REMOGUARD

Cloud to Obsolete On-Site Management
User's Manual

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Table of Contents

About this Manual

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Warranty

1. Warranty does not cover damages or failures that arised from misuse of the product, inability to use the product, unauthorized replacement or alteration of components and product specifications.

2. The warranty is void if the product has been subjected to physical abuse, improper installation, modification, accidents or unauthorized repair of the product.

3. Unless otherwise instructed in this user's manual, the user may not, under any circumstances, attempt to perform service, adjustments or repairs on the product, whether in or out of warranty. It must be returned to the purchase point, factory or authorized service agency for all such work.

4. We will not be liable for any indirect, special, incidental or consequential damages to the product that has been modified or altered.

Chapter 1 - Introduction

▶ 1.1 DFI Cloud Administration Platform

RemoGuard, the DFI Cloud Administration Platform, is a browser-accessed management platform that allows you to monitor the status of solid-state drives (SSDs), memory, and other components in edge devices. RemoGuard accomplishes this by gathering data from all connected devices and storing it on a central server, either in the cloud or on one's intranet. From there, the data is easily accessible from internet-connected cell phones, tablets, or laptops.

RemoGuard is also a perfect companion for out-of-band-enabled devices, allowing operators to seamlessly manage and restore edge devices that have broken down. With convenient out-of-band management from anywhere, RemoGuard reduces maintenance costs and downtime for devices everywhere.
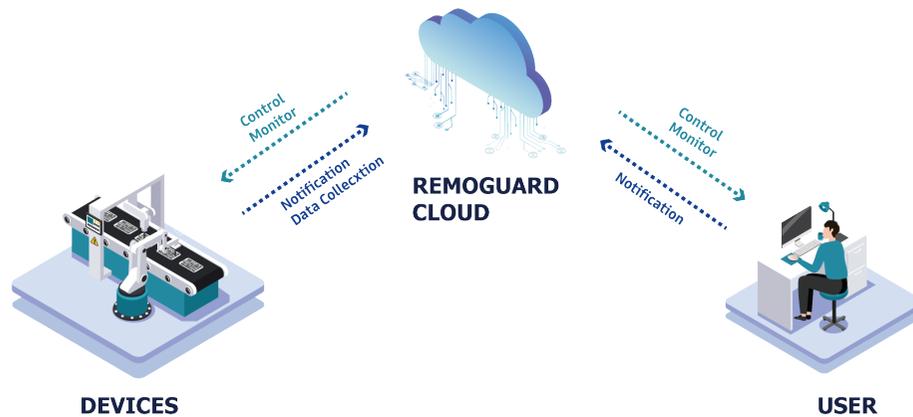
Chapter 2 System environment

Web service		Web browser that supports HTML5+CSS3+Javascript - Google Chrome:9.0+ - Safari:5.1+ - Firefox - Microsoft Internet Explorer 10+
Server	Hardware Minimum Requirement	Intel Core i3 2.3 Ghz CPU or above 4 GB RAM 20 GB root partition for the system 100 GB data storage partition for documents and indexing
	Operation System	Ubuntu 16.04+ Windows Server 2016 Docker 17.03+
Agent (client side)	Hardware	Bundled with DFI Storage products
	Operation System	Windows 10/8.1/7/XP kernel 32/64-bits Ubuntu 16.04 64-bits Debian 8 64-bits Others by request

Note:

- Memory information varies from the module, to install an Innodisk module is strongly advised to get complete status and avoid incompatible issues.

- Only Innoage SSDs support OOB functions.

- Please refer to the Appendix section of this document for further information.

Chapter 3 Website Operation(Server)

Sign in

"admin" is the default account and password, press "Next" to login.

RemoGuard Dashboard

The first screen will be the dashboard which shows several widgets contain various information of devices, these widgets can be customized. You can also add other dashboards of different combination of widgets.
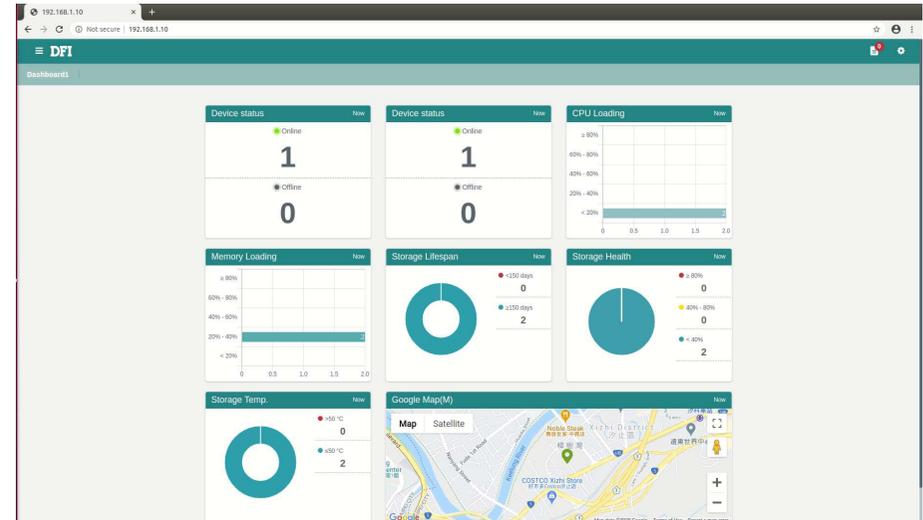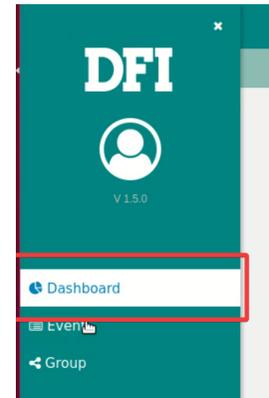
Menu

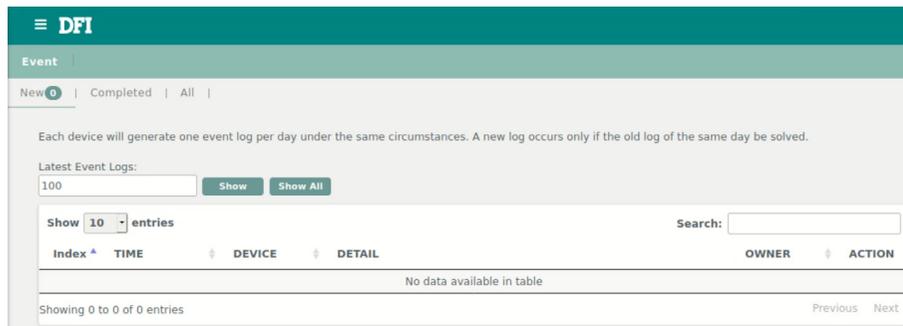Press "Menu" icon to show the main menu, there are three categories "Dashboard", "Event", and "Group" in the menu.
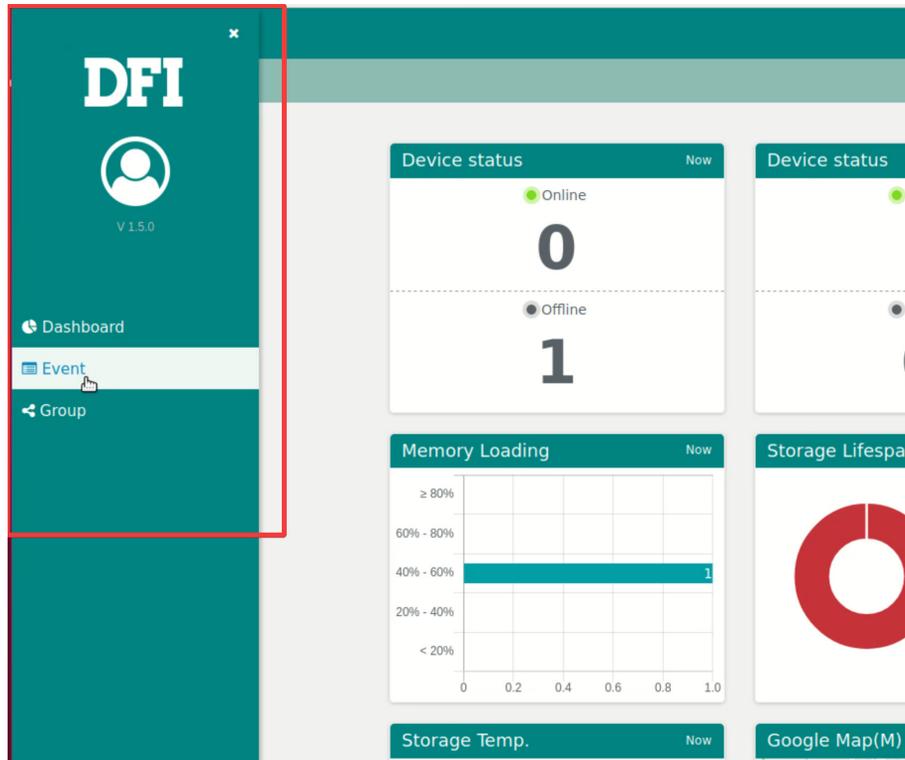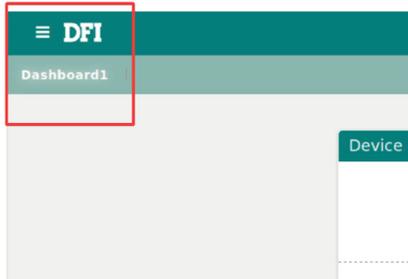
► **3.1 Dashboard page**

