OpenNMS Meridian Release Notes

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OpenNMS Meridian 2017

System Requirements

- Java 8: OpenNMS Meridian 2017 requires Java 8 as the runtime environment. To run Meridian 2017, we recommend the most recent version of Oracle JDK 8 for your platform.
- **PostgreSQL 9**: Meridian 2017 requires PostgreSQL 9.x, version 9.2 or higher.

What's New in Meridian 2017

Since Meridian 2016, a huge number of backend changes have occurred, including a large refactor of provisioning, many cleanups in Enlinkd, and a number of new features including the Business Service Monitor.

Important Upgrade Notes

- **Clean Up Events and Alarms**: Please clean up your event and alarm lists as much as possible before performing an upgrade to Meridian 2017. The upgrade process includes a change to move event parameters to a separate table, rather than being encoded in a column in the event table. If you prune unused data from these tables beforehand, it will make the upgrade process much quicker.
- **Remote Poller API Change**: Due to internal API changes, the Remote Poller API has changed in Meridian 2017. If you upgrade to Meridian 2017, you will also need to upgrade all Remote Pollers attached to the system to 2017 as well.

• **Cassandra JMX Metrics**: The default value for the friendly-name attribute on the JMX-Cassandra collection service has changed from cassandra21x to cassandra.

This changes the path in which the metrics are stored. If you have already been collecting these metrics and wish to preserve them, you can ignore this change when merging your configuration.

• Jetty 9.4 Upgrade: Jetty has been upgraded from 8.1 to the latest 9.4.

If you have a custom jetty.xml in your etc folder, you will need to migrate your changes. Use etc/examples/jetty.xml as a starting point.

• **Drools 6.5.0 Upgrade**: Drools has been upgraded from 6.0.1.Final to 6.5.0.Final.

If you have custom Drools rules, they may need to be revised. The compiler used in 6.5.0.Final is stricter than the compiler in previous versions.

• **Separate opennms-webapp-remoting Package**: The webapp that supports the Remote Poller has been separated from the main OpenNMS webapp.

This will make installations much smaller for users that do not use the Remote Poller. If you use the Remote Poller, you will need to install the meridian-webapp-remoting package.

- User roles moved from magic-users.properties into users.xml: The users.xml file now contains a list of roles for each user alongside the rest of the user attributes.
- JICMP 2.0 Upgrade: Our Java ICMP library has been upgraded to version 2.0.

You will need to upgrade to this version before upgrading to OpenNMS Meridian 2017.

• **org.opennms.newts.nan_on_counter_wrap**: If you are using Newts, returning NaN when a counter-wrap is encountered now defaults to true.

If you relied on the old behavior, you can change it back by setting org.opennms.newts.nan_on_counter_wrap=false in a file in opennms.properties.d.

Breaking Changes

• **Custom Topology Icon Definitions**: Custom Icon Definitions in the Topology Map are now handled differently.

You will need to migrate your existing custom icons to the new layout. The Administrators Guide covers this topic in more detail.

• **Event Translator**: The default behavior of the event translator preserving SNMP data when cloning event has been changed to *NOT* preserve that data by default.

To restore the old behavior, set preserve-snmp-data="true" on the event XML. For more information, see issue NMS-8374.

• **ReST API**: The ReST API has been normalized to give better and more consistent responses to queries.

This includes dropping support for redirecting to the model URL on write operations (POST, etc.) If you were relying on this old (broken) behavior, please update your ReST API calls accordingly. Most client code should be unaffected.

• NMS-9303: Deprecated Capsd and Linkd event definitions are removed.

Otherwise unused event definitions are also cleaned up and removed from the code and configurations. For a detailed list of all removed events see NMS-9303. For people maintaining databases prior to OpenNMS 1.8, we provide a maintenance script for Linux and Windows in the *opennms-contrib* package to clean up old events in the database. The script is named NMS-9303-cleanup-deprecated-events.sh and executes a SQL script. In case you run PostgreSQL on Windows, you can use psql.exe -d opennms -U opennms -W -a -f NMS-9303-cleanup-deprecated-events.sh

New Features

• Business Service Monitor: Correlation for root cause and business impact analysis.

The goal of the Business Service Monitor is to provide a high-level correlation of business rules, and to display them in the topology map.

In the BSM, you define a Business Service that encompasses a set of entities (nodes, interfaces, services, and other Business Services) and the relationships among them. The alarm states of the component entities are rolled up in a map-reduce fashion to drive a state machine. The state of a Business Service is reflected in a new type of event, and can also be visualized (along with the service hierarchy) in the existing OpenNMS topology map.

