

Talking Points: Home Wireless Router Setup

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- I. Layered Security: Don't rely on router firewall alone
 - a. Use software firewall/malware/antivirus protection on each device
- II. Getting a wireless router
 - a. Expect to replace every five years
 - b. Check with ISP - may be included with service
 - c. Inexpensive older models & refurbished units at www.evertek.com
 - d. Online ratings - CNET ([http://cnettv.cnet.com/8301-13489_53-57548501-10389930/top-5-routers-under-\\$80/](http://cnettv.cnet.com/8301-13489_53-57548501-10389930/top-5-routers-under-$80/)), etc.
 - e. Features (5 GHz, 802.11ac, IPv6, USB)
- III. Out of the box
 - a. Install vendor firmware updates
 - b. Download PDF of user manual
 - c. Placement considerations
 - i. Best toward back/center of home (away from street)
 - ii. Fewest interceding walls from usual workspaces
 - d. Wi-Fi Protected Setup (WPS) only for initial setup
 - i. Disable WPS afterwards (security vulnerability)
- IV. Manual Setup
 - a. Use wired (ethernet) connection
 - b. Change administrative password from default
 - c. Assign unique SSID
 - d. Enable WPA2-AES encryption with strong passphrase
 - e. Enable Internet Filters (IDENT, Anonymous Internet Requests)
 - f. Extra Credit (Advanced)
 - i. enable Media Access Control (MAC) filter policy
 1. Don't forget when adding new devices
 - ii. enable day/time restriction policy
 - iii. use Lowest wireless power setting that works
 - iv. enable Quality of Service (QoS) settings for video, games, voice (VoIP)
 - g. Back off settings one at a time if connections don't work
 - h. Verify firewall
 - i. IPv4: ShieldsUP! (<http://www.grc.com/default.htm>)
 - ii. IPv6: Tim's Free Online IPv6 Port Scanner (<http://ipv6.chappell-family.com/ipv6tcpst/>)
 - i. Save configuration to file
 - j. Check vendor website periodically for firmware updates