

LinkRunner[®] 10G v1.4 Release Notes

January 13, 2021

These LinkRunner 10G version 1.4 Release Notes briefly describe the new features and enhancements included in the release.

[Go to Software Upgrading Instructions at the end of this document](#)

Version 1.4 New Features

Optical Power Meter Operation

When connected with fiber, the AutoTest Link card has been augmented with the ability to set a reference and display the current power reading relative to that reference. This is useful for saving the power level at the source as a reference, then measuring the fiber power loss at the far end.

Pressing **SET REFERENCE** will set the current power level as the Reference Power. In addition to showing the absolute Rx Power, the Power Difference between the current and reference is displayed. **CLEAR REFERENCE** nullifies the reference and power difference.



Speed

Advertised Speeds: 1G
Actual Speed: 1G

Duplex

Advertised Duplex: FDX
Actual Duplex: FDX

SFP Details

Rx Power: -9.77 dBm
Reference Power: -2.92 dBm
Power Difference: -6.85 dB
Wavelength: 850 nm

Result Codes

Success

[SET REFERENCE](#) [CLEAR REFERENCE](#)

Improved Manufacturer MAC resolution

Instead of using a proprietary manufacturer MAC lookup, LinkRunner nXG now uses the Wireshark manufacturer MAC database.

As such, we now display eight characters (was six) for the manufacturer prefix. The number of

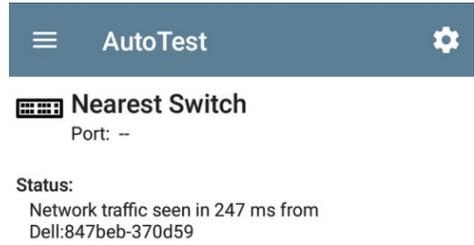
 **192.168.0.50**

EchoStar:000dc5-b9ff41

manufacturers recognized has doubled as LinkRunner now includes manufacturers with small and medium MAC blocks.

Device MAC address

It is often necessary to determine the MAC address of a device when it is not apparent or easy to access. The first MAC address seen has been added to the AutoTest Switch card. This is the source MAC of the first packet received by the LinkRunner. For example, connecting to a laptop RJ-45 would display the manufacture prefix and full MAC address and the number of seconds between establishing a link to the reception of that packet.



Stop After

- Link
- Switch
- DHCP
- DNS
- Gateway
- All

If desired, a specialized profile for only determining the device MAC address by limiting the scope of AutoTest using the Stop After control in the profile settings

Wait for Network Traffic

During Wired AutoTest, LinkRunner by default waits for network traffic before DHCP, allowing Spanning Tree to resolve and packets to be forwarded. In some low-traffic network environments, it may be desirable to skip this traffic validation delay and proceed immediately with the rest of the AutoTest.



Adding Test Targets from Discovery

When building AutoTest profiles, it is useful to use the Discovery app's information to automatically populate the DNS name or IP address in a new test target.

A new option to Add Test Target has been added to the available actions when viewing device details. The action then allows the user to specify what type of service test to add. The new test target will be created in the list of AutoTest targets.

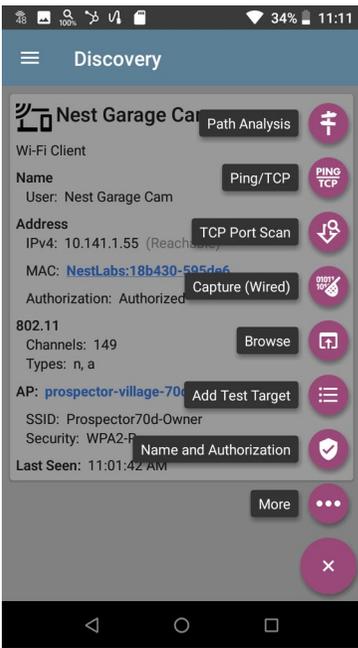


Image: Add Test Target action

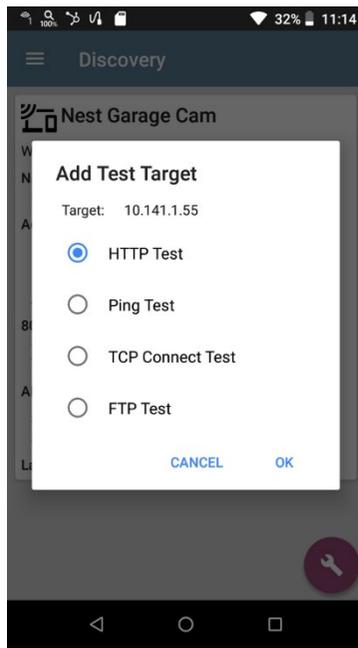


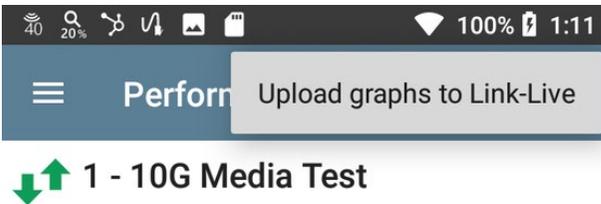
Image: Selecting the type of service for the new target

