

OpenNMS Release Notes

Cumulative Release History

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Preface

OpenNMS is the creation of numerous people and organizations, operating under the umbrella of the OpenNMS project. The original code base was developed and published under the GPL by the Oculan Corporation until 2002, when the project administration was passed on to Tarus Balog.

The current corporate sponsor of OpenNMS is [The OpenNMS Group](#), which also owns the OpenNMS trademark.

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Chapter 1. Introduction

About This Release

1.1. Release 1.10.8

Release 1.10.8 is the latest in the stable series of OpenNMS releases. It contains a number of bugfixes and enhancements.

The codename for 1.10.8 is *Trikiti*

1.2. Release 1.10.7

Release 1.10.7 is the latest in the stable series of OpenNMS releases. It contains a number of bugfixes and enhancements.

The codename for 1.10.7 is *Buccina*

1.3. Release 1.10.6

Release 1.10.6 is the latest in the stable series of OpenNMS releases. It contains a number of bugfixes and enhancements.

The codename for 1.10.6 is *Cornamuse*

1.4. Release 1.10.5

Release 1.10.5 is the latest in the stable series of OpenNMS releases. It contains a few minor bugfixes and enhancements.

The codename for 1.10.5 is *Tromboon*

1.5. Release 1.10.4

Release 1.10.4 is the latest in the stable series of OpenNMS releases. It contains a few minor bugfixes and enhancements.

The codename for 1.10.4 is *Archlute*

1.6. Release 1.10.3

Release 1.10.3 is the latest in the stable series of OpenNMS releases. It contains a few bugfixes, most notably an important deadlock fix when using provisiond.

The codename for 1.10.3 is *Fiscorn*

1.7. Release 1.10.2

Release 1.10.2 is the latest in the stable series of OpenNMS releases. It contains bugfixes, including a fix for a filehandle leak regression, Windows installer fixes, and some minor enhancements.

The codename for 1.10.2 is *Charango*

1.8. Release 1.10.1

Release 1.10.1 is the second in the latest series of stable releases. It contains plenty of bugfixes, as well as a few minor enhancements.

The codename for 1.10.1 is *Hurdy Gurdy*

1.9. Release 1.10.0

Release 1.10.0 is the first in the latest series of stable releases.

The codename for 1.10.0 is *Alboka*

1.10. Release 1.9.93

Release 1.9.93 is the latest in a series of development releases of OpenNMS. This represents what will eventually become OpenNMS 1.10.0 when it is blessed as the next stable release.

The codename for 1.9.93 is *Kora*

1.11. Release 1.9.92

Release 1.9.92 is the latest in a series of development releases of OpenNMS. This represents what will eventually become OpenNMS 1.10.0 when it is blessed as the next stable release.

The codename for 1.9.92 is *Superbone*

1.12. Release 1.9.91

Release 1.9.91 is the latest in a series of development releases of OpenNMS. This represents what will eventually become OpenNMS 1.10.0 when it is blessed as the next stable release.

The codename for 1.9.91 is *Crumhorn*

1.13. Release 1.9.90

Release 1.9.90 is the latest in a series of development releases of OpenNMS. This represents what will eventually become OpenNMS 1.10.0 when it is blessed as the next stable release.

The codename for 1.9.90 is *Balafon*

1.14. Release 1.9.8

Release 1.9.8 is the latest in a series of development releases of OpenNMS. This represents what will eventually become OpenNMS 1.10.0 when it is declared feature-complete and stable.

The codename for 1.9.8 is *Pulalu*

1.15. Release 1.9.7

Release 1.9.7 is the latest in a series of development releases of OpenNMS. This represents what will eventually become OpenNMS 1.10.0 when it is declared feature-complete and stable.

The codename for 1.9.7 is *Naqara*

1.16. Release 1.9.6

Release 1.9.6 is the latest in a series of development releases of OpenNMS. This represents what will eventually become OpenNMS 1.10.0 when it is declared feature-complete and stable.

The codename for 1.9.6 is *Barbat*

1.17. Release 1.9.5

Release 1.9.5 is the latest in a series of development releases of OpenNMS. This represents what will eventually become OpenNMS 1.10.0 when it is declared feature-complete and stable.

The codename for 1.9.5 is *Canjo*

1.18. Release 1.9.4

Release 1.9.4 is the latest in a series of development releases of OpenNMS. This represents what will eventually become OpenNMS 1.10.0 when it is declared feature-complete and stable.

The codename for 1.9.4 is *Guzheng*

1.19. Release 1.9.3

Release 1.9.3 is the latest in a series of development releases of OpenNMS. This represents what will eventually become OpenNMS 1.10.0 when it is declared feature-complete and stable.

The codename for 1.9.3 is *Recorder*

1.20. Release 1.9.2

Release 1.9.2 is the latest in a series of development releases of OpenNMS. This represents what will eventually become OpenNMS 1.10.0 when it is declared feature-complete and stable.

The codename for 1.9.2 is *Psaltery*

1.21. Release 1.9.1

Release 1.9.1 is the latest in a series of development releases of OpenNMS. This represents what will eventually become OpenNMS 1.10.0 when it is declared feature-complete and stable.

Since 1.9.0, [a few new features](#) were added.

The codename for 1.9.1 is *Oboe*

1.22. Release 1.9.0

Release 1.9.0 is the latest in a series of development releases of OpenNMS. This represents what will eventually become OpenNMS 1.10.0 when it is declared feature-complete and stable.

Since 1.8, [a few new features](#) were added.

The codename for 1.9.0 is *Timple*

Chapter 2. What's New?

Changes in This OpenNMS

2.1. Changes in OpenNMS 1.10.8

2.1.1. Bug

- NodeAvailabilityReport.jrxml doesn't work: PSQLErrorException caused by date string in french locale (Issue [NMS-5379](#))
- subreports/InterfaceAvailabilityReport_subreport1.jrxml doesn't work on my locale (Issue [NMS-5457](#))
- SnmpMonitor is not able to manage "OCTET STRING" (Issue [NMS-5563](#))
- Selecting Surveillance Categories Per Node Broken (Issue [NMS-5609](#))
- Nodes with the same IP show up in the wrong categories (availability table on the index page) (Issue [NMS-5611](#))
- JavaSendMailer throws NPE when no e-mail address configured for report (Issue [NMS-5665](#))
- The search page is not displaying the services correctly if Capsd is disabled (Issue [NMS-5669](#))
- The NTP Detector is broken (Issue [NMS-5677](#))
- Add a way to use the IP address when building criteria selections for the SNMP interfaces on the SNMP Poller's configuration file. (Issue [NMS-5683](#))
- The JRobin Converter doesn't work when the RRD Step is different than 5 minutes (Issue [NMS-5685](#))
- The hover icon of the delete button from the Surveillance Categories Page is wrong. (Issue [NMS-5693](#))
- Categories with spaces or non alphanumeric characters breaks the delete operation on the WebUI. (Issue [NMS-5694](#))
- google-collections has been replaced with guava (Issue [NMS-5695](#))
- HttpCollector doesn't detect response locale (PATCH INCLUDED) (Issue [NMS-5701](#))
- Default poller-configuration.xml specifies timeout, retry, port for SNMP-based services (Issue [NMS-5703](#))
- WMI Capsd plugin mixes up username, domain, and password (Issue [NMS-5707](#))
- Wrong redirect after clicking on any ticket related button from the alarm details page (Issue [NMS-5713](#))
- AssetRecordDao.findById is not working (Issue [NMS-5714](#))

2.1.2. Enhancement

- Improve the ticketer API in order to access more information about the ticket's originator. (Issue [NMS-5705](#))

2.2. Changes in OpenNMS 1.10.7

2.2.1. Bug

- Missing IP interfaces in node.jsp list (Issue [NMS-5261](#))
- datacollection stops after making changes in "Schedules Outages" (Issue [NMS-5491](#))
- vague provisiond.log DEBUG verbage (and misspelling) (Issue [NMS-5518](#))
- DnsDetector logs an error message when attempting to detect the DNS service (Issue [NMS-5565](#))
- verbose messages about old import formats should be removed (Issue [NMS-5571](#))
- Latency thresholding fails for StrafePing, perhaps others when nulls exist in PollStatus properties (Issue [NMS-5600](#))
- Ability to disable the scheduling for rescan existing nodes when Provisiond starts (Issue [NMS-5622](#))
- Can't hide a single widget from dashboard.jsp (Issue [NMS-5638](#))
- missing \ in report.mikrotik.temp.command in snmp-graphs.properties (Issue [NMS-5648](#))
- nortel.kerneltasks report uses incorrect column name (Issue [NMS-5649](#))
- typo in property name for novell report (Issue [NMS-5650](#))

