# How to integrate vs133 and gateway devices with vemcount platform

| Version Change Log | | | |
|---|---|---|---|
| Version | Revision Date | Revision Details | Revised By |
| V1.0 | 20250310 | Initial | Lockon |
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# Preface

Vemco Group is a leading data analytics software company specializing in cutting-edge solutions for people counting, retail analytics, IoT dashboards, and business optimization. Our global partner network spans various sectors, including retail, entertainment, smart buildings, and public institutions. Together, we help businesses gain deep insights into visitor behavior and enhance operational efficiency using data from various sensors.

This document outlines the integration processes for both the VS133 LoRaWAN version and PoE version.

# 1. VS133 Device Integration Process

## 1.1. Hardware Requirements

- **Gateway Model**: UG65 (Firmware Version v60.0.0.45) or UG56, UG67
- **Sensor Model**: VS133-915M LoRaWAN version, Firmware v133.1.0.8
- **Frequency Band Used in This Example**: 915M (8-15 channels)

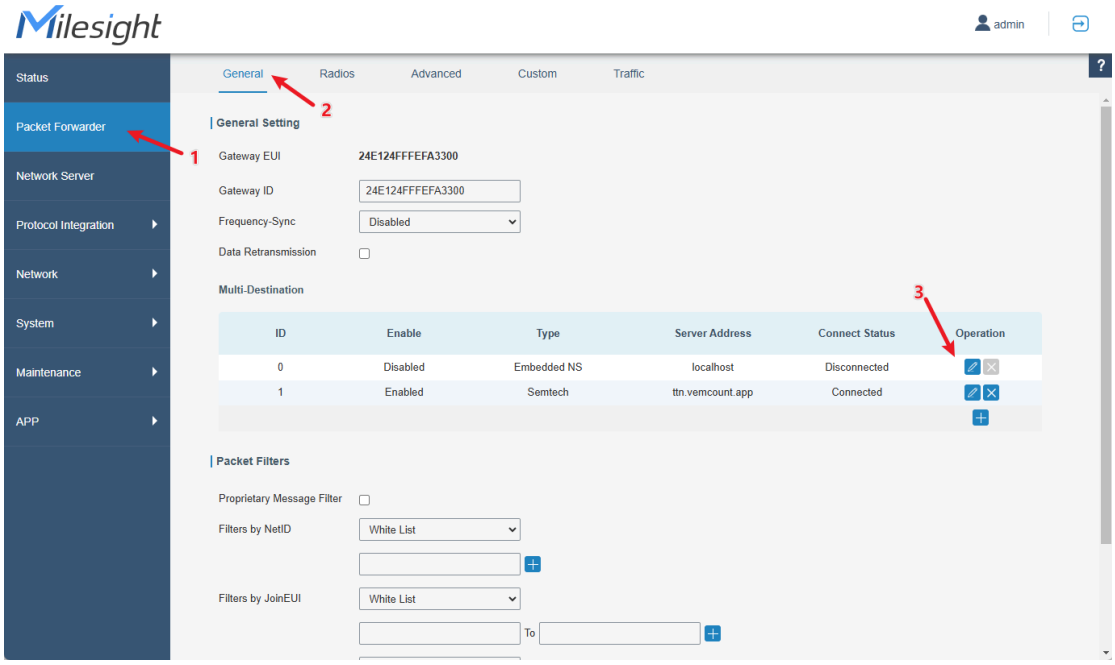
## 1.2. Network Requirements

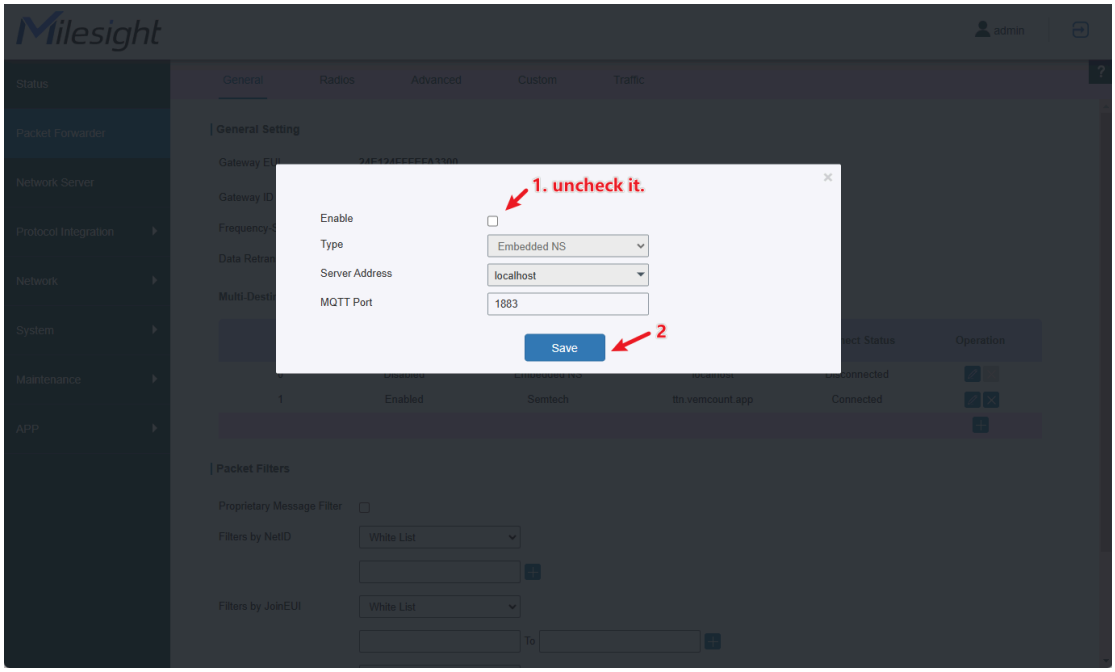
- Ensure that the gateway is connected to the internet and can access the Vemcount server.

