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Introduction

All existing customers have the option to upgrade their deployments to the auto-failover configuration for standalone, operations center, and collector appliances.

The following sections describe new features, supported devices, guidelines for upgrading devices, resolved issues, and known issues for the current release.

NOTE: Active penetration and vulnerability scans are conducted as part of the security testing. We have fixed all reported and discovered vulnerabilities related to SQL injections, and we have found and fixed a number of high-severity vulnerabilities. We will fix lower-severity vulnerabilities in the upcoming releases. To be exploited, all vulnerabilities require an authenticated user to initiate the action. Based on our knowledge and testing capabilities, we are unaware of exploits conducted by unauthenticated users.

New Features and Improvements

The following new features and improvements are included in this release of NetMRI:

- You can now use the Audit Log to track all requests made to APIs.
- You can now use APIs to discover devices on Juniper Mist, which is an SDN/SD-WAN solution from Juniper.
- You can now enable automatic failover on NetMRI VMs.
- You can now use external sandbox images, which are based on Ubuntu 20.04.

For more information, see Resolved Issues.

Deprecated and Obsolete Features

This section describes the features no longer supported in this release or planned for removal in future releases. These are the features that have not been adopted by customers or have been used only for specific cases in the past. NetMRI contains a rich set of features; to ensure that the focus remains on improving the features that are in use, we have trimmed many existing features and added new ones in areas where the number of use cases is growing.

Deprecated Features

Deprecated features are features skipped during release qualification. The code for them has not changed but might be removed in future releases.

There are no deprecated features in NetMRI version 7.5.4.

Obsolete Features

Because the SSH client has been upgraded, NetMRI 7.4.4 has dropped support for the following:

- SSH protocol version 1, associated configuration options, and documentation
- hmac-ripemd160 MAC
- ARCFOUR, Blowfish, and CAST ciphers
- RSA keys shorter than 1024 bits

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Compatibility support for some very old SSH implementations, including ssh.com <= 2 and OpenSSH
 3

These versions were released in or before 2001 and predate the final SSH RFCs. The support for them is not necessary for RFC-compliant implementations of SSH.

If you get the "no matching cipher" error when attempting to connect to devices from NetMRI over SSH, use the configure ssh command to adjust the list of ciphers.

Planning for Deprecated and Obsolete Features

This release does not contain features that are candidates for becoming deprecated or obsolete in future releases.

Device Support Updates

The following devices are newly supported for release 7.5.4:

| Vendor | Model | Туре | OS or Firmware |
|--------------------|----------------------|---------------|-------------------|
| Nortel | ERS-4850GTS-PWR-PLUS | Switch-Router | 5.11.2.013 |
| Palo Alto Networks | PA-3260 | Firewall | 8.1.19 |
| Huawei | S5731-S48P4X | Switch-Router | V200R019C10SPC500 |
| | | | |
| Mellanox | SH2200 | Switch-Router | 3.6.8008 |
| | | | |
| Cisco | N77c7710 | Switch-Router | 8.4(2) |
| | | | |
| нзс | LS-6820-4C | Switch-Router | 7.1.070 |

Guidelines for Performing Upgrades

The file with the upgrade image is ib_network_automation-7.5.4.XXXXX.gpg.

The following table provides guidelines and use cases for upgrading previous versions of NetMRI to 7.5.4.

| Version | Guidelines |
|------------------|--|
| 6.9.x or earlier | Follow this upgrade path: 7.0.5 > 7.1.4 > 7.4.5 > 7.5.4. |
| 7.0.x | |
| 7.1.x | Upgrade to 7.1.4, then to 7.4.5, and then to 7.5.4. |

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| 7.2.x | Upgrade to 7.4.5 and then to 7.5.4. |
|--|--|
| 7.3.x 7.4.x 7.5.x | Upgrade to 7.5.4. |
| HA system running 7.1.[2-4] | Before performing the upgrade, apply one of the v7.1.[2-4]-NETMRI-30000.gpg hotfixes available on the AutoUpdate server. When applying a hotfix, ignore the reference to 7.1.4-NETMRI-30000. |
| HA system running 7.3.2, 7.3.3, or 7.4.[1-4] | Before performing the upgrade, apply the NETMRI-33842.gpg hotfix for the appropriate NetMRI. These hotfixes are available on the AutoUpdate server. When applying the hotfix, ignore the reference to NETMRI-33842. |

In communications between an operation's center controller and a collector, all collected network data passes from the collector to the controller through a tunnel. Because the tunnel is shut down during the upgrade, data collection is shut down in operations centers.