2.2.2. Enhancement

- Allow user documentation on alarms and a class of alarms (Issue [NMS-5632](#))
- Order of threshold groups (Issue [NMS-5647](#))

2.3. Changes in OpenNMS 1.10.6

2.3.1. Bug

- 1.10 Removed IP Hostname Field During Provisioning Scans (Issue [NMS-5233](#))
- send-event.pl changes system hostname on Solaris systems (Issue [NMS-5351](#))
- The "finished" logging statement is never called for CollectableService:doCollection() (Issue [NMS-5441](#))
- provisioning problem for simple services java.net.SocketException (Issue [NMS-5469](#))
- Thresholding on HTTP collections is broken (Issue [NMS-5504](#))
- Fedora 17 Packages (Issue [NMS-5538](#))

- CollectionResourceWrapper cache takes up large amounts of RAM (Issue [NMS-5557](#))
- Update RRD datasources to have a step field (Issue [NMS-5570](#))

2.3.2. Enhancement

- Add UEI to the notification configuration UI (Issue [NMS-5559](#))

2.4. Changes in OpenNMS 1.10.5

2.4.1. Bug

- Arithmetic Exception in QueuedStrategy (Issue [NMS-4437](#))
- Installer fails when using the "EnterpriseDB" PostgreSQL database. (Issue [NMS-5431](#))
- WebStart (JNLP) remote poller is missing ConfigurationGui and other Groovy bits (Issue [NMS-5447](#))
- Include/Exclude range (Issue [NMS-5465](#))
- Fix ReST "count" requests, refactor PUT/POST to use Post/Redirect/Get pattern (Issue [NMS-5489](#))
- Debian package misses postgresql requirement for dependency-based booting (Issue [NMS-5490](#))

2.4.2. Enhancement

- No packaging for mib2events, mibparser, and Provisioning Adapters (Issue [NMS-3183](#))
- Greater flexibility in RelativeTime for Statistics Reports (Issue [NMS-5422](#))

2.5. Changes in OpenNMS 1.10.4

2.5.1. Bug

- Collectd collects for deleted node (Issue [NMS-1996](#))
- No working breadcrumb on System Report List Page (Issue [NMS-4943](#))
- Services not deleted when removed from provisioning requisition (Issue [NMS-5198](#))
- An exception is thrown if a notification is configured to have a subject with more than 256 characters (Issue [NMS-5375](#))
- There are some NPE when trying to collect data from nodes managed by Capsd (Issue [NMS-5400](#))
- IpAddressTableEntry: Unable to determine IP address type (4) (Issue [NMS-5414](#))
- MockSnmppAgent does not parse properly STRING with quotes "" (Issue [NMS-5415](#))
- HttpCollector fails to parse numeric values in locales that use different decimal notation (Issue [NMS-5426](#))
- NullPointerException when printing errors in the JNI6 code (Issue [NMS-5428](#))

2.5.2. Enhancement

- Add logmsg support to send-event.pl (Issue [NMS-5373](#))
- Add notification ID to NotificationTask.toString() (Issue [NMS-5377](#))
- Add SNMP data collection and resource graph definitions for pfSense firewall / router (Issue [NMS-5378](#))

2.6. Changes in OpenNMS 1.10.3

2.6.1. Bug

- Path-Outage: parent-foreign-id is not recognized when defined in another requisition (Issue [NMS-4109](#))
- JRobinRrdStrategy: JRobin: Unrecognized graph argument: (Issue [NMS-4757](#))
- Provisiond leaks file handles, eventually causing "Too many open files" crashes (Issue [NMS-4846](#))
- Scheduled outages applied on latency thresholds are ignored by Pollerd. (Issue [NMS-5357](#))
- Unable to create reports after upgrade from 1.10.1 to 1.10.2 (Issue [NMS-5359](#))

2.7. Changes in OpenNMS 1.10.2

2.7.1. Bug

- Path-Outage: parent-foreign-id is not recognized when defined in another requisition (Issue [NMS-4109](#))
- nodeAdded event create when POSTing to REST api does not include nodeLabel (Issue [NMS-4891](#))
- POST for node/<nodeId>/ipinterface creates interface does not returns its data (Issue [NMS-4892](#))
- Unable to add custom poller with capsd disabled. (Issue [NMS-4924](#))
- Deletion of surveillance categories via WebUI is broken (Issue [NMS-4927](#))
- handle bad SNMP ranges gracefully (Issue [NMS-4947](#))
- collectd does not unschedule deleted nodes (Issue [NMS-5105](#))
- Graphing Fails on Windows (Issue [NMS-5139](#))
- DO_NOT_PERSIST fails on explicitly defined interface when matching any IP address (Issue [NMS-5154](#))
- Some XSDs are missing after installing opennms-core (Issue [NMS-5220](#))
- Show interfaces at search for nodes causes crash (Issue [NMS-5230](#))
- Correlator lacks its own log appender (Issue [NMS-5250](#))

- OpenNMS can't load JICMP and/or JICMP6 (Issue [NMS-5253](#))
- OpenNMS-remote-poller debian package requires sun-java6-jre (Issue [NMS-5295](#))
- You cannot start OpenNMS with a configured Selenium-Monitor (Issue [NMS-5299](#))
- [Main] C3P0ConnectionFactory: C3P0 has no equivalent to setMaxSize. Ignoring. (Issue [NMS-5300](#))
- Copy of jdhcp-1.1.1.jar Not Included in the opennms-plugin-protocol-dhcp Debian Package (Issue [NMS-5305](#))
- Exception when installing OpenNMS 1.10.1 on Windows 2008 Server (Issue [NMS-5306](#))
- Debian package libopennms-java does not depend on libpostgresql-jdbc-java (Issue [NMS-5308](#))
- clicking on Nodelist throws an error (Issue [NMS-5316](#))
- Threshold Groups page "Request a reload threshold packages configuration" button produces 404 error on IE9 (Issue [NMS-5323](#))
- log messages show up in wrong log file (Issue [NMS-5331](#))
- Automatically created threshold event description missing % at %parm[all]% (Issue [NMS-5336](#))

2.7.2. Enhancement

- Default netsnmp group memAvailSwap / memTotalSwap threshold raises alerts for devices that have no swap space allocated (Issue [NMS-5115](#))
- Events file for websense appliance (Issue [NMS-5314](#))
- Add the ability to apply the SiblingColumnStorageStrategy to resource's instance (Issue [NMS-5339](#))

2.8. Changes in OpenNMS 1.10.1

2.8.1. Bug

- ONMS in "fr" and "de" locales: all event times end in hh:mm:00 (no seconds) (Issue [NMS-3111](#))
- Model importer can silently fail and report importSuccessful when given badly formed XML (Issue [NMS-4205](#))
- Errors in master pom.xml (Issue [NMS-4950](#))
- KSC Child Resource List is not in alphabetical order (Issue [NMS-4957](#))
- Excluded IP ranges are ignored in discovery (Issue [NMS-5045](#))
- Clicking the search button on the Node Interfaces Gizmo causes strange 128 Interface to appear (Issue [NMS-5054](#))
- missing interfaces on node page -> physical interface list (Issue [NMS-5127](#))
- Asset CSV import will not import new asset fields. (Issue [NMS-5146](#))

