

Configure Zabbix to Monitor PDU Via SNMP

Models: PDU-L6324I-VSW
PDU-3PNE24I-VSW
PDU-2PE24I-VME
PDU-3PNPE24I-VME
PDU-C148I-HME
PDU-5158N-HME
PDU-L528N-HME
PDU-L5324N-VME
PDU-L6316I-HME
PDU-3PNE42I-VME

Contents

1. Preface	1
2. Operation Guide	1
2.1 Operation Steps	1
2.2 Operation Process	1
2.2.1 Log in to Zabbix to Import Templates	1
2.2.2 Create Host Groups	3
2.2.3 Create Hosts	5
2.2.4 Monitoring PDU Data	8
2.3 FAQ	8
2.3.1 Monitoring Host Failed	8

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 MPDU. The version of Zabbix in this document is 6.4.4 (Linux version is 4.18.0, Mysql version is 8.0.30), and taking MPDU as an example to monitor the PDU.

2. Operation Guide

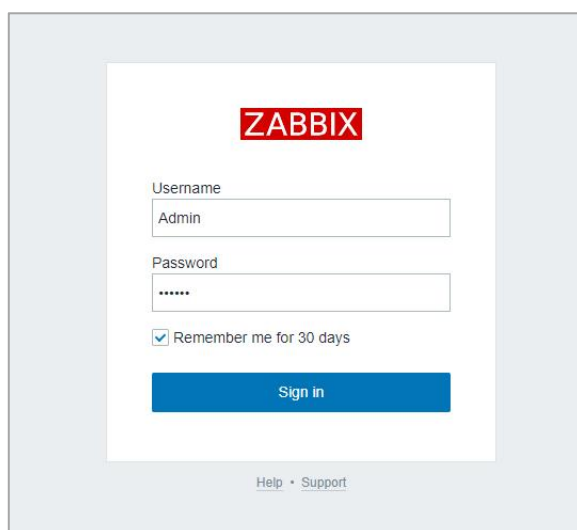
2.1 Operation Steps

- Log in to Zabbix to import the “FS MPDU Series SNMP” template
- Create host group FS MPDU
- Create host, link host group and template
- Monitor host data