For details on using the BSM, see the Administrators Guide.

- **Modular Configuration Updates**: Now most properties set in the opennms.properties file can be instead overriden by creating a file in the \${OPENNMS_HOME}/etc/opennms.properties.d directory.
- Notifications: New notification strategies for Slack and Mattermost have been added.
- **OpenNMS Plugin Manager**: An API for adding 3rd-party "plugins" to OpenNMS.

The core of a tool for adding plugins into OpenNMS has been included in Meridian 2017. This provides a set of tools for finding and adding plugins to be loaded into the OpenNMS OSGi container.

- **Provisioning Requisition UI**: A huge number of improvements have gone into the requisition UI. Also, the old "Quick-Add Node" functionality has been reimplemented using the same backend as the requisition UI.
- "Scan Report" Remote Poller GUI: A new front-end for the remote poller that lets you perform a single scan and get a pass/fail report in a GUI has been added. You can enable this alternate UI with the "-s" option on the remote poller CLI.
- **Topology UI Updates**: As part of the BSM work, the topology UI has been vastly improved for both performance and usability.
- TSRM Ticketing Plugin: Create incidents in IBM's TSRM.

Information on configuring the TSRM ticketing plugin can be found in the Administrators Guide.

• Usage Statistics: Collect anonymous usage statistics.

To get a better idea of how to estimate hardware requirements and the performance characteristics of OpenNMS, we wrote a tool to occasionally submit anonymous diagnostic information about your OpenNMS install. It will submit information like the number of nodes, alarms, etc. as well as some basic system information to our servers for statistical reasons.

When a user with the Admin role logs into the system for the first time, they will be prompted as to whether or not they want to opt-in to publish these statistics. Statistics will only be published once an Administrator has opted-in.

These statistics are visualized on stats.opennms.org.

- **GraphML Topology Provider**: A new Topology Provider is available that reads GraphML formatted graphs and displays them in the the Topology UI.
- **OpenNMS Elasticsearch ReST Forwarder**: This Elasticsearch forwarder can store events, alarms, and alarm state changes in Elasticsearch for archival or searching. It is compatible with all currently supported versions of Elasticsearch.
- **Drools Persistence**: Drools working memory can now be persisted to disk upon shutdown of OpenNMS.
- **Unified JAAS Authentication**: The web UI, the Apache Karaf OSGi console, and the built-in ActiveMQ broker all use a single authentication method.
- **Monitoring Location Events**: Events will be sent when Monitoring Locations are added, updated, or deleted.
- External JMS broker: It is possible to configure OpenNMS to use an external JMS broker if desired.
- New Syslog Parser: A new syslog parser, the RadixTreeSyslogParser, has been added, which supports all major syslog message formats, and uses Grok for more performant parsing.
- String Persisting over TCP: The TCP persister can now persist string values.
- **ICMP traffic class and don't-fragment support**: It is possible to configure OpenNMS to set DSCP traffic class and "don't fragment" bits when polling ICMP.
- **Geographical Maps**: Geographical maps are now included by default in the center of the Web UI front page.
- Web UI improvements: Location information has been added to many places in the UI, and a number of pages have been enhanced including the BSM editor and topology UI.
- Asset Topology Provider: The Asset Topology Provider generates a GraphML topology based on node metadata including asset fields. (more details).
- Alarm Sounds: The web UI can now optionally flash and play an alert sound when alarms are created and optionally updated. (more details).

Events

New or updated trap definitions have been added for the following classes of devices:

- APC
- Juniper IVE
- NetGear ProSafe Smart Switch
- OpenWRT
- SonicWall

Data Collection

- AKCP SensorProbe
- Cisco ASA5515-X and ASA5525-X
- Juniper SRX100h and SRX210he2 Router
- HTTP:
 - Elasticsearch
- JMX:
 - Apache Kafka
 - VMware vCenter Server 6.0.0

Other Improvements

As always, many updates and cleanups have been made to the OpenNMS core, through refactoring, addition of unit tests, and other code modernization.

• **Minion Infrastructure**: Minion is OpenNMS's project to provide full distributed monitoring and collection.

While the Minion is not supported in Meridian 2017, the work that went towards Minion support (modernizing polling and data collection) is included.

- ActiveMQ: An ActiveMQ broker is now embedded in the OpenNMS JVM.
- **Discovery Daemon Rewrite**: The discovery daemon has been replaced with a Camel-based implementation to facilitate future Minion support.
- **Enhanced Linkd**: Enlinkd has had many bugs fixed and should perform orders of magnitude faster in many configurations.
- JNA: The JNA ping implementation got cleaned up and received many improvements.
- **Newts**: A number of bugfixes and improvements have been made to the Newts support since Meridian 2017.
- **Syslog Daemon Updates**: The performance of the OpenNMS syslog support has been vastly improved and updated.

