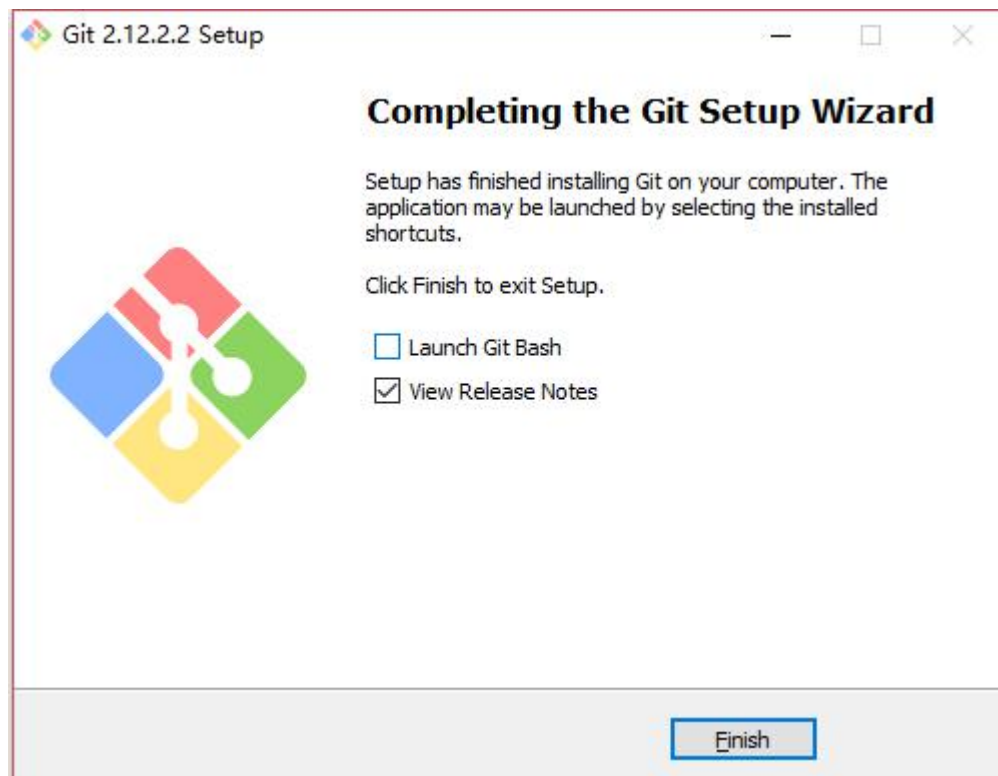
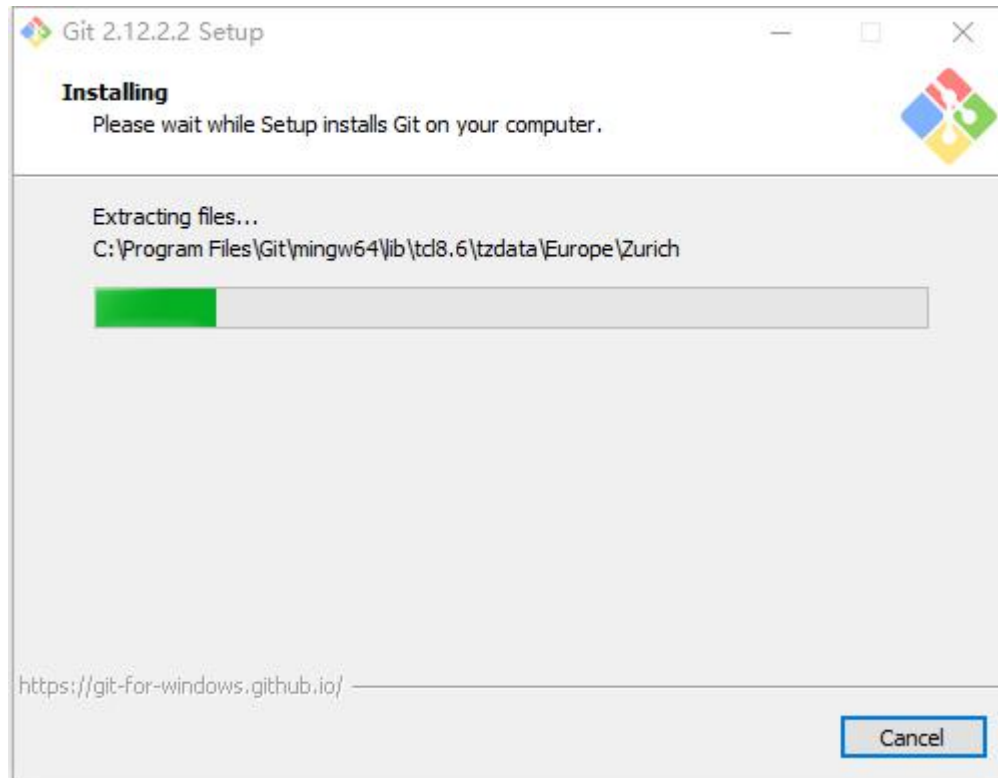


