

Residence Hall WiFi and Switch Update 2021-2022

Introduction

NJIT is in the process of updating the WiFi and Network connectivity in all the Residence Halls and Greek Housing. The project began months ago with the design, planning and update of the University's core infrastructure. During the summer of 2021 we began the installation of the new WiFi Access Point and Network Switches replacing the oldest technology first.

- Redwood Hall Wifi and Network Switches, Completed Summer 2021
- Cypress Hall WiFi and Network Switches, Completed Summer 2021
- Greek Housing Network Switches, Completed Summer 2022
- Oak Hall Network Switches, Completed Summer 2021
- Oak Hall WiFi, Spring 2023
- Laurel Residence Hall WiFi, Completed Summer 2022
- Dorman Honors Residence Hall WiFi and Network Switches, Completed Summer 2022

What is new

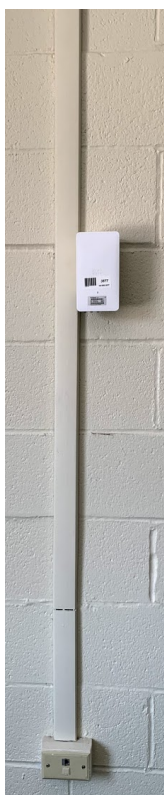
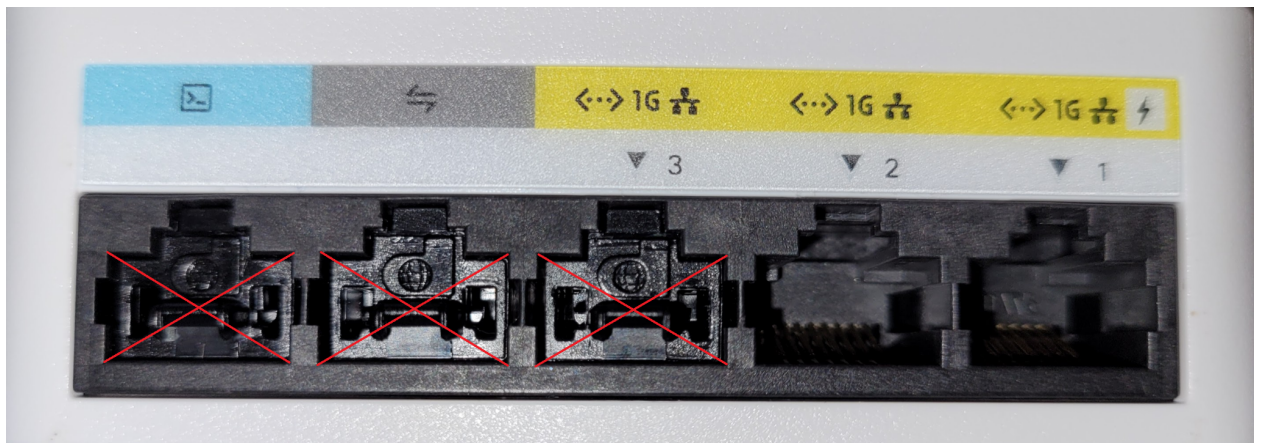
NJIT is providing its residential students the latest in Wireless and Networking technology. Exciting changes are happening or on the way.

- All access points in residential buildings will be upgraded to WiFi 6 supporting the latest and fastest wireless technology.
- An access point has been installed in each bedroom in Laurel, Redwood, Cypress and Honors Halls. This access point is connected at up to 2.5 Gig to the NJIT network.
- The common area access points in the Greek Houses, Laurel, Redwood and Cypress Residence Halls will be adjusted and replaced to improve coverage. The common areas access points will be connected at 5 Gigs improving bandwidth.
- The wired network wall ports will support at least a 100/1000Mb/s connection. 10 Mb/s is no longer supported.
- The Network Switches will be connected to the Residence Hall distribution at 50 Gig.
- The Residence Halls are connected to the campus core at 200 Gig.
- NJIT's network core has been upgraded to a very fast multiple 100 Gig network mesh.
- NJIT will continue to monitor and improve its Internet Connectivity.

What is changing

The update in technology will also bring change improving how you access and use the network. These are the changes you should expect.

- Authentication for wired will change to the latest technology. The wired ports will require 802.1X authentication. This authentication is supported by most wired devices, however some may need to be installed.
- The NJIThousing SSID will be removed to clear the airways, NJITsecure will provide the same services. You will no longer need to change your SSID when you go from the campus to your residence hall.
- One of the existing wired wall plates in each room in **Cypress, Redwood, Laurel and Honors** has been converted to connect the access point. The remaining port in the wall plate will not be active, this port was for a legacy wired telephone and is no longer used. Wired network connectivity on this side of the room is available by using ports 1 and 2 on the access point.



What are your next steps

We have updated the process required to connect in Honors, Greek Houses, Cypress Hall, Redwood Hall and Oak Hall.

1. Before you come on campus or before you try to connect to a wired port setup authentication:
 - a. Launch a web browser (Internet Explorer, Firefox, or Chrome) and go to <http://auth.njit.edu/njitwired/>
 - b. If you are not able to download this service before coming to campus, connect to one of the red jacks on the wall plate in the room. Before you install the service, you will only have access to <http://auth.njit.edu/njitwired/> to download and install it.
2. Your operating system (OS) should be automatically detected. If it was incorrectly detected, you can select the correct system in the drop-down menu at the bottom of the page. Linux and other Unix operating systems are a manual setup. Guides for Linux will be provided shortly.
3. When ready click the JoinNow button to continue.
4. After you click JoinNow, an EXE file called “Wired_NJIT_Windows.exe” or “Wired_NJIT_MacOSx.dmg” file will begin to download.
5. Choose to Run.
6. If the file does not run automatically, go to the download folder and run it from there.
7. Enter your UCID and password
8. You will see Joined when the installation is completed and the profile is installed.
9. If you are connecting to a wired port from a PC that has wireless, you may need to turn on airplane mode.
10. NAT/PAT (wired routers, wireless routers and other access points) devices do not support the new 802.1x authentication. You can register the MAC (physical address) of the devices using <http://auth.njit.edu/register/> .
(This is only for WIRED connections only and should not be confused with NJIoT registration. A single MAC can only be added to one portal.)

Cypress and Redwood Halls wall mounted access points:

- a. There are newly installed access points (APs) in each room.
- b. The occupants of the room are responsible for this access point and the installation if it is lost or damaged.
 - Do not move or tamper with the access point.
 - Do not hang or secure any items to the access point or its mount.
 - Do not block it with furniture, this will impact the signal.
- c. Keep items and people at least 12 inches away from the access point.
 - Locate the desk under the access point.
 - If you bunk your beds, place them on the opposite side of the room.

- d. These APs have two ports available for wired connectivity. Use ports 1 and 2 on the bottom right. The ports that are covered are not usable.
- e. There is also a wall plate on one side of the room, the red jack has been activated for your usage.