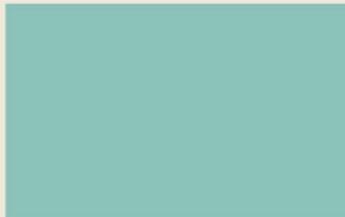
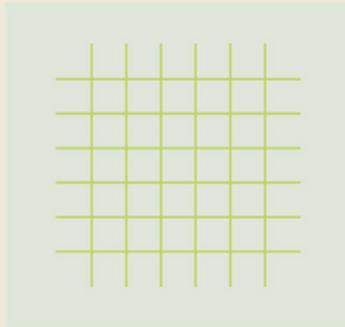
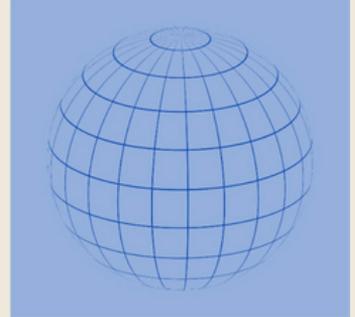
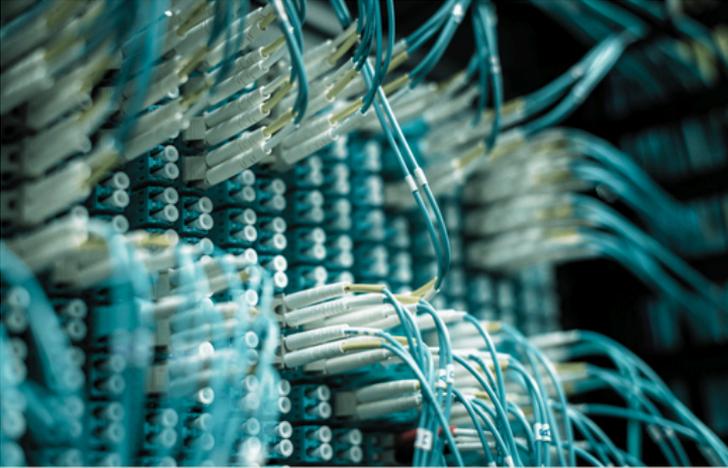


OPERATIONAL INTELLIGENCE AT THE SPEED OF FIBER

Monitoring and Management for
Distributed ISP Infrastructure



RADIX® 

The Challenge:

Complex Remote Operations

Distributed ISP infrastructure faces significant challenges, including growing network complexity, increased competition, rising bandwidth demand, and evolving security threats. ISPs must manage intricate core and access networks comprising high-capacity routers, switches, and diverse last-mile technologies, all while navigating regulatory pressures and the rapid pace of technological change. These factors make troubleshooting difficult, increase operational costs, and can lead to service disruptions if not addressed efficiently.

- **Complex Infrastructure Monitoring**
Too many disconnected systems make it hard to spot and solve issues fast.
- **Costly Network Downtime**
Slow root-cause analysis leads to longer outages and unhappy customers.
- **Operational Silos Slow Response**
Separate tools across teams slow coordination and delay action.
- **Manual Processes Increase Errors**
Manual tasks raise costs, increase delays, and allow mistakes to slip through.

Every outage risks SLA penalties, subscriber churn, and brand damage. As service areas grow, so do the number of remote sites, each adding complexity and vulnerability. Without unified oversight, teams are forced into reactive mode. They chase alarms, dispatch trucks, and struggle to maintain uptime. The result is higher costs, slower rollouts, and stalled growth in an industry that demands speed and reliability

The Solution: mango

- **Centralized Site Visibility**

Monitor all infrastructure across your network, including edge huts, POPs, power systems, and security devices. Access real-time status from every location through one intuitive platform.

- **Audit Trails and Historical Trends**

Log every action and event to create a searchable history. Identify recurring issues, compare performance across sites, and maintain compliance with SLA and audit requirements.

