How to Integrate Milesight Gateways and Devices into the Datacake Platform

Version Change Log			
Version	Revision Date	Revision Details	Revised By
V1.0	20250313	Initial	Lockon

Preface

Datacake is a company specializing in IoT (Internet of Things) data management and visualization, providing a low-code cloud platform that supports multiple communication protocols such as LoRaWAN, MQTT, and REST API. Datacake enables users to quickly connect IoT devices for data storage, analysis, and visualization. It is widely used in smart agriculture, environmental monitoring, industrial IoT, and other application scenarios. The platform supports custom dashboards, alarm rules, and remote device management, allowing enterprises to efficiently deploy and manage IoT solutions.

This document primarily introduces how to directly integrate the UG65 gateway with the Datacake platform and provides a complete step-by-step process for adding an AM319 device as an example on the Datacake platform.

1. Prerequisites

- **Gateway Model**: UG65 (firmware version v60.0.0.45), or UG56, UG67
- **Sensor Model**: AM319 (firmware version v1.6)
- **Frequency Band Used in This Guide**: US915
- **Gateway is connected to the Internet**

2. Register a Datacake Account

Visit **https://app.datacake.de/signup** and fill in the required information as prompted on the webpage:

After completing the registration, visit **https://app.datacake.de/login** and log in using the credentials you created earlier:
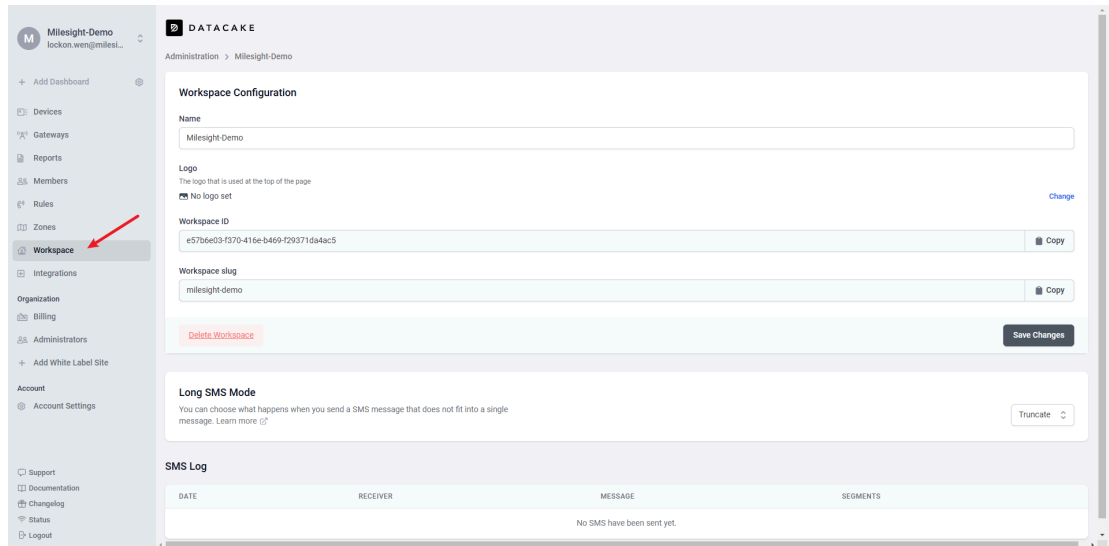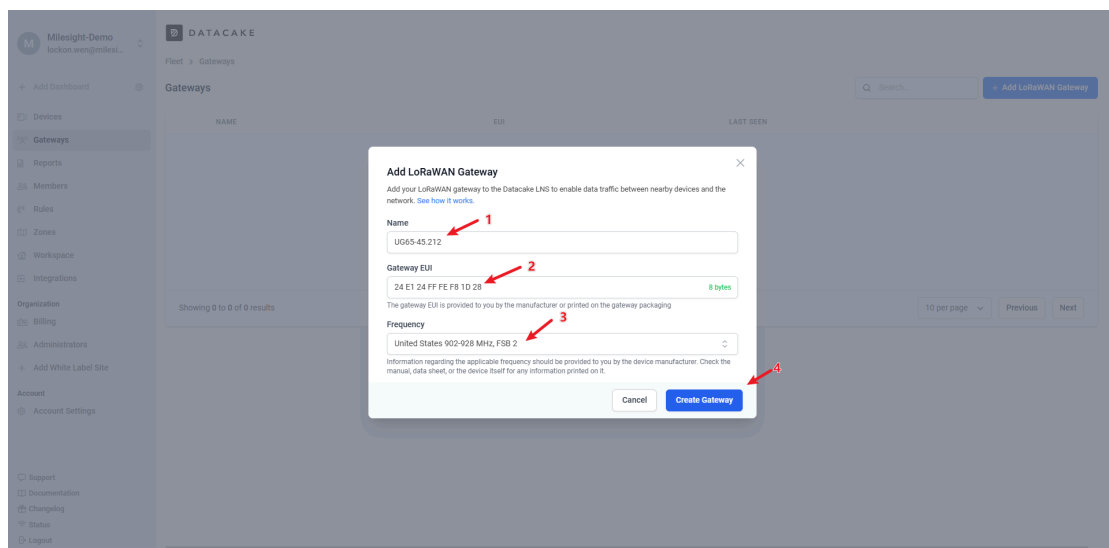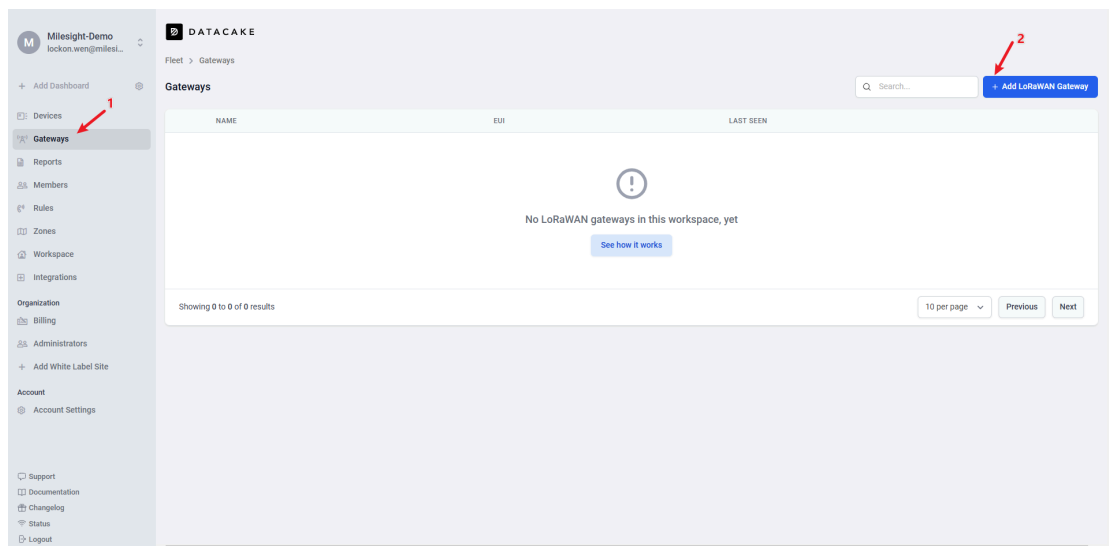

