



Configure Zabbix to Monitor Network Packet Broker via SNMP

Models: T5850-32S2Q/T5850-48S6Q/T5850-48S2Q4C

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1. Preface

Zabbix is an open-source monitoring software for networks and applications. It can monitor many network parameters and the health and integrity of servers, virtual machines, and any other kind of network devices. This document will guide you to import the FS template in Zabbix and apply the template to monitor the FS Network Packet Brokers. The version of Zabbix in this document is 4.4.4 (CentOS Linux version is 7.7, Mysql version is 5.6.46), and taking T5850 network packet broker as an example to monitor the T5850-48S6Q network packet broker.

2. Operation Guide

2.1 Operation Steps

- Configure SNMP function of the network packet broker.
- Log in to Zabbix to import the "FS T5850 Series" template
- Create host group FS T5850 and link "FS T5850 Series" template
- Create host, link FS T5850 host group, link "FS T5850 Series" template
- Monitor host data

2.2 Operation Process

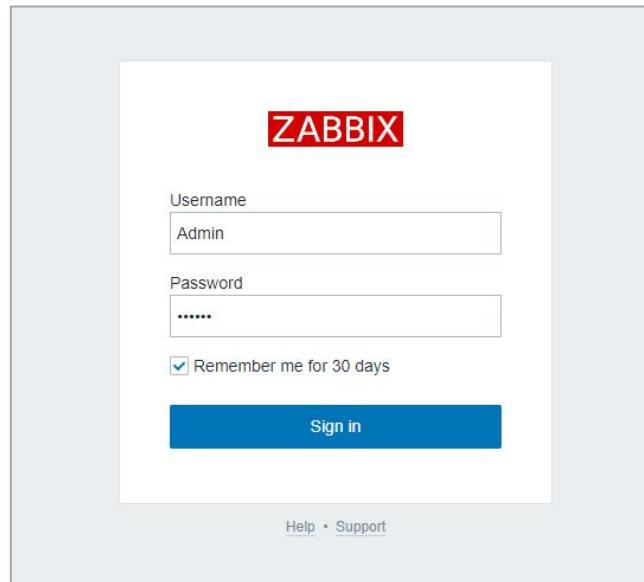
2.2.1 Configure the Switch

Take T5850-48S6Qs an example to configure the SNMP function

```
Switch# configure terminal
Switch(config)# snmp-server enable
Switch(config)# snmp-server version v2c
Switch(config)# snmp-server community Public read-only
```

2.2.2 Log in to Zabbix to Import Templates

Step 1:



Step 2: Select the **Templates** under Configuration category, and click **Import** in the upper right corner to enter the template import interface.

Step 3: Select the 'FS T5850 Series', click the **Import** button to import it, and then you can see the "FS T5850 Series" templates that have been successfully imported in the template list after the import success is displayed.

ZABBIX

appliance

Monitoring

Inventory

Reports

Configuration

Host groups

Templates

Hosts

Maintenance

Actions

Event correlation

Discovery

Services

Templates

Host groups type here to search Select Tags AndOr Or

Linked templates type here to search Select Add

Name FS

Apply Reset

Name	Hosts	Applications	Items	Triggers	Graphs	Dashboards	Discovery	Web	Linked templates	Tags
FS S2800S	Hosts 4	Applications 2	Items 3	Triggers	Graphs	Dashboards	Discovery 1	Web	Interfaces SNMP	
FS T5600	Hosts	Applications 6	Items 33	Triggers	Graphs 2	Dashboards	Discovery	Web		
FS T5850	Hosts	Applications 6	Items 33	Triggers	Graphs 1	Dashboards	Discovery	Web		

