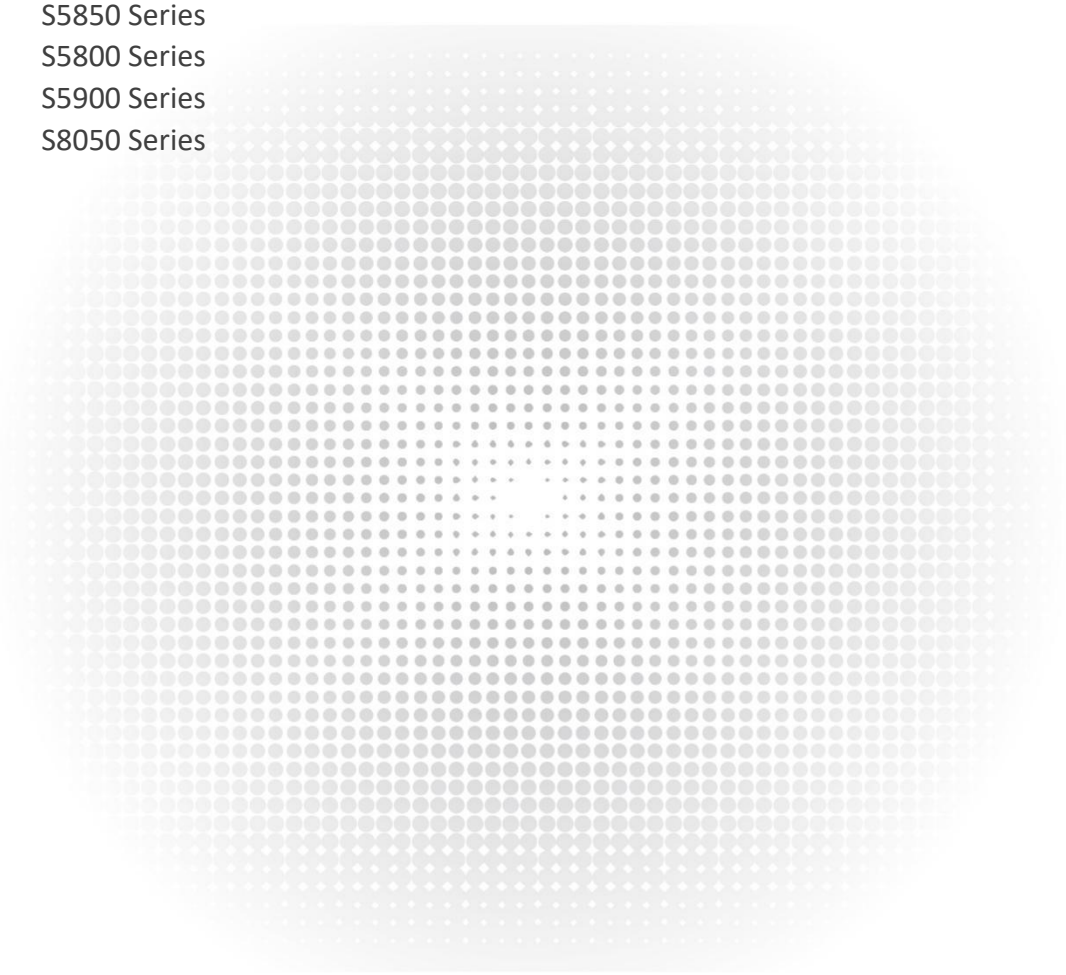
Configure Zabbix to Monitor FS Switches via SNMP

Models: S5860 Series
S3910 Series
S3900 Series
S3950 Series
S3700 Series
PoE+ Series
S5850 Series
S5800 Series
S5900 Series
S8050 Series



CONFIGURATION GUIDE

Contents

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 device. This document will guide you to import the FS template in Zabbix and apply the template to monitor the FS Switches. 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 FS-S5860 switch as an example to monitor the S5860-24XB-U switch.

2. Operation Guide

2.1 Operation Steps

- Configure SNMP function of the switch
- Log in to Zabbix to import the FS-S5860 template
- Create host group S5860-Switch and link FS-S5860 template
- Create host, link S5860-Switch host group, link FS-S5860 template
- Monitor host data

2.2 Operation Process

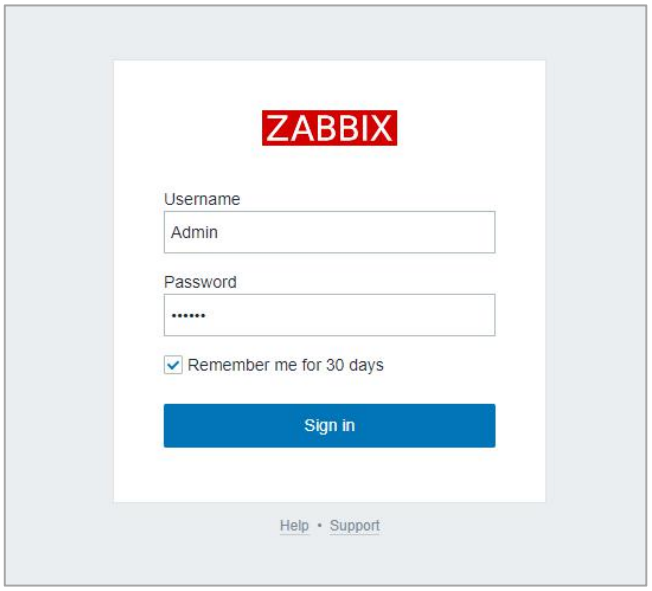
2.2.1 Configure the Switch

Take S5860-24XB-U as an example to configure the SNMP function

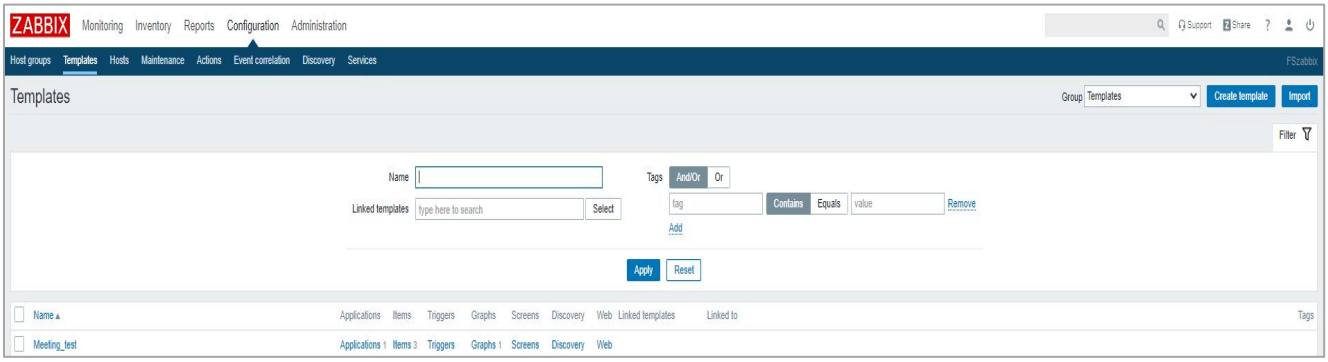
```
FS#configure terminal
FS(config)#snmp-server enable version v2c
FS(config)#snmp-server community Public ro
```

2.2.2 Log in to Zabbix to Import Templates

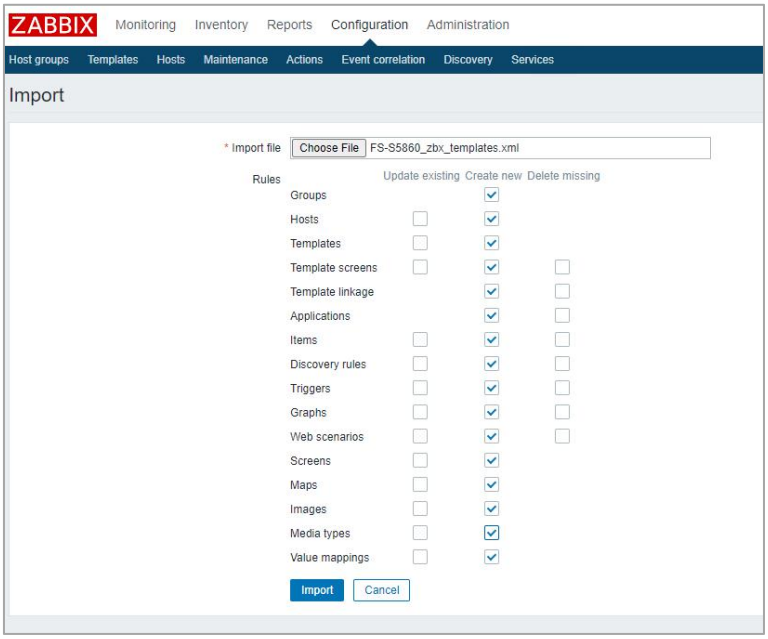
Step 1: Open Zabbix login interface and enter the user name and password to log in to the Zabbix software.



