Agent MaaS Suite (AMS)

MaaS User's Manual

v1.0

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AXIOMTEK

Agent MaaS Suite

MaaS

Software & Solution Product Division

Release Note

Version	Revised Date	Author	Description
v1.0	2019/03/21	Brandon	- 1st release

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AXIOMTEK

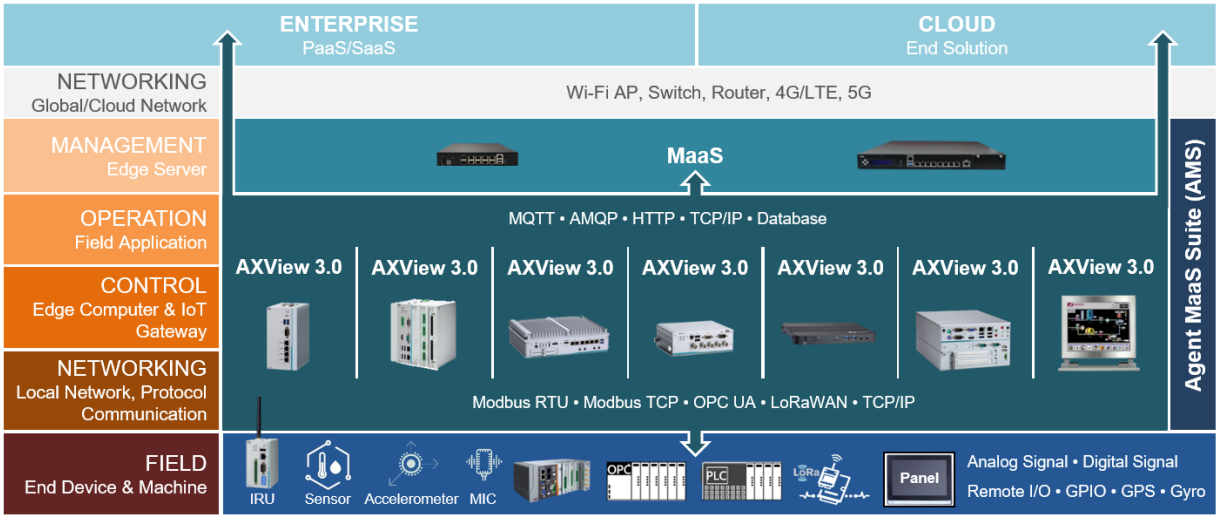
Agent MaaS Suite
AXView 3.0

Software & Solution Product Division

1 Introduction

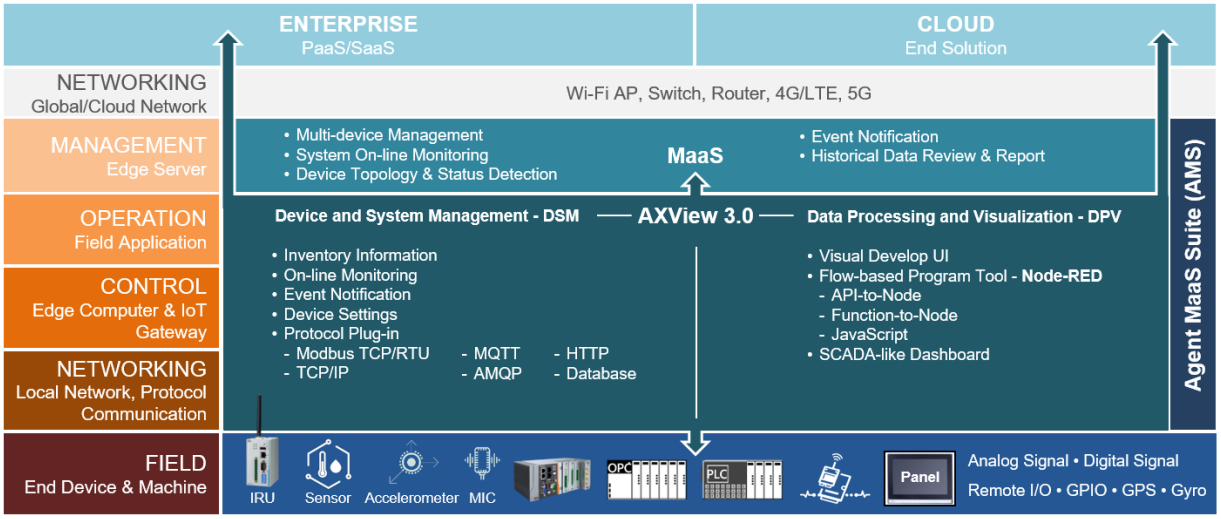
1.1 Architecture

Agent MaaS Suite (AMS) is the latest software solution product released by Axiomtek in response to the trend of the Internet of Things (IoT). It is a lightweight device and data management software platform that comes with information visualization and data clouding features. From the terminal device to the gateway equipment in the middle stage, and then to the remote management platform, AMS assists users in managing and handling the tasks that they may encounter in various classes, such as protocol communication, data collection and processing, message transmission, and information presentation. AMS also puts the IoT / IIoT spirit into action by performing device and equipment management, allowing users to reduce human resources and lower technical thresholds during project development, so that they can fully focus on application integration and creation of value-added services.



1.2 Features

To exemplify the spirit of IoT/IIoT while retaining flexibility, AMS is divided into two packages according to their operational role requirements: System Management - AXView 3.0; and Remote Management - MaaS (Management as a Service).



Besides providing basic device management and data processing functions, AXView 3.0 also includes flexible features for design change and functional expansion, with the main function blocks encompassing both Device and System Management (DSM) and Data Processing and Visualization (DPV).

1.3 Specifications

COMMUNICATION	Interface	RS-485, RJ-45, Wi-Fi, 3G/4G
	Protocol	Modbus RTU/TCP, MQTT, TCP/UDP, HTTP, Socket, WebSocket
MONITORING	System	Voltage, Temperature, Digital I/O, Fan speed, Status and USB insert/remove
	Connected device for Modbus device	
DEVELOP TOOL	Node-RED integrated	
PROGRAMMING LANGUAGE	JavaScript supported	
SECURITY	Watchdog Timer to ensure normal operation Operating per user ID authentication	
SYSTEM REQUIRMENTS	OS	Linux Ubuntu 16.04 or Yocto 2.5.1
	CPU	Intel® Atom® processor E3815 or above
	Storage	16GB or above
	Memory	4GB or above
PLATFORMS	Please refer to [1.4 Hardware Platform Support List]	

1.4 Hardware Platform Support List

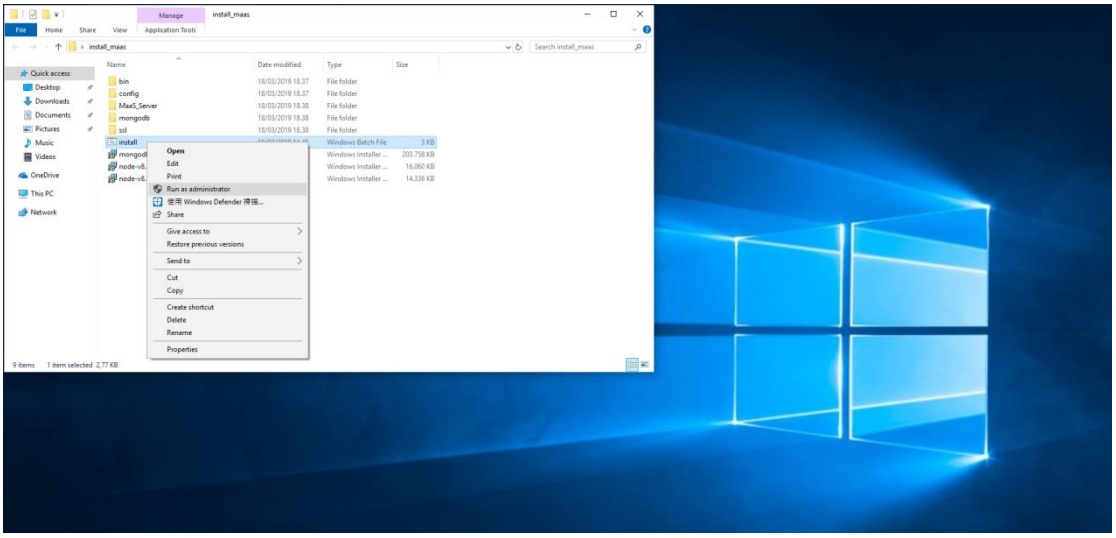
Fanless Embedded System	eBOX100-312, eBOX560-300, eBOX560-500, eBOX560-512, eBOX565-312, eBOX565-500, eBOX625-853, eBOX626-853, eBOX627-312, eBOX625-312, eBOX670-891
IoT Gateway	ICO100-839, ICO120-83D, ICO300-83B, ICO310, ICO320-83C
Transportation System	tBOX300-510, tBOX324-894, tBOX500-510 UST100-508, UST500-510
Fanless Touch Panel PC	GOT110-316
Digital Signage Player	DSP300
Industrial PC	IPC962-511, IPC962-512, IPC964-512, IPS960-511-PoE, IPS962-512-PoE
Industrial Motherboard	IMB520, IMB523
System Host Board	SHB150, SHB140
Card/Module	AX92320