• We replaced all of the GWT components in the web UI with AngularJS components.

This reduces the complexity of the UI code and will make it easier for developers with Javascript experience to maintain and contribute to the UI.

- All Javascript dependencies for the web UI are now managed by Bower and Gulp.
- Jasper reports are now automatically recompiled if changed.
- The JIRA ticketer has been improved.
- The default database connection pool has been switched from c3p0 to HikariCP (http://brettwooldridge.github.io/HikariCP/) to increase performance.
- Our ICMP libraries are now capable of being run by non-root users (although OpenNMS is not yet configured to support this).
- The startup order of OpenNMS has been improved to make sure that a number of time-sensitive event-consuming daemons are ready immediately after Eventd, and before traps are consumed.
- Collection APIs have been refactored and cleaned up immensely as part of refactoring for future Minion support.
- JSON datacollection now supports properly handling responses that return an array.
- Path handling for collection resources has been improved.
- Many improvements have been made to the documentation, including documentation for collectors, detectors, and monitors, as well as Karaf shell commands and event sources.
- A number of improvements to geolocation resolution and node maps have been made.
- Internal OpenNMS events have been cleaned up and broken into logical parts in \$OPENNMS_HOME/etc.
- Graphs that use relative time periods have additional drop-down choices now.
- The topology infrastructure has been vastly improved, with MANY bug fixes and performance improvements.
- Fix a thread leak in SNMP queries that can happen when old connections don't get closed properly.
- Fix a long-standing bug in the vacuumd-configuration.xml that referred to the wrong ticket state for "closed".
- Fix calculation of KSC report "Last Week" and "This Week" timespans.
- Fix startup on systems without any IPv6 support.
- Reverse lookups in provisioning now handle IPs without a corresponding A record.

Release Meridian-2017.1.12

Release 2017.1.12 is a small update to OpenNMS Meridian 2017.1.11. It contains a few small systemlevel bug fixes and improvements to VMware connection pooling.

The codename for 2017.1.12 is Meridian of Alexandria.

Bug

- find-java.sh doesn't understand newer JDK output (Issue NMS-10401)
- int overflow in InstallerDb causes bamboo failures (Issue NMS-10402)

Enhancement

• Improve concurrency in Vmware Connection Pool (Issue NMS-10373)

Release Meridian-2017.1.11

Release 2017.1.11 is a small update to OpenNMS Meridian 2017.1.10. It contains a few small bug fixes and enhancements.

The codename for 2017.1.11 is Paris meridian.

Bug

- Content-Type tag wrong in emailed reports (Issue NMS-9027)
- The upgrade task for magic-users.properties fails because of the read-only attribute (Issue NMS-9267)

Enhancement

- add polling interval definition on service UI (Issue NMS-9747)
- Release notes in Help / Support links to 2015 (Issue LTS-214)

Release Meridian-2017.1.10

Release 2017.1.10 is a small update to OpenNMS Meridian 2017.1.9. It contains a critical RADIUS fix as well as a number of smaller enhancements.

The codename for 2017.1.10 is *Capital meridian*.

Breaking Change: trapd-configuration.xml

Meridian 2017.1.10 includes a bug fix that introduces validation of the Trapd config file. In the process of testing this fix we found that the trapd-configuration.xml that shipped with Meridian 2017 had issues that could prevent proper configuration of the snmp-trap-address.

To fix your trapd-configuration.xml file, make the following changes:

- If your trapd-configuration.xml contains an attribute called snmpv3-user-count, delete it.
- If your trapd-configuration.xml has <snmp-trap-address>...</snmp-trap-address>, delete that element and add an snmp-trap-address="..." attribute to the enclosing <trapd-configuration /> tag instead. (The only thing that should be inside the <trapd-configuration> tag is <snmpv3-user> elements.)

```
Before:
```

```
<trapd-configuration snmpv3-user-count="0" queue-size="10000"
include-raw-message="false" new-suspect-on-trap="false"
batch-interval="500" batch-size="1000" snmp-trap-port="162" threads="0">
<snmp-trap-address>*</snmp-trap-address>
</trapd-configuration>
```

After:

```
<trapd-configuration snmp-trap-address="*" queue-size="10000"
include-raw-message="false" new-suspect-on-trap="false"
batch-interval="500" batch-size="1000" snmp-trap-port="162" threads="0">
</trapd-configuration>
```

