

Convert a KONA Gateway from External LNS to Embedded LNS

Description

This guide explains how to convert a supported TEKTELIC KONA gateway from an external LoRaWAN Network Server configuration to Embedded LNS using the KONA Link web UI.

Compatibility

- BSP release 7.2.10.1 or later is required. If necessary, upgrade the BSP before starting this procedure.
- Supported gateway models: Micro Gen 2, Micro Gen 2t (with Telit modem), Enterprise Gen 2, Photon Gen 2, Enterprise Gen 2t, and Macro Gen 1.6.
- After conversion to Embedded LNS, only Gen 2t gateways can be converted back to the standard gateway configuration.
- A valid license is required to run Embedded LNS and to convert gateways that did not previously contain Embedded LNS. Contact your TEKTELIC sales representative to order a license.

Prerequisites

- A PC connected to the same network as the gateway.
- Access to KONA Link through the gateway IP address or host name.
- KONA Link login credentials for the gateway.
- A valid Embedded LNS license file generated for the target gateway.
- Required BSP feed URL information, if your deployment uses custom feeds.
- Network access to the BSP feed server from the gateway.

Steps

1. Open KONA Link in a web browser using the gateway IP address or host name. See <https://wiki.tektelic.com/TEKTELIC-Kona-Gateways/kona-link-login/>.

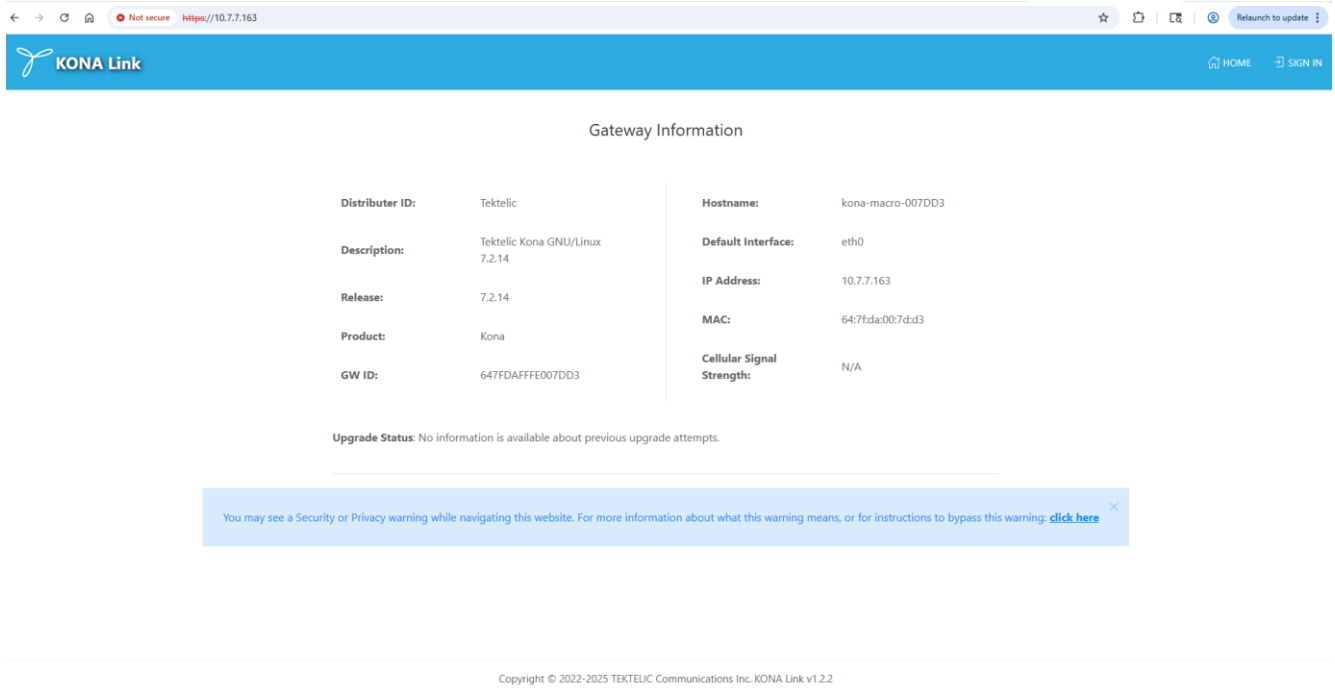


Figure 1. Open KONA Link.

