24CYS333 - IoT - MQTT Implementation

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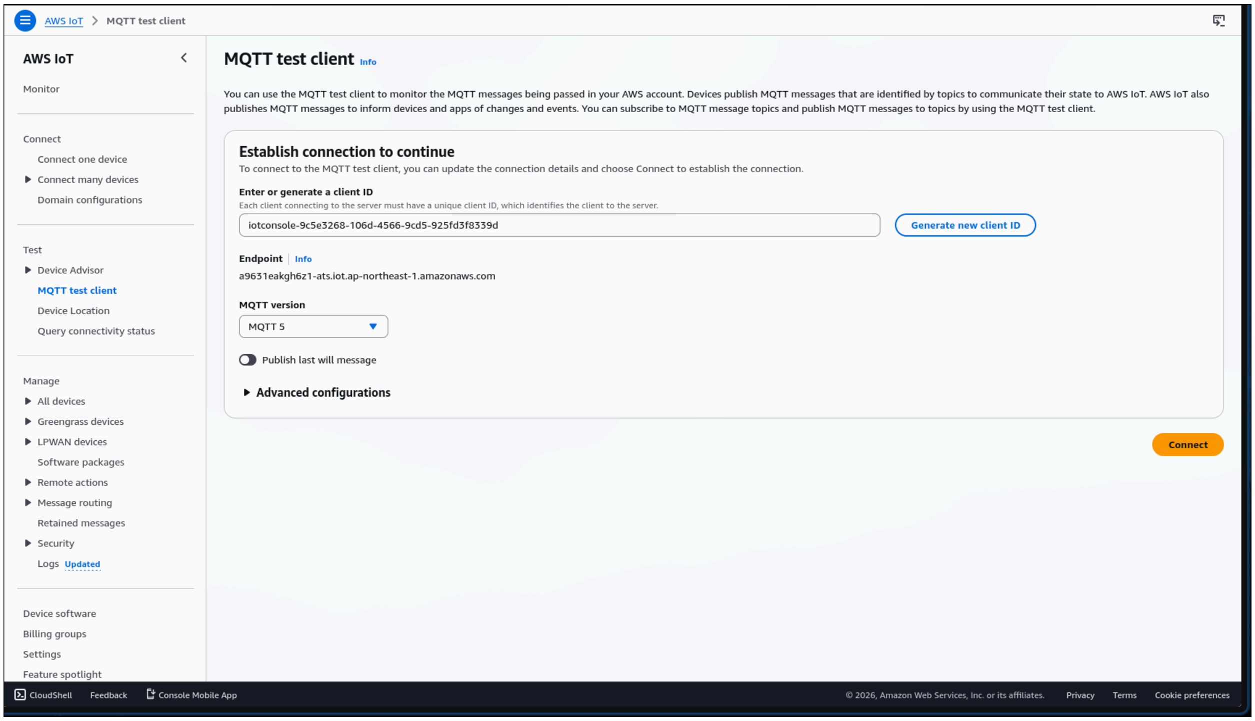
Go to the AWS IoT Section and And go to MQTT Test client



MQTT test client Info

You can use the MQTT test client to monitor the MQTT messages being passed in your AWS account. Devices publish MQTT messages that are identified by topics to communicate their state to AWS IoT. AWS IoT also publishes MQTT messages to inform devices and apps of changes and events. You can subscribe to MQTT message topics and publish MQTT messages to topics by using the MQTT test client.

Establish connection to continue

To connect to the MQTT test client, you can update the connection details and choose Connect to establish the connection.

Enter or generate a client ID

Each client connecting to the server must have a unique client ID, which identifies the client to the server.

