Monitoring Versus Troubleshooting: Different Focus, Different Tools

Most organizations deploy monitoring software to provide insight into their network environment. The primary focus is to make sure that outages are communicated so remediation can swiftly begin. However, if you are using a monitoring solution to troubleshoot network issues you will encounter many drawbacks:

- **Limited information.** Monitoring solutions don't collect enough information to know what's happening on the network to aid troubleshooting:
    - **No Breadth—**Not enough devices or interfaces monitored to get complete visibility into the entire environment.
    - **No Depth—**No error counters, configuration information, QoS queues, or performance information collected.
- **No correlation.** Without correlation, scoping the problem can be very difficult, as there is too much data to dig through to determine if it is relevant to the problem at hand.
- **No automated analysis.** Without automation, a network expert is required to interpret the information and provide a diagnosis.

When it comes to network troubleshooting, monitoring software doesn't have enough information about the environment, or the ability to correlate and analyze that information to pinpoint problems.

Troubleshooting solutions are designed to do a deep-dive into the environment, collecting significantly more information than monitoring solutions, while providing correlation and analysis to make it easy to pinpoint and resolve problems, anytime they occur, anywhere in the infrastructure.

Troubleshooting solutions should also be able to track this information over time to solve problems that happened five minutes ago, or five hours ago. A static point-in-time snapshot won't solve problems that are transient.

When considering troubleshooting solutions to complement your monitoring solution, ensure that you are getting a solution that can answer questions like the following:

> *"What happened between the PC 192.168.2.45 and the server 10.21.4.17 at 2:45pm?"*

While a monitoring solution can tell you that *something* happened, a troubleshooting solution will tell you exactly *when, where, and why* a problem occurred.