

Scripts to quickly assess ICMP
polling targets

IBM Middleware User Community
Ask the Experts Series

Ken Stone
Senior Software Engineer

Agenda

Review PMR relevance for this topic
Existing troubleshooting/must gather
Review ICMP polling exception scripts
Test this today!
Follow-up on DWA

PMR relevance:

- Frequent pmrs for the status of a single IP address and ICMP polling
- GUI access?
- Can collect tcpdump
- Could quickly assess the situation.

Current troubleshooting

- Mustgather –p would provide the monitors.current
- Individual monitors.current, extract ICMP and IP
- Is the tcpdump necessary
- Confirm policy is enabled itnm_poller.pl

seeds.txt

```
[root@ncserver scripts]# cat seeds.txt
172.31.230.88
172.31.230.129
172.31.230.237
9.9.9.9
10.10.10.10
172.30.232.54
172.31.230.211
172.30.232.114
[root@ncserver scripts]#
```

ICMP polling exception scripts

- \$PRECISION_HOME/scripts/perl/scripts
- Create a seed file (previous slide seeds.txt)
- \$PRECISION_HOME/bin/ncp_perl ncp_ping_poller_snapshot.pl -domain NCOMS411
- \$PRECISION_HOME/bin/ncp_perl ncp_upload_expected_ips.pl -domain NCOMS411 -file seeds.txt
- \$PRECISION_HOME/bin/ncp_perl ncp_polling_exceptions.pl -domain NCOMS411

Demo!

- Slides after this one are examples in the presentation in case you don't have access to the demo.

Review exception output examples 1

```
$PRECISION_HOME/bin/ncp_perl ncp_polling_exceptions.pl -domain NCOMS411  
IBM Tivoli Network Manager Monitoring Status
```

```
=====
```

```
SUMMARY  
UNDISCOVERED
```

```
=====
```

```
List of IP addresses from the reference list that are not in the management database.
```

```
+-----+  
| IP Address |  
+-----+  
| 9.9.9.9   |  
+-----+
```


Review exception output examples 2

```
$PRECISION_HOME/bin/ncp_perl ncp_polling_exceptions.pl -domain NCOMS411  
IBM Tivoli Network Manager Monitoring Status
```

```
=====
```

```
OUT OF SCOPE
```

```
=====
```

```
+-----+-----+-----+  
| IP Address | Hostname           | AOC Class |  
+-----+-----+-----+  
| 10.10.10.10 | cat3560a.test.lab | CiscoCat35xx |  
  
| 172.31.230.211 | 172.31.230.211 | NoSNMPAccess |
```

Review exception output examples 3

```
$PRECISION_HOME/bin/ncp_perl ncp_polling_exceptions.pl -domain NCOMS411
```

```
IBM Tivoli Network Manager Monitoring Status
```

```
=====
```

UNMANAGED

```
=====
```

List of IP addresses from the reference list that are not being monitored because they were unmanaged in the GUI (status = 1)

IP Address	Hostname	AOC Class	Entity Status	Device Status
172.30.232.114	ny-pe8-cr28.test.lab	Cisco28xx	1	

List of IP addresses unmanaged from Discovery (status = 2)

Check ifDescr in TagManagedEntities.stch for the following interfaces:

IP Address	Hostname	ifDescr	Entity Status

Review exception output examples 4

```
$PRECISION_HOME/bin/ncp_perl ncp_polling_exceptions.pl -domain NCOMS411
```

```
IBM Tivoli Network Manager Monitoring Status
```

```
=====
```

NOT POLLED IN LAST 15 MINS

```
=====
```

List of IP addresses that have not been polled during the last 15 minutes:

```
+-----+-----+-----+
| IP Address | Hostname | AOC Class |
+-----+-----+-----+
| 172.31.230.237 | GSRb.test.lab | Cisco12xxx |
+-----+-----+-----+
```

FALLING BEHIND

```
=====
```

List of IP addresses in policies that are falling behind by more than twice the polling interval

```
+-----+-----+-----+-----+-----+-----+
| IP Address | Hostname | Policy | Poll Interval | Last Poll Int | Time since Last Poll |
+-----+-----+-----+-----+-----+-----+
|           |         |       |              |               |                     |
+-----+-----+-----+-----+-----+-----+
```

Review exception output examples 5

```
$PRECISION_HOME/bin/ncp_perl ncp_polling_exceptions.pl -domain NCOMS411
```

```
IBM Tivoli Network Manager Monitoring Status
```

```
=====
```

```
NO SNMP ADDRESS
```

```
=====
```

These devices may have other IP addresses that were not be discovered, but only the management address shown here will be polled (unless unmanaged above).

```
+-----+-----+-----+
| IP Address  | Hostname    | Node Managed |
+-----+-----+-----+
| 172.30.232.54 | 172.30.232.54 |             |
| 172.30.232.114 | 172.30.232.114 |             |
| 172.31.230.211 | 172.31.230.211 |             |
+-----+-----+-----+
```

Test today: Best Practice

- Confirm the policy is enabled with `itnm_poller.pl` script or through the GUI
- Rerun `ncp_ping_poller_snapshot.pl` if you make any changes or discovery may have run
- Understand common misunderstanding of NO SNMP ACCESS
- Edit the exception script to make output more clear

Links

- Developer Works
- Knowledge Center
- Mustgather data gathering script
- (-p option would collect monitors.current)