NMIS 9 Release Notes

NMIS 9.0.11

RELEASED The release was published on 10 March 2020.

Highlights

- Events updated through Events.pm class were not updating **lastupdate** field, which caused some events not being synchronised in opHA.
- Handle undefined $cursor in NMIS9 NMISNG::Node->_load()
- Display **Node Custom Properties** in Node View.
- **Fix gaps in interface graphs**: When snmp collects table index and an error occurs, the table was compared with the inventory interface data, and, as the interface was not in the table, was marked as down and was not being collected. It was not going to be marked as up until the next update (By default, 1 day in the worst scenario). Now, if the interface table is empty is not going to mark an interface down, and it will log snmp errors.
- **node_admin** now supports node_uuid for all the relevant operations.
- **Alert and Proactive events** with custom node roles were not matching the Model Event Policy

NMIS 9.0.10

RELEASED The release was published on 21 February 2020.

Highlights

- Be able to **read other configuration files** from the master server. Requires opHA 3.0.7
- **NMIS GUI configuration tables** are not editable if other configuration files from the poller are sent.
- Added conf.d configuration files to **support zip**.

- The **minimum length of time** that a **graph** can show has been reduced from 30 min to 10 min, this allows to see shorter periods with better details, meaningful when used with 1min polls.
- **Prevent the queue jobs** from getting too big when unnecessary:
  - Add default configuration parameter 'abort_plugins_after' => 7200, # seconds
  - Updated nmis9 scheduler to not add a plugin job if already exist another for the same nodes.
  - Updated the queue information message when truncate output to be more clear.
- Prevent **tests collection events** being contaminated by real NMIS9 processes.
- Added function '**retrieve_section**' to lib/NMISNG/Node.pm to retrieve systemHealth sections for QoS for non-Cisco devices.
- Added submodule **SQoS** (Standardised Quality of Service) to NMISNG as lib/NMISNG/SQoS.pm
- Fix **create Outages function** used by opCharts (4.0.12) when programming an Outage.
- Added **node group to Events** to make the query faster for RBAC queries in opCharts (4.0.12).

NMIS 9.0.9

RELEASED NMIS 9.0.9 was published on 2 December 2019.

Highlights

- Bugfix to update a node status during the collect. This bug made the node status be refreshed with a delay in opCharts (The delay will usually be as long as the poll time for that node). Now node status is updated in NMIS and opCharts at the same time.
- Bugfix for advanced export.

NMIS 9.0.8

RELEASED NMIS 9.0.8 was published on 10 October 2019.

Highlights

- This is the first stable release of NMIS 9.
- NMIS now includes a field 'level_previous' in an NMIS Event.
- Added new argument 'include_previous' to NMISNG::Event::load() which defaults to '0' to have no impact on existing code.

NMIS 9.0.7

RELEASED The beta release was published on 23 September 2019.

Please contact us at beta@opmantek.com if you're interested in trying out NMIS 9 pre-releases.

Highlights

- Improve performance of NMIS9 Metrics. This improvement will decrease the NMIS 9 CPU load.
- Renamed nmis workers. While performing any job, the process will appear as **nmisd job**. E.x. **nmisd metrics**.
- Added new information to status document for opReports. In detail: index, section and source.
- Added new information to NMIS::loadServiceStatus returning custom graphs for opReports.
- Fixed dbcleanup error when running the job with no event data.

NMIS 9.0.6c

RELEASED The beta release was published on 12 September 2019.

Please contact us at beta@opmantek.com if you're interested in trying out NMIS 9 pre-releases.

Highlights

- The dbcleanup function available in nmis-cli has been improved:
  - The process does not die if there is a failing query. The loop iteration will continue.
  - New cleanup queries where added to cleanup inventory, latest_data, status and events collection where they have a node_uuid associated but the cluster_id does not exit. This will prevent a node appears as duplicate in opCharts, when a node is duplicate in different pollers and synchronised by opHA (Duplicate nodes in the poller is not supported yet).
  - New option was added - use_performance_query - to use a non lookup query that could fail with big amount of data. This query is not used by default, as it could increase the nmis9d CPU usage.
  - Log messages added.
  - Example of use: act=dbcleanup [simulate=t/f] [info=t/f] [use_performance_query=t/f]

NMIS 9.0.6b

RELEASED The beta release was published on 3 September 2019.