- Reload KSC Report Configuration - Button fails (Issue [NMS-5148](#))
- Linkd generates undefined event (Issue [NMS-5149](#))
- Errors inside the Event Analysis Report related with "Top 25 events by node" (Issue [NMS-5161](#))
- opennms-core RPM is huge - war files packaged in /opt/opennms/lib (Issue [NMS-5166](#))
- Exceptions thrown by one provisioning adapter block further adapters from invocation (Issue [NMS-5167](#))
- etc-pristine in opennms-core contains configuration files from optional packages like the XML Collector (Issue [NMS-5168](#))
- malformed snmp-config.xml entry could cause config to not be read (Issue [NMS-5172](#))
- Only 20 interfaces shown (Issue [NMS-5176](#))
- database report input date wrong (Issue [NMS-5177](#))
- Unable to manually provision service via GUI without first defining detector (Issue [NMS-5178](#))
- Any authenticated user can use the snmpConfig ReST service (Issue [NMS-5184](#))
- Default Provisiond config contains a dns://localhost/localhost URL requisition-def (Issue [NMS-5188](#))
- Old asset field "maintContractNumber" in legacy requisitions breaks provisioning after upgrading to 1.10 (Issue [NMS-5191](#))
- reparenting of snmp interfaces fails (Issue [NMS-5195](#))
- Custom initial-delay not preserved in destination path web editor (Issue [NMS-5197](#))
- Delete an outage through the REST API is not working (Issue [NMS-5200](#))
- The provisioning GUI in the webapp presents the wrong services to add to an interface when creating requisitions (Issue [NMS-5211](#))
- Notifications cannot contain non-ASCII characters and will cause NPEs (Issue [NMS-5216](#))
- TcpHandler in eventd times out too soon (Issue [NMS-5224](#))
- upgrade from 1.8.11 to 1.10.0 breaks provisioning groups and discovery (Issue [NMS-5229](#))
- Nodes marked as deleted in the database still appear in the output of REST calls. (Issue [NMS-5231](#))
- output.log reports java.net.ConnectException error while starting (Issue [NMS-5238](#))
- syslog date parsing fails in non-English locales (Issue [NMS-5242](#))
- The Tcp Exporter cannot process a null Rrd value (Issue [NMS-5248](#))
- A restart is required after changing the resource filter of a threshold (Issue [NMS-5258](#))
- A restart is required after adding a new threshold package. (Issue [NMS-5259](#))

- Resource Types are not ordered on Choose Resources Page (Issue [NMS-5265](#))
- HostResourceSwRunPlugin is not working (Issue [NMS-5274](#))
- Data Export throws an exception when trying to process a '-nan' value. (Issue [NMS-5275](#))
- Small cosmetic problem with the feature "Add to KSC Report" (Issue [NMS-5287](#))
- Provisioning Groups WebUI error (Issue [NMS-5290](#))

2.8.2. Enhancement

- Mib2opennms : replace the unreadable html entities by CDATA sections (Issue [NMS-5142](#))
- import update ArsDigita eclipse code formatter xml (Issue [NMS-5156](#))
- Increase Group Name Size (Issue [NMS-5181](#))
- Handle numbers with units when configuring the XML Collector (Issue [NMS-5185](#))
- Use multiples XPath for the resource identifier (resource key). (Issue [NMS-5186](#))
- Enhance JMXSecureCollector with RMI protocol support (Issue [NMS-5205](#))
- Split jmx-datacollection-config.xml (Issue [NMS-5213](#))
- Be able to control the filterOperator attribute from the WebUI (Issue [NMS-5239](#))
- Add any resource graph to a KSC report (Issue [NMS-5268](#))

2.9. Changes in OpenNMS 1.10.0

2.9.1. Bug

- OpenNMS does not keep track of changes that effect the psk map key (Issue [NMS-2384](#))
- VMware traps not recognized (Issue [NMS-2566](#))
- Cisco temperature threshold too low (Issue [NMS-3574](#))
- Link discovery gets confused by Cisco HSRP Mac Addresses (Issue [NMS-3626](#))
- Reasons Missing From nodeLostService events (Issue [NMS-3848](#))
- Opennms silently fails to detect SNMP on Dlink Switches (Issue [NMS-3961](#))
- Standard OpenNMS Solaris SMF manifest creates an insane multi-user-server dependency (Issue [NMS-4543](#))
- Linkd can't collect QBridgeDot1dTpFdbTable from D-link switches (Issue [NMS-4930](#))
- KSC Overall Report Menu Formatted Strangely (Issue [NMS-4956](#))
- The opennms startup script doesn't work in Solaris on a fresh installation (Issue [NMS-4971](#))

- Resource graph code is forming bad URLs (Issue [NMS-4981](#))
- Invalid characters on MibObj's alias prevent their usage on thresholds expressions (Issue [NMS-5019](#))
- No Reason Code on IPv6 HTTPS outage (Issue [NMS-5028](#))
- linkd needs to "upsert" entries in the ipRouteInterface, atinterface, vlan tables (Issue [NMS-5029](#))
- Broken support for net-snmp (Issue [NMS-5036](#))
- CIDR-notation IP address in linkd causes exception (Issue [NMS-5050](#))
- dateParser in Rfc5424SyslogParser (Issue [NMS-5051](#))
- Map appears to show duplicate links (Issue [NMS-5052](#))
- Terminology around provisioning considered confusing (Issue [NMS-5056](#))
- Enabling DEBUG for Collectd, breaks SiblingColumnStorageStrategy (Issue [NMS-5062](#))
- The placeholders added to sample configuration files are not replaced when generating RPMs (Issue [NMS-5070](#))
- Field reference to script engine appears to cause memory bloat (Issue [NMS-5076](#))
- Change in hrStorage jrb directory naming usage breaks snmp graphs (Issue [NMS-5078](#))
- Notification names cannot contain an apostrophe it breaks the Java script (Issue [NMS-5090](#))
- 1.8-compatible CustomSyslogParser is not actually 1.8-compatible ;) (Issue [NMS-5091](#))
- SyslogNG parser can't handle older Syslog messages (Issue [NMS-5092](#))
- Spike hunter throws an exception that prevents to scan all RRAs. (Issue [NMS-5096](#))
- If a threshold configuration contains invalid data from evaluators point of view a silent exception is thrown. (Issue [NMS-5102](#))
- Security Roles seem to be busted (Issue [NMS-5108](#))
- Batch reports under database reports GUI seems to be broken (Issue [NMS-5111](#))
- Radius (potentially all) Detector logging incomplete (Issue [NMS-5122](#))
- XSS vulnerability in OpenNMS web UI (Issue [NMS-5128](#))
- provision.pl not working "set" (Issue [NMS-5130](#))
- Outage ReST Interface outputs invalid XML (multiple <ipAddress/> fields) (Issue [NMS-5138](#))
- Capsd should exit if org.opennms.provisiond.enableDiscovery is true (Issue [NMS-5157](#))

2.9.2. Enhancement

- Making logging from linkd more readable (Issue [NMS-5081](#))

- Change of log level for certain messages from linkd (Issue [NMS-5087](#))
- Convert OPENNMS-MIB to SMIV2 (Issue [NMS-5099](#))

2.10. Changes in OpenNMS 1.9.93

2.10.1. Bug

- HttpMonitor marks service down when response-text matches first line of server response (Issue [NMS-2702](#))
- linkd not working (Issue [NMS-4005](#))
- events written to DB although dest=suppress (Issue [NMS-4006](#))
- linkd ignores <specific> in <iproutes> section of config file (Issue [NMS-4326](#))
- JDBCCollector Appears to Be Broken - stores last value only (Issue [NMS-4512](#))
- Outages crossing report time boundary counted fully in SNMP Interface Availability Report (Issue [NMS-4699](#))
- Interface MAC addresses don't display (and are missing from the DB) on some SNMP-capable nodes (Issue [NMS-4902](#))
- Configuring SNMP broken for biggish IPv4 ranges (Issue [NMS-4972](#))
- Bubble-up submap status (not severity) (Issue [NMS-4976](#))
- rrd.usetcp crashing on startup (Issue [NMS-4989](#))
- DHCP plugins changed (Java) package, old configs are no longer compatible (Issue [NMS-5011](#))
- ClassCastException when using complex threshold expressions. (Issue [NMS-5014](#))
- OnmsAlarm class incorrectly references the alarm_attributes table as alarm_details (Issue [NMS-5027](#))
- NPE in linkd with two Linux nodes (Issue [NMS-5030](#))
- interfaceOperDown events are sent every time a node with down interfaces is rescanned. (Issue [NMS-5040](#))

