



Milesight AI Workplace Occupancy Sensor

API Specification

V1.0

Table of Contents

| | |
|--------------------------------------|----|
| Overview | 3 |
| Permission level | 3 |
| 1. People Counting | 4 |
| 1.1 Get Region People Counting | 4 |
| 1.2 Set Region People Counting | 4 |
| 1.3 Get Line Crossing Counting | 6 |
| 1.4 Set Line Crossing Counting | 6 |
| 1.5 Set People Flow Analysis | 7 |
| 2. Communication | 8 |
| 2.1 Set Network Configuration | 8 |
| 2.2 Set HTTP Configuration | 9 |
| 2.3 Set MQTT Configuration | 10 |

Overview

This document specifies the parameters and configuration files for Milesight AI Workplace Occupancy Sensor.

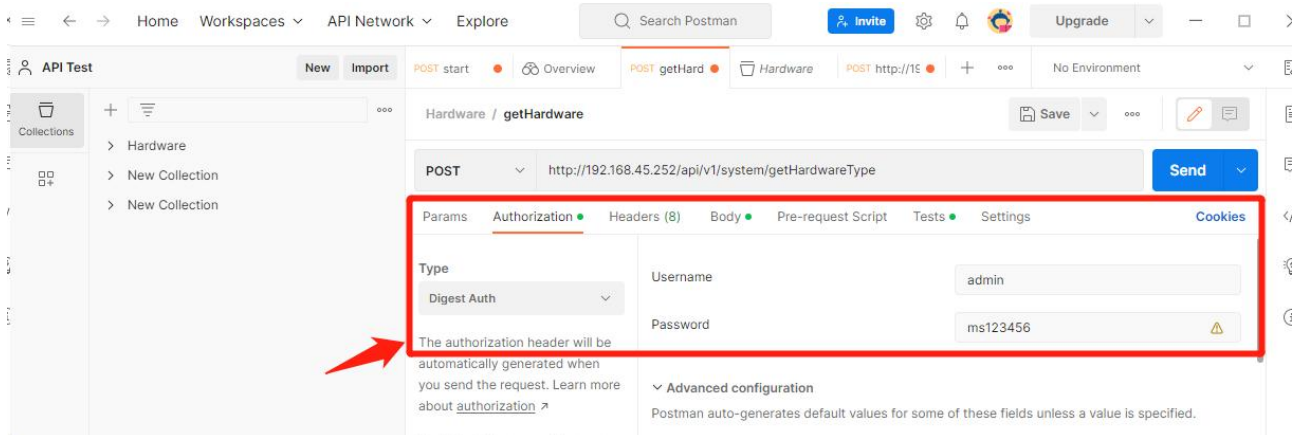
Permission level

The permission levels column in each parameter table shows the required permission level to operate parameters.

To be able to perform an action on a parameter the user needs to have a permission level equal to or higher than the corresponding permission level of the parameter.

| Security level | Description |
|----------------|-------------------|
| Admin | Top access right. |

Each API call needs to be accompanied with **Digest Authentication** as the following picture shows.



1. People Counting

1.1 Get Region People Counting

Total People Counting

Request URL:

```
http://IP:PORT/vb.htm?getppccurnumber
```

Request Method:

post method

Request Example:

```
http://192.168.5.220:80/vb.htm?getppccurnumber
```

Return Example:

```
OK getppccurnumber=1
```

Per Region People Counting

Request URL:

```
http://IP:PORT/vb.htm?peoplecountingstays
```

Request Method:

post method

Request Example:

```
http://192.168.5.220:80/vb.htm?peoplecountingstays
```

Return Example:

```
OK peoplecountingstays=0:0:1:0:0:0:0:0:0:0:0:0:0:0:0:0:0: //The first two digits are fixed as 0 and invalid
```

1.2 Set Region People Counting

Request URL:

| | | |
|-------------|----------------------------|--|
| | | Format: x1;y1;x2;y2;x3;y3;x4;y4;x5;y5; x1 and y1 consists of a line, supports to add 5 lines at most, undrawn points should be set as -1 |
| ufilterplgx | U-turn Region x-coordinate | Normal Range: 1~1024 |
| ufilterplgy | U-turn Region y-coordinate | Separate coordinates by “:”, undrawn points should be set as -1 Supports to add 10 points at most |

Request Example:

```
http://192.168.5.220:80/vb.htm?page=msvca&counterenable=0&countreportinterval=300&ufilterenable=0&countline=38;95;280;106;-1;-1;-1;-1;-1;-1;&ufilterplgx=256:128:620:746:-1:-1:-1:-1:-1;-1;&ufilterplgy=134:830:810:258:-1:-1:-1:-1:-1;-1:-1;-1:-1;
```

Request URL:

```
http://IP:PORT/vb.htm?page=alarm.3
```

Request Method:

post method

Request parameter description:

| Parameter | Description | Value |
|----------------------------------|------------------------|-----------------------|
| alarmdienable&alarmFilterCounter | Filter Staff/Deliverer | 0: disable, 1: enable |

Request Example:

```
http://192.168.5.220:80/vb.htm?page=alarm.3&alarmdienable=1&alarmFilterCounter=1
```

1.5 Set People Flow Analysis

Request URL:

```
http://IP:PORT/vb.htm?page=peopleFlowAnalysis
```

Request Method:

post method

Request parameter description:

| Parameter | Description | Value |
|--------------------|-------------------------------|---|
| peopleFlowEnable | People Flow Analysis | 0: disable, 1: enable |
| peopleFlowInterval | Reporting Interval | 5~86400, unit: s |
| peopleFlowPlgX | Detection Region x-coordinate | Normal Range: 1~1024 |
| peopleFlowPlgY | Detection Region y-coordinate | Separate coordinates by “:”, undrawn points should be set as -1 Supports to add 4 points at most |
| peopleFlowAreaName | Detection Region name | Separate every name by “;”, the max length of name is 16 |

