

Homelab overview

- [homelab diagram](#)

homelab diagram

```
%%{init: {'theme': 'base', 'themeVariables': { 'primaryColor': '#cfd8dc', 'primaryTextColor': '#eceff1', 'primaryBorderColor': '#cfd8dc', 'lineColor': '#b0bec5', 'tertiaryColor': 'transparent', 'edgeLabelBackground': 'transparent', 'mainBkg': '#121212'}}}%  
flowchart LR  
    %% =====  
    %% 1. DEFINITIONS & CLASSES  
    %% =====  
    %% App Nodes (Dark Boxes)  
    classDef app fill:#263238,stroke:#546e7a,stroke-width:2px,color:#eceff1,rx:5,ry:5  
  
    %% The "Internet" Circle  
    classDef internet fill:#fff,stroke:#333,color:#000,stroke-width:2px  
  
    linkStyle default stroke:#607d8b,stroke-width:1px,fill:none;  
  
    %% =====  
    %% 2. THE CANVAS  
    %% =====  
    subgraph DarkCanvas [ ]  
        direction LR  
        style DarkCanvas fill:#121212,stroke:#121212,color:#121212  
  
        %% --- SOURCE ---  
        Internet((Internet)):::internet  
  
        %% =====  
        %% 3. BLUE ZONE: ORACLE CLOUD  
        %% =====  
        subgraph OracleCloud [Oracle Cloud - Free Tier]  
            direction TB  
            %% Blue Fill with Bright Blue Border  
            style OracleCloud fill:#0d47a1,stroke:#448aff,stroke-  
width:4px,color:#fff,rx:10,ry:10
```

```

%% --- SERVER: PHOENIX ---
subgraph PhoenixBox [Phoenix - Gateway]
    direction TB
    %% Charcoal Box
    style PhoenixBox fill:#212121,stroke:#607d8b,stroke-
width:2px,color:#fff,rx:5,ry:5

    P_Traefik[Traefik Proxy]:::app
    P_WG[WireGuard Interface]:::app

    %% Grey Box: Stack
    subgraph P_Infra [Infrastructure]
        style P_Infra fill:#424242,stroke:#757575,stroke-width:1px,stroke-
dasharray: 5 5,color:#eee,rx:5,ry:5
        P_Fail2Ban[Fail2Ban]:::app
        P_Agent[Portainer Agent]:::app
        P_Kuma[Uptime Kuma]:::app
    end
end

%% --- SERVER: DOBBY ---
subgraph DobbyBox [Dobby - Game Node]
    direction TB
    style DobbyBox fill:#212121,stroke:#607d8b,stroke-
width:2px,color:#fff,rx:5,ry:5

    %% Grey Box: Stack
    subgraph D_Games [Game Stack]
        style D_Games fill:#424242,stroke:#757575,stroke-width:1px,stroke-
dasharray: 5 5,color:#eee,rx:5,ry:5
        D_Wing[Pterodactyl Wing]:::app
        D_MC[Minecraft Cluster]:::app
    end

    D_Agent[Portainer Agent]:::app
end

%% =====

```

```
%% 4. GREEN ZONE: HOME NETWORK
```

```
%% =====
```

```
subgraph HomeNet [Home Network - Deltona]
```

```
direction TB
```

```
%% Green Fill with Bright Green Border
```

```
style HomeNet fill:#1b5e20,stroke:#00e676,stroke-width:4px,color:#fff,rx:10,ry:10
```

```
Unifi[Unifi Router]:::app
```

```
style Unifi fill:#000,stroke:#00e676,stroke-width:2px,color:#fff
```

```
%% --- SERVER: FIREBOLT ---
```

```
subgraph FireboltBox [Firebolt - Main Server]
```

```
direction TB
```

```
style FireboltBox fill:#212121,stroke:#607d8b,stroke-  
width:2px,color:#fff,rx:5,ry:5
```

```
F_Traefik[Traefik Internal]:::app
```

```
F_WG[WireGuard Interface]:::app
```

```
subgraph F_Stacks [Apps & Services]
```

```
style F_Stacks fill:none,stroke:none,color:#fff
```

```
%% Grey Box: Stack
```

```
subgraph F_Infra [Infrastructure]
```

```
style F_Infra fill:#424242,stroke:#757575,stroke-width:1px,stroke-  
dasharray: 5 5,color:#eee,rx:5,ry:5
```

```
F_Auth[Authentik]:::app
```

```
F_Portainer[Portainer]:::app
```

```
F_Homepage[Homepage]:::app
```

```
F_Tug[Tugtainer]:::app
```

```
F_Dozzle[Dozzle]:::app
```

```
end
```

```
%% Grey Box: Stack
```

```
subgraph F_Media [Media Stack]
```

```
style F_Media fill:#424242,stroke:#757575,stroke-width:1px,stroke-  
dasharray: 5 5,color:#eee,rx:5,ry:5
```

```
F_Plex[Plex Media Server]:::app
```

```
F_Req[Overseerr / Tautulli]:::app
```

```

        F_Arr[Sonarr / Radarr / Prowlarr<br/>Huntarr / Doplarr]:::app
        F_Down[qBit / Unpackerr / Flare]:::app
    end

    %% Grey Box: Stack
    subgraph F_Admin [Admin Tools]
        style F_Admin fill:#424242,stroke:#757575,stroke-width:1px,stroke-
dasharray: 5 5,color:#eee,rx:5,ry:5
        F_Bit[Vaultwarden]:::app
        F_Book[BookStack]:::app
        F_Dup[Duplicati]:::app
        F_File[FileBrowser]:::app
        F_PMA[PhpMyAdmin]:::app
    end

    %% Grey Box: Stack
    subgraph F_GameStack [Game Stack]
        style F_GameStack fill:#424242,stroke:#757575,stroke-width:1px,stroke-
dasharray: 5 5,color:#eee,rx:5,ry:5
        F_Panel[Ptero Panel]:::app
        F_Wing[Ptero Wing]:::app
        F_DB[Panel DB & Redis]:::app
        F_Ark[Ark Survival Evolved]:::app
    end
end

end

%% --- SERVER: NORBERT ---
subgraph NorbertBox [Norbert - Storage]
    direction TB
    style NorbertBox fill:#212121,stroke:#607d8b,stroke-
width:2px,color:#fff,rx:5,ry:5

    N_WG[WireGuard]:::app
    N_Store[Media Storage]:::app

    %% Grey Box: Stack
    subgraph N_Apps [App Stack]
        style N_Apps fill:#424242,stroke:#757575,stroke-width:1px,stroke-

