

"Keeping You Informed"

Wired vs. Wireless

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General Information

People are always asking whether they should use a wired network connection or a wireless connection, or why their wireless connection isn't as reliable or as fast. The simple answer is that with wired Ethernet cables, an actual wire is connecting your computer directly into the network. With wireless networking, your computer is connected to a wireless access point over various frequencies in the air. That wireless access point is then connected directly into the network. The result is a much less reliable connection (as compared to the direct connection using an Ethernet cable). Because wireless is transmitted over a certain frequency to a wireless access point, it is much slower than an actual electrical signal through a wire, which explains why wired connections are much faster.

Wired:

- Direct connection into the network by Ethernet cable
- MUCH more reliable
- Faster

Wireless:

- Connection by air frequency to a wireless access point, which is then connected to the network
- Not nearly as reliable
- Slower

Conclusion:

In conclusion, if you are having issues with getting a good, constant reliable connection to a wireless network, simply use a wired connection with an Ethernet cable. Wired network connections are much more reliable and a significant amount faster.

How to Connect to Messiah's Network

Wired:

1. Check your laptop or desktop computer to see if it has wired connectivity.
2. Obtain an Ethernet cable (Sold in the bookstore and any other technology-related store, such as Best Buy and Circuit City). If connecting multiple computers in one room or apartment, obtain a network switch from Student Computer Services (located in Fry Apartments Basement).
3. Connect your computer to either your network switch or wall jack (labeled by a handwritten "C"). If connecting through a network switch, connect switch to the wall jack (labeled by a handwritten "C").

Wireless:

1. Make sure Ethernet cable is unplugged from computer and makes sure that the wireless is turned out (usually a combination of the “Fn” key and an F5, F6, F7, etc. key).

Windows: In the bottom right corner of the screen, right click on the icon that looks like a black computer screen with the))) coming out of it. Select Connect to Network or View Wireless Networks, or something similar. Then, click on either MC-WPA or MC-Open and click connect in the bottom right corner of the window. If you connect to MC-WPA, you should be prompted to enter in a username, password, and domain. Enter your messiah college username and password, and then leave the domain box blank. For MC-Open, you will have to sign in when you first open your internet browser.

Mac: Connecting to the wireless network on a mac is as easy as selecting 'MC-Open' or 'MC-WPA' from the airport menu in the menubar. Mac OS will prompt you for credentials if you connect to MC-WPA, these are your Messiah username and password. Be forewarned that wireless has been known to be imperfect in Leopard (OS 10.5), and MC-Open seems to be more reliable.