First TWSNMP FK

Most popular SNMP manager in Japan

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At the beginning

TWSNMP is an SNMP manager that supports the most popular SNMPv3 in Japan for over 20 years.
It is TWSNMP FK that has been reprinted with the latest machine technology in 2023.
The TWSNMP FC that runs on the container is accessed from the web browser, but the FK is a desktop app and does not require a browser.

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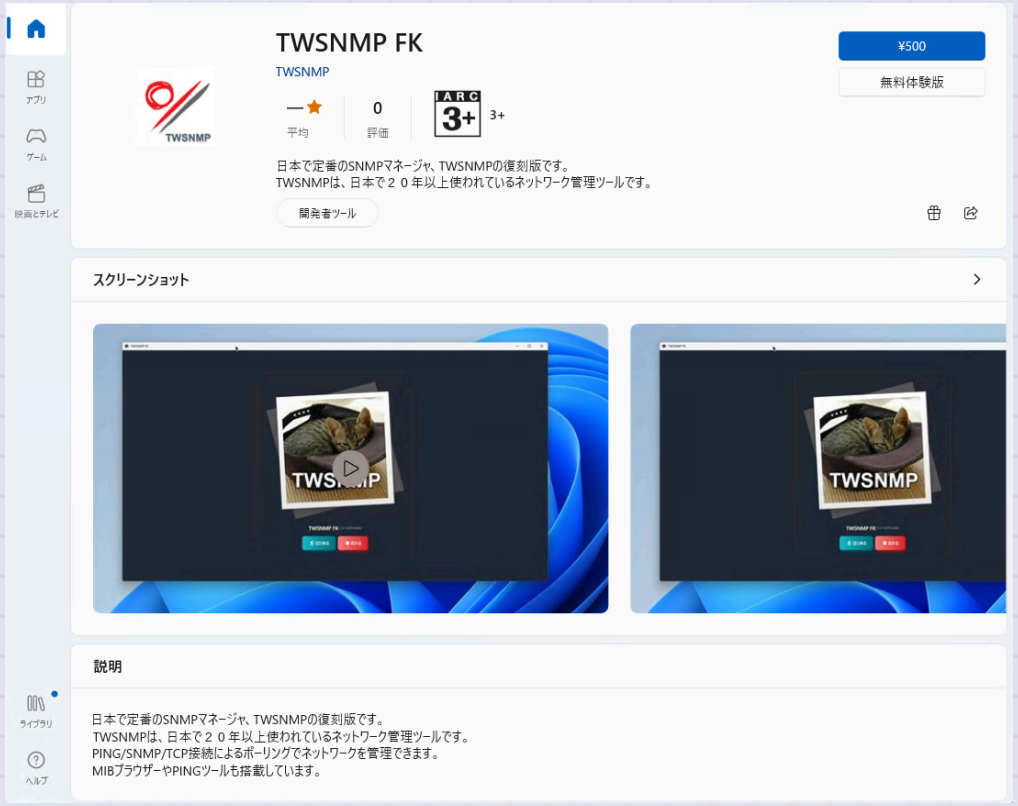
Microsoft Store

Windows version

https://www.microsoft.com/store/apps/9nsqn46p0mVL

You can buy it.



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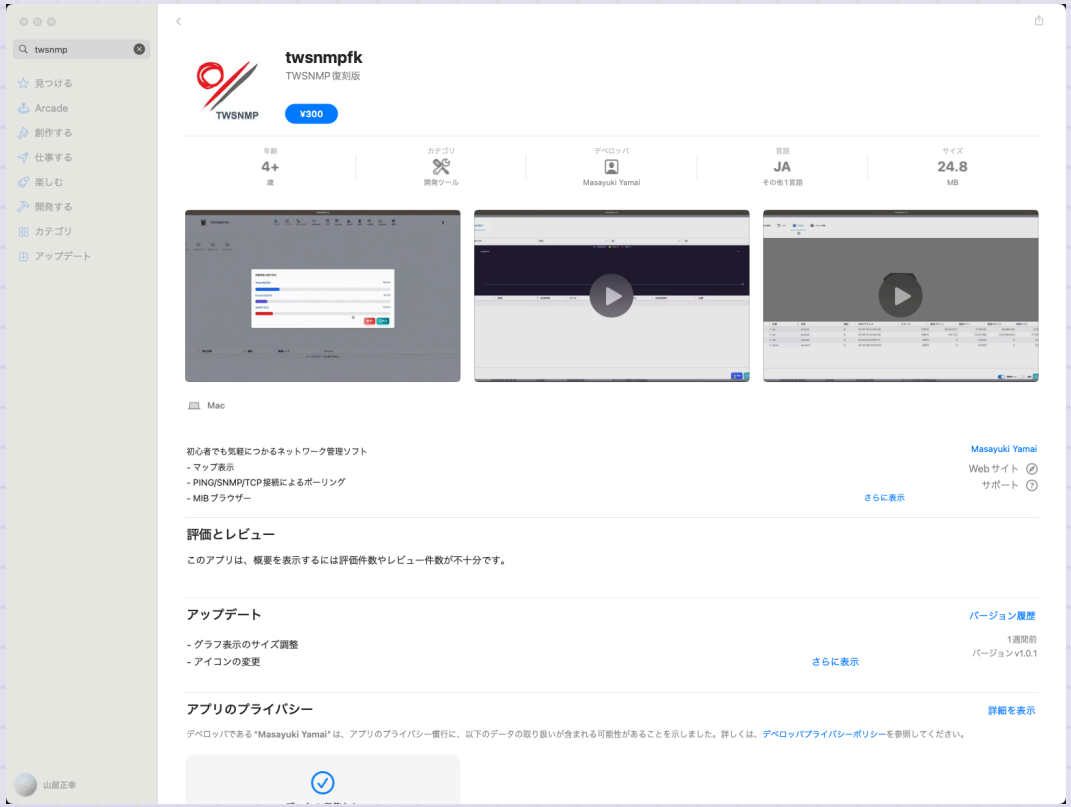
App Store

The Mac version is

https://apps.apple.com/jp/app/twsnmpfk/id6468539128

You can buy it.



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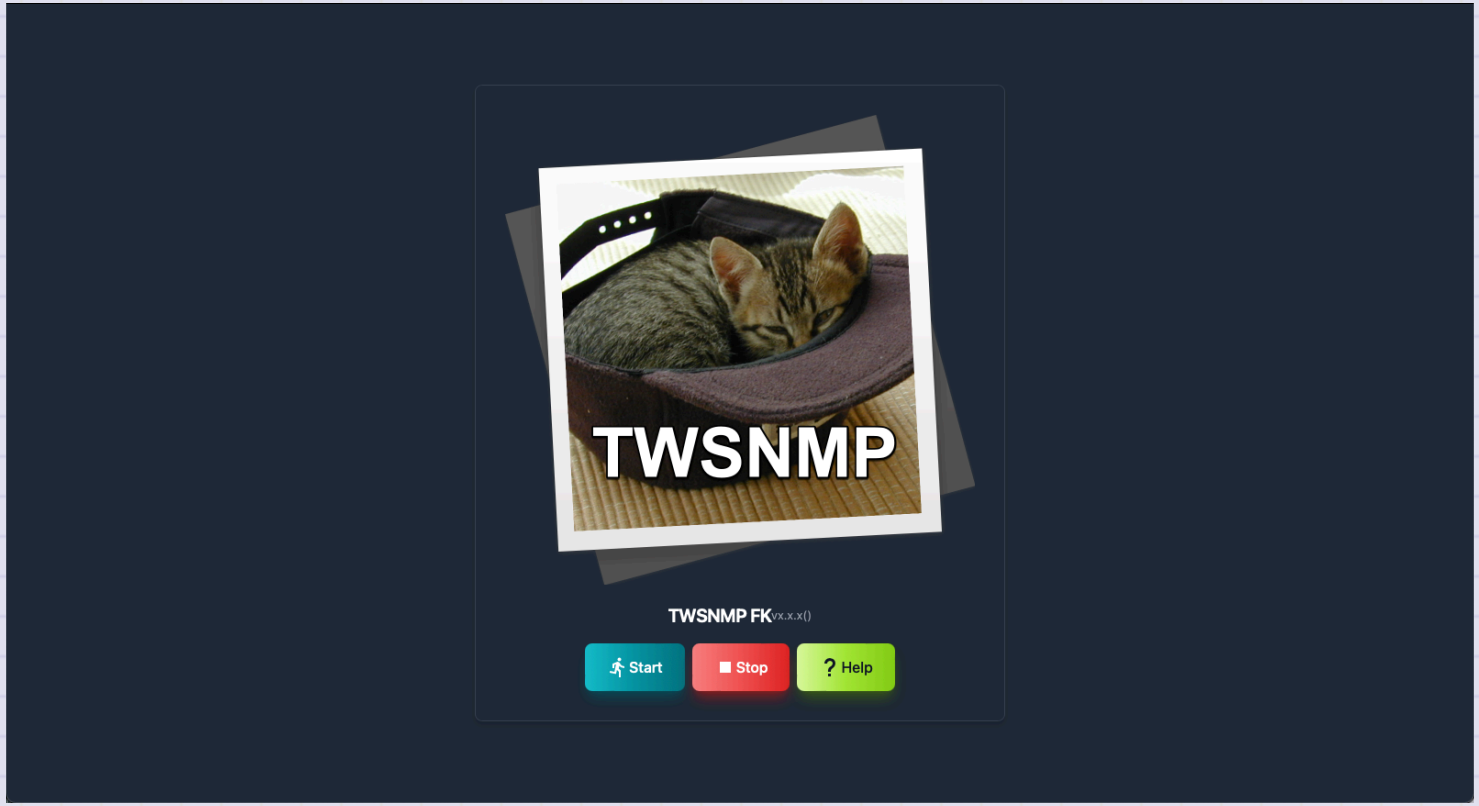
Starting TWSNMP FK

In the case of Windows, start from the start menu to the Mac OS in your favorite method, such as from the launcher.Welcome to the screen.Start with the <Start> button.Stop the program with the <Stop> button.The explanation screen of how to use it is displayed with the <Help> button.



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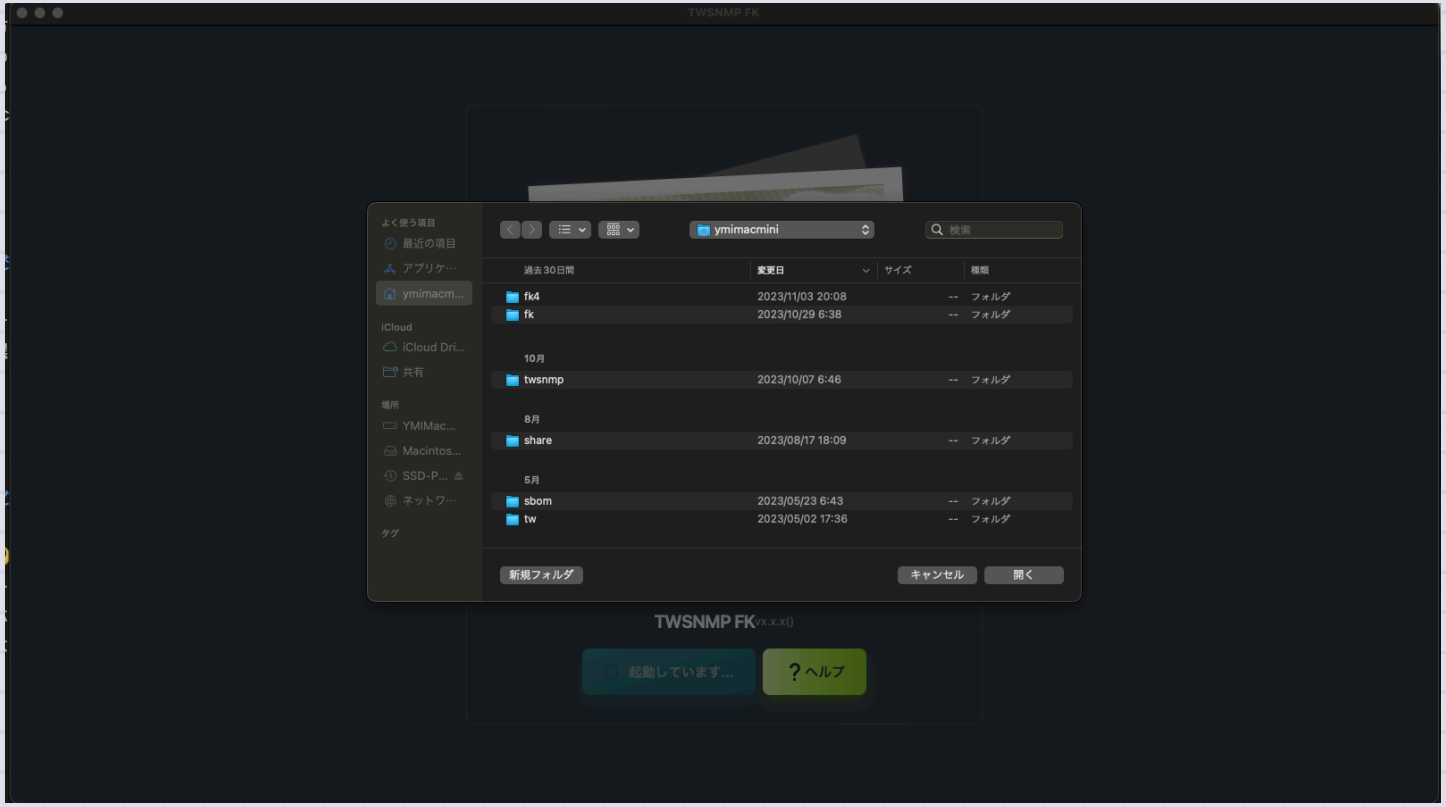
Select a folder to save data

Click the <Start> button on the screen to display a dialog to select a folder to save the data.Please select a folder.You can also create a new one.



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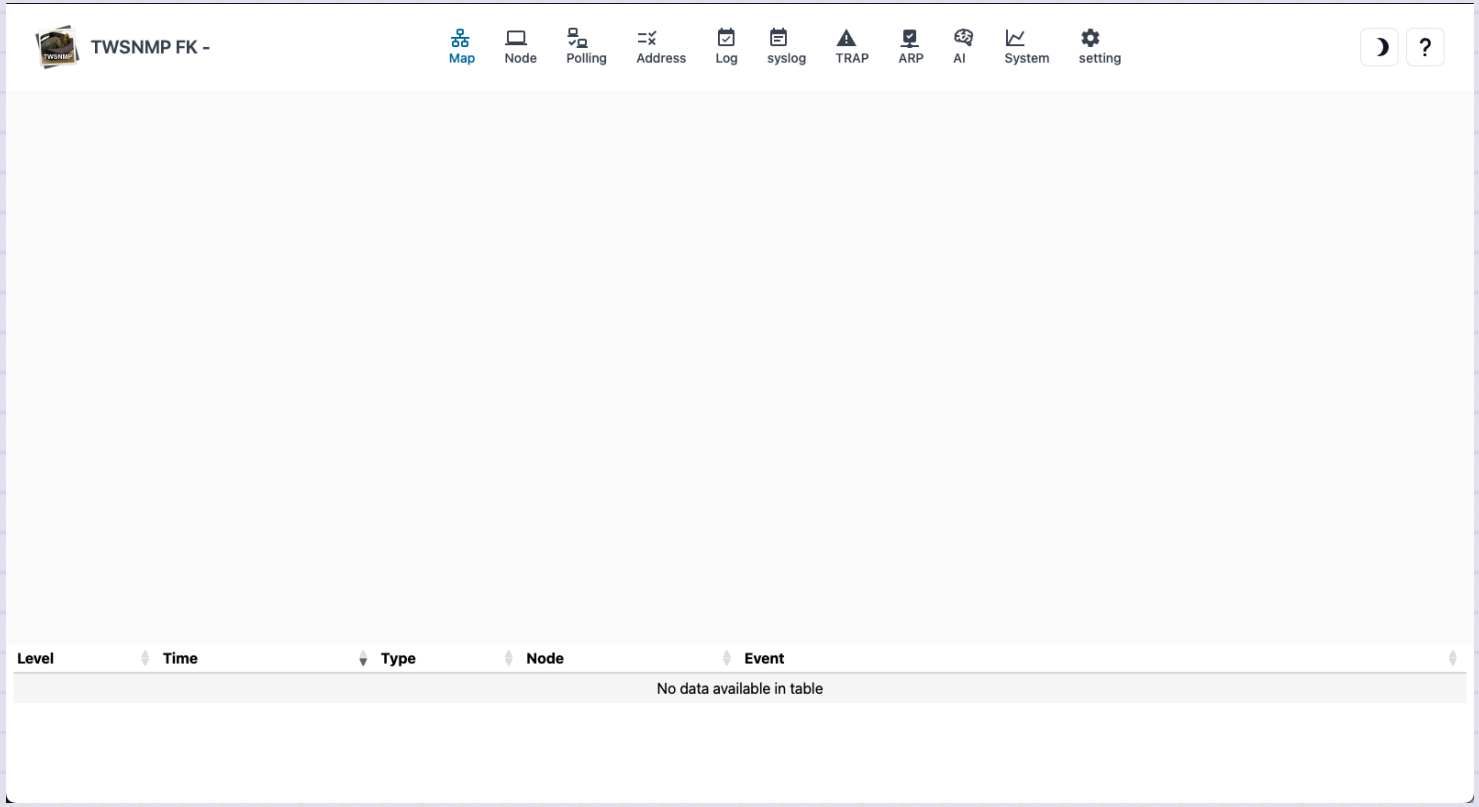
First map

Select a new folder and start a map without node.After a while, the log will be displayed.



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Flow of the first map creation

The flow of creating a map is

- Click the appropriate position on the map
- Start "Automatic discovery" from the menu
- The IP address range to be searched
- Precrose automatic discovery
- Move node on map
- Line connection

You can now search for PCs, routers, servers, etc. connected to the managed network and register on the map.

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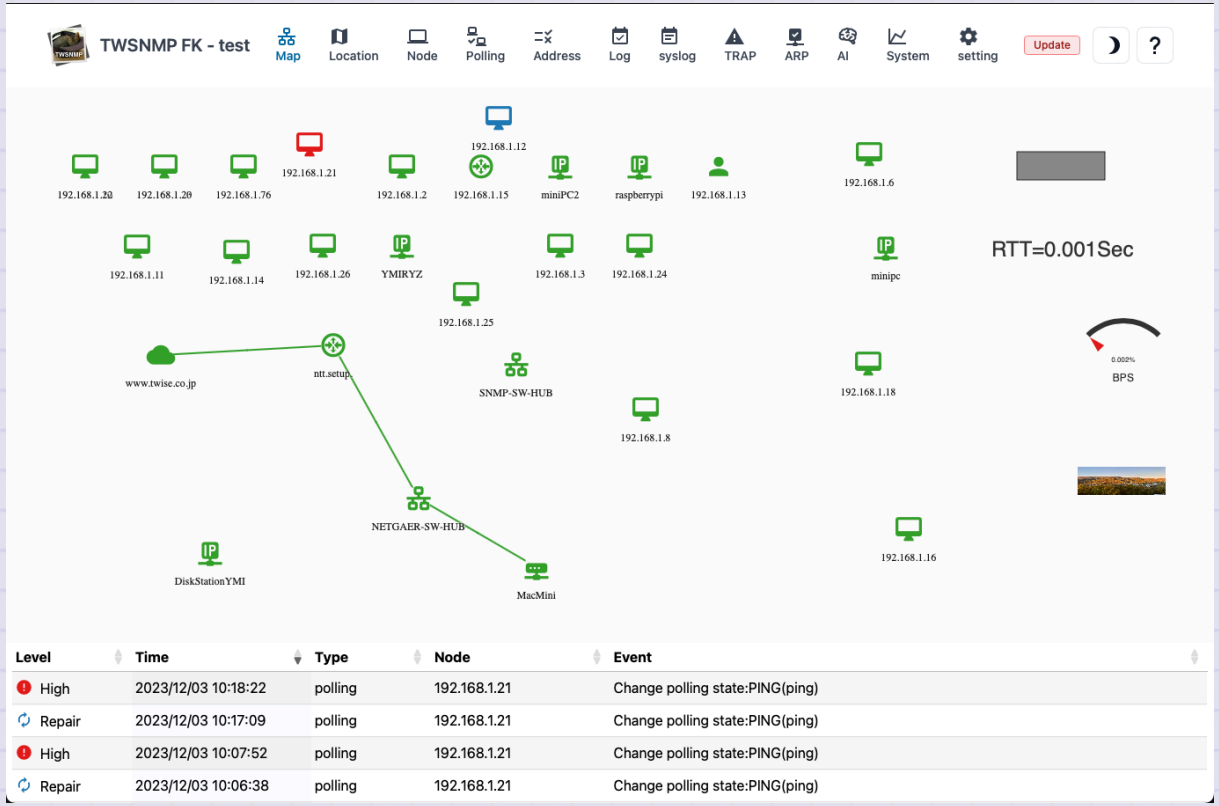
Map

The map screen has three large parts.



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Screen	Contents
Toolbar	Switch the screen.
Map	This is the part that displays the composition of the network.
Event Log	Displays the latest 100 event logs.

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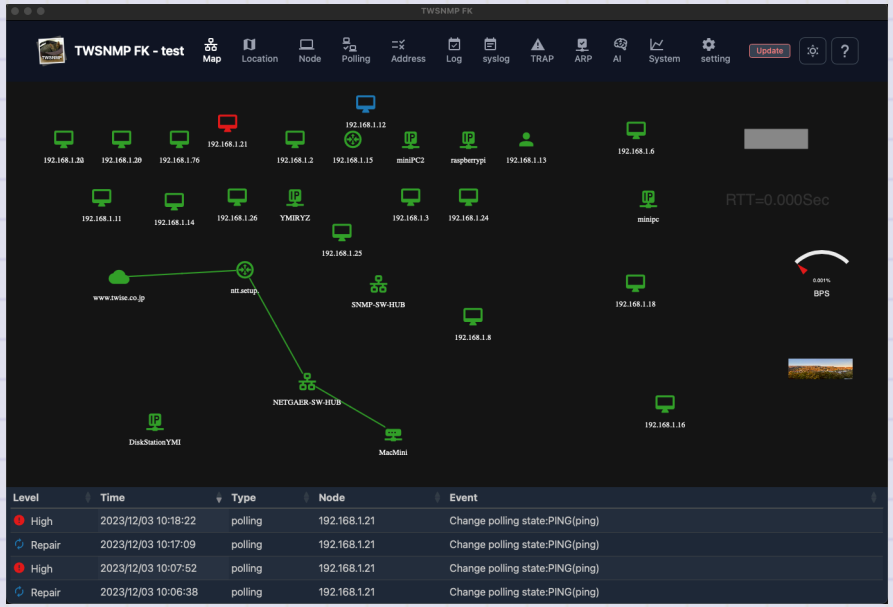
Light/dark mode switching

Click the 🌙 mark on the upper right to dark mode.I like dark mode.Probably the person who aims for a white hacker likes dark mode.There are only white hackers in the cat world.By Cat of the predecessor assistant.The current assistant cat seems to like both because the pattern is black and white.



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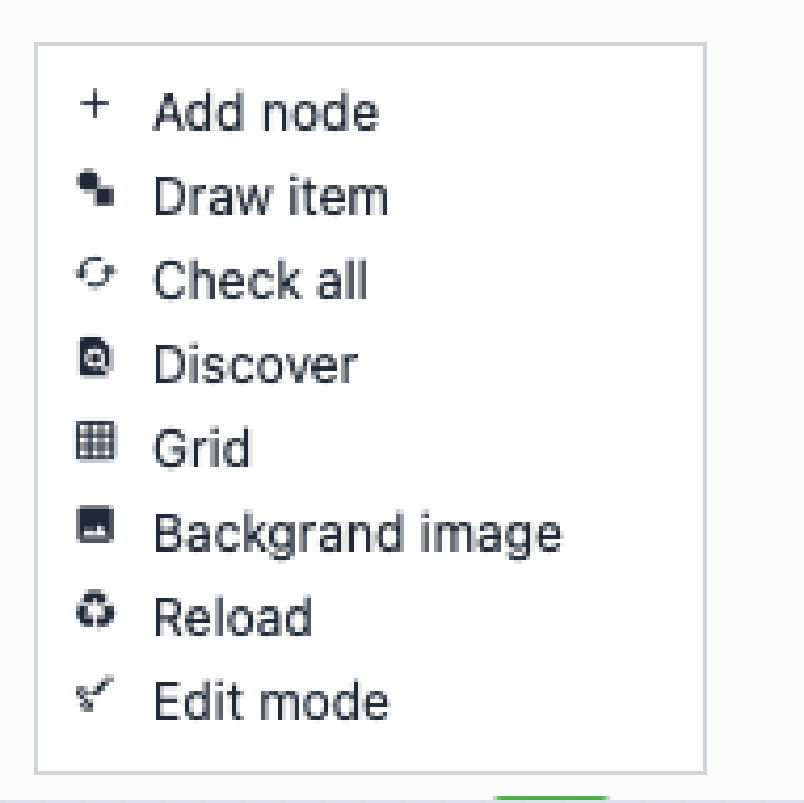
Map menu

Right -click the location other than the node and drawing items on the map to display.



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Menu	Operation
Add node	Add the node to the map manually.
Draw item	Add drawing items to the map.
Check all	Reconfirm the node that has occurred.
Discover	Displays the automatic discovery screen.
Grid	Align the position of the node at the specified interval.
Backgrand image	set backgrand image to map
Reload	Update the map to the latest state.
Edit mode	All drawing items are displayed regardless of the state of the map.

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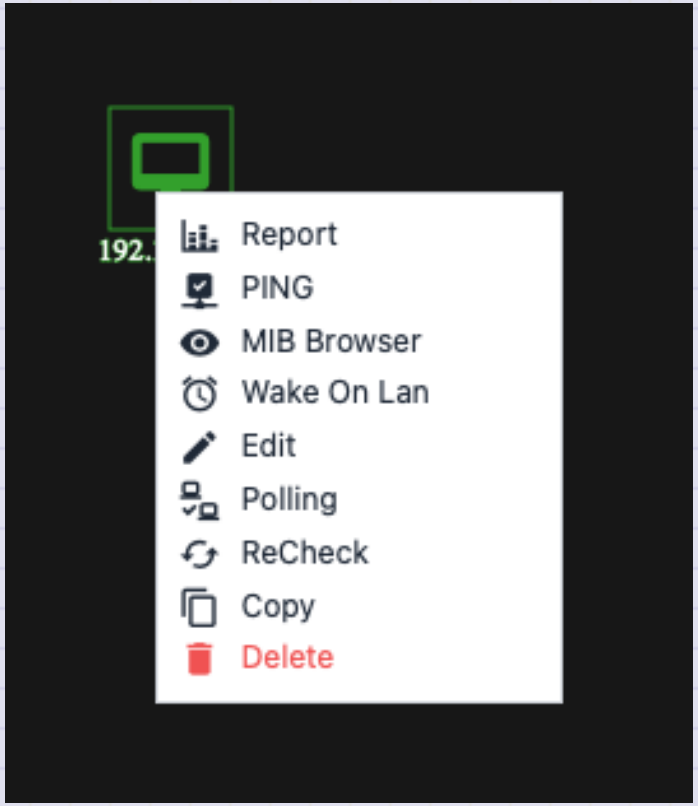
Node menu

Right -click the node on the map to display it.



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Menu	Operation
Report	Displays the report screen related to the node.
Ping	Displays the ping screen.
MIB browser	Displays MIB browser.
gNMI Tool	Displays gNMI Tool.
Wake on LAN	Wake on LAN packet.
Edit	Displays the screen to edit the node settings.
Polling	Displays a polling list related to nodes.
ReCheck	Relieve the condition of the node by executing the polling.
Copy	Create a node duplication.
Delete	Delete node.

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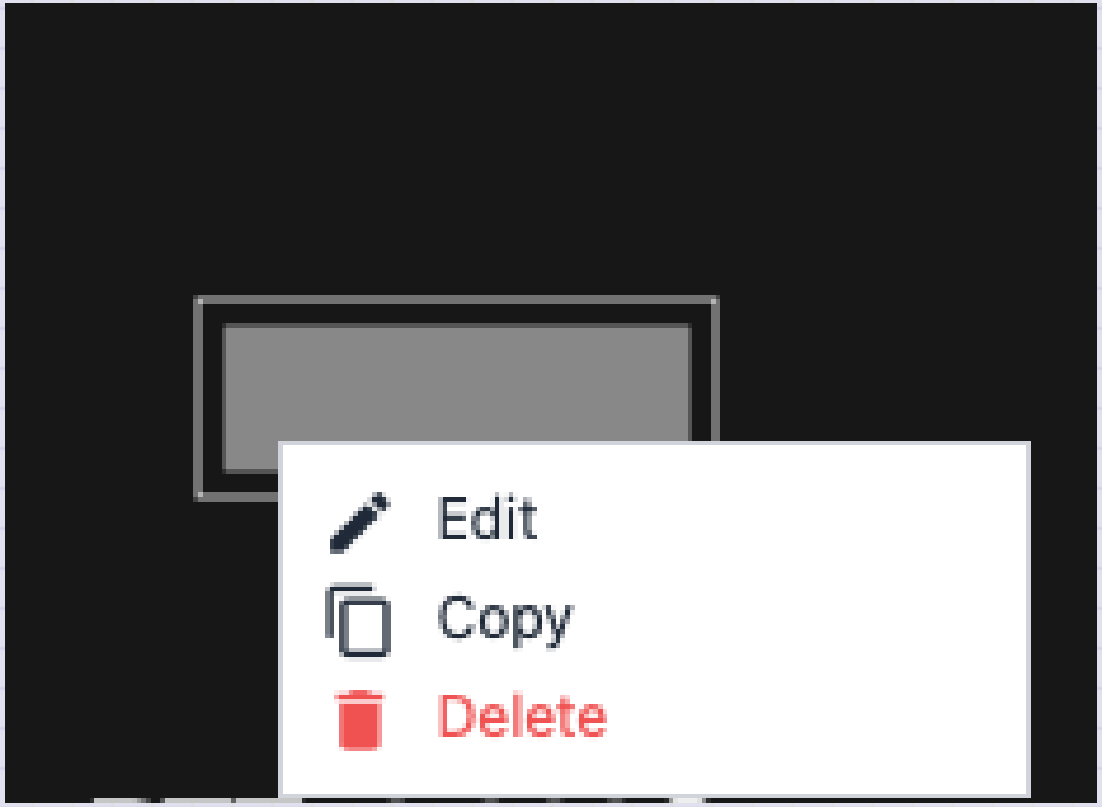
Draw item menu

Right -click the drawing item on the map to display it.



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Menu	Operation
Edit	Displays the screen to edit the drawing item settings.
Copy	Create drawing items.
Delete	Delete drawing items.

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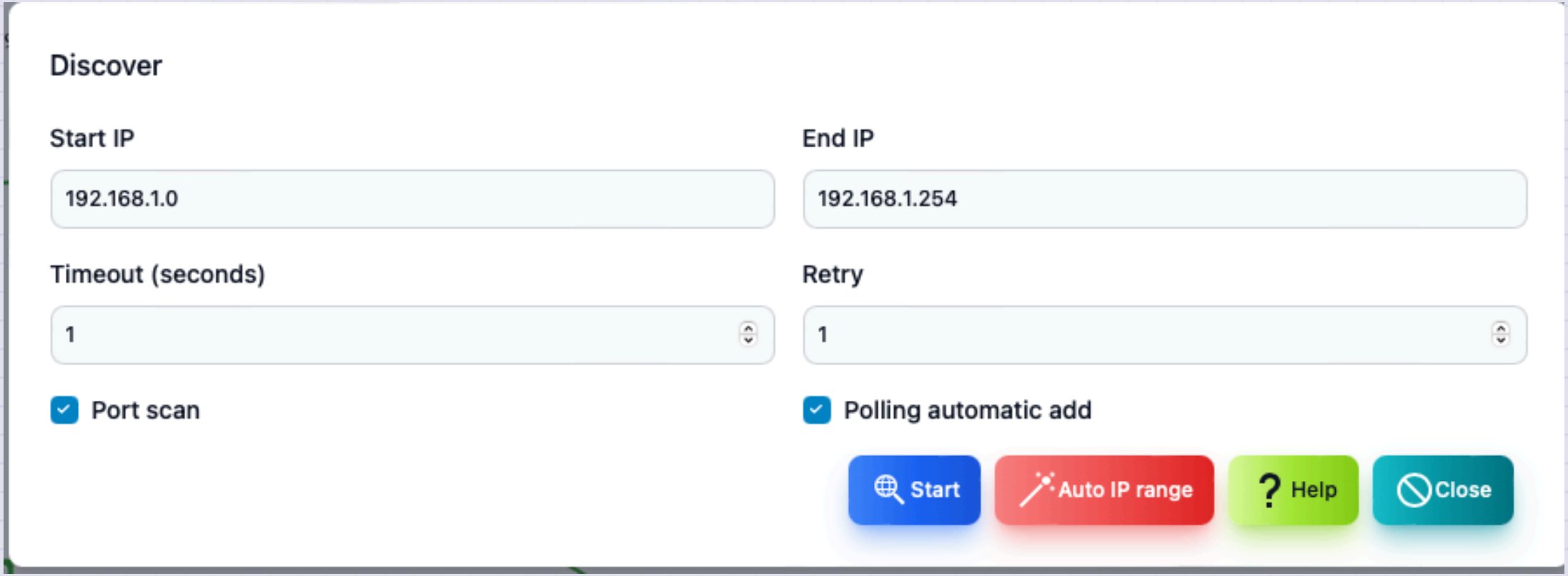
Discover

Automatic discovery screen.



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Items	Contents
Start IP	The first IP address range to search.
End IP	The end of the IP address range to search.
Timeout	This is the timeout of ping when searching.
Retry	This is the number of retrys of ping when searching.
Port scan	Perform a port scan on the found node.
add polling	Polling is automatically set on the found node.
<Start>	Start automatic discovery.
<Auto IP range>	Automatically set the search range from the PC IP address.

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Automatic discovery is being performed

The number of nodes you have executed or discovered is displayed.

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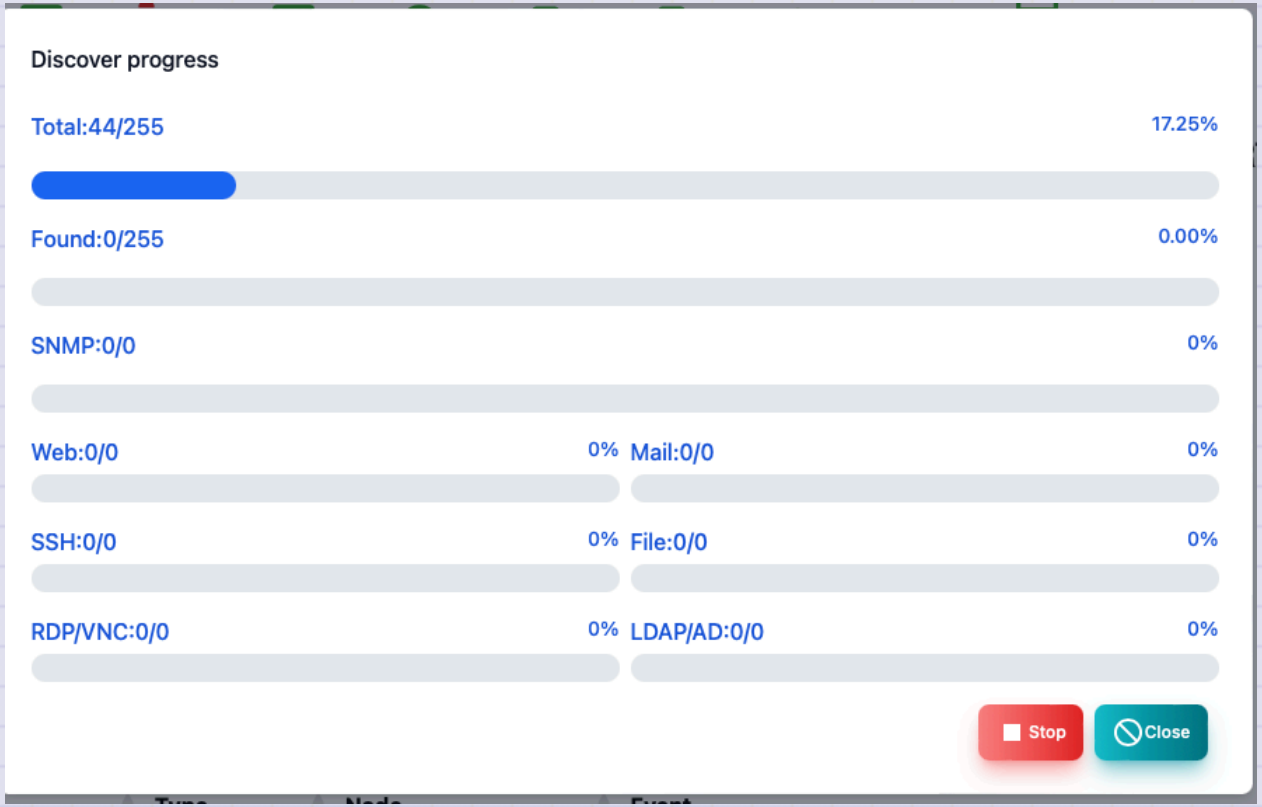
Automatic discovery is being executed (with port scanning)

The number of nodes you have executed or discovered is displayed.When performing a port scan, the discovered server function is also displayed.



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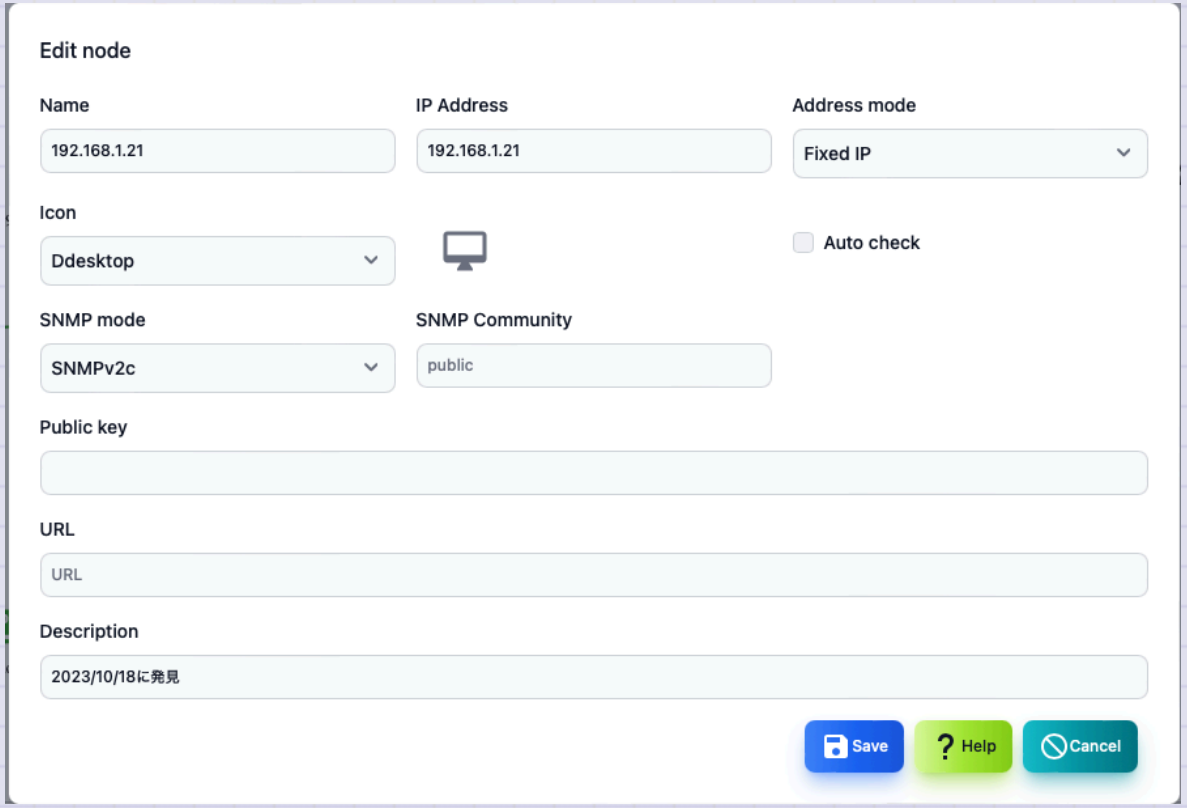
Node editing

You can edit the node from the menu or button by selecting a node on the map screen or node list.



