

Carleton's Networks and IP ranges

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Overview

Carleton's network is divided up into several different logical networks, each of which serve different purposes, operate slightly differently and are therefore managed differently. Below is a brief overview of these various networks

Network Services

Main article: [Network Services](#)

Residential Network

Main article: [Residential Network](#)

ResNet wired ports require registration through <https://connect.carleton.edu/>

The ResNet has a number of subnets of its own, defined geographically as below.

These divisions are why iTunes does not see all students' shared music. The only shared folders that are visible are those in the subnet that the computer is on.

The subnets can also be a problem for LAN gaming. The computers may not be immediately visible, but if there is the option to enter an [IP address](#), you can type in the addresses of computers in other subnets and the game will be able to connect.

IP address ranges: 137.22.(224-240).* and (41-42).*

ResNet IP addresses are in the range 137.22.X.Y, where X between 224 and 240 and Y 1-253. In general, ResNet subnets increase from west to east:

41 Guest-registered devices on ports in Alumni Guest House and a small number of other locations
42 Registered devices on floating NetGear switches, AGH, and a small number of other locations not otherwise noted above
224 West-Houses Prentice/Allen/Wilson/Geffert
225 Townhouses Eugster/Scott/Brooks/Owens/Collier/Dixon/Dow/Colwell/Hunt House/Henrickson/Clader/Berg/Dacie Moses/Hunt Cottage/Hall/Nason
226 Musser
227 Davis
228 Burton
229 Sevy
230 South-Houses Jewett/Page/Rice/Hill/Douglas/Parish/Chaney/Benton/Huntington/Williams/Stimson/Parish
231 Facultyclub
232 Nourse
233 Memorial
234 Cassat
235 Myers
236 Watson
237 Evans
238 Goodhue
239 North-Houses: Parr/Farm
240 (reserved for future use)

On the wired ports, networks are tied to buildings, not users. If a computer is registered in Cassat, it will get a 137.22.234 address. Bring that computer to Sevy, and it will pull a 137.22.229 address (with no need to re-register).

Carleton Guest Wireless SSID

SSID, Service Set Identifier, is the technical term for the "name" of a wireless network. Carleton has two SSIDs, Carleton Guest and Eduroam. Students, faculty, and staff are strongly encouraged to use Eduroam for better speed and security. Regardless, the Carleton Guest SSID remains available for guests and for devices that don't support wireless security. The Carleton Guest SSID requires MAC address registration through <https://connect.carleton.edu/>

Related articles: [Wireless at Carleton](#) and [Wireless Access for Guests](#)

IP address ranges: 137.22.(183-191).*

183-187 Carleton account holders (registered by username/password) (Note: 5 subnets)
188-191 Guests (registered by SMS or email challenge/response)

All devices owned by the same user will appear in the same subnet – schillerj's half dozen computers will all show up in 137.22.186.*, and all of guest bob@bob.com's computers will show up in 137.22.188.*.

Eduroam Wireless SSID

Eduroam is a global, authenticated, encrypted wireless network. To avoid some of the performance problems observed on the old Carleton wireless network, Eduroam is broken up into subnets of no more than 254 addresses. There are a total of 22 such subnets, grouped into categories according to the user's role, below.

Related articles: [Eduroam Wireless Setup](#)

IP address ranges: 137.22.(160-182).*

160-175 Eduroam General, 15 distinct subnets, for Carleton accounts not otherwise specified below. This gets access equivalent to the legacy Carleton network, but it's faster and more secure.
176-179 Eduroam Staff, 4 distinct subnets, for staff and faculty on college-owned devices (where "College-owned" means "wireless MAC address exists in WebHelpDesk). This range gets additional access to administrative systems.
180-181 Eduroam Guest, 2 distinct subnets. Logons by Carleton alumni (like schillerj_2011) and visitors from other schools in the Eduroam federation will end up here. Access to some Carleton-only resources will be restricted, but otherwise, Internet access is open.
182 Eduroam Special, 1 subnet. System administrators and other staff needing special network access will end up here.

All devices with the same (logon plus role) will appear in the same subnet – schillerj's half dozen computers will all show up in 137.22.162.*, and all of sposkanzer's College-owned computers will show up in 137.22.178.* (but if he logs on from a non-College-owned device, he will land in 137.22.163.* and be unable to access certain things).

Acad

This is the network used by faculty, academic staff, and college-owned computers in the [public computer labs](#)

Acad Network specifications:

137.22.1.0/19 (or, 137.22.1.* - 137.22.31.*)

Conventions: 137.22.30.* and 137.22.31.* are the unregistered nets. Machines connected to the Academic network that are not explicitly registered on this network will receive a dynamic address in this range.

Admin

This is the network used by staff computers in offices.

Admin Network specifications:

137.22.128.0/18 (or, 137.22.128.* - 137.22.159.*)

137.22.156.* is assigned to staff/faculty VPN users. 157 is for system administrators with mostly unrestricted network access.

Conventions: 137.22.158.* and 137.22.159.* are the unregistered nets. Machines connected to the Admin network that are not explicitly registered on this network will receive a dynamic address in this range.

GlobalProtect VPN

Main article: [GlobalProtect VPN](#)

VPN users get addresses in one of three ranges based on affiliation:

- EIS, SysNet, and other enumerated staff get addresses in 137.22.157.* (mgw.carleton.edu)
 - Other staff and faculty get 137.22.156.* (gateway.carleton.edu)
 - Students get 137.22.40.*
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Frequently Asked Questions

How do I register my computer on the network?

For Students:

You should automatically be directed to the registration process whenever you connect to a part of the network that you haven't registered on before. To register, just follow the steps on screen, and when asked for username and password simply use your Carl Net ID and password.

For Guests:

From <https://connect.carleton.edu/> choose "guest access" link. Enter your name and phone number (both are always required). If you choose "Register by Email," you will need to check your email and click on an address verification link within one hour. If you choose "Register by SMS," you must have chosen your cell phone provider correctly. A verification code will be sent to your phone, which you'll enter into connect.carleton.edu for immediate access.