

ECE 4213/5213 Digital Signal Processing

Handout: How to Install Matlab on Your Own Computer

Fall 2023

Effective Spring 2020, the University of Oklahoma has a campus-wide site license for Matlab. This means that you can install Matlab on your own computer and run it for educational use, including use for this course. This handout explains how to do that. Use the following steps:

1. If you plan to install Matlab from off campus (for example, from your apartment using a non-OU commercial internet provider like Cox), then you **may** need to be connected to the OU VPN to run the Matlab installer. Once installed, to run Matlab from off campus you **will** need to be connected to the OU VPN. If you will **only** install and run Matlab from on campus, then you can skip to step 2. If you have already installed and can already run the OU VPN client software, then you can skip to step 2. Otherwise, here's how to install and run the OU VPN client:
 - a. To run the OU VPN client, you must have the PingID two-factor authentication app installed. If you have not already done so, then please install it by following the directions given here:
<https://itsupport.ou.edu/TDClient/30/Unified/KB/ArticleDet?ID=2543>
 - b. Once you have PingID installed, then use the following link to log into the OU IT Store software downloader using your OU 4x4:
<https://customapps.ou.edu/studio/itstore/Download>
 - c. Once logged in, click on the "Cisco AnyConnect 4.9" link (the full link name will include your operating system). You may need to click "PC," "Mac," or "Other" (for Linux) on the left-hand pane in order to see the link for Cisco AnyConnect.
 - d. Download and run the installer.
 - e. Once installed, you can run the VPN client. It will be called something like "Cisco Any Connect Secure Mobility Client." When you run it, there will be a dialog box with an entry field for "VPN:". It should say "soonerconnect1.ou.edu." If it doesn't say that, then type it in.
 - f. Click "connect". This should bring up another dialog box. Your group should be "Default user split-tunnel." Your username should be your OU 4x4. Type in your password and click "OK." This will bring up yet another dialog box with the user agreement. Click on "Accept." In most cases, you will then be required to authenticate using PingID. Once you complete the two-factor authentication you should be automatically connected to the VPN.
2. To install Matlab, follow these steps:
 - a. Use this link to go to the MathWorks web site:
<https://www.mathworks.com/academia/tah-portal/university-of-oklahoma-norman-557289.html>

- b. On this page, click the “Sign in to get started” button and log in with your OU 4x4.
- c. In the table that says “My Software”, click the line that says “MATLAB” in the second column.
- d. On the page that comes up, click the “Install and Activate” tab. Then click the button that says “Download Installer.” The installer should start automatically, but start it manually if it doesn’t.
- e. You may have to type in your OU credentials several times during the installation process.¹ You should install the entire product. But if you are short on space, make sure to get at least the following components:
 - i. Matlab
 - ii. Signal Processing Toolbox
 - iii. DSP System Toolbox
 - iv. Control Systems Toolbox
 - v. Symbolic Math Toolbox
- f. Once the installation is finished (which may take a long time), you can run Matlab.² Remember: if you want to run it from off campus, you need to start the OU VPN client first. If you forget to start the VPN client, then Matlab will fail with a license server error.

¹ Note for Linux users: on my Ubuntu system, the keyboard was locked out by the installation program making it impossible to type the required responses directly into the Matlab installer dialog box. If you google, you will find that others have also had this problem. **The solution is:** for each response you need to type into the installer window, type the text in another window (e.g., a terminal, shell window, or text editor like vi). Then use your mouse to copy the response from that window and paste it into the installer window. I had to do this for my OU userid and password and other text entries, but the radio buttons and “click on me” buttons all worked without having to do this.

² Note for Linux users: on my system, the Matlab executable was installed in `/usr/local/MATLAB/R2022a/bin/matlab`. To make this accessible, I put a symlink to it in `/usr/local/bin`. Alternatively, you can add `/usr/local/MATLAB/R2022a/bin/` to your PATH environment variable. Either way, you then invoke matlab simply by typing “matlab” at the command prompt and the program will open.