iotconsole-9c5e3268-106d-4566-9cd5-925fd3f8339d

Generate new client ID

Endpoint | Info

a9631eakgh6z1-ats.iot.ap-northeast-1.amazonaws.com

MQTT version

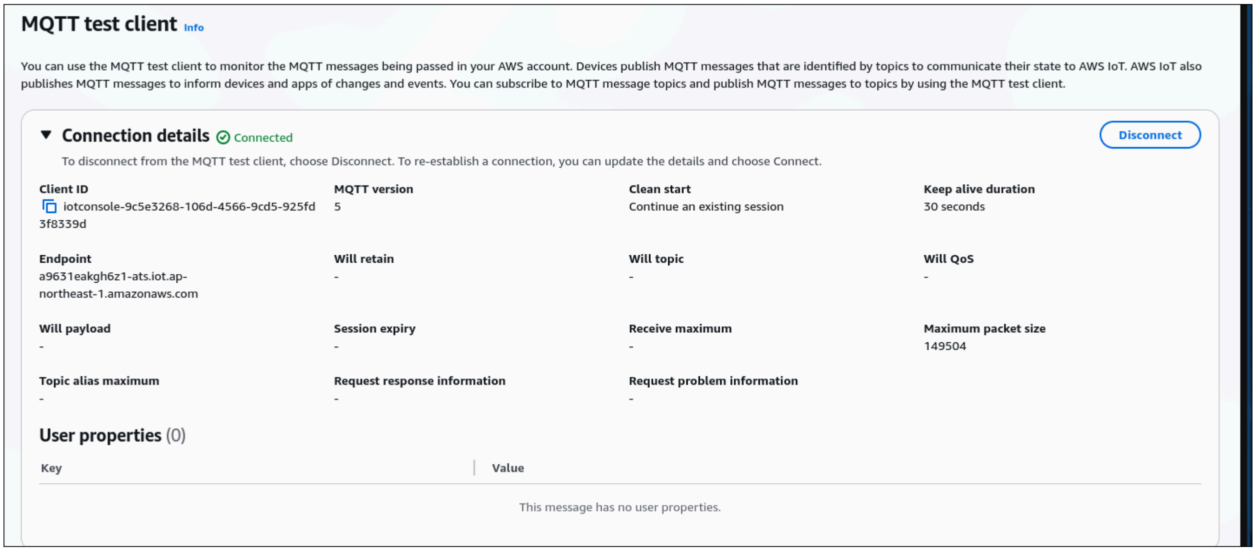
MQTT 5 ▼

○ Publish last will message

▶ Advanced configurations

Connect

Then connect to the MQTT Test Client



MQTT test client

You can use the MQTT test client to monitor the MQTT messages being passed in your AWS account. Devices publish MQTT messages that are identified by topics to communicate their state to AWS IoT. AWS IoT also publishes MQTT messages to inform devices and apps of changes and events. You can subscribe to MQTT message topics and publish MQTT messages to topics by using the MQTT test client.

Connection details

To disconnect from the MQTT test client, choose Disconnect. To re-establish a connection, you can update the details and choose Connect.