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-S5860_zbx_templates', click the **Import** button to import it, and then you can see the FS-S5860 templates that have been successfully imported in the template list after the import success is displayed.


ZABBIX
Monitoring
Inventory
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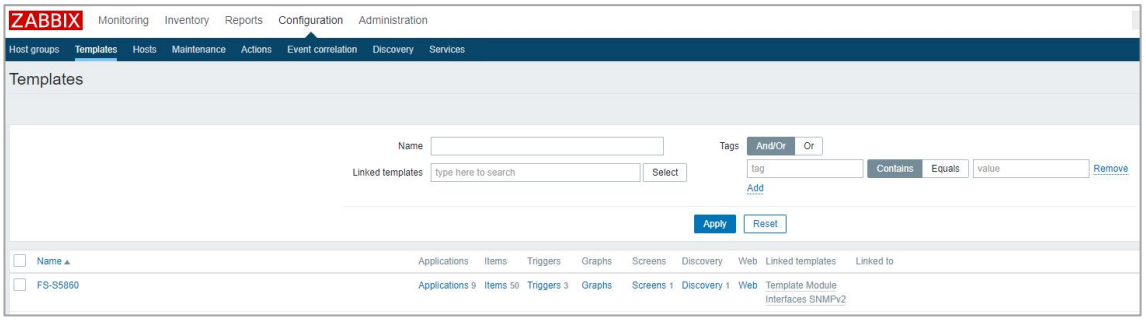
Hosts
Maintenance
Actions
Event correlation
Discovery
Services
Import
* Import file
Choose File
FS-S5860_zbx_templates.xml
Rules
Update existing
Create new
Delete missing
Groups
Hosts
Templates
Template screens
Template linkage
Applications
Items
Discovery rules
Triggers
Graphs
Web scenarios
Screens
Maps
Images
Media types
Value mappings
Import
Cancel


ZABBIX
Monitoring
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Templates
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Event correlation
Discovery
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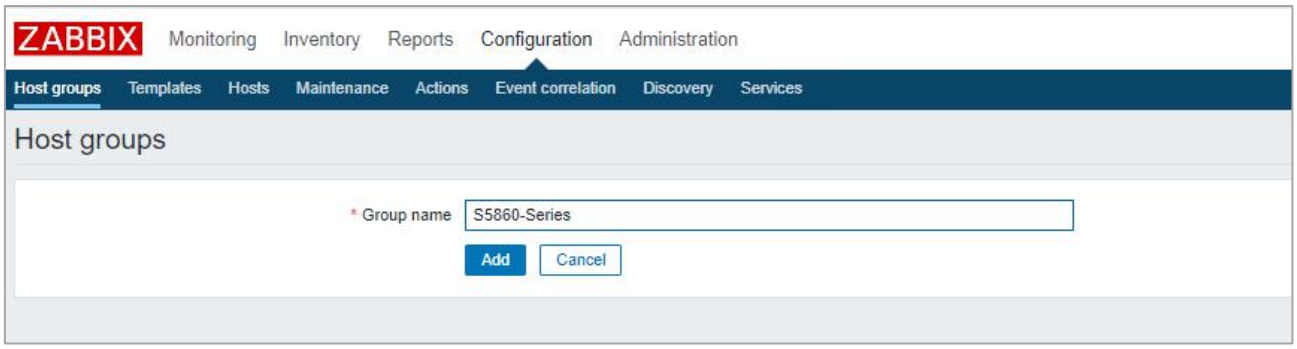
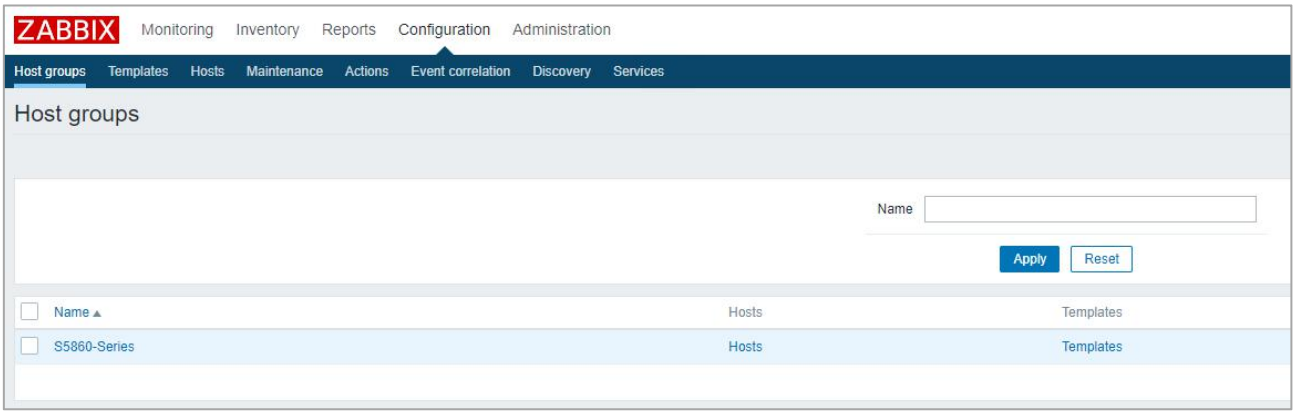
Templates
Name
Linked templates
type here to search
Select
Tags
And/Or
Or
tag
Contains
Equals
value
Remove
Add
Apply
Reset
Name
Applications
Items
Triggers
Graphs
Screens
Discovery
Web
Linked templates
Linked to
FS-S5860
Applications 9
Items 50
Triggers 3
Graphs
Screens 1
Discovery 1
Web
Template Module Interfaces SNMPv2

2.2.3 Create Host Groups

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

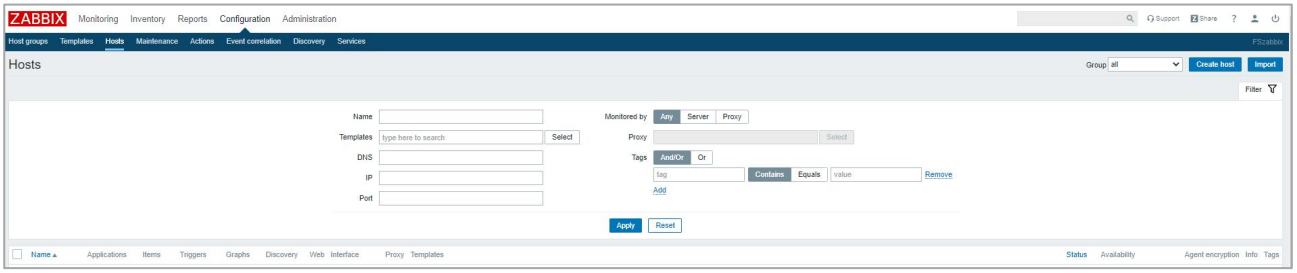


Step 2: Create a host group named 'S5860-Series' host group, then view the successfully created host group.

