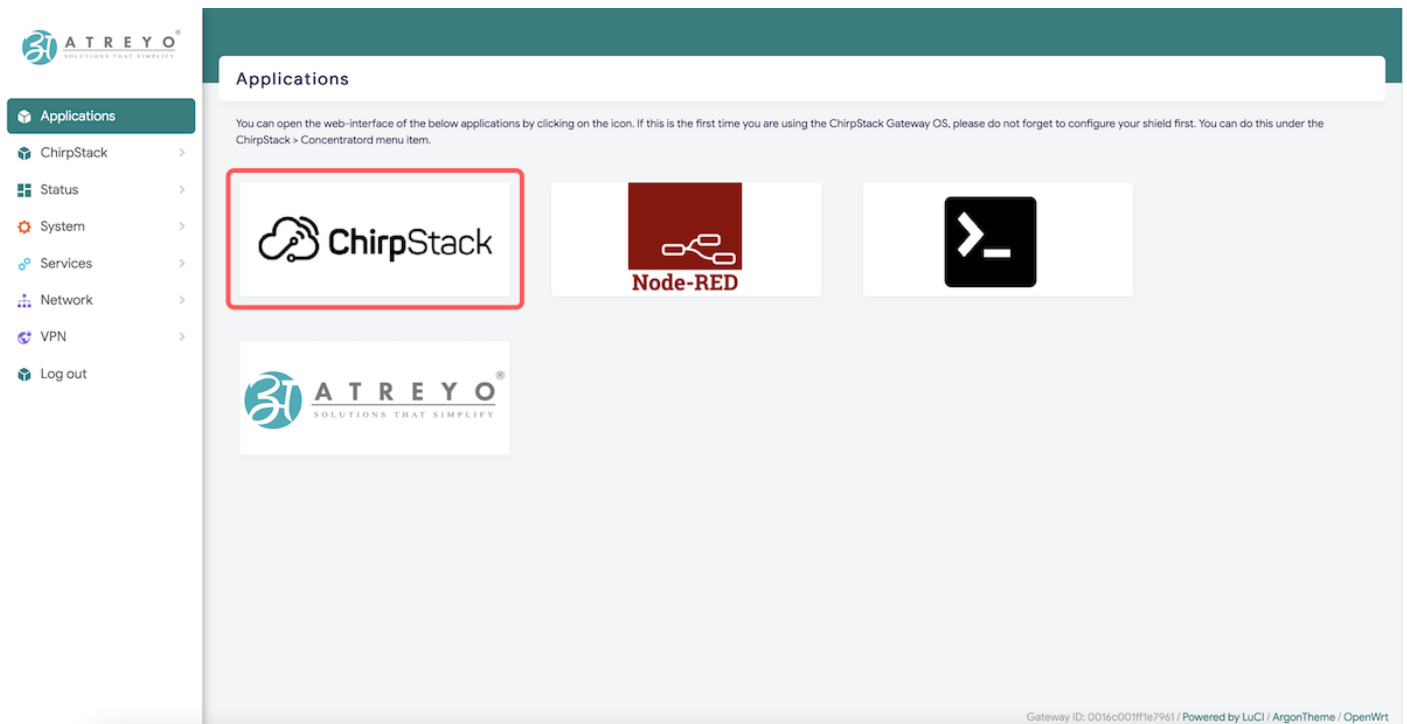


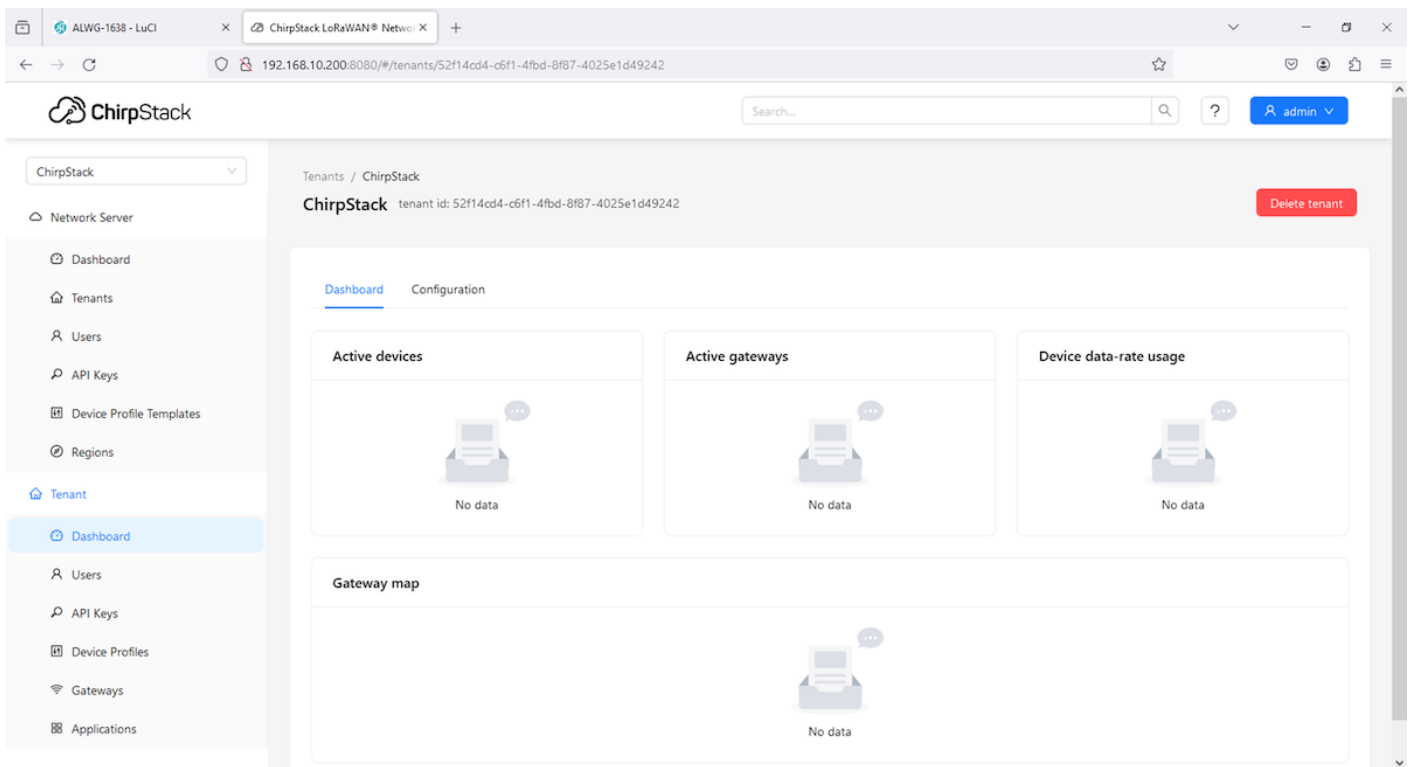
# Chirpstack LNS

Once the Chirpstack LNS has been configured in gateway side, few things to be done in Chirpstack console. i.e. to add Gateway, End devices, Application etc.

