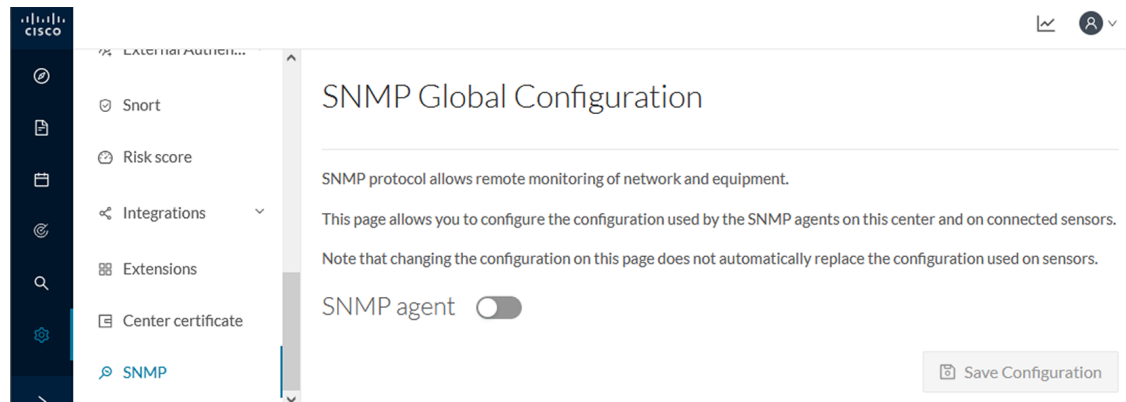# SNMP

SNMP Protocol in CyberVision is used for remote monitoring purposes.

Supported versions are:

- SNMP V2C
- SNMP V3

Older versions are not supported.

☞

Important   It is highly recommended to use version 3 of the SNMP protocol. Version 2c is available due to a large number of infrastructures still using it. However, take into account that risks in terms of security are higher.

Snmp information:

- CPU % per core
- Load 0 to 100 (combination of CPU and I/O loads)
- RAM kilobytes
- Swap kilobytes
- Traffic for all physical interfaces (nb bytes in and out/interface (since the snmp service startup))
- Data storage (% - 250G)

- Packets stats (packets/sec/int)

Configure SNMP

This section explains how to configure SNMP on a CyberVision Center.

Step 1   In Cisco Cyber Vision, navigate to Admin > SNMP.

Step 2   Toggle the SNMP agent button.

A configuration menu appears.

SNMP Global Configuration

SNMP protocol allows remote monitoring of network and equipment.

This page allows you to configure the configuration used by the SNMP agents on this center and on connected sensors.

Note that changing the configuration on this page does not automatically replace the configuration used on sensors.

SNMP agent 🔵⬤

Configuration

Monitoring hosts (IPv4):

Version: ⦿ 3   ◯ 2c

Security type: NoAuth ⌄

Username: ics

Step 3   In the Monitoring hosts (IPv4) field, fill in the IP address of the Monitoring host.

Step 4   Select a version:

- Version 3
- Version 2c

Version:	⦿ 3 ○ 2c
Security type:	NoAuth ∨
Username:	ics

Note For security reasons, it is recommended to use SNMP version 3.

a) **Version 3**

Select a security type:

• NoAuth: Only a username is required. No authentication password required.

| Security type: | NoAuth ∨ |
| Username: | ics |

Add the username that will be used for the SNMP authentication. "ics" is used by default.

• Auth with NoPriv : A username and an encrypted password are required.

Security type:	Auth ∨	NoPriv ∨
Username:	ics	
Authentication:	SHA ∨	password ⦸

Add the username that will be used for the SNMP authentication. "ics" is used by default.

Add the Hash algorithm needed and its password. It must be at least 8 characters long.

• Auth with Priv: Only the AES encryption is available. A username, an encrypted password, and an AES encryption are required.

Security type:	Auth ∨	Priv ∨
Username:	ics	
Authentication:	SHA ∨	password ⦸
Privacy:	AES ∨	password ⦸

Add the username that will be used for the SNMP authentication. "ics" is used by default.

Add the Hash algorithm needed and its password. It must be at least 8 characters long.

Add the AES password. It must be at least 8 characters long.

b) **Version 2c**

Add the community string for the Center to communicate with the monitoring host.

Version: ○ 3 ● 2c

ⓘ For security reasons, we recommend using version 3 of the SNMP protocol

Community: public

Step 5   Toggle the Trap button.

Trap ◯

The following configuration menu appears:

Trap ⬤

Engine ID: [   ]

☐ Type: CPU   Rate: 5s   Threshold: 80%

☐ Type: RAM   Rate: 5s   Threshold: 80%

Step 6   Setup traps to be delivered.

Trap ⬤

Engine ID: 1234

☑ Type: CPU   Rate: 5s   Threshold: 80%

☑ Type: RAM   Rate: 5s   Threshold: 80%

a)   If SNMP v3 has been selected, the Engine ID field (i.e. the Center id) is displayed so you can customize it.
b)   Select and set the CPU and memory rate limit and threshold according to your needs.

Step 7   Click Save Configuration.

SNMP MIB

Table 1:

MIB	OID prefix	Description
MIB-2	.1.3.6.1.2.1.1	System

MIB	OID prefix	Description
IF-MIB	.1.3.6.1.2.1.2.2.1.1	All physical interfaces
IF-MIB	.1.3.6.1.2.1.31.1.1	All physical interfaces
HOST-RESOURCES-MIB	.1.3.6.1.2.1.25.1	System
HOST-RESOURCES-MIB	.1.3.6.1.2.1.25.2.3	Storage
HOST-RESOURCES-MIB	.1.3.6.1.2.1.25.3.3	CPU
HOST-RESOURCES-MIB	.1.3.6.1.2.1.25.3.6	Disk
UCD-SNMP-MIB	.1.3.6.1.4.1.2021.4	Memory
UCD-SNMP-MIB	.1.3.6.1.4.1.2021.9	Disk
UCD-SNMP-MIB	.1.3.6.1.4.1.2021.10	Load
UCD-SNMP-MIB	.1.3.6.1.4.1.2021.11	CPU
UCD-DISKIO-MIB	.1.3.6.1.4.1.2021.13.15.1	Disk IO