

Cisco Evolved Programmable Network Manager 4.1.0 Release Notes

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Introduction

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Functionality Added in Cisco EPN Manager 4.1

This section lists the new features/functionality delivered in Cisco EPN Manager 4.1. Cisco EPN Manager 4.1 is a major release.



Note MTOSI support for EPNM has been deprecated from Cisco EPN Manager 3.1 onwards, please use RESTconf NB APIs for integration.



Note IoT feature and device support has been deprecated from Cisco EPN Manager 4.1 onwards.



Note Features marked “BETA” provide limited functionality in this release. The intention is to fully support these features in the next release.

GUI - General

- Improved tab titles to view and distinguish multiple tabs in a user session

Device Configuration

- Ability to add a device in Cisco EPN Manager whose IP address is already in-use on an interface on another device in the network.

Carrier Ethernet



Note G8032 is not supported and has been deprecated starting EPNM release 4.0

Device Lifecycle Management

- Ability to auto-refresh Network Devices table.
- Protection Switching Status Indication in Device 360 view.
- Ability to navigate from topology map to device configuration page. It is recommended to use Inline view for configuration.
- Chassis view
 - Display the Alarm Severity Icon when port is in Admin Testing State
 - Display alarm icons on card (NCS 2000) passive modules

SVO



Note Cisco NCS 2000 device SVO features provide Beta support in Cisco EPN Manager 4.1 Release

- NCS2k SVO basic support for R12.0.1 FCS release - Beta support
- NCS2k SVO SWIM support - beta level NCS2k SVO Fault Management - Beta support
- NCS2k SVO RT Performance Management - Beta support
- NCS2k SVO 15m/24h Performance Management - Beta support
- NCS2k SVO EPNM regression testing on 12.0 and 12.0.1 cards - Beta support
- NCS2k SVO support for OCH-Trail circuits - Beta support
- NCS2k SVO support for OCH-CC circuits - Beta support
- NCS2k SVO support for installation and migration from existing - Beta support
- NCS2k based network - Beta support
- NCS2k SVO support for circuit restoration - Beta support

- NCS2k SVO support for Netconf based template - Beta support
- NCS2k: basic support for R12.0.1 - Beta support
- NCS2k SVO enhancements to circuit constraint visualisation and settings MP usecase - Beta support
- EPN-M to support Netconf templates for bulk transponder commissioning (NCS2k SVO) - Beta support
- Device 360 view enhancements for SVO devices – Beta support
- Support SSO (single sign-on) login from Cisco EPN Manager to SVO nodal craft – Beta support

Service - Assurance

- Support for Optical WSON/ SSON circuit end point OTU register history for NCS 2000 devices – Beta support

Job Management

- Ability to auto-refresh job tables.

Optical

- Device 360 of OLA device lists all optical circuits (OCHTRAIL/OCHNC) which pass by the OLA device
- WSON and SSON circuits to have OMS link as path constraint
- NCS2k device Admin status set to unlock, automaticInService when disconnected
- NCS2K: WSON circuits support link names as path constraint
- NCS2k basic support for R11.1.1.2
- Supporting x50G trunk bit rate with NCS1004 with release 7.1.1
- 400G-XP and 10x10 with OPM_PEER_ODU2 slicing mode support OC192 pluggable client port
- OTDR support for NCS1001 devices
- NCS1004: Predefined templates to set alarm definition profile and activation
- Create OCH-Trail Between Routers colored ports with third party or no DWDM
- EPNM to support GCC link discovery for ONS15454 devices
- EPNM to display more than one wavelength when the OCH-Trail has more than 2 wavelengths in the regeneration approach
- NCS1001: Basic Support for release 7.1.1
- Optical devices show live data on the optical performance tab on Interface 360
- Add on tab from OCH-Trail the OCHCC correlated in View 360°
- API compatibility with WAE 7.2.2, WAE 7.2.1 and WAE 7.1.3

User Management Feature



Note NBI Credential user group is deprecated starting EPNM 4.0 release.

Fault Management

- Ability to share a filter with other users.
- Ability to view alarms of all severities in the alarm lists from NCS 2000 devices.
- Ability to navigate to affected device and port information or settings for NCS 2000 devices alarms or conditions

RESTCONF NBI

- NCS1004 NX 50G modes support on Trunk with release 7.1.1.
- Added OC192 client support in Cisco EPN Manager software for T5 applications.
- NCS 1001: OTDR support - scan and visualisation .
- Protection Switching Status Indication.
- Enhancement to CE and CEM partial services.

