

Wireless — Deco Mesh

Overview

Wireless coverage is provided by a **TP-Link Deco mesh network** operating in **AP mode** — all routing and DHCP is handled upstream by Whistler (UCG Fiber). All nodes use **wired Ethernet backhaul**; no wireless backhaul is in use.

The network supports WiFi 7 (BE) on capable nodes with Multi-Link Operation (MLO).

Node Inventory

Node	Model	Location	Mount	Power Source	Backhaul Uplink
Primary	Deco BE11000	Kitchen	Freestanding	Passive (powered via Cat6)	GigaPlus switch (Cat6)
Secondary	Deco BE11000	Basement Gym	Freestanding	Passive (powered via Cat6)	GigaPlus switch (Cat6)
Office	Deco XE75 Pro	Office	Freestanding	Passive	MokerLink switch (Cat5a)
Master Bedroom	Deco X50-PoE	Master Bedroom	On-wall	PoE (5-port PoE switch via Cat5a)	5-port PoE switch
Back Yard	Deco X50-Outdoor	Back Yard	Outdoor mount	PoE (5-port PoE switch via Cat6)	5-port PoE switch
Garage	Deco X50-Outdoor	Garage	Outdoor mount	PoE (5-port PoE switch via conduit Cat6)	5-port PoE switch

SSID Configuration

SSID	Bands	Purpose	Client Isolation
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Main (MLO)	2.4 / 5 / 6 GHz	Primary devices	No
IoT	2.4 GHz only	Smart home devices	Intended — method unverified
Guest	2.4 / 5 GHz	Guest access	Yes — no local network access

“ **IoT isolation caveat:** Deco abstracts network isolation implementation details. It is the intent that IoT devices cannot communicate with main LAN devices, but the specific mechanism (VLAN, client isolation, UCG firewall rule) has not been verified. **Do not treat IoT as confirmed isolated until this is investigated.**

Known Limitations & Notes

- IoT device migration to the IoT SSID is **in progress** — not all smart home devices have been moved over yet
- The Back Yard Run 2 (non-PoE Cat6) is reserved for future WAN failover — not a Deco uplink
- No wireless backhaul in use — all nodes require a wired Ethernet connection

Outstanding Action Items

- ☐ Verify IoT network isolation mechanism — check UCG firewall rules and Deco app network settings
- ☐ Complete migration of all smart home devices to IoT SSID
- ☐ Document final device-to-SSID mapping once migration is complete

Last Updated

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