

Rivergreen Internet Update Sept 26th 2022

On Sept 1st, we had a failure of our main internet router for our wifi system. Fortunately, we had a backup router in our building, and we had that put online the next morning. The failed router was sent back for repair. The board then went out and purchased another router, so that we always have a backup on site. When the repaired router is returned to us, we will then have 2 backups. We have been told that several owners have had trouble connecting to the system with some of their devices. We are trying our best to solve these issues one at a time.

This letter will have information on how the wifi works in the building, and provide more detail on how to connect to the Rivergreen wifi system.

How our wireless internet system works

Rivergreen uses a Hotel Style gateway to control access to the internet. This device is made by a company called Guest Internet, and is used by many major hotels around the world.

The model we have is a GIS-R20, which allows for up to 500 connected users at one time. It allows for 2 separate internet services that we use for connection to the outside world.

Internet Service 1 – Spectrum Business Class - Cable Modem. This is known as Wide Area Network 1 (WAN 1). Speed is 1 Gig/sec

Internet Service 2 – Consolidated Communications - Fiber Optic Line This is known as Wide Area Network 2 (WAN 2). Speed is 1 Gig/sec

The function of the router is to hand out IP (internet protocol) addresses to any device that connects to the internet. Each connected user is alternately connected to either WAN 1 or WAN 2.

The router has 2 Local Area Networks.

Local area Network 1 (LAN 1) is for the 1st floor, 2nd floor, and the front lobby.

Local area Network 2 (LAN 2) is for the 3rd floor, 4th floor, and the great room.

There are network switches in the internet equipment closet that send these LAN 1 and LAN 2 signals down each of the hallways using high quality ethernet cables.

Connections to the internet are done using wireless access points (APs). They are made by a company called Netgear. There is one of these Aps in every condo unit, as well as the front lobby and the great room. Total of 66 in the building.

In each hallway, there are additional network switches that provide internet signal, as well as power to each of the Aps in each condo unit. Each of these Aps has a fixed IP address that is registered and monitored by the router. The router counts each of these Aps as a connection, so the true number of connections allowed is 500 less 66 = 434. On our busiest weekend (presidents' holiday) we had 225 connections at one time. So, we still have plenty of capacity.

The router allows us to control who connects and for how long we allow that connection, just like any hotel you may have stayed at. The router allows for remote access, so members of the Rivergreen board have the ability to monitor the router from the outside world at any time. It also allows us to monitor all 66 Aps and see that they are communicating with the router.

Each unit has an internet AP mounted to the ceiling, with a broadcast signal name matching your unit number. You may connect your devices to the one with your unit number or any nearby one. If your unit numbers wifi signal is not available, please send an email to board@rivergreencondominium.com and let us know.

Please do not tinker with these devices as they are pre-programmed for your unit # as well as its IP address for the router.

Rivergreen has spare Aps available for replacement in case of a failure of an individual AP. Rivergreen also has spare network switches available in case of a failure.