2 Getting Started

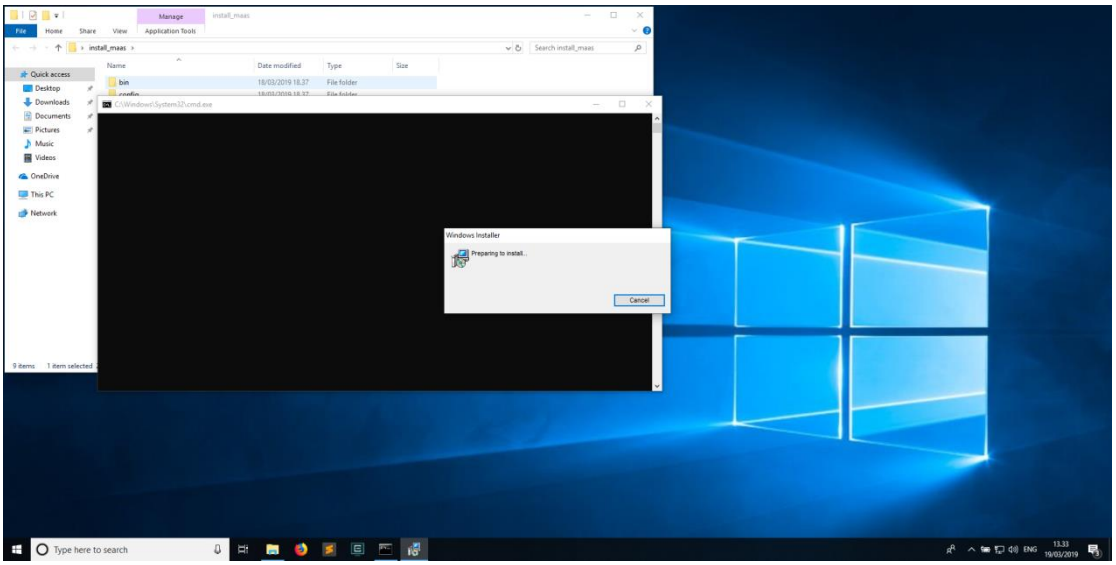
2.1 Install MaaS

2.1.1 Install MaaS in Windows 10 x64

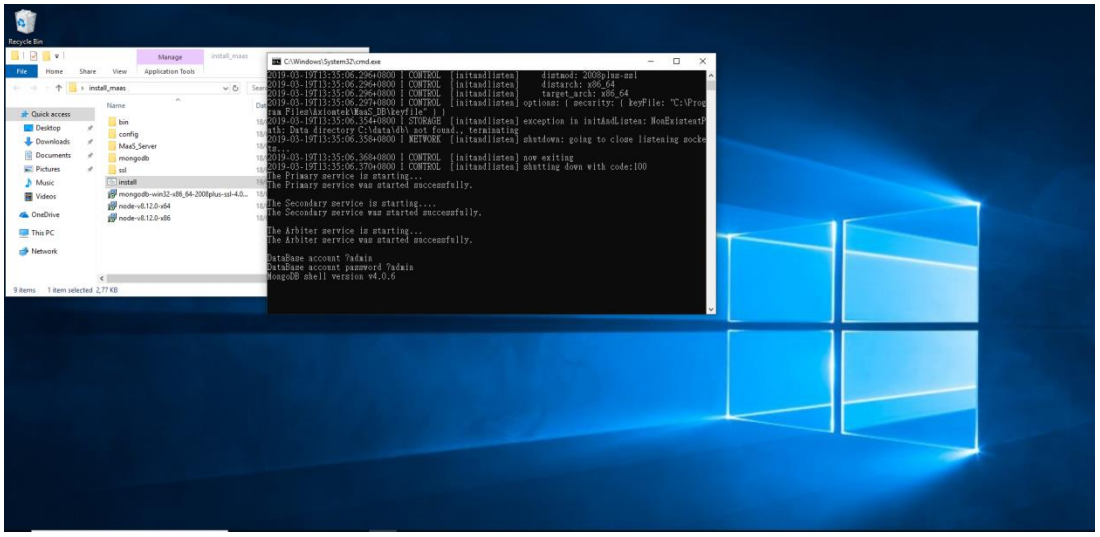
1) Unzip the zip file and navigate to the directory.
2) Right-click on “install.bat” file and choosing “Run as administrator”.



3) System will install needed components.

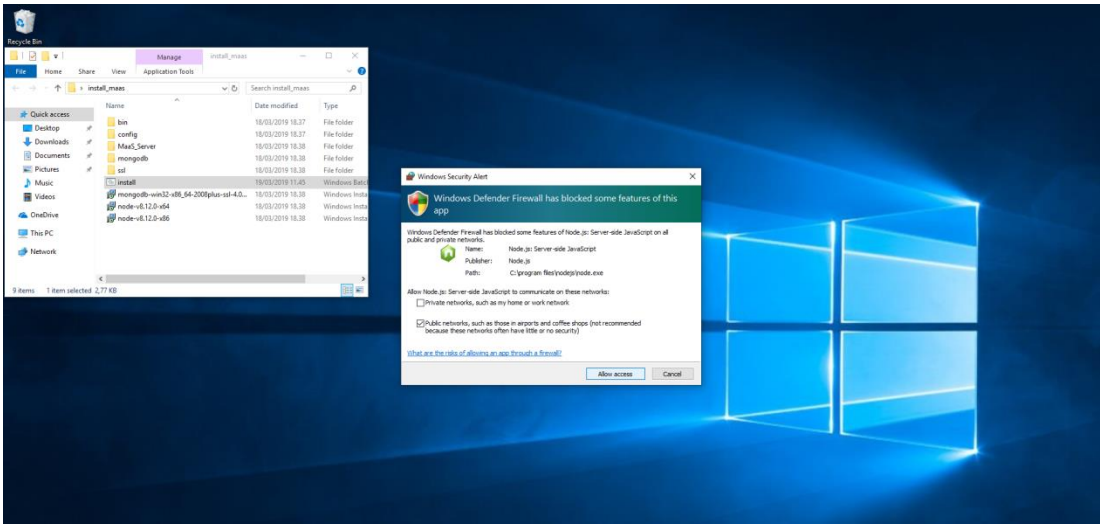


4) Creating database, please key in the database id and password.



5) Waiting for a moment to complete the installation. The command line will closed when installed complete.

6) When starting the MaaS server on Windows, a prompt to allow connections in Windows Firewall may appear. Click “Allow access” to confirm.



2.1.2 Install MaaS in Yocto 2.5.1

Please contact us.

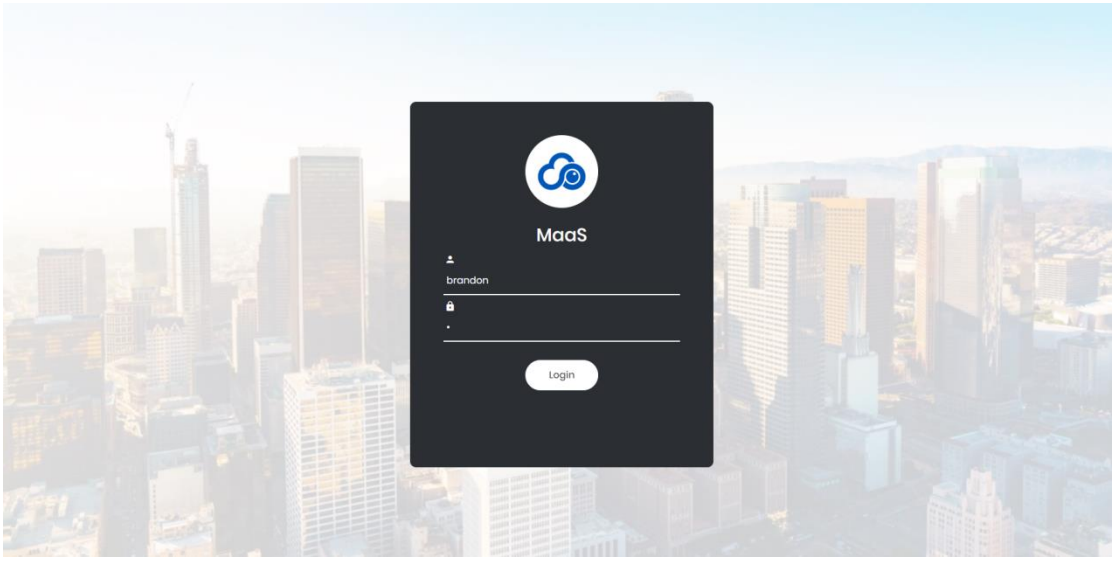
3 MaaS

There are three role administrator, manager and user in MaaS web service. Administrator is the role with highest level access to the website. Administrator can manages all Axiomtek devices which connected to MaaS service. Administrator also can manage the account. Manager can view and control the own Axiomtek devices. User only can view the specific devices which devices are setting by administrator. The permissions of the roles are as below.

