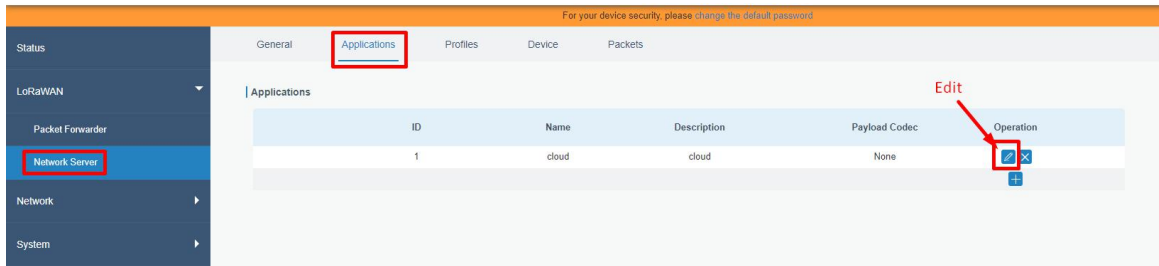


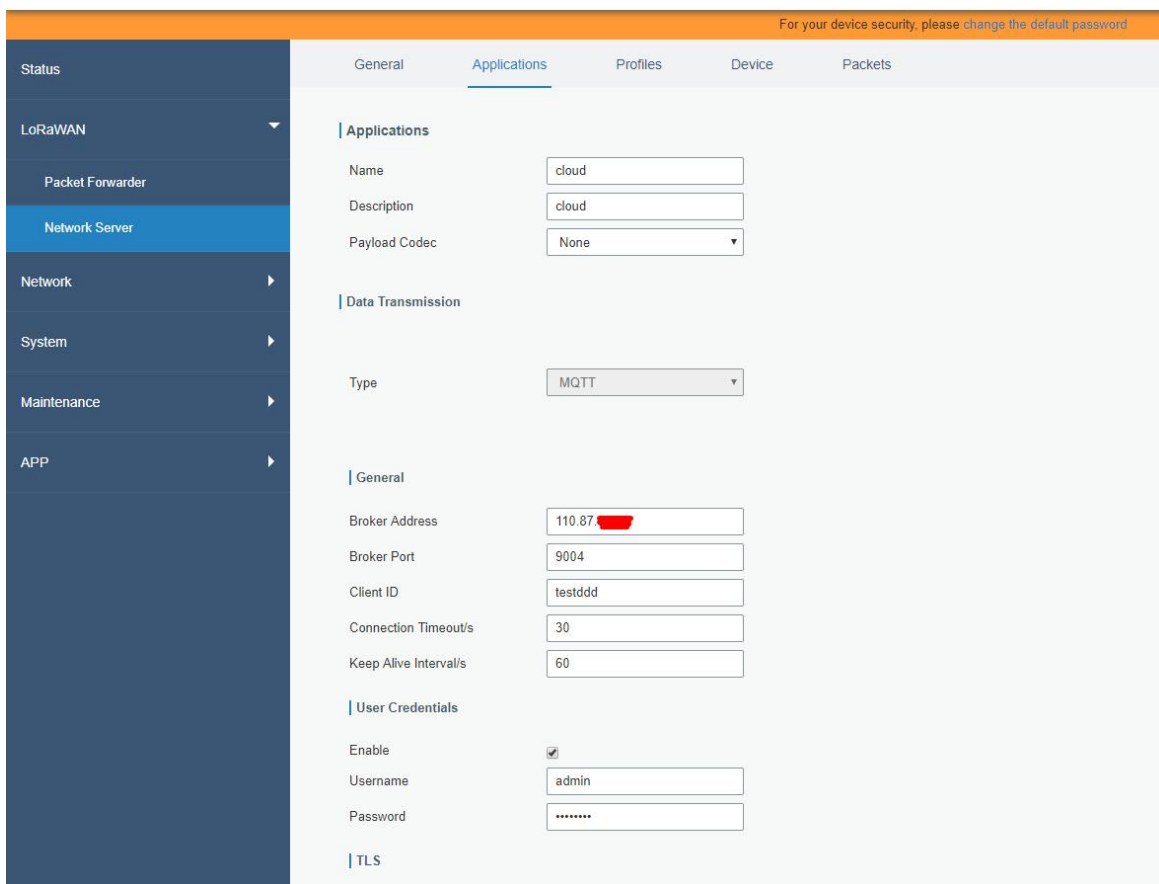
## 1. Gateway Configuration

**Note:** Gateway firmware version should be higher 80.0.0.28

1.1 Navigate to “LoRaWAN/Network Server/Applications/”, click the Edit button.



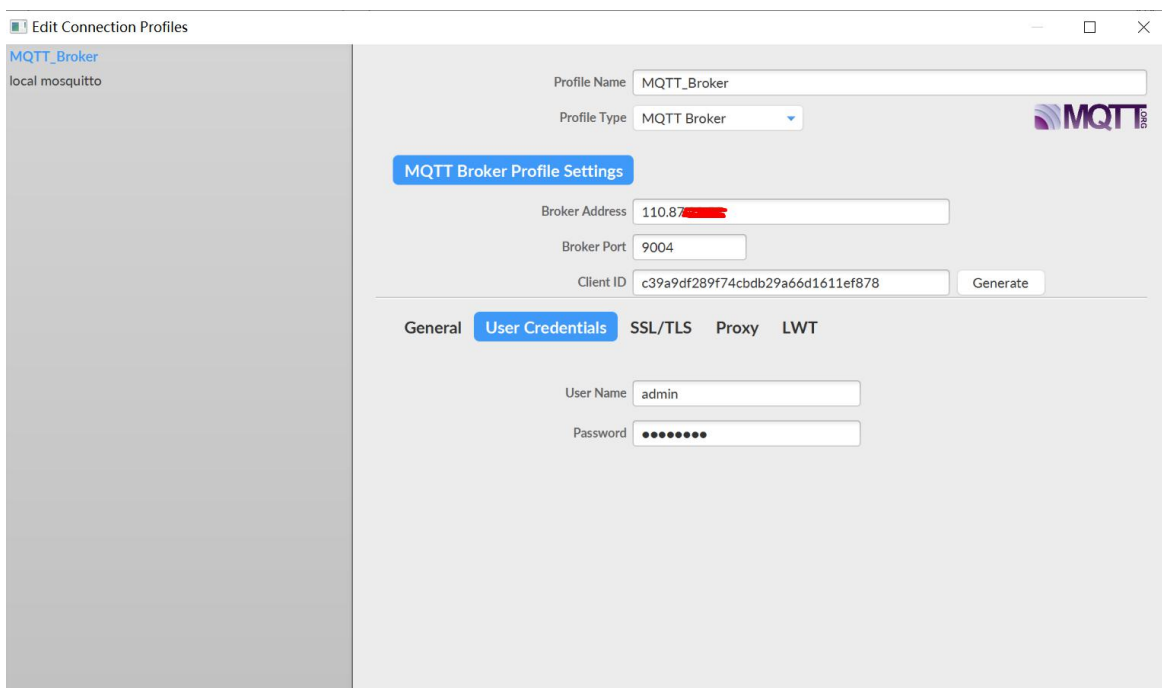
## 1.2 Configure MQTT Parameters



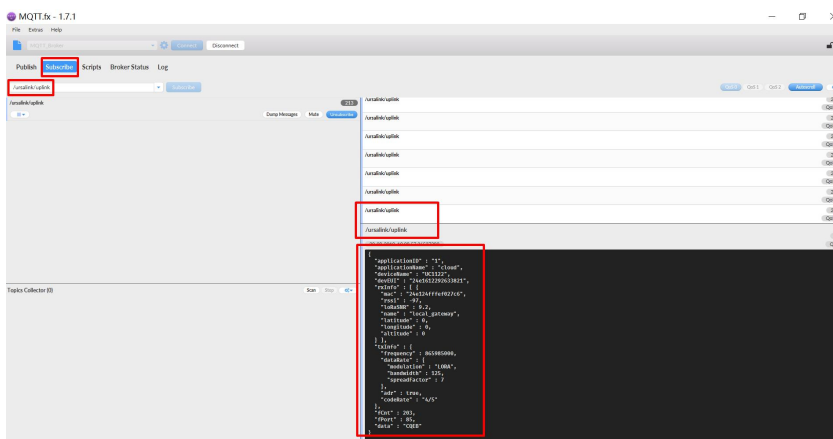
Data Type	topic	
Uplink data	<input type="text" value="/ursalink/uplink"/>	QoS 0
Downlink data	<input type="text" value="/ursalink/downlink/\$deveui"/>	QoS 0
Join notification	<input type="text" value="/ursalink/uplink/\$deveui/join"/>	QoS 0
ACK notification	<input type="text" value="/ursalink/uplink/\$deveui/ack"/>	QoS 0
Error notification	<input type="text" value="/ursalink/uplink/\$deveui/err"/>	QoS 0

## 2. MQTT.fx Connection

### 2.1 MQTT.fx Configuration



### 2.2 Subscribe Uplink Topic



## 2.3 Control the DO

### 2.3.1 When the downlink data topic is blank

Data Type	topic	
