
psrt-py documentation

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<https://github.com/alttch/psrt-py>

Client usage example:

```
from psrt import Client
import time

def process_message(client, userdata, message):
    print(message.topic)
    print(message.payload)

client = Client(path='localhost:2873')
# client.tls = True
# client.tls_ca = '/opt/workstuff/psrt/certs/ca.crt'
# client.need_data_socket = False
client.on_message = process_message
client.connect()
client.subscribe('test')
client.subscribe_bulk(['test2', '#'])
client.unsubscribe('test')
client.unsubscribe_bulk(['test2', '#'])
client.subscribe('#')
for _ in range(3):
    client.publish('unit/tests/test1', 'hello')
    time.sleep(1)
client.bye()
```

exception `psrt.AccessError`

class `psrt.Client(**kwargs)`

PSRT client

Initialize PSRT client

Additioanal properties which can be set directly to client object:

- `on_message = on_message(client, userdata, message)` # message handler
- `on_connect(self, client, userdata, flags, rc)` # connect handler

(as the connection is performed in the current thread, `on_connect` is used for paho-mqtt compat. only)

Optional:

- `path`: host:port or (host, port) tuple
- `user`: user name
- `password`: password
- `timeout`: client timeout
- `buf_size`: socket and message buffer (set 100K+ for large frames)
- `userdata`: anything useful
- `tls`: use TLS (default: False)
- `tls_ca`: path to an alternative CA file

bye()

End communication

connect(*host=None, port=2873, keepalive=None*)

Connect the client

Optional:

- **host**: override server host
- **port**: override server port
- **keepalive**: not used, for paho-mqtt compat-only

connect_cluster(*paths, randomize=True*)

Connect the client to PSRT cluster

If randomize parameter is set to False, the nodes are chosen in the listed order

Parameters

paths – list of node paths (host:port or tuples)

Optional:

- **randomize**: choose random node (default: True)

Returns

Successful node path if connected

Raises

RuntimeError – if no nodes available

is_connected()

Check is the client connected

publish(*topic, message, qos=None, retain=None*)

Publish a message

Parameters

- **topic** – topic name
- **message** – message (string, bytes or anything which can be str())

Optional:

- **qos**: not used, for paho-mqtt compat-only
- **retain**: not used, for paho-mqtt compat-only

subscribe(*topic, qos=None*)

Subscribe to a topic

Parameters

topic – topic name

Optional:

- **qos**: not used, for paho-mqtt compat-only

subscribe_bulk(*topics*)

Subscribe to topics

Parameters

topics – topic names (list or tuple)

Optional:

- **qos**: not used, for paho-mqtt compat-only

unsubscribe(*topic*)

Unsubscribe from a topic

Parameters

topic – topic name

Optional:

- **qos**: not used, for paho-mqtt compat-only

unsubscribe_bulk(*topics*)

Unsubscribe from topics

Parameters

topics – topic names (list or tuple)

Optional:

- **qos**: not used, for paho-mqtt compat-only

`psrt.pub_udp(target, topic, message, need_ack=True, check_ack_src=True, **kwargs)`

Publish message with UDP frame

Parameters

- **target** – host:port or (host, port) tuple
- **topic** – topic to publish
- **message** – message (string, bytes or anything which can be str())

Optional:

- **need_ack**: require server acknowledge (default: True)
- **check_ack_src**: check acknowledge source (host/port, default: True)
- **user**: user name
- **password**: password
- **timeout**: socket timeout

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