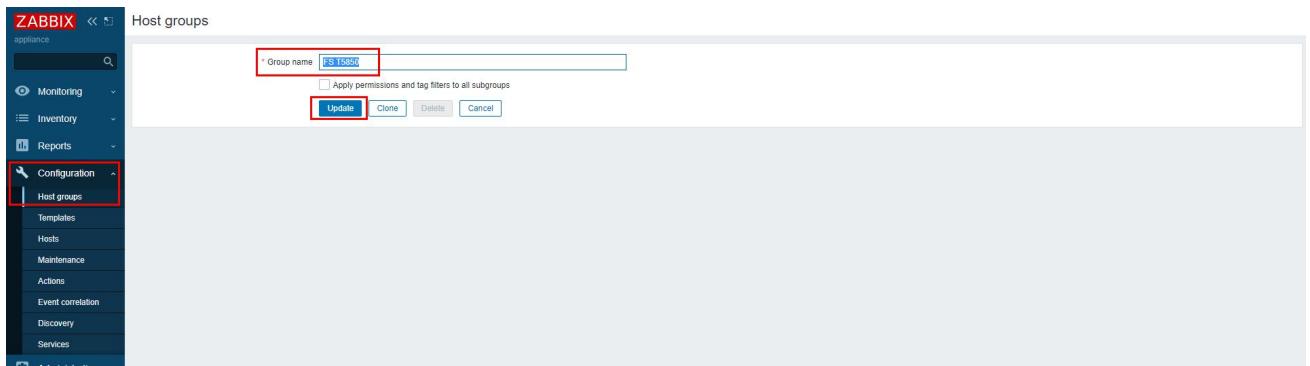
Displaying 3 of 3 found

0 selected Export Mass update Delete Delete and clear

Create template Import Filter

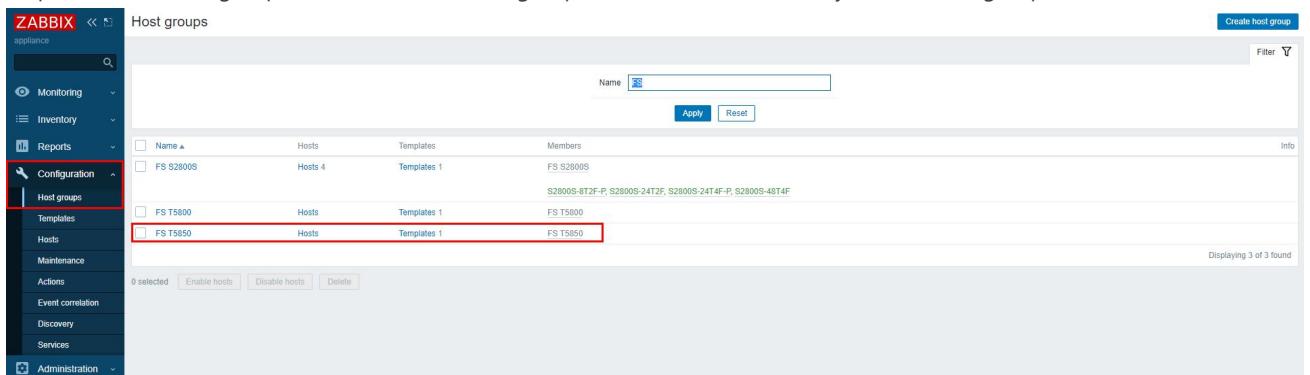
2.2.3 Create Host Groups

Step 1: Select the host groups and click the Create host group button in the upper-right corner.



The screenshot shows the Zabbix interface under the Configuration menu, specifically the Host groups section. A new host group is being created with the name 'FS T5850'. The 'Update' button at the bottom of the form is highlighted with a red box.

Step 2: Create a host group named 'FS T5850' host group, then view the successfully created host group.

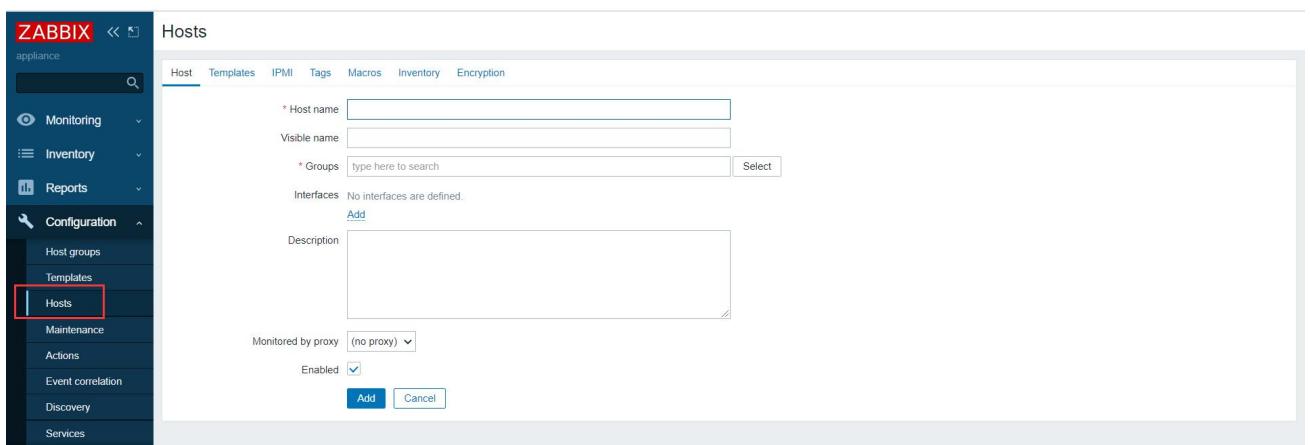


The screenshot shows the Zabbix interface under the Configuration menu, specifically the Host groups section. The newly created host group 'FS T5850' is listed in the table, highlighted with a red box. The table columns include Name, Hosts, Templates, and Members.

Name	Hosts	Templates	Members
FS S2800S	Hosts 4	Templates 1	FS S2800S S2800S-BT2F-P, S2800S-24T2F, S2800S-24T4F-P, S2800S-48T4F
FS T5850	Hosts	Templates 1	FS T5850
FS T5850	Hosts	Templates 1	FS T5850

2.2.4 Create Hosts

Step 1: Enter Hosts page under Configuration, click on the Create Host button in the upper right corner to create the host.