Press "Dashboard" button to return to the dashboard.
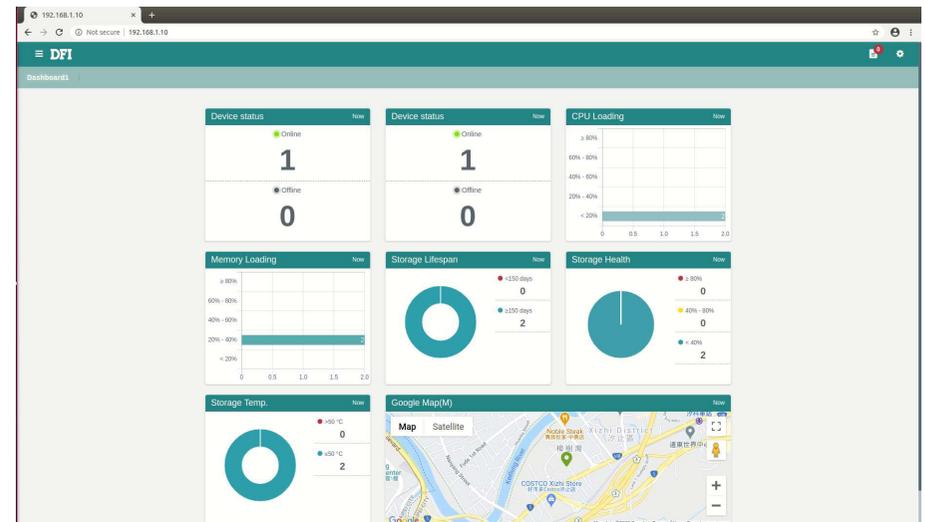
▶ 3.2 Event page

The "Event" button links to the Event category.
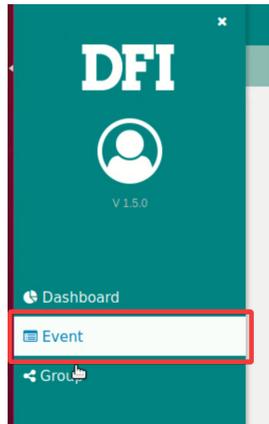
▶ 3.3 Group view page

The "Group" button links to the group view page.
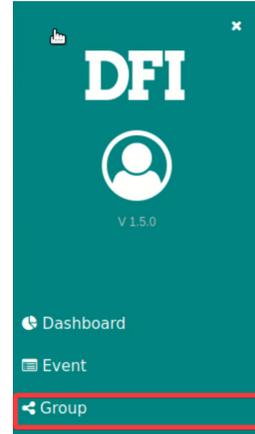
All devices will be shown in the group view page, "View More" button retrieves detail information of each device.
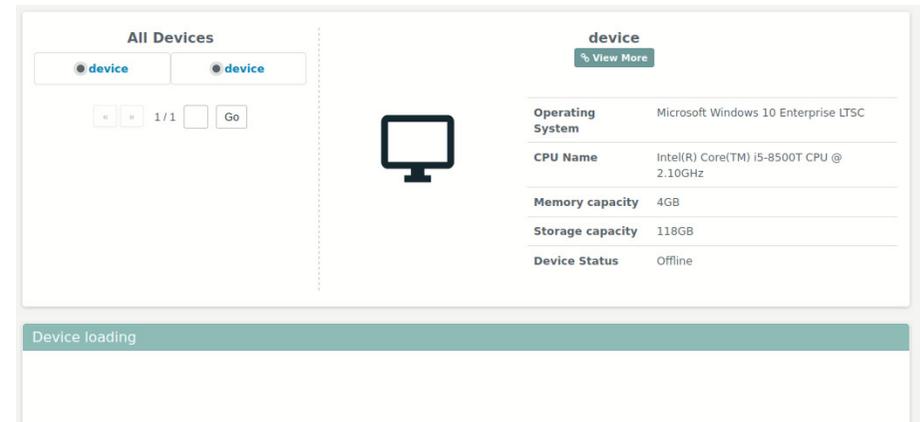
▶ 3.4 Device information page

Device information page displays all information including operation system, CPU, memory, Mainboard, network, location and Out-of-band devices.

3.4.1 Overview page
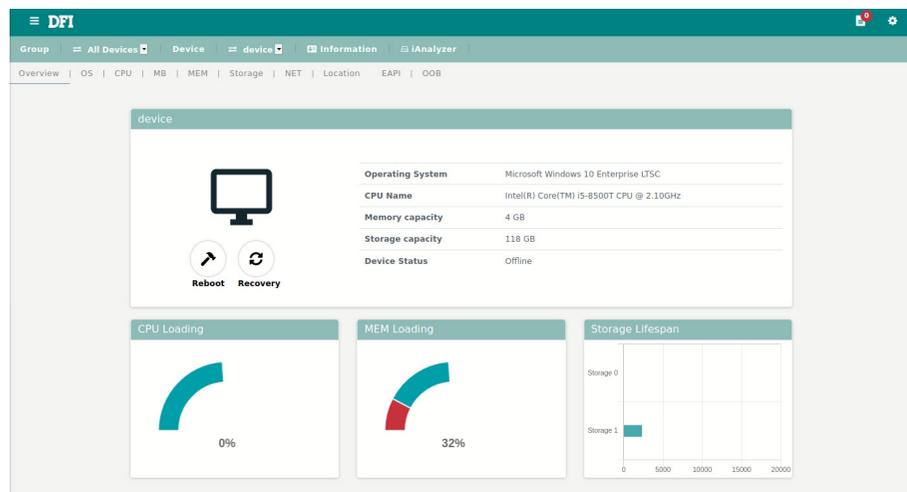
3.4.2 Operation system page
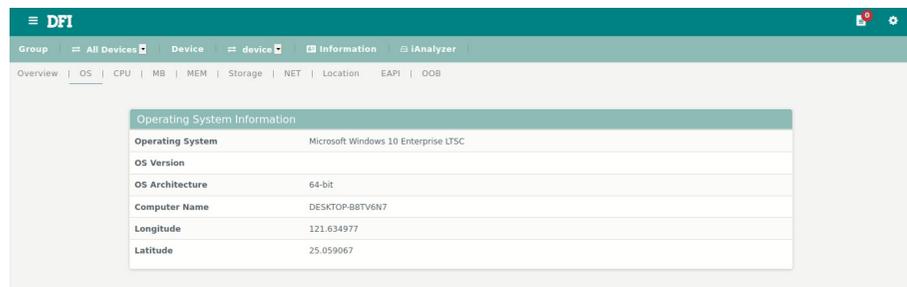
3.4.3 CPU page
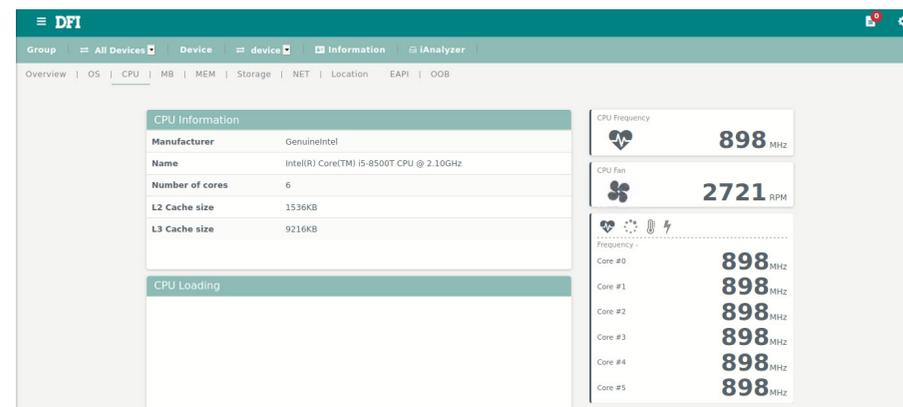
3.4.4 Mainboard page

3.4.5 Memory page
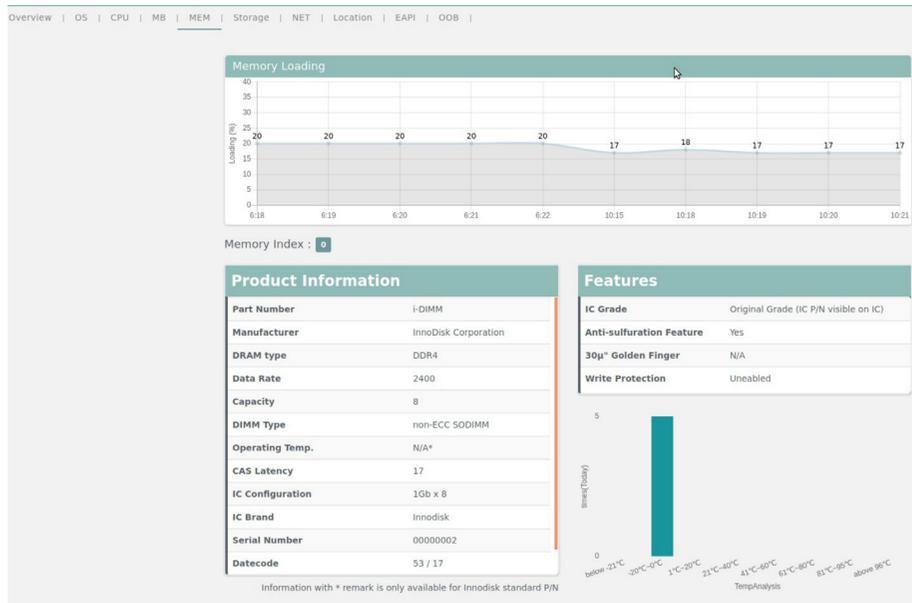
Memory information varies from the module, to install an Innodisk module is strongly advised to get complete status and avoid incompatible issues.

