

# Networking

This contains information about the information network on campus including wireless networks, wired networks, and other information.

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# Dorm Networking

Residential students have a number of options for connecting their devices to the campus-wide network and gaining access to both MLC-offered services and the greater Internet. Depending on your room, and the device you wish to connect, the steps you follow to gain access will be slightly different. You can find a variety of topics, information, and instructions here to help you but ultimately, if you have questions or issues, you can [contact IT Services](#) for help.

Before continuing on, please read the [MLC Student-Owned Devices Policy](#).

## Connecting

### Wireless

Martin Luther College currently offers access to three wireless networks throughout campus including (starting Fall 2018) in dorms rooms around campus. Two of these networks are applicable to students. Click on the links below to find out how to connect to each network.

- [MLC Guest WLAN](#)
- [MLC Student WLAN](#)

For information on which network to choose, check below based on the type of device you are connecting with.

### Wired

While **wireless routers are now prohibited in the dorms**, wired connections are still supplied for

those instances where it makes sense to connect a device using an Ethernet connection. How you will go around connecting is dependent on how your room is setup.

To utilize the wired connections it is recommended to use a device that has access to a web browser as registration takes place using a webpage. If you have need to connect a device without a web browser to a wired port, please [contact IT Services](#).

## Wireless Access Points

If your room has one of our wireless access points installed, you will find two Ethernet ports available for your use either on the bottom or the top (depending on the orientation of the device). You are free to connect your device to either of these ports and you can register your device and have access to the Internet and other MLC services.

If you run into issues with the ports on your access point, please [contact IT Services](#).

## Standard Ethernet Ports

These ports will switch to the proper network depending on if your device is registered or not. The switching can sometimes take a few minutes. After you have successfully registered your device on the MLC Guest Network, your port will switch to the MLC Student Network within a few minutes.

## Quick Start Guide

1. Hook your computer up to the network jack using your own Ethernet cable (cables are available from the [MLC Bookstore](#), Walmart, Menards, Amazon, and other retailers).
2. Open your web browser (e.g. Firefox, Chrome, Internet Explorer, Edge, Safari, Opera, etc.).
3. Follow the registration instructions (you will need your MLC Account username and password to register).
4. Go take a walk to give the system time to register your machine if it doesn't seem to work at first.

# Devices

Some devices have specific requirements and will work better than others on certain networks. The following section will outline some of the issues to keep in mind when it comes to using your devices on campus.

## Laptops/Phones/Tablets/Desktops

These are, perhaps, the easiest devices to support on campus. The main issue to remember is that you will need to connect to the MLC Guest WLAN first before moving to the MLC Student WLAN. Successful registration on the MLC Guest WLAN will last for 7 days while the MLC Student WLAN registration will last for nearly a half-year.

If you are having issues connecting, it is often useful to forget the network and then try connecting again. Changing your MLC Account password will cause connection issues as well.

## Gaming Consoles

Most gaming consoles do not support WPA2 Enterprise authentication, which is required to connect to the MLC Student WLAN. As such, you can attempt to use the MLC Guest WLAN for access (if you have a web browser in order to register) or to connect via a wired connection and register that way.

**You will have a much better experience using a gaming console connected to a wired connection and registered on the MLC Network.**

If your console does not have a web browser (The Xbox One, Xbox Series X/S, Playstation 4, and Playstation 5 DO), then you will need to [contact IT Services](#) with the following information so that the console can be registered successfully:

- Name

- Dorm Name
- Room Number
- Type of Connection (either wired or wireless; if wired, which port you are connected to if connect to an access point)
- Console MAC Address (for either the wired or wireless adapter)
- Console Type

Your device will be registered, and your port switched (if connected to an access point) during the next business day.

We cannot guarantee each and every game/game console will be able to be successfully played/used here on campus. We will make our best effort to get things to work, but as this is a campus instead of a single home, some things cannot be supported.

# Streaming/Smart Devices/Printers/Televisions/Internet of Things

Streaming/smart devices, most of which do not support the needed encryption to log into the [MLC Student WLAN](#). As such, the streaming devices (Amazon Echo, Google Home, Chromecasts, Apple TV, Apple HomePod, Roku, etc.) will need to be registered in order to connect to the [MLC Guest WLAN](#) since the devices normally have no web browser or even a screen.

As such, you will need to [contact IT Services](#) with the following information so that the console can be registered successfully:

- Name
- Dorm Name
- Room Number
- Type of Connection (either wired or wireless; if wired, which port you are connected to if

connect to an access point)

- Device MAC Address (for the wireless adapter)
- Device Type

You can connect to a wired connection as well, just include your wired MAC address.