The screenshot shows the Zabbix interface under the Configuration menu, specifically the Hosts section. A new host is being created with the host name 'T5850-48S6Q'. The 'Add' button at the bottom of the form is highlighted with a red box.

Step 2: Create a host named T5850-48S6Q select the FS T5850 host group, enter the management IP address of the switch in the SNMP interfaces, remove the check box before Use bulk requests, and click Add.

ZABBIX Hosts

Host Hosts Templates IPMI Tags Macros Inventory Encryption

* Host name T5850-48S6Q
Visible name T5850-48S6Q
* Groups FS T5850 Select

Interfaces Type IP address DNS name Connect to Port Default

SNMP 10.32.130.136 IP DNS 161 Remove

SNMP version SNMPv2
* SNMP community \${SNMP_COMMUNITY}

Use bulk requests

Add Description

Monitored by proxy (no proxy)
Enabled

Add Cancel

Step 3: You can view the created hosts under the host list.

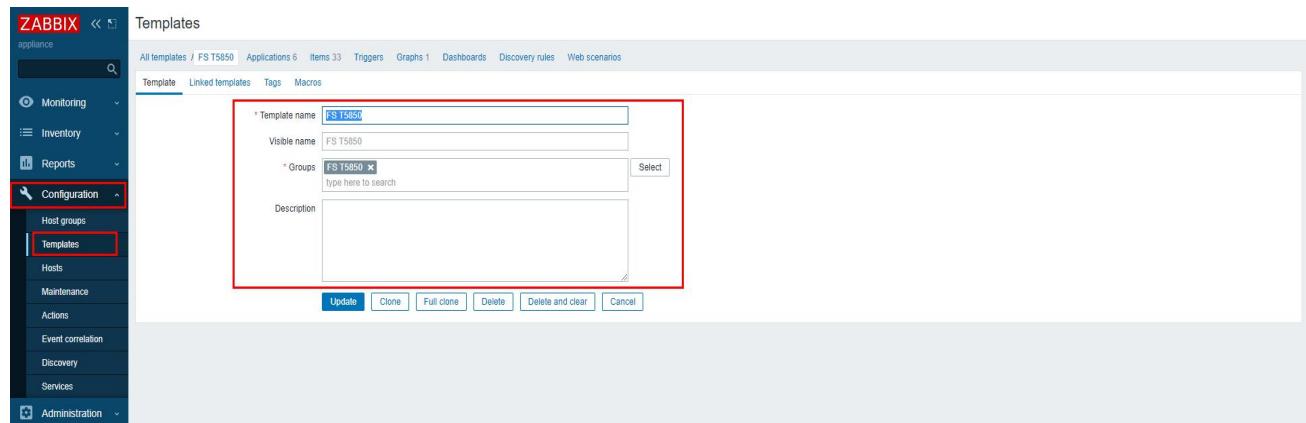
ZABBIX Hosts Create host Import

Host added

Name	Applications	Items	Triggers	Graphs	Discovery	Web	Interface	Proxy	Templates	Status	Availability	Agent encryption	Info	Tags
T5850-48S6Q	Applications	Items	Triggers	Graphs	Discovery	Web	10.32.130.136:161	Enabled	ZBX SNMP JMX PMI	None				

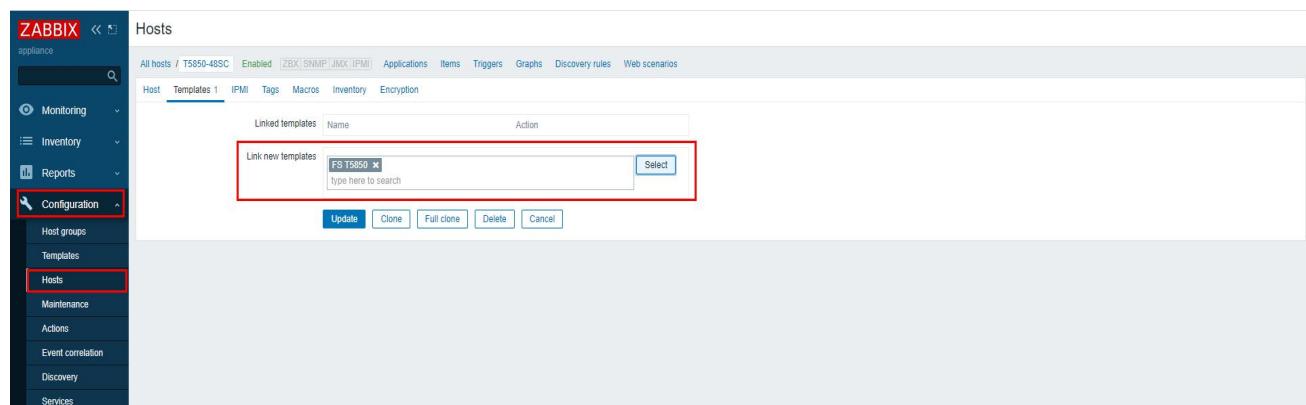
2.2.5 Link Template and Host Group

Step 1: Link the FS T5850 host group in the “FS T5850 Series” template.



