



Keeping the heart of healthcare in good shape

The importance of **network monitoring** for hospitals, clinics and healthcare institutions.



The true cost of network downtime

At best, network downtime is inconvenient and can impact revenues and reputations. At worst, it can be life-threatening.

We're constantly being told that network downtime is costly. Most articles will tell you that the average cost is \$5,600 per minute, a figure that comes from a 2014 Gartner report. For healthcare organizations the usual figure is \$7,900 per minute, from a 2016 report by the Ponemon Institute. These numbers will have grown considerably since they were originally published. Yet the real impact of poor network health can be far greater than remedial costs or lost revenue.

The network is now the foundation on which modern healthcare operations are built, crucial to quality of care, response times, collaboration, and communication. When it goes down, access to electronic health records (EHR) goes down. Vital equipment can stop working. Critical decisions can be delayed. The impact is felt by medical professionals, care teams, hospital staff, patients, visitors – anyone and everyone involved in delivering and receiving healthcare.

More connectivity means less room for error.

Digital transformation across the healthcare sector has led to increased reliance on networks to support everything from clinical outcomes to the quality of patient experiences.

As hospitals and clinics adopt more cloud-based platforms, the use of IoT proliferates, and more technology-based services (such as telehealth and PACS) are introduced, networks are under increasing pressure.

If a doctor can't access medical records, a remote monitoring alarm is missed, or an online consultation is interrupted, standards of care and service are impacted, and compliance can be put at risk.

Every minute of downtime matters, and 24/7 operation leaves little room for network maintenance without disruption to vital operations.



Keep your finger on the pulse

When your network slows down, everything slows down.

For some sectors this can present little more than a minor annoyance, but in healthcare even a short delay can make a difference to patient outcomes. You need to know that your network is optimized and performing properly to keep technologies, services and people connected.

Effective network monitoring gives you complete visibility of your network, and provides you with anomaly detection, accurate future predictions and intelligent real-time information.

This will enable you to optimize availability and spot problems before they occur, such as pinch points where data is not flowing freely, and potential bottlenecks likely to develop when demand grows.

You can set up recurring reports that detail which segments, interfaces, and devices are at or near capacity, as well as alerts to let you know when capacity is exceeded.

Your network monitoring solution should include:

- Edge-to-edge monitoring and granular data collection in as near to real-time as you can get, with discovery of every network interface and device
- Monitoring and troubleshooting all behaviors by port, device, site and region, using and storing data from NetFlow, sFlow, Syslog and SNMP-trap compatible devices
- Full reporting on data usage, latency, errors, discards, CPU, memory, disk and temperature values
- Self-maintenance, with automatic rewalks of the network
- Third party integration, with the ability to extract data for additional analysis and capacity planning, send emails and alerts to security tools or ticketing systems, and embed reports into other systems

For your institution's mission-critical systems, checking network performance and availability every five, ten or fifteen minutes simply isn't enough.

Every second counts

High-frequency polling and meaningful data are the keys to rapid response.

You need 60-second polling, real-time monitoring, and proactive maintenance capabilities to maintain stable, predictable, and secure network performance across your institution's critical systems.

This granularity gives you actionable data and insights that rapid anomaly detection and accurate forecasting.

A high level of accuracy matters, too. For example, by measuring round-trip time (RTT) in milliseconds, you know exactly how long it takes for a data packet to be sent, plus the amount of time it takes for an acknowledgment of that signal to be received. You can then identify any potential bottlenecks and take remedial action.

Along with RTT, you also can use other metrics to monitor real-time network performance to determine the quality of connectivity being achieved. Jitter, for example, can affect VoIP and video quality for your critical business services.

RTT only measures data packet transport time, making it a reliable indicator of network performance, independent of the application, server, or device being used.

Statseeker monitors healthcare networks



Statseeker should be the first tool you use to diagnose and troubleshoot network problems, minimizing downtime and potential impact on patient care.

Here's why.

Get real-time anomaly alerts

Statseeker's industry-leading 60-second polling provides early alerts to any behavioral change as soon as it happens, so you can react sooner and resolve network issues before they escalate into outages.

By alerting you to potential problems in the network, it enables you to plan and execute remedial maintenance to prevent unnecessary downtime.

Measure and monitor vital latency data

Now you can proactively manage network performance to maintain low latency, minimal jitter, and high reliability for critical healthcare applications. Statseeker monitors key metrics (such as RTT, jitter, and packet loss) and enables you to deploy observability appliances in multiple locations.

Stay up to date with accurate reporting

Statseeker never rolls-up or averages your data, analyzing network behavior and producing a model for every monitored metric, for every minute, of each day of the week.

Increase efficiencies and lower TCO

Statseeker polls and stores granular data for a network of up to 1 million interfaces, enabling you to quickly and easily identify and redeploy under-utilized assets.

Plan for future network needs

As well as keeping you informed on current status, Statseeker's forecasting functionality draws on the granular detail of your historic network data to help you predict and scale to accommodate future network needs.

See the complete picture

SNMP integration and custom data types (CDT) functionality enable you to monitor medical devices and IT infrastructure seamlessly. It gives you centralized visibility and the ability to customize monitoring packages, so you can maintain continuous operations and optimize patient care delivery across complex, multi-vendor healthcare environments.