Request Example:

```
http://192.168.5.220:80/vb.htm?page=peopleFlowAnalysis&peopleFlowEnable=0&peopleFlowInterval=300&peopleFlowPlgX=486:351:546:767:;&peopleFlowPlgY=254:555:715:563:;&peopleFlowAreaName=A;B;C;D
```

2. Communication

2.1 Set Network Configuration

Request URL:

```
http://IP:PORT/vb.htm?page=network.0
```

Request Method:

post method

Request parameter description:

| Parameter | Description | Value |
|------------|--------------------------------|--|
| dhcpenable | Get IPv4 address automatically | 0: disable, 1: enable |
| netip | IPv4 Address | |
| netmask | IPv4 Subnet Mask | |
| gateway | IPv4 Default Gateway | |
| dnsip | Preferred DNS Server | |
| ipv6mode | IPv6 Mode | 0: Manual, 1: Route Advertisement, 2: DHCPv6 |
| netipv6 | IPv6 Address | |

| | | |
|-----------|----------------------|------------------|
| netmaskv6 | IPv6 Prefix | |
| gatewayv6 | IPv6 Default Gateway | |
| netmtu | MTU | Range: 1200~1500 |

Request Example:

```
http://192.168.5.220:80/vb.htm?page=network.0&dhcpenable=0&netip=192.168.60.181&netmask=255.255.255.0&gateway=192.168.60.1&dnsip=8.8.8.9&ipv6mode=0&netipv6=&netmaskv6=&gatewayv6=&netmtu=1500
```

2.2 Set HTTP Configuration

Request URL:

Region People Counting: <http://IP:PORT/vb.htm?page=httpnotice.0>

Line Crossing Counting: <http://IP:PORT/vb.htm?page=httpnotice.1>

People Flow Analysis: <http://IP:PORT/vb.htm?page=httpnotice.2>

Request Method:

post method

Request parameter description:

| Parameter | Description | Value |
|---------------------------|-----------------------|---|
| httpnotifyenable | HTTP Notification | 0: disable, 1: enable |
| httpnotifyselect | HTTP Notification URL | 0: disable, 1: enable Example: 0:1:0 means URL2 enable, 1:1:0 means URL1 and URL2 enable |
| httpnotifysnapshot enable | Snapshot | 0: disable, 1: enable Example: 0:1:0 means URL2 snapshot enable, 1:1:0 means URL1 snapshot and URL2 snapshot enable |
| httpnotifyurl0 | URL1 Address | |
| httpnotifyuser0 | URL1 Username | |
| httpnotifypwd0 | URL1 Password | |
| httpnotifyurl1 | URL2 Address | |
| httpnotifyuser1 | URL2 Username | |
| httpnotifypwd1 | URL2 Password | |
| httpnotifyurl2 | URL3 Address | |
| httpnotifyuser2 | URL3 Username | |
| httpnotifypwd2 | URL3 Password | |

Request Example:

```
http://192.168.5.220:80/vb.htm?page=httpnotice.0&httpnotifyenable=0&httpnotifyselect=1:1:0&httpnotifysnapshote
nable=0:0:0&httpnotifyurl0=https%3A%2F%2Fpts3.com%2F%2Fchnejs%2F&httpnotifyuser0=&httpnotifypwd0=&htt
pnotifyurl1=http%3A%2F%2Fpts3.com%2F%2Fchnejs%2F&httpnotifyuser1=&httpnotifypwd1=&httpnotifyurl2=&htt
pnotifyuser2=&httpnotifypwd2=
```

2.3 Set MQTT Configuration

Request URL:

```
http://IP:PORT/vb.htm?page=mqtt
```

Request Method:

post method

Request parameter description:

| Parameter | Description | Value |
|----------------------|-------------------------------|---|
| mqttEnable | MQTT Notification | Format: Region People Counting:Line Crossing Counting:People Flow Analysis 0: disable, 1: enable MQTT, 2: enable MQTTS Example: 0:1:0 means line crossing counting enables MQTT |
| mqttHost | MQTT Host Address | The max length is 512 |
| mqttPort | MQTT Port | 1~65535 |
| mqttClientID | Client ID | The max length is 512 |
| mqttUsername | Username | The max length is 512 |
| mqttPassword | Password | The max length is 512 |
| mqttTopic | Topic | The max length is 512 |
| mqttQos | QoS | 0: QoS0, 1: QoS1, 2: QoS2 |
| mqttCertificateType | Certificate Type | 0: CA Signed Server, 1: Self Signed |
| mqttRootCertDelete | Delete CA Certificate | 0: Not delete, 1: delete |
| mqttClientCretDelete | Delete Client Certific ate | 0: Not delete, 1: delete |
| mqttClientKeyDelete | Delete Client Key | 0: Not delete, 1: delete |

Request Example:

```
http://192.168.5.220:80/vb.htm?page=mqtt&mqttEnable=1:1:0&mqttHost=120.25.213.14&mqttPort=1883&mqttClie
ntID=&mqttUsername=&mqttPassword=&mqttTopic=topic&mqttQos=0&mqttCertificateType=0
```

<http://192.168.5.220:80/vb.htm?page=mqtt&mqttRootCertDelete=1>

Import MQTT certificates via below CGI:

<http://IP/dataloader.cgi?up=mqttRootCert>

<http://IP/dataloader.cgi?up=mqttClientCert>

<http://IP/dataloader.cgi?up=mqttClientKey>

-END-