Please refer to the appendix of this document for further information.

3.4.6 Storage page
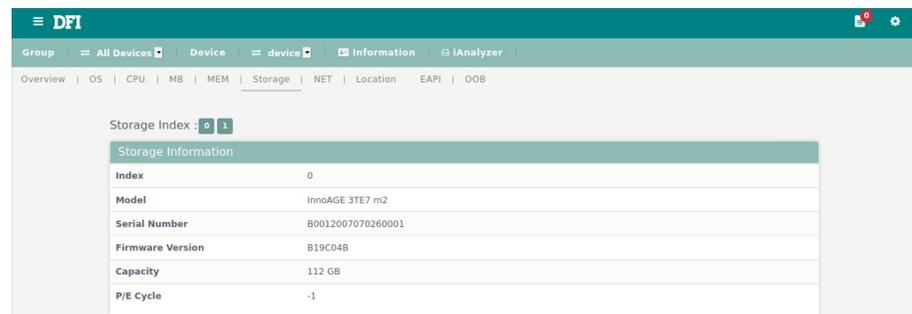
Only Innoage SSDs support OOB functions.

Please refer to the appendix of this document for further information.

3.4.7 Network Card Index
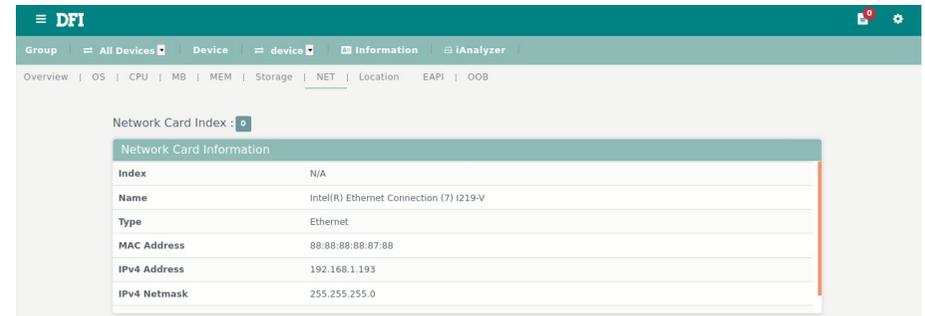
3.4.8 Location

• **Google Map**
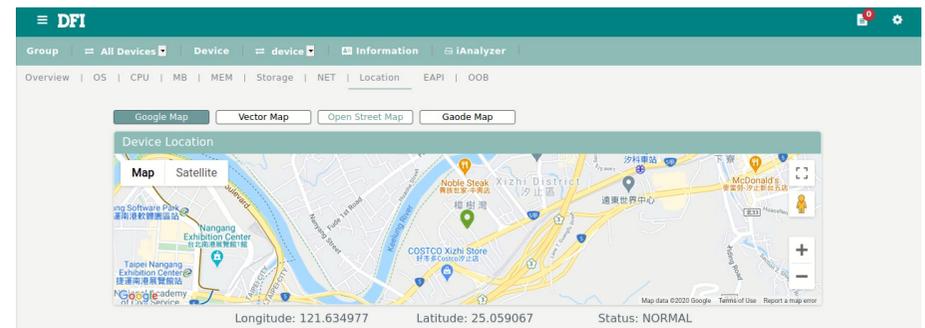
• **Vector Map**

• **Open Street Map**

• **Gaode Map**
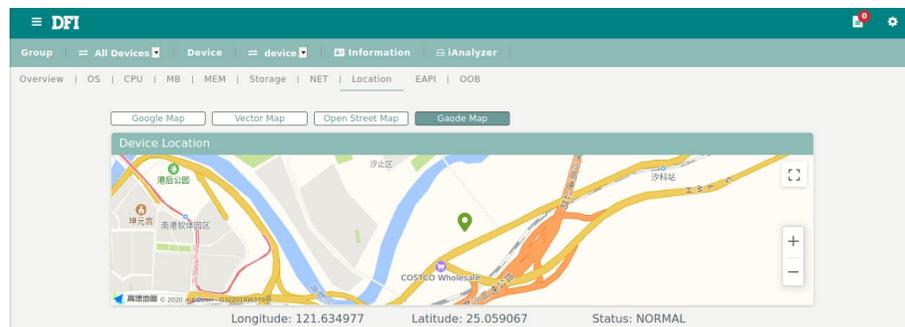
3.4.9 EAPI
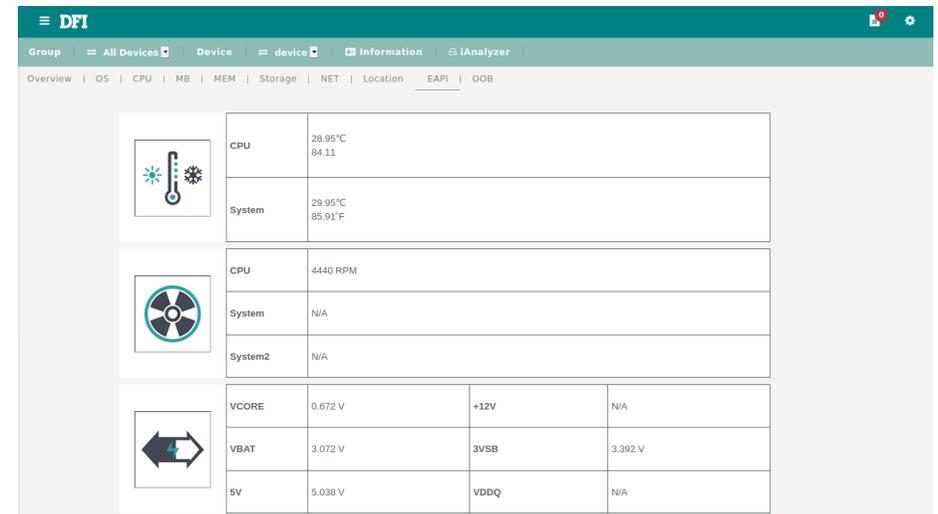
3.4.10 OOB (Out of Band)

The OOB(out-of-band) function is used to control the dedicated out of band device.
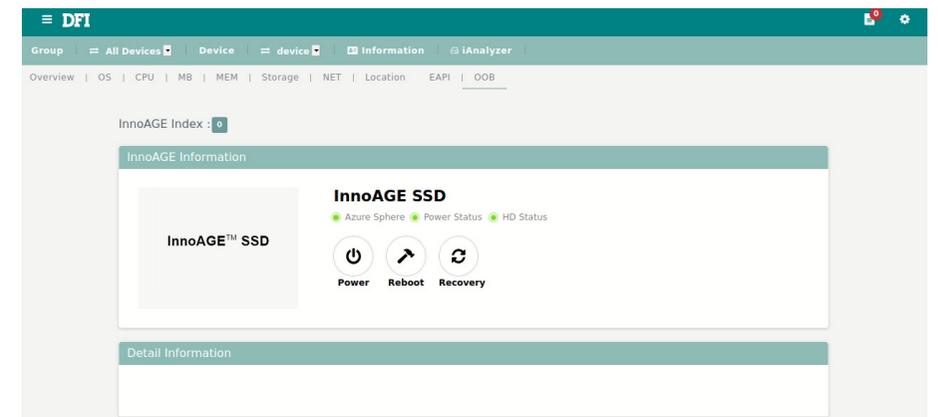
Before doing any operation of the OOB device, please make sure it's connected to the corresponding pin on the mainboard.

· Reboot

Press "Reboot" button to trigger the reboot function. A pop-up window will show to confirm the operation.
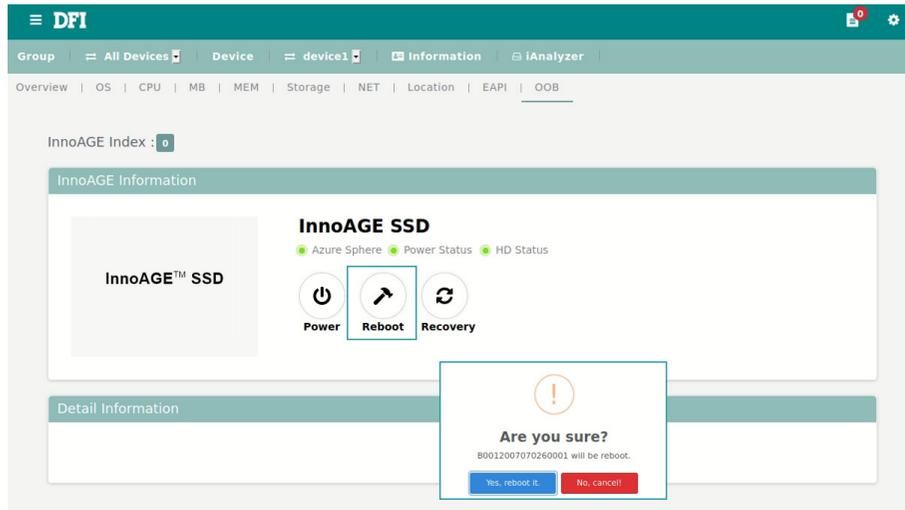
Clicking the "Yes, reboot it" button starts the reboot process, the progress bar will be drawn like a doughnut around the reboot icon showing the percentage.