2. Sign in to KONA Link using the gateway credentials.

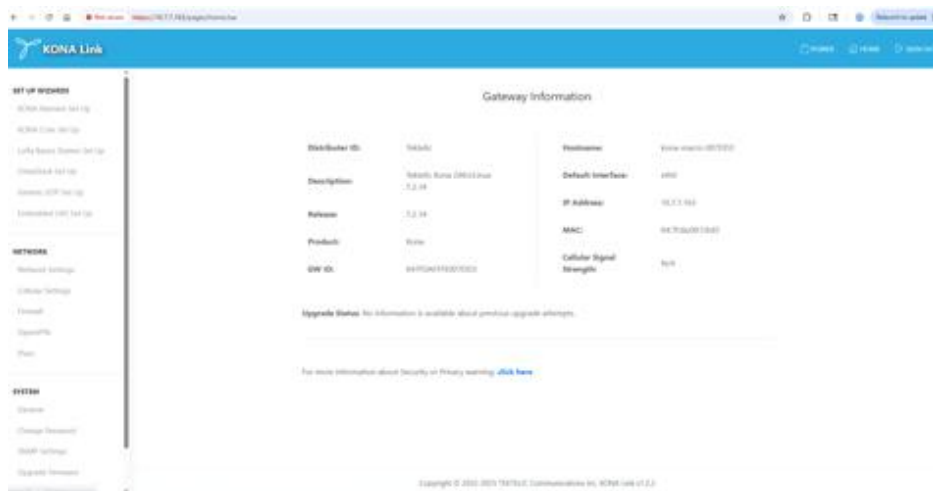


Figure 2. Sign in to KONA Link.

3. If required for your deployment, enter the BSP feed URLs to match your current BSP version before starting the conversion. For example, for BSP 7.2.14, the feed URLs would be:

```
src/gz bsp          https://kona-gw-update.s3.us-west-2.amazonaws.com/kona/current/kona-7.2.14/bsp
src/gz utils       https://kona-gw-update.s3.us-west-2.amazonaws.com/kona/current/kona-7.2.14/utils
src/gz net         https://kona-gw-update.s3.us-west-2.amazonaws.com/kona/current/kona-7.2.14/networking-extra
src/gz py          https://kona-gw-update.s3.us-west-2.amazonaws.com/kona/current/kona-7.2.14/python-extra
src/gz web         https://kona-gw-update.s3.us-west-2.amazonaws.com/kona/current/kona-7.2.14/webserver
src/gz admin       https://kona-gw-update.s3.us-west-2.amazonaws.com/kona/current/kona-7.2.14/admin-unsafe
src/gz gpio-fpga   https://kona-gw-update.s3.us-west-2.amazonaws.com/kona/current/kona-7.2.14/gpio-fpga
src/gz fe-fpga     https://kona-gw-update.s3.us-west-2.amazonaws.com/kona/current/kona-7.2.14/fe-fpga
```

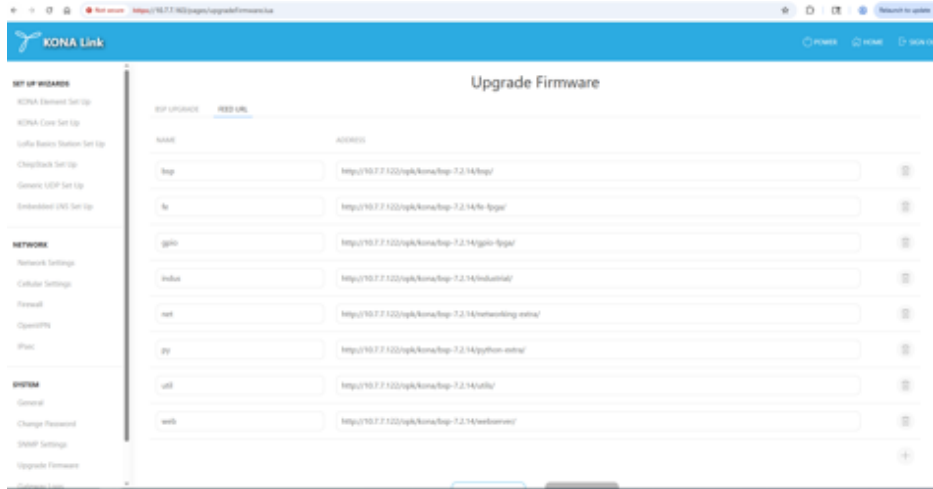


Figure 3. Provide BSP feed URLs.