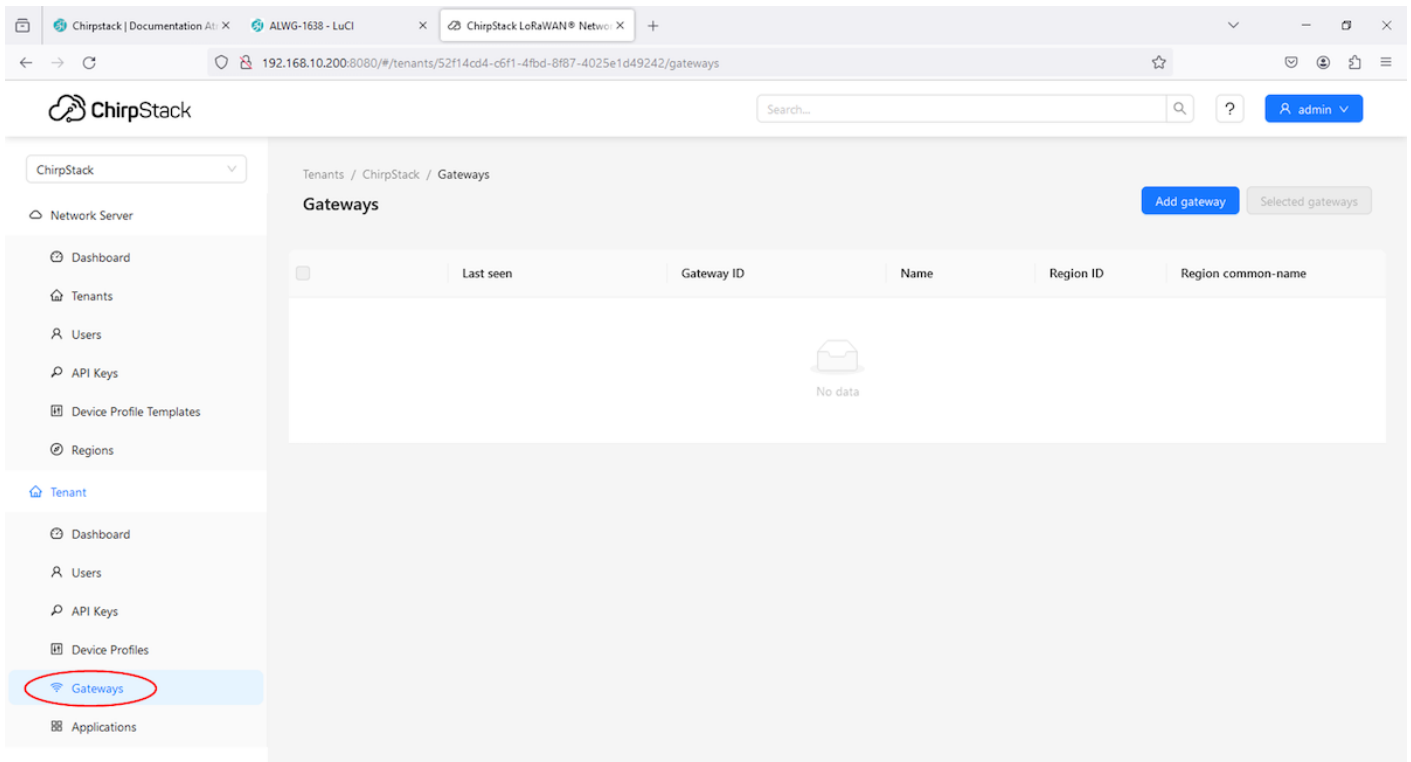
to **Add gateway** in chirpstack LNS open chirpstack LNS by clicking the icon in Application.



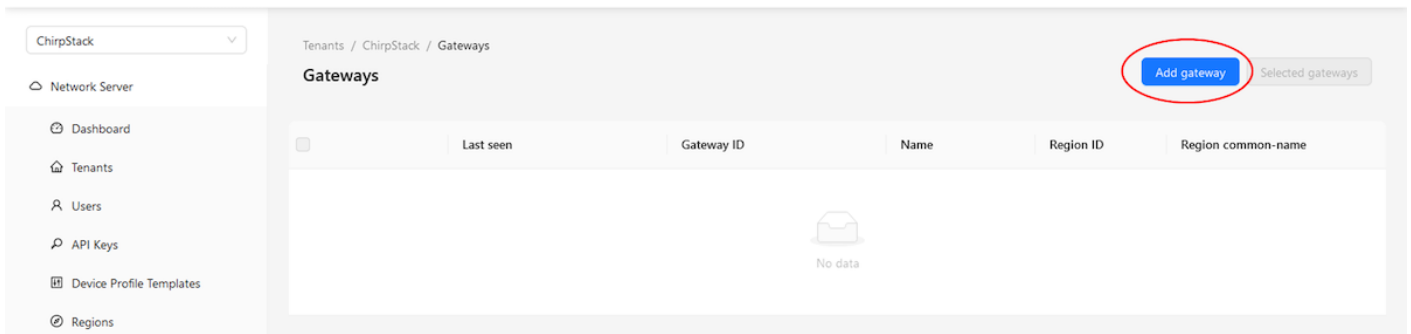
Login pop-up will appear, use admin/admin as user/pass. After login the screen will be like:



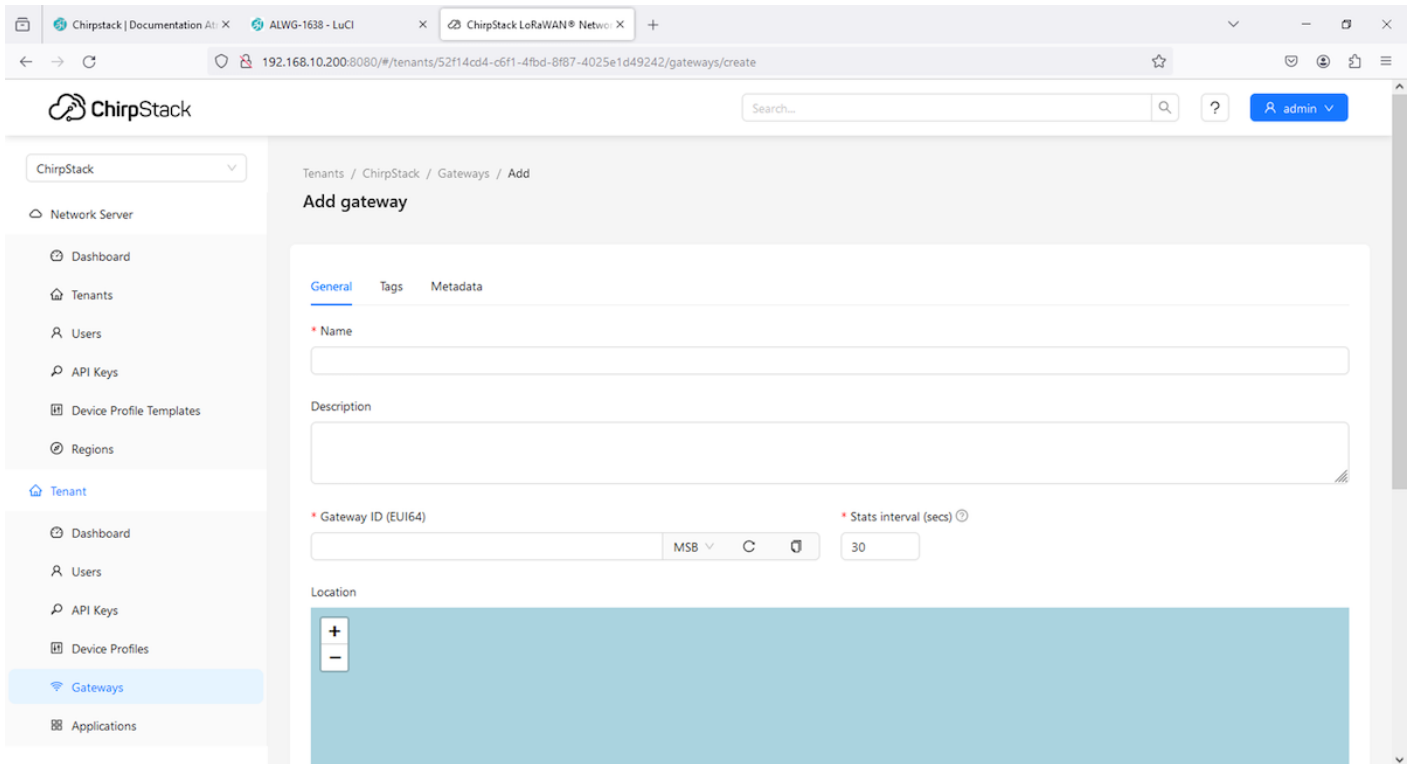
Go to Gateway section in Tenant to add perticular gateway.