2.10.2. Enhancement

- Event definition for Juniper Chassis Cluster SNMP trap (Issue [NMS-4986](#))
- Events definition for Juniper access authentication related SNMP traps (Issue [NMS-4987](#))
- Separate out RADIUS implementation (Issue [NMS-4992](#))
- Split Syslogd configuration across multiple files, add useful definitions and matching events (Issue [NMS-5024](#))
- Missing OID in linkd's config for VLAN classes (Issue [NMS-5031](#))

2.11. Changes in OpenNMS 1.9.92

2.11.1. Bug

- Selected more than 56 things in an add hoc resource graph returns no data (Issue [NMS-2205](#))
- Statsd Database Deadlock (Issue [NMS-2390](#))
- normalize radius code (Issue [NMS-2812](#))
- Deleted node appear in KSC report creation (Issue [NMS-2977](#))
- Provisioning issues with Primary Interface (Issue [NMS-3324](#))
- Unable provisioned node when SNMP Agent is down (Issue [NMS-3470](#))
- provisiond does not create nodelabelchanged event (Issue [NMS-3594](#))
- webUI shows 100% availability although service is not monitored (Issue [NMS-3887](#))
- WebUI shows "rescan to suspend" for "forced unmanaged" services (Issue [NMS-3906](#))
- Thresholding - Absolutechange stored as floating-point value (Issue [NMS-4028](#))
- Poll failure reasons pooched in 1.9.1 Snapshot again (Issue [NMS-4073](#))
- XMPP Failure on empty XMPP addresses (Issue [NMS-4123](#))
- No nodeid found for next hop ip/0.0.0.0 (Issue [NMS-4185](#))
- Sending notifications causes exception in javamailer if user is missing smtp adress (Issue [NMS-4367](#))
- When an IP is configured on an interface, the interface name is no longer visible in Node Link Detailed Info (Issue [NMS-4412](#))
- Provisiond NodeCategorySettingPolicy. Nodes lose categorization in subsequent Synchronizations (Issue [NMS-4423](#))
- 404 NOT_FOUND after generating a system report using FTP (Issue [NMS-4674](#))
- Provisiond allows duplicate nodes (Issue [NMS-4695](#))
- Service monitored with 100% availability instead of Not Monitored (Issue [NMS-4704](#))
- Requisition REST Service allows duplicate nodes (Issue [NMS-4749](#))
- WMI datacollection stops after changes in Schedules Outages (Issue [NMS-4830](#))
- Remote Poller state changes from Paused to Running (Issue [NMS-4834](#))
- InterfaceFilter does not normalize IP addresses (Issue [NMS-4881](#))
- HttpCollector ignores "port" parameter from Collectd config (Issue [NMS-4886](#))
- base-url not used when viewing resource graphs (Issue [NMS-4903](#))

- Provisiond NodeScan aborted scanning IP address tables (Issue [NMS-4904](#))
- wrong implementation of `org.opennms.netmgt.correlation.Correlator$EngineAdapter.getName()` ? (Issue [NMS-4914](#))
- Resource Graphs selector - doesn't indicate stale graph data (Issue [NMS-4918](#))
- Resource Graphs selector - "Show more" to infinity and beyond! and other quirks (Issue [NMS-4919](#))
- KSC Reports search box on home page is case sensitive (Issue [NMS-4922](#))
- RadiusAuthenticationProvider.java Tests against wrong variable. (Issue [NMS-4928](#))
- Availability Miscalculated in NodeAvailabilityReport.jrxml (and others) (Issue [NMS-4931](#))
- KSC Reports fails due to Missing Parameter: report (Issue [NMS-4934](#))
- The Snmp Poller does not follow the `maxVarBindPerPDU` statement (Issue [NMS-4935](#))
- Hung threads causing 100% CPU usage (possibly Jetty + HTTPS/SSL related) (Issue [NMS-4940](#))
- All SNMP Interfaces marked as "no collect" by default on any provisioned node (Issue [NMS-4965](#))
- ReinitializePrimarySNMPInterface event causes SNMP interfaces manually marked as "Collect" to revert to "No collect" (Issue [NMS-4967](#))
- Exception with ldapAuthoritiesPopulator with LDAP and / or Radius integration (Issue [NMS-4975](#))
- Notifications Fail with IPv6 Addresses (Issue [NMS-4977](#))

2.11.2. Enhancement

- DELL DRAC/CMC power stats collection and graphs (Issue [NMS-3299](#))
- Default support AKCP SecurityProbe x20 (Issue [NMS-4156](#))
- New Cisco OIDs for linkd (Issue [NMS-4670](#))
- Report on Windows Servers disk usage (Issue [NMS-4948](#))
- Asset-page categorie fields validation. (Issue [NMS-4963](#))
- HostResourceSwRunMonitor: define the service-name parameter as a regular expression (Issue [NMS-4978](#))

2.11.3. Task

- Make sure we add `-XX:+HeapDumpOnOutOfMemoryError` to default runtime arguments (Issue [NMS-4953](#))

2.12. Changes in OpenNMS 1.9.91

2.12.1. Bug

- HTTP monitor nits (Issue [NMS-1802](#))

- When running the database checker rethrow any exceptions with details (e.g.: database URL) (Issue [NMS-2374](#))
- Make the severity element in event configuration an enumeration and fix our default config files (Issue [NMS-2375](#))
- Node when deleted remains in performance report list (Issue [NMS-2893](#))
- GUI error if we remove Switches from Surveillance (Issue [NMS-3143](#))
- Reporting is truncated by URL length limitation (Issue [NMS-3194](#))
- Broken paged grid in Select SNMP Interfaces (Issue [NMS-3515](#))
- WMI/WQL Poller - Wrong text in event (Issue [NMS-3606](#))
- Create detectors for all protocol plugins (Issue [NMS-3651](#))
- reload of Threshold configuration does not work - only after restart OpenNMS new threshold are applied (Issue [NMS-3905](#))
- Alarm Description in Dashboard not formatted (Issue [NMS-3912](#))
- SNMPPoller is the cause of loss of snmpinterfaces during the re-import / synchronization Provision Groups. (Issue [NMS-4040](#))
- Can't provision a node with one IP address and a policy to avoid all IP address (Issue [NMS-4049](#))
- spring/beanfactory issue Java 1.7.0 - pointcut issues (Issue [NMS-4350](#))
- Provisiond fails with a Unable to return specified BeanFactory instance exception at startup (Issue [NMS-4475](#))
- [patch] Show correct values in net-snmp CPU Usage graph (Issue [NMS-4502](#))
- Remote Poller implodes with lack of WMI classes (Issue [NMS-4526](#))
- Provisiond HOST-RESOURCES process detector (Issue [NMS-4544](#))
- Report Issue - Surveillance Category Not Correctly Chosen (Issue [NMS-4593](#))
- Resource Graph Resources - limited to 55 Resources or less (Issue [NMS-4675](#))
- Various linkd issues (Issue [NMS-4684](#))
- LDAP authorization fails - group to role mapping does not work (Issue [NMS-4725](#))
- Events generated from trapd are not associated with any node (Issue [NMS-4799](#))
- Node.jsp - double clicking physical interfaces goes to interface.jsp instead of snmpinterface.jsp (Issue [NMS-4800](#))
- Null (\0) characters in logmsg field of events causes org.postgresql.util.PSQLException: ERROR: invalid byte sequence for encoding "UTF8": 0x00 (Issue [NMS-4817](#))
- RrdUtils.createRRD log message is unclear (Issue [NMS-4845](#))

- Notification not being sent event if status="on", looks like notifd is not using the status in the config file properly (Issue [NMS-4851](#))
- unit tests on windows creates directories outside of temp directory (Issue [NMS-4853](#))
- StorageStrategy documentation does not match API in code (Issue [NMS-4857](#))
- Runaway threads consuming CPU when rendering certain graphs (Issue [NMS-4861](#))
- With Jetty + HTTPS, certain Web UI actions prompt browser to "Save As" JSP and HTML files (Issue [NMS-4871](#))
- Show all nodes with asset info not working (Issue [NMS-4872](#))
- Upgrade bug when Linkd tables contain data (Issue [NMS-4873](#))
- Typo in datacollection-config.xml (Issue [NMS-4877](#))
- java.lang.ClassCastException when building an event notification with a category filter (Issue [NMS-4880](#))
- IP address formatting does not match (Issue [NMS-4882](#))
- 1.9.90 newer graphics display inconsistency - node.jsp (Issue [NMS-4895](#))
- notifd DEBUG message "supress" misspelling (Issue [NMS-4899](#))
- Change StorageStrategy to throw an IllegalArgumentException when the arguments (or parameters) are not properly configured on datacollection-config.xml (Issue [NMS-4913](#))