4. In the left navigation menu, go to System and open Licensing.

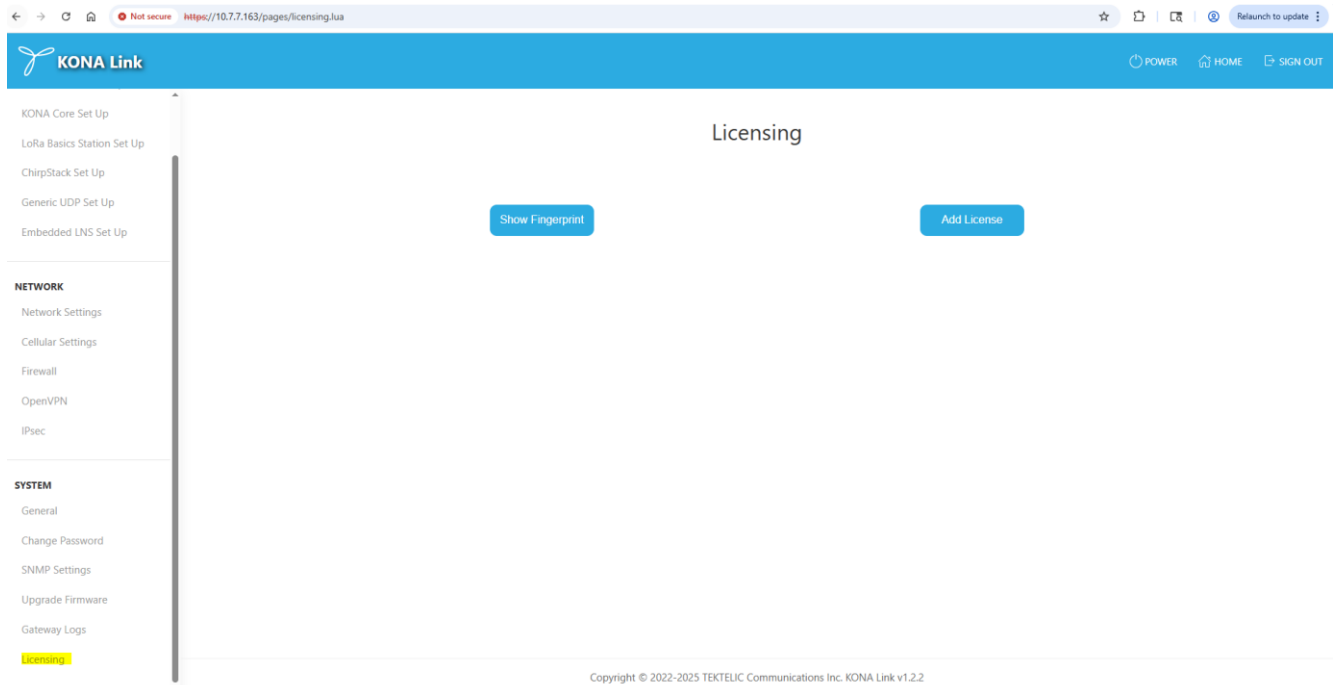


Figure 4. Open the Licensing page.

5. Click Add License and upload the Embedded LNS license file for this gateway.

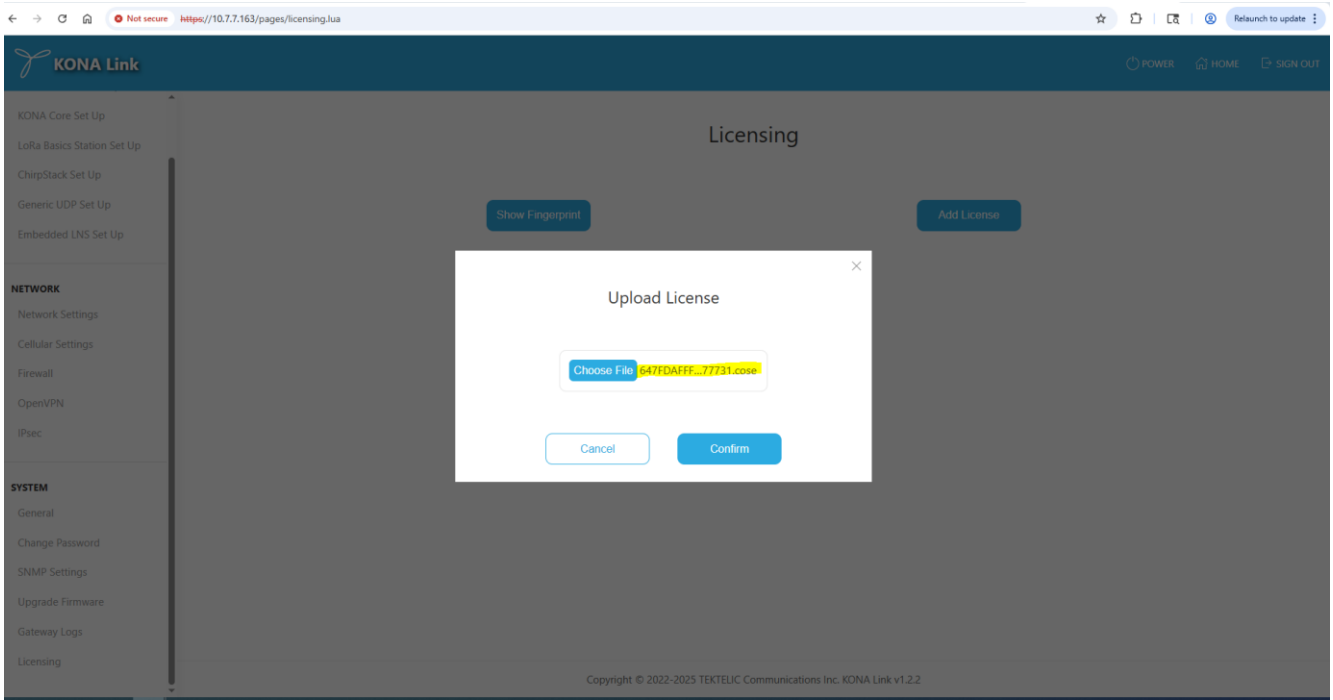


Figure 5. Upload the Embedded LNS license.

