

Enabling Applications to use Internet Communication (including UDP – User Datagram Protocol):

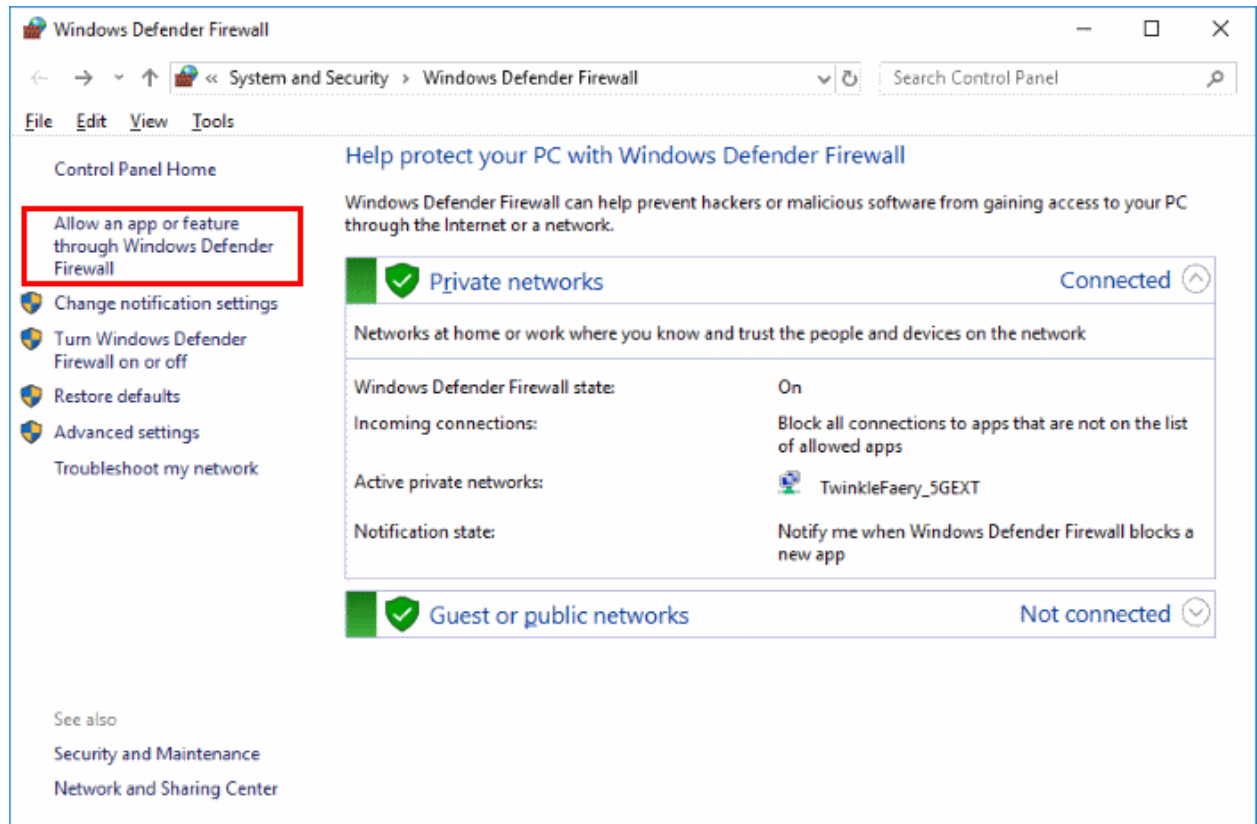
Every time you request information from the Internet, such as a web page or email message, your computer sends [data packets](#) to request the information. Servers receive the packets, and then send other packets back to your computer. Once your computer has reassembled the packets, you may see something, like an email message or web page.

A firewall can help prevent *bad packets* from entering your computer. Hackers love to run automated applications that can scan thousands of computers (including your computer) for [open ports](#) that can be exploited. To ensure that random individuals do not gain unauthorized access to your computer, you should utilize built-in firewalls to close open ports and disallow random network scans.