Device/OS Support Added in Cisco EPN Manager 4.1

This section lists the new support provided in Cisco EPN Manager 4.1. For a list of all support information, click the gear icon at the top right of the web GUI and choose Help > Supported Devices.



Note “BETA” means that the device/operating system has not yet been released but Cisco EPN Manager has been tested on the Beta version.

Cisco Network Convergence Systems 2000 Series—New Operating System Support

Device Model	Device OS
Cisco NCS 2000	Release 12.0.1

Cisco Network Convergence Systems 2006 Series—Beta Support

Device Model	Device OS
Cisco NCS 2006	Release 11.1.12

Cisco Network Convergence Systems 2015 Series—Beta Support

Device Model	Device OS
Cisco NCS 2015	IOS-XR 12.0.1

Cisco Network Convergence Systems 540 Series Routers—New Operating System Support

Device Model	Device OS
Cisco NCS 540 Router	IOS-XR 7.1.2

Cisco ASR 900 Series Aggregation Services Routers—New Operating System Support

Device Model	Device OS
Cisco ASR 900 Router	IOS-XE 16.12.4

Cisco NCS 4200 Network Convergence Systems—New Operating System Support

Device Model	Device OS
Cisco NCS 4200	IOS-XE 16.12.4

Supported Installation/Upgrade Paths

The following table lists the valid paths for installing/upgrading to Cisco EPN Manager 4.1 from previous versions.

Current Cisco EPN Manager Version	Upgrade Path to Cisco EPN Manager 4.1
Cisco EPN Manager 4.0	Cisco EPN Manager 4.0 > 4.1
Cisco EPN Manager 4.0.1	Cisco EPN Manager 4.0.1 > 4.1
Cisco EPN Manager 4.0.2	Cisco EPN Manager 4.0.2 > 4.1
Cisco EPN Manager 3.1.3	Cisco EPN Manager 3.1.3 > 4.1

See the relevant [installation guide](#) for installation prerequisites and procedures for Cisco EPN Manager versions.

For point patch installation instructions, see the readme file supplied with the patch file on the on the [Software Download site on Cisco.com](#).

Important Notes

Upgrade Issues

After upgrading to Cisco EPN Manager 4.1:

- FTP and TPTP will be disabled by default.
- Active threshold crossing alarms (TCA) for temperature will remain active and will not be cleared. Please clear these alarms manually.
- Devices must be resynced in order to view ISIS links and ISIS LTPS.
- LDP-enabled devices must be resynced in order to view LDP feature-related information.
- TCAs for inbound/outbound errors and inbound/outbound discards must be recreated in the Interface Health monitoring policy.

Limitations on Carrier Ethernet Circuit Provisioning

- Promotion of service using old probe name format will be supported and probes will get listed in user interface with appropriate standard OAM Profile name after promotion.
- Sample profile: profile PM2_3_8_CoS5_DM type cfm-delay-measurement.
- Till custom profiles names is supported, empty modification of brownfield services with different naming format will cause deleting of existing custom profile and adding of new profiles with provisioning supported name format.
- Inventory models only loose and delay profiles which is associated to service. But, there can be profiles in device which is not associated to any service. Validation if limit of 100 profiles is reached in device is not handled before config is deployed.
- Error will be thrown from device and deploy will get failed when user tries to create new SLA operation profile when EPNM tries to create 101th profile.

TLS 1.2 Required for Secured Channel Communication for HTTPS and TLS

Only Transport Layer Security (TLS) 1.2 is supported for HTTPS and TLS related secured communication, for example, RADIUS EAP-TLS. Support for TLS 1.0, TLS 1.1, and all versions of SSL has been disabled due to security vulnerabilities.

This means that all peer systems and clients that transact with Cisco EPN Manager using HTTPS/TLS must support TLS 1.2. If they do not support TLS 1.2, they must be upgraded. Wherever possible, the Cisco EPN Manager documentation highlights the potentially affected systems. Please contact your Cisco representative for support in this regard, if necessary.

Reconciliation Report Limitations

When provisioning a service, if you have not provided a value for any of the attributes, the provisioned value for those attributes will be displayed as “Missing” in the reconciliation report. The device may have default values for these attributes but Cisco EPN Manager does not have any values configured.