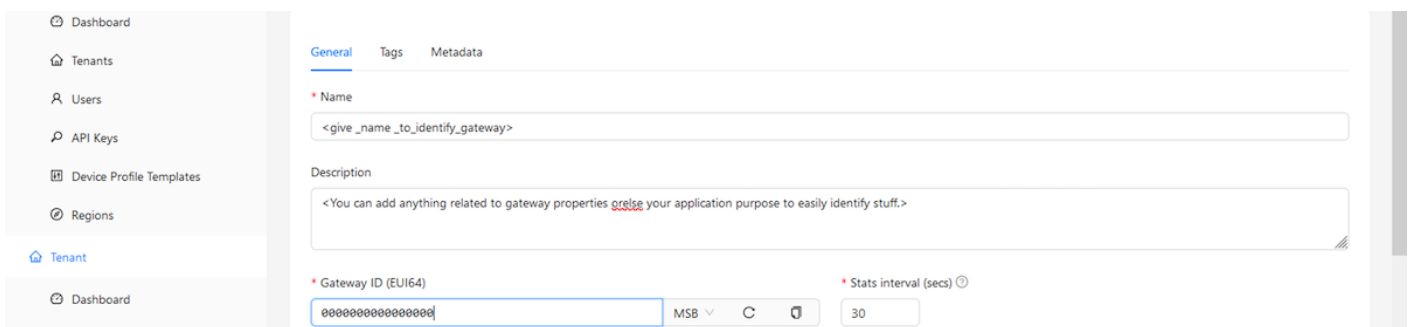
Click on **Add gateway** button.



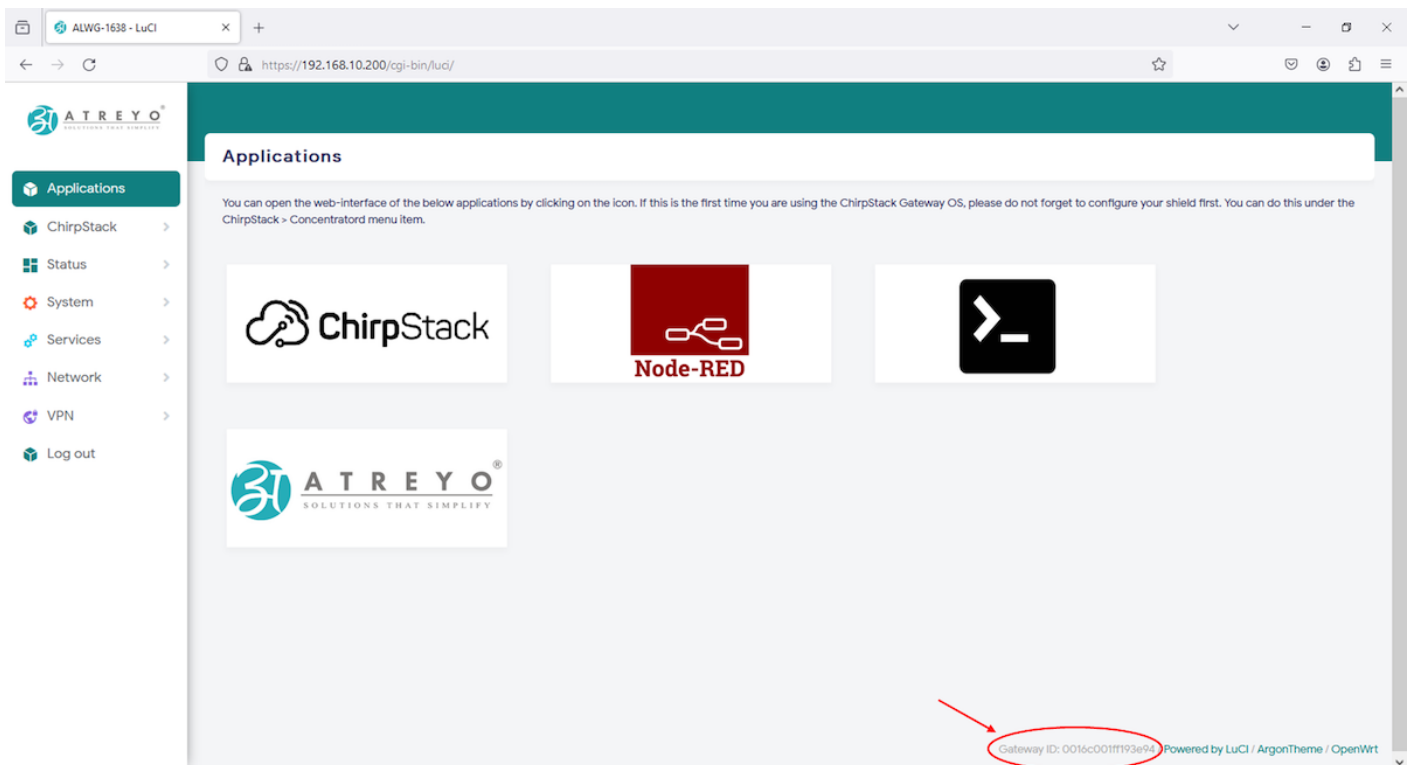
It will open another page and ask for Gateway Name, it's EUI and any description you want to add for sack of your application purpose.