2.12.2. Enhancement

- Allow HttpCollector and PageSequenceMonitor to accept all SSL certificates (Issue [NMS-3622](#))
- Configure scheduling outages via RESTful Web Service (Issue [NMS-4232](#))
- Make Jetty headerBufferSize property configurable (Issue [NMS-4815](#))
- notifd.log - Info if message was send (Issue [NMS-4831](#))
- Poorly used INFO log message (Issue [NMS-4833](#))
- jmx collector does direct db lookup of nodeid (Issue [NMS-4838](#))
- Check if a node is currently covered by a scheduled outage using Rest (Issue [NMS-4839](#))
- Add PostgreSQL 9.1 support (Issue [NMS-4923](#))

2.13. Changes in OpenNMS 1.9.90

2.13.1. Bug

- threshd.log shows wrong nodeId in certain circumstances (Issue [NMS-1121](#))
- columnName argument to AssetModel.searchAssets allows SQL injection (Issue [NMS-1769](#))

- Trapd is not able to process SNMPv3 traps (Issue [NMS-2995](#))
- XMPPNotificationStrategy (or JavaMailNotificationStrategy) does not utilise the "Numeric Message" field -nm (Issue [NMS-3322](#))
- reportd missing ability to select mailer from javamail-configuration.xml (Issue [NMS-3771](#))
- Interface Deleted with SNMP supported and no ipAddrTable (Issue [NMS-3982](#))
- SNAPSHOT installer scripts are faulty (Issue [NMS-4034](#))
- translated events are displayed like the original event (Issue [NMS-4038](#))
- provisioning node with NodeCategorySettingPolicy policy in foreign source does not work if node has no SNMP available (Issue [NMS-4039](#))
- Win32ServiceDetector fails to detect services (Issue [NMS-4047](#))
- We need a WmiDetector (Issue [NMS-4106](#))
- Support relativetime in graph URL (Issue [NMS-4114](#))
- Thresholdvalue in scientific notation not displayed/stored correctly (Issue [NMS-4126](#))
- threshd process wrong counter-type SNMP data after SNMP data collection failed or restored (Issue [NMS-4244](#))
- In-line thresholder ignores scheduled outages (Issue [NMS-4261](#))
- Update Copyright Notice to include 2011 (Issue [NMS-4339](#))
- jetty allows directory listings (Issue [NMS-4375](#))
- Problems adding nodes during discovery (Issue [NMS-4376](#))
- Provisiond NodeCategorySettingPolicy. Nodes lose categorization in subsequent Synchronizations (Issue [NMS-4423](#))
- SnmpAsset Adapter has dependency on Trapd (Issue [NMS-4463](#))
- Services drop down list not alphabatized (Issue [NMS-4483](#))
- SiblingIndexStorageStrategy does SNMP Queries and makes collection VERY slow (Issue [NMS-4494](#))
- Collectd's ServiceCollector class was erroneously changed to take Map<String, String> (Issue [NMS-4500](#))
- IPAddress class overrides equals but not hashCode (Issue [NMS-4530](#))
- Provisiond silently fails to import an invalid model importer file but reports importSuccessful anyway. (Issue [NMS-4546](#))
- [patch] hardware asset fields need more space and one more field (Issue [NMS-4585](#))
- Node label changes outside requisition editor on nodes with a foreign-source ID (Issue [NMS-4590](#))

- Brocade resource-type and fcTable collection could be nicer (Issue [NMS-4661](#))
- Default JDBC data collection config does not work (Issue [NMS-4662](#))
- Capsd may reparent duplicate interfaces from requisitioned nodes (Issue [NMS-4663](#))
- c-ping fails to configure (Issue [NMS-4677](#))
- Permissions on multiple files/directories are poor (allow world-write, have setuid) (Issue [NMS-4682](#))
- OpenNMS GoogleMaps geo-enocder no longer functioning and creates a 503 error in UI (Issue [NMS-4691](#))
- Email Notifications are not properly encoded when the message contains non us-ascii characters. (Issue [NMS-4692](#))
- Provisiond allows duplicate nodes (Issue [NMS-4695](#))
- Path not filtered correctly during build, etc/response-graph.properties (Issue [NMS-4697](#))
- Surveillance part of WEB GUI crashes after all default categories were removed and custom ones were created (Issue [NMS-4698](#))
- snmpStorageFlag="all" is being ignored by the threshold procesing (Issue [NMS-4700](#))
- Unable to add IPv6 address for discovery via web UI (Issue [NMS-4701](#))
- Data Collection Broken for some nodes in testing (Issue [NMS-4703](#))
- race condition in Provisiond IPv6 scanning (Issue [NMS-4717](#))
- When using the GoogleMaps remote poller interface, unchecked markers are visible on initialization (Issue [NMS-4734](#))
- Event Analysis report is missing in default configuration (Issue [NMS-4753](#))
- nodeList page fails to pass the foreignSource when "show interfaces" is selected (Issue [NMS-4777](#))
- DNS provisioning expression matching matches hostname but not record data (Issue [NMS-4783](#))
- DNS provisioning needs to allow foreign ID to be a hash of IP address instead of nodeLabel if administrator so chooses (Issue [NMS-4801](#))
- Word spelled wrong on log message (Issue [NMS-4804](#))
- SELECT tag not closed in asset/modify.jsp (Issue [NMS-4819](#))
- Reportd JavaMailDeliveryService always copies address in sendmail-message "to" attribute or root@localhost (Issue [NMS-4820](#))
- Trapd node-matching should prefer SNMP primary ifaces (Issue [NMS-4822](#))
- AttributeGroup and SiblingColumnStorageStrategy are producing a StackOverflowError (Issue [NMS-4832](#))

- Provisiond leaks file handles, eventually causing "Too many open files" crashes (Issue [NMS-4846](#))
- MSExchangeDetectorClient is too verbose on exceptions (Issue [NMS-4856](#))

2.13.2. Enhancement

- Add IPv6 Support to OpenNMS (Issue [NMS-1094](#))
- Enhancement - Assets with clean date input (Issue [NMS-2834](#))
- Implement PersistenceSelectorStrategy framework (Issue [NMS-3164](#))
- allow trapd to bind to specific address (Issue [NMS-3956](#))
- Enhance default JVM Monitoring configurations (Issue [NMS-4363](#))
- Create a poller monitor to "proxy" pings via the CISCO-PING-MIB (Issue [NMS-4668](#))
- Add alarm-data annotation for Powerware upsDischarged trap event (Issue [NMS-4679](#))
- Better provisiond debugging (Issue [NMS-4694](#))
- Add time it takes to persist the data to the ILR (Issue [NMS-4705](#))
- Enable support for filtering the displayed data (Issue [NMS-4706](#))
- Add ability for HttpMonitor to use node label as virtual host for HTTP polls (Issue [NMS-4707](#))
- MicroBlog doesn't support -nm (Issue [NMS-4708](#))
- Add the possibility to modify eventparms (as text) from Vacuumd (Issue [NMS-4712](#))
- DbHelper class should use dao's (Issue [NMS-4721](#))
- Add new opennms mib events definition (Issue [NMS-4722](#))
- Sort by Stat (Issue [NMS-4728](#))
- Add Label to thresholds for display on "Edit Group" page (Issue [NMS-4742](#))
- Event Analysis Report should be usable on postgres older than 8.4 (Issue [NMS-4752](#))
- Add support for matching syslog messages by process name, severity, facility in ueiMatch (Issue [NMS-4772](#))
- Alphabetize group names in the Users/Groups list (Issue [NMS-4776](#))
- Split syslogd-configuration.xml (Issue [NMS-4779](#))
- Standardize the time zone format reports (Issue [NMS-4785](#))
- collectd log entries could be enhanced (Issue [NMS-4809](#))
- Add a BSF (bean scripting framework) notification strategy (Issue [NMS-4837](#))
- Convert Linkd to use Hibernate (Issue [NMS-4850](#))