```

```

dasharray: 5 5,color:#eee,rx:5,ry:5
    N_Hass[Home Assistant]:::app
    N_LLM[LLMCord AI]:::app
end

%% Grey Box: Stack
subgraph N_Games [Game Node 1]
    style N_Games fill:#424242,stroke:#757575,stroke-width:1px,stroke-
dasharray: 5 5,color:#eee,rx:5,ry:5
    N_Wing[Ptero Wing]:::app
    N_MC[MC Test]:::app
end
end

%% --- HARDWARE: RASPBERRY PI ---
subgraph PiHoleBox [Raspberry Pi]
    direction TB
    style PiHoleBox fill:#212121,stroke:#607d8b,stroke-
width:2px,color:#fff,rx:5,ry:5
    PI_SVC[DNS Sinkhole]:::app
    PI_VPN[PiVPN Ingress]:::app
end
end

end

%% =====
%% 5. TRAFFIC WIRING
%% =====

%% Internet Ingress (GREEN - PUBLIC)
Internet ==>|HTTPS| P_Traefik
Internet ==>|MC Ports| D_Games
Internet ==>|32400 / 51820 / Games| Unifi
linkStyle 0,1,2 stroke:#00e676,stroke-width:3px;

%% Tunnel (ORANGE - WIREGUARD)
P_Traefik --> P_WG
P_WG ==>|WireGuard Tunnel| F_WG
linkStyle 3,4 stroke:#ff9100,stroke-width:4px;

```

```
%% LAN (BLUE - INTERNAL)
F_WG --> F_Traefik
linkStyle 5 stroke:#2979ff,stroke-width:2px;

%% LAN Distribution (BLUE)
F_Traefik --> F_Infra & F_Media & F_Admin & F_GameStack
linkStyle 6,7,8,9 stroke:#2979ff,stroke-width:2px;

%% LAN Remote (BLUE)
F_Traefik --> N_Apps & PI_SVC
linkStyle 10,11 stroke:#2979ff,stroke-width:2px;

%% Split Route (ORANGE - TUNNEL)
P_WG -->|Direct Route| N_WG
linkStyle 12 stroke:#ff9100,stroke-width:3px,stroke-dasharray: 5 5;

%% LAN Internal (BLUE)
N_WG --> N_Games
linkStyle 13 stroke:#2979ff,stroke-width:2px;

%% PORT FORWARDING (GREEN DASHED - PUBLIC MAPPED)
Unifi -->|32400| F_Plex
Unifi -->|Game Ports| F_GameStack
Unifi -->|Game Ports| N_Games
Unifi -->|UDP 51820| PI_VPN
linkStyle 14,15,16,17 stroke:#00e676,stroke-width:2px,stroke-dasharray: 5 5;

%% Management (GREY/NEUTRAL)
F_Portainer --> P_Agent & D_Agent
F_Down -->|NFS| N_Store
F_Panel --> D_Wing & N_Wing & F_Wing
```

Color Legend

- **Green Lines:** Public Internet Traffic (HTTPS, 32400, Game Ports)
- **Orange Lines:** WireGuard Tunnel Traffic
- **Blue Lines:** Internal LAN Traffic

- **Blue Zone:** Oracle Cloud Infrastructure
- **Green Zone:** Home Network Infrastructure
- **Charcoal Boxes:** Servers & Hardware (Phoenix, Firebolt, etc.)
- **Grey Boxes:** Logical Stacks (Media, Infra, Admin)
- **Dark Boxes:** Individual Applications