- **Role-Based Dashboards**

Tailor the interface to each team. Network Operations Center staff, field technicians, and operations teams see only the data relevant to them, cutting through noise and helping them focus on what matters most.

- **Automated Alerting and Escalation**

Get instant alerts for critical events like temperature spikes, equipment faults, or power loss. Configure thresholds and escalation paths to ensure fast, accurate response before issues impact service.

- **Remote Control and Diagnostics**

Take action from anywhere. Remotely reboot devices, adjust settings, acknowledge alarms, or isolate failures without sending a technician. This reduces truck rolls and speeds up resolution.

- **Cross-System Integration**

Connect network, power, HVAC, and facility tools into one unified view. Mango supports both open protocols and legacy equipment, so you can modernize without replacing your entire stack.

- **Rapid Deployment and Scalability**

Deploy in phases and connect with your current infrastructure. Mango adapts to your environment so you can scale smoothly as your network grows.



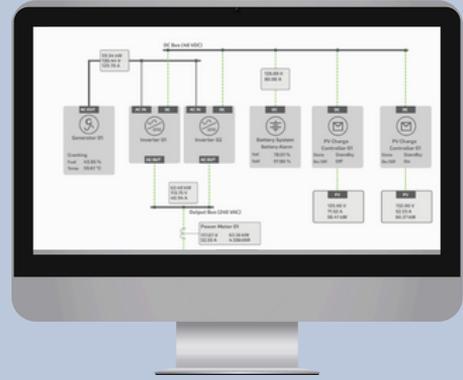
For Fiber ISP Operations

Mango connects across your existing infrastructure to deliver a unified, real-time operational view without replacing systems or requiring complex installs. It integrates easily with network gear, power systems, HVAC units, security devices, and environmental sensors, bringing all critical site data into one centralized dashboard. Instead of jumping between tools or relying on partial reports, your team gets a complete, real-time picture of how every site is performing. Mango provides visibility into power quality, temperature and humidity trends, door access events, and equipment status. This helps ISPs reduce downtime, scale efficiently, and meet uptime commitments with confidence.

Built to solve challenges.

Beyond integration, Mango captures the operational knowledge that often lives in the heads of a few experienced techs. This includes what an intermittent alert really means, how gear behaves during peak loads, or which devices are most likely to fail when temperatures rise. That insight is turned into shared intelligence so teams can respond quickly and consistently, regardless of shift or staffing. Mango also filters and prioritizes alerts by context, location, and severity, cutting through the noise so teams can focus on what matters most. Over time, the platform builds a performance record across all sites, giving leadership the ability to track trends, compare regions, and make smarter, data-driven decisions about expansion, upgrades, and long-term infrastructure strategy.

Unified, Scalable, and Built for the Demands of ISP Fiber Operations



Multi-System Integration



Mango speaks every language - Modbus, SNMP, BACnet, OPC, APIs, and more - connecting your entire infrastructure into one cohesive, streamlined view.

Remote - First Operations



From anywhere, your team can diagnose faults, control devices, and automate responses in real time - no truck rolls, no delays, just action.

Portfolio - Wide Visibility



Whether you're running 5 sites or 500, Mango lets you manage, standardize, and scale from a single, cloud-ready platform.

Actionable Intelligence



Set performance thresholds, surface hidden trends, and get smart alerts that help you optimize output and reduce downtime - before it impacts your bottom line.

Faster Deployment, Lower Overhead



Lightweight, edge-enabled, and built for speed - Mango adapts to your stack without disruption, so you can scale with confidence.

mango Quantifiable ROI

Radix IoT transforms ISP operations from reactive to predictive, delivering measurable ROI. With centralized visibility across all distributed sites, Radix IoT enables ISPs to benchmark performance, detect anomalies, and prioritize critical alerts-such as edge node faults, power system issues, and last-mile disruptions-before they escalate. This proactive approach reduces downtime and emergency service calls.