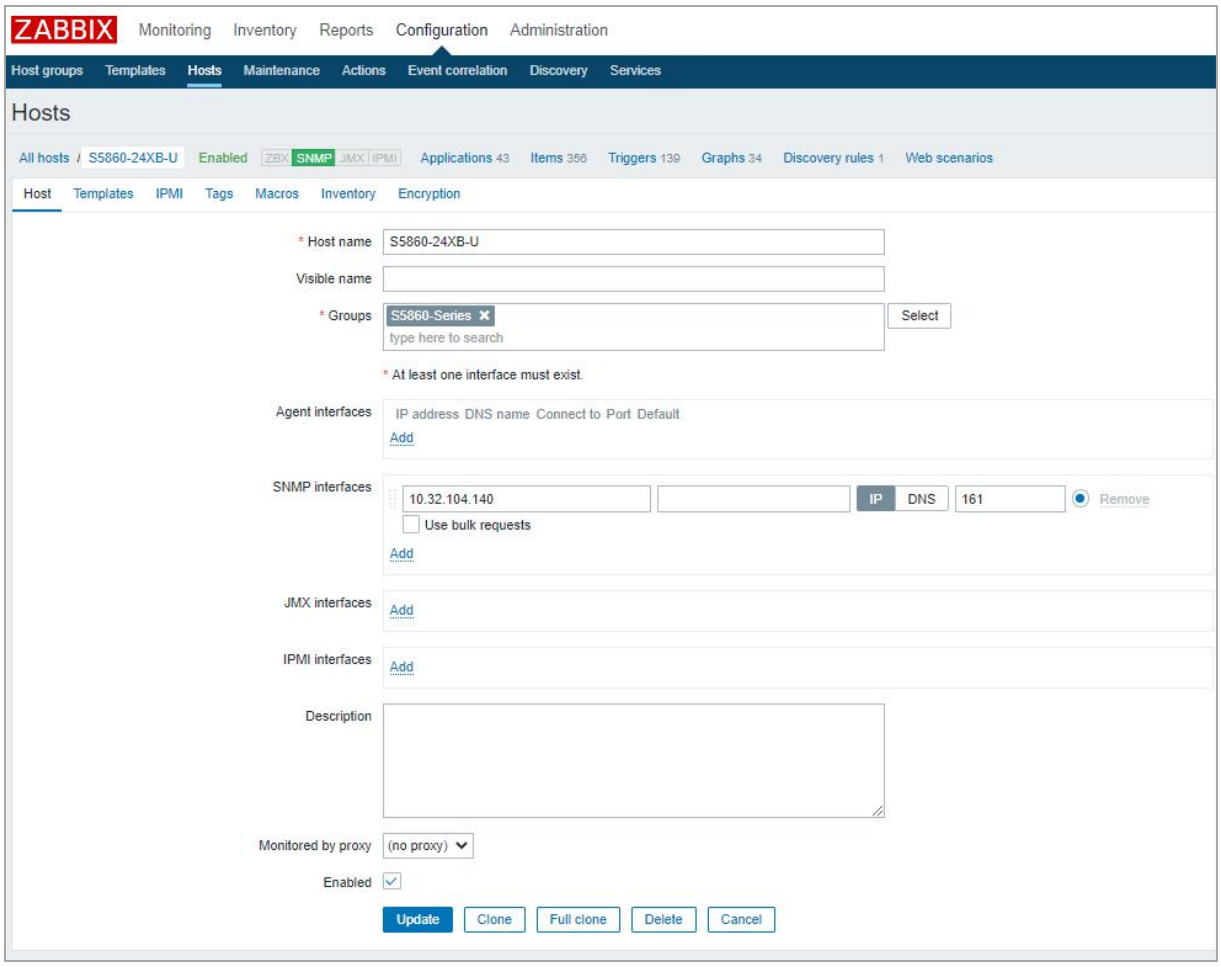


2.2.4 Create Hosts

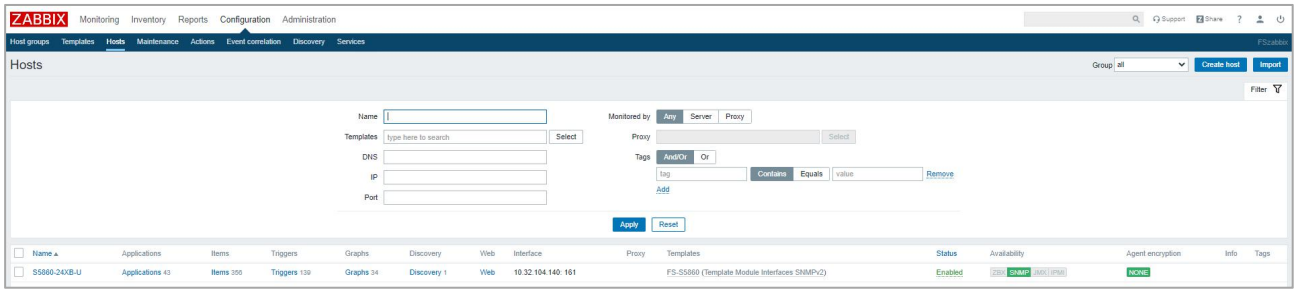
Step 1: Enter **Hosts** page under **Configuration**, click on the **Create Host** button in the upper right corner to create the host.



Step 2: Create a host named S5860-24XB-U, select the S5860-Series 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.

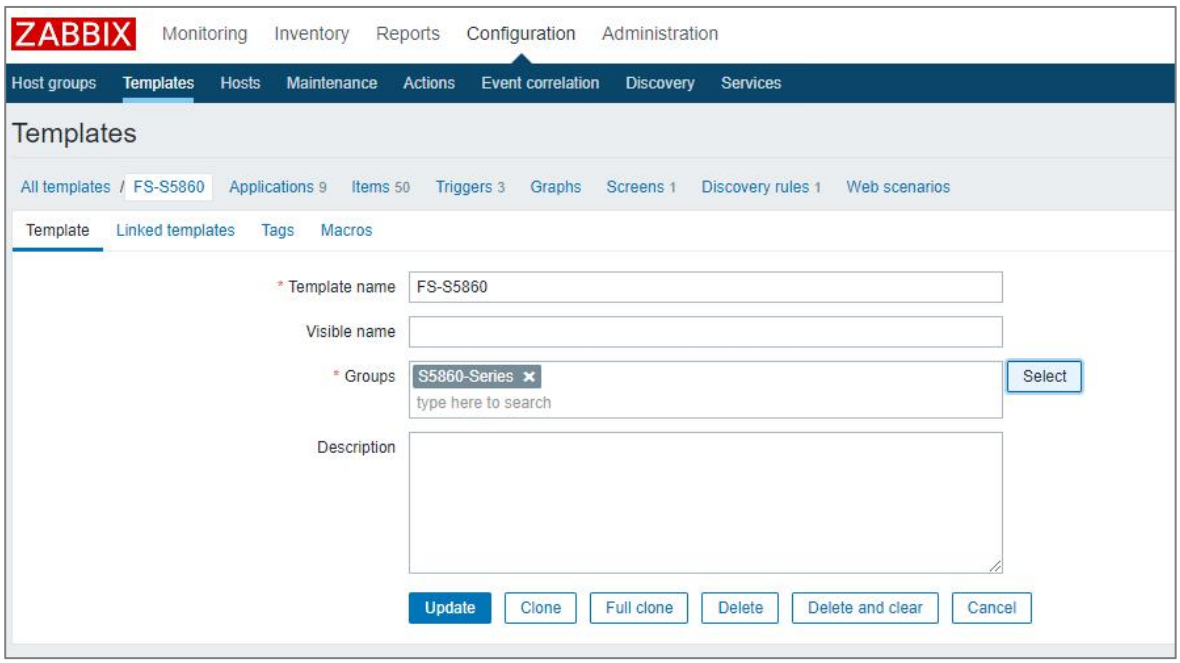


Step 3: You can view the created hosts under the host list.

