

# NMIS 9 Release Notes

## Product Compatibility

Refer to [product compatibility](#) to determine supported Operating Systems and Database Versions.

Download NMIS here - <https://firstwave.com/products/network-management-information-system/>

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## NMIS 9.4.7

**RELEASED** 10 May 2024

### Important

- We have reversed a change made to mark interfaces historic if the index has changed, this has caused a regression.
- Interface summary has been turned off by default, this usually updates the Links.nmis file. the config "disable\_interfaces\_summary" item has been removed and if you need this feature set "enable\_interfaces\_summary" to true. With this feature turned off there are significant performance increases when nodes update.

### Highlights

- New feature to add custom validation logic for node updating and saving.
- node\_admin.pl can now delete nodes which are currently collecting.
- CDP Plugin speed enchantments.
- Installer support RHEL9
- Reduced the frequency with updating the expire\_at record if there are no data changes to be saved.
- New feature to add 95th percentile onto graphs
- New config item "minimum\_node\_configuration\_change\_seconds", some devices do not report the node configuration change well so we have allowed a bit of wiggle room. default is 10s
- efficiently ensuring indexes on timed\_data collections.
- new index on status collection

## BugFixes

- Various fixes with error checking.
- Fixed issue with how NMIS9 checks snmp errors from Windows.
- Fixed issue where lastupdate was not being kept updated for inventory, this was caused when we goto save a record and the detection of data changes between the last update.
- Fixed issue with nodes raising "Illegal modulus zero at" in RRDFunc.pm
- Fixed issue with Mojo::File->spurt depreciation warnings
- Fixed bug with the inventory index hint.

## NMIS 9.4.6

RELEASED

24 Jan 2024

## Highlights

- Updated services check for web availability in the installer
- Improve installer with timestamps, indented urls, don't install unneeded packages
- Ensure traceroute and mtr are installed by NMIS installer
- Remove end-of-life Debian 8 (Jessie) code
- Keep Inventory configuration/group in sync on update
- Add new action `nmis-cli act=inventoryrefresh` to refresh inventory

## NMIS 9.4.5

RELEASED

19 Dec 2023

## Highlights

- New action **notify** in `nmis-cli` to create an event
- NodeHealth sections will continue to next section if error found in previous instead of stopping altogether
- Added more Status text for Monitored Services
- Improved detection of interfaces being added and removed
- Strings now quoted with ' instead of ", so " now allowed in all gathered data
- Various performance improvements
- Performance optimization for debug print statements
- Added support for `wmic_server`

## Models

- models now support 'placeholder' section entry
- Dell switch model ported to NMIS9
- [cisco\\_device\\_report.pl](#) ported to NMIS9
- Ericsson PPX plugin ported to NMIS9
- [ZyxellInterface.pm](#) plugin ported to NMIS9
- Host Resource plugin updates
- Fixes to ASAM model and plugins
- new model/plugin section to help better report Cisco memory and CPU
- Update to Cisco Meraki and Cisco ESA models
- Update to ESXI model
- Port JuniperCoS model to NMIS9

## Bugfixes

- Fix bug in node depend functionality
- fix `display_keys` for various plugins (were using wrong format)

## Known Limitations

- If you have upgraded to Open-Audit 5, you will need to update the NMIS Modules menu to take you to the new Open-Audit 5, with the command:  

```
sudo /usr/local/nmis9/admin/patch_config.pl /usr/local/nmis9/conf/Modules.nmis "/Open-Audit Enterprise/link"
=/open-audit/index.php "/Open-Audit Enterprise/base"=open-audit "/Open-Audit Enterprise/file"=env
```

## NMIS 9.4.4

RELEASED

27 Apr 2023

## Highlights

- Add a new 'ping\_successful' timestamp whenever ping is successful.
- Add support for comments in the Node configuration.
- New action **unset** in `node_admin.pl` to allow the ability to remove non-essential keys from the Node configuration.
- New action **remove\_duplicate\_events** in `nmis-cli`.
- New action **status** in the NMIS Daemon (`nmisd`) to print the status of the scheduler (i.e. "The Scheduler 29740 is running as user 'root'")
- Add support for SNMPv3 256 bit encryption.
- Improvements in the NMIS installer to support new Linux Releases. Tested new versions:
  - Debian 10
  - Debian 11
  - Mint 21.01
  - RedHat 8.7
  - Rocky 8.7
  - Ubuntu 22.04
  - Ubuntu 23.04
  - **NOTE:** RedHat based systems from version 9 onwards are unsupported because MongoDB is not supported.

