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USR-LG270

LoRaWAN Edge Gateway

ThingsBoard Application

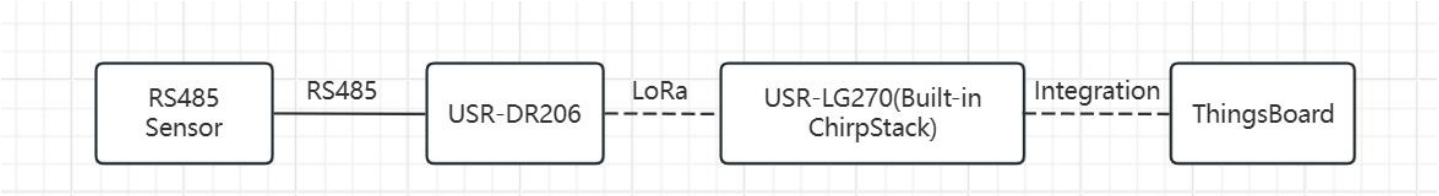


V2.0

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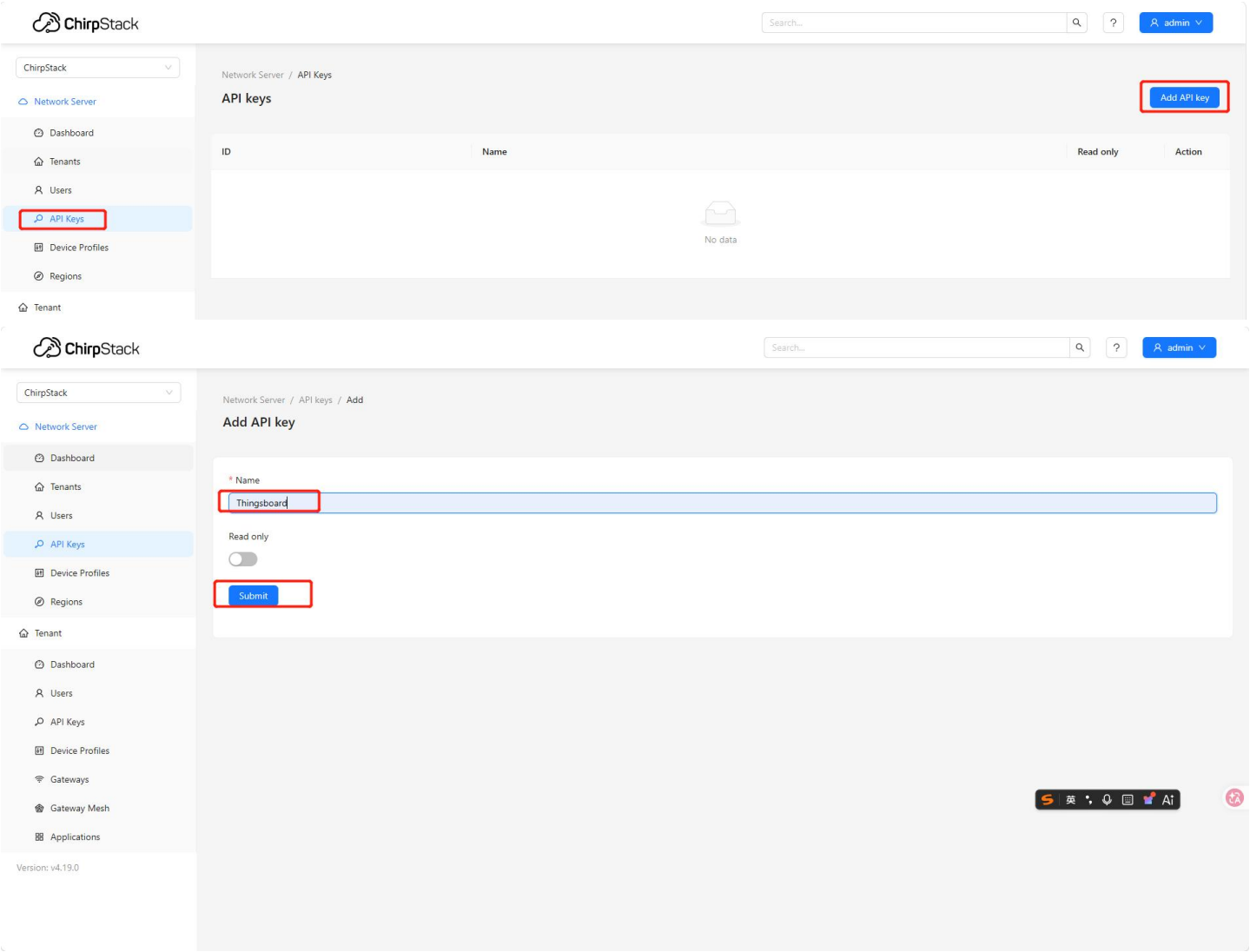
1. Network Architecture