- Add command option to NRPE in provisiond (Issue [NMS-4862](#))

2.14. Changes in OpenNMS 1.9.8

2.14.1. Bug

- deleted interfaces are included in polling package ip lists (Issue [NMS-1158](#))
- nsclient-datacollection-config.xml only collects on 1st attribute in wpm group (Issue [NMS-2692](#))
- DemoUI - Leaving the search field blank causes an "Unexpected Error" (Issue [NMS-3500](#))
- Cpu Usage graph missing when using rrdtool (Issue [NMS-3703](#))
- Unexpected error (Issue [NMS-3902](#))
- archive_events.sh still uses the old lib/scripts/* style initialization (Issue [NMS-3933](#))
- outage editor problems (Issue [NMS-4093](#))
- prevent automatic start after installation / upgrade (Issue [NMS-4110](#))
- null pointer exception from Admin ? Instrumentation Log Reader jsp page (Issue [NMS-4118](#))
- 'some' matchType for WMI Poller matches 2 or more, not 1 or more as documented (Issue [NMS-4172](#))
- Failed to load the required jicmp library (Issue [NMS-4211](#))
- No services are registered in the database (Issue [NMS-4230](#))
- Patch for "CPU Usage graph missing when using rrdtool" (Issue [NMS-4346](#))
- HTTP Collector throwing exception "Host must be set to create a host URL" (Issue [NMS-4445](#))
- Reports throughin Exception when doing traffic based reports and store-by-group (Issue [NMS-4454](#))
- System Report: only "full" is working (Issue [NMS-4465](#))
- UI exception when deleting a service from an interface (Issue [NMS-4472](#))
- RRD-based JasperReports fail with JRobin exception (Issue [NMS-4482](#))
- Mail Transport Monitor deletes all mail (Issue [NMS-4537](#))
- Quoting problems in contrib/maint_events.sh (Issue [NMS-4553](#))
- Page Sequence Monitor (PSM) doesn't appear to do retries (Issue [NMS-4558](#))
- org.opennms.netmgt.snmp.TableTracker writes to stderr. (Issue [NMS-4559](#))
- Report Issue - Average and Peak Traffic rates for Nodes by Interface (Issue [NMS-4565](#))
- Filter rules tend to get all IP addresses, even if they are deleted (Issue [NMS-4583](#))
- Remove ModelImporter stuff from log4j.properties (Issue [NMS-4587](#))

- service search constraints show up as "null" when used to filter the event list page (Issue [NMS-4591](#))
- Report Issue - Surveillance Category Not Correctly Chosen (Issue [NMS-4593](#))
- eventd cannot parse events which are missing an XML namespace (Issue [NMS-4595](#))
- send-event.pl errors on IPv6 addresses (Issue [NMS-4596](#))
- Primary keys are not set to not null (Issue [NMS-4597](#))
- Role provision has no effect (Issue [NMS-4598](#))
- MailTransportMonitor POP3 javax.mail.AuthenticationFailedException, but without connection to host at all (Issue [NMS-4605](#))
- Changing the default password in 1.9.7 (Issue [NMS-4608](#))
- Node Rescan -> node.jsp not found (Issue [NMS-4610](#))
- Problem accessing /opennms/KSC/KSC/customGraphEditDetails.htm. Reason: Not Found - 404 (Issue [NMS-4614](#))
- Report Issue - Total Bytes Transferred by Interface (Issue [NMS-4616](#))
- Refactor ICMP Implementations and make sure that main works for JNA (Issue [NMS-4617](#))
- refactor XSDs to not rely on common XSDs (types.xsd) (Issue [NMS-4634](#))
- Don't print out the database administrator password during install. (Issue [NMS-4638](#))
- KSC reports "add graph" fails with a 404 (Issue [NMS-4643](#))
- Unable to start OpenNMS "An error occurred while attempting to start the "OpenNMS:Name=Eventd" service" (Issue [NMS-4644](#))
- Deleted nodes are showing up in available nodes when creating/editing a surveillance category (Issue [NMS-4652](#))
- Inconsistent use of org.opennms.web.api.Util.calculateUrlBase(request) (Issue [NMS-4660](#))
- JNA library fails to work for IPv6 on Solaris (Issue [NMS-4664](#))
- Thresholds being evaluated on interfaces marked DISABLE_COLLECTION (Issue [NMS-4669](#))

2.14.2. Enhancement

- FilterDao calls need to return InetAddresses (Issue [NMS-4509](#))
- EventBuilder setInterface needs to take an InetAddress rather than a String (Issue [NMS-4510](#))
- Alphabetize the User List in the GUI (Issue [NMS-4561](#))
- make ICMP implementation configurable (Issue [NMS-4603](#))
- Add script execution, response times, logging, more to BSFMonitor (Issue [NMS-4604](#))
- add a No SNMP checkbox to the Node Quick-Add web page (Issue [NMS-4615](#))

- Maven settings.xml CR & LF format (Issue [NMS-4626](#))
- Convert snmp-config.xml code to use JAXB instead of Castor (Issue [NMS-4636](#))
- Add MSCHAPv1 and MSCHAPv2 support to RADIUS clients (Issue [NMS-4659](#))

2.14.3. New Feature

- RADIUS MS-CHAPv2 (Issue [NMS-4665](#))

2.15. Changes in OpenNMS 1.9.7

2.15.1. Bug

- NullPointerExceptions in node IP route information (Issue [NMS-2482](#))
- [syslogd] OpenNMS's syslogd implementation does not handle all syslog facilities (Issue [NMS-2640](#))
- correlator service unable to start : java.lang.NoSuchMethodError org.eclipse.jdt.internal.compiler.CompilationResult.getProblems() (Issue [NMS-2847](#))
- statistics report pdf creation does not work (Issue [NMS-3855](#))
- Provisiond Deleting IpAddr On Nodes After Rescan (Issue [NMS-3997](#))
- Provisiond - simple TCP detector fails to detect services (Issue [NMS-4033](#))
- provisioning node with NodeCategorySettingPolicy policy in foreign source does not work if node has no SNMP available (Issue [NMS-4039](#))
- stored report data in non-unique named files (Issue [NMS-4058](#))
- Need to be able to acknowledge notifications through the ReST service (Issue [NMS-4069](#))
- send-event.pl timestamp is not parsed correctly (Issue [NMS-4148](#))
- Rescans Not Happening for Default Nodes (Issue [NMS-4168](#))
- Memcached graph definitions left out of default configuration (Issue [NMS-4208](#))
- Exception when Provisioning an ipv6 address on a node with SNMP Enabled (Issue [NMS-4251](#))
- Null pointer exception when listing outstanding notifications (Issue [NMS-4352](#))
- Documentation can't be build off-line (Issue [NMS-4416](#))
- interface.jsp gives NPE (Issue [NMS-4469](#))
- PageSequenceMonitor double-URL-encodes query parameters (Issue [NMS-4484](#))
- Poller not responding to nodeGainedService events when event interface is an ipv6 address (Issue [NMS-4488](#))
- jdbc-datacollection-config.xml has hard coded path for rrdRepository (Issue [NMS-4491](#))

- Don't require all code to pass the PRESERVE_WHITESPACE constant to CastorUtils (Issue [NMS-4495](#))
- NSClient data collection only reads the first <nsclient-collection> tag (Issue [NMS-4499](#))
- Someone left two q's in the file ./WEB-INF/jsp/graph/chooserresource.jsp (Issue [NMS-4527](#))
- XSD definitions don't need to be anchored (Issue [NMS-4547](#))
- IP validation in web UI doesn't handle IPv6 (Issue [NMS-4555](#))
- Report Issue - Average and Peak Traffic rates for Nodes by Interface (Issue [NMS-4565](#))
- Physical Interface Page Doesn't load on IE (Issue [NMS-4575](#))
- Debian init script not LSB compatible (Issue [NMS-4578](#))
- The attribute "totalCount" for OnmsNodeList is not well calculated (Issue [NMS-4580](#))

