THE SOVEREIGN WISP KIT

AUTOMATED MICRO-ISP & EDGE NODE

DOCUMENT CLASSIFICATION:	CONFIDENTIAL INTERNAL DOCUMENT
RESTRICTION:	DO NOT DISTRIBUTE WITHOUT AUTHORIZATION
SUBJECT:	PRODUCT SSOT
VERSION:	1.0
DATE:	MARCH 10, 2026
STATUS:	PRE-PRODUCTION / PILOT PHASE
OWNER:	DERETICULAR INFRASTRUCTURE DIVISION & TRIFIWIRELESS PARTNERSHIP

EDGE COMPUTE NODE
SPEC/ 8A-00GE ARR, 128GB RAM, 4TB NVMe STORAGE.
SRU: 02SP-EOR-44
FUNCTION: LOCAL TRAFFIC ANALYTICS, CACHING, SECURITY ENFORCEMENT.

SOVEREIGN WISP KIT HUB

EDGE COMPUTE NODE
SPEC: 64-CORE ADR, 128GB RAM, 4TO NVMe STORAGZ.
SRU: N1SP-ECN-64
FUNCTION: LOCAL TRAFFIC ANALYTICS, CACHING, SECURITY ENFORCEMENT.

NICRO-ISP ACCESS POINTS
SPEC: 802.11be (WI-FI 7), NESH CAPABLE, LOW-LATENCY BEAMFORMING.
SKU: RISP-RAP-87
RANGE: 500M DIRECT LINE OF SIGHT.

COMPLIANCE: FCC, CE, ETSI APPROVED.
RENETEZATION: INTEGRATED BILLING & ACCESS CONTROL.

GLOBAL INTERNET GATEWAY

TRANSFORMING DECENTRALIZED INFRASTRUCTURE FROM A PASSIVE COST CENTER INTO AN ACTIVE, AUTONOMOUS PROFIT CENTER.

Cost Center

Autonomous Profit Center

1. Raw Compute:
Sovereign Sentry (Pro) processing power.

2. Unkillable Connectivity:
Starlink Business paired with Nomad Link LTE failover.

3. Automated Billing:
Embedded Captive Portal splitting local Wi-Fi and IoT backhaul profits.
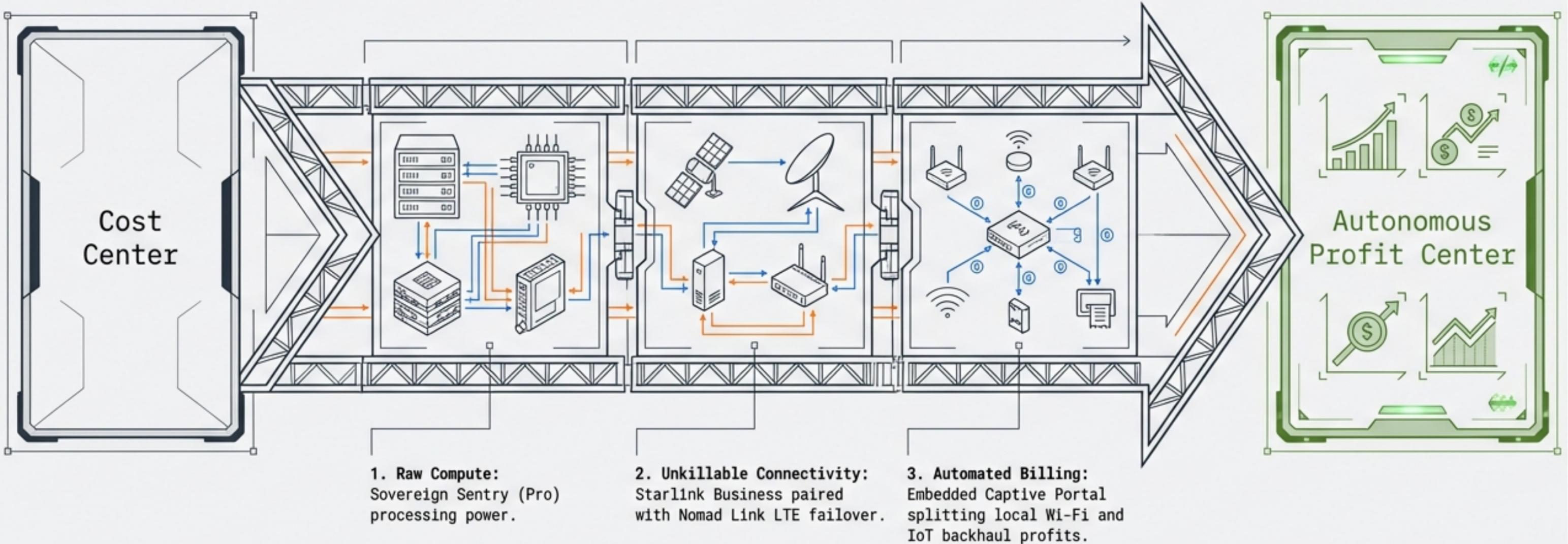
This is not just networking equipment; it is an automated, off-grid telecom business in a single, ruggedized box.