Increase Uptime Performance by Up to 61%

With centralized, real-time monitoring across every site, Mango detects anomalies like node faults and power issues before they impact service. This proactive visibility allows you to respond instantly, boosting uptime and customer satisfaction.

Cut On-Site Labor Time by 22%

Remote diagnostics and centralized alerts mean field techs arrive prepared or don't have to roll at all. Mango consolidates monitoring into one view, reducing the hours spent traveling and troubleshooting on-site.

Reduce Truck Rolls by 38%

By enabling remote fixes and eliminating unnecessary dispatches, Mango lowers the number of truck rolls needed. Technicians can address many issues without leaving the office, cutting fuel costs and improving operational efficiency.

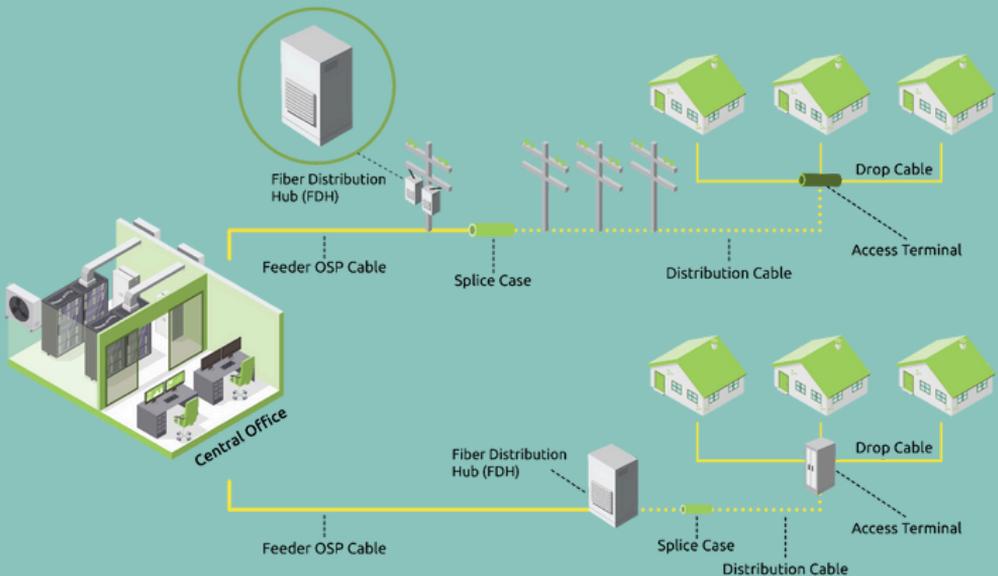
Overall Ease of Scalability

Mango's protocol-agnostic integration lets you add new sites, devices, or services without re-engineering your system. That means you can expand coverage rapidly while minimizing the need for additional field staff.



mango Driving ROI

A leading FTTH (Fiber to the Home) provider serving Georgia and the Florida panhandle, faced the challenge of maintaining reliable operations across numerous remote hubs and central office sites-many located in areas prone to severe weather and requiring frequent, costly truck rolls for manual checks. By deploying Radix IoT's Mango platform, the ISP gained comprehensive remote visibility and real-time alerts for all their sites, significantly reducing the need for on-site visits. Mango's ability to monitor both legacy and modern equipment from any manufacturer eliminated the cost and complexity of standardizing hardware across locations. Seamless integration with the ISPs preferred ticketing system and Pager-Duty system, ensured that alerts fit directly into their existing workflows. This solution not only enhanced operational efficiency and responsiveness, especially during hurricanes, but also delivered measurable ROI by minimizing downtime and reducing maintenance costs.



Connect the Infrastructure That Keeps Your Network Alive

Unlock the full potential of your fiber operations with real-time visibility, control, and insight.



Ready to streamline your operations? Discover how Mango by Radix IoT can boost uptime, cut costs, and scale your portfolio - contact us for a demo today.

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