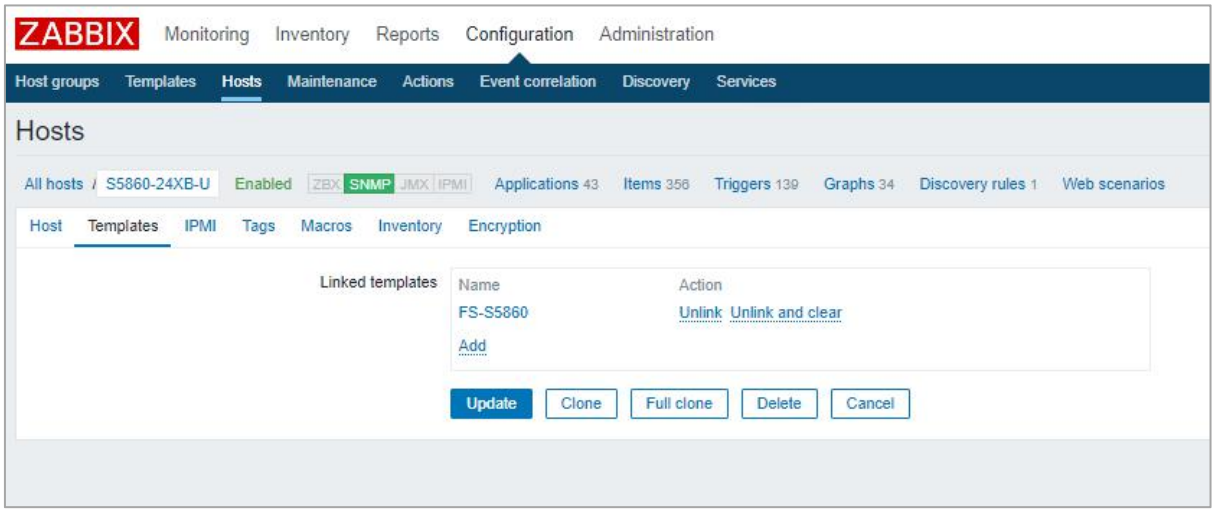


2.2.5 Link Template and Host Group

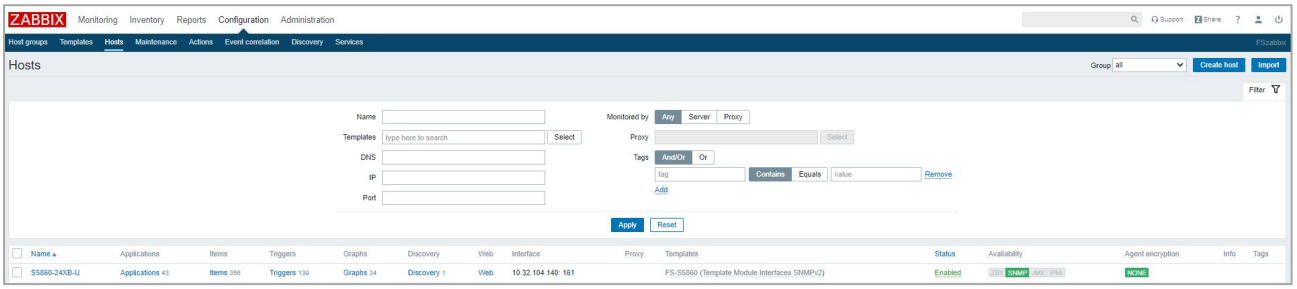
Step 1: Link the S5860-Series host group in the FS-S5860 template.



Step 2: Link FS-S5860 template under S5860-24XB-U host.

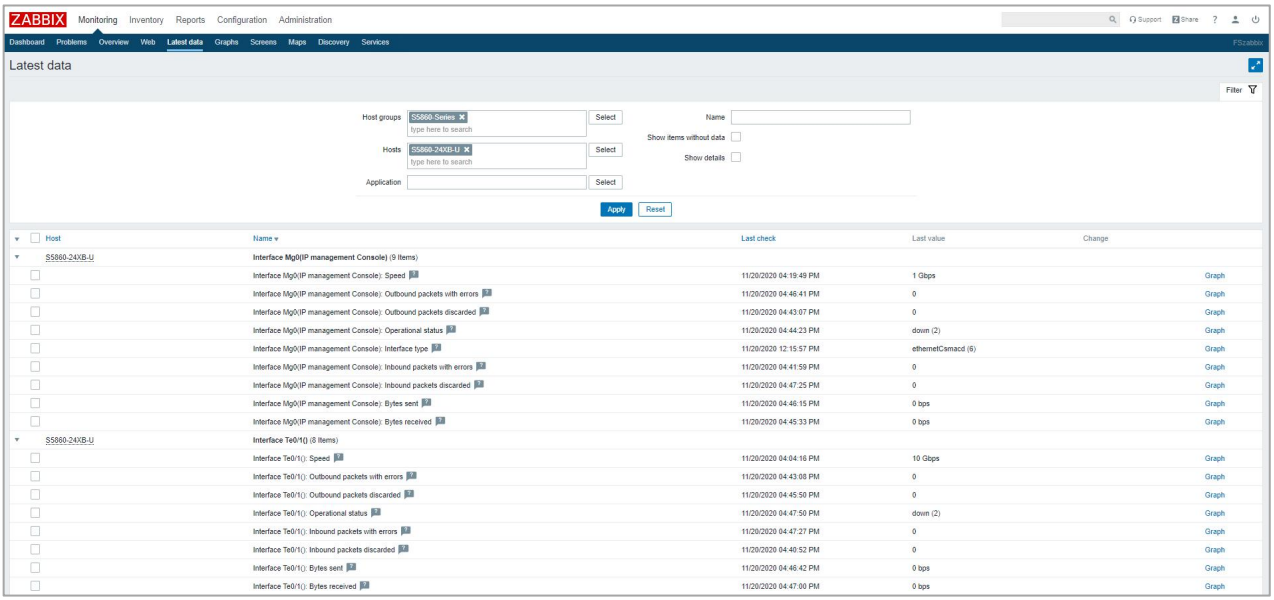


Step 3: Return to the host interface, you can view the information that has been linked to the template in the host.



2.2.6 Monitoring Switch Data

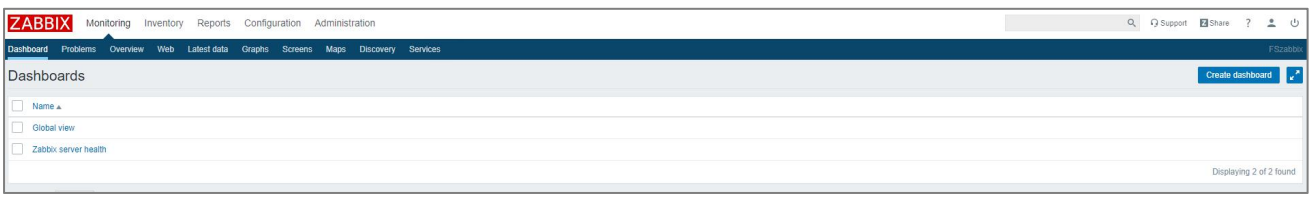
Select S5860-Series Host groups and S5860-24XB-U Hosts, you can view that Zabbix has monitored the relevant information and data of the switch S5860-24XB-U.



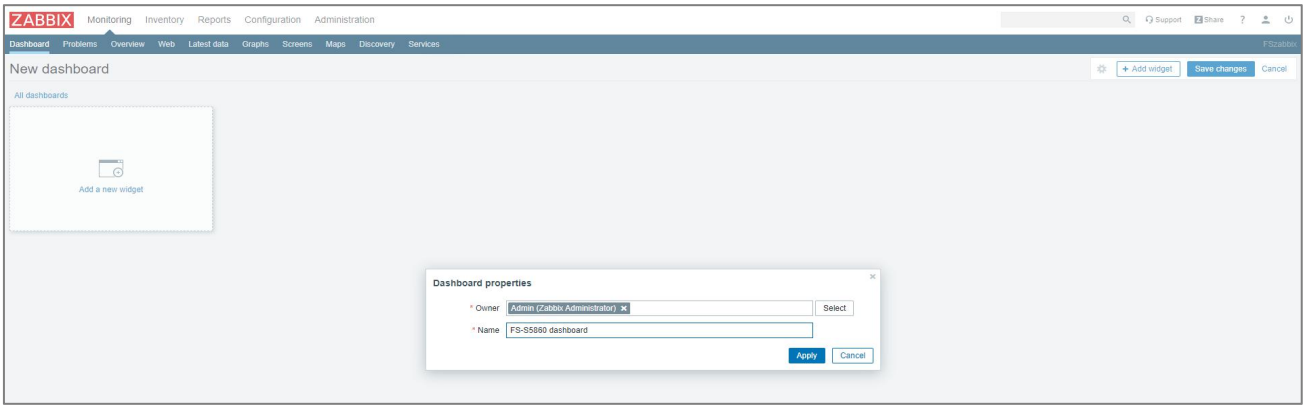
2.3 Zabbix Personalized Customization

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.