6. Confirm that the license installation completed successfully.

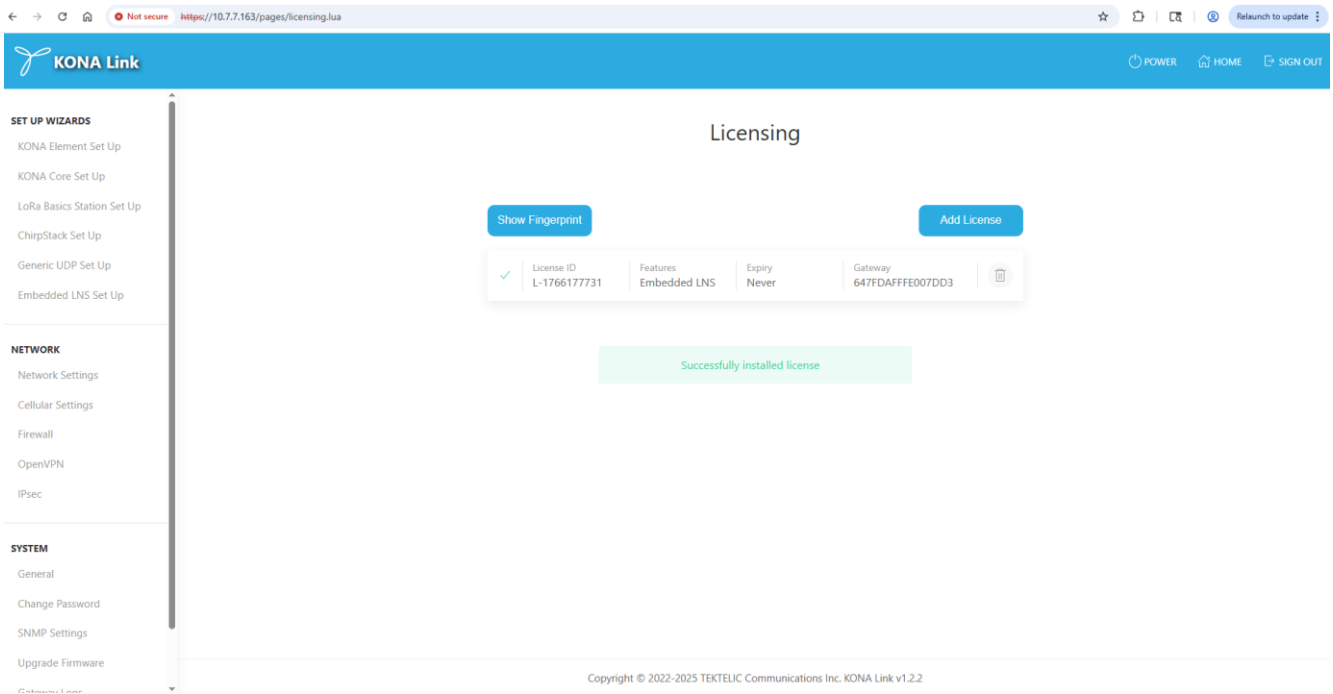


Figure 6. Confirm license installation.