Pre-upgrade Hotfix for OC-Collector Setup

All NetMRI appliances in an OC-Collector setup require a pre-upgrade hotfix. To install the hotfix while upgrading an OC-Collector setup to version 7.5.4, refer to the "Pre-upgrade Hotfixes for NetMRI 7.5.4 OC-Collector Setups" in the Support portal.

A Note on External Authentication and Authorization Services

If you are using external authentication over SSL, ensure it supports TLS 1.2 before upgrading NetMRI.

Upgrading Sandbox Instances

Before starting an upgrade, ensure that all local and remote sandboxes are fully and properly upgraded or reinstalled on the starting release version. If a sandbox is in an incorrect state prior to a follow-on upgrade, issues that are difficult to diagnose might arise.

Local sandbox instances for NetMRI are upgraded automatically.

Remote sandbox instances (such as those on a VM server) must be reinstalled manually in the following instances:

- Upgrading between major versions, for example, from 7.3.3 to 7.4.1.
- Upgrading to 7.4.5, which is a minor version.
- Updating from 7.5.0 or 7.5.1 to 7.5.2 or later.

Release version 7.5.4 has an external Sandbox image based on Ubuntu 20.04. When upgrading between minor versions, such as 7.4.1 to 7.4.2 and 7.5.3 to 7.5.4, redeployment of the remote sandbox is not required.

To reinstall a remote sandbox instance, perform the steps below:



- 1. Download a new Sandbox VM file from Infoblox.
- 2. In the administrative shell, run the sandbox deregister command for the previous remote sandbox.
- 3. After the NetMRI upgrade is complete, deploy a new instance of the sandbox image.
- 4. In the administrative shell, register the new instance with the sandbox register command.

For more information, refer to the topics *Using the NetMRI Sandbox* and *Setting Up a Remote Sandbox* in the online Help.

To extend the size of an image and of an internal swap partition for the local sandbox, manually execute the sandbox reset command after the upgrade. Any changes made to the sandbox (for example, additional libraries installed) will be lost during this process.

Other Requirements

Tested Versions of Web Browsers

NetMRI 7.5.4 has been tested with the following web browsers:

| OS | Browser |
|-------------------------|--|
| Microsoft Windows 7® | Microsoft Internet Explorer® 11.x |
| | Mozilla Firefox 63.x |
| | Latest version of Google Chrome |
| Microsoft Windows 8.1® | Microsoft Internet Explorer 11.x, Edge |
| | Mozilla Firefox 63.x |
| | Latest version of Google Chrome |
| Microsoft Windows 10 | Microsoft Internet Explorer 11.x, Edge |
| | Mozilla Firefox 63.x |
| | Latest version of Google Chrome |
| Apple® Mac OS X 10.13.6 | Safari 13.0.5 |

NOTE: Internet Explorer 11 does not render Topology Viewer well. Topology Viewer requires a browser that supports the ES6 standard (ECMAScript 2015 and later), but IE11 does not support this and later standards.

Infoblox has removed the "The browser you are using is not supported" warning. Occasional issues with display might occur because these browsers go through rapid release cycles. We expect that the coding of browsers is compatible with NetMRI and that highlighting the version difference in red during every login is no longer necessary.

When viewing NetMRI, set the following screen resolution on your monitor:

Minimum: 1024x768

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Recommended: 1280x800 or better

Supported Hypervisors

Infoblox offers NetMRI in a VM version. The following hypervisors support NetMRI 7.5.4 on VMs:

- VMware ESXi 5.5, ESXi 6.5, ESXi 6.7, and ESXi 7.0
- OpenStack Victoria and OpenStack Wallaby

Technical Support

Product Support

Telephone:

• Toll-free number for the US and Canada: 1-888-463-6259

EMEA: +32 3 2590440

• US: +1-408-986-4000, ext. 1

Email: support@infoblox.com

Web: https://support.infoblox.com

Documentation

The latest documentation is available on docs.infoblox.com.

