Git in Computer Science Department

1 April 2016

Git Basics


Picture taken from https://git-scm.com/book/en/v2/
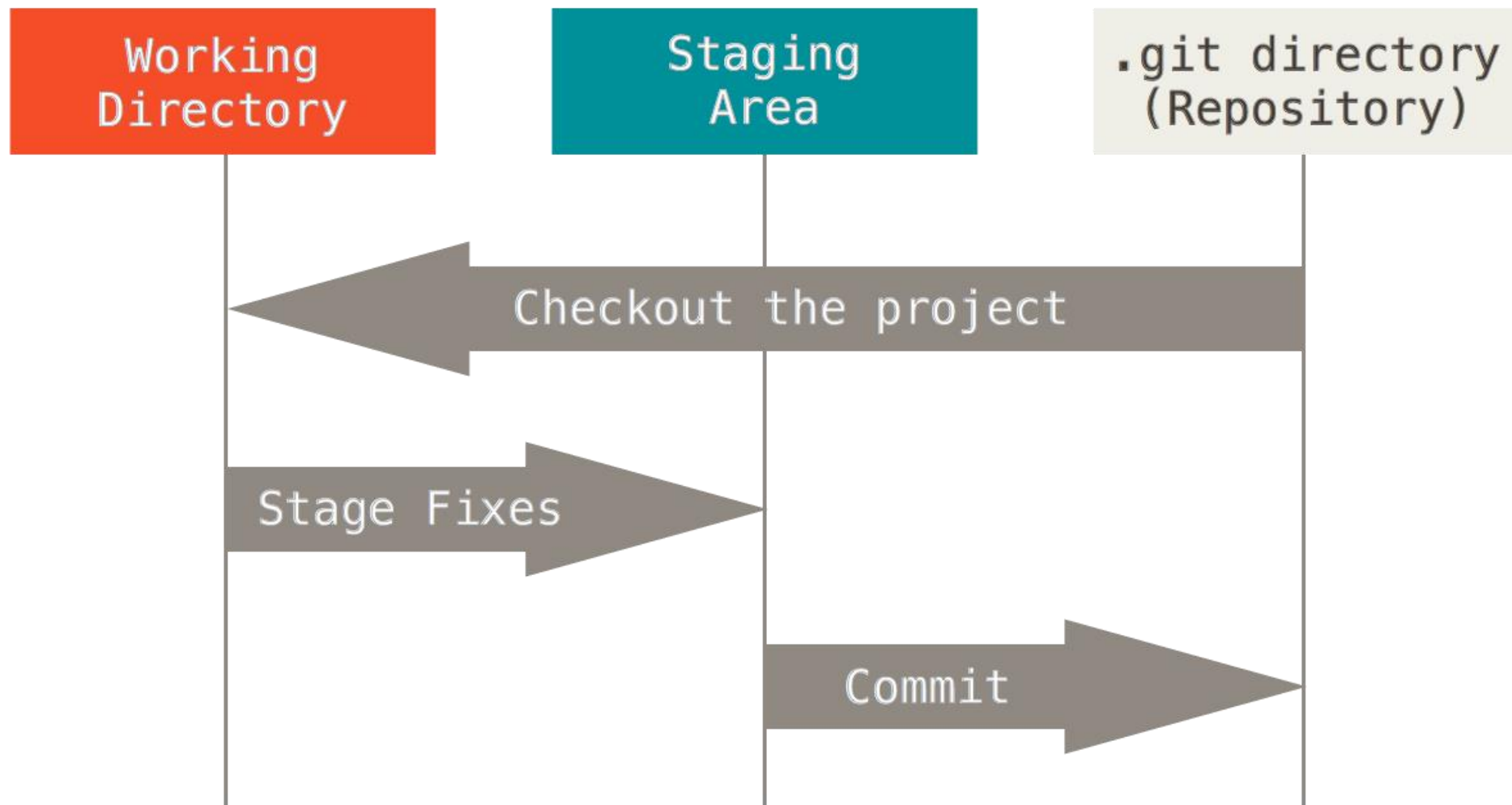
Windows: Installing Git Extentions