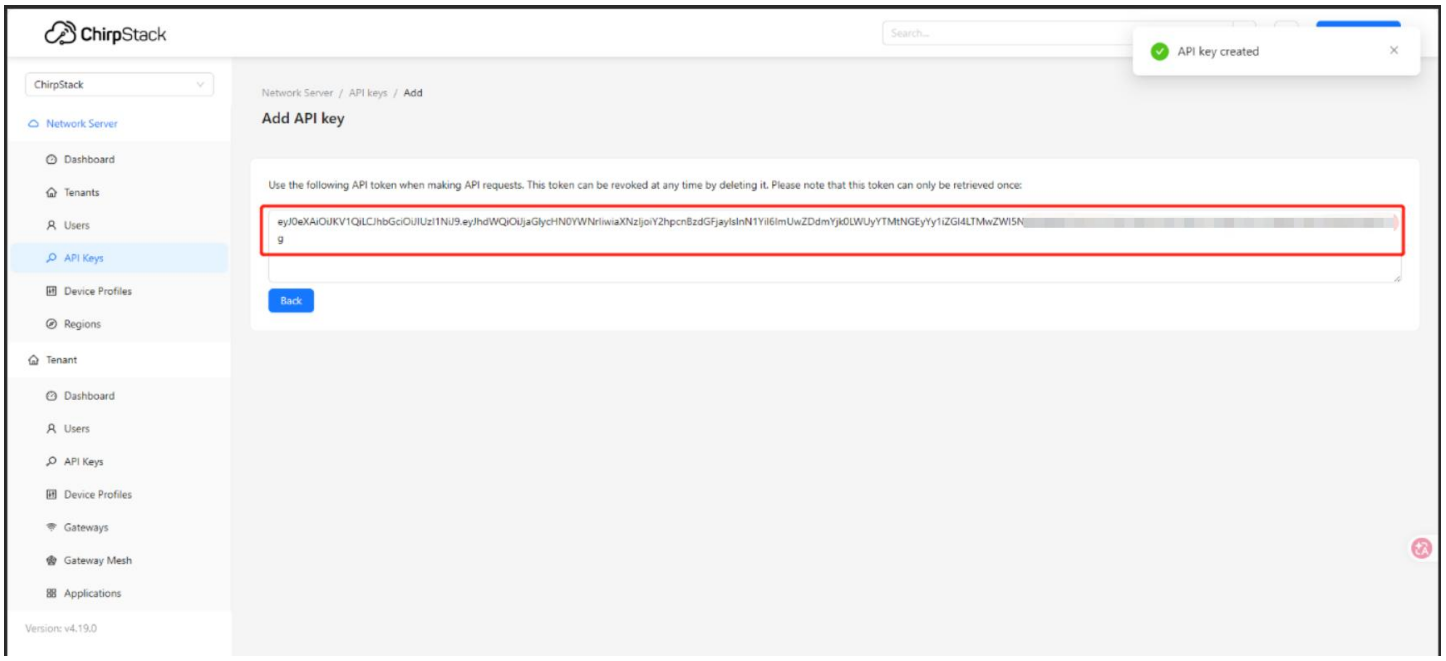


2. Create a ChirpStack API Key

The API key is used by ThingsBoard to authenticate requests to the ChirpStack API when sending downlink messages.

- In the ChirpStack UI, go to Tenant → API Keys and click Add API key.
- Enter a name for the key (e.g. ThingsBoard) and click Submit.
- Copy and save the token — it is displayed only once.



