Mellanox NEO™ Release Notes

Rev 2.3.1

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1 Overview

Mellanox NEO™ is a powerful platform for managing scale-out computing networks. Mellanox NEO enables data center operators to efficiently provision, monitor and operate the modern data center fabric.

Mellanox NEO serves as interface to the fabric, thus extending the existing tools capabilities into monitoring and provisioning the data center network. Mellanox NEO uses an extensive set of REST APIs to allow access to fabric-related data and provisioning activities.

Mellanox NEO eliminates the complexity of fabric management. It automates the configuration of devices, provides deep visibility into traffic and health, and provides early detection of errors and failures.

These release notes pertain to the Mellanox NEO software version 2.3.1.

1.1 System Requirements

The platform and server requirements for Mellanox NEO are detailed in the following sections:

1.1.1 Mellanox NEO Server Requirements

Table 1: Mellanox NEO Server Requirements

Platform	Type and Version
OS	RedHat/CentOS 7.3, 7.4, 7.5
CPU	8-core server and above
RAM	16 GB and above
Disk	10G for every 100 managed systems (switches)

NOTE: In Order for IP Discovery to load, DNS should be configured properly on installed machine or hostname should be defined at /etc/hosts file.

1.1.2 Mellanox NEO GUI Client Requirements

Table 2: Mellanox NEO GUI Client Requirements

Supported Browser	Browser Version
Internet Explorer	11 and above
Chrome	62 and above
Firefox	56 and above
Safari	11.0 and above

NOTE: Deprecated Safari versions on Windows are not supported by NEO.

NOTE: In order for NEO GUI client to work properly, flash player should be installed and enabled for client browser. For more information regarding flash player installation and enabling, refer to the following link: https://helpx.adobe.com/flash-player.html

1.1.3 Recommended Screen Resolutions

Table 3: Recommended Screen Resolution

Screen Type	Screen Size	Recommended Resolution
Desktop	23”	1920 X 1080
Laptop	15”	1366 X 786
Tablet	9.7”	1024 X 768

1.1.4 Supported Mellanox Managed Systems

Table 4: Mellanox Managed Systems Supported by Mellanox NEO

System Type	Platform	Device	Software Version
Ethernet	Mellanox SN2000 Series	SN2010 SN2100 SN2100B SN2410 SN2410B SN2700 SN2700B SN2740	Mellanox Onyx v3.7.1000 or newer Cumulus Linux 3.6.2 or newer

System Type	Platform	Device	Software Version
	HPE M-Series	SN2100M SN2410M SN2410bM SN2700M	Mellanox Onyx v3.6.5009 or newer
	Edgecore	AS4610	Cumulus Linux 3.2 or newer

NOTE: Mellanox Onyx SX series (both PPC and x86) systems are not supported in NEO starting from NEO v2.3.

1.1.5 Supported 3rd party Managed Switch Systems

The following are the supported 3rd party managed switch systems and software by Mellanox NEO:

- Arista DCS-7050S1
- Cisco Nexus 3064
- Cisco 2960 (without provisioning)
- Juniper QFX3500
- HPE 5900AF
- Brocade VDX6740

NOTE: For more information about Mellanox NEO 3rd party managed systems, please refer to Mellanox NEO Solutions Community page, and select the current release's Plugins page.

