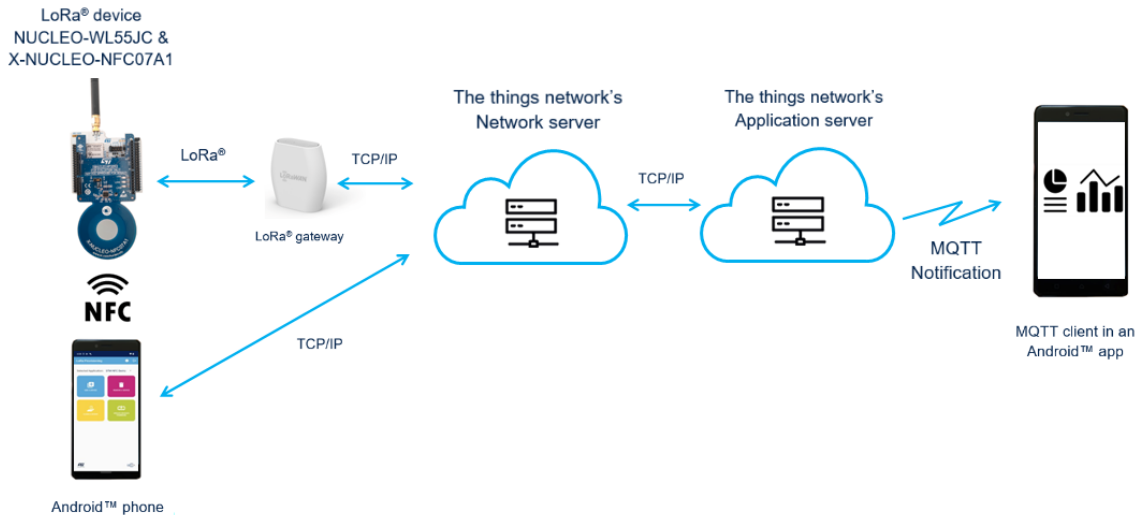


## ST25 MQTT Client for ST25DV64KC LoRa<sup>®</sup> provisioning demonstration



### Product status link

[STSW-ST25DV011](#)

## Features

- Key provisioning of a LoRa<sup>®</sup> device
- Registration of a LoRa<sup>®</sup> device on a LoRaWAN<sup>®</sup> server
- Transmission of LoRa<sup>®</sup> events and data via MQTT notifications
- Display of data coming from a LoRa<sup>®</sup> device

## Description

This demonstration is a joint development between STMicroelectronics and ISCA-Lab from Hellenic Mediterranean University. LoRa<sup>®</sup> is a long-range, low data rate and lower-power wireless communication system used in Industrial IoT applications like smart metering, sensor monitoring, alarm.

Each LoRa<sup>®</sup> device is provisioned with some cryptographic keys and registered on a LoRaWAN<sup>®</sup> network.

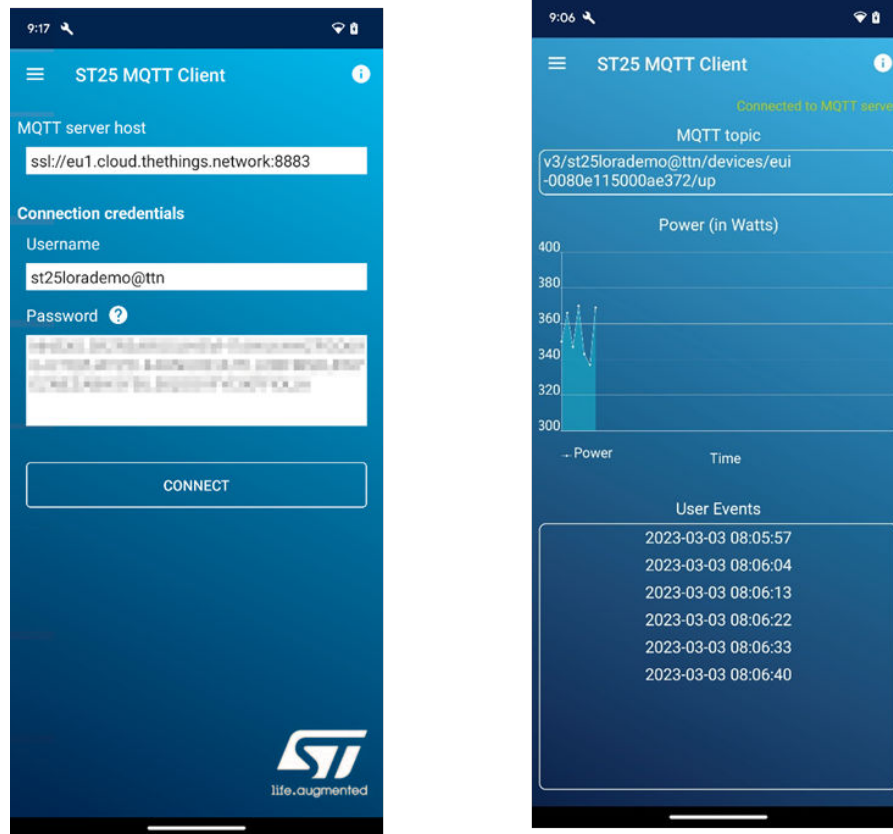
The current demonstration shows how a ST25DV64KC NFC Tag can be used to:

- facilitate the provisioning of a LoRa<sup>®</sup> device with keys.
- register the device on a LoRaWAN<sup>®</sup> network.

This demonstration leverages on The Things Network's LoRaWAN<sup>®</sup> infrastructure.

Once this registration is done, a dashboard, displayed in a web browser or on a smartphone, can be used to monitor all the data coming from the LoRa<sup>®</sup> device.

Figure 1. Example of LoRa® data displayed in ST25 MQTT Client



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The following packages are available on [www.st.com](http://www.st.com) for this demonstration:

- STSW-ST25DV010 STM32WL55 firmware
- STSW-ST25011 LoRa® Provisioning Android™ application
- STSW-ST25011 ST25 MQTT Client Android™ application

## 1 General information

The firmware includes drivers running on a STM32WL microcontroller, which embeds a Arm<sup>®</sup> core.

*Note: Arm is a registered trademark of Arm Limited (or its subsidiaries) in the US and/or elsewhere.*



## Revision history

**Table 1. Document revision history**

Date	Version	Changes
24-Mar-2023	1	Initial release.



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