## 1.3. Adding UG65 Gateway to Vemcount Platform

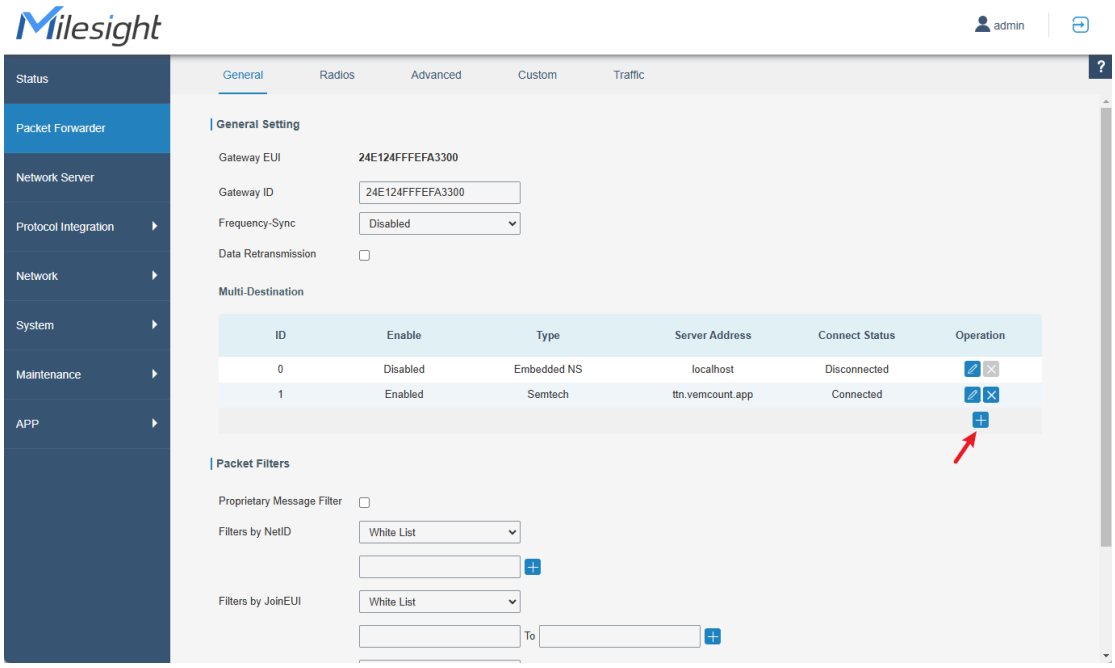
### 1.3.1. Gateway Configuration

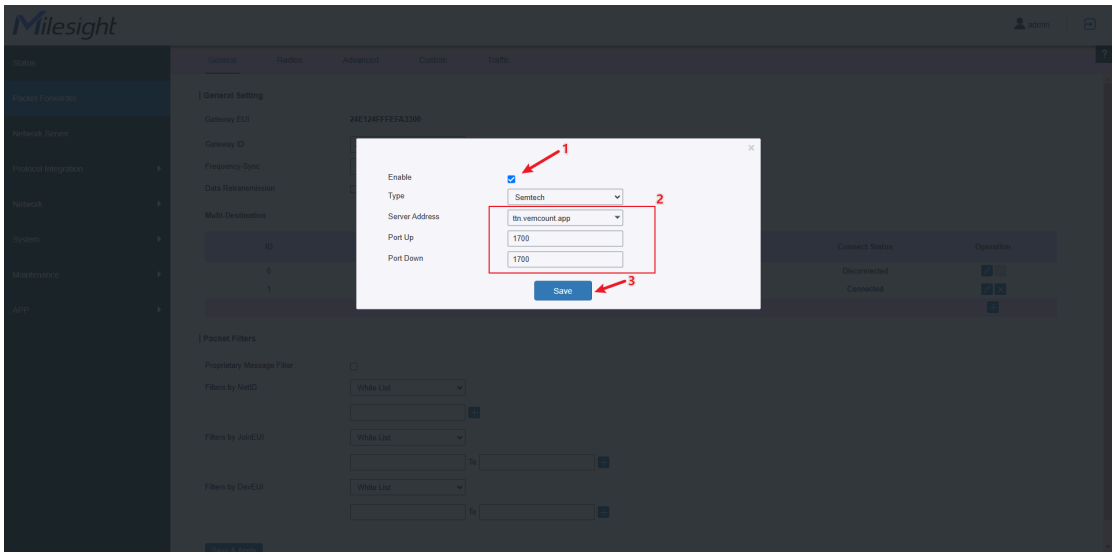
First, disable the built-in LNS. Log in to the UG65 gateway management interface and navigate to **Packet Forward -> General**, then configure as shown below:



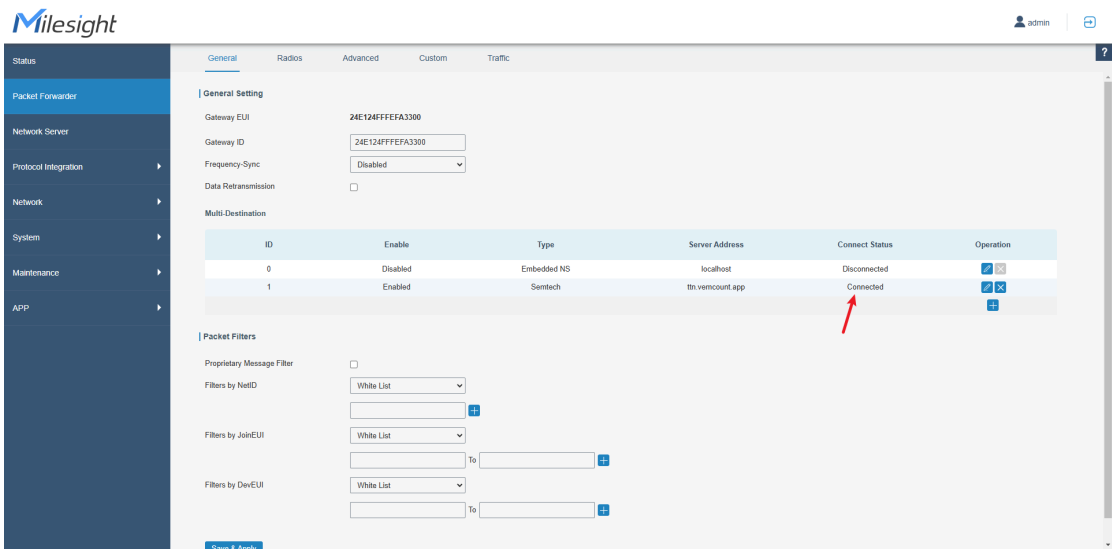




Next, configure the Semtech parameters as shown:




After completing all configurations, the result should be as follows:

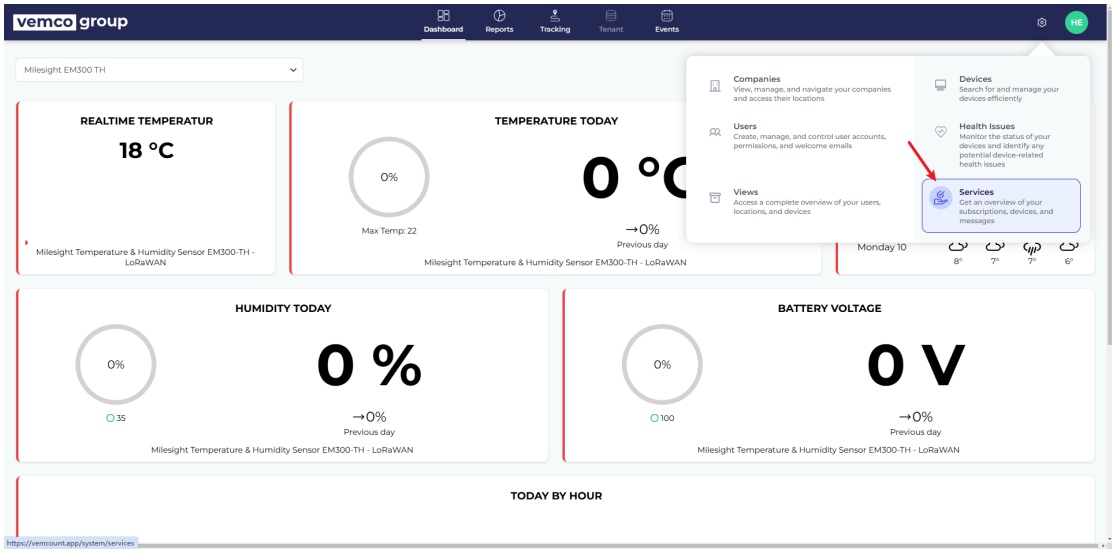



**Important Notes:**

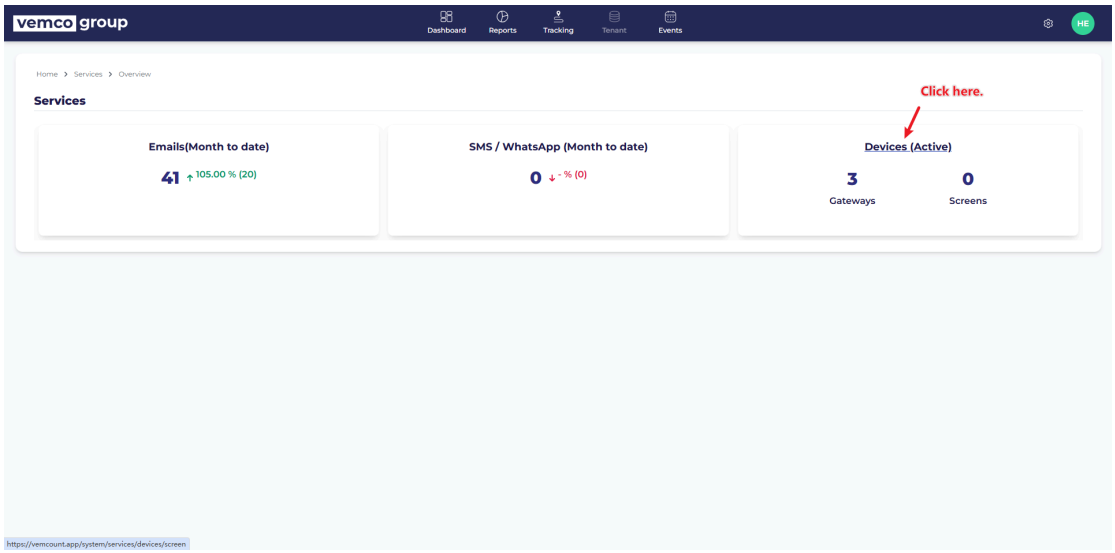
- The server address should be **ttn.vemcount.app**, with **uplink and downlink ports set to 1700**.
- After completing the setup, wait a moment. If the status shows Connected, the addition was successful. Otherwise, refer to <Fail to Access the Network of Milesight Gateway> for troubleshooting.

### 1.3.2. Adding the Gateway to Vemcount Platform

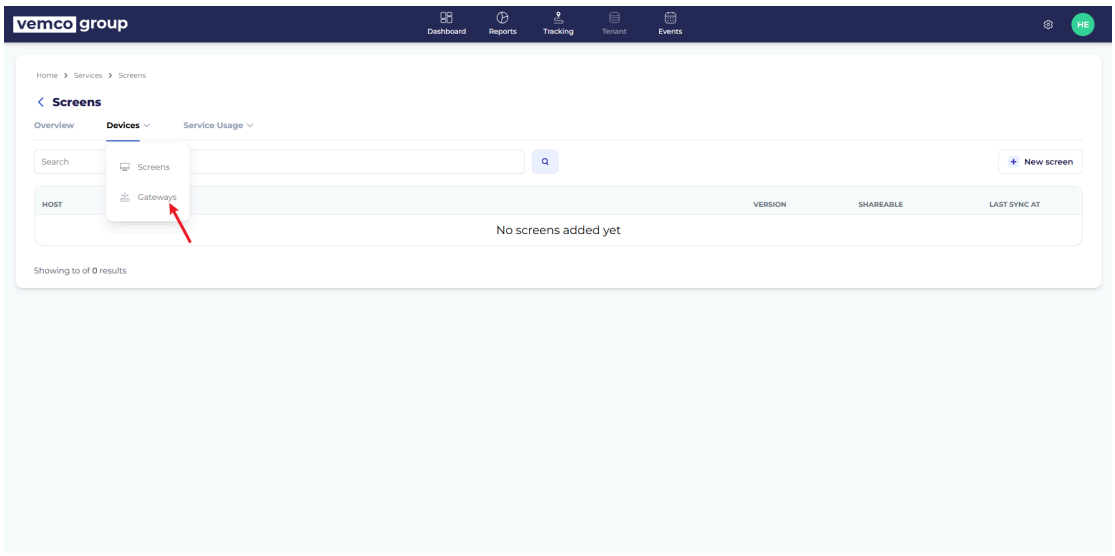
Log in to login · vemcount.app , click the top-right menu, and navigate to Services.

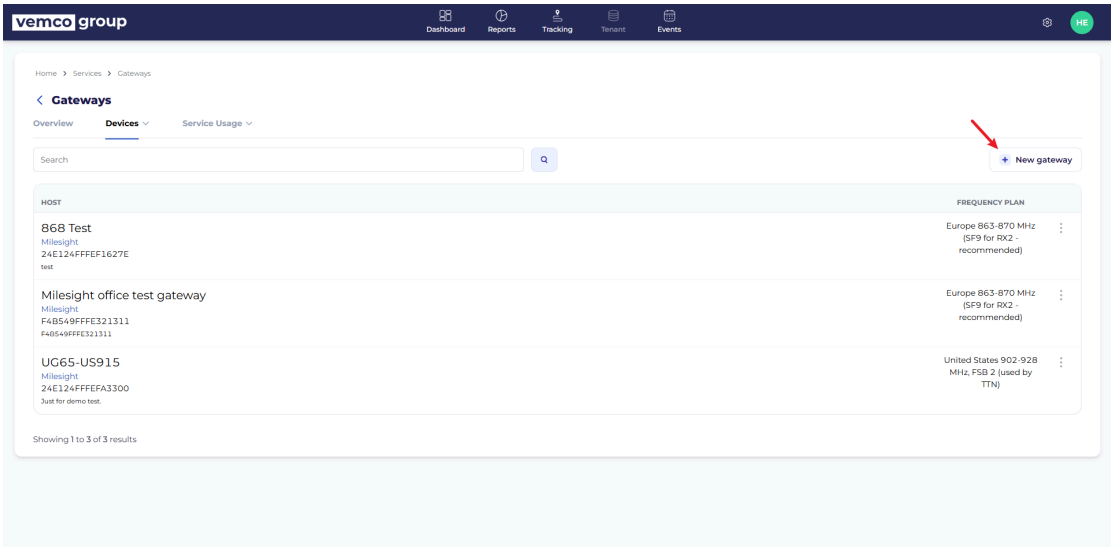



Click **Devices** to enter a new interface.