2.15.2. Enhancement

- Debian Startup Script hides important Debian Specific Error Output (Issue [NMS-3411](#))
- Remove c3p0 dependencies from installer code so we can change the DB connection pooling implementation (Issue [NMS-4388](#))
- Increase servicename in table service in the core schema to accomodate services with names longer than 32 characters (Issue [NMS-4477](#))
- All Event creation should use the EventBuilder (Issue [NMS-4489](#))
- Get rid of PostgreSQL-specific calls in installation/upgrade tools. (Upgrade to Liquibase 2.0) (Issue [NMS-4496](#))
- OnmsMonitoredService getIpAddress returns a String rather than an InetAddress (Issue [NMS-4507](#))
- OnmsOutage does not following the same getIpInterface pattern as OnmsIpInterface (Issue [NMS-4508](#))
- Convert Event XML to JAXB (Issue [NMS-4535](#))
- New events for traps from Sun/Oracle ILOM cards (Issue [NMS-4541](#))
- Trap events for Comtech EF Data CDM-625 satellite modems (Issue [NMS-4554](#))
- provisiond needs to be able to scan the new ipAddress table, in addition to the (deprecated) ipAddr table, and handle IPv6 addresses (Issue [NMS-4577](#))
- [patch] add new asset fields for hardware configuration data (Issue [NMS-4579](#))

2.15.3. New Feature

- OpenNMS needs a way to do in-depth configuration testing without starting the daemon (Issue [NMS-4336](#))
- create a tool for migrating RRDs (Issue [NMS-4450](#))

2.16. Changes in OpenNMS 1.9.6

2.16.1. Bug

- Stop distributing the non-Jetty webapp as part of the base distribution (Issue [NMS-2572](#))
- rrd-configuration.properties error in comment (Issue [NMS-3068](#))
- Split example poller package into components (Issue [NMS-4053](#))
- database reports ui enhancement request (Issue [NMS-4057](#))
- null pointer exception from Admin ? Instrumentation Log Reader jsp page (Issue [NMS-4118](#))
- Javascript error in IE7 on 1.8.7 (Issue [NMS-4368](#))
- Configure SNMP Data Collection per Interface generates org.postgresql.util.PSQLException (Issue [NMS-4391](#))
- Unable to see Telnet/HTTP/OpenManage links in node.jsp (Issue [NMS-4398](#))
- KSC reports editor broken in IE7 (Issue [NMS-4406](#))
- OpenNMS not installing on RHEL6 x86_64 (Issue [NMS-4409](#))
- Node Availability report query incorrect (Issue [NMS-4410](#))
- opennms-webapp is built and contains all of the jars though they are not needed (Issue [NMS-4411](#))
- Java Exception opening Node Page -> Admin -> Configure SNMP Data Collection per Interface (Issue [NMS-4413](#))
- REST calls for iPhone and iPad App broken (Issue [NMS-4414](#))
- Deleting Foreign Source policy throws java.lang.NoSuchMethodException (Issue [NMS-4415](#))
- Interface Availability report query incorrect (Issue [NMS-4417](#))
- Need to update PostgreSQL JDBC JAR to 9.0 (Issue [NMS-4420](#))
- Only role.admin users are able to use the iphone app (Issue [NMS-4425](#))
- Acknowledging alarms results in an error (Issue [NMS-4426](#))
- Increase default max file descriptors setting (Issue [NMS-4428](#))
- runInPlace.sh script gives unclear instructions (Issue [NMS-4429](#))
- null pointer exception when attempting to enable snmp collection. (Issue [NMS-4432](#))
- WebUI Broken When Deleting Parameters in Foreign Sources (Issue [NMS-4438](#))

2.16.2. Enhancement

- OpenNMS 1.9.x needs to depend on PostgreSQL (≥ 8.1) and IPLIKE ($\geq 2.0.0$) (Issue [NMS-4389](#))

- installer should make sure IPLIKE has IPv6 support (Issue [NMS-4408](#))
- upgrade to JRobin 1.5.10 (Issue [NMS-4431](#))

Note: JRobin 1.5.10 includes a new backend that can improve performance dramatically. For safety's sake, it is disabled by default, but users are encouraged on test systems to enable the new "MNIO" backend in rrd-configuration.properties and report any issues, if found.

2.16.3. Task

- Change event-label name "OpeNMS" for restartPollingInterface event in eventconf.xml (Issue [NMS-4421](#))

2.17. Changes in OpenNMS 1.9.5

2.17.1. Bug

- Installer still has RCS-style \$Id\$ tag in banner (Issue [NMS-3922](#))
- OpenNMS unable to connect to opennms database with opennms username (Issue [NMS-4392](#))
- Clicking the Delete Icon next to a entity (node, interface, service) defined in the Edit provisioning group page causes exception (Issue [NMS-4394](#))
- yum update from 1.8.7 to 1.8.8 is breaking opennms (Issue [NMS-4396](#))
- rancid provisioning adapter jar still included in opennms-core RPM (Issue [NMS-4397](#))

2.18. Changes in OpenNMS 1.9.4

2.18.1. Bug

- icmp and http thresholds not working properly (Issue [NMS-1657](#))
- Liquibase: ERROR: there is no unique constraint matching given keys for referenced table "datalinkinterface" (Issue [NMS-3465](#))
- webapps won't deploy with Tomcat in 1.7.7 and 1.7.8-SNAPSHOT (Issue [NMS-3469](#))
- Can't proceed in Reports Database Run (Issue [NMS-3717](#))
- Invoking rest method with orderBy triggers sql error (Issue [NMS-3756](#))
- Case sensitive inconsistency between capsd and poller for HostResourceSwRunMonitor (Issue [NMS-3882](#))
- provision group does not validate ip-addr field on input (Issue [NMS-4084](#))
- JRFontNotFoundException for Early-Morning-Report (Issue [NMS-4102](#))
- On IE8/Win7 the date in the page banner is shown twice (Issue [NMS-4146](#))
- "View Node Link Detailed Info" problem (Issue [NMS-4243](#))

- Provisioning problem due to ipv6 address formatting (Issue [NMS-4252](#))
- Date offsets incorrectly applied when batch reports (Issue [NMS-4253](#))
- Upgrade from jetty 6.1.24 to 6.1.26 breaks AJP13-connections from apache 2.2.x (Issue [NMS-4275](#))
- OpenJDK fails privatevoidcheckJvmName() check (Issue [NMS-4277](#))
- Missing fonts when running newly committed reporting stuff in 1.8.7 (Issue [NMS-4286](#))
- NPE when trying to generate reports from JRB datasources (Issue [NMS-4287](#))
- Build failure - NtpDetector tests fail (Issue [NMS-4292](#))
- Remove option C from SNMP Primary pick-list in provisioning groups editor (Issue [NMS-4293](#))
- Node-Availability-Report failing - possibly due to a parameter that should be marked notForPrompting (Issue [NMS-4294](#))
- JRobin VDEFs sometimes do not work (Issue [NMS-4295](#))
- Provisiond discovers services on capsd provisioned nodes (Issue [NMS-4297](#))
- Default categories for CIORPTS (Issue [NMS-4299](#))
- linkd UndeclaredThrowableException (Issue [NMS-4303](#))
- "View Node Ip Route Info" link causes exception (Issue [NMS-4305](#))
- Topo map error popup: Load Label Map failed (Issue [NMS-4306](#))
- Provisioning Groups UI throws exception when trying to sync unmodified group (Issue [NMS-4308](#))
- duplicate jars in packages (Issue [NMS-4310](#))
- Asset adapter does not store Hex-STRINGs (Issue [NMS-4312](#))
- Dashboard loading image tag missing (Issue [NMS-4314](#))
- Serial Interface Utilization Report (Issue [NMS-4315](#))
- [Build] Some changes needed to get a clean build in Eclipse (Issue [NMS-4320](#))
- PSQLException - Configure SNMP Data Collection per Interface (Issue [NMS-4321](#))
- Fonts Very Large on KSC Reports and Admin Surveillance Categories (Issue [NMS-4322](#))
- Interface Page Broken in 1.8 Testing (Issue [NMS-4323](#))
- Opennms cannot start up without Internet access (Issue [NMS-4341](#))
- Typo in MemcachedMonitor.java (Issue [NMS-4347](#))
- Make compile.pl / assemble.pl actually exit with maven exit code (Issue [NMS-4349](#))
- generic values wrong for certain OIDs in Cisco2.events.xml (Issue [NMS-4351](#))
- Package building fails on Ubuntu due to default shell usage (Issue [NMS-4357](#))

