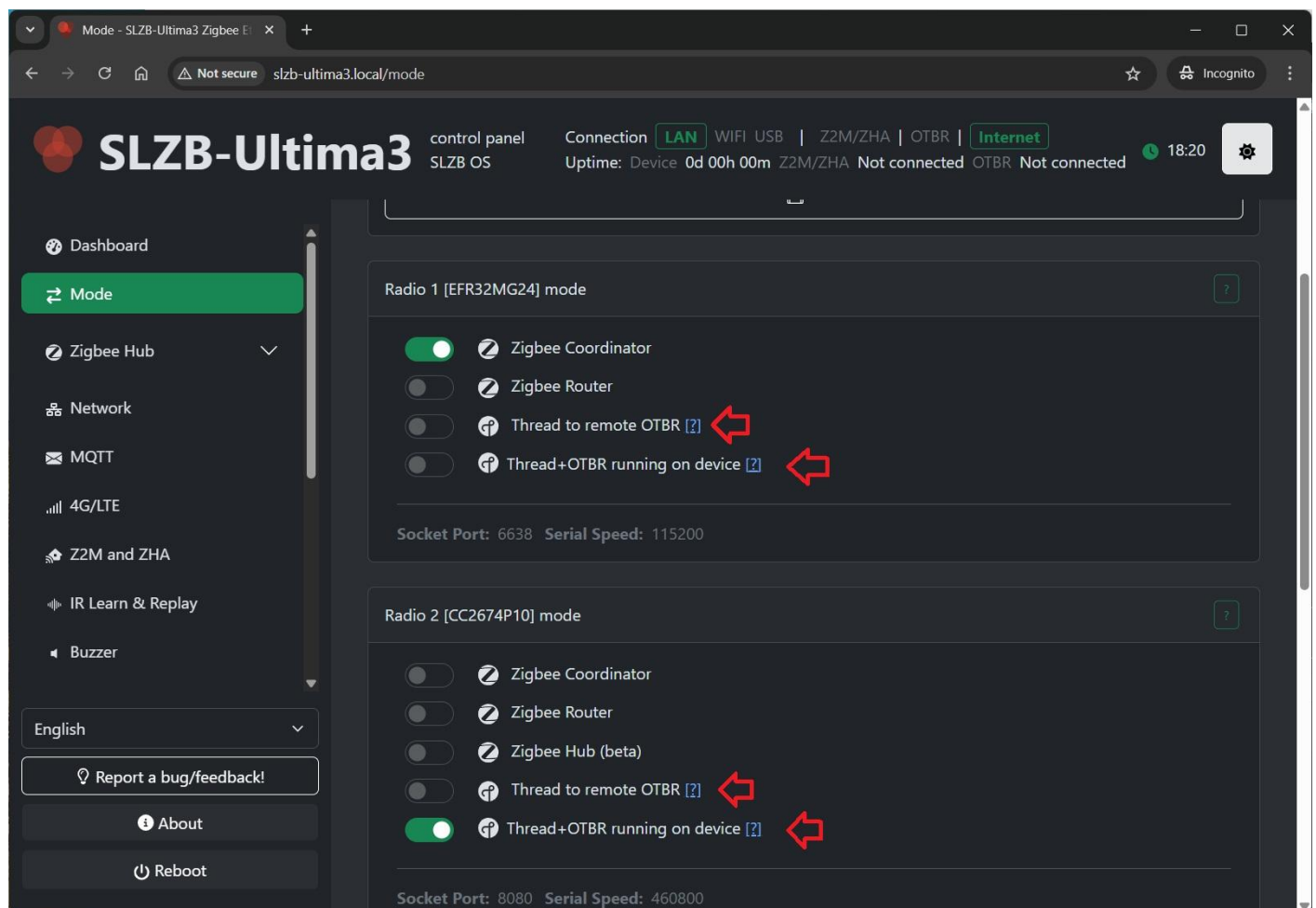


Thread setup (network and USB connection)

Thread setup for Home Assistant: two options

SLZB devices support two ways to run a Thread network with Home Assistant:

- **Option A - “Thread to remote OTBR”**: OTBR runs on Home Assistant (OTBR add-on, or, since Jan-2026, called "**App**"), SLZB works as a Thread RCP (radio).
- **Option B - “Thread + OTBR running on device”**: OTBR runs directly on the SLZB device, Home Assistant connects to it via REST API.