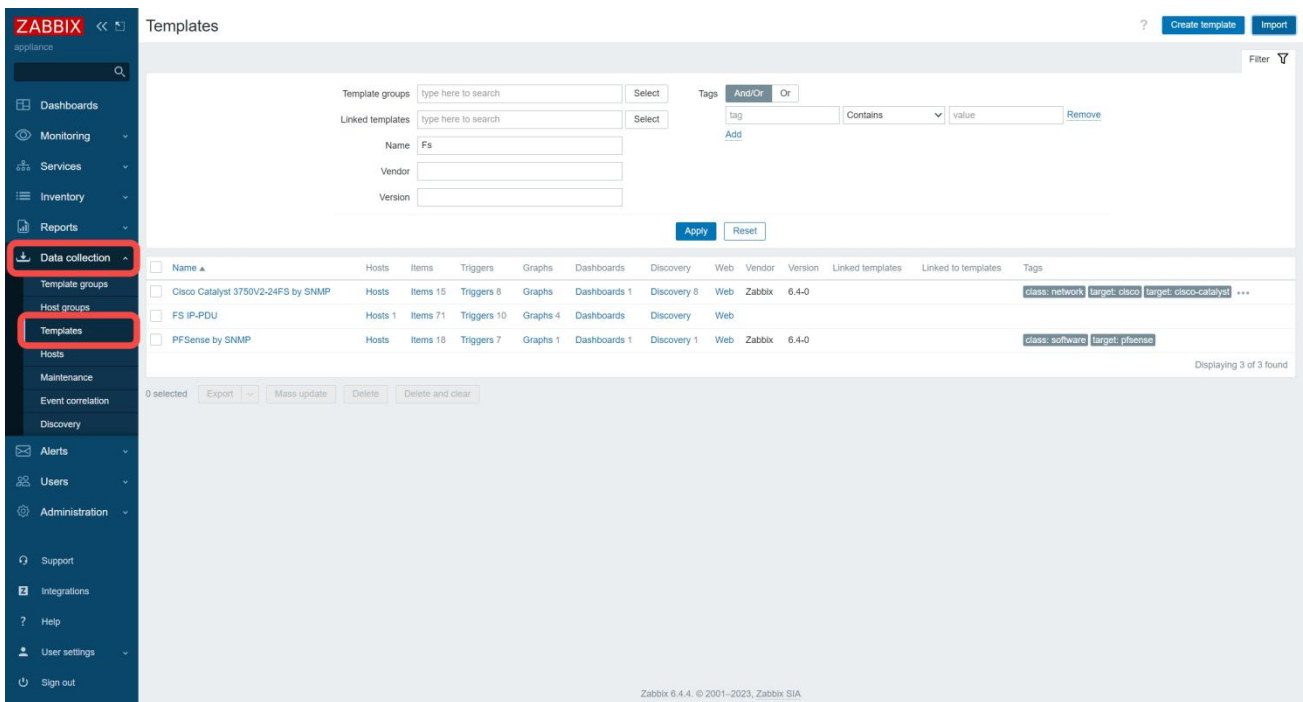
2.2 Operation Process

2.2.1 Log in to Zabbix to Import Templates

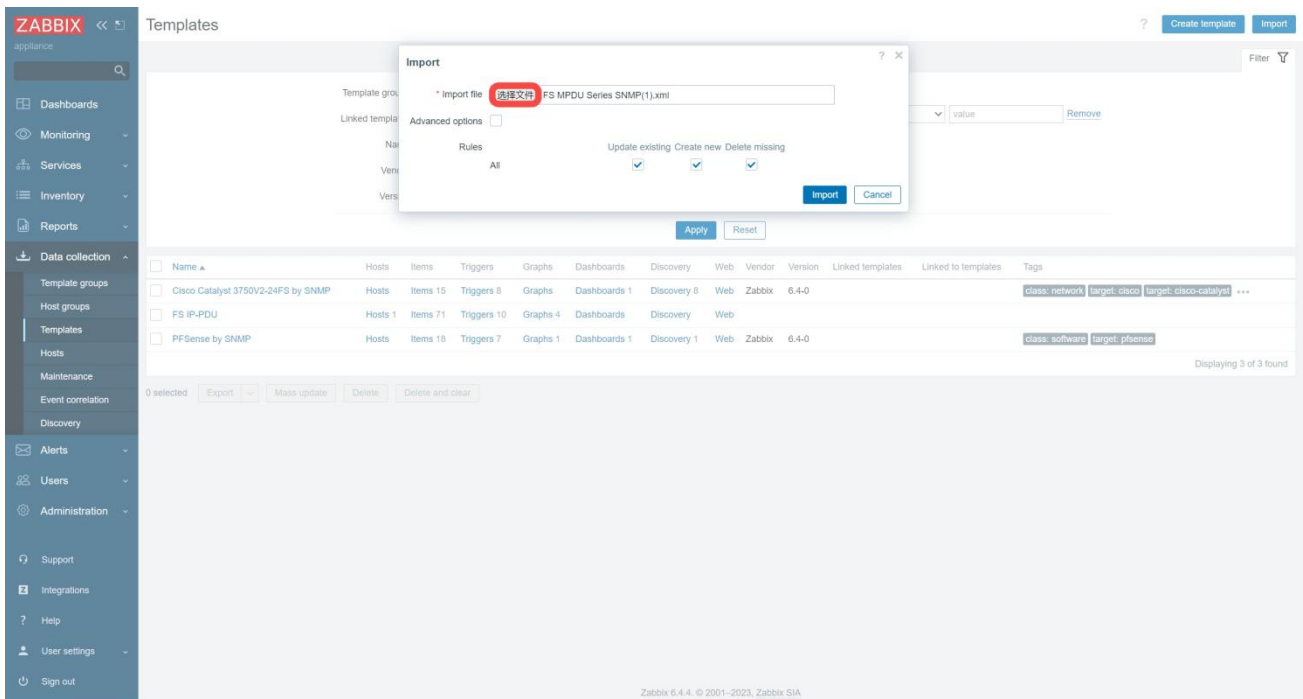
Step 1: Open Zabbix login interface and enter the user name and password to log in to the Zabbix software.



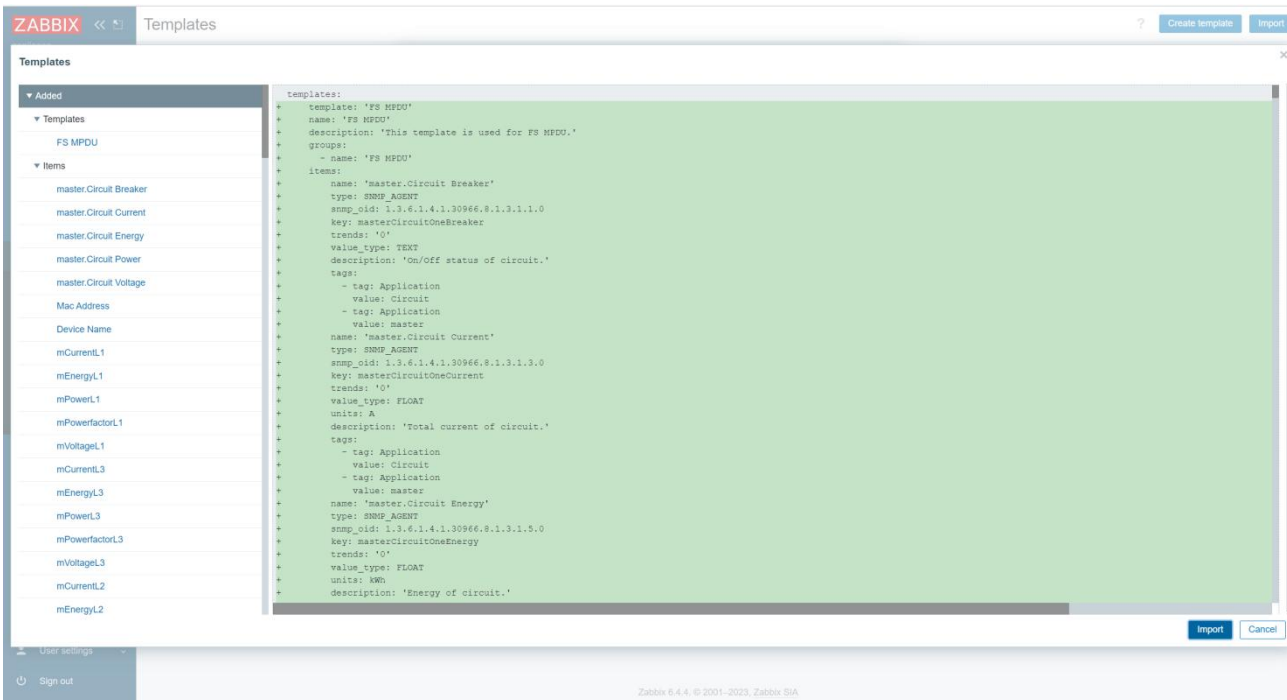
Step 2: Select the **Templates** under Data collection category, and click **Import** in the upper right corner to enter the template import interface.