- https://github.com/gitextensions/gitextensions/releases

- GitExtensions-2.48.05-SetupComplete.msi also available from J: drive

- Make sure to install MsysGit

- Make sure to install KDiff

- Choose OpenSSH as SSH Client

- Sometimes KDiff's installer stays under Git Extentions' window: bring it up and accept license agreement etc

- MsysGit asks about adjusting PATH: leave setting as default "Use Git Bash only"

Git Extentions: Initial Setup

- Run Git Extentions
- Click on "Tools -> Settings"
- Click on Git config
- Put your name in "User name"
- Put your emial in "User email"
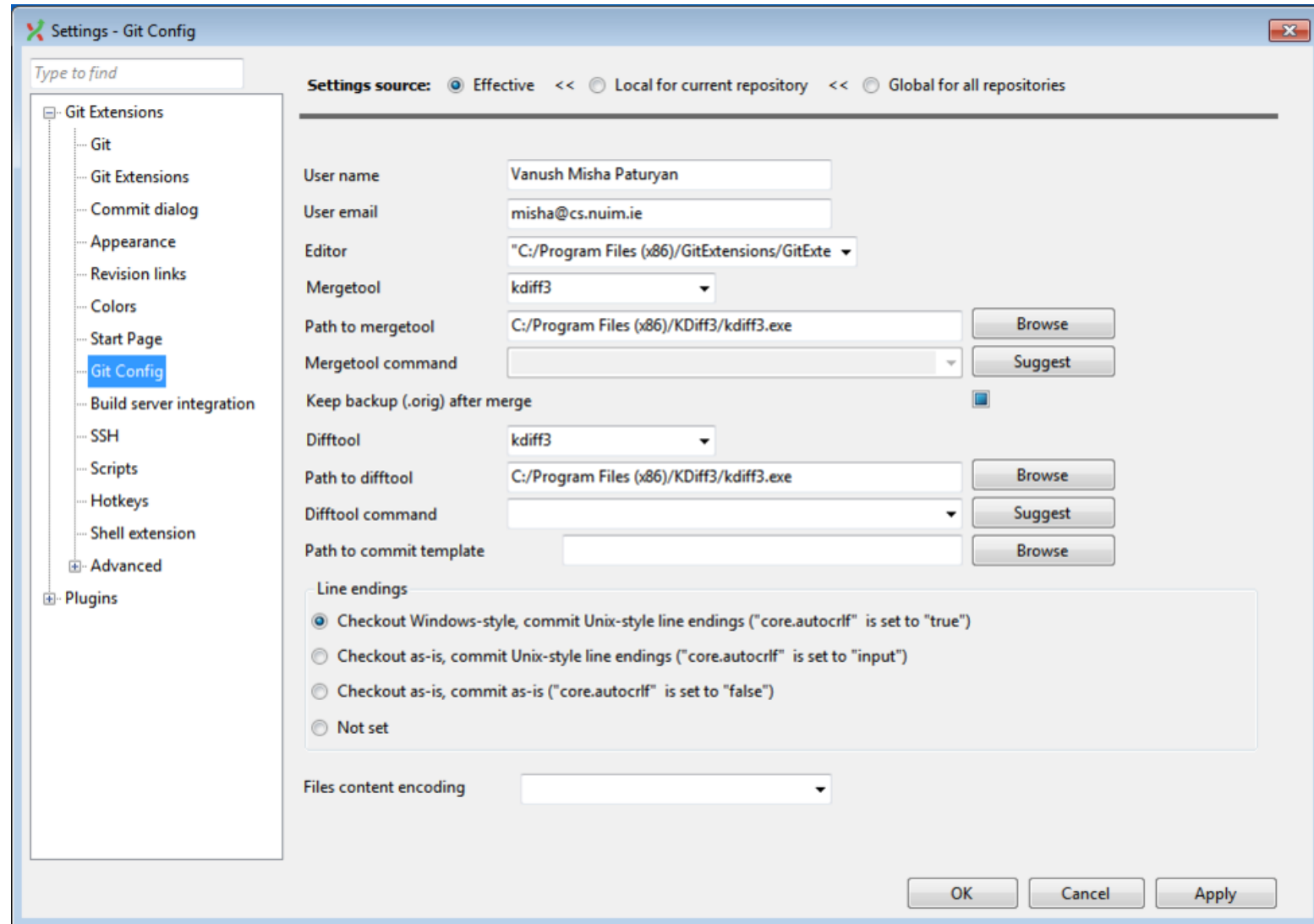
Windows: password-less login

