EtherScope® nXG v1.5 Release Notes

May 12, 2021

These EtherScope® nXG version 1.5 Release Notes briefly describe the new features and enhancements included in the release.

Version 1.5 Major New Features

Bluetooth/BLE Survey in AirMapper™

Using the AirMapper Site Survey app, EtherScope nXG users can now perform passive Bluetooth and BLE surveys, making it easier to validate coverage and provisioning of indoor location services or identify and locate Bluetooth devices in the area.

Before conducting a Bluetooth survey, turn on the Bluetooth radio on the EtherScope nXG unit. Bluetooth surveys will be performed in parallel to Wi-Fi Active or Passive surveys, thus allowing you to perform three different types of wireless site surveys at the same time.

Perform the Bluetooth survey using the same methodology you would use to perform a Wi-Fi Active or Passive survey, then upload it to Link-Live. The Bluetooth heatmap option will be available in Link-Live.

In addition to displaying the Address and RSSI of any Bluetooth device, if the beacon type is iBeacon or Eddystone the following information is displayed:

- iBeacon UUID, MajorID, MinorID
- Eddystone UID Namespace, Instance
- Eddystore URL

Other fields are displayed in the table when present in the Bluetooth packet.

LANBERT™ Media Qualification App

The new LANBERT Media Qualification app for EtherScope nXG and LinkRunner® 10G, provides a simple and fast method of assessing the quality of transmission and available bandwidth of your copper and fiber cable plant. LANBERT generates and measures the transmission of line-rate Ethernet frames over your network cabling infrastructure, qualifying its ability to support 1G/10G on fiber and 100M/1G/2.5G/5G/10G on copper links. For more information about qualifying cabling using LANBERT, see our white paper.

The LANBERT test can be run in three main modes:

1) Single tester with physical loopback

2) Single tester with active remote loopback (switch port configured in loopback mode, or reflector test instrument (LinkRunner G2, for up to 1Gbps)

3) Dual tester, one in Generator mode, the other in Loopback mode, using two EtherScope nXG units, two LinkRunner 10G units, or one of each (up to 10Gbps copper or fiber testing.)

Discovery Difference

An important aspect of proper network management and security best practices is to ensure you have a way of knowing what is connected to the network and where it is. Network discovery, as offered by EtherScope nXG and LinkRunner 10G (with AllyCare support) is an effective and fast way of identifying devices on your network.

The new Discovery Difference analysis in the Link-Live cloud service provides an automated way of comparing two different discovery snapshots and identifying both new devices and devices that are no longer on the network.

In the Analysis tab in Link-Live two Discovery snapshots can be selected, then click CREATE DISCOVERY DIFFERENCE You can choose either Topology for a map-based view or View Analysis for a tabular view. New devices are colored red, missing devices yellow.

Improvements in AirMapper – One Walk, Many Views

The multiple radios in EtherScope nXG enable collection of a vast amount of information when conducting a site survey, beyond just Wi-Fi signal data. In version 1.5, EtherScope nXG will automatically send both the Wi-Fi connection log and discovery snapshot to Link-Live when AirMapper survey data is uploaded. Key to this practice is to have the management radio connected as a client to the SSID of interest for an active 1x1 connection while conducting a simultaneous passive survey.

When linked to the network, EtherScope nXG automatically runs its network discovery via the management radio to query infrastructure devices and identify connected clients on both Wi-Fi and wired Ethernet. Now, one walk of a site can produce:

- Wi-Fi Passive Survey
- Wi-Fi Active Survey
- Bluetooth/BLE Survey
- Network Discovery
- Wi-Fi Analysis
- Network Topology Map
- Roaming and Connection Analysis
- … all while allowing remote operation

Another AirMapper improvement is that when present, the AP Tx power level and QBSS channel utilization and client count is also seen in the data table when a specific survey point is selected in the Link-Live heatmap.

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Fiber SFP DDM Measurements

Digital Diagnostics Monitoring (DDM) is a feature in many modern fiber transceivers providing real-time control and diagnostic information that can be useful for troubleshooting.