Please contact us at beta@opmantek.com if you're interested in trying out NMIS 9 pre-releases.

Highlights

- Bugfix in the **rename node process** failing when the new folder already contain the same rrd file names. Now the process is as follows:
  - If there are some existing files in the destination folder, NMIS9 will try to rename the existing file to file-name.rrd.duplicate
  - If it can't rename the existing file, it is going to log a warning. The file will have to be handled manually.
  - The process continues.
- Now the collector adds the configuration.node in the latest_data collection and an index for this field and **time**. This allow certain queries to be more efficient, specially for opCharts 4.0.7B topN.
- Restore node now updates the last_update field.

NMIS 9.0.6a

RELEASED The beta release was published on 30 August 2019.

Please contact us at beta@opmantek.com if you're interested in trying out NMIS 9 pre-releases.

Highlights

- Bugfix in the rename node process failing during the movement of certain rrd files.
- Now the collector adds the node_uuid in the latest_data collection. This allow certain queries to be more efficient, specially for opCharts 4.0.7A topN.
- Bugfix for new installations that prevent the process to complete.

NMIS 9.0.6

RELEASED The beta release was published on 22 August 2019.

Please contact us at beta@opmantek.com if you're interested in trying out NMIS 9 pre-releases.

Highlights

- NMIS 9 configuration can be now set up using the master node.
- Fixed bug when renaming a node on a specific situation, when the node had track of files that doesn't exist anymore. The message was "*Failed to relocate inventory storage XXX: file "/nodes/namenode/interface/inloopback0.rrd" does not exist, cannot relocate!*".
- Fixed bug in the NMIS interface that, in some situations, shows the wrong color (green) for unreachable nodes. It happened when the node was unreachable but a node down event does not exist.
- Fixed cgi-bin/models to handle distinction between config nmis_default_models and nmis_models directories for listing, and to use nmisng::util::getmodelfile to read the appropriate model file (custom or default); any written out data already went to the custom model directory.
- Replace legacy logging code.
- Fixed "*Network Tools >> SNMP Tool*" that was opening when the node was not active.

NMIS 9.0.5

RELEASED The beta release was published on 24 July 2019, and fixes one scheduling bug in NMIS 9.0.4.

Please contact us at beta@opmantek.com if you're interested in trying out NMIS 9 pre-releases.

NMIS 9.0.4

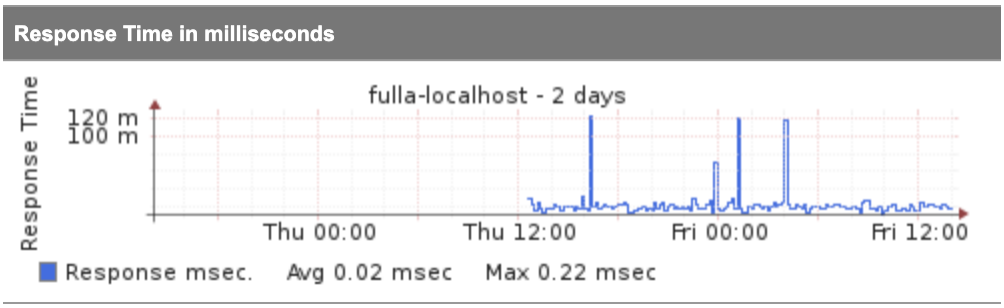
RELEASED This beta release was published on 22 July 2019.

Please contact us at beta@opmantek.com if you're interested in trying out NMIS 9 pre-releases.

Highlights

- Smarter non-interactive installation with Preseeding
- Support to See poller nodes from the master.
- Fixed visualisation problem with numeric node nodes. Nodes with only numbers on the name, like "12345" were causing problems on the system.