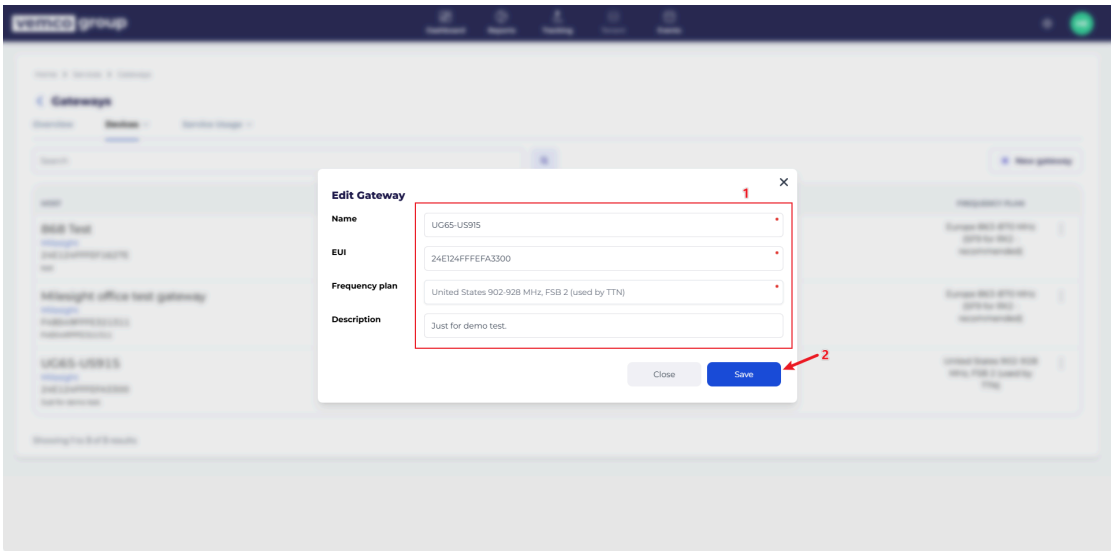



Hover over the **Gateways** section and click **New Gateway**.






Configure the gateway as shown:

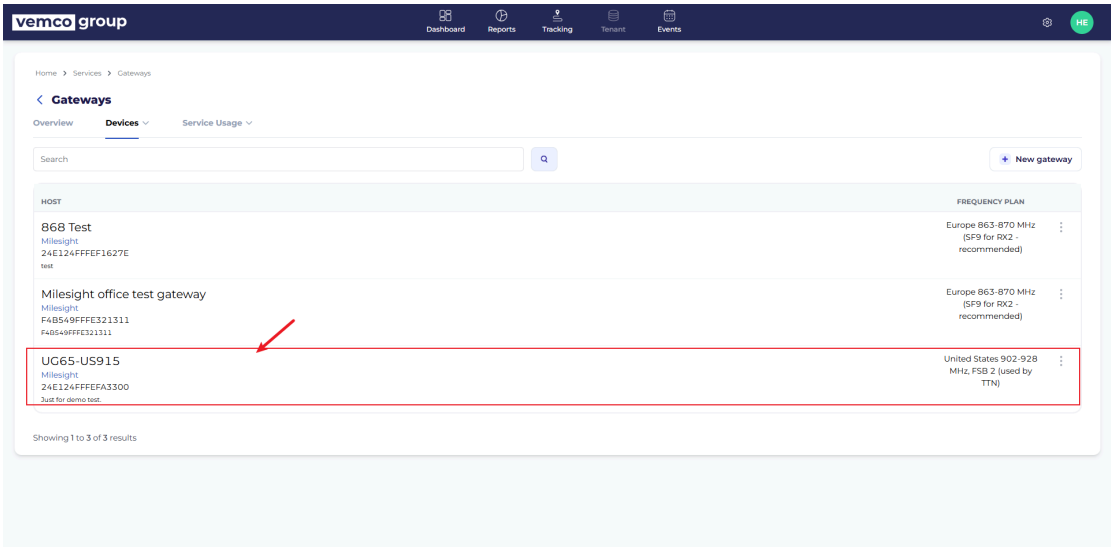



Notes:

1、The EUI parameter is retrieved from the gateway.

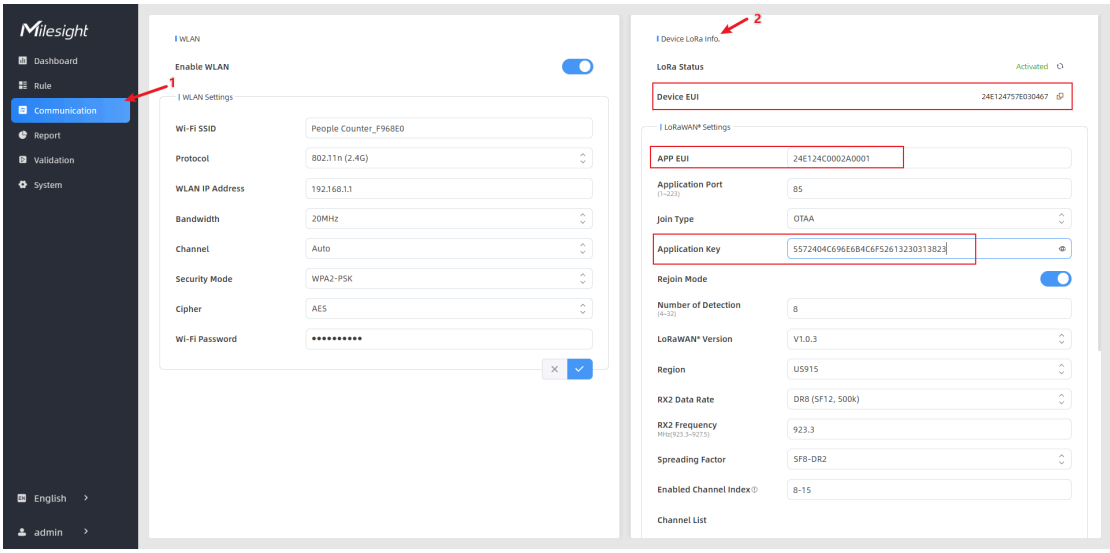
2、Since both the gateway and VS device use the 915MHz frequency band, select the frequency plan accordingly.

Once added, the result should be as follows:




## 1.4. Configuring the VS133 Device

Refer to the <VS133 User Guide> to access the device management interface. Navigate to Communication -> Device LoRa Info, as shown:




Record the DevEUI, App EUI, and Application Key, as they will be used later.
Important Notes:

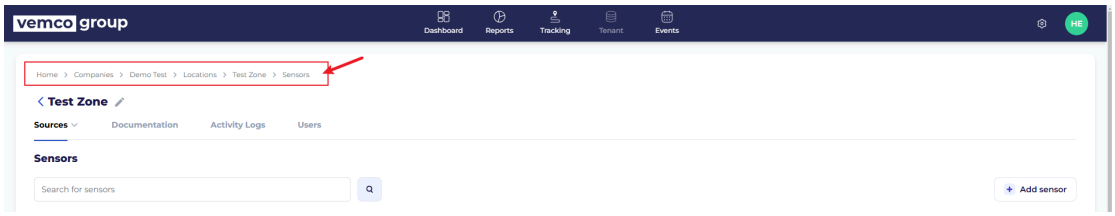
1、**Join Type** must be set to **OTAA** (ABP is not supported).
2、The **Application Key** is hidden by default; click the icon to reveal it.
3、Since we are using **US915**, the Region must be set to **US915**.
4、Other parameters should remain as default.