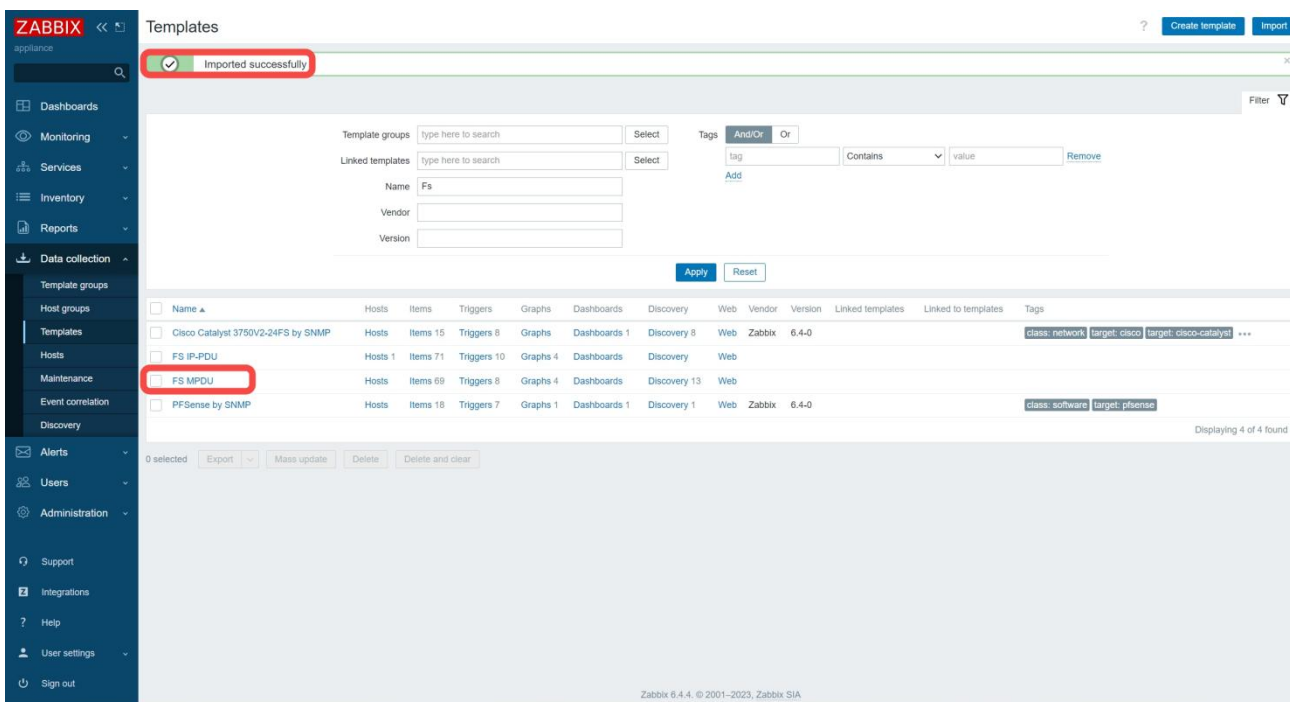
Step 3: Select the "FS MPDU Series SNMP.xml" file, click the **Import** button to import it.



When you import the template, the template name is automatically recognized and a template group is created with the name "FS MPDU", which corresponds to the template as follows, click "import".

