GL.iNet Beryl AX (GL-MT3000) Re-Imaging Guide

Version: 1.0 | **Classification:** UNCLASSIFIED // TRAIL GUIDE

1.0 SITUATION

The GL.iNet Beryl AX is the hardware of choice for deployed connectivity due to its size and thermal properties. However, as hardware manufactured in a non-NATO aligned region, supply chain security is a concern. To mitigate the risk of factory-installed backdoors or data telemetry, the "Clean Slate" protocol dictates removing the vendor firmware immediately upon receipt.

2.0 MISSION

Replace factory GL.iNet firmware with "Vanilla" OpenWRT (Open Source) to ensure software transparency and data integrity.

3.0 EXECUTION

3.1 Requirements

- 1x GL.iNet Beryl AX (GL-MT3000)
- 1x Laptop (Windows/Mac/Linux)
- 1x Ethernet Cable (Preferred) or Wi-Fi connection
- Internet access (for Phase 1 only)

3.2 Phase 1: Acquisition

1. Navigate to the official OpenWRT Firmware Selector: `https://firmware-selector.openwrt.org/`
2. Enter Model: **GL.iNet GL-MT3000**
3. Locate the release labeled **"Stable"**.
4. Download the **"KERNEL"** or **"SYSUPGRADE"** image (File ending in `.bin`).
    - *Warning: Do not download the "Factory" image unless using the Uboot method.*

3.3 Phase 2: Connection

1. Power on the Beryl AX. Wait for the blue LED to stabilize.
2. Connect your workstation to the router via Ethernet (LAN Port) or via the default Wi-Fi SSID (printed on bottom sticker).
3. Open a web browser and navigate to the Default Gateway: `http://192.168.8.1`
4. Select your language and set a temporary administrative password.

3.4 Phase 3: Flashing (The Wipe)

1. In the GL.iNet Admin Panel, navigate to **SYSTEM** > **UPGRADE**.
2. Click the tab for **LOCAL UPGRADE**.
3. Drag and drop the `.bin` file downloaded in Phase 1.

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4. **CRITICAL ACTION:** The system will ask if you wish to "Keep Settings." Ensure this box is **UNCHECKED**.
    - *Rationale: We require a complete partition wipe to ensure no vendor config files remain.*
5. Click **INSTALL/FLASH**.

3.5 Phase 4: Stabilization

The device will reboot. This process takes approximately 3 to 5 minutes.

- **Do not** remove power.
- **Do not** unplug the ethernet cable.

Once the LED stabilizes, the router will broadcast a new SSID: `OpenWrt`.

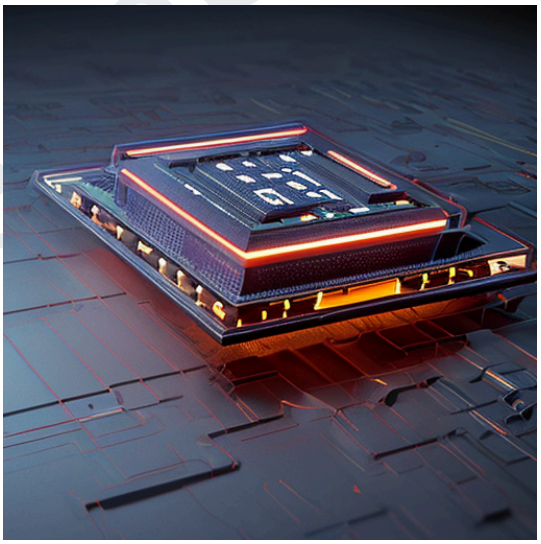
4.0 CONFIGURATION

1. The new Default Gateway is: `http://192.168.1.1`
2. Navigate to this address. There is no password by default.
3. **IMMEDIATE ACTION:** Go to **System** > **Administration** and set a strong router password.
4. **SECURE WIFI:** Go to **Network** > **Wireless**. "Edit" the Master interface to set a WPA2/WPA3 password for your Wi-Fi (it is open by default).

5.0 DISCLAIMER

This guide is provided "as is" by Core Lab. Flashing firmware carries a small risk of "bricking" the device if power is lost during the process. Ensure you are connected to a stable power source. This procedure is not officially endorsed by the CAF.

Courtesy of **https://corelab.tech**



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