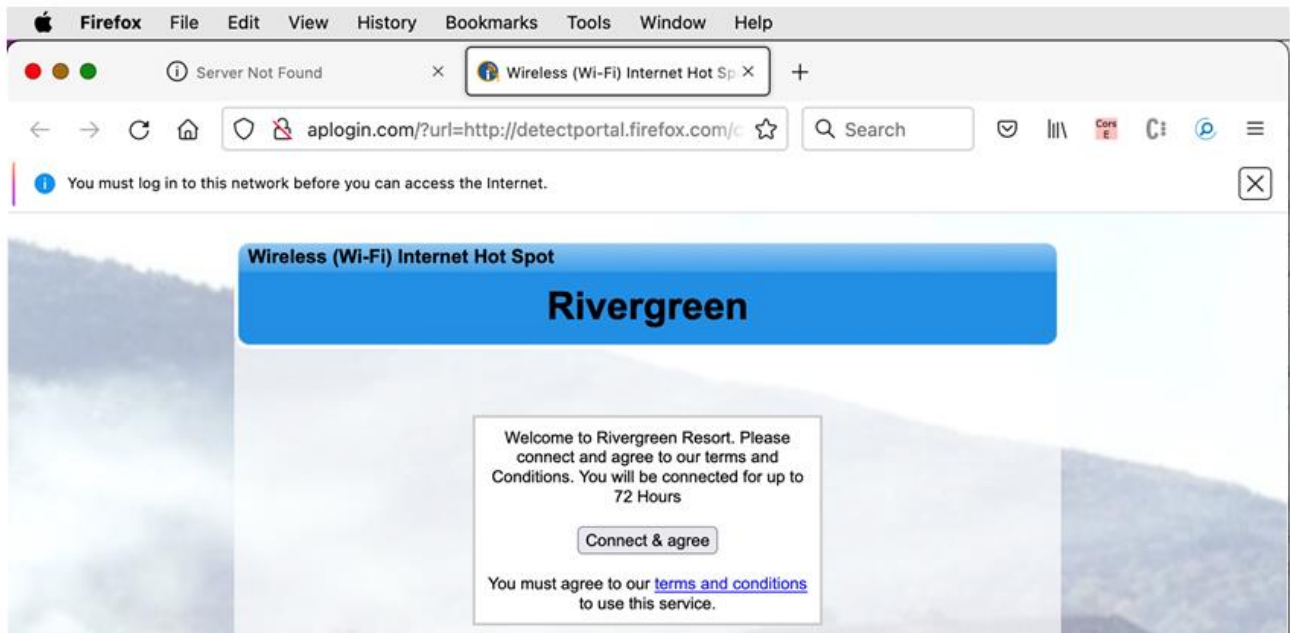
How to connect to the internet



We require each user to connect to an available AP, most likely your room number or the great room as an example.

Once you connect, you have to agree to the terms of agreement to use our internet. Most devices automatically connect you to our “Welcome to Rivergreen” login page but some do not. If you are not automatically connected to that page, you have to open your internet browser, and type in **aplogin.com**, or **www.aplogin.com**

This will get you connected to the Rivergreen login page. Once connected, you will be connected for up to 72 hours. If your device is idle for more than 4 hours, you may have to reconnect. We have the ability to change or modify these time limits if needed and best fits our needs. Many hotels allow for only a 24 hour connection, we felt it best to allow for at least a long weekend.



Connecting without using the Rivergreen Login page

Some owners live here, some are here very frequently, and some units have smart devices, such as wifi thermostats. Those smart devices do not have the ability to click and accept, so there is an alternative method for them. It's called the **Allowed MAC List**.

Every device capable of connecting to wifi has a unique MAC address, a series of characters that look like this. 00:7E:4b:88:0C:A3

Our router can recognize these MAC addresses and allow that device to connect automatically without going thru the login process. In the setup menu for the router, there is a list of allowed MAC addresses. Some owners were not able to connect, even though their MAC addresses were registered in the router.

After consulting with the manufacturer of the router, they have told us that the maximum allowed is only 100. So, any MAC addresses after 100 were ignored. Just recently, we had 140 MAC addresses in the list. This explained why some could not connect. We pared down the list to 85 and now we want to do a full review of the list to see if we can reduce it even further.

The list we have is very old, and most likely many of the MAC addresses in there are no longer needed. Some owners whose MAC addresses were in the list have sold their units. It's time for a MAC address review. We are asking all owners who have a device that needs to be registered as an allowed MAC to send an update to board@rivergreencondominium.com with your name, unit number, type of device, and the wifi MAC address. Since this list is limited to only 100, this is only for owners who use the internet very frequently, or have smart devices that need to be connected, such as wifi thermostats. The board has discretion on whether or not to allow an owners MAC address to be registered.

Bypassing the Rivergreen Internet System

The cost of internet is part of your quarterly utility expenses and currently ranges from \$16 per month for a smaller unit to \$23 per month for the larger units.

As an owner, you do have the ability to purchase your own internet service directly thru Spectrum at your own cost. The cost is about \$50 per month. The board highly discourages this as it creates many extra wifi signals in the building. Even if you purchase your own internet services, your quarterly utility bills will not change.

The Future

Technology moves fast and we are trying to stay on top of things as best we can within the budget we have. Please be patient with us as we try to keep on top of the changing times. If internet speed upgrades are available, we will pursue them. Sometimes higher internet speeds require upgraded equipment. For example, when we upgraded to the 1 Gig /sec of capacity last year, we did have to replace some of the ethernet cables in each hallway as well as the one to the great room.

We are always looking for help. If any owners have any expertise in this area, you are welcome to contact the board at board@rivergreencondominium.com and we would greatly appreciate your assistance.

Rivergreen currently has a computer consultant available in the area, but he is at an hourly rate of \$95. We try our best to reduce our reliance on his services, but he is available for emergencies.

Best Regards,

The Rivergreen Board of Directors

Arthur Vogel

Rich Strazdas

Ron DeFlora