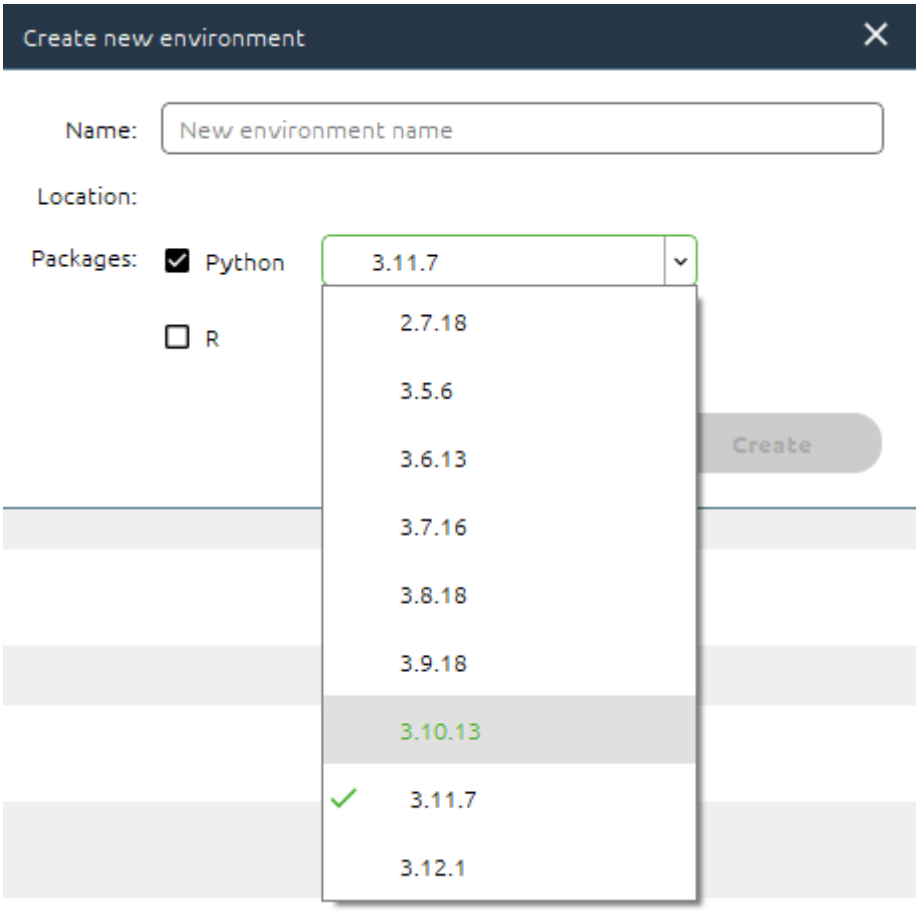
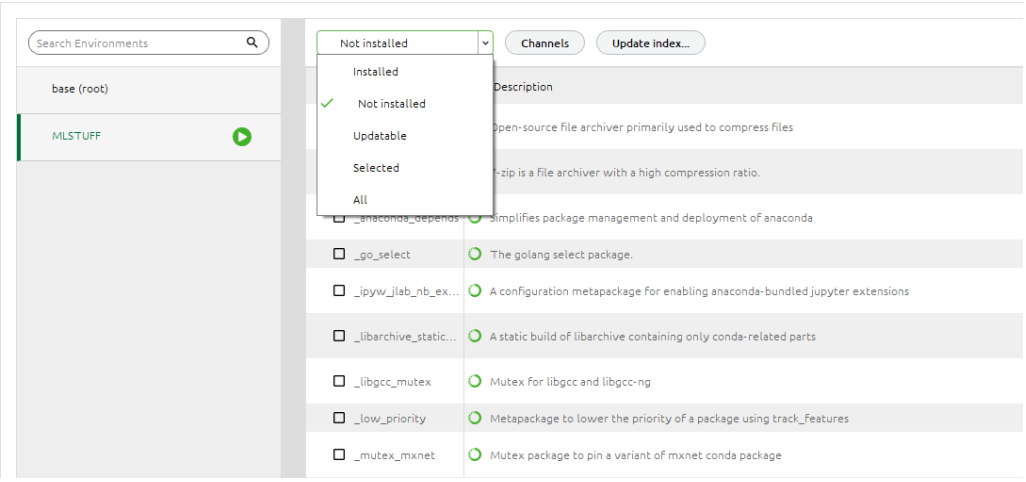
1. Install Unity 2022.3.4f1
    a. This is the version the examples use and the one I have tested
2. Install Anaconda
    a. [Free Download | Anaconda]
    b. We use anaconda as it provides a way to install python 3.10.13
3. Make an environment with Python 3.10.13
    a. Open Anaconda navigator
    b. Click on ”environments” in the left side
    c. Click on ”create” at the bottom
    d. Name your environment and choose the python version(here 3.10.13)

