



PfSense router build and configuration

During the summer of 2017 I read *Computer Networks A Top-Down Approach* by James F. Kurose and Keith W. Ross and wanted to put my new knowledge to work. I was inspired by one of my favorite YouTube personalities, Wendell from Level1Techs, to build a high-powered, business-class router to supercharge my home network. Using components from my previous PC build, along with a new network card and access point, the router was complete and a fresh install of pfSense 2.3.2 was up and running that afternoon. Configuring the router was much more of an undertaking. Thankfully I discovered a 13 part YouTube series by Mark Furneaux discussing everything from simple settings to RRD graphs and traffic shaping.

The Build:

- 1 “old” PC
- Intel pro 1000 PT 2 port network interface card
- TP-Link Wireless N300 Access Point
- pfSense version 2.3.2

Configurations and optimizations:

- enabled SSH access to router with PuTTY
- DNS benchmarking and optimization
- firewall and network address translation configuration
- deep packet inspection with Suricata

