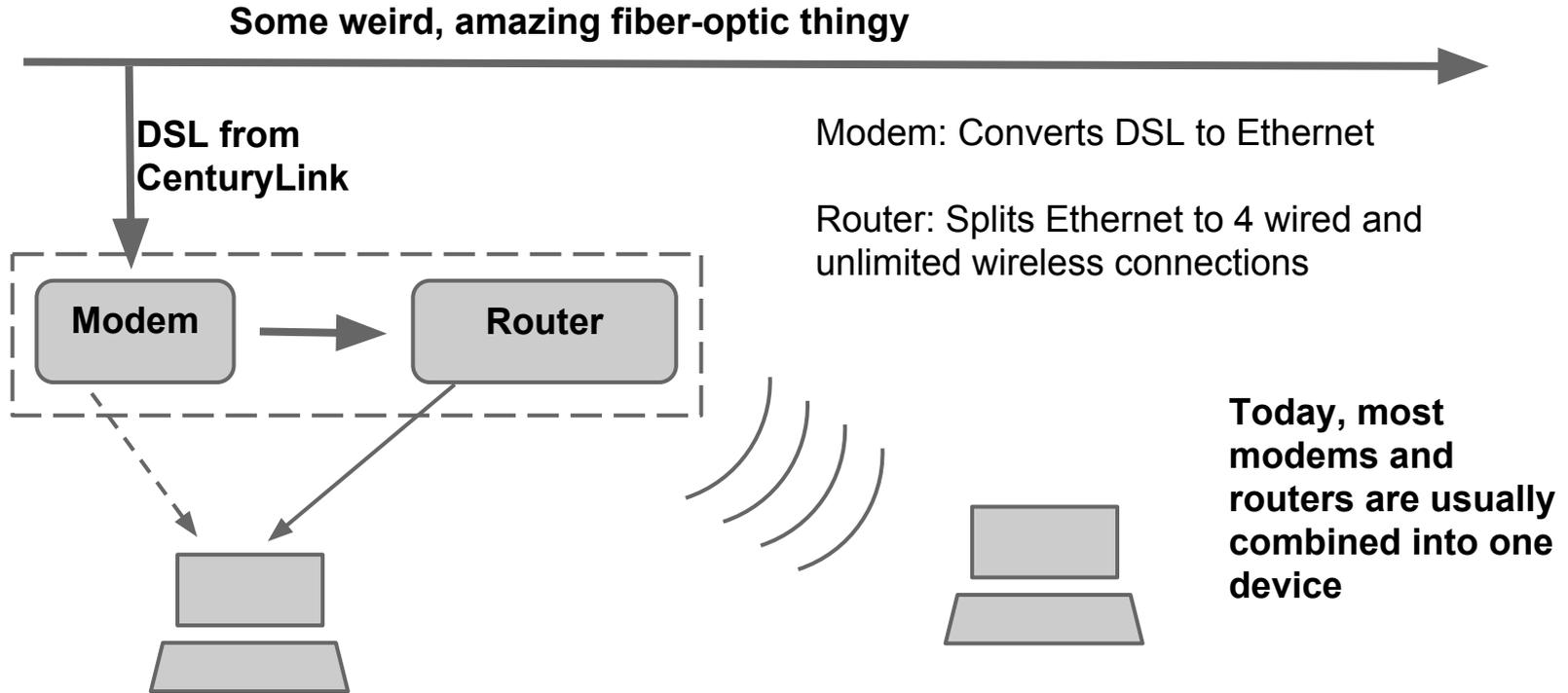


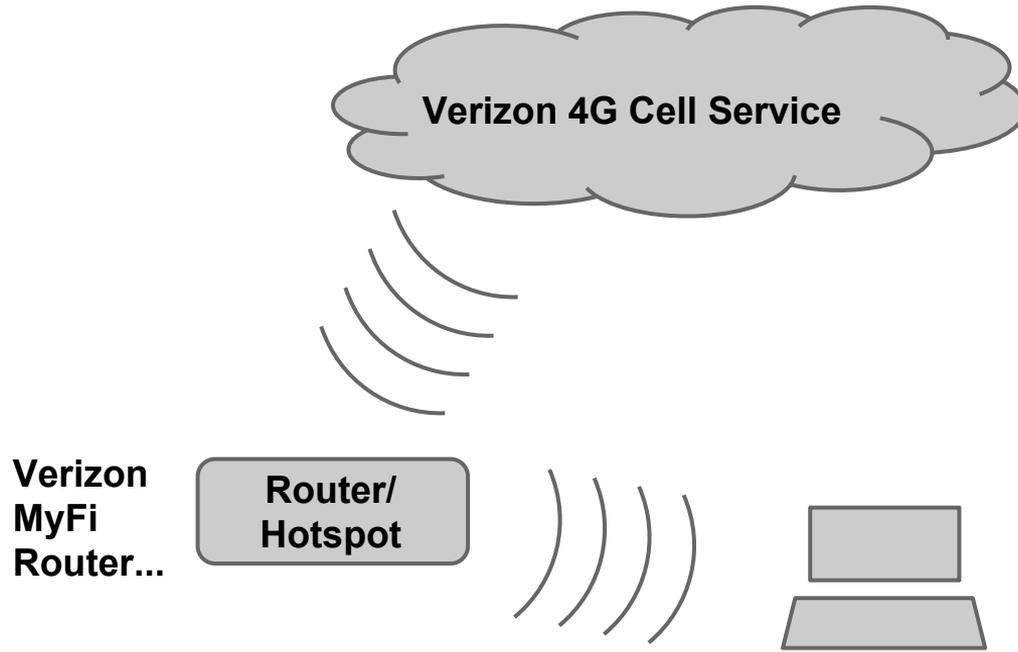
# Home Networking

Steve Hanlon - Lot 592

# All the Networking Parts



# Router/Hotspot Parts



Router/Hotspot: Converts 4G cell service to wireless Ethernet

Laptop: Has wireless Ethernet radio built-in

**Think of a hotspot as a cellphone with very limited features!**

# WiFi Router Basics

Your router creates a little wired and wireless network that you own.

Each network **must** have a name

Known as the SSID (mine is JED-NET)

Every router will have a default name  
(ex: CenturyLink1342 for PrismTV)

# If you have a **NEW** router or PrismTV

New routers should have WPA2 pre-selected and have the WPA2 key (or router password) on a **label on the bottom**.

PrismTV routers also have the admin password on the bottom. If not you must create one. Otherwise **this is a serious security issue**.

# Sample Bottom Label

the bottom of your modem



OR

the bottom of your modem



**ZyXEL** Communications Corporation

**Model Number :**

|                    |                   |
|--------------------|-------------------|
| SSID:              | CenturyLink1234   |
| Security Type:     | WPA-WPA2-Personal |
| Key/Passphrase:    | a7aa9245febba6    |
| WPS PIN:           | 60027764          |
| Modem GUI Address: | 192.168.0.1       |
| Admin Username:    | admin             |
| Admin Password:    | f4B4fb6c          |

Serial Number: S120Y23078881

MAC Address: B0:B2:DC:25:20:D9

802.11n WiFi Router

Actiontec or ZyXEL

Example Model #

HW: 2A

F/W: GAPK01-3.60.3.0.9.0

Serial Number:

CPAA9222901566

Network Name (SSID): myqwest0241

Security Type: WPA2-Personal

Key/passphrase: FFFFAE59FFFE96A0006F29A9C

WPS PIN: 68021573

WAN MAC: 00247B007621

# How do I change the Router?

Easy. Use your browser!!!

# Router Admin Basics

Every router has a little website built into it

This website can be accessed by you to make changes to the router setup

Some changes are very important