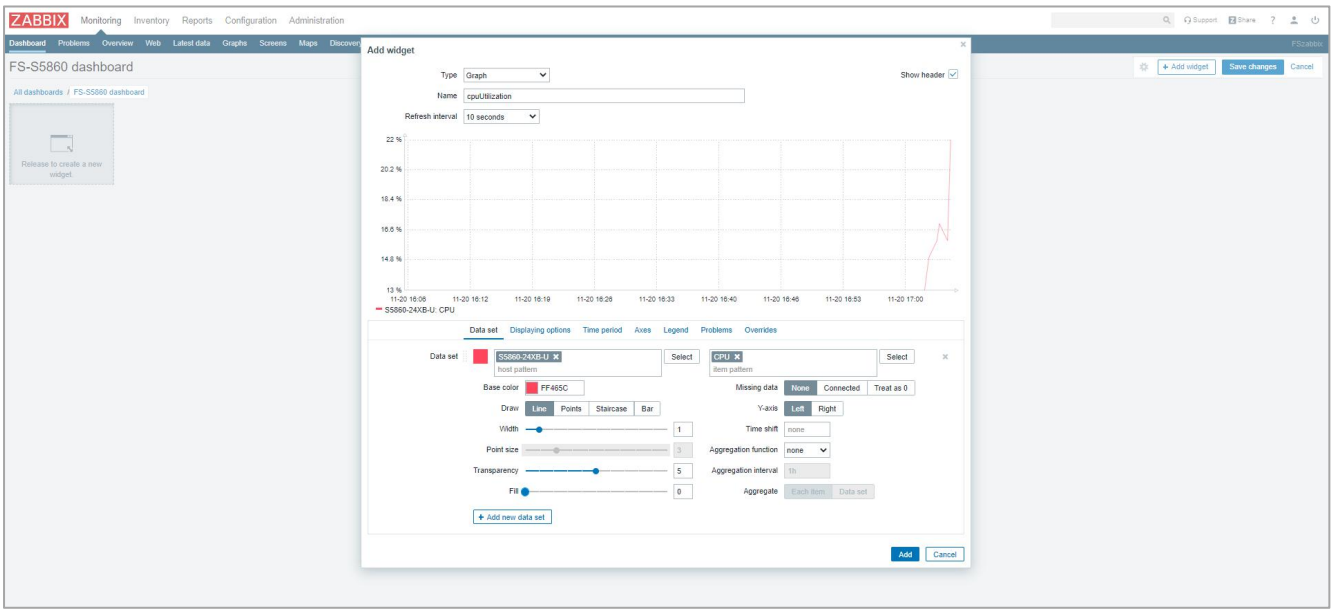
Step 1: Click Create dashboard in the upper right corner to create a dashboard.

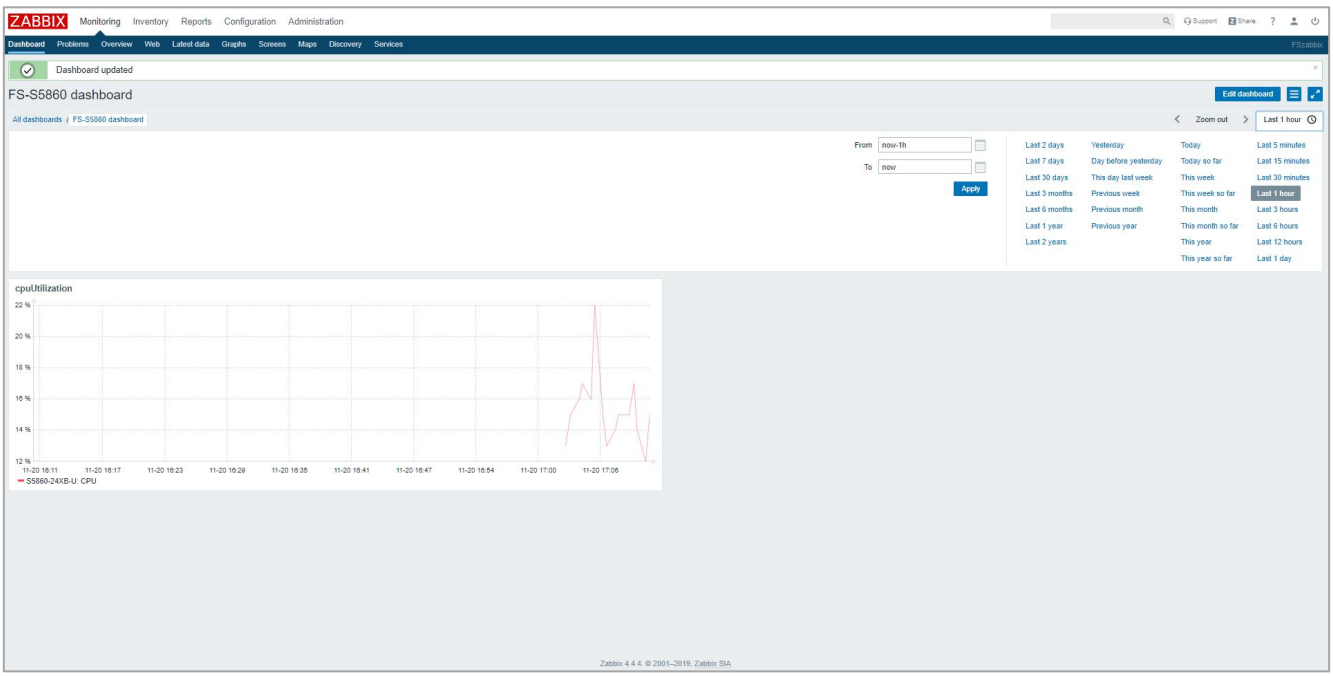


Step 2: Create a dashboard named FS-S5860 dashboard.



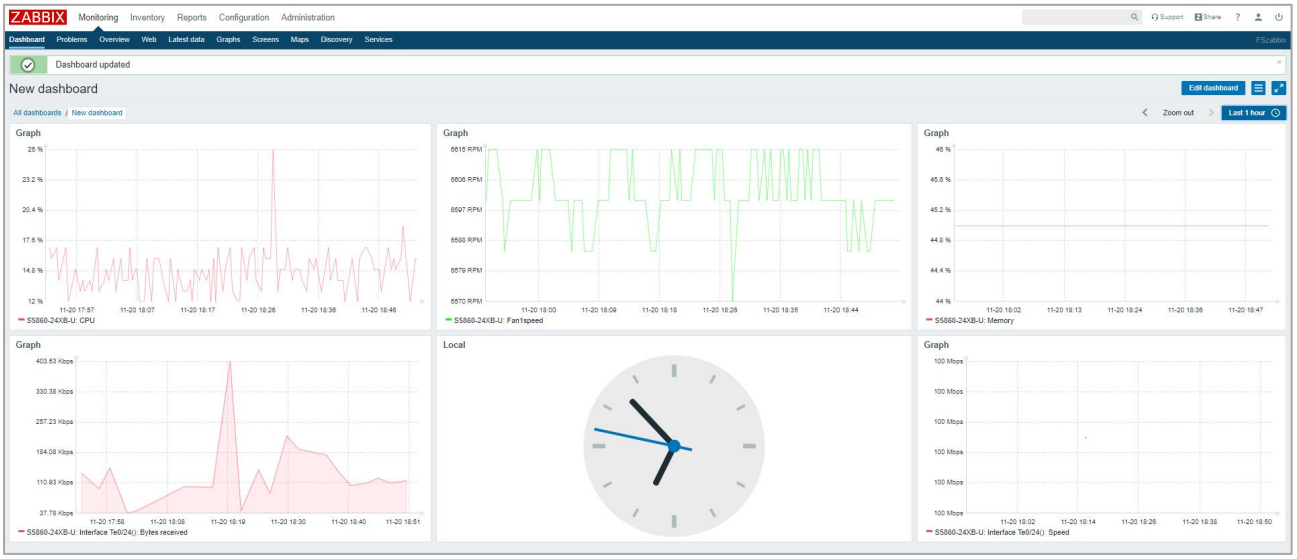
Step 3: Click anywhere on the dashboard to create a component, for example namded as cpu Utilization, select S5860-24XB-U host pattern, CPU item pattern of Data set, and click Create.