- Click on "Tools -> Git Bash" in Git Extentions (A "cmd.exe" window should open)

- Type **`ssh-keygen`**

- Accept default values to all questions (by pressing Enter)

- Type **`scp ~/.ssh/id_rsa.pub <login>@git.cs.nuim.ie:`**

- (replace <login> with your login)

- (enter your password)

- Double-check that there were no errors!

Windows: password-less login (cont.)

- Connect to the server and put the public key in its proper place:
- In the shell: type **`ssh <login>@git.cs.nuim.ie`**
- (and enter your password again)
- Your prompt should change, it should say "<login>@git:~$"
- Type **`mkdir -p .ssh`**
- Type **`cat id_rsa.pub >> .ssh/authorized_keys`**
- Exit from server by typing "exit"
- Connect to the server again (this time it should not ask for the password)

First local repository

- Assumption: you have all your work in a folder named "Work".

- In the Windows Explorer, navigate to "Work", right-click and choose "GitExt Create new repository"

- (the Git shell command is "git init")
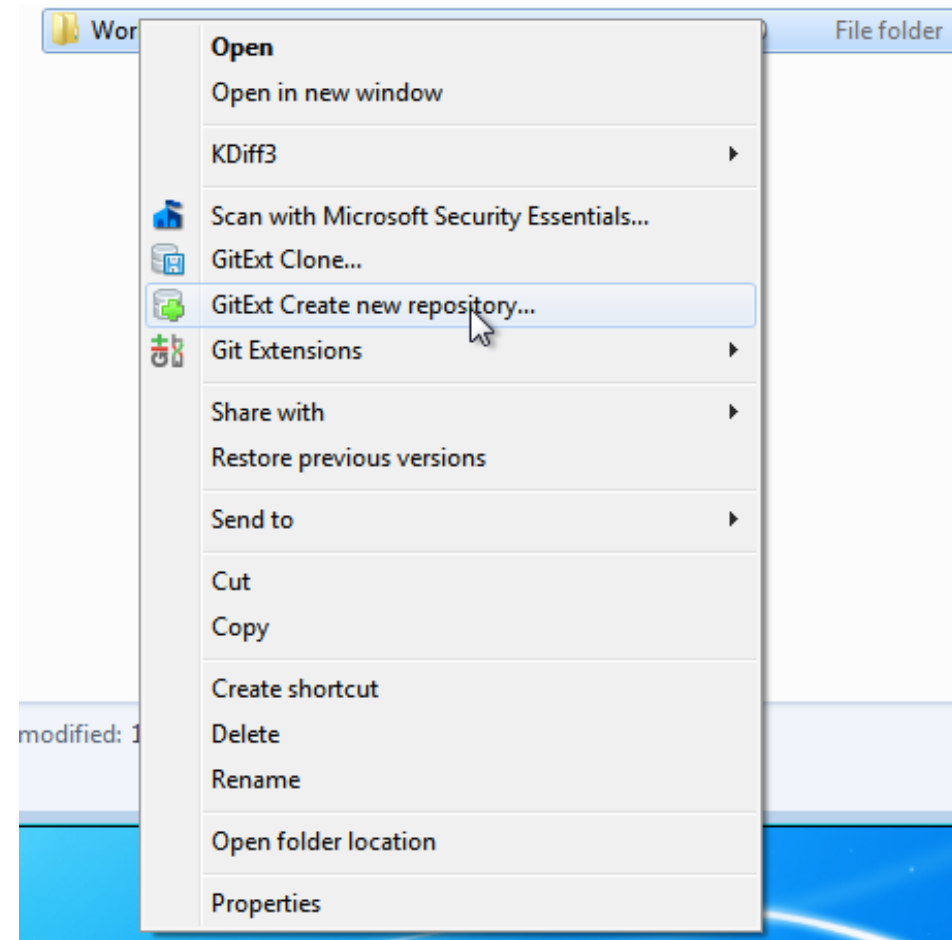
Adding files and commiting

