RELEASE NOTES

NETOPS

VERSION 2.7.0



INTRODUCTION

This is a recommended patch software release. Please check the <u>Lighthouse User Guide</u> for instructions on how to upgrade NetOps.

SUPPORTED PRODUCTS

• NetOps - Secure Provisioning

KNOWN ISSUES

• CM8100 is not supported. [IM-12634]

DEFINITIONS

Production release: A production release contains new features, enhancements, security fixes and defect fixes.

Patch release: A patch release contains only security fixes or defect fixes for high priority issues.

2.7.0 (September, 2025)

This is a production release.

Minimum required versions

• Lighthouse: 21.Q4.0

• Operations Manager: 20.Q3.0

• Console Server: 4.5.0

Enhancements

- Added Secure Provisioning mounted directory support. [IM-18352] This enhancement
 adds the ability for a user to USB/SCP files into a fixed directory on an OM, at
 /mnt/nvram/ztp/, which is then served by the provisioning container over HTTP, in the root
 directory. These files will be kept between reboot and upgrade, allowing for easy manual
 and automated file uploads without extra container copying steps.
- Updated the deployment container in support of a Python version upgrade to 3.12. [IM-16155]
- Upgraded OpenSSH to v10.0.p2. [IM-18585]

2.6.3 (October, 2023)

This is a patch release.

Minimum required versions

• Lighthouse: 21.Q4.0

• Operations Manager: 20.Q3.0

• Console Server: 4.5.0

Features

• Updates to the deployment scripts, needed for the latest version of Docker

2.6.2 (September, 2022)

This is a patch release.

Minimum required versions

• Lighthouse: 21.Q4.0

• Operations Manager: 20.Q3.0

• Console Server: 4.5.0

Features

- Accessibility improvements to raise standards of keyboard support
- Minor interface and input changes to improve user experience and flow when accessing parts of the UI
- Aligned module naming convention from Device Provisioning to Secure Provisioning

2.6.1 (June, 2022)

This is a production release.

Minimum required versions

• Lighthouse: 21.Q4.0

• Operations Manager: 20.Q3.0

• Console Server: 4.5.0

Features

- Adjusted Secure Provisioning to accommodate for increases in the size of the OM firmware
- Support new NGCS DHCP vendor string

2.6.0 (July, 2021)

This is a production release.

Note:

- In order to deploy NetOps modules using the offline installer, the Lighthouse should have at least 8GB of disk space available.
- After successful deployment of NetOps modules to Lighthouse, the user will need to redeploy modules on the nodes. This can be done by clicking the refresh button for each module on Configure -> NetOps Modules page.

Minimum required versions

• Lighthouse: 20.Q4.0

• Operations Manager: 20.Q3.0

• Console Server: 4.5.0

Features

• Integrated with reworked Lighthouse roles and permissions

2.5.0 (May, 2020)

This is a production release.

Minimum required versions

• Lighthouse: 20.Q2.0

• Operations Manager: 20.Q2.0

• Console Server: 4.5.0

Enhancements

- Add Operations Manager device type which supports both OM12xx and OM22xx Operations Managers
- Add API endpoints for managing Git SSH keys
- Add guard to prevent provisioning on Operations Manager interfaces configured for IP Passthrough
- Changed behaviour to no longer automatically sync NetOps Modules on applying a license

Defect Fixes

• Fix issue with post-provisioning scripts running repeatedly for devices provisioned without resource files

2.4.0 (February, 2020)

This is a production release.

Minimum required versions

• Lighthouse: 20.Q1.0

• Operations Manager: 19.Q2.0

• Console Server: 4.5.0

Features

• New UI framework with faster deployment

2.3.1 (December, 2019)

This is a patch release.

Minimum required versions

• Lighthouse: 19.Q2.0

• Operations Manager: 19.Q2.0

• Console Server: 4.5.0

Defect Fixes

• Fix race condition with handing out DHCP addresses during resource deployment

2.3.0 (October, 2019)

This is a production release.

Minimum required versions

• Lighthouse: 19.Q2.0

• Operations Manager: 19.Q## 2.0

• Console Server: 4.5.0

Enhancements

• Add support for configuring static address on Operations Manager provisioning interface

Defect Fixes

- Fix network services running with default configurations on Operations Manager
- Fix central DNS access for provisioned devices
- Fix hardcoded interface name in NetOps deployment firewall rules

2.2.0 (October, 2019)

This is a production release.