3. Add a Gateway to the Platform

After logging in for the first time, you will see the workspace information entered during registration, as shown in the image below:

Next, navigate to the Gateways section as illustrated in the following image:


Since we are using a gateway and sensor that operate on the US915 frequency

band, make sure to select the appropriate Frequency option from the dropdown menu, as shown. And the Gateway EUI needs to be obtained from the UG65 device. You can retrieve this from the UG65 management interface, as shown below:
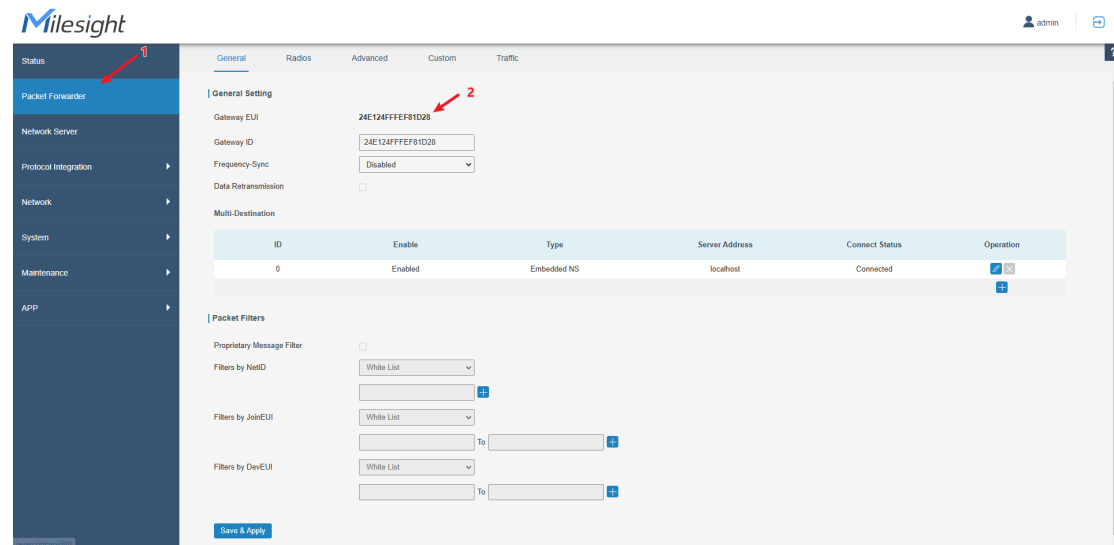
