



NSP

Network Services Platform

Release 24.4

Release Description

3HE-20026-AAAA-TQZZA
Issue 1
April 2024

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About this document

Purpose

This document is intended to assist network planners and administrators by providing high-level feature descriptions for NSP Release 24, along with the schedule for delivery.

Scope

The NSP Release Description lists and describes all significant features introduced in NSP Release 24, including classic IP management (NFM-P). The features available in your deployment depend on the feature packages you purchased. For information about feature packages and the product functionality they license you to use, see the *NSP System Architecture Guide*.

Document organization

The document is organized on a cumulative basis by release. Descriptions reflect the release in which the feature was introduced. If an enhancement is delivered in a subsequent release, the enhancement feature would appear separately.

Feature descriptions are sorted in alphabetical order by product area, and then by feature key.

For more detailed information and procedures related to the features described in this Release Description document, refer to the customer documentation suite delivered with the NSP product.

Document support

Customer documentation and product support URLs:

- [Documentation Center](#)
- [Technical support](#)

How to comment

Please send your feedback to [Documentation Feedback](#).

1 Introduction

1.1 Release information

1.1.1 Target schedule

Three releases with new content are planned in Release 24, as summarized below:

- Release 24.4 — April 2024
- Release 24.8 — August 2024
- Release 24.11 — November 2024

Service packs in support of these releases will be delivered as required.

1.2 Ordering information

1.2.1 Sales engineering information

Table 1-1 NSP resources

Resource
Software download from the Nokia Support portal (registered customers only)
License keys (please contact your account representative for assistance)

1.2.2 Pricing information

To obtain NSP pricing information or assistance with ordering, please contact your regional sales representative.

1.2.3 Sizing

Contact your account representative to make a sizing request.

1.2.4 Support for Beta keys

Beta keys are controlled by NSP Product Management. To apply for the NSP Beta Program, contact your account representative.

1.3 Additional information

1.3.1 Network element support

Please see the *NSP NFM-P Network Element Compatibility Guide* for complete network element compatibility information. This compatibility reference guide is updated frequently to incorporate new network element release information and compatibility with NFM-P. Always consult the latest version on the Doc Center.

1.3.2 Deprecations and support discontinuation notices

Feature deprecation and discontinuation notices are listed in the *NSP Release Notice*.

1.3.3 Scale and architecture

The scalability and performance targets for NSP Release 24 are described in the *NSP Planning Guide*.

1.3.4 Supported operating systems

Please refer to the *NSP Planning Guide* for detailed information about supported operating systems and requirements.

1.3.5 Adaptors and artifacts

Adaptors and other artifacts can be delivered off-cycle and are accompanied by their own documentation.

NSP framework features that support these artifacts are delivered with NSP releases and may be described in this document.

2 NSP NMS feature descriptions

2.1 Mediation Collection features

2.1.1 [NSPF-241820] Support IPFIX for MD SR and IXR

Release introduced: 24.4

NSP Flow Collectors support the collection of System cFlowd statistics from the model-driven Release 23.10 7250 IXR and 7750 SR. Model-driven collection of AA cFlowd statistics from the devices is not supported.

2.1.2 [NSPF-126079] Auxiliary Database Installation and Management with or without NFM-P

Release introduced: 24.4

Until Release 24.4, an NSP deployment that included an auxiliary database also required the NFM-P.

NSP Release 24.4 eliminates the NFM-P dependency, and supports auxiliary database deployment and management regardless of whether the NSP system includes the NFM-P.

2.2 IP/Optical Coordination features

2.2.1 [NSPF-313926] Ciena T-API Controller - 2.4.1 support Phase 2

Release introduced: 24.4

NSP IP/Optical Coordination support for TAPI Release 2.4.1.

2.3 Device Management features

2.3.1 [NSPF-229815] Centralized discovery manager for all of NSP

Release introduced: 24.4

Feature Description

The purpose of this feature is to provide centralized discovery management across a classic and model mode network.

This will allow user to :

- Unify the visualization of all discovered Network Element into a central GUI
- Provide unified discovery rules definition and execution
- Centralize un-manage/remove Network Elements from NSP

Customer Benefit

The main benefit for the customer is that this feature will increase visibility of the Network Elements managed by NSP, merging the current functionalities of model-driven and classic device discovery. This is another step forward in unification of NSP functionality and central visualization of the network.

Restrictions/Limitations

None

2.4 Analytics features

2.4.1 [NSPF-205637] Analytics server containerization

Release introduced: 24.4

In Release 24.4, the NSP analytics server functions and data are transferred to the NSP Kubernetes cluster. The RPM-based analytics servers deployed outside the cluster are no longer required or supported.

The move to the NSP cluster reduces the number of required VMs in a deployment, and eliminates the need for discrete analytics installation and upgrade procedures.

The analytics migration to the NSP cluster is a simple and straightforward operation that requires minimal user interaction.

3 NSP nodal feature descriptions

3.1 IP Edge features

3.1.1 [NSPF-311130] Require OS6900-V48C8 Support

Release introduced: 24.4

NSP will manage OS 6900V48C8 with the following characteristics:

OS6900V48: 25Gigabit/100Gigabit Ethernet L3 fixed configuration chassis in a 1RU form factor with 48 1/10/25G SFP28 ports and 8 40/100G QSFP28 ports. QSFP28 ports operate as single 40/100GE port or Quad-10/25GE. Console and Ethernet management ports are RJ45. Front to Rear cooling. The chassis includes two 650W AC power supplies. The bundle ships with user manuals access card and rack mounts.