After the process is done, a pop-up window will show the result.

· Recovery

The recovery function supports partition backed up by the Remoguard setter utility.

Press "Recovery" button to trigger recovery function and confirm the action, the whole process will be similar with the reboot process.
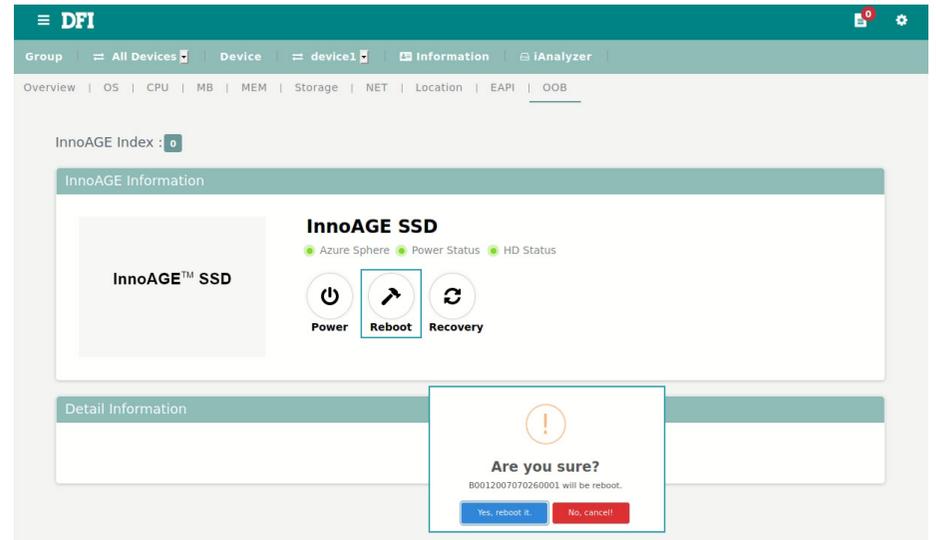
After the process is done, please check the feedback information returned.

• **Power On/Off**

The OOB function also supports power switch, press the "Power" button to turn on or turn off the power of the system.
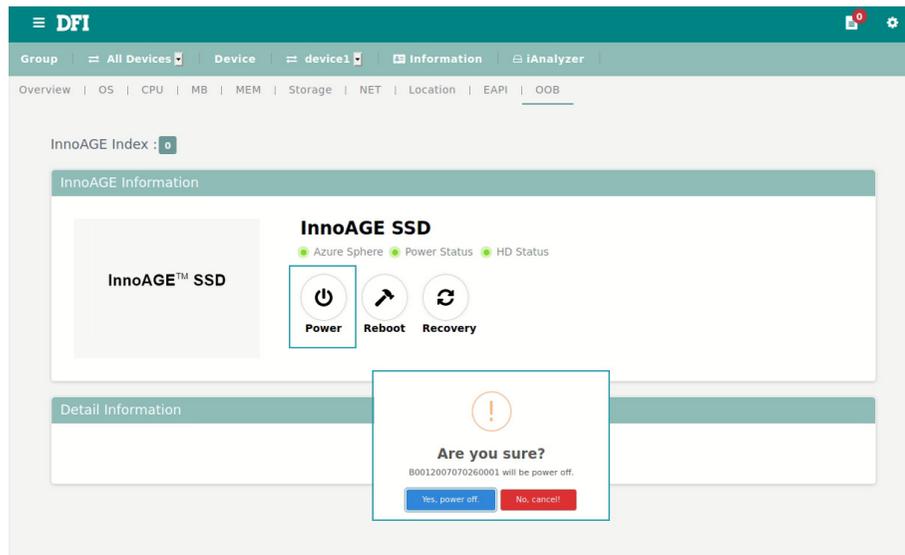
▶ **3.5 iAnalyzer page**

• **Storage Analyzer**
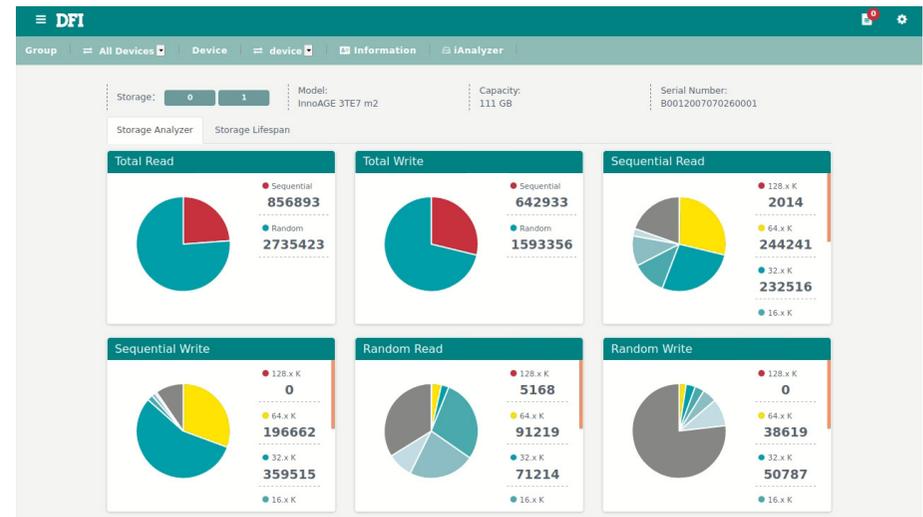
• **Storage Lifespan**
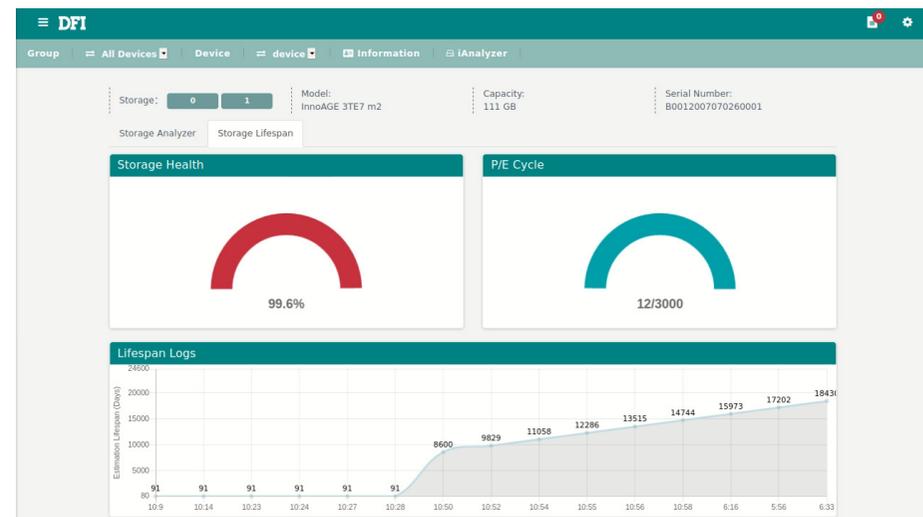
▶ 3.6 Device authentication and connection

When Agent application is installed in the client device being connected to the server, device authentication will be done automatically without any manual operation. A working connection indicates with a green light on the agent side.

Device status widget shows the amount of devices connected or offline.

▶ 3.7 Index Table

Index table indicates the device list by clicking relevant widgets on the dashboard, click on the device name will show its overview page.
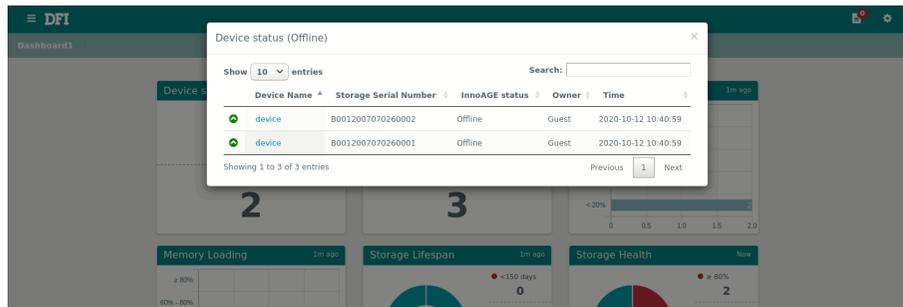
▶ 3.8 Settings