Proceed with the setup by clicking the Create Gateway button. A new window will appear, containing the necessary parameters for Semtech connection. Make sure to record these details, as they will be required when configuring the UG65 gateway later:
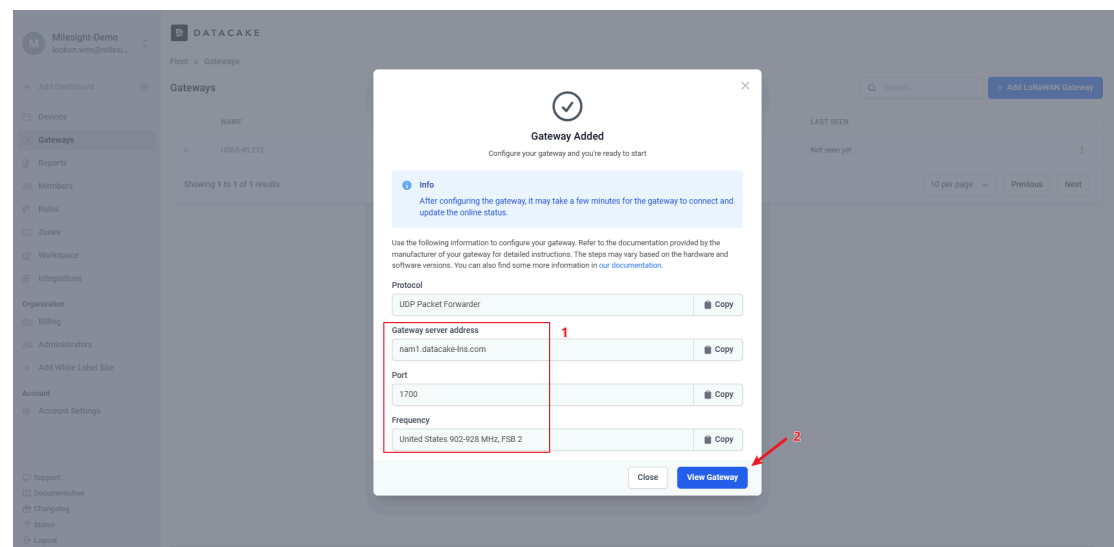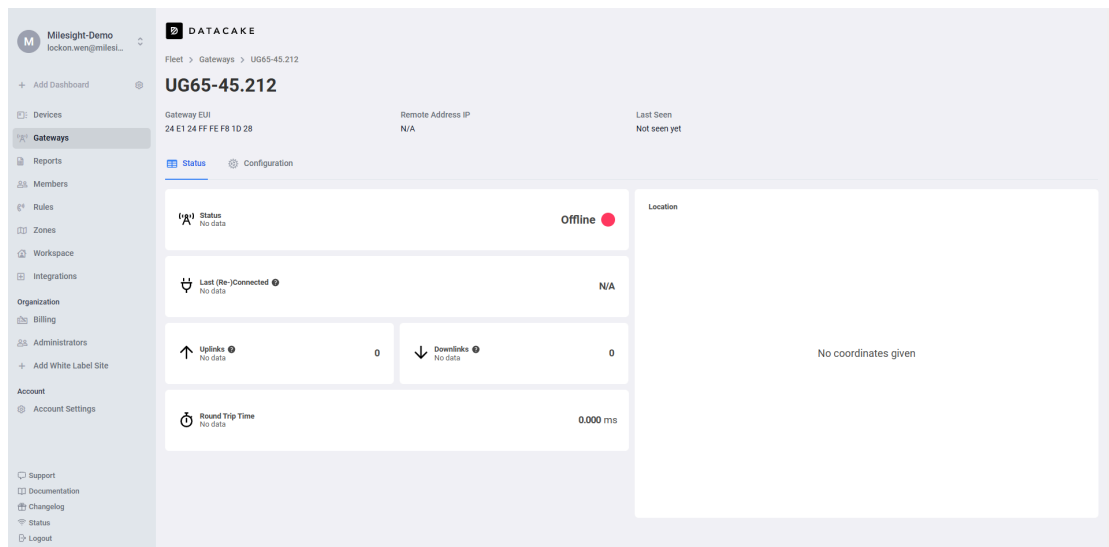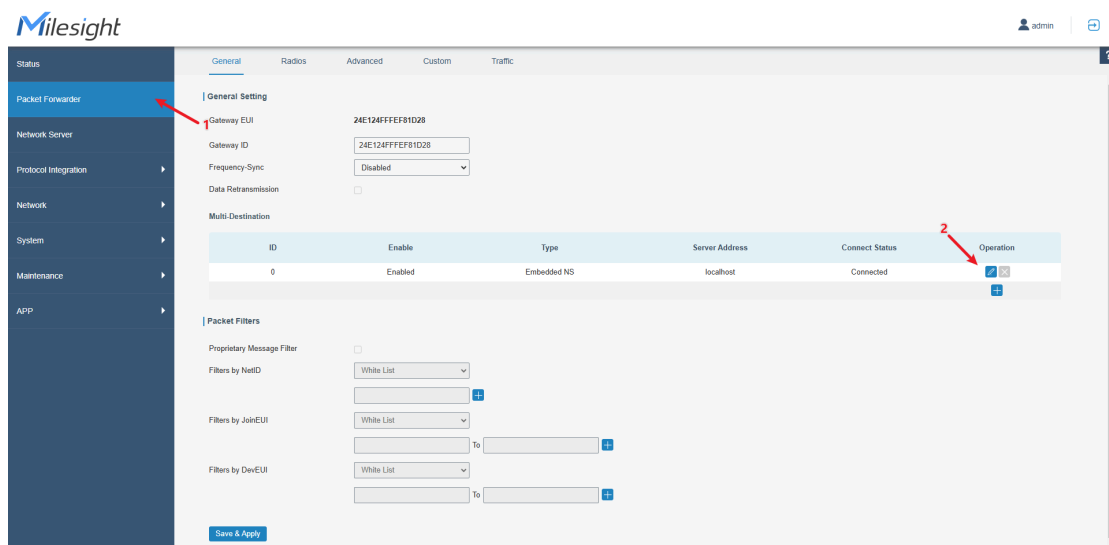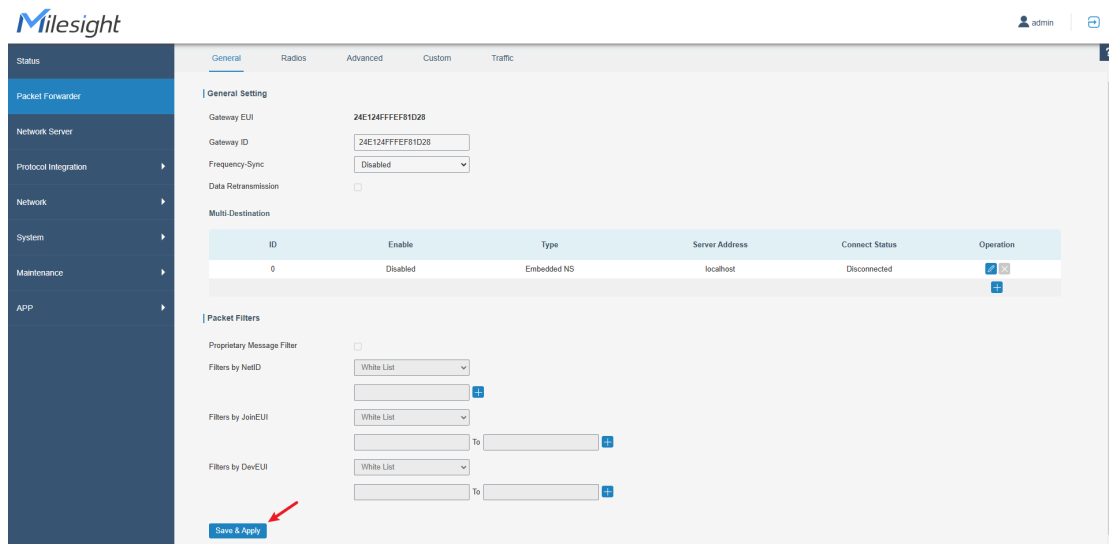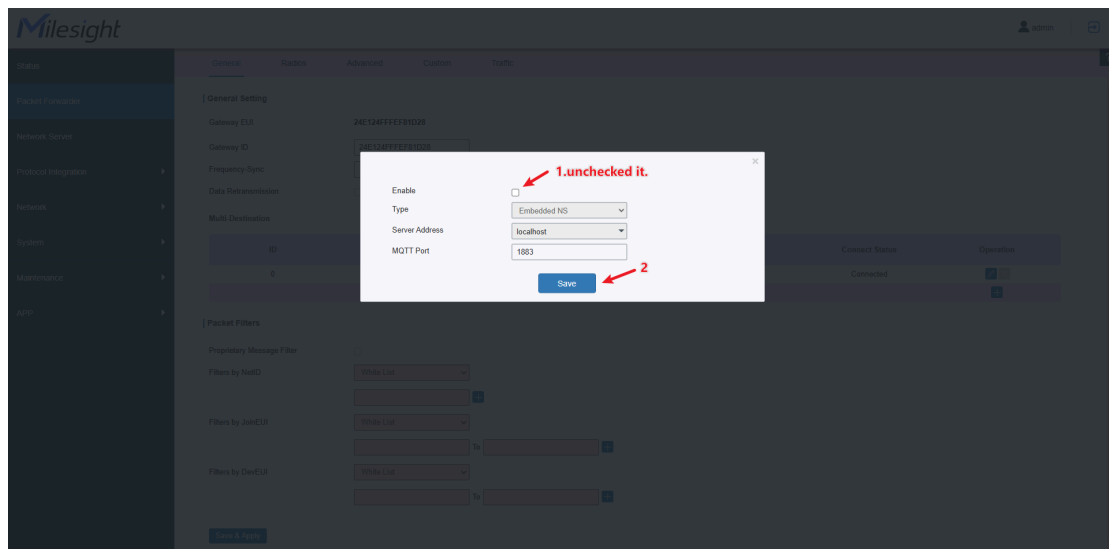
At this stage, the gateway has been added, but its status will appear red (**Offline**). This is normal. Next, we need to configure the UG65 gateway parameters.

