

Gateway Network Server Configuration Guide

Purpose: Point a Kona gateway to the correct Network Server (NS) so it connects and shows "Online" in the portal.

What you need before starting

- A computer on the same local network as the gateway
- Free tool: **Advanced IP Scanner** (or similar network scanner) — <https://www.advanced-ip-scanner.com/>
- The correct NS server address: `lorawan-ns-eu.tektelic.com`

Steps

1. Find the gateway's IP address

1. Download and install Advanced IP Scanner on a computer connected to the same network as the gateway.
2. Open the tool — it should auto-detect your network range. Click **Scan**.
3. Look through the results for the gateway. Match it by its **MAC address**, printed on the label on the gateway itself.
4. Note the **IP address** shown next to it.

2. Connect to the gateway

Open a terminal (Command Prompt, PowerShell, or Terminal) and run:

```
ssh admin@<gateway_IP>
```

Enter the gateway's admin password when prompted.

3. Back up the config file

```
sudo cp /etc/default/tektelic-bridge.ns.toml /etc/default/tektelic-bridge.ns.toml
```

This lets you undo the change if needed.

4. Open the config file

```
sudo vi /etc/default/tektelic-bridge.ns.toml
```

Basic vi controls:

- `i` — start editing (insert mode)
- `Esc` — stop editing
- `:wq` then Enter — save and quit
- `:q!` then Enter — quit without saving (use if something looks wrong)

5. Check the `[ns]` section

Look for a section starting with `[ns]` . It should contain lines like:

```
url = "ssl://SOME_SERVER_ADDRESS:8883"  
gw_user = "..."  
gw_pass = "..."
```

If any of these lines start with `#` , remove the `#` — a `#` disables that line.

6. Set the correct server address

Make sure the `url` line reads exactly:

```
url = "ssl://lorawan-ns-eu.tektelic.com:8883"
```

`gw_user` and `gw_pass` should already be filled in. If they are blank, or you're unsure, fill them in using the NS Username and NS Password listed on the gateway's test report (the paper insert included in its box).

7. Save and exit

Press `Esc` , then type `:wq` and press Enter.

8. Restart the connection

```
sudo /etc/init.d/mqtt-bridge restart
```

If that command returns an error, power-cycle the gateway instead (unplug and replug power).

9. Confirm it connected

```
sudo tail -f /var/log/gwbridge.log
```

Press `Ctrl+C` to stop watching once done.

- **No errors, connection stays up** → success. The gateway should now show “Online” in the portal within a few minutes.
- **Error mentioning MQTT code 4** → the username or password in `gw_user / gw_pass` doesn't match what's expected. Double-check them against the test report.
- **Error saying “no endpoints are enabled”** → a line in Step 6 still has a `#` in front of it. Go back and check.

If something goes wrong

Restore the backup and try again:

```
sudo cp /etc/default/tektelic-bridge.ns.toml.bak /etc/default/tektelic-bridge.ns.  
sudo /etc/init.d/mqtt-bridge restart
```