

IxProbe + Hawkeye:

Helping Service Providers Take Control of Last-Mile Delivery

Connectivity is the heartbeat of business, and service providers supply the pulse. Faster speeds fuel the modern enterprise, while retailers and other multi-site organizations depend on managed services like hosting and security. And to keep their businesses running safely and smoothly, they count on you to fulfill contractuallyobligated service level agreements (SLAs) with minimal disruption and latency.

But what if you cannot monitor and verify the speeds you have promised?

It does not matter whether your clients are outside your geographic service area, you do not own the equipment, or something else entirely: when someone else is supplying last-mile connectivity, you lose visibility and control. While you are still accountable for your clients' SLAs, you cannot monitor them without access to last-mile infrastructure.

That can cost you in several ways, including:

- Preventing you from offering lucrative tiered services to your clients
- Lowering profits with severe SLA penalties when you fail to deliver
- Driving customers away with prolonged outages and troubleshooting
- Requiring costly truck rolls for unsubstantiated issues

Until now, there has never been a viable way to gain direct insight into these last-mile links. Without access to devices like modems and routers, you cannot monitor inline traffic or SLAs, while other approaches like synthetic monitoring are not as useful when something goes wrong.



Solution Components:

Ixia IxProbe

- Inline monitoring probe
- Deploys between provider's modem and client's firewall/router
- · Capable of inline monitoring via SNMP
- Endpoint for Hawkeye synthetic/active monitoring

Ixia Hawkeye

- Synthetic/active monitoring platform
- Proactive QoS monitoring
- Robust library of tests (VOIP, video, and more)



Enter IxProbe and Hawkeye. The first solution of its kind, these tools enable you to take control of last-mile delivery — even when you are not the one supplying it. Inline and scalable, IxProbe and Hawkeye mean last-mile blind spots are a thing of the past. Not only can you monitor SLAs in real time, you will be able to pinpoint outages faster while conducting synthetic quality of service (QoS) testing across all your service locations.

What Is IxProbe?

IxProbe is the first device of its kind — and tailor-made to solve one of your most vexing last-mile challenges. An inline monitoring probe, it packs a host of features that make it ideal for service providers of all sizes:

- Built-in heartbeat monitoring and polling via Simple Network Management Protocol (SNMP) for tracking live traffic and conducting status checks at client sites
- Fast, simple deployment with IP address self-discovery simplifies installation; eliminating the need for costly truck rolls
- Inline design with fail-to-wire ensures connectivity and does not impact reliability during power failures
- Optional pre-configuration simplifies integration with operations support systems (OSS) and deployment at scale

Built for large-scale deployments, IxProbe can be installed in as little as two minutes by non-technical personnel on-site. Instead of dispatching technicians via costly truck rolls, you can simply mail the device to a branch office and have the branch manager connect it to a power source as well as your sub-contractor's modem/router and the site's firewall/router.





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Hawkeye – The Missing Link for Last-Mile Qos Monitoring

In this circumstance, it is tempting to think that inline traffic data is all you need. However, while real-time SNMP heartbeats will tell you the moment a client site goes dark, that's only a fraction of the detail you need. Just think: wouldn't it be nice to know the moment your SLAs have dropped below your contracted threshold — or to be able to pinpoint the exact node that's causing an outage?

To fully take control of the last mile, you need to be proactive. That is where Hawkeye — Ixia's active network monitoring platform — comes in. Instead of relying on passive data collected from live traffic, Hawkeye conducts a wide range of QoS tests by sending simulated traffic to hardware- and software-based endpoints across your network, including:

- IP network SLA verification
- Site-to-site speed testing
- Mean Opinion Scores (MOS) for VOIP
- Video streaming service quality (Netflix, YouTube)
- Server response times
- Real-time reporting/correlation against historical data/KPIs

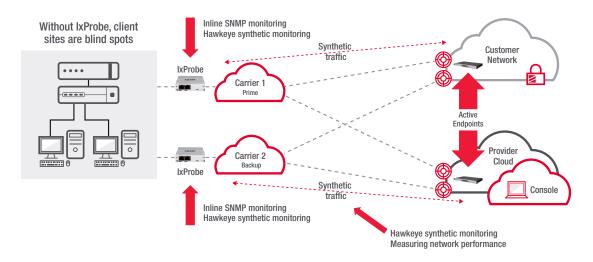




With Hawkeye and IxProbe, the last mile is finally within your grasp. Instead of prolonged troubleshooting, incomplete information, and a complete lack of visibility, you can arm yourself with actionable intelligence.

Boasting turnkey compatibility with Hawkeye, *IxProbe enables you to definitively monitor service delivery across all your client sites* — regardless of whether you have access to the infrastructure or not. By adding synthetic monitoring to IxProbe's native SNMP monitoring, Hawkeye gives you more detail and value — enabling you to:

- Offer your clients verified, tiered services (including faster speeds and greater connectivity) — even when they are outside your service area
- Prevent costly outages by detecting problems before your clients do
- · Avoid costly SLA penalties and truck rolls by tracking last mile QoS
- Troubleshoot faster and improve mean time to resolution (MTTR) with network path discovery



How It Works

Once installed, IxProbe will immediately start monitoring inline traffic via SNMP traps, including real-time link status reporting, status changes, and traffic statistics. However, data is only as good as how you interpret it — so you have a few options for how you choose to collect and view it:

- 1. Monitor inline traffic from individual devices through IxProbe's GUI
- 2. Integrate SNMP data into a third-party monitoring tool or network management system
- 3. Track all active and inline traffic metrics via Hawkeye's integrated dashboard, including historical data for synthetic QoS tests

Regardless of how you choose to monitor the data, Hawkeye gives you another key benefit: remote administration. Rather than configuring and controlling each IxProbe individually via command-line interfaces (CLI), you can manage entire fleets of devices with Hawkeye Controller — the platform's centralized management interface. The easy-to-use GUI saves your employees considerable amounts of time and prevents costly errors.

The Bottom Line

According to Gartner, 81% of companies "expect to be competing mostly or completely on the basis of customer experience." And while that is critically important for you, it is even more important for your customers. You play a critical role: *supplying the connectivity that powers their customer experiences.*

However, great responsibility comes with even bigger expectations. As consumers grow more demanding, their loyalty has become increasingly uncertain. That means your clients are accountable to deliver 24/7/365. Unfortunately, this leaves very little room for error on your side — with steep consequences should you fail to deliver.

With Hawkeye and IxProbe, however, the last mile is finally within your grasp. Instead of prolonged troubleshooting, incomplete information, and a complete lack of visibility, you can arm yourself with actionable intelligence. Faster fixes, increased revenues, and happier clients await. *Isn't it time you made the customer experience your key differentiator as well?*

Discover Ixia's Network Performance Solutions

From your centralized data centers to the furthest reaches of your network's edge, lxia's range of network performance products enables you to gather dynamic network intelligence.

Discover how Hawkeye and our full suite of network monitoring endpoints can make you more proactive, while our robust solutions can ensure end-to-end QoS and user experience.

Learn more at: www.keysight.com

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