- Right-click on the folder and choose "GitExt Browse"
- Click on "Commit" button to commit some files.
- Pick files from the top that you want to put into repository and stage them (CLI: `git add`)
- When all files you want to be part of one commit are staged enter the comment and Commit them (CLI: `git commit`)
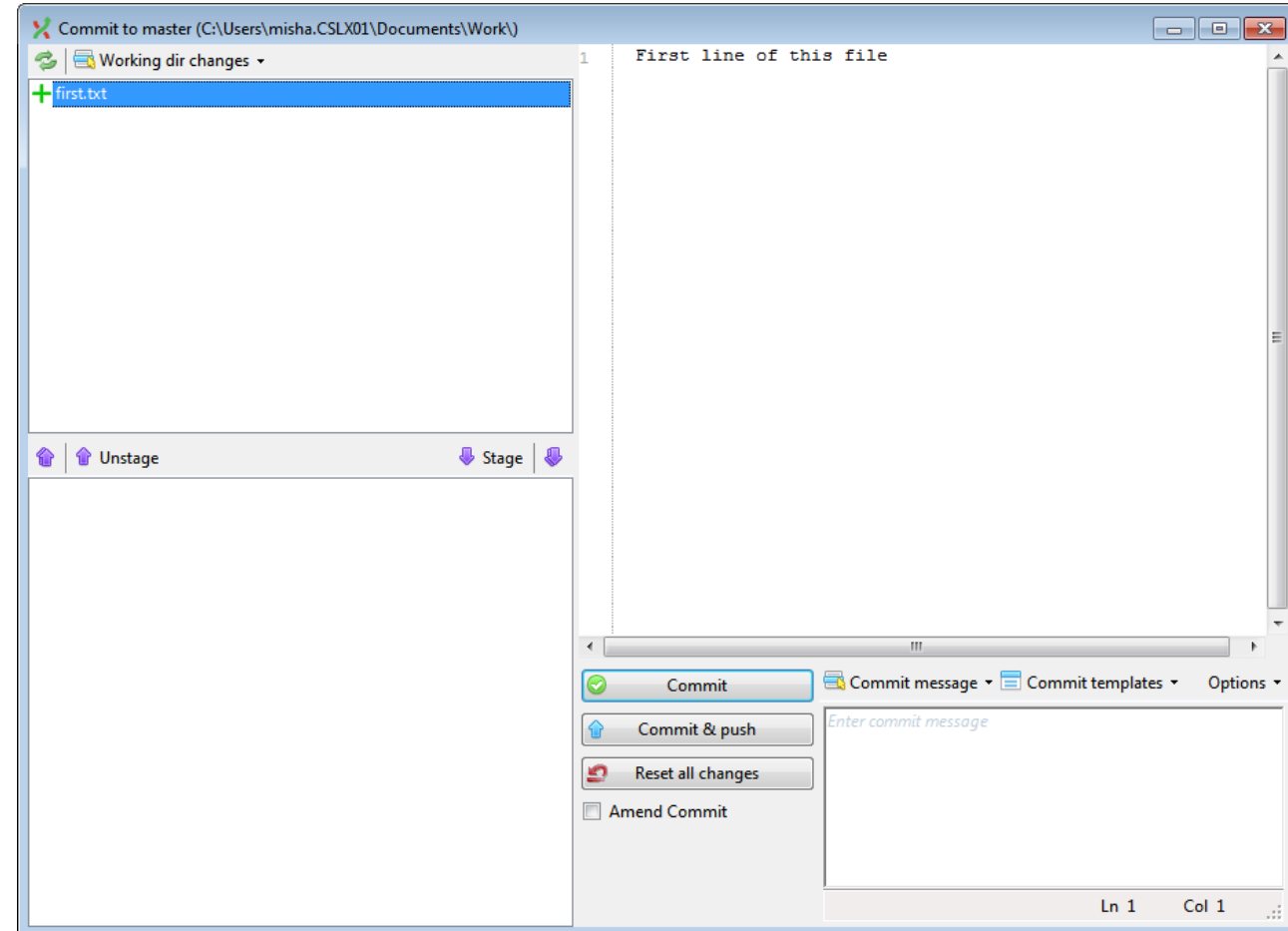
Remote repositories