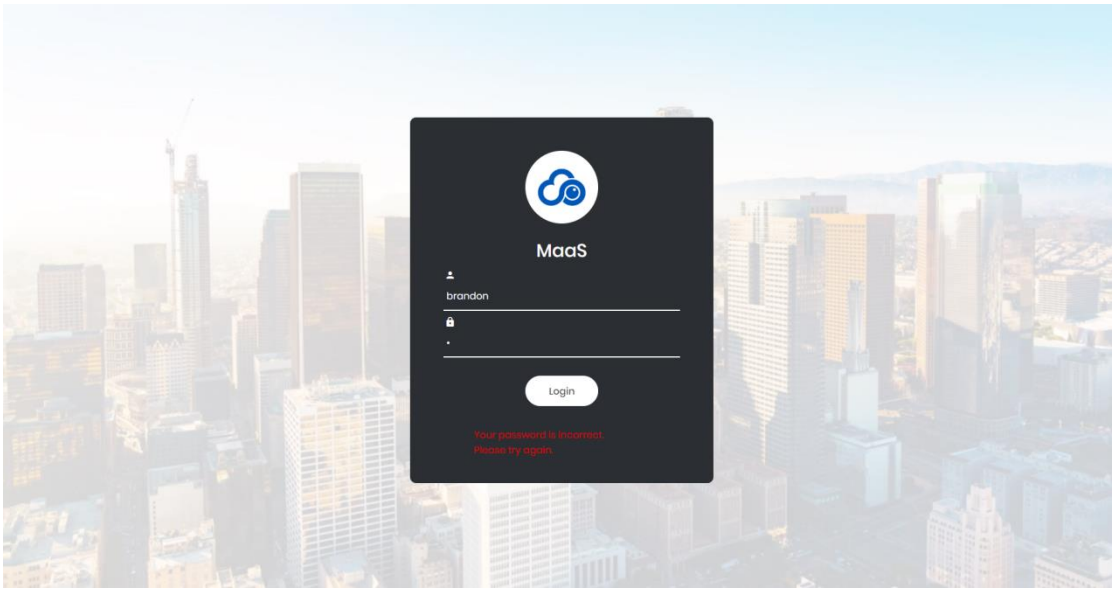
Items / Roles	Account Management	Device Management	Data Visualization
Administrator	V	V	V
Manager		V	V
User			V

3.1 Login

Open your web browser recommended that you to use browser software Google Chrome, Firefox, and type in the following address to the URL bar:
http://<*MaaS_ip*>
After the navigation, it'll show login web page. Please enter the id and password to login (Apply for an account by administrator of MaaS server).



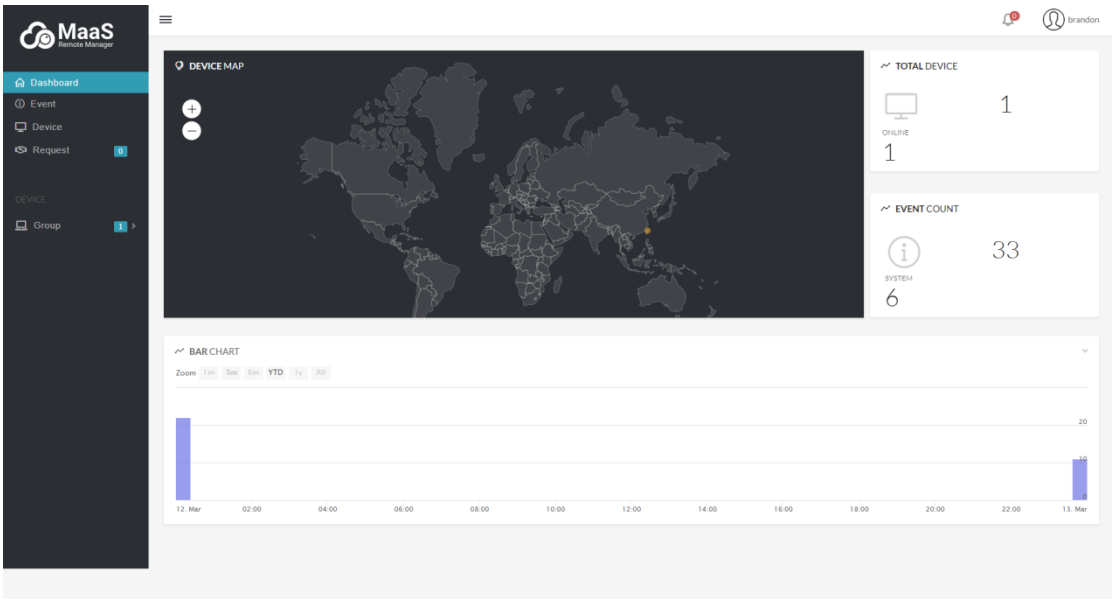
If you enter the wrong id or password, it'll show error message as below.

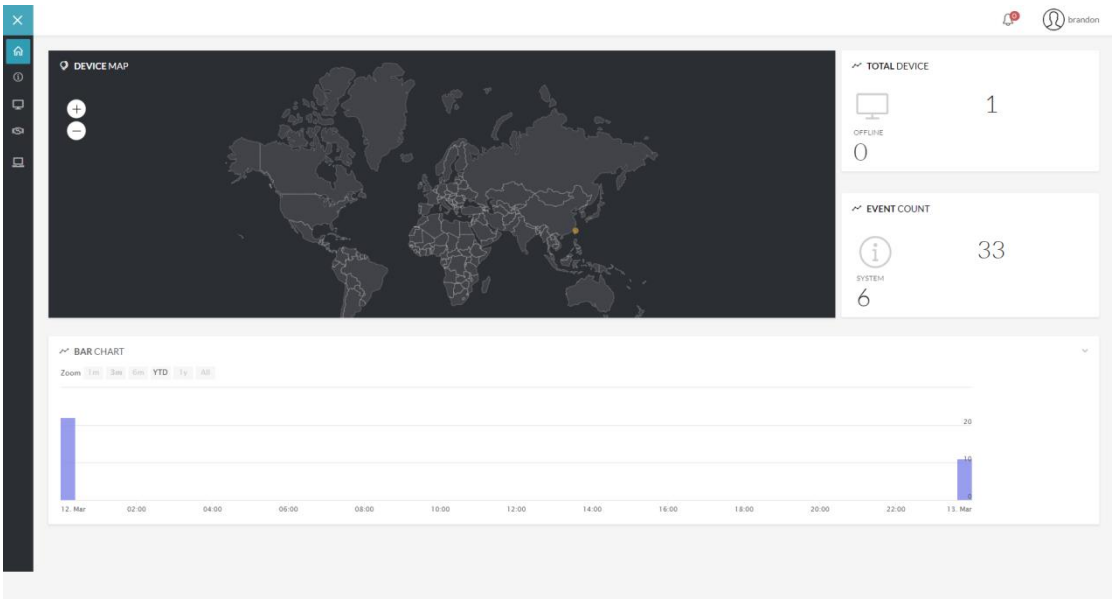


3.2 System Information

3.2.1 Dashboard

This is the home page of MaaS. The dashboard provides a one-stop summary in this account. From here you can see the gateways status like device's location, device count, event's count and event history. Only administrator and manager can see the "Request" item.

