

# COVID Impacts Require Accurate Network Testing

## CHALLENGES

With the COVID-19 pandemic, healthcare systems around the world needed to rapidly expand capacity to effectively treat a large number of critical care patients. With this possible exponential growth in the numbers of patients needing treatment, this healthcare provider embarked on a plan to convert standard patient wards in their hospitals to ICU-level (intensive care unit) emergency overflow wards.

While many departments rely on bedside telemetry systems that can utilize Wi-Fi networks for connectivity, COVID-19 surge patients require full bedside monitors (and the respirator systems needed for treatment of COVID-19) that rely on wired network connections to meet the standard for ICU-level care. That link must provide assured connectivity into the critical patient bedside monitoring VLAN.

The provider's biomedical device technicians needed the ability to effectively and quickly survey the available network connections in the wards that were being converted. This involved identifying which switch/slot/port served each jack in the ward that would be utilized for the bedside systems, and creating a document of the current configuration which would be supplied to their network operations team so that the proper port reassignment work could be completed.

The problem was that they had no quick and easy way to identify the port assignments. Manual methods, such as utilizing a cumbersome laptop, hand-writing the information (including the room, wall-plate, and jack numbers), and collating that data for the report to the network team was time consuming and open to error. In the delivery of patient care, errors are simply unacceptable.

## SOLUTION

Their biomed technician team turned to the NetAlly LinkSprinter® Pocket Network Tester and the secure Link-Live cloud service. As a small device, LinkSprinter is easily carried to and around the wards. One-button automation ensures that every test is executed consistently, across the entire team of technicians, and a comprehensive connectivity test is completed in less than 10 seconds. This test returns data about:

- Power over Ethernet (PoE) if present
- Ethernet link speed and duplex
- Connected switch information, including the critical slot/port and VLAN configuration
- DHCP and DNS network services
- Connectivity to user-defined internal or external resources

## AT A GLANCE

**CUSTOMER:** Non-profit  
Healthcare Organization

- 24 Acute Care Hospitals
- 200 Clinics

**INDUSTRY:** Healthcare

**LOCATION:** Northern California

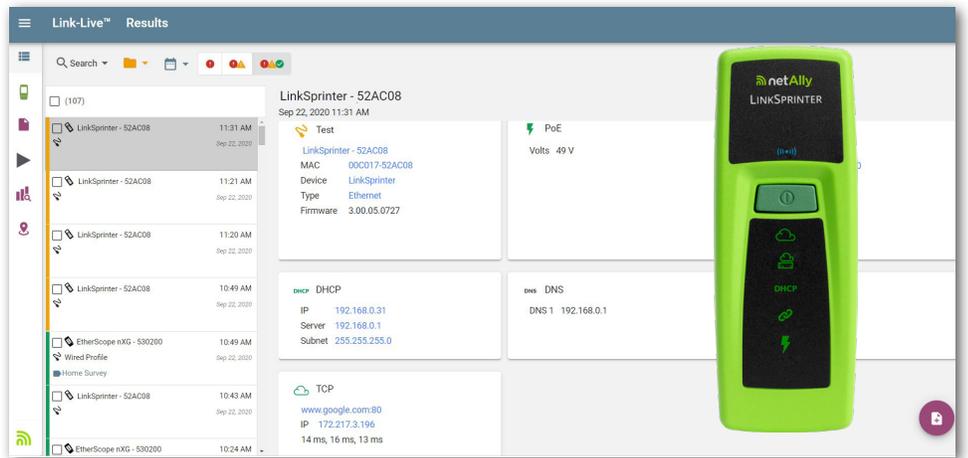
The LinkSprinter® was able to assess the hospital's network port configurations quickly and accurately, automatically uploading results into the Link-Live Cloud Service.

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- Medical Device  
Integration & Security  
Manager

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The technicians can verify the progress of the testing with the unit's color-coded test icons, and view detailed test data by connecting their phone to the embedded Wi-Fi radio. The test result is annotated with the patient room number, and jack identification.

Best of all, the test results are automatically uploaded to the secure Link-Live cloud portal, where centralized job supervisors can easily see and manage the progress of the testing, and quickly create accurate documentation for the change order needed by network operations. Once the port assignments have been changed, LinkSprinter provides the team with a fast way to verify that the port is up, assigned to the critical VLAN, with connectivity to essential services.

## RESULTS

“With the segmentation of the biomedical equipment on these special VLANs, we have to be very precise on connectivity,” explains their Medical Device Integration Manager. “Using LinkSprinter with the data upload and reporting in Link-Live eliminates the margin of error, which is critical in this environment. The time savings is huge, and the data quality prevents mistakes - we love it!”

For more information on the NetAlly LinkSprinter® Pocket Tester visit:  
[www.netally.com/products/linkspprinter/](http://www.netally.com/products/linkspprinter/)