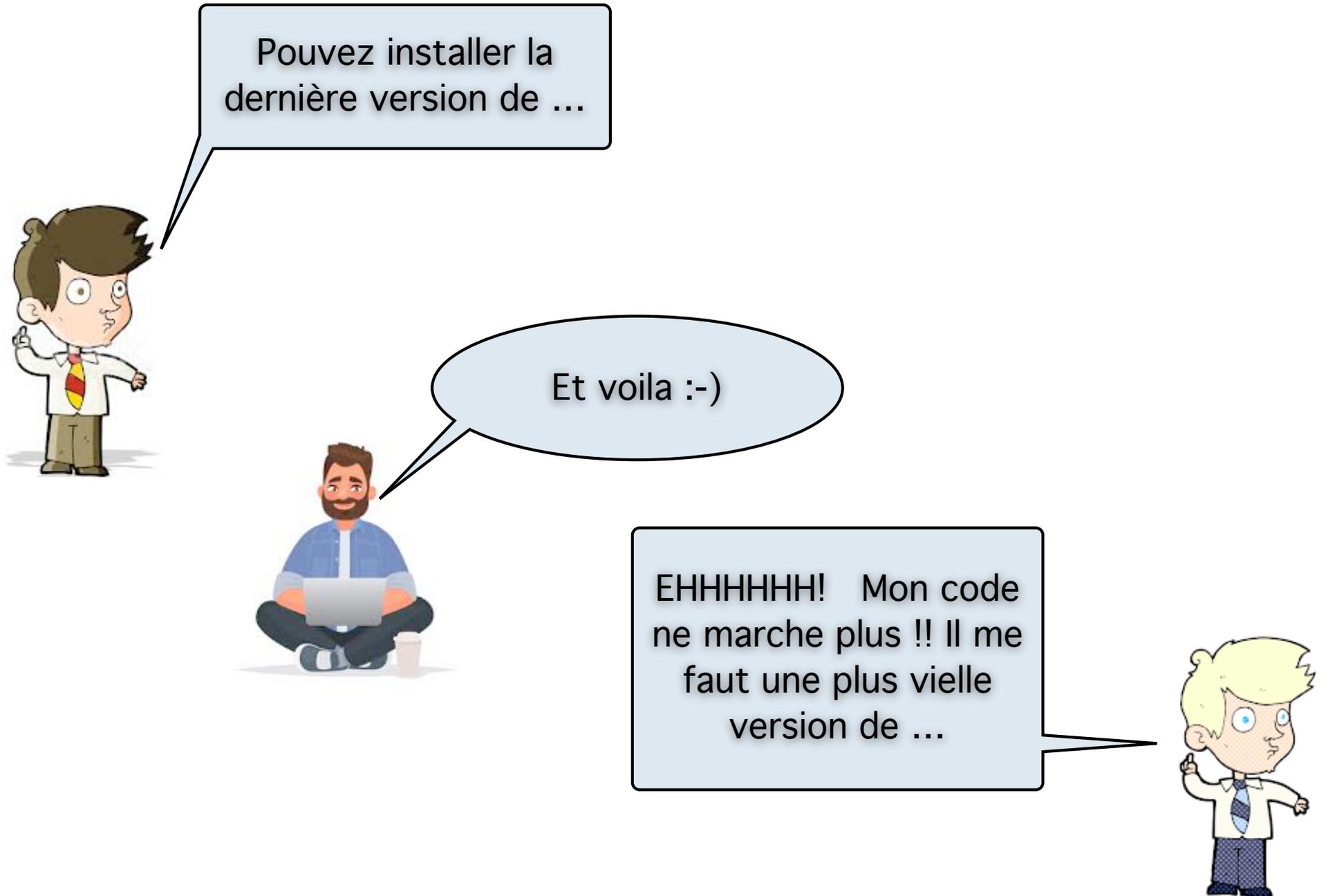




Utilisations des softwares

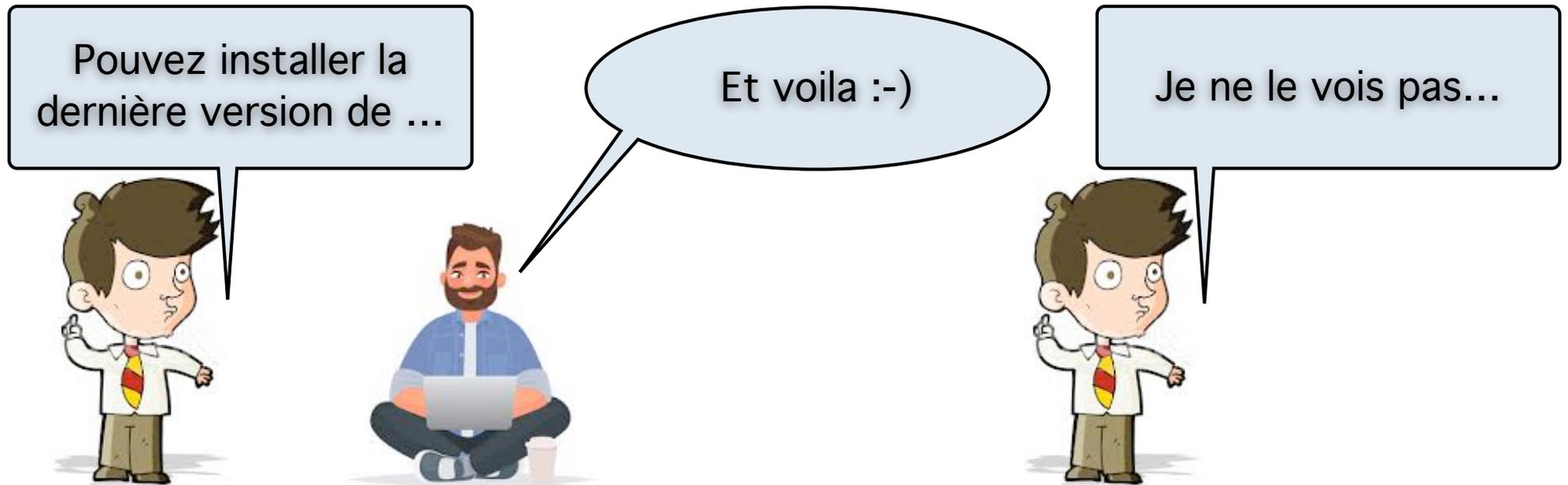
Olivier Mattelaer

Le conflit des utilisateurs



La Solution:

- Ne pas installer les softwares de manière globales
- Laisser le choix aux utilisateurs
 - ➔ Mais



trouver un soft

Chercher les différentes versions d'un soft

\$> module spider Python

```
Python:
-----
Description:
  Python is a programming language that lets you work more quickly and integrate your systems more effectively.

Versions:
  Python/2.7.14-GCCcore-6.4.0-bare
  Python/2.7.14-intel-2017b
  Python/2.7.15-foss-2018b
  Python/2.7.15-GCCcore-7.3.0-bare
  Python/2.7.16-GCCcore-8.3.0
  Python/2.7.18-GCCcore-10.2.0
  Python/2.7.18-GCCcore-11.2.0
  Python/3.6.6-foss-2018b
  Python/3.7.4-GCCcore-8.3.0
  Python/3.8.6-GCCcore-10.2.0
  Python/3.9.5-GCCcore-10.3.0-bare
  Python/3.9.5-GCCcore-10.3.0
  Python/3.9.6-GCCcore-11.2.0-bare
  Python/3.9.6-GCCcore-11.2.0
  Python/3.10.4-GCCcore-11.3.0-bare
  Python/3.10.4-GCCcore-11.3.0
  Python/3.10.8-GCCcore-12.2.0-bare
```

For detailed information about a specific "Python" package (including how to load the modules) use the module's full name. Note that names that have a trailing (E) are extensions provided by other modules. For example:

```
$ module spider Python/3.10.8-GCCcore-12.2.0-bare
```

trouver un soft

Chercher les différentes versions d'un soft

\$> module spider whisper

```
[omatt@mbackf2 omatt]$ module spider whisper
-----
whisper: whisper/1.0-foss-2021a-CUDA-11.3.1
-----
Description:
  Whisper is a general-purpose speech recognition model. It is trained on a large dataset of diverse audio and is also a multi-task model that can perform multilingual speech recognition as well as speech translation and language identification.

Other possible modules matches:
  whisper-models

-----
You will need to load all module(s) on any one of the lines below before the "whisper/1.0-foss-2021a-CUDA-11.3.1" module is available to load.

  releases/2021a
-----
Help:

Description
=====
Whisper is a general-purpose speech recognition model. It is trained on a large dataset of diverse audio and is also a multi-task model that can perform multilingual speech recognition as well as speech translation and language identification.
```

sélectionner un soft

Chercher les différentes versions d'un soft

\$> module spider whisper

```
You will need to load all module(s) on any one of the lines below before the "whisper/1.0-foss-2021a-CUDA-11.3.1" module is available to load.  
releases/2021a
```

\$> module load releases/2021a

\$> module load whisper

Quels sont les softwares accessibles pour le moment?