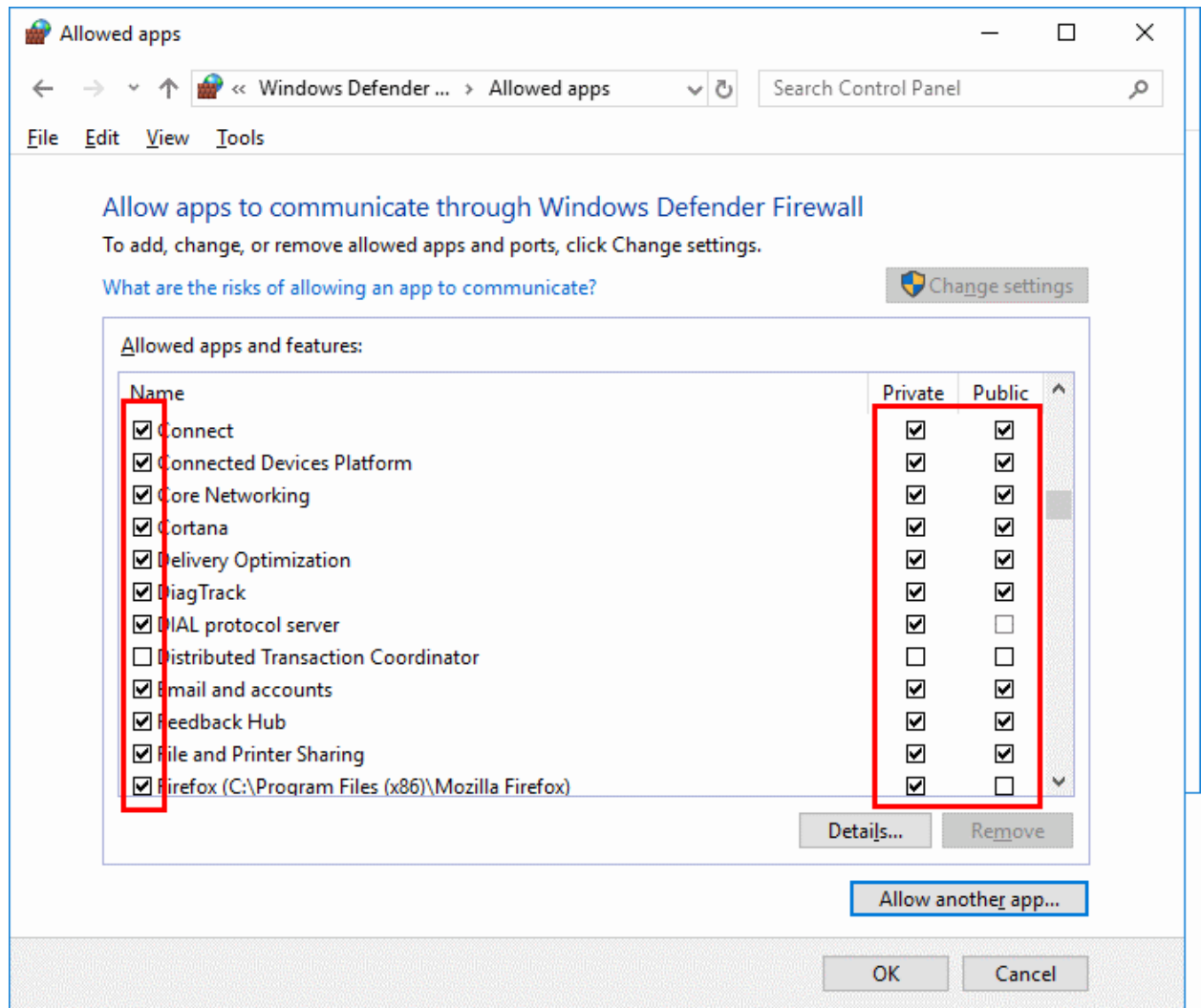
However, you may need to allow certain programs to send and receive communication packets to allow them to function properly, such as for sending information between MATLAB and another application. Below we will instruct you on how to do this for enabling communication for **MATLAB** (and the miniVIE), and for the **VMPL**.

Windows 10:

1. Select the “Start” button, then type “firewall”.
2. Select the “Windows Defender Firewall” option.
3. Choose the “Allow an app or feature through Windows Defender Firewall” option in the left pane.



4. Unchecking the box to the left of the application name disallows it from accessing network resources, while checking it allows access. You can also check the boxes to the right of the name labeled “Private” or “Public” to allow and disallow the app on private or public networks respectively.



5. If the program you wish to block or unblock is not listed, you can click the “Allow another app...” button to add it. Choose the application in the list and select “Add”. If the program is not in this list, use the “Browse...” button to select the program file manually.
 - a. **MATLAB** should be included in this list, but if you can’t find it, you can navigate to the folder location where the MATLAB application exists (open MATLAB, right click the MATLAB icon in the task bar, and then Shift+Right Click on the MATLAB Application that pops up above the Task Bar Icon).
 - b. To enable communication for the **VMPL**, you will need to find the VMPL application file where you downloaded it and unpacked it.

