Setting up your personalized micc environment

micc was built for

University of Antwerp course on Parallel Programming

CalcUA Course on
High Performance Python – software development for PhD students and Postdocs

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Development of Python/C++/Fortran projects with micc

- This document assumes that all the tools of the development environment have been setup as described in https://micc.readthedocs.io/en/master/devenv.html.
- An Ubuntu 20.10 virtual machine for VirtualBox with all tools installed can be downloaded from https://calcua.uantwerpen.be/courses/parallel-programming/ubuntu-20.10.ova. It has a userid user with password calcua@ua
- This document describes how to customize the environment for so that micc is able to automatically create GitHub repos for the projects you create.

Create GitHub account (1)

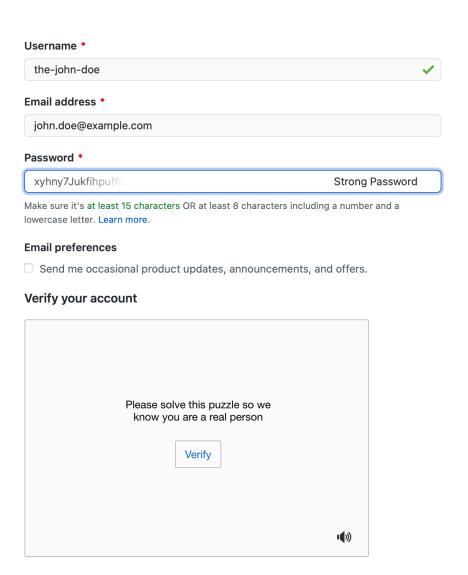
go to https://github.com,
 enter your e-mail address
 and click "Sign up for
 GitHub":



Create GitHub account (2)

- Choose your Username
- Choose a password (and remember it)
- Click "Verify" and solve the puzzle
- A button "Create account" will appear, click on it
- You will receive an e-mail at the e-mail address you provided to activate your account

Create your account



Create a personal access token for GitHub

- follow this guide: https://docs.github.com/en/github/authenticating-to-github/creating-a-personal-access-token
- At point 7 check at least these boxes:
 - repo
 - read:org
- After point 9 (copying the token), paste it in a text file .pat.txt in your home directory. Type this command in a terminal:

```
$ echo shift+ctrl+V > ~/.pat.txt
```

- Micc uses this file to automatically create a GitHub repo for your project
- Skip point 10.

Setup micc (1)

• Before micc can be used it must be set up by typing this command in a terminal. Provide your name, e-mail address and GitHub username:

```
$ micc setup
your full name [first-name last-name]: John Doe
your e-mail address [your.email@whatev.er]: john.doe@example.com
your github username (leave empty if you do not have one,
    or create one at https://github.com/join) [your-github-username]: the-john-doe
```

 After you provided your GitHub username, you may accept the default values of all further questions

Setup micc (2)

• Finally, micc will configure your git environment

```
Configuring git:
[ > git config --global user.name John Doe
l done.
 > git config --global user.email john.doe@example.com
 done.
 > git config --global credential.helper cache
 done.
```

Micc is now configured and ready to be used

Setup micc (3)

 If you want to change your preferences, you can edit the default entries in file

```
/Users/etijskens/_et_micc/micc_json
```

- Note that these changes will only affect NEW projects. Existing projects will be unaffected.
- Alternatively, you can start all over again typing

```
$ micc setup --force
```

• The first time you push a local repo to GitHub, git will ask the password for your GitHub account. After that it will remember the password.

Things I forgot to install ...

- openmpi:
 - Open terminal and execute these commands (sudo password is calcua@ua)
 - > sudo install openmpi-bin libopenmpi-dev

you're good to go

- browse the micc tutorials
 - at https://micc.readthedocs.io/en/master/devenv.html
 - or in the course's git repository
 - \$ cd workspace
 - \$ git clone https://github.com/etijskens/pp
 - \$ xdg-open pp/course-material/micc-documentation/index.html