4. Configure Packet Forwarder Parameters

First, log in to the UG65 management interface and disable the built-in LNS by following the steps shown in the image below:
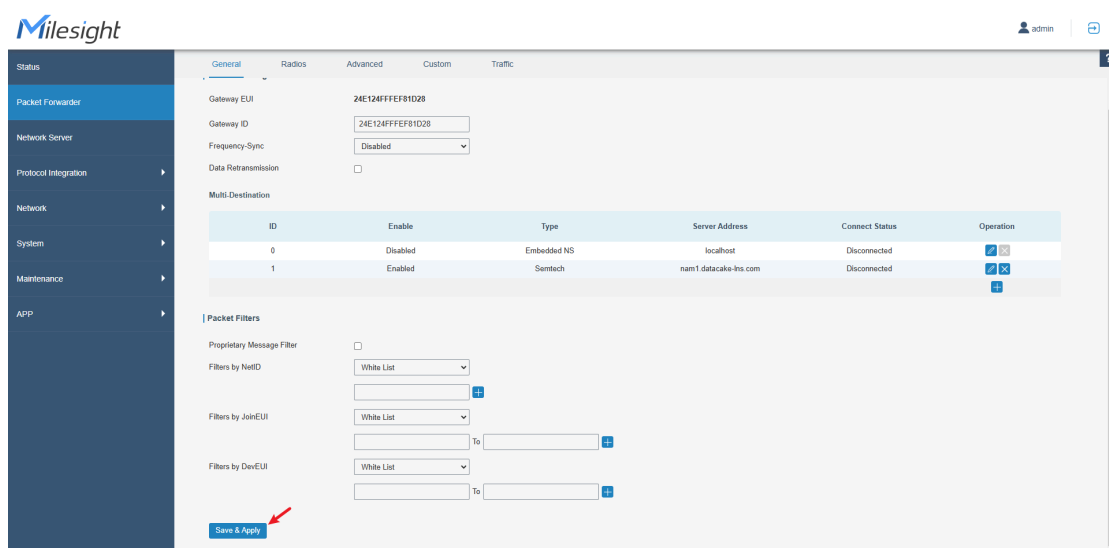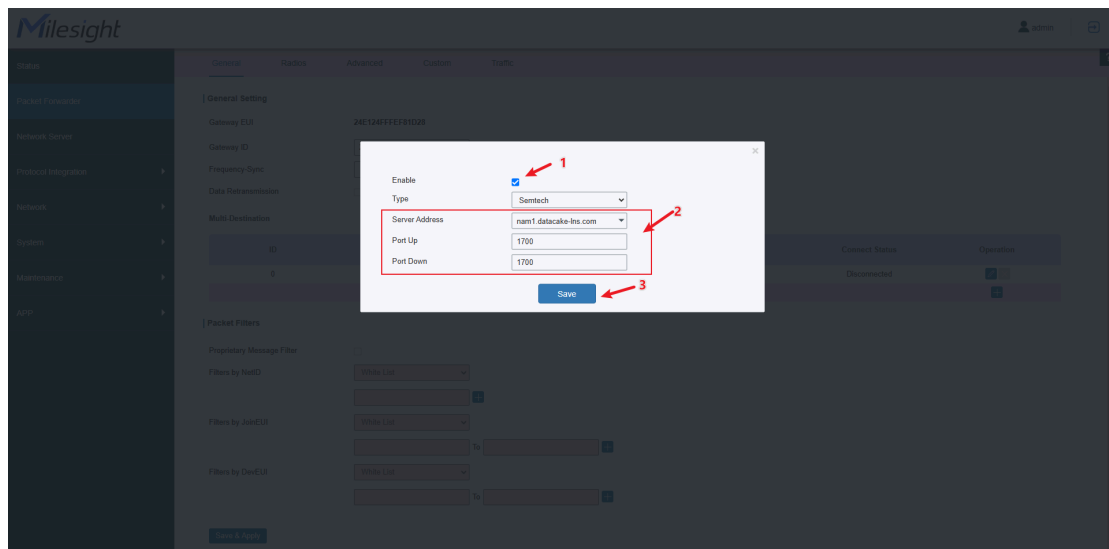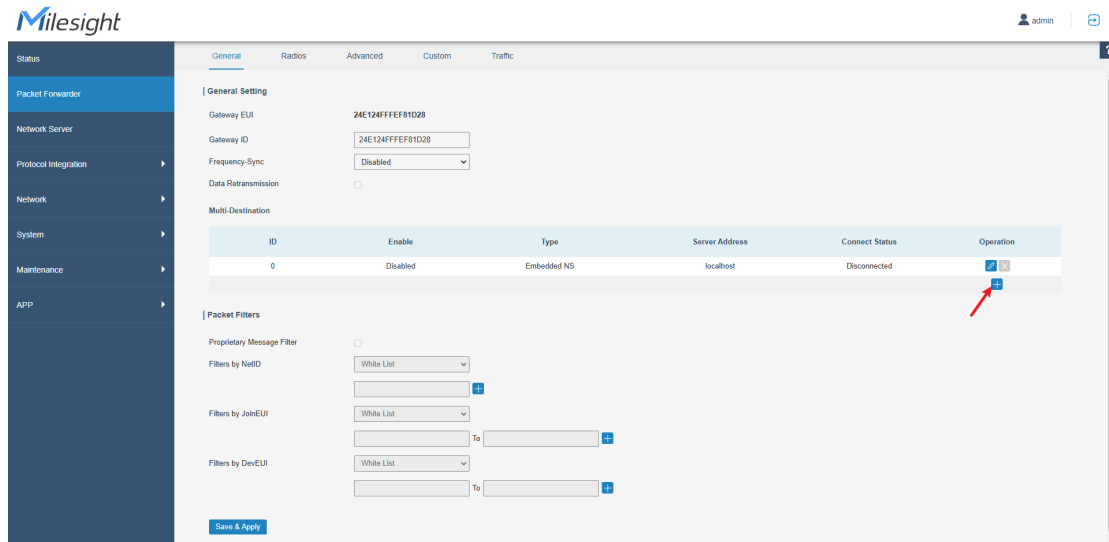
