

How To Monitor AIX Using SNMP With Nagios XI 5

Purpose

This document describes how to monitor AIX machines with Nagios XI using SNMP. SNMP is an “agentless” method of monitoring network devices and servers and is often preferable to installing dedicated agents on target machines.

If you are monitoring AIX using SNMP with Nagios XI 2024, see [Monitoring AIX using SNMP 2024](#).

Overview

This documentation will allow you to monitor AIX via SNMP using the Linux SNMP wizard. While AIX is not technically Linux, the monitoring configurations created using the Linux SNMP wizard work just the same.

Before you can monitor a AIX machine using SNMP, you'll need to configure it first. This documentation will explain how to configure AIX with SNMP v2c.

The steps in this documentation will use the community string of `public` as an example. After this an example will be provided that shows you how to change the community string.

It is assumed that you know how to edit operating system configuration files on your AIX server.

Obtain SNMP Configuration File

Nagios Enterprises have made available an SNMP configuration file that exposes only the required SNMP OID's to the Nagios XI server. Download this configuration file using this [link](#):

Implement SNMP Configuration File

Once you've downloaded the configuration file, open it in a text editor. You will need to copy the contents of the file and paste it into the `/etc/snmpdv3.conf` file on the AIX server, replacing the original contents.

The next step is to restart the SNMP daemon on the AIX server. These commands require the name of the community string, `public` is being used in this example.

To stop the daemons, execute the following as root:

```
stopsrc -s aixmibd
stopsrc -s hostmibd
stopsrc -s snmpmibd
stopsrc -s snmpd
```

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To start the daemons, execute the following:

```
startsrc -s aixmibd -a "-c public"
startsrc -s hostmibd -a "-c public"
startsrc -s snmpmibd -a "-c public"
startsrc -s snmpd
```

Change SNMP Community

It's advisable to change the SNMP community from the default of `public`, this example is going to change the community string to `Str0ngC0mmunity`. You will need to edit the `/etc/snmpdv3.conf` file on the AIX server and find the following lines:

```
VACM_GROUP group1 SNMPv1 public -
COMMUNITY public public noAuthNoPriv 0.0.0.0 0.0.0.0 -
VACM_GROUP director_group SNMPv2c public -
```

Change the lines with the new community string:

```
VACM_GROUP group1 SNMPv1 Str0ngC0mmunity -
COMMUNITY Str0ngC0mmunity Str0ngC0mmunity noAuthNoPriv 0.0.0.0
0.0.0.0
VACM_GROUP director_group SNMPv2c Str0ngC0mmunity -
```

You then need to stop the daemons:

```
stopsrc -s aixmibd
stopsrc -s hostmibd
stopsrc -s snmpmibd
stopsrc -s snmpd
```

To start the daemons, execute the following commands using the new community string:

```
startsrc -s aixmibd -a "-c Str0ngC0mmunity"
startsrc -s hostmibd -a "-c Str0ngC0mmunity"
startsrc -s snmpmibd -a "-c Str0ngC0mmunity"
startsrc -s snmpd
```

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Testing SNMP Communication

Before you continue, you'll need to make sure that the Nagios XI server can communicate with the remote AIX server using SNMP.

To do this, establish a terminal session to your Nagios XI server and execute the following commands to run a test query. The example here is targeting the AIX server 10.25.13.38 and using the community string of Str0ngC0mmunity:

```
cd /usr/local/nagios/libexec
./check_snmp_storage.pl -H 10.25.13.37 -C Str0ngC0mmunity -m "^/$" -w 2 -c 4
```

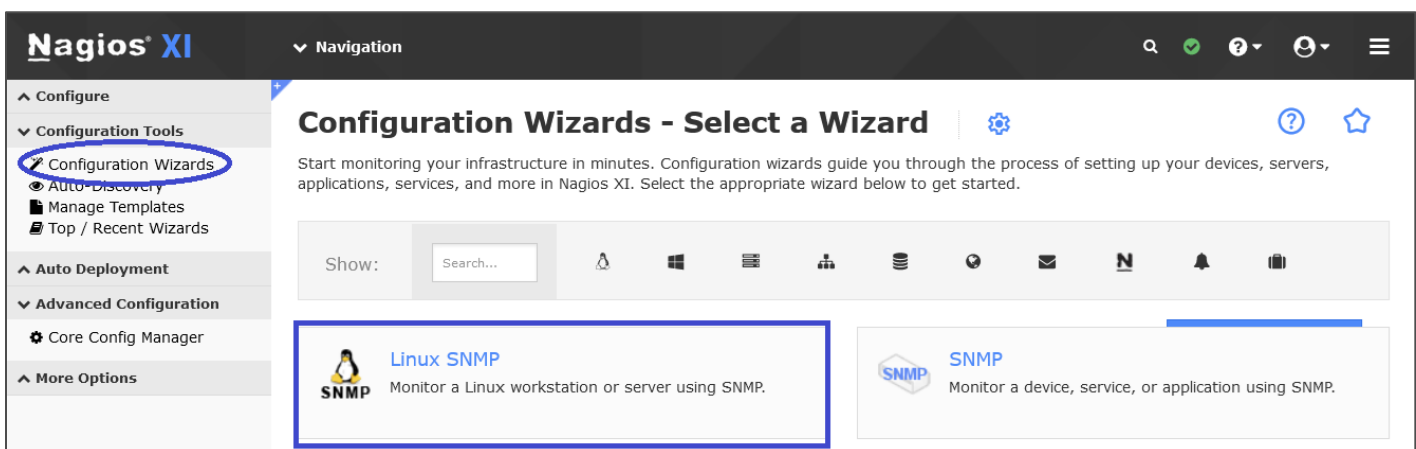
This check should return disk usage information from the remote AIX server, something like:

```
/: 11%used(1550MB/13892MB) (>4%) : CRITICAL
```

Important: If the command doesn't return data, it likely means that SNMP is not configured properly, or that possibly a firewall issue exists. In that case, go through the steps in the previous section to ensure everything is configured properly.