EtherScope nXG and LinkRunner 10G will report DDM information for the SFP/SFP+ in the unit when connected to an active fiber link. Since these tools can utilize any standards-compliant transceiver, the DDM measurements (as well as the link to the network) can be used to validate the proper operation of the transceiver itself. DDM measurements can include (may vary by manufacturer):

SFP Details

Wavelength: 850 nm
Temperature: 30 C
Voltage: 3.33 V
Tx Bias Current: 8.73 mA
Tx Power: -2.38 dBm
Rx Power: -2.80 dBm
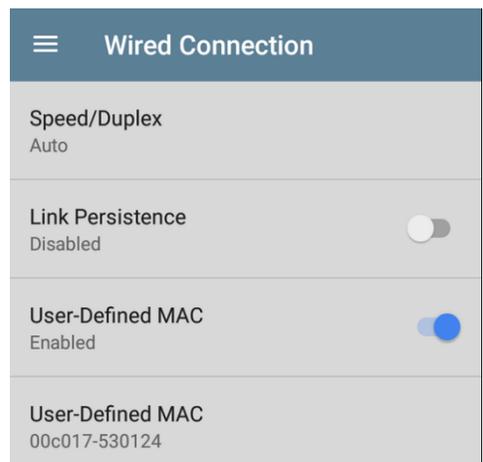Reference Power: -2.80 dBm
Power Difference: 0 dB

Link-Live Status

The Link-Live screen now displays the interface and reachability status of Link-Live providing additional visibility into that connection.

≡ **Link-Live (0 buffered)** ⋮

James's DEV1 - 530124

Organization: James's Organization
E-mail: james.kahkoska@netally.com
AllyCare: Enabled (expires 12/31/2025)
MAC: 00C017-530124
Interface: Wi-Fi Management Port
(Link-Live is reachable)

Enable Link-Live

Wired Profile User Defined MAC

For validating MAC based policies such as ACL lists, the EtherScope now allows you to specify a user defined MAC address on a per profile basis.

≡ **Wired Connection**

Speed/Duplex
Auto

Link Persistence
Disabled

User-Defined MAC
Enabled

User-Defined MAC
00c017-530124

Saving Test Scrolled Images

When looking at the multi-trended results graphs in certain EtherScope nXG apps (Network Performance Test, Wi-Fi AutoTest, RF and Traffic Stats, LANBERT, …), you can now save the entire screen with a single action. This operation can be performed as 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 the "…" ellipsis in the title bar brings up the option to upload the graphs to Link-Live.
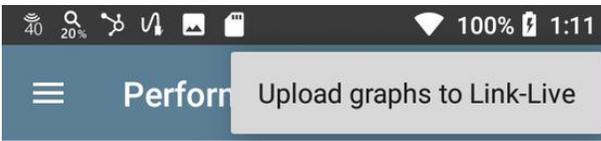
In some screens such as Wi-Fi RF and Traffic Stats the option appears at the bottom of the screen.

	Cur	Min	Max	Avg
Retry Rate %	11	0	11	2
Retry Pkts	5	0	5	0
Total Pkts	45			22

Last Seen: 11:49:59 AM

UPLOAD GRAPHS TO LINK-LIVE

Security Enhancements

Google Chrome has been replaced by Chromium; Adobe Acrobat has been removed from the product and replaced PDF with HTML5 version. If needed Adobe Reader and Chrome are available in the Link-Live app store.

Terms and Conditions

Like most products we are now required to provide a Clickwrap agreement for the terms and conditions.

Upgrading to Version 1.5

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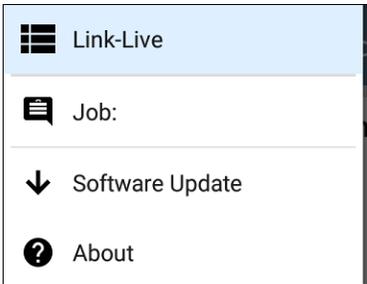
3. Touch **Software Update**. The Software Update screen opens and displays the version number of any available updates.

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.

Note that we will never change your customized screen icon arrangements. If possible perform a factory reset under Settings, System, Reset Options. You can save any app setting you wish to a thumb drive using Export options in the individual apps save menu (the disc in the upper right of the app).

To avoid a system default and manually configure the desktop follow these instructions:

The v1.5 software introduced the new LANBERT™ App and changed the built-in user manual from PDF format to HTML format. To access the new LANBERT™ App and the new HTML format user manual, swipe up on the Home screen or touch the up arrow icon ∧ and enter the App Screen.

To add new Apps to the Home screen, you can hold and drag an icon from the App Screen upwards to add it to your Home screen. Remove the old PDF manual icon by pressing it and dragging it to the Remove X at the top of the screen.

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