Prerequisites

- A server with **Home Assistant** installed and running (example: Raspberry Pi 4 with HAOS).
- An **SLZB device** with a Thread-capable radio module.
- The **Matter** device you want to connect (example: Eve Energy EU).
- An **Android or iOS** smartphone.

Additional:

- **Option A (Thread to remote OTBR):** Available on **ALL SLZB** coordinators. Can run over either **USB** or **network (Serial-over-IP)**.
- **Option B (Thread + OTBR on device):** Available on **SLZB-06xU**, **SLZB-MRxU** and **SLZB-Ultima**. OTBR requires **IPv6** on your LAN (IPv6 will be force-enabled on the device when this mode is activated).

Step 1 - Choose your setup option

Option A: “Thread to remote OTBR” (OTBR add-on/app runs on Home Assistant)

Choose this if you want OTBR to run on Home Assistant or other smart home systems. SLZB acts as a **Thread RCP** (radio only). This is the traditional setup, and supports USB or network connection.

Option B: “Thread + OTBR running on device” (OTBR runs on SLZB)

Choose this if you want OTBR to run **directly on the SLZB device**. Home Assistant connects via network API (**http://device-ip:8080**), and you don't need the OTBR add-on in HA.

Note: this is an **initial (beta)** integration and may have limitations or unexpected behavior.

Step 2 - Set SLZB mode / firmware

Option A (Thread to remote OTBR): Flash / select Thread RCP mode

- Your device must have an internet connection.
- Go to and select the "**Thread to remote OTBR**". The device will be reflashed; wait until the update completes.

Option B (Thread + OTBR on device): Enable OTBR on the device

- Your device must have an internet connection.
 - Go to `Mode` and select **“Thread + OTBR running on device”**. The device will apply the required configuration and services and reboots.
 - OTBR REST API will be available at **`http://device-ip:8080`**.
-

Step 3 - Home Assistant software setup

3.1 Install and start Matter Server (required for both options)

1. In Home Assistant go to `Settings` → `Devices & Services`.
 2. Click `Add integration` and search for `Matter`.
 3. Keep `Use the official Matter Server Supervisor add-on` enabled and click `Submit`.
 4. Wait until Matter Integration and Matter Server add-on are installed.
 5. Go to `Settings` → `Add-ons` → `Matter Server` and click `Start`. Recommended: enable `Start on boot` and `Watchdog`.
-

Step 4 - Thread / OTBR setup in Home Assistant

Option A: OTBR add-on on Home Assistant

Install the **OpenThread Border Router** add-on and connect it to the SLZB radio (USB or network).

1. Go to `Settings` → `Add-ons` → `Add-on Store`.
2. Search for `OpenThread Border Router` and click `Install`.
3. Open the add-on and go to the `Configure` tab.

Option A - OTBR add-on with **USB** connection

1. Switch the coordinator to USB connection mode (if applicable).
2. Set OTBR add-on parameters:
 - `Port`: select your SLZB USB serial port.
 - `Hardware flow control`: **No**
 - `Baud rate`: **460800**
 - `Flash firmware`: **No** (use pre-flashed RCP firmware)
 - Click `Save`
3. Go to `Info` tab and click `Start`.
4. Recommended: enable `Start on boot` and `Watchdog`.