Client ID
iotconsole-9c5e3268-106d-4566-9cd5-925fd3f8339d

MQTT version
5

Clean start
Continue an existing session

Keep alive duration
30 seconds

Endpoint
a9631eakgh6z1-ats.iot.ap-northeast-1.amazonaws.com

Will retain
-

Will topic
-

Will QoS
-

Will payload
-

Session expiry
-

Receive maximum
-

Maximum packet size
149504

Topic alias maximum
-

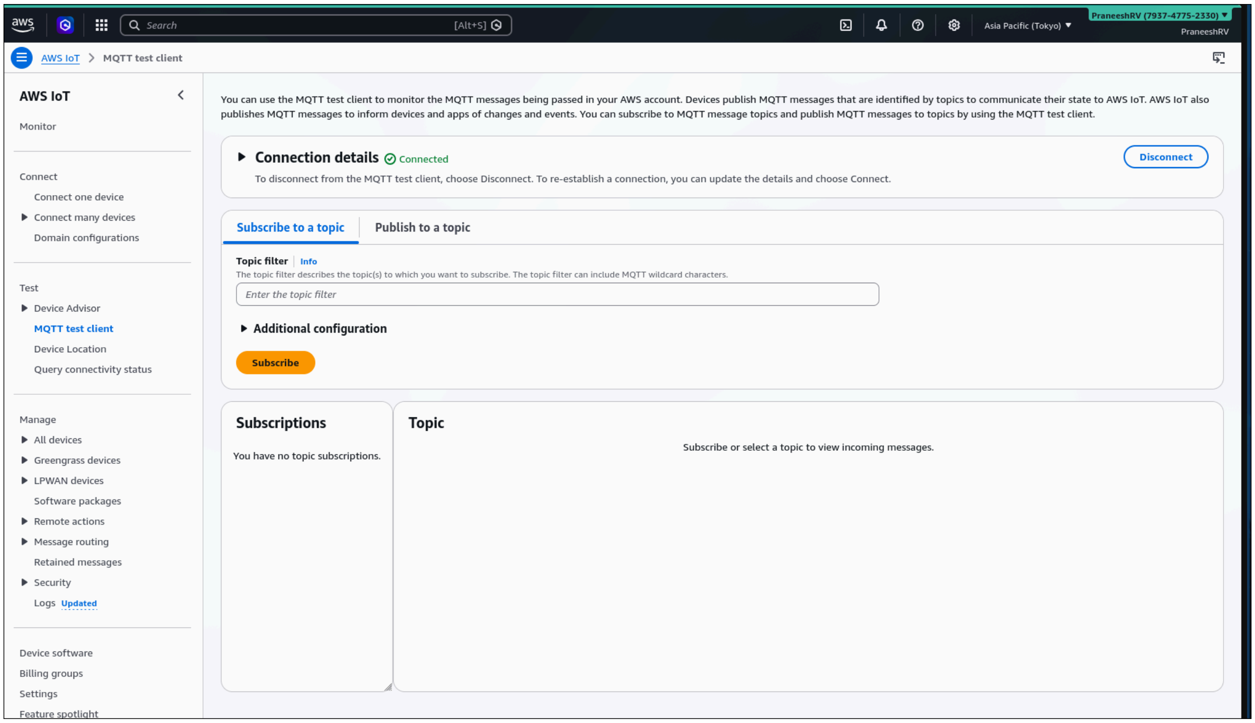
Request response information
-

Request problem information
-

User properties (0)

Key	Value

This message has no user properties.



You can use the MQTT test client to monitor the MQTT messages being passed in your AWS account. Devices publish MQTT messages that are identified by topics to communicate their state to AWS IoT. AWS IoT also publishes MQTT messages to inform devices and apps of changes and events. You can subscribe to MQTT message topics and publish MQTT messages to topics by using the MQTT test client.

▶ Connection details

To disconnect from the MQTT test client, choose Disconnect. To re-establish a connection, you can update the details and choose Connect.

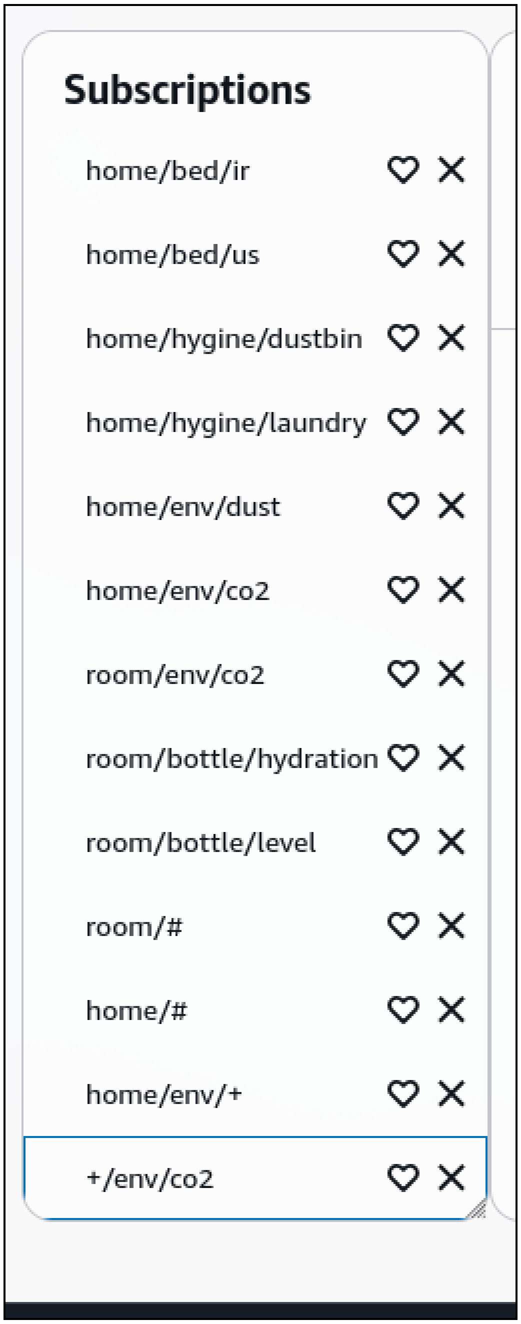
Topic filter

The topic filter describes the topic(s) to which you want to subscribe. The topic filter can include MQTT wildcard characters.