Press "setting" button to display system setting menu.
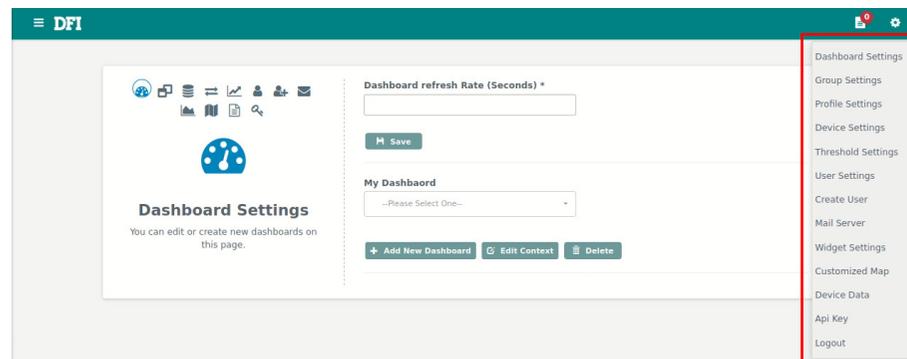
3.8.1 Profile Settings

This page edits profile of the current user, including the password.
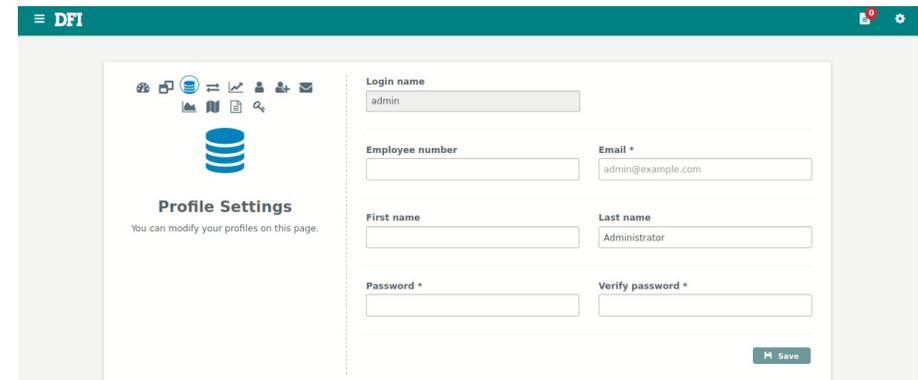
3.8.2 Create User

To add a new user please use "Create User".
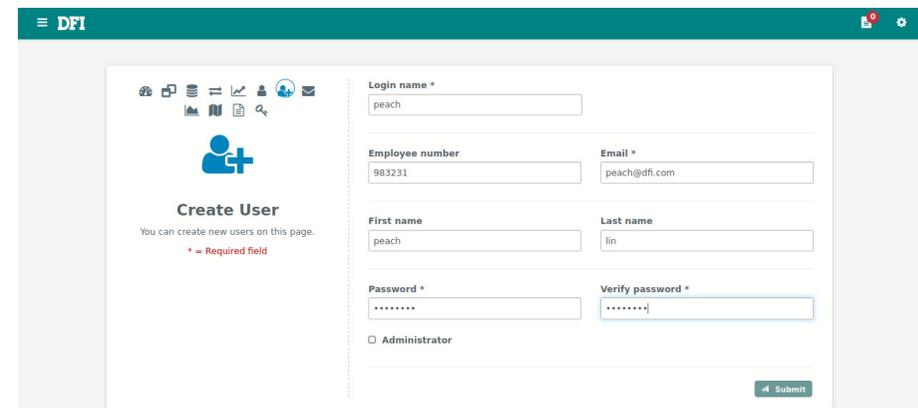
3.8.3 User Settings

This page edits user profiles, including the password.
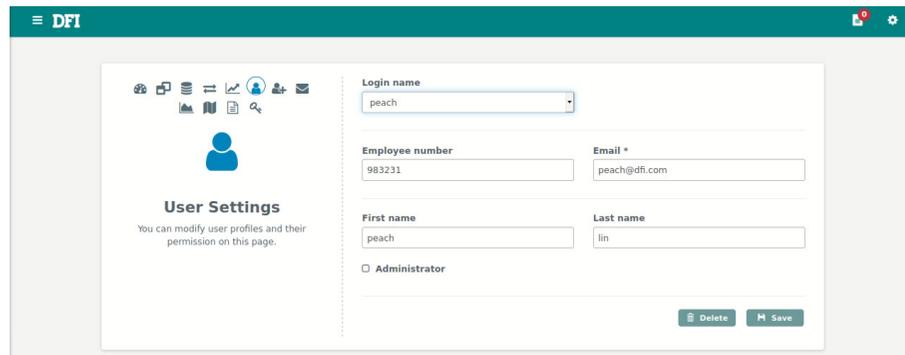
3.8.4 Group Settings

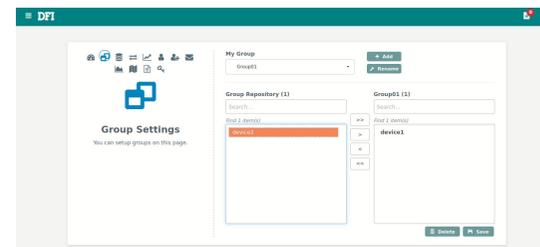Devices can be arranged into various groups for easy management.
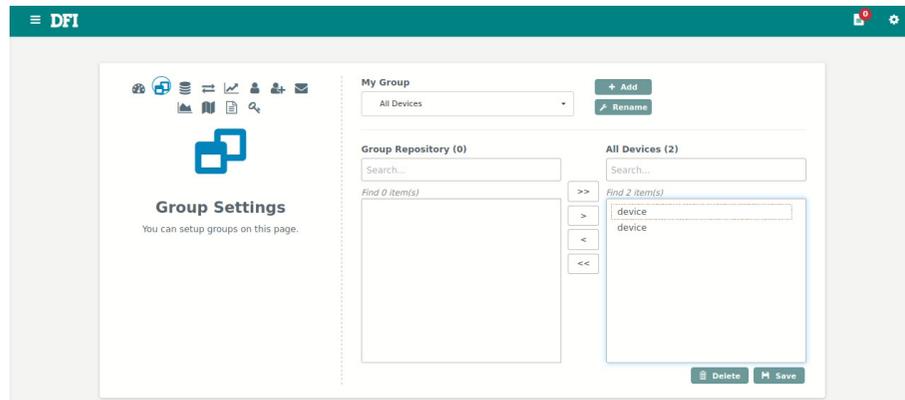
Press "Add" button to add a group and insert a name of it.
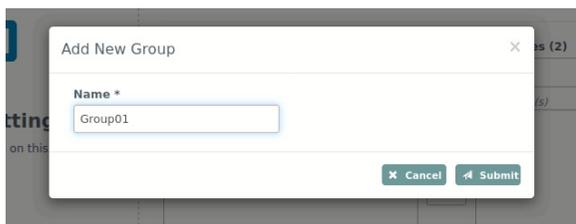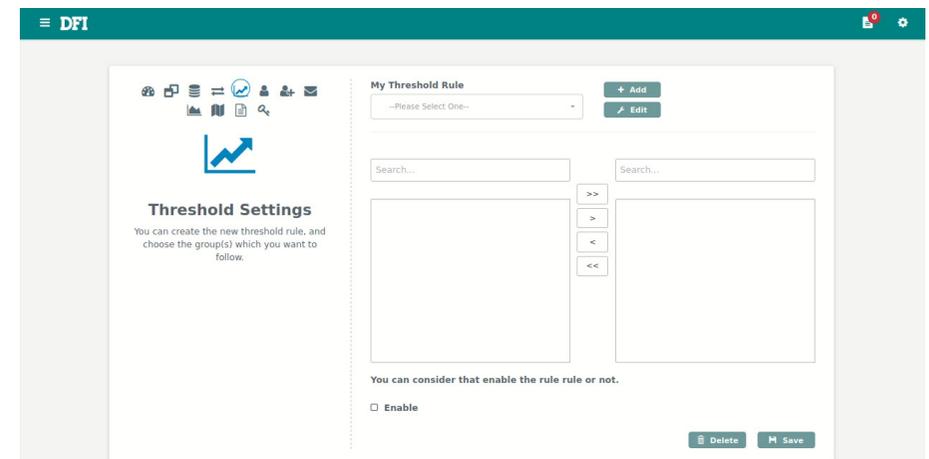

Then a new group is generated.
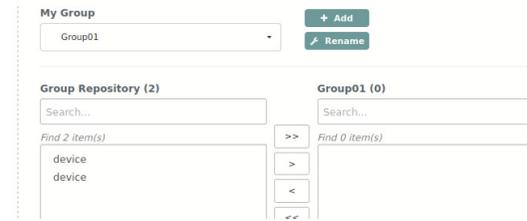
Choose devices from all device list in the left to new group in the right and press save button to complete. Press "Delete" button will delete the group.

3.8.5 Threshold Setting

Enable, add or Edit thresholds and choose groups to be applied. Press "Add" button to add new threshold or "Edit" button to edit exist ones.

A threshold is including of a name, source, condition and threshold value. (EX: CPU fan rotating speed > 3000)

Input mail addresses to receive the notice if the threshold is triggered.

After a threshold is added, apply the threshold to groups by selecting exist group to the right list.