Breaking Change: RADIUS Authentication Provider

A security issue in the RadiusAuthenticationProvider has been fixed (Issue NMS-10212) This requires changes to the radius.xml file located in \${OPENNMS_HOME}/jetty-webapps/opennms/WEB-INF/spring-security.d. Now instead of providing a bean for the authTypeClass property, it is sufficient to just provide the class name:

Before

```
<?xml version="1.0" encoding="UTF-8"?>
<beans:beans xmlns="http://www.springframework.org/schema/security"</pre>
xmlns:beans="http://www.springframework.org/schema/beans"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.springframework.org/schema/beans
http://www.springframework.org/schema/beans/spring-beans-3.0.xsd
             http://www.springframework.org/schema/security
http://www.springframework.org/schema/security/spring-security-3.1.xsd">
<beans:bean id="externalAuthenticationProvider" class=</pre>
"org.opennms.protocols.radius.springsecurity.RadiusAuthenticationProvider">
   <!--->
   <beans:property name="authTypeClass"><beans:bean class=</pre>
"net.jradius.client.auth.PAPAuthenticator"/></beans:property>
   <!--->
</beans:bean>
</beans:beans>
```

After

```
<?xml version="1.0" encoding="UTF-8"?>
<beans:beans xmlns="http://www.springframework.org/schema/security"</pre>
xmlns:beans="http://www.springframework.org/schema/beans"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.springframework.org/schema/beans
http://www.springframework.org/schema/beans/spring-beans-3.0.xsd
            http://www.springframework.org/schema/security
http://www.springframework.org/schema/security/spring-security-3.1.xsd">
<beans:bean id="externalAuthenticationProvider" class=</pre>
"org.opennms.protocols.radius.springsecurity.RadiusAuthenticationProvider">
 <!--->
 <beans:property name="authTypeClass" value="</pre>
net.jradius.client.auth.PAPAuthenticator"/>
 <!--->
</beans:bean>
</beans:beans>
```

Supported values for authTypeClass are:

- net.jradius.client.auth.TunnelAuthenticator
- net.jradius.client.auth.PAPAuthenticator
- net.jradius.client.auth.EAPMSCHAPv2Authenticator
- net.jradius.client.auth.MSCHAPv2Authenticator
- net.jradius.client.auth.EAPMD5Authenticator
- net.jradius.client.auth.CHAPAuthenticator
- net.jradius.client.auth.MSCHAPv1Authenticator
- net.jradius.client.auth.RadiusAuthenticator
- net.jradius.client.auth.EAPAuthenticator

If no value is provided net.jradius.client.auth.PAPAuthenticator is used.

- VMWare-Center-Monitoring make for every virtual machine a login/logout (Issue NMS-8204)
- LDAPMonitor causes Errors in ldap logfiles (Issue NMS-8891)
- The KSC Dashlet for the Ops-Board is not working (Issue NMS-10191)
- Radius Login Problem (Issue NMS-10212)
- Trapd does not validate config against XSD (Issue NMS-10242)
- Drools correlation engine do not always respond to targeted reloadDaemonConfig events (Issue NMS-10257)
- DefaultProvisionService logs noisily for monitored service having state "N" (Issue NMS-10291)

• Failed to run Jasper report local_Serial-Interface-Utilization-Summary: Key receive rate is duplicated in pie dataset (Issue NMS-9875)

Release Meridian-2017.1.9

Release 2017.1.9 is a small update to OpenNMS Meridian 2017.1.8. It contains a few bug fixes and documentation updates.

The codename for 2017.1.9 is *Antwerp meridian*.

Bug

- Entering new destination path in GUI with near identical name overwrites the current one (Issue NMS-3994)
- Just opening a foreign-source in the web UI causes it to be written to disk (Issue NMS-4720)
- Surveillance category membership of deleted nodes "leaks" in filters to interfaces of successor nodes (Issue NMS-4876)
- ConcurrentModificationException in DefaultEventHandlerImpl (Issue NMS-8413)
- The ReST API used to return XMLs with namespace, and now it doesn't (Issue NMS-8524)
- MBean "TasksCompleted" for Collectd and Pollerd returns wrong counters (Issue NMS-9741)
- The auto-acknowledge-alarm tag with no content doesn't work on notifd-configuration.xml (Issue NMS-10085)
- The KSC Dashlet for the Ops-Board is not working (Issue NMS-10191)

Enhancement

• Link to privacy policy from Data Choices UI elements (Issue NMS-10169)

Release Meridian-2017.1.8

Release 2017.1.8 is a small update to OpenNMS Meridian 2017.1.7. It contains a few bug fixes and an update to support Newts cache priming.

