Finding Root Cause Shouldn’t Take Long

Complaints of slowness are nothing new. In fact, “The network is slow” has become such a common phrase that some engineers now ignore it. Even after years of network and system upgrades, modifications, and so-called improvements, calls continue to stream into help desk centers and IT support with one word as a common theme - slow. The propensity of these issues in today’s networks is both puzzling and frustrating.

There are several things that make troubleshooting network problems difficult, especially ones that impact connectivity or cause performance to crawl. These challenges include but are not limited to:

- No standard troubleshooting workflow for IT Techs and Engineers
- Increasingly complex network and application systems
- Dissimilar tool sets and documentation methods
- Isolating the problem takes too much time
- Technician skill sets widely vary

In addition to these challenges, when we peel back the layers and really dig into why network problems persist, we find that legacy tools and methods are being used to troubleshoot everyday issues. One would think that in this day and age there would be a better way to identify and resolve problems fast. However, in many IT environments, the same old thing is done to troubleshoot the same old problem, which costs time, user patience, and ultimately, money.

Using a legacy approach is not restricted to troubleshooting efforts. Other tasks within IT are impacted as well, including validating new connections, moving users into new areas, and testing connectivity to new servers and applications once they are brought online, either locally or in the cloud.

What Are We Doing Today, and Why Isn't It Working?

A call comes in to help desk. A ticket is generated. The CRM application is slow. After checking the green lights on the network health map in the command center, the technician grabs his laptop loaded with a few software based troubleshooting tools and heads out to the user site. After connecting into the network from the user perspective, the tech looks at the address and user configuration. He tries a few pings, monitors a network connection or two for utilization, checks that he has access to the server, and makes sure that he can log in.

Since each tech has a different tool set and method, this general sequence and execution time will change depending on who was sent out. In many cases, these steps do not follow a workflow with a standard tool set, which means that each technician has his “style” based on his experience and training. Network problems may be quickly identified by some techs, but not by others, further compounding the frustration of solving them. Even when the problem is identified, the documentation step is typically overlooked, taking a backseat to new issues that come up on the network.

This method can be improved in several ways. Although it may eventually get the job done, it often takes too long, lacks a workflow, and makes data collaboration between teams difficult should the problem be escalated or reassigned. Ultimately, connectivity problems continue to plague users as there isn’t a simple, repeatable way to quickly find the root cause.

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How Can We Resolve These Issues Faster?

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- **Internet Connection:** Confirm cloud connectivity or internal service reachability. Verify DNS server lookup and application port connectivity.
- **Gateway Connection:** Verify the router/gateway address and reachability by pinging the device.
- **DHCP Connection:** Confirm that the DHCP server is running and responsive. Request an IP address, get your subnet information, and identify the default gateway and DNS server.
- **Link to the Switch:** Using CDP/LLDP, the LinkSprinter will discover the connected switch name, model, slot, port and VLAN.
- **Power Over Ethernet (PoE):** Check to make sure you can power a phone, security camera or a Access Point through a specific port. The LinkSprinter Network Tester can even run without batteries on PoE.
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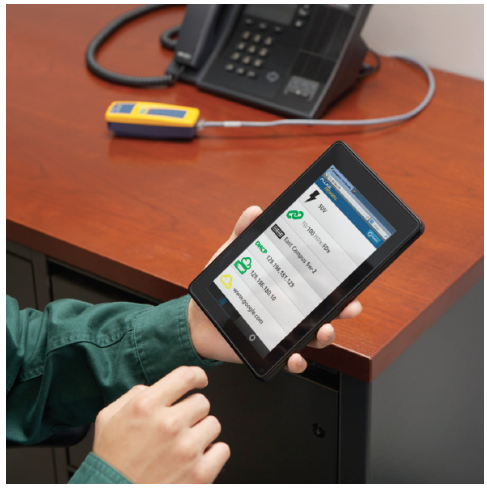
Automated Results Through Mobile User Interface

Test results are available by connecting to the LinkSprinter 200 via Wi-Fi to a built-in web service, which reports on the most recent test. This connection can be made locally to the tool from a mobile device to see instant results of the last executed test. Test details can be accessed through the UI, displaying the connection ID (Switch IP, VLAN, and port), as well as gateway and server response time. LinkSprinter will automatically email test results to the mobile device, allowing the technician to annotate as needed.