NotebookLM

TARGET DEPLOYMENT PROFILES

QUADRANT 1: RV PARKS

Target: High-density transient populations requiring temporary, high-speed retail data.

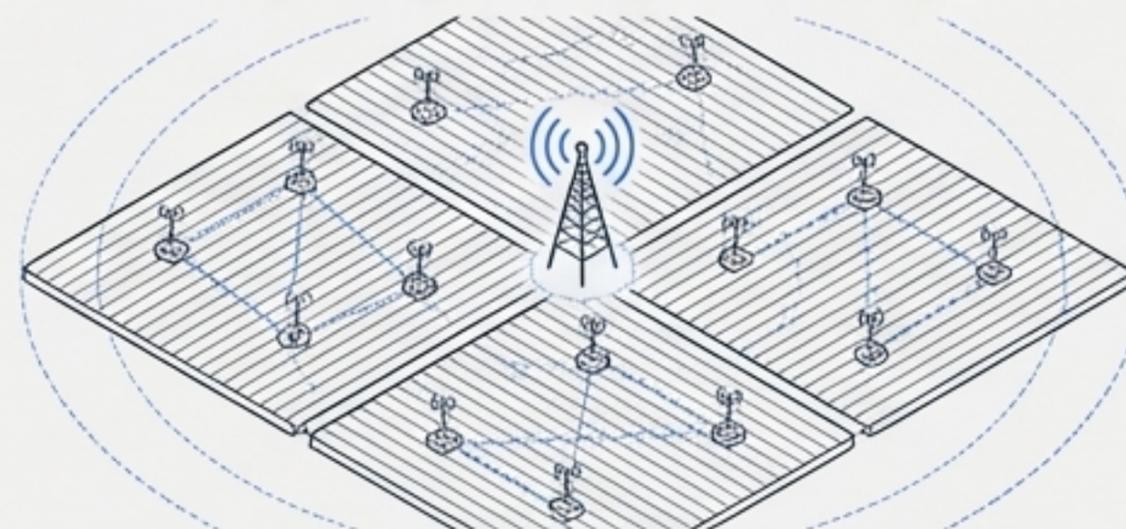## QUADRANT 2: ECO-TOURISM OPERATORS

Target: Off-grid luxury hospitality requiring zero-touch guest access and secure payment gateways.

QUADRANT 3: REMOTE MINING CAMPS

Target: Industrial deployments requiring both crew communication (Wi-Fi) and equipment telemetry (LoRaWAN).

QUADRANT 4: AGRI-BUSINESS LANDOWNERS

Target: Expansive acreage requiring M2M (Machine-to-Machine) backhaul for soil and weather sensors.

NotebookLM

HARDWARE BOM (THE PHYSICAL INFRASTRUCTURE)

PRIMARY PACKAGE BLOCK: RIOS-KIT-WISP BUNDLE | **MSRP: $1,749.00**

1x SOVEREIGN SENTRY (PRO)

SKU: RIOS-SS-PRO

The core edge compute, SD-WAN router, and Local RADIUS host.

1x NOMAD LINK

SKU: RIOS-NL-01

Industrial, battery-less LTE failover bridge for payment gateway uptime.