You have no topic subscriptions.

Subscribe or select a topic to view incoming messages.

Now subscribe to the required publishers



Subscriptions

home/bed/ir

home/bed/us

home/hygine/dustbin

home/hygine/laundry

home/env/dust

home/env/co2

room/env/co2

room/bottle/hydration

room/bottle/level

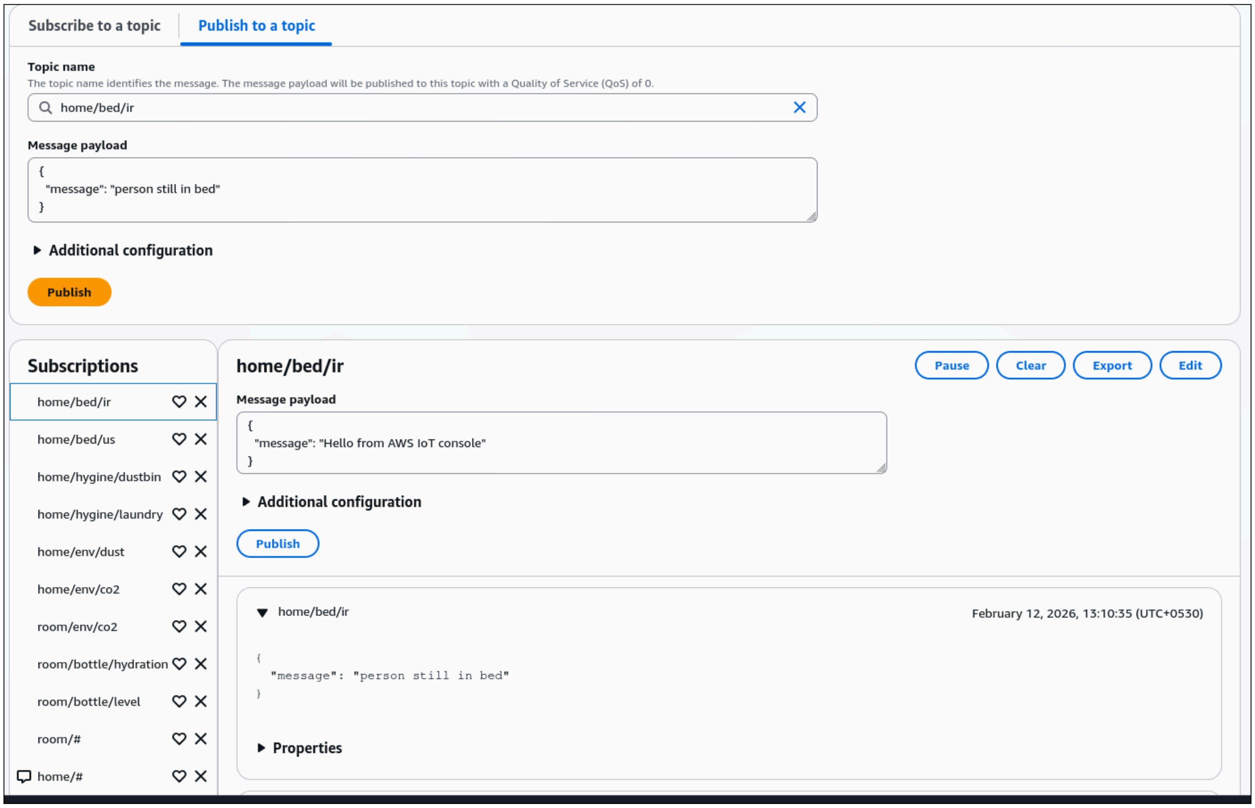
room/#

home/#

home/env/+

+/env/co2

Now publish messages



Topic name

The topic name identifies the message. The message payload will be published to this topic with a Quality of Service (QoS) of 0.