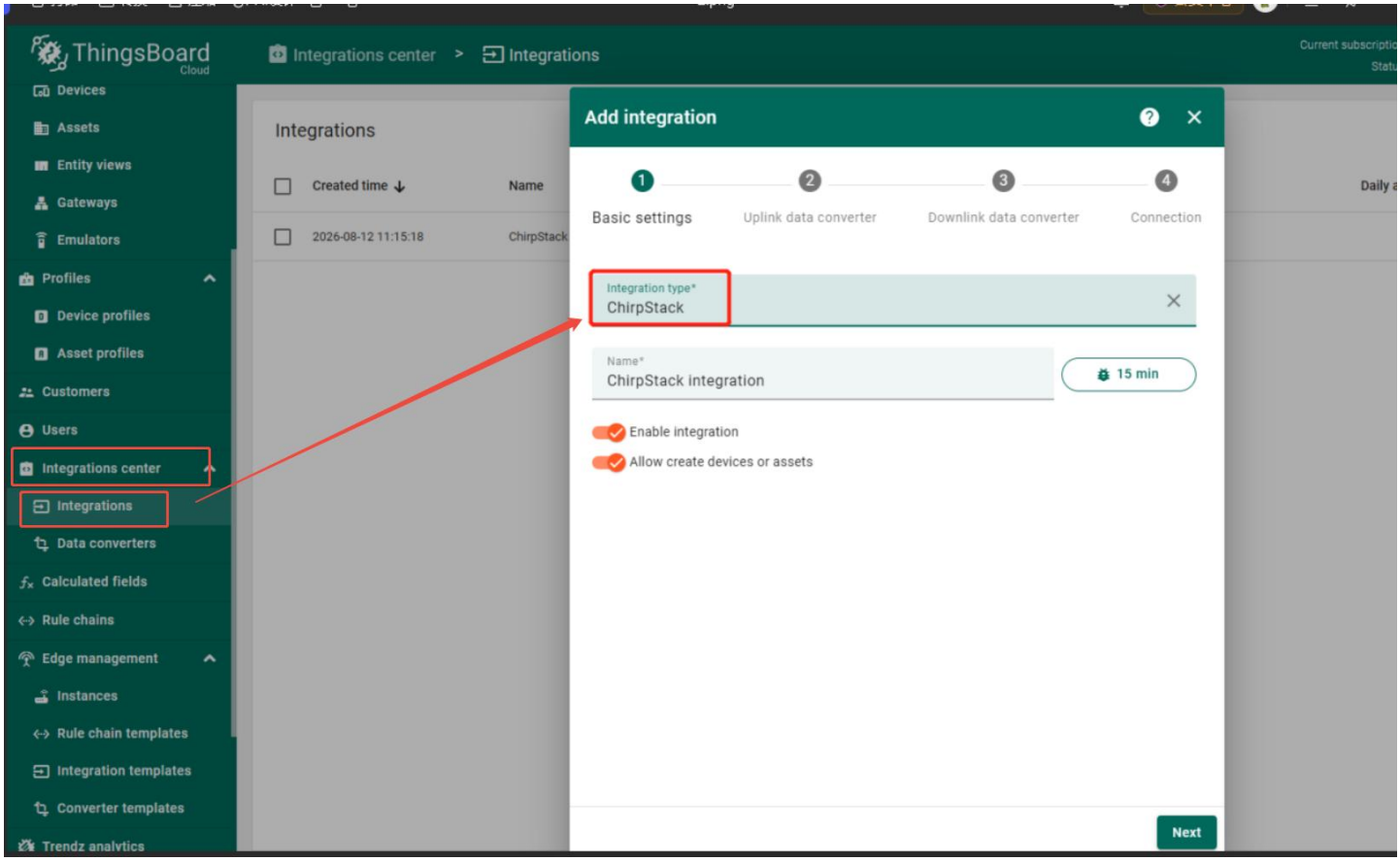


3. Set Up the Integration in ThingsBoard

3.1. Log In to ThingsBoard

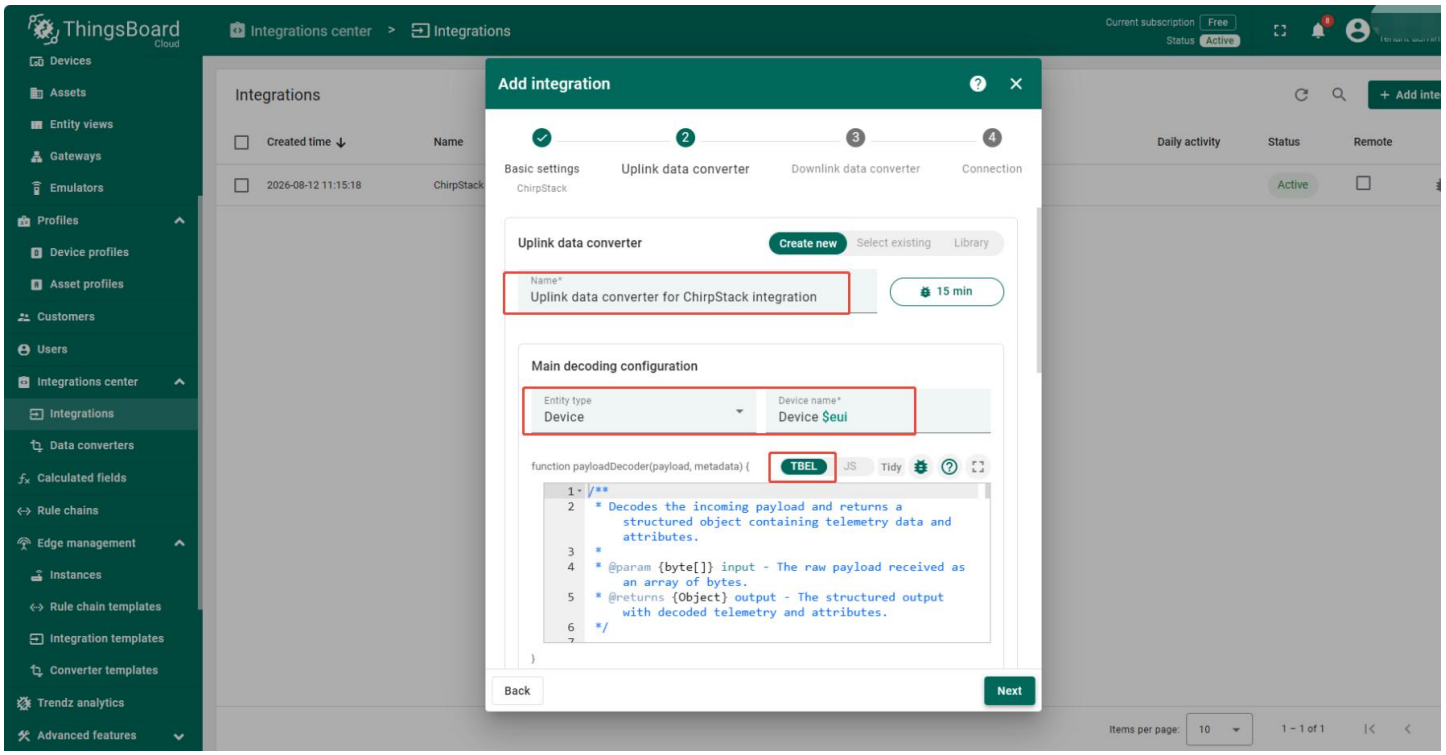
1> Basic Settings

- Navigate to the Integrations page under Integrations Center, then click the plus (+) button to add a new integration.