- Show **poller_event_log** by default if the NMIS9 is a master, in case syslog is configured to get network events on master.
- mojolicious 8.x is a new dependency that has a totally rotten default format for mojo::log. Fixed log format and set log_level to info which is no longer the default.
- Fixed race condition in the poll process causing the catchall inventory data not being updating propertly when the ping operation runs at the same time.
- Fixed fpingd process on debian 10 was causing heaps of space padding to be added if $0 is changed.
- Fixed NMIS9 runtime graph was not working.
- Change sysLocation field title to 'SNMP Location' to declash with manually configured location field, which is titled 'Location'.
- Added hr* sections to net-snmp model so opCharts can know what charts to make.
- Fixed network_summary_group view had empty columns.
- Fixed node response time graphs for nodes (shown NaN on previous):



NMIS 9.0.3

RELEASED This beta release was published on 28 June 2019.

Please contact us at beta@opmantek.com if you're interested in trying out NMIS 9 pre-releases.

Highlights

- nmisng nodes now handle cluster_id on get_events_node: This is going to allow opHA to remove events from the poller on a peer deletion, so no data from the poller should remain. Also fix node_admin when dumping a node from the poller (Now will be able to get also event_data).
- Show message on delete node errors.
- Minor fixes ported from NMIS8:
    - Added support for fping inter packet gap for some firewalls. New configuration options added: fastping_interval and fastping_target_interval.
    - IPrevent NMIS from failing when an escalation event element is c:\\
    - Adding the new opConfig "Node Configuration Change Detected event"
    - Fixed newlines being included in WMI error messages
    - Calling /proc/cpuinfo in the Support ZIP
    - run-reports.pl makes sure the reports directory exists
    - Optimisation to stop running services if no service polling required on a node
    - work around net-snmp snmpd which reports almost anything as hrfixeddisk
    - fixes for the Cisco Temperature model
- loadServiceStatus: A new parameter is added that allows filter by all clusters. This will allow opCharts to show Monitored Services from the poller.
- services.nmis: Added Opmantek.pl
- nmis-cli: On job type collect wasn't filter by local nodes.
- purge_op_status: Changed to 7 days by default.
- Display node name in opstatus.pl

NMIS 9.0.2

RELEASED This beta release was published on 7 June 2019.

Please contact us at beta@opmantek.com if you're interested in trying out NMIS 9 pre-releases.

Highlights

- Avoid pre-fill the wmiusername and wmipassword on edit/add a Node.
- Prompt a confirmation window before deleting a node.
- Show only local nodes. Nodes from the pollers are not shown.
- Fix to being able to manage a node when having another node with the same name from the poller.

NMIS 9.0.1a

RELEASED This beta release was published on 28 May 2019.
Please contact us at beta@opmantek.com if you're interested in trying out NMIS 9 pre-releases.

Highlights

- The main page load time was optimised by reducing the network_summary_view load time.

NMIS 9.0.1

RELEASED This beta release was published on 17 May 2019.
Please contact us at beta@opmantek.com if you're interested in trying out NMIS 9 pre-releases.

Highlights

- Lots of bug fixes, robustness and performance improvements.
- It is no longer necessary to configure the list of groups that the NMIS GUI should show;
  by default members of all groups are visible now and only groups that are explicitely configured to be hidden (using the `hide_groups` configuration item) are omitted from the display. Groups can be created and assigned freely when editing or creating nodes, both with node_admin as well as using the GUI.
- Self-check faults are now logged as stateless events for node 'localhost' (if such a node exists).
- NMIS 9 now supports authentication using the system's PAM authentication infrastructure.
- NMIS 9 now properly and fully supports case-sensitivity in node names everywhere.
- "-node" and "-info" files in var are no longer required or created.
- Various information shown on the node dashboard is now updated immediately (e.g. "last ping" timestamp"), and no longer refreshed only during collect operations.
- The node_admin tool now supports more complete snapshotting of nodes (with `act=dump`), which optionally includes the node's RRD files, events and other historic records.
  When importing a thusly dumped node with `act=import` it is now possible to have all identifiers localised to the current system (with `localise_ids=true`); this causes the imported node to be 'adopted' by and become active on the current NMIS system immediately.
  This mechanism allows a node to be moved completely between NMIS systems, without losing any of the node's history.
- Minor model improvements.
- More efficient node configuration structures.
  Please note that it is necessary to run `bin/nmis-cli act=noderefresh` once after upgrading to activate those changes; the installer will normally perform this operation for you.