After a short wait, the Embedded NS status will show **Disconnected**, indicating that the built-in LNS has been successfully disabled.
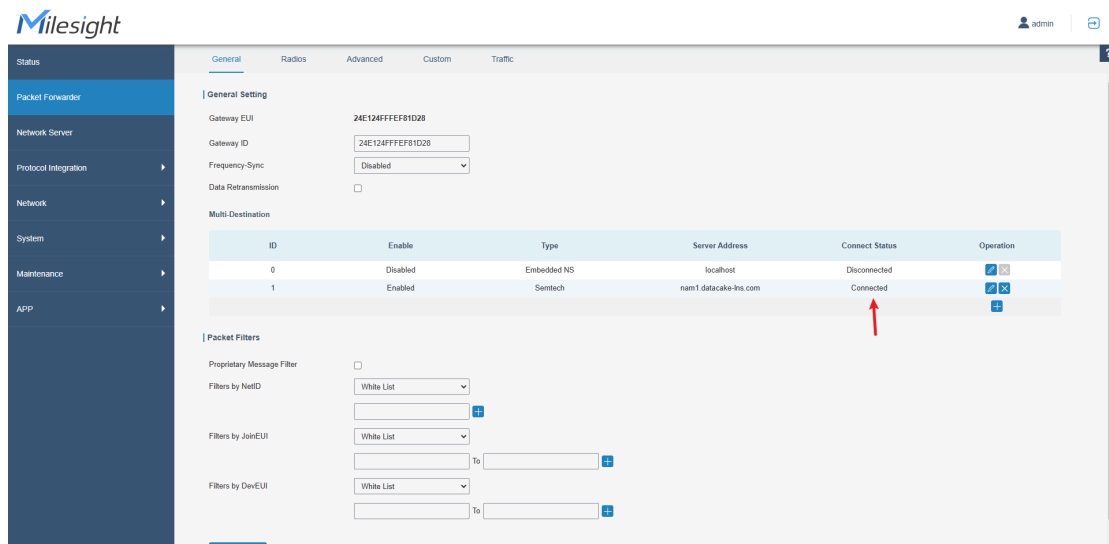
Next, configure the Datacake LNS address by following these steps:

After a short wait, if the **Semtech** section displays **Connected**, it means the UG65 gateway has successfully connected to the Datacake LNS platform, as shown below:

At this point, the gateway configuration is complete.
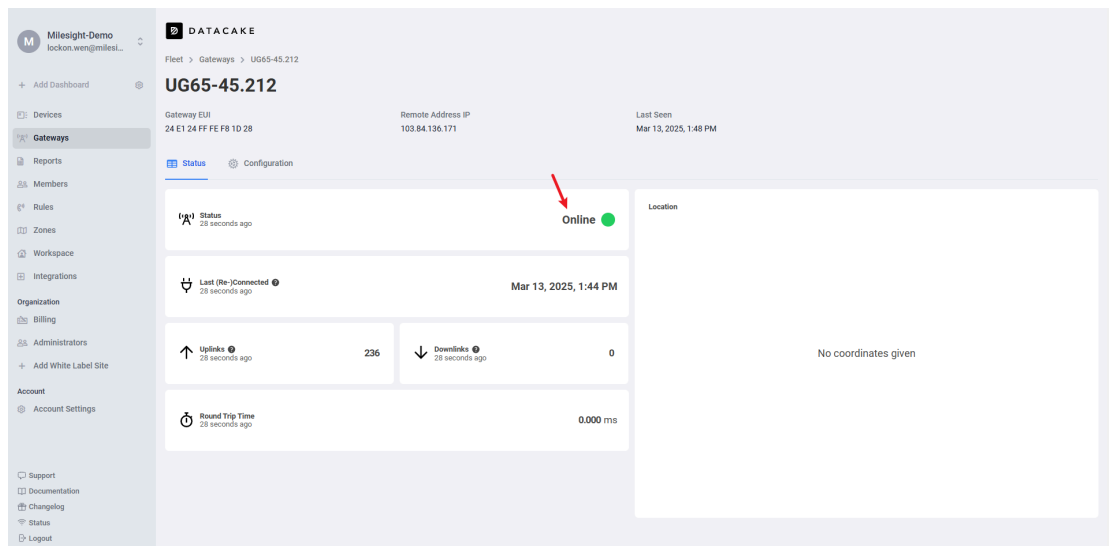
Note:

If the gateway continues to show no connection, refer to < Fail to Access the Network of Milesight Gateway> to troubleshoot the gateway's internet connectivity. Ensure that the gateway has access to the internet.
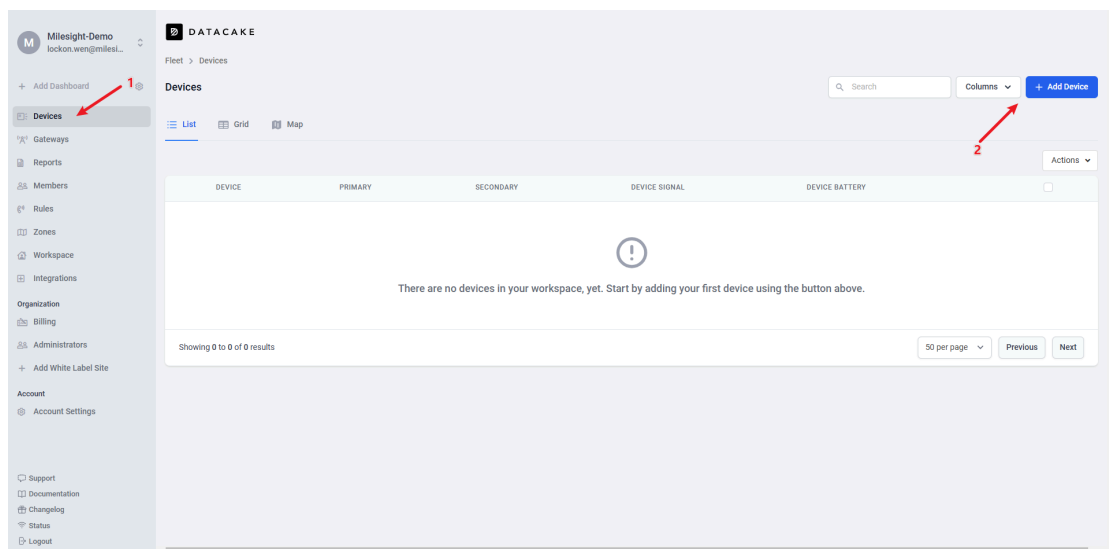
5. Add a Sensor Device to the Platform