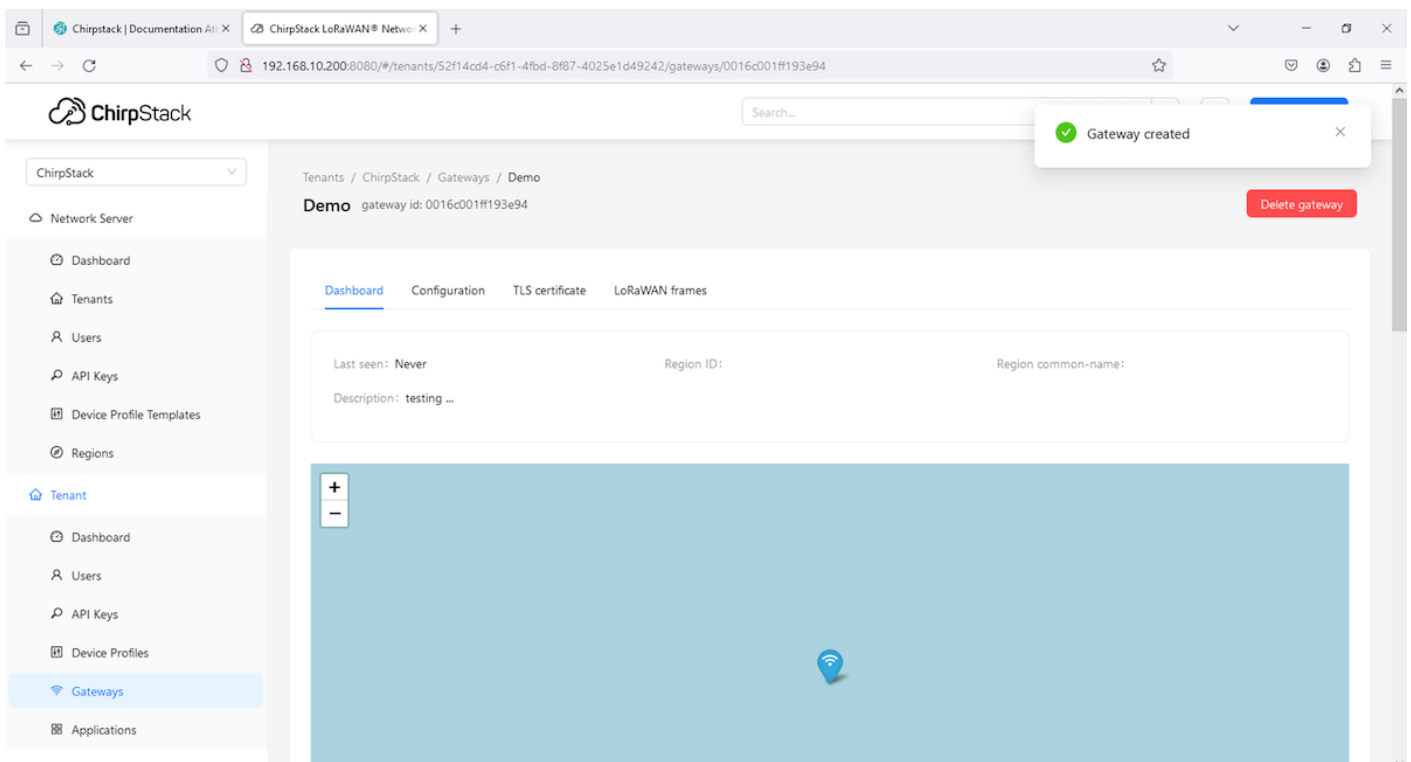
You can add data as per need and **Submit**.