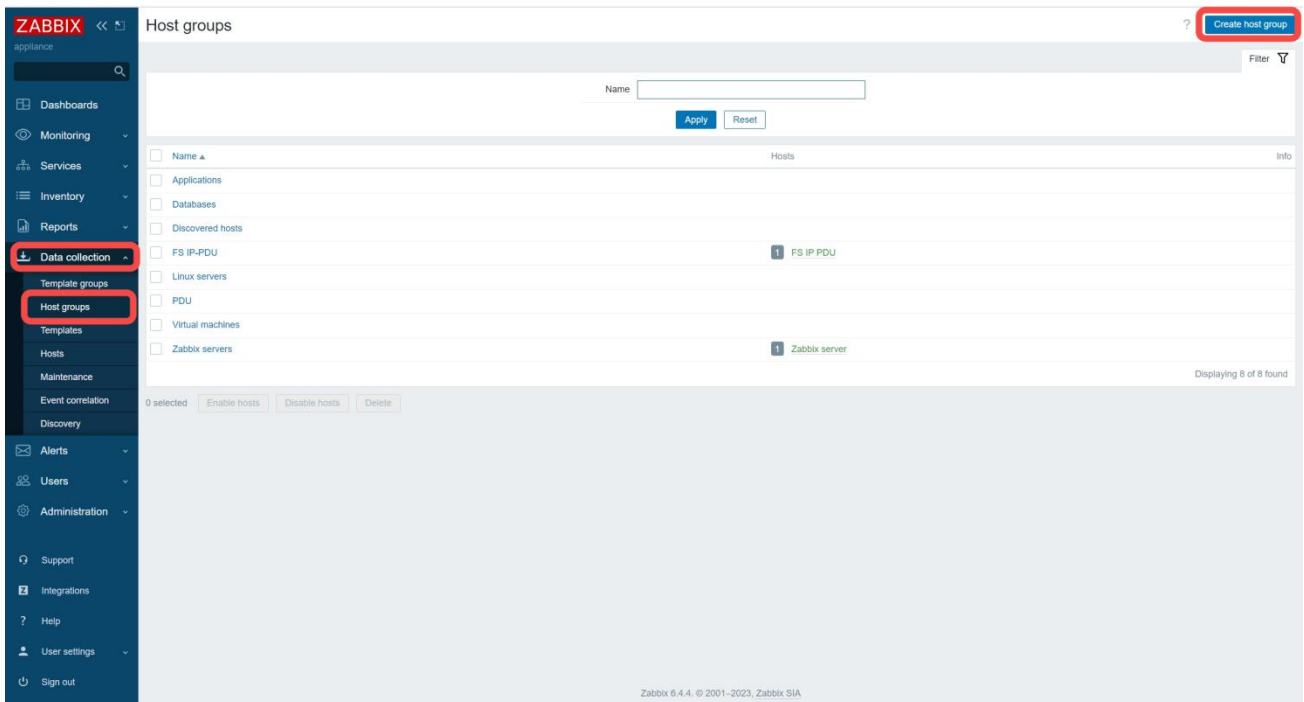


Then you can see the “FS MPDU” template that have been successfully imported in the template list after the import success is displayed.