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

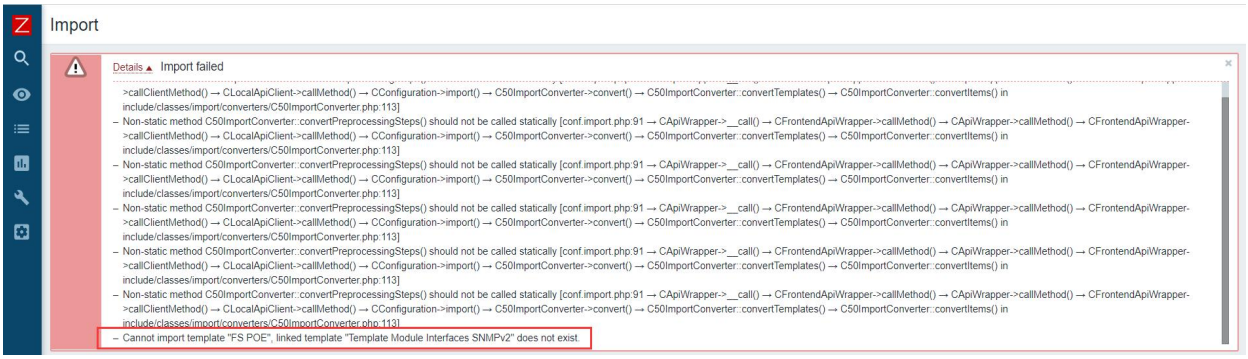
Of course, you can also configure the visualized information in the dashboard according to personal preferences.



2.4 FAQ

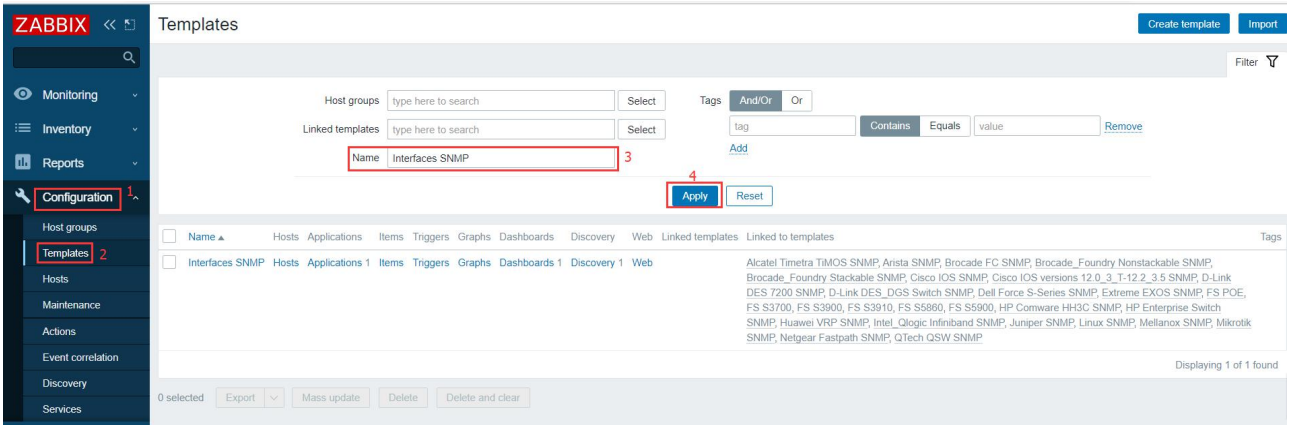
2.4.1 Template Import Failed

Due to the iteration of Zabbix version, the name of the public template provided by Zabbix may change. The template provided by FS refers to the public template "Template Module Interfaces SNMPv2". During the template import process, if the import fails, it prompts that the template is not found like below:



Pls refer to below solution:

Step 1: Search for the keyword "Interfaces SNMP" in Zabbix, find the template, and record the template name.

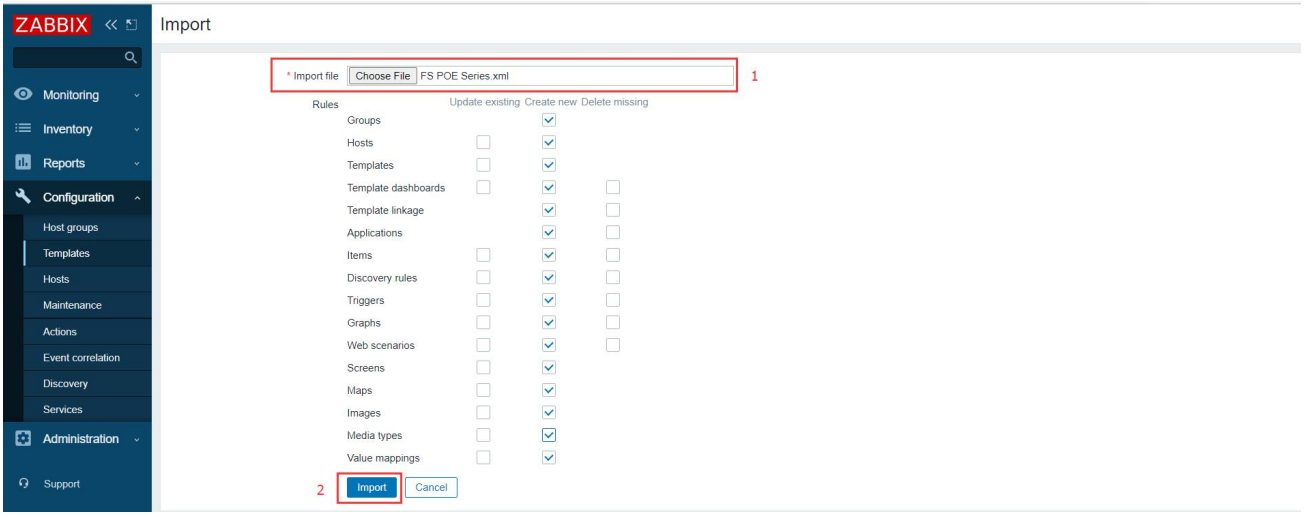


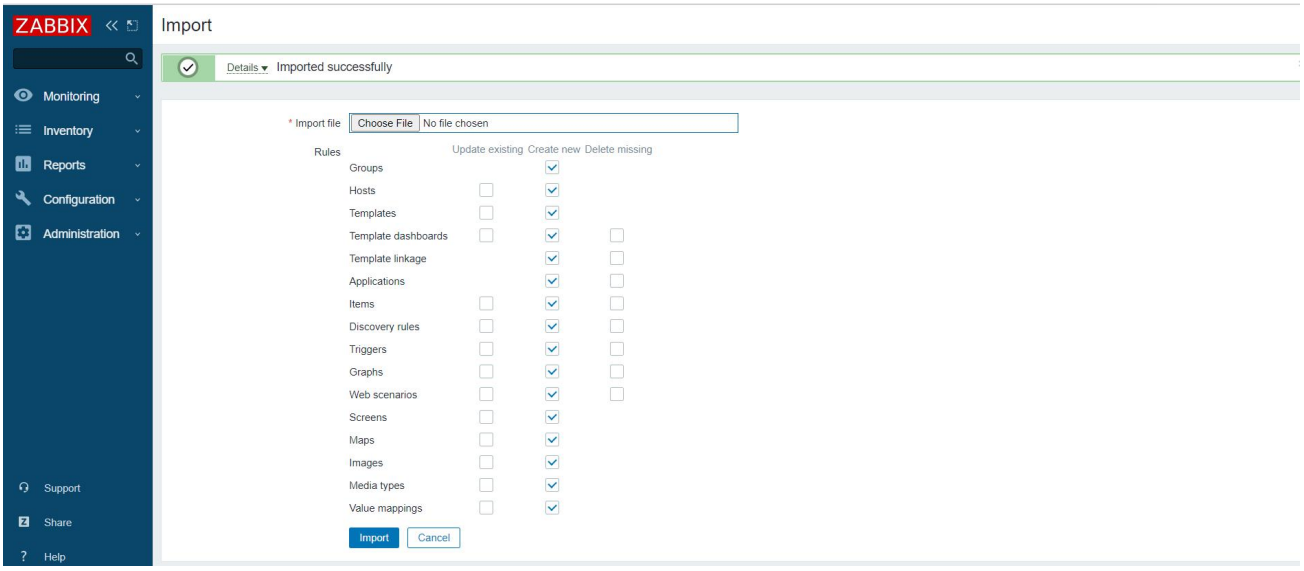
Step 2: Edit the template in text mode and replace "Template Module Interfaces SNMPv2" with the searched template name.

