Logs, debugs and files which are useful when troubleshooting and resolving issues in NMIS

When resolving issues with NMIS, there are various outputs and logs which can assist the support and development teams with troubleshooting issues to determine root cause and a workaround or solution.

To collect those logs and related evidence for debugging you should also consider using The NMIS Support Tool.

Node Issues

Usually most useful output and most requested output is that from an nmis.pl collection and update for the node with issues. To generate this, the command is:

```
<nmisroot>/bin/nmis.pl type=update debug=true node=<nodename>
<nmisroot>/bin/nmis.pl type=collect debug=true node=<nodename>
<nmisroot>/bin/nmis.pl type=summary debug=true
```

The output from any of these commands can be redirected to a file by appending a redirection to the command e.g. "> ~nmis/nmisoutput.txt"

MIB Issues

The other most common output is a MIB dump which can be generated using NET-SNMP the SNMPv2c command syntax looks like:

```
/path/to/snmpwalk -v 2c -m all -c <community> <node> <mib>
```

If we ask for a full dump <mib> would be ".1", which is the full ISO tree, or we might ask for a specific branch, like "system" or "ifTable" for example.

Polling Log

If you need to diagnose RRD-related issues you may also want to make use of the Polling Log, which records exactly what is sent to RRDtool for storage.

Please note that this log can be filling up quite quickly, so you shouldn't leave it enabled any longer than necessary. The Polling Log is configured using the option polling_log (in the files section of Config.nmis), and it's inactive unless the file exists. The default file is <nmis_logs>/polling.log and to activate this log you need to create the file, for example using touch:

```
cd /usr/local/nmis8 touch logs/polling.log
```

It is highly recommended that you deactivate the polling log once you are done with your diagnostics by simply deleting the polling log file.

Log Files

Other logs are useful to see, but usually depending on the issue we would ask for this, but some handy logs to look at are:

- NMIS Log: <nmisroot>/logs/nmis.log
- Apache Error log: on CentOS 5.5, /var/log/httpd/error_log

As NMIS see's odd things it will log it to the NMIS log, and when Apache sees problems with things, or the CGI generates STDERR content, it will be sent to the Apache Error log.