1.1.6 Managed Hosts Supported by Mellanox NEO

- Linux
- Windows

2 Key Features

Table 5: Key Features

Feature	Description
Telemetry	Enables the user to collect telemetry data from Spectrum based managed switches, and stream it to external data collectors.
Device Management	Enables chassis discovery, health monitoring and running operations (reboot, software-upgrade) on managed systems
Device Provisioning	Enables the user to run commands on selected systems
Port & Device Monitoring	Enables the user to collect all managed switches ports traffic and error counters via the SNMP protocol
Ethernet Discovery	Enables the user to discover the managed devices' connectivity via the LLDP protocol
Report Management	Enables the user to generate and save traffic counter graphs
Events	Enables the user to receive notifications on the managed systems and the Mellanox NEO application, and enables the use to define rules for events triggering
Task and Job Management	Enables the user to centralize task running on managed switches, and enables tracking running and completed jobs in the system
Task Sequence	Enables the user to create and manage sequences of tasks which can be executed at any time
Running and Tracking Configuration Info	Enables the user to view the current running configuration of every managed switch system, and notifies the user of network configuration changes, summarizing all systems configuration changes
Dashboard	Provides a summary of the managed site's traffic and events behavior
RoCE Dashboard	The RoCE Dashboard contains a snapshot of the RoCE related network state, including information on service state, traffic and events. RoCE services can also be added and managed from this dashboard.
What Just Happened (WJH)	A dashboard that contains information about packet drops in the fabric.
Network Mismatch Analysis	Notifying the user on a network configuration mismatch – for example: MTU mismatch, Mellanox Onyx mismatch
Topology Map	Enables the user to have a graphical view of managed network topology
Configuration Management	Enables the user to edit and apply running configuration files (Global Configuration), CLI files (Provisioning Templates) and to save/restore old running configurations (Network Snapshots).
Cable Information	Enables the user to present cable information of selected devices, ports and groups
NIC Capabilities	Enables the user to retrieve important information about managed Hosts Adapter Cards (HCAs)

Feature	Description
Performance Monitoring	Enables the user to run performance checks between two hosts
Performance Health Check	Enables the user to run performance health tests between all managed hosts or for randomly selected hosts
Service View	Enables the user to apply selected network configurations and validate these configurations periodically
Power Management	Enables the user to reduce network power consumption by entering Eco mode
High Availability	Enables the user to use a cluster of nodes for high availability of network management
Cumulus Linux Support	Added support for Cumulus Linux network operating system operated over Mellanox switch systems

3 Changes and New Features

This section lists the new and changed features for this Mellanox NEO™ version.

Table 6: New and Changed Features

Feature	Description
Telemetry Agent	Telemetry sessions performance improvements
NEO Telemetry Management	Telemetry status reflection improvement
Discovery	Add option for disabling VLAN discovery
Task Management	Added an option to attach additional NEO data model attributes to the collected switch information
NEO VM Deployment	Improved the NEO OVA image for easier VM deployments

4 Changes and New Features History

This section lists the changes *and* new features of the previous versions of Mellanox NEO™.

Table 7: History of Changes and New Features

Release	Feature	Description
2.3	**RoCE Dashboard**	The RoCE Dashboard contains a snapshot of the RoCE related network state, including information on service state, traffic and events. RoCE services can also be added and managed from this dashboard.
	Nutanix Virtualization Improvements	Allows discovering the virtualization information (VM name) using prism central API.
	Cisco Model 2960 Switches Support	Cisco switches model 2960 can be managed by NEO, apart from provisioning related operations.
	What Just Happened	A dashboard that contains information about packet drops in the fabric.
	MAC Address table for Onyx	Allows the Telemetry Agent to retrieve MAC Tables data.
	Switch Agent (Onyx): Routing Tables	Allows the Telemetry Agent to retrieve Routing Tables data.
	Telemetry Agent for SwitchDev (interface and port counters)	Allows running the telemetry agent as a docker container on SwitchDev switches. The data is collected using ethtool.
	Telemetry Agent for Linux Host	Allows running the telemetry agent as a docker container on Linux hosts. The data is collected using ethtool.
	LLDP Discovery APIAutomatic SNMP v3 Registration	Enables the user to attach the 'Register for SNMP v3 traps for Mellanox switch' built-in task to the ‘Device Added’ event so it will run every time a new device has been added.
	Port Unsilenced Admin State	Added support for ‘Unlicensed’ port admin state.