- Exception raised when trying to view ip route info (Issue [NMS-4362](#))
- Change the logmsg and description fields for events and alarms to text object. (Issue [NMS-4369](#))
- OpenNMS will not start if unable to connect to the database as "postgres" (admin) user (Issue [NMS-4378](#))
- Provisioner always punts on deleteService events when discovery not enabled (Issue [NMS-4379](#))
- Make sure tests pass on bamboo (Issue [NMS-4384](#))

2.18.2. Enhancement

- Upgrade JasperReports 3.6.0 to 3.7.4 (Issue [NMS-4103](#))
- Sort saved database Reports and display more than 10 of them (Issue [NMS-4201](#))
- dispatcher-servlet.xml should be listed as a 'config' file for debian package install (Issue [NMS-4296](#))
- reportd-configuration.xml, update quartz URL (Issue [NMS-4318](#))
- include script output in event reason text for GpPoller notifications (Issue [NMS-4325](#))
- Customize Subject on Emailed Batch Reports (Issue [NMS-4331](#))
- Catch NullPointerException when running BSFScripts (Issue [NMS-4332](#))
- Make Node available to the Beanshell (Issue [NMS-4358](#))
- Add a build script to clean everything (top-level and full assembly) (Issue [NMS-4386](#))

2.18.3. New Feature

- make it easier to open support tickets from the web UI (Issue [NMS-4307](#))

2.19. Changes in OpenNMS 1.9.3

2.19.1. Bug

- Web users can bypass ACLs by editing params of element/node.jsp URLs (Issue [NMS-3184](#))
- Going to edit KSC reports generates an uncaught exception (Issue [NMS-3414](#))
- Yet another uncaught exception, KSC reports (Issue [NMS-3455](#))
- Home / Admin / Provisioning Groups page generating bad HTML when a provisioning group has an apostrophe in the name (Issue [NMS-3601](#))
- provisiond logging to output.log (Issue [NMS-4023](#))
- DNS outage identified on interface X with reason code: IOException while polling address (Issue [NMS-4071](#))
- Bug in netapp.fsfile report (Issue [NMS-4171](#))
- deprecated -c installer option does not produce a warning or error (Issue [NMS-4174](#))

- Net-SNMP agent 5.5 always misreports sysObjectID as ".1.3" or ".0.1" (Issue [NMS-4192](#))
- Notifications fail when Notification name is longer than 63 chars (Issue [NMS-4194](#))
- NPE in "View Node Link Detailed Info" (Issue [NMS-4215](#))
- deleting old notifications is slow (Issue [NMS-4217](#))
- SNMP fails while accessing a Dell/Avocent 2161DS KVM Device (Issue [NMS-4219](#))
- 1.8.5 Solaris package fails to install (Issue [NMS-4227](#))
- ThresholdingVisitor: create: Can't create ThresholdingVisitor for <IP ADDRESS> (Issue [NMS-4233](#))
- JMX datacollection aliases longer than 19 characters (Issue [NMS-4236](#))
- Two BGP-related SNMP graphs use daily RRAs (Issue [NMS-4245](#))
- Acknowledgement Service bails when an ack is sent for an invalid ID (Issue [NMS-4248](#))
- TableTracker failing in some instances (Issue [NMS-4250](#))
- In-line thresholding should ignore Aliased Resources if they are not enabled (Issue [NMS-4255](#))
- Fix lower limit in Net-SNMP CPU graphs (Issue [NMS-4257](#))
- Make SNMPv2c the default in web SNMP config dialog (Issue [NMS-4263](#))
- build blacklists JDKs other than version 1.5 or 1.6 (Issue [NMS-4270](#))

2.19.2. Enhancement

- SNMP Asset Provisioning Adapter: suppress output like No such instance (Issue [NMS-4173](#))
- Add a few more Cisco Catalyst sysObjectIDs to default Linkd config (Issue [NMS-4191](#))
- Add events for Compuware ServerVantage traps (Issue [NMS-4195](#))
- Reportd should create events run or delivery failure (Issue [NMS-4213](#))
- fix locking in configuration file access (Issue [NMS-4234](#))
- make build system Maven3-compatible (Issue [NMS-4235](#))
- Add new options for domain/ifalias resource collection (Issue [NMS-4239](#))
- Improve Liebert power-related SNMP data collection and resource graph definitions (Issue [NMS-4241](#))
- Create performance resource graphs for MS HTTP stats (Issue [NMS-4242](#))

2.20. Changes in OpenNMS 1.9.2

Version 1.9.2 is identical to 1.9.1, except it contains the changes present in [OpenNMS 1.8.5](#).

2.21. Changes in OpenNMS 1.9.1

2.21.1. New Features and Enhancements

- Some of the groundwork for IPv6 support has been started.
- Syslogd has been refactored and has a number of new features and parsing options. (Bug [#4112](#))
- You can now specify whether to be strict or loose when verifying HTTPS connections in the PageSequenceMonitor. (Bug [#4113](#))

2.22. Changes in OpenNMS 1.9.0

2.22.1. New Features and Enhancements

- You can now have syslogd bind to a specific IP address. (Bug [#3192](#))
- Threshold expressions have been enhanced and now use JEXL instead of JEP. (Bug [#3413](#))
- Data collection configuration has now been split out into multiple include files, like events. (Bug [#4031](#))

Chapter 3. Supported Systems

Supported UNIX-like OSes

OpenNMS is written almost entirely in Java, and should be able to run on any system that supports the Sun Java Virtual Machine -- OpenNMS 1.3.x and higher requires Java 5 or higher. There are requirements for other programs such as PostgreSQL and Perl, but the JDK is the key requirement as most of the other packages can be compiled from source.

The following are the systems that support or are known to run OpenNMS.

Windows 2000/XP/Vista are supported as of 1.3.8.

3.1. Fully Supported

The following systems are supported out-of-the-box with native installation packages:

- **RPM-based Distributions (Using Yum).**
 - Red hat Enterprise Linux 3 and higher
 - CentOS 3 and higher
 - Fedora Core 4 and higher (including 64-bit)
 - SuSE Linux 9 and 10 (Using the Yum repository through YAST)
- **Other RPM-based Distributions.**
 - Mandriva Linux 2007 and higher (Using URPMI)
- **Debian and Ubuntu Linux.** Debian packages for Etch and later are available at the following apt repository:

```
deb http://debian.opennms.org/ unstable main
```

These same packages should work equally well with Ubuntu releases 6.10 (Edgy Eft) and higher.

- Solaris 10 (X86 and SPARC)
- **MacOSX 10.4 and Higher.** On MacOSX, the Fink distribution [packages of OpenNMS](#) are supported. See [the Fink web site](#) for more information on installing and using Fink. Also note that on MacOSX, PostgreSQL must be configured in the same manner as above for Linux. *However*, to do so you will need to update the SHM settings so that the OS allows enough resources for PostgreSQL to run with larger buffers. There are details for configuring the shared memory segments on [the Fink wiki](#).
- **Windows Server and Desktop (Windows 2000+).** Note that while it is technically possible to install on FAT32, NTFS is the only officially supported filesystem for Windows installs. Additionally, while Windows is supported, OpenNMS is much more heavily tested (and easier to maintain) on UNIX, and it is recommended that unless you have a specific reason to go with Windows, that you use one of the supported UNIX-based operating systems.

3.2. Unsupported

OpenNMS 1.3.7 and up require Java 5 (a 1.5 JDK) and PostgreSQL 7.4 or higher. In addition, for native RRD support (as opposed to the builtin Java-based JRobin round-robin database), RRDTool 1.2 is required.

Any operating system that can support these dependencies should be able to run OpenNMS. However, since many older distributions do not support packages for these applications it will be much harder to get them installed, and so they are not officially supported.

A number of distributions that used to be supported are still able to run OpenNMS but are not officially supported:

- **Gentoo.** Gentoo ebuids used to be available but are no longer officially maintained, as we have no Gentoo packager volunteers to keep them up-to-date.
- **Red Hat Linux.** While Red hat Linux 7, 8, and 9 (and potentially even others might still work, they have long gone untested and are not recommended for production use.
- SuSE 8 and earlier
- Solaris 9 and earlier