Connect M2 Multi-Platform Gateway to ChirpStack

This tutorial will guide users to set up a LoRaWAN® network by connecting

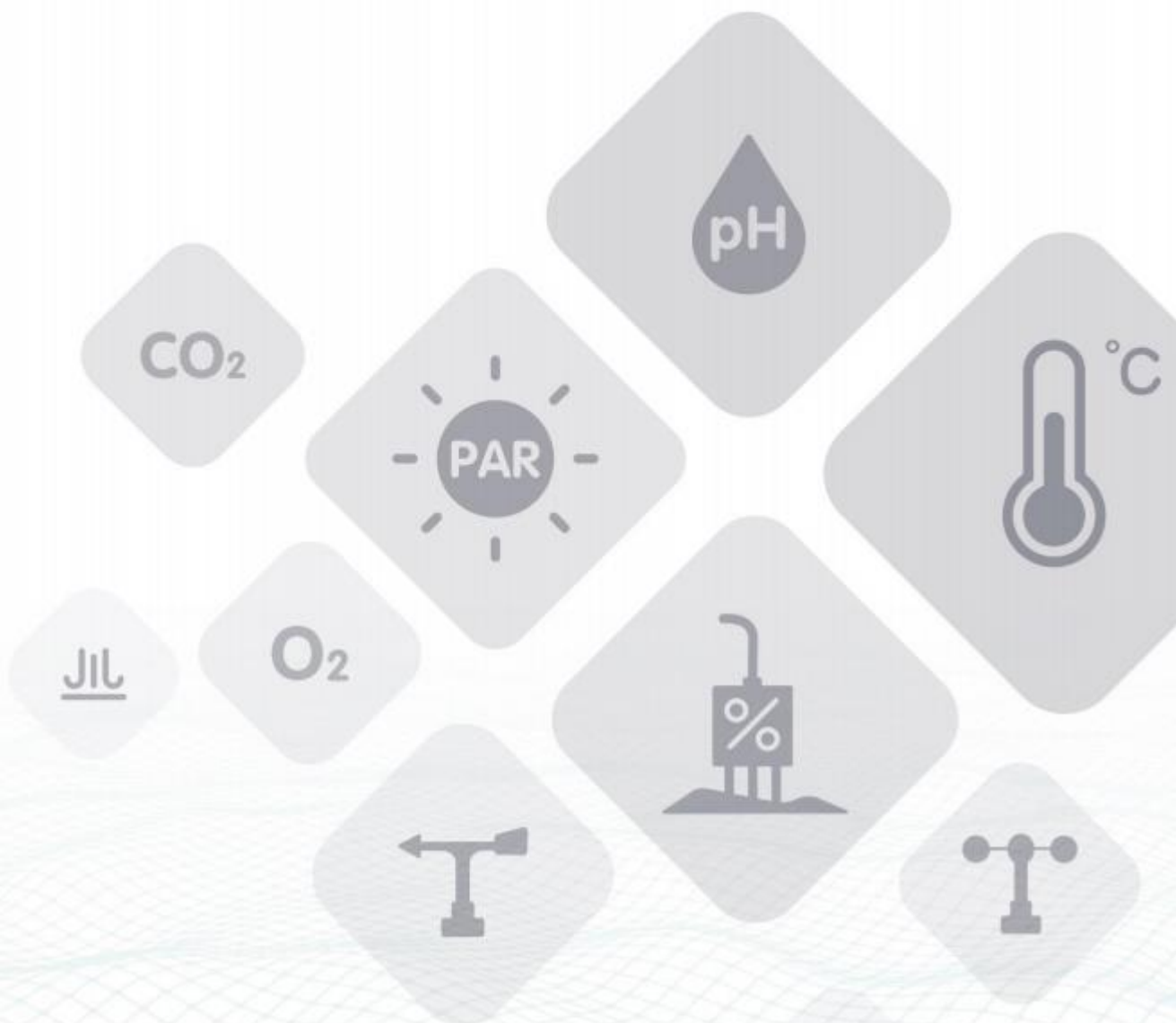**the LoRaWAN® sensors and M2 Multi-Platform Gateway to the ChirpStack**

