

# Hardware

Hardware used in the data center.

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# 1 - Firewall and Router

# Network Firewall and Router

HP T620 Plus is running pfSense 2.4.4 r6.

Network Firewall and Router with Certificate Authority

## Why pfSense?

I've been using pfSense since 2016 and it has been a great platform. I've tried using OPNsense in the past, but I've found it had some pitfalls compared to pfSense and it had some goods. However, pfSense had goods that outweighed OPNsense. Maybe in the future I will try again.

If you want to try pfSense for yourself, checkout [pfSense](#)

## Specs

- Manufacturer: HP
- Model: T620 Plus
- Motherboard: Rev. B
- Video: AMD Radeon HD 8400E
- CPU: AMD Quad Core GX-420CA
- RAM: 8GB
- Storage: 16GB Flash
- Network:
  - (1) Integrated 10/100/1000 Nic
  - (1) HP NC364T PCIe x4 low profile Quad Port Gigabit Adapter and OpenVPN

## 2 - Storage

# Network Attached Storage (NAS)

## TrueNAS Network Attached Storage

Calypso Runs TrueNAS Core 13.0 U2 (previously known as FreeNAS).

### Information

This system is currently running TrueNAS 13.0 U2. I've been running TrueNAS since it was FreeNAS version 9.3 in early 2015. Over the years I have tested a few systems and found that TrueNAS runs efficiently and I love it. I ensure that updates and patches are installed as quickly as possible and ensure that I conduct upgrades as soon as they are available. Before these are conducted, I ensure that I make a backup of the configuration in the event that something occurs so that I may roll the system back and test to see what made the error occur.

### PC Specs

Manufacturer: Dell

Model: Optiplex 990 (Previously on Optiplex 780 until September 2022)

RAM: 16GB

Hard Drives:

- (2) 16GB SandDisk Micro Flash Drives for Boot Storage Configured in RAID1
- (2) 4TB Western Digital Red Drives for Regular Data Storage configured in RAID1
- (1) 8TB Western Digital Red Drive for Media Data Storage (Movies, Music, etc.)
- (1) 4TB Western Digital Green Drive for Backup Storage (Local and Remote)
- (1) 125GB PNY SSD for Jail Storage

Network:

- 1-port Gigabit Internal NIC
  - Used for connecting to LAN
- TP-LINK 2-port Gigabit PCI Adapter
  - 1 port used to crossover with Proxmox for NFS connections
  - 1 port for future use

# 3 - Virtualization