# Router Administration

Look at the router's manual but it will likely be

<http://192.168.1.1> or (Linksys)

<http://192.168.0.1> or (PrismTV)

<http://10.0.0.1> (Netgear)

# Router Admin Basics

You only have **two or three** jobs

1. Make the router's wireless work encrypted, and set a network/router password
2. Change the admin password
  - a. Ideally to the encryption password so you won't forget it
3. (Optional) Change the SSID so you can recognize it

# Router Security Basics

Each router has a choice of wireless encryption

WPA2, WPA, WEP

Always choose WPA2

Choose an encryption key (password) for WPA2 (the router)

Tape it to the bottom of the router. !important!

# Router Admin (cont)

Every routers administration will look different

Security > Change Password

change admin username/password

Wireless > Basic

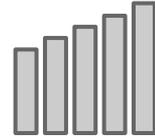
to set SSID

Wireless > Security

to set WPA2 and router password

# Connecting your PC

Right click on the wireless icon



Click on your network name

Enter your WPA2 key (password)

Make sure to check the "Connect Automatically"

# If you mess up...

- Every router has a reset button
- Usually it's in a hole on the back
- Pressing it (with a paperclip) will reset it back to factory new and you can start all over again.

# Other Wireless Stuff

- OK, so now you have your PCs, smartphones and tablets connected to your wireless network.
- What about my wireless printer?
- Now we need to learn about one more router feature - WPS (WiFi Protected Setup)

# Wireless Printers

Printers can have 3-4 methods for connecting wirelessly

The problem is usually because the printer doesn't have a screen or a keyboard for selecting a network and entering a password

# Wireless Printers (cont)

Most new printers support WPS

Here's how it works:

1. you find the printer's wireless setup and initiate a (2 minute) WPS scan
2. you run over to the router and push the WPS button

If this doesn't work... call me... sigh...