Mosquitto MQTT broker and clients

CONCEPTS

Clients never talk to each other: publishers and subscribers meet at a topic on the broker.

Publisher mosquitto_pub
↓ topic + payload
Broker mosquitto
↓ matching filters
Subscriber mosquitto_sub

Topic wildcards

Filter	Matches
+	exactly one level: a/+/c
#	all remaining levels, last only: a/#
$SYS/#	broker stats; not matched by a lone #

Quote '#' and '$SYS' in the shell, or it expands or becomes a comment.

PUBLISH

mosquitto_pub -t *<topic>* **-m** *<msg>*
Publish one message

mosquitto_pub -t *<topic>* **-f** *<file>*
Send a file as the payload

<cmd> **| mosquitto_pub -t** *<topic>* **-l**
Send each stdin line as a message

mosquitto_pub -r -t *<topic>* **-m** *<msg>*
Retain message on the broker

mosquitto_pub -q *<0|1|2>* **-t** *<topic>* **-m** *<msg>*
Set delivery guarantee

SUBSCRIBE

mosquitto_sub -t *<topic>*
Print each payload

mosquitto_sub -v -t *<topic>*
Prefix payloads with the topic

mosquitto_sub -t *<a>* **-t** *<b>*
Subscribe to several filters

mosquitto_sub -q *<0|1|2>* **-t** *<topic>*
Set subscription QoS

SUBSCRIBE (cont.)

mosquitto_sub -C *<n>* **-t** *<topic>*
Exit after n messages

mosquitto_sub -W *<s>* **-t** *<topic>*
Exit after s seconds

mosquitto_sub -R -t *<topic>*
Skip retained messages

mosquitto_sub -F "%t %p" -t *<topic>*
Custom output format

CONNECTION & AUTH

-h *<host>* **-p** *<port>*
Broker address (localhost:1883)

-u *<user>* **-P** *<password>*
Username and password

-i *<id>*
Fixed client ID

-L mqtt://*<url>*
Everything in one URL

-V *<5|311|31>*
MQTT protocol version

-c -i *<id>*
Persistent session

-d
Print protocol debug output

TLS

--cafile *<ca.pem>*
Trust this CA certificate

--cert *<cert.pem>* **--key** *<key.pem>*
Client certificate login

USERS & PASSWORDS

mosquitto_passwd -c *<file>* *<user>*
Create file with a user

mosquitto_passwd *<file>* *<user>*
Add a user or change password

mosquitto_passwd -D *<file>* *<user>*
Delete a user

Point password_file at the file in mosquitto.conf and set allow_anonymous false; the broker needs a reload (SIGHUP) for changes.