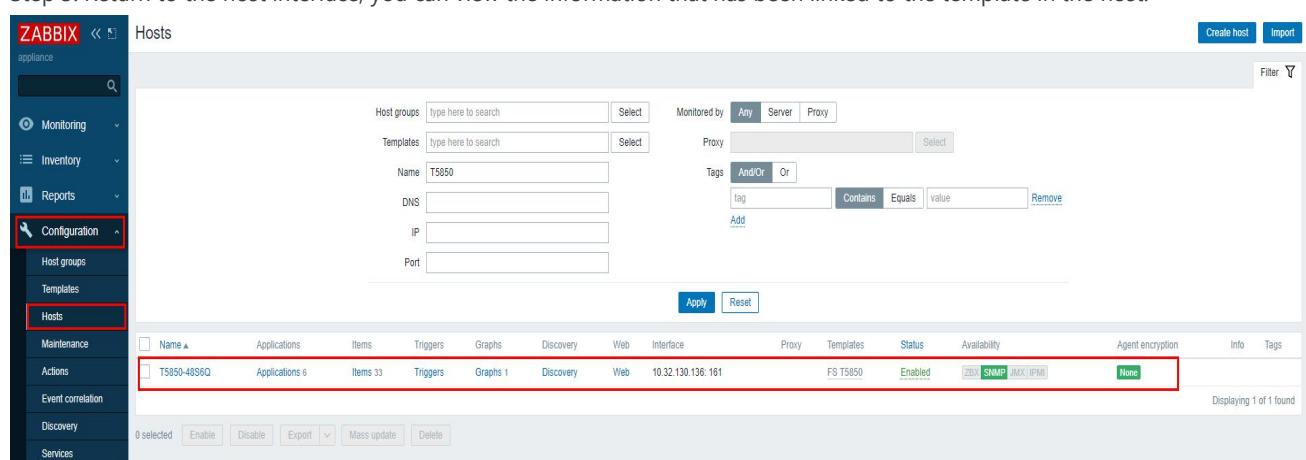
The screenshot shows the Zabbix 'Templates' page. A red box highlights the 'Groups' input field, which contains 'FS T5850'. Other fields include 'Template name' (FS T5850), 'Visible name' (FS T5850), and 'Description' (empty). Below the form are buttons for 'Update', 'Clone', 'Full clone', 'Delete', 'Delete and clear', and 'Cancel'.

Step 2: Link “FS T5850 Series” template under T5850-48S6Q host.



The screenshot shows the Zabbix 'Hosts' page. A red box highlights the 'Linked templates' dropdown, which contains 'FS T5850'. Below it is a 'Select' button. Other tabs in the header include 'All hosts / T5850-48SC', 'Enabled', 'ZBX|SNMP|JMX|IPMI', 'Applications', 'Items', 'Triggers', 'Graphs', 'Discovery rules', and 'Web scenarios'. The left sidebar shows 'Configuration' selected under 'Hosts'.

Step 3: Return to the host interface, you can view the information that has been linked to the template in the host.