2x MESH BEACONS
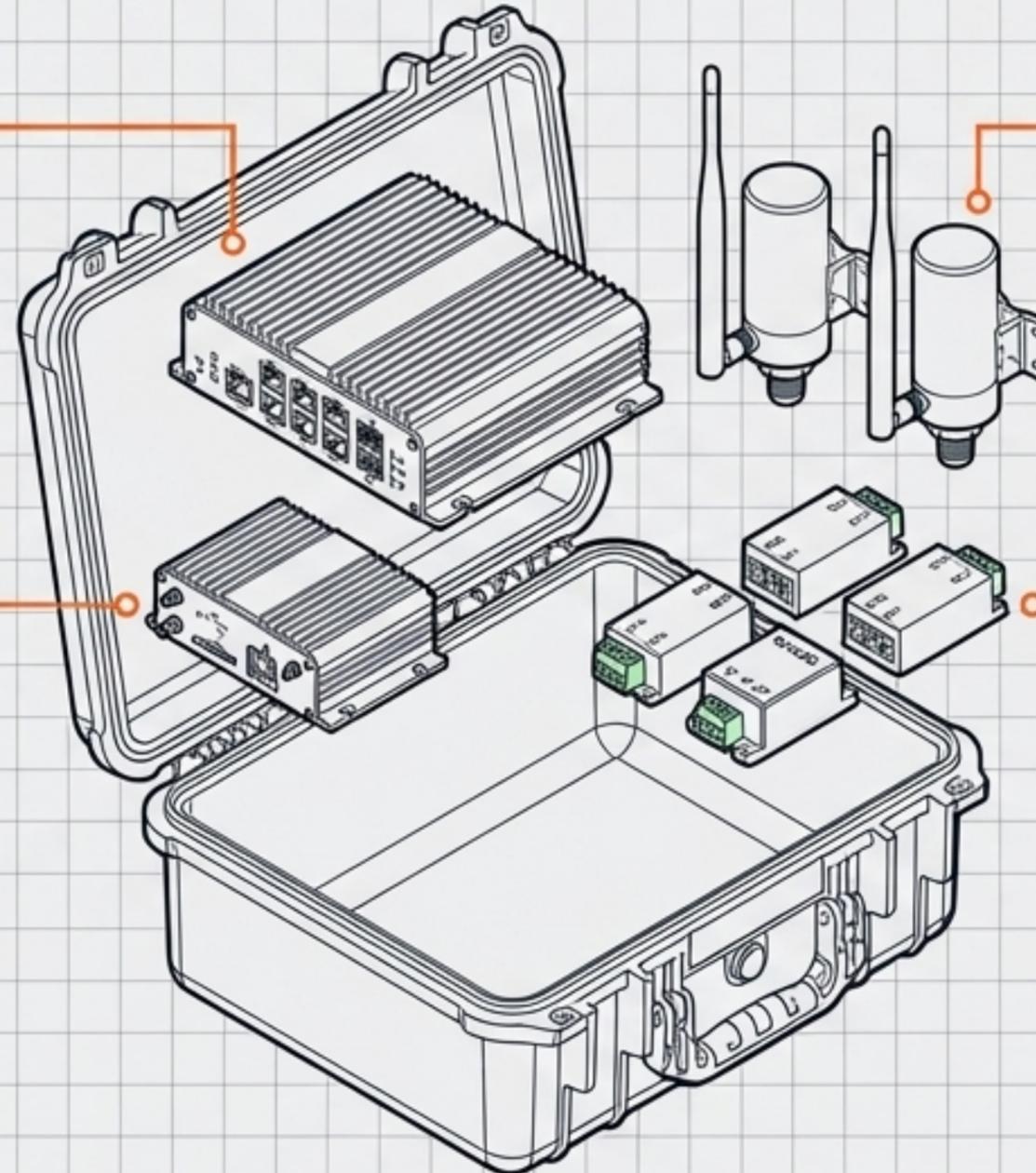
SKU: RIOS-EXT-01

IP67-rated outdoor access points broadcasting Wi-Fi 6 and 915MHz LoRaWAN.

POWER MANAGEMENT

2x PoE+ Injectors & 1x DC Step-Down for direct solar microgrid or UPS integration.

