

# NetEase MQTT Interface

---

## version 0.1

2018-8-13

## Basic MQTT Topic Structure

`/prefix/[boxid]/[direction]/[type]/[subtype]`

- direction
  - command {% Cloud to box %}
  - edge {% Box to cloud %}
- type
  - management
  - livedata
  - alarmdata
  - historicdata
  - logdata
  - userdefine
- subtype

## Management

- Cloud query box model

`[direction] = command`

`[type] = management`

`[subtype] = modelquery`

```
topic = "/prefix/[boxid]/command/management/modelquery";
```

```
payload = {};
```

- Box feedback model

`[direction] = edge`

`[type] = management`

`[subtype] = modeldata`

```
topic = "/prefix/[boxid]/edge/management/modeldata";
```

```
payload = {  
  id: "",  
  name: "",  
  edgeModel: EdgeModelSchema,  
  extModel: ExtModelSchema  
};
```

- Cloud set box model

```
[direction] = command
```

```
[type] = management
```

```
[subtype] = modelset
```

```
topic = "/prefix/[boxid]/command/management/modelset";
```

```
payload = ModelSetSchema;
```

- Box feedback modelset result

```
[direction] = edge
```

```
[type] = management
```

```
[subtype] = modelsetresult
```

```
topic = "/prefix/[boxid]/edge/management/modelsetresult";
```

```
payload = {  
  result: "OK | Failure",  
  errorInfo: "",  
  errorCode: ""  
};
```

- Cloud query single device status

```
[direction] = command
```

```
[type] = management
```

```
[subtype] = devicequery
```

```
topic = "/prefix/[boxid]/command/management/devicequery";
```

```
payload = {  
    device: deviceName  
};
```

- Box feedback / report single device status

```
[direction] = edge
```

```
[type] = management
```

```
[subtype] = devicedata
```

```
topic = "/prefix/[boxid]/edge/management/devicedata";
```

```
payload = {  
    deviceName: DeviceStatusSchema  
};
```

- Cloud query batch devices status

```
[direction] = command
```

```
[type] = management
```

```
[subtype] = devicesquery
```

```
topic = "/prefix/[boxid]/command/management/devicesquery";
```

```
payload = {  
    devices: ["device1", "device2"]  
};
```

- Box feedback / report batch devices status

```
[direction] = edge
```

```
[type] = management
```

```
[subtype] = devicesdata
```

```
topic = "/prefix/[boxid]/edge/management/devicesdata";
```

```
payload = {  
  device1: DeviceStatusSchema,  
  device2: DeviceStatusSchema,  
  ...  
};
```

## Livedata

- Cloud query tag live data [direction] = command

```
[type] = livedata
```

```
[subtype] = tagname
```

```
topic = "/prefix/[boxid]/command/livedata/tagname";
```

```
payload = {};
```

- Box feedback/report tag live data [direction] = edge

```
[type] = livedata
```

```
[subtype] = tagname
```

```
topic = "/prefix/[boxid]/edge/livedata/tagname";
```

```
payload = {  
  value: 1000,  
  timestamp: '',  
  quality: ''  
};
```

## Alarmdata

- Cloud query alarm data/status [direction] = command

[type] = alarmdata

[subtype] = alarmname

```
topic = "/prefix/[boxid]/command/alarmdata/alarmname";
```

```
payload = {};
```

- Box feedback/report alarm data [direction] = edge

[type] = alarmdata

[subtype] = tagname

```
topic = "/prefix/[boxid]/edge/alarmdata/tagname";
```

```
payload = {
  text: "",
  value: "",
  triggerValue: "",
  timestamp: "",
  status: "come | go | acknowledge"
};
```

## Historicdata

- Cloud query historic data [direction] = command

[type] = historicdata

[subtype] = historicname / alarmname

```
topic = "/prefix/[boxid]/command/historicdata/historicname";
```

```
payload = {
  begin: '',
  end: ''
};
```

- Box feedback/resend(after network restore) historic data [direction] = edge

```
[type] = historicdata
```

```
[subtype] = historicname / alarmname
```

```
topic = "/prefix/[boxid]/edge/historicdata/historicname";
```

```
payload = {  
  value: 1000,  
  timestamp: '',  
  quality: '',  
  total: 10000,  
  count: 121  
};
```

```
topic = "/prefix/[boxid]/edge/historicdata/alarmname";
```

```
payload = {  
  text: "",  
  value: "",  
  triggerValue: "",  
  timestamp: "",  
  status: "come | go | acknowledge",  
  total: 10000,  
  count: 121  
};
```

## Q

- Q1: Cloud Command 流水号
  - Q1.1: feedback / report 是否需要区别
- Q2: Cloud端主动请求盒子数据的模式，逐条响应还是按发送模式响应
- Q3: Cloud App 数据请求，数据源是否全部都是来自于TSDB，是否有可能从盒子直接读取