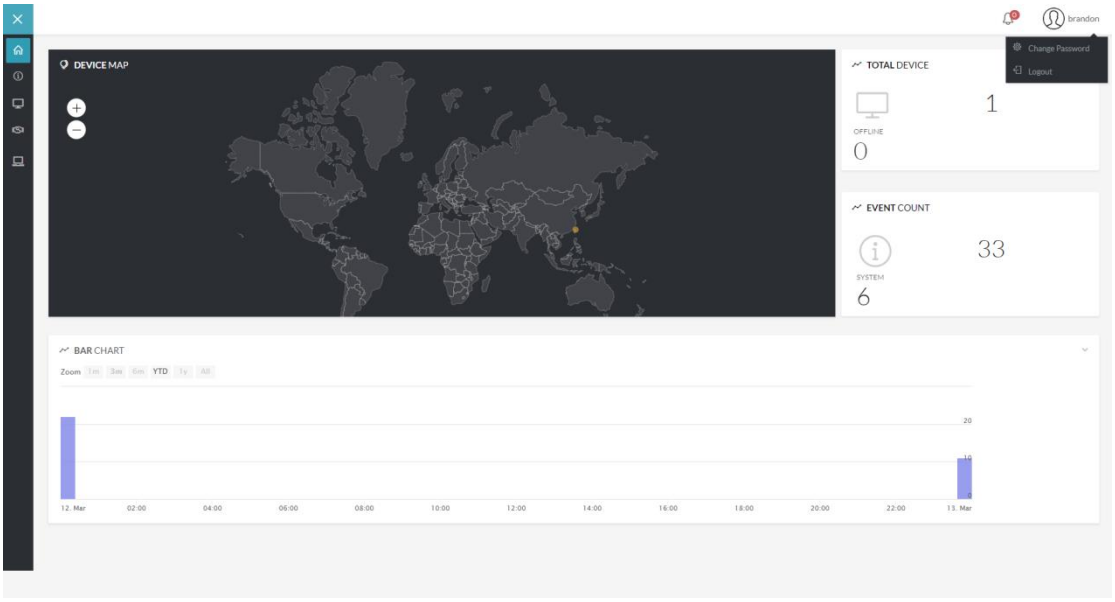


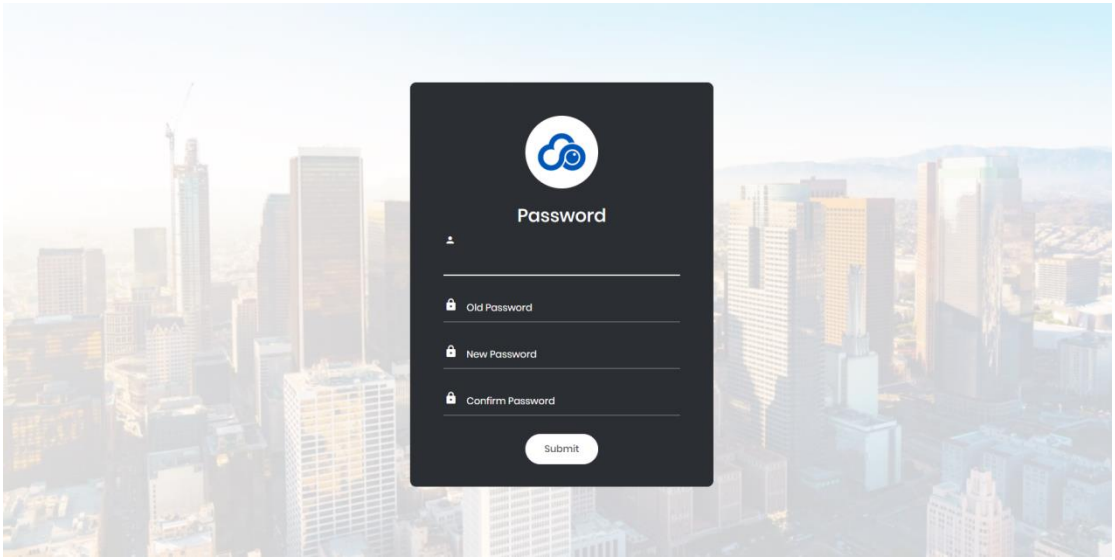


User can use user icon to change password and log out.

3.2.1.1 Change Password

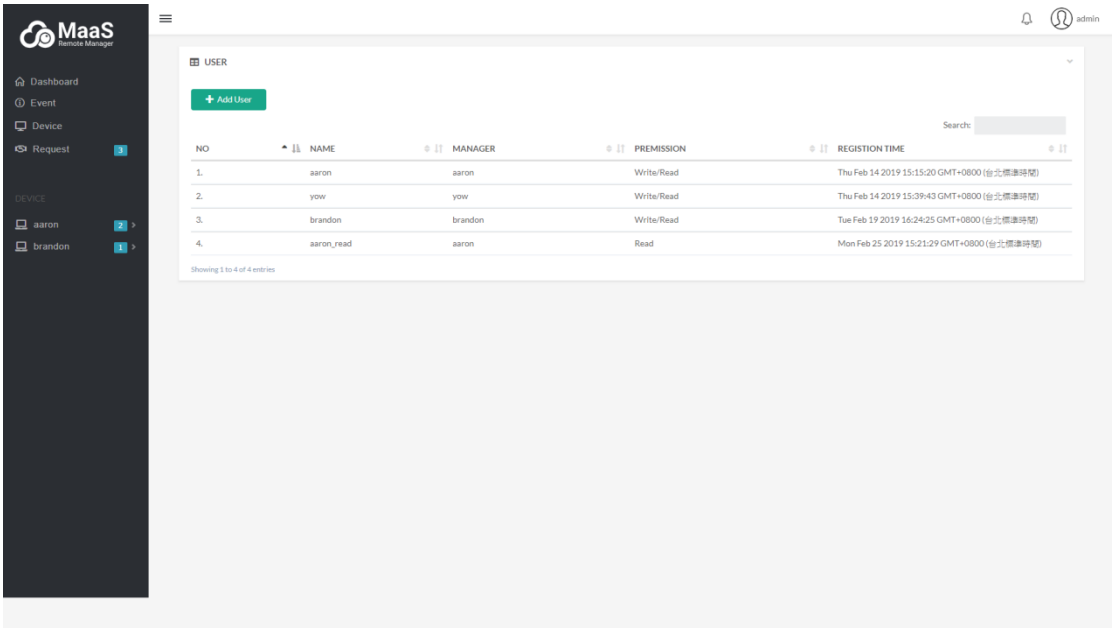
- Click “Password” will navigate to password change page.
  Enter the Username, old password and new password to change password



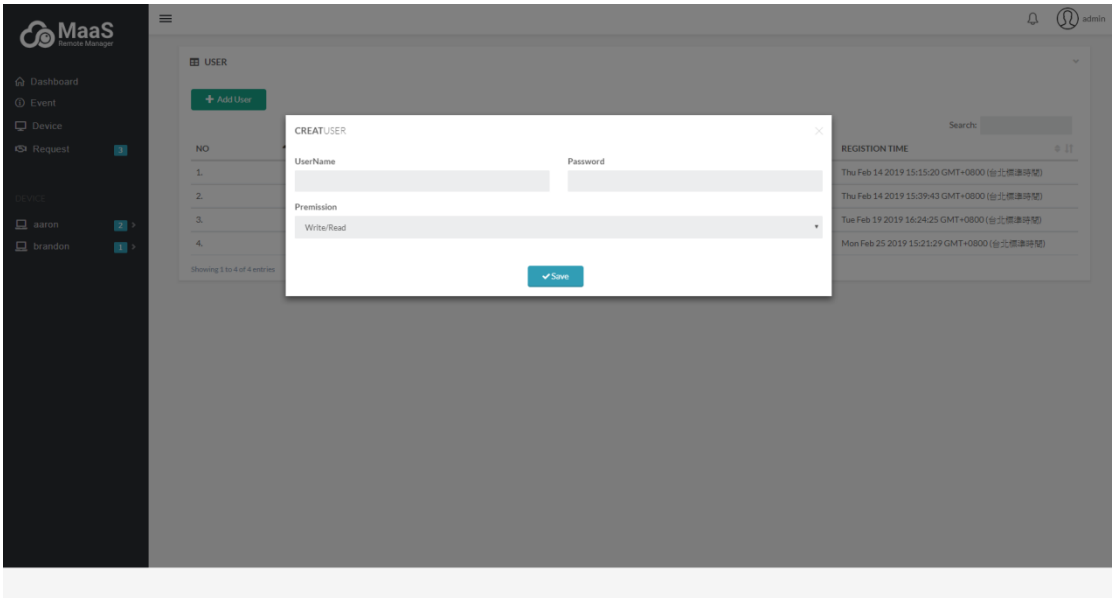


3.2.1.2 Account Settings

- Click “Account Settings” will navigate to account setting page. Only the administrator can create new account.