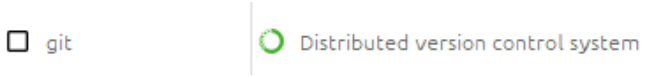


    e. After having created your environment, you need to run it. You run your environment by pressing the green arrow next to your environment.

    f. Here you choose “Open Terminal”
4. Use git to clone mlagents to a folder
    a. Git might not be installed by default
        i. To install git we use Navigator
        ii. Set Navigator to show all (or not installed) and not just installed



iii. Search for git and choose the one just named “git”



b. It doesn’t matter which folder you clone git to, I’ll just clone mine to C:/IT
c. Use the command “cd” followed by the path to where you want mlagents to be cloned to
    i. In my situation it would be cd C:/IT
d. Use the following command to clone mlagents into the folder you just navigated to (using cd)
    “git clone --branch release_21 https://github.com/Unity-Technologies/ml-agents.git”

5. Now we install PyTorch
    a. We use the PyTorch version that mlagents recommends (1.13.1)
    b. Here is a link to 1.13.1 Previous PyTorch Versions | PyTorch
    c. Now we find the download command under ”wheel” not under ”conda”
    d. Then we choose the version we use
        i. For me is cuda, but if you’re on a laptop without a GPU you’ll need ”CPU only”
        ii. You can check if you have cuda by running ”nvcc –version” in cmd (this also tells you the version of cuda you have)
        iii. If you use cuda you need to download the correct version of cuda as PyTorch 1.13.1 only supports 11.6 and 11.7

Wheel

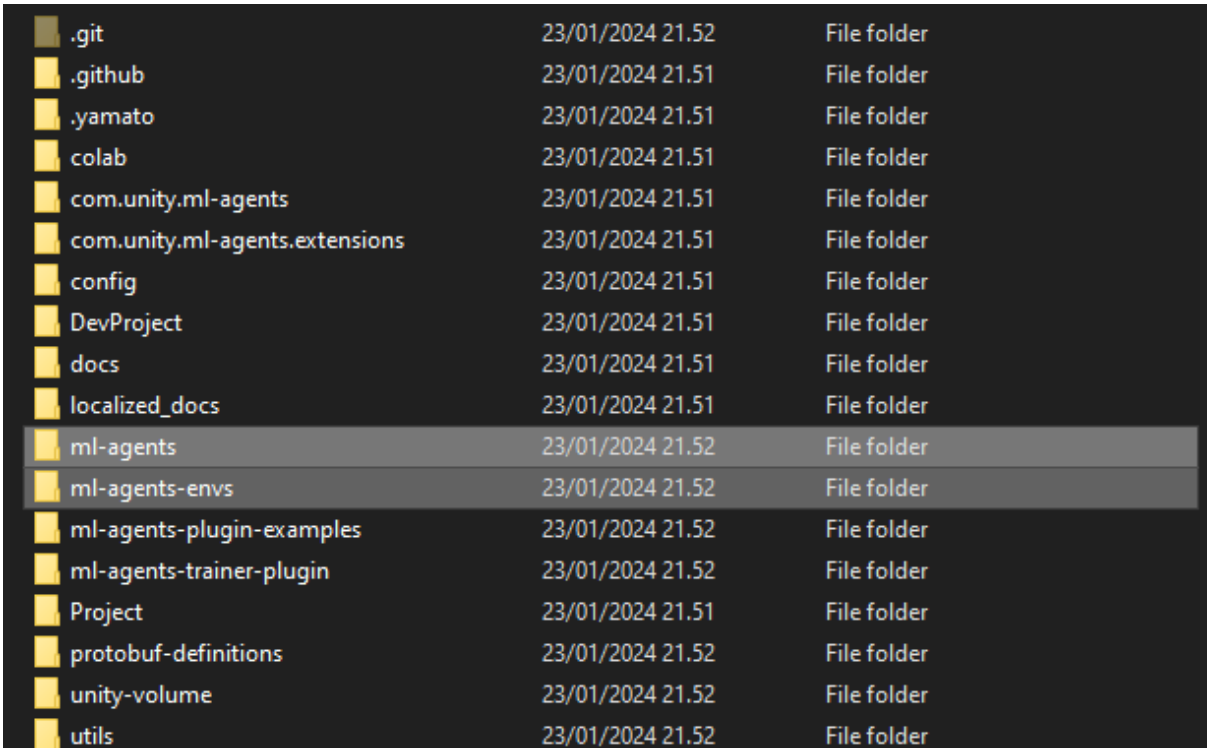
OSX

```
pip install torch==1.13.1 torchvision==0.14.1 torchaudio==0.13.1
```