3.8.6 Widget Setting

To add/edit/delete widgets.
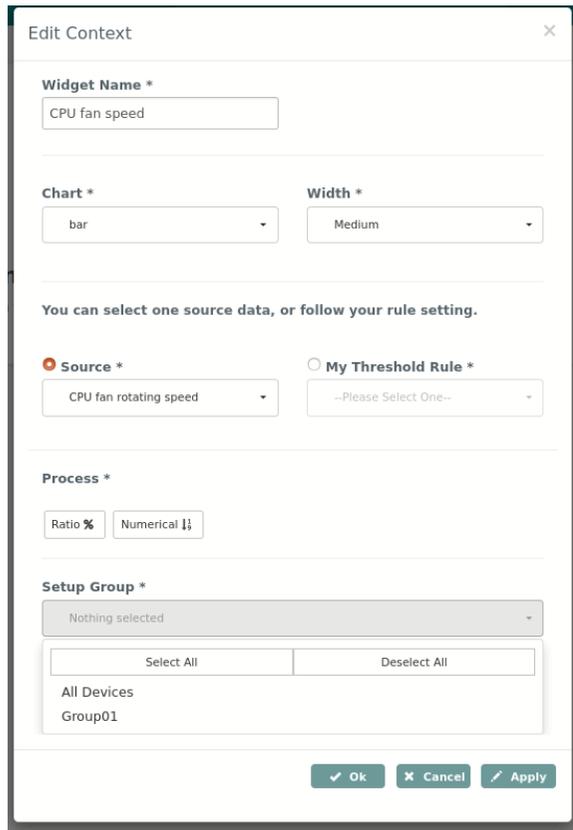
To add a widget, press "Add Widget Catalog" and input name of the widget.
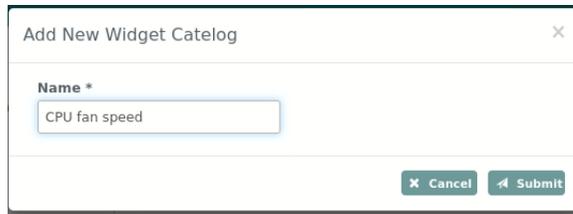
Specify a chart type and width, adjust relevant settings to continue.

Then press the "Apply" button to activate the widget.

3.8.7 Dashboard Setting

This page adds, edits and deletes dashboards, the refresh rate of dashboards can be specified.
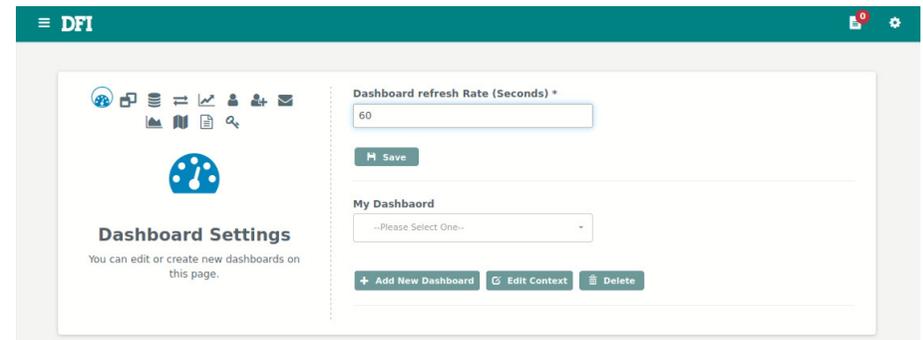
To add a new dashboard, select "Add New Dashboard" and input the name of it.
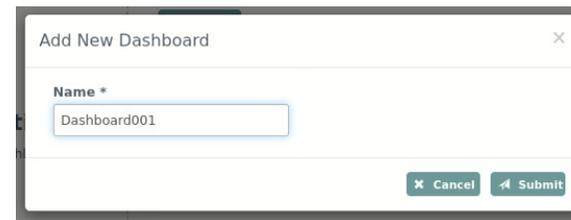
Select preferred repository and press OK or Apply to finish.
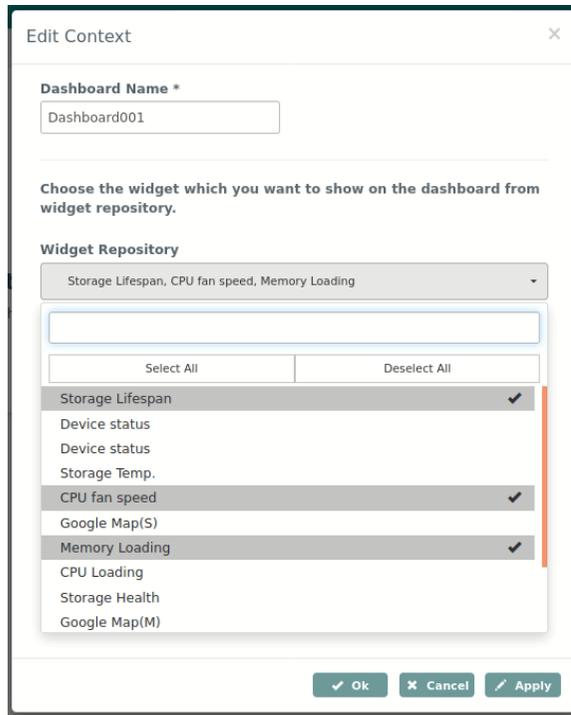
Switch back to the home page to view the new dashboard.
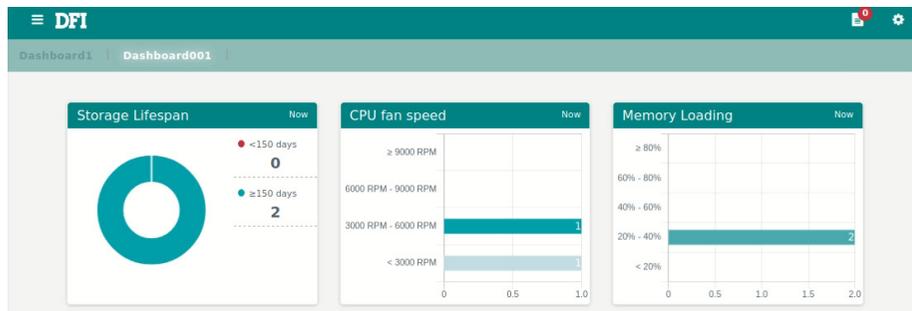
3.8.8 Email Setting

Email settings should be done before activating any relevant services like the email notification in "Threshold" function. Please press "Send test email" to see if the configuration works.
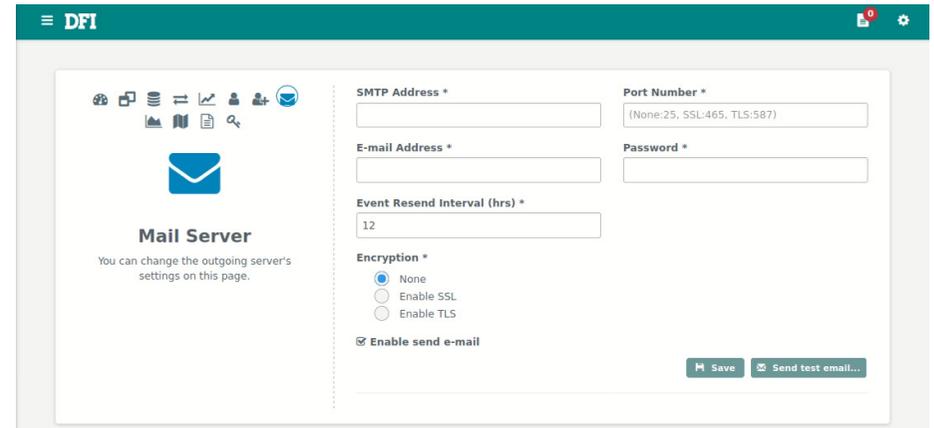
3.8.9 Device Setting

Name the alias of the device for better identification.
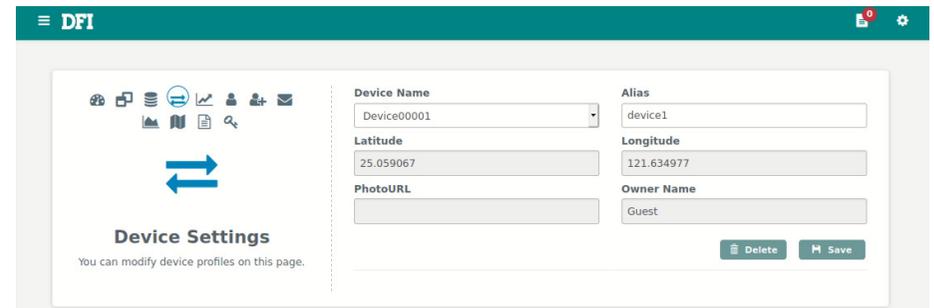
3.8.10 Customized Map Setting

Upload a customized map to indicate where the device is located. Press "Add New" to upload and name the customized map, the file format should be PNG.

After pressing the "Submit", the new map will be shown.

Click anywhere on the map, a marker will be pinned at the desired location.

Meantime, type the name of the marker and choose devices to be bind, click save button to apply. You can add several markers on the map.