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1. ChirpStack Configuration

ChirpStack provides open-source components for LoRaWAN networks. Together they form a ready-to-use solution including a user-friendly web-interface for device management and APIs for integration.
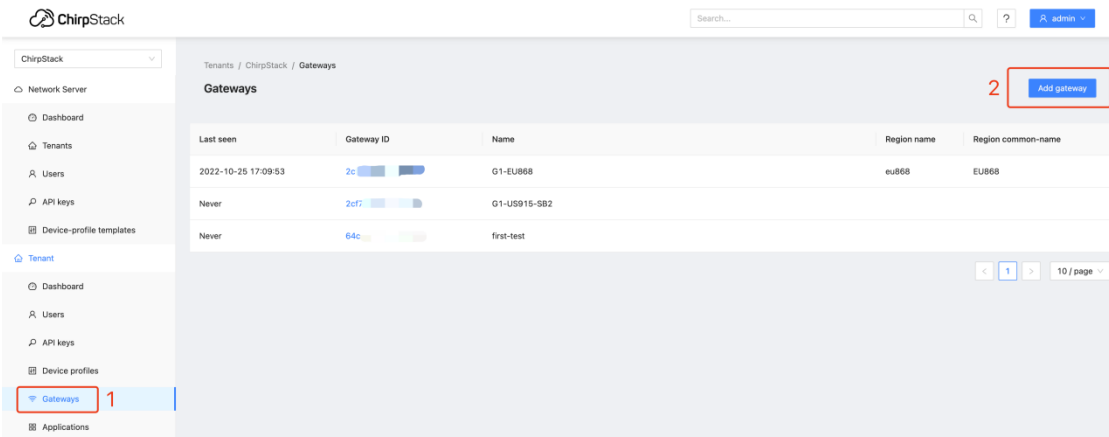
1.1 Add Gateway

- **Step 1**: Login into the ChirpStack Application Server.

The default credentials are: Username: admin; Password: admin

Note: If you have not yet connected your ChirpStack Application Server instance with a ChirpStack Network Server instance, you need do this first. See Network servers. Also you need connect the organization with the network-server by creating a Service profile.

- **Step 2**: Add gateway

Navigate to **Gateways > Add gateway**

Gateway name: A name of your gateway

Gateway EUI: Gateway EUI can be found on the device label or Local Console

1.2 Add Device

- **Step 1**: Add device profile

Before you can add your device to ChirpStack, you have to create a [Device-profile](#) if you haven't done this already.

Navigate to **Device profile> Add device profile**

Name: A name of your device profile

Region: Select the Region plan according to your gateway.

MAC version: LoRaWAN 1.0.3

Regional parameters revision: A

ADR algorithm: Default ADR algorithm (LoRa only)

Note: Select MAC version/Regional parameters revision/ADR algorithm according to your device. For details, please refer to: https://lora-alliance.org/resource_hub/
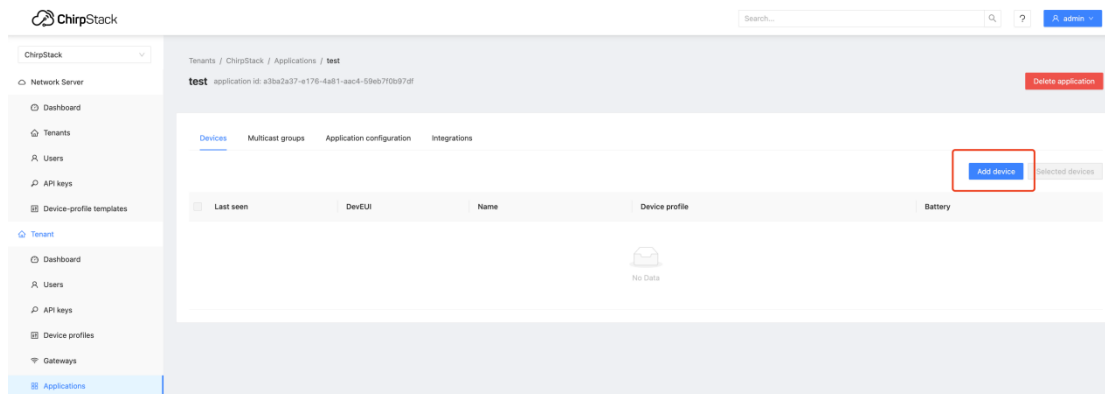