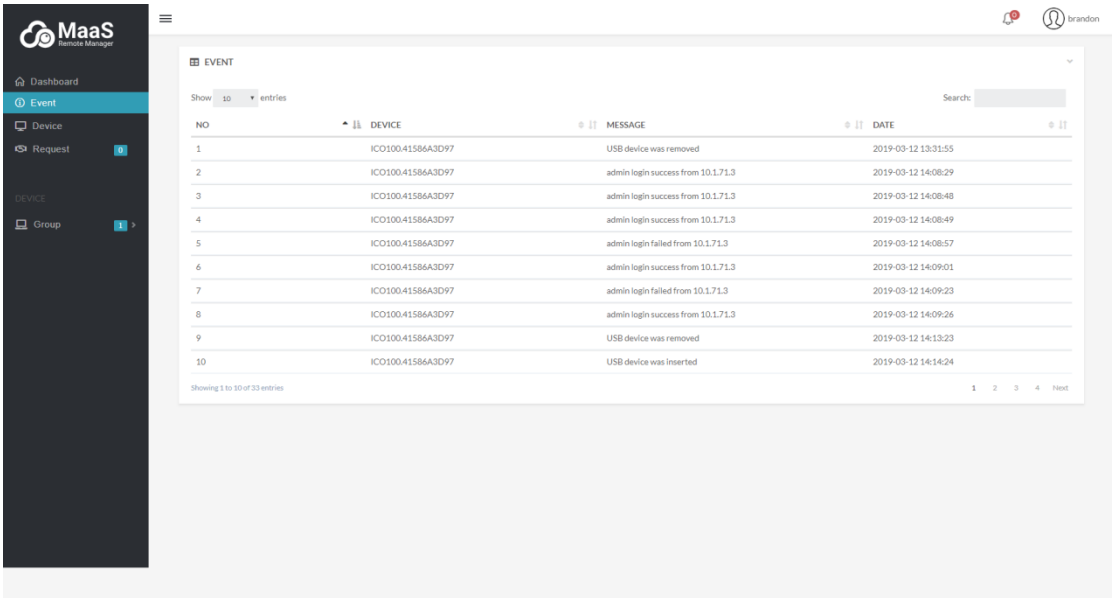


Administrator can add new account by click “Add User” button. Fulfill the request to complete added new account.



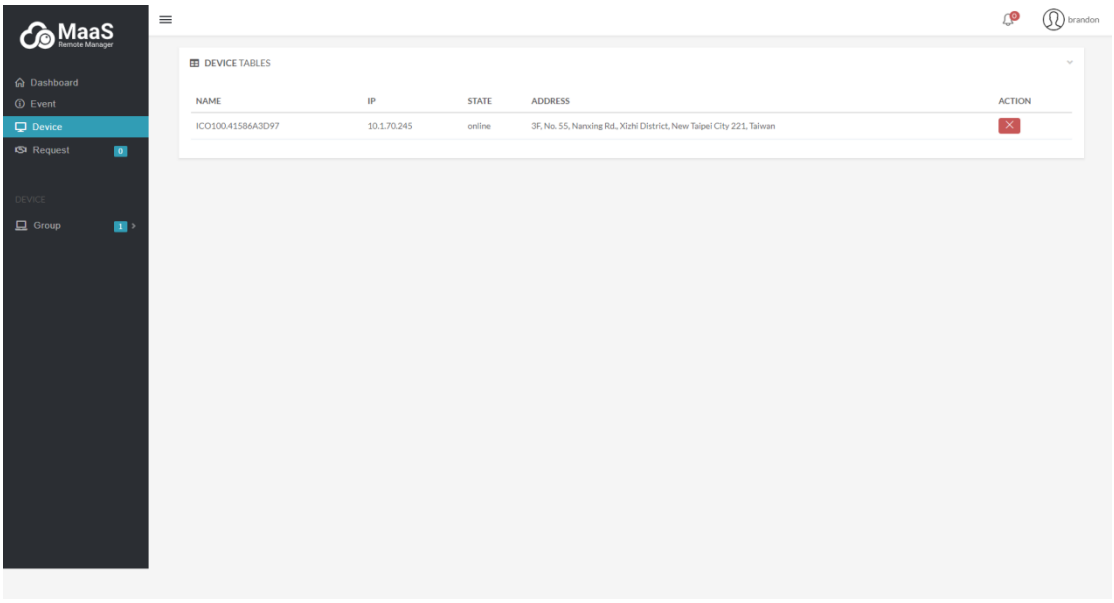
3.2.2 Event

- List all events in this account.



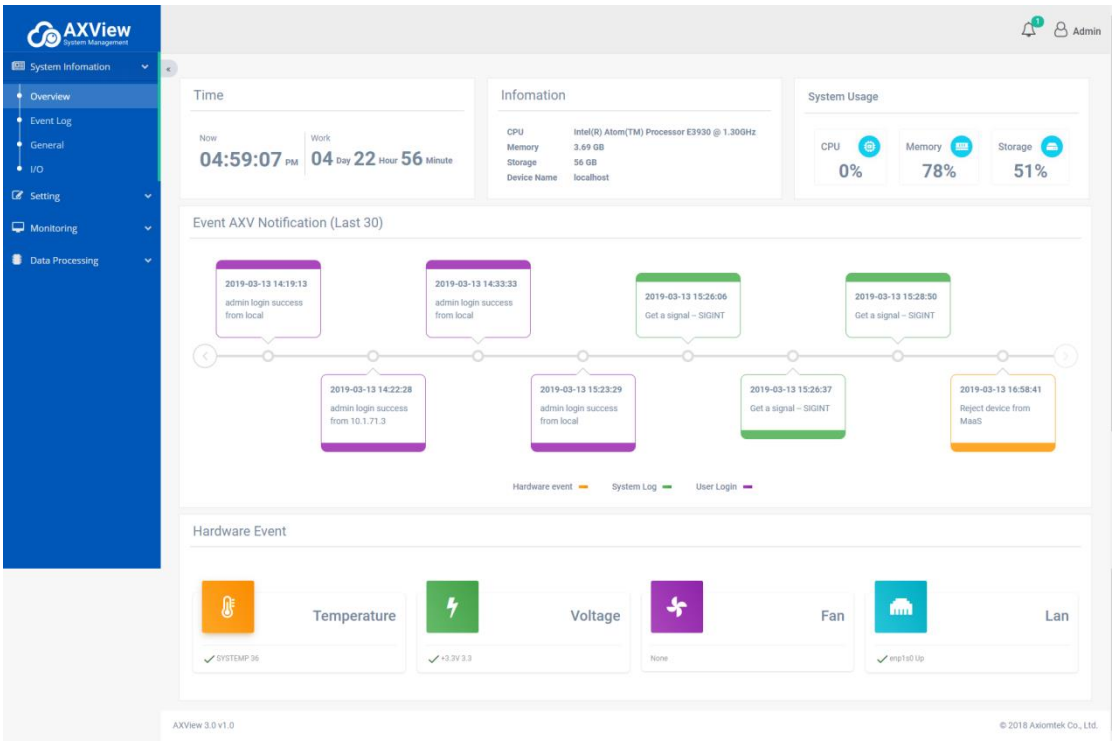
3.2.3 Device

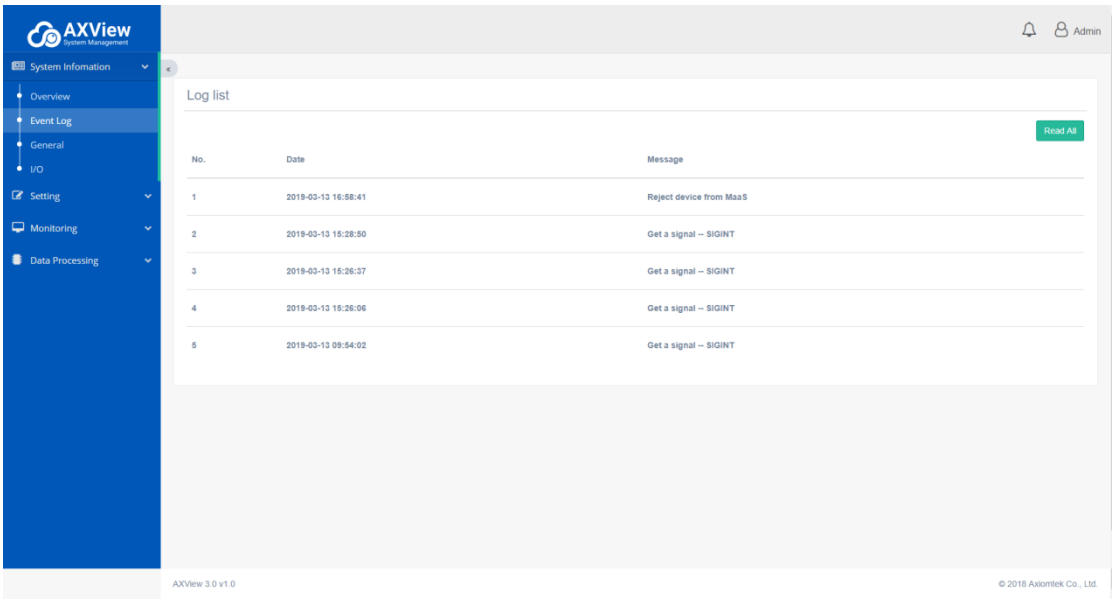
List all devices in this account. Only administrator and manager can see the “ACTION” item.



When administrator or manager rejects the device, the device’s local web page will get a reject notification.