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Items	Contents
Name	Node name.
IP address	Node IP address.
Address mode	IP address fixation (default), MAC address fixing, host name fixed.
Icon	It is an icon to be displayed.
Auto recheck	When it is returned, it will be automatically normal.
SNMP mode	SNMP mode.There are SNMPv1, V2C, V3 (authentication and encryption).

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Items	Contents
SNMP Community	Community name for SNMPV1, V2C.
User	User ID when accessing with SNMPv3.
Password	Password when accessing with SNMPv3.
Public key	This is the public key of the node when polling with SSH. In the case of blank, automatically set at the first connection.
URL	URL when accessing with browser etc. It will be displayed on the right -click menu. You can specify multiple by separation of comma.
Description	Supplementary information is described.

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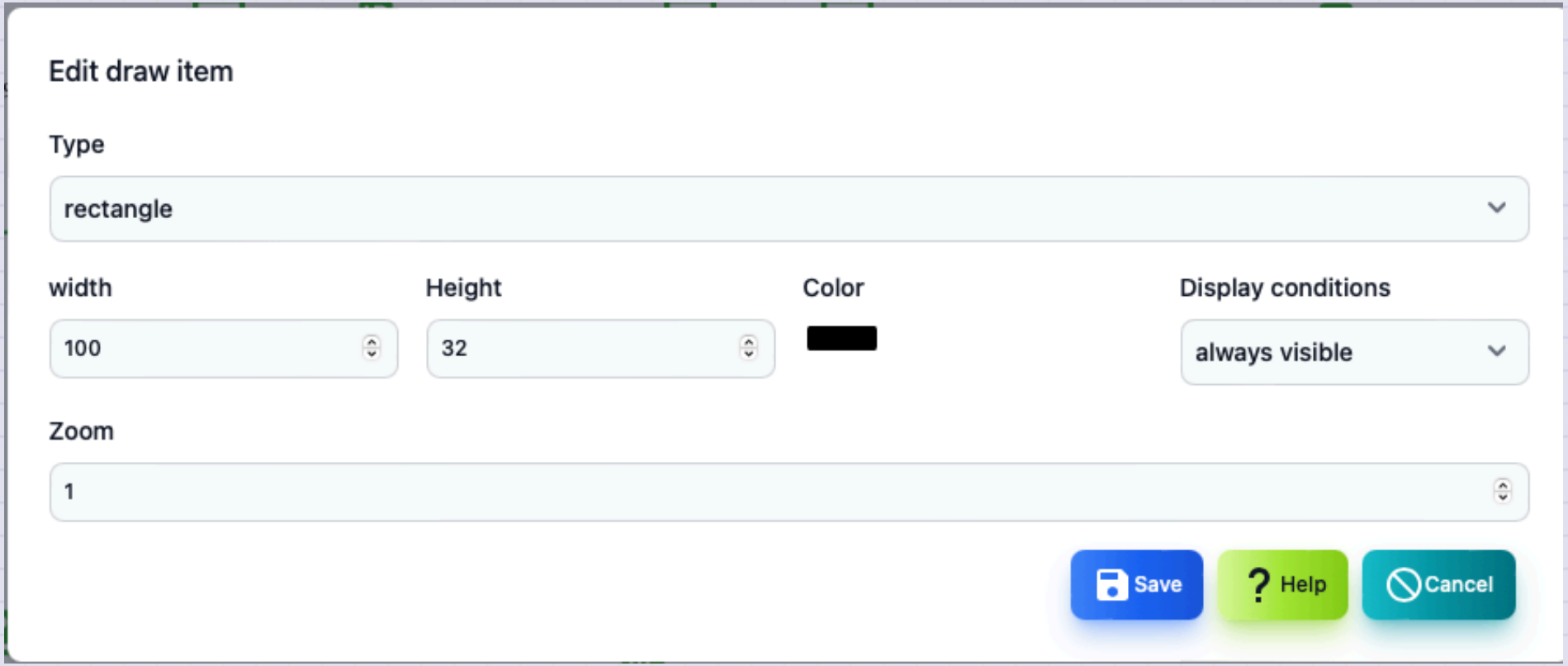
Drawing item (rectangle, elliptical)

It is an edit screen of drawing item (rectangle, elliptical).



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Items	Contents
Type	It is a type of drawing item.You can only change it when you add it.
Width	The width of the drawing item.
Height	It is the height of the drawing item.
Color	It is the color of the drawing item.
Display condition	It is a state of the map that displays drawing items.
Magnification	The display rate of drawing items.

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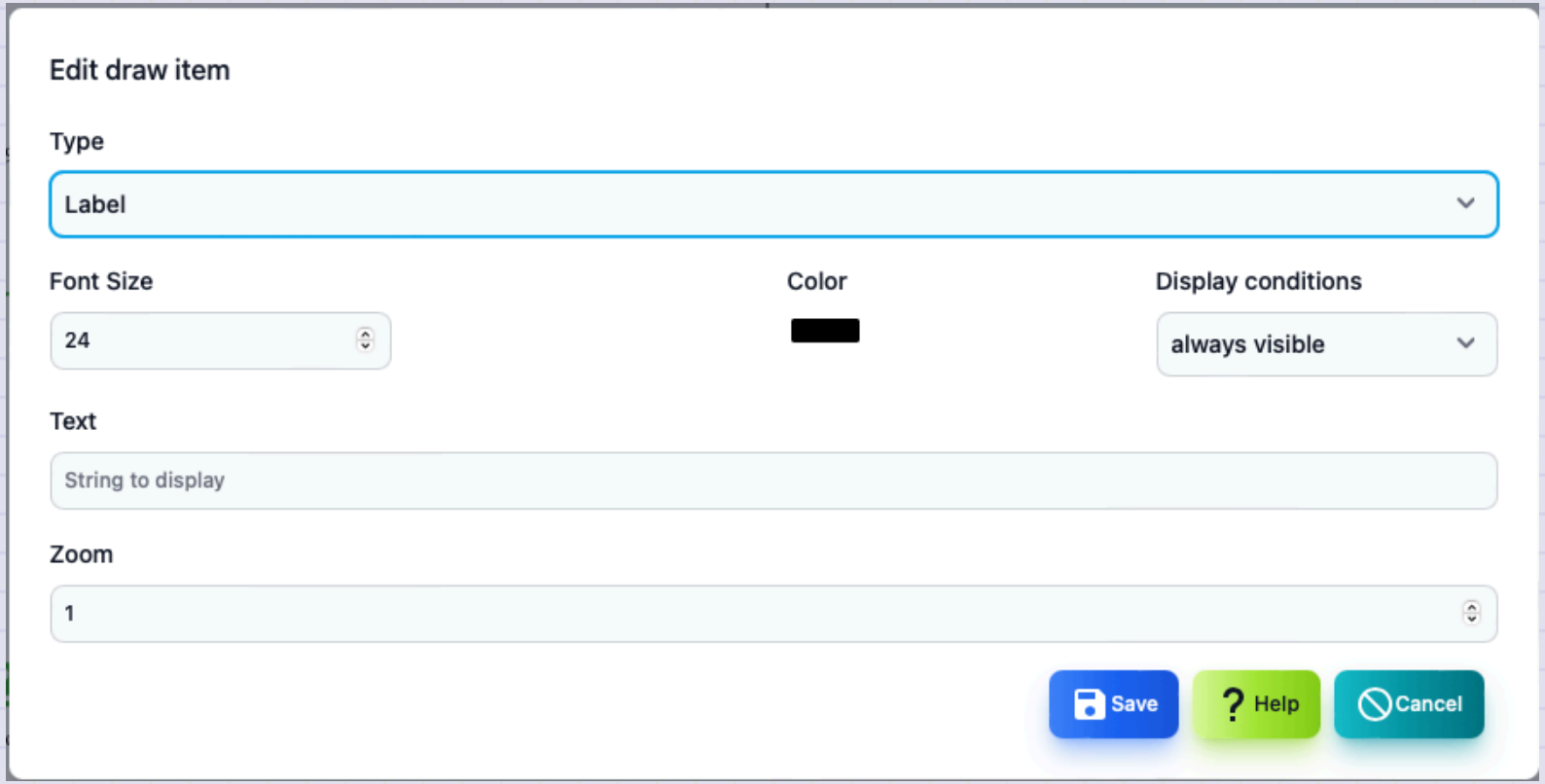
Drawing item (label)

It is the editing screen of the drawing item (label).



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Items	Contents
Type	It is a type of drawing item.You can only change it when you add it.
Character size	Label character size.
Color	It is the color of the drawing item.
Display condition	It is a state of the map that displays drawing items.
Character string	It is a string to be displayed.
Magnification	The display rate of drawing items.

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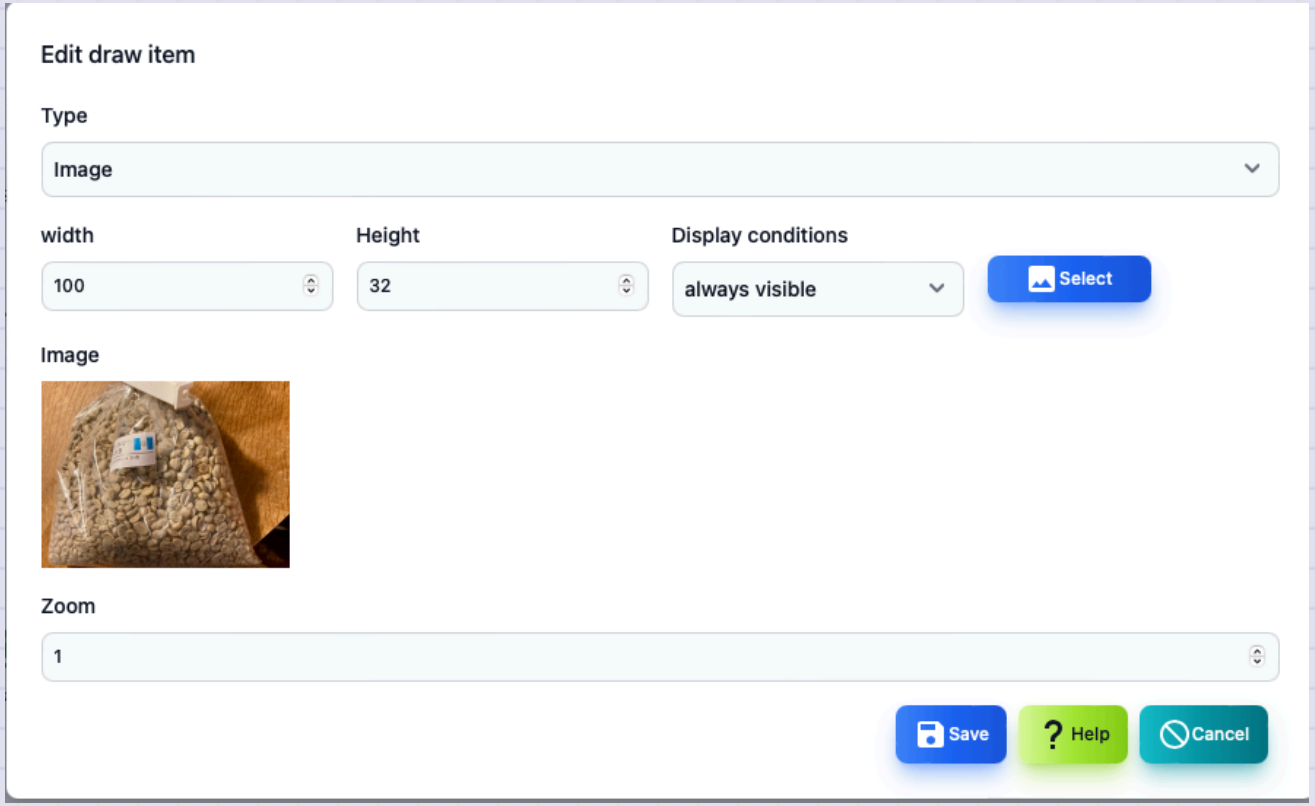
Drawing item (image)

It is the editing screen of drawing item (image).



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Items	Contents
Type	It is a type of drawing item.You can only change it when you add it.
Width	It is the width of the image.
Height	It is the height of the image.
Display condition	It is a state of the map that displays drawing items.
Image	It is an image to be displayed.Select an image file with the <Select> button.
Magnification	The display rate of drawing items.

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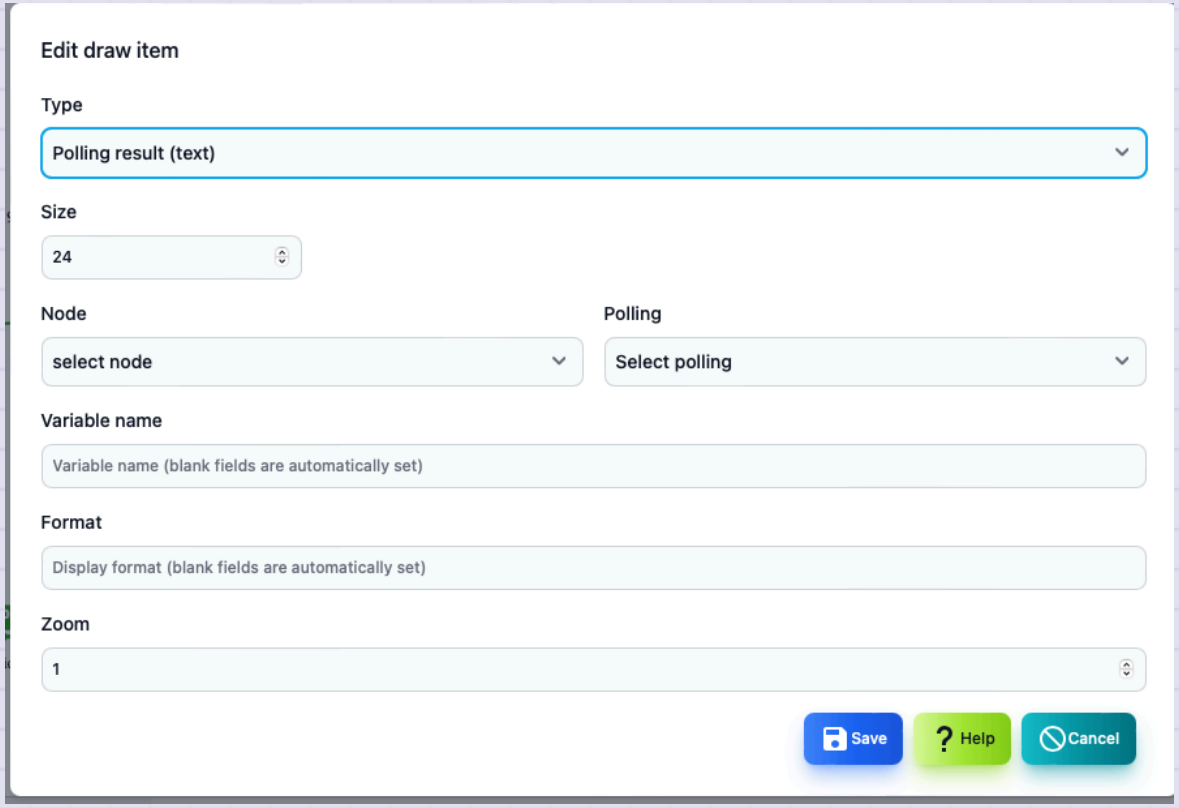
Drawing item (polling result)

It is the editing screen of drawing item (polling result: text).



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Items	Contents
Type	It is a type of drawing item.You can only change it when you add it.
Size	Character size.
Node	This is a node list for selecting polling.
Polling	Polling that displays results.
Variable name	The name of the variable displayed from the polling results.
Display format	Format when displaying.
Magnification	The display rate of drawing items.

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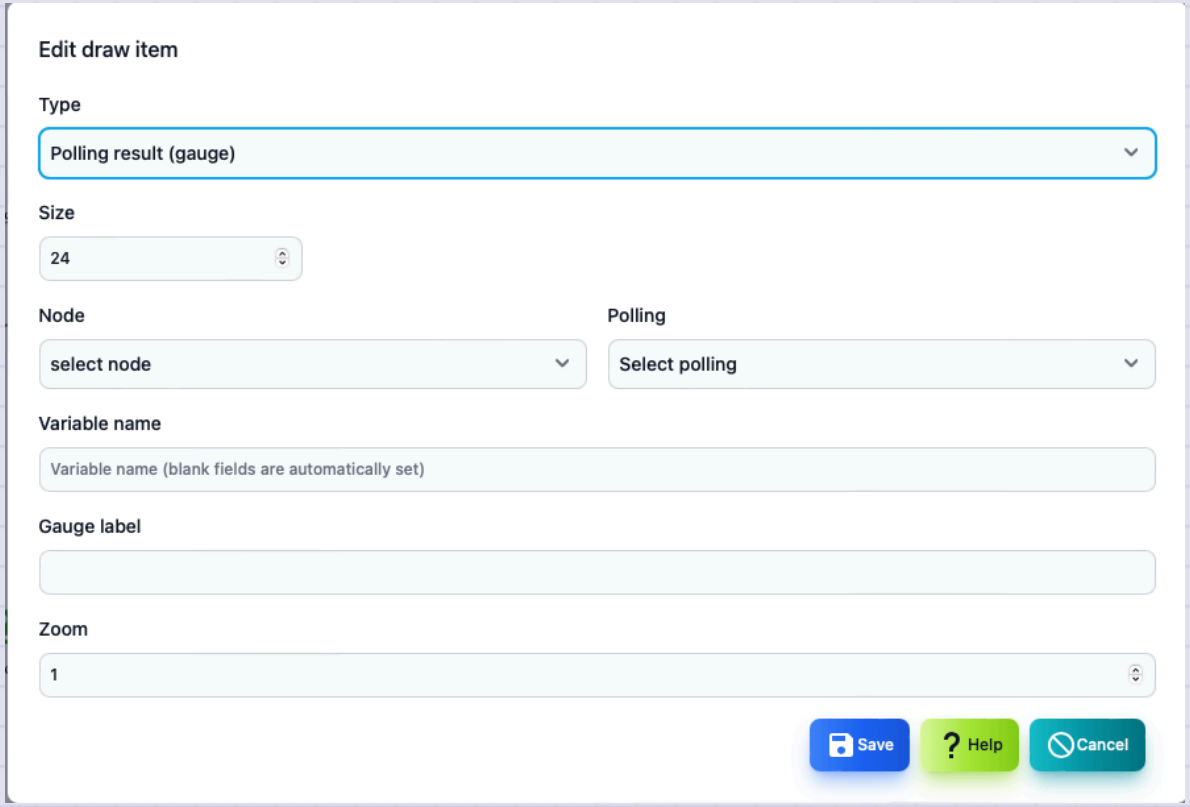
Drawing item (polling result: gauge)

It is the editing screen of drawing item (polling result: gauge).It can be used to display % data.



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Items	Contents
Type	It is a type of drawing item.You can only change it when you add it.
Size	Gauge size.
Node	This is a node list for selecting polling.
Polling	Polling that displays results.
Variable name	The name of the variable displayed from the polling results.
Gauge label	This is a character string displayed under the gauge.
Magnification	The display rate of drawing items.

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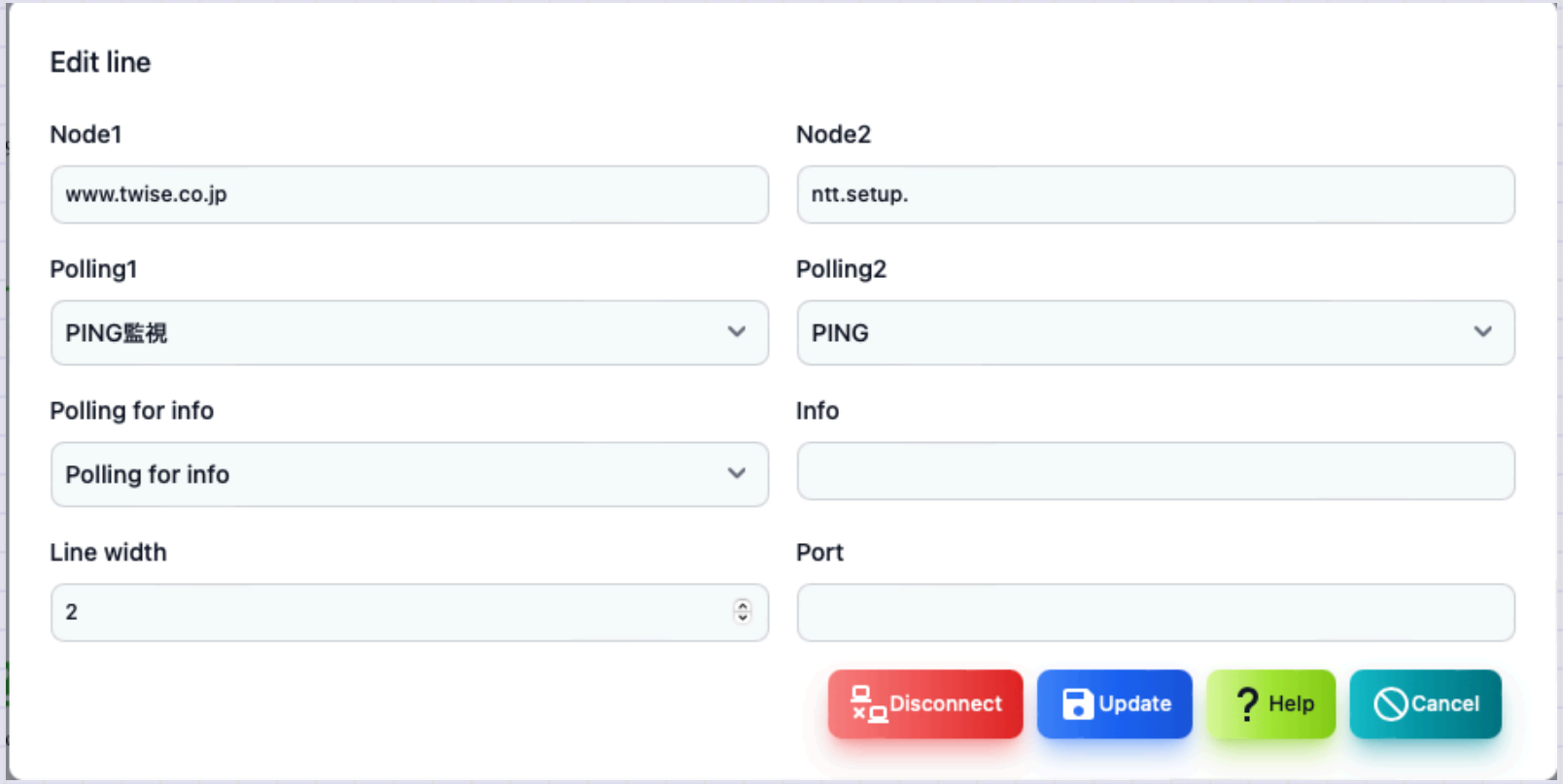
Line editing

To edit the line, press the two nodes while pressing the shift key on the map screen.



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Items	Contents
Node1	This is the first node to connect the line.
Polling1	This is the first node polling that determines the color on one side of the line.
Node2	This is the second node to connect the line.
Polling2	This is the second node polling that determines the color on one side of the line.

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Items	Contents
Polling for information	Polling for information displayed next to the line. Specify the traffic monitor polling.
Information	Set the character string to be displayed next to the line. It will be overwritten by setting a polling for information.
Thickness of the line	It is the thickness of the line.
Port	Specify the port number used when displaying the panel.

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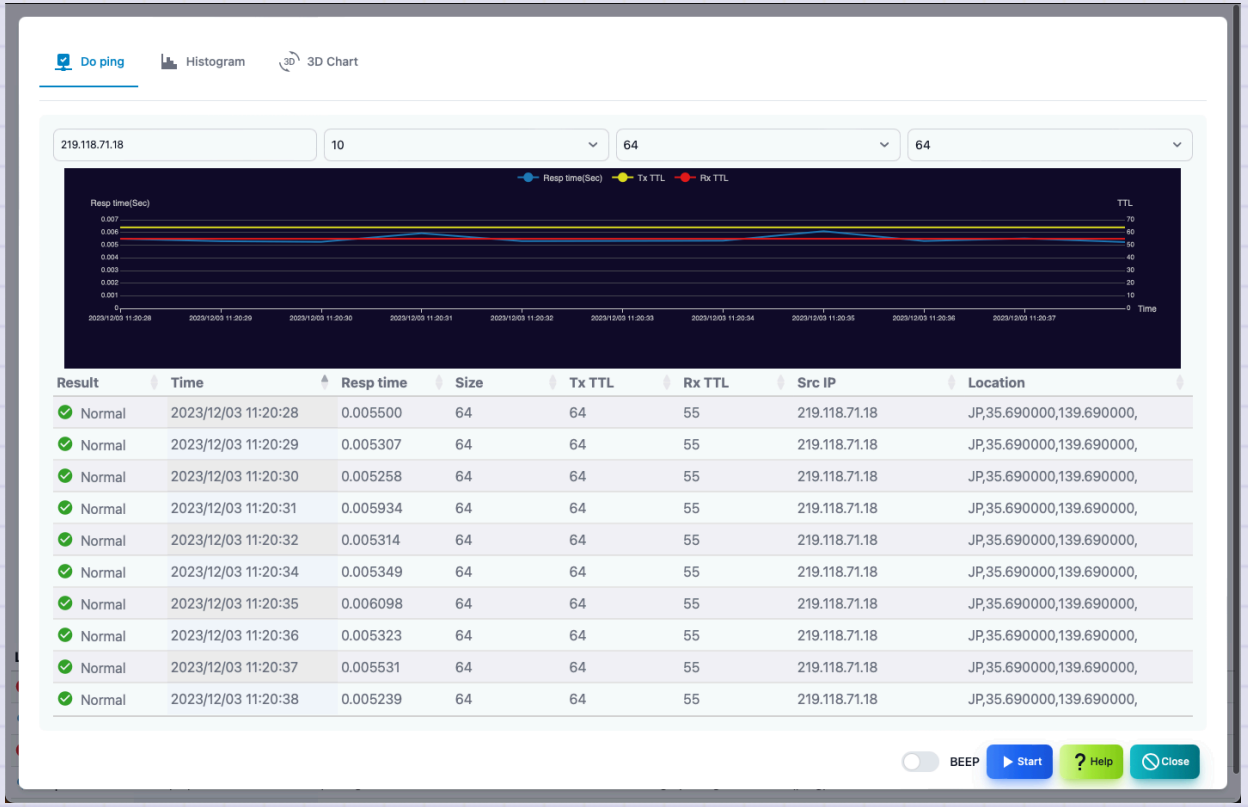
PING

This is the screen to execute ping.

To get a location information, you need a Geoip database file.



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Items	Contents
IP address	This is the IP address to run ping.
Number of times	Ping is the number of execution times.
Size	Ping packet size. The change mode is executed while increasing the size.
TTL	TTL value of ping packet. The trace route runs while increasing the TTL value.
Result Graph	Ping's execution result is a graph of the response time, TTL value.

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Items	Contents
Results	Ping execution results. As a result, the date and time of implementation, the response time, the size, the transmission reception TTL, the source IP, the location
Beep	Ping will be informed by sound.
Start	Start ping.
Stop	Ping stops.
Close	Ends ping.

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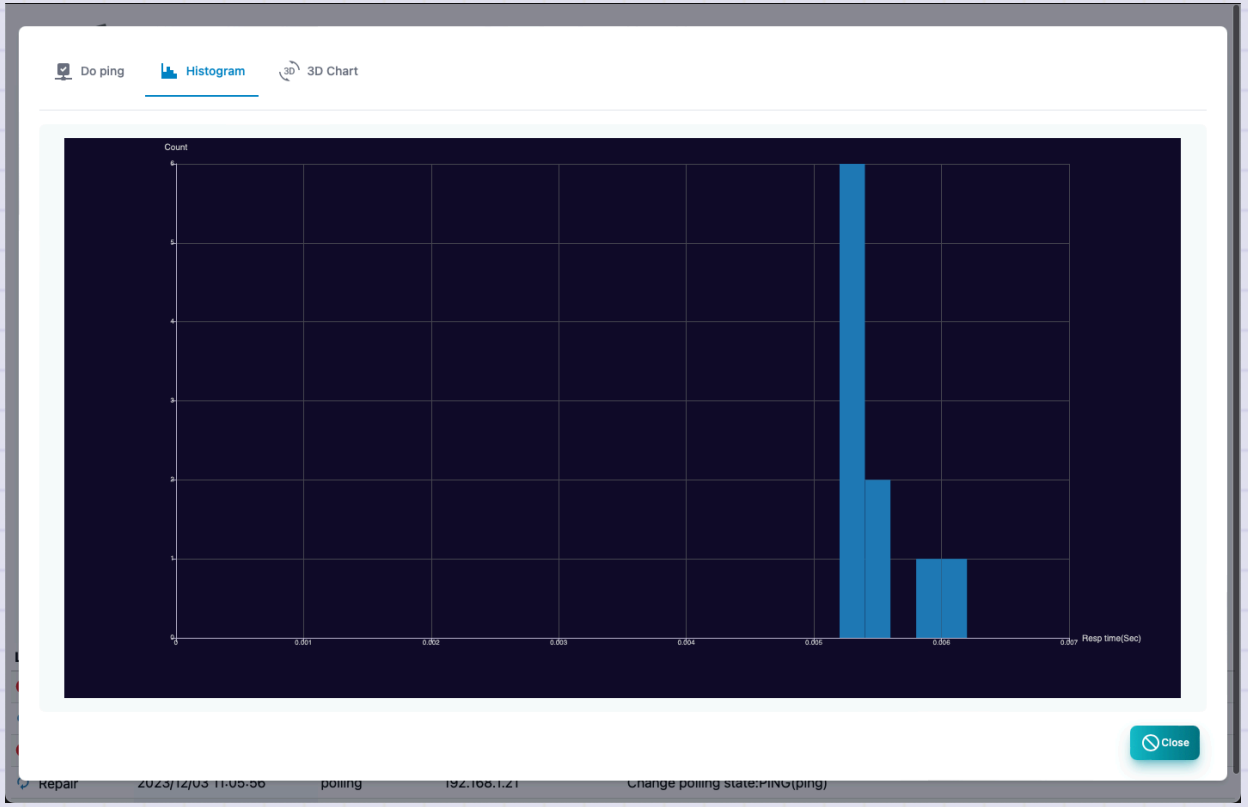
PING Histogram

It is a histogram of response time.



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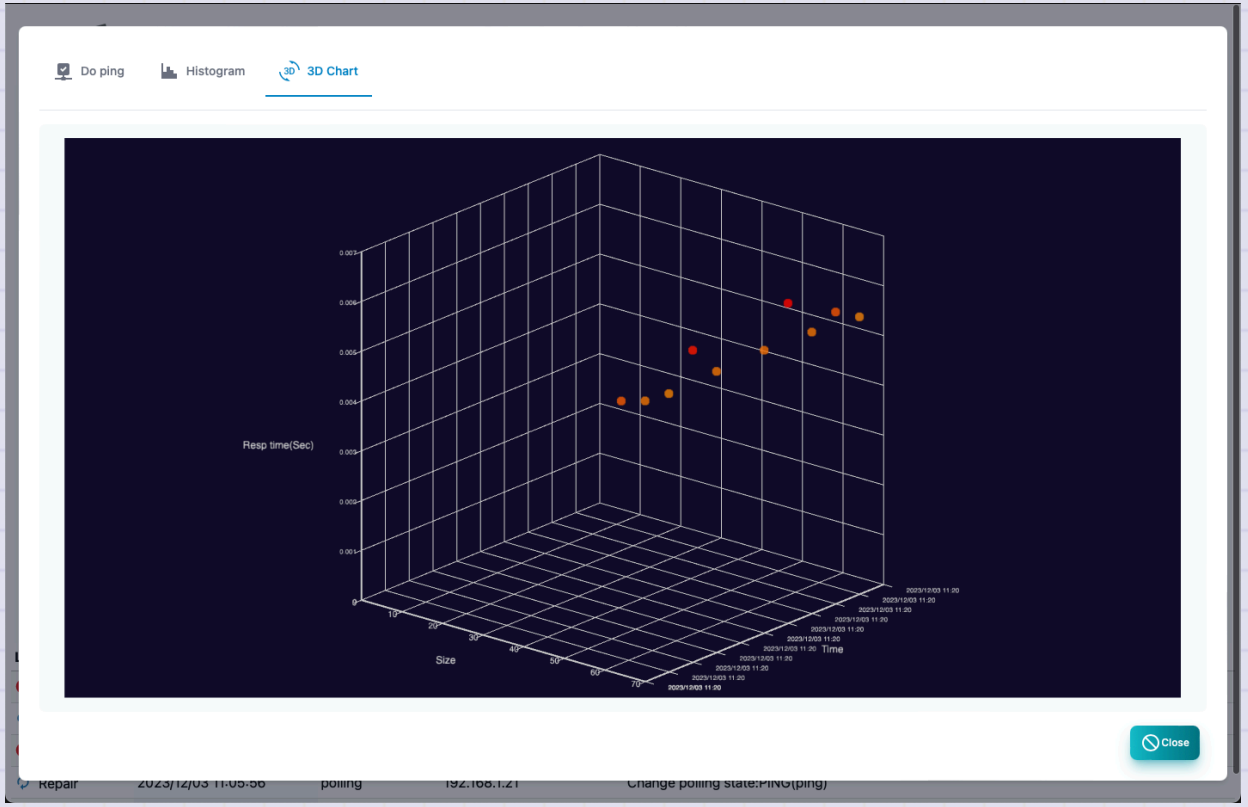
PING 3D analysis

The response time, size, and implementation date and time are displayed in 3D graphs.



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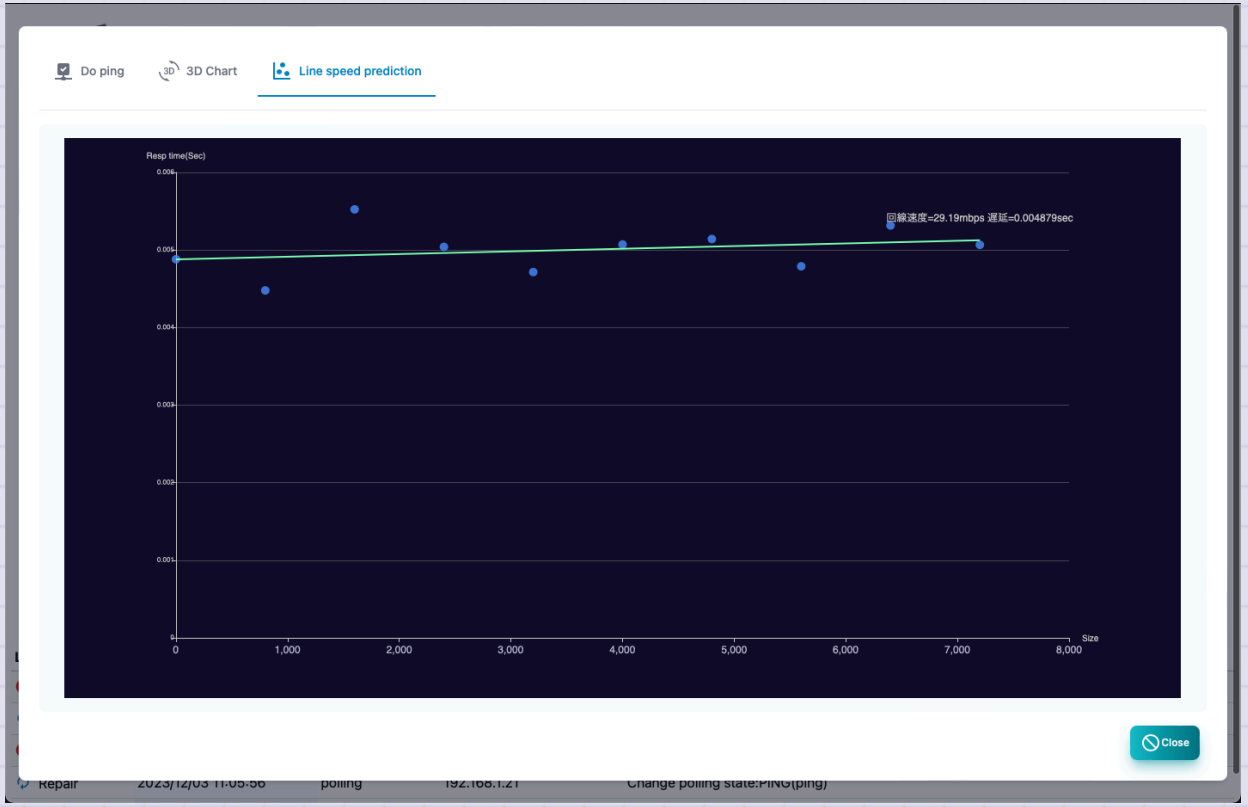
PING Line speed prediction

From the change in response time if the size is changed
This is a report that predicts the line speed.



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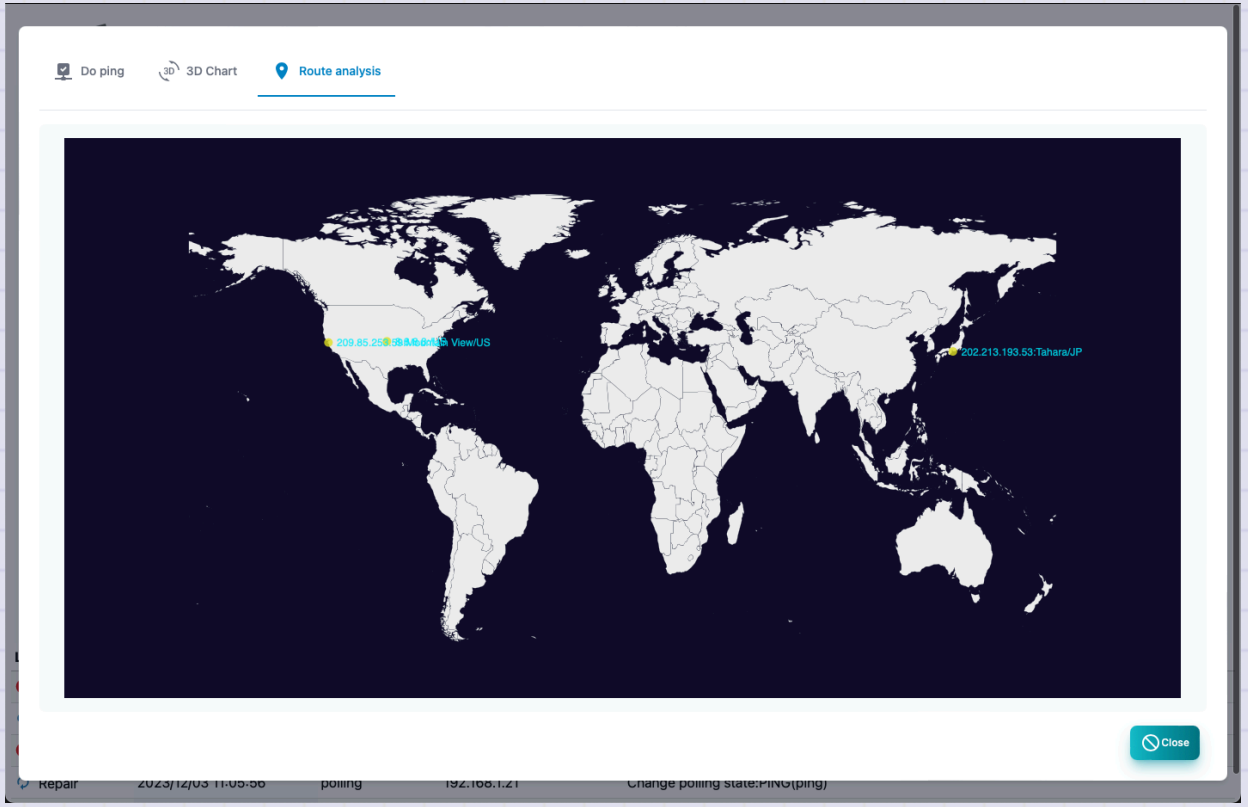
PING Route analysis

Display location information.It cannot be displayed without a GEOIP database.