Minimum required versions

• Lighthouse: 19.Q2.0

• Operations Manager: 19.Q## 2.0

• Console Server: 4.5.0

Features and Enhancements

- Added support for new Cisco IOS XE provisioning over HTTP, as well as legacy TFTP provisioning
- Added restricted non-root user for Git resource provisioning
- Added support for deactivating Secure Provisioning on a node
- Added support for configuring firewall via API for Secure Provisioning on Operations Manager nodes
- Secure Provisioning no longer activates nodes automatically on enrollment
- Reduced verbosity of NetOps container logs
- Integrated offline NetOps installer into NetOps Deployment container

Defect Fixes

 Fix incorrectly serving DHCP addresses to devices not being provisioned by Secure Provisioning

2.0.0 (June, 2019)

This is a production release.

Minimum required versions

• Lighthouse: 19.Q2.0

• Operations Manager: 18.Q4.0

Features and Enhancements

- Add support for provisioning Cisco IOS XE and Cisco NX-OS devices
- Add SSH key template variable to allow provisioning scripts to access devices from the Opengear node
- Dynamically determine provisioning interface on Operations Manager based on network configuration
- Add HTTP support for device provisioning on ACM7xxx and IM72xx nodes

Defect Fixes

- Fix NetOps ports listening externally on Lighthouse
- Fix HTTP timeout when serving large files on Operations Manager
- Fix provisioning configuration being overridden by system changes on ACM7xxx and IM72xx
- Fix creating a Node Inventory without specifying a Smart Group

1.2.0 (April, 2019)

This is a production release.

Minimum required versions

• Lighthouse: 19.Q2.0

• Operations Manager: 18.Q4.0

Features and Enhancements

- Added support for IM72xx and ACM7xxx as provisioning nodes
- Added support for OM2224-24E as provisioning nodes

- Updated to support Operations Manager new firewall framework (firewalld)
- Only show Secure Provisioning activated nodes on Static Inventory page

1.1.1 (December, 2018)

This is a patch release.

Minimum required versions for Lighthouse and Operations Manager are: - Lighthouse: 5.2.2 - Operations Manager: om22xx-18.Q3.0

Features and Enhancements

- Add UI warning when resource bundle filenames conflict with existing files
- Updated template variables for referencing the netmask

Defect Fixes

• Fixed bug with templated resource filenames being offered with .j2 extension still intact

1.1.0 (November, 2018)

This is a production release.

Minimum required versions

• Lighthouse: 5.2.2

• Operations Manager: om22xx-18.Q3.0

Features and Enhancements

- Add support for Operations Manager acting as NTP and syslog server for provisioned devices
- Add device information such as allocated DHCP address to available resource template variables
- Prefer HTTP to TFTP as ZTP file transfer method for vendors that support it
- Consolidate downloads and templates directories into a single downloads directory for CLI workflow
- Only restart Operations Manager provisioning services as strictly necessary
- Add support for creating model-specific resource bundles for Opengear devices, and support ZTP enrollment into Lighthouse
- Improve performance of resource push
- Improve performance of node module upgrade
- Remove built-in Push to all nodes / 'all' resource distribution policy
- Ignore any DHCP client requests originating from Operations Manager's provisioning interface

Defect Fixes

- Fix long Docker operations timing out during deployment
- Fix known issue with Cisco IOS XR file retrieval

1.0.0 (September, 2018)

This is the first generally available release for the Secure Provisioning module for NetOps Automation. This includes and improves upon all functionality in the beta release.

Minimum required versions

• Lighthouse: 5.2.2

• Operations Manager: om22xx-18.Q3.0

Features

- Add per-user resource and inventory separation for Node Admin privileged users, including tiered deployment strategies for resources
- Add remote logging to Lighthouse and Operations Manager systems for ZTP services
- Add support for file serving over HTTP(S) in place of TFTP
- Add output from git deployment process displayed to users
- Rename Day One Provisioning module to Secure Provisioning module, which currently provides the Device Provisioning feature

1.0.0b1 (June, 2018)

This is the first beta release for the NetOps Automation platform. This release is intended for use by selected clients, and runs within Lighthouse 5.2.2b1 and Opengear NGCS om22xx-18.Q## 2.0b1 (on the Operations Manager).

Features

- The Day One Provisioning NetOps module provides a platform to distribute resources and configuration (ZTP) to devices managed by the Lighthouse 5 platform and connected to an Operations Manager.
- First-class support for provisioning the following vendors: Opengear, Arista, Aruba, Cisco IOS, Cisco IOS-XR, Cumulus, Huawei, Juniper, and Pico8. See the individual vendor documentation for supported ZTP operations.
- Workflows for NetOps configuration & push supported via Git and Web UI.
- Docker engine integrated with the Lighthouse 5 and Opengear Operations Manager platforms.
- DNS and DHCP via the Opengear Operations Manager for managed devices.
- Access to configured networks from managed devices via the secure Lighthouse VPN tunnel.