Training

Training information is available on https://training.infoblox.com.



Resolved Issues

The following table describes the issues that were reported in previous NetMRI releases and fixed in this release.

Fixed in NetMRI 7.5.4

| ID | Summary |
|--------------|--|
| TOPOV-70 | When multiple device groups were selected to filter the topology view, it did not highlight all selections and did not show the option to hide the deselected groups in the custom view. |
| TOPOV-59 | Some fields in the settings for the topology viewer were indented inconsistently. |
| NETMRI-35484 | It was not possible to import a file with CLI credentials to an Operations Center via API. |
| NETMRI-35441 | The privilege to use the NetMRI Discovery Diagnostic feature tool was set incorrectly. |
| NETMRI-35428 | During weekly maintenance, the system occasionally hung when it was overloaded. |
| NETMRI-35412 | Users with the Polling Admin role did not have access to all options on the Device Viewer menu. |
| NETMRI-35406 | Reports were canceled when the Vlan: Root Bridge Name field was added. |
| NETMRI-35401 | Due to changes in physical components, frequent email notifications were received from APC PDU devices. |
| NETMRI-35396 | If the report had the column Interfaces: control capabilities, the column was empty. |
| NETMRI-35388 | When you navigated from Switch Port Management > View Device History, the Device History menu was not selected. |
| NETMRI-35384 | An attempt to change the parent group of a device group to a non-existing parent group via an API request resulted in an error message. |
| NETMRI-35381 | The Selected Files box disappeared from Comparing Configuration Files. |
| NETMRI-35379 | The expand/collapse checkbox was not displayed for parent device groups. |
| NETMRI-35343 | The SSH and Telnet Port checks returned incorrect results even when both ports were disabled on a device. |
| NETMRI-35341 | Upgrades failed when duplicate device groups with distinct hash IDs were present. |
| NETMRI-35326 | The DNS processor did not remove any domain names. |





| NETMRI-35278 | A virtual device was discovered as physical if it had multiple serial numbers for a chassis. |
|--------------|---|
| NETMRI-35274 | Under the CLI collection, MFR interfaces were not collected from Cisco devices. |
| NETMRI-35272 | The pages for security settings could be accessed without the proper permissions. |
| NETMRI-35266 | If the advanced setting FQDN was empty, the Issue Details report was not executed. |
| NETMRI-35260 | Some scriptxmld logs were absent from the collectors. |
| NETMRI-35259 | An incorrect policy rule was displayed on the edit page of the Triggered Job Wizard. |
| NETMRI-35251 | The Triggered Job Wizard's preview page displayed an incorrect device group. |
| NETMRI-35238 | The state of the Privileged Polling option could not be set to disabled. |
| NETMRI-35237 | The configuration page for Syslog Forwarding failed to load in an Operations Center with no collectors. |
| NETMRI-35235 | Occasionally, CLI authentication failed due to the presence of an HTTP config collection. |
| NETMRI-35230 | Scheduled jobs could be copied and deleted even without the Schedule privilege. |
| NETMRI-35220 | Disabling the Switch Port Data collection for a Device Group did not affect SPM polling for SDN devices. |
| NETMRI-34687 | Launching the test authentication service without adding a server was possible. |
| NETMRI-34686 | In Device Viewer > Settings & Status > SNMP Credentials , the Use SNMPv1/v2 and Use SNMPv3 checkboxes could not be selected in MacOS Safari 14.1.1. |
| NETMRI-34435 | The displayed values of PoE ports were incorrect. |
| NETMRI-34267 | Unable to save Syslog Forwarding settings after adding two test hosts and then removing the second host. |
| NETMRI-34144 | When trying to configure a remote system, Database Settings-related operations (such as Archive Database, Scheduled Archive, and Remote Config Archive) failed to work with IPv6 addresses. |
| NETMRI-34003 | The search field did not accept non-alphanumeric characters. |
| NETMRI-34401 | During an upgrade, no remote backup was created. |
| NETMRI-33733 | Virtual devices were identified as physical. |
| | |