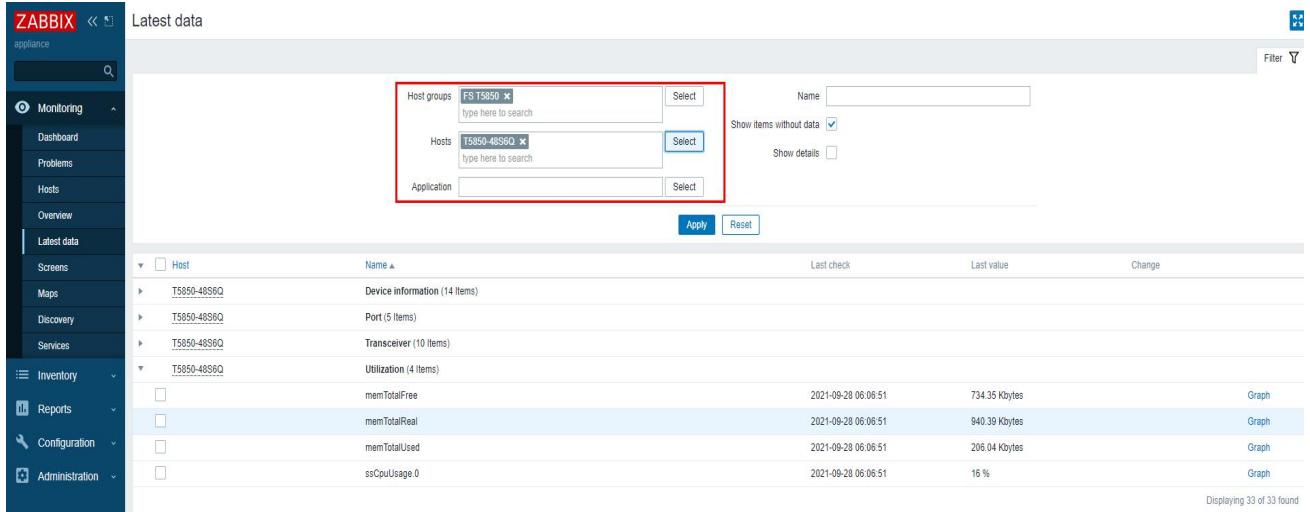


The screenshot shows the Zabbix 'Hosts' page for the host 'T5850-48S6Q'. A red box highlights the 'Templates' tab in the top navigation bar. The host details shown include 'Name' (T5850), 'DNS' (empty), 'IP' (empty), and 'Port' (empty). Below the host details is a table with columns: Name, Applications, Items, Triggers, Graphs, Discovery, Web, Interface, Proxy, Templates, Status, Availability, Agent encryption, Info, and Tags. The row for 'T5850-48S6Q' shows 'FS T5850' under 'Templates', 'Enabled' under 'Status', and 'None' under 'Agent encryption'. At the bottom, there are buttons for '0 selected', 'Enable', 'Disable', 'Export', 'Mass update', and 'Delete'.

2.2.6 Monitoring Switch Data

Select FS T5850 Host groups and T5850-48S6Q Hosts, you can view that Zabbix has monitored the relevant information and data

of the T5850-48S6Q.

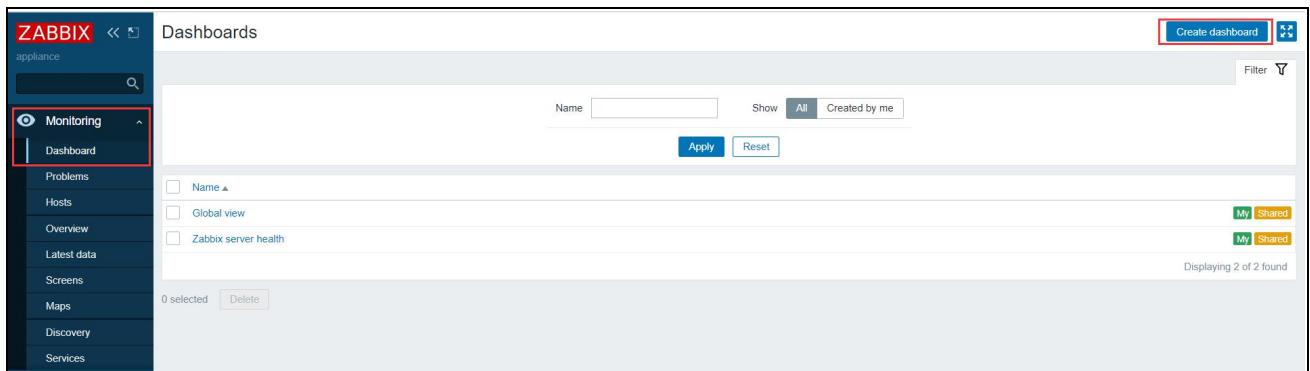


The screenshot shows the Zabbix 'Latest data' interface. On the left is a dark sidebar with navigation links: appliance, Monitoring (selected), Dashboard, Problems, Hosts, Overview, Latest data (selected), Screens, Maps, Discovery, Services, Inventory, Reports, Configuration, and Administration. The main area is titled 'Latest data' and shows a search bar with 'Host groups FS T5850' selected. Below it are sections for 'Hosts' (T5850-48S6Q) and 'Application'. A red box highlights the host group and host selection fields. To the right is a table with columns: Host, Name, Last check, Last value, and Change. It lists items under 'Device information', 'Port', 'Transceiver', and 'Utilization' for the host T5850-48S6Q. At the bottom right of the table area, it says 'Displaying 33 of 33 found'.