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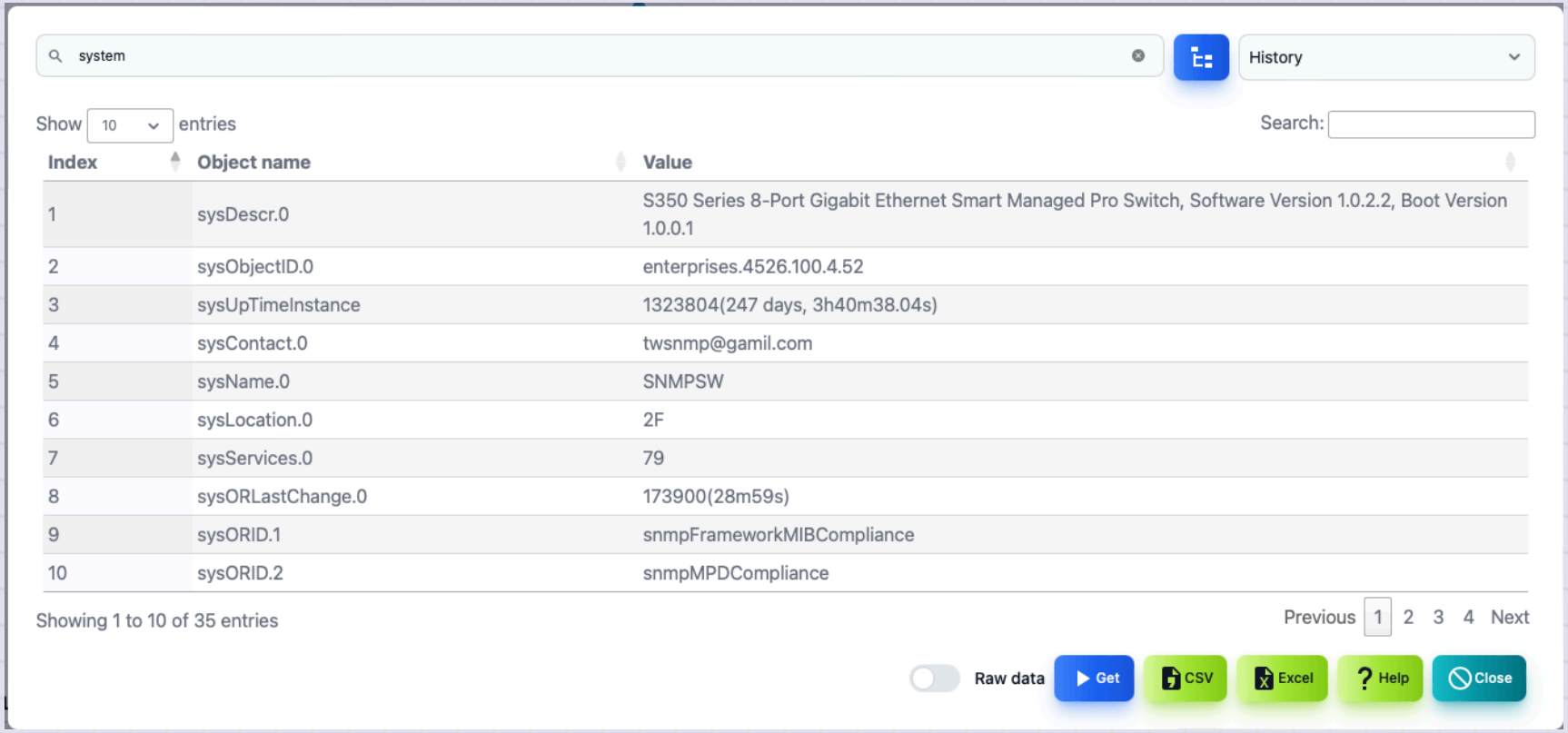
MIB browser

This is a screen to get MIB information of SNMP from the node.
It is necessary to set SNMP access information in the node setting.
If you want to use MIB other than built -in, save the MIB file to the extmibs of the data folder.



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Items	Contents
Object name	Specify the object name of the MIB you want to get. You can choose from the MIB tree.Example: System
<MIB Tree> Button	Display MIB tree.
History	It is the history of the object name obtained so far.You can select and get it again.
Results	Acquired MIB information.In the case of MIB in a table format, it is automatically displayed in a table format.

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Items	Contents
Raw data	Displays the acquired MIB information without converting it. In the case of off, convert the time data to an easy -to -understand display.
Acquisition	Get MIB information.
CSV	Export the obtained MIB information of the CSV file.
Excel	Export the acquired MIB information of the Excel file.

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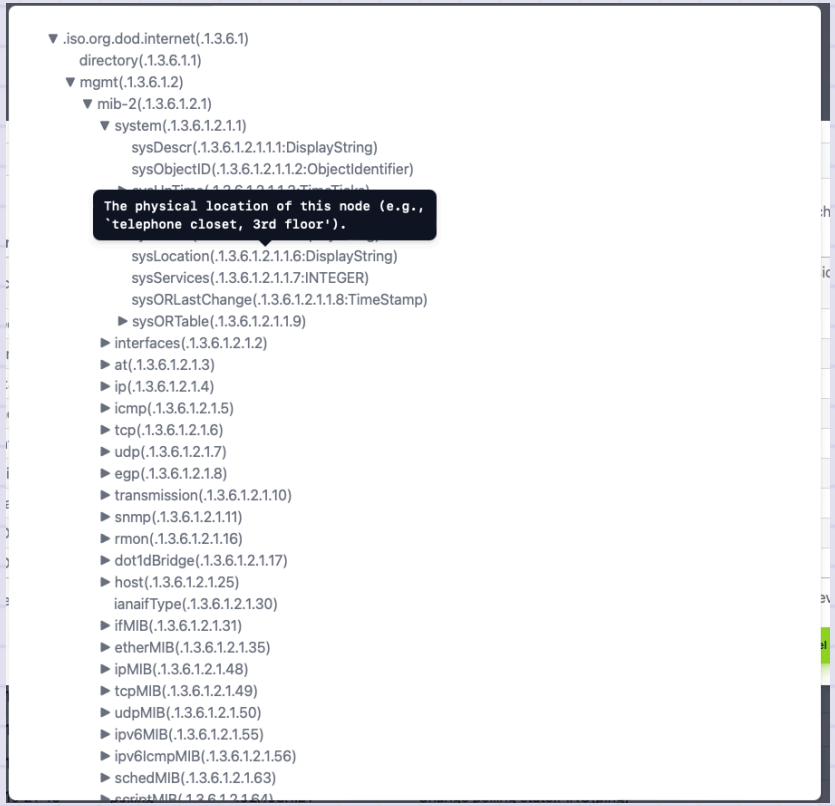
MIB tree

This is a screen for selecting the obtained MIB object name.

Open the tree and click the object name to see the explanation.

Double click to select.



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GNMI tool

<!-_class: TinyText->

This is a screen to acquire management information from Node from GNMI.

You need to set the GNMI in the node settings.

Items	Contents
Target	Specify the IP: port to access with GNMI.
Encoding	Specify GNMI encoding.(JSON
PATH	Specify the path to get.
History	Path history acquired so far.You can select and get it again.
Result	This is the result of acquired.
Copy	Copy the acquired results.
Polling	Create a polling from the selected result.

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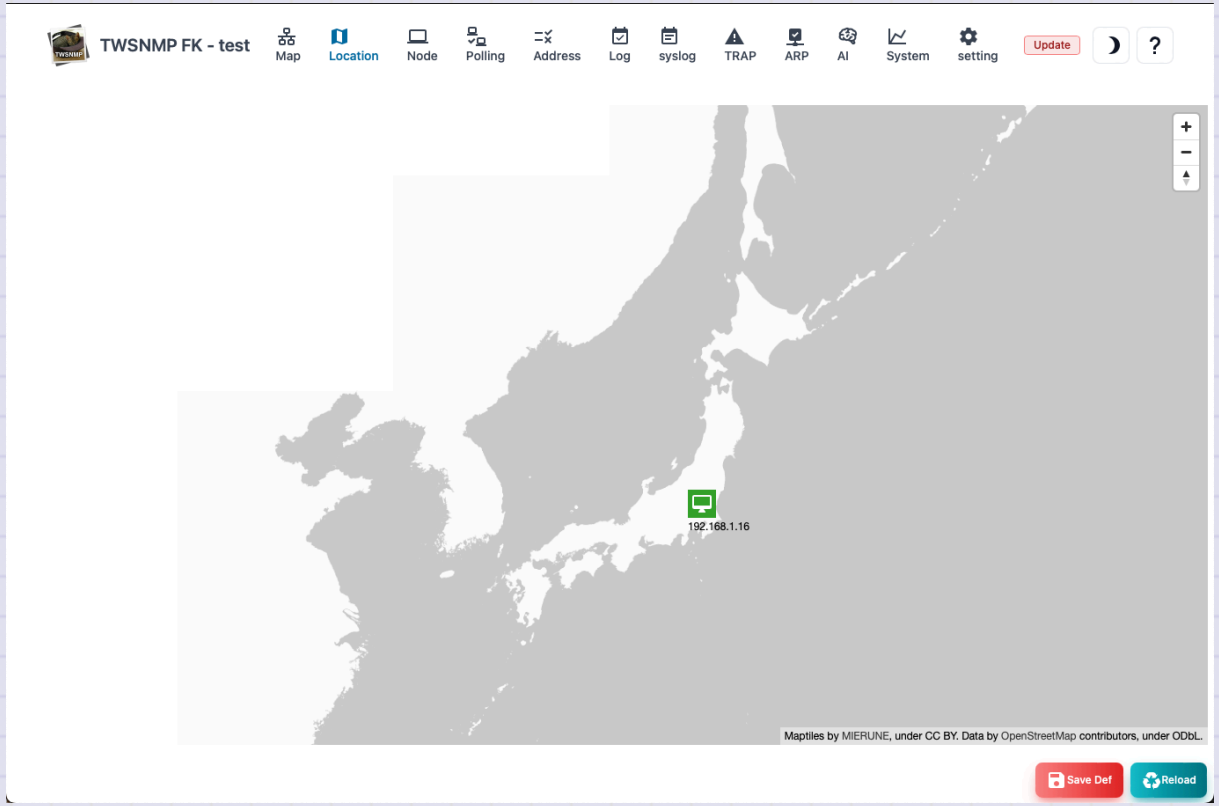
Location Map screen

This is a screen that displays the node on the map.
Map data can be used in OpenStreetMap, which is used in location information services.
You can select by clicking the node.You can move by dragging.Multiple choices cannot be selected.



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Items	Contents
Edit	Displays the screen of the selected node.
Polling	Displays the selected node polling.
Delete	Delete the selected node from the map screen.
Report	Displays the selected node report screen.
Initial display	Save the center and zoom level of the map.The next time you open the map screen, it will be in the same state.
Reload	Update the list of event logs to the latest state.

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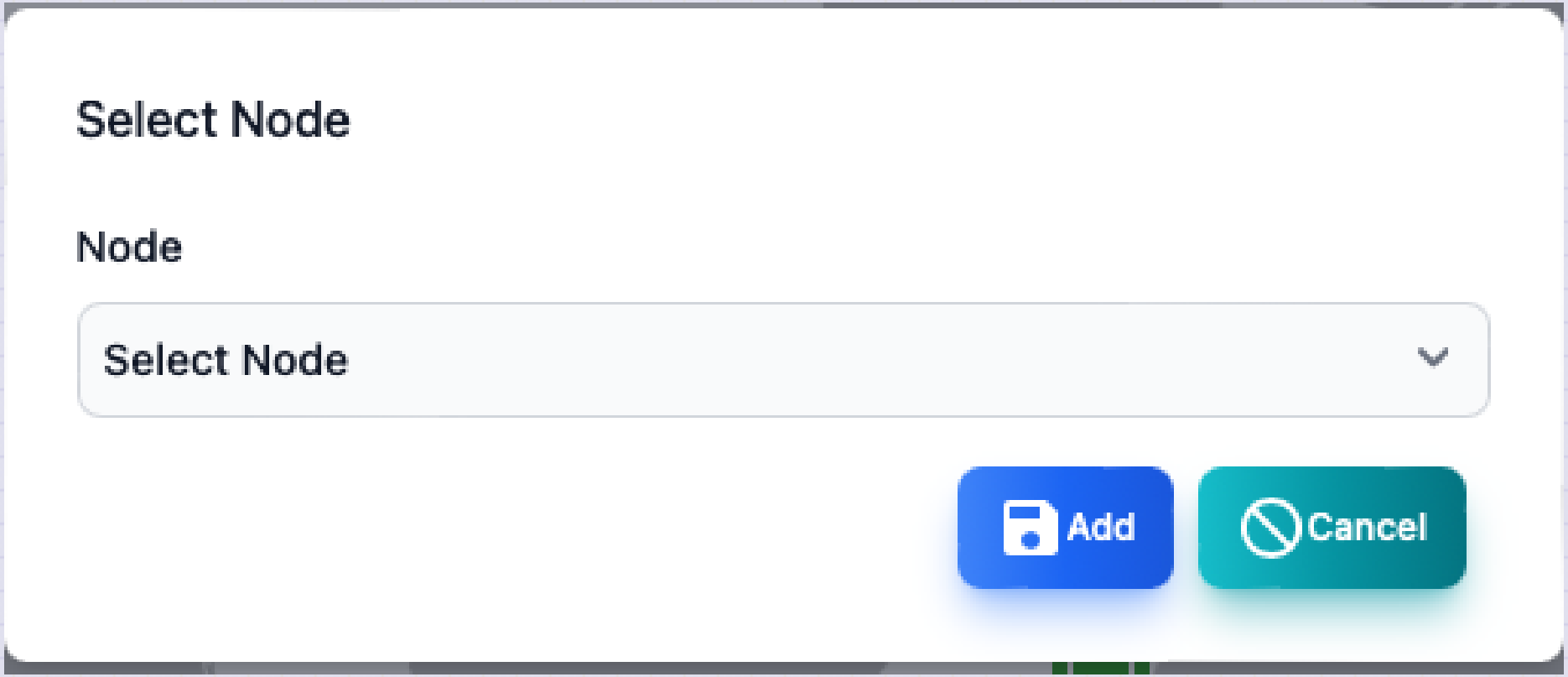
Add node to location map

Right -click where you want to place the node on the map and the dialog to add is displayed.You can add it by selecting a node.



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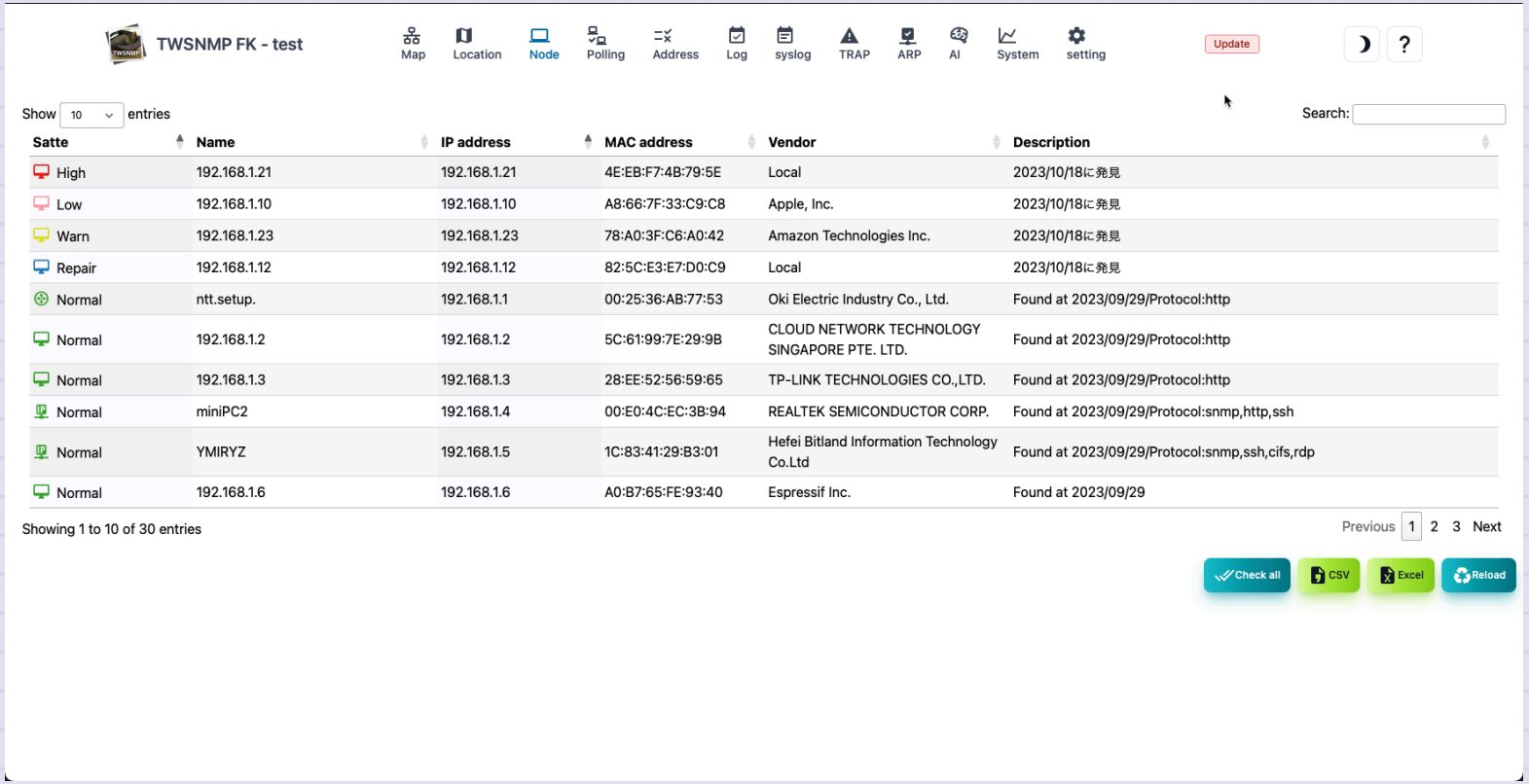
Node list

A list of nodes to be managed.



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Items	Contents
State	Node condition. Severe, mild, precautions, return, normal, unknown.
Name	Node name.
IP address	Node IP address.
MAC address	Node MAC address.
Vendor	The name of the vendor corresponding to the MAC address.
Description	Supplementary information about nodes.

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Items	Contents
Edit	Edit node settings.
Polling	Displays a list of polling related to the selected node.
Report	Displays the selected node analysis report.
Delete	Delete the selected node.
Reconfirm	Reconfirm the polling of the selected node.
Remost confirmation	Reconfirm all nodes polling.
CSV	Export the node list to the CSV file.
Excel	Export the node list to the Excel file.
Reload	Update the node list to the latest state.

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Node polling list

A list of polling related to nodes.

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Items	Contents
State	Polling state. Severe, mild, precautions, return, normal, unknown.
Name	Polling name.
Level	Pauling level.
Type	Polling type. Ping, SNMP, TCP, etc.
Log	Log mode.
Last time	This is the last date and time when polling was implemented.

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Items	Contents
Add	Add polling to nodes.
Edit	Edit the selected polling.
Copy	Create a selected polling copy.
Report	Displays the selected polling analysis report.
Delete	Delete the selected polling.
Reload	Update the polling list to the latest state.
Close	Close the list of polling.

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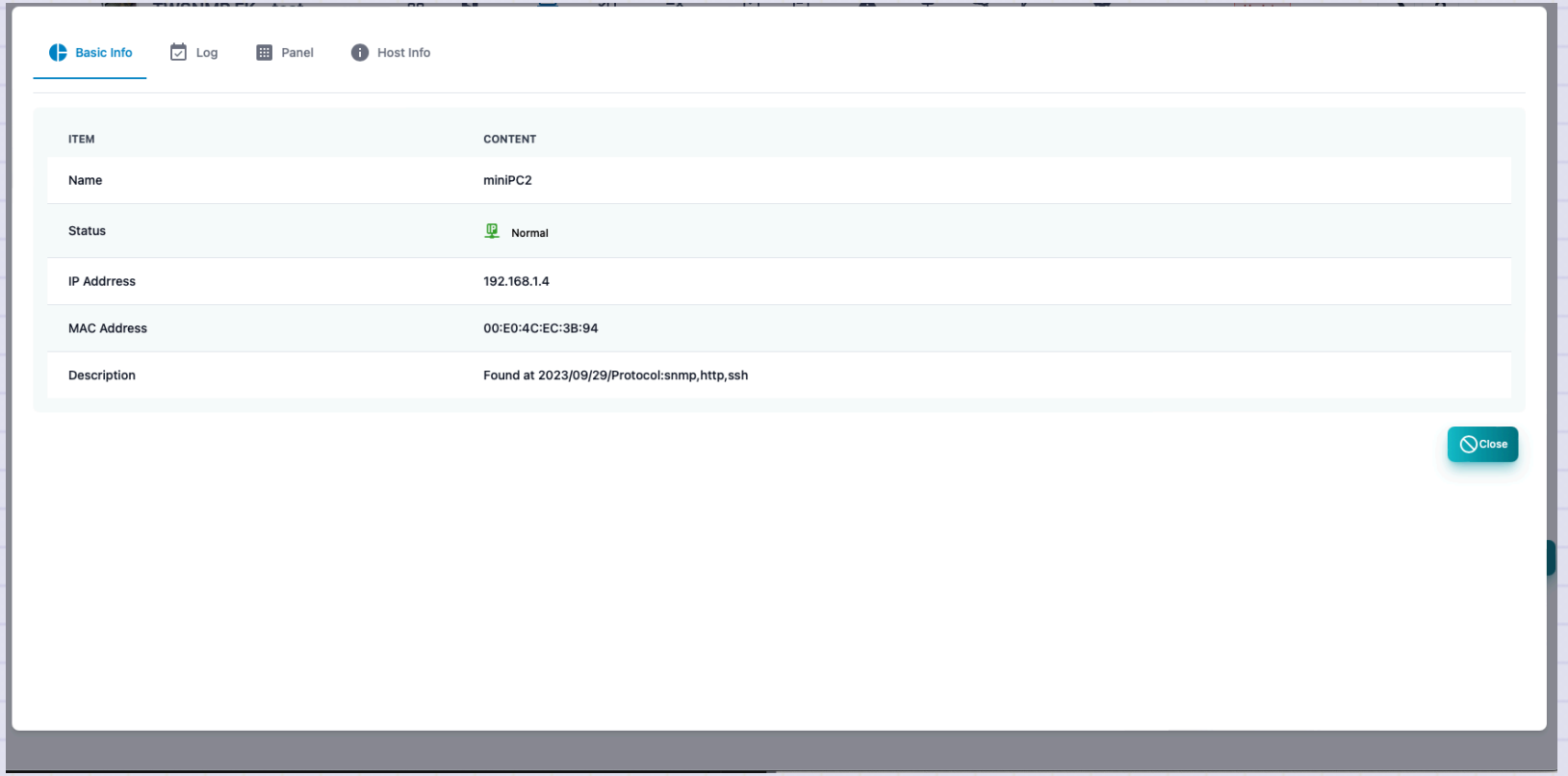
Basic information report

Basic information about nodes.



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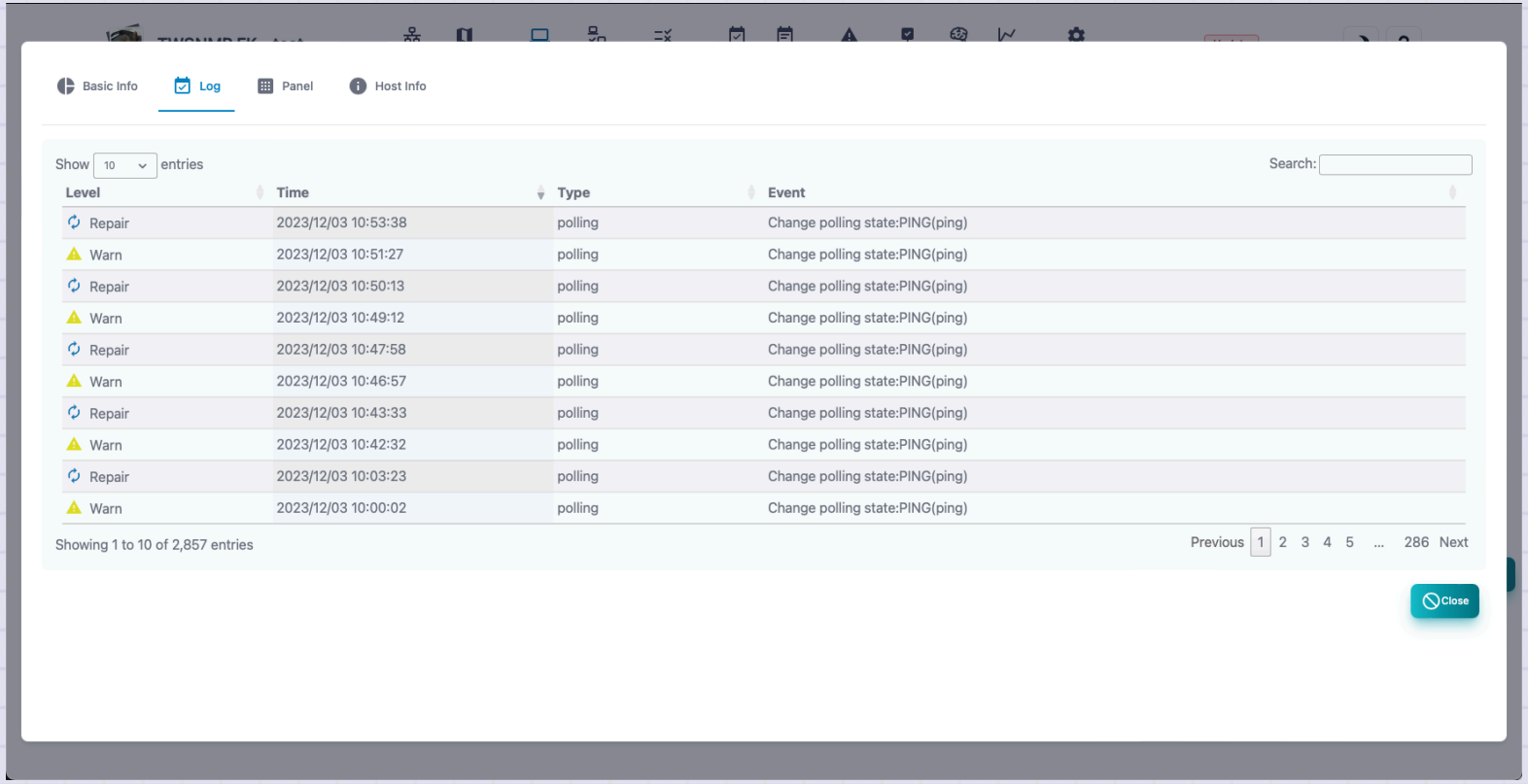
node event log

This is an event log related to the node.



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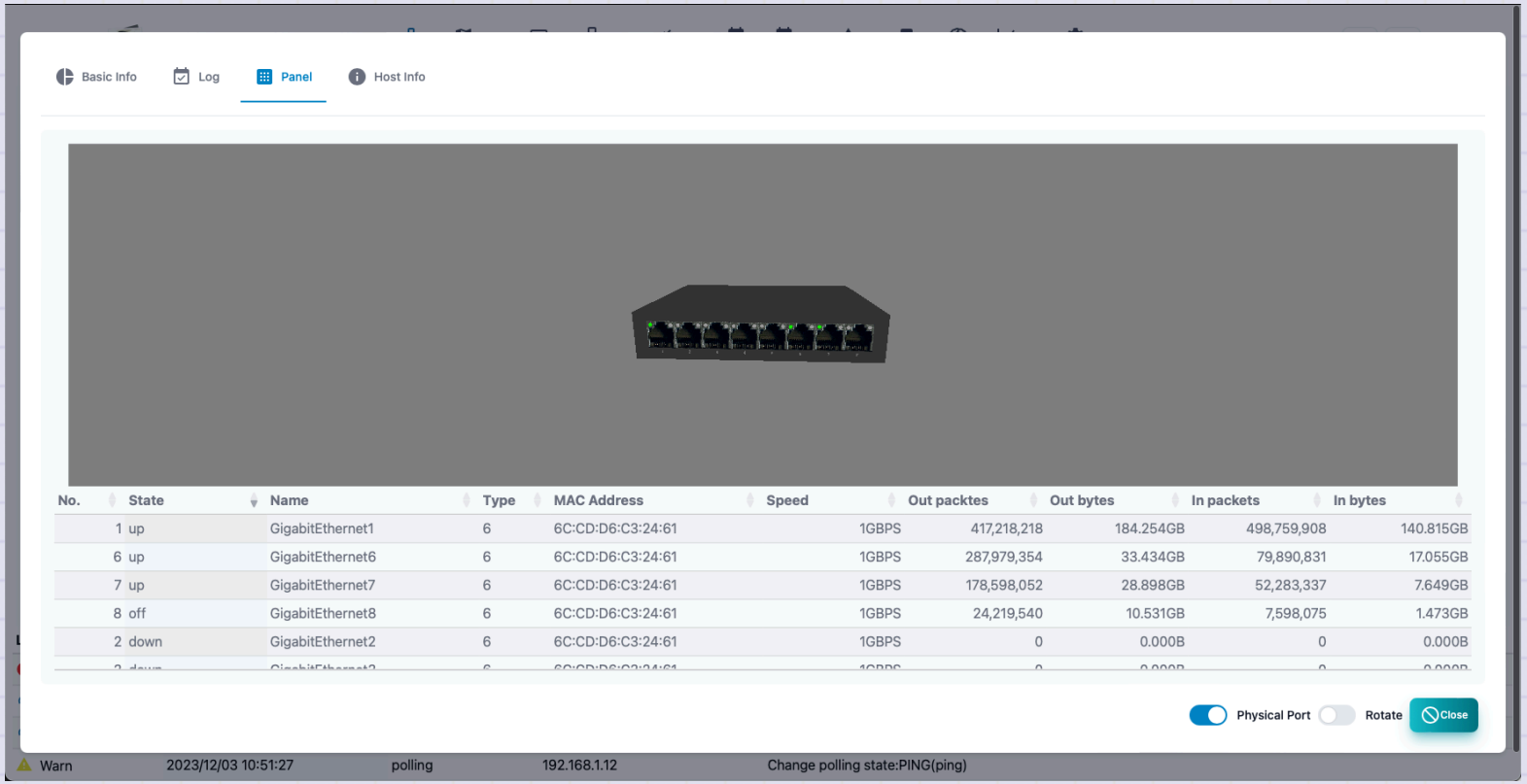
Panel

Displays the appearance of the node.Displays the port from the acquisition of the interface mib by SNMP or the line connection information.The <physical port> switch can only be displayed on the physical port.Rotate the panel display with the <rotation> switch.



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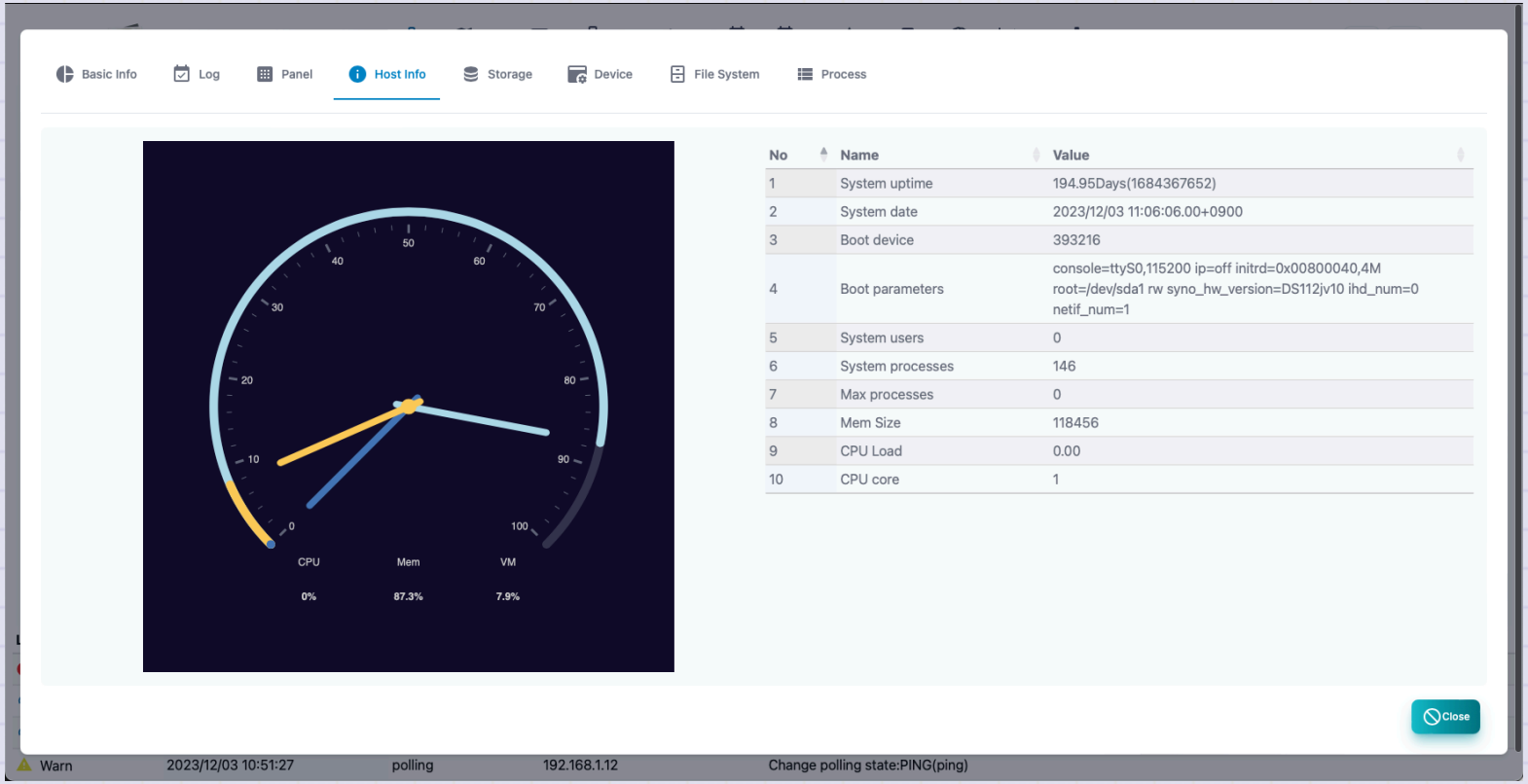
Host information

Displays the information of the host resource mib of SNMP.If it is not compatible with the host resource MIB, it cannot be displayed.



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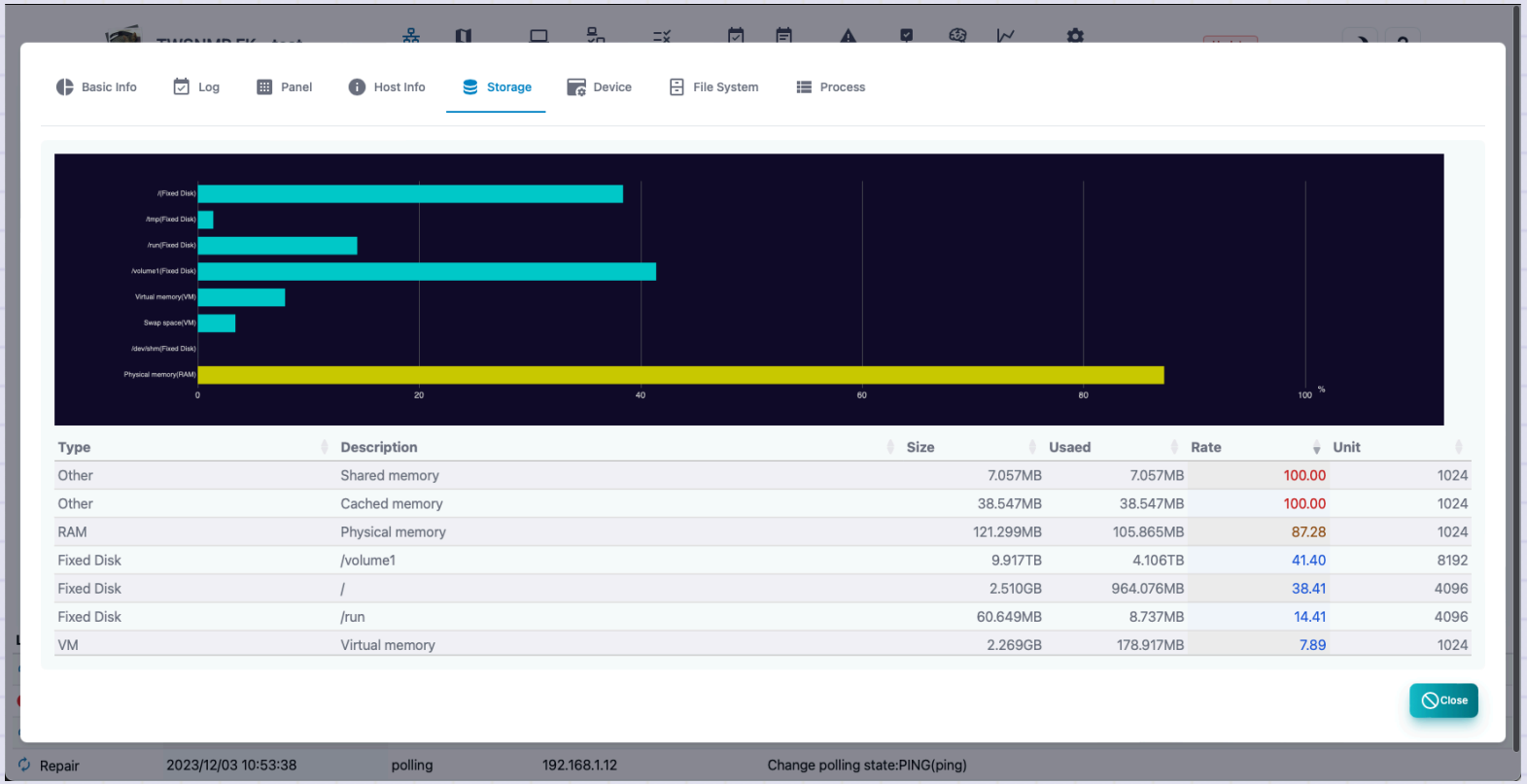
Storage

Displays the storage information of SNMP host resource mib.When you select, the addition button of the polling will be displayed.If it is not compatible with the host resource MIB, it cannot be displayed.



