Home Lab Hardware Specifications

This section outlines the physical hardware powering my virtualization environment. It includes both compute and network components that support VM hosting, containerization, and service reliability.

?? Primary Host (Proxmox Node)

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Primary Node for all Production VMs and CTs

- **CPU:** Intel(R) Core(TM) i7-10700 CPU @ 2.90GHz (8 Cores / 16 threads)
- **RAM:** 80GB DDR4 (2x32GB & 2x8GB DDR4 UDIMM)
- **Storage:**
  - 500GB NVMe SSD (Proxmox OS + Storage)
  - 2TB NVMe SSD (Storage)
- **Network:** 1000 Mbps Ethernet NICs
- **Power Supply:** 650W Gold-rated PSU
- **Chassis:** Dell Precision 3450 Small Form Factor

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Node for Tanium Appliance (TanOS)

- **CPU:** Intel(R) Core(TM) i7-10610U CPU @ 1.80GHz (4 Cores)
- **RAM:** 64GB DDR4
- **Storage:** 500GB NVMe SSD (Proxmox OS + Storage)
- **Network:** 1000 Mbps Ethernet NICs
- **Device:** Dell Latitude 5410

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Node for testing endpoints

- **CPU:** Intel(R) Core(TM) i5-6200U CPU @ 2.30GHz (4 Cores)
- **RAM:** 16GB DDR3
- **Storage:** 500GB SATA SSD (Proxmox OS + Storage)
- **Network:** 1000 Mbps Ethernet NICs
- **Device:** ThinkPad L460

? Networking Equipment

- **Firewall / Router:** pfSense running on Protectli VP2410
- **Switch:** TP-Link TL-SG108E (8-Port Gigabit Smart Switch)
- **Access Point:** Ubiquiti UniFi U6-Lite (Wi-Fi 6)

?? Storage & Backup

- **NAS:** TrueNAS Core running on Mini-PC with:
  - Intel i5 CPU
  - 16GB RAM
  - 2x 4TB HDDs (ZFS mirror)
- **External Backup:** 2TB USB 3.0 external drive (rotated offsite weekly)

> □□ *Note:* This setup is optimized for cost-efficiency, power savings, and scalability, allowing me to run dozens of services simultaneously in a virtualized and containerized environment.

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