- Select ChirpStack from the list of integration types.



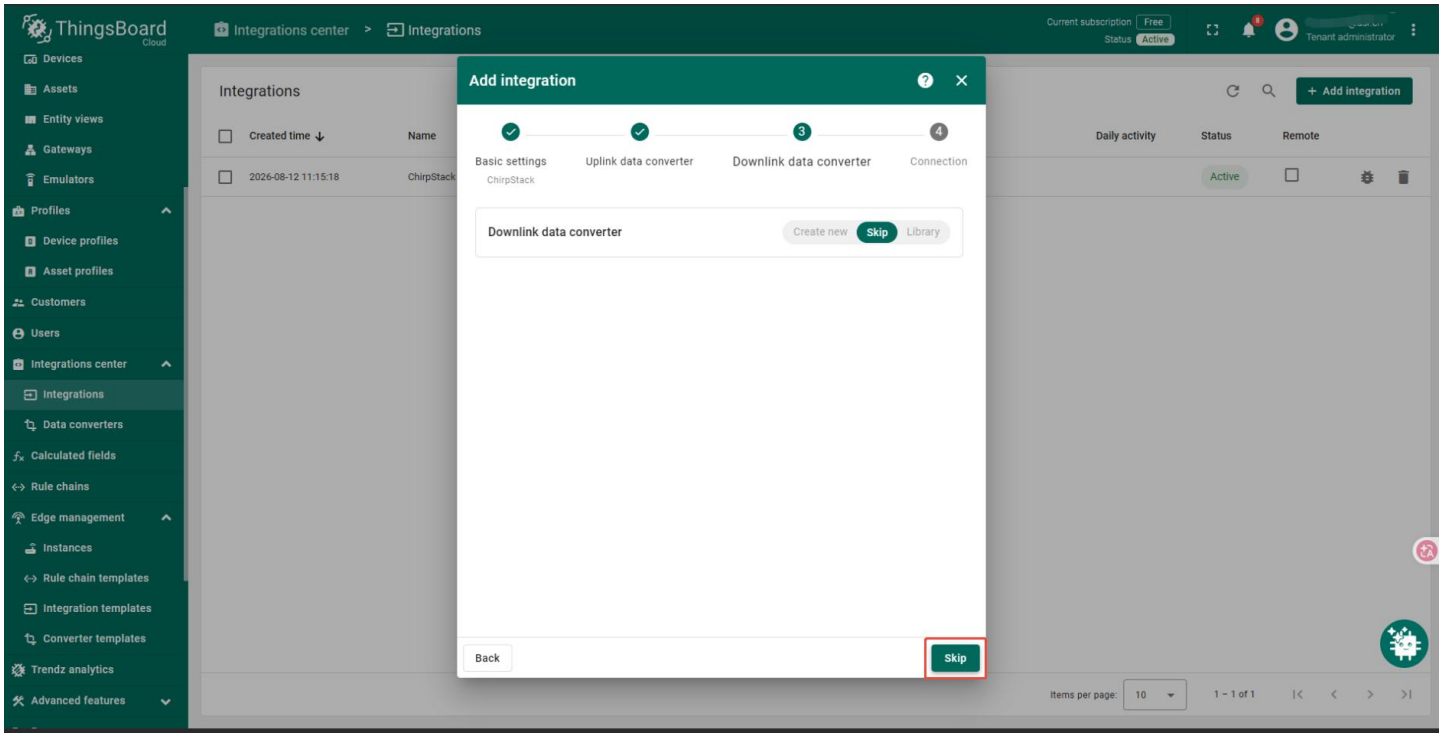
3.2. Uplink data converter

The uplink converter transforms incoming device data into the format required by ThingsBoard.