Type	Description	Size	Usaed	Rate	Unit
Other	Shared memory	7.057MB	7.057MB	100.00	1024
Other	Cached memory	38.547MB	38.547MB	100.00	1024
RAM	Physical memory	121.299MB	105.865MB	87.28	1024
Fixed Disk	/volume1	9.917TB	4.106TB	41.40	8192
Fixed Disk	/	2.510GB	964.076MB	38.41	4096
Fixed Disk	/run	60.649MB	8.737MB	14.41	4096
VM	Virtual memory	2.269GB	178.917MB	7.89	1024

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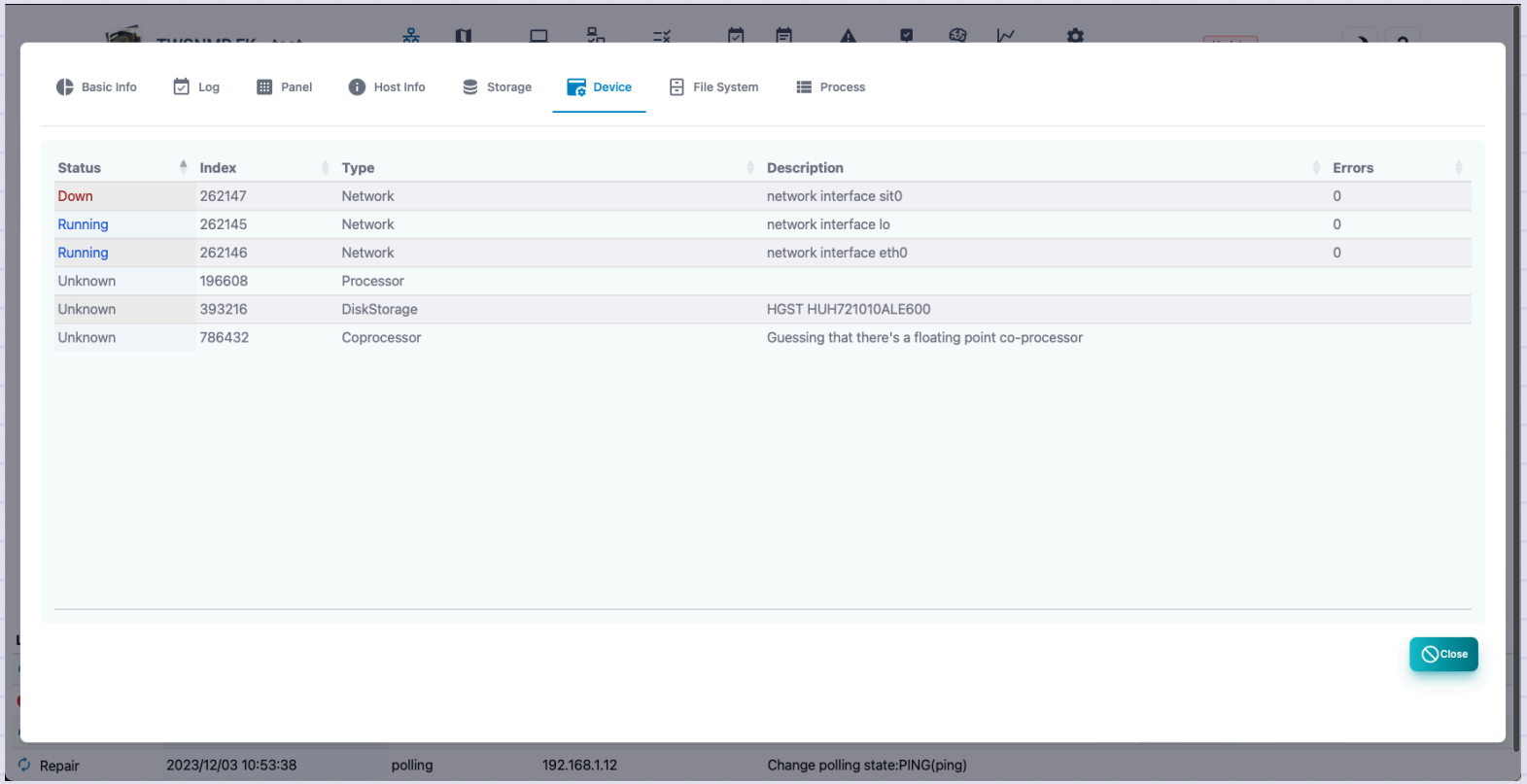
Device

Displays the device information of the SNMP host resource MIB.If it is not compatible with the host resource MIB, it cannot be displayed.



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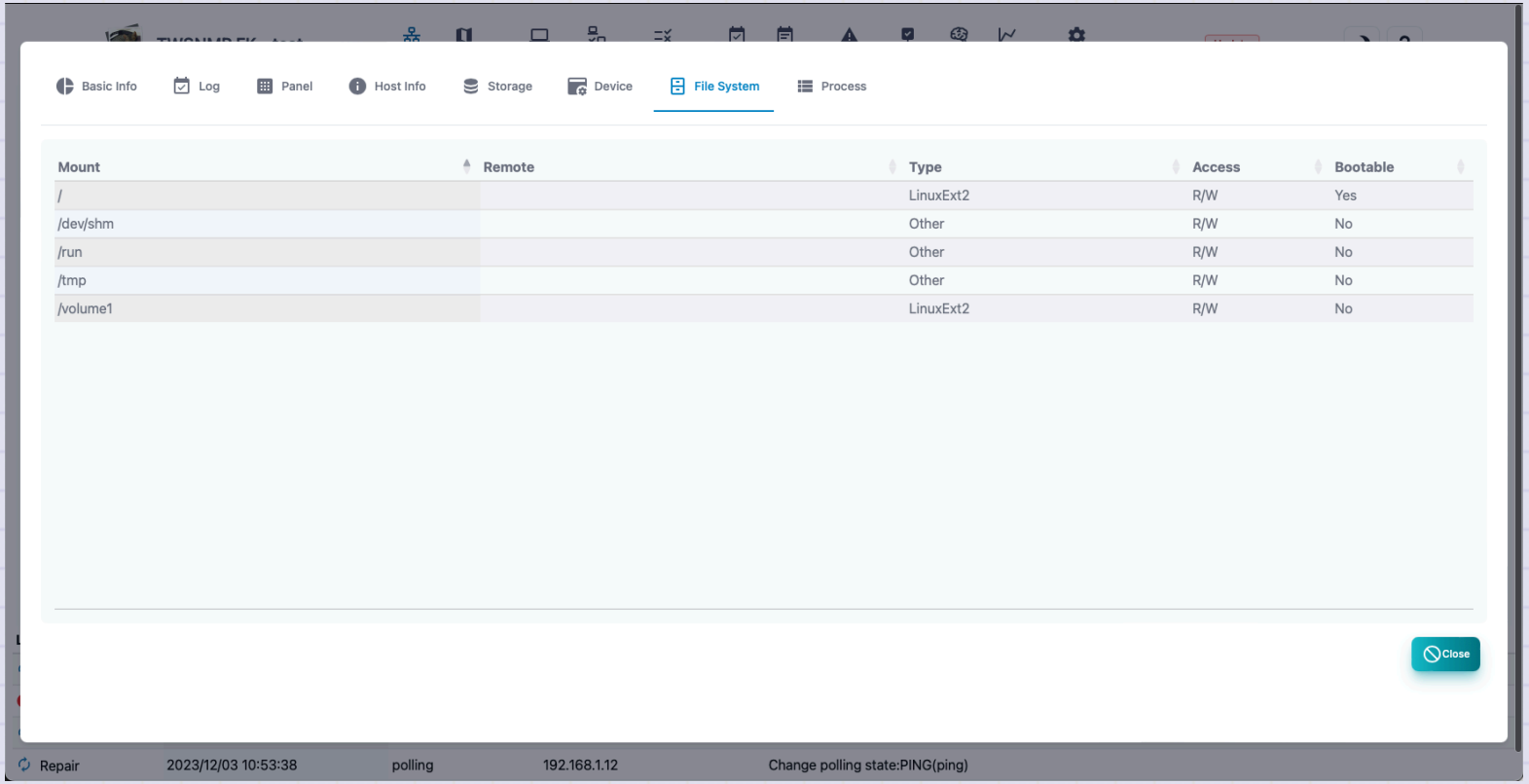
File System

Displays File System, information on SNMP host sources MIB.If it is not compatible with the host resource MIB, it cannot be displayed.



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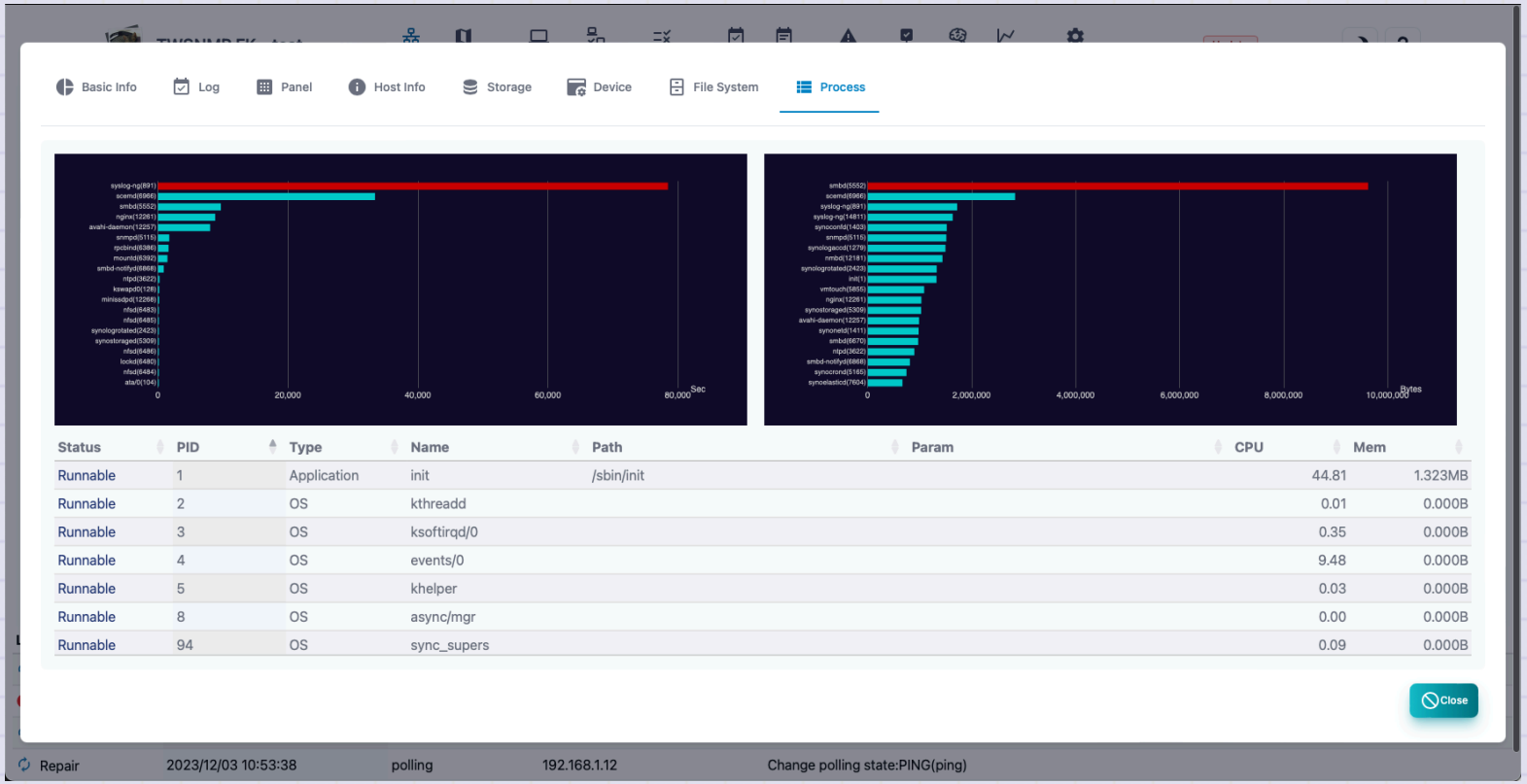
Process

Displays the process information of SNMP host resource mib.When you select, the addition button of the polling will be displayed.If it is not compatible with the host resource MIB, it cannot be displayed.



Status	PID	Type	Name	Path	Param	CPU	Mem
Runnable	1	Application	init	/sbin/init		44.81	1.323MB
Runnable	2	OS	kthreadd			0.01	0.000B
Runnable	3	OS	ksoftirqd/0			0.35	0.000B
Runnable	4	OS	events/0			9.48	0.000B
Runnable	5	OS	khelper			0.03	0.000B
Runnable	8	OS	async/mgr			0.00	0.000B
Runnable	94	OS	sync_supers			0.09	0.000B

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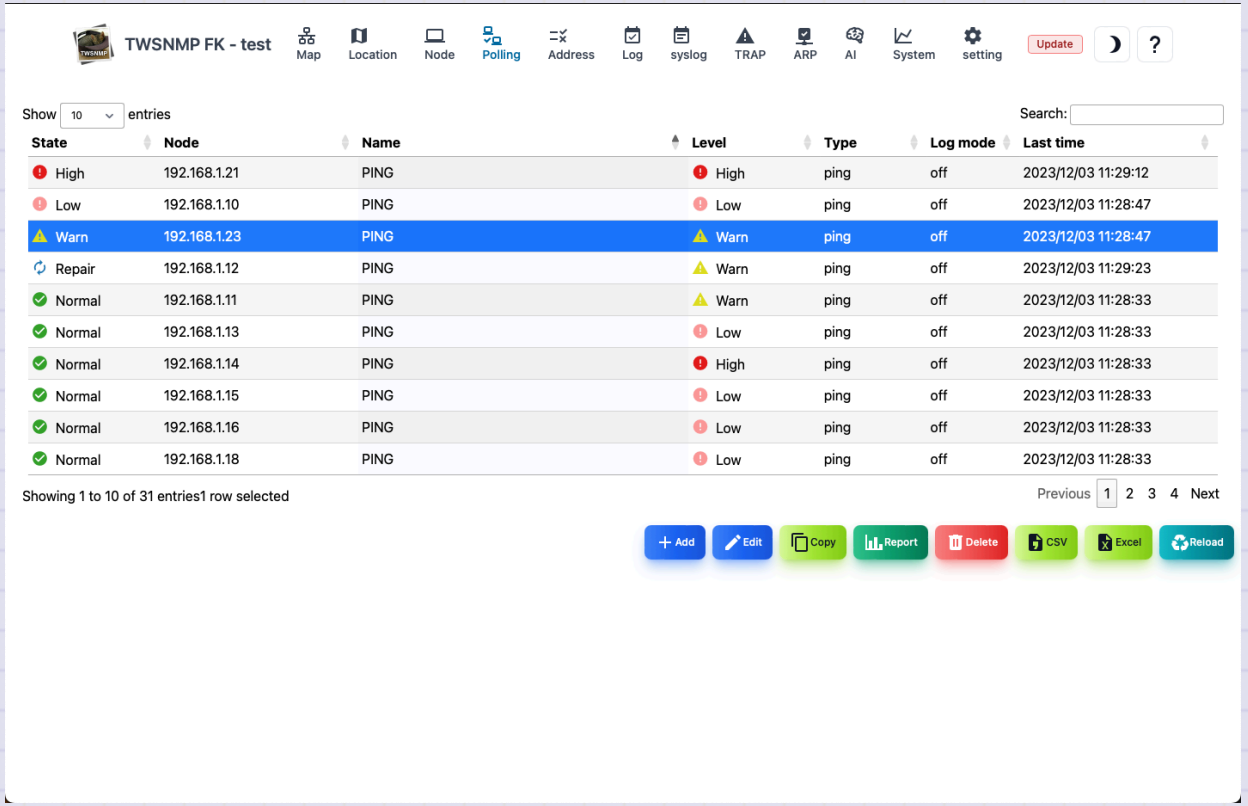
Polling list

A list of polling to be managed.



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Items	Contents
State	Polling state. Severe, mild, precautions, return, normal, unknown.
Node name	Node related to polling.
Name	Polling name.
Level	Pauling disability level.
Type	Polling type.
Log	Polling log mode.
Final confirmation	Polling final confirmation date and time.

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Items	Contents
Add	Add polling.
Edit	Edit the selected polling.
Copy	Copy the selected polling.
Report	Displays the selected polling analysis report.
Delete	Delete the selected polling.
CSV	Export the polling list to the CSV file.
Excel	Export the polling list to the Excel file.
Reload	Update the polling list to the latest state.

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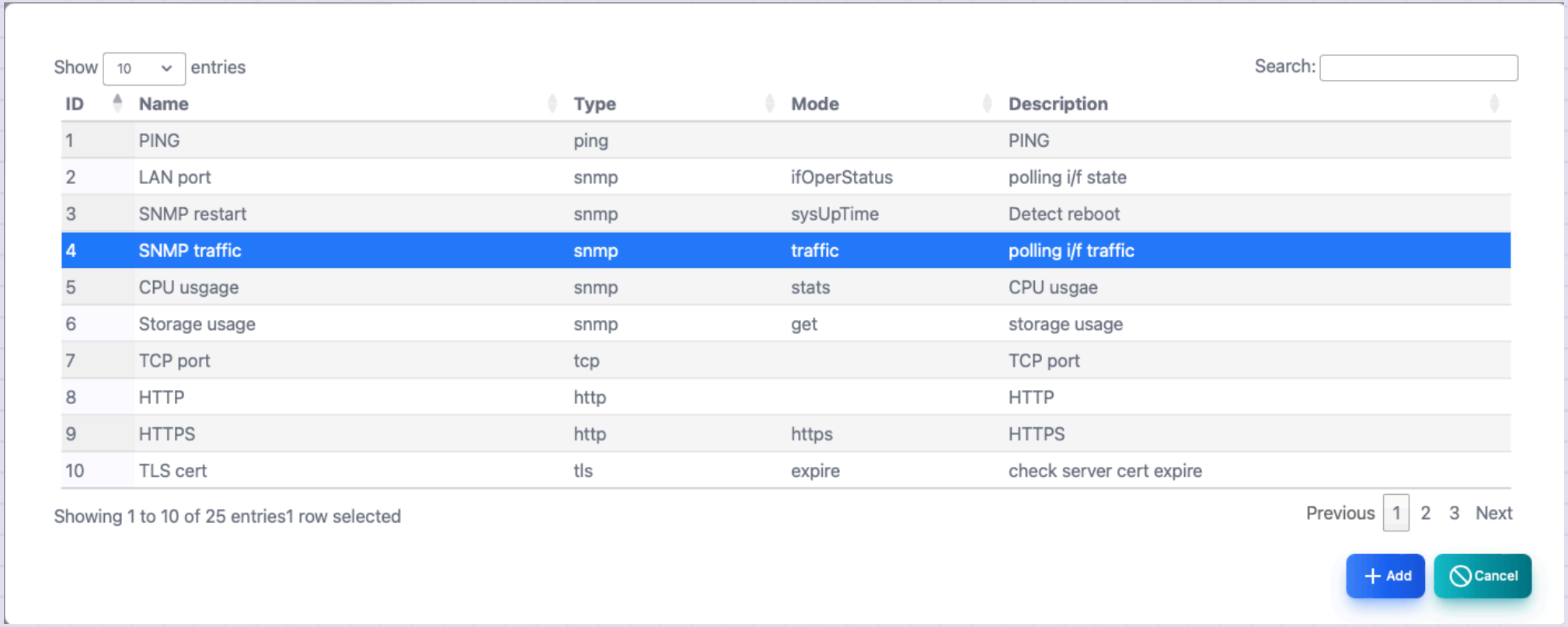
Polling template selection

This is the selection screen of the template displayed when adding polling.



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Items	Contents
ID	Template number.
Name	Polling name.
Type	Polling type. Ping, SNMP, TCP, etc.
Mode	Polling mode.
Description	Polling explanation.
Add	Select polling.
Cancel	Polling Closes.

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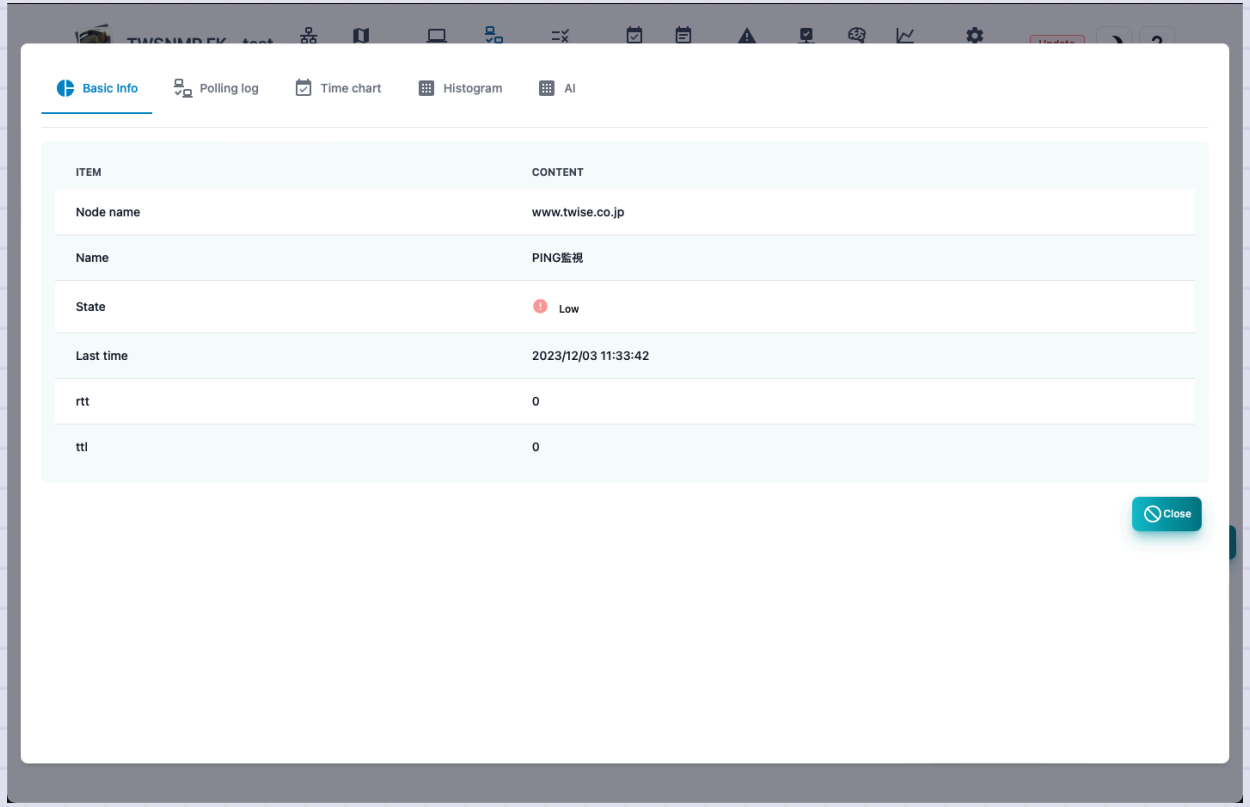
Basic information

Basic information about polling.



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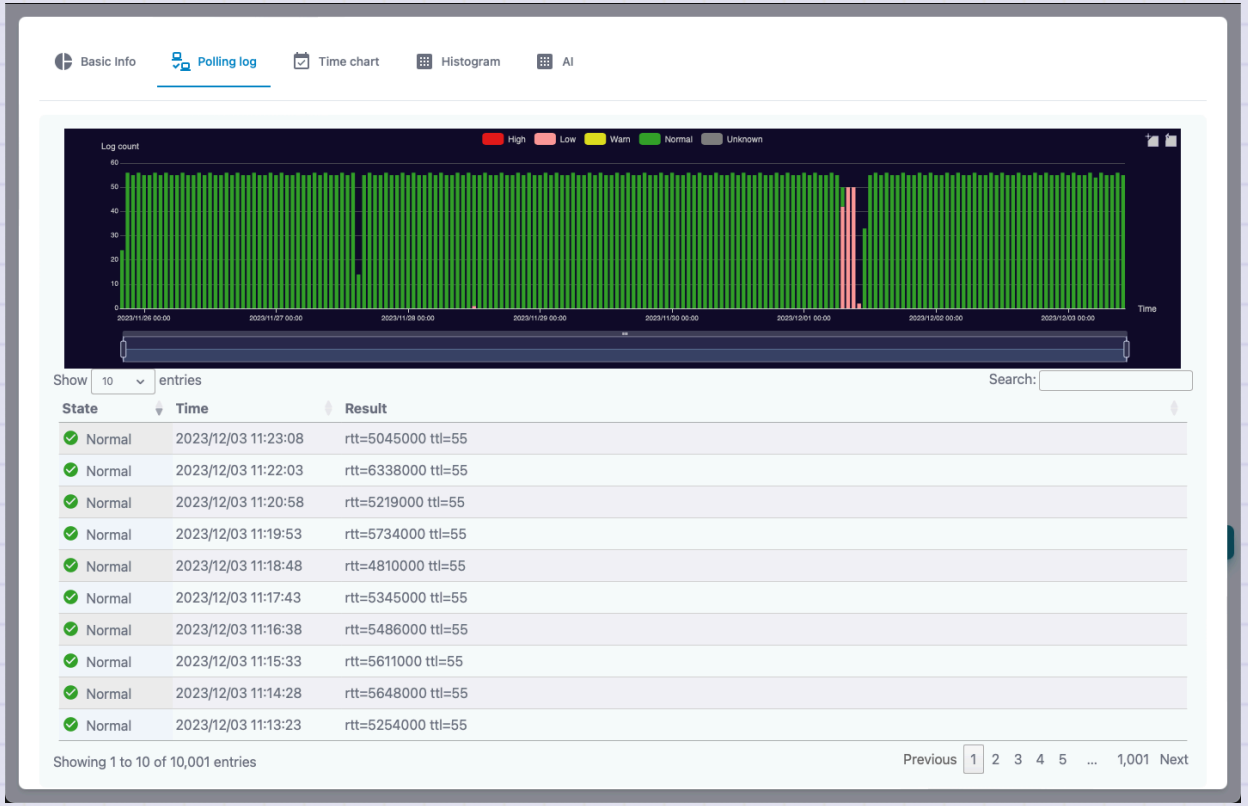
Polling log

This is a log of the polling result.It is displayed only when the log mode is not output.



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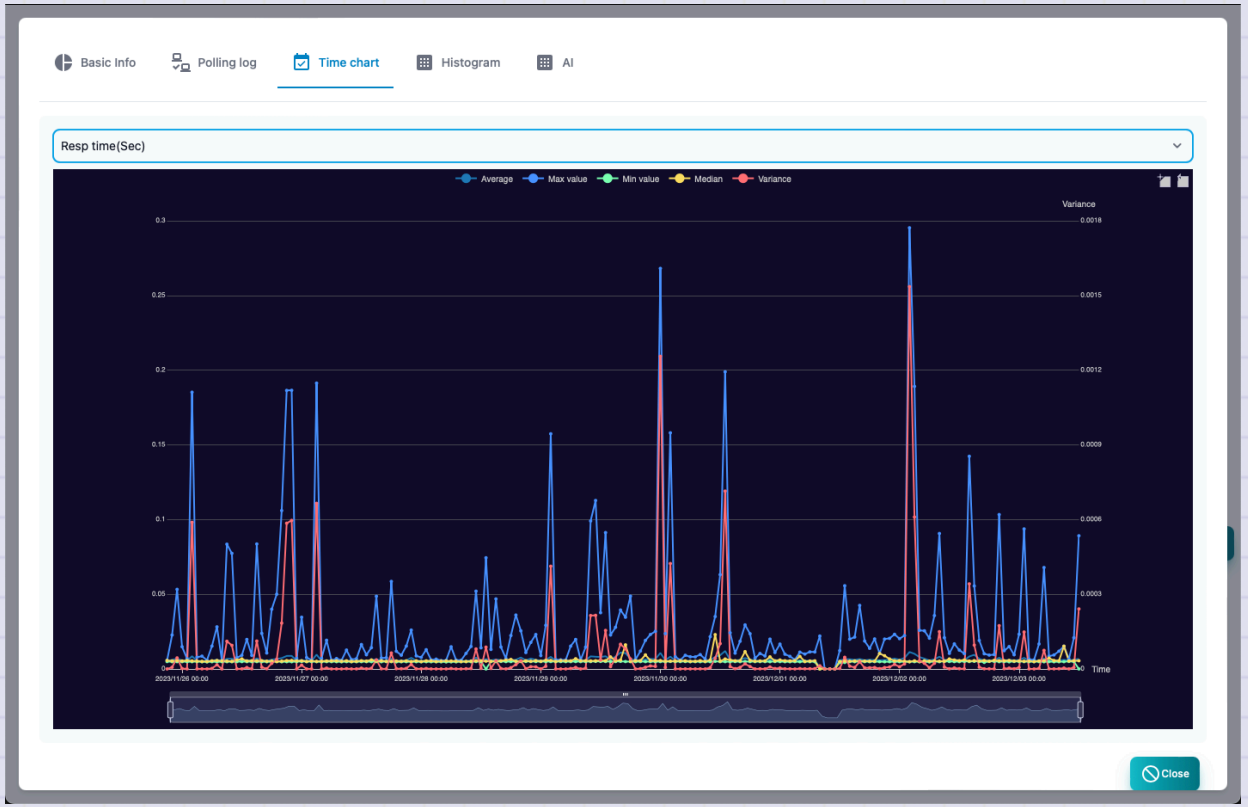
Time chart

In the log of the polling result, the numerical data is displayed in a chronological graph.The displayed items can be selected at the top of the graph.It is displayed only when the log mode is not output.



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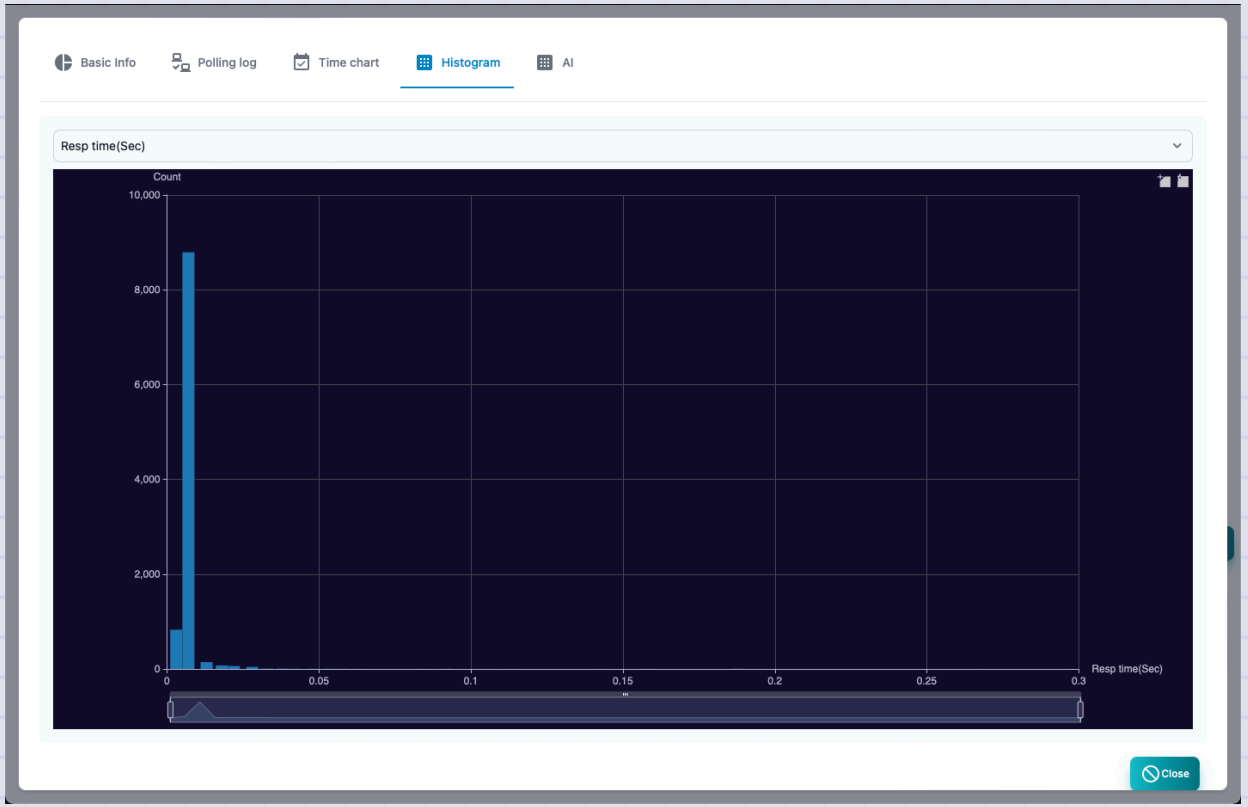
Histogram

The numerical data in the log of the polling result is displayed on the histogram.The displayed items can be selected at the top of the graph.It is displayed only when the log mode is not output.



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AI analysis

This is the result of AI analysis of numerical data in the log of the polling results.It is displayed only when the log mode is set to AI analysis and sufficient data is obtained.

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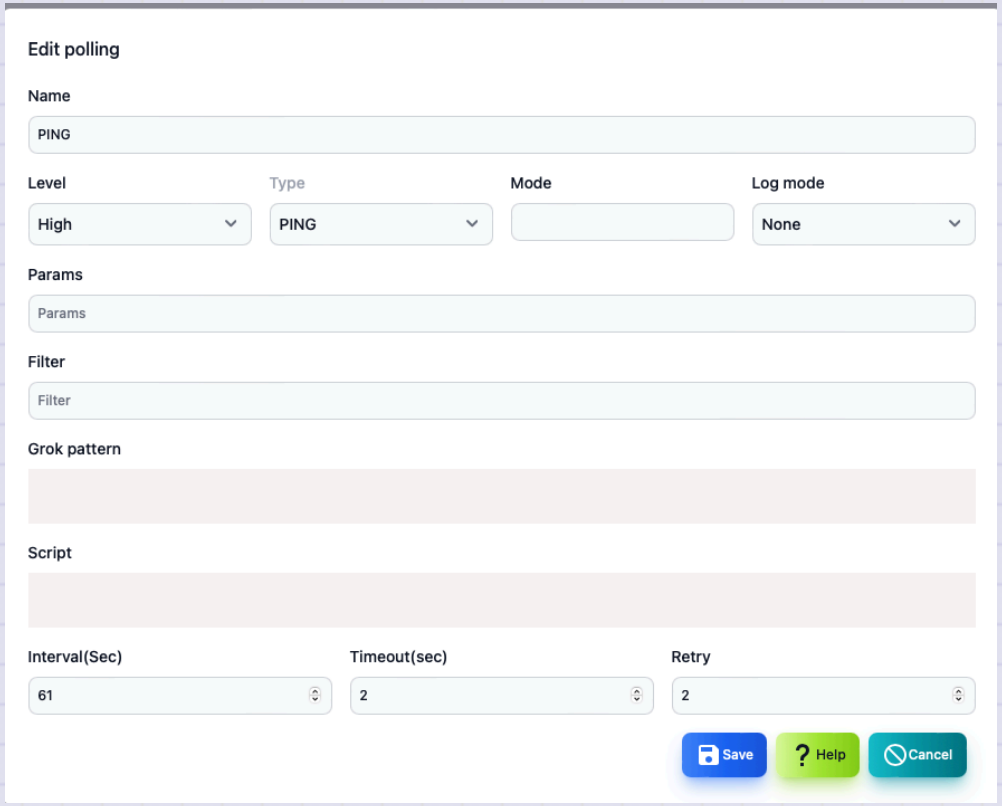
Polling editing

Polling edit can be displayed from the button by selecting a polling list on the polling list.



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Items	Contents
Name	Polling name.
Level	Pauling disability level.
Type	Polling type. Ping, SNMP, TCP, etc.
Mode	Operation mode depends on the type of polling.
Log mode	How to save the polling result log.

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Items	Contents
Parameter	Polling type and mode -dependent parameters.
Filter	Polling type and filter condition that depends on mode.
Extract pattern	This is a GROK pattern that depends on the type of polling and the mode.Use when extracting data from logs.
Script	Java Script that determines disability and calculates variables.
Polling interval	Polling interval.
Timeout	Timeout at the time of polling.
Retry	This is the number of retry times when polling.

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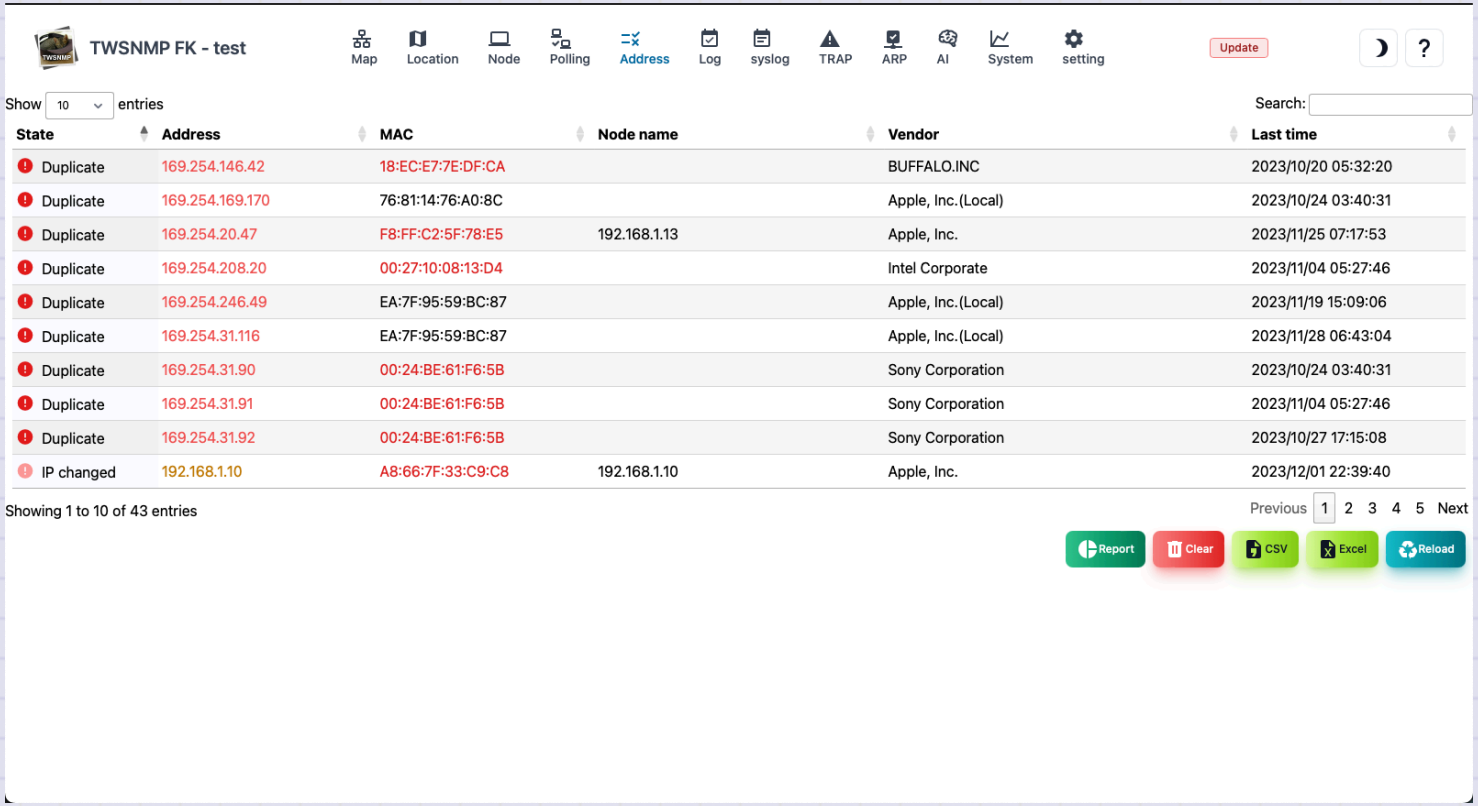
Address list

This is a list of IP address found by TWSNMP.Only the IP address in the same segment found in the ARP watch function is displayed.You can detect duplicate and the change in the address.



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Items	Contents
State	It is the state of the address.(Normal, duplicate, IP change, Mac change.)
Address	IP address.
MAC address	MAC address.
Node name	The name of the node registered on the map as a management target.
Vendor	The name of the vendor corresponding to the MAC address.
Final change	This is the last change date and time.

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Items	Contents
Add node	Add the selected IP address to the map.It is displayed only when it is not registered.
Delete	Delete the selected IP address.
Report	Display the address list report.
clear	Clear all address lists.
CSV	Export the address list to the CSV file.
Excel	Export the address list to the Excel file.
Reload	Update the address list to the latest state.