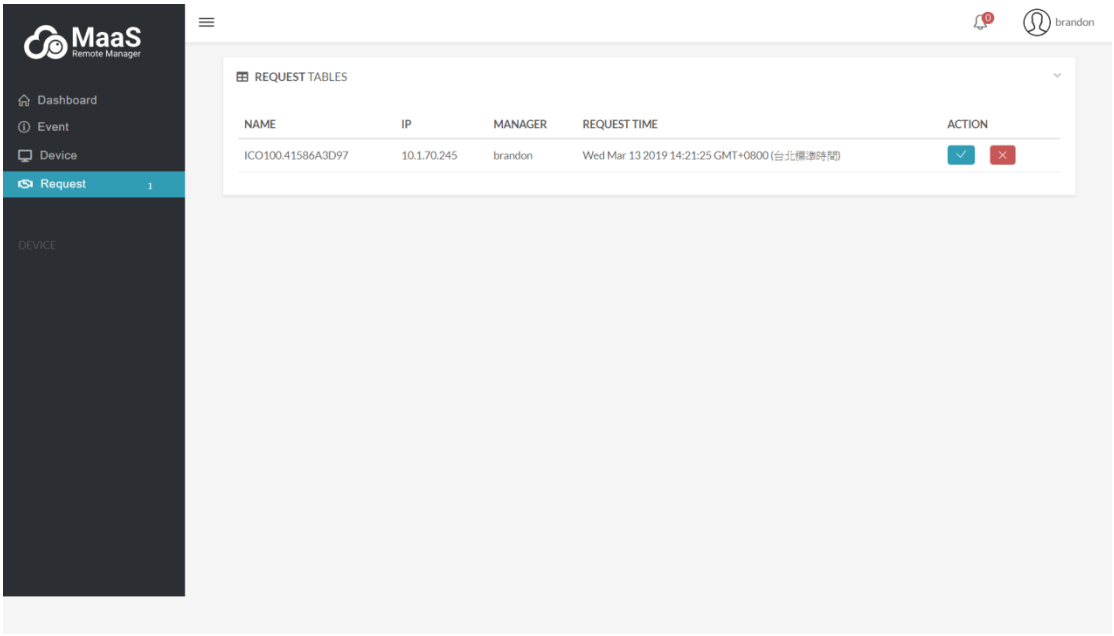
Agent MaaS Suite MaaS



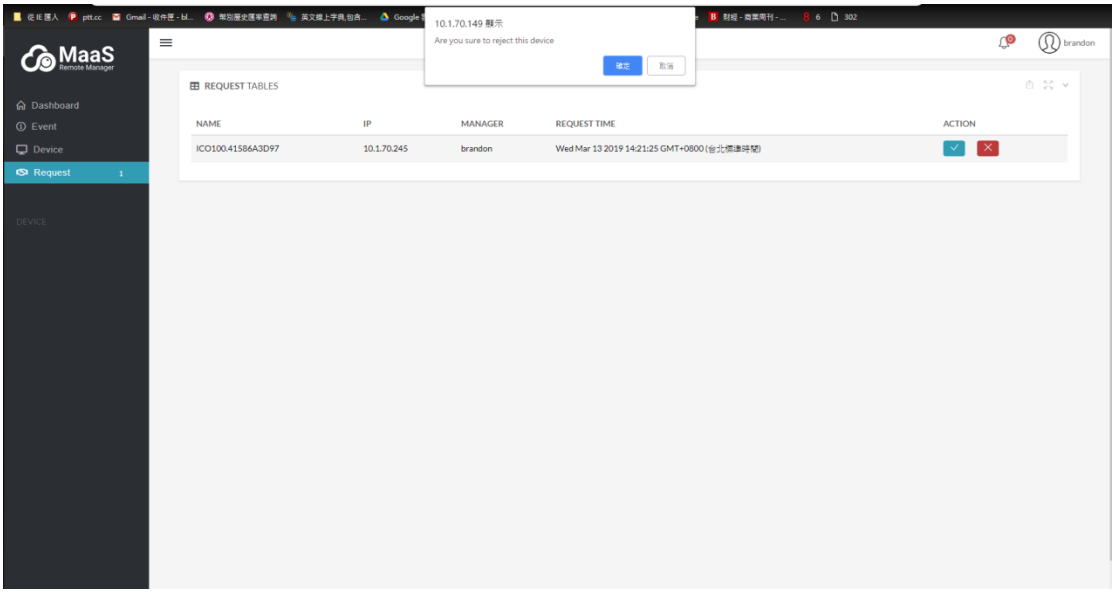

AXView
System Management
Admin
System Infomation
Overview
Event Log
General
I/O
Setting
Monitoring
Data Processing
Log list
Read All
No.
Date
Message
1
2019-03-13 16:58:41
Reject device from MaaS
2
2019-03-13 15:28:50
Get a signal -- SIGINT
3
2019-03-13 15:26:37
Get a signal -- SIGINT
4
2019-03-13 15:26:06
Get a signal -- SIGINT
5
2019-03-13 09:54:02
Get a signal -- SIGINT
AXView 3.0 v1.0
© 2018 Axiomtek Co., Ltd.

3.2.4Request

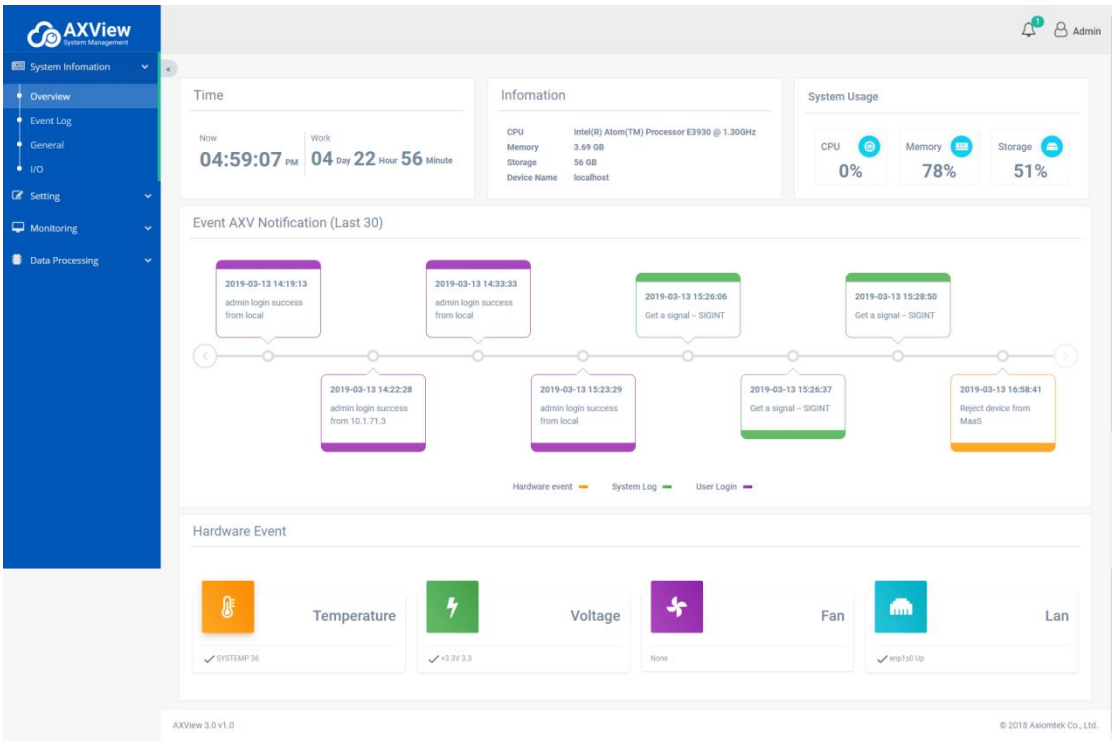
List all request in this account. Administrator and manager can accept and reject device's request to add it into manager account. Only administrator and manager can see the "Request" web page.