## Report of environment installation and learning

### Git - the distributed version control system

The installation of Git is quite easy, just follow the wizard and keep the default choices. Of course you can change some settings using the setup wizard.



After completing the Git Setup Wizard, we can start to learn about Git. According to the official website, Git is a free and open source distributed version control system designed to handle everything from small to very large projects with speed and efficiency.

The beginners can start to learn about Git from this website:

<https://try.github.io/levels/1/challenges/1>

Here are the scripts for reference:

```
> git init
$ git status
$ git status
$ git add octocat.txt
$ git status
$ git commit -m "Add cute octocat story"
$ git add '*.txt'
$ git commit -m 'Add all the octocat txt files'
$ git log
$ git remote add origin https://github.com/try-git/try_git.git
$ git push -u origin master
$ git pull origin master
$ git diff HEAD
$ git add octofamily/octodog.txt
$ git diff --staged
$ git reset octofamily/octodog.txt
$ git checkout -- octocat.txt
$ git branch clean_up
$ git checkout clean_up
$ git rm '*.txt'
$ git commit -m "Remove all the cats"
$ git checkout master
$ git merge clean_up
$ git branch -d clean_up
$ git push
```

In conclusion, Git is such a system that is quite useful for distributed version control, and our team can take advantage of this useful tool in our project.

### **Bug Tracking System and Continuous Integration Environment**

According to Github, continuous integration can help catch bugs by running your tests automatically, and you can merge your code with confidence using one of their continuous integration providers. Here Travis CI is chosen as the CI provider.

The beginners can start to learn about Travis CI from this website:

<https://docs.travis-ci.com/user/for-beginners>

The builds failed in the given example:


Search all repositories

My Repositories +

✗ pengr7/travis-broken-ex # 1

⌚ Duration: 1 min 56 sec

📅 Finished: less than a minute ago

pengr7 / travis-broken-example  build unknown

Current Branches Build History Pull Requests More options

✗ master 'Testing'

🔗 Commit e0ba467

🔗 Compare c041083..e0ba467

🔗 Branch master

👤 Rui Peng authored and committed

🔗 #1 failed

⌚ Ran for 51 sec

⌚ Total time 1 min 56 sec

📅 less than a minute ago

🔄 Restart build

Build Jobs

✗ # 1.1	🔗 </> PHP: 5.5	📖 no environment variables set	⌚ 35 sec
✗ # 1.2	🔗 </> PHP: 5.4	📖 no environment variables set	⌚ 30 sec
✗ # 1.3	🔗 </> PHP: hhvm	📖 no environment variables set	⌚ 51 sec

After fixing the code in Test.php, the build succeeded:


Search all repositories

My Repositories +

✓ pengr7/travis-broken-example # 2

⌚ Duration: 1 min 54 sec

📅 Finished: less than a minute ago

pengr7 / travis-broken-example  build unknown

Current Branches Build History Pull Requests More options

✓ master 'TestingTravisCI:fixingTheBuild'

🔗 Commit 76c9440

🔗 Compare e0ba467..76c9440

🔗 Branch master

👤 Rui Peng authored and committed

🔗 #2 passed

⌚ Ran for 1 min 2 sec

⌚ Total time 1 min 54 sec

📅 less than a minute ago

🔄 Restart build

Build Jobs

✓ # 2.1	🔗 </> PHP: 5.5	📖 no environment variables set	⌚ 30 sec	⌂
✓ # 2.2	🔗 </> PHP: 5.4	📖 no environment variables set	⌚ 35 sec	⌂
✓ # 2.3	🔗 </> PHP: hhvm	📖 no environment variables set	⌚ 49 sec	⌂