Uplink data	<input type="text" value="/ursalink/uplink"/>	QoS 0
Downlink data	<input type="text"/>	QoS 0
Join notification	<input type="text"/>	QoS 0
ACK notification	<input type="text"/>	QoS 0
Error notification	<input type="text"/>	QoS 0

Publish Topic Format :

**application/[applicationID/device/[devEUI]/tx**

Sample :

**application/1/device/24e1612292633821/tx**

MQTT.fx - 1.7.1

MQTT.fx - 1.7.1

File Extras Help

MQTT\_Broker

**Publish** Subscribe Scripts Broker Status Log

{"confirmed": true, "port": 85, "data": "CQEA/w=="}

### 2.3.2 When the downlink data topic is filled

Example: The UG85's topic: /ursalink/downlink/\$deveui

Data Type	topic	
Uplink data	<input type="text" value="/ursalink/uplink"/>	QoS 0
Downlink data	<input type="text" value="/ursalink/downlink/\$deveui"/>	QoS 0
Join notification	<input type="text" value="/ursalink/uplink/\$deveui/join"/>	QoS 0
ACK notification	<input type="text" value="/ursalink/uplink/\$deveui/ack"/>	QoS 0
Error notification	<input type="text" value="/ursalink/uplink/\$deveui/err"/>	QoS 0

Publish Topic Format :

**/ursalink/downlink/[devEUI]**

Sample :

**/ursalink/downlink/24e1612292633821**

MQTT.fx - 1.7.1

File Extras Help

MQTT\_Broker

**Publish** Subscribe Scripts Broker Status Log

{"confirmed": true, "port": 85, "data": "CQEA/w=="}

**Command:****For UC1122&UC1152**

Set DO1 high

`{"confirmed": true, "fport": 85, "data": "CQEA/w=="}`

Set DO1 low

`{"confirmed": true, "fport": 85, "data": "CQAA/w=="}`**For UC1114**

Set DO1 high

`{"confirmed": true, "fport": 85, "data": "CQEA/w=="}`

Set DO1 low

`{"confirmed": true, "fport": 85, "data": "CQAA/w=="}`

Set DO2 high

`{"confirmed": true, "fport": 85, "data": "CgEA/w=="}`

Set DO2 low

`{"confirmed": true, "fport": 85, "data": "CgAA/w=="}`