to commit, working directory clean

devesh@DESKTOP-9T1HQF7 MINGW64 /c/Working/Git/GitTest (master)

$ git remote set-url origin git@github.com:deveshase/GitTest.git

devesh@DESKTOP-9T1HQF7 MINGW64 /c/Working/Git/GitTest (master)

$ git push -u origin master

Counting objects: 4, done.

Delta compression using up to 4 threads.

Compressing objects: 100% (4/4), done.

Writing objects: 100% (4/4), 15.68 KiB | 0 bytes/s, done.

Total 4 (delta 0), reused 0 (delta 0)

To git@github.com:deveshase/GitTest.git

0adb6ca..c9d8a94 master -> master

Branch master set up to track remote branch master from origin.

Modified the file

devesh@DESKTOP-9T1HQF7 MINGW64 /c/Working/Git/GitTest (master)

$ git status

On branch master

Your branch is up-to-date with 'origin/master'.

Changes not staged for commit:

(use "git add <file>..." to update what will be committed)

(use "git checkout -- <file>..." to discard changes in working directory)

modified: Git Usage.docx

no changes added to commit (use "git add" and/or "git commit -a")

devesh@DESKTOP-9T1HQF7 MINGW64 /c/Working/Git/GitTest (master)

$ git add -A

devesh@DESKTOP-9T1HQF7 MINGW64 /c/Working/Git/GitTest (master)

$ git commit -m "Version 1"

[master e97051f] Version 1

1 file changed, 0 insertions(+), 0 deletions(-)

devesh@DESKTOP-9T1HQF7 MINGW64 /c/Working/Git/GitTest (master)

$ git push -u origin master

Counting objects: 3, done.

Delta compression using up to 4 threads.

Compressing objects: 100% (3/3), done.

Writing objects: 100% (3/3), 9.39 KiB | 0 bytes/s, done.

Total 3 (delta 2), reused 0 (delta 0)

remote: Resolving deltas: 100% (2/2), completed with 2 local objects.

To git@github.com:deveshase/GitTest.git

c9d8a94..e97051f master -> master

Branch master set up to track remote branch master from origin.

# Troubleshooting

## Problem 1:

devesh@DESKTOP-9T1HQF7 MINGW64 /c/Working/Git/GitTest (master)

$ git push origin master

To git@github.com:deveshase/GitTest.git

! [rejected] master -> master (non-fast-forward)

error: failed to push some refs to 'git@github.com:deveshase/GitTest.git'

hint: Updates were rejected because the tip of your current branch is behind

hint: its remote counterpart. Integrate the remote changes (e.g.

hint: 'git pull ...') before pushing again.

hint: See the 'Note about fast-forwards' in 'git push --help' for details.

Solution:

GitHub repo has seen new commits pushed to it, while you were working locally, I would advise using:

git pull --rebase origin master

git push origin master

devesh@DESKTOP-9T1HQF7 MINGW64 /c/Working/Git/GitTest (master)

$ git pull --rebase origin master

From github.com:deveshase/GitTest

\* branch master -> FETCH\_HEAD

First, rewinding head to replay your work on top of it...

Applying: Initial Version

devesh@DESKTOP-9T1HQF7 MINGW64 /c/Working/Git/GitTest (master)

$ git push origin master

Counting objects: 3, done.

Delta compression using up to 4 threads.

Compressing objects: 100% (2/2), done.

Writing objects: 100% (3/3), 313 bytes | 0 bytes/s, done.

Total 3 (delta 0), reused 0 (delta 0)

To git@github.com:deveshase/GitTest.git

bad3a9f..0adb6ca master -> master