



Release Notes

MLTG-CN

Version: 1.4.0-00123-7e047ba
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1. Re-define Operation Modes – Base Station and Client

The operation modes for MLTG-CN (CN) and MLTG-CN LR (LR) are redefined as Base Station mode and Client mode. The new operation modes are defined by the role of link ignition. A Base Station initiates the link setup process, while a Client passively waits for associate requests.

Client Mode

- When connecting with MLTG-360 (DN), the CN or the LR will setup the network behavior according to the operation mode of the POP node (setup VXLAN in Terragraph mode or setup as layer 2 bridge in Bridge mode).
- When connecting with a Base Station, 60GHz radio will be bridged with LAN.
- Listens to the associate requests from all channels. There is no channel configuration when in Client mode.

Base Station Mode

- A Base Station can only setup links with Clients. It is not allowed to link with DN (MLTG-360) or another Base Station.
- The 60GHz interfaces are bridged with LAN.
- It will monitor the link status and attempts to recover the links if disconnected

2. PtMP Support for Base Station Mode

In Base Station mode, MLTG-CN supports setting up links to up to 15 Clients. On the other hand, due to the antenna characteristics, a Base Station mode MLTG-CN LR can only setup 1 link to a Client.

When a Base Station MLTG-CN connects with 15 Clients, the end-to-end total bi-directional throughput can reach 2Gbps (limited by Ethernet port speed).

3. Radio Configuration Page

Link Configuration page is re-designed to be Radio Configuration page. It is only available for Base Station mode.

Channel and links can be configured in the Radio Configuration page. Based on the capability, up to 15 links can be configured for MLTG-CN, and only 1 link can be configured for MLTG-CN LR.

An Enable/Disable switch is added to each link. It allows administrator to disable specific links temporarily and add it back easily.

Edg-e Networks MLTG-CN node-98-19-2c-ae-32-fb Logout

STATUS

NETWORK

Interfaces

Radio Configuration

SYSTEM

Radio Configuration

Please only configure the link, including channel and Peer Radio MAC in one of the peers.
If the link is configured in both peers, the link may not be established.

Channel

[+ Add new](#) [Scan](#) The allowed max number is 15.

Enabled	Peer Radio MAC	
<input checked="" type="checkbox"/>	<input type="text" value="34:ef:b6:58:7f:9b"/>	
<input checked="" type="checkbox"/>	<input type="text" value="34:ef:b6:58:7e:a8"/>	
<input checked="" type="checkbox"/>	<input type="text" value="34:ef:b6:f6:2c:79"/>	
<input checked="" type="checkbox"/>	<input type="text" value="34:ef:b6:58:7e:ff"/>	
<input checked="" type="checkbox"/>	<input type="text" value="34:ef:b6:58:7e:45"/>	
<input checked="" type="checkbox"/>	<input type="text" value="34:ef:b6:f6:2b:e9"/>	
<input checked="" type="checkbox"/>	<input type="text" value="34:ef:b6:58:7e:48"/>	
<input checked="" type="checkbox"/>	<input type="text" value="34:ef:b6:f6:2c:07"/>	
<input checked="" type="checkbox"/>	<input type="text" value="34:ef:b6:58:7f:02"/>	

4. 60GHz Radio Scan

60GHz Radio Scan is supported for Base Station mode. The scan feature allows a Base Station to find out other MLTG-CN or MLTG-CN LR in the same channel. You can start the radio scan by clicking the “Scan” button in the Radio Configuration page.

RADIO SCAN [Scan Now](#) [Add Selected as Links](#) ✕

<input type="checkbox"/>	Radio MAC	Channel	SNR, dB	Tx Angle	Rx Angle
<input type="checkbox"/>	34:ef:b6:f6:2d:c6	2	-39	30.25	10.5
<input type="checkbox"/>	04:ce:14:fc:b1:de	2	-42	39	22.5
<input type="checkbox"/>	04:ce:14:fc:ba:06	2	-43.5	12	33
<input type="checkbox"/>	34:ef:b6:f6:2b:dd	2	-9	108	9.75
<input type="checkbox"/>	04:ce:14:fc:b9:79	2	-18	34.5	9.5

The scan results will be listed as the screenshot above. The SNR and Tx/Rx angle for each radio scanned will be shown. The scan results can also be added as links directly.

Note that there are some expected behavior and limitation for radio scan feature.

- It takes a few minutes for a scan process.
- It only scans on current working channel.
- It may not be able to find out all radios in a single round of scan. It is recommend to do scan multiple times to get all possible results.
- Only MLTG-CN and MLTG-CN LR will be shown in the results.

5. Dashboard Enhancement

The Status Overview page is reformatted as a dashboard. The system information and status are shown with clearer layout. Port status and interface info are also added to the page.

The dashboard is divided into several sections:

- GENERAL STATUS** and **NETWORK STATUS** tabs are at the top.
- PORT STATUS** section shows:
 - ETHERNET PORT #0**: Linked at 1000M/Full duplex (indicated by a blue double-headed arrow icon).
 - SFP PORT #0**: No connection detected (indicated by a yellow circle with a slash icon).
- OPERATION MODE** section:
 - OPERATION MODE: Client Mode
 - NETWORK BEHAVIOR: Layer 2 Bridge
- MEMORY INFO** section with progress bars:
 - TOTAL AVAILABLE: 678400 kB / 908856 kB (74%)
 - FREE: 659048 kB / 908856 kB (72%)
 - BUFFERED: 19352 kB / 908856 kB (2%)
- DEVICE INFO** section:
 - SERIAL NUMBER: EC2150000874
 - FIRMWARE VERSION: 1.4.0-00123
 - MGMT. PORT MAC ADDRESS: 98:19:2c:ae:71:1b
 - LAN PORT MAC ADDRESS: 98:19:2c:ae:71:1c
 - RADIO MAC ADDRESS: 98:19:2c:ae:71:1d
 - LOCAL TIME: Fri Jul 8 08:58:55 2022
 - UPTIME: 02h 28min
 - LOAD AVERAGE: 1.81 1.66 1.56
- INTERFACE INFO** section:
 - PORTS BRIDGED TO INTERNET: SFP0
 - MANAGEMENT PORT: ETH0

6. Default Value Modification

The default values for the following configuration are adjusted to make deployment simpler.

CONFIG ITEM	NEW DEFAULT VALUE
OPERATION MODE	Client Mode
CLOUD MANAGEMENT AGENT	Enable
LAN IP ADDRESS MODE	DHCP

7. Issue Fixed

- Fixed an issue that sometimes active link was not displayed in the Link Status table.
- Fixed an issue that the PoE port cannot work after switch the PoE port role many times.
- When LAN is set as static IP mode, the default gateway can be configured normally now.

8. Known Issue

- If there are existing links, modifying channel configuration will cause the Base Station mode CN crash. To prevent this issue, please disable all the links before modifying channel.
- When LR is linked with DN in Terragraph mode and the 2.5G port is bridged with LAN, if there is overloading traffic pouring into the 2.5G port for more than 15 hours, the VXLAN may be disconnected until reboot.
- When connected with DN in Terragraph mode, the VXLAN tunnel information still show even if the link is already disconnected.
- Changing fallback IP of LAN require an additional reboot to take effect.
- For client mode CN or LR, the SNMP private OIDs regarding to link status may response with nothing even when the link is existing.