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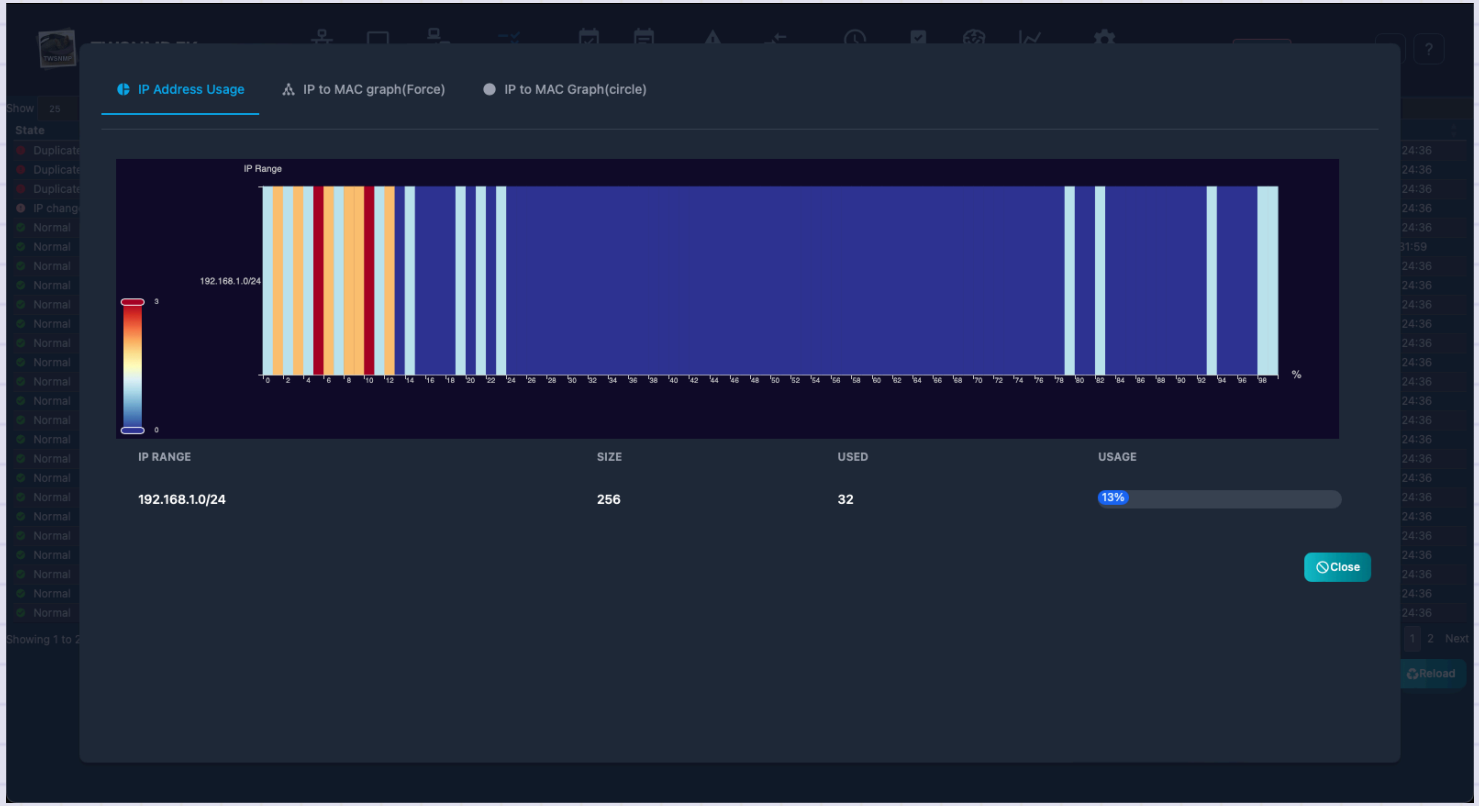
IP address usage status

This is a report on the status of the set IP address.



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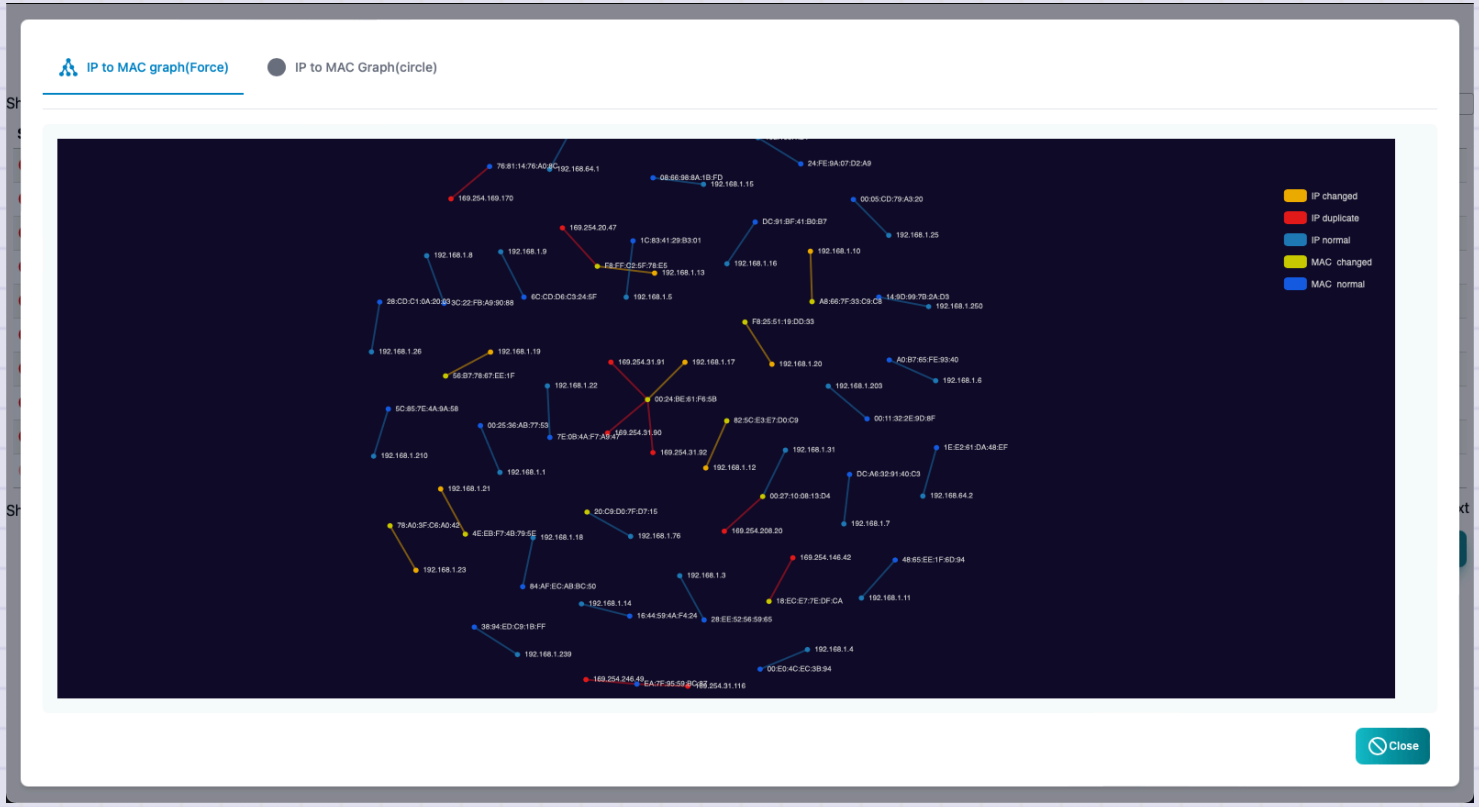
Relationship between IP and MAC address (force model)

This is a report that shows the relationship between IP address and MAC address with an force model.The normal address is one -on - one for the IP address and the MAC address.You can detect MAC addresses using the same IP address on multiple Macs or having multiple IP addresses.



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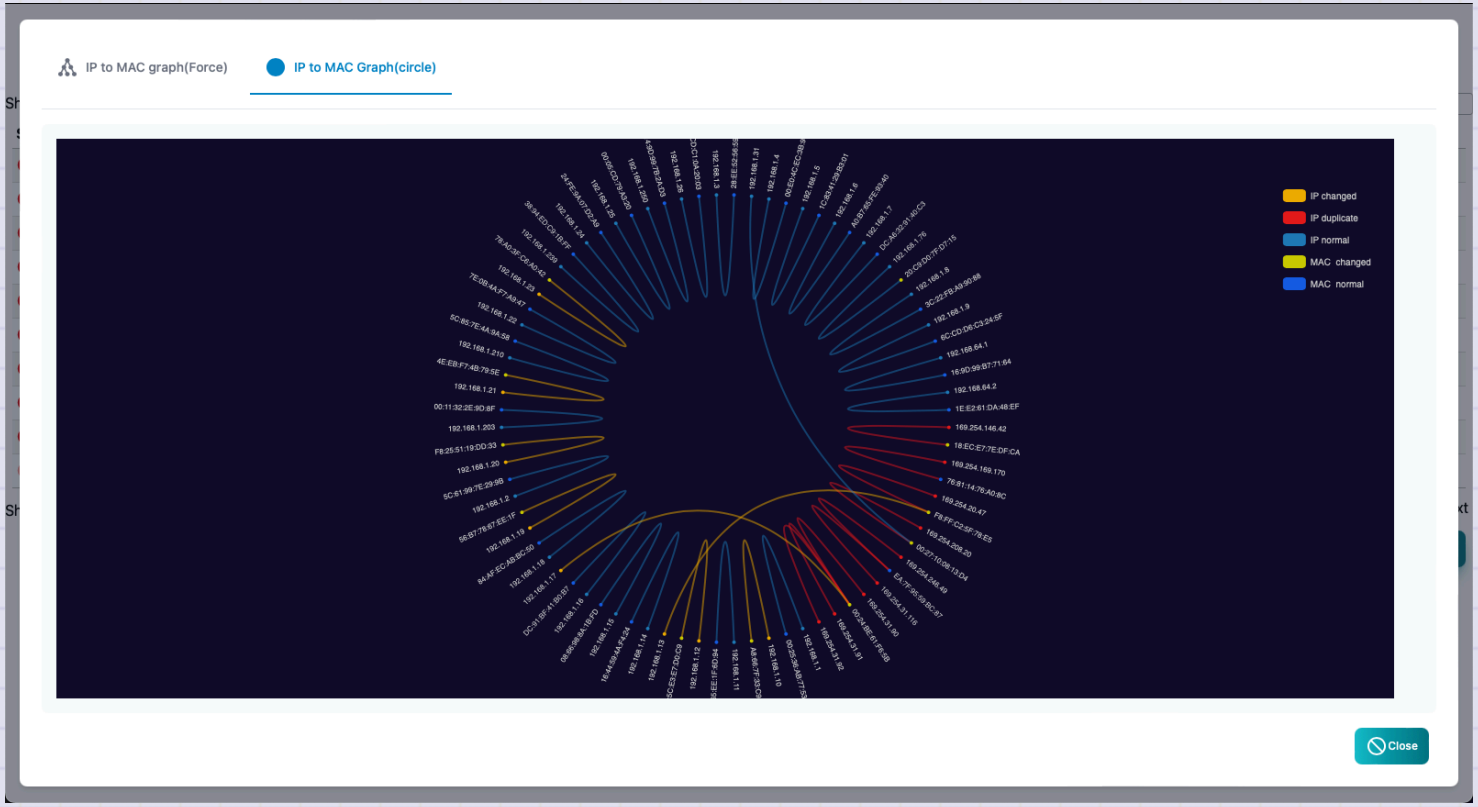
Relationship between IP and MAC address (circular model)

This is a report that shows the relationship between IP address and MAC address with a circular model.The normal address is one -on -one for the IP address and the MAC address.You can detect MAC addresses with the same IP address on multiple Macs or have multiple IP addresses.



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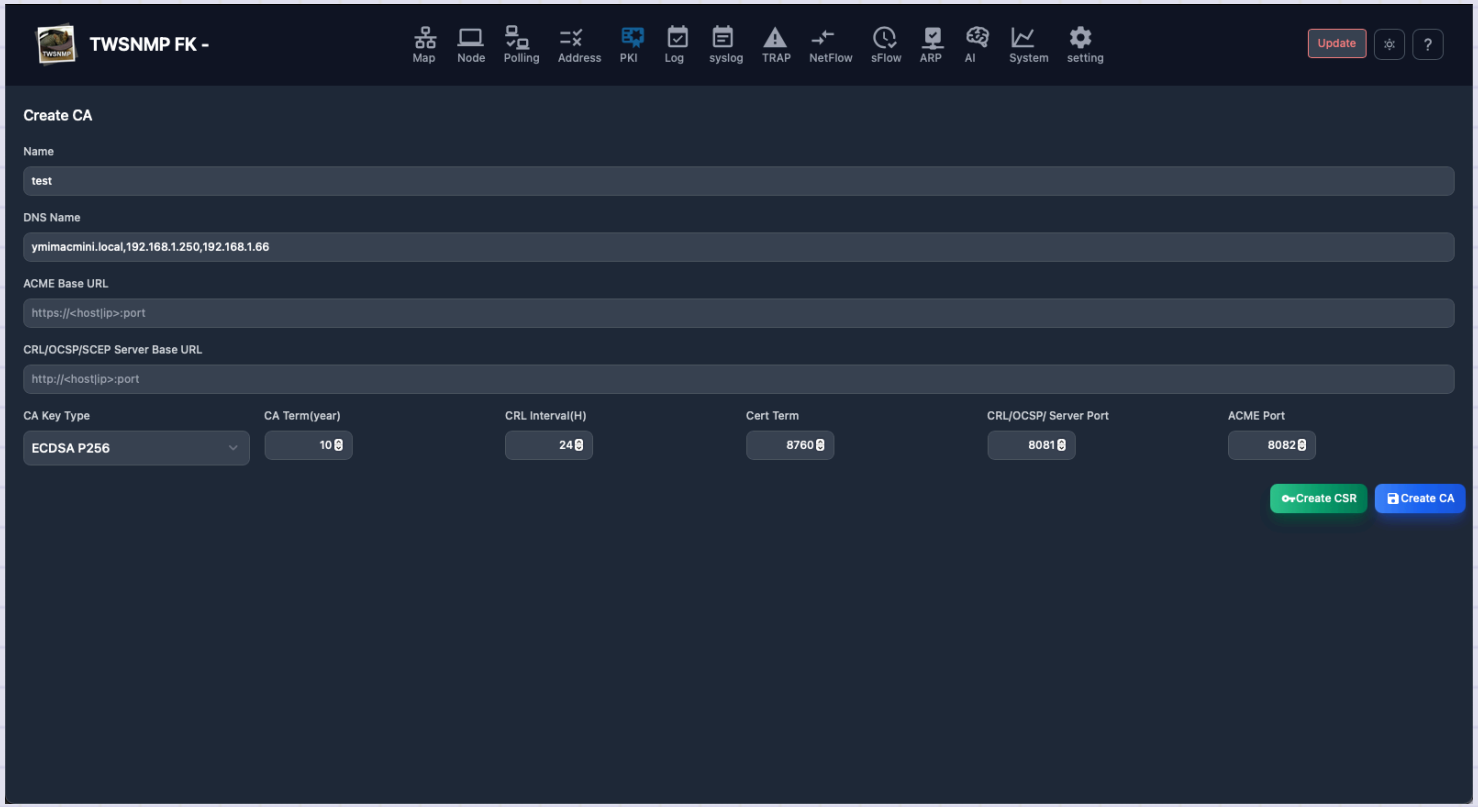
PKI CA construction

This is the screen before building a CA for the PKI function.



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Item	Content
Name	This is the name of the CA.I'll try to use the Subject of the CA certificate.
DNS name	Specify the CDP of the certificate to be issued, the OCSP address, the host name and IP address to be used for SANs for the certificate of the ACME server, separated by commas.
ACME URL	This is the basic URL for the ACME server.Blanks will be automatically set from the host name.
OCSP/SCEP Server URL	This is the basic URL for the CRL/OCSP/SCEP Server.Blanks will be automatically set from the host name.
CA key type	Specify the CA key type.

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Item	Content
CA certificate duration	Specify the number of years the certificate is valid.
CRL Update Interval	Specify the CRL update interval in hours.
Certificate Period	Specify the period of the certificate to be issued in hours.
CRL/OCSP/SCEP server port number	Specify the HTTP server port number.Cannot be changed later.
ACME Server Port Number	Specify the ACME Server Port Number.Cannot be changed later.

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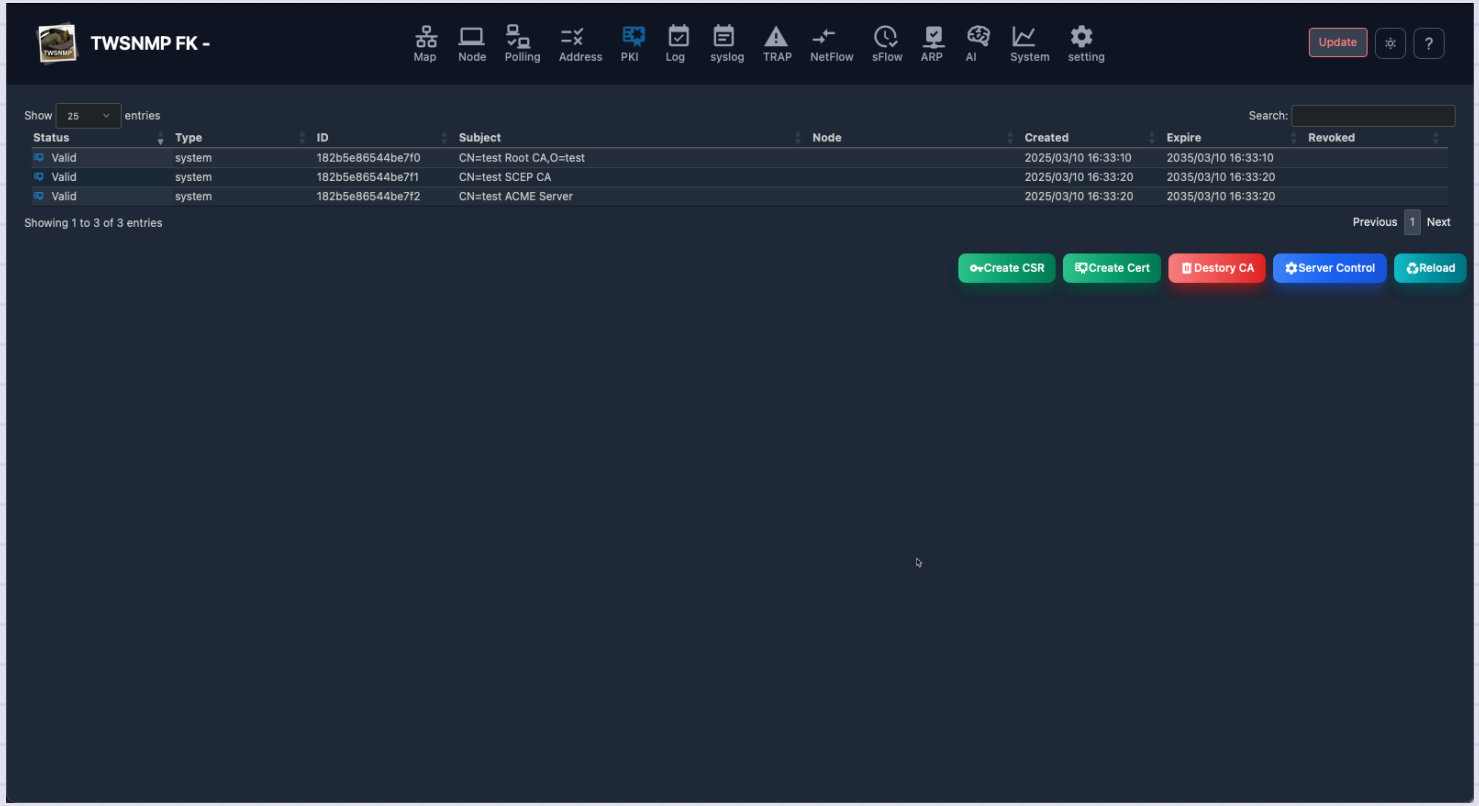
Certificate list

After the CA is built, the certificate list screen will be displayed.You can check the issued certificate.



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Item	Content
Status	Certificate status.
Type	Certificate type.
ID	Certificate serial number.
Subject	A Subject for the certificate.
Node	The node where the certificate was obtained.
Created	The start date and time of the certificate period.
Expire	The end date and time of the certificate period.
Revoked	The date and time the certificate was revoked.

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Item	Content
Create CSR	Displays the screen for creating a certificate request (CSR).
Certificate creation	Read the CSR and issue the certificate.
CA Initialization	Destroy CA.
Server Control	Displays the server control screen.
Renew	Update the certificate list.
Revokes	Revokes the selected certificate.
Export	Saves the selected certificate to a file.

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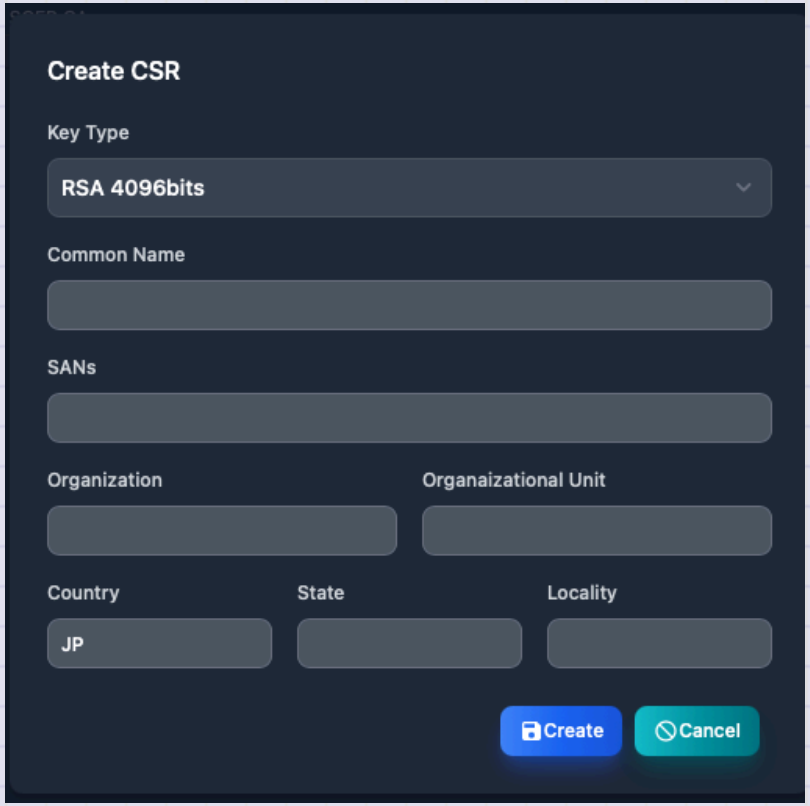
Create CSR

This is the screen for creating a certificate request (CSR).



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Item	Content
Key type	Specifies the key type for CSR.
Name	Specifies the value for CN.
SANs	Subject Alt Names are specified, separated by commas.
Organization name	Specify the organization name.It's OK to leave blank.
Organization Unit	Specify an organizational unit.It's OK to leave blank.
Country code	Specify the country code.It's OK to leave blank.
State/Province name	Specify the state or prefecture name.It's OK to leave blank.
City name	Specify the city name.It's OK to leave blank.

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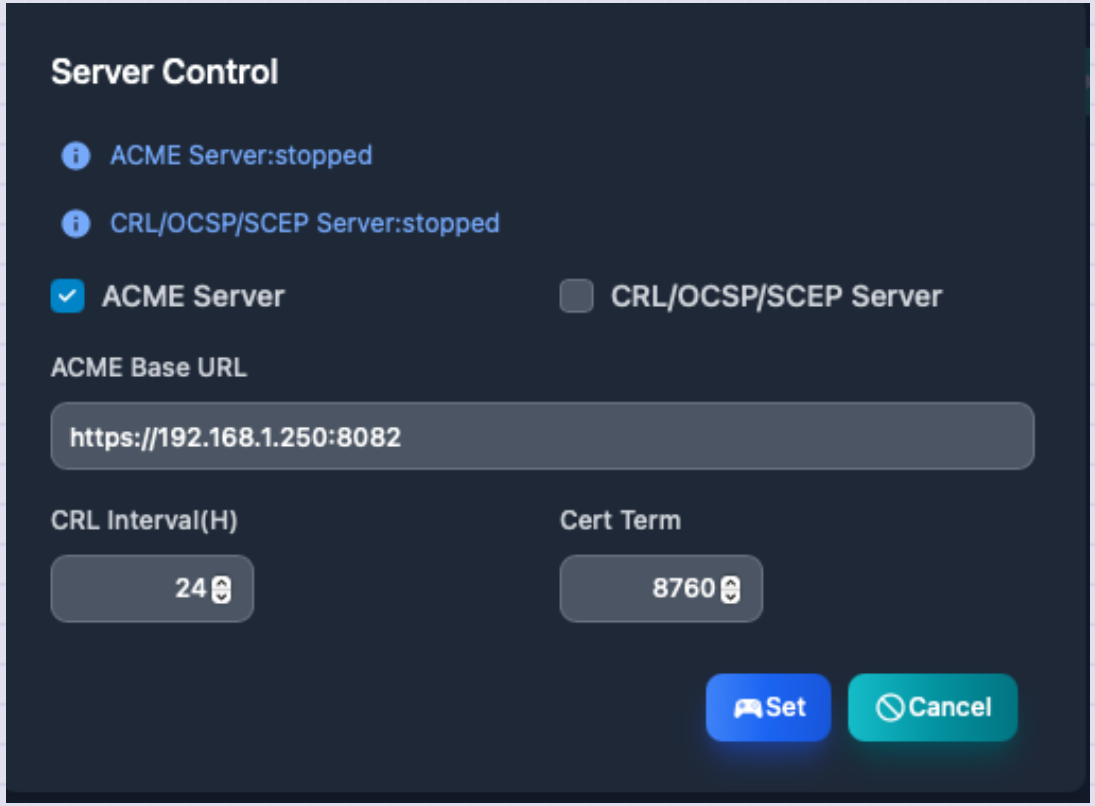
Server Control

This is a screen that controls the operation of the PKI server.



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Item	Content
ACME Server	Start the ACME server.
CRL/OCSP/SCEP Server	Start the CRL/OCSP/SCEP server.
ACME Server Basic URL	Specifies the basic URL that the ACME server responds to.
CRL Update Interval	Specify the CRL update interval in hours.
Certificate Period	Specify the period of the certificate to be issued in hours.

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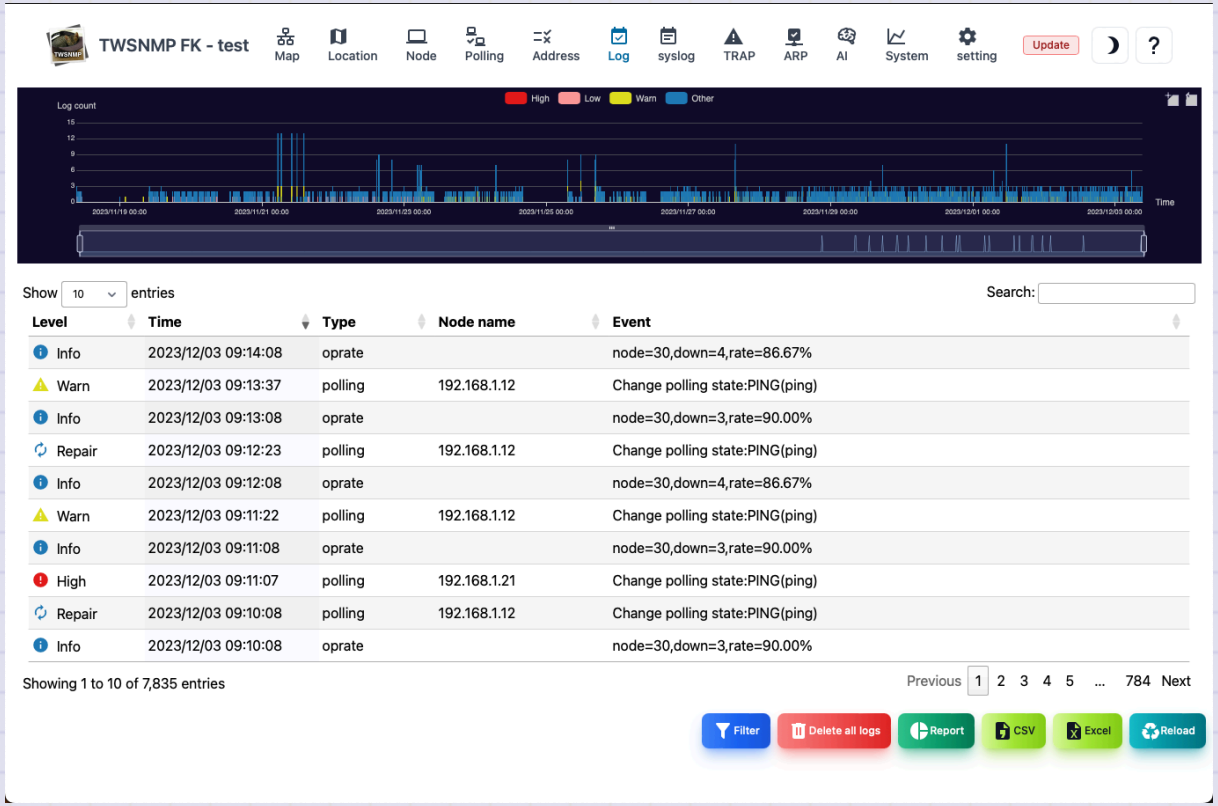
Event Log

This is the event log screen.At the top, there is a graph showing the number of logs in chronological order.



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Items	Contents
Level	Log level.There is severe, mild, attention, return, and information.
Date and time	The date and time of the log is recorded.
Type	Log type. Polling, System, Oprate, User, ArpWatch,
Related node	Name of node related to logs. The blank means that there is no related node.
Event	This is an event that occurred.

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Items	Contents
Filter	Specify the search conditions and display the log.
Delete all logs	Delete all event logs.
Report	Displays the event log analysis report.
CSV	Export the event log to the CSV file.
Excel	Export the event log to the Excel file.
Reload	Update the list of event logs to the latest state.

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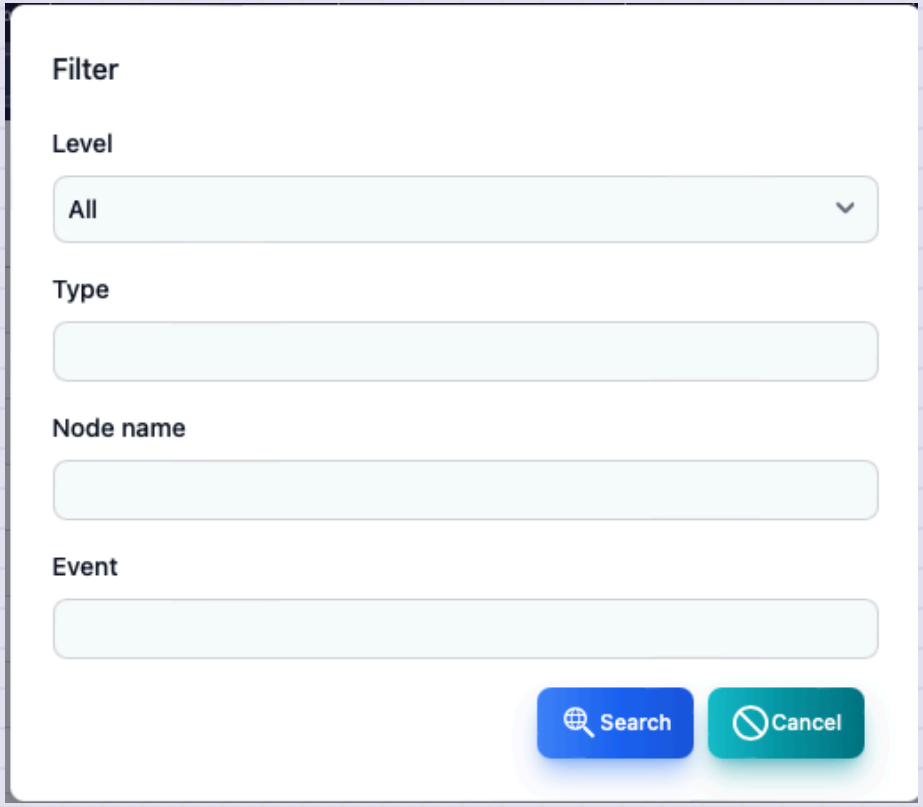
Event log filter

This is a dialog that specifies the search conditions for the event log.



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Items	Contents
Level	Log level.All, there are more attention, more than severe, mild.
Type	Log type. Polling, System, Oprate, User, ArpWatch,
Related node	Search by node name related to the log.
Event	Search by the string of the event that occurred.

The string can be searched by regular expression.

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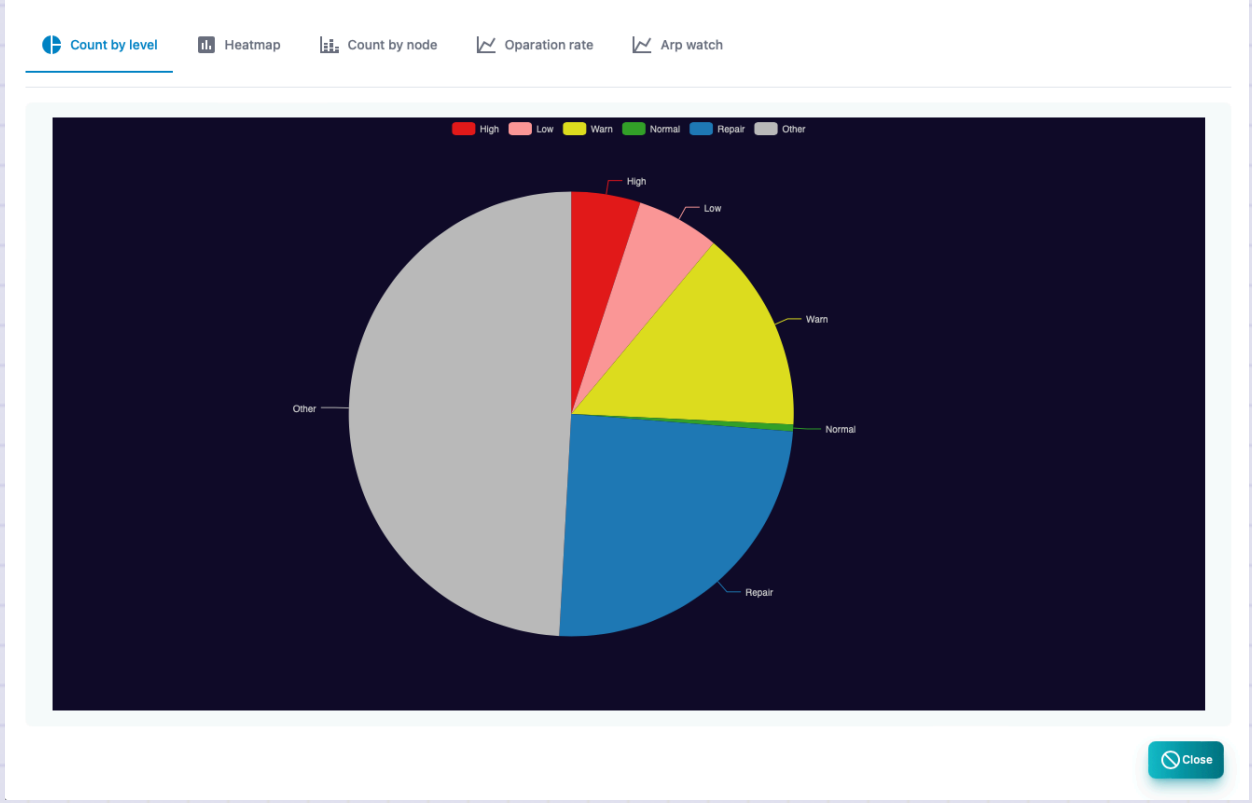
Event log count by state

This is a report of the number of event logs by state (level).



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Event log Heatmap

This is a report of the number of cases of each event log on the heat map.

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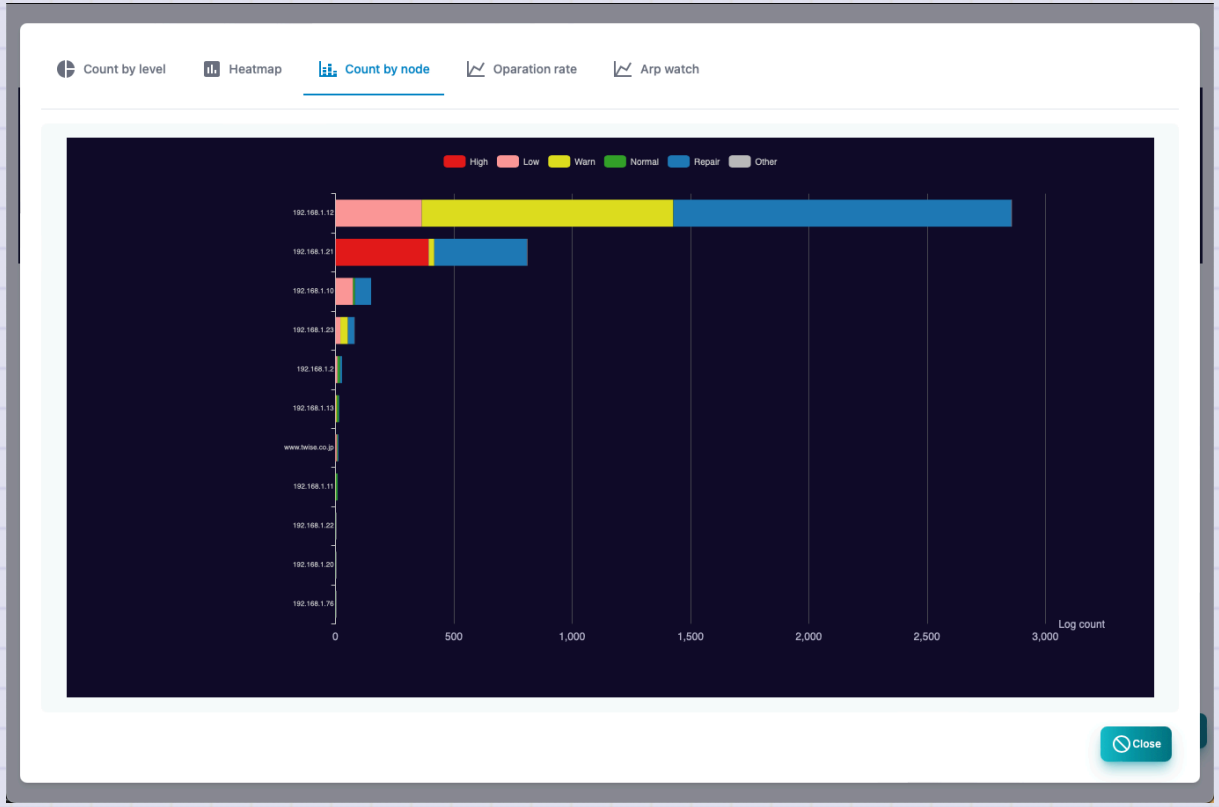
Event log count by node

This is a report of the number of event logs by node.



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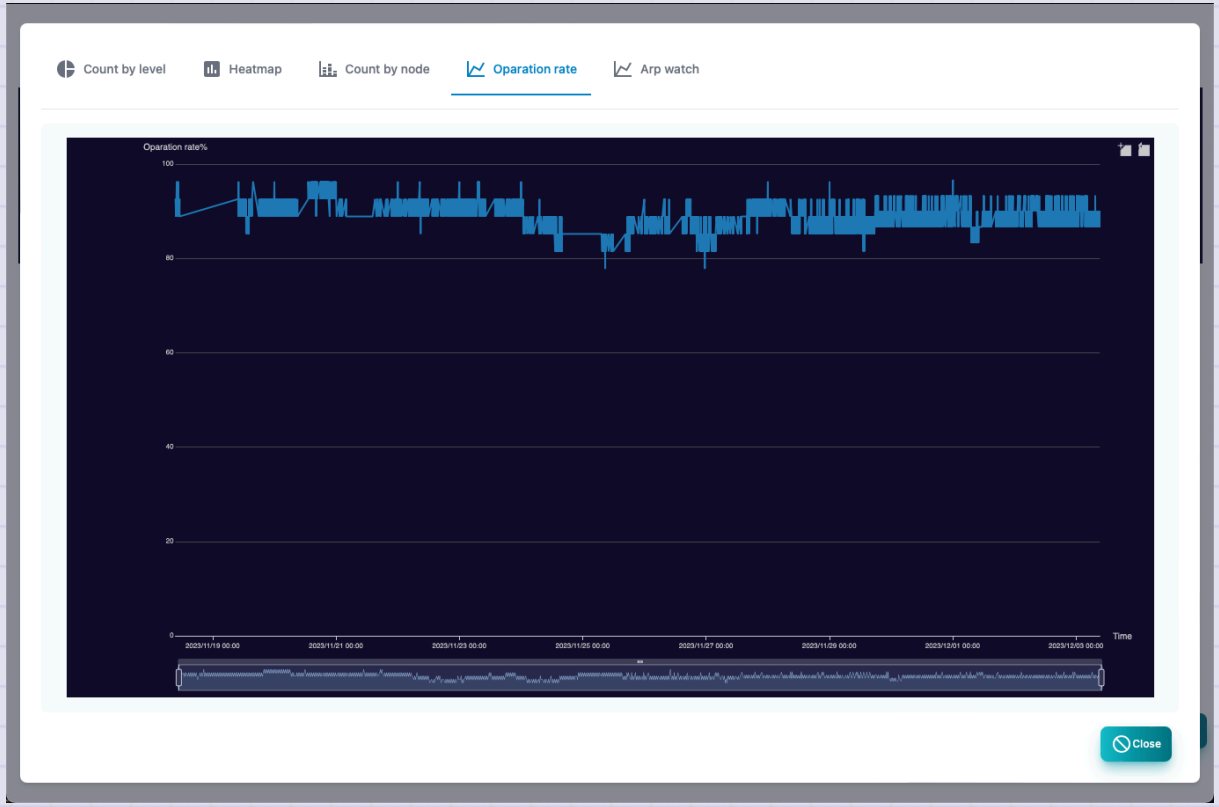
Operating rate

This is a report that uses a chronological graph of the value of the operating rate (OPRATE) in the event log.