Known Limitations

- When this version is installed on CentOs and RedHat *from scratch*, the log format in logs/nmis.log is unsatisfactory, and too much data will be logged (at level debug).
  This is caused by incompatible changes in the Mojolicious module version 8.x. A workaround is in planning.
  Please note that when upgrading from an earlier NMIS 9 version, the Mojolicious module will not be upgraded and this problem will not affect you.

NMIS 9.0.0.e

RELEASED This beta pre-release was published on 11 Apr 2019.
Please contact us at beta@opmantek.com if you're interested in trying out NMIS 9 pre-releases.

Highlights

- The nmis9d (and the NMIS 9 installer) now interact cleanly with both systemd and sysv init systems.
- Installing on Ubuntu 18 now works.
- Orphaned worker processes left behind by a crashed nmis9d are now cleaned up more quickly and reliably.
- various feature extensions in `admin/node_admin.pl`, e.g. act=dump and act=restore can now also capture and restore a node's RRD files
- Node deletion was improved to ensure no scheduled collection jobs remain or interfere, and also includes historic/inactive events and operational status records.
- Support tool no longer captures leftover legacy configuration files
- Selftest is less likely to produce false positives
- Node editing in the GUI now presets the configuration fields with correct defaults
- The fping infrastructure now correctly handles the case of an admin modifying a node's IP address instead of caching stale data.
- Service tests whose monitoring scripts return unexpected exit codes are now treated as 'failed/service down' and such occurrences are logged.
- Fixed race condition in the configuration loading code, which could cause daemon crashes if the configuration is updated frequently (using the GUI or `admin/patch_config.pl`).
- Various bug fixes and robustness improvements

NMIS 9.0.0d

RELEASED This is a beta pre-release and was published on 21 Aug 2018.
Please contact us at beta@opmantek.com if you're interested in trying out NMIS 9 pre-releases.

Highlights

- Feature Parity with NMIS 8.6.7G
  The improvements made in NMIS 8.6.7G have been incorporated into NMIS 9 where applicable.
- Substantially improved GUI rendering speed and reduced resource usage
  The GUI is now usable on a system with only one CPU core and 2 GB of ram.
- Now supports running on systems without systemd better: the installer now provides a classic init script for MongoDB
- `admin/node_admin.pl` was extended to offer more flexible import and export options.
- Various bug fixes and robustness improvements

NMIS 9.0.0c

RELEASED This beta pre-release was published on 14 Jun 2018.
Please contact us at beta@opmantek.com if you're interested in trying out NMIS 9 pre-releases.