- In GitExtentions: click on "Repository -> Remote Repositories"

- Click on "New", give it name "origin", and add Url in the form: ssh://<login>@git.cs.nuim.ie/repos/2016/desem/<login>

- (replace <login> with actual login)

- (CLI: git remote add origin <url>)
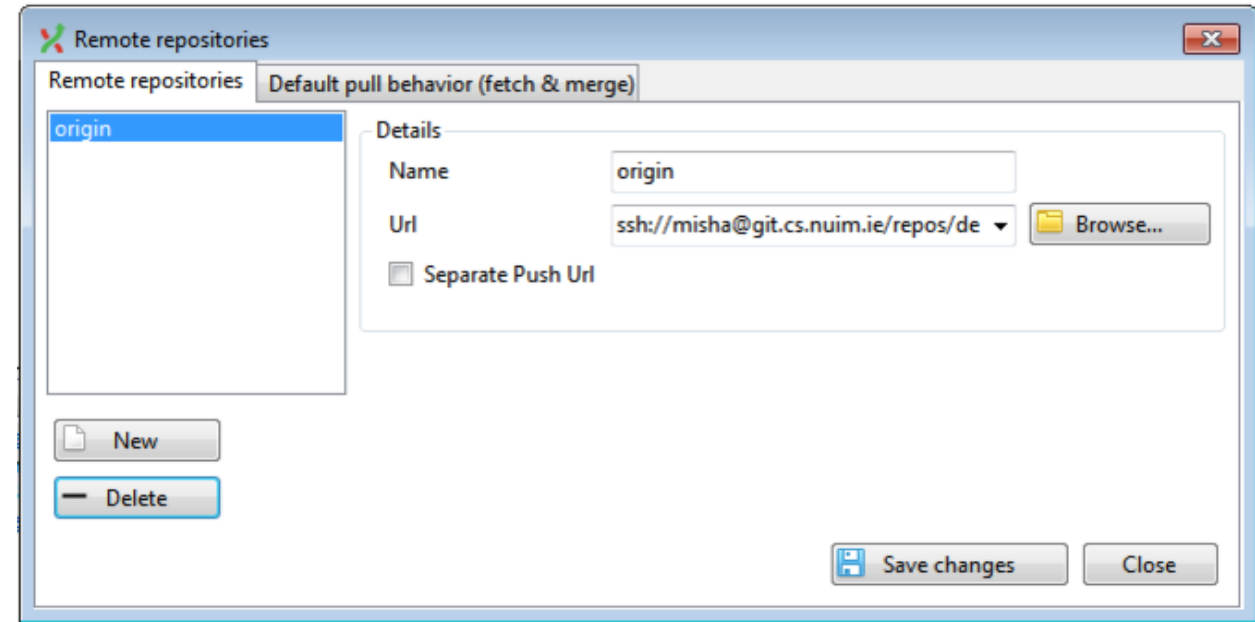
Remote: pull before you push

• Make sure to pull from the remote before pushing to it!