Wait! Are you not using Software Heritage yet?!

DMI-HPC Group Retreat

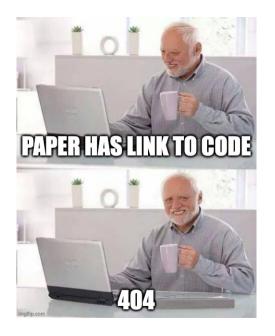
Quentin GUILLOTEAU

2024-07-17

University of Basel, Switzerland









• google drive? mega(upload)?

• google drive? mega(upload)? → please do not

- google drive? mega(upload)? → please do not
- zip on personal webpage?

- google drive? mega(upload)? → please do not
- \bullet zip on personal webpage? \leadsto What if you change institution? Webpage changes?

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- github/gitlab link?

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- github/gitlab link? → What if they close? (Google Code, Forge Inria)

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- zenodo? figshare? \(\simes \) Partial exploration?

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The key word is **Longevity**

Software Heritage – Presentation

- www.softwareheritage.org
- Archival of Source Code
 - GitHub, GitLab, BitBucket, ...
 - PyPI, NPM, Guix, Nix, ...
- since 2015/2016 (INRIA)
- Supported by UNESCO
- Jul. 24:
 - 301 Millions of projects
 - 4 Billions of commits
 - 19 Billions of files





Software Heritage – Biblatex 1 (1/2)

```
usepackage[
                     @softwarerevision{lb4omp,
  datamodel=software, title = {{LB40MP}},
]{biblatex}
                       author = {{DMI-HPC Group}},
\usepackage{
                       year = \{2021\},\
  software-biblatex
                       url = {https://github.com/unibas-dmi-hpc/LB40MP},
                       version = \{0.1\},
                       swhid = {
LB40MP \cite{lb4omp}
                       swh:1:rev:60e73ee93dccee745603fdc65825cbfa5130f4e9
```

 $^{^{1}} https://www.softwareheritage.org/2020/05/26/citing-software-with-style/$

Software Heritage – Biblatex (2/2)

LB4OMP [1]

References

[1] [SW Rel.] DMI-HPC Group, LB4OMP version 0.1, 2021. URL: https://github.com/unibas-dmi-hpc/LB4OMP, SWHID: \swh:1:rev:60e73ee93dccee745603fdc65825cbfa5130f4e9\rangle.

Conclusion

- Software Heritage
 - Long term archival of Source Code
 - supported by UNESCO
- Most adapted solution (as of today)
- Can easily and precisely cite software
- (sustainability?)