The codename for 2017.1.8 is *IERS Reference Meridian*.

- ONMS starts with broken threshold configuration file (Issue NMS-9064)
- Interface delete from a node does not work (Issue NMS-9506)
- Topology map node icons vanish (IE10, IE11 only) when alarm status unchecked (Issue NMS-9614)
- Access Denied With Surveillance View In Ops Board (Issue NMS-9678)
- Enlinkd startup fails due to NPE in BroadcastDomain class (Issue NMS-9852)

- Value of \${nodeLabel} for PSM services apparently not eagerly updated (Issue NMS-9900)
- Wrong initial message displayed on AngularJS based tables. (Issue NMS-9932)
- Alarm favorite link URL does not have AddRefreshHeader-30 applied (Issue NMS-9938)
- Cannot see StrafePing graphs when using Backshift. (Issue NMS-9946)
- foreign-id with space (%20) at end causes issues with Newts (Issue NMS-9961)
- perfdata-receiver doesn't compile (Issue NMS-9967)
- Home Page Map does not display node details (Issue NMS-10008)
- Backport intermittent SNMPv3 failures to foundation-2016 (Issue NMS-10153)

• Improve performance of newts.indexing to avoid overwhelm Cassandra cluster (Issue NMS-9959)

Release Meridian-2017.1.7

Release 2017.1.7 is a small update to OpenNMS Meridian 2017.1.6. It contains a few bug fixes and minor enhancements.

The codename for 2017.1.7 is United Kingdom Ordnance Survey Zero Meridian.

Configuration Update

Some updates to Cisco data collection and graph configuration have been made since 2017.1.6. They add collection from CISCO-REMOTE-ACCESS-MONITOR-MIB on a number of ASAxxxx devices, as well as alarm reduction keys for FRU insertion and removal. Additionally, graphs for tunnel sessions have been added. To avoid configuration conflicts, however, the updated files have been written with the extension .xml-2017.1.7. If you wish to use these new configurations, rename the .xml-2017.1.7 files to .xml, overwriting the existing files.

Bug

- Node ReST service not handling assets and deleting properly (Issue NMS-9855)
- JasperStudio extension dependency error (Issue NMS-9915)
- EventUtils.eventsMatch() fails if nodeId is greater than 127 (Issue NMS-9941)
- compilation fails on windows due to checkstyle exceptions (Issue NMS-9943)
- Java not found properly when building from Windows CMD proc (Issue NMS-9947)

Enhancement

- Subsume "Event Configuration How-To" from wiki into admin guide (Issue NMS-9926)
- Update docs section of devel guide with section on migrating info from wiki (Issue NMS-9934)
- Refactor UserGroupLdapAuthoritiesPopulator to provide a default role. (Issue NMS-9937)

Release Meridian-2017.1.6

Release 2017.1.6 is a small update to OpenNMS Meridian 2017.1.5. It contains a few bug fixes.

The codename for 2017.1.6 is *Meridianus Posoniensis*.

Bug

- It is not possible to see Statsd results on the WebUI (Issue NMS-9861)
- Inconsistent handling of keyboard navigation on top menu (Issue NMS-9867)

Release Meridian-2017.1.5

Release 2017.1.5 is a small update to OpenNMS Meridian 2017.1.4. It contains a few bug fixes and performance enhancements.

The codename for 2017.1.5 is *Pulkovo meridian*.

Bug

- Change links to docs in help page using https (Issue NMS-9832)
- Copyright dates need a bump for 2018 (Issue NMS-9871)

Enhancement

- ES REST plugin not doing preemptive basic auth (Issue NMS-9699)
- bsmd: avoid processing alarm lifecycle events when no rules are defined (Issue NMS-9835)

Release Meridian-2017.1.4

Release 2017.1.4 is an update to OpenNMS Meridian 2017.1.3. It is primarily a bug fix release.

The codename for 2017.1.4 is *Tenerife meridian*.

- Notification storm causes JVM crash with: Native memory allocation (mmap) failed (Issue NMS-9766)
- The typeahead widget for KSC Report Search on front page is not working (Issue NMS-9776)
- The geographical maps on large installations is unusable (Issue NMS-9777)
- Cannot create user groups through the WebUI (NPE) (Issue NMS-9785)
- Broken Link in Admin guide to Alarm Introduction (Issue NMS-9802)
- Wrong syntax for automatic rescanning in admin guide (Issue NMS-9803)
- Geocoordinates truncated to 5 decimal places (Issue HZN-1219)

Release Meridian-2017.1.3

Release 2017.1.3 is an update to OpenNMS Meridian 2017.1.2. It is primarily a security and bug fix release.