FS POE Series.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<zabbix_export>
    <version>4.4</version>
    <date>2020-11-20T01:54:21Z</date>
    <groups>
        <group>
            <name>FS POE</name>
        </group>
    </groups>
    <templates>
        <template>
            <template>FS POE</template>
            <name>FS POE</name>
            <templates>
                <template>
                    <name>Interfaces SNMP</name>
                </template>
            </templates>
            <groups>
                <group>
                    <name>FS POE</name>
                </group>
            </groups>
            <applications>
                <application>
                    <name>bldgHVACFanSpeed</name>
                </application>
                <application>
                    <name>ifOperStatus</name>
                </application>
                <application>
                    <name>ifPhysAddress</name>
                </application>
                <application>
                    <name>nmscardCPUUtilization</name>
                </application>
                <application>
                    <name>nmscardMEMUtilization</name>
                </application>
                <application>
```

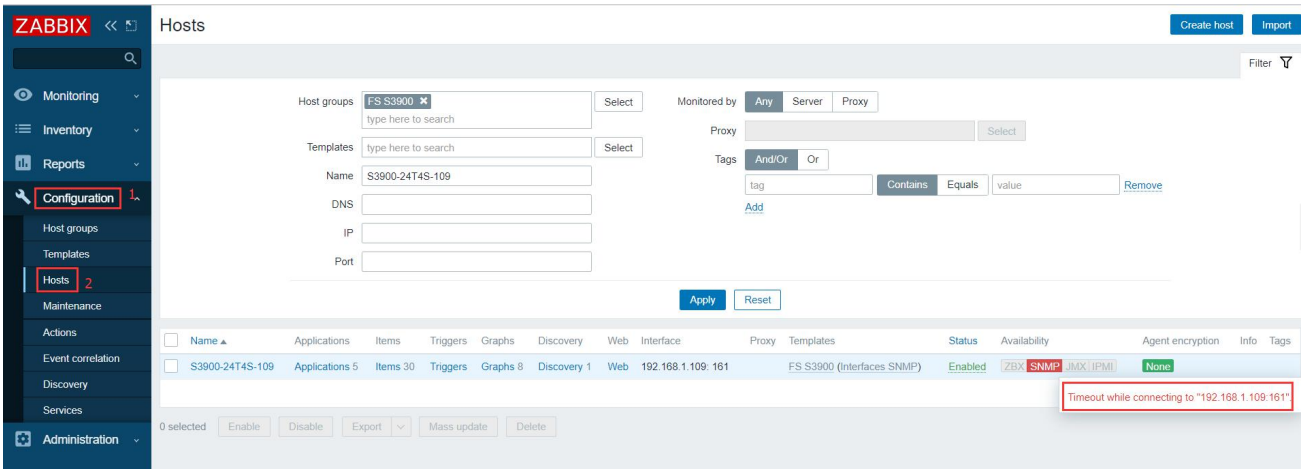
Step 3: Save the modified template and re-import the template.





2.4.2 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:


ZABBIX
Hosts
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Monitoring
Inventory
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Configuration
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Host groups
Templates
Hosts
2
Maintenance
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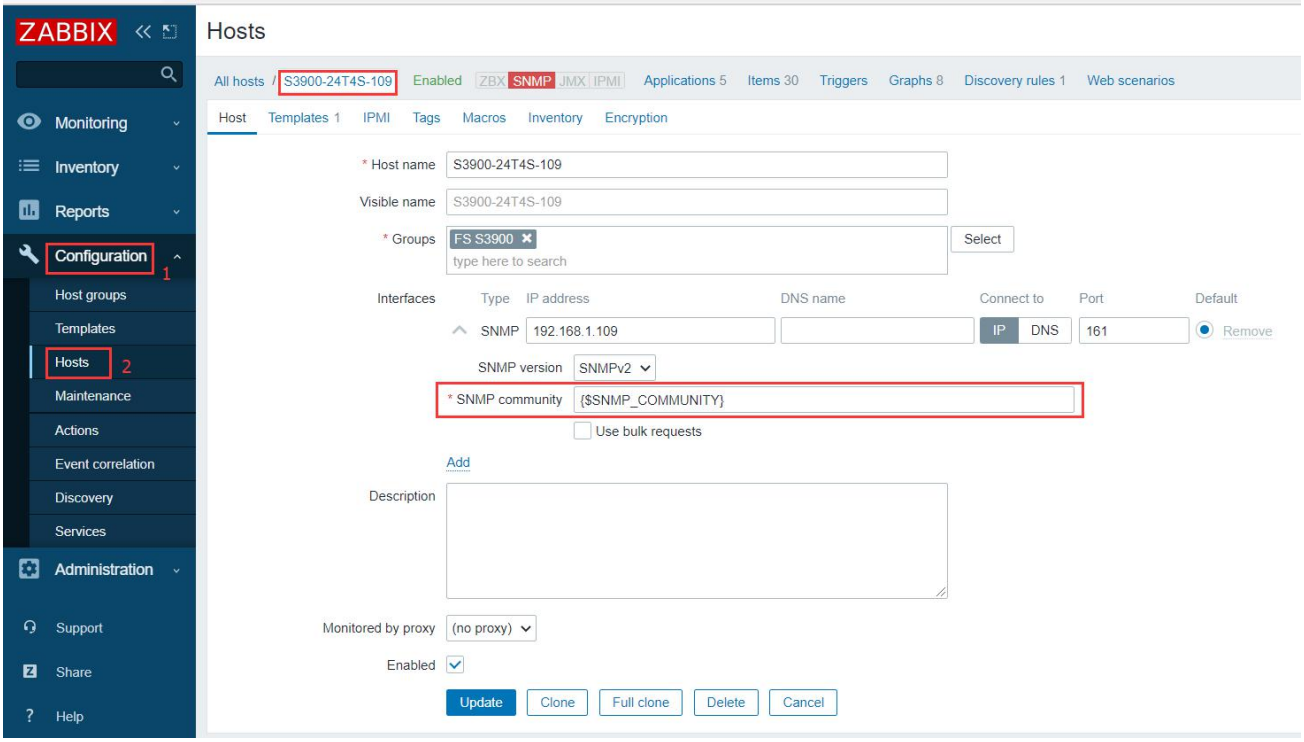
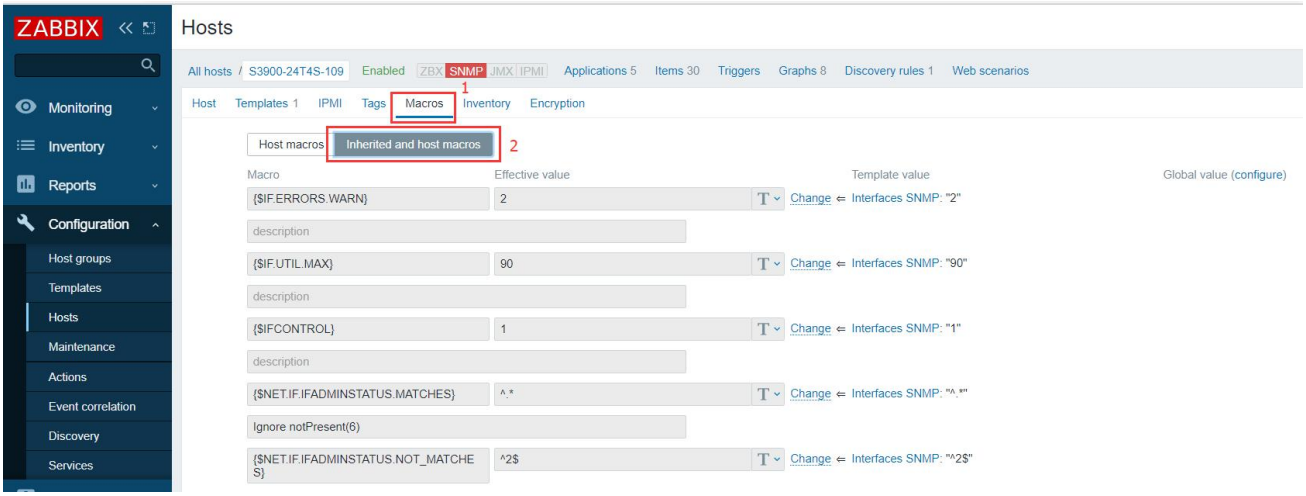
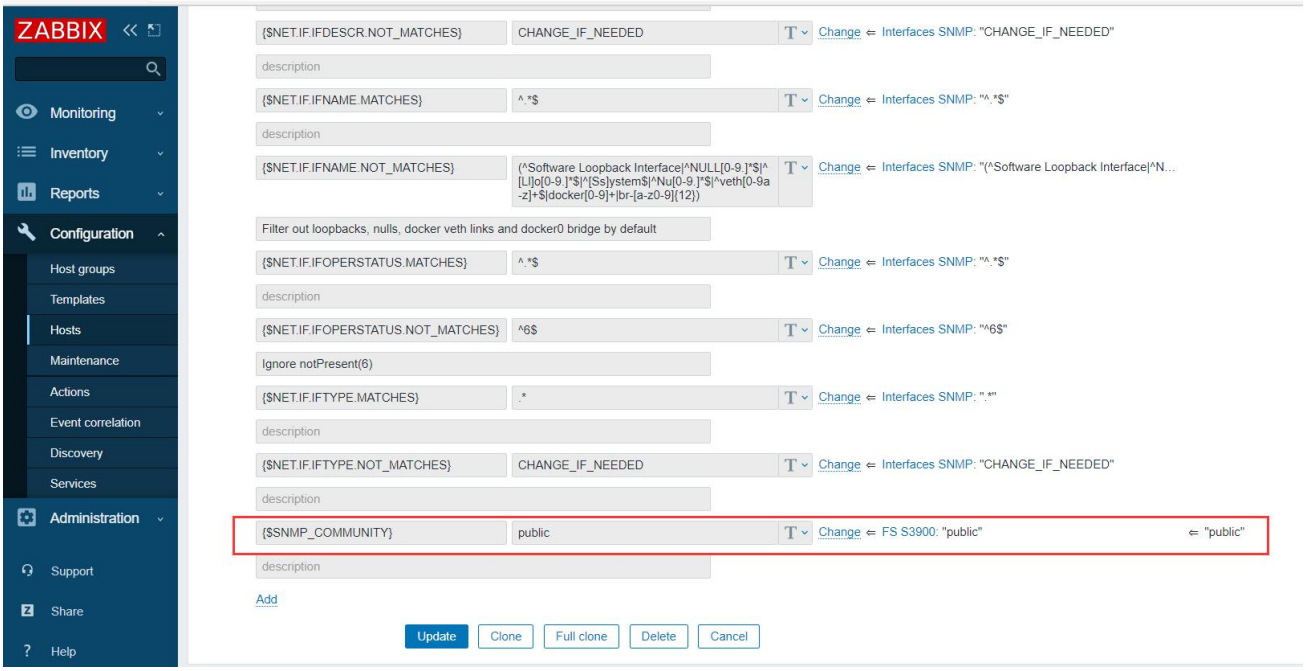
Services
Administration
Host groups
FS S3900
type here to search
Select
Templates
type here to search
Select
Name
S3900-24T4S-109
DNS
IP
Port
Monitored by
Any
Server
Proxy
Proxy
Select
Tags
And/Or
Or
tag
Contains
Equals
value
Remove
Add
Apply
Reset
Name
Applications
Items
Triggers
Graphs
Discovery
Web
Interface
Proxy
Templates
Status
Availability
Agent encryption
Info
Tags
S3900-24T4S-109
Applications 5
Items 30
Triggers
Graphs 8
Discovery 1
Web
192.168.1.109: 161
FS S3900 (Interfaces SNMP)
Enabled
ZBX SNMP JMX IPMI
None
Timeout while connecting to "192.168.1.109:161"
0 selected
Enable
Disable
Export
Mass update
Delete

Pls refer to below solution:

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







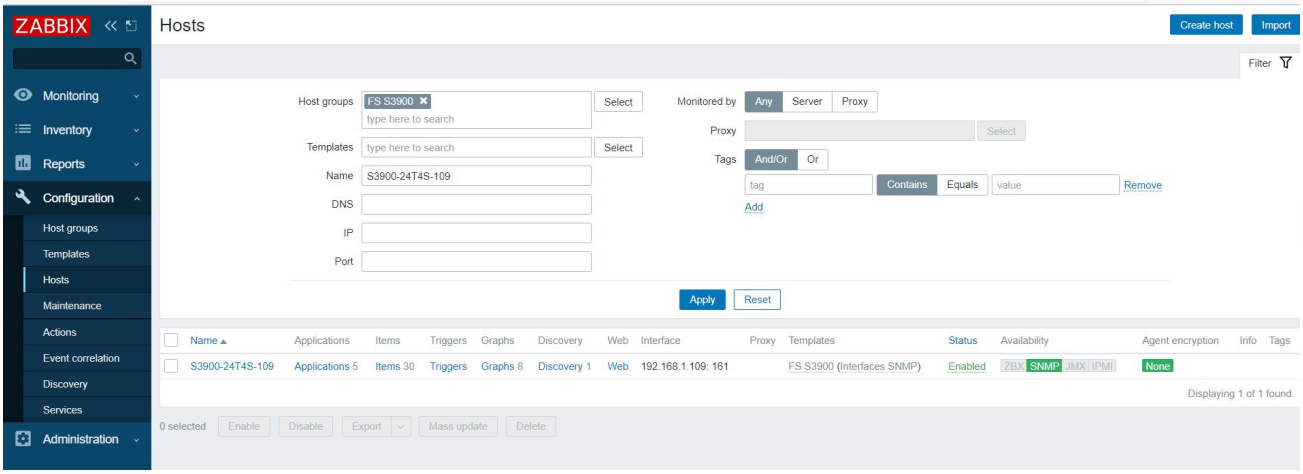
Step 2: Check whether the SNMP community name configuration of the switch is consistent with the Zabbix host SNMP community name configuration.