Statseeker is fast, scalable and flexible, delivering real-time results from a minimal server footprint.

It can monitor networks of any size, collecting data such as SNMP and ping, NetFlow (sFlow and J-Flow), syslog and SNMP trap messages, as well SDN configuration and health metrics.

Statseeker.

Keeping your network fit for the future



Using granular data to forecast demand and inform network decision

Optimizing network performance shouldn't just be a question of reacting to problems. Taking a proactive approach to monitoring the wellbeing of your network will help you to identify potential problems and tackle them early, before they affect patients or the medical teams looking after them.

Innovations in connected medicine and digital health services are all impacting hospital and healthcare networks. More remote services and users, more IoT devices, more data, growing traffic, and increasingly sophisticated platforms and solutions – especially those using AI tools – are all putting pressure on digital infrastructure. At the same time, costs and resources have to be managed even more closely.

As network managers in healthcare facilities continue to seek solutions to handle the complexities of digital patient care, reliable networking monitoring and management become increasingly important. This isn't just about the here-and-now. Collecting and

analyzing network data is certainly important for identifying where there are problems that need addressing today, but will also help you determine where, when and how your network needs upgrading.

Predicting future demand

With centralized visibility and the ability to customize monitoring packages, Statseeker delivers accurate, granular data that helps healthcare operators to maintain continuous operations and optimize patient care delivery across complex, multi-vendor environments.

The combination of SNMP integration and custom data types (CDT) allows you to monitor your entire network of IP-enabled medical devices and IT infrastructure seamlessly, helping network engineers ensure reliable interoperability, proactive maintenance, near real-time alerts, and compliance with regulatory standards.

Statseeker's sophisticated trend analysis and intelligent forecasting capabilities use granular data to predict future behavior, empowering network managers to plan the right changes at the right times.

Diagnose before you prescribe

Observe the vital signs

Statseeker's network monitoring solution monitors every IP-enabled physical, virtual and logical interface across your entire WAN and LAN network – up to 1 million of them – every 60 seconds from a single dedicated server. With minimal impact on bandwidth, it will analyze traffic, measure latency, and check device availability, reporting back to you seconds through informative dashboards and precise, customized alerts.

Statseeker polls different objects and stores values at different rates depending on the type of data, its relative importance, the likely number of objects on the network, and the likely frequency that the data is going to change. For example, the volume of data transmitted from an interface is likely to change frequently, so it is polled every minute, whereas configuration data is unlikely to change so it's only collected during initial discovery and daily rewalks.

“Statseeker ensures 99.99% availability by providing real-time monitoring and historical SLA reporting across a 13-month window.” – A renowned Clinic in Cleveland

Be informed by the history

Real-time alerts to system anomalies or outages are an essential part of network monitoring. But so is analyzing and understanding what's been happening in the lead up to that alert: what trends are emerging in the behavior and usage of your network? Just like treating a human patient, diagnosing and predicting network outcomes can't be done without context – you need to know the history.

Statseeker analytics will provide you with trendlines and forecasting, based on accurate minute-by-minute data, enabling you to predict, visualize and respond to changing network conditions.

Remedy or prevent the problem

Statseeker's customizable maintenance scheduling allows teams to coordinate updates with minimal impact on clinical workflows. With access to historical data and growth trends, you can plan network upgrades proactively and use insights and trends to inform future scaling of infrastructure to meet emerging needs.

How major US healthcare organizations are benefiting from Statseeker



- Using it as their primary tool for diagnosing and addressing network issues quickly and effectively.
- Being able to make informed decisions, including upgrading network circuits to handle future demand.
- Detecting and resolving issues before they escalate, ensuring continuous operation of essential systems like Epic and Phillips medical equipment, to help maintain patient care and continuity (especially during emergencies).
- Ensuring network upgrades are planned proactively to keep pace with emerging needs like ePathology and advanced radiology systems.
- Bridging gaps between legacy and modern systems for comprehensive monitoring, thanks to seamless integration with other tools.

- Monthly utilization reports and daily performance reviews catch potential bottlenecks early, keeping the network running reliably.
- Historical reporting helps identify patterns and prevent recurring issues, improving long-term network stability and reliability.
- Monitoring device connectivity and bandwidth utilization across the entire ecosystem, ensuring all devices operate seamlessly, from MRI scanners to patient monitors.
- Obtaining real-time visibility into network performance, helping ensure rapid data transfer of critical images and reports, such as CT scans, to meet 15-minute processing targets for stroke care and improved patient outcomes.
- Continuous monitoring of WAN carrier links and key network segments, allowing detection and resolution of issues in seconds, ensuring clinicians have the images, patient records, and data they need without delay.
- Minimizing latency and ensuring reliable operation of systems like Epic for seamless clinical workflows and enhanced patient outcomes.
- Fast data delivery supports clinicians at the bedside, and high-performance network links provide uninterrupted access to diagnostic images and patient records.
- Fast troubleshooting and resolution of network issues ensure that medical services, such as radiology and patient monitoring systems, remain uninterrupted.
- SLA tracking to avoid service-level violations and sustain operational excellence.





Statseeker delivers instant visibility of your entire healthcare network at granular level – and does so at a fraction of the cost of traditional monitoring tools.

Start a free 30-day trial.

Visit statseeker.com/free-trial

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