



Release Notes

MLTG-360

Version: 1.2.1-02542-f73072fc
Enhanced from version 1.1.2-02827-55e6616a

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Table of Content

1.	Operation Mode Enhancement	2
2.	Support VLAN for Control Path	2
3.	Access POP GUI via Control Path	2
4.	Support DN Node Configuration on POP	2
5.	Show Topology Information and VXLAN Status on Dashboard	3
6.	Support SNMP Private MIB.....	3
7.	Node Discovery via Management Port.....	4
8.	GUI Design Enhancement	4
9.	Issue Fixed	5
10.	Known Issue	5

1. Operation Mode Enhancement

Bridge mode is redesigned and using same configuration concept for topology. It is also manageable for TGNMS. In the GUI for the POP node, the configurable items are the same for Terragraph mode and Bridge mode.

In Terragraph mode, all the DNs and CNs works as a router. The DNs and CNs will setup VXLAN tunnel with the POP node automatically. The clients connected to the LAN ports of DNs and CNs will be bridged to the uplink network of the POP node via the VXLAN tunnel.

In Bridge mode, all the DNs and CNs works as a Layer 2 bridge. All the clients connected to the LAN ports of DNs and CNs will be in the same Layer 2 network.

2. Support VLAN for Control Path

VLAN for control path is supported for the POP node. A new configuration item "Control VLAN ID" is added for POP nodes.

When Control VLAN ID is set to 0, the selected "Control Interface" will be dedicated for control path. The data traffic will not pass through the "Control Interface".


When Control VLAN ID is set (1 to 4094), the control path will be only accessible with the configured VLAN ID on the Control Interface. Data traffic can pass through the Control Interface and be separated by VLAN.

For example, if SFP+ port is set as "Control Interface", and "Control VLAN ID" is set to 1000, then the "Control Address" will be accessible via SFP+ port with VLAN tag 1000. The SFP+ port can also serve as data path for untag traffic or traffic with VLAN IDs other than 1000.

3. Access POP GUI via Control Path

The GUI of the POP node can be access via the control path. There is also an option "WebUI Access through Control Interface" to enable or disable the GUI accessibility from the control path.

4. Support DN Node Configuration on POP

When enabling local controller on the POP, the configurations of the managed DNs are configurable on the POP GUI. In the Node Setting page, administrator can configure the DN settings by clicking the  icon.

TOPOLOGY NODES

Discover Add

Name	Type	Node MAC	Radio MACs			POP Node	Status	Action
POP	DN	34:efb6:c6:e9:b5	Radio A 04:ce:14:fc:b9:7d	Radio B 04:ce:14:fc:ba:7a	Radio C 04:ce:14:fc:ba:d8	<input checked="" type="checkbox"/>	ONLINE_INITIATOR	
			Radio D 04:ce:14:fc:ba:06					
DN2	DN	34:efb6:c6:e8:59	Radio A 04:ce:14:fc:b1:5c	Radio B 04:ce:14:fc:b1:66	Radio C 04:ce:14:fc:b1:75	<input type="checkbox"/>	ONLINE_INITIATOR	
			Radio D 04:ce:14:fc:b1:d5					
LD	CN	86:8a:17:9f:4f:08	Radio A			<input type="checkbox"/>	ONLINE	

The following items are supported to be configured via POP.

- Management Port configuration
- PoE out configuration
- Failure recovery configuration
- Radio sector configuration

5. Show Topology Information and VXLAN Status on Dashboard

Link status page is enhanced to show the status of all links in the topology. The established links in the topology will be shown in the list.

Also, when in Terragraph mode, the VXLAN tunnel information can also be checked in this page.

6. Support SNMP Private MIB

SNMP private MIB is supported from v1.2.0 for MLTG-360. Note that the private MIB can only be accessed via “**Control Address**”, it cannot be accessed via the management port.

Depending on the controller type, SNMP function is enabled in different way. When managed by local controller, when SNMP is enabled and configured on the POP node, the POP will synchronize the SNMP configuration to all the DNs and Cns in the network. When managed by TGNMS, you need to set “envParams.SNMP_ENABLED” to 1, and configure community string for the network under “snmpConfig.snmpV2C”.

The following information can be retrieved with the private MIB in this version.

- Device name
- Serial number
- Firmware version
- Link status (interface name, peer MAC, MCS, SNR, RSSI, PER, Tx power Index, Tx/Rx beam index, channel).