## Models

- Add support for Power and Temperature sensors in Linux devices.
- Add model support for 'Calix E7'.
- Add model support for 'VyOS'.
- Add model support for 'PulseSecure'.
- Fix graphs in 'Adtran' devices. These were added earlier, but got commented out during testing.
- Cisco Model enhancements.
- Juniper Model enhancements.

## Bugfixes

- Add support for LLDP for certain vendors that have unique implementations.
- Change the handling of events to prevent duplicate events.
- Add code to prevent multiple `nmis` daemons from starting, and add a test to trigger an alert if multiple daemons are found.
- Make the NMIS daemon ('`nmisd`') exit if invalid arguments are passed instead of ignoring them to prevent doing the wrong thing.
- Ensuring that 'nodestatus' stays up to date with 'node\_down' status. Before certain conditions allowed 'nodestatus' to not reflect a node outage.

## NMIS 9.4.3

RELEASED

23 Feb 2023

## Highlights

- An early release to include a fix for a reported security issue, which includes the following improvements (CVE not currently assigned):
  - Prevent reflected cross site scripting in `cgi-bin/config.pl`
- Improvements and bug fixes for `node_admin.pl`

## Models

- New and Updated models and graphs for Nokia and Arista devices.
- Additional support for UPS Battery monitoring

## Bugfixes

- Support tool now gathers `conf-default` as well (in case people are changing things in there)
- Handling the use of reserved "." (period) character in Cisco CBQoS class names.
- Minor cosmetic fixes

## NMIS 9.4.2

RELEASED

23 Jan 2023

## Highlights

- **Config Change:** The Event "Node Polling Failover" was not generating notify on upNotify when Closed/Recovery. This was caused by the parameter 'upnotify\_stateful\_events' in 'Config.nmis'. The parameter should include 'failover' (i.e. 'down|proactive|alert|failover') to get Clear notifications.
- It was possible to edit Nodes in the Poller in NMIS in a High Availability environment. This caused the Poller and the Primary system to become out of Sync. This has been fixed. Nodes can no longer be edited in the Poller system in this environment.
- When Node configuration changes were made, especially in OMK->Admin, the changes were not immediately reflected in NMIS, as the stored configuration was updated, but the running configuration did not show the changes. This has been fixed.
- The 'Contrib' program 'server\_perf\_report.pl' has been ported to NMIS9.

## Models

- Ported the NMIS8 Plugin 'combinedCPULoad' to NMIS9.
- The 'ZyxellInterface' plugin has been ported to NMIS9.

## Bugfixes

- NMIS9 was displaying empty groups in the metrics and health panel. This issue is partially fixed. It is caused by Groups with members lacking historical data. A future update will improve the handling further.
- Running an update did not always update connection link information. This has been fixed.
- In a RedHat 8 System, the 'fping6' command has been removed because 'fping' now properly handles IPV6. NMIS would loop constantly on startup looking for this command. NMIS now checks the version of 'fping', and does not require 'fping6' if 'fping' handles IPV6. Also, if one of the required programs is missing, NMIS will now simply report this as a fatal error in the log and exit, so that the Administrator can know immediately that there is a problem.
- A logic error in Interface handling caused the system to occasionally be unable to locate an Interface because the calling routine requested a specific Interface, and the logic attempted to do a global search, which required an extra argument that was not included.
- node\_admin.pl when using the 'import\_bulk' action was failing failing to import Node Configuration data from NMIS8. This has been fixed.

## NMIS 9.4.0

RELEASED

18 Jun 2022

Limited release for compatibility with Commercial Modules.

Added support for MongoDB 4.2

## NMIS 9.3.0

RELEASED

The release was published on 12 Jan 2022.

## Highlights

- Upgrade jQuery version to 3.6.0 and jQuery UI 1.13. The libraries versions are specified in Config.nmis, these will be updated by the installer.
- Rename model\_discovery tool to model\_tool
- Added quiet mode list nodes in node admin
- Improved check\_daemons script and added to a cron job
- Changed submit button on top of alert list in events list
- set default nmisd\_worker\_max\_cycles to a initial value of 100
- Change last update for last\_update in group view (GUI)
- Improved [NMIS 9 support bot](#). Now it is possible to run it from the GUI.
- Added support for NTLM Version 2
- Added support for the importation of NMIS8 setting into NMIS9.

## Models

- Added IPSLA models to NMIS9
- Fixing F5 Connection graph
- Updated the pingonly model to add the health ping graph
- Updated Cisco NX/OS Model to match the updates from NMIS8
- Node resources not displaying correctly in Model net snmp
- Updates to Huawei MA5600
- New Cisco ASR 1000 model

## Bugfixes

- Avoid print Error if graph error in view node
- Step not changed in the rds by default so polling policy different than default was not working properly

- Polling policy was corrupted when edited from the GUI.