3.1.2 [NSPF-306650] OS6360-P10 Support

Release introduced: 24.4

NSP will manage OS6360-P10, which is a replacement of OS6450-P10.

It has the following characteristics:

OS6360-P10 GigE fixed chassis 8 RJ-45 PoE 10/100/1G BaseT. 2 10/100/1G BaseT. 2 fixed SFP (1G) uplink ports. 1RU size. internal AC power supply (120W PoE budget). Includes US power cord.

4 NSP Release 24 features at a glance

4.1 NMS feature list

4.1.1 NSP NMS features

Table 4-1 NSP Release 24.4

Key	Summary	Area
[NSPF-205637]	Analytics server containerization	Analytics
[NSPF-213321]	Analytics: Data Dictionary - configurable retention time for MOs that need availability monitoring	Analytics
[NSPF-109413]	Audible Alarm sounds on new alarms	Assurance
[NSPF-281432]	Complete coverage of NFM-P discovery aspects in NSP	Assurance
[NSPF-315314]	FWA CUPS : 5G Reference Point KPI Support	Assurance
[NSPF-315709]	FWA CUPS - Alarm Addition	Assurance
[NSPF-229815]	Centralized discovery manager for all of NSP	Device Management
[NSPF-317658]	Discontinuation of "Dual NE Management"	Device Management
[NSPF-293699]	Extend Centralized Discovery to OMNI Devices	IP Edge
[NSPF-291771]	IP/Optical : Integrate NSP 23.11 with WS-NOC/WS-RC 23 H2	IP/Optical Coordination
[NSPF-313926]	Ciena T-API Controller - 2.4.1 support Phase 2	IP/Optical Coordination
[NSPF-299586]	Update NSP K8S Platform Packages - kubenspray 2.23 (k8s v1.27)	Infrastructure
[NSPF-299884]	NSP RHEL Updates to RHEL 8.9	Infrastructure
[NSPF-311104]	Post 23.11: Support a small resource profile	Infrastructure
[NSPF-126079]	Auxiliary Database Installation and Management with or without NFM-P	Mediation Collection
[NSPF-241820]	Support IPFIX for MD SR and IXR	Mediation Collection
[NSPF-313573]	CN Telemetry - Support for vendor-agnostic LAG utilization	Mediation Collection
[NSPF-252572]	Generate device specific artifacts for 7220 IXR configuration	Network Configuration
[NSPF-293321]	Remove support for embedded and non-secure nspos	Platform core
[NSPF-316045]	NSP as a domain controller for multiple HCOs	Service Management
[NSPF-416822]	Enhance MD Stitch Algorithms - Part 1	Service Management

4.2 Nodal feature list

4.2.1 NSP

Table 4-2 NSP Release 24.4

Key	Summary
[NSPF-300634]	MAGC 24.3 R1 & 23.10 R2 release support
[NSPF-318250]	Support SRL OS 23.10.2
[NSPF-318252]	Support SRL OS 22.11.4

4.2.2 Classic NE management (formerly known as NFM-P)

Table 4-3 NSP Release 24.4

Key	Summary
[NSPF-283162]	7750 SR-s 3.0T 36p 400G QSFP112 XMA2-s
[NSPF-287197]	State to indicate system needs reboot
[NSPF-287233]	Timing algorithm reroute handling and performance improvements (Bell Labs)
[NSPF-287239]	Support MACSec over 800G channelized optics for FP5 HW
[NSPF-287321]	NG-mVPN with PIM ASM: BSR mode for RP discovery on 7250 IXR-R6
[NSPF-288973]	OpenSSL 3.1 - upgrade from 1.1.1 to 3.1.4
[NSPF-288988]	YANG Operations: 'reset card/mda' Commands
[NSPF-289000]	Additional Ethernet port interface stats (nokia-yang, Openconfig, MIB)
[NSPF-289020]	Major and Minor ISSU on IXR-R6d/R6dl (first usage in 23.10.R1)
[NSPF-289139]	Microloop avoidance for OSPF
[NSPF-294756]	Support IXR-ec on SRUX
[NSPF-294784]	PTP G.8273.2 Class B Performance: 7750 SR-1/1x/1d FP5 platforms
[NSPF-294806]	Missing card detection, alarming and logging
[NSPF-306650]	OS6360-P10 Support
[NSPF-310209]	vSIM support for VMware ESXi 7.0
[NSPF-310221]	cVSR Intel E810 NIC family support
[NSPF-310250]	MPLS-QA - LDP: Enhance lldp and tldp (functional / scaling) automation coverage
[NSPF-311130]	Require OS6900-V48C8 Support

Table 4-3 NSP Release 24.4 (continued)

Key	Summary
[NSPF-318724]	Improve bof.cfg encryption
[NSPF-318732]	Add "PTP steps removed" in "show system ptp clock csm"
[NSPF-318736]	BGP error-handling default behavior change (7705)
[NSPF-318738]	VRRP - NTP reply for master address
[NSPF-318740]	Avoid BGP session reset when malformed NLRIs are received - 7705
[NSPF-318746]	Overload max-metric support for ISIS