7. Under Setup Wizards, select Embedded LNS Set Up.

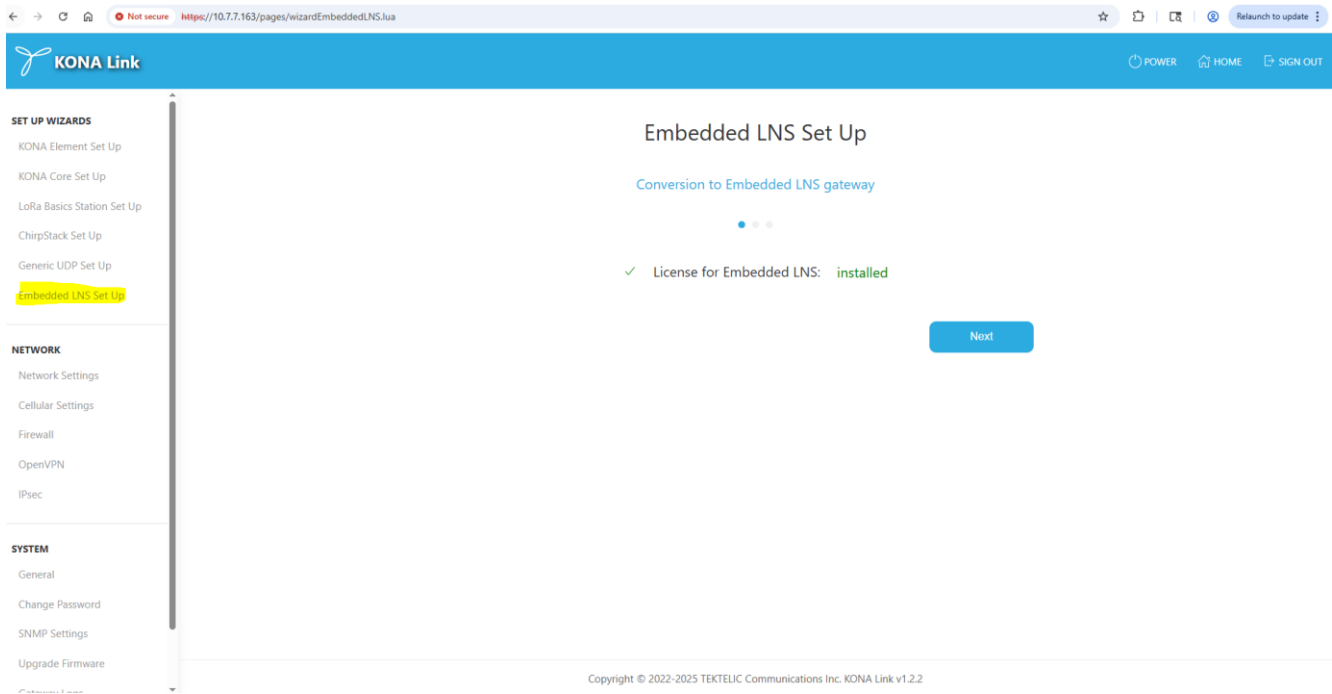


Figure 7. Open the Embedded LNS Set Up wizard.

8. Click Next and choose the correct region for your deployment, for example US915_0.

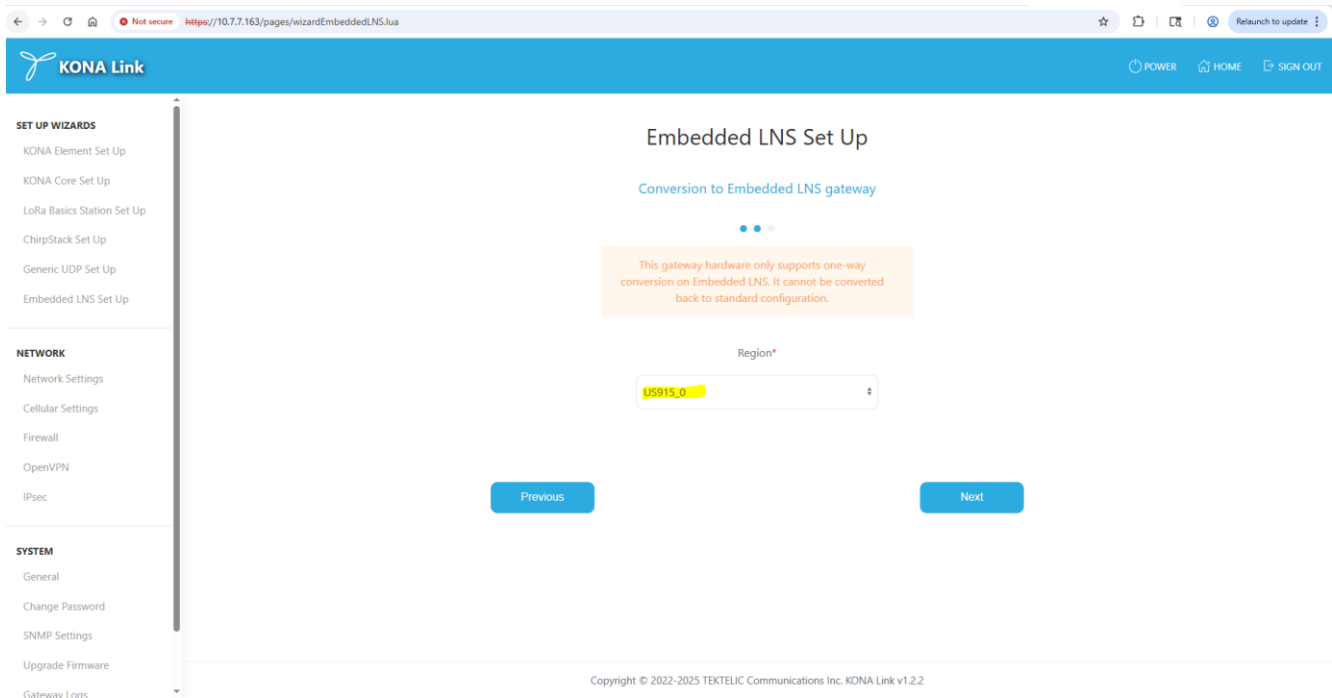


Figure 8. Select the deployment region.