*Please note that the LinkSprinter 100 and 200 are not available for China

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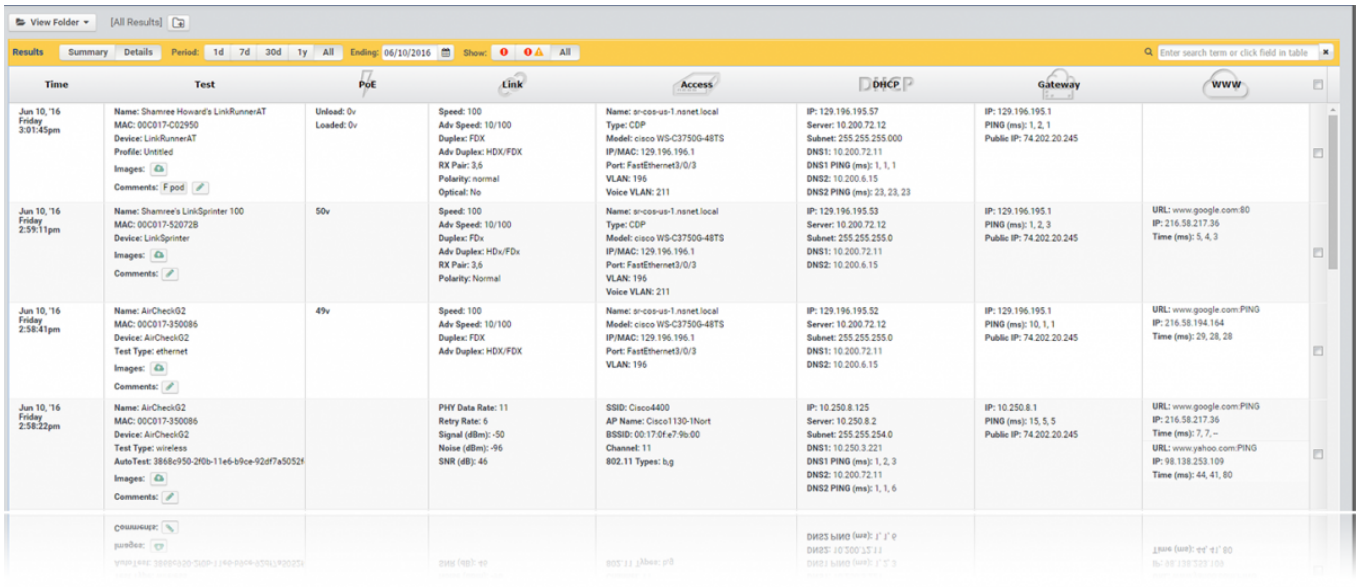
Cloud Documentation

Documentation is a pain for any technician. It often suffers because it is considered a lower priority than taking on new issues that arise and can be time consuming and cumbersome to generate.

LinkSprinter is designed with this culture in mind. It can be configured to automatically send test results to the included LinkSprinter Cloud Service, saving documentation time for the technician and allowing results to be instantly shared between team members and archived for historical reporting and baselining.

The cloud results can also be used to document network connections for new installations or adds/changes, which greatly simplifies the process of drop identification. This saves a ton of time when problems strike in the future, as engineers can quickly identify which switch port is affected when a user calls in.



Conclusion

The LinkSpinter enables IT teams to get to the root cause of network problems quickly. It streamlines and simplifies common tests, creating an automated workflow for network technicians and engineers. This enables IT organizations to isolate and resolve performance problems, quickly, regardless of who is sent out. The easy to read LED's and test results enable technicians with all levels of IT experience to get to the root of tough network issues, while cutting documentation and collaboration time down to almost nothing.

Visit: **LinkSprinter.com** to learn more