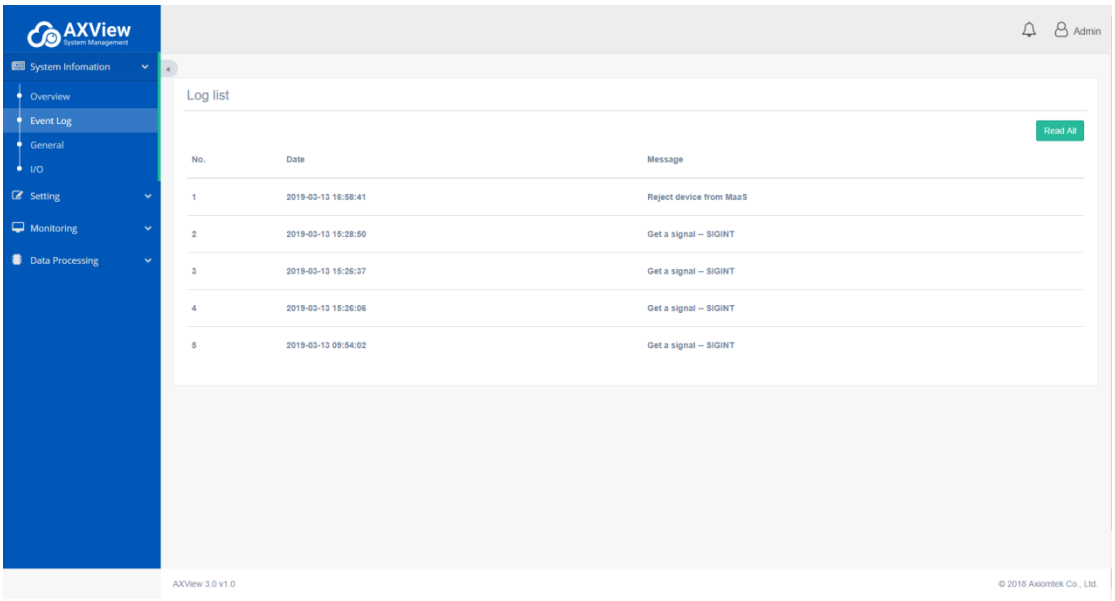


When administrator or manager rejects the request, the device's local web page will get a reject notification.


10.1.70.149 顯示
Are you sure to reject this device
確定
取消
MaaS
Remote Manager
Dashboard
Event
Device
Request 1
DEVICE
brandon
REQUEST TABLES
NAME
IP
MANAGER
REQUEST TIME
ACTION
ICO100.41586A3D97
10.1.70.245
brandon
Wed Mar 13 2019 14:21:25 GMT+0800 (台北標準時間)

Agent MaaS Suite
MaaS




AXView
System Management
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Setting
Monitoring
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Log list
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2019-03-13 15:26:06
Get a signal -- SIGINT
5
2019-03-13 09:54:02
Get a signal -- SIGINT
AXView 3.0 v1.0
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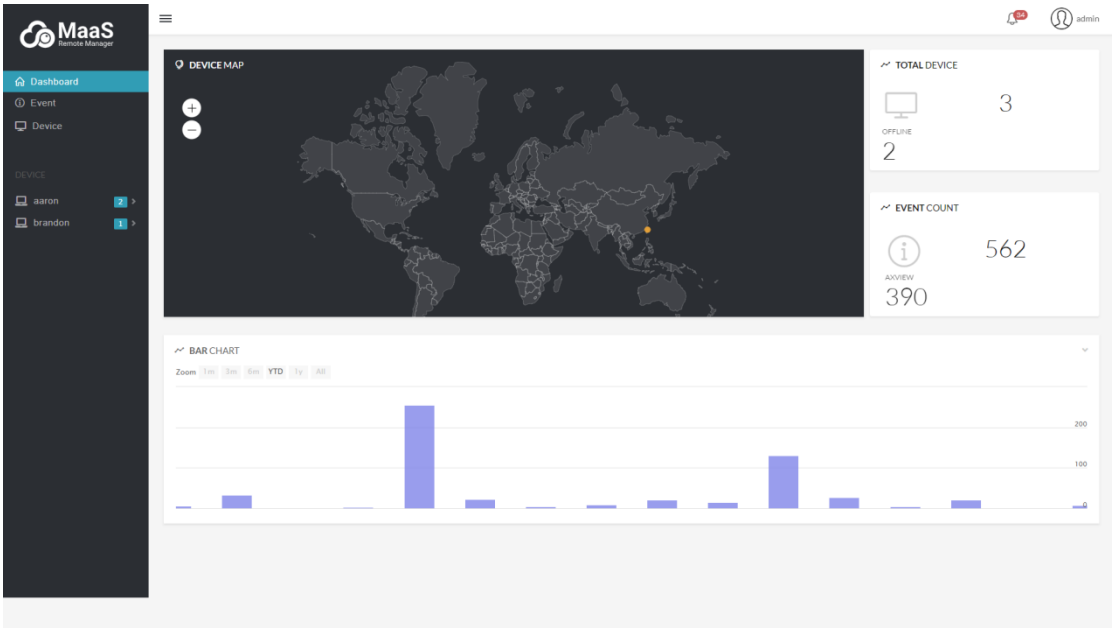
3.3 Device

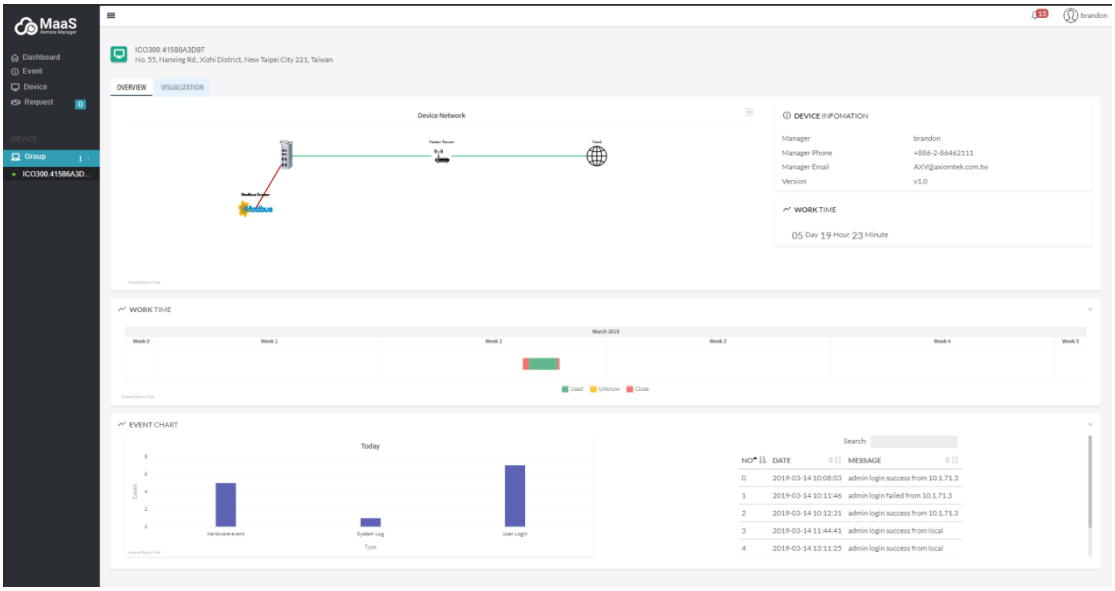
The device will list Group by manager name when log in account is administrator.

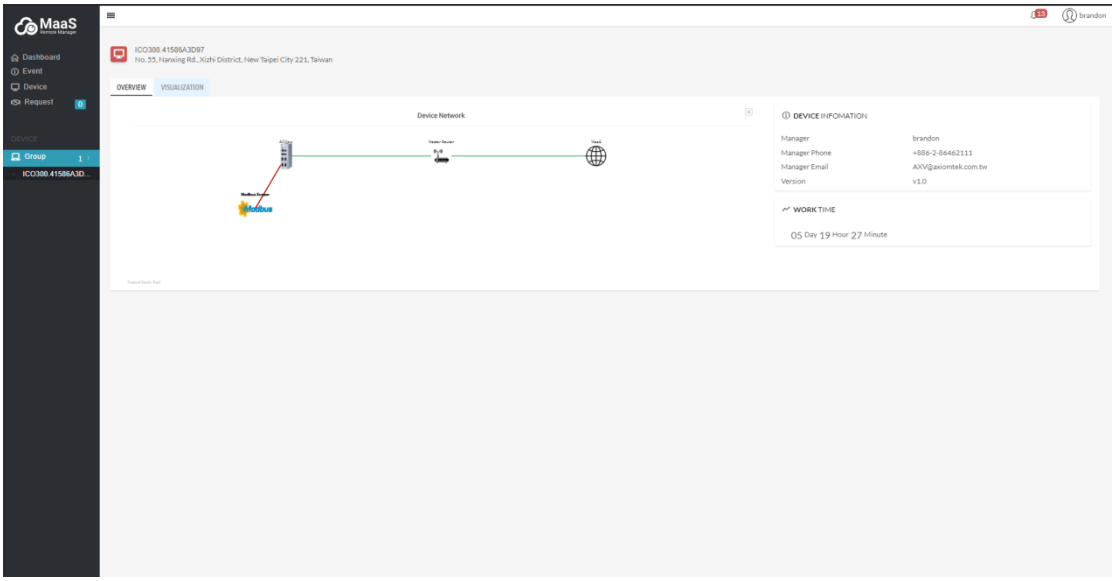


3.3.1 Overview

The device page displays more detailed information about the following items:

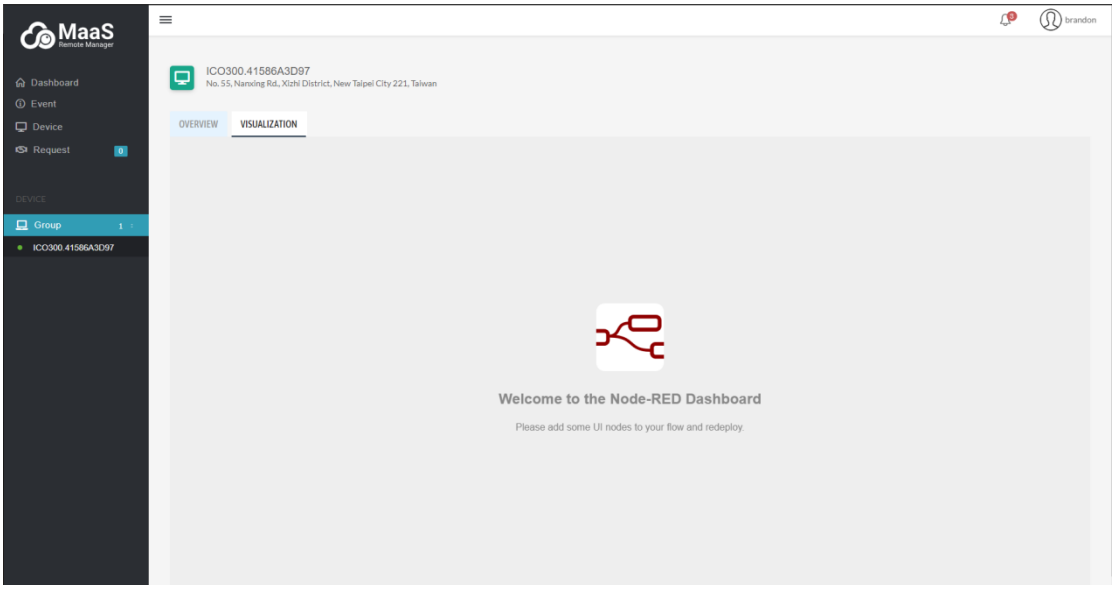
- Device status: If the device is online, the icon will be green. If the device is offline, the icon will be red.
- Device information: Display the owner information, device status, name and address.
- Topology: Display the connected sensor node.
- Work Time: Display the work time in this month. It'll show when device is online.
- Event Chart: Display the event by three types (Hardware event, system log and user login). It'll show when device is online.


MaaS
Dashboard
Event
Device
Request
Group
ICO300 41586A3D97
No. 55, Nanxing Rd., Xizhi District, New Taipei City 221, Taiwan
OVERVIEW
VISUALIZATION
Device Network
DEVICE INFOMATION
Manager
brandon
Manager Phone
+886-2-86462111
Manager Email
AXV@axiomtek.com.tw
Version
v1.0
WORK TIME
05 Day 19 Hour 23 Minute
WORK TIME
March 2019
Week 0
Week 1
Week 2
Week 3
Week 4
Week 5
EVENT CHART
Today
Search:
NO
DATE
MESSAGE
0 2019-03-14 10:08:03 admin login success from 10.1.71.3
1 2019-03-14 10:11:46 admin login failed from 10.1.71.3
2 2019-03-14 10:12:31 admin login success from 10.1.71.3
3 2019-03-14 11:44:41 admin login success from local
4 2019-03-14 13:11:25 admin login success from local


MaaS
Dashboard
Event
Device
Request
Group
ICO300 41586A3D97
No. 55, Nanxing Rd., Xizhi District, New Taipei City 221, Taiwan
OVERVIEW
VISUALIZATION
Device Network
DEVICE INFOMATION
Manager
brandon
Manager Phone
+886-2-86462111
Manager Email
AXV@axiomtek.com.tw
Version
v1.0
WORK TIME
05 Day 19 Hour 27 Minute

3.3.2Visualization

Display the device visualization page.

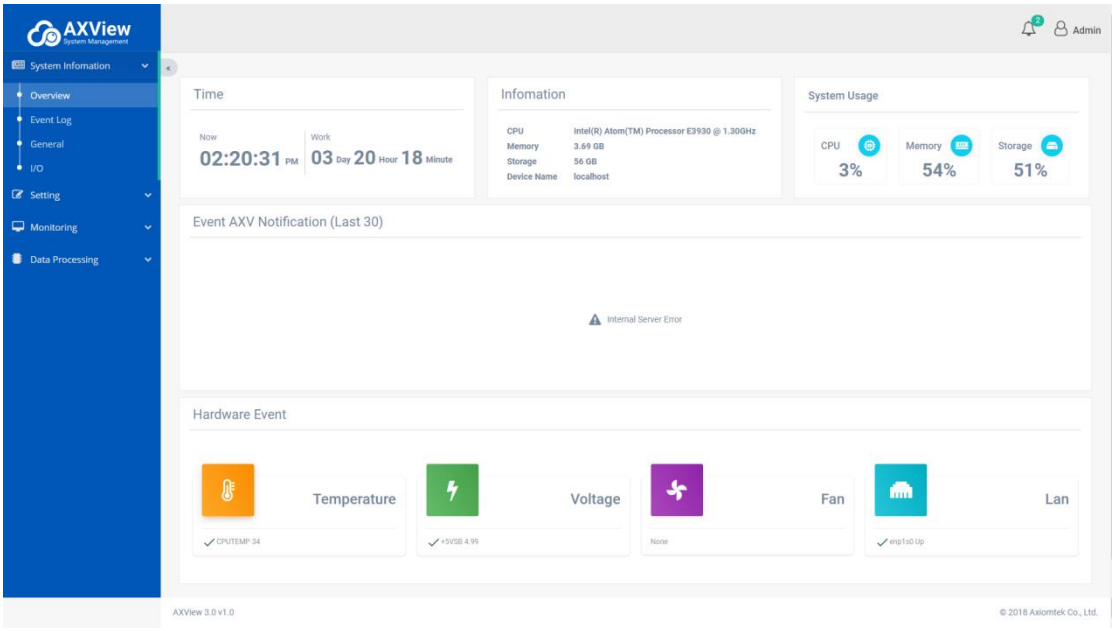


Appendix A

Troubleshooting

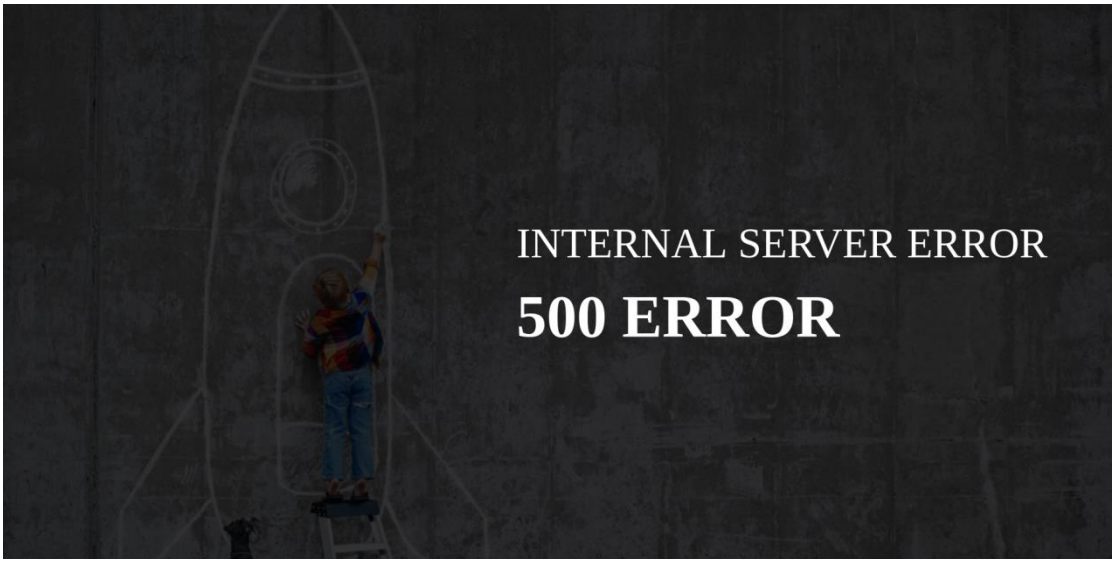
400 ERROR – PAGE NOT FOUND

The request could not be understood by the server due to malformed syntax. The client should not repeat the request without modifications.



404 ERROR – PAGE NOT FOUND

The server has not found anything matching the request-URI. The requested resource could not be found but may be available in the future. Subsequent requests by the client are permissible.

500 ERROR – INTERNAL SERVER ERROR

The server encountered an unexpected condition which prevented it from fulfilling the request.