## NMIS 9.2.4

RELEASED

The release was published on 1st Dec 2021.

### Highlights

- Upgrade mojo to 8.11. Logging has been adapted.
- Installer improvements.
- Table location updates.
- Load synchronously some of the GUI widgets in NMIS 9.
- Remove sysDescription from validation so no issues when saving model from opAdmin.
- Update permissions from file users\_login.
- Improved audit logs for nodes and tables management. It can be enabled/disabled if the configuration item **audit\_enabled** is set. Defaults is disabled.
- Improved polling summary with a more human readable output in timestamps.
- Improved performance for network view, important for models with lots of interfaces.
- Allow restrict\_groups to be passed through to get\_nodes\_model.
- Now it is possible to see events from the pollers.
- Now it is possible to see the server tabs to redirect to the pollers.
- Improved node admin to load all node events.
- Improved nmis9d service by adding wants=mongod.service to ensure the service restarts when Mongod is restarted.
- Improved tests.pl to send the key contact as a parameter when testing email.
- Update performance data to use ps aux.
- New script to monitor nmis 9 and mongo daemons. Should be added to a cron job for regular checkings:

```
# Check daemons
*/5 * * * * root /usr/local/nmis9/admin/check_daemons.pl act=check-daemons start=1 notify=EMAIL quiet=1
verbose=1
```

### Models

- Merge models from NMIS 8:
  - Huawei
  - BTI-7000
  - BTI-7800
  - BTI-OPS
  - RadwinWireless
  - Common Stats
- Model updates for Teldati60.
- Added model F5 BigIP.
- Updated Huawei MA5600, ported plugin from NMIS8.
- Improved the [model discovery](#) utility. Fixes applied in some of the available options.

### Bugfixes

- Fix to prevent the GUI from load when there are incorrect models.
- Fix to acknowledge an event.

## NMIS 9.2.3

RELEASED

The release was published on 12th Aug 2021.

### Highlights

This is mainly a security release that includes the following improvements (Fixing CVE-2021-38550):

- Prevent reflected cross site scripting.
- Prevent stored cross site scripting.
  - As part of these security changes, some special characters no longer be available for node configuration fields like group names, including `;( )<>%"V`
- Generate cookie http only

Other improvements:

- Fix For NMIS\_IS\_LOCKED that was not working.

- Update logJsonEvent with all the event properties.
- Added output options to [import\\_nodes.pl](#).
- Updated models to better support the baseline tool: Common-database, Common-stats and Model-CiscoRouter.
- Fixed running Host Resources plugin when SNMP or Node are down.

## NMIS 9.2.2

RELEASED

The release was published on 29th Jun 2021.

### Highlights

- Admin tools:
  - **support bot** improvement to accept zip as an input (support\_file=) and report directory (report\_dir=) to change the output directory.
  - **support tool**: Added the output for a node update/collect when node is sent as a parameter.
  - **node\_admin**: New argument to migrate rrd names from nmis8: node\_admin.pl act=move-nmis8-rrd-files {node=nodeX|ALL|uuid=nodeUUID} [remove\_old=1] [force=1]
  - **node\_admin**: Added new options to import\_bulk: delay and bulk number, so nodes can be imported in batches waiting delay seconds between them.
  - **node\_admin**: Added new options to show node: Showa interface, inventory and catchall data.
  - **node\_admin**: Provide feedback with act=import.
  - **patch\_config**: Now supports json files. Also, new option added to create an empty array. Also supports -r and -R options to return keys and values.
  - **model\_discovery**: [Tool](#) ported from nmis8.
- Installer Improvements:
  - Adds a logged and presented warning message if no known ntp type service is detected during install.
  - Updates grep regex in installer that detects Network Time is being synchronised
  - Implements correct yum EPEL repository setup for RHEL8
  - Add Domain support to WMI.
- Other improvements:
  - Updates modelling for Huawei AR2240 QoS and Teldat M1 QoS and BRS.
  - Records the collect delta (polldelta) in the reach database to track polling performance. This value can be seen in the polling summary.
  - Added support for serviceOnly nodes.
  - Config.nmis won't be reloaded by the daemon.
  - nmis-cli act=daemon-status will show all daemons.
  - the status\_summary threshold is now configurable using the configuration item "status\_summary\_threshold". The value was by default set to 99.
  - Added new GUI button to test snmp for a node. The configuration item can be show/hidden using the configuration item "view\_snmp".
  - Clear events when a node is deleted.
- Other fixes:
  - Fixed end of nmis9 cron.d file, which needed a newline character
  - nmis-cli reads performance.nmis default configuration file when no configuration file is set.