2.3 Zabbix Personalized Customization

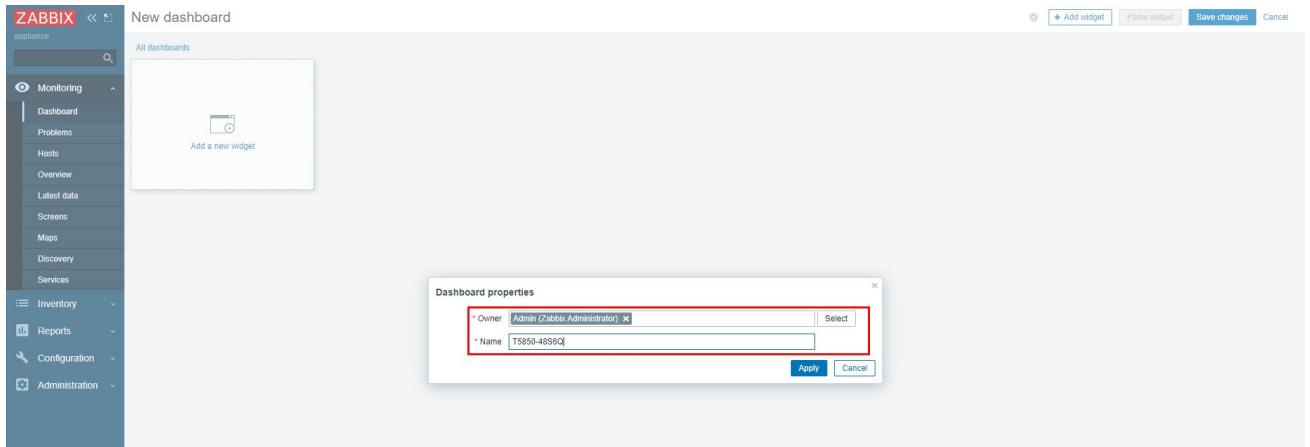
Zabbix's Dashboard can display visualized information and data (overview, map, chart, clock, etc.). Here we take the creation of CPU utilization as an example.

Step 1: Click Create dashboard in the upper right corner to create a dashboard.

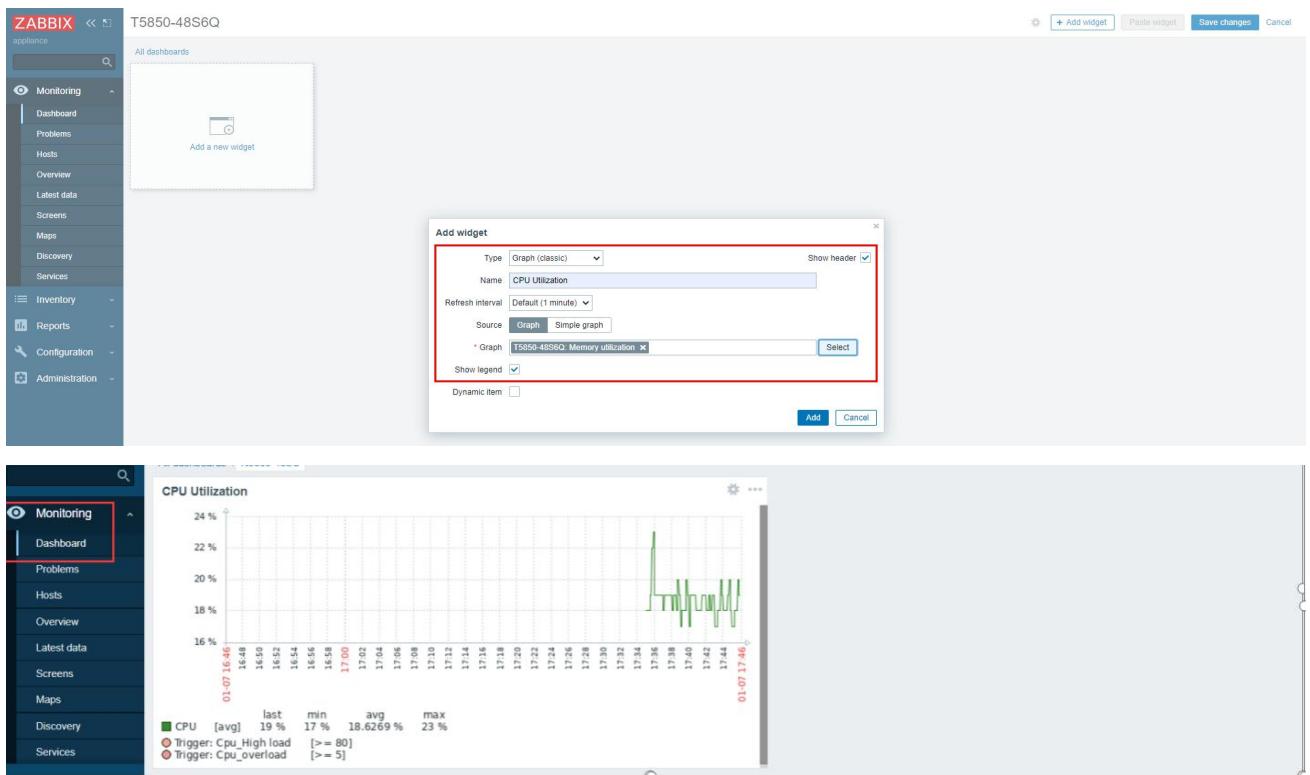


The screenshot shows the Zabbix 'Dashboards' interface. The left sidebar is identical to the previous one. The main area is titled 'Dashboards' and features a 'Create dashboard' button with a red box around it. Below it is a search bar with 'Name' and filter buttons for 'All' and 'Created by me'. A table lists dashboards: 'Name' (Global view, Zabbix server health), both marked as 'My Shared'. At the bottom, it says 'Displaying 2 of 2 found'.