PARTNER DEPENDENCY NOTE: REQUIRES STARLINK FLAT HIGH-PERFORMANCE KIT (~$2,500 + $250/mo Priority Data via TriFiWireless).
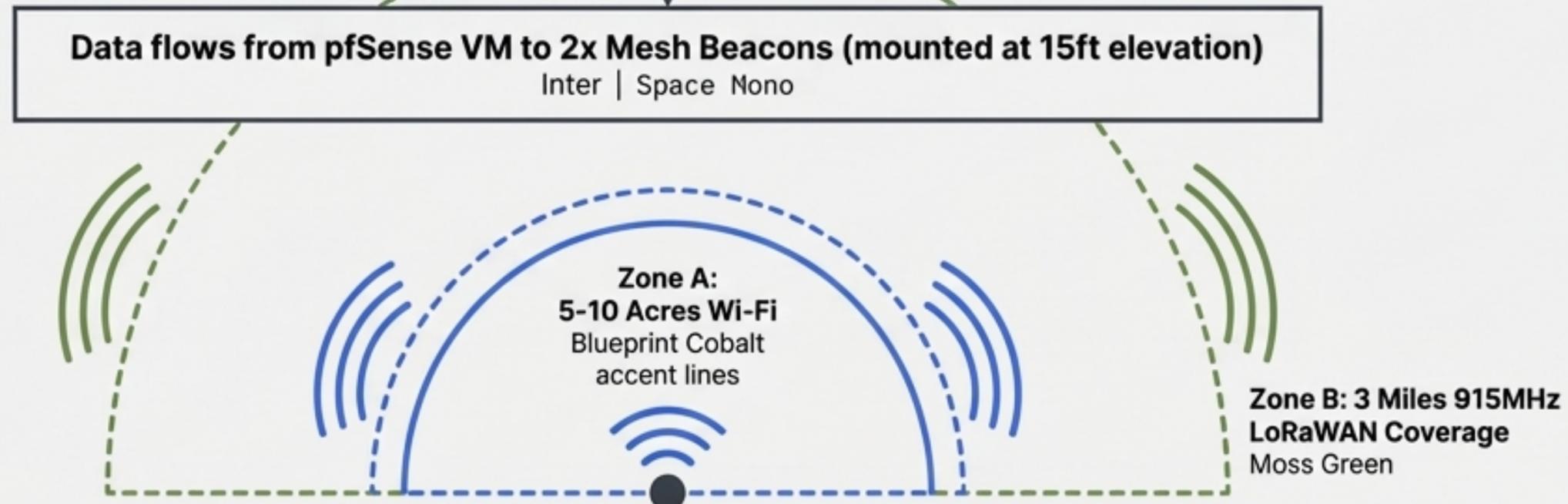
NotebookLM

NETWORK TOPOLOGY & COMPUTE EDGE

INGRESS & COMPUTE

WAN 1: Starlink Business (Tier 1 Priority)
Inter | Space Mono

WAN 2: Nomad Link LTE (Tier 2)
Space Mono

⚠ **Failover Trigger:**
>15% Packet Loss

Core Node: Sovereign Sentry Pro (i3-N305)
Space Mono

Easily handles Deep Packet Inspection (DPI) unnotated to meter data without throttling the 220Mbps+ Starlink connection. Inter

BROADCAST & COVERAGE

Data flows from pfSense VM to 2x Mesh Beacons (mounted at 15ft elevation)
Inter | Space Mono

Zone A:
5-10 Acres Wi-Fi
Blueprint Cobalt
accent lines

Zone B: 3 Miles 915MHz
LoRaWAN Coverage
Moss Green

NotebookLM

THE TOLLBOOTH OS (THE DIGITAL ENGINE)

LAYER 4 (TOP): TriFiWireless API Bridge

A secure, locked container syncing total consumption with the TriFiWireless enterprise backend to guarantee Acceptable Use Policy (AUP) compliance.

LAYER 3: THE TOLLBOOTH AGENT
Image: `dereticular/openclaw-wisp:latest`

The core logic engine. Handles MAC address whitelisting, Stripe/Crypto API calls, and strict per-user QoS metering.

LAYER 2: pfSense VM

Handles SD-WAN bonding, intercepting DNS, and routing traffic to the Captive Portal.
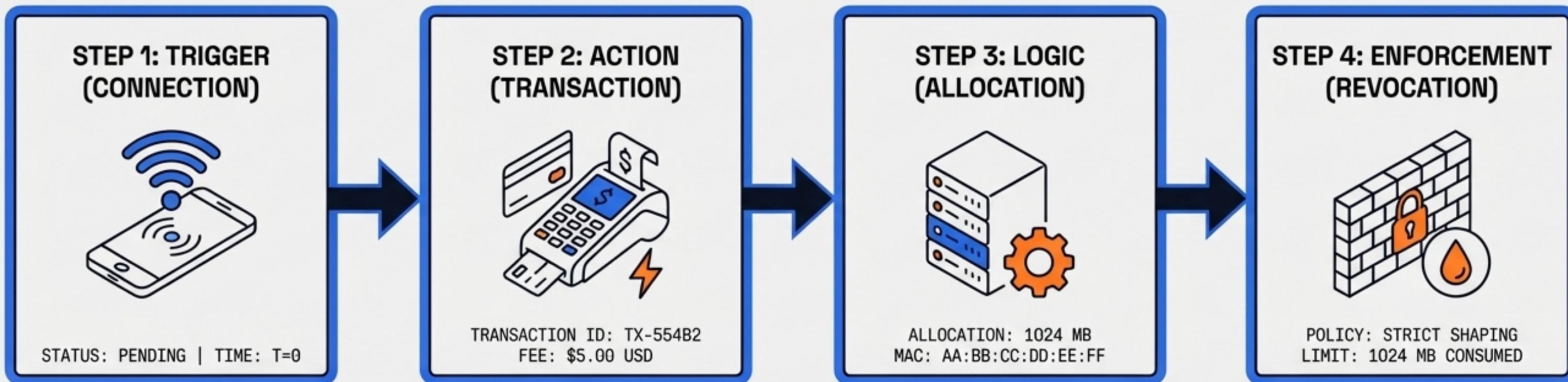
LAYER 1 (BASE): SENTRY HARDWARE