9. Continue to the confirmation prompt, enter the requested password, and click Apply.

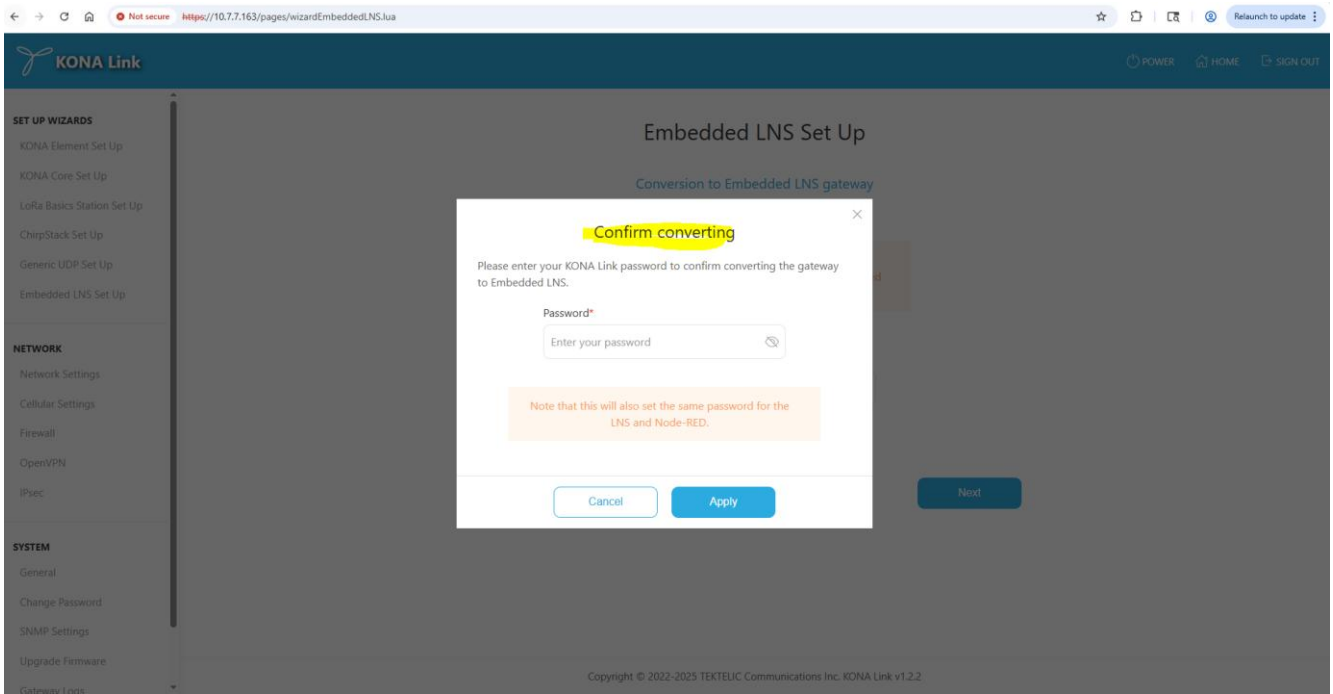


Figure 9. Confirm the password and apply the conversion.

10. Wait for the conversion to complete. The process can take 15 to 30 minutes.

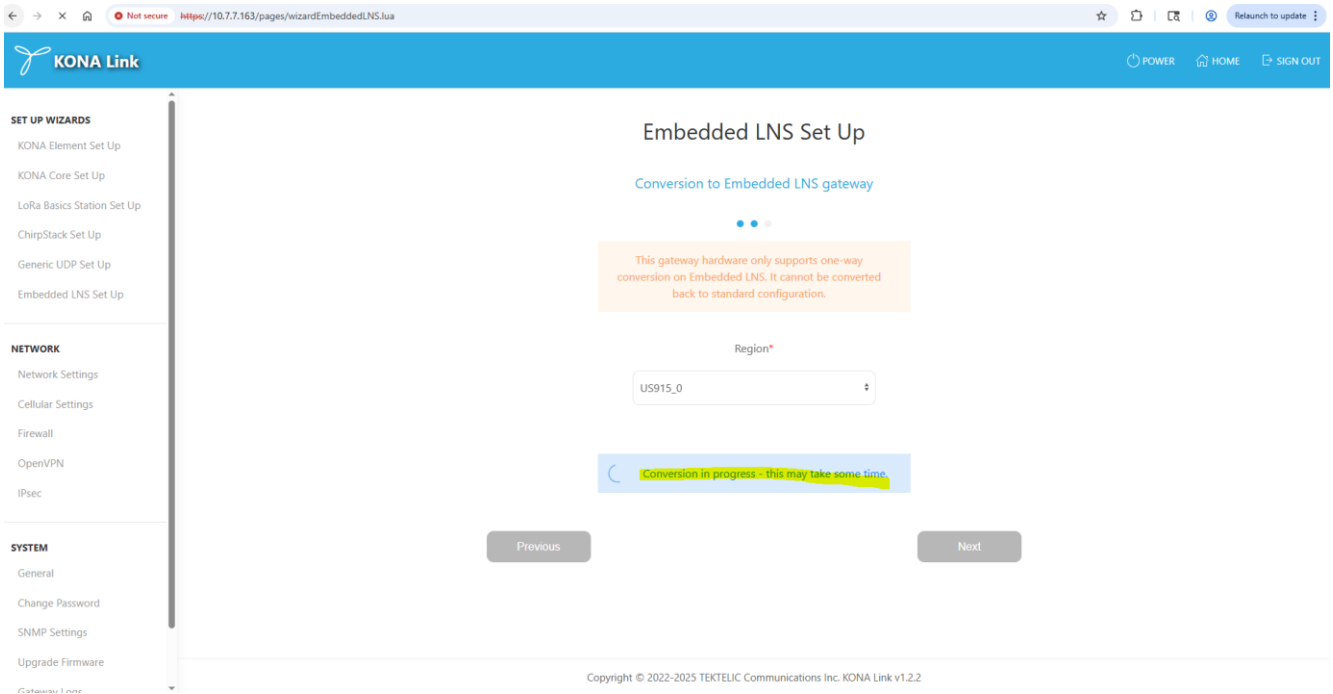


Figure 10. Conversion in progress.