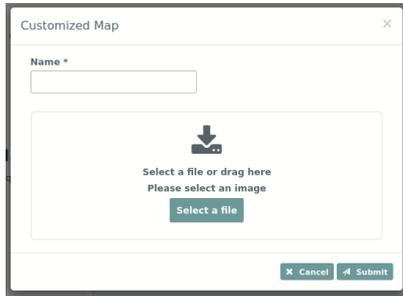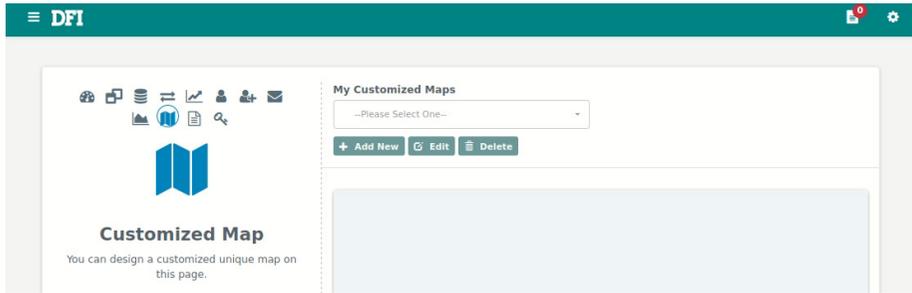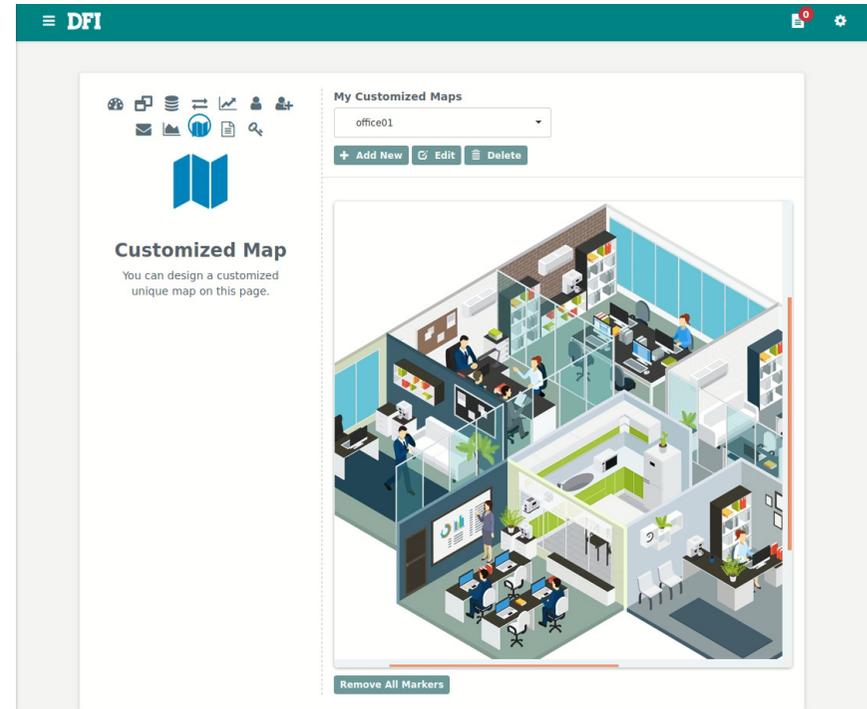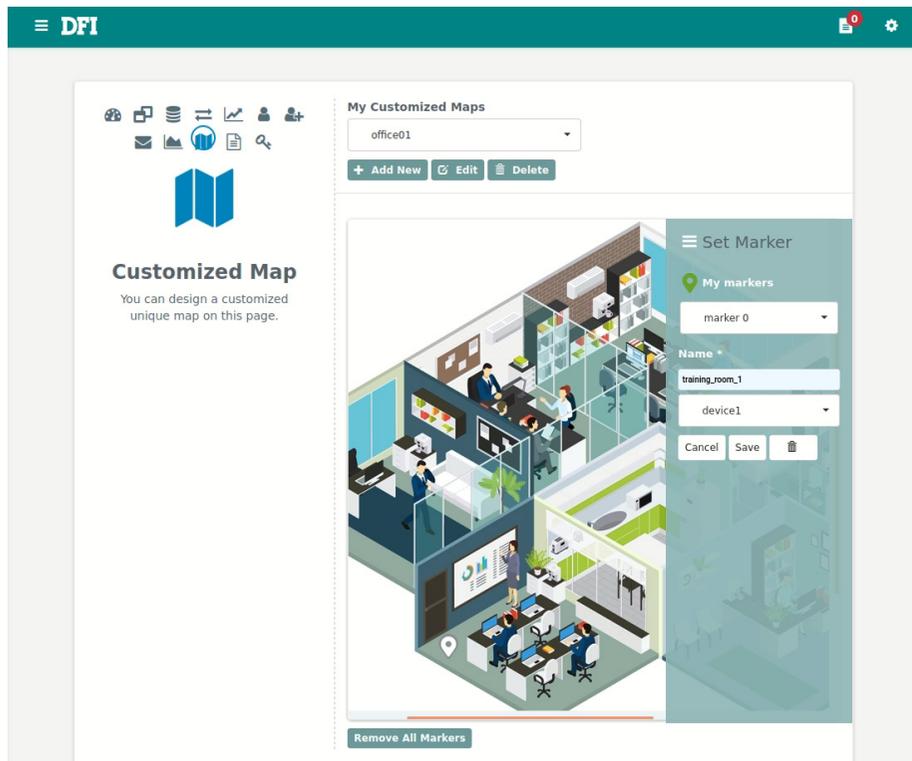You can also modify present markers or remove them at this page.

3.8.11 Device data setting

Determine the length of days to keep data in the database. If "Always keep" is chosen, data won't be deleted.
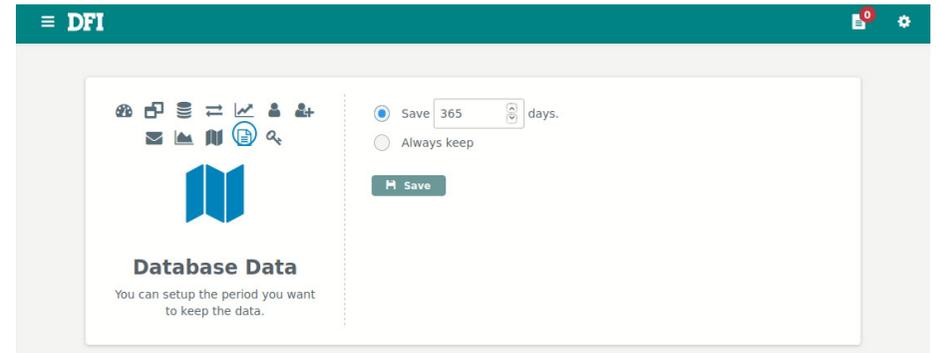
3.8.12 API key settings

A google map API key is necessary to activate the google map service, insert the key in the text field and press "update" button to confirm.
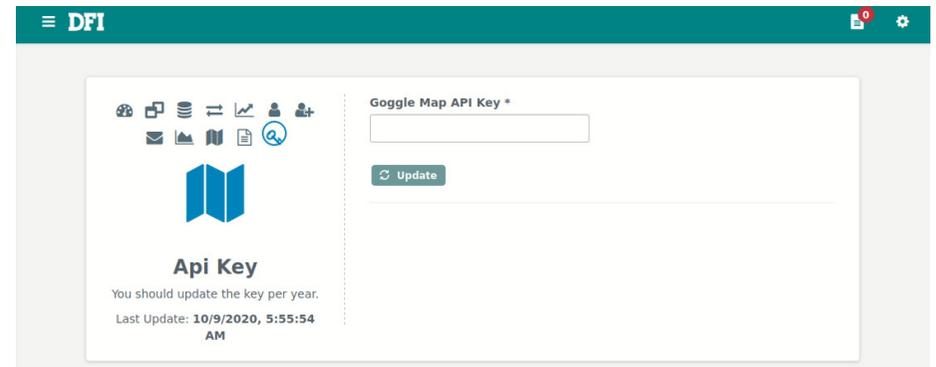
▶ 3.9 Event

3.9.1 New Events

The event page lists all events in a table. There are three types of tags in the list ("New", "Completed" and "All"). When a new event occurs, it will be put into the list under the "New" tag.

If the "Solve" button was clicked, events will be moved to the "Completed" page.

3.9.2 Completed events

This page shows completed events.

3.9.3 All events

The "All" events page shows all events including solved ones.

Chapter 4 Agent Operation(Client)

Before operating following process of client side, please make sure the RemoGuard server package has been installed and running successfully.

The Agent dashboard as below displays CPU, memory loading, and storage information such like temperature, lifespan and P/E cycle.

Note: Storage lifespan shows no information in the beginning, it may need 1 day to calculate from the FW algorithm.

▶ 4.1 Setting Menu

Please find and press the "setting" icon located on the top right corner to show the menu.