Mac:

Turning on and Configuring the Mac OS X Firewall

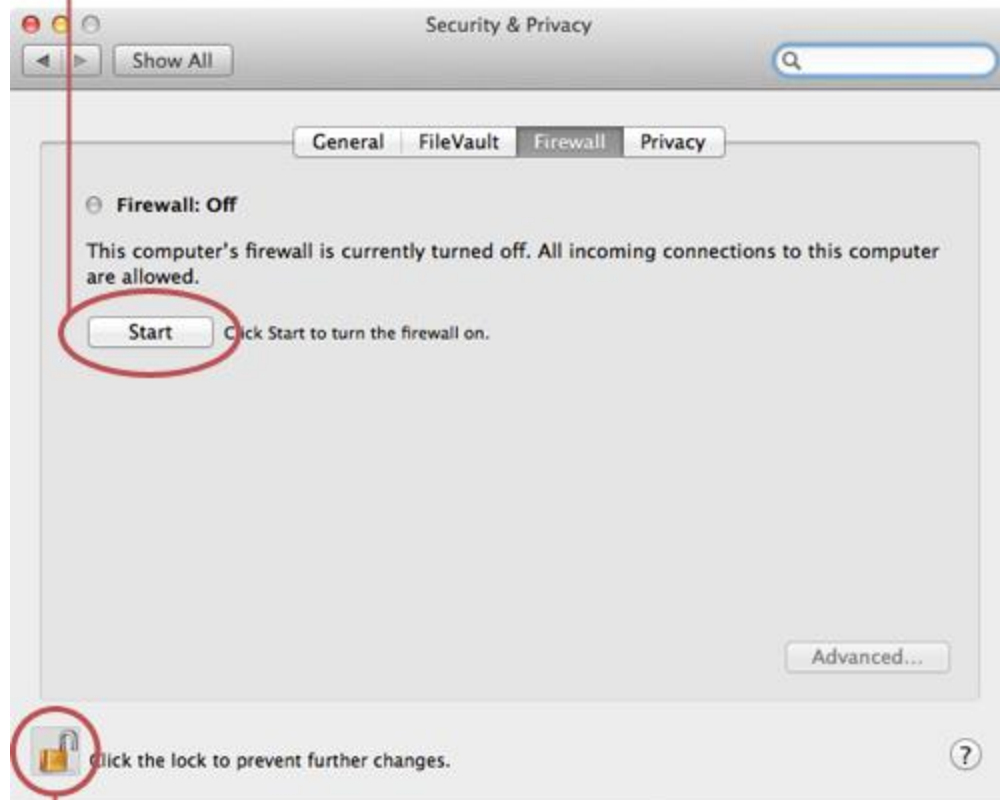
Here's how to turn on and configure your Mac's built-in firewall:

- 1) From the Apple menu, select **System Preferences**. The window shown below appears.



- 2) Select **Security & Privacy**.
- 3) Click the **Firewall** tab.
- 4) Click the lock icon and authenticate with your administrator username and password. The window shown below appears.

Click Start to enable the OS X firewall.

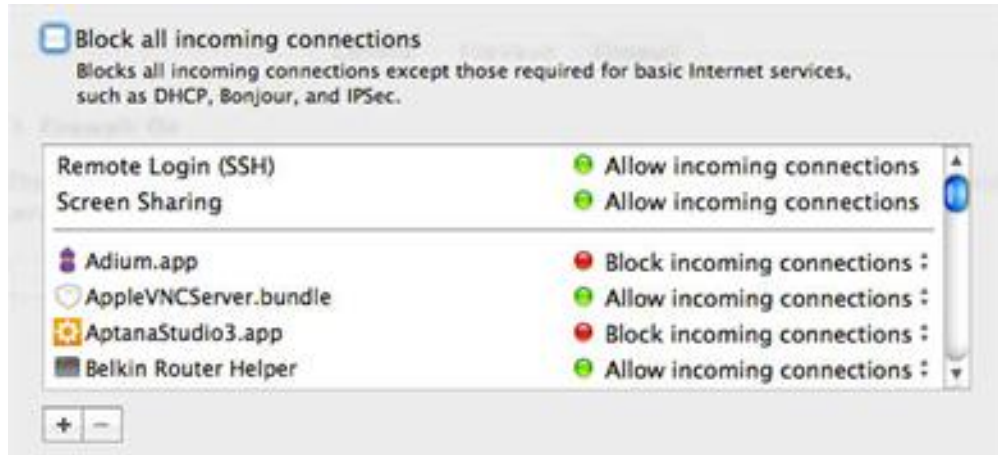


Click the lock and authenticate with your administrator user-name and password.

- 5) Click **Start**. The firewall turns on - you'll know it's enabled when you see the green light and the **Firewall: On** message, as shown below.



- 6) Click **Advanced (or "Firewall Options")**. The window shown below appears.



- 7) Find the applications that you would like to modify the connection settings for (**MATLAB**, and **VMPL**) and set them to “Allow incoming connections”.

Note: To Add applications (if they are not listed), then click on the (+) button.

- 8) Click **OK** to close the Advanced settings.
- 9) Close System Preferences. Your Mac is now protected by the built-in firewall!

Information derived from the following sites:

<https://www.technipages.com/blockunblock-programs-in-windows-firewall>

<https://pureinfotech.com/allow-apps-firewall-windows-10/>

<https://www.macinstruct.com/node/165>