	Planned-Reload Event	Added a new event policy - 'Planned Reload'.
	MAC Address Table Scheduled Task	Allows the user to set a scheduled task to obtain the MAC address table for each Onyx device.
2.2	**Telemetry Agent Enhancements**	• Added calculated counters (rate and normalized counters) • Added error handling and telemetry sessions status • Added support for multiple sessions and multiple destinations • Added a mechanism for triggering threshold crossing events
	Telemetry Agent on Cumulus Linux	Added support for deploying and running telemetry agent on Cumulus Linux.
	Telemetry Integration with ELK	Added support for switch telemetry data integration with ELK.
	One Click RoCE	Added support for deploying RoCE on Windows and Cumulus Linux systems.
	Network Map Enhancements	• Added support for link utilization (showing bandwidth utilization per link) • Added a new hierarchical view of managed devices
	Log Debug level via Web-UI	Added support for NEO controller log debug level.
	Multi-site Support	Added support for grouping and managing devices per site
	Network Path	Added a view of the optional network paths between a selected switch and a target host.
	Nutanix Integration	Added support for NEO integration with Nutanix Prism Central and Multi-Cloud environment.
2.1	**One-click RoCE**	• Updated the RoCE recipes for: a. ECN only b. ECN + QoS c. ECN + QoS + PFC. • Added the ability to select specific switches, hosts and ports to RoCE provision. • Added the ability to easily grow the RoCE fabric after the initial provisioning with additional switches, hosts and ports.
	Telemetry Agent (Early Availability)	The NEO telemetry agent is a software module designed to run inside a Docker container operated on a Mellanox Spectrum switch system. The agent collects data on the switch, and streams it out to an external data collector for processing, analysis and presentation. The telemetry agent can be centrally deployed and managed from the NEO application or from a 3rd party controller.
	Mellanox Spectrum Containers Management	Added the ability to orchestrate Docker containers on Mellanox Spectrum switch systems operated with Mellanox Onyx software.
	Cable Inventory	Added the ability to view and manage an inventory of cables across the fabric through one pane of glass.

	NEO Docker Appliance	The NEO Docker appliance is a pre-packaged Docker container image operating on CentOS and installed with the NEO 2.1 software.
	Backup & Restore	Added the ability to backup and restore a NEO instance for data protection and recovery purposes.
	Event Management	• The condition ID was changed to be numeric instead of textual data • The event description contains the condition message instead of the reason • The reason field is generated by NEO, and contains Reason information per event ID. The user cannot modify the Reason information • The 'RelatedObjectID', 'RelatedObjectName' and 'RelatedObjectType' new attributes were added to each event • The 'Parent' attribute was changed to 'RelatedSystem'. Only one related system is supplied • The 'ConditionID' attribute was added • Additional log data entries were added - 'ConditionID', Event sequence ID and related object data • The corrective description is generated by NEO, and contains corrective information per condition ID
	Remote Storage	Added the ability to change the default path where NEO stores all configuration files from the local host to a remote storage.
	NEO-Host Notification	Added new notification listing hosts that are not installed with NEO-Host, as well as the ability to install the latest NEO-Host software.
	Device Access	Added the ability to set http/https device access for every Mellanox Onyx operated device.
	Export/Import Network Map Views	Added the ability to export Network Map views as files and import them to other NEO user environments.
	QoS Monitoring	Added the ability to set traffic priority for monitoring, with priority 3 being the default for RoCE traffic.
	Network Services	Added an option to automatically create a network snapshot before applying a service configuration to allow a restoration point in case of a failure.
	Provisioning	Added several new provisioning templates.
2.0.5	**RoCE Profiles Support**	Added the ability to use MLNX_OS 3.6.5000 traffic pool APIs for RoCE service configuration.
	HTTPS Communication	Added the option to replace HTTP access to the switches with HTTPS access.
	Configuration Management Module	Added a new module to consolidate all related configuration management functions, such as network provisioning templates, global configuration templates, etc. in a single pane of glass.

