

Pinpoint the location of network problems for one-trip solutions

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Most network outages affecting a large customer base are detected by: 1) customer calls, 2) proactive network monitoring, and/or 3) technicians in the field. Depending on the method of detection, time to resolution can vary significantly.

In terms of time, the most effective, efficient and proactive means of detecting network outages early is a proactive network monitoring platform. This type of platform allows a LMC, Dispatch or Call Center staff to detect and escalate issues affecting multiple customers *often prior to customers calling*.

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A proactive network monitoring platform helps field technicians by reducing “No Problem Found,” “Outage Related” or “Escalate to Other Group” trouble tickets that may have slipped through the cracks after clearing an outage because a larger percentage of customers will call the longer an outage exists.

Pinpoint the Problem

The *Pointer™ Network Monitoring and Status application* from Scientific Atlanta proactively pinpoints the location of HFC network problems in near real-time, often before customers are aware of any problem. This capability is done by monitoring the two-way connectivity state of every set-top and cable modem in the network to quickly correlate problems to the Node, Amp, Power Supply, and even the house to enable a dispatcher to quickly send the right technician to one network location to resolve multiple outages with a single truck roll.

Tech Tip #1: In-home issues typically represent a large percentage of non-responding set-tops and modem flappers. Fewer non-responding set-tops and flapping modems results in more accurate outage detection capabilities. A few good practices to minimize Non Responders whenever you're in a customer's home:

- Check the in-home engineering. Ensure proper cable loss and forward/return levels are appropriate at the tap, house enclosure and each outlet.
- Use set-top or modem diagnostics to confirm two-way connectivity, video quality and data channel performance
- Use test equipment such as leakage detectors to identify any heavy ingress problems.
- If local practices or time allows, check all set-tops and modems in the home for optimal performance.
- If available, perform a whole house check remotely of all CPE before you visit the customer.
- Verify two-way services, such as VOD, work by viewing free content if available.
- Record the IP Address on the work order. This could be useful in the future.

Network Maintenance and Repair

The Pointer system can also support and conduct proactive network maintenance activities by detecting and identifying locations where routine maintenance or equipment degradation may be occurring that may be affecting multiple customers. Pointer Scorecards automatically rank the performance at the hub and node level. These scorecards support a maintenance department's ability to enhance or develop a logical, orderly network maintenance programs.

Tech Tip #2: Whenever completing maintenance or repair activities, document before and after results to confirm the most reliable resolution. Node level scorecards can be used post-maintenance to verify two-way connectivity enhancements. After an outage conduct remote verification, if available, that set-tops and modems are re-establishing connectivity.

Benefits of the Pointer System

The benefits for the cable tech, the CSR and the cable customer include:

- Cable techs' time is used more efficiently
- Cable techs' skills are used more appropriately
- Cable techs can be immediately alerted to problems via the Pointer system's alarm features
- Cable techs and CSRs can use the system's cascading, screen-by-screen views for rapid drill down to detect network failure points
- CSR call volume is reduced by proactive problem detection
- CSRs can inform customers that response is already underway
- Customer satisfaction can be enhanced by rapid, targeted response

Pointer Scorecards automatically rank the performance at the hub and node level

Case Study

Download the technical paper at www.ScientificAtlanta.com/Pointer. The paper includes a case study that shows how Pointer's proactive outage detection capability identified system outages an average of 3 hours and 34 minutes sooner than one operator's reactive method. The Pointer paper also includes screen shots and the application's architecture.