Limitations on ME 1200 Devices

The Y.1564 performance test does not work if the source/destination is a ME 1200 device.

Limitations on NCS 4200 Devices Running IOS-XE 16.8.1

The following functionality does not work on NCS 4200 devices running IOS-XE 16.8.1:

- Alarm profile
- Configuration of SONET LOP and CT3 LOP from the GUI
- Admin shut/no shut functionality on SONET/T1/T3 HOP/LOP

Limitations on NCS540 and NCS5500 devices

- NCS540 device series does not support Fault-OAM, Wrap-Protection and BFD.
- NCS5500 device series does not support Fault-OAM, Wrap-Protection and BFD.

Use CLI Templates for Configuring PTP Commands

On ASR920 devices with software version 16.9.1, IEEE 1588-2008 BC/MC license is required to execute the 1588 PTP commands.

Configuration and Inventory Not Supported for PTP Templates

The behavior of modeling the configurations pushed through PTP templates may not work as expected because the model may not be in place for all the configurations pushed through PTP templates. Configuration/Inventory is not supported for these configurations.

Deprecation of Support for ONS 10.00.10, 10.01.00, 10.03.00

No Support for ONS 10.00.10, 10.01.00, 10.03.00 ONS 10.00.10, 10.01.00, and 10.03.00 are no longer supported on Cisco NCS 2002, 2006 and 2015 devices.

Data Center Device Lifecycle Support Only

Cisco EPN Manager provides foundation lifecycle support for UCS compute systems, CSR 1000v, and Nexus series devices but does not provide data center topology.

LINK_DOWN alarm on sub interfaces in Gig Port

LINK_DOWN alarms will not be generated when link is down on sub interfaces in Gig Port.

Cisco EPN Manager Bugs

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Open Bugs

The table below lists the open bugs in Cisco EPN Manager Release 4.1 according to the following criteria:

- Severity 1, 2, and high priority severity 3 open bugs
- All open customer-found bugs

- High-impact bugs that are likely to affect Cisco EPN Manager workflows.

Click the identifier link to view the impact and workaround for the bug in the [Bug Search Tool](#). Use this tool to track the status of the open bugs.

Bugs	Description
CSCvv12869	EPN - UI - Network Inventory limited rowCount to 1000
CSCvu91058	LINK_DOWN alarm with null location column in alarm page for subinterface
CSCvu94437	Custom syslog is not getting deleted
CSCvv07811	Catalyst3850 - Sync "Completed with Warning"
CSCvs29170	Admin link up alarm shows wrong previous severity status
CSCvv12297	N540X wrong port assignment
CSCvt13962	Chassis View: 0/EC0-SSD0 and 0/EC0 components missing in EPNM response
CSCvu89583	local (offline) geomap is not working for admin users
CSCvu70810	NCS2K -> Dropdown for configuration not working for chassis view when opened in new window
CSCvq59838	After updating optical port baud-rate/Bits Per Symbol via EPNM does not sync automatically
CSCvr89141	EPNM not validate the NCS2K user not exists before create a new user
CSCvu82635	Failure source value inconsistent for Switch, Switches and routers category of alarms
CSCvs68779	Resync on the circuit is not building a specific relationship
CSCvt43443	Service discovery fails in a scenario
CSCvv01541	End to End Performance Statistics dashlet shows values between 0-1 instead percent
CSCvv08329	[Scale] Memory Usage is high due nice/discovery/mtosi
CSCvv00386	Chrome always pops up alert when exporting OTDR data
CSCvt04362	circuit 360 view lists alarms for devices not part of circuit working path after reroute.
CSCvt42312	In get TL of OTS Link , for the retrieved data of Logo Attributes "SF Filter " attribute missing
CSCvu65683	Error in open Circuit 360 view due to corrupted customer_id col value in customerfacingservice table
CSCvu67485	Performance graph expands and exceeds the screen, when Device 360 is opened in network topology
CSCvv00945	Unknown Error in UI in logging page when no log modules selected and saved
CSCvu94287	Hostname in the EPNM Syslog tab is not updated

