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Creating mne conda environment

To create the same mne environment that we are using on COGNESTIC-25 Virtual Machines, follow these steps below.

Note: Because of different system settings and requirements, we do not guarantee it will work for you exactly in these steps.

STEP 0: Prerequisites

- WINDOWS users
 - Install WSL following instructions in the fMRI_analysis_on_Windows.pdf Steps 1 to 2.1.3
 - Start your WSL terminal and install Miniconda Step 2.5.1 in fMRI_analysis_on_Windows.pdf
 - Once inside WSL, follow the Linux instructions below.
- LINUX users
 - If you haven't done so already, install Miniconda (or less preferably Anaconda) on your system
 - Follow the steps below.
- MAC users
 - nothing, a standalone MNE-Python will be installed

STEP 1: Download the MNE installer

• WINDOWS (via WSL) and LINUX users

In the terminal, navigate to the directory where you want to save the installer and execute this command:

curl -L -o mne_installer.sh https://github.com/mne-tools/mne-installers/releases/download/v1.9.0/MNE-Python-1.9.0_0Linux.sh

• MAC (intel) users

Navigate to the directory where you want to save the installer and execute this command:

curl -L -o MNE-Python-1.9.0_0-macOS_Intel.pkg https://github.com/mne-tools/mne-installers/releases/download/v1.9.0/
MNE-Python-1.9.0_0-macOS_Intel.pkg

• MAC (Apple Silicon) users

Navigate to the directory where you want to save the installer and execute this command:

curl -L -o MNE-Python-1.9.0_0-macOS_M1.pkg https://github.com/mne-tools/mne-installers/releases/download/v1.9.0/MNE-Python-1.9.0_0-macOS_M1.pkg

STEP 2: Install MNE

WINDOWS (via WSL) and LINUX users

- Deactivate any active conda environments: conda deactivate
- Check the location of your conda environments: conda info
 Look for line envs directories:/home/username/miniconda3/envs.

 That path is the parent folder where conda keeps your environments.
- In the terminal execute (replacing the /home/username/miniconda3/envs with the path to your environments):
 - sh ./mne_installer.sh -b -p /home/username/miniconda3/envs/mne

Note: the -p option requires the full path where you want the environment installed, not just the environment name. That's why we use /home/username/miniconda3/envs/mne rather than just mne.

MAC users

Run the downloaded .pkg file.

This will install a new application 'MNE-Python', which has a self-contained conda and mne-environment. You can find in either in your Applications or using spotlight to search. This application has its own terminal 'Prompt (MNE)'. Use that to install additional packages and start Jupyter Lab.

STEP 3: Install additional packages

WINDOWS (via WSL) and LINUX users

- Activate the new mne environment: conda activate mne
- Run these commands:
 - pip install levenshtein
 - pip install rsatoolbox==0.1.5
 - pip install mtrf
 - python -m ipykernel install --user --name mne --display-name "Python (mne)"

MAC users

- Open your 'Prompt (MNE)'
- Run these commands:
 - pip install levenshtein
 - pip install rsatoolbox==0.1.5
 - pip install mtrf
 - python -m ipykernel install --user --name mne --display-name "Python (mne)"

STEP 4: Verify the installation

Run: python -c "import mne; mne.sys_info()"

If everything is set up correctly, this will print system and package information for your mne environment.

Now you should have the same **mne** environment we are using on the VMs.