To poll the SNMP agent and retrieve the values of a given OID (object identifier), or the values of an SNMP table, thereby enabling the operator to easily identify the source of the problem or just be informed of the status of the monitored device/parameter.

Many applications rely on middleware instrumented with SNMP (Simple Network Management Protocol) agents, which contain managed objects that provide information related to the current state of its operation. These objects are arranged in a Management Information Base (MIB). SNMP is an Application Layer protocol that allows external tools to communicate with the agent and read the values of the objects.

Testing SNMP polling

After you configure SNMP, you should verify that you can poll the cluster.

To poll a cluster, you need to use a third-party command such as snmpwalk.

Step

1. Send an SNMP command to poll the cluster from a different cluster.

Example

For systems running SNMPv1, use the CLI command

snmpwalk -v version -c community_string ip_address_or_host_name system

to discover the contents of the MIB (Management Information Base).

In this example, the IP address of the cluster management LIF that you are polling is

10.11.12.123. The command displays the requested information from the MIB:

```
C:\Windows\System32>snmpwalk -v 1 -c public 10.11.12.123 system

SNMPv1-MIB::sysDescr.0 = STRING: NetApp Release 8.3.0
            Cluster-Mode: Tue Apr 22 16:24:48 EDT 2014
SNMPv1-MIB::sysObjectID.0 = OID: SNMPv1-SMI::enterprises.789.2.5
DISMAN-EVENT-MIB::sysUpTimeInstance = Timeticks: (162644448) 18 days,
19:47:24.48
SNMPv1-MIB::sysContact.0 = STRING:
SNMPv1-MIB::sysName.0 = STRING: systemname.testlabs.com
SNMPv1-MIB::sysLocation.0 = STRING: Floor 2 Row B Cab 2
SNMPv1-MIB::sysServices.0 = INTEGER: 72
```

Example

For systems running SNMPv2c, use the CLI command

snmpwalk -v version -c community_string ip_address_or_host_name system

to discover the contents of the MIB (Management Information Base).

In this example, the IP address of the cluster management LIF that you are polling is

10.11.12.123. The command displays the requested information from the MIB:

```
C:\Windows\System32>snmpwalk -v 2c -c public 10.11.12.123 system

SNMPv2-MIB::sysDescr.0 = STRING: NetApp Release 8.3.0
           Cluster-Mode: Tue Apr 22 16:24:48 EDT 2014
SNMPv2-MIB::sysObjectID.0 = OID: SNMPv2-SMI::enterprises.789.2.5
DISMAN-EVENT-MIB::sysUpTimeInstance = Timeticks: (162635772) 18 days,
19:45:57.72
SNMPv2-MIB::sysContact.0 = STRING:
SNMPv2-MIB::sysName.0 = STRING: systemname.testlabs.com
SNMPv2-MIB::sysLocation.0 = STRING: Floor 2 Row B Cab 2
SNMPv2-MIB::sysServices.0 = INTEGER: 72
```

Example

For systems running SNMPv3, use the CLI command

snmpwalk -v 3 -a MD5 or SHA -l authnopriv -u username -A password

ip_address_or_host_name system

to discover the contents of the MIB (Management Information Base).

In this example, the IP address of the cluster management LIF that you are polling is

10.11.12.123. The command displays the requested information from the MIB:

```
C:\Windows\System32>snmpwalk -v 3 -a MD5 -l authnopriv -u snmpv3
       -a password123 10.11.12.123 system

SNMPv3-MIB::sysDescr.0 = STRING: NetApp Release 8.3.0
       Cluster-Mode: Tue Apr 22 16:24:48 EDT 2014
SNMPv3-MIB::sysObjectID.0 = OID: SNMPv3-SMI::enterprises.789.2.5
DISMAN-EVENT-MIB::sysUpTimeInstance = Timeticks: (162666569) 18 days,
19:51:05.69
SNMPv3-MIB::sysContact.0 = STRING:
SNMPv3-MIB::sysName.0 = STRING: systemname.testlabs.com
SNMPv3-MIB::sysLocation.0 = STRING: Floor 2 Row B Cab 2
SNMPv3-MIB::sysServices.0 = INTEGER: 72
```