The codename for 2017.1.3 is *Ferro meridian*.

Bug

- Privilege Escalation Bug with Grafana Plugin (Issue NMS-8093)
- IOActive: Cross-Site Scripting in createFavorite filter Parameter (Issue NMS-9670)
- IOActive: Reflected Cross-site Scripting in userGroupView/roles roleDescr and Other Parameters (Issue NMS-9673)
- IOActive: Reflected Cross-site Scripting in admin/thresholds/index.htm filterField and Other Parameters (Issue NMS-9674)
- HEAD requests to static resources in the UI don't work (Issue NMS-9689)
- The EXE installer of the remote poller on Windows is not working (Issue NMS-9721)
- IllegalStateException in OnmsVaadinContainer (Issue NMS-9742)
- Karaf snmp:show-config command lists value of timeout for retries (Issue NMS-9745)
- The content of the clone foreign source definition dialog is misleading (Issue NMS-9749)
- Relative path reference to version.properties (Issue NMS-9767)

Enhancement

• Authentication proxy support (Issue NMS-9739)

Release Meridian-2017.1.2

Release 2017.1.2 is the third release of OpenNMS Meridian 2017. It is primarily a security and bug fix release.

The codename for 2017.1.2 is *Kraków meridian*.

- JMX config GUI can't connect to JMX service with JNDI name not "jmxrmi" (Issue NMS-8596)
- Tweak Mattermost notification docs not to specify a channel (Issue NMS-9362)
- INFO-level "unable to locate resource" log messages for interfaces not persisted by policy (Issue NMS-9388)
- rescan-exitsing attibute of requisition-def tag in provisiond-configuration.xml is not passed to scanNode() in CoreImportActivities (Issue NMS-9492)
- Northbounders implementation are not sending feedback events for reloadDaemonConfig (Issue NMS-9524)
- XSS: HTML attribute values with quotes not escaped properly (Issue NMS-9645)

- Incorrect logging of exceptions in Slack and Mattermost notifications (Issue NMS-9656)
- IOActive: Reflected Cross-site Scripting in instrumentationLogReader.jsp searchString Parameter (Issue NMS-9672)
- Typo prevents FIQL query values from being URI-encoded (Issue NMS-9694)
- Typo in regional status geo map: Unacknowledges (for unacknolwedged) (Issue NMS-9700)
- Typo: "not elegible" for SNMP primary N enumeration (Issue NMS-9701)
- Duty schedules with embedded newlines break startup (Issue NMS-9709)
- Unexpected errors while generating event definitions from TRAP-TYPE without a DESCRIPTION field (Issue NMS-9718)
- NPE in Enlinkd bridge topology broadcast domain calculation (Issue NMS-9720)
- Null pointer exception in SurvellianceViewConfigurationCategoryWindow.java (Issue NMS-9722)
- ReST v1 does not return errors for unparseable events (Issue NMS-9724)
- Sending bad XML to the Requisitions ReST end point makes the API unusable (Issue NMS-9725)

• ES REST plugin not doing preemptive basic auth (Issue NMS-9699)

Release Meridian-2017.1.1

Release 2017.1.1 is the second release of OpenNMS Meridian 2017. It contains a number of security and bug fixes and a few small enhancements.

The codename for 2017.1.1 is Meridian of Monte Mario.

- An empty category is not shown when in focus (Issue NMS-9423)
- Multiple XSS vulnerabilities in OpenNMS webapp (Issue NMS-9457)
- The button to add a graph to a KSC report doesn't work (Issue NMS-9498)
- RadixTreeSyslogParser confuses timezone and hostname fields (Issue NMS-9522)
- Stale IP Address Cache (Issue NMS-9613)
- opennms-webapp-remoting JARs are not signed (Issue NMS-9638)
- trapd may silently discard invalid traps (Issue NMS-9660)
- Trap event parenting lacks bias toward SNMP primary interfaces (Issue NMS-9666)
- IOActive: Stored Cross-site Scripting in SNMP Trap Message (Issue NMS-9668)
- IOActive: Reflected Cross-site Scripting in heatmap/outages heatmap Parameter (Issue NMS-9671)

- Display AlarmId on Event page (Issue NMS-8445)
- Check/add support for PostgreSQL 10 (Issue NMS-9679)

Release Meridian-2017.1.0

Release 2017.1.0 is the first release of OpenNMS Meridian 2017. It is based on OpenNMS Horizon 19, plus a number of other bug fixes and changes that went into Horizon 20.

