VRE for regional Interdisciplinary communities in Southeast Europe and the Eastern Mediterranean



### Source Code Repository

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Introduction to version control
 VI-SEEM repository
 Introduction to git

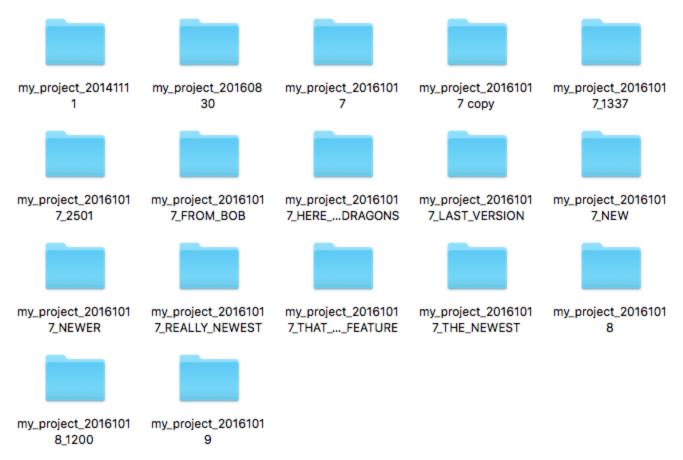
 starting a project
 making changes
 synchronising

**GUI** Clients

### **Introduction to Version Control**



#### The problem it tackles:



## **Introduction to Version Control**



Organizes your file versions.
 Keeps track of changes.
 Enables sharing and collaboration with others.

# **VI-SEEM Repository**



# Repository url: <u>https://code.vi-seem.eu</u> Requesting a new user account:

New user? Create an account

Name

Username

Email

Password - minimum length 8 characters



# Introduction to git - starting a project



### Starting a project git init

#### Checkout an existing project from a repository

- git clone /path/to/repository
- git clone username@host:/path/to/repository

#### Key terms:

- Repository
- Working dir
- Stage (Index)
- Head

# Introduction to git - making changes



#### Inspecting changes

🛛 git status

#### Saving changes

- □git add .
- □git commit -m `commit message'

#### Pushing changes

□git push origin master

□ if the origin repository is not set:

git remote add origin <repository\_url>

# Introduction to git - making changes



#### Updating

- □git pull
- □ or: git fetch & git update
- Merging
  - □git merge <branch>

# Introduction to git





#### Branching

□git checkout -b new\_branch

#### Switching branch

git checkout the\_branch

#### Deleting a branch

□git branch -d the\_branch

#### To push the branch to remote repository:

□git push origin <branch>



There are graphical interfaces for GIT and other SCMs.
 Most IDEs have some integrated support.

- Some recommendations:
  - TortoiseGIT (for Windows): <u>https://tortoisegit.org/</u>
  - Git's official list: <a href="https://git-scm.com/downloads/guis">https://git-scm.com/downloads/guis</a>

### Relevant XKCD







Thank you for your attention.