EDM C++ MQTT Demo User Guide

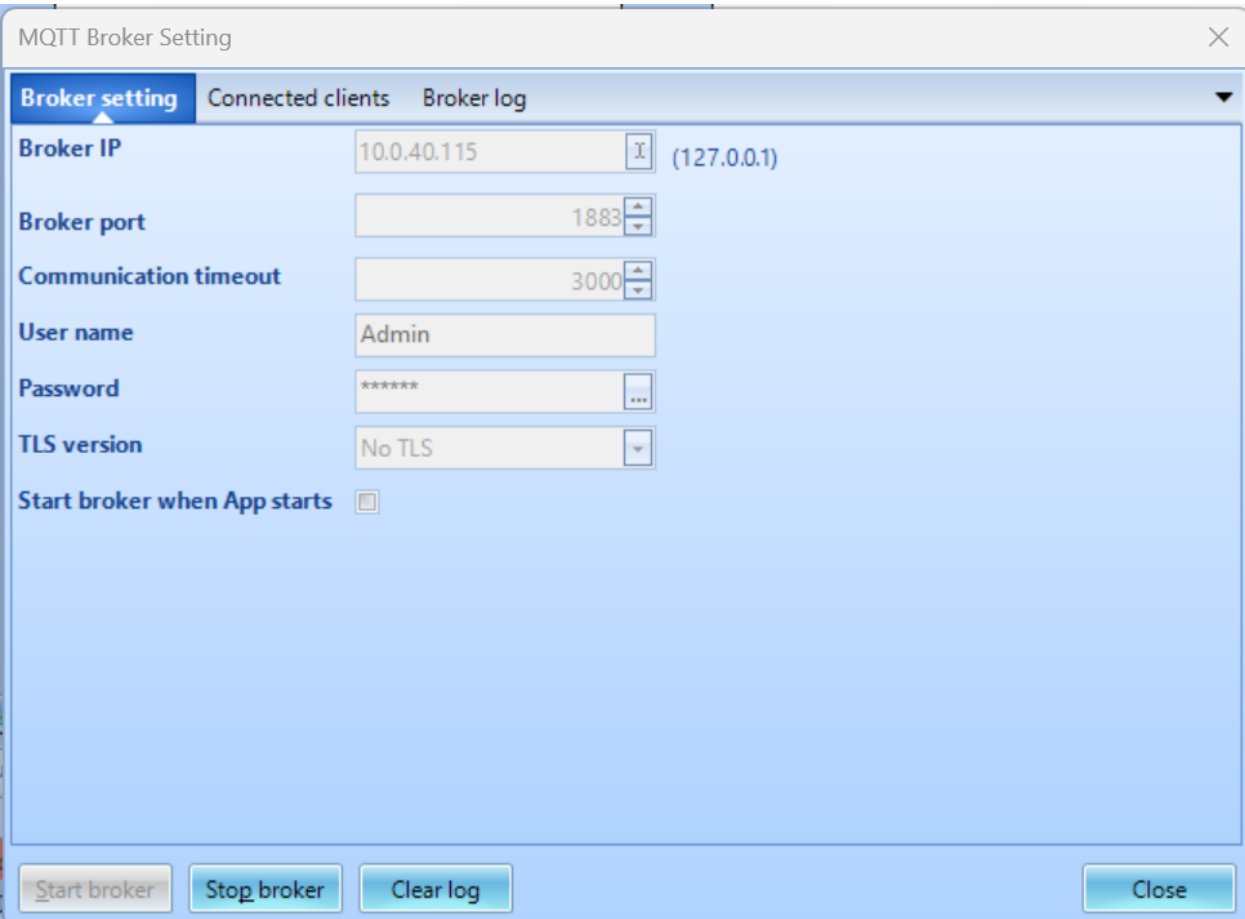## VCS/DSA

April 2, 2024

Contents

CONNECTING

1. Host: IP address of the MQTT broker
    See Broker IP in photo below
2. Port: Port of the MQTT broker
    See Broker port in photo below
3. Username: Username specified when initializing the MQTT broker
    See User name in photo below
4. Password: Password specified when initializing the MQTT broker
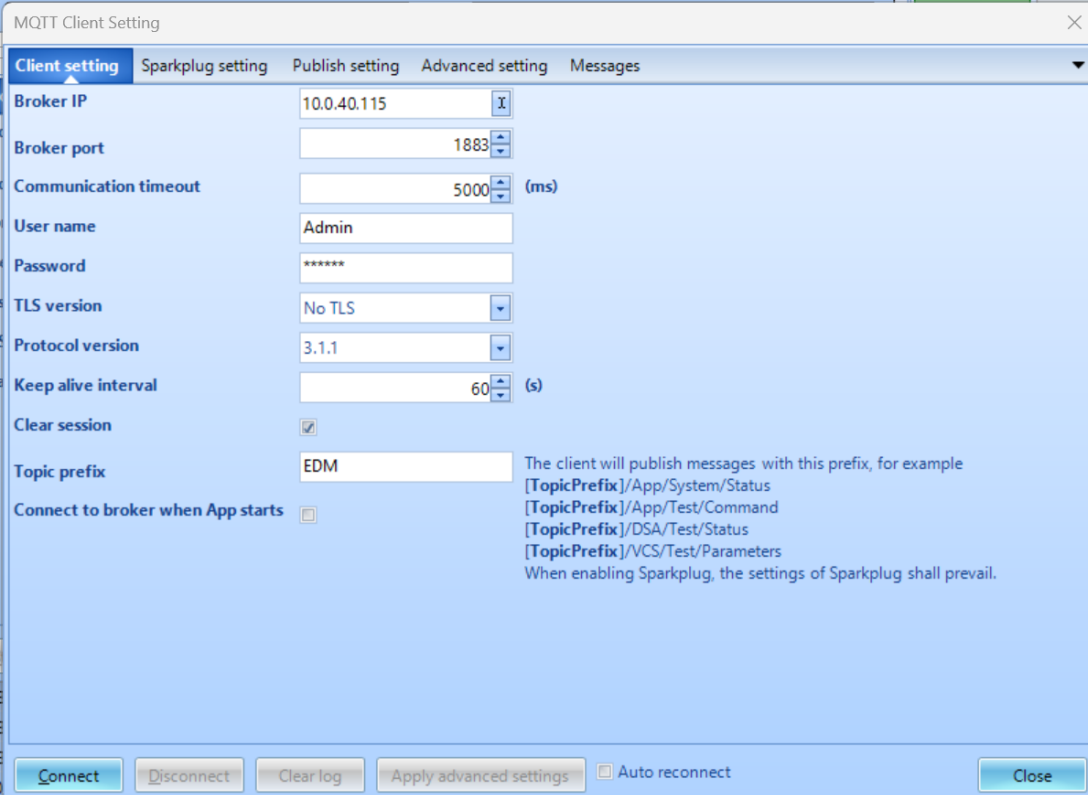   See Password in photo below

MQTT Broker Setting		✕
Broker setting Connected clients Broker log		▼
Broker IP	10.0.40.115 I	(127.0.0.1)
Broker port	1883	
Communication timeout	3000	
User name	Admin	
Password	******	
TLS version	No TLS	
Start broker when App starts	☐	
Start broker Stop broker Clear log		Close

5. Topic Prefix: Topic prefix specified when initializing the MQTT client
      See Topic Prefix in photo below

MQTT Client Setting		✕

Client setting Sparkplug setting Publish setting Advanced setting Messages ▼

Broker IP	10.0.40.115
Broker port	1883
Communication timeout	5000 (ms)
User name	Admin
Password	******
TLS version	No TLS
Protocol version	3.1.1
Keep alive interval	60 (s)
Clear session	☑
Topic prefix	EDM
Connect to broker when App starts	☐

The client will publish messages with this prefix, for example
[TopicPrefix]/App/System/Status
[TopicPrefix]/App/Test/Command
[TopicPrefix]/DSA/Test/Status
[TopicPrefix]/VCS/Test/Parameters
When enabling Sparkplug, the settings of Sparkplug shall prevail.

Connect   Disconnect   Clear log   Apply advanced settings   ☐ Auto reconnect   Close

COMMANDS

Run: Runs the open test
Parameters: None
Reference:

```
The commands you can perform are: Run (Runs Current Test), Stop (Stops Current Tes
t), Get (Gets Signal Data), Publish (Publishes a Topic and Payload), Subscribe (Su
bscribes to a Topic), and Exit (Exits Program). Please type the action you want to
 perform.
run
```

Stop: Stops the running test
Parameters: None
Reference:

```
The commands you can perform are: Run (Runs Current Test), Stop (Stops Current Tes