Step 2: Create a dashboard named T5850-48S6Q dashboard.

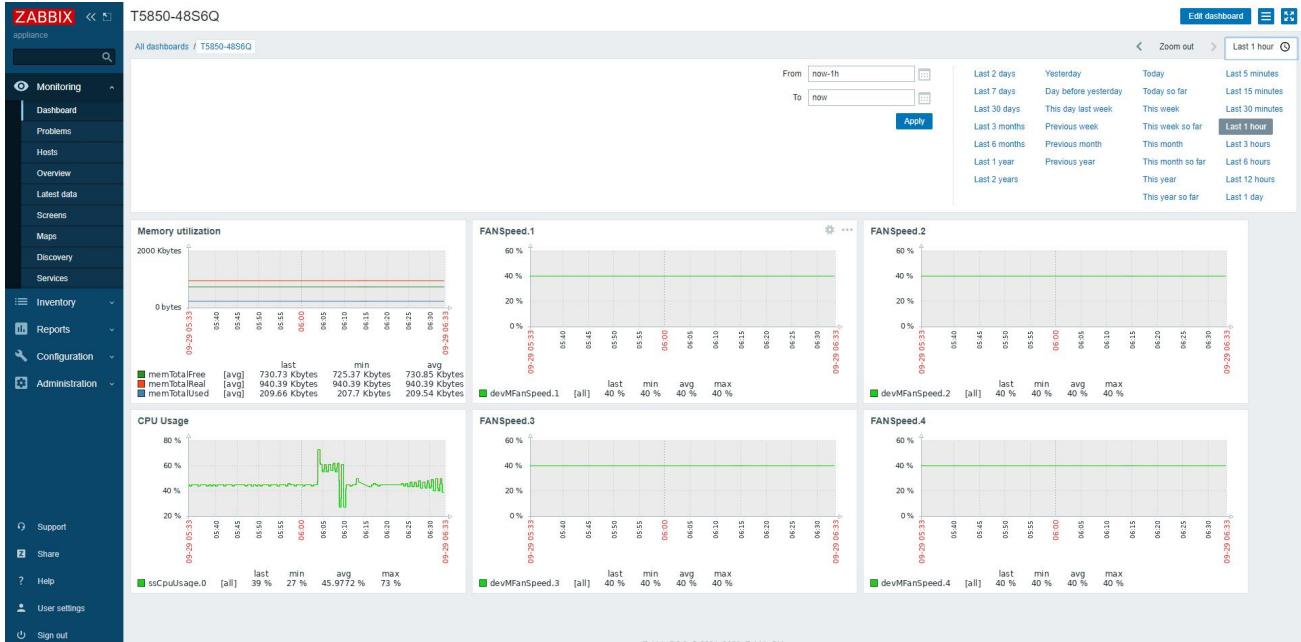


Step 3: Click anywhere on the dashboard to create a component, for example named as cpu Utilization, select T5850-48S6Q host pattern, CPU item pattern of Data set, and click Create.



Step 4: View the created components and save the dashboard.

Of course, you can also configure the visualized information in the dashboard according to personal preferences.



2.4 FAQ

2.4.1 Monitor Host Failed

Due to the configuration of the SNMP community name of the switch(case-sensitive), the switch may not be monitored and managed by Zabbix, as shown in the following figure:

The figure shows the Zabbix 'Hosts' configuration screen. The left sidebar has 'Configuration' selected under 'Hosts'. The main form fields include:

- Host groups: Type 'T5850' and click 'Select'.
- Templates: Type 'T5850' and click 'Select'.
- Name: T5850.
- DNS: (empty).
- IP: (empty).
- Port: (empty).
- Monitored by: Any.
- Proxy: (empty).
- Tags: And/Or, Or, tag, Contains, Equals, value, Add.

Below the form is a table of hosts:

Name	Applications	Items	Triggers	Graphs	Discovery	Web	Interface	Proxy	Templates	Status	Availability	Agent encryption	Info	Tags
T5850-48S6Q	Applications 6	Items 33	Triggers 1	Graphs 1	Discovery	Web	10.32.130.136:161	FS T5850	Enabled	ZBX SNMP JMX IPMI	None			

A red box highlights a warning message at the bottom right: "Timeout while connecting to '10.32.130.136:161' 1 found".

Please refer to the following solution:

Step 1: View and record the Zabbix host SNMP community name configuration.