Using The Linux SNMP Wizard

To begin using the Linux SNMP wizard navigate via the top menu bar to **Configure > Configuration Wizards**, and select the **Linux SNMP** wizard. In the following screenshot you can see how the search field allows you to quickly find a wizard.



On Step 1 you will be asked to supply the **address** of the server you will monitor via SNMP.

You will also have to provide the appropriate **SNMP Settings**.

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Linux SNMP Configuration Wizard Step 1

Linux Machine Information

* IP Address ⓘ
10.25.13.37

SNMP Settings
Specify the settings used to monitor the Linux machine via SNMP.

* SNMP Version ⓘ
2c

* SNMP Port ⓘ
161

SNMP Version Settings

* SNMP Community ⓘ
public

Next > Cancel

Click **Next** to progress to **Step 2**.

When you proceed to **Step 2**, the wizard will perform an SNMP query against the AIX server to get a list of the available disks and processes.

Select the server metrics you wish to monitor and adjust the thresholds as required.

Linux SNMP Configuration Wizard Step 2

Linux Machine Details

IP Address
192.168.157.129

Host Name ⓘ
192.168.157.129

Legacy Performance Data Order ⓘ

Server Metrics
Specify which services you would like to monitor for the Linux machine.

Ping ⓘ

CPU ⓘ ▲ 80 % ● 90 %

Physical Memory Usage ⓘ ▲ 80 % ● 90 %

Swap Usage ⓘ ▲ 5 % ● 10 %

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With the **Disk Usage** checks, double click a disk in the **Scanned Disk List** to add it to the **Drive** field. Adjust the thresholds as required.

Disk Usage ⓘ

The SNMP wizard detected 7 disks and mounts on 192.168.157.129

Drive	Warning	Critical	Scanned Disk List (double click to add)
<input type="text"/>	80 %	95 %	<input type="text" value="/
/boot
/dev/shm
/run
/run/lock
/run/snapd/ns
/run/user/1001"/>
<input type="text"/>	80 %	95 %	
<input type="text"/>	80 %	95 %	
<input type="text"/>	80 %	95 %	
<input type="text"/>	80 %	95 %	

[Add Row](#) | [Delete Row](#)

With the **Processes** checks, double click a process in the **Scanned Process List** to add it to the Linux Process field. Adjust the thresholds as required.

Processes

Specify any processes that should be monitored to ensure they're running.

Note: Process names are case-sensitive. Click on Tips for more information about creating a process service

[Tips ^](#)

The SNMP wizard detected 257 processes on 192.168.157.129

Linux Process	Display Name	Warning Count	Critical Count	Scanned Process List
<input type="checkbox"/>	<input type="text"/>			<input type="text" value="(sd-pam)
agetty
apache2
cpuhp/0
cpuhp/1
cpuhp/2
cpuhp/3"/>
<input type="checkbox"/>	<input type="text"/>			
<input type="checkbox"/>	<input type="text"/>			
<input type="checkbox"/>	<input type="text"/>			
<input type="checkbox"/>	<input type="text"/>			

[Add Selected](#) | [Select All](#)

[Add Row](#) | [Delete Row](#)

[< Back](#) | [Next >](#) | [Cancel](#)

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When you enter one number in each of the **Warning** and **Critical** fields, a WARNING alert will be generated when the amount of processes is below the number specified in the Warning field. A CRITICAL alert will be generated when the number of processes is equal to or below the number specified in the Critical field.

Tip: When you enter two numbers (delimited by a comma), you are specifying a range that is acceptable for the number of processes to be running. In the instance of the `sshd` in the example screenshot, a WARNING alert will be generated if there are (1 or less) **or** (3 or more) instances of `sshd` running. A CRITICAL alert will be generated if there is (1 or less) **or** (4 or more) instances running.

Once you've finished selecting all the items you wish to monitor click **Next** and then complete the wizard by choosing the required options in **Step 3 - Step 5**.

To finish up, click on **Finish** in the final step of the wizard. This will create the new hosts and services and begin monitoring. Once the wizard applies the configuration, click the **View status details for xxxxx** link to see the new host and services that were created.

Service Status for this Host						Last updated: 2024-12-03 02:12:22
Service	Status	Duration	Attempt	Last Check	Status Information	
/ Disk Usage	Ok	8d 23h 27m 46s	1/5	2024-12-03 02:09:45	/: 34%used(16859MB/49077MB) (<80%) : OK	
CPU Usage	Ok	3d 3h 42m 34s	1/5	2024-12-03 02:08:33	8 CPU, average load 6.8% < 80% : OK	
Memory Usage	Ok	8d 23h 26m 0s	1/5	2024-12-03 02:08:59	Memory buffers: 4%used(303MB/7894MB) (<80%) : OK	
Ping	Ok	4d 22h 19m 42s	1/5	2024-12-03 02:09:29	OK - 192.168.157.129: rta 0.036ms lost 0%	
SSH	Critical	19h 41m 58s	5/5	2024-12-03 02:10:21	1 process named sshd (<= 1 : CRITICAL) (<= 2):OK	

More Information

[Using Configuration Wizards](#)

Finishing Up

This completes the documentation on monitoring AIX using SNMP with Nagios XI.

If you have additional questions or other support-related questions, please visit us at our Nagios Support Forum, Nagios Knowledge Base, or Nagios Library:

[Visit Nagios Support Forum](#)

[Visit Nagios Knowledge Base](#)

[Visit Nagios Library](#)