home/bed/ir

Message payload

```
{
  "message": "person still in bed"
}
```

Subscriptions

- home/bed/ir
- home/bed/us
- home/hygine/dustbin
- home/hygine/laundry
- home/env/dust
- home/env/co2
- room/env/co2
- room/bottle/hydration
- room/bottle/level
- room/#
- home/#

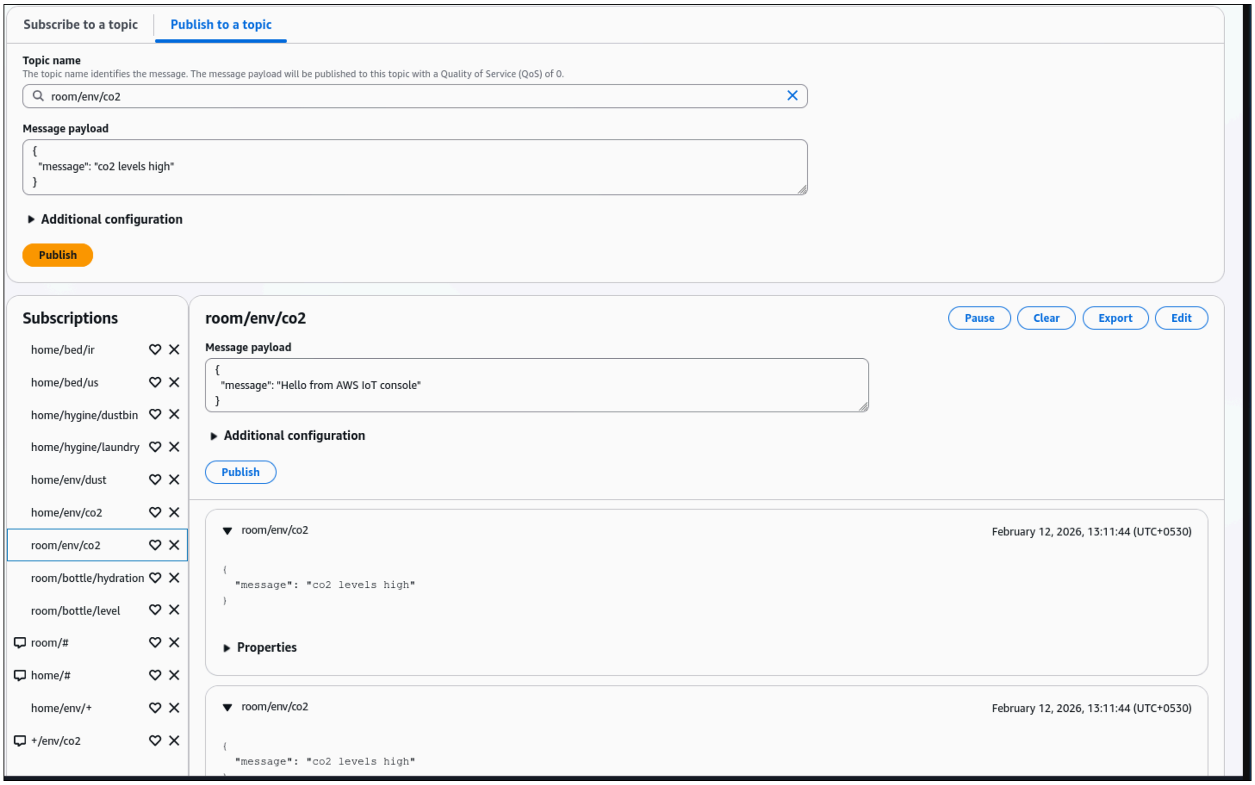
home/bed/ir

Message payload

```
{
  "message": "Hello from AWS IoT console"
}
```

home/bed/ir February 12, 2026, 13:10:35 (UTC+0530)

```
{
  "message": "person still in bed"
}
```



Topic name

The topic name identifies the message. The message payload will be published to this topic with a Quality of Service (QoS) of 0.