3.3. Downlink Data Converter

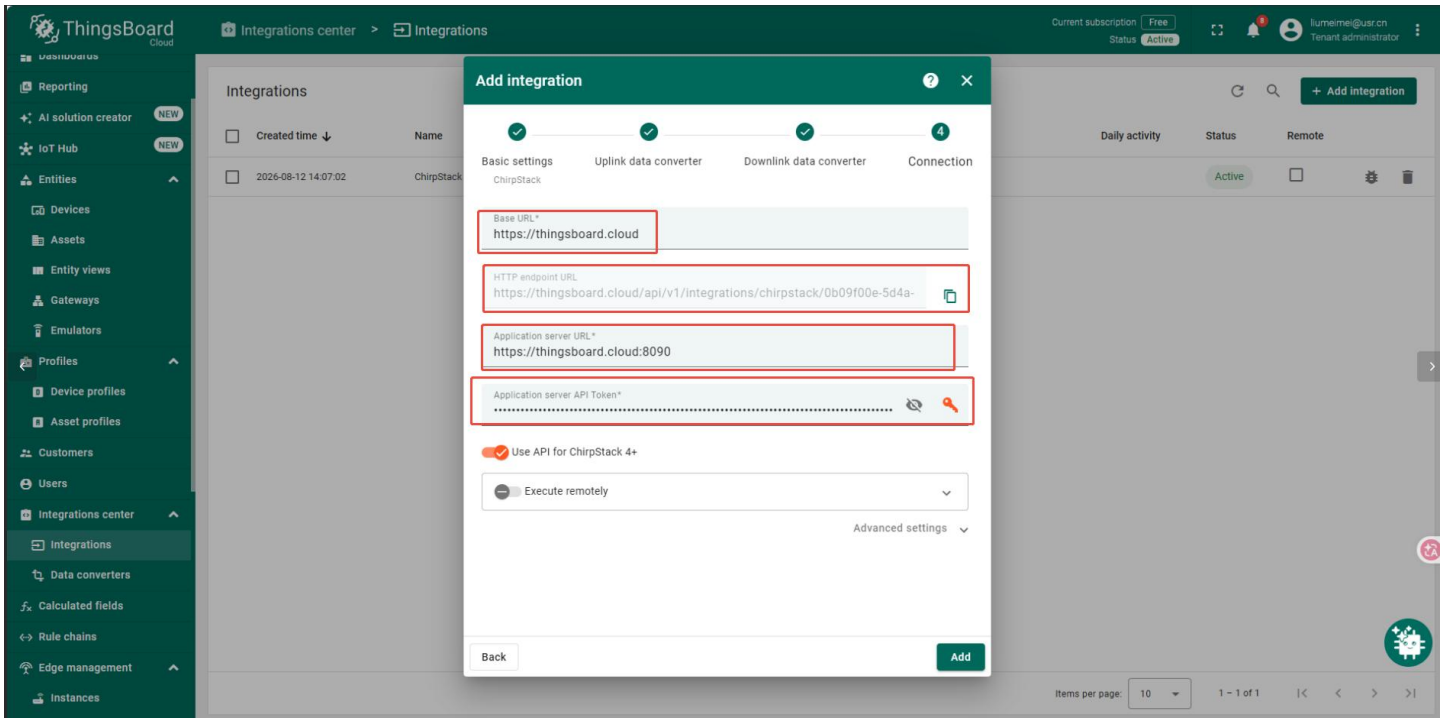
When adding a downlink converter, you may select an existing converter or create a new one. For now, leave the Downlink data converter field blank and click Skip.