7. Node Discovery via Management Port

Node discovery feature is supported on the POP node when local controller is enabled. When the management ports of the DNs and CNs are connected to the same Layer 2 network, the POP can discover the nodes and get the MAC addresses for the nodes. The discovered nodes can be selected to be added to the topology directly.

Nodes found

Type	IP Address	Node MAC	Radio MACs	<input type="checkbox"/>
DN	10.131.5.157	34:ef:b6:c6:e8:59	RadioA - 04:ce:14:fc:b1:5c	<input type="checkbox"/>
DN	10.131.5.140	34:ef:b6:c6:e7:ab	RadioA - 04:ce:14:fc:ba:e6	<input type="checkbox"/>
DN	10.131.5.180	34:ef:b6:c6:e7:c9	RadioA - 04:ce:14:fe:c6:84	<input type="checkbox"/>
CN	0.0.0.0	34:ef:b6:58:7e:db	RadioA - 34:ef:b6:58:7e:db	<input type="checkbox"/>
CN	10.131.25.19	34:ef:b6:58:7e:96	RadioA - 34:ef:b6:58:7e:96	<input type="checkbox"/>
CN	10.131.5.164	34:ef:b6:58:7f:9b	RadioA - 34:ef:b6:58:7f:9b	<input type="checkbox"/>
CN	10.131.5.212	f8:8e:a1:70:40:98	RadioA - f8:8e:a1:70:40:98	<input type="checkbox"/>
CN	0.0.0.0	34:ef:b6:58:7f:02	RadioA - 34:ef:b6:58:7f:02	<input type="checkbox"/>
CN	10.131.5.3	34:ef:b6:58:7f:80	RadioA - 34:ef:b6:58:7f:80	<input type="checkbox"/>
CN	0.0.0.0	34:ef:b6:58:7e:45	RadioA - 34:ef:b6:58:7e:45	<input type="checkbox"/>

Close

Add

8. GUI Design Enhancement

The following GUI enhancements are included.

- The checkbox for many options are replaced with a more straightforward on/off switch.
- Added graphical indication for physical port mapping and the order of radios.
- System settings are categorized and separated into three different pages. “General Settings” includes time settings, failure recovery settings, and SNMP settings. “Maintenance” includes system actions such as firmware upgrade or configuration backup/restore/reset. “Radio Sectors” can configure country for regulatory limitation and enable/disable radios.
- When using local controller and adding CN node in node setting page, administrator only has to fill the radio MAC. The system will automatically fill up the node MAC field with the same MAC address. Note that the node MAC of the CN node must be the same as the radio MAC.

9. Issue Fixed

- Fixed the issue that MLTG-360 was hard to setup link with MLTG-360 when there are other links to CNs on the same radio.
- Fixed the issue that local controller would reserve a redundant LAN prefix for each node.
- Fixed the issue that some of the fields in operation mode page would become disabled or no value after change page or applying settings.
- Topology status page will not show the links already disconnected now.
- All settings can be kept correctly after firmware upgrade.
- Time zone configuration can take effect correctly now.
- The changes can be saved correctly when modifying time zone and NTP server settings at the same time.
- Static IPv6 addresses can be configured correctly to management port now.
- A deleted node can be added again successfully now.
- Fix the issue that sometimes reset to factory default would stuck.
- When a MLTG-360 is upgraded from v1.1.0 to v1.1.2, and then upgraded to v1.2.0, the VXLAN tunnel will not be able to be established. This version fixes this issue and make sure the VXLAN tunnel and Layer 2 Bridge work correctly no matter the MLTG-360 was upgraded from which version.
- Fixed an issue on local controller that in some cases, the antenna parameter of the CN would be modified improperly.
- The source IP and the destination IP of VXLAN tunnels are corrected on non-POP DNs.
- SNMPv3 settings works on local controller now.
- Fixed an issue that the management port settings will be changed to DHCP after reboot.
- Switching bootbank will not trigger reset to default now.
- Fixed an internal loop issue between the management port and the other ports, which may have chance to make device reboot.

10. Known Issue

- In operation mode page, there is no warning message when some of the required fields are not filled up.
- When using external controller (NMS), sometimes node name and link name will be empty in topology dashboard.
- Even if unchecking “Keep current settings” when doing firmware upgrade, some internal configuration are kept. It requires another Reset to Default to wipe out all old configuration.
- Management Port settings will not be reset after resetting to default.