The physical routing and compute foundation.

NotebookLM
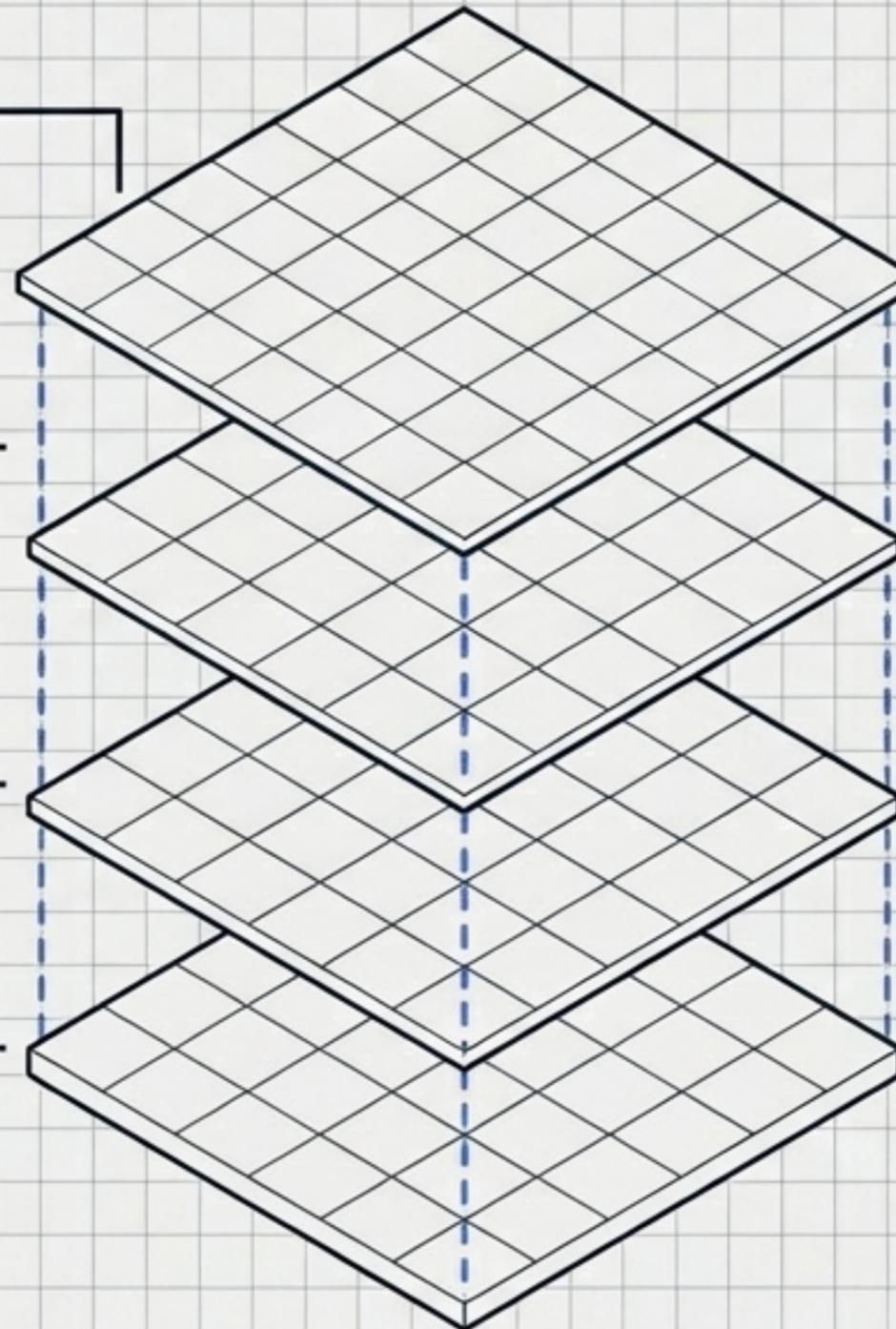
REVENUE ENGINE MODE A: TRANSIENT MICRO-TRANSACTIONS

STEP 1: TRIGGER (CONNECTION)

STATUS: PENDING | TIME: T=0

User smartphone connects to the public SSID (e.g., Sovereign_Connect_$5_GB). pfSense intercepts DNS.