Linux and Windows

```
# ROCM 5.2 (Linux only)
pip install torch==1.13.1+rocm5.2 torchvision==0.14.1+rocm5.2 torchaudio==0.13.1 --extra-index-url https://
# CUDA 11.6
pip install torch==1.13.1+cu116 torchvision==0.14.1+cu116 torchaudio==0.13.1 --extra-index-url https://downl
# CUDA 11.7
pip install torch==1.13.1+cu117 torchvision==0.14.1+cu117 torchaudio==0.13.1 --extra-index-url https://downl
# CPU only
pip install torch==1.13.1+cpu torchvision==0.14.1+cpu torchaudio==0.13.1 --extra-index-url https://download.
```

6. Now we install all the packages and dependencies that mlagents uses
    a. Go into your mlagents folder (the one you cloned)
    b. Find these 2 folders



    c. Go into ml-agents-envs and edit setup.py
    d. Change the specified version of NumPy and Python

```
    zip_safe=False,
    install_requires=[
        "cloudpickle",
        "grpcio>=1.11.0,<=1.48.2",
        "Pillow>=4.2.1",
        "protobuf>=3.6,<3.20",
        "pyyaml>=3.1.0",
        "gym>=0.21.0",
        "pettingzoo==1.15.0",
        "numpy>=1.23.3",
        "filelock>=3.4.0",
    ],
    python_requires=">=3.10.1,<=3.10.13",
    # TODO: Remove this once mypy stops having spurious setuptools issues.
    cmdclass={"verify": VerifyVersionCommand},  # type: ignore
)
```

e. The end of setup.py should look like this after you've changed it
f. Now we go to ml-agents (not envs) and edit that setup.py
g. Here we just change the python version to 3.10.13

```
    python_requires=">=3.10.1,<=3.10.13",
    entry_points={
        "console_scripts": [
            "mlagents-learn=mlagents.trainers.learn:main",
            "mlagents-run-experiment=mlagents.trainers.run_experiment:main",
            "mlagents-push-to-hf=mlagents.utils.push_to_hf:main",
            "mlagents-load-from-hf=mlagents.utils.load_from_hf:main",
        ],
        # Plugins - each plugin type should have an entry here for the default behavior
        ML_AGENTS_STATS_WRITER: [
            "default=mlagents.plugins.stats_writer:get_default_stats_writers"
        ],
        ML_AGENTS_TRAINER_TYPE: [
            "default=mlagents.plugins.trainer_type:get_default_trainer_types"
        ],
    },
    # TODO: Remove this once mypy stops having spurious setuptools issues.
    cmdclass={"verify": VerifyVersionCommand},  # type: ignore
)
```

7. Now we cd into the cloned mlagents folder
    a. Run these 2 commands
        i. python -m pip install ./ml-agents-envs
        ii. python -m pip install ./ml-agents
8. Now we can create a project or use the example projects
9. To use the examples you go to Unity Hub and click "add"
    a. Now navigate to the cloned mlagents folder and find the folder "project"
    b. Now you go to the package manager in Unity (under window) and install MLAgents (Remember to set it to show Unity Registry and not just In Project)
10. Now you can follow guides as it is now installed