

# Mesh Glossary

Telecommunications, computing, and internetworking technologies often have an enormous amount of jargon associated with them. This jargon makes it possible to speak precisely and quickly to others who are in-the-know, but can also drastically increase the learning curve for newcomers. We offer this page as a quick reference guide for common terms, acronyms, and other abbreviations that NYC Mesh technical teams use on a regular basis.

## A

Antenna : Antenna, router and radio are often confused- [see our FAQ](#)

AP : a wifi Access Point

ARIN : American Registry for Internet Numbers- where you get your ASN

ASN : Autonomous System Number that identifies your network on BGP for [peering](#). Our number is [AS395853](#)

## B

Backhaul : very high bandwidth connections, usually point to point.

[BGP](#) : This is the routing protocol of the Internet. We use it to connect at an IXP

BMX6 : An ad-hoc mesh protocol we use. (BatMan eXperimental 6)

BuB : “Bottom up Broadband” The beneficiaries of the networks actively participate in the planning, deployment and maintenance tasks.

## C

Captive portal : a web page that is shown before connecting to the Internet normally

Cjdns : Caleb James DeLisle's Network Suite. Encrypted IPv6 mesh protocol.

Cleartnet : the regular internet as opposed to the hidden web (Tor, I2P, Freenet)

Commons : The commons include public libraries, the Internet, parks and roads and some mesh networks. Guifi has a “Wireless Commons License”.

CPE : Customer premises equipment (e.g. a LiteBeam, NanoStation, home router). ISP jargon

## D

Dark fiber : fiber cable that is not connected.

DHCP : or "Automatic" setting will automatically try to get you an IP address and subnet mask

## E

[Ethernet cable](#) :The cable we use that has 8 wires for carrying data and power

## F

FFTF : Fiber From The Farms Broadband Initiative -- Guifi term for BuB

FNF : Free Network Foundation

FTTH : Fiber to the home. For example our [Grand Street Hub](#)

## G

Guifi : The largest community owned network, based in Catalonia, Spain

GPON : Gigabit Ethernet Passive Optical Network. Fiber network that doesn't need power

# H

HNA : Host and Network Association information used by mesh protocols

# I

IPv4 : the most common version of the Internet Protocol (IP), An IPv4 address consists of four octets e.g. 192.168.1.20

IPv6 : 6th version of Internet Protocol. Designed to replace IPv4. e.g. 2001:db8:0:1:1:1:1:1

ISP : Internet Service Provider

IXP : Internet Exchange Point, where internet networks come together to peer or exchange traffic between their networks. (An IXP is a network and not really a "point" or a building)

# J

# K

# L

LIR : local Internet registry, an organization that has been allocated a block of IP addresses by a regional Internet registry (RIR)

LuCI : (pronounced Lucy) Lua Unified Configuration Interface, the web interface in OpenWRT

# M

MANET : Mobile Ad-hoc NETWORK

# N

NAT : Network address translation- a method of remapping one IP address space into another

node : WiFi router or other routing devices in a particular location on a network

# O

OLSR : Optimized Link State Routing Protocol (popular mesh protocol)

OLT : [Optical Line Terminal](#). This expensive device powers a fiber GPON network

ONT : [Optical Network Terminal](#). Small cheap device that converts fiber to ethernet in apartment

OpenWRT : Open source Wireless Receiver/Transmitter (WRT) software

[OSPF](#) : a popular dynamic routing protocol

# P

[Peering](#) : An agreement between two networks to connect and exchange traffic without charge

P2P : Point-to-point connection between two antennas

P2MP : Point-to-multipoint connection, e.g. between one sector antenna and multiple smaller antennas

POE : Power over ethernet (how Ubiquiti routers get 24 volt power)

# Q

# R

Radio : The wireless receiver/transmitter part of a router

Router : Antenna, router and radio are often confused- [see our FAQ](#)

RIR : Regional Internet registry

## S

Sector antenna : a directional antenna designed to connect to many other antennas. Typical "sectors" are 90 degrees or 120 degrees

SSID : Service set identification- the Wi-Fi access point name

Supernode : This is a large install, typically with a fiber connection and many sector and point-to-point antennas

Site survey : Normally refers to checking the suitability of a building for an install, for example taking panoramic photos of the view to see what other buildings are reachable, as well as checking how cables will be run. Also used for the process of scanning for wireless networks in some wireless products, for example a Ubiquiti LiteBeam refers to a network scan as a "Site Survey" in the web interface.

## T

## U

## V

## W

WAP : Wireless Access Point

WDS : Wireless Distribution System, A mesh protocol we use

WISP : Wireless ISP

WNDW : Wireless Networking in the Developing World -- essential book

WRT : Wireless Receiver/Transmitter software (WRT)

X

Y

Z

---

Revision #12

Created 9 December 2023 04:39:29 by Willard Nilges

Updated 11 June 2024 04:17:36 by Andy