Bugs	Description
CSCvt44894	[HA] Restart of primary while acting as standby result with a failure
CSCvs19271	Placement of NCS5504-MOD Linecard MPA's port is not green in chassis view
CSCvt16959	[scale]:alarm summary-->ISIS/MPLS alarm retained for the deleted devices and device header empty
CSCvv11665	Scale] Memory Usage is high due to Nice task and Service Discovery
CSCvv12752	Authentication of External User with permission config manager fail for Card Mode get/create/delete
CSCvv17395	EPNM REST CONF does not respond with JSON Tags is there is one element
CSCvt19360	NBI: A end and Z end circuit id shown in reverse when EVPN id is modified
CSCvv14993	In prov OCHNC for validation mode as NONE, in getVC missing acceptance threshold, missing UI parity
CSCvv18856	PPM for the line card A9K-4T16GE-TR is not supported for ASR9K device
CSCvu67485	Performance graph expands and exceeds the screen, when Device 360 is opened in network topology
CSCvt66677	NCS1004 device goes into collection failure sometimes
CSCvu19970	More than 1 wavelength is not shown in the Circuits/VCS page though it is seen in circuits 360
CSCvu26031	NCS2K- >Data under Configuration Tab -> Line not loading without refresh after create of cardmode/ppm
CSCvu57491	NCS2K: Y-CABLE circuit not report serviceability state as Up after enabling the interface
CSCvu91759	Optical VC Primary State is not updated on VC admin down when there is already alarm on the VC
CSCvu59301	NCS2K- >EPNM doesnt handle ckt creation/discovery of 2 or more ckts with the same ckt name properly
CSCvu94288	OCHCC service provisioning failing, error in get response as '@xpath /beans[1]/CFS[1]/serviceId[1]'
CSCvv07204	NCS2K- >Ports with warning alarms which are part of wson/sson ckt MLT are greyed out
CSCvv08307	NCS2K- > Span loss values should be properly displayed in MLT and Link360 when link disconnected
CSCvu98071	[FEC Mode]: Unsupported/NA FEC modes need to remove from ASR9K devices

Bugs	Description
CSCvv12569	NCS2k:Editing LMP client/termination does not show the available local/remote interface IP address.
CSCvv13611	NCS2k: Inline edit fails for Virtual trunk tab in GMPLS/WSON section.
CSCvv16261	In getTP, och-attributes wavelength retrieved as 'NA', instead of 'First Tunable Wavelength'
CSCvu94604	NCS2K -> Flex port configuration from CTC not reflecting correctly in EPNM for 200G-CK-C card_part2
CSCvv07473	NCS2K-> Filtering not working properly for inventory in chassis view
CSCvv19912	[NCS 1001]: OTDR scan graph plotted with improper data points
CSCvv14638	NCS1004: Card mode is NOT removed in EPNM though deleted in the device with GI enabled.
CSCvv13543	NCS2K -> Data retention \"Age\" value for optical 15 min tables cant be set between 169 to 336 days
CSCvv10919	NCS2K -> OTN lines under configuration tab goes blank after navigation to Logical view->OTN FEC
CSCvv09376	NCS2K-> Discrepancy between device up time in EPNM and TL1
CSCvv08502	Add card screen not opening if selected device has more racks(mycase it is 4)
CSCvu77343	Create ODU circuit between two NCS4K's via CLI where Z end inventory status shows Collection failure

Resolved Bugs

The table below lists bugs that were listed as open bugs in the Cisco EPN Manager 4.0 release notes that have been resolved in Cisco EPN Manager 4.1.

For more information about the resolved bugs, go to the [Bug Search Tool](#).

Bugs	Description
CSCvs83461	configuring pluggable port modules is abusing the device connections and may causing CF/CFWW
CSCvt42563	Optical SFP Monitoring not working for NCS 55A2-MOD-S devices
CSCvs29119	New Menu Options Are Added in EPNM 4.0 server after upgrading.
CSCvt21265	[HA] DB fails to start post Automatic Failover in Dual-NIC
CSCvs91131	Inconsistent timestamps in "Recent Changes" tab in device 360
CSCvr78845	Sorted timestamps in Link 360 is incorrect