Some features of these devices require you to be on the same network as the devices you are using or controlling. For example, wireless printers will be available to anyone using the same network you are connected to. If you have specific needs, please [contact IT Services](#) and work with the staff there.

# Frequently Asked Questions

## **Why can't I play my Xbox/Playstation?**

It is possible you are connected to the Guest Network/MLC Guest WLAN and that device has more restrictions than the Student Network/MLC Student WLAN. You will need to connect to the correct network, register your device, or contact IT Services for help.

## **Can I use my own wireless router in the dorms?**

No. Please do not.

## **What is a MAC address?**

It is the hardware identifier for the network device on your machine. It is sometimes called a MAC address, hardware address, network address, or similar things. Often you can find the information needed in your device settings, printed on the box, on a sticker on the device, or on a network connection screen. They often look like pairs of letters and numbers separated by colons.

Look for something like this: `aa:bb:cc:11:22:33`.

This information is vital and is needed in order for the network to be able to recognize your device and give it the access you require. Providing even a single inaccurate digit or number is enough to stop a device from connecting properly. Often the information is found while setting up a network

connection on the device.

### **I can't connect my device to the network, what should I do?**

If you are having issues, the best option is to contact IT Services to get the discussion started on how to best meet your needs.

### **Can you open a port for me?**

As long as your gaming device is registered properly on the network, you should not need to request any additional network ports to be opened.

Be warned, some features of modern gaming devices are built with the idea that you are connected to a minimally shared internet connection in your home. However, this is not the case with a network shared among hundreds of students. If a feature is not working, please contact our office so that we can try and look into it but we are not able to guarantee operation of all features.

### **Where can I get an Ethernet cable?**

The MLC Bookstore sells cables, along with Walmart in New Ulm as well.

### **What if I want/need to hook up multiple devices using a wired connection and have only one port?**

You will need to purchase a network switch, NOT a router. Switches are usually quite cheap and easy to order online.

### **Does MLC filter Internet access?**

MLC maintains firewalls and a filtering service.

MLC provides Internet access for all students, staff, and faculty with the purpose of enabling and enriching your academic experience. While it is available for personal and recreational purposes, we contract a service that runs on our firewalls that filters out pornographic and gambling sites.

The firewalls also filter by port. Ports that are not needed for common web applications are blocked to

prevent attacks on your computers from the outside. This may prevent you from playing some multiuser games and other web applications that use non-standard ports in their setup.

Direct outbound SMTP (port 25 mail) is also blocked from the dormitories to prevent computers that have been infected with viruses from sending emails to propagate the virus. Outbound SMTP email is only allowed through MLC's mailhost which does antivirus checking prior to sending. You can, however, send and receive mail through any web based email system that uses ports 80 or 443.

# Wireless Networks

Martin Luther College maintains three wireless networks throughout the main campus and the Early Childhood Learning Center:

- [MLC Guest WLAN](#)
- [MLC Student WLAN](#)
- [MLC Academic WLAN](#)

Click the above links for more information.

## MLC Guest WLAN

The MLC Guest WLAN is the main wireless network on campus for guests on campus. It is an open network that requires users to register via a captive portal before users are able to access the Internet. The MLC Guest WLAN has access to a limited number of campus-specific web properties, so internal users should instead log into the MLC Academic WLAN or MLC Student WLAN.

## Who Can Connect

This is open to guests, faculty, staff, and students to connect to and use at any time. You do not need to have your device registered in the past, or have a campus-owned device either.

Guests will need to have a passcode (which can change periodically). Please contact the front desk or talk with another member of the campus for the current passcode. They will need to log into the MLC Portal and then visit Portal > Information > Network Guest Codes to retrieve the current passcode.

# How to Connect

Any computing device with a web browser and a wireless network adapter are able to connect to the MLC Guest WLAN wireless network. The following instructions will help you get started.

- Connect To the MLC Guest WLAN with your computing device and open a web browser.
- Read the Acceptable Use Policy, scroll to the bottom of the screen and click on the “I agree” button to proceed.
- Choose who you are.
  - **Guest:** Please enter your full name and the passcode you received from someone on the faculty or staff of Martin Luther College.
  - **MLC User:** Please enter your MLC Account username and password.
- You now have access to the internet for a 24 hour period as a guest or 183 days as an MLC user.

If, at any point, you have any issues. Please stop by IT Services on the second floor of the Wittenberg Collegiate Center.

## Frequently Asked Questions

### **I do not know the passcode needed as a guest.**

Guests will need to have a passcode (which can change periodically). Please contact the front desk or talk with another member of the campus for the current passcode. They will need to log into the MLC Portal and then visit Portal > Information > Network Guest Codes to retrieve the current passcode.