## 1.5. Creating Vemcount Hierarchical Structure

According to the Vemcount system design, users need to create a Company and Location hierarchy. In this guide, we use:

- **Company**: Milesight
- **Location**: Demo Test
- **Installation** Zone: Test Zone

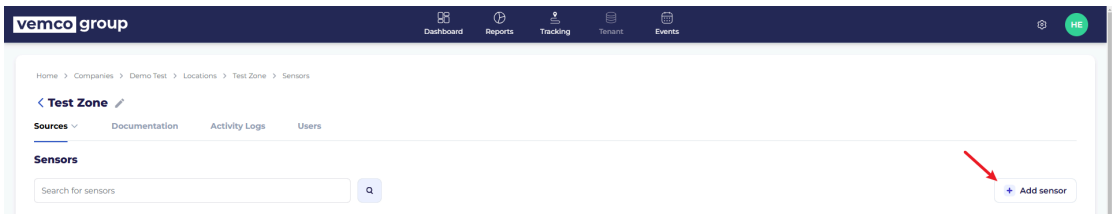
The hierarchical structure is shown below:



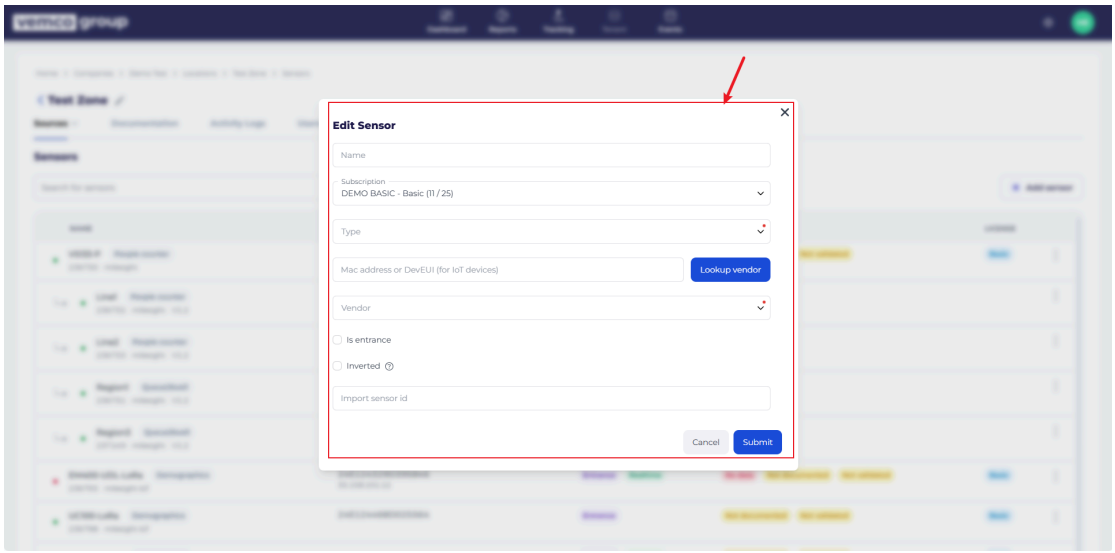

Now that we have created the basic structure, we can proceed with adding the sensor.

## 1.6. Adding VS133 to the Platform

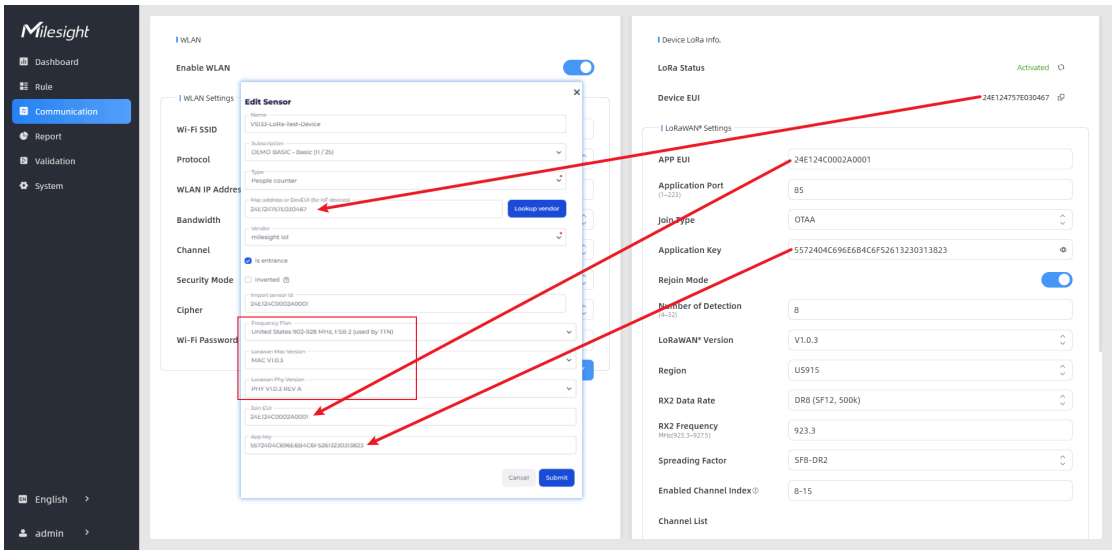
Click **Add Sensor** and fill in the details as shown:




A pop-up window will appear:




Parameter Explanation:




Parameter Explanation:

- **Name**: Enter as per your requirement.
- **Subscription**: Select from the dropdown.
- **Type**: Select **People Counter**.
- **DevEUI**: Enter the **DevEUI** obtained in **Step 1.4**.
- **Vendor**: Select **milesight IoT**.
- **Frequency Plan**: Select **United States 902-928 MHz, FSB2 (used by TTN)**.
- **LoRaWAN MAC Version**: **MAC V1.0.3**.
- **LoRaWAN PHY Version**: **PHY_V1.0.3_REV_A**.
- **Join EUI**: Enter the **App EUI** from **Step 1.4**.
- **App Key**: Enter the **Application Key** from **Step 1.4.**

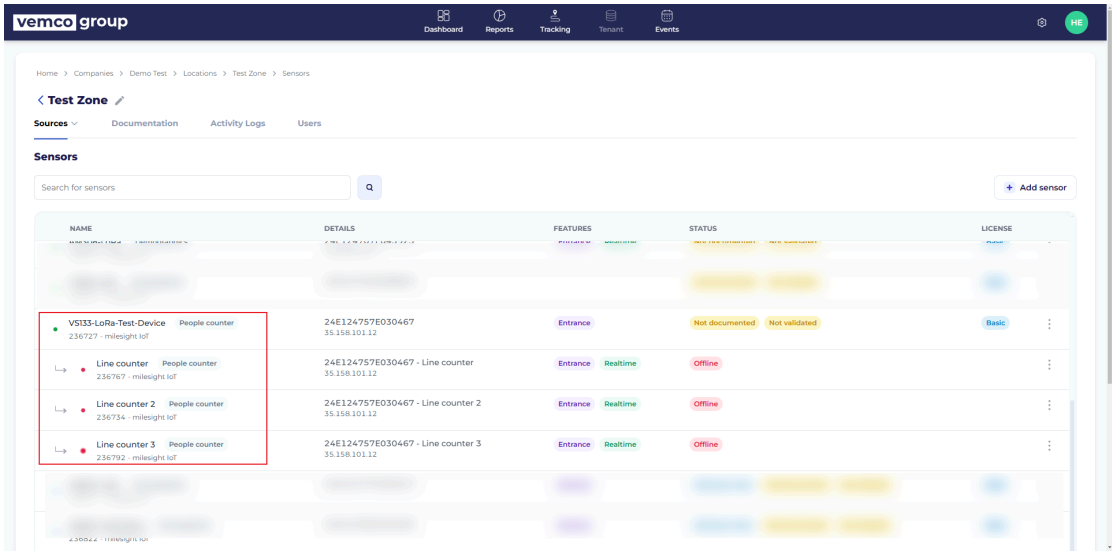
Click **Submit** to complete the process.