The codename for 2017.1.0 is *Bering Strait*.

- collectd does not unschedule deleted nodes (Issue NMS-5105)
- provisiond hangs (Issue NMS-5593)
- vmware urls do not support username/passwords that require URL encoding (Issue NMS-6530)
- noSuchInstance causing problems during provision scan (Issue NMS-8046)
- Renaming a root business services does not work anymore (Issue NMS-8370)
- Simulation mode is ended when clicking on "Set as focal point" (Issue NMS-8542)
- Outage ReST service forNode use case calculates dates incorrectly (Issue NMS-8823)
- DB installer tries to class-load every file under OPENNMS_HOME as a JAR (Issue NMS-8860)
- Updating assets/categories through ReST affects Forced Unmanaged services. (Issue NMS-8879)
- Statsd: erroneous reporting; aggregators not reset between worker's runs (Issue NMS-8944)
- Skip /var/lock/subsys actions when running as unprivileged user (Issue NMS-8962)
- Copyright bump 2017 (Issue NMS-9060)
- Collection timing enhancements (Issue NMS-9090)
- "Manually Add an Interface" seems broken (Issue NMS-9108)
- opennms stays running when during a rpm/yum/dnf update (Issue NMS-9127)
- Fix CORS section to include /api/* besides /rest (Issue NMS-9133)
- Fix the execution of Drools rules when using streaming (CEP, Temporal Reasoning) (Issue NMS-9172)
- NPE in GeolocationProvisioningAdapter (Issue NMS-9187)
- OSPF Router Id not properly updated (Issue NMS-9218)
- DNS Adapter on Delete Node does not delete DNS record (Issue NMS-9219)
- Topology Map ip like search produces duplicates (Issue NMS-9265)
- Make TCP output queue parameters configurable (Issue NMS-9282)
- syslogd logs "No hideMessage configured" though it is really not needed (Issue NMS-9289)
- Logging for TCP output queue (Issue NMS-9291)

- The geolocation provisioning adapter is not updating coordinates correctly (Issue NMS-9316)
- Installation issues with OpenJDK JRE (Issue NMS-9327)
- geo-coder creates invalid latitude/longitude in assets table (Issue NMS-9338)
- XSS vulnerability on quick-add node page (Issue NMS-9353)
- XSS vulnerability on node error page (Issue NMS-9354)
- XSS vulnerability with application names (Issue NMS-9355)
- Thresholding on WSMan datasources appears broken (Issue NMS-9361)
- Business service states are not properly updated when alarms are deleted (Issue NMS-9369)
- Incorrect sysoid for the systemDef Juniper J-Routers (Issue NMS-9372)
- Breadcrumb for requisitions has extra "/app" in path (Issue NMS-9386)
- Increase default connection timeout for HikariCP (Issue NMS-9387)
- TCP persistence strategy should output time in milliseconds, not seconds (Issue NMS-9409)
- NullPointerException during nodeScan on devices with broken IP-MIB::ipAddressIfIndex (Issue NMS-9415)
- Quick search HTTP error (Issue NMS-9419)
- No bounds-checking in processing of DHCP Options (Issue NMS-9420)
- Possible XSS in Alarm Filter Favorites (Issue NMS-9421)
- Event Configuration Screen Requires Alarm Type (Issue NMS-9422)
- Grouped status circle on geomap is not a circle (Issue NMS-9424)
- ClassNotFoundException when running vmwarecimquery/vmwareconfigbuilder (Issue NMS-9456)
- Fix JSP issues related to JAXB update (Issue NMS-9460)
- SQL injection in DefaultSurveillanceViewService (Issue NMS-9476)
- Clone foreign source requisition overwrites config of other requisition without any hint or warning (Issue NMS-9481)
- Using maskelements based on nodeID (and maybe other fields) to match event definition doesn't work (Issue NMS-9496)
- The alarm-type for BSM event definitions is conceptually incorrect (Issue NMS-9497)
- Using varbind to match event definition doesn't work (when using the same UEI in many definitions) (Issue NMS-9507)
- ConcurrentModificationException thrown by Statsd (Issue NMS-9511)
- Update copyright date in docs (Issue NMS-9516)
- Document supported products and versions for Remedy integration (Issue NMS-9538)
- Microsoft IE and Edge doesn't like relative path on Angular apps (Issue NMS-9542)
- initial-delay="null" when adding a new destination path (Issue NMS-9548)
- The reason parameter for a nodeLostService event is limited to 255 characters (Issue NMS-9550)