t), Get (Gets Signal Data), Publish (Publishes a Topic and Payload), Subscribe (Su
bscribes to a Topic), and Exit (Exits Program). Please type the action you want to
 perform.
stop
```

Get: Creates a file containing the APS of Channel 1 of the Spider 80x
Parameters: None
Reference:

```
The commands you can perform are: Run (Runs Current Test), Stop (Stops Current Tes
t), Get (Gets Signal Data), Publish (Publishes a Topic and Payload), Subscribe (Su
bscribes to a Topic), and Exit (Exits Program). Please type the action you want to
 perform.
get
```

Subscribe: Subscribes the MQTT Client to a topic
Parameters:
      Topic – the topic that the client will be subscribed to
Reference:

```
The commands you can perform are: Run (Runs Current Test), Stop (Stops Current Tes
t), Get (Gets Signal Data), Publish (Publishes a Topic and Payload), Subscribe (Su
bscribes to a Topic), and Exit (Exits Program). Please type the action you want to
 perform.
subscribe
Please enter the subscribe topic: GlobalParameter/Response
```

Publish: MQTT Client publishes a payload to a topic
Parameters:
      Topic – the topics that the client will publish to
      Payload – the payload that will be published

Reference:

```
Please enter the subscribe topic: GlobalParameter/Response
The commands you can perform are: Run (Runs Current Test), Stop (Stops Current Tes
t), Get (Gets Signal Data), Publish (Publishes a Topic and Payload), Subscribe (Su
bscribes to a Topic), and Exit (Exits Program). Please type the action you want to
 perform.
publish
Please enter the publish topic: GlobalParameter/Request
Please enter the payload: Test.Run.Parameter.ShakerName
```

Exit: Exits the program
Parameters: None
Reference:

```
The commands you can perform are: Run (Runs Current Test), Stop (Stops Current Test),
Get (Gets Signal Data), Publish (Publishes a Topic and Payload), Subscribe (Subscribes
 to a Topic), and Exit (Exits Program). Please type the action you want to perform.
 exit
```