	Running-Config Variables	Added the ability to use variables in running-config templates such that a single running-config can be provisioned on multiple switches in a single operation.
	Network Snapshots	Added support for creating network-wide snapshot of switch running-configurations to use as restoration points. By default, a network snapshot is created automatically by the system every 24 hours.
	One-click MLAG	Expanded the existing MLAG service to provision and validate IP networks and servers on the switch and host.
	Nutanix AHV Support	Added support for auto-discovery and visibility of Nutanix Acropolis (AHV) virtual machines across the network fabric.
	Linux Virtual Networking	Added modeling and visibility into a Linux host virtual networking and virtual functions bridging to physical adapters.
	NEO Virtual Appliance for PowerKVM	Added support for new NEO Virtual Appliance compatible with PowerKVM based systems.
	Device MAC	Added a new identifier for switch systems.
	Device Access	Added SNMP-based connection settings per switch and changed “Device Credentials” to “Device Access”.
	Syslog Server	Added configuration options to set up to five servers to export syslog messages to, each has its own service/port settings.
	Live Monitoring Interval Improvement	Reduced the minimal counters monitoring interval of Spectrum and SwitchX devices from 20 to 2 seconds.
	NMOS API	Added support for Networked Media Open Specifications (NMOS) API. For further information on NMOS, visit the following links: https://www.nmos.tv/about_NMI.html
1.9	**Enhanced Server/NIC Support**	Added Mellanox adapter and port information through integration with NEO-Host software operated on the host.
	Enhanced Device Discovery	Disabled the default automated device discovery mechanism, and enabled the user to create and manage a discovery policy of allowed IP subnets and/or ranges.
		Added a new discovery solution of IP subnet/range scan.
	Configuration Management	Added the option to schedule a configuration swap/rollback on a Mellanox switch or a group of switches using an **Apply Config** task operation.
		Added the option to edit switch configuration through a built-in config editor.
	One-Click RoCE Service	Added built-in automation for the provisioning and validation of RDMA over Converged Ethernet (RoCE). This feature is designed for Mellanox Spectrum switch systems operated with Mellanox Onyx, and Linux servers operated with Mellanox ConnectX-4 or ConnectX-5.
	RoCE Monitoring	Added sampling of additional counters on Mellanox switches, used for RoCE traffic.

		This feature is designed for Mellanox Spectrum switch systems operated with Mellanox Onyx.
	NEO Software Upgrade	Added an enhanced solution for NEO software upgrade from NEO v1.9 and up.
	Enhanced Device State	Added the following new device states: • Pending Reboot – indicates that a device is pending reboot (as a result of a software upgrade or apply configuration) • Reboot Status – indicates the status of a device upon reboot operation
	Enhanced LAG/MLAG Support	Added an enhanced support for LAG/MLAG port-channels on Mellanox Onyx powered switch systems with: • One-click provisioning – configuring LAG/MLAG ports configuration based on physical connectivity • LAG/MLAG information – added information on LAG/MLAG port members/peers, state, MTU, etc. • One-click validation – monitoring existing LAG/MLAG ports through network services
1.8	**Network Health Enhancements**	Added new network health tests for: • IP connectivity between all nodes to all nodes, or random selection of one node per switch/rack. Multicast latency and bandwidth tests between all nodes to all nodes, or random selection of one node per switch/rack.
	Network Health Report	Allows the user to execute data traffic tests across the network, to ensure utmost network performance
	Task Sequence	Allows the user to select multiple tasks that will run in a sequence, to achieve end-to-end network automation in a single run-time
	End to End RoCE Automation	Added a new wizard that configures Lossless RoCE/Resilient RoCE on an entire fabric comprised of Mellanox switches, Linux and Windows hosts
	Ports Group	Enablse the user to create a group of ports, to achieve port-level network automation and create monitoring policies
	Software Upgrade Profiles	Allows the user to manage software upgrade profiles for a more intuitive way to upgrade Mellanox software on switches and servers
	VLAN Auto-Provisioning for Nutanix Acropolis Virtualization	Added network automation for configuring VLAN networks on Mellanox switches, for Nutanix Acropolis VM life-cycle, VM creation, VM migration and deletion. This is provided as a software add-on/plug-in.
1.7	**High Availability**	Added the option to install and run NEO on a cluster of nodes that are synchronized and can take over each other in cases of failovers
	Cable Information	Added the option to view cable information of selected devices, ports and groups
	Performance Monitoring	Added the ability to run performance checks between two hosts

