

# Python training - lab 10

# Git

- SCM – source control management
- VCS – version control system

Benefits of a SCM:

- change history of files
- branching and merging
- traceability

SCM examples:

- Git
- CVS (Concurrent Versioning System)
- SVN (Subversion)
- Mercurial
- Perforce

# Git

Git – created in 2005 by Linus Torvalds

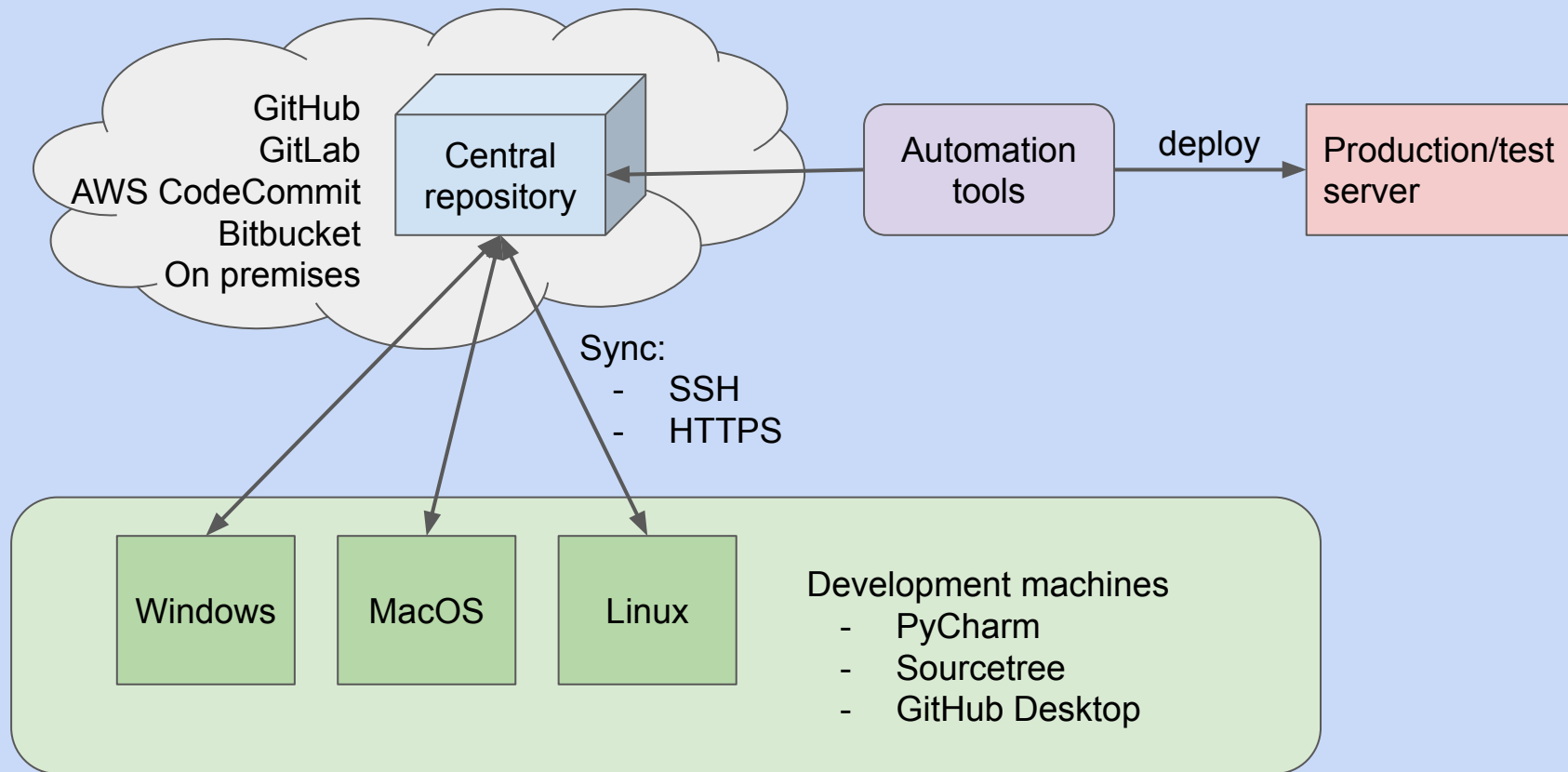
## Pros:

- open source
- strong support for non-linear development
- distributed repository model
- super fast
- solid command line utility (git bash)

## Cons:

- advanced features might be harder to understand

# Git



# Git

Central repository:

- GitHub - <https://github.com/>

Development tools:

- Git - <https://git-scm.com/>
- PyCharm

# Git - set-up project

Steps to set-up and work

- create GitHub repository
- create access token
- git clone project locally
- git config user.name "Name Surname"
- git config user.email "[username@email.com](#)"
- git config credential.helper store
- do changes -> commit -> push
- <- pull

# Git - command line

## Common Git actions

- clone - clone a remote repository
- commit - save changes to the local repository
- push - push the commits to the central repository
- fetch - downloads the changes from the remote repository
- pull - updates local version