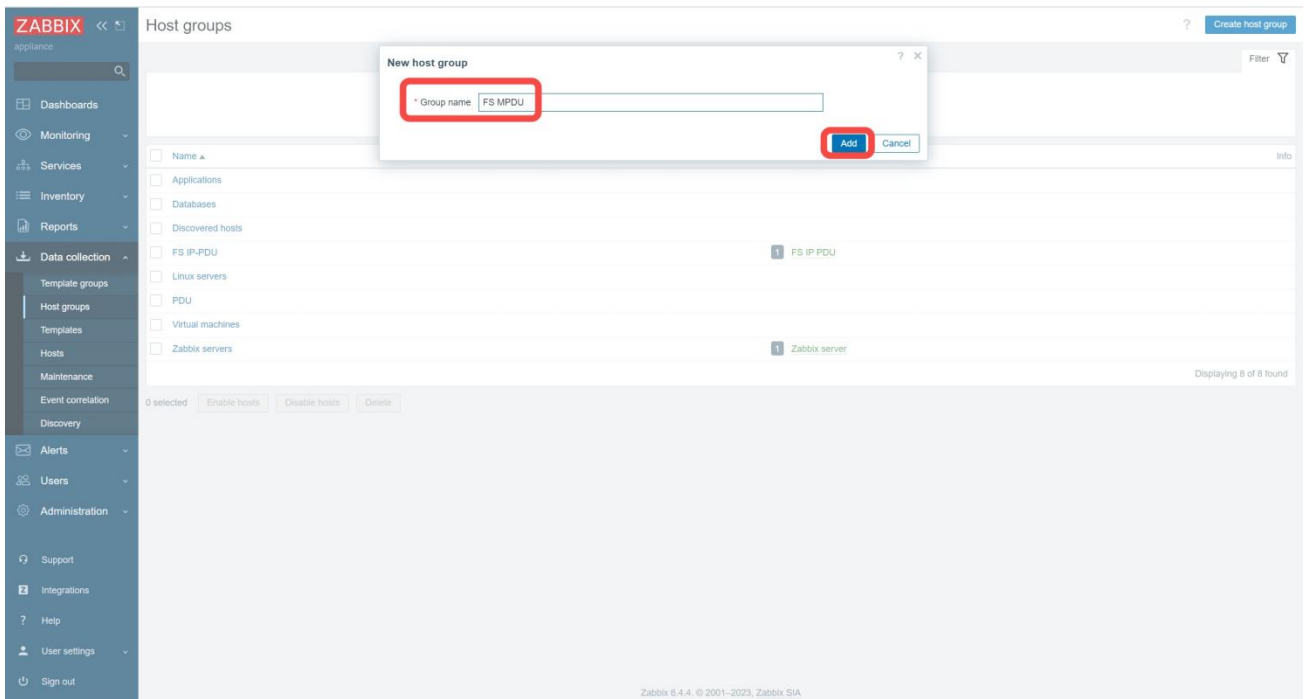


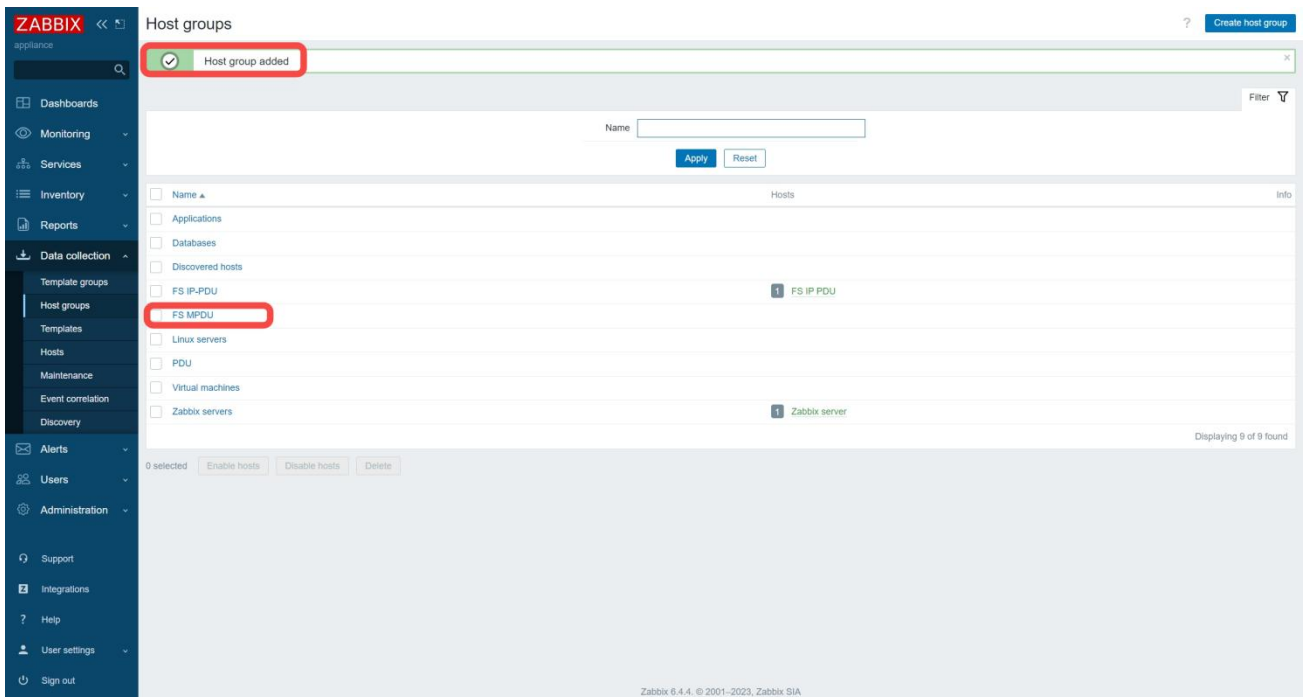
2.2.2 Create Host Groups

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



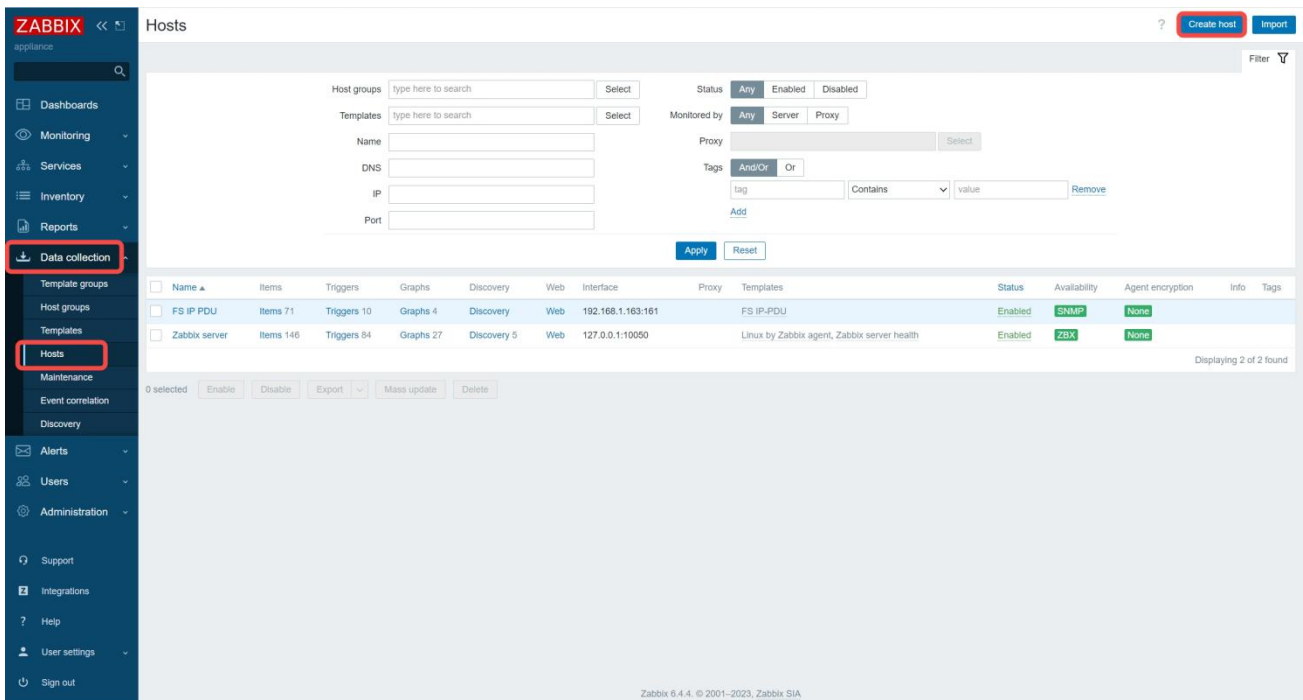
Step 2: Create a host group named 'FS MPDU' host group, then view the successfully created host group.