	New Supported Virtual Appliances	Added new VM images of NEO for the following hypervisors: • VMWare Workstation • ESXI Server • Virtual-BOX • Hyper-V
	Port Level Provision	Added the ability to run provisioning actions for Mellanox Onyx switch ports
	L3 Network Provisioning	Added the option to define a dynamic layer 3 network configuration which can be automatically applied for new discovered systems
	Syslog Configuration	Added the option to change NEO syslog configuration settings and filter for events to be written to Syslog
	Support for 3rd Party Switches	Added support for managing HP and Brocade switches via monitoring and provisioning
	Saving Topology Layouts	Added the option to save a user-defined layout of the discovered topology
	Skin Personalization	Added the option to personalize the UI view of NEO in terms of colors and theme
1.6.1	**NEO Installation and Start-up Enhancements**	Made various enhancements to the NEO installation process to make the installation experience easier for the user. These enhancements include: • An error message that appears once Python packages conflict with NEO packages during installation. • An error message that appears once RPM conflict with NEO packages during installation. • An error message that appears when trying to access NEO GUI while SELinux is enabled. This message asks for disabling SELinux to be able to access the GUI.
	Mellanox Virtual Modular Switch (VMS)	Added support for configuring SN2410 and SN2700 switch systems as members in VMS.
1.6.0	**Enhanced Network Awareness**	Presents VLAN and LAG configuration data per Mellanox switch on the fabric.
	Virtualization Support	Enables NEO to automatically identify and extract data from Linux KVM hypervisos regarding virtual machines' properties and virtual switches. This data is presented to the user per device and on a fabric level.
	Services View	Services View is a single pane of glass for initial network provisioning and monitoring. NEO services are used to provision complex configurations on multiple devices, and upon completion, constantly monitors these configurations. It includes an Out-of-the-box support for Virtual Modular Switch (VMS), Lossless Fabric, MLAG, and MTU services.
	Live Monitoring	Enables the user to create graph reports on device and traffic counters with intensive polling rates, whenever real-time monitoring capabilities are needed.

	Configuration Management	Enhanced configuration management with the following capabilities: • Provision new switches by pushing full device config • Rollback switch config to a last known good configuration • New global config repository to manage global device configurations
	MLNX_OFED Software Upgrade	Added the option to upgrade MLNX_OFED software on Linux servers.
	Maintenance Mode	Enables the user to set NEO to maintenance mode where all NEO events will be disabled.
	Dashboard Enhancements	Added the option to create custom device heatmap views based on various types of attributes (CPU, memory, traffic, etc.), and user-defined thresholds.
	Network Map Enhancements	Enhanced network map with the following capabilities: • Added filtering capabilities based on device type (switch, host, etc.), severity (warning, error, etc.) and VLAN number. • Enhanced search capabilities to use standard strings.
	Mellanox Care Support	Enables Mellanox NEO customers to subscribe to Mellanox Care support service, where all configured events/alerts will be relayed to the Mellanox Care support team constantly.
	Logs	Added the option to download log files.
	Kerberos Authentication	Added support for Kerberos authentication for Windows hosts management.
1.5	**Topology Map**	Added a visual view of the physical connectivity between managed devices.
	VMS Configuration	Added a wizard for Virtual Modular Switch™ (VMS) configuration.
	Provisioning of 3rd Party Switches	Added the option to provision configurations to 3rd party switches using templates.
	Traffic Monitoring of 3rd Party Switches	Added the option to monitor traffic counters for 3rd party switches using SNMP protocol.
	NEO SDK Enhancement	Added support for additional SDK scripts for NEO integrations.
	Task Management Enhancement	Enhanced performance of task management and task editing.
	RH7.0 Support	Added the option to install NEO on an RH7.0 system.
	VM Deployment	Added a pre-configured Virtual Machine (VM) image with NEO for deploying it on a Linux KVM hypervisor system.