room/env/co2

Message payload

```
{
  "message": "co2 levels high"
}
```

Subscriptions

- home/bed/ir
- home/bed/us
- home/hygine/dustbin
- home/hygine/laundry
- home/env/dust
- home/env/co2
- room/env/co2
- room/bottle/hydration
- room/bottle/level
- room/#
- home/#
- home/env/+
- +/env/co2

room/env/co2

Message payload

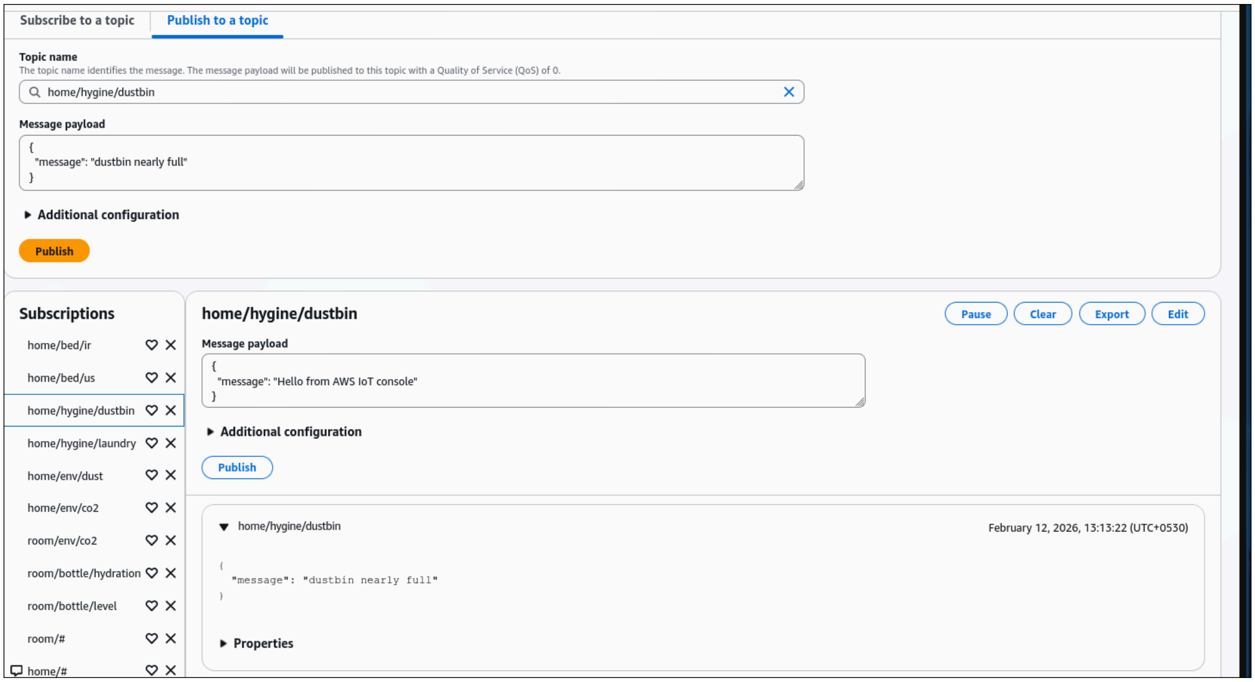
```
{
  "message": "Hello from AWS IoT console"
}
```

room/env/co2 February 12, 2026, 13:11:44 (UTC+0530)

```
{
  "message": "co2 levels high"
}
```

room/env/co2 February 12, 2026, 13:11:44 (UTC+0530)

```
{
  "message": "co2 levels high"
```



Topic name
The topic name identifies the message. The message payload will be published to this topic with a Quality of Service (QoS) of 0.
home/hygine/dustbin

Message payload
```
{
  "message": "dustbin nearly full"
}
```

Subscriptions
- home/bed/ir
- home/bed/us
- home/hygine/dustbin
- home/hygine/laundry
- home/env/dust
- home/env/co2
- room/env/co2
- room/bottle/hydration
- room/bottle/level
- room/#
- home/#

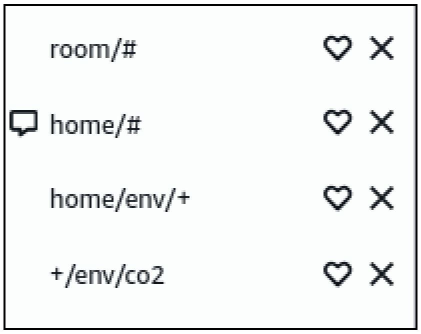
home/hygine/dustbin

Message payload
```
{
  "message": "Hello from AWS IoT console"
}
```

home/hygine/dustbin February 12, 2026, 13:13:22 (UTC+0530)
```
{
  "message": "dustbin nearly full"
}
```

