WISP & ISP OPERATIONS CASE STUDY · 1-PAGE EXECUTIVE BRIEF

Catching Tower Outages Under 2 Minutes & Deflecting 40%+ Tier-1 Subscriber Tickets

Pablo Ian Laurino
Network Automation & NOC Systems
MTCNA · 3× UniFi Pro · GoHighLevel L1/L2
github.com/PabloIan92/isp-network-monitor

<2 min	**40%+**	**6,000+**	**$0 HW**
Tower & OLT Outage Alert	Tier-1 Ticket Deflection	Subscriber ISP Scale	Zero Hardware Swaps

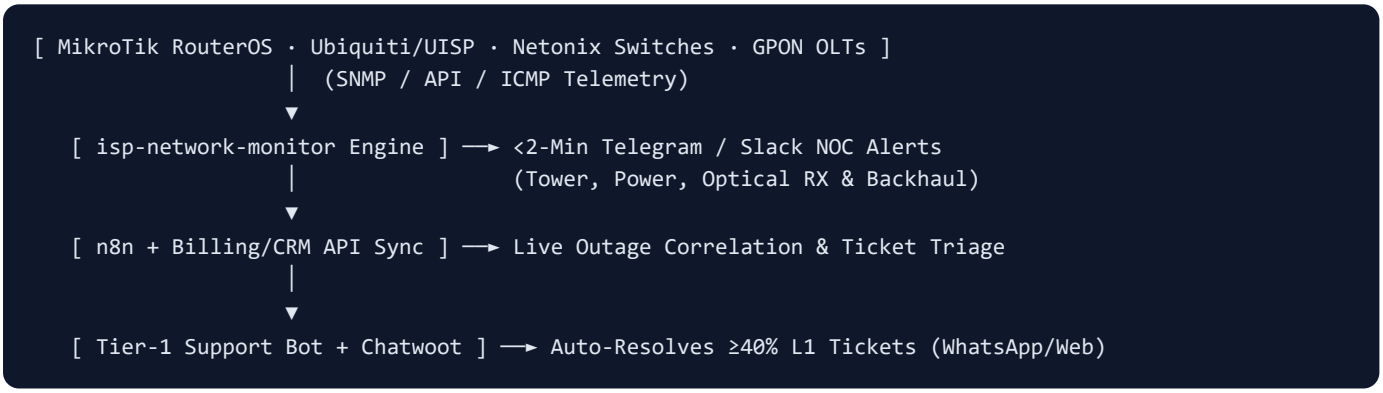
THE WISP OPERATIONAL BOTTLENECK

Regional WISPs and fiber operators running mixed-vendor footprints (MikroTik routers, Ubiquiti/UISP towers, Netonix PoE switches, and GPON OLTs) typically discover silent tower failures when subscribers flood support phones—causing high truck-roll costs, alert fatigue, and burned-out NOC engineers.

THE AUTONOMOUS WISP OPS STACK

Battle-tested across a **6,000-subscriber regional ISP operation**: deployed a unified multi-vendor polling & telemetry engine wired into instant Telegram/Slack escalation channels, paired with a self-hosted **n8n + Chatwoot** Tier-1 support bot synced to subscriber billing and outage status APIs.

PRODUCTION NOC & TIER-1 SUPPORT ARCHITECTURE



BEFORE VS. AFTER OPERATIONAL IMPACT (MULTI-VENDOR WISP)

Operational Metric	Legacy Manual NOC & Phone Desk	Autonomous WISP Ops Stack
Outage Detection & Escalation	15–45 min (subscriber-reported)	**<2 min** automated Telegram / Slack tower alerts
Multi-Vendor Visibility	Siloed portals (UISP, Winbox, OLT CLI)	**Unified** MikroTik + Ubiquiti + Netonix + GPON polling
Tier-1 Repetitive Inquiries	100% manual agent replies & phone queues	**≥40% deflected** (outage checks, billing, router reset)
Hardware & Deployment Overhead	Vendor lock-in or expensive NMS licensing	**Zero hardware swaps** · Live on client VPS in 14 days

Ready to automate your WISP NOC & Tier-1 support in 14 days?
Open-source core: github.com/PabloIan92/isp-network-monitor · Guaranteed <2-min alerts & ≥40% L1 deflection.

pabloianlaurino@gmail.com
linkedin.com/in/pablo-ian-laurino-263aa5145