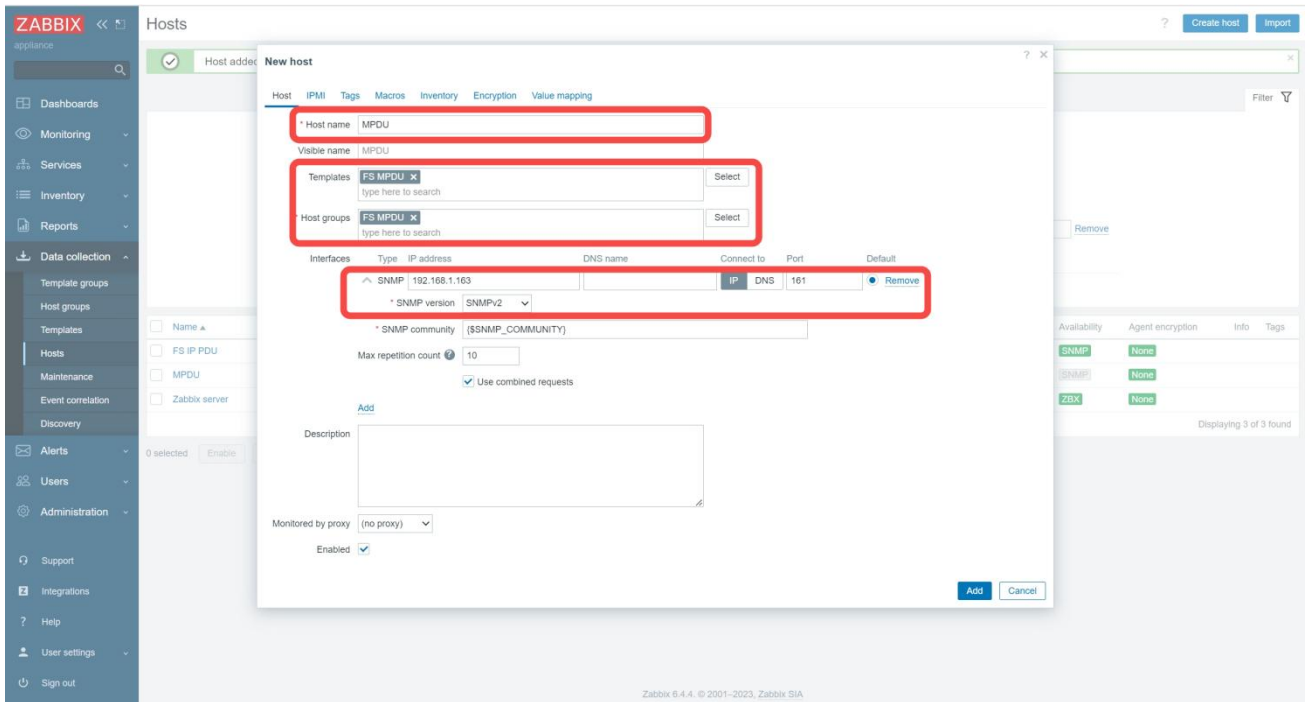


2.2.3 Create Hosts

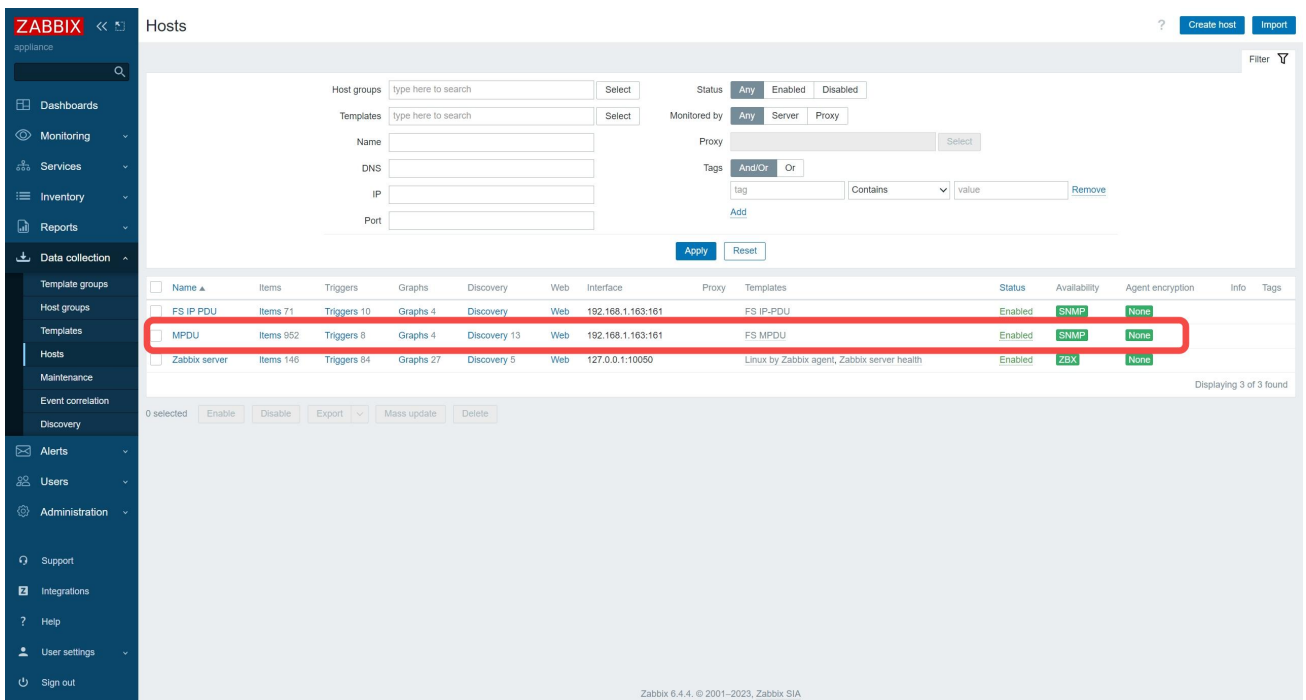
Step 1: Enter **Hosts** page under **Data collection**, click on the **Create Host** button in the upper right corner to create the host.



Step 2: Create a host named FS MPDU and link the "FS MPDU" Template and the "Host Group" that you can click "Select" in the box, 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.



Step 4: Wait a moment and the SNMP is up, which means that the switch is connected to the zabbix.