| | · |
|--------------|--|
| NETMRI-32989 | Policies were not deployed when you selected All Devices on the Config Management > Policy Design Center > Policy Deployment page. |
| NETMRI-32938 | Positive messages about free storage were delivered in the Network Health Alert but not displayed on Notifications > System Message . |
| NETMRI-32914 | Hiding the Message column increased the height of expanded rows that contained errors and warnings. |
| NETMRI-32579 | The positive message from the Network Health Alert did not appear in Notifications > System Message . |
| NETMRI-32227 | The "System Health" and "Available Space" alerts contained incorrect information about available free space. |
| NETMRI-30902 | Some text buttons were difficult to read. |
| NETMRI-30431 | The email notification option did not work in the Support Bundle Wizard. |
| NETMRI-30349 | The Interfaces > Ports Present page did not clearly indicate whether it was showing all ports or only free ones. |
| NETMRI-29716 | The maximum number of database archives specified in Settings > General Settings > Advanced Settings > Database Archives was removed since it did not perform as intended. |
| NETMRI-29212 | The Device Viewer > Interfaces > Address Table was not hidden for Cisco ACI. |
| NETMRI-6319 | In the Audit Log page, the HTML tags were exported with the CSV file. |

Fixed in NetMRI 7.5.4 Documentation

| ID | Summary |
|--------------|--|
| NETMRI-35492 | If ping sweep was enabled on the subnet of IPs excluded from Discovery, it would continue to transmit packets across all protocols, so excluded IPs would not stop transmitting packets. |



Known Issues

The following lists are notable bugs or potential improvements found by Infoblox or reported by customers. These are candidates for future maintenance or major releases. For information on specific tickets, please contact Technical Support.

| ID | Summary |
|--------------|---|
| NETMRI-35533 | The Reached status of unreachable Cisco Meraki and Juniper Mist devices is not changed to red. |
| NETMRI-35510 | In Network Explorer > Inventory > Models , the serial number of the chassis is not displayed for virtual (child) devices. |
| NETMRI-35485 | Field "Type" column in the pop-up menu Filters in Network Explorer > Inventory considers only the first entry. |
| NETMRI-35468 | After the system is reconfigured and the UI is started, the system displays the message about expiration of the license and then the message about restart of service. |
| NETMRI-35443 | NetMRI attempts to validate HTTP credentials while HTTP polling is disabled. |
| NETMRI-35385 | An attempt to create groups with recurring dependencies might result in an internal server error. |
| NETMRI-35374 | The "Undefined method 'auth method' for nil:NilClass" error message is displayed when an attempt is made to copy authentication services. |
| NETMRI-35077 | Unable to log in to NetMRI when the PKI authentication is enabled. |
| NETMRI-34843 | Upgrade to OpenSSL 3.0 FIPS version from OpenSSL 1.0.2j-FIPS version. |
| NETMRI-34597 | NetMRI uses an old version of the Phusion Passenger framework, 3.0.21, which has known vulnerabilities. |
| NETMRI-34550 | When the installation of a device support bundle fails, the system continues to make attempts to install it and turns off data collection. |
| NETMRI-34549 | Because NetMRI does not close sessions properly, it causes Viptela to overload. |
| NETMRI-34461 | Unable to define an SSH or a Telnet custom port in a CSV file that is used to import device credentials in the Settings icon > Setup > Credentials page. |
| NETMRI-34430 | The hpacucli command sometimes stops responding, and this causes systemd to stop responding and prevents a reboot. |



| NETMRI-34427 | After the referenced registered collector is replaced, the statuses of the devices change to Unmanaged or Unlicensed . |
|--------------|--|
| NETMRI-30616 | When NetMRI uses SNMPv1 for polling on devices that support High Capacity counters, unicast counts are set to zero. |
| NETMRI-30460 | Reports that take longer than 5,000 seconds do not send email notifications. |
| NETMRI-28959 | Running discovery diagnostics in the Operations Center does not display data in the Device 90 Day History section. |