

# Testing SNMP Connectivity from the NMIS Server with snmpwalk

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## Introduction

NMIS is heavily dependant on [SNMP](#) for collecting information. If you are having some sort of SNMP configuration or connectivity issues, one of the easiest things to do is to run an SNMPWALK command from the Unix shell.

## Using Shell Access to do an SNMPWALK

To do this, SSH to your NMIS server, it is important to do this from the NMIS server itself because it ensures that any access control you have from Firewalls or other security controls is part of the testing.

The command to test SNMP with is:

Test SNMP V2C first.

```
snmpwalk -v 2c -c COMMUNITY_STRING IPADDRESS_HOST system
```

If SNMPv2c does not work, try SNMP v1, we have found there are some vendors still not supporting SNMP v1

```
snmpwalk -v 1 -c COMMUNITY_STRING IPADDRESS_HOST system
```

The command result for something working would look like this:

```
[keiths@nmisdev64 kaos]$ snmpwalk -v 2c -c GOODCOMMUNITY kaos system
SNMPv2-MIB::sysDescr.0 = STRING: Hardware: Intel64 Family 6 Model 15 Stepping 6 AT/AT COMPATIBLE - Software:
Windows Version 6.1 (Build 7601 Multiprocessor Free)
SNMPv2-MIB::sysObjectID.0 = OID: SNMPv2-SMI::enterprises.311.1.1.3.1.1
DISMAN-EVENT-MIB::sysUpTimeInstance = Timeticks: (40604629) 4 days, 16:47:26.29
SNMPv2-MIB::sysContact.0 = STRING: dc_admin@opmantek.com
SNMPv2-MIB::sysName.0 = STRING: kaos
SNMPv2-MIB::sysLocation.0 = STRING: Head Office
SNMPv2-MIB::sysServices.0 = INTEGER: 79
```

The command result for something NOT working would look like this:

```
[keiths@nmisdev64 kaos]$ snmpwalk -v 2c -c BADCOMMUNITY kaos system
Timeout: No Response from kaos
```

If you are using SNMPv3, have a look at the [WIKI article on SNMPv3 and Cisco Devices](#).

## Using the NMIS GUI to do SNMP WALK

### Access the SNMP Tool

Access the SNMP Tool from the menu "Network Tools -> SNMP Tool"



Metrics 🔍 🔄 Mon 12:16 ✕

**8Hr Summary**

▲ Metric 99%

- Ping
- Traceroute
- SNMP Tool**
- IP Tools ▶

### Select a Node and MIB to Check

Select the node you wish to test, and you can select a MIB from the list or enter an OID or mib name in the box.

SNMP Tool 🔍 🔄 Mon 12:17 ✕

Select node  Select name  old

### Review the Results

See what happened.

SNMP Tool 🔍 🔄 ⏪ Mon 12:17 ✕

Select node  Select name  old

result of query, max entries of 100 reached

ifindex.1	1.3.6.1.2.1.2.2.1.1.1	1
ifindex.2	1.3.6.1.2.1.2.2.1.1.2	2
ifindex.3	1.3.6.1.2.1.2.2.1.1.3	3
ifindex.4	1.3.6.1.2.1.2.2.1.1.4	4
ifindex.6	1.3.6.1.2.1.2.2.1.1.6	6
ifindex.7	1.3.6.1.2.1.2.2.1.1.7	7
ifindex.8	1.3.6.1.2.1.2.2.1.1.8	8
ifindex.9	1.3.6.1.2.1.2.2.1.1.9	9
ifindex.10	1.3.6.1.2.1.2.2.1.1.10	10
ifindex.11	1.3.6.1.2.1.2.2.1.1.11	11
ifDescr.1	1.3.6.1.2.1.2.2.1.2.1	FastEthernet0/0
ifDescr.2	1.3.6.1.2.1.2.2.1.2.2	FastEthernet0/1
ifDescr.3	1.3.6.1.2.1.2.2.1.2.3	Serial0/0/0
ifDescr.4	1.3.6.1.2.1.2.2.1.2.4	Null0
ifDescr.6	1.3.6.1.2.1.2.2.1.2.6	Loopback0
ifDescr.7	1.3.6.1.2.1.2.2.1.2.7	Tunnel0
ifDescr.8	1.3.6.1.2.1.2.2.1.2.8	Dialer1
ifDescr.9	1.3.6.1.2.1.2.2.1.2.9	Dialer1194
ifDescr.10	1.3.6.1.2.1.2.2.1.2.10	Virtual-Access1
ifDescr.11	1.3.6.1.2.1.2.2.1.2.11	Virtual-Access2
ifType.1	1.3.6.1.2.1.2.2.1.3.1	6
ifType.2	1.3.6.1.2.1.2.2.1.3.2	6
ifType.3	1.3.6.1.2.1.2.2.1.3.3	22