ZABBIX
Hosts

[Create host](#)
[Import](#)

Host groups [Select](#)

Templates [Select](#)

Name

DNS

IP

Port

Status Any Enabled Disabled

Monitored by Any Server Proxy

Proxy [Select](#)

Tags And/Or Or

[Remove](#)

[Add](#)

[Filter](#)

[Apply](#) [Reset](#)

<input type="checkbox"/>	Name	Items	Triggers	Graphs	Discovery	Web	Interface	Proxy	Templates	Status	Availability	Agent encryption	Info	Tags
<input type="checkbox"/>	FS IP PDU	Items 71	Triggers 10	Graphs 4	Discovery	Web	192.168.1.163:161		FS IP-PDU	Enabled	SNMP	None		
<input type="checkbox"/>	MPDU	Items 952	Triggers 8	Graphs 4	Discovery 13	Web	192.168.1.163:161		FS MPDU	Enabled	SNMP	None		
<input type="checkbox"/>	Zabbix server	Items 146	Triggers 84	Graphs 27	Discovery 5	Web	127.0.0.1:10050		Linux by Zabbix agent, Zabbix server health	Enabled	ZBX	None		

0 selected [Enable](#) [Disable](#) [Export](#) [Mass update](#) [Delete](#)

Displaying 3 of 3 found

Zabbix 6.4.4. © 2001–2023, Zabbix SIA

2.2.4 Monitoring PDU Data

Select FS MPDU Host groups and MPDU Hosts, you can view that Zabbix has monitored the relevant information and data of the MPDU.

The screenshot shows the Zabbix 'Latest data' page. The left sidebar has 'Monitoring' and 'Latest data' highlighted. The main area shows filters for 'Host groups' (FS MPDU) and 'Hosts' (MPDU). Below the filters, there are sections for TAGS and TAG VALUES. The TAG VALUES section lists various metrics like 'application', 'cpu', 'data-collector', etc. The bottom section is a table of monitored items.

Host	Name	Last check	Last value	Change	Tags	Info
Zabbix server	/: Filesystem is read-only	16s	0		component: storage filesystem: /	Graph
Zabbix server	/: Free inodes in %	16s	98.7916 %		component: storage filesystem: /	Graph
Zabbix server	/: Get filesystem data	16s	("fsname","option...		component: raw component: storage filesystem: /	History
Zabbix server	/: Space utilization	16s	27.4289 %		component: storage filesystem: /	Graph
Zabbix server	/: Total space	16s	3.99 GB		component: storage filesystem: /	Graph
Zabbix server	/: Used space	16s	1.09 GB		component: storage filesystem: /	Graph
Zabbix server	/boot: Filesystem is read-only	16s	0		component: storage filesystem: /boot	Graph

2.3 FAQ

2.3.1 Monitoring Host Failed

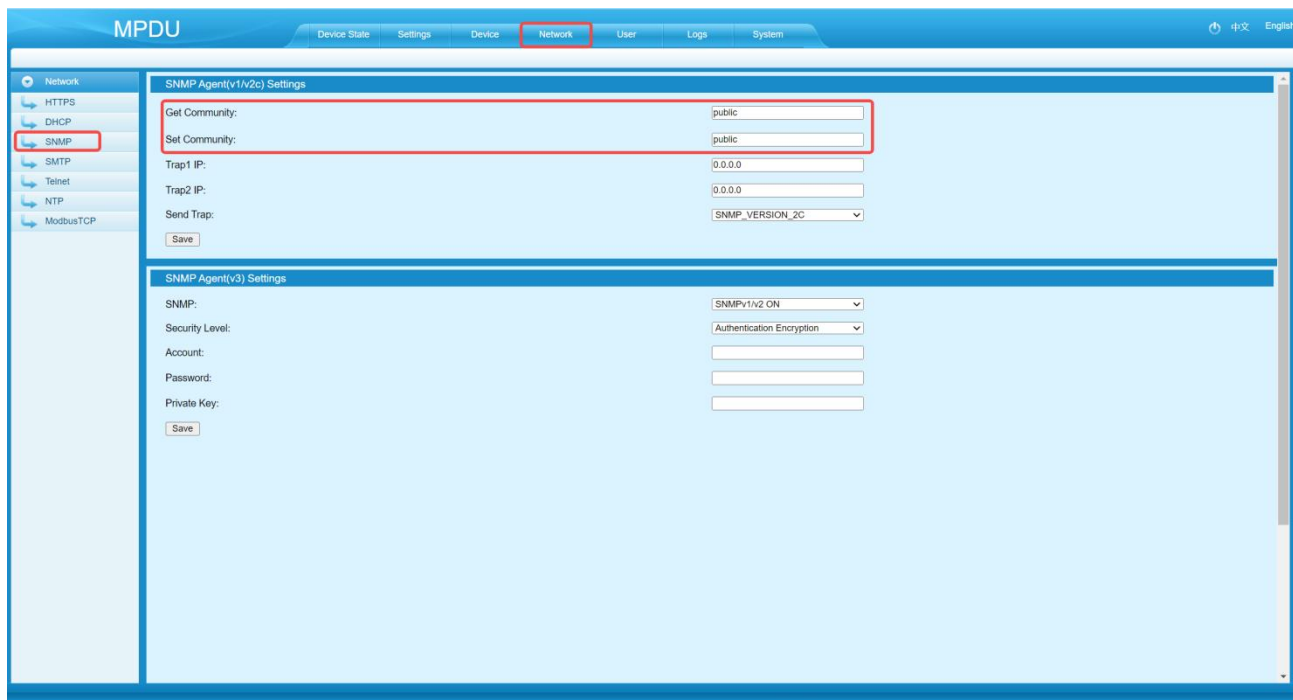
Due to the different SNMP community of the PDU, the PDU may not be monitored and managed by Zabbix, as shown in the following figure:

The screenshot shows the Zabbix 'Hosts' page. The 'Hosts' table lists three hosts: 'FS IP PDU', 'MPDU', and 'Zabbix server'. The 'MPDU' host is highlighted in blue and has a status of 'Not available'. A tooltip shows the error message: 'Not available: Timeout while connecting to *192.168.1.163:161*'. The error message is highlighted with a red box.