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ARP watch

This is a report of the value of the address usage rate (ARPWATCH) in the event log as a chronological graph.

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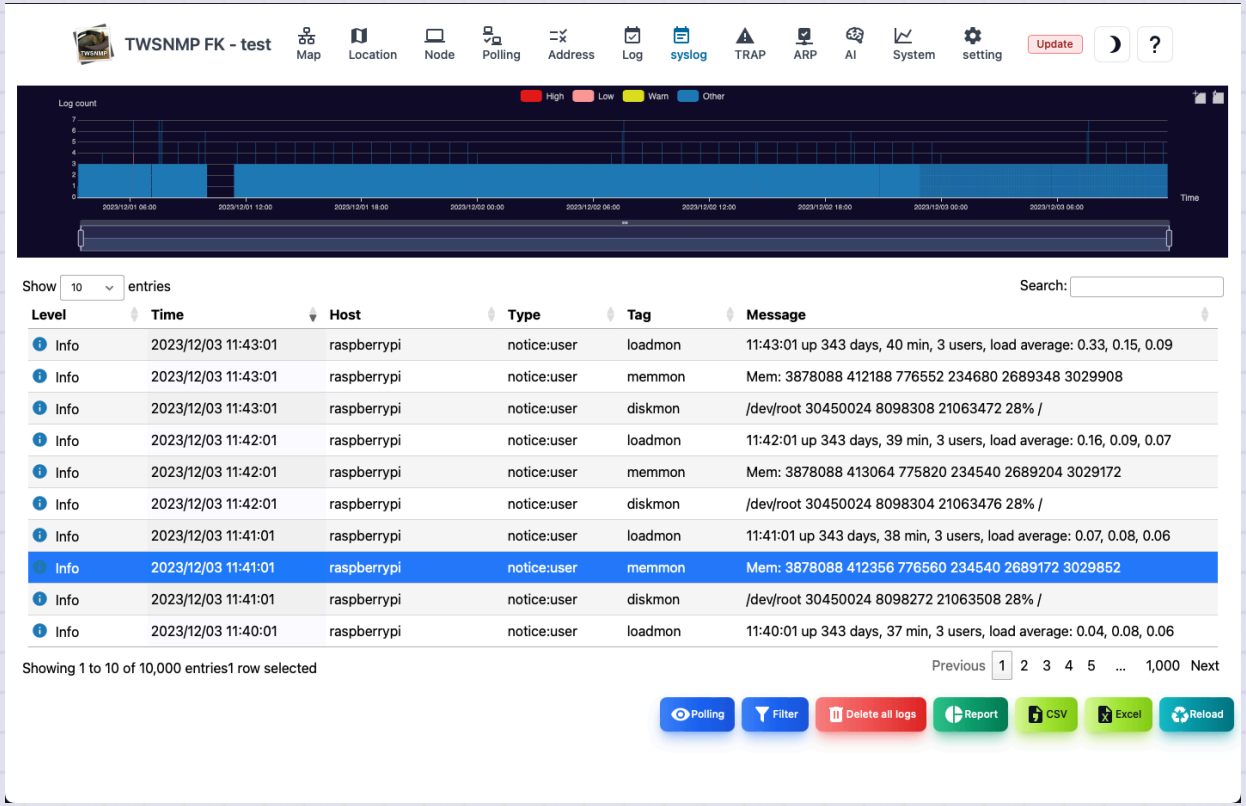
Syslog

Syslog screen.At the top, there is a graph showing the number of logs in chronological order.



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Items	Contents
Level	Syslog level.There is severe, High,Low, Warn, and information.
Date and time	It is the date and time when I received syslog.
Host	SYSLOG source host.
Type	Syslog Facility and priority string.
Tags	Syslog tag.Process and process ID.
Message	Syslog message.

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Items	Contents
Polling	Register the polling from the selected syslog.
Filter	Specify the search conditions and display syslog.
Delete all logs	Delete all syslogs.
Report	Displays Syslog analysis reports.
Export CSV	syslog to CSV file.
Excel	EXCEL file is exported to syslog.
Reload	Update the list of syslog to the latest state.

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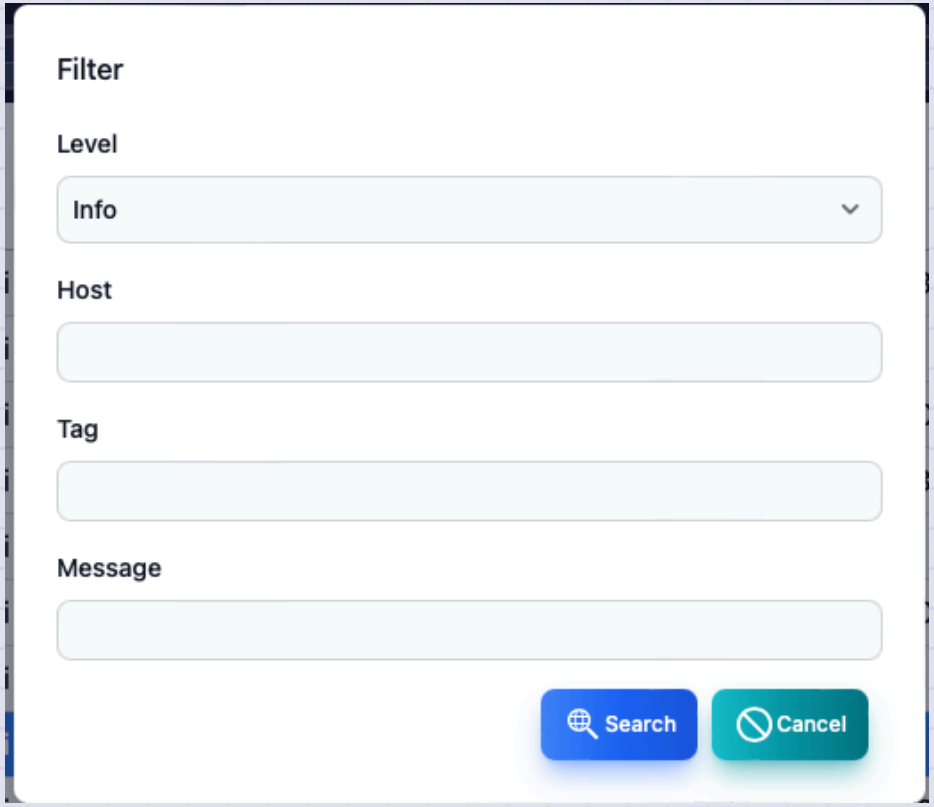
Syslog Filter

This is a dialog that specifies the search conditions for syslog.



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Items	Contents
Level	Syslog level. All, more than information, more than caution, mild or higher, more severe.
Host	It is the source host.
Tags	The value of the syslog tag.
Message	Syslog message.

*Host,Tag,Message can be searched in regular expressions.

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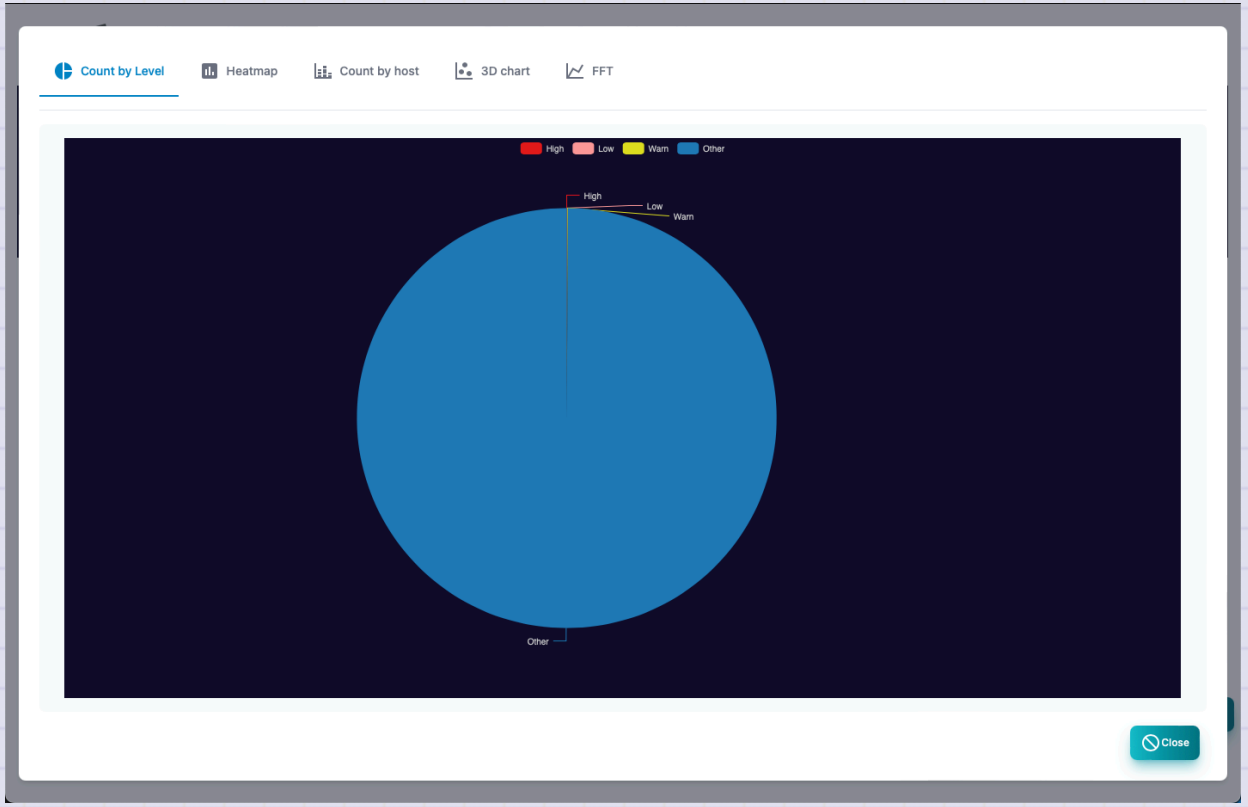
Syslog count by state

This is a report of the number of syslogs by state.



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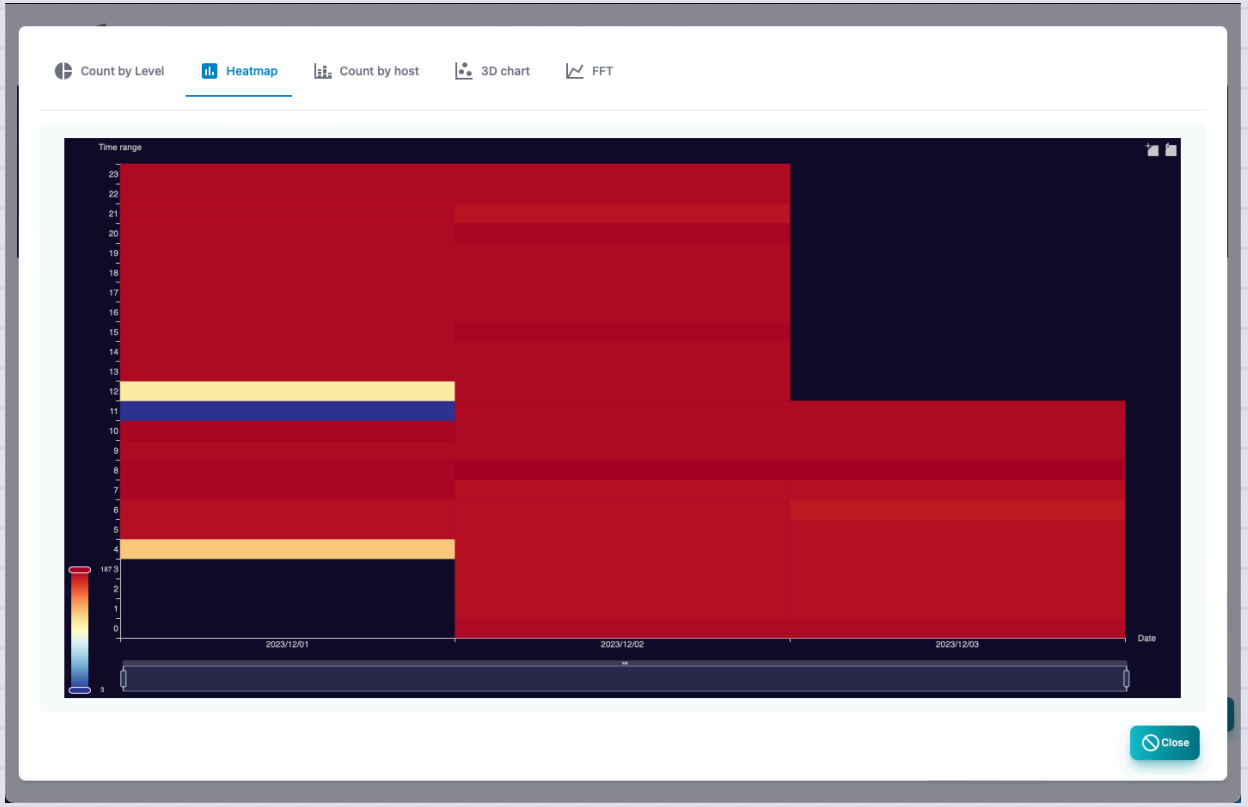
Syslog Heatmap

This is a report of the number of cases of syslog on the heat map.



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Syslog count by host

This is a report of the number of syslogs by the source host.

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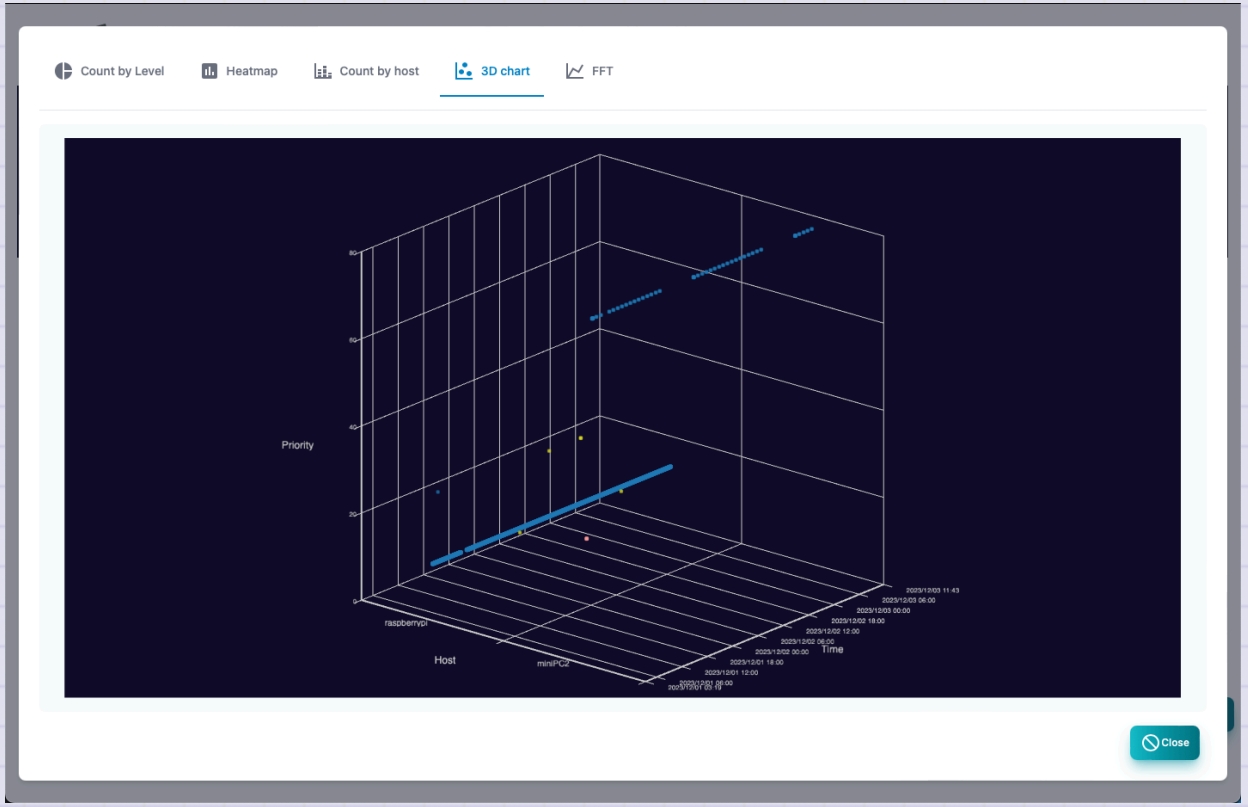
Syslog count by host (3D)

This is a report displayed in three -dimensional graphs of Syslog, source host, priority, and time.



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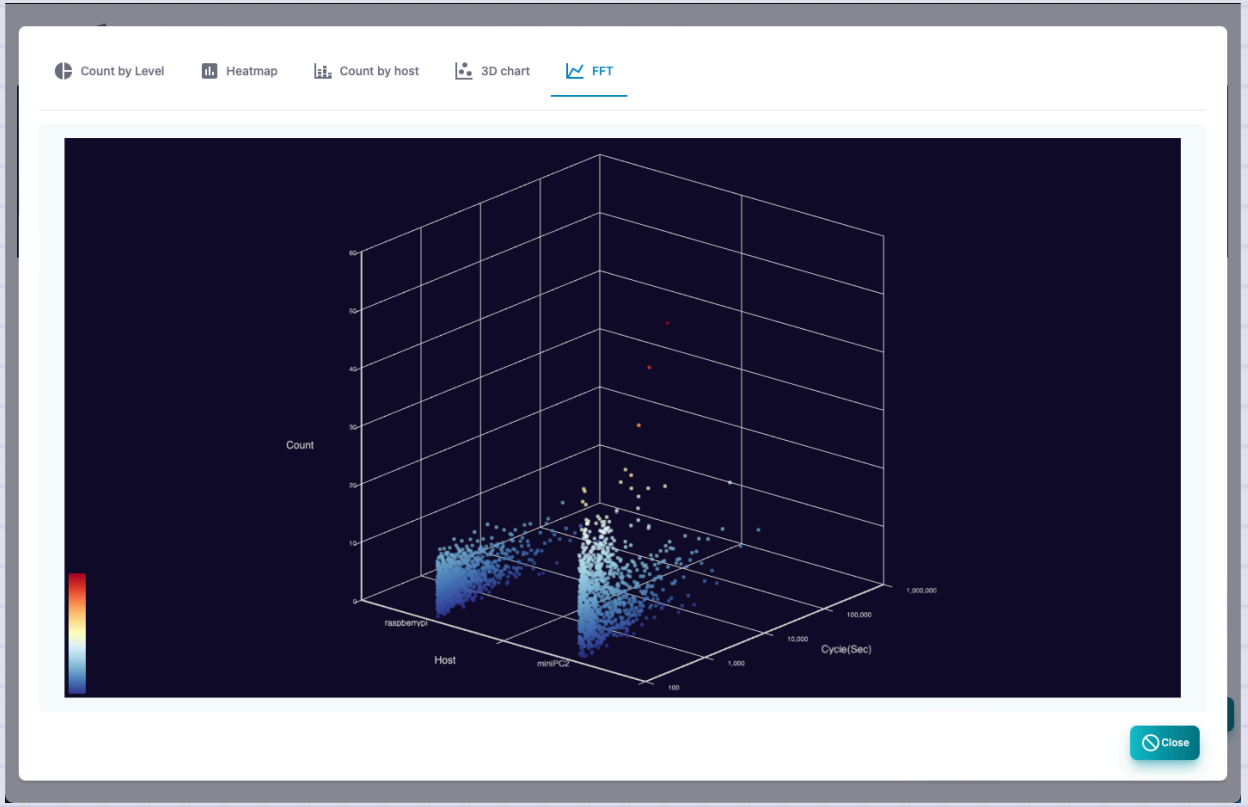
Syslog FFT

This is a report that analyzes Syslog for each host and analyzes the number of receiving cases.



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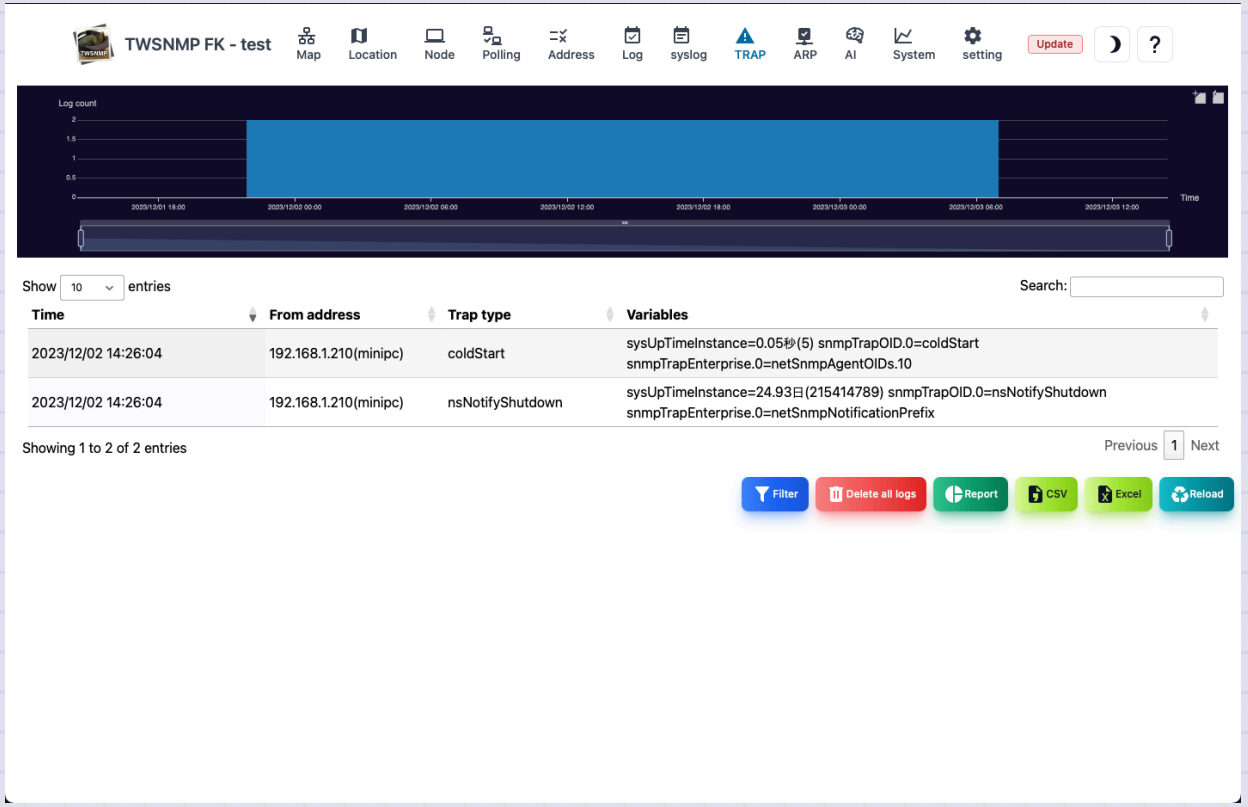
SNMP TRAP

SNMP Trap log screen.At the top, there is a graph showing the number of logs in chronological order.



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Items	Contents
Date and time	This is the date and time of receiving SNMP Trap.
Sending source	SNMP Trap's source host.
Type	SNMP Trap type.
Variables	Variables attached to SNMP Trap.

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Items	Contents
Polling	Register the polling from the selected SNMP Trap.
Filter	Specify the search conditions and display SNMP Trap.
Delete all logs	Delete all syslogs.
Report	Displays the analysis report of SNMP Trap.
CSV	Sport the SNMP Trap to the CSV file.
Excel	Export SNMP Trap to Excel file.
Reload	Update the SNMP Trap list to the latest state.

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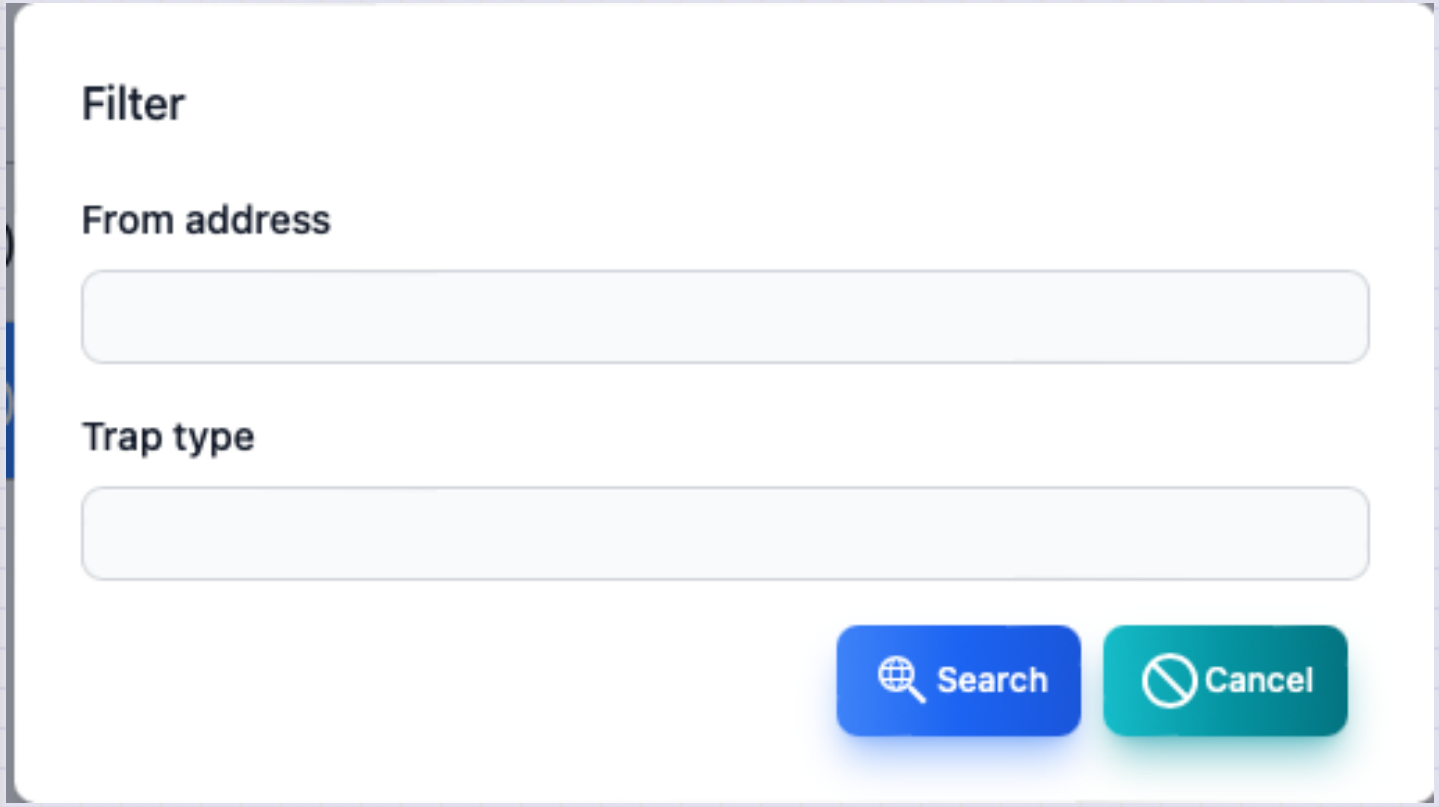
SNMP TRAP Filter

This is a dialog that specifies the search conditions for SNMP Trap.



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Items	Contents
Sending source	It is the source host.
Type	SNMP Trap type.

*Character strings can be searched in regular expressions.

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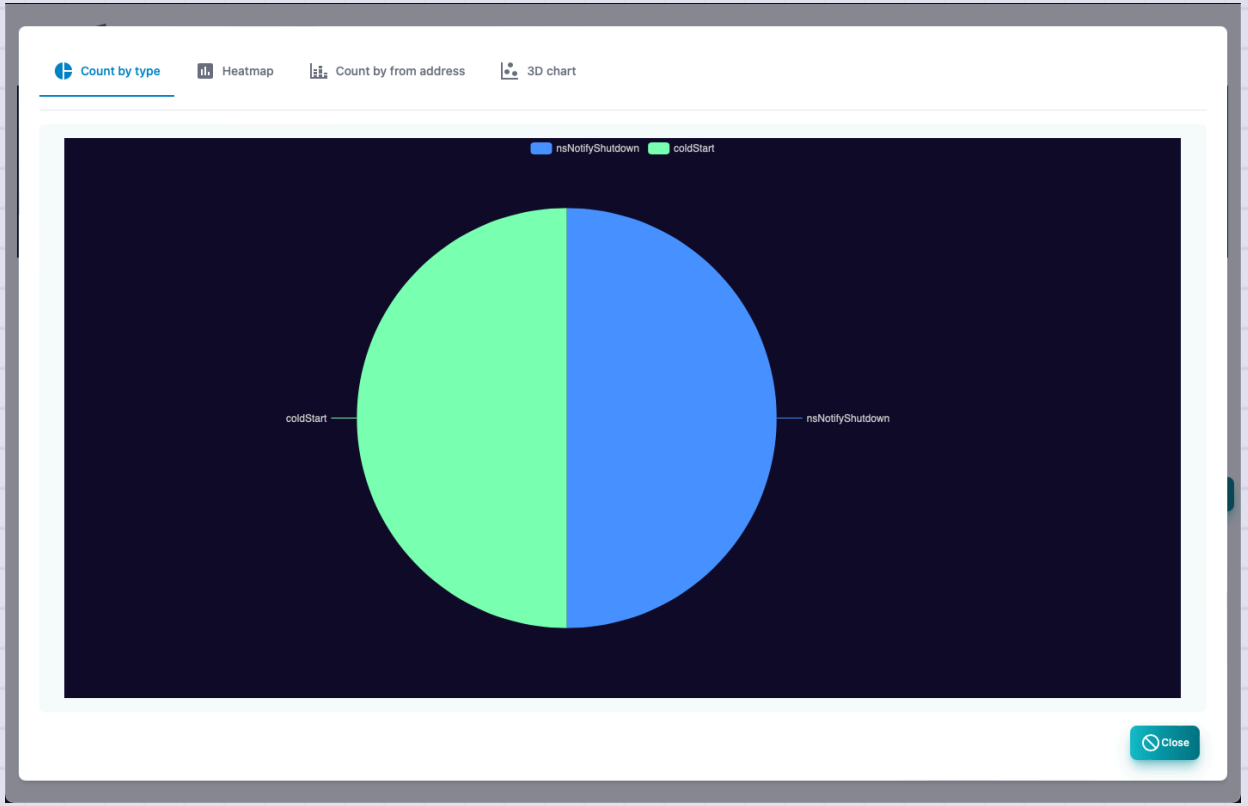
SNMP TRAP count by TRAP type

This is a report of the number of SNMP traps by type.



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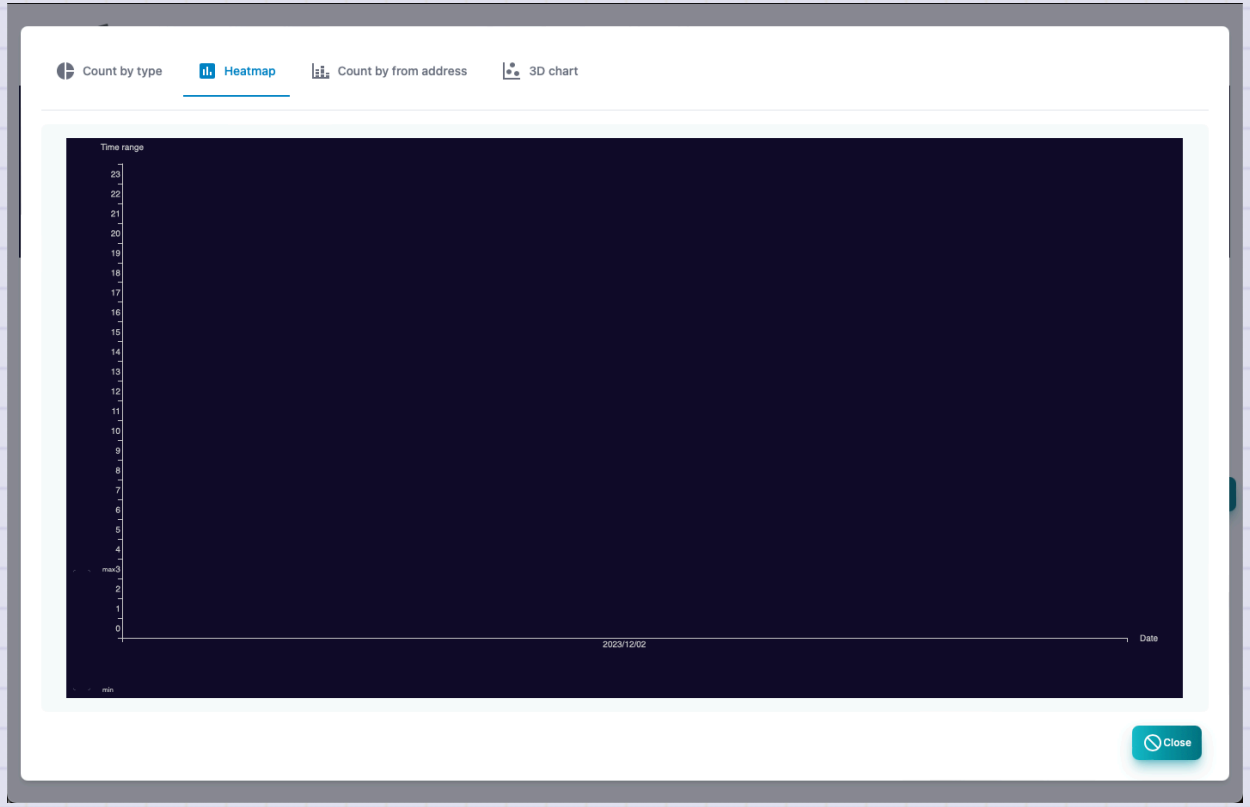
SNMP TRAP Heatmap

This is a report of the number of cases of SNMP TRAP on the heat map.



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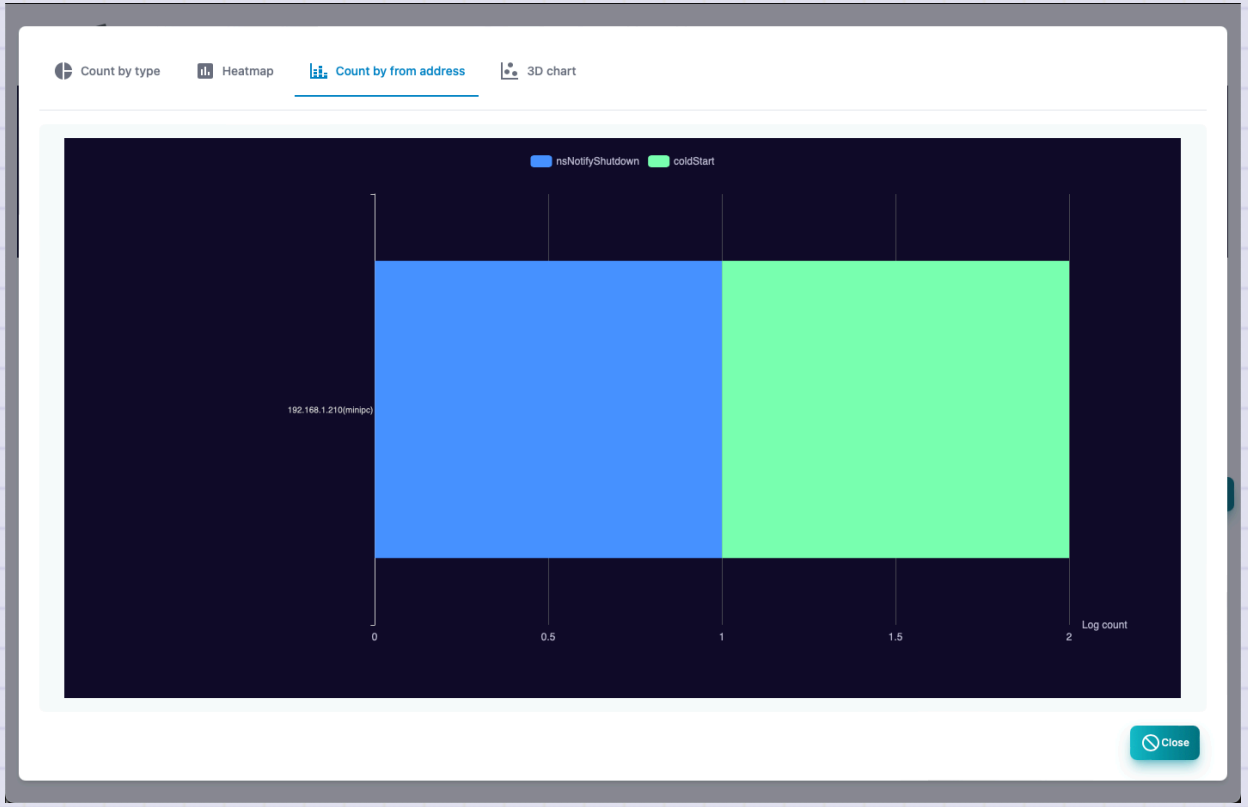
SNMP TRAP count by host

This is a report of the number of SNMP Trap receiving cases by source host.