Important Notes:

- Vemcount determines sensor uniqueness based on **DevEUI**. If you receive a duplicate DevEUI error, the device has already been added.

## 1.7. Observing Data

After completing the steps above, wait a moment, and you will see VS133's reported data in the Test Zone interface:




Note:
The red color indicates **no recent data updates**. You can reduce the **reporting interval** of VS133 to resolve this.

At this point, **VS133 has been successfully added to the Vemcount platform, and the data link is operational**.

# 2. VS133-P Device Integration Process

Since the Vemcount platform offers an HTTP API, VS133-P mainly uses this API for data reporting.

## 2.1. Hardware Requirements

- **Sensor Model**: VS133-P version, Firmware v133.1.0.8

## 2.2. Network Requirements

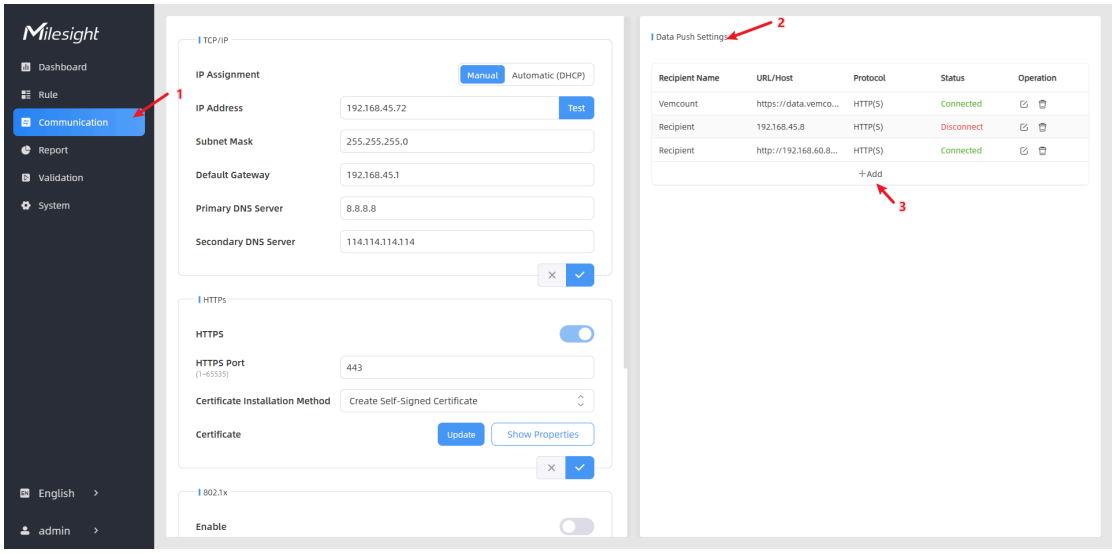
- Ensure the **VS133-P** device is connected to the internet and can access the Vemcount server.

## 2.3. Platform API URL

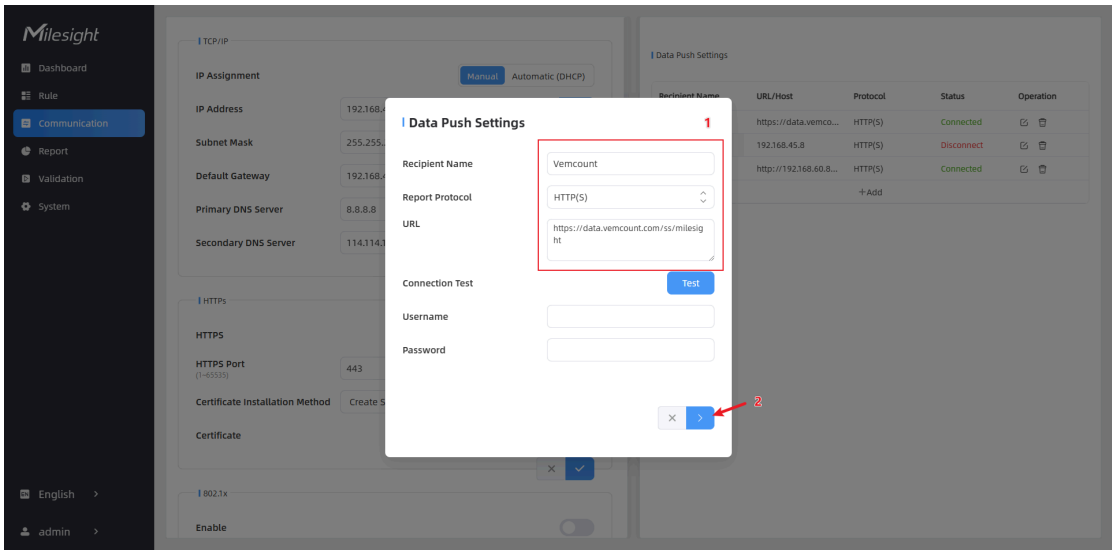
- Vemcount's default HTTP API URL: https://data.vemcount.com/ss/milesight

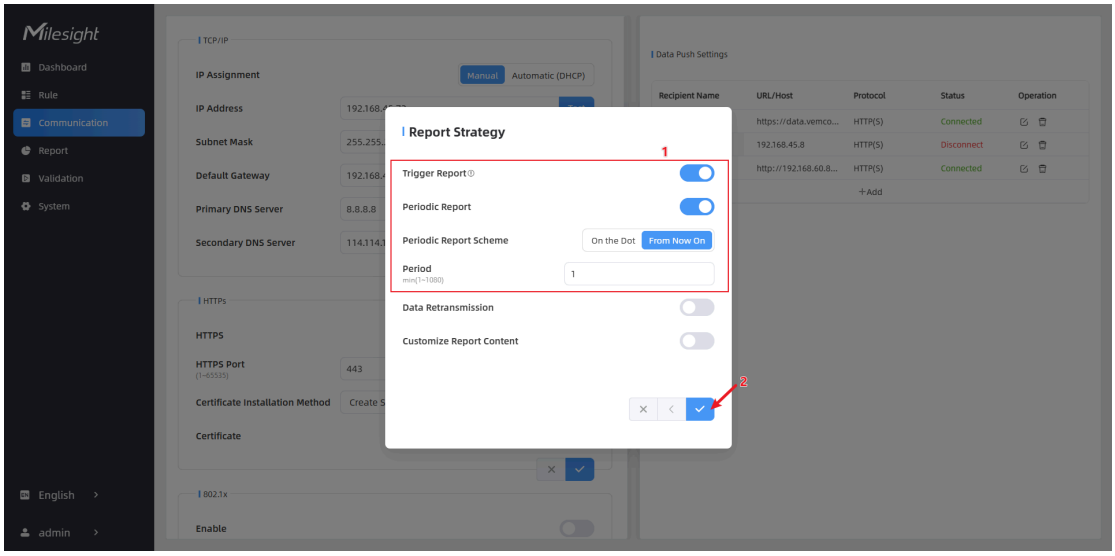
## 2.4. Configuring VS133-P

Refer to the VS133-P User Guide User Guide and navigate to **Communicate -> Data Push Settings**:




Click **+Add** and configure as follows:



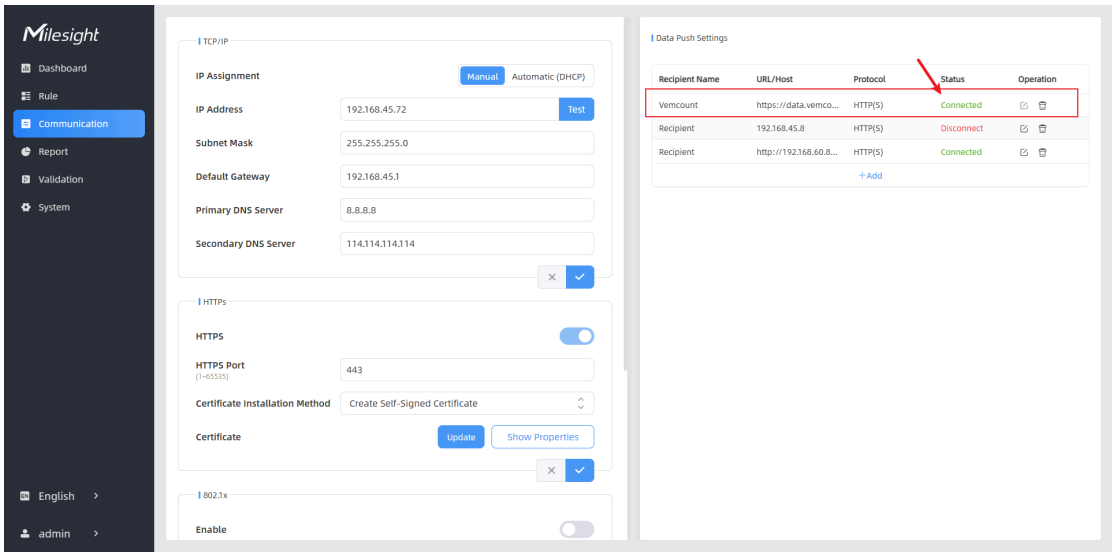



Parameter description:

- **Recipient Name** : Fill in the name according to your actual needs.
- **Report Protocol** : Select **HTTP(S)** from the drop-down list.
- **URL** : fill in https://data.vemcount.com/ss/milesight
- **Username** : Leave blank
- **Password** : Leave it blank
- **Trigger Report** : Slide on
- **Periodic Report** : Slide to on.
- **Periodic Report Scheme**: Select "**From Now On**".
- **Period**: Fill in 1 minute here.

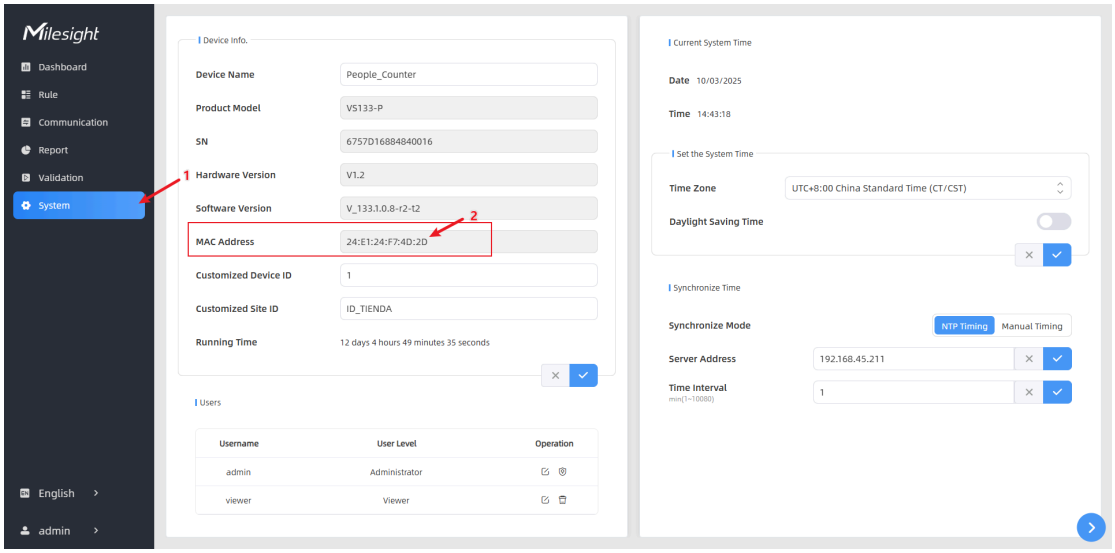
Keep the rest of the parameters as default.

After adding, refresh the interface, we will see that the Status shows green Connected, which means that VS133-P is connected to Vemcount's platform network normally.




## 2.5. Retrieving VS133-P MAC Address

Navigate to **System -> Device Info** and copy the **MAC Address**:




Special Note:

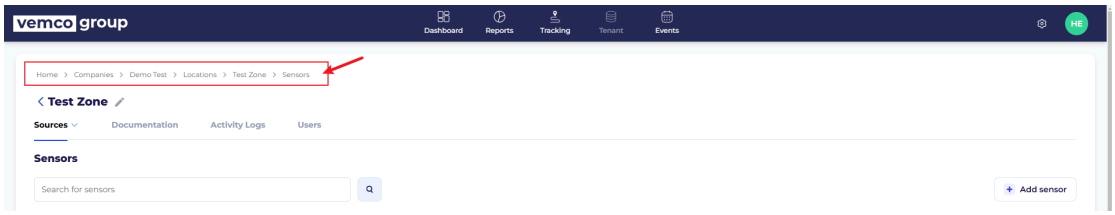
According to Vemcount's Sensor management logic, the platform determines the uniqueness of a device based on the MAC information of the VS133-P, and readers need to pay special attention not to add devices with duplicate MACs, or they will fail to be added.

