# Truenas Monitoring with Zabbix

### Enable SNMP on Truenas Host

- On your Truenas host navigate to **Services**.
- Locate the SNMP service and click the  $\blacksquare$  icon (Figure 1).

Services				TrueNAS CORE® © 2021
	Q Filter Service			
	Name	Running	Start Automatically	Actions
	OpenVPN Server			1
	Rsync	-		ř
	S.M.A.R.T.		~	i i
	\$3			P
	SMB	-	~	<u> </u>
	SNMP	-	V	1
	SSH	-	~	1
	TFTP			1
	UPS		~	1
	WebDAV	•		ř

#### Figure 1

• Take note of the **Community** value which by default should be set to **public** (**Figure 2**) and click the CANCEL button to go back to **Services**.

Services / SNMP		TrueNAS CO
	General Options	
	Location	
	Contact	0
	Community public	0
	SNMP v3 Options	
	SNMP v3 Support 🕜	
	Other Options	
	Auxiliary Parameters	
		<u>_</u> 20
	Expose zilstat via SNMP ⊘	
	Log Level Info	•@
	Enable Network Performance Statistics ⊘	
	SAVE CANCEL	

• Back in the **Services** page, on the **SNMP** service, ensure the **Start Automatically** is checked and slide the **Running** slider to the right so that it turns blue to indicate the service is running (**Figure 3**).

Services				TrueNAS CORE® © 2021
	Q Filter Service			
	Name	Running	Start Automatically	Actions
	OpenVPN Server			1
	Rsync		~	r
	S.M.A.R.T.	-	~	1
	S3	•		1
	SMB	-	~	1
	SNMP			P
	SSH	-	~	1
	TFTP	•	D	P
	UPS	•	~	1
	WebDAV	•		1

## Download the the FREENAS-MIB Definitions File from your Truenas Host

- On your Truenas host navigate to **Services**.
- Locate the **SSH** service and click the **Z** icon (**Figure 4**).

#### Figure 4

Services				TrueNAS CORE® © 2021 -
	Q Filter Service			
	Name	Running	Start Automatically	Actions
	OpenVPN Server			1
	Rsync			1
	S.M.A.R.T.	-	✓	1
	S3	•	D	P
	SMB	-	V	/
	SNMP	-	~	1
	SSH		×	1
	TFTP			1
	UPS		×	/ h
	WebDAV	•		1

• Place a checkmark on the Log in as **Root with Password** checkbox and click the **SAVE** button (**Figure 5**).

Services / SSH		X	TrueNAS CO
	General Options TOP Port 22 Construction Construction		
	SAVE CANCEL ADVANCED OPTIONS		

• Back in the **Services** page, on the **SSH** service, ensure the **Start Automatically** is checked and slide the **Running** slider to the left to stop the SSH service and then slide back to the right so that it turns blue to indicate the service is running (this ensures the new SSH settings we set take effect (**Figure 6**).

Services				TrueNAS CORE® © 2021 -
	Q Filter Service			
	Name	Running	Start Automatically	Actions
	OpenVPN Client			1
	OpenVPN Server	•		1
	Rsync			/
	S.M.A.R.T.			/
	S3			1
	SMB			1
	SNMP			/
	SSH			1
	TFTP			1
	UPS			1

#### Figure 6

 Using <u>Winscp</u> or any tool of your choice, login to your Truenas host using the SCP protocol, navigate to /usr/local/share/snmp/mibs/ and download FREENAS-MIB.txt to your computer.

# Copy the the FREENAS-MIB Definitions File to your Zabbix Server

- Using <u>Winscp</u> or any tool of your choice, login to your Zabbix Server host using the SCP protocol and copy the FREENAS-MIB.txt file you downloaded from your Truenas host above to the /var/lib/zabbix/mibs/ directory. If you have deployed Zabbix server on docker, the directory would be /path-to-zabbix-docker/zbx\_env/var/lib/zabbix/mibs/.
- Restart your Zabbix server.

## Import the SNMP Freenas 11 Template into Zabbix Server

- Download the <u>template\_freenas\_11\_snmp.xml</u> template from this article or download it from the Zabbix Community Templates Github page.
- On your Zabbix server navigate to **Configuration ---> Templates --> Import.**

- On the **Import** page, click the **Choose File** button and navigate to the location of the downloaded **template\_freenas\_11\_snmp.xml** file and click **Open**.
- Back to the **Import** page, click the **Import** button (**Figure 7**).

#### Figure 7

Import					
	* Import file	Choose File temp	late_freenas_11 <sub>-</sub>	_snmp.xml	
	Rules	Up Groups	date existing Cr	eate new Delet	e missing
		Hosts Templates			
		Template screens	▶ ☑		
		Applications			
		Items Discovery rules	× •		
		Triggers Graphs			
		Web scenarios Screens			
		Maps			
		images Media types			
	Ľ	Value mappings Import Cance			

### Add Truenas Host to Zabbix server

- On your Zabbix server navigate to **Configuration** ---> **Host** ---> **Create Host**.
- In the Host name field enter the name of your Truenas host
- Set the **Groups** field to a an existing group or create a new one.
- In the Interfaces section add the IP address of your Truenas host in the Agent IP address field
- Click the Add link and in the resultant menu select the SNMP option (Figure 8).

Hosts					
Host Templates IPMI Tags Ma					
* Host name	truenas				
Visible name					
* Groups	saninas 🗙	Select			
	type here to search				
* Interfaces	Type IP address DNS name				
	Agent 192.168.1.100	IP	DNS	10050	Remove
	Add				
Description	Agent				
	SNMP				
	ЈМХ				
	ІРМІ				
Monitored by proxy	(no proxy) 🗸				
Enabled					
	Add Cancel				

- In the **SNMP** field enter the IP address of your Truenas host again.
- Ensure the **SNMP version** field is set to **SNMPv2.**
- In the **SNMP community** field enter the community value you got from the Truenas SNMP service above (Default: **public**) (**Figure 9**).

Hosts			
Host Templates IPMI Tags Mad			
* Host name Visible name	truenas		
► * Groups	SAN/NAS × type here to search	Select	
* Interfaces	Type IP address D Agent 192.168.1.100	INS name Connect to	Port Default
	SNMP 192.168.1.100  SNMP version SNMPv2  SNMP community public Use bulk requests	IP DNS	161   Remove
Description			
Monitored by proxy	(no proxy) 🗸		
Enabled	Add Cancel		

• Click the **Templates** link on top of the screen, in the **Link new templates** section, search and select the **SNMP FreeNAS 11** template you imported earlier and then click the **Update** button (**Figure 10**).

Figure 10	
-----------	--

Hosts				
All hosts / ec-truenas Enabled ZBX S	NMP JMX IPMI Applications 8	Items 198 Triggers 33	Graphs 49 Discovery	rules 5 Web scenarios
Host Templates IPMI Tags Mad	ros Inventory Encryption			
Linked templates		Action		
Link new templates	SNMP FreeNAS 11 ×			Select
	Update Clone Full cl	lone Delete Canc		

 Navigate to Monitoring --> Hosts, locate the Truenas host you just added and click the Latest data link and wait for data to start appearing. It may take a few minutes. Revision #5 Created 13 June 2022 16:50:09 by Dino Edwards Updated 13 June 2022 19:24:21 by Dino Edwards