STEP 2: ACTION (TRANSACTION)

TRANSACTION ID: TX-554B2
FEE: $5.00 USD

Redirect to locally hosted Captive Portal. User pays $5.00 via Stripe or Lightning Network.

STEP 3: LOGIC (ALLOCATION)

ALLOCATION: 1024 MB
MAC: AA:BB:CC:DD:EE:FF

The Tollbooth Agent registers the MAC address and provisions exactly 1,024 MB in the local RADIUS server.

STEP 4: ENFORCEMENT (REVOCATION)

POLICY: STRICT SHAPING
LIMIT: 1024 MB CONSUMED

Strict shaping applied (15 Mbps Down / 2 Mbps Up). Upon consuming 1,024 MB, the firewall instantly drops the session and redirects to the top-up page.

NotebookLM

REVENUE ENGINE MODE B: M2M IOT BACKHAUL

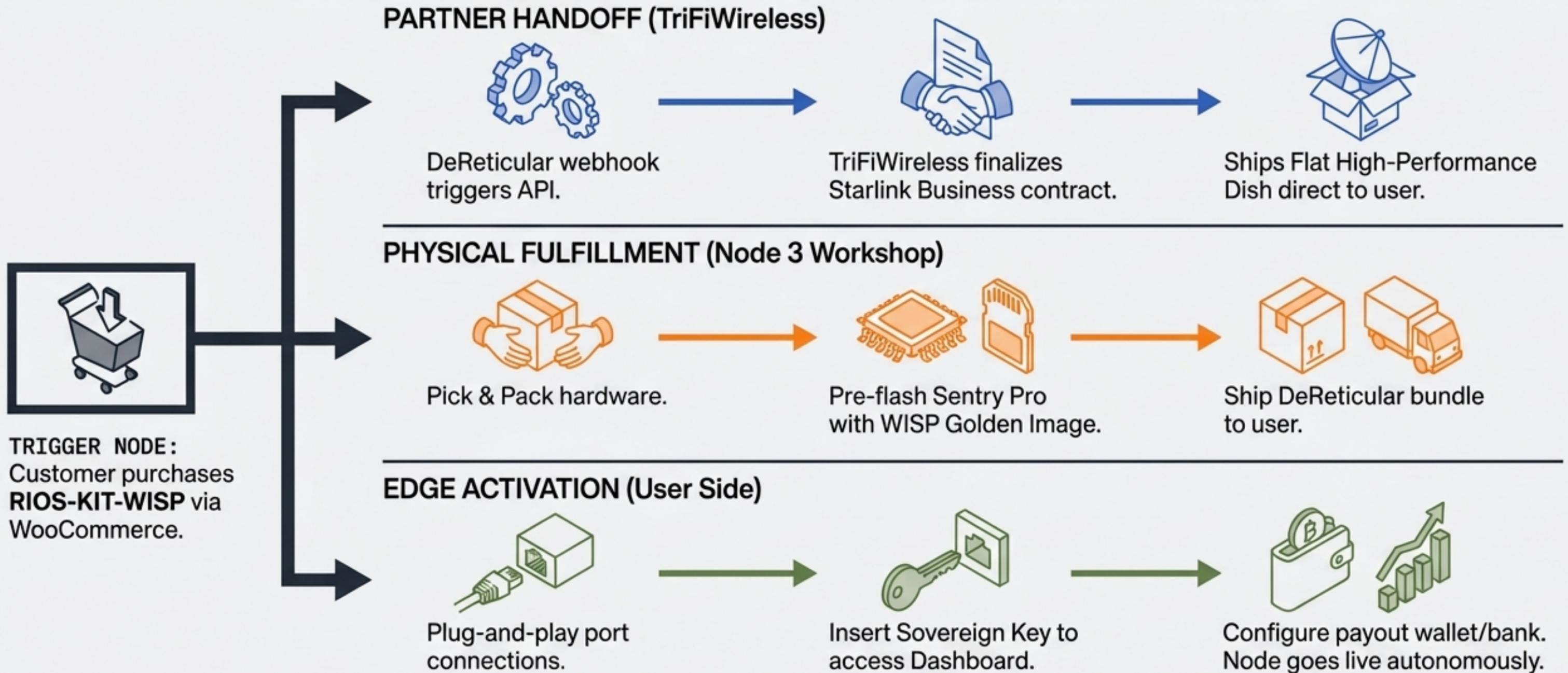**USE CASE:** Neighboring agri-business deploying soil moisture sensors within the 3-mile LoRaWAN radius.