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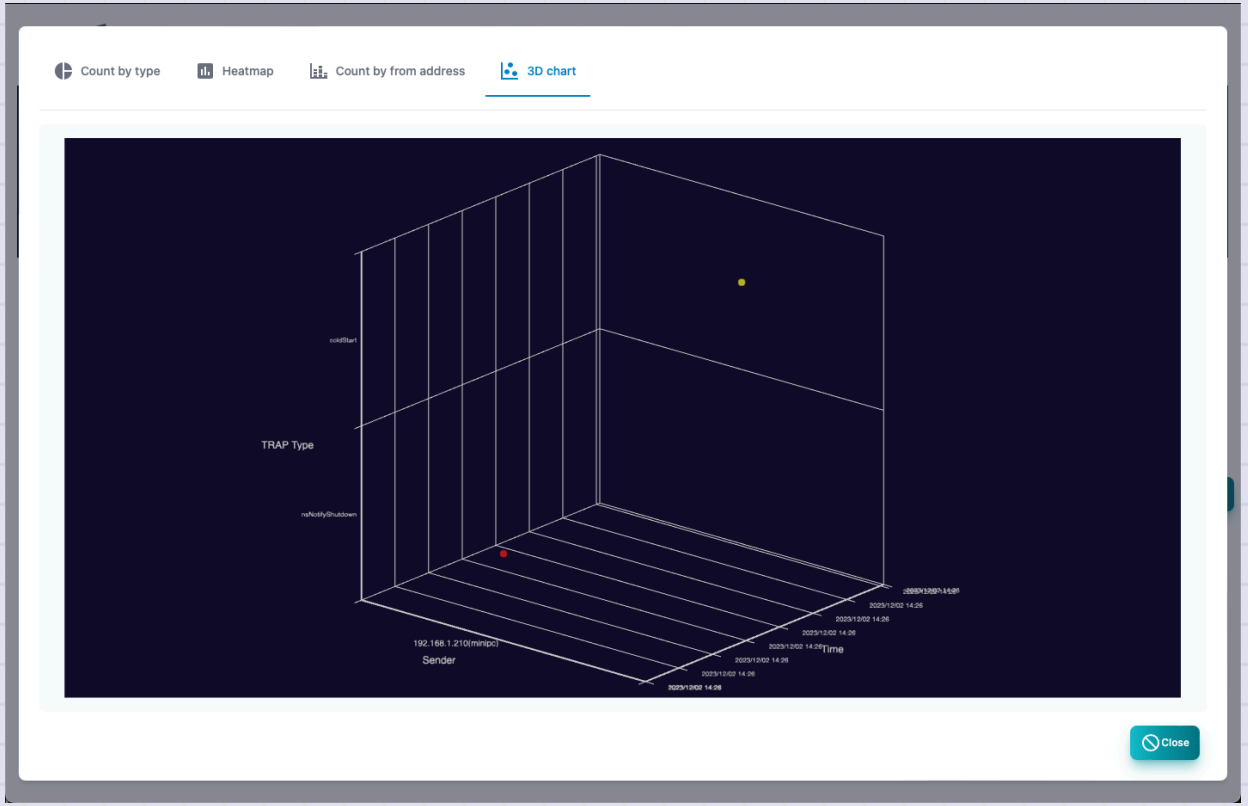
SNMP TRAP send source and type (3D)

This is a report displayed in the source host, type, and three -dimensional graph of the SNMP Trap receiving log.



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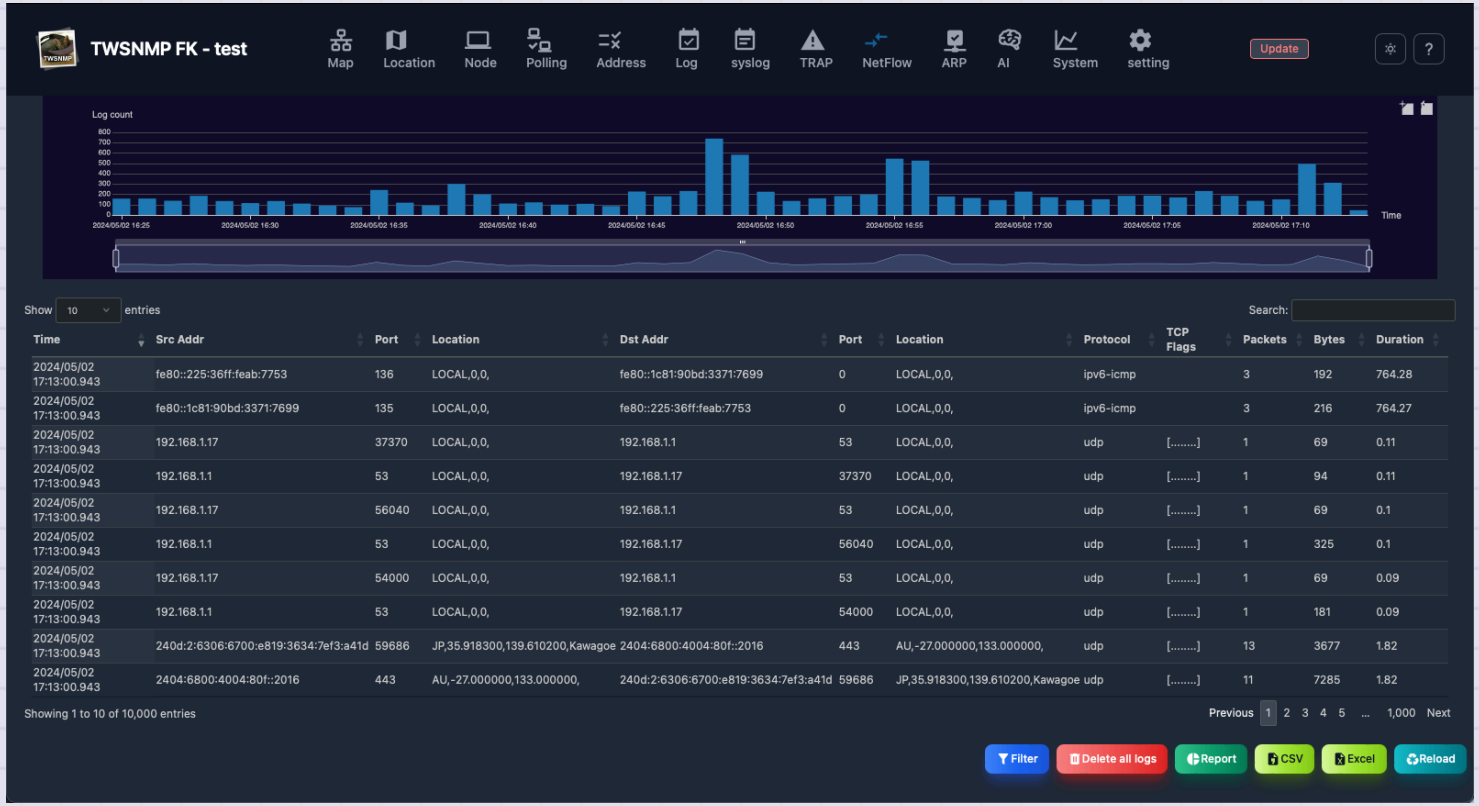
NetFlow

This is the analysis screen of Netflow.



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Explanation of table items

Items	Contents
Date and time	The date and time of receiving Netflow.
Sending source	It is the source IP.
Port	It is the port number of the source.
Location	It is the source of the source.GEOIP DB is required.
Address	IP for the destination.
Port	The destination port number.
Location	It is the destination position.GEOIP DB is required.

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Items	Contents
Protocol	Protocol such as TCP/UDP/ICMP.
TCP flag	TCP flag.
Packet	The number of sending packets.
Byte	The number of sending bytes.
Period	Flow communication time.

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Button

Items	Contents
Filter	Specify the search conditions and display Netflow.
Delete all logs	Delete all Netflow.
Copy	Copy the selected log.
Report	Displays Netflow analysis reports.
CSV	Export Netflow to CSV file.
Excel	Export Netflow to Excel file.
Update	Update the Netflow list to the latest state.

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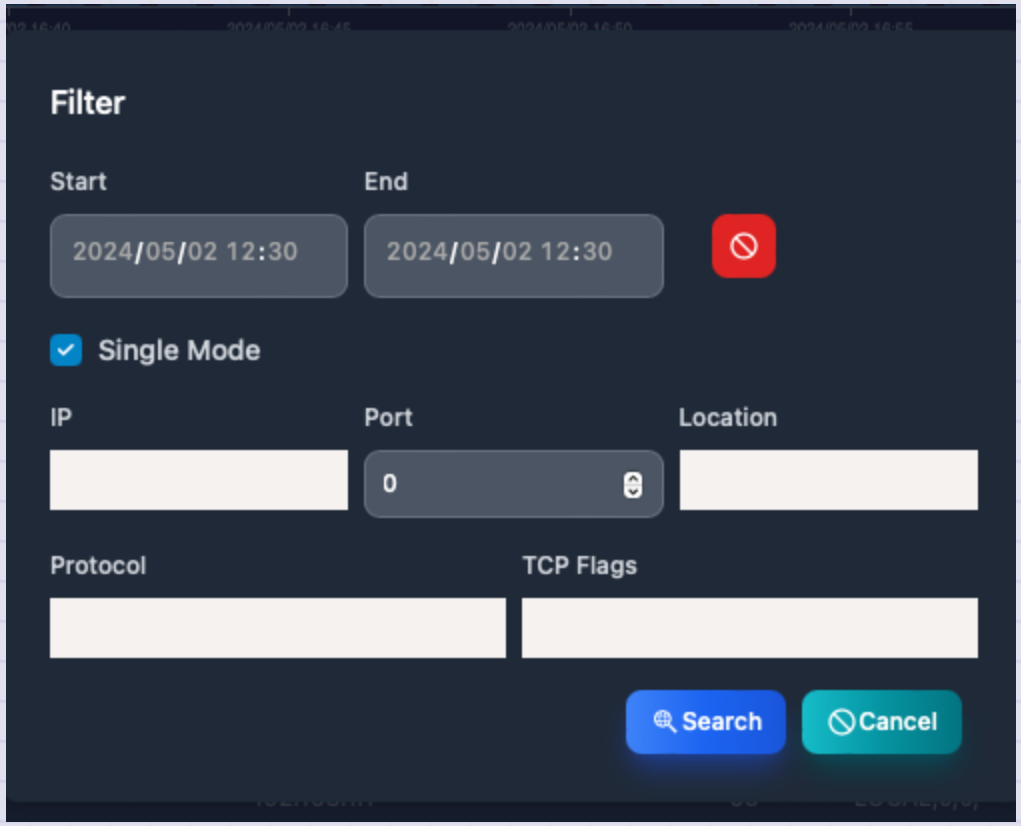
Filter item

It is a filter for netflow search.



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Items	Contents
Start date and time	Specify the date and time of the search start.
End date and time	Specify the date and time of the search termination.
Simple mode	Mode to apply IP, port, and position in both directions.
IP	In the case of simple mode, specify the source and destination IP.
Port	In the case of simple mode, specify the source and destination port.
Location	Specify the source and destination position in the case of simple mode.

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Items	Contents
Sending source IP	Specify the source IP.
Port	Specify the source port.
Location	Specify the source position.
Destination IP	Specify the destination IP.
Port	Specify the destination port.
Location	Specify the destination position.
Protocol	Specify the protocol name.
TCP flag	Specify the TCP flag.

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Netflow report

Report name	Contents
Heat Map	Heat map by time zone of Netflow's receiving number.
Histogram	Histgram of numerical data.
Traffic	This is a time -series graph of traffic.
TOP List	This is a ranking report for each item.
TOP list (3D)	Ranking reports for each item are displayed in 3D graphs.
IP Pair Flow	The combination of communication is displayed in a graph.

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Report name	Contents
FFT Analysis	Analyzing the communication cycle with FFT.
FFT Analysis (3D)	Analyze the communication cycle with FFT and display it on the 3D graph.
Map	Display the position of the IP address on the map.

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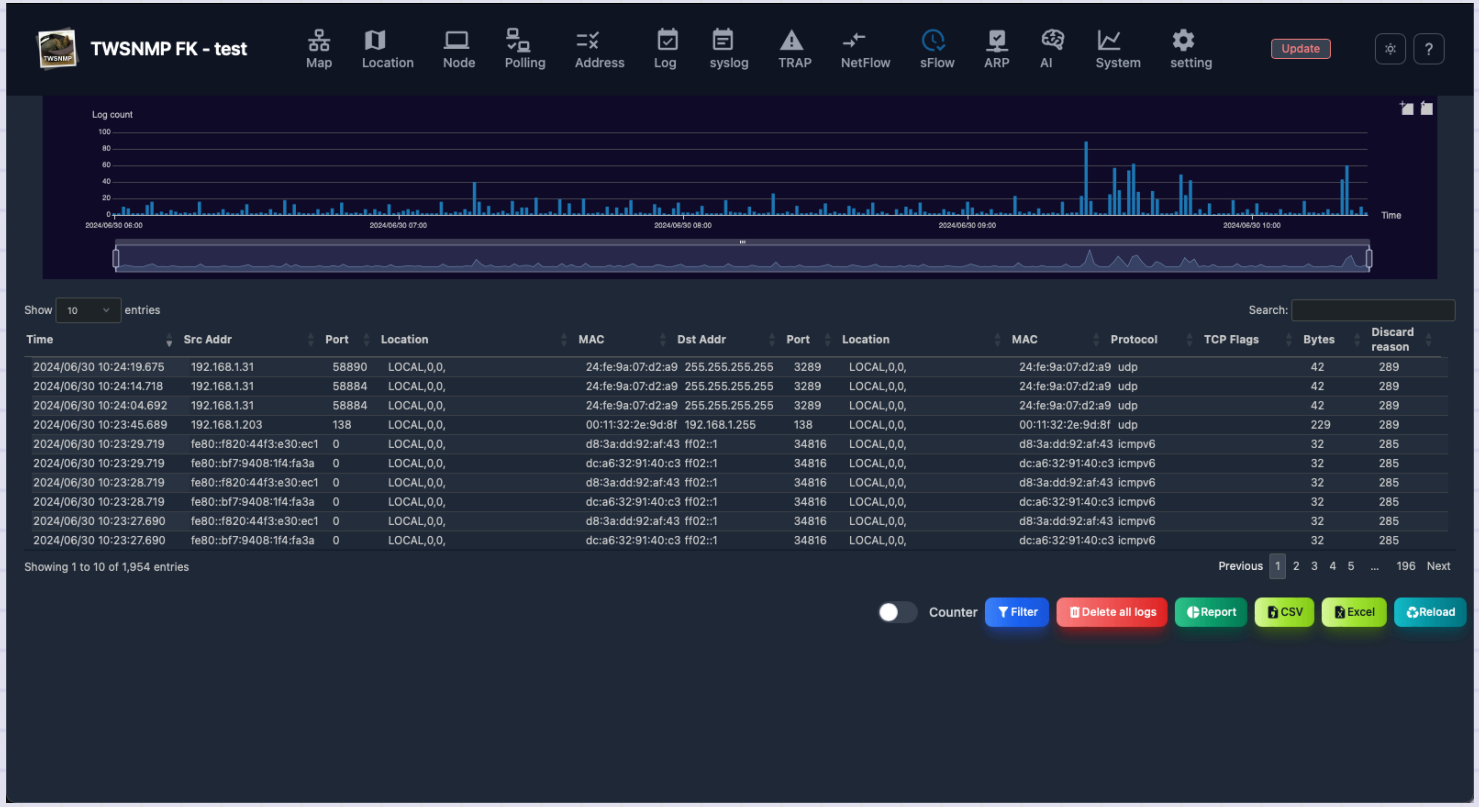
sFlow

This is the analysis screen of sFLOW.



Flow sample

Items	Contents

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Items	Contents
Address	IP for the destination.
Port	The destination port number.
Location	It is the destination position.GEOIP DB is required.
Mac	This is the destination MAC address.
Protocol	Protocol such as TCP/UDP/ICMP.
TCP flag	TCP flag.
Byte	The number of sending bytes.

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Description of button

Items	Contents
Counter	Switch between flow samples and counter samples.
Filter	Specify the search conditions and display sFlow.
Delete all logs	Delete all sFlow.
Copy	Copy the selected log.

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Items	Contents
Report	Displays SFLOW analysis reports.
CSV	Export sFlow to CSV file.
Excel	Export SFLOW to Excel file.
Update	Update the SFLOW log to the latest state.

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Flow sample filter item

Items	Contents
Start date and time	Specify the date and time of the search start.
End date and time	Specify the date and time of the search termination.
Simple mode	Mode to apply IP, port, and position in both directions.
IP	In the case of simple mode, specify the source and destination IP.
Port	In the case of simple mode, specify the source and destination port.
Location	Specify the source and destination position in the case of simple mode.

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Items	Contents
Port	Specify the source port.
Location	Specify the source position.
Destination IP	Specify the destination IP.
Port	Specify the destination port.
Location	Specify the destination position.
Protocol	Specify the protocol name.
TCP flag	Specify the TCP flag.

- 文字列は、正規表現で検索できます。

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Counter sample

Items	Contents
Date and time	It is the date and time when the SFLOW sample received.
Sending source	It is the source IP.
Type	The type of counter sample.(I/F, CPU, Memory, Disk, Netowk)
Data	Data of counter sample.

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Counter sample filter item

Items	Contents
Start date and time	Specify the date and time of the search start.
End date and time	Specify the date and time of the search termination.
Submit	Specify the source.
Type	Specify the type of counter sample.

- The character string can be searched by regular expression.

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Flow sample report

Report name	Contents
Heat map	Heat map showing the number of log time.
Communications	This is a time -series graph of communication volume.
TOP List	This is a ranking report for each item.
TOP list (3D)	Ranking reports for each item are displayed in 3D graphs.
IP Pair Flow	The combination of communication is displayed in a graph.
FFT Analysis	Analyzing the communication cycle with FFT.
FFT Analysis (3D)	Analyze the communication cycle with FFT and display it on the 3D graph.
Map	Display the position of the IP address on the map.

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Counter sample report

Report name	Contents
Heat map	Heat map showing the number of log time.
I/F BPS	This is a time -series graph of the communication volume (Bytes/Sec) obtained from I/F sample.
I/F PPS	This is a time -series graph of the communication volume (Packets/Sec) obtained from I/F sample.

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Report name	Contents
CPU	CPU usage rate and load time series graph acquired from CPU sample.
Memory	Memory is a graph of memory usage and available capacity obtained from a sample.
DISK	This is a graph of disk usage and access amount acquired from Disk sample.
Network	Network is a graph of network usage obtained from sample.

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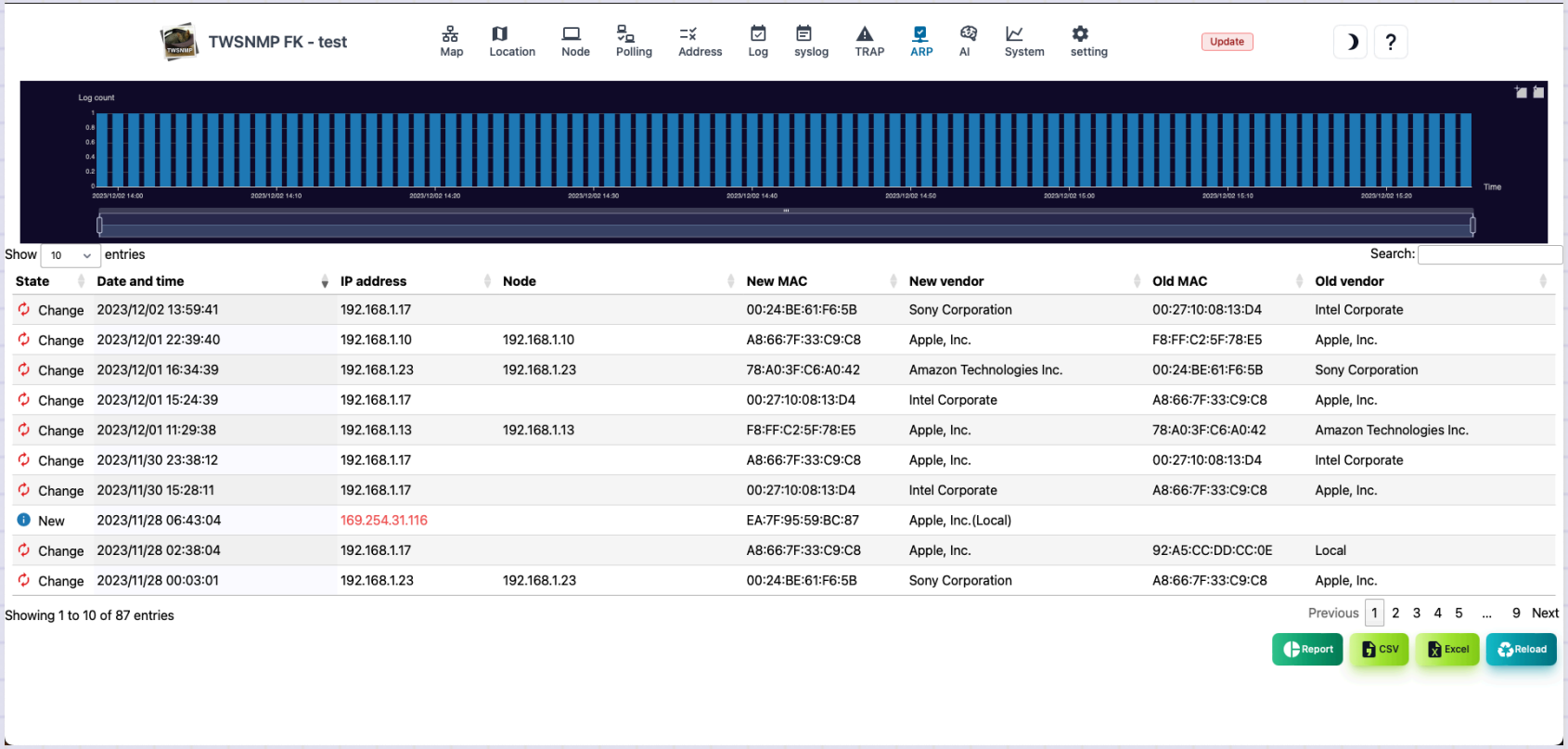
ARP warch log

ARP watch log screen.

At the top, there is a graph showing the number of logs in chronological order.



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Items	Contents
State	Log status.Either new or change.
Date and time	The date and time of the log.
IP address	IP address to log.
Node	The name of the node registered on the map.
New MAC	New discovery or MAC address after change.
New vendor	The vendor name of the new MAC address.
Old MAC	MAC address before change.
Old vendor	This vendor name of the old MAC address.

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Items	Contents
Report	Displays the ARP watch log analysis report.
CSV	Export the ARP watch log to the CSV file.
Excel	Export the ARP watch log to the Excel file.
Reload	Update the list of ARP watch logs to the latest state.

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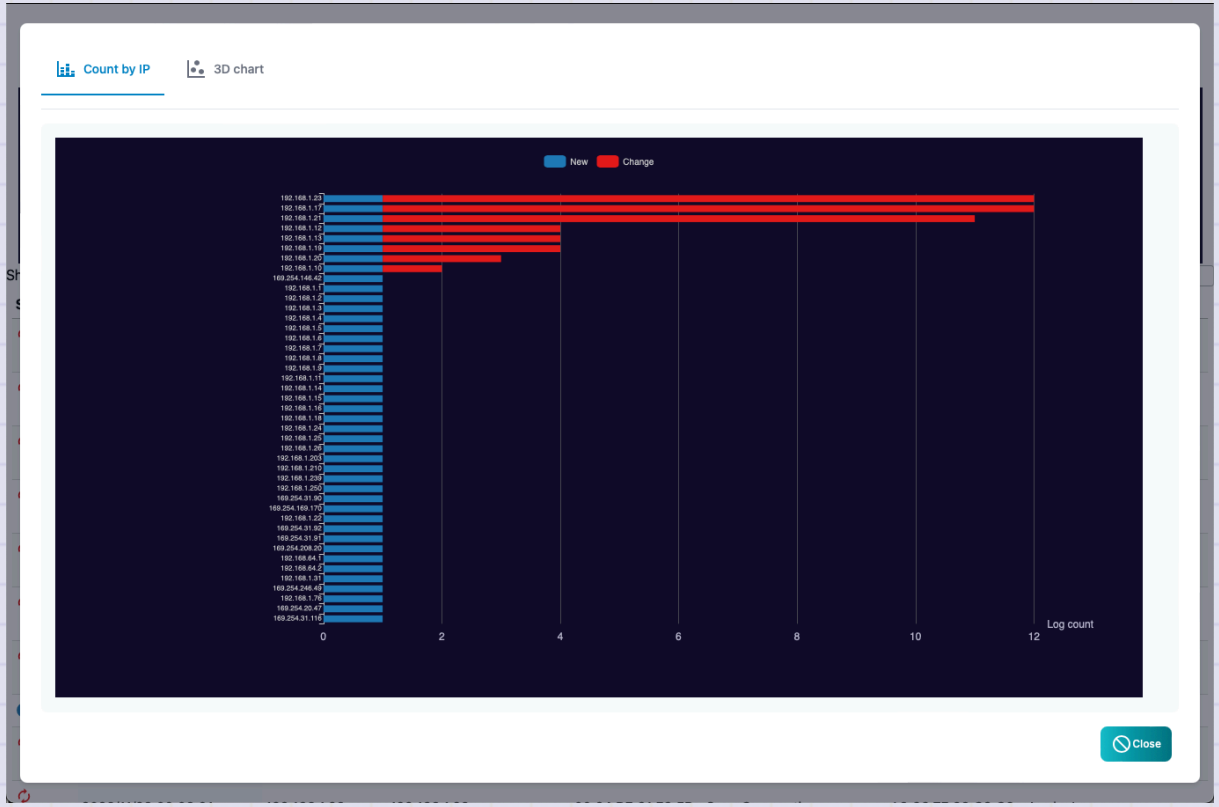
ARP watch log count by IP address

This is a report of the number of logs by IP address.The IP address with many changes is obvious at a glance.



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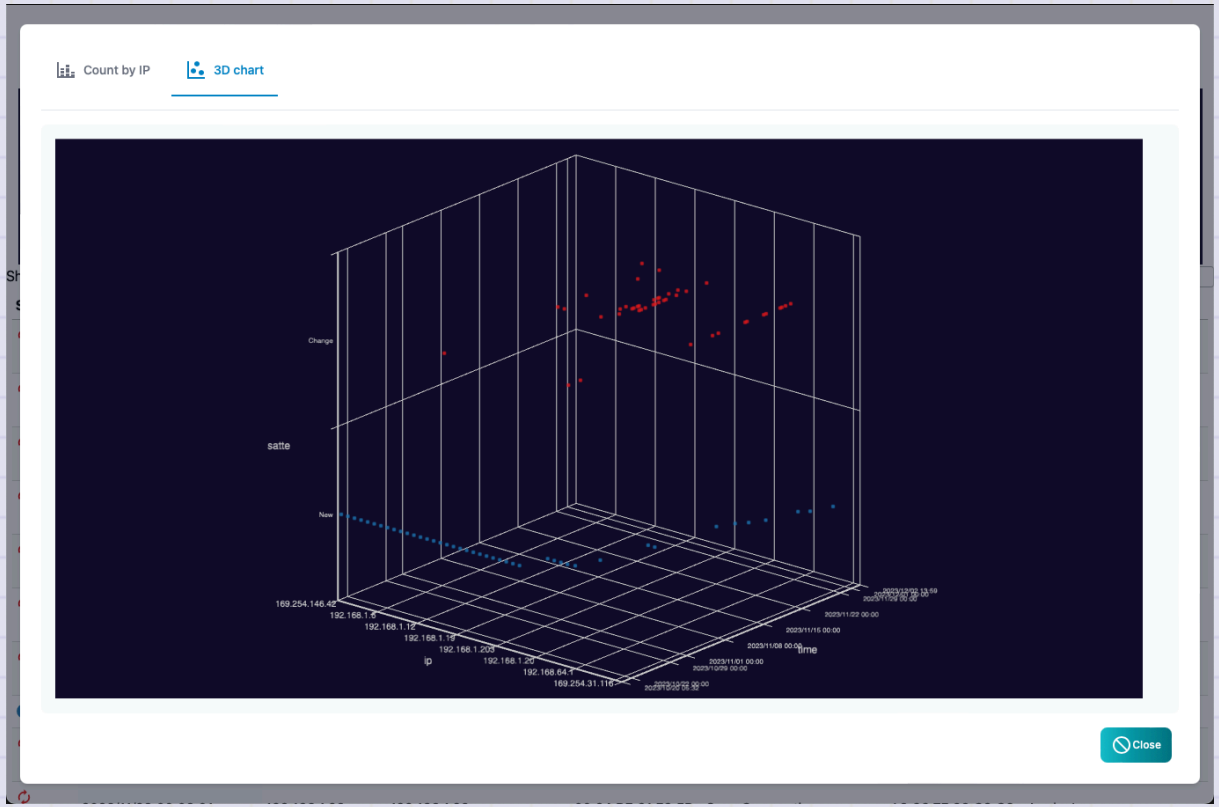
ARP watch log count by IP address (3D)

This is a report of ARP watch logs from both IP addresses and time series.The time of new discoveries and changes is obvious at a glance.



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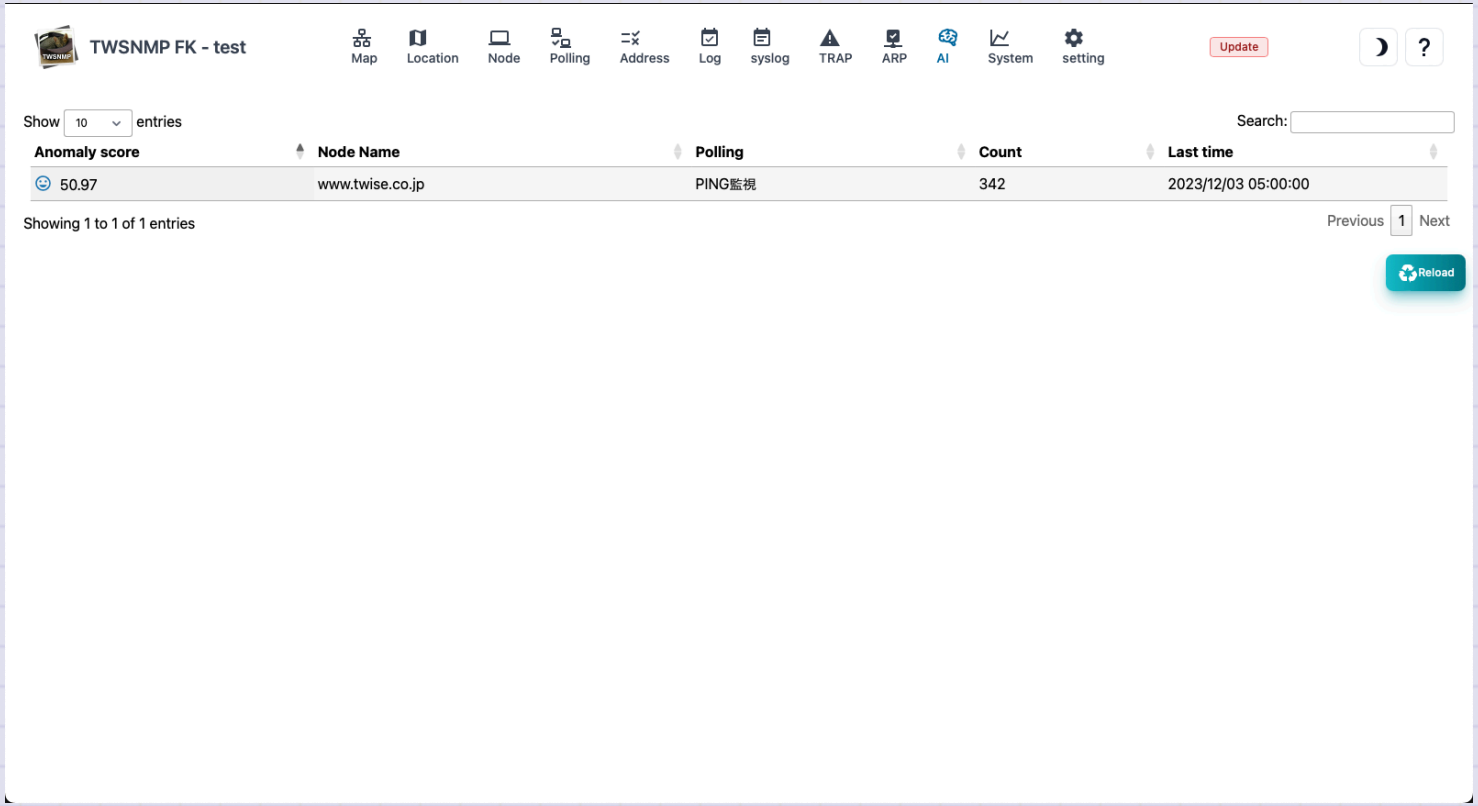
AI analysis

The screen of the AI analysis list.Only the list is displayed in the polling log settings and the analysis is performed.



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Items	Contents
anomaly score	A deviation value that indicates the degree of anomaly of AI analysis results. 50 is average.Large values are highly anomaly.
Node name	The name of the node to be analyzed.
Polling	Polling for AI analysis.
Data count	The number of data to be analyzed AI.If you are small, the accuracy will be low.
Last time	The last date and time of AI analysis.

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Items	Contents
Report	Displays reports on the selected AI analysis results.
clear	Clear the selected AI analysis results.
Reload	Update the AI analysis list to the latest state.

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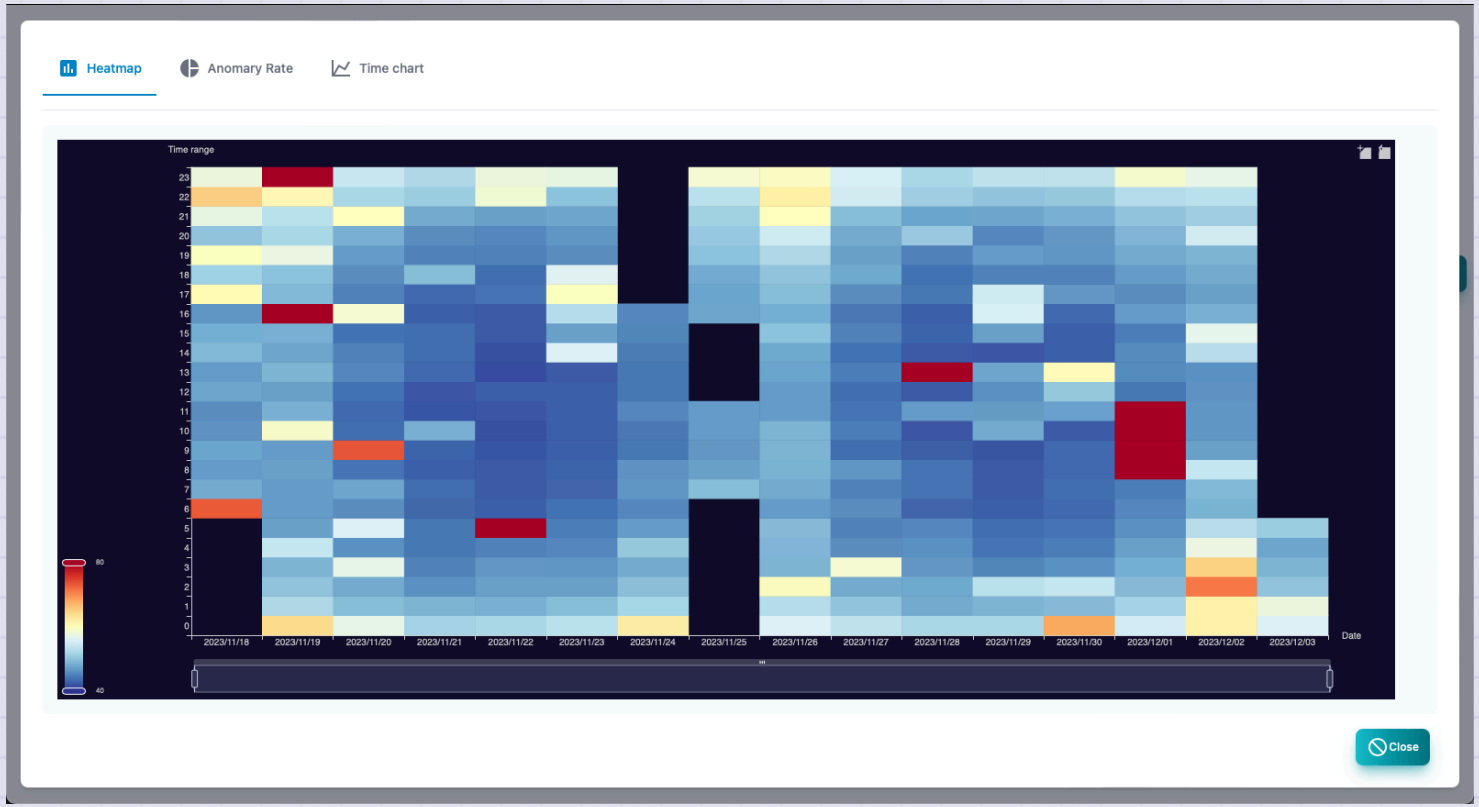
AI anomaly score heatmap

This is a report showing an anomaly score on a daily heat map.It indicates that the red color is the time when the anomaly has occurred.



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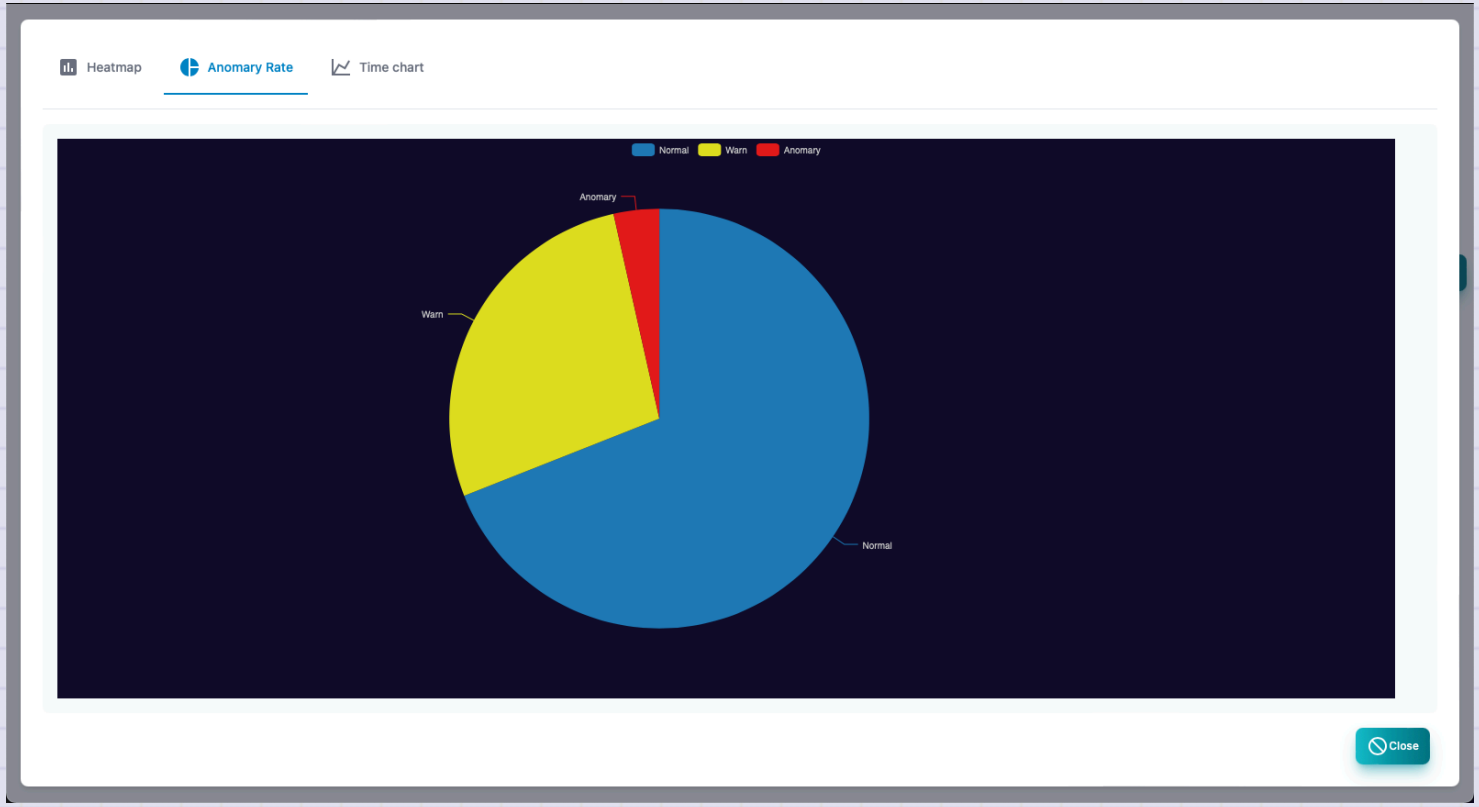
AI anomaly score percentage

The percentage of the anomaly score in the entire period is shown in a circular graph.