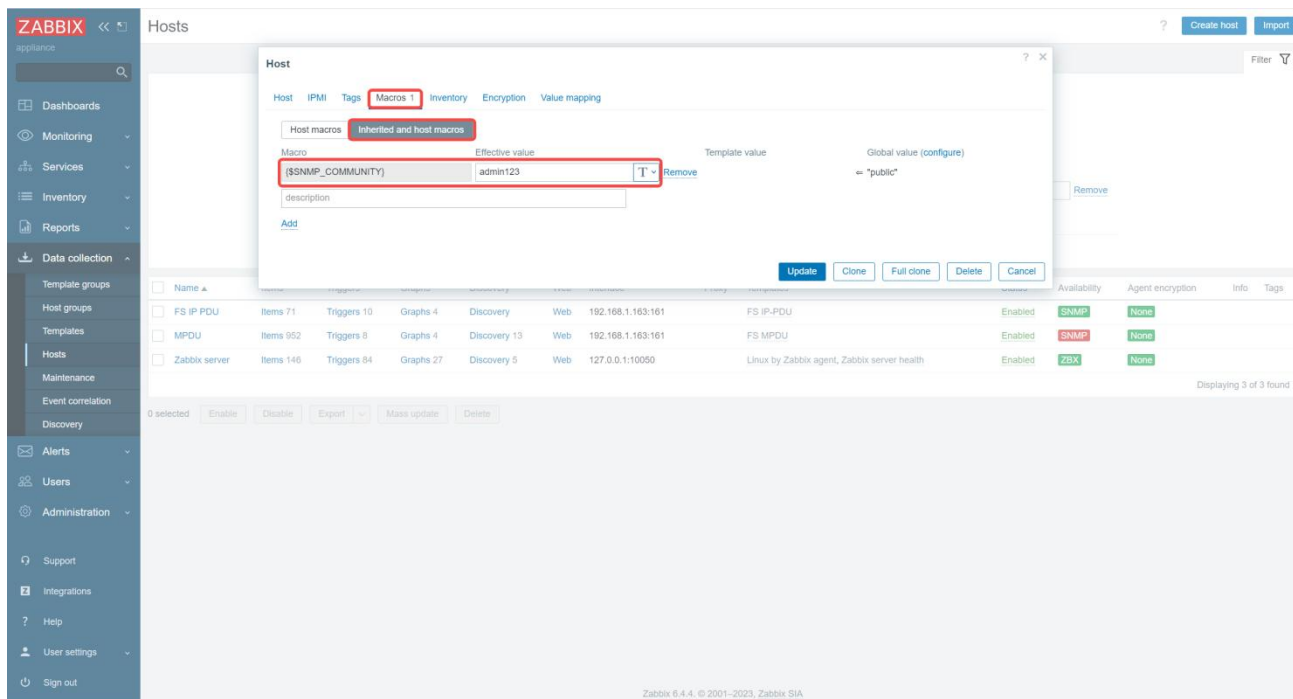
Name	Items	Triggers	Graphs	Discovery	Web	Interface	Proxy	Templates	Status	Availability	Agent encryption	Info	Tags
FS IP PDU	Items 71	Triggers 10	Graphs 4	Discovery	Web	192.168.1.163:161		FS IP-PDU	Enabled	SNMP	None		
MPDU	Items 952	Triggers 8	Graphs 4	Discovery 13	Web	192.168.1.163:161		FS MPDU	Enabled	SNMP	None		
Zabbix server	Items 146	Triggers 84	Graphs 27	Discovery 5	Web	127.0.0.1:10050		Linux by Zabbix					

The solution is as follows:

Step 1: View the community setting of MPDU.



Step 2: Check the host community in Zabbix, click "Host" -> "Macros" -> "Inherited and host macros", and discover that the community settings are different.



Step 3: Modify the host community in Zabbix and click "Update".

Host

Host macros **Macros 1** Inherited and host macros

Macro	Effective value	Template value	Global value (configure)
(\$SNMP_COMMUNITY)	public		= "public"

Buttons: Update, Clone, Full clone, Delete, Cancel

Name	Items	Triggers	Graphs	Discovery	Web	Interface	Proxy	Templates	Status	Availability	Agent encryption	Info	Tags
FS IP PDU	71	10	4		192.168.1.163:161			FS IP-PDU	Enabled	SNMP	None		
MPDU	952	8	4	13	192.168.1.163:161			FS MPDU	Enabled	SNMP	None		
Zabbix server	146	84	27	5	127.0.0.1:10050			Linux by Zabbix agent, Zabbix server health	Enabled	ZBX	None		

Step 4: Refresh the page and enable SNMP successfully

Hosts

Host updated

Name	Items	Triggers	Graphs	Discovery	Web	Interface	Proxy	Templates	Status	Availability	Agent encryption	Info	Tags
FS IP PDU	71	10	4		192.168.1.163:161			FS IP-PDU	Enabled	SNMP	None		
MPDU	952	8	4	13	192.168.1.163:161			FS MPDU	Enabled	SNMP	None		
Zabbix server	146	84	27	5	127.0.0.1:10050			Linux by Zabbix agent, Zabbix server health	Enabled	ZBX	None		