Record of Installation 16in M1 Max Monterey

15 Nov 2021
Country- United Kingdom
Accessibility - Not Now
Join wifi network
Data & Privacy - Continue
Migration Assistant - Not Now
Apple ID - Sign In
Terms and Conditions - Tick I have read, Agree
Create a Computer Account - Details, Continue
Find My - Continue
Enable Location Services - Continue
Express Set Up - Continue
Analytics - Continue
Screen Time - Continue
Siri (enabled) - Continue
Improve Siri & Dictation - Share Audio Recordings, Continue
Choose Your Look - Dark, Continue
Calendar would like to use your current location - OK
About this mac - 12.01 Serial No XXXXXX Software Update
Up to date
Settings Apple ID iCloud unticked Photos, contacts, News, Stocks
Downloaded Xcode 13.1 from App Store
Open Xcode Agree, Open test project
Git login details
In terminal xcode-select - -install
From code.visualstudio.com downloaded VSCode 1.62.2 Apple Silicon to Applications
My extensions added to VSCode
From Desktop.github.com installed Github Desktop for macOS Apple Silicon
From julialang.org downloaded and installed Julia 1.6.2 (x86) and 1.7.0-rc2
From nodejs.org other downloads nodejs .pkg for 64-bit-ARM64 17.1.0, Run package install from Downloads
Downloaded Wolfram Engine for Developers macOS ARM
In Downloads executed dmg WolframEngine_12.3.1_MAC-ARM_DLM.dmg
2 steps drag Wolfram Engine to Applications and Install script from package
In Applications run Wolframscript - enter wolfram login credentials
In /Applications/Utilities copy Terminal and Paste Terminal, Rename one of them Terminal_x86, File get info and tick Open with Rosetta for Terminal_x86
In Terminal (not _x86):
/bin/bash -c "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"
echo 'eval "$(/opt/homebrew/bin/brew shellenv)"' >> /Users/YOURUSER/.zprofile
eval "$(/opt/homebrew/bin/brew shellenv)"
If first time:
In Github Desktop login clone URL https://github.com/WolframResearch/WolframLanguageForJupyter.git

In Terminal_x86:
/usr/bin/python3 -m venv x389
source x389/bin/activate
pip install --upgrade pip setuptools wheel
pip install jupyterlab
pip install numpy sympy matplotlib
pip install pandas plotly bokeh
pip install scipy seaborn statsmodels
pip install octave-kernel ipympl pyvista ipyvtklink vispy jupyter_rfb ipywidgets
watermark scilab-kernel gnuplot-kernel mdanalysis stochastic mdanalysistests
nglview
jupyter-nbextension enable nglview --py --sys-prefix
python -m gnuplot_kernel install - -user
ln -s /Applications/Julia-1.6.app/Contents/Resources/julia/bin/julia /Users/
YOURUSER/x389/bin/julia
julia
using Pkg
Pkg.add("IJulia")
Pkg.add("Plots")
Pkg.add("DifferentialEquations")
Pkg.add("Plotly")
Pkg.add("Pluto")
Pkg.add("Makie")
Pkg.add("AbstractPlotting")
Pkg.add("Molly")
Pkg.add("DynamicalSystems")
Pkg.add("GLMakie")
exit()
cd Documents/GitHub/WolframLanguageForJupyter
export WOLFRAMSCRIPT_KERNELPATH=/Applications/Wolfram\ Engine.app/
Contents/MacOS/WolframKernel
./configure-jupyter.wls add

In Terminal:
brew install qt
brew install octave
Run with octave - -gui
brew install wxmaxima
brew install r
brew install ffmpeg
brew install cmake
From scilab.org downloaded Scilab 6.1.1-MacOS 64bits dmg
Installed from dmg with install JRE option
Scilab warning on Monterey selected Try anyway
ln -s /Applications/scilab-6.1.1/Contents/bin/scilab-cli /Users/YOURUSER/x389/
bin/scilab-cli

Ensure iCloud Drive , options has Desktop and Documents folder ticked

ln -s /Users/YOURUSER/Documents/Developer /Users/YOURUSER/Developer

In Terminal_x86 In x389 environment:
export JUPYTER_CONFIG_DIR=~/x389
export WOLFRAMSCRIPT_KERNELPATH=/Applications/Wolfram\ Engine.app/Contents/MacOS/WolframKernel
export SCILAB_EXECUTABLE=/Applications/scilab-6.1.1.app/Contents/bin/scilab-adv-cli
jupyter notebook - -generate-config
jupyter notebook password
jupyter-lab --notebook-dir=~/Developer/solutions