Running newly added Test Targets

Previously, when you added a new test target to a currently connected AutoTest profile, you had to rerun the AutoTest to run the new test target. Starting with v1.4, test targets added to an active profile can now be run using the **TEST AGAIN** action on the newly added individual test target.

Saving Performance Test Scrolled Image

When looking at the trended results of any service in the Performance Test app, you can now save the entire screen with a single action. This operation can be performed many times as desired. For example, you could save an overall 24-hour trended result, then zoom into specific time periods of interest to generate additional images. Pressing ... in any Performance stream title bar brings up the option to upload the graphs to Link-Live.



Note: this capability will be added to other multi trended screens (such as Wi-Fi Auto-Test link/roaming) in the future.



Link Persistence

During Wired AutoTest when Start is pressed, the LinkRunner waits 25 seconds for link before timing out and failing the AutoTest. When using line-rate performance testing for validating dark media (fiber or copper) and linking between two testers, it may be desirable to enable the remote, unmanned Performance Test Peer to wait indefinitely for link rather than timeout. When enabled there is no timeout waiting for link to be established, allowing a single operator to move to the far end of the media and perform the Performance Test.



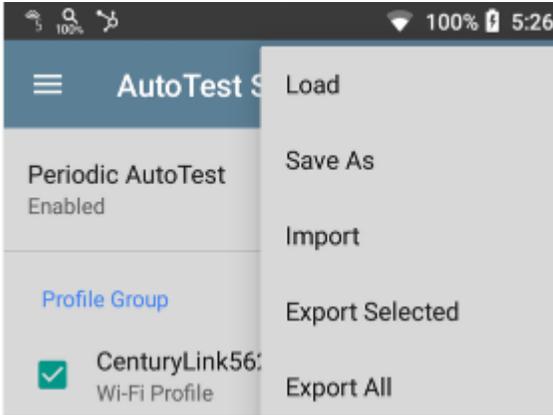
Force 10/100 Link Duplex

Some legacy 10Mbps and 100Mbps equipment allowed the user to provision the port a full duplex but not advertise using Auto-Negotiation. As such the LinkRunner would always default to a safer half duplex link. Two additional Force settings have been added to the Wired AutoTest Speed/Duplex options allowing the LinkRunner to link at full duplex when the link partner is not advertising.

- Speed/Duplex**
- Auto
 - 10 M HDx
 - 10 M FDx
 - 10 M FDx Forced
 - 100 M HDx
 - 100 M FDx
 - 100 M FDx Forced

AutoTest Profile Export

When moving AutoTest profiles between testers, users now have 'Export Selected' and 'Export All' options. This allows the user to control if only selected (checked) profiles, or all profiles, are exported.



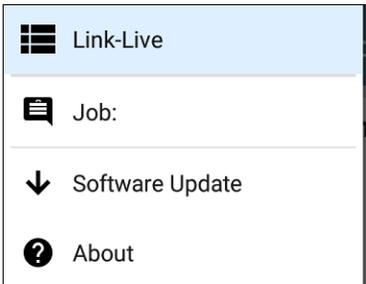
exFAT USB Support

LinkRunner now supports higher capacity external USB thumb drives using the exFAT format. This supports greater file size and partition size limits than FAT 32.

Upgrading to Version 1.4

If you have claimed your unit to Link-Live.com, we highly recommend following the Over the Air (OTA) Firmware Update procedure:

1. To check for available software updates at any time, open the Link-Live App from the Home screen.
2. In the Link-Live App, touch the menu icon or swipe right to open the left-side Navigation Drawer.



3. Touch **Software Update**. The Software Update screen opens and displays the version number of any available updates.

For this beta release, you should see Android Update version 1.4.0.89 available.

4. Touch **Download + Install** to update the Android operating system or NetAlly applications. Each update must be installed separately.
The files download and install. When finished, the unit will restart.