

Help on module cayenne.client in cayenne:

NAME

cayenne.client

CLASSES

builtins.object
CayenneMQTTClient
CayenneMessage

```
class CayenneMQTTClient(builtins.object)
|   Cayenne MQTT Client class.
|
|   This is the main client class for connecting to Cayenne and sending and
receiving data.
|
|   Standard usage:
|   * Set on_message callback, if you are receiving data.
|   * Connect to Cayenne using the begin() function.
|   * Call loop() at intervals (or loop_forever() once) to perform message
processing.
|   * Send data to Cayenne using write functions: virtualWrite(),
celsiusWrite(), etc.
|   * Receive and process data from Cayenne in the on_message callback.
|
|   The on_message callback can be used by creating a function and assigning
it to CayenneMQTTClient.on_message member.
|   The callback function should have the following signature:
on_message(message)
|   The message variable passed to the callback is an instance of the
CayenneMessage class.
|
|   Methods defined here:
|
|   begin(self, username, password, clientid, hostname='mqtt.mydevices.com',
port=1883)
|       Initializes the client and connects to Cayenne.
|
|       username is the Cayenne username.
|       password is the Cayenne password.
|       clientID is the Cayenne client ID for the device.
|       hostname is the MQTT broker hostname.
|       port is the MQTT broker port. Use port 8883 for secure connections.
|
|   celsiusWrite(self, channel, value)
|       Send a Celsius value to Cayenne.
|
|       channel is the Cayenne channel to use.
|       value is the data value to send.
|
|   fahrenheitWrite(self, channel, value)
|       Send a Fahrenheit value to Cayenne.
|
|       channel is the Cayenne channel to use.
|       value is the data value to send.
|
|   getCommandTopic(self)
|       Get the command topic string.
|
|   getDataTopic(self, channel)
|       Get the data topic string.
|
|       channel is the channel to send data to.
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    getResponseTopic(self)
        Get the response topic string.

    hectoPascalWrite(self, channel, value)
        Send a hectopascal value to Cayenne.

        channel is the Cayenne channel to use.
        value is the data value to send.

    kelvinWrite(self, channel, value)
        Send a kelvin value to Cayenne.

        channel is the Cayenne channel to use.
        value is the data value to send.

    loop(self)
        Process Cayenne messages.

        This should be called regularly to ensure Cayenne messages are sent
and received.

    loop_forever(self)
        Process Cayenne messages in a blocking loop that runs forever.

    luxWrite(self, channel, value)
        Send a lux value to Cayenne.

        channel is the Cayenne channel to use.
        value is the data value to send.

    mqttPublish(self, topic, payload)
        Publish a payload to a topic

        topic is the topic string.
        payload is the payload data.

    pascalWrite(self, channel, value)
        Send a pascal value to Cayenne.

        channel is the Cayenne channel to use.
        value is the data value to send.

    responseWrite(self, msg_id, error_message)
        Send a command response to Cayenne.

        This should be sent when a command message has been received.
        msg_id is the ID of the message received.
        error_message is the error message to send. This should be set to
None if there is no error.

    virtualWrite(self, channel, value, dataType='', dataUnit='')
        Send data to Cayenne.

        channel is the Cayenne channel to use.
        value is the data value to send.
        dataType is the type of data.
        dataUnit is the unit of the data.

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Data descriptors defined here:

__dict__
    dictionary for instance variables (if defined)

```

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|   __weakref__
|       list of weak references to the object (if defined)
|
|   -----
|   Data and other attributes defined here:
|
|   client = None
|
|   connected = False
|
|   on_message = None
|
|   reconnect = False
|
|   rootTopic = ''
|
class CayenneMessage(builtins.object)
|   CayenneMessage(msg)
|
|   This is a class that describes an incoming Cayenne message. It is
|   passed to the on_message callback as the message parameter.
|
|   Members:
|
|   client_id : String. Client ID that the message was published on.
|   topic : String. Topic that the message was published on.
|   channel : Int. Channel that the message was published on.
|   msg_id : String. The message ID.
|   value : String. The message value.
|
|   Methods defined here:
|
|   __init__(self, msg)
|       Initialize self.  See help(type(self)) for accurate signature.
|
|   __repr__(self)
|       Return repr(self).
|
|   -----
|   Data descriptors defined here:
|
|   __dict__
|       dictionary for instance variables (if defined)
|
|   __weakref__
|       list of weak references to the object (if defined)

```

FUNCTIONS

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    on_connect(client, cayenne, flags, rc)
        # The callback for when the client receives a CONNACK response from the
server.

    on_disconnect(client, cayenne, rc)
        # The callback for when the client disconnects from the server.

    on_message(client, cayenne, msg)
        # The callback for when a PUBLISH message is received from the server.

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DATA

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COMMAND_TOPIC = 'cmd'
DATA_TOPIC = 'data'
PROTOCOL_TLSv1_2 = <_SSLMethod.PROTOCOL_TLSv1_2: 5>
RESPONSE_TOPIC = 'response'
TYPE_BAROMETRIC_PRESSURE = 'bp'

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TYPE_BATTERY = 'batt'  
TYPE_LUMINOSITY = 'lum'  
TYPE_PROXIMITY = 'prox'  
TYPE_RELATIVE_HUMIDITY = 'rel_hum'  
TYPE_TEMPERATURE = 'temp'  
TYPE_VOLTAGE = 'voltage'  
UNIT_CELSIUS = 'c'  
UNIT_CENTIMETER = 'cm'  
UNIT_DIGITAL = 'd'  
UNIT_FAHRENHEIT = 'f'  
UNIT_HECTOPASCAL = 'hpa'  
UNIT_KELVIN = 'k'  
UNIT_LUX = 'lux'  
UNIT_METER = 'm'  
UNIT_MILLIVOLTS = 'mv'  
UNIT_PASCAL = 'pa'  
UNIT_PERCENT = 'p'  
UNIT_RATIO = 'r'  
UNIT_UNDEFINED = 'null'  
UNIT_VOLTS = 'v'
```

VERSION

1.1.0

FILE

c:\program files (x86)\python37-32\lib\site-packages\cayenne\client.py