## 2.6. Creating Vemcount Hierarchical Structure

According to the Vemcount system design, users need to create a Company and Location hierarchy. In this guide, we use:

- **Company**: Milesight
- **Location**: Demo Test
- **Installation Zone**: Test Zone

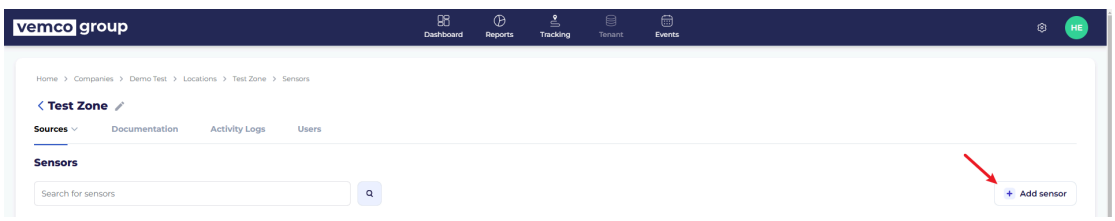
The hierarchical structure is shown below:



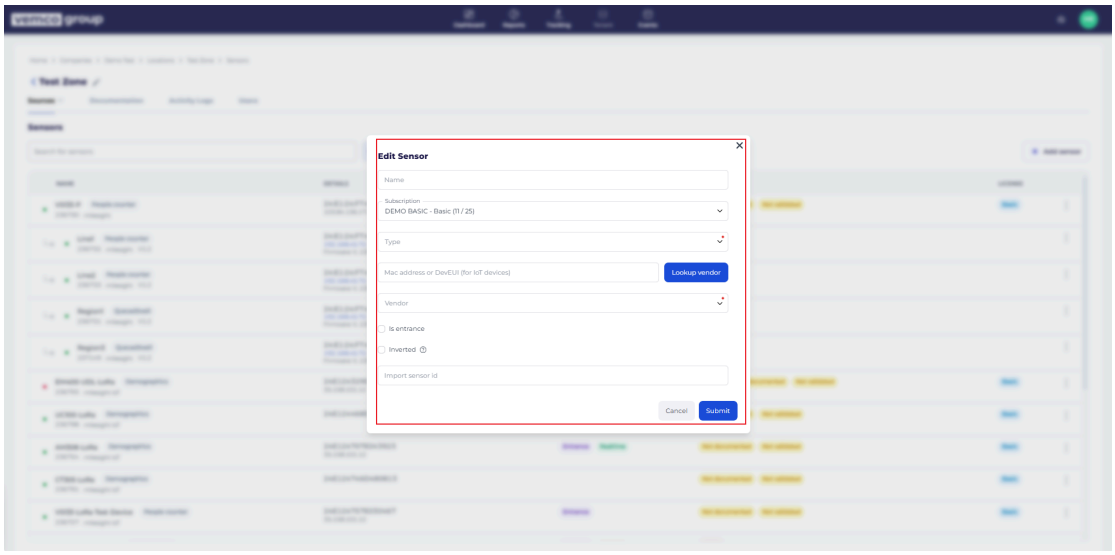

Now that we have created the basic structure, we can proceed with adding the sensor.

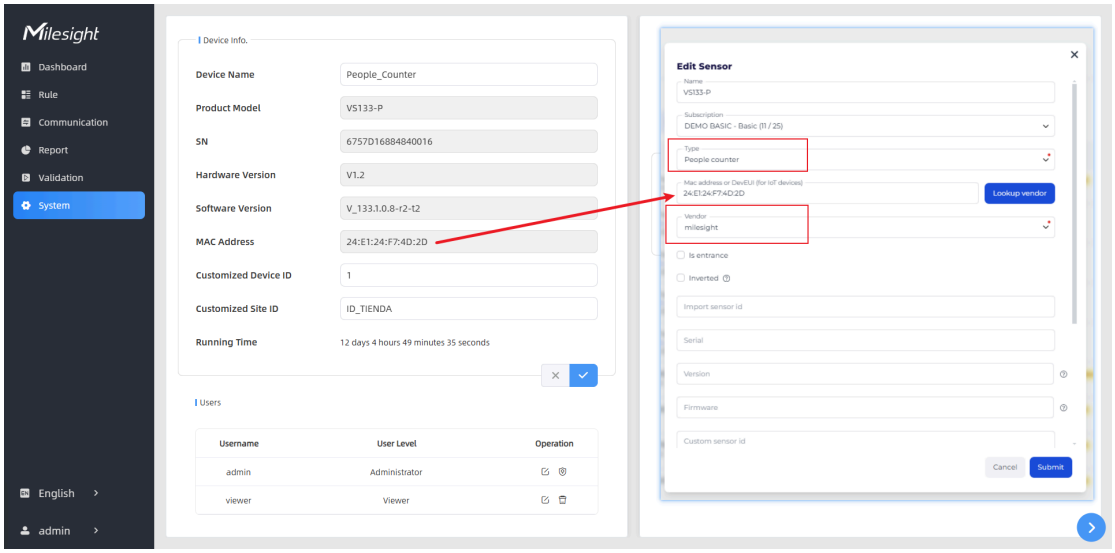
## 2.7. Adding VS133-P to the Platform

Click **Add Sensor** and fill in the details as shown:



A pop-up window will appear:



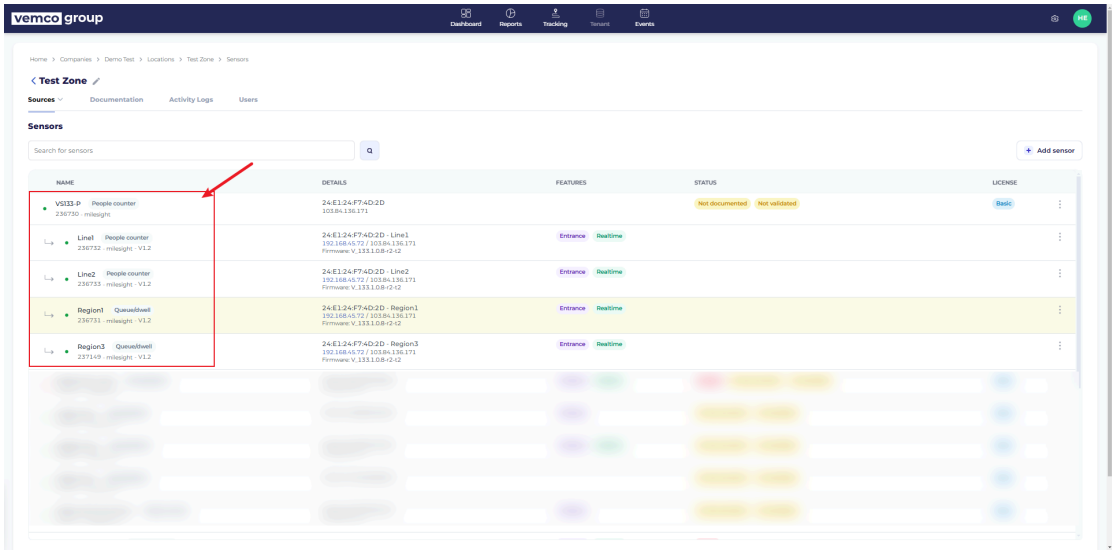

Parameter Descriptions:

- **Name**: Enter as per your actual requirements.
- **Subscription**: Select the appropriate option from the dropdown.
- **Type**: VS133-P is a **People Counter device**.
- **MAC**: Enter the **MAC address** obtained in Step 2.5.
- **Vendor**: Select **milesight**.
- **Other parameters**: Leave blank.

After completing the setup, click the "**Submit**" button.

## 2.8. Monitor the Data

After completing the previous steps, wait for a moment, and you will see data from the VS133-P device displayed in the Test Zone interface, as shown below:




At this point, the VS133-P device has been successfully added to the Vemcount platform, and the data transmission is functioning properly.

-END-