3.4. Connection

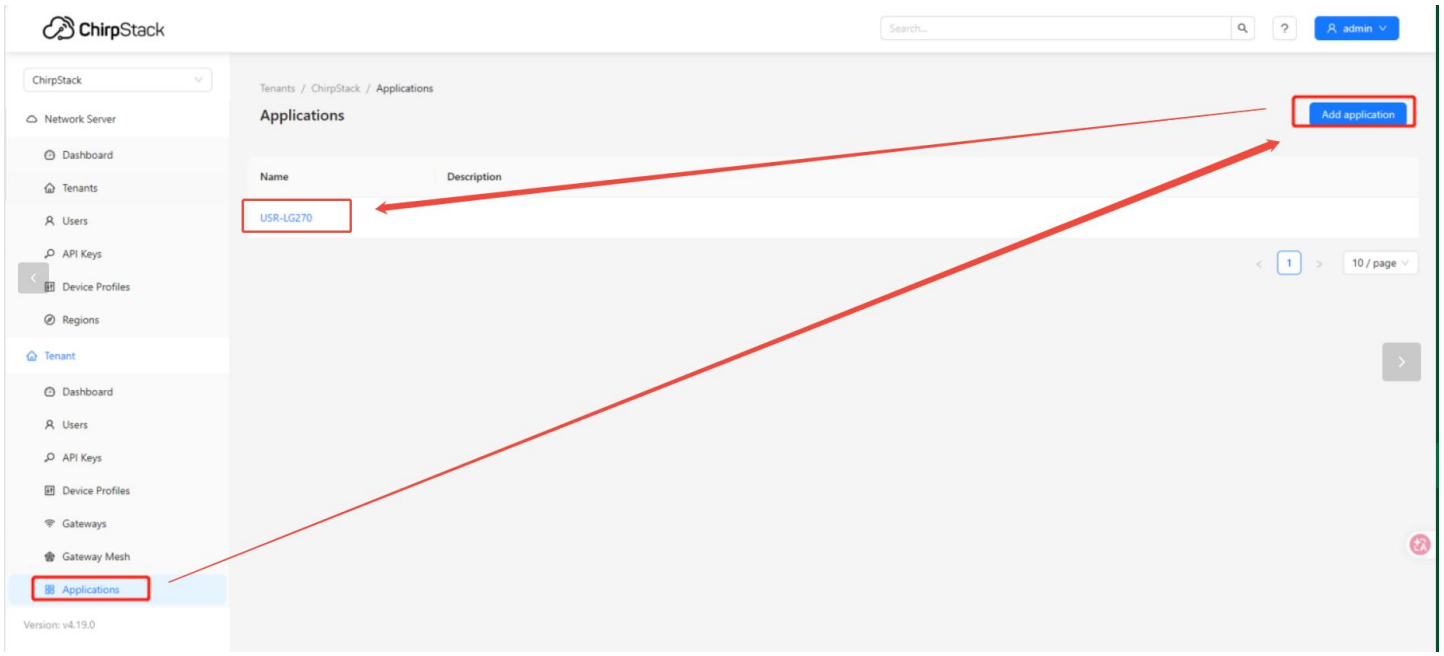
- Specify the Base URL. Keep the default URL in this example.
- Note the HTTP endpoint URL; you will need it later.
- Specify the Application server URL - the address of the application server or REST API service. In a standard installation, you typically only need to change the port to 8090.
- Specify the Application server API Token. Obtain it from the application server, then paste the API key saved above

here.

