



Unykorn Black: Full System Architecture

Telematics Bridge, DBSCAN Dynamic Pricing, and UUPS Split Ledger

Open-Source Backend Specification | Central Hub: 5655 Peachtree Pkwy, Norcross, GA

1. Four-Phase Enterprise Technology Pipeline

1. Fleet Telematics Bridge (FastAPI / Tesla Fleet API): OAuth2 token management, battery SoC monitoring, FSD state logging, geofence boundary checks, and remote commands.
2. Dynamic Pricing Engine: Spatial DBSCAN clustering over real-time traffic, weather, and Supercharger grid electricity rates to proactively reposition idle vehicles.
3. Smart Contract Ledger (UUPS Proxy): Automated atomic split distributing 35% to Operational Reserve, 40% to Debt Service, and 25% to Unykorn Multi-Sig Treasury Yield.
4. Sovereign Cockpit & WebGL Console: Glassmorphic real-time dispatch dashboard with live radar and cabin ambient profile synchronization.

2. Open-Source API Endpoints

GET	/api/v1/telematics/fleet (Real-time battery, speed, coords for all vehicles)
GET/POST	/api/v1/depot/norcross (Staged fleet status at 5655 Peachtree Pkwy)
POST	/api/v1/pricing/quote (DBSCAN dynamic surge calculation and fare quote)
POST	/api/v1/ledger/settle (UUPS smart contract atomic revenue split trigger)

3. Physical Hub & Depot Specifications

- Address: 5655 Peachtree Pkwy, Norcross, GA 30092
- Charging: 12 DC Fast Chargers (250kW V4 Supercharger Compatible)
- Depot Capacity: Up to 32 autonomous vehicles staged simultaneously
- High-Speed Connectivity: Redundant fiber gigabit + Starlink telemetry uplink