

ifm mate – MQTT events

Base-Topic-Structure:

{CUSTOM_PREFIX}/ifm-mate/{CUSTOM_IDENTIFIER}/

If {CUSTOM_IDENTIFIER} is not defined in the ifm mate settings, the mac address is used as the identifier in the format 00-00-00-00-00-00.

{CUSTOM_PREFIX} is optional and can be defined in the ifm mate MQTT settings.

System

Topic:

{Base-Topic}/system

Triggered during system startup and shutdown

Payload:

- ts (Unix timestamp)
- state (string: "on" | "off")

Example:

```
01  {
02    "ts": 1738326038585,
03    "state": "on"
04  }
```

User authentication

Topic:

{Base-Topic}/authentication

Triggered at user login/logout

Payload:

- ts (Unix Timestamp)
- state (string: "logged_in" | "logged_out")
- uid (string)

Example:

```
01  {
02    "ts": 1738326038585,
03    "state": "logged_in",
04    "uid": "admin"
05  }
```

Topic

{Base-Topic}/authentication/error

Triggered on failed authentication attempt

Payload:

- ts (UTC Timestamp)
- uid (string)

Example:

```
01  {
02    "ts": 1738326038585,
03    "uid": "admin"
04  }
```

Workflow

Topic

{Base-Topic}/workflow

Triggered when loading/unloading a workflow

Payload:

- ts (UTC Timestamp)
- state (string: "loaded" | "unloaded")
- uid (string)
- workflow (object)

Example:

```
01  {
02    "ts": 1738326038585,
03    "state": "loaded",
04    "uid": "admin",
05    "workflow":
06      {
07        "id": "123456789012344",
08        "custom_ids": ["my custom id 1", "my custom id 2"],
09        "name": "workflow name",
10        "sap_order_id": "123456789",
11        "sap_confirmation_id": "123456789"
12      }
13  }
```

Topic

{Base-Topic}/workflow/process

Triggered every time the state of the loaded workflow changes.

Payload:

- ts (UTC Timestamp)
- state (string: "running" | "paused" | "stopped" | "error")
- uid (string)
- workflow (object)

Example:

```
01  {
02    "ts": 1738326038585,
03    "state": "running",
04    "uid": "admin",
05    "workflow":
06    {
07      "id": "123456789012344",
08      "custom_ids": ["my custom id 1", "my custom id 2"],
09      "name": "workflow name",
10      "sap_order_id": "123456789",
11      "sap_confirmation_id": "123456789"
12    }
13  }
```

Topic

{Base-Topic}/workflow/process/item

Triggered every time the production of an item is finalised. Either due to completeness or due to scrap.

Payload:

- *ts* (UTC Timestamp)
- *uid* (string)
- *itemId* (string) – A unique autogenerated id for a single item
- *finished* (true | false) – true on completion, false on scrap
- *errorPattern* (string) – Reported error pattern on scrap
- *processTime* (number [milliseconds]) – total process time of the item
- *pauseTime* (number [milliseconds]) – total pause time during the production of the item
- *workflow* (object)

Example:

```
01  {
02    "ts": 1738326038585,
03    "uid": "admin",
04    "itemId": "12345678912344",
05    "finished": "false",
06    "errorPattern": "Cold solder joint",
07    "processTime": 12345,
08    "pauseTime": 0,
09    "workflow":
10    {
11      "id": "123456789012344",
12      "custom_ids": ["my custom id 1", "my custom id 2"],
13      "name": "workflow name",
14      "sap_order_id": "123456789",
15      "sap_confirmation_id": "123456789"
16    }
17  }
```

Topic

{Base-Topic}/workflow/process/item/step

Triggered every time a single workflow step is finalised.

Payload:

- *ts* (UTC Timestamp)
- *uid* (string)
- *itemId* (string)

- *index* (number)
- *processTime* (number [milliseconds])
- *pauseTime*(number [milliseconds])
- *workflow* (object)

Example:

```

01  {
02    "ts": 1738326038585,
03    "uid": "admin",
04    "itemId": "12345678912344",
05    "index": 3,
06    "processTime": 1234,
07    "pauseTime": 0,
08    "workflow":
09    {
10      "id": "123456789012344",
11      "custom_ids": ["my custom id 1", "my custom id 2"],
12      "name": "workflow name",
13      "sap_order_id": "123456789",
14      "sap_confirmation_id": "123456789"
15    }
16  }

```

Topic

{Base-Topic}/workflow/process/event/pick

Triggered every time a worker picks an item. Regardless of the workflow step.

Payload:

- *ts* (UTC Timestamp)
- *uid* (string)
- *workflow* (object)
- *field* (object)

Example:

```

01  {
02    "ts": 1738326038585,
03    "uid": "admin",
04    "workflow":
05    {
06      "id": "123456789012344",
07      "custom_ids": ["my custom id 1", "my custom id 2"],
08      "name": "workflow name",
09      "sap_order_id": "123456789",
10      "sap_confirmation_id": "123456789"
11    },
12    "field":
13    {
14      "field_id": "123456789012344",
15      "custom_field_id": "1234",
16      "name": "screw"
17    }
18  }

```

Topic

{Base-Topic}/workflow/process/event/o2d5

Triggered every time a connected O2d5 sensor is triggered.

Payload:

- *ts* (UTC Timestamp)
- *uid* (string)
- *workflow* (object)
- *o2d5* (object)

Example:

```
01  {
02    "ts": 1738326038585,
03    "uid": "admin",
04    "workflow":
05    {
06      "id": "123456789012344",
07      "custom_ids": ["my custom id 1", "my custom id 2"],
08      "name": "workflow name",
09      "sap_order_id": "123456789",
10      "sap_confirmation_id": "123456789"
11    },
12    "o2d5":
13    {
14      "mac_address": "00:00:00:00:00:00",
15      "application_id": "01",
16      "name": "application name",
17      "passed": true
18    }
19  }
```