5 Known Issues

This section lists the known issues in this version of Mellanox NEO™ with available workarounds.

Table 8: Known Issues

Internal Reference Number	Issue
-	**Description:** When a What Just Happened (WJH) session is enabled on the telemetry agent, the WJH feature on the Onyx switch is disabled (the user is not able to view WJH details via Onyx switch CLI) and vice versa - When the WJH feature is enabled on the Onyx switch, it disables the WJH session of the telemetry agent.
	Workaround: N/A
	Keywords: What Just Happened, WJH, Onyx, telemetry agent
	Detected in Version: 2.3
-	**Description:** The What Just Happened feature is supported by NEO only for Onyx Spectrum switches using v3.7.1134, or newer.
	Workaround: N/A
	Keywords: What Just Happened, WJH, Dropped Packets
	Detected in Version: 2.3
-	**Description:** NEO-Host installation is supported only for Linux hosts, using one of the following HCAs: ConnectX-4 / ConnectX-4 Lx / ConnectX-5.
	Workaround: N/A
	Keywords: NEO-Host
	Detected in Version: 2.3
1578231	**Description:** NEO telemetry agent can stream Routing Table information up to 20K records, and Mac Table information up to 800 records.
	Workaround: N/A
	Keywords: Telemetry agent, Routing Table, Mac Table
	Detected in Version: 2.3
1417273	**Description:** System icons are not shown for Edge and Safari systems.
	Workaround: N/A
	Keywords: Network Map, Edge, Safari
	Detected in Version: 2.2
1504128	**Description:** The network path calculation requires that all switches along the path will have the same SSH credentials. Otherwise, the calculation will fail.
	Workaround: N/A
	Keywords: Network path, SSH, Credentials
1484291	**Description:** The telemetry agent cannot be stopped on switches running Onyx OS v3.6.8100.
	Workaround: Do not deploy the telemetry agent on Onyx OS v3.6.8100.

Internal Reference Number	Issue
	Keywords: Telemetry Agent, ONYX-OS
1421369	**Description:** The "In Packets rate" calculated counter shows an incorrect value for Cumulus switches only, due to an issue with the switch (the Unicast RX Packets counter always returns a value of zero)**.**
	Workaround: N/A
	Keywords: In Packets rate, Cumulus, Unicast RX Packets
1498434	**Description:** The network path calculation will display the links transmitted bandwidth utilization according to the maximal value of the aggregated links (in case of a multiple links connection)**.**
	Workaround: N/A
	Keywords: Network path, bandwidth, utilization
1332120	**Description:** Telemetry Agent does not support split ports.
	Workaround: N/A
	Keywords: Telemetry Agent, split port
1331732	**Description:** The SX1000 Switch Series is identified as 'other host' when discovered by range scan.
	Workaround: Add the SX1000 Switch Series manually from the “Devices” view.
	Keywords: Discovery, SX1000
1328501	**Description:** In the MLAG service, the bond is configured with the default gateway.
	Workaround: Configure a different static route to the relevant ports.
	Keywords: MLAG, bond
1316429	**Description:** Port live monitoring only works from a certain Onyx [MLNX-OS] version.
	Workaround: N/A
	Keywords: Telemetry, live monitoring
1327385	**Description:** Upgrade procedure (from an older version to 2.1.0) does not include Events Policy and RoCE Service.
	Workaround: N/A
	Keywords: Upgrade
1309655	**Description:** Telemetry session interval cannot be changed
	Workaround: N/A
	Keywords: Telemetry Agent
1309448	**Description:** Starting from release 2.1.0, NEO automatically generates network snapshots for all service members before the service configuration is applied. This mechanism applies only for the entire configuration (not changes).
	Workaround: N/A
	Keywords: Services

