

# Quick Tips To Help Network Pros Work Faster And Smarter



*Our increased dependence on complex information systems, with ever-growing numbers of network endpoints, makes the role of IT first responders a critical one. More work is being demanded of fewer, often less-skilled, network and PC technicians. The sprawl of their networks across metros, regions, and even the globe adds to the difficulties of keeping systems running. This reliance on the connected world demands that frontline personnel keep networks running, whether troubleshooting an end user's problem, setting up new cubicles, or deploying new technology, such as VoIP, IP surveillance or Wi-Fi access points. Continuous advances in networking technologies—from healthcare to government, energy to education—depend on the ability to share and grow ever bigger ideas more and more quickly.*

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Here are 7 ways individuals and organizations can improve how they manage their networks:

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Fortunately, the same disruptive computing technologies of mobility and the cloud are now also being used to provide new testing capabilities for IT personnel, such as those offered by NETSCOUT Systems. Comprised of handheld test tools (OneTouch AT, LinkSprinter, LinkRunner AT, AirCheck G2) with built-in cloud-based reporting tools (Link-Live), these products provide complete end-to-end network connectivity testing and automated reporting. These tools support organizations of any size as well as users of varying skill level by providing the right tool for the job.

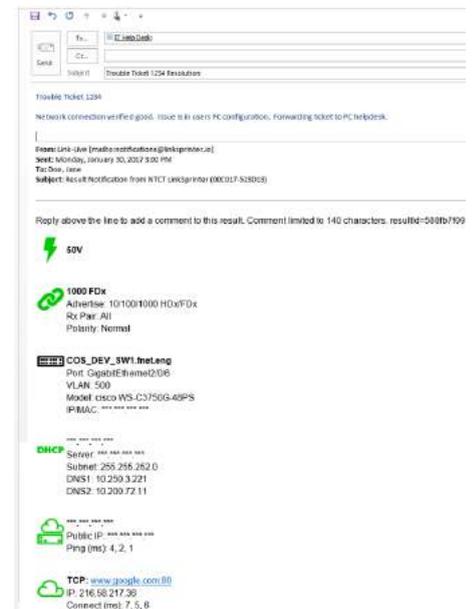
## 1. Document the connection path.

Did that drop have PoE last time? What VLAN was this phone on? Is this wall jack connected to the same switch port? Those who forget history are doomed to repeat it. Documentation of these types of network connectivity results is important and will prove to be a big time saver during troubleshooting. By giving technicians reference to past test results when network connectivity was stable, it will substantially help to understand why the connection doesn't work now. I know right now you are saying to yourself, "Yea, a nice thing to have but I don't have the time to constantly be doing documentation on my network connectivity." I know, I know, but just realize that it doesn't have to be as daunting as you think and these days, documentation can be completely automated. So don't despair, there is a better way.

## 2. Prove it's not the network by sharing your test results.

Every day over 100 billion emails are sent, speaking to the pervasiveness of the technology and how engrained it is into workflows. Emails are documents in their own sense as they are how problems are escalated and vendors are engaged. Equally pervasive is the network always is being blamed for every problem, even when the WAN, data center, application, or servers are at fault. It becomes the responsibility of the network staff to prove it's not the network.

Test results from our handheld network testers, be it wired or Wi-Fi, are delivered to your inbox within seconds of the AutoTest completing. Receipt of the test results on your mobile device indicates network health, in that the tester was able to link, get an IP address, perform a DNS lookup, and connect to Link-Live. Simply forward the email to the PC or server group with any additional information, such as the trouble ticket number, to show that the network and drop are working just fine.



### 3. Demystify your switch and cable plant.

Years of ad-hoc moves, adds, and changes to the network often yield spaghetti cabling in the wiring closet. This haphazard patching makes it difficult to know what is connected where. As specific port provisioning is pushed to access switches, it becomes even more important to know what endpoints are plugged in where.

Our handheld testers are designed with a variety of methods for annotating and organizing your switch and cable setup. You can comment on test results in Link-Live, on your phone using the LinkSprinter Mobile UI, or on the tester itself if you're using a LinkRunner AT, OneTouch AT or AirCheck G2. You can also annotate the test result by replying to emailed test results with details about where the wall jack is located or even a photo, such as the serial number of the AP you just installed. The important thing to realize is that this information associates to the test result and gets directly associated to the switch slot port, allowing users to build a map of layer 2 switch port to physical endpoint and LAN.

Click [here](#) to see how **Valparaiso University** tested and annotated all their dorm rooms with a LinkSprinter and student labor. With LinkSolutions, the project timeline was cut down from the usual month-long process to just one week.

### 4. Watch your team completing moves, adds, and changes in real time.

GPS tracking has revolutionized the service industry, as companies are now able to observe which trucks are where and for how long. This fleet automation saves time and energy by allowing supervisors to keep track of people and productivity. In the IT world, you may have sent your PC technicians to move 20 workers between floors, but have no way to view the progress, let alone the correctness of the job.

Because test results are posted automatically to the cloud with zero-touch reporting, supervisors can see the tests as they come in and progress can be tracked via their email inbox or Link-Live. Managers can watch the work being done, and know who is doing what, when, and for how long, as well as the outcome of the work. No checking in is needed from your technicians as you monitor test activity in real time.

In Link-Live, you can even assign different email recipients for each handheld tester, and there is no limit to how many email addresses you can assign. Because multiple recipients can be assigned per tester, individual technicians are typically set up to receive their personal testing device's results, while the supervisor gets emails from all of the testers. Rules can even be used to automatically file test results in Link-Live, eliminating the overhead of managing and sorting results that one might need to provide a printed report for, just find the folder and print to .pdf or .csv. Link-Live updates in real-time, so all organizational test activity can be monitored from the web portal. Also take note that Link-Live is included with all handheld testers at no cost and there is no limit to the number of results, testers, users, organizations, or folders!