- **Step 2**: Add device

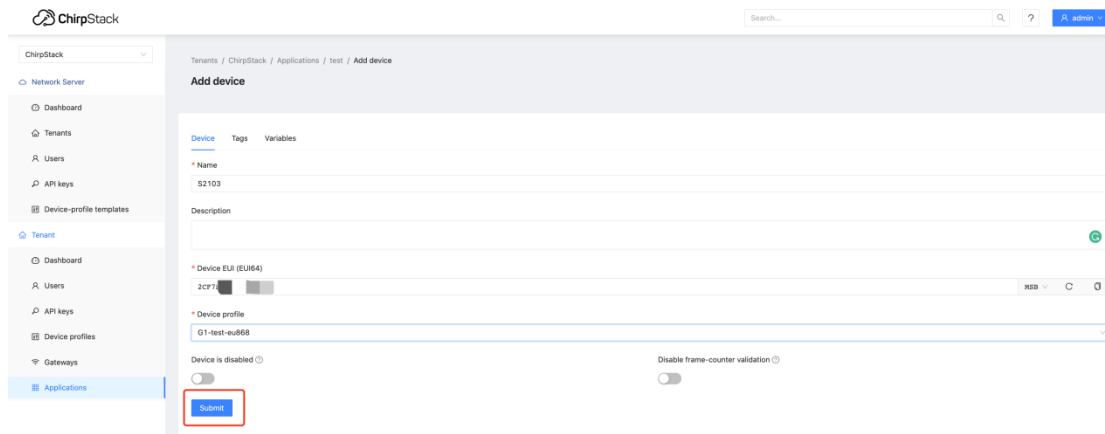Navigate to **Application > Add Application**

Click the application to which you want to add your device. Under the **Devices** tab, click **Add device**

Name: A name of your device

Device EUI: Device EUI can be found on the device label or SenseCAP Mate APP

Device profile: Choose the device profile we create in 1.2 step1.

2. Gateway Configuration

Configure the gateway via the Web UI, please check the [Quick Start](#) to log into Local Console first.

- **Step 1**: LoRa Network Settings

Navigate to **LoRa > LoRa Network**

Mode: Packet Forward

Packet Forwarder Settings:

Gateway EUI: It will automatically get the EUI of the connected gateway

Server Address: Your ChirpStack Server address

Server Port (Up/Down): 1700

Other settings can be left as default or can be changed to suit your requirements.

- **Step 2:** Channel Plan Settings

Navigate to **LoRa > Channel Plan**

Select the Region and Frequency plan according to the actual choice.

After setting, click **Save&Apply**

3. Data View

● **Gateway data**

Navigate to **Gateways**, choose the gateway you want to check
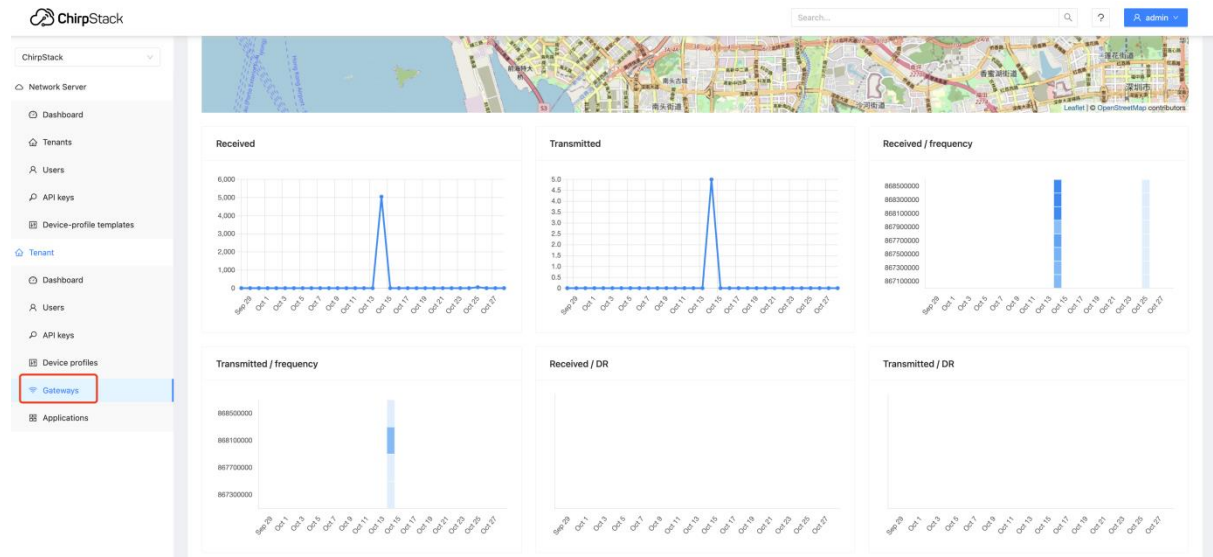
● **Device data**

After adding your LoRaWAN device to ChirpStack, validate that your device is able activate (in case of OTAA) and send data.

Navigate to **Applications** > **Devices**, choose the device you want to check