MODE A: CAPTIVE PORTAL (BYPASSED)

MODE B: DIRECT CLOUD ROUTE

TRIGGER & ACTION

Node Operator accesses the Sovereign Dashboard and whitelists the neighboring LoRa device EUIs.

STATUS: ACTIVE | **TIME:** T=0

LOGIC & REVENUE

Neighbor is billed a flat $10/month subscription. The Mesh Beacon captures 915MHz telemetry and tunnels it securely over the Starlink backhaul, completely bypassing the Mode A Captive Portal.

BILLING: $10/MONTH FLAT FEE | **PROTOCOL:** LORAWAN 915MHZ | **ROUTE:** SECURE STARLINK TUNNEL
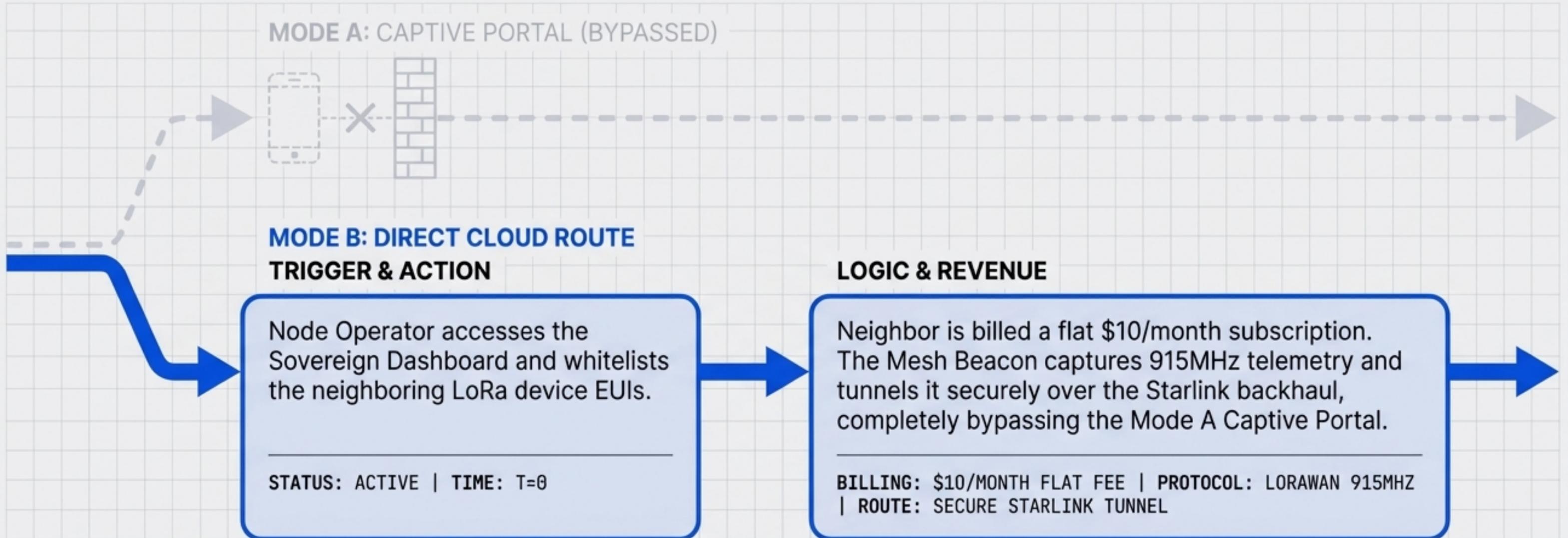
STRATEGIC TAKEAWAY: Blends high-margin transient B2C revenue (Mode A) with stable, recurring B2B leasing revenue (Mode B).

LOGISTICS & ACTIVATION (THE FULFILLMENT SWIMLANE)

TRIGGER NODE: Customer purchases **RIOS-KIT-WISP** via WooCommerce.

PARTNER HANDOFF (TriFiWireless)

DeReticular webhook triggers API. → TriFiWireless finalizes Starlink Business contract. → Ships Flat High-Performance Dish direct to user.

PHYSICAL FULFILLMENT (Node 3 Workshop)

Pick & Pack hardware. → Pre-flash Sentry Pro with WISP Golden Image. → Ship DeReticular bundle to user.