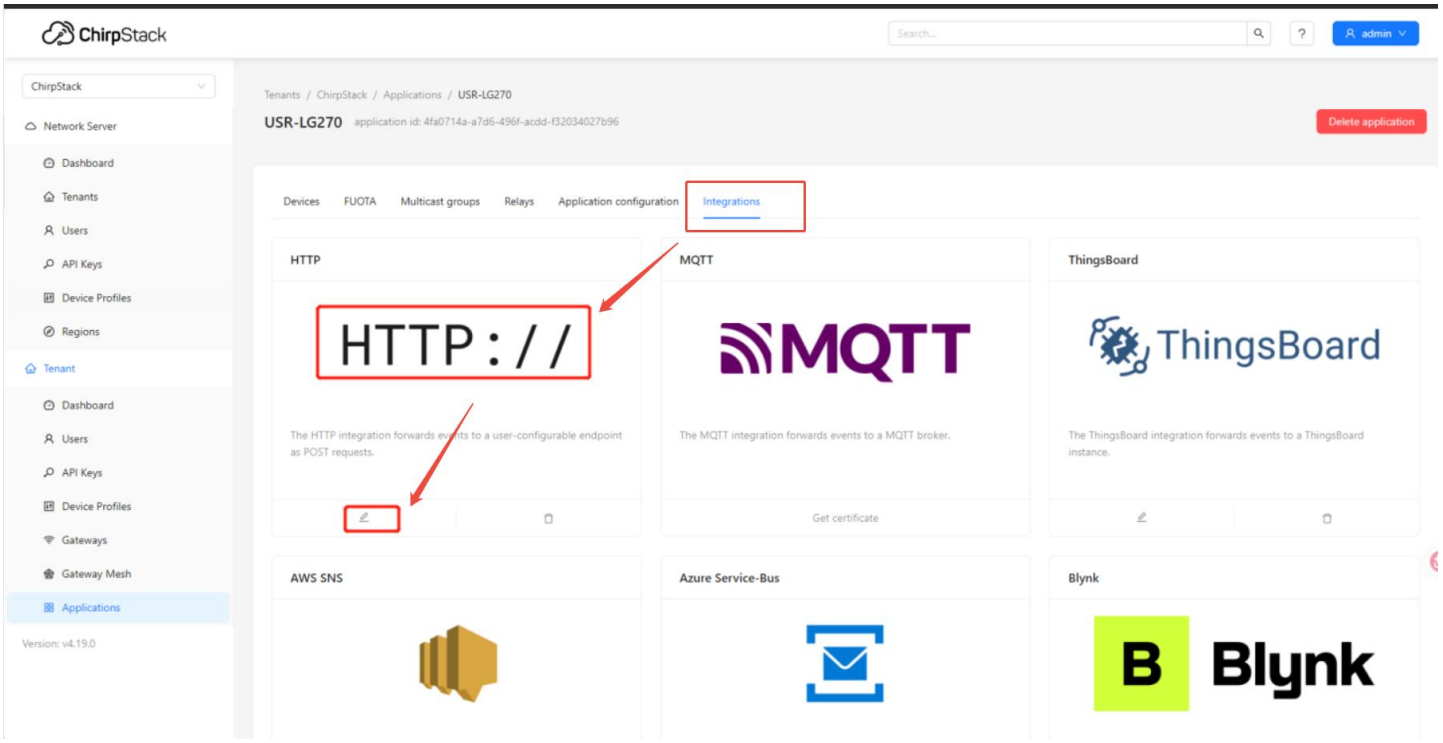


4. Configure an HTTP Integration in ChirpStack

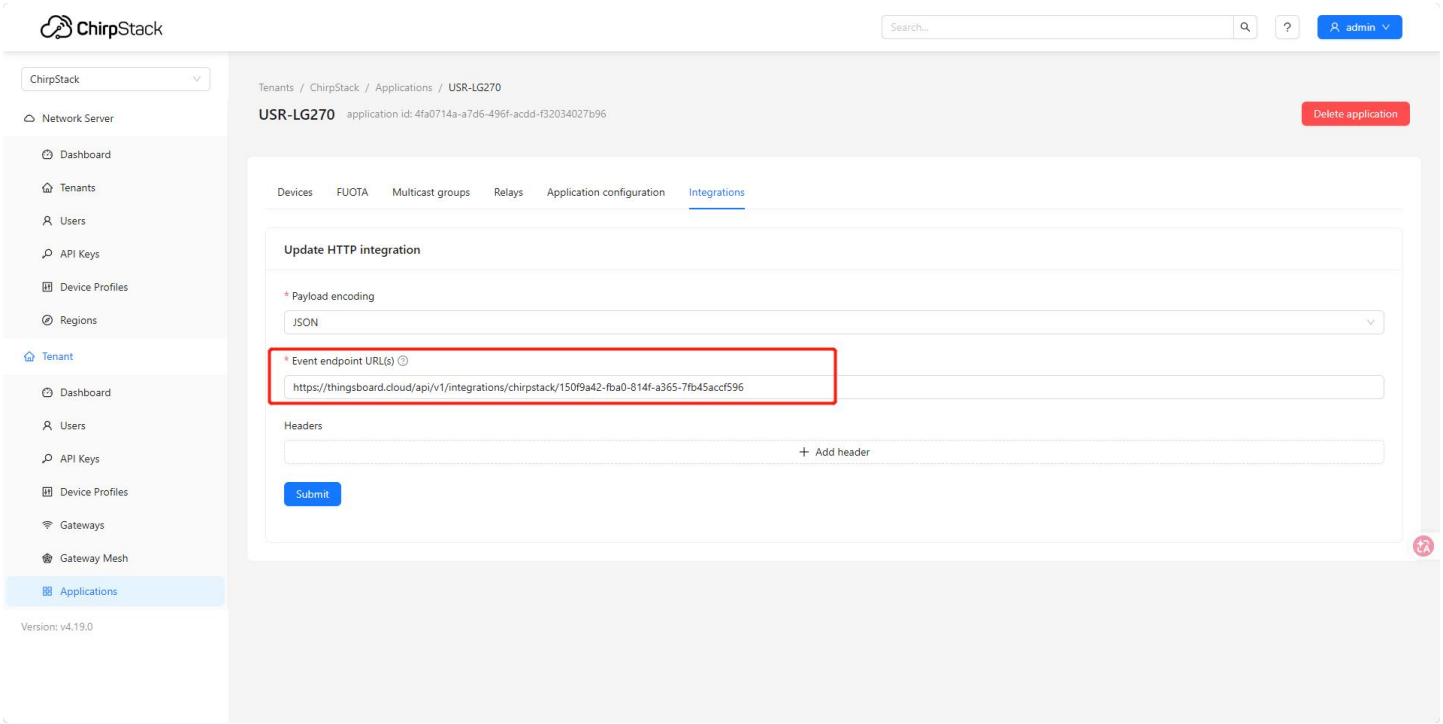
1> Add an application. If one already exists, simply select it.



2> Open the application and navigate to the Integrations tab.In the integration catalog, click + on the HTTP card.