11. When the GW reboot required message appears, use it to start the reboot from the web UI.

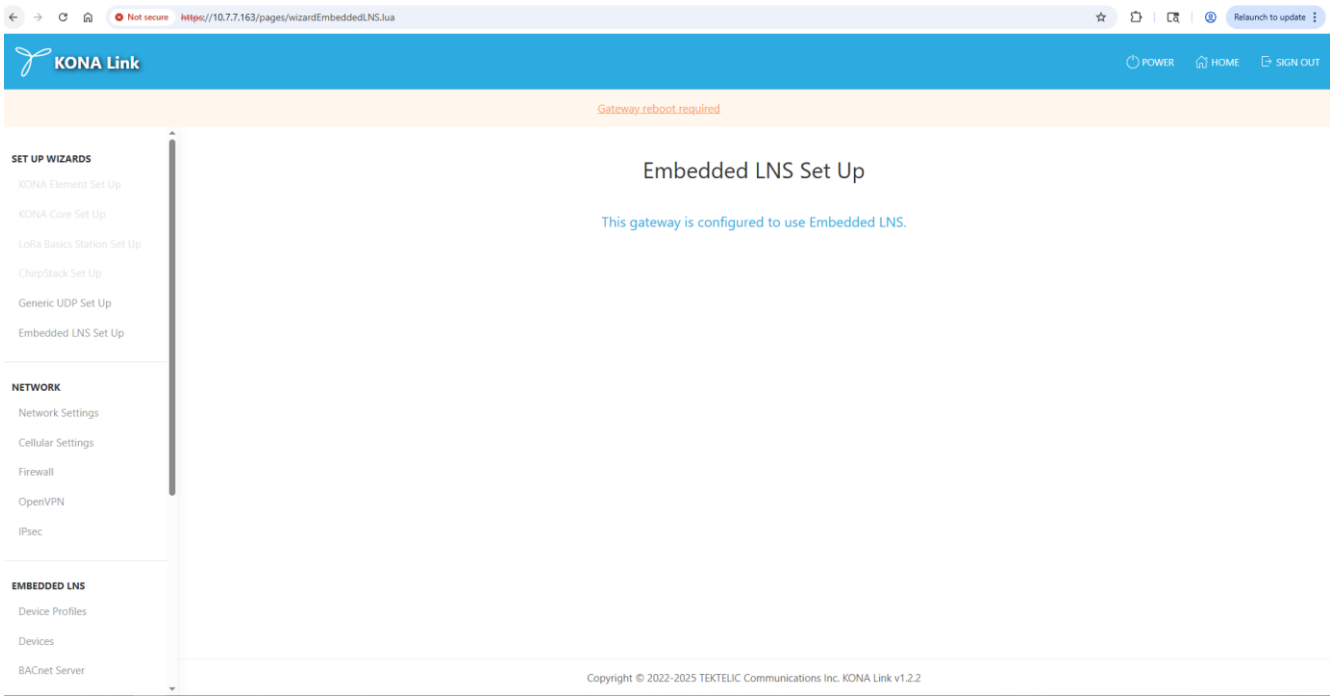


Figure 11. Reboot required message.