Highlights

- Feature Parity with NMIS 8.6.6G
  NMIS 9.0.0c supports the new Polling Failover mechanism, and all recent improvements made in NMIS 8 are present in NMIS 9.0.0c (where applicable).
  This also includes the recent improvements for Single-Sign-On.
- Can run in parallel with NMIS 8
  If your server specs are suitable (min. 4GB of RAM, 6-8GB recommended), then NMIS 8 and NMIS 9 can be installed on the same server without interference.
  NMIS 9 normally installs itself into `/usr/local/nmis9`, and its web entry point (`http://localhost/nmis9/`) doesn't interfere with NMIS 8.
  If the installer detects an NMIS 8 instance on your server, then it offers to import the NMIS 8 nodes' configuration: all nodes would then be polled in parallel by both NMIS 8 and NMIS 9.
- Full installer support for platforms Debian 9, Ubuntu 16.04, CentOS 7 and 6.
- Improved installer behaviour for both installations from scratch and upgrades from 9.0.0b.
  Upgrading from earlier releases of NMIS 9 (nightly or 9.0.0b) should now be supported seamlessly, ie. all required structural changes should be taken care of by the installer.
- Automatic priming for monitoring of localhost, ie. the NMIS server itself
- Node administration suite is now feature-complete
  `admin/node_admin.pl` can now perform all typical node operations, as well as export and import of a node's complete database information for diagnostic purposes.
- Improved and more consistent logging
- Fine-grained Operational Status information
  NMIS 9 now creates operational status overview records for every operation that is performed in the background.
  This operational status is accessible from the GUI (in the menu under System -> Host Diagnostics -> Ops Status).
- Improved robustness and flexibility of the job scheduling logic
  Long-dead nodes are now demoted to fewer connection attempts after 14 days of inaccessibility.
  Job priorities can now be freely configured (see `priority_schedule` in conf-default/Config.nmis).
  The intial update operation for newly added nodes is now automatically prioritised above all other operations.
- Improved self-test capability and support tool.
- More flexibility for manually scheduled jobs
  `bin/nmis-cli` can now schedule any job with a specific (higher or lower than default) verbosity, which will affect just that one job.
  See the help text from `bin/nmis-cli act=schedule` for details.
  Furthermore, all log output for a particular job can be redirected to a separate file as well (using `job.output=/some/path/nameprefix`).
- NMIS 9 CLI Improvements
  `bin/nmis-cli` can now show the live NMIS daemon and worker process status (with `act=status`).
  It is now possible to delete or abort scheduled jobs in bulk, using `bin/nmis-cli act=delete-schedule id=ALL job.type=<something> job.uuid=<somenodeuuid>`; note that "`id=ALL`" is required to indicate that all matching jobs are to be removed.
- Various Minor GUI Improvements
  The Node dashboard widget now displays the last time for ping, collect and update separately, and if there is a job in progress or pending for this node, then that is shown as well.

Known Limitations

- Installation on CentOS 6 takes at least 30 minutes to compile and install the necessary perl modules from CPAN
- NMIS 9 won't work properly with less than 4GB of RAM.
  The polling engine does work ok with 2GB but the GUI is not optimised yet, and memory consumption will balloon very badly as soon as the GUI is accessed.
- Report creation still relies on Cron.

NMIS 9.0.0b

Version 9.0.0b is a late alpha/early beta pre-release, which was published on 6 Apr 2018.
Please contact us at beta@opmantek.com if you're interested in trying out NMIS 9 pre-releases.

Highlights

- Full installer support for platforms Debian 9, Ubuntu 16.04, CentOS 7 and 6.
- This version can coexist with NMIS 8 on the same machine.
- New MongoDB backend which now holds almost all node and status information.
- Better long-term maintainability (no more configuration file or default model copying necessary)
- New NMIS polling engine which now uses an nmis9 daemon and a configurable number of worker processes,
  which results in more even (and somewhat reduced) server resource utilisation.
- Daemons support reconfiguration without restart for verbosity/debugging changes with signals USR1 (more verbose) and USR2 (less verbose)

Known Limitations

- Installation on CentOS 6 takes at least 30 minutes to compile and install the necessary perl modules from CPAN
- NMIS 9 won't work properly with less than 4GB of ram
  The polling engine does work ok with 2GB but the GUI is not optimised yet, and memory consumption will balloon very badly as soon as the GUI is accessed.
- Upgrading from previous pre-releases (9.0.0a or nightly pre-releases) is not supported;
  We recommend that you delete both /usr/local/nmis9 and the `nmisng` MongoDB database before installing 9.0.0b
- No support tool support for MongoDB yet
  The support tool doesn't yet interact with MongoDB, so won't be able to capture meaningful data for nodes in NMIS 9.
- Report creation still relies on Cron.
- No activity status collection and feedback for async operations yet
  All collect, update etc. operations are now asynchronous and performed by nmisd workers from a priority- and time-based queue, but support for capturing and displaying results of the operations is not completed yet. At this time only the nmis log contains that information.
  For edits from the GUI that implies that subsequent node updates cannot be observed in the GUI at this time.
- No Documentation for `nmisd` and `nmis-cli.pl` beyond the built-in help texts.