```
S3900-24T4S-109-1#show running-config
Building running configuration. Please wait...
!<Version>0.0.2</Version>
!<stackingDB>000000000000</stackingDB>
!<stackingMac>01_64-9d-99-10-35-6a_05</stackingMac>
!<stackingMac>00_00-00-00-00-00-00_00</stackingMac>
!<stackingMac>00_00-00-00-00-00-00_00</stackingMac>
!<stackingMac>00_00-00-00-00-00-00_00</stackingMac>
!<stackingMac>00_00-00-00-00-00-00_00</stackingMac>
!<stackingMac>00_00-00-00-00-00-00_00</stackingMac>
!
!
!
!
!
hostname S3900-24T4S-109
!
!
!
!
!
!
!
!
snmp-server community Public rw
!
!
!
```

Step 3: Modify the SNMP community name configuration of the switch to keep it consistent with the Zabbix host SNMP community name configuration.

```
S3900-24T4S-109-1#show running-config
Building running configuration. Please wait...
!<version>0.0.2</version>
!<stackingDB>000000000000</stackingDB>
!<stackingMac>01_64-9d-99-10-35-6a_05</stackingMac>
!<stackingMac>00_00-00-00-00-00-00_00</stackingMac>
!<stackingMac>00_00-00-00-00-00-00_00</stackingMac>
!<stackingMac>00_00-00-00-00-00-00_00</stackingMac>
!<stackingMac>00_00-00-00-00-00-00_00</stackingMac>
!<stackingMac>00_00-00-00-00-00-00_00</stackingMac>
!
!
!
!
!
hostname S3900-24T4S-109
!
!
!
!
!
!
!
!
snmp-server community public rw
!
!
!
```

Step 4: Wait for Zabbix to reconnect to the host, and finally connect to the host successfully.



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