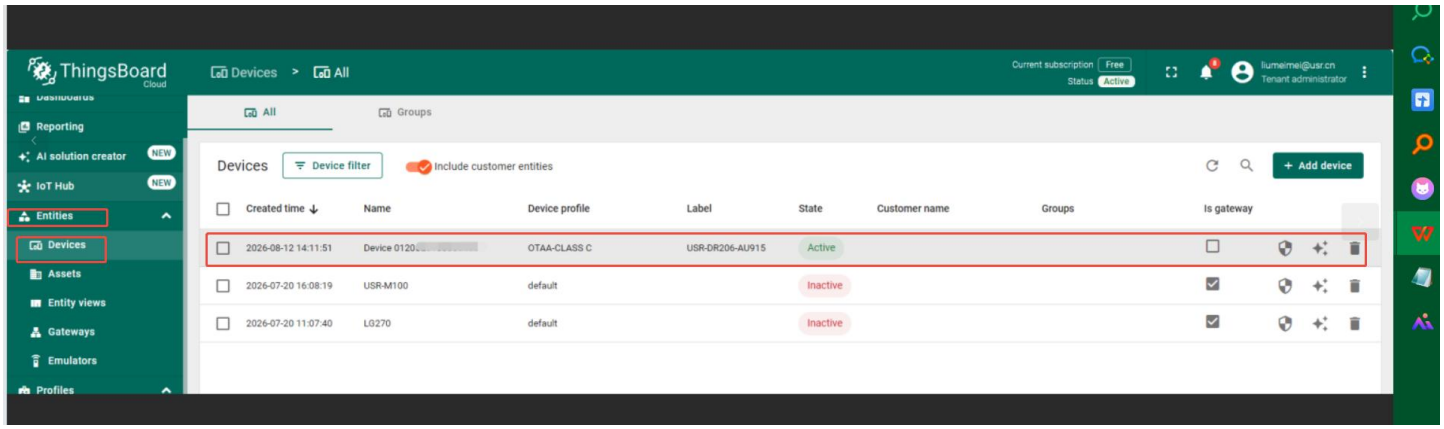


3> Paste the copied HTTP endpoint URL field from the ThingsBoard integration. Click Submit.

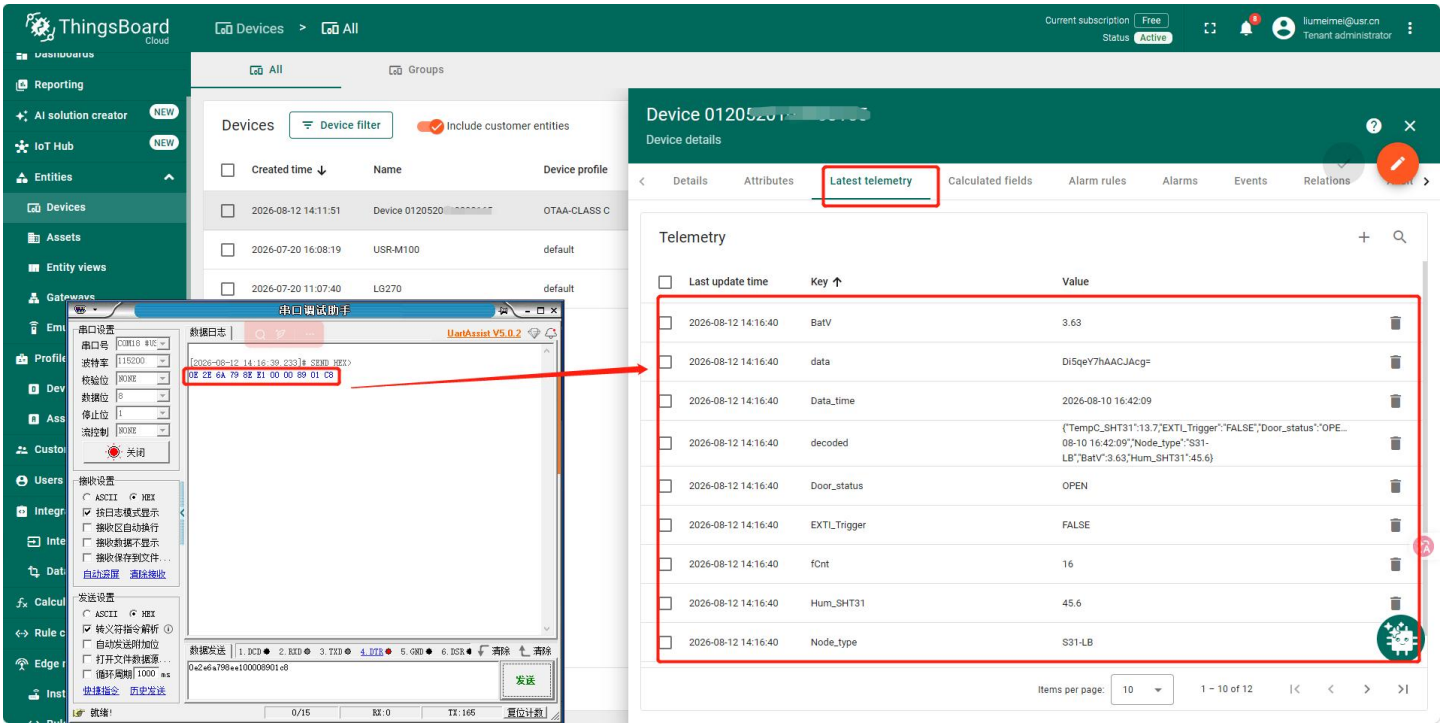


5. Test Uplink

1> When your device sends an uplink message, a new device appears in the ThingsBoard user interface.



12> Click the device name to view details of its latest communication.



2> An uplink event is received in the ChirpStack integration.