Makesure to findout Gateway ID from gateway webUI as shown in below image.



After submitting all the data pop-up at upper right side will shown to confirm that gateway has been added succesfully. and it will open page where you can see Dashboard, it's configuration as well as option to see loraWAN frames.



Last seen will change in a while as well as GPS will be fetched from gateway itself , also the metadata will be fetch from gateway.

Gateway status is also visible in Dashboard section as well as in Gateway section.

ALWG-1638 - LuCI | ChirpStack LoRaWAN® Network

192.168.10.200:8080/#/tenants/52f14cd4-c6f1-4fbd-8f87-4025e1d49242

# ChirpStack

Search...

admin

ChirpStack

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Tenants / ChirpStack

ChirpStack tenant id: 52f14cd4-c6f1-4fbd-8f87-4025e1d49242 [Delete tenant](#)


Dashboard Configuration

Active devices

No data

Active gateways

Never seen Offline Online



Device data-rate usage

No data

# ChirpStack

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admin

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Tenants / ChirpStack / Gateways

Gateways [Add gateway](#) [Selected gateways](#)

|                                 | Last seen           | Gateway ID                      | Name | Region ID             | Region common-name |
|---------------------------------|---------------------|---------------------------------|------|-----------------------|--------------------|
| <input type="checkbox"/> Online | 2024-04-02 11:46:39 | <a href="#">0016c001f193e94</a> | Demo | <a href="#">in865</a> | IN865              |

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Click on Gateway ID to open Gateway ... (last seen and GPS has been updated after a while).

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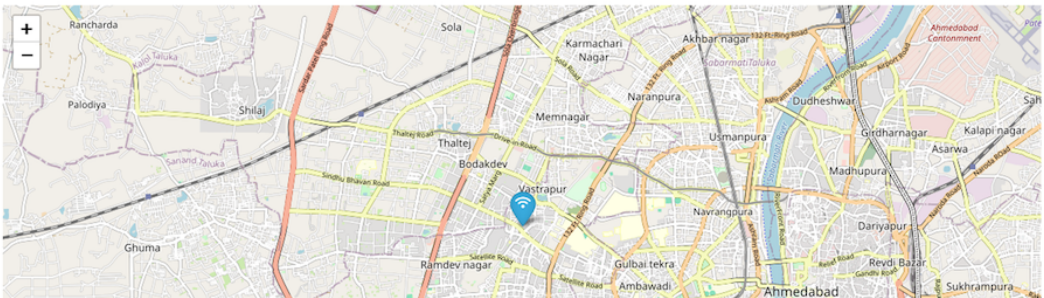
Tenants / ChirpStack / Gateways / Demo

Demo gateway id: 0016c001f193e94 [Delete gateway](#)

Dashboard Configuration TLS certificate LoRaWAN frames

Last seen: 2024-04-02 11:38:29 Region ID: in865 Region common-name: IN865

Description: testing ...



To change configuration or edit anything got to Configuration tab, you can add tag for easy traceability in Tag tab under Configuration tab as well as gateway metadata will be fetched as shown below.

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Demo gateway id: 0016c001ff193e94

Delete gateway

Dashboard

**Configuration**

TLS certificate

LoRaWAN frames

General

**Tags**

Metadata

+ Add tag

Submit

Tenants / ChirpStack / Gateways / Demo

Demo gateway id: 0016c001ff193e94

Delete gateway

Dashboard

**Configuration**

TLS certificate

LoRaWAN frames

General

**Tags**

**Metadata**

Metadata is pushed by the gateway on every stats update and can be used to expose information about the gateway like ip / hostname, serial number, HAL version.

|                      |                 |
|----------------------|-----------------|
| concentrator_version | 4.3.1           |
| config_version       | Value           |
| hal_version          | Version: 2.1.0: |
| model                | rak_5146        |
| region_common_name   | IN865           |
| region_config_id     | in865           |

Submit

In TLS certificate tab you can generate TLS certificate for specific application.