Internal Reference Number	Issue
1298137	**Description:** when loading images with a similar name [differed only by tag] the 1st image name becomes empty due to an issue in Red Hat Docker https://bugzilla.redhat.com/show_bug.cgi?id=1184247
	Workaround: N/A
	Keywords: docker, container
1272497	**Description:** There is no validation for the maximum ECN value in RoCE Service. The max allowed ECN value is dynamic and depends on switch type, current memory state , etc.
	Workaround: N/A
	Keywords: RoCE Service
1277047	**Description:** Configuring one of the IPL ports in MLAG service to 'switchport mode trunk' fails the service
	Workaround: reset switchport mode before adding the port to the IPL.
	Keywords: MLAG Service
1302777	**Description:** Switch Reboot stops a telemetry agent session [if running]
	Workaround: After Switch reboot, manually restart the telemetry session
	Keywords: Telemetry
1071652	**Description:** For optimized UI functionalities, LastPass browser add-on should either be disabled or not installed.
	Workaround: N/A
	Keywords: UI, LastPass
1021786	**Description:** RoCE service is not supported on router ports.
	Workaround: N/A
	Keywords: RoCE Service
-	**Description:** RoCE extended counters are supported in MLNX Onyx (MLNX_OS) starting from v3.6.4000.
	Workaround: Make sure to upgrade your MLNX Onyx (MLNX_OS) version to v3.6.4000 or above.
	Keywords: RoCE Service
-	**Description:** A NEO-Host package installation is required for successful provisioning of RoCE through the new RoCE service.
	Workaround: Install NEO-HOST either on Linux-without-Neo-Host-installed predefined group or on a specific host.
	Keywords: RoCE Service
1064979	**Description:** The MLAG service is supported in MLNX Onyx (MLNX_OS) starting from v3.6.4000.
	Workaround: Make sure to upgrade your MLNX Onyx (MLNX_OS) version to v3.6.4000 or above.
	Keywords: MLAG Service

Internal Reference Number	Issue
-	**Description:** When using SNMPv3 with sha authentication and priv=aes128 option, the switch will become unreachable due to timeout.
	Workaround: For Mellanox PPC switches, use md5 authentication with a priv=des option.
	Keywords: Authentication
-	**Description:** Mellanox NEO Client (browser) might fail to connect to the NEO server in case the iptables service is running.
	Workaround: Make sure to disable the iptables service before running NEO installation.
	Keywords: Installation
-	**Description:** VLANs and LAGs information may not be displayed as part of device information for non-Mellanox Devices.
	Workaround: N/A
	Keywords: 3rd Party Systems Support
-	**Description:** Linux/Windows hosts provisioning via NEO is non-persistent (configuration information is not saved after reboot).
	Workaround: N/A
	Keywords: Host Provisioning
-	**Description:** NEO start-up will fail in case the machines' local time zone is not configured.
	Workaround: Make sure the installed machines' local time zone is configured. (/etc/localtime file exists)
	Keywords: NEO Start Up
-	**Description:** Apply Config operation is only available for switches with MLNX Onyx (MLNX_OS) v3.6.2000 and above.
	Workaround: N/A
	Keywords: Configuration Management
-	**Description:** Cable Information is only supported for Mellanox Onyx switch ports.
	Workaround: N/A
	Keywords: Cable Information
-	**Description:** Eco-mode is not supported on Mellanox Spectrum switches.
	Workaround: N/A
	Keywords: Power Management
951789	**Description:** Performance tests are only supported for ConnectX-4 and ConnectX-5 family adapter cards.
	Workaround: N/A
	Keywords: Performance Check
-	**Description:** Performance check can be performed only on two Linux hosts, running MLNX_OFED_LINUX-3.3-1.0.4.0 version or higher.