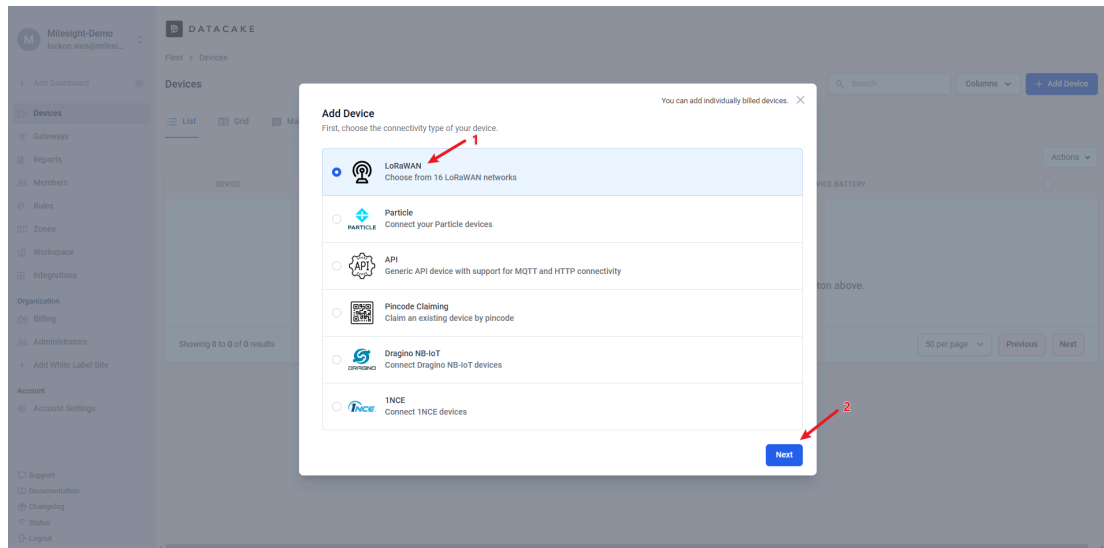First, check whether the gateway has successfully come **online**, as shown below:
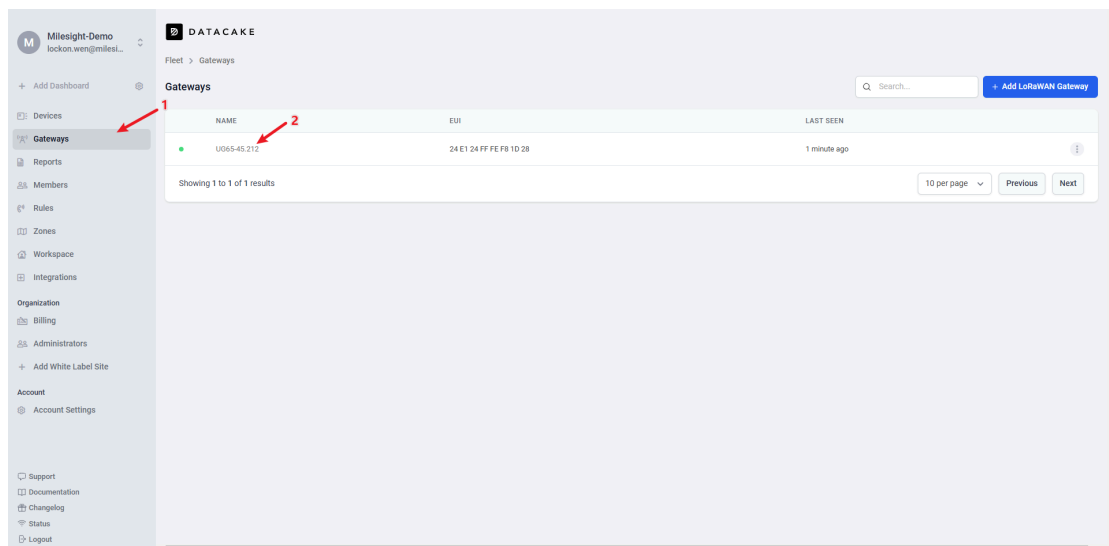
If the Status appears green (Online), it means the gateway has been successfully added.

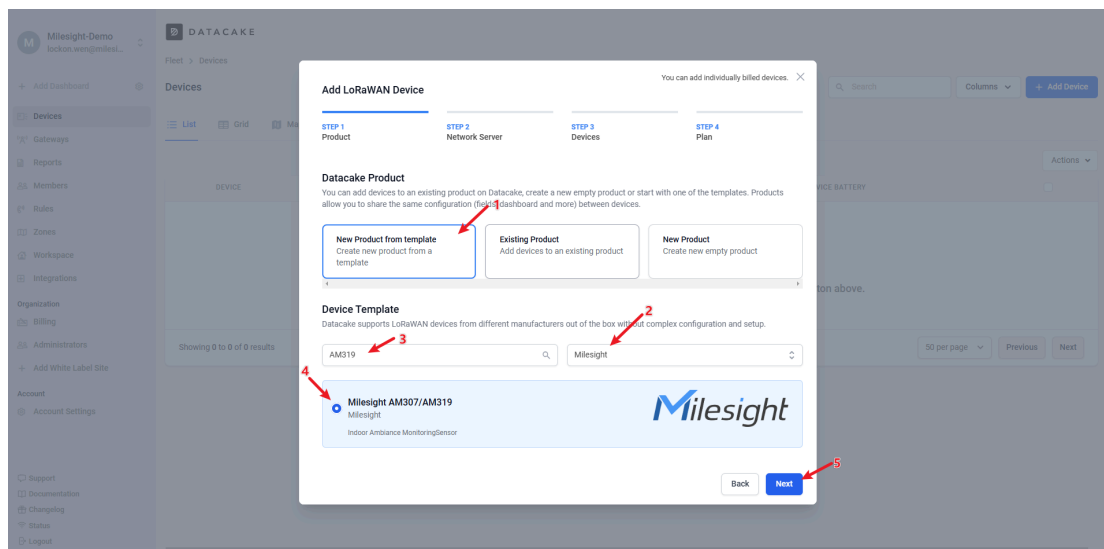Next, proceed with adding the AM319 sensor device by following these steps:

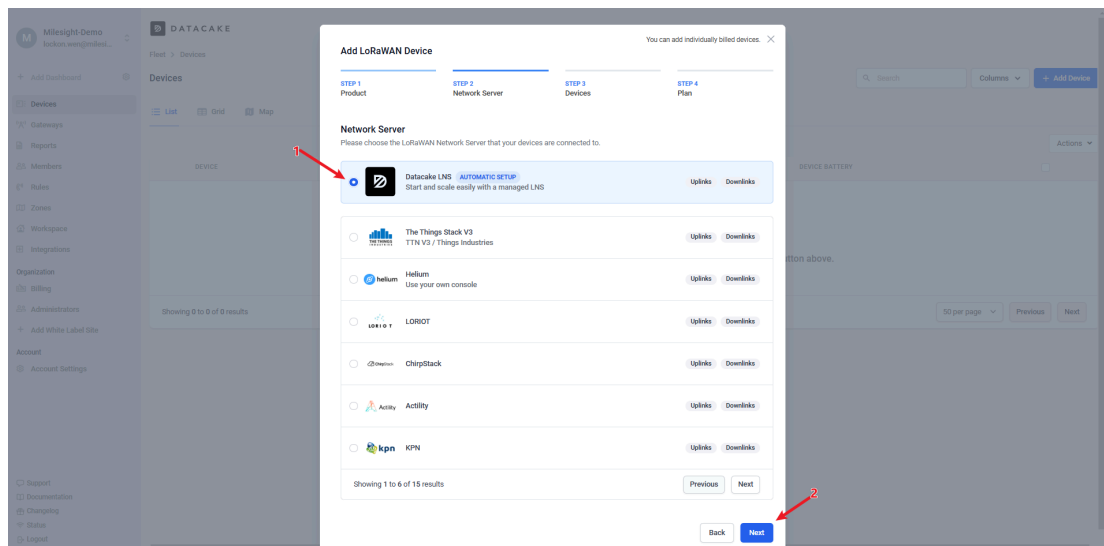In the pop-up window, select the **LoRaWAN** option:

On the next screen, enter **Milesight** in the search bar and then type **AM319**. The platform will display the built-in device information.
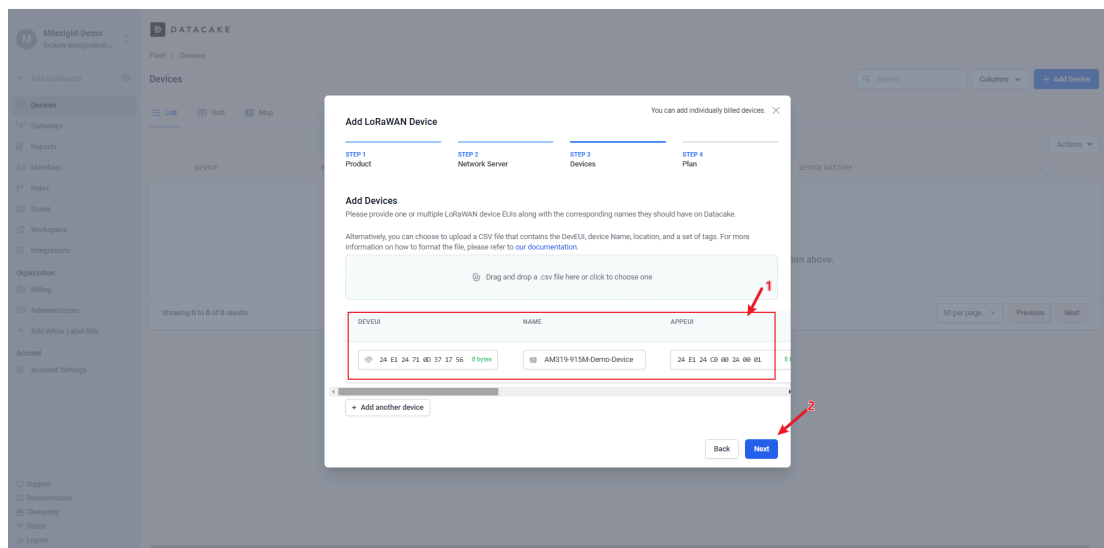Select it and click **Next**:

Since we are using Datacake as the LNS, select the appropriate option as shown:

Next, enter the LoRa parameters of the sensor.

These details can be obtained using the PC version of the ToolBox software:

Click **Next**, then choose the appropriate plan.

Since this guide uses the Free version, you may select the option that best suits your needs:

At this stage, the AM319 device has been successfully added.

Wait for approximately 3-5 minutes, then refresh the interface. If the device status changes from gray to green, it means that the AM319 has come online:

Now, the AM319 device has been successfully added, and its real-time data can be reported to the Datacake platform.

Similarly, other devices such as WS136 and UC100 can also be added using the same method, as shown in the image below:

Fleet > UC100

UC100

Serial Number
24E1244680025564

Last update
Thu Mar 13, 2025 14:22:14 GMT+08:00

Dashboard | History | Downlinks | Configuration | Debug | Rules | Permissions

● Live data

Milesight UC100 Controller

Milesight

Modbus Channel 1 No data	0	Modbus Channel 2 No data	0	Modbus Channel 3 No data	0	Modbus Channel 4 No data	0
Modbus Channel 5 No data	0	Modbus Channel 6 No data	0	Modbus Channel 7 No data	0	Modbus Channel 8 No data	0
Modbus Channel 9 No data	0	Modbus Channel 10 No data	0	Modbus Channel 11 No data	0	Modbus Channel 12 No data	0
Modbus Channel 13 No data	0	Modbus Channel 14 No data	0	Modbus Channel 15 No data	0	Modbus Channel 16 No data	0

Manual location
No data

No coordinates given

Set Location

Sensor transmission

LoRa RSSI
18 seconds ago

-17
dBm

LoRa SNR
18 seconds ago

13
dB

Milesight-Demo
lockon.wen@milesi...

+ Add Dashboard

Devices
Gateways
Reports
Members
Rules
Zones
Workspace
Integrations

Organization
Billing
Administrators
+ Add White Label Site

Account
Account Settings

Support
Documentation
Changelog
Status
Logout

-END-