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Demo gateway id: 0016c001ff193e94

Delete gateway

Dashboard

Configuration

**TLS certificate**

LoRaWAN frames

The gateway client-certificate can be used to connect the gateway in case a client-certificate is required for authentication. Please note that this feature might not be available in case it has not been configured in the server configuration. After the certificate has been generated, store the content of the files on your gateway. **Please note the expiration of the certificate and make sure to renew the certificate on time!**

Generate certificate

Once can download by clicking on **Download** button or open another sidebar to view event by clicking on event.

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Demo gateway id: 0016c001ff193e94

Delete gateway

Dashboard Configuration TLS certificate LoRaWAN frames

Download

|                     |                   |                   |
|---------------------|-------------------|-------------------|
| 2024-04-01 18:51:22 | UnconfirmedDataUp | DevAddr: 01cae33b |
| 2024-04-01 18:50:50 | UnconfirmedDataUp | DevAddr: 005d7efe |

Download

|                     |                   |                   |
|---------------------|-------------------|-------------------|
| 2024-04-01 18:51:22 | UnconfirmedDataUp | DevAddr: 01cae33b |
| 2024-04-01 18:50:50 | UnconfirmedDataUp | DevAddr: 005d7efe |
| 2024-04-01 18:50:08 | UnconfirmedDataUp | DevAddr: 0067fdd9 |
| 2024-04-01 18:50:00 | UnconfirmedDataUp | DevAddr: 01447ec8 |
| 2024-04-01 18:49:41 | UnconfirmedDataUp | DevAddr: 01cae33b |

Gateway | Documentation Atr: X ChirpStack LoRaWAN® Netwo: X

192.168.10.200:8080/#/tenants/52f14cd4-c5f1-4fbd-8f87-4025e1d49242/gateways/0016c001ff193e94/frames

ChirpStack

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Tenants / ChirpStack / Gateways / Demo

Demo gateway id: 0016c001ff193e94

Dashboard Configuration TLS certificate LoRaWAN frames

|                     |                   |                   |
|---------------------|-------------------|-------------------|
| 2024-04-01 18:51:22 | UnconfirmedDataUp | DevAddr: 01cae33b |
| 2024-04-01 18:50:50 | UnconfirmedDataUp | DevAddr: 005d7efe |
| 2024-04-01 18:50:08 | UnconfirmedDataUp | DevAddr: 0067fdd9 |
| 2024-04-01 18:50:00 | UnconfirmedDataUp | DevAddr: 01447ec8 |
| 2024-04-01 18:49:41 | UnconfirmedDataUp | DevAddr: 01cae33b |
| 2024-04-01 18:49:40 | UnconfirmedDataUp | DevAddr: 00603b76 |
| 2024-04-01 18:49:27 | UnconfirmedDataUp | DevAddr: 00603b76 |

```
phy_payload: {} 3 keys
  mhdr: {} 2 keys
    m_type: "UnconfirmedDataUp"
    major: "LoRaWANR1"
  mic: {} 4 items
    0: 149
    1: 161
    2: 130
    3: 25
  payload: {} 3 keys
    f_port: 9
    fhdr: {} 4 keys
      devaddr: "01cae33b"
      f_cnt: 45
      f_ctrl: {} 6 keys
        ack: false
        adr: true
        adr_ack_req: false
        class_b: false
        f_opts_len: 0
        f_pending: false
        f_opts: {} 0 items
      frm_payload: "d662431b3430d5d18795ca46bd3fd8433083ab8ca5b8a46bddaee28bbfc1eb017989057a43b23ce813c7ea69cd6489ca36"
    rx_info: {} 1 item
      0: {} 7 keys
        context: "UcYm9Q=="
        crcStatus: "CRC_OK"
        gatewayId: "0016c001ff193e94"
        metadata: {} 2 keys
          region_common_name: "IN865"
          region_config_id: "in865"
        rssi: -113
        snr: 1.5
        uplinkId: 933966086
```

Revision #1

Created 25 February 2025 13:04:09 by Admin

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