Using wildcards

I used the following wildcards

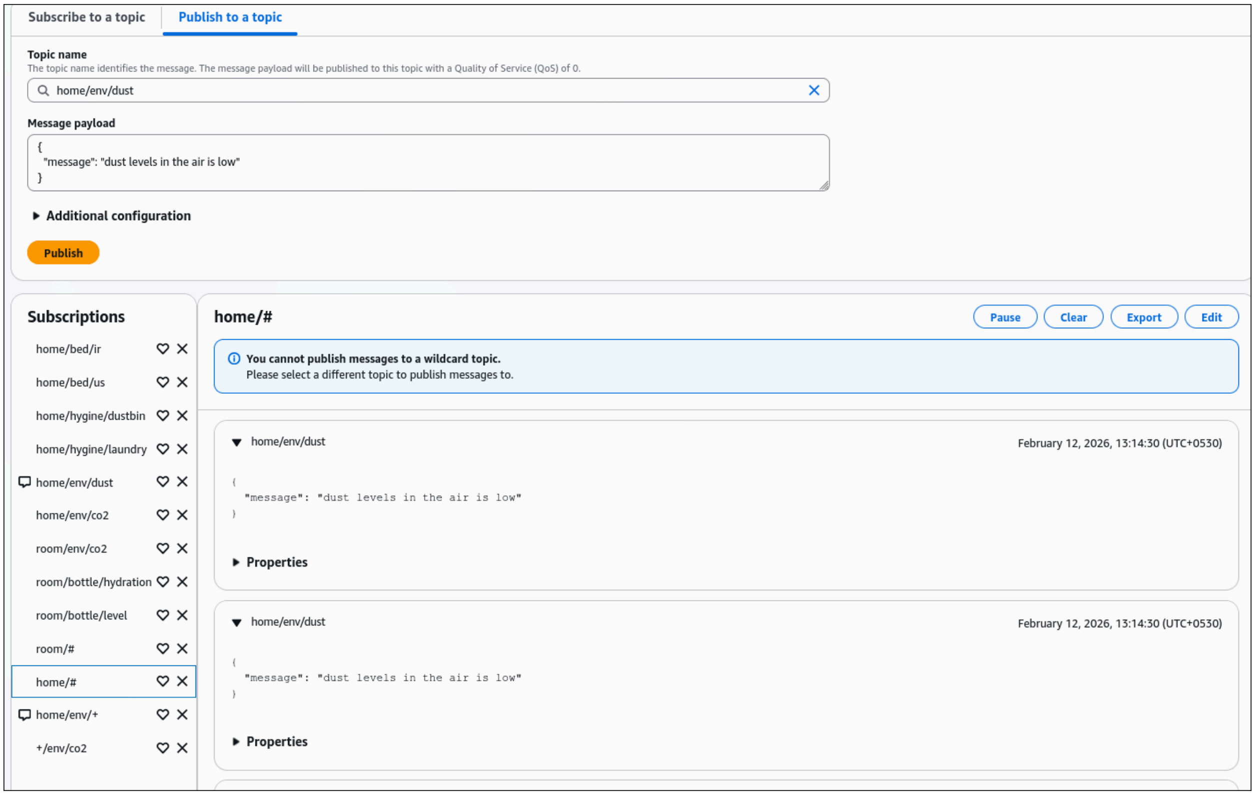


room/#

home/#

home/env/+

+/env/co2



Topic name

The topic name identifies the message. The message payload will be published to this topic with a Quality of Service (QoS) of 0.

home/env/dust

Message payload

```
{
  "message": "dust levels in the air is low"
}
```

Subscriptions

home/bed/ir

home/bed/us

home/hygine/dustbin

home/hygine/laundry

home/env/dust

home/env/co2

room/env/co2

room/bottle/hydration

room/bottle/level

room/#

home/#

home/env/+

+/env/co2

home/#

You cannot publish messages to a wildcard topic.
Please select a different topic to publish messages to.

