

Home Assistant meshcore polling rate

Assistant integration polling best practices

How it affects the mesh

Limiting your polling rate in MeshCore is essential because LoRa radio frequencies have extremely limited bandwidth and are shared across your entire network.

Here is why high polling rates cause problems:

- **Airtime Saturation:** Every active poll creates a multi-hop round trip. Frequent polling clogs the airwaves, blocking text messages and critical network traffic.
- **RF Collisions:** Too many devices transmitting simultaneously leads to packet loss and dropped data across the mesh.

Since meshcore traffic should prioritize human messages, we should aks the community to poll their repeaters with Home Assistant in a responsible manner and reduce the polling rate if their repeater path is multi hop.

The polling rate per hop

As a rule of thumb, we can use the formula $hours = 2^{\text{hops}}$ to estimate a polling rate in hours for the number of hops required one way. Here is an example :

Hops	Hours
0	1
1	2
2	4
3	8
4	16

Hops	Hours
5	32
6	64

You can change the polling rate of a repeater in the meshcore integration, the cog wheel, manage monitored device, select device, submit, update_interval (in seconds)

Revision #1
Created 2026-09-28 02:49:02 UTC by Shawn
Updated 2026-09-28 03:22:51 UTC by Shawn