- Eventd does not respect event configuration order when reloading (Issue NMS-9551)
- reloadDaemonConfig doesn't work for Eventd, only eventsConfigChange works (Issue NMS-9555)
- users.xml being overwritten on installation (Issue NMS-9573)
- Apache CXF is not decoding url parameters correctly. (Issue NMS-9578)
- Custom security roles files is not mentioned on the documentation (Issue NMS-9579)
- ExceptionMapper does not update the entity type accordingly (Issue NMS-9598)
- offset=0 is rendering as offset=null in ReSTv2 collections (Issue NMS-9599)
- Unable to modify poller packages through the Monitoring Locations UI (Issue NMS-9608)
- Remove any mention of using Atomikos as a valid DB Connection Pool to avoid unwanted side effects (Issue NMS-9609)
- vmware importer fails with NPE (Issue NMS-9611)
- Basic syslog messages with Informational severity turn into unknown events (Issue NMS-9615)
- quick add node is broken (Issue NMS-9618)
- Remote poller logs have place holders for their names (Issue NMS-9621)
- Missing visual aid on BSM Admin Page after hitting Reload Daemon (Issue NMS-9624)
- Remote Poller log path incorrect when using the NSIS installer (Issue NMS-9631)
- Pristine installation with an empty content for etc/drools-engine.d/ncs which is invalid (Issue NMS-9636)
- MomentJS warning after running sample code (Issue NMS-9637)
- yum error when upgrading from Meridian 2016 to Meridian 2017 with XML protocol package (Issue NMS-9640)
- Changed thresholds file in Meridian 2017 (Issue NMS-9641)
- notifd-configuration file wrong in Meridian 2017 (Issue NMS-9642)
- Misordered collections in datacollection-config.xml (Issue NMS-9643)
- Meridian 2017.1.0 needs some packages from yum.opennms.org repo (Issue NMS-9644)
- re-fix BSM alarm types (Issue NMS-9653)
- The Surveillance View and the Dashboard are rendered with Horizon colors (Issue LTS-201)
- "Manage Minions" is not supposed to appear on the Admin Pages. (Issue LTS-204)
- Display the Meridian logo in the Jasper reports (Issue LTS-205)
- Color scheme in "Help improve OpenNMS" is too horizon like (Issue LTS-210)
- The favicon does not comply with the meridian color scheme. (Issue LTS-211)
- Distributed/Geographical Maps do not show images anymore (Issue NMS-8597)

• Simple usability improvement to the provisioning UI (Issue NMS-8601)

- Make an automation to clear pathOutage alarms (Issue NMS-8857)
- Add foreignSource and foreignId parameters when sending events as an alternative to nodeId (Issue NMS-8919)
- Save syslog hostname in an event parameter (Issue NMS-8928)
- Identify time-series strategy in support/about page (Issue NMS-8936)
- VMware collector support for units and value modifier (Issue NMS-9092)
- SNMP data collection definitions for Cisco ASA5585-SSP-60 devices (Issue NMS-9094)
- Migrate remaining XSDs from Castor to JAXB (Issue NMS-9134)
- Cleanup and remove Castor related dependencies (Issue NMS-9135)
- Persist Drools working memory to disk when stopping and starting OpenNMS (Issue NMS-9143)
- Expose task queue size for ExecutorService runners. (Issue NMS-9161)
- Add Checkstyle to the build (Issue NMS-9174)
- Upgrade Spring from 4.0 to 4.1 (Issue NMS-9259)
- Finishing the implementation of the missing endpoints for ReST v2 (Issue NMS-9278)
- Upgrade Drools to 6.5.0 (Issue NMS-9279)
- Redefine the start ordering of the OpenNMS daemons during bootstrap. (Issue NMS-9280)
- Reload Drools configuration without restart OpenNMS (Issue NMS-9290)
- Alarms Page Enhancements Sound and Flashing (Issue NMS-9375)
- Improved visualization for large trees with the Hierarchy Layout (Issue NMS-9379)
- Add support for retrieving the SNMPv2 agent address from a specific varbind (Issue NMS-9449)
- Improve logging for EventIpcManagerDefaultImpl (Issue NMS-9452)
- Minion requires location-specific definitions in SNMP config (Issue NMS-9462)
- add HTTPS response time datacollection and graph definitons (Issue NMS-9465)
- Add parameterized SQL support to Criteria API (Issue NMS-9480)
- Programmable Northbounder Interfaces (Issue NMS-9513)
- Remove "delete" flag from default downtime model (Issue NMS-9257)