ZABBIX

Hosts

All hosts / T5850-48S6Q Enabled ZBX SNMP JMX IPMI Applications 6 Items 33 Triggers Graphs 1 Discovery rules Web scenarios

Host Templates 1 IPMI Tags Macros 1 Inventory Encryption

* Host name: T5850-48S6Q
 Visible name: T5850-48S6Q
 * Groups: FS T5850 type here to search

Interfaces Type IP address DNS name Connect to Port Default
 ▲ SNMP 10.32.130.136 IP DNS 161 Remove

SNMP version: SNMPv2
 * SNMP community: \${SNMP_COMMUNITY} Use bulk requests

Add Description

Monitored by proxy: (no proxy)

Enabled:

Hosts

All hosts T5850-48S6Q Enabled ZBX SNMP JMX IPMI Applications 6 Items 33 Triggers Graphs 1 Discovery rules Web scenarios

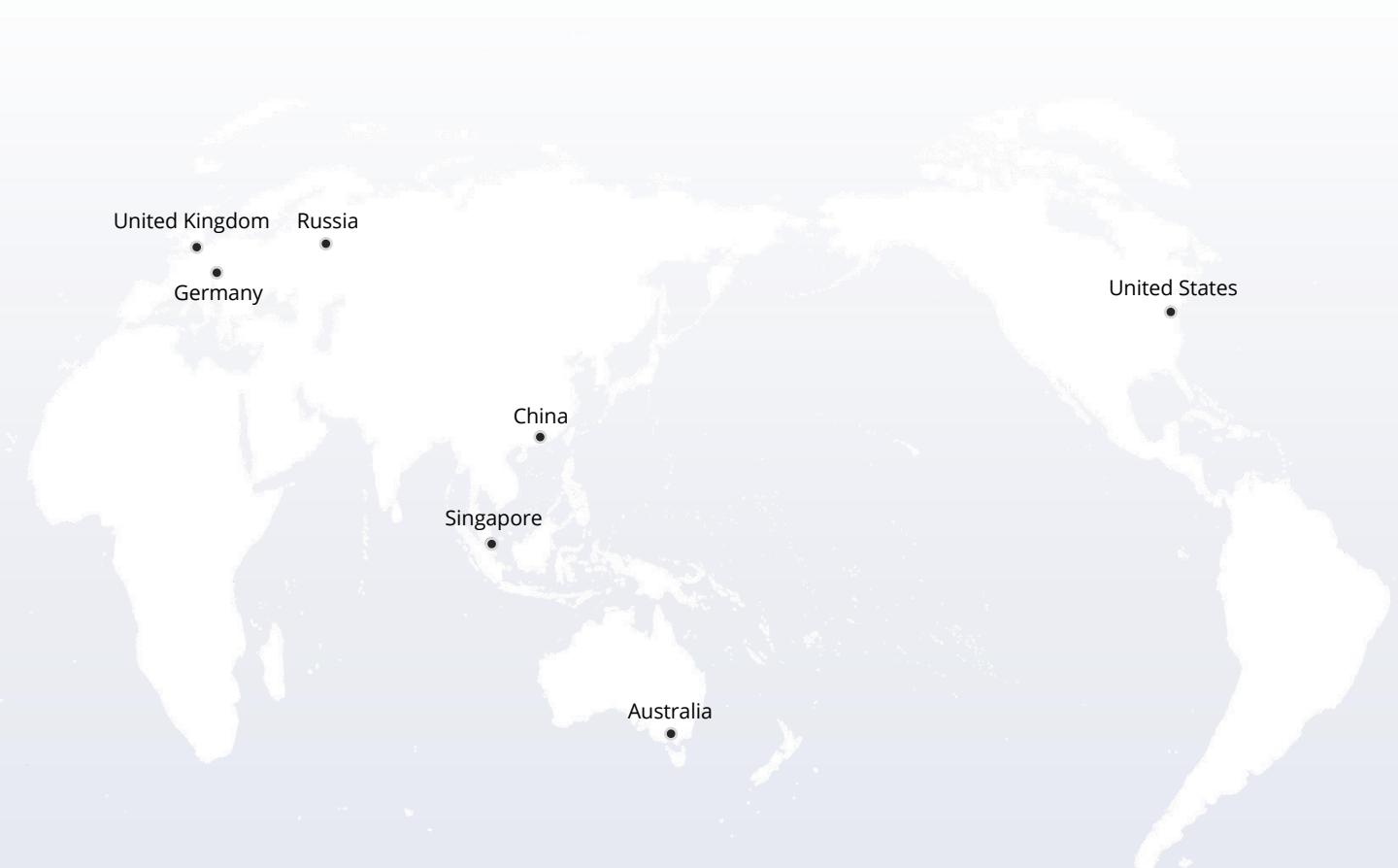
Host Templates 1 IPMI Tags Macros 1 Inventory Encryption

Host macros Inherited and host macros 1

Macro	Effective value	Template value	Global value (configure)
{\${SNMP_COMMUNITY}}	Public	T' 4 Remove	= "public"
description			

Add

Step 2: Check whether the SNMP community name configuration of the switch is consistent with the Zabbix host SNMP community name configuration.



 <https://www.fs.com>



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