## NMIS 9.2.1

RELEASED

The release was published on 26th Apr 2021.

### Highlights

- Admin tools:
  - The tests tools have been organised in one admin tool, tests.pl.
  - Included new test option to test syslog.
  - Added a support bot to generate a [support\\_report.html](#) based in the support output:

```
sudo admin/support.pl action=collect report_dir=/tmp
sudo admin/support.pl action=run-bot dir=/tmp/nmis-collect.2021-04-21-2230
```

- New tool to migrate nmis8 rrd directories: admin/node\_admin.pl act=move\_nmis8\_rrd\_files node=ALL
- Improvements:
  - Added new [Authentication configurations](#).
  - Added asynchronous load from widgets to improve the GUI load time.
  - [Improve dual stack IPv4/v6 handling](#).
  - [Improve rrd directories name to replace "/" for "-" and remove blanks](#).
  - [Added validation in the GUI to prevent introduce "qr/"](#)
- Other fixes:
  - Fixed condition where more than nodes with last\_wmi\_attempt set but disable where sent to the queue, increasing the load and the queued jobs.
  - Fixed custom tables when using uppercase names.
- Model changes:
  - [Added Device Modelling for LLDP](#)

## NMIS 9.2

RELEASED

The release was published on 9 Mar 2021.

This 9.2 version provides [IPv6 support](#).

### Highlights

- Admin tools:
  - New admin tool to test email, admin/testemail.pl
  - Improved polling summary output
  - New nmis-cli option to [collect performance data](#). Used by a cron job.
  - Improved support tool
  - Fixed import bulk for node\_admin tool
- Collect engine:
  - Check if collect is false before collect interface data
  - Support for variables names in rrd names
  - Update storage when changed the rrd names
  - Fixed manual model selection when collect is false
- Improvements:
  - Improved the default SNMPTrapd options
  - Now it is possible to install nmis in an alternative path
  - Support for different size ICMP packets with FastPing
- Other fixes:
  - Fixed default table escalations
  - Fix omkd [Opmantek.pl](#) service monitor
  - Fix error in saving windows positions
  - Fix permissions in node dump
  - Fixed issue with ifSpeed in parseString
  - Fixed connection leaks due to the use of ensure\_index
  - Fixed GUI Node admin summary
  - Fix in update polling policy from GUI
  - IPv6 fixes
- Model changes:
  - Added Siklu models
  - New model for Mikrotik TopN
  - Ported Fortinet models from nmis8
  - Added empty Common-heading for back compat NMIS8 models, removed using this from several ported models
  - Default no collect for veth interfaces in model net snmp

## NMIS 9.1.2a

RELEASED

The release was published on 12 Jan 2021.

This is an early 9.1.2 version provided for those who like to test the new [IPv6 support](#).

### Highlights

- [Support for IPv6](#)
- New admin tool to provide nodes polling summary information, admin/polling\_summary9.pl
- New admin tool testsnmp.pl, to test an access to a node with default snmp credentials provided
- New [connect wise connector](#)
- Improved import\_nodes default data
- Set default threshold to true if not specified on node import
- Interface updates now use ifDescr as description instead of Description in the inventory record
- Added -p flag to SNMP trap options
- Fix in custom notification methods
- Graph and model improvements:
  - Fix for graph max bits
  - updated net-snmp model
  - Migrated host resources plugin from NMIS 8
  - Improved LLDP plugin
  - Fixed MikroTik model display

## NMIS 9.1.1-1

RELEASED

The release was published on 30 Sep 2020.

### Highlights

- Bug fix in Graph-maxbits.nmis not being visualised. The fix consist in modify the simple quotes for double:

```
- 'heading' => "Interface $ifDescr Max. Bits/Second Utilisation",
+ 'heading' => 'Interface $ifDescr Max. Bits/Second Utilisation',
```

## NMIS 9.1.1

RELEASED

The release was published on 29 Sep 2020.