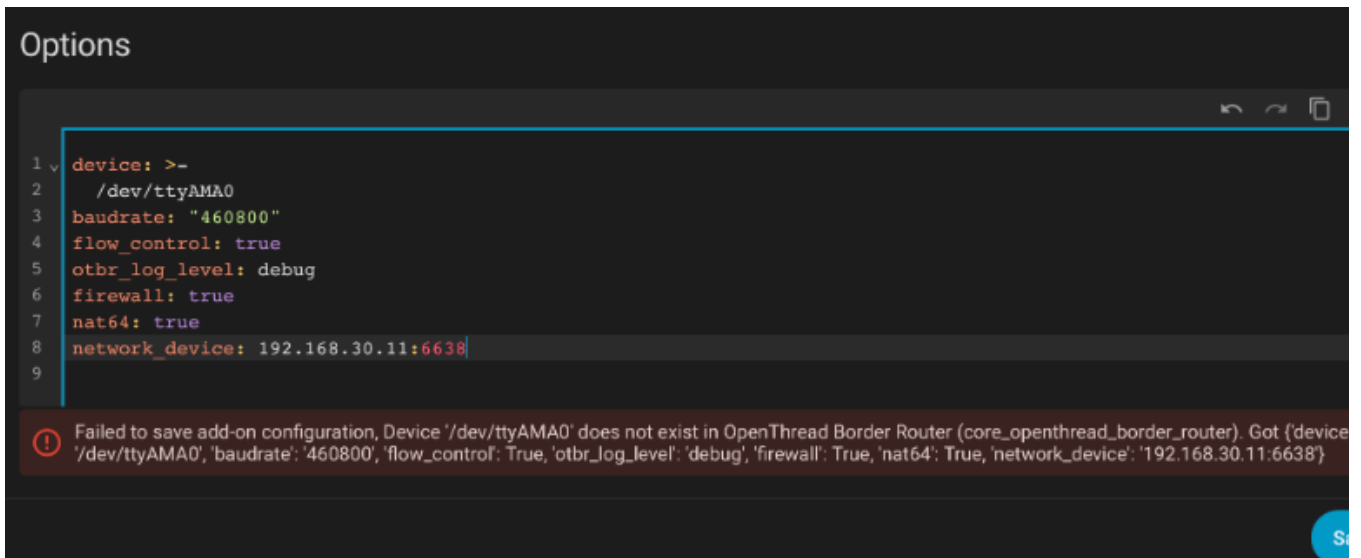
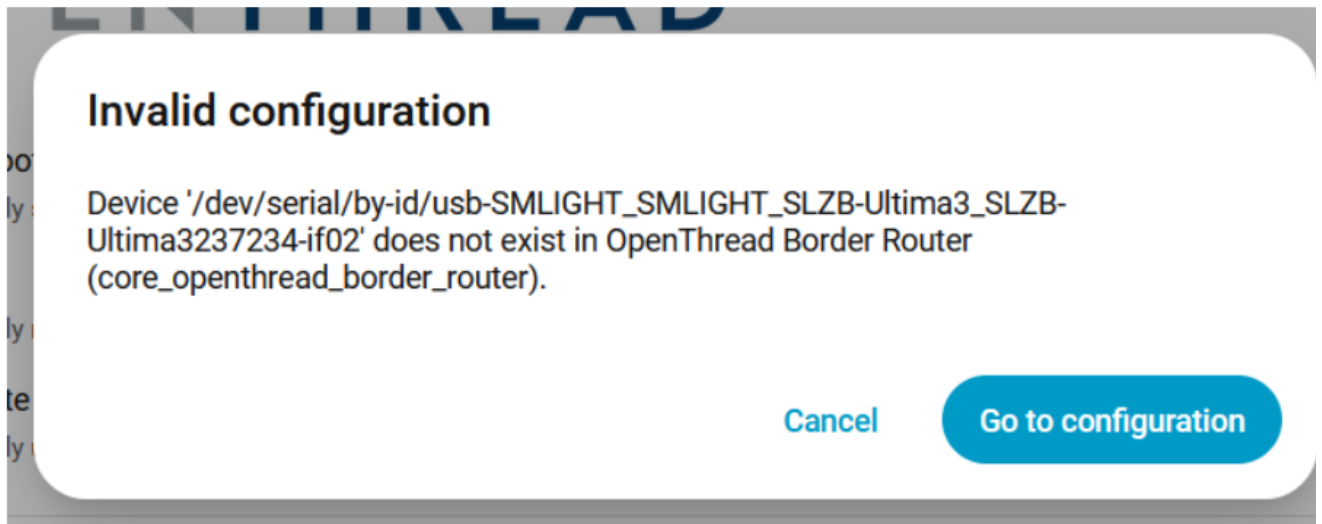
Option A - OTBR add-on with **Network** connection (Serial-over-IP)

Configure the OTBR add-on to connect to the SLZB network serial endpoint (example: `192.168.1.10:6638`).

Setting Up the Thread Border Router Add-on (**Network connection**)

1. OTBR config validation issues workarounds.

If you have errors like the ones in the screenshots below:




Workarounds:

- <https://github.com/home-assistant/addons/issues/3993#issuecomment-3536041147> and <https://github.com/home-assistant/addons/issues/4299#issuecomment-3771514634>
- Connect any USB-serial device

2. Configure the addon according to the example below

Device

 /dev/serial/by-id/usb-SMLIGHT_SMLIGHT_SLZB-07p7_be0732adb173ed11b17068eefd7b791-if00-port0

The serial port where the OpenThread RCP radio is attached.

