



Release Notes

MLTG-360

Version: 1.3.0-02617-7ca9063c
Enhanced from version 1.2.1-02542-f73072fc

Copyright Notification

Edgecore Networks Corporation

© Copyright 2022 Edgecore Networks Corporation.

Table of Content

1.	ecCLOUD Management.....	2
2.	Support IPv4 for Control Plane	2
3.	Dummy IPv6 Settings	3
4.	Configuration Flow Enhancement	3
5.	Support Iraq Country Codes	3
6.	Diagnostics Log Enhancement	3
7.	GUI Modification	4
8.	Issue Fixed	4
9.	Known Issue	4

1. ecCLOUD Management

MLTG-360 is able to be managed by ecCLOUD from version 1.3.0. Cloud administrator can configure the topology of the MLTG network.

Below is the concept and rough flow for creating MLTG network in ecCLOUD.

- (1) Add all devices in your MLTG network to the cloud. The serial number and the MAC address of each device are required.
- (2) On the GUI of the POP node, set it as the POP node and configure all the addresses for its network connectivity. Select “ecCLOUD” for “Management Option”.
- (3) Wait for the POP node until it is registered and synced.
- (4) Go to site level configuration page for Terragraph, add the POP node to the topology.
- (5) Add the other nodes and links to the topology. The non-POP DNs and CNs will be registered to the cloud once the links are successfully established.

2. Support IPv4 for Control Plane

Terragraph is originally based on IPv6 network. To make it more applicable, the IPv4 support for control plane is introduced in v1.3.0.

In the operation mode page, an option “IPv4 Support on Control Plane” is added. When the option is disabled, each node can only be managed via IPv6 addresses. When the option is enabled, each node will get an IPv4 address either by DHCP or set as static. The IPv4 addresses will be accessible for GUI and SNMP, even for ecCLOUD management.

Note that IPv6 settings are required by the E2E controller no matter IPv4 support is enabled or not. However, when IPV4 support is enabled, it is able to configure “fake” IPv6 settings.

IPv4 support is available when managed by Local Controller or ecCLOUD. When managed by TGNMS, routable IPv6 addresses are still required.

3. Dummy IPv6 Settings

The E2E controller requires IPv6 configurations to start its service. However, for a pure IPv4 network, it is not possible to configure a routable IPv6 address. In this case, a set of dummy IPv6 addresses is able to activate the local controller.

Therefore, a new button to generate a set of dummy IPv6 settings is added in version 1.3.0. When use Local Controller or managed by ecCLOUD, IPv6 settings including “Terragraph WAN address”, “Gateway Address”, “Terragraph LAN Prefix”, “Terragraph LAN Prefix Length”, and “Control Address” will be filled out automatically after clicking the “Generate” button.

Note that when managed by the external controller or TGNMS, a set of routable IPv6 settings is still required. The TGNMS can only be accessed via IPv6 network.

4. Configuration Flow Enhancement

In previous version, some network-wide configurations has to be configured on each node. In version 1.3.0, the POP is able to synchronize these configurations to every nodes in the network and greatly simplify the configuration flow.

The configurations will be synchronized by the POP node is listed as follow.

- Operation Mode (Terragraph Mode (VXLAN) / Bridge Mode)
- IPv4 Support on Control Plane (The non-POP DNs will be configured as DHCP mode by default).
- Management Option (Local Controller / ecCLOUD / External Controller (TGNMS))

5. Support Iraq Country Codes

Added “Iraq” to the supported country list. Only channel 2 is available for Iraq.

6. Diagnostics Log Enhancement

VXLAN tunnel related information and process list are included in the diagnostics log.

7. GUI Modification

Several GUI enhancements are included in version 1.3.0.

- Remove “Uplink Setting” section in Management > Network Configuration page, because the configuration is not applicable anymore.
- Tx Power in link status is now expressed as percentage.
- Add hint message to link status table to show the auto power/rate control mechanism.

8. Issue Fixed

- The input check in the operation mode page is fixed now so that it cannot be applied if required IPv6 addresses are not filled completely.
- When “Keep current settings” is unchecked during firmware upgrade, the configuration will be reset to default correctly now.
- Management port settings will be reset correctly after resetting to factory default.
- In node settings page, the MAC address of a CN node can be edited correctly now.
- After modifying Terragraph LAN Prefix, the VXLAN tunnel will be updated automatically with correct source and destination IPv6 addresses.
- In the node discovery result page, the “Add” button is only available when at least one node is selected.
- After firmware upgrade from older version, the cache of the browser would not affect the behavior of the GUI from now on.
- The hint message for Control Interface is corrected now.
- The privacy settings for SNMPv3 can be saved and works now.
- VXLAN tunnel can be recovered automatically after link disconnection when the total number of tunnels is more than 10.
- Fix an issue that all the links in a mesh become unstable after one of the links disconnected and recovered.
- Fix an issue that the routing information takes long time to converge after link disconnection.

9. Known Issue

- Sometimes node name and link name will be empty in topology dashboard.
- Sometimes after a disconnected link is recovered, the keep-alive packets are not recovered. This may cause routing issue and it can only be recovered after the link is re-associated again.