Internal Reference Number	Issue
	Workaround: N/A
	Keywords: Performance Check
-	**Description:** RoCE configuration on hosts is not persistent.
	Workaround: N/A
	Keywords: RoCE Service
-	**Description:** RoCE End to End does not support Inter Peer Link (IPL) port-channels, therefore, it fails in existing setups where MLAG is configured.
	Workaround: For new setups, execute RoCE End to End before configuring IPL port-channels. For existing setups, remove first any IPL port-channels before executing RoCE End to End.
	Keywords: RoCE Service

6 Bug Fixes History

Below are the fixes that were made in previous releases.

Table 9: Bug Fixes History

Internal Ref.	Issue
-	**Description:** Fixed a memory leak on NEO telemetry agent which occurred during telemetry sessions (WJH and Counters sessions)
	Keywords: Memory leak, Telemetry Agent
	Discovered in Release: 2.3.0
	Fixed in Release: 2.3.1
1640823	**Description:** Fixed an issue where NEO CloudX API failed to connect UFM during a stress test.
	Keywords: CloudX, stress test
	Discovered in Release: 2.1.0-5
	Fixed in Release: 2.3.1
1593466	**Description:** Fixed an issue where NEO discovery failed to operate when the Fan Status was 'NOT PRESENT'
	Keywords: Fan Status, Not Present
	Discovered in Release: 2.3.0
	Fixed in Release: 2.3.1
1370061	**Description:** Fixed an issue in VLAN mode, where NEO reported a switch port as an access port instead of a hybrid port in case of a hybrid port with “only one VLAN”.
	Keywords: VLAN Mode
	Discovered in Release: 2.1
	Fixed in Release: 2.2
1281752	**Description**: Fixed "*GraphiteSupplier: Failed to get response*" error (a workaround for versions prior to 2.1.0 can be found here).
	Keywords: GraphiteSupplier
	Discovered in Release: 2.0.5
	Fixed in Release: 2.1.0
1296798	**Description**: Fixed an issue where the Static IP was lost following a reboot of NEO OVA image**.**
	Keywords: Static IP, OVA
	Discovered in Release: 2.0.5
	Fixed in Release: 2.1.0
1321485	**Description**: Fixed an issue where Live Monitoring failed on split ports
	Keywords: Split ports
	Discovered in Release: 2.0.5

Internal Ref.	Issue
	Fixed in Release: 2.1.0
1281714	**Description**: Fixed an issue where following a switch upgrade, the new version was not displayed in the UI.
	Keywords: Switch upgrade
	Discovered in Release: 2.0.5
	Fixed in Release: 2.1.0
1321708	**Description**: Fixed an issue where the REST API sent a 'dummy' cookie as part of the response.
	Keywords: Cookie
	Discovered in Release: 2.0.5
	Fixed in Release: 2.1.0
777783	**Description**: Fixed an issue where the installation would exit with a vague error message. This issue occurred when NEO was installed using an installation package which was not compatible with the OS version.
	Keywords: Installation, OS version validation
	Discovered in Release: 1.6
	Fixed in Release: 1.6.1
777713	**Description**: Fixed the issue where a missing RPM (pyOpenSSL) in RedHat 7 used to cause NEO to crash during initialization.
	Keywords: RPM, initialization, RedHat 7
	Discovered in Release: 1.6
	Fixed in Release: 1.6.1

7 Related Documentation

This section lists the release contents for this version of Mellanox NEO™.

Table 10: Release Contents

Item	Document Number
Mellanox NEO™ User Manual	MLNX-15-4587
Mellanox NEO™ Release Notes	MLNX-15-4637
Mellanox NEO™ Quick Start Guide	MLNX-15-4867
Mellanox NEO™ SDK User Manual	MLNX-15-5323
Mellanox NEO™ REST API	MLNX-15-5284
Mellanox NEO™ Telemetry Agent User Manual	MLNX-15-98547