From https://github.com/conda-forge/miniforge downloaded Miniforge3-MacOSX-arm64
In Terminal (not x86) cd Downloads
bash Miniforge3-MacOSX-arm64.sh yes Enter yes
Quit Terminal and restart
If forget to get script to init then do:
/Users/YOURUSER/miniforge3/bin/conda init zsh
conda config - -set auto_activate_base false
Close terminal and re enter
/Users/YOURUSER/miniforge3/bin/conda create -n a396 python=3.9.6
/Users/YOURUSER/miniforge3/bin/conda activate a396
which python shows /Users/YOURUSERminiforge3/envs/a396/bin/python
python -V shows Python 3.9.6
which pip shows /Users/YOURUSER/miniforge3/envs/a396/bin/pip
conda install -c conda-forge jupyterlab
conda install -c conda-forge numpy
conda install -c conda-forge sympy
conda install -c conda-forge matplotlib
conda install -c conda-forge pandas
conda install -c conda-forge plotly
conda install -c conda-forge bokeh
conda install -c conda-forge scipy
conda install -c conda-forge seaborn
conda install -c conda-forge ipympl
conda install -c conda-forge pyvista
conda install -c conda-forge ipyvtklink
conda install -c conda-forge vispy
conda install -c conda-forge watermark
conda install -c conda-forge lfortran
conda install -c conda-forge stochastic
conda install -c conda-forge nglview
conda install -c conda-forge astropy plasmapy
jupyter-nbextension enable nglview --py --sys-prefix
pip install octave-kernel scilab-kernel gnuplot-kernel mdanalysis mdanalysistests
ln -s /Applications/Julia-1.7.app/Contents/Resources/julia/bin/julia /Users/YOURUSER/miniforge3/envs/a396/bin/julia

```
ln -s /Applications/scilab-6.1.1/Contents/bin/scilab-cli /Users/YOURUSER/
miniforge3/envs/a396/bin/scilab-cli
R (capital)
install.packages('IRkernel')
75
install.packages('plotly')
IRkernel::installspec()
quit()
jupyter labextension install @techrah/text-shortcuts
jupyter labextension list
jupyter kernelspec list
jupyter nbextension list
mv .jupyter miniforge3/envs/a396
export JUPYTER_CONFIG_DIR=~/miniforge3/envs/a396
export WOLFRAMSCRIPT_KERNELPATH=/Applications/Wolfram\ Engine.app/
Contents/MacOS/WolframKernel
export SCILAB_EXECUTABLE=/Applications/scilab-6.1.1.app/Contents/bin/scilab-
adv-cli

conda env config vars set MPLBACKEND=qt5agg for Julia
conda env config vars set MPLBACKEND=MacOSX for Jupyter
conda deactivate
conda activate a396
ln -s /Applications/Julia-1.7.app/Contents/Resources/julia/bin/julia /opt/
homebrew/bin/julia17
n -s /Applications/Julia-1.6.app/Contents/Resources/julia/bin/julia /opt/homebrew/
bin/Julia16
In julia1.7
ENV["PYTHON"]="/Users/YOURUSER/miniforge3/envs/a396/bin/python3"
]
add PyPlot
add IJulia
add Plots
add DifferentialEquations
add Plotly
add Pluto
add Makie
add AbstractPlotting
add Molly *
add DynamicalSystems
add GLMakie
A star * indicates package errors in 1.7 rc2 kernel (not ARM compatible yet?) Use
1.6.2 kernel which runs with Rosetta
using Pluto
Pluto.run(host="0.0.0.0")
Pluto errors Monterey x86 and arm versions
exit()
jupyter notebook - -generate-config
```

jupyter notebook password
jupyter-lab build
jupyter-lab - -no-browser - -ip=192.168.1.16 - -port=8889 - -notebook-dir=~/
Developer/solutions
Verify working with test notebook Then shutdown

In VScode Terminal conda activate base pip install fortran-language-server

cd /Volumes/animal/codes
mkdir lammps
git clone -b unstable https://github.com/lammps/lammps.git lammps
cd lammps
git checkout
Standard cmake build and pylammps build
mkdir build
cd build
cmake ../cmake
make
cd ..
mkdir build-shared
cd build-shared
cmake ../cmake -DPKG_MOLECULE=yes -DLAMMPS_EXCEPTIONS=yes
-DBUILD_LIB=yes -DBUILD_SHARED_LIBS=yes
make

16 Nov 2021
Installed Parallels Desktop 17, Parallels Toolbox, Avogadro2, BalenaEtcher, brew
install get_iplayer, Obsidian, Zotero, VMD 1.9.4a51 arm64, NAMD 2.14 x86
Updated Ubuntu VM uname -a 5.40.0-90
Updated Windows 11 build to 22000.318