Installing Qiskit Metal Using Git+URL by Onri Jay Benally

• Double check online or on ChatGPT for recommended Python version for desired package to be installed.
• Download and install Anaconda. Make sure Jupyter Notebook gets installed. (https://www.anaconda.com/download)
• The following scripts for conda and pip commands should be performed in Anaconda Prompt [Admin mode]. Anaconda Prompt comes with the Anaconda installation. Check your app location.

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• Install pip. Confirm versions: conda install pip conda >> pip --version >> conda --version
• Create new environment: conda create --name <custom Qiskit Metal environment name> python=3.9 (or other recommended Python version)
• Access the new Qiskit Metal environment, proceed with installing desired packages and their dependencies: conda activate <custom Qiskit Metal environment name>
• Install ipykernel. Create custom kernel using ipykernel: conda install -c conda-forge ipykernel >> python -m ipykernel install --user --name=<name of custom kernel>
• Install Git: conda install git -y
• Install Visual Studio Installer from online >> install Visual Studio Community (Check the boxes on the right-side panel or under the Individual Components tab & be sure to select Windows 10 or 11 SDK). Select the C++ options on the Universal Windows Platform development box as well, including the Desktop Development with C++. [pip install gdspy won't be able to build wheels without an updated Visual Studio or Visual Studio Build Tools].
• Upgrade pip: python -m pip install --upgrade pip setuptools wheel
• Run a script to install directly from the GitHub URL: pip install git+https://github.com/qiskit-community/qiskit-metal (not the git URL)
• Run the next script to install a DXF interface: pip install git+https://github.com/mozman/ezdxf
• Add these 3 associated paths to System Variables: Anaconda3, Anaconda3\Scripts, & Anaconda3\Library\bin. Follow instructions from this video (https://youtu.be/Xa6m1hJHba0) for more details.
• Done! Qiskit Metal should be ready to use.

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Options:
• To export the GDS file from the Qiskit Metal render, go to the GDS button on the UI and select the download location using the browse button. Press Enter, then check download location in the File Explorer. Proceed with converting the downloaded file into a GDS by renaming the file with a .gds at the end of the name to turn it into GDS filetype.
• To add darkmode manually to Qiskit Metal, type (pip install qdarkstyle) into Anaconda Prompt [Admin mode].
• To update Qiskit Metal, type (pip install --upgrade qiskit_metal) into Anaconda Prompt [Admin mode].
• If the install is bringing up an error, be sure to restart entire system.