Then press DFI logo on the top left to return to the agent dashboard.
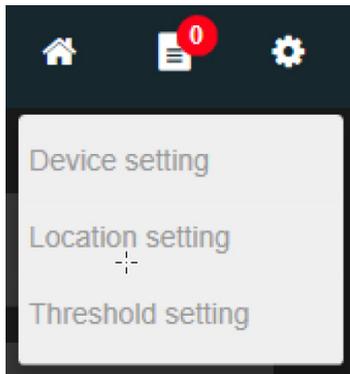
4.1.1 Device Setting

To set up connection with Server side, insert the server IP and press "Submit".
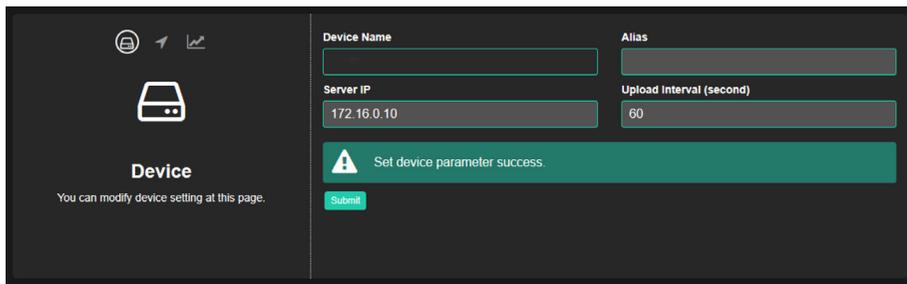
A message will show the result.
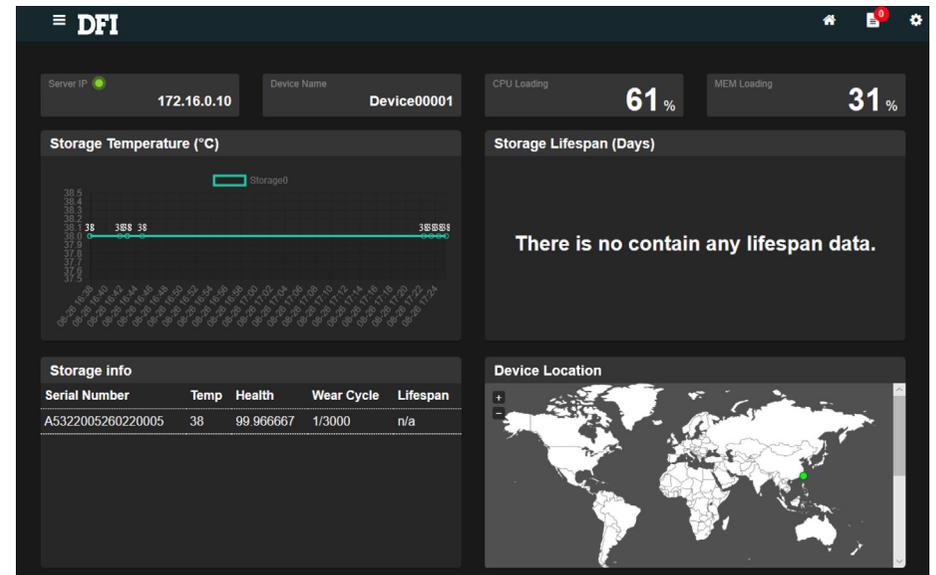
Check the connection status with green light that indicates the connection is working normally.

Server will assign an ID of this device in the "Device Name" column automatically.

You can specify an alias of the device.
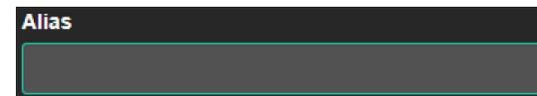
"Upload Interval" determines the interval of sending data to server.
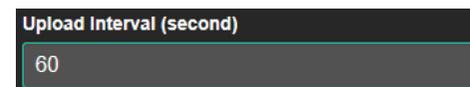
4.1.2 Location setting

Point out the device location by longitude and latitude. Device will show on the server side's map according to this setting.
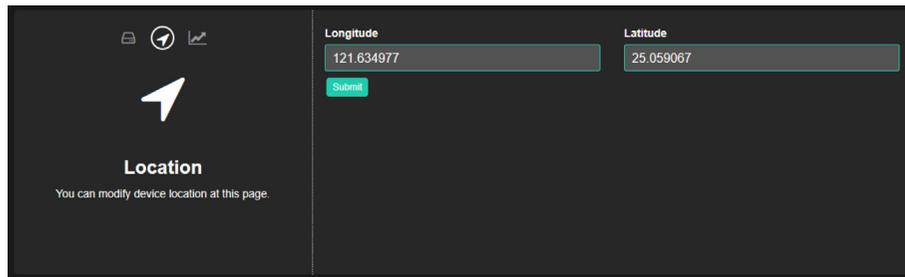
4.1.3 Threshold setting

Set up thresholds of storage information to trigger event notification.
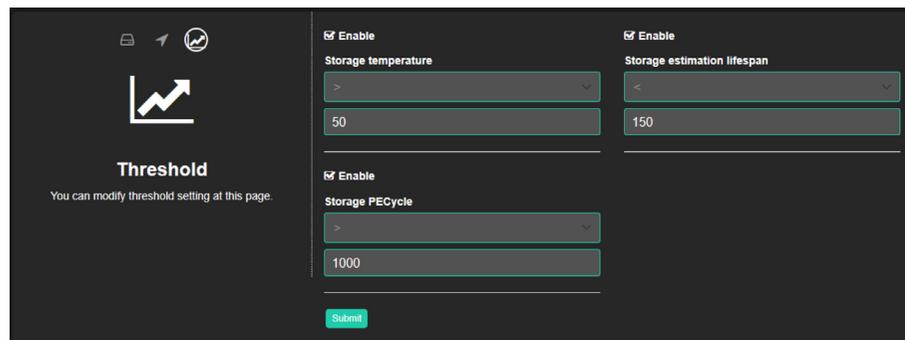
▶ 4.1 Event notification

Press the icon next to settings on the top right corner to get the event notifications list.

This icon also shows the amount of notifications.

Appendix

▶ Memory and SSD Compatibility List

SSDs compatible with OOB

Model Name	Interface	Flash Type
InnoAGE™ 2.5" SATA SSD 3TI7	SATA III 6.0 Gb/s	3D TLC

or visit https://www.innodisk.com/en/products/flash-storage/ssd/ and find the model name prefixed by "Innoage".

SSDs compatible with information retrieving

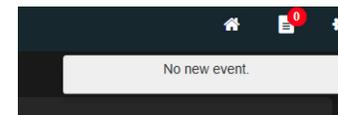| Model Name	Interface	Flash Type
2.5" SATA SSD 3TG6-P AES	SATA III 6.0 Gb/s	3D TLC
2.5" SATA SSD 3MV2-P	SATA III 6.0 Gb/s	MLC
2.5" SATA SSD 3MG2-P	SATA III 6.0 Gb/s	MLC
Slim SSD 3ME4	SATA III 6.0 Gb/s	MLC
InnoAGE™ 2.5" SATA SSD 3TI7	SATA III 6.0 Gb/s	3D TLC
2.5" SATA SSD 3TS5-P	SATA III 6.0 Gb/s	3D TLC
Slim SSD 3ME3	SATA III 6.0 Gb/s	MLC
2.5" SATA SSD 3SE2-P AES	SATA III 6.0 Gb/s	SLC
1.8" SATA SSD 3TG6-P	SATA III 6.0 Gb/s	3D TLC
1.8" SATA SSD 3MG2-P	SATA III 6.0 Gb/s	MLC
2.5" SATA SSD 3TG6-P	SATA III 6.0 Gb/s	3D TLC
2.5" SATA SSD 3SE-P	SATA III 6.0 Gb/s	SLC
2.5" SATA SSD 3ME3	SATA III 6.0 Gb/s	MLC
1.8" SATA SSD 3MR3-P	SATA III 6.0 Gb/s	MLC
2.5" SATA SSD 3SE4	SATA III 6.0 Gb/s	SLC
2.5" SATA SSD 3IE3	SATA III 6.0 Gb/s	iSLC
1.8" SATA SSD 3SR-P	SATA III 6.0 Gb/s	SLC
2.5" SATA SSD 3ME4	SATA III 6.0 Gb/s	MLC
1.8" SATA SSD 3SE2-P AES	SATA III 6.0 Gb/s	SLC
2.5" SATA SSD 3MR3-P	SATA III 6.0 Gb/s	MLC
2.5" SATA SSD 3SR-P	SATA III 6.0 Gb/s	SLC
2.5" SATA SSD 3IE2-P	SATA III 6.0 Gb/s	iSLC
2.5" SATA SSD 3SE3	SATA III 6.0 Gb/s	SLC
2.5" SATA SSD 3SE	SATA III 6.0 Gb/s	SLC
3.5" Fire Shield SSD	SATA III 6.0 Gb/s	iSLC, SLC
2.5" SATA SSD 3TE7	SATA III 6.0 Gb/s	3D TLC
2.5" SATA SSD 3MR2-P	SATA III 6.0 Gb/s	MLC
1.8" SATA SSD 3SE	SATA III 6.0 Gb/s	SLC
2.5" SATA SSD 3MG2-P AES	SATA III 6.0 Gb/s	MLC
2.5" SATA SSD 3SR3-P	SATA III 6.0 Gb/s	SLC
2.5" PATA SSD 1SR-P	PATA	SLC
2.5" PATA SSD 1SE	PATA	SLC
2.5" PATA SSD 1MG3-P	PATA	MLC
1.8" SATA SSD 3MG3-P	SATA III 6.0 Gb/s	MLC
2.5" SATA SSD 3IE4	SATA III 6.0 Gb/s	iSLC

or visit
https://www.innodisk.com/en/products/flash-storage/ssd/

Memory modules compatible with information retrieving

https://www.innodisk.com/en/products/dram-module

Notes

1. OOB functions strictly rely on InnoAGE SSDs.
2. Memory information varies from the module, to install an Innodisk module is strongly advised to get complete status and avoid incompatible issues.
3. Functions might be limited by installing SSDs or memory modules not listed above.