Baudrate *
460800

The serial port baudrate used to communicate with the Silicon Labs radio.

Hardware flow control

Enable hardware flow control for serial port.

Backbone Network Interface

The network interface used for the backbone network. If not specified, it falls back to the primary interface.

Network Device
192.168.50.192:6638

<host:port> when connecting to a device via sockets (takes precedence over above configuration). Not recommended! See documentation for more information.

OpenThread Border Router agent log level *
debug

Set logging level of the OpenThread Border Router agent (otbr-agent).

OTBR firewall

Use OpenThread Border Router firewall to block unnecessary traffic.

NAT64

Enable IPv6 to IPv4 network address translation. This allows Thread devices to communicate with devices on the Internet.

Beta

Enable beta mode with Thread 1.4 and native OpenThread mDNS.

- Select `Show unused optional configuration options`
- `Hardware flow control`: **No**.
- `Baud rate`: **460800**.
- `Flash firmware`: **No** (we use pre-flashed coordinator)
- `Network Device`: Enter the IP and port of your coordinator. (for example 192.168.1.10:6638)
- Click `Save`.

4. Go back to the INFO tab and `Start` the OpenThread Border Router add-on. It may take a moment to initialize. We would suggest to activate both `Start on boot` and `Watchdog`.
5. You can check logs, they should say that addon started, although they can contain some errors as Thread and Matter are still under development in Home Assistant.

Option B: OTBR runs on the SLZB device (no OTBR add-on needed)

In this option, you **do not** install/use the OTBR add-on in Home Assistant. OTBR is already running on the SLZB device.

- Make sure SLZB mode is set to **“Thread + OTBR running on device”**.
-

Step 5 - Configure Home Assistant integrations (both options)

1. Go to `Settings` → `Devices & Services`.
2. Add (or confirm autodiscovery of) these integrations:

- **Thread**
- **OpenThread Border Router**

Notes:

- If you use **Option A**, the “OpenThread Border Router” integration will typically use the OTBR add-on.
- If you use **Option B**, when asked for the Border Router address, use: **<device-ip>:8080**.

In the **Thread** integration:

- Set **OpenThread Border Router** as the **Preferred network**.
 - If available, enable **Use router for Android + iOS credentials**.
-

Step 6 - Reboot Home Assistant

1. After installing and configuring Matter + Thread components, reboot your Home Assistant server.
-

Step 7 - Pre-set up your phone

1. Install `Home Assistant` app on your phone.
 2. Install `Google Home` app (often required for Thread credential handling on Android).
 3. Open Home Assistant app and connect it to your Home Assistant server (same Wi-Fi network).
 4. In the app go to `Settings` → `Companion app` → `Troubleshooting` → `Sync Thread Credentials`.
 5. Repeat until you see: `Home Assistant and this device use the same network`.
 6. If it fails repeatedly, try resetting Google Play Services data (Android) and try again.
-

Step 8 - Add the Matter-over-Thread device

1. Ensure Bluetooth is enabled on your phone.
2. In Home Assistant app: `Settings` → `Devices & Services` → `Devices`.
3. Tap `+ ADD DEVICE` → `Add Matter device`.
4. Scan the QR code (or enter the pairing code) and follow the on-screen steps.
5. If prompted “Which app to open?”, choose `Other` → `Home Assistant`.

The pairing flow usually goes through:

- Connecting to device...
- Generating Matter credentials...
- Connecting device to network...
- Checking network connectivity...
- Connecting device to Home Assistant...
- Device connected!

Tips:

- If the device was powered for a long time, you may need to reset it to enter pairing mode again.
- If you have Google/Nest Thread devices and pairing is unstable, try turning them off temporarily while pairing.

Step 9 - Verify connection and control

1. After pairing, the device should appear in Home Assistant under `Devices`.
2. Open it and confirm you can control it (e.g., switch on/off).

Congratulations! You’ve successfully connected a Matter-over-Thread device to Home Assistant.

TIP:

Home Assistant Thread documentation: <https://www.home-assistant.io/integrations/thread/>

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