### **I cannot get the captive portal page to come up.**

Often this is an issue when the device's DNS settings are not being set automatically by our internal systems. This can happen if you (or your network admin at your school or work) have set the DNS servers manually, or there is an issue with your device.

Either reset your DNS settings or contact IT Services.

# MLC Student WLAN

## Who Can Connect

The MLC Student WLAN is meant for use by currently-enrolled students at Martin Luther College with a currently-active MLC Account.

## How to Connect

Your device will need to support WPA2 Enterprise security standards in order to connect to the MLC Student WLAN. The following instructions will help you get started.

First, you will need to connect to the MLC Student WLAN.

- On your device, choose the *MLC Student WLAN* from the list of available wireless networks.
- You should be prompted for some account credentials, use your [MLC Account credentials](#) to log into the network. You may need to accept/trust a server certificate as well.
- Wait to be connected!

If you have registered your device recently, you should now be connected and ready to go. If not, you will also need to register your device on the network.

- Connect To the MLC Student WLAN with your computing device and open a web browser.
- Read the Acceptable Use Policy, scroll to the bottom of the screen and click on the “I agree” button to proceed.
- Only current MLC users are able to register on the MLC Student WLAN. Select the **MLC User** option and then enter your MLC Account username and password.
- Your device is now registered for 183 days.

# MLC Academic WLAN

## Who Can Connect

The MLC Academic WLAN is meant for current faculty and staff to connect to in order to complete their work while on campus. This is most often used for MLC-owned devices and not personal devices.

## How To Connect

Your device will need to support WPA2 Enterprise security standards in order to connect to the MLC Academic WLAN. The following instructions will help you get started.

First, you will need to connect to the MLC Academic WLAN.

- On your device, choose the *MLC Academic WLAN* from the list of available wireless networks.
- You should be prompted for some account credentials, use your [MLC Account credentials](#) to log into the network. You may need to accept/trust a server certificate as well.
- Wait to be connected!

If you have registered your device recently, you should now be connected and ready to go. If not, you will also need to register your device on the network.

- Connect To the MLC Academic WLAN with your computing device and open a web browser.

- Read the Acceptable Use Policy, scroll to the bottom of the screen and click on the “I agree” button to proceed.
- Only current MLC users are able to register on the MLC Student WLAN. Select the **MLC User** option and then enter your MLC Account username and password.
- Your device is now registered for 183 days.

# Troubleshooting Issues

## I just changed my MLC Account password and cannot connect!

Some operating systems (Windows 10 has been known to have issues) will not prompt you to change the saved password when connecting after you have changed your password. You will need to forget that saved account and reconnect. Here are some simple instructions:

1. click on the wireless network icon in the lower-right of the screen
2. right-click on the network (either the MLC Academic WLAN or MLC Student WLAN) you want to forget
3. click

Then follow the connection instructions above. For other devices, you will need to follow the instructions from your operating system or device manufacturer. Here are some links to try out:

- [How to forget a Wi-Fi network on your iPhone, iPad, iPod touch, or Mac \(Apple Support\)](#)

## I am using a Chromebook, Chrome OS, Android, a Linux distribution, or some other operating system!

You are going to have to do more manual setup to get things working. Here are some settings you can look for!

- **EAP method:** "PEAP" or "Protected EAP"
- **EAP Phase 2 authentication:** Best option "MSCHAPv2" (or "Automatic")
- **Server CA certificate:** Best option "Default" or "Use system certificates". If needed, use one of "Do not check"/"Do not validate"/"No CA certificate is required".
- **Domain:** "mlc-wels.edu"
- **Subject name match:** "radius.mlc-wels.edu"
- **Domain suffix match:** "mlc-wels.edu"
- **Identity:** your MLC Account username
- **Password:** your MLC Account password
- **Anonymous Identity:** leave blank

Then use your MLC Account username and password from there.

There are often other words used depending on the specific operating system you are using. Feel free to contact IT Services if you have questions. Also, some devices do not support WPA2 Enterprise authentication methods, so check with your manufacturer.

## I just cannot seem to connect!

Please [contact IT Services](#) or stop in the office to get some help.

# Known Issues

This page will contain known issues that students, faculty, and staff have run into with connecting and using devices on campus.

## Internet of Things

### TP-Link Kasa Smart Plug

This device requires connecting to a protected wireless network, but does not support the needed wireless authentication standards of WPA2 Enterprise.

**This means that, at this time (August 22, 2019), we cannot support TP-Link Kasa Smart Plug devices on campus.**