edge

Proxmox instance running virtualized network infrastructure.

- Physical Hardware
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- LXC / pihole
- LXC / adguard

Physical Hardware

Basic Components



This is a Mini PC purchased from AliExpress to act as a router/firewall. It only
through USB and focuses more on power efficiency than raw performance. T
without any fan for cooling.

Compute

Processor

Intel Pentium N4200 - Provides excellent mix between performance and efficiency using only 6W.

Cores / Threads	4 / 4
Base Frequency	1.1 GHz
Burst Frequency	2.5 GHz
Cache	2MB L2 Cache
TDP	6W

GPU

Integrated Intel HD Graphics 505

Base Frequency	200 MHz
Burst Frequency	750 MHz
Max Memory	8GB
QuickSync Video	Yes

Motherboard

Form Factor	Proprietary
CPU	Soldered Intel Pentium N4200
Chipset	unknown
Memory	1x DDR3L 1866MHz SODIMM, 1.35V, Max 8GB
Video	1x HDMI
Networking	4x Intel i211AT 1GbE
PCI	none
Storage	1x mSATA 1x SATA
USB	4x External USB 2.0 (Type-A) 2x External USB 3.0 (Type-A) 1x Internal USB 2.0 (mPCIe)
COM	1*RS232

Memory

Slot 1 	Timetec Hynix IC 8GB DDR3L 1866MHz (1x8GB) • 2Rx8 Dual Rank • CAS Latency 13 • 1.35V

Case

n/a

Storage

SATA1 	Dogfish 128GB mSATA MLC SSD
SATA2 	Inland Professional 120GB SATA MLC SSD

Cooling

n/a

Power Supply

n/a

Image not fo

UPS

Manufacturer	APC
Model	Back UPS PRO BN-M2 1500VA
Features	• 900Watts / 1.5kVA • 6x Batter backed outlets • 4x Surge outlets

Add-On Cards

n/a

Base Install

Operating System

Proxmox Virtual Environment 6.x

Configuration

> Proxmox configuration has been transitioned to being automated by an Ansible Role

LXC / ember



Description

LXC container acting as a router/firewall. You can read more about how it is setup at Project Router.

Configuration

Resources

Hostname	CPU	Memory
ember	4 vCPU	2048MB

Storage

Mount Point	Source	Mount Path	Size	Options
rootfs	apool-zfs:subvol-100-disk-0	/	2GB	noatime

Networking

Interfaces

ID	Type	Name	Link	IPv4 Address	IPv6 Address	Description
net0	physical	eth0	enp1s0	DHCP	DHCPv6	WAN
net1	bridge	eth1	vmbr0	-	-	LAN

Installed Software

LXC / pihole



Description

A LXC container running Pi-Hole to provide DNS caching and advertisement blocking.

Configuration

Resources

Hostname	CPU	Memory
backup	2 vCPU	512MB

Storage

Mount Point	Source	Mount Path	Size	Options
rootfs	apool-zfs:subvol-101-disk-0	/	2GB	noatime

Networking

Interfaces

ID	Name	Bridge	IP Address	Description
net0	bridge	eth0	vmbr0	DHCP

LXC / adguard



Description

A LXC container running AdGuard Home to provide DNS caching and advertisement blocking.

Configuration

Resources

Hostname	CPU	Memory
adguard	2 vCPU	512MB

Storage

Mount Point	Source	Mount Path	Size	Options
rootfs	apool-zfs:subvol-101-disk-0	/	2GB	noatime

Networking

Interfaces

ID	Name	Bridge	IP Address	Description
net0	bridge	eth0	vmbr0	DHCP