### Highlights

- Bug fix in renaming node: new error handle when the rrd graph cannot be resolved. In that case this graph won't me moved, but the renaming won't fail.
- Post-install: Update the localhost node with active:1 for self monitor the local server (For new installations).
- Bug fix in plugin QualityOfServiceStat.
- New modelling for TeldatBRSSStat and TeldatQOSStat
- Update Modules.nmis
- Added missing files entry for rrdraw
- Installer improvements
- Fixed CBQoS graphs
- node\_admin improvements:
  - New jobs for delete, create, update and set so this operations can run in the background. [More information](#).
  - New parameter server="" for delete, create, update and set operations to let opHA manage these nodes as remote in the next release. [More information](#).
  - Delete job now creates a backup of the node. New configuration options. [More information](#).
  - List action now includes a new parameter remote=1/0 to show the cluster\_id or server name.
  - Show nodes includes a new option to show node interface (interfaces=true)
  - Operations are limited to restore/dump nodes when the server is marked as a poller.
- Delete node in the GUI now is performed in the background as a job. The GUI will return the job id.
- Added new tool for import nodes from CSV. [More information](#).
- Added server\_name into inventory data.
- Bugfix in the Logout where the cookie was not properly removed.
- Bugfix to cleanup modelling oddness. Old concepts will be marked as historic (Not only subconcepts). Catchall records will be removed.
- Bugfix to update storage from inventory: This will fix the issue with renamed interfaces. The graph had been generated but was not show in the GUI.
- Bugfix that prevented use the debug\_auth configuration.
- Updated default configuration options:
  - nmisd\_worker\_cycle => 100
  - purge\_opstatus\_after => 3 days

## NMIS 9.0.12

RELEASED

The release was published on 12 May 2020.

### Highlights

- Bugfix where not collect or not pingable nodes don't respect the collect period cycle and were polled every time the scheduler runs (10 seconds by default). This situation could affect the server load being increased.
- The nmis process was not able to be monitored in CentOS servers. The fix was to change the nmis processes names by using a "." instead of blank spaces. Note this change could affect existing Services created by users containing spaces.

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
31332	root	20	0	359876	124480	4180	S	75.7	2.0	0:16.94	nmisd.metrics
15931	mongodb	20	0	3904000	2.117g	8832	S	22.0	36.3	434:56.25	mongodb
29872	root	20	0	341420	106592	4600	S	3.0	1.7	0:11.79	nmisd.scheduler
31375	root	20	0	341420	105876	3884	S	1.0	1.7	0:00.03	nmisd.worker.<i
31377	root	20	0	341420	105876	3884	S	1.0	1.7	0:00.03	nmisd.worker.<i
31379	root	20	0	341420	105876	3884	S	1.0	1.7	0:00.03	nmisd.worker.<i
31369	root	20	0	341420	105876	3884	S	0.7	1.7	0:00.02	nmisd.worker.<i
31370	root	20	0	341420	105876	3884	S	0.7	1.7	0:00.02	nmisd.worker.<i
31373	root	20	0	341420	105876	3884	S	0.7	1.7	0:00.02	nmisd.worker.<i
31381	root	20	0	341420	105876	3884	S	0.7	1.7	0:00.02	nmisd.worker.<i

- Avoid printing passwords in debug logs.

## 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 Primary 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](mailto: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](mailto: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 were added to cleanup inventory, latest\_data, status and events collection where they have a node\_uuid associated but the cluster\_id does not exist. 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](mailto: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](mailto: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](mailto: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 Primary 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](mailto:beta@opmantek.com) if you're interested in trying out NMIS 9 pre-releases.

## NMIS 9.0.4

RELEASED

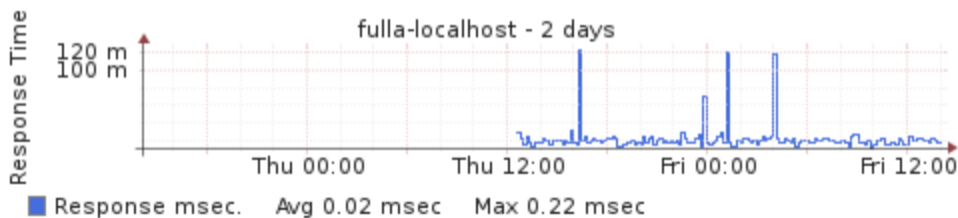
This beta release was published on 22 July 2019.

Please contact us at [beta@opmantek.com](mailto: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 primary server](#).
- 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 Primary, in case syslog is configured to [get network events on Primary](#).
- 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 properly 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):

#### Response Time in milliseconds



## NMIS 9.0.3

RELEASED

This beta release was published on 28 June 2019.

Please contact us at [beta@opmantek.com](mailto: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](mailto: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](mailto: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](mailto: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 explicitly 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](mailto: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](mailto: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](mailto: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 initial 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](mailto:beta@opmantek.com) at [beta@opmantek.com](mailto: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.