## 5. Manage all your testers with a single configuration. Easily gather base-line information across your enterprise.

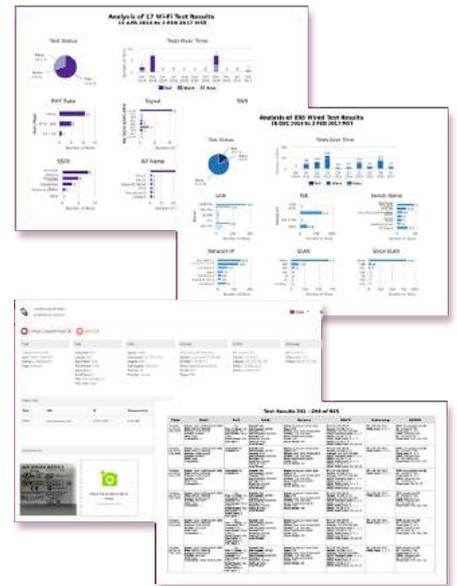
Imagine the server team at your organization just rolled out a new SharePoint server in the data center. It would be fantastic if all the testers could validate connectivity and availability to it for the next few weeks, but dragging all the testers back to a managing PC, tethering to the USB, and updating the test profiles to include the new server, is effort-intensive and time-consuming.

Link-Live can maintain a single configuration for all of your LinkRunner ATs and LinkSprinters. Regardless of the geographic location of your sites, this feature allows you to change the test targets in use by front-line personnel and to gather baseline connectivity and availability information across your enterprise. In addition to checking for configuration settings, the LinkSprinter checks for any firmware updates after every test, making it simple to keep the tester updated.

## 6. Document job completion with professional reports.

Nothing wows a client or management like a professional report. But creating a report of major upgrade projects or bulk moves is difficult without centralized and standardized test results and a report generation package. Generating documentation is a daunting and unpleasant task, undertaken begrudgingly during overtime, once all other work is done.

With Link-Live, however, one click is all it takes to create a PDF report of all the work performed, which you can hand off to a manager or customer. Create customized cover pages for each client including company logo and subtitles. The report includes an analytics summary page for both wired and Wi-Fi results. Even include pictures of finished installations and configurations. As a managed IT provider, attach it to your invoice as proof positive that the work was completed, or just forward it to your boss at the end of a job. If a more specific format or control is needed, test results can be exported to a CSV file so you can develop your own report.



## 7. Avoid dispatch costs.

Much of IT is distributed across sites, branches, buildings and districts. When there is a problem at one of these sites, a first responder is dispatched to troubleshoot. Recent reports put the cost of “rolling a truck” at over \$150 when considering lost labor during travel time and vehicle fuel, depreciation, insurance, and maintenance.

NETSCOUT handheld testers can help control dispatch costs in two ways:

- Our tools can be used by non-IT staff at the remote sites through the use of pre-defined autotests and even remote control capabilities. A site administrator simply needs to plug a LinkSprinter into an RJ-45 port at the point of trouble. The six, color-coded LEDs provide problem domain isolation in under 10 seconds, from validating PoE to DHCP to internet access. LinkSprinter empowers novices and non-technicians to perform basic network triage.
- Because the test results are automatically pushed to Link-Live, the centralized network engineer can see the details of the test. It might be that the wrong VLAN was provisioned or the user is simply plugged into the wrong switch. Or the network may be fine and the problem is in the PC. In these cases, you can altogether avoid the cost and time for a technician to travel to the site. With less travel, you get less overhead as well, and the ROI will be realized after only one or two unneeded trips are skipped.

### NETSCOUT Handheld Network Tester lineup

Here’s a quick lineup of the various products with a high-level overview of functionality. Most IT organizations find that a mix of these wired troubleshooting tools based on site criticality, media type requirements and skill level of users provides the best ROI and efficiency gains. Also, keep in mind that these are available as kits or in multi-unit packs so you can get more bang for your buck when making the purchase.

### LinkSprinter Network Tester

Test and Validate Network Connectivity in less than 10 seconds

The LinkSprinter network tester provides network connectivity troubleshooting and identifies error problem domain in less than 10 seconds. Automated reporting to the included Link-Live Cloud Service ensures network connectivity status and path information is documented for every link.

The LinkSprinter gives you 5 essential network tests in the palm of your hand:

- Power Over Ethernet (PoE) Tester
- Link to the Switch
- DHCP Connection
- Gateway Connection
- Internet Connection



More information at:

[enterprise.netscout.com/linkprinter](http://enterprise.netscout.com/linkprinter)

## LinkRunner AT Network Auto-Tester

Quick and complete copper and fiber network connectivity testing

The LinkRunner AT Network Auto-Tester performs 6 essential network connectivity tests in 10 seconds, enabling you to quickly and accurately identify and solve network connectivity problems. Cloud reporting automatically uploads network connectivity test results to the Link-Live Cloud Service for reporting and project management.

- Powers on in 3 seconds, 10-second AutoTest
- Verify connections at 10M/100M/1G on copper and fiber
- Cable testing and verification
- Nearest switch, port and VLAN information
- Measure Power over Ethernet under a load with the TruePower™ Power over Ethernet (POE) tester
- Ping and TCP port connectivity tests to up to 10 user-selected targets
- Stores up to 50 test results

More information at:

**[enterprise.netscout.com/linkrunner](http://enterprise.netscout.com/linkrunner)**