12. Wait for the gateway to restart, then sign back in after the successful reboot message appears.

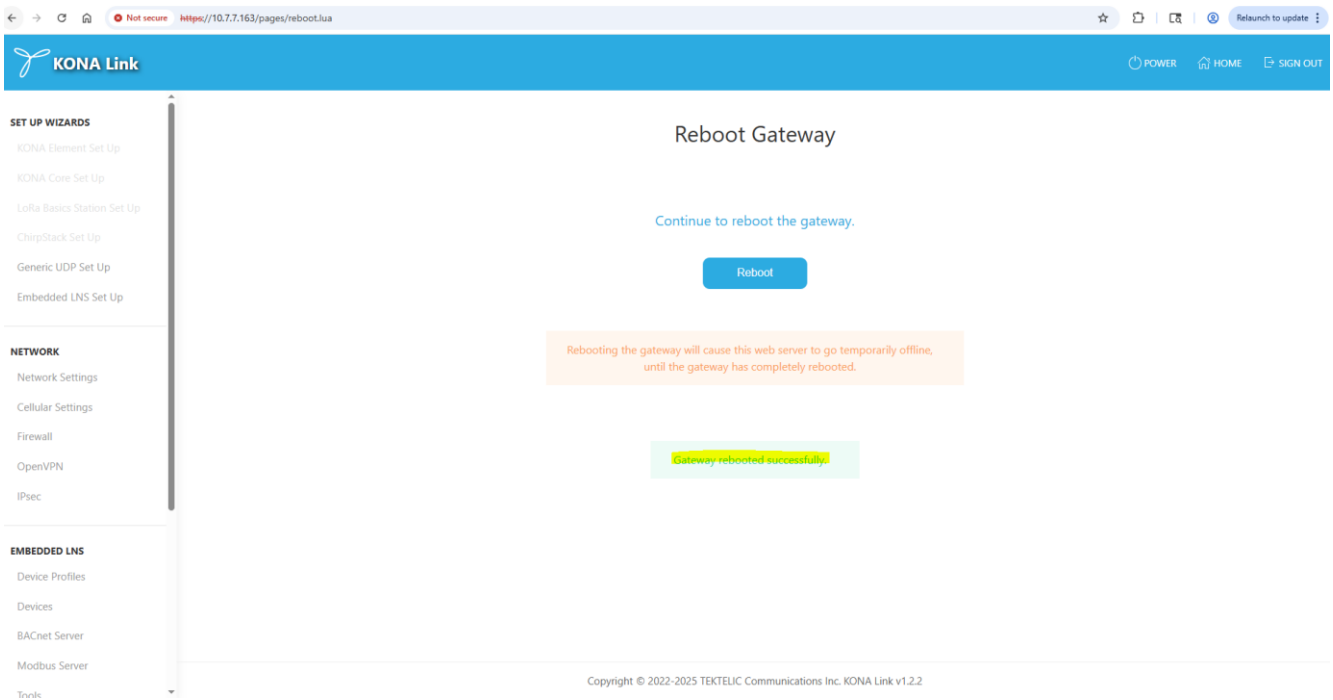


Figure 12. Gateway rebooted successfully.

13. Verify that Embedded LNS pages are enabled in the left navigation and the external LNS setup pages are disabled as appropriate.

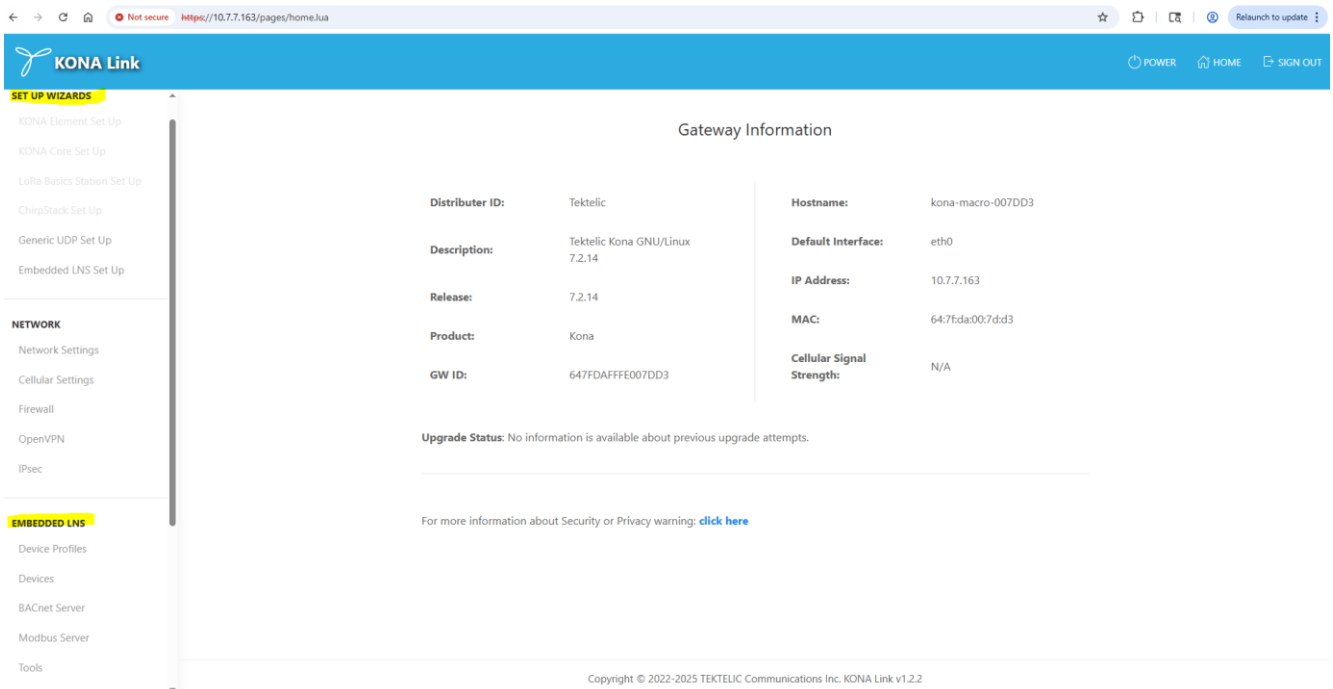


Figure 13. Embedded LNS pages enabled after conversion.

Troubleshooting

Embedded LNS wizard cannot continue

- Confirm the gateway is running BSP 7.2.10.1 or later.
- Confirm the gateway model is supported for this functionality.
- Confirm a valid Embedded LNS license has been uploaded.

Can the gateway be converted back later?

Only Gen 2t gateways can be converted back to the standard gateway configuration after conversion to Embedded LNS.

References

- KONA Link user guide (<https://knowledgehub.tektelic.com/kona-link-user-guide>)
- Configuring Embedded LNS (<https://knowledgehub.tektelic.com/configuring-embedded-lns>)
- KONA BSP upgrade (<https://knowledgehub.tektelic.com/kona-gateway-bsp-upgrade-overview>)
-