\$> module list

```
[omatt@backf2 omatt]$ module list  
Currently Loaded Modules:  
1) t1s/2018_01 (S) 38) protobuf-python/3.17.3-GCCcore-10.3.0  
2) StdEnv 39) pybind11/2.6.2-GCCcore-10.3.0  
3) releases/2021a (S) 40) SciPy-bundle/2021.05-foss-2021a  
4) GCCcore/10.3.0 41) typing-extensions/3.10.0.0-GCCcore-10.3.0  
5) zlib/1.2.11-GCCcore-10.3.0 42) libyaml/0.2.5-GCCcore-10.3.0  
6) binutils/2.36.1-GCCcore-10.3.0 43) pyyaml/5.4.1-GCCcore-10.3.0  
7) GCC/10.3.0 44) mpfr/4.1.0-GCCcore-10.3.0  
8) numactl/2.0.14-GCCcore-10.3.0 45) NASM/2.15.05-GCCcore-10.3.0  
9) XZ/5.2.5-GCCcore-10.3.0 46) x264/20210414-GCCcore-10.3.0  
10) libxml2/2.9.10-GCCcore-10.3.0 47) LAME/3.100-GCCcore-10.3.0  
11) libtesseract/0.16-GCCcore-10.3.0 48) x265/3.5-GCCcore-10.3.0  
12) hwloc/2.4.1-GCCcore-10.3.0 49) expat/2.2.9-GCCcore-10.3.0  
13) OpenSSL/1.1 50) libpng/1.6.37-GCCcore-10.3.0  
14) libevent/2.1.12-GCCcore-10.3.0 51) Brotli/1.0.9-GCCcore-10.3.0  
15) UCX/1.10.0-GCCcore-10.3.0 52) freetype/2.10.4-GCCcore-10.3.0  
16) libfabric/2.12.1-GCCcore-10.3.0 53) tcl/1.1.11-GCCcore-10.3.0  
17) PMIX/3.2.3-GCCcore-10.3.0 54) Fontconfig/2.13.93-GCCcore-10.3.0  
18) OpenMPI/4.1.1-GCC-10.3.0 55) xorg-macros/1.19.3-GCCcore-10.3.0  
19) OpenBLAS/0.3.15-GCC-10.3.0 56) x11/20210518-GCCcore-10.3.0  
20) FlexBLAS/2.0.4-GCC-10.3.0 57) FFmpeg/4.3.2-GCCcore-10.3.0  
21) gmp/2021a 58) FFmpeg/4.3.2-GCCcore-10.3.0  
22) FFTW/3.3.9-gompi-2021a 59) libjpeg-turbo/2.0.6-GCCcore-10.3.0  
23) ScalAPACK/2.1.0-gompi-2021a-fb 60) jbigkit/2.1-GCCcore-10.3.0  
24) foss/2021a 61) gzip/1.10-GCCcore-10.3.0  
25) CUDA/11.3.1 62) tcl/1.1.11-GCCcore-10.3.0  
26) bzip2/1.0.8-GCCcore-10.3.0 63) zstd/1.4.9-GCCcore-10.3.0  
27) ncurses/6.2-GCCcore-10.3.0 64) LibTIFF/4.2.0-GCCcore-10.3.0  
28) libreadline/8.1-GCCcore-10.3.0 65) P11Low/8.2.0-GCCcore-10.3.0  
29) Tcl/8.6.11-GCCcore-10.3.0 66) cudnn/8.2.1.32-CUDA-11.3.1  
30) S2L/3.35.4-GCCcore-10.3.0 67) magma/2.6.1-foss-2021a-CUDA-11.3.1  
31) QMP/6.2.1-GCCcore-10.3.0 68) QDRCopy/2.2-GCCcore-10.3.0  
32) libffi/3.3-GCCcore-10.3.0 69) UCX-CUDA/1.10.0-GCCcore-10.3.0-CUDA-11.3.1  
33) Python/2.9.5-GCCcore-10.3.0 70) NCCL/2.10.3-GCCcore-10.3.0-CUDA-11.3.1  
34) tadm4/61.2-GCCcore-10.3.0 71) expecttest/0.1.3-GCCcore-10.3.0  
35) Rust/1.60.0-GCCcore-10.3.0 72) PyTorch/1.11.0-foss-2021a-CUDA-11.3.1  
36) Ninja/1.10.2-GCCcore-10.3.0 73) whisper/1.0-foss-2021a-CUDA-11.3.1  
37) protobuf/3.17.3-GCCcore-10.3.0  
Where:
```

70 softwares dans la listes.
Ce sont les dépendances de whispers
(Et les dépendances des dépendances)

Et voila :-)

Mais, après tout cela, je lance
comment whisper?



```
$> whisper PATH_TO_FILE.MP4 --model large --language fr
```

Truc et astuces

- Les lignes de commandes
 - ➔ module load releases/2021a
 - ➔ module load whisper
- Peuvent être écrites dans le fichier `.bashrc`