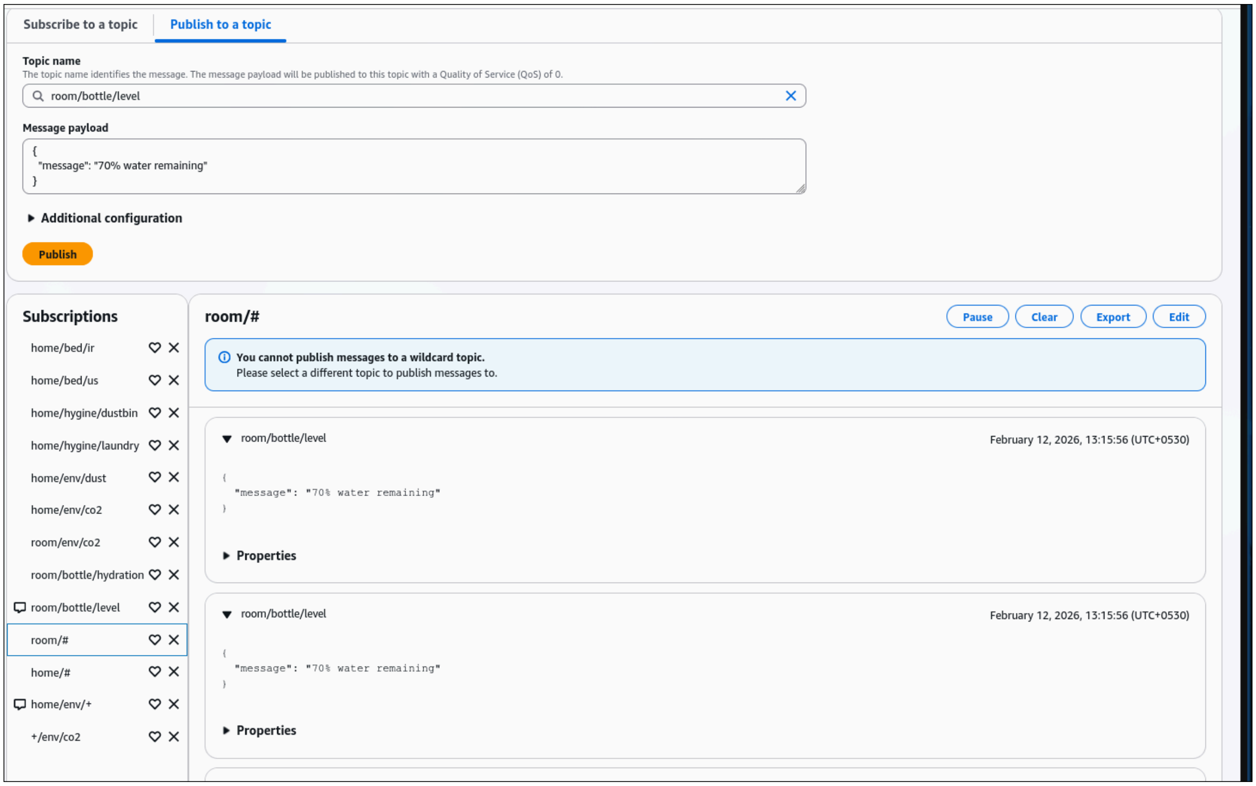
home/env/dust — February 12, 2026, 13:14:30 (UTC+0530)

```
{
  "message": "dust levels in the air is low"
}
```

home/env/dust — February 12, 2026, 13:14:30 (UTC+0530)

```
{
  "message": "dust levels in the air is low"
}
```

Sending to home/env/dust sends it to home/# and home/env/+ as well



Topic name

The topic name identifies the message. The message payload will be published to this topic with a Quality of Service (QoS) of 0.

room/bottle/level

Message payload

```
{
 "message": "70% water remaining"
}
```

Subscriptions

- home/bed/ir
- home/bed/us
- home/hygine/dustbin
- home/hygine/laundry
- home/env/dust
- home/env/co2
- room/env/co2
- room/bottle/hydration
- room/bottle/level
- room/#
- home/#
- home/env/+
- +/env/co2

room/#

You cannot publish messages to a wildcard topic.
Please select a different topic to publish messages to.

room/bottle/level — February 12, 2026, 13:15:56 (UTC+0530)

```
{
  "message": "70% water remaining"
}
```

room/bottle/level — February 12, 2026, 13:15:56 (UTC+0530)

```
{
  "message": "70% water remaining"
}
```

Sending to /room/bottle/level also sends to room/#