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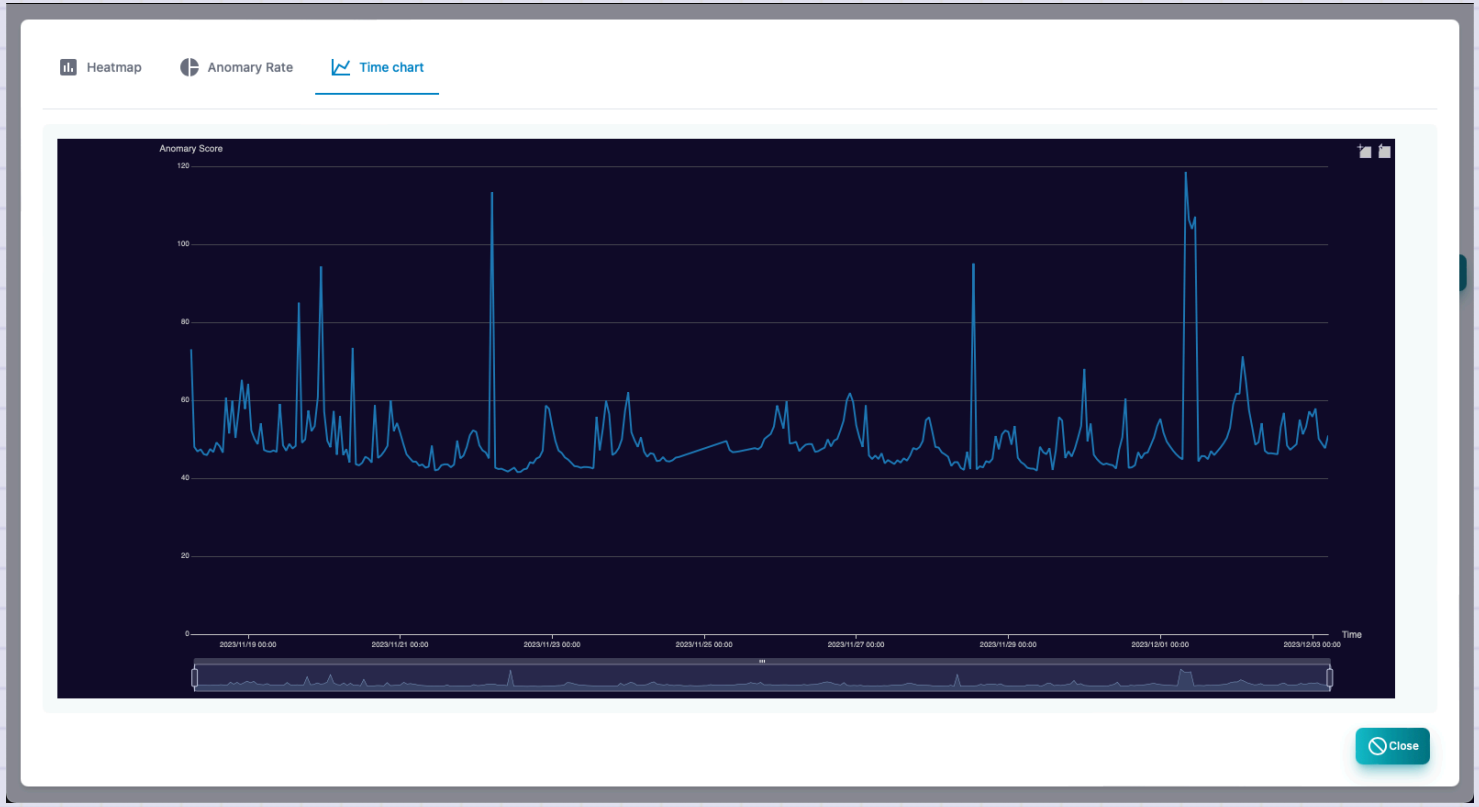
AI anomaly score time chart

This is a report that displays an anomaly score in chronological order.



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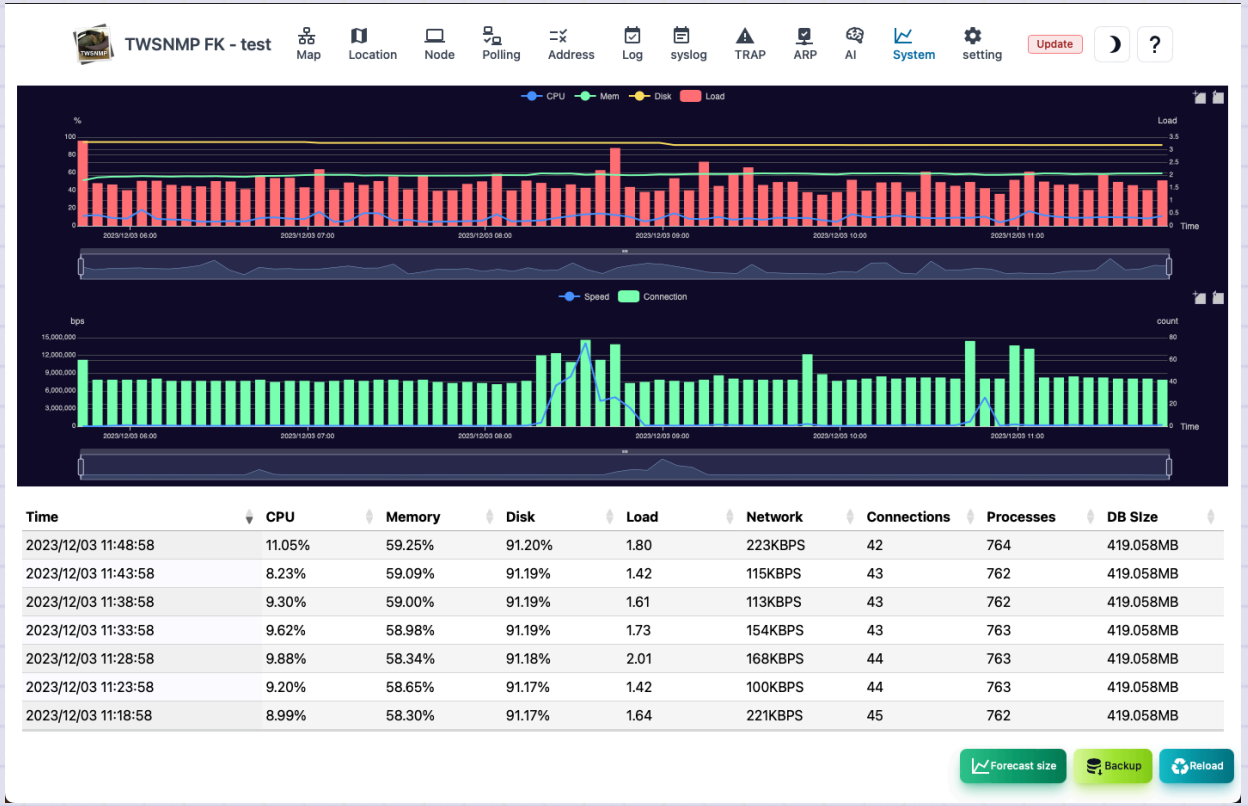
System

System information screen.At the top, there is a graph showing log resources and communication information in a chronological order.



Time	CPU	Memory	Disk	Load	Network	Connections	Processes	DB Size
2023/12/03 11:48:58	11.05%	59.25%	91.20%	1.80	223KBPS	42	764	419.058MB
2023/12/03 11:43:58	8.23%	59.09%	91.19%	1.42	115KBPS	43	762	419.058MB
2023/12/03 11:38:58	9.30%	59.00%	91.19%	1.61	113KBPS	43	762	419.058MB
2023/12/03 11:33:58	9.62%	58.98%	91.19%	1.73	154KBPS	43	763	419.058MB
2023/12/03 11:28:58	9.88%	58.34%	91.18%	2.01	168KBPS	44	763	419.058MB
2023/12/03 11:23:58	9.20%	58.65%	91.17%	1.42	100KBPS	44	763	419.058MB
2023/12/03 11:18:58	8.99%	58.30%	91.17%	1.64	221KBPS	45	762	419.058MB

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Items	Contents
Date and time	It is the date and time when System information is recorded.
CPU	CPU usage rate.
Memory	Memory usage rate.
Disk	Data folder is the usage rate of disks.
Load	load.
Communication amount	LAN port communication amount.
Connection number	TCP connection number.
Process	Total number of processes.
DB size	Database size.

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Items	Contents
Size prediction	Database size and disk usage rate are forecast for one year.
Backup	Get backup.
Reload	Update System information to the latest state.

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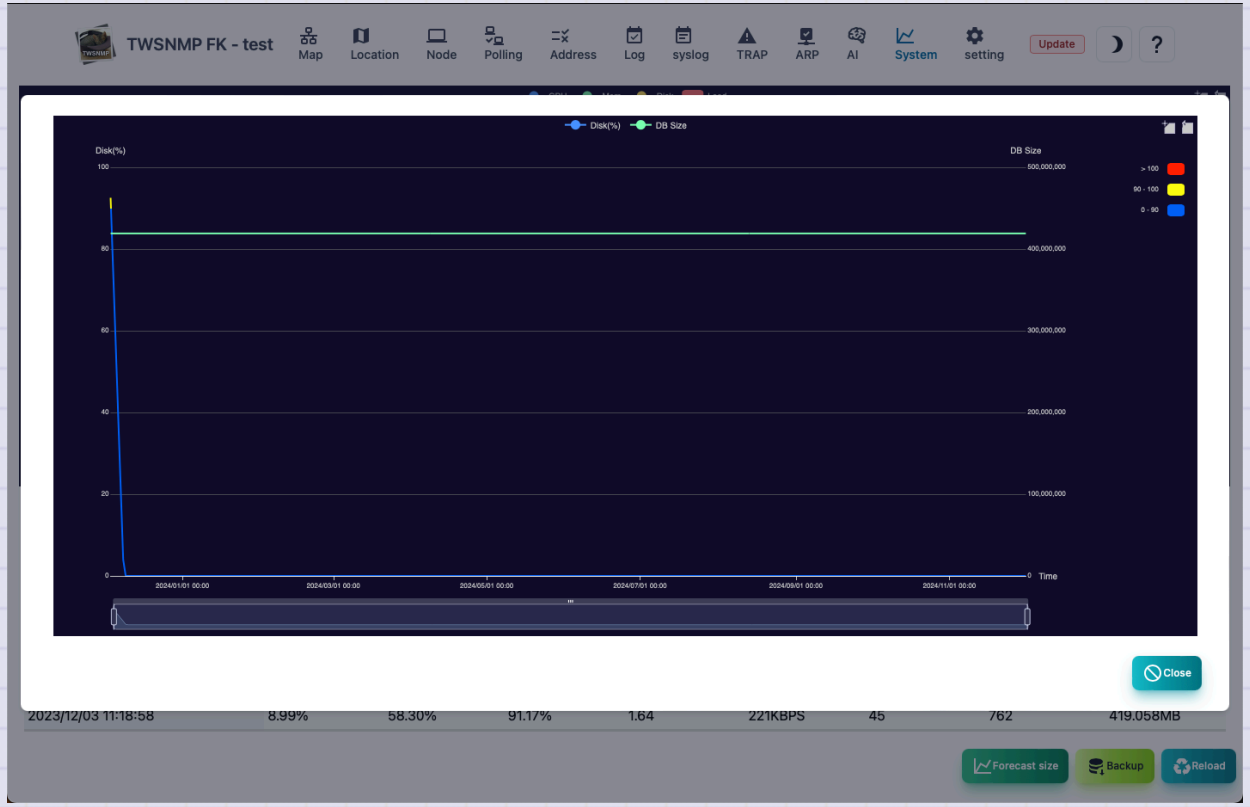
Size prediction

This is a year forecast for the database size and disk usage rate.



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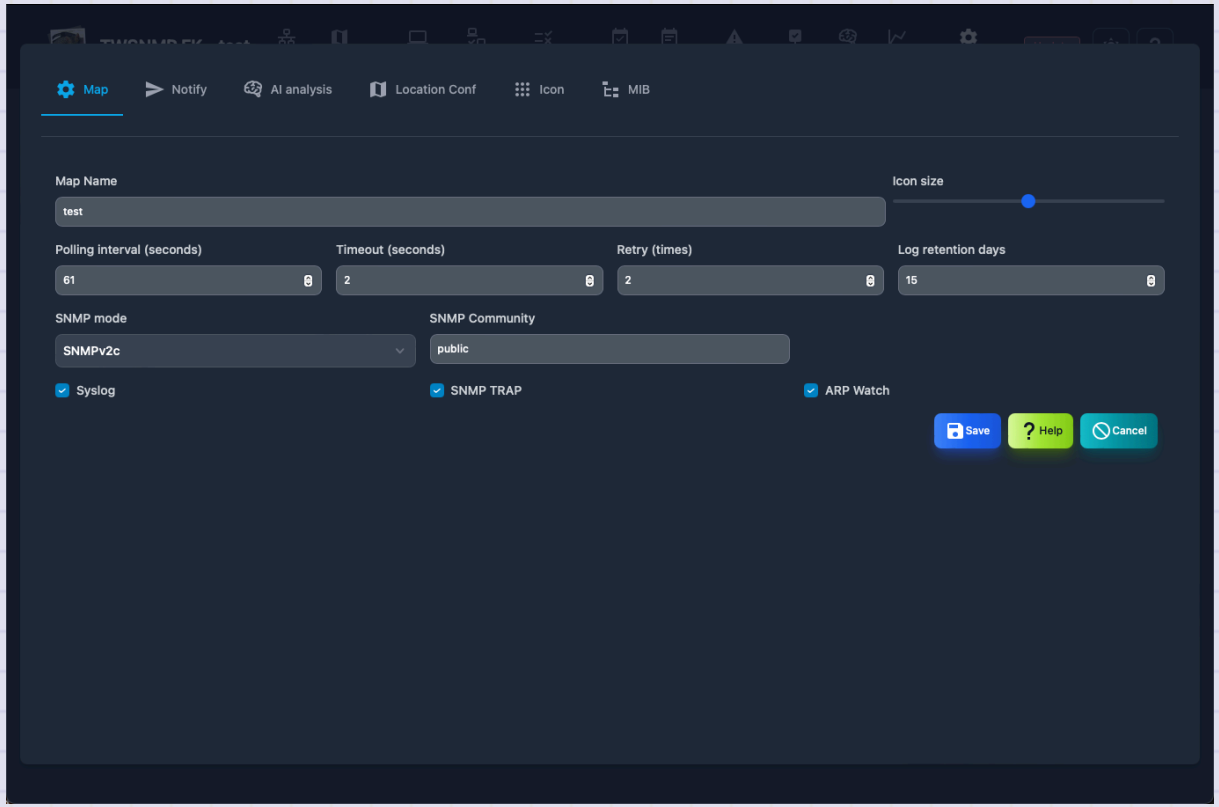
Map settings

This is the screen to set the management map.



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Items	Contents
Map name	Map name.It will be displayed in the upper left of the screen. Please give your favorite name.
Icon size	It is the size of the icon to be displayed on the map.
Polling interval	Default polling interval.
Timeout	Default timeout.
Retry	Default number of retry times.
Log saving days	It is the number of days to save the log.The log will be deleted automatically after passing.

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Items	Contents
SNMP mode	SNMP version and type of encryption.(SNMPV1, SNMPv2C, SNMPv3)
SNMP Community	Community name for SNMPV1, V2C.
SNMP user	User name at SNMPv3.
SNMP password	Password name for SNMPv3.
Syslog	Receive syslog.
SNMP Trap	Receive SNMP Trap.
SSH Seerver	SSH Server
ARP Watch	Enable ARP monitoring function.

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When you want to change the receiving port of syslog, SNMP Trap

The port number is specified by the startup parameter of the program.

```
-syslogPort int
      Syslog port (default 514)
-trapPort int
    SNMP TRAP port (default 162)
-sshdPort int
    SSH Server port (default 2022)
```

*If SYSLOG or SNMP Trap cannot be received, check the OS and security software firewall settings.

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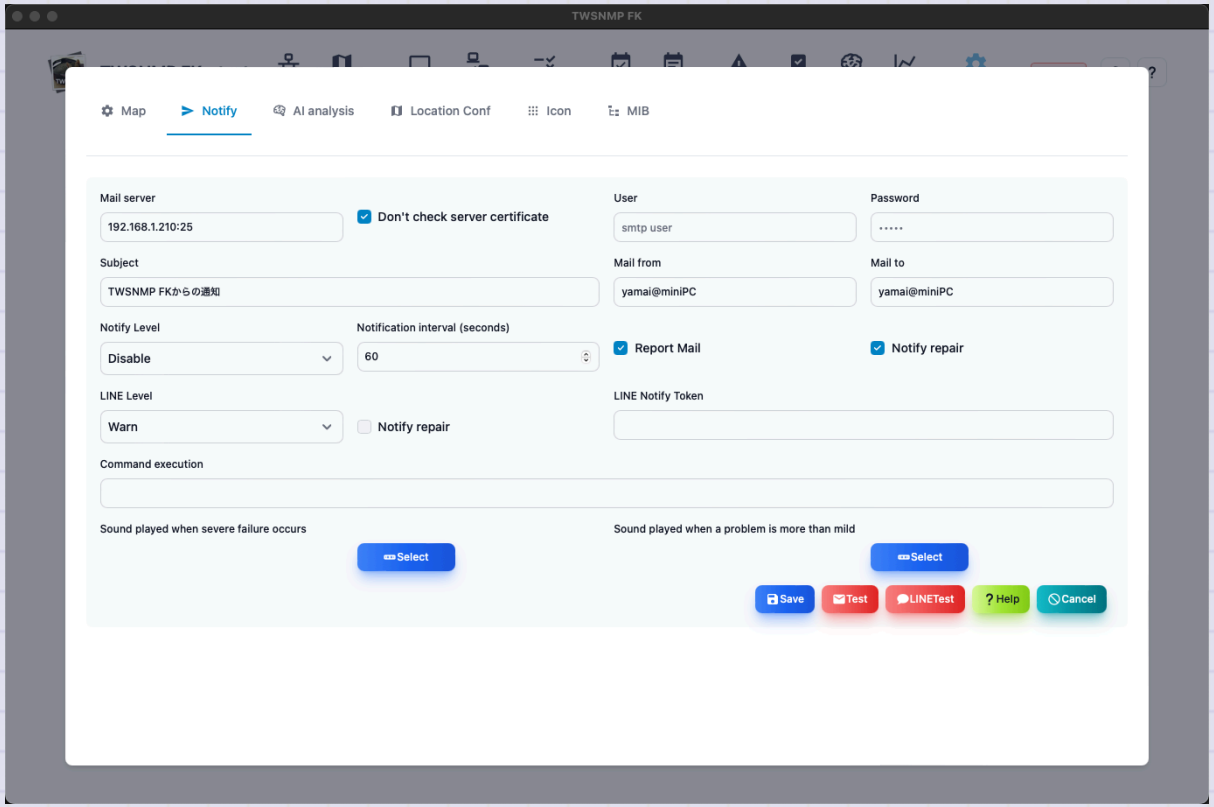
Notification settings

This is the screen to set the notification.



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Items	Contents
Mail server	Specify a mail server to send notification emails. Host name or IP address: port number
Do not check the server certificate	Check when the specified mail server is self certificate.
User	Set a user ID for authentication.
Password	Set the password for authentication
Form	Sending source email address.
To	Notification email destination email address. You can specify multiple by separation of comma.

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Items	Contents
Subject	Notification email subject.
Notification level	Specify the monitoring level to send disability notifications.
Notification interval	Specify the interval to check the notification.
Regular report	Send a daily report.
repair notification	We will also send an email when you repair.

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Items	Contents
Line Notification level	Specify the monitoring level to send LINE notifications.
Repair notification	We will also send an email when you repair.
LINE Token	LINE Notify token

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Items	Contents
Command execution	Run the command specified in the state parameter when the map changes. $ Level is in the map.0: Severe, 1: Mild, 2: Note, 3: Normal, -1: Unknown
Sounds played during severe disorders	Specify the audio file to play when the state of the map is severe.
Sounds played during mild disability	Specify the audio file to be played when the state of the map is mild.

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Email send test

Click the <Test> button to send the test email with the configured content.
Click the <LINE Test> button to send the test LINE message with the configured content.

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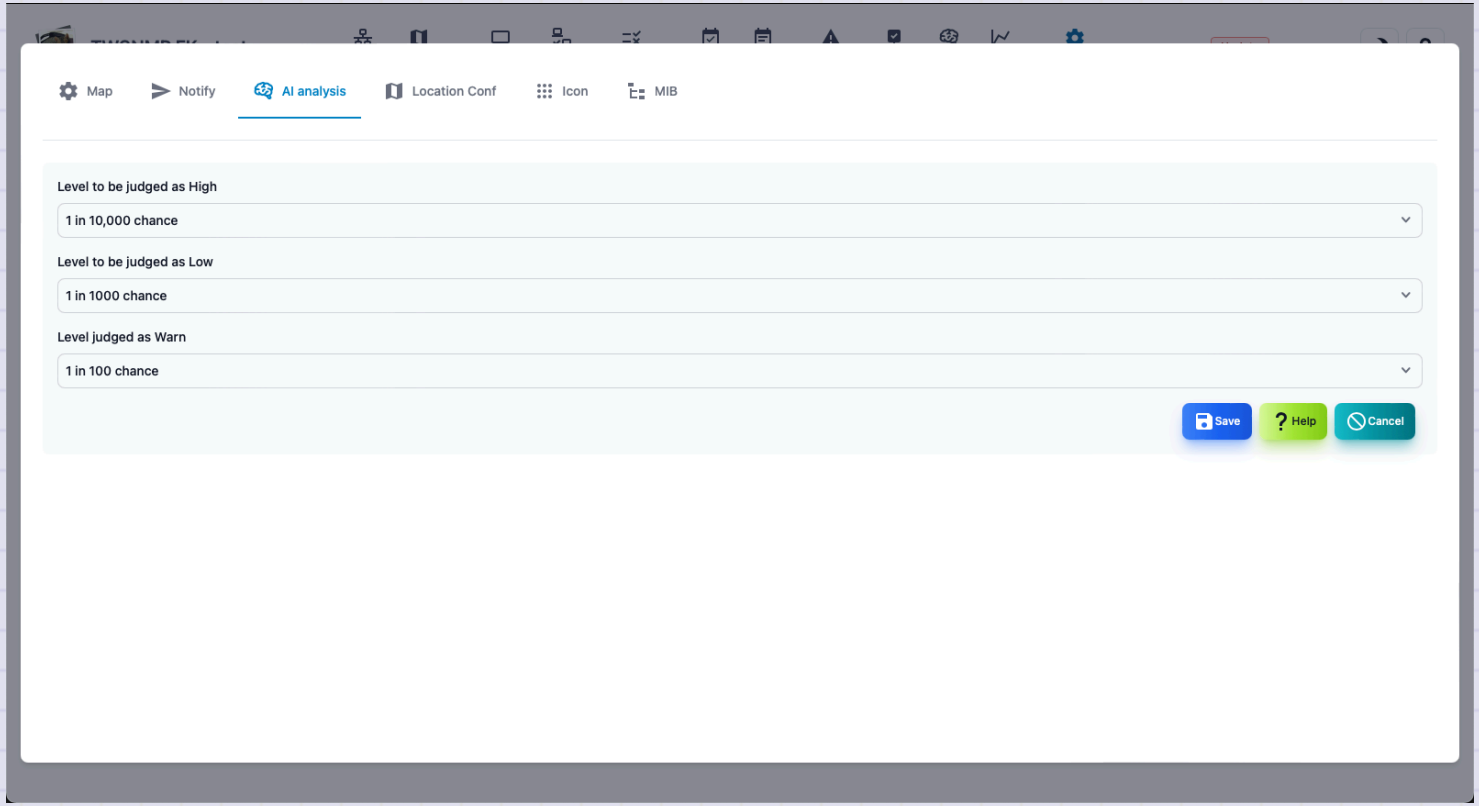
AI analysis setting

This is the screen to set AI analysis.



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Items	Contents
Level to be high	Specify the deviation level of AI analysis determined as severe disorder.
Level to be low	Specify the deviation level of AI analysis determined as mild disorder.
Level to be warn	Specify the deviation level of AI analysis determined as a disorder.

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About AI analysis

- The AI analysis is implemented by setting the log mode to "AI analysis" in the polling settings.
- An anomaly detection of the numerical data of the polling result in isolation forest.
- The results are set to deviation values.
- The deviation value is familiar to school results.It shows how rare it is.
- So, the disability level setting is an expression of once every 10,000 times.

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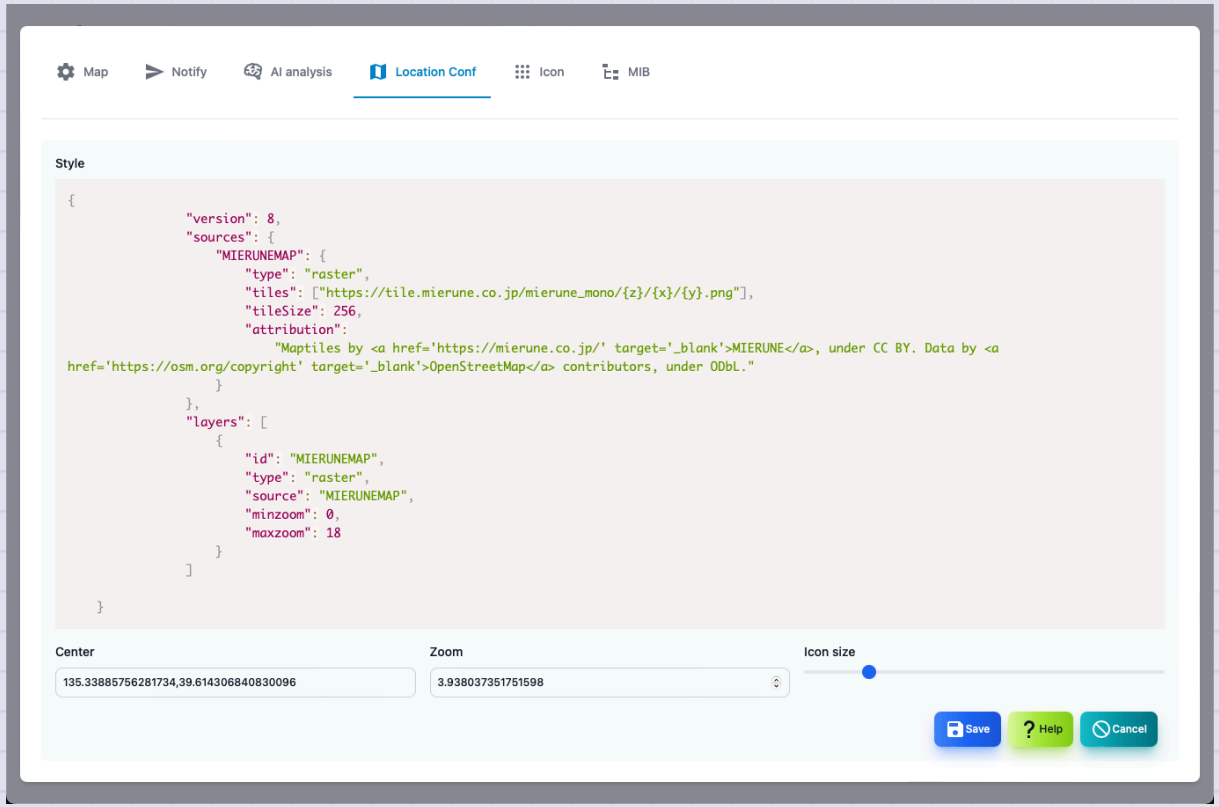
Location map settings

This is the screen to set the map.



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Items	Contents
Style	Specify the map style.Specify in URL or JSON.
Central coordinates	The central coordinates on the map are in the order of longitude and latitude. Example: 135.3338576281734, 39.614306840830096
Zoom	Specify the enlargement level of the map.
Icon size	Specify the size of the icon to be displayed.

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About map style

The map is displayed using Maplibre GL JS.The map to be displayed is specified in the style.
You can specify it with URL or JSON.Search for MAPLIBRE GL JS and find something suitable.

URL example

```
https://tile.openstreetmap.jp/styles/osm-bright-ja/style.json
```

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JSON example

```
{
                        "version": 8,
                        "sources": {
                                "MIERUNEMAP": {
                                        "type": "raster",
                                        "tiles": ["https://tile.mierune.co.jp/mierune_mono/{z}/{x}/{y}.png"],
                                        "tileSize": 256,
                                        "attribution":
                                                "Maptiles by <a href='https://mierune.co.jp/' target='_blank'>MIERUNE</a>, under CC BY. Data by <a href='https://osm.org/copyright' target='_blank'>OpenStreetMap</a> contributors, under ODbL."
                                }
                        },
                        "layers": [
                                {
                                        "id": "MIERUNEMAP",
                                        "type": "raster",
                                        "source": "MIERUNEMAP",
                                        "minzoom": 0,
                                        "maxzoom": 18
                                }
                        ]
}
```

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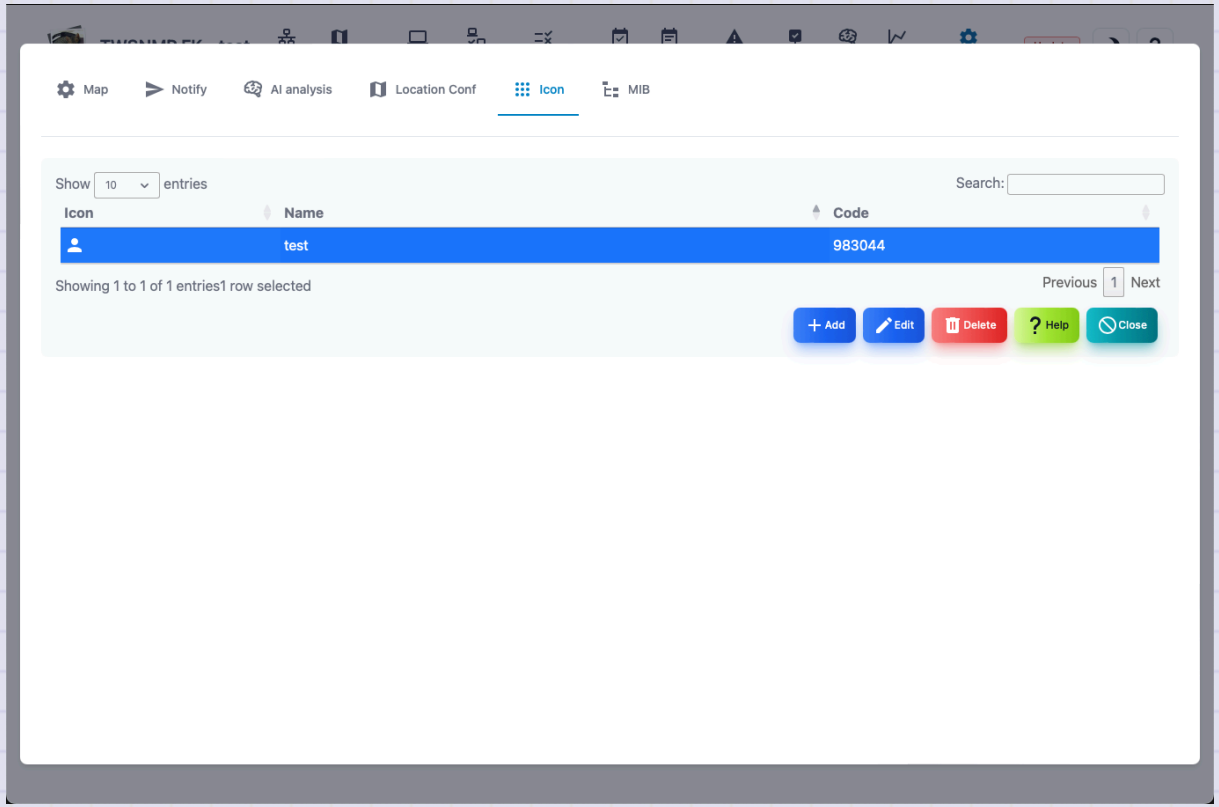
Icon management

This is a screen that manages the icon.



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Items	Contents
Icon	It is an image of an icon.
Name	Name when choosing.You can attach it freely.
Code	icon code.

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Button	Contents
Added	Add a new icon.
Edit	Edit the name of the selected icon.
Delete	Delete the selected icon.
Help	Display this help.
Close	Close the setting screen.

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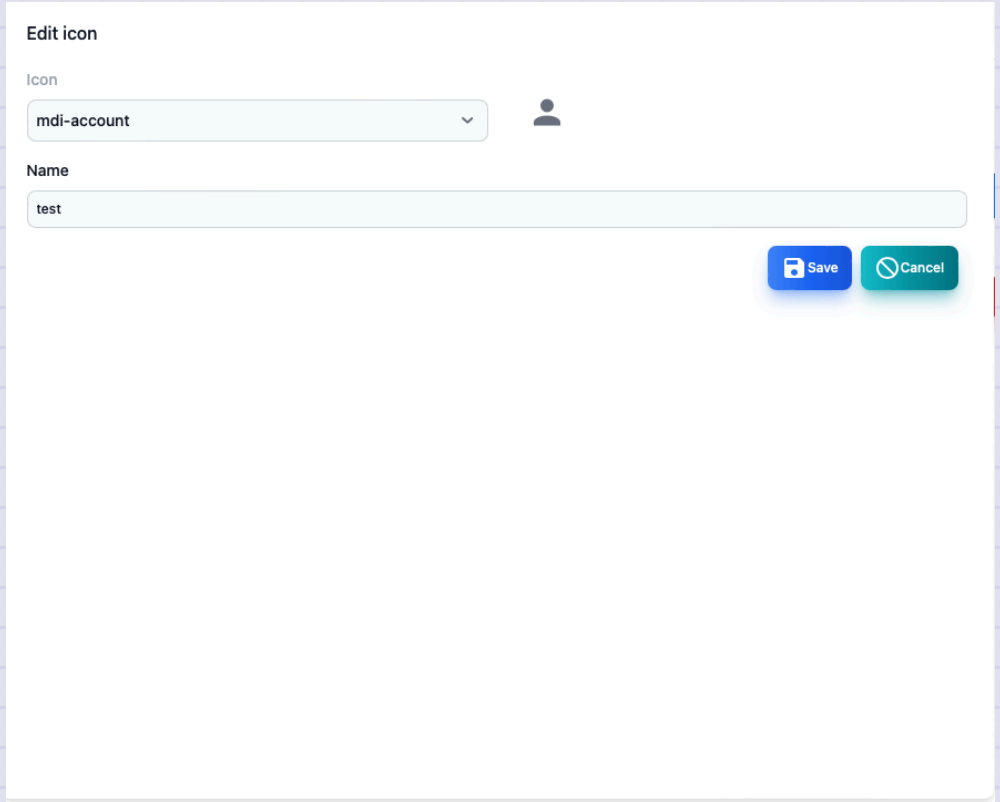
Icon editing screen



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Items	Contents
Icon	Select an icon.The name of the web font of the MDI icon.
Name	Give the icon your favorite name.

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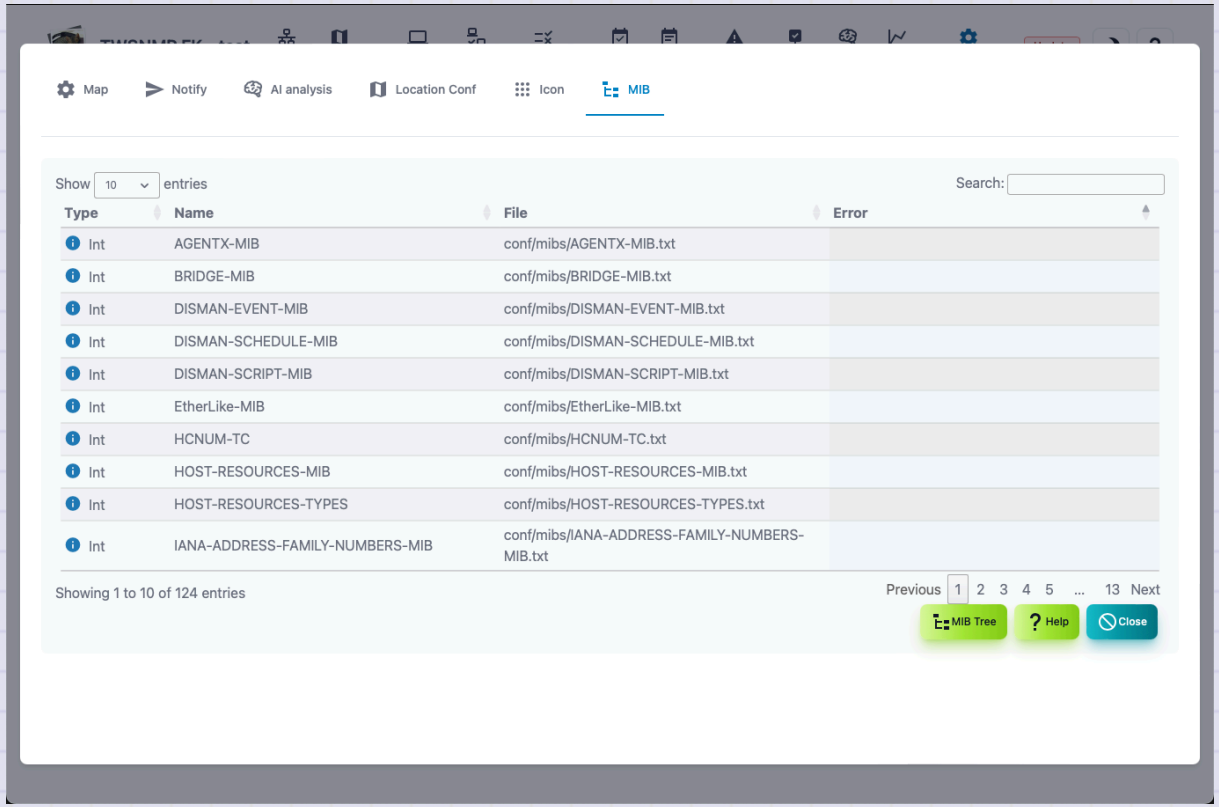
MIB management

This is a screen that manages SNMP MIB.



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Items	Contents
Type	It is a type of built -in or reading.
Name	MIB module name.
File	It is a read file name.
Error	An error when you read it.

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Button	Contents
MIB Tree	Displays MIB tree.
Help	Display this help.
Close	Close the setting screen.

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MIB tree screen

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File in the datastore

You can customize it by saving the following files in the data folder.

File	Contents
TWSNMPFK.db	Database file.If it does not exist, it will be created automatically.
Services.txt	This is a file to use the service name conversion.(Optional)
Mac-vendors-export.csv	Mac A database that indicates the relationship between the MAC address and the vendor name.(Optional)
Polling.json	Polling settings (optional)

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File	Contents
mail_test.html	Notification test mail template (optional)
mail_notify.html	Notification mail template (optional)
Mail_repot.html	Template of report mail (optional)
EXTMIBS/*	Additional reading extended MIB (optional)

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Usage

```
Usage of twsnmpfk:
  -caCert string
        CA Cert path
  -clientCert string
        Client cert path
  -clientKey string
        Client key path
  -datastore string
        Path to data store directory
  -kiosk
        Kisok mode(frameless and full screen)
  -lang string
        Language(en|jp)
  -lock string
        Disable edit map and lock page(map or loc)
  -maxDispLog int
        Max log size to diplay (default 10000)
```

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```
-netflowPort int
      Netflow port (default 2055)
-ping string
      ping mode icmp or udp
-sFlowPort int
      sFlow port (default 6343)
-sshdPort int
      SSH server port (default 2022)
-syslogPort int
      Syslog port (default 514)
-tcpdPort int
      tcp server port (default 8086)
-trapPort int
      SNMP TRAP port (default 162)
```

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Parameters	Description
dataStore	Datstore Pass
kiosk	Kiosk mode (frameless, full screen)
lock <page>	disable edit map and show fixed page
Maxdisplog <number>	Maximum number of logs (default 10000)
ping <Mode>	Ping operation mode (ICMP or UDP)
syslogPort <PORT>	Syslog receiving port (default 514)
trapPort <Port>	SNMP TRAP Reception port (Default 162)
sshdPort <Port>	SSH server port (Default 162)

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Parameters	Description
sshdPort <port>	SSH Server Receive Port (Default 2022)
netflowPort <port>	NetFlow/IPFIX receive port (default 2055)
sFlowPort <port>	sFlow receiving port (default 6343)
tcpdPort <port>	TCP log receiving port (default 8086)

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