EDGE ACTIVATION (User Side)

Plug-and-play port connections. → Insert Sovereign Key to access Dashboard. → Configure payout wallet/bank. Node goes live autonomously.

NotebookLM

SYSTEM GOVERNANCE & RISK MITIGATION

THREAT PROFILE	AUTOMATED COUNTERMEASURE
Threat: Bandwidth Hogging Single user streams 4K video, depleting Starlink pool.	**Countermeasure (R-QOS-01)** Tollbooth Agent enforces a hard, unyielding 15/2 Mbps limit per MAC address.
Threat: Starlink TOS Ban Reselling residential connections violates SpaceX rules.	**Countermeasure (R-AUP-01)** System strictly locked to TriFiWireless Enterprise API. Boot failure sequence initiated if connected to residential dish.
Threat: MAC Spoofing & Legal Liability Captive portal bypass or illegal torrenting.	**Countermeasure (R-SEC-01 & Legal)** Sovereign Audit engine detects rapid MAC cycling and auto-blocks. Enforces Layer 2 Client Isolation. Retains 90-day MAC/IP association logs for CALEA / DMCA Safe Harbor protection.

NotebookLM

SLA, ECOSYSTEM ECONOMICS & NEXT STEPS

ECOSYSTEM ECONOMICS

Blueprint Cobalt

50%
Data Margin Split

50%
Data Margin Split

Moss Green
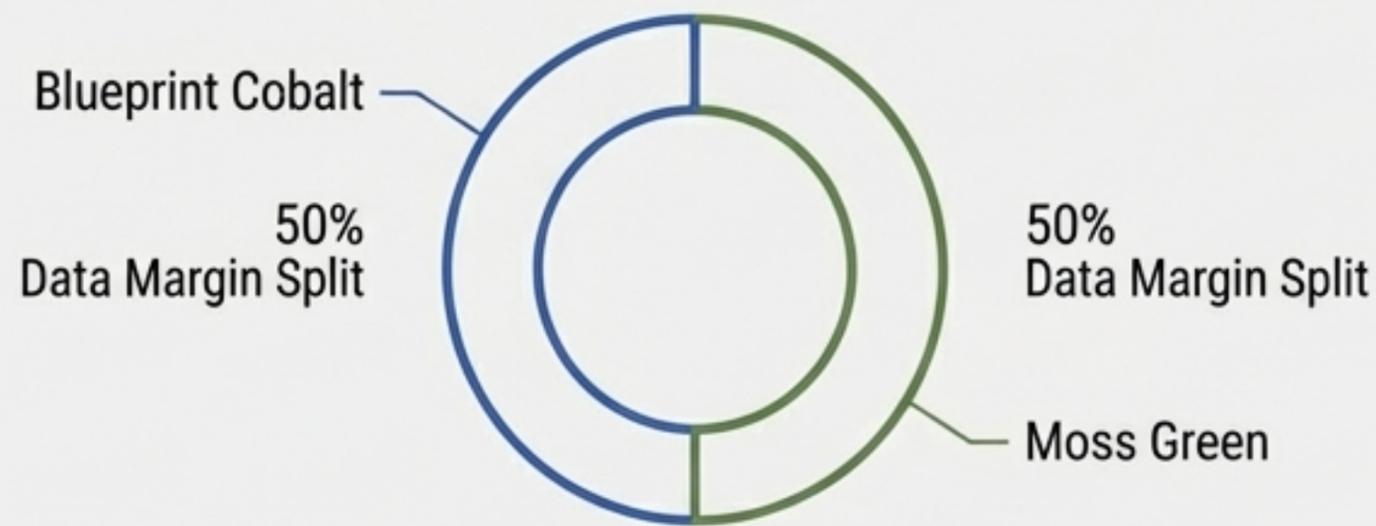
DeReticular Value:
Manages underlying
Stripe/Crypto gateways,
assumes chargeback risk,
and handles complex
tax reporting.

Operator Value:
Cryptographically
auditable micro-transactions
via localized Locutus
Ledger dashboard.
Total operational autonomy.

SUPPORT & SLA ARCHITECTURE

Hardware Warranty:
1-Year Limited on Sentry Pro, Beacons, and Nomad
Link. (Starlink supported via SpaceX/
SpaceX/TriFiWireless).

Software Lifecycle:
Continuous OTA updates for pfSense firewall and
OpenClaw agent via DeReticular registry.

[Authority: Remnant / TriFiWireless Joint Steering Committee]

NotebookLM