Bugs	Description
CSCvs14907	Get response not showing the submit status
CSCvs94800	ASR-920-12SZ-A goes into Collection failure.
CSCvt32807	'Last Successful Collection Time' not updated for few devices, that are Completed With Warning
CSCvt05290	[Scale]Dashboard UI performance issue identified on optical scale setup
CSCvt35889	Template CLI does not parse map values correctly (using vtl)
CSCvt34022	Tech-overlay is not working, not decorating the link between groups
CSCvr08353	customer-facing-service,virtual-connection API return no data,but ServiceDetails does on same ckt
CSCvt42205	No span-type on direction A to Z in get TL and performance metric, for retrieved data of tl metrics
CSCvs60665	Devices not grouped in ROOT-DOMAIN do not show up All Locations either in Inventory or Reports page
CSCvt08154	Optical provisioning creating duplicate circuits in some scenario
CSCvt38861	ISIS Level value incorrect in Database causing Inventory sync Alarms to be raised on Level 3
CSCvt39180	When changing the card mode, sync will change card mode but not update the ports
CSCvt37443	Incorrect L3VPN serviceability status showing in EPNM
CSCvr70723	Promotion is failing for MPLS-TE bidirectional tunnels for Fretta devices
CSCvn00371	Unable to restart NCS2K port ALS
CSCvr53698	Deploy of Missing circuit does not mantain ALLOWREGEN intent
CSCvs31127	No wavelength and frequency in 360 view of SSON circuit
CSCvs34164	ONS-15454:System Summary in device details page shows Error ocured while retrieving data.
CSCvs82073	MCH-NC circuit - Interface 360 - admin and operational status shows question mark
CSCvs89925	Fail change NCS4K synce timing-mode
CSCvt05892	Optical inventory-- >Configuration-- >TNC--360 View--open failed with Backend error
CSCvt07986	In get VC of ODU Tunnel, for A and Z node termination points admin and operation state is unknown
CSCvt12246	Restorable OCHCC WSON services doesn't show restoration parameter enabled in EPNM
CSCvt16055	NCS1001 device managed with OTDR and netconf warnings

Bugs	Description
CSCvt34364	incorrect Layer Rate for Coherent DSP ports in protocolendpoint table
CSCvt37870	Unable to create virtual trunk from EPNM UI after deletion.
CSCvu81090	After restoring EPNM 3.1.3 on 4.0 device parameters are missing or replaced by garbage values

Closed Bugs

The table below lists the closed bugs in Cisco EPN Manager Release 4.1.

Click the identifier link to view the impact and workaround for the bug in the [Bug Search Tool](#). Use this tool to track the status of the open bugs.

Bugs	Description
CSCvu57190	Doc update for Alarm Retention limits in Cisco Evolved Programmable Network Manager user guide
CSCvu83977	SVO:JointTest: Issues when 2 ochcc circuits with same circuit name and endpoints are present in EPNM

Get Information about Cisco EPN Manager Bugs

Use the Bug Search tool (BST) to get the latest information about Cisco EPN Manager bugs. BST allows partners and customers to search for software bugs based on product, release, and keyword, and it aggregates key data such as bug details, product, and version.

Cisco EPN Manager bugs may be caused by defects in a device's platform or operating system. In those cases, the Cisco EPN Manager bug will be resolved when the hardware/operating system bug is resolved.

Procedure

Step 1

Log into the Bug Search Tool.

- a) Go to <https://tools.cisco.com/bugsearch/>.
- b) At the Log In screen, enter your registered Cisco.com username and password; then, click **Log In**

Note If you do not have a Cisco.com username and password, you can register for them at <http://tools.cisco.com/RPF/register/register.do>

Step 2

To list all bugs for this version, click the Select from list hyperlink that is next to the Product field and select the product.

- a) Choose **Cloud and Systems Management > Routing and Switching Management > Cisco Evolved Programmable Network (EPN) Manager** and then select the required product version.
- b) When the results are displayed, use the filter and sort tools to find bugs according to their status, severity, how recently they were modified, if any support cases are associated with them, and so forth.

You can also search using bug IDs or keywords. For more information, click **Help** at the top right of the Bug Search page.

Related Documentation

For a list of all documentation available for Cisco EPN Manager 4.1, see the [Cisco Evolved Programmable Network Manager 4.1 Documentation Overview](#). The documentation overview also lists several Cisco Prime Infrastructure documents because the content of those documents is relevant to Cisco EPN Manager 4.1.

Accessibility Features in Cisco EPN Manager 4.1

For a list of accessibility features in Cisco EPN Manager 4.1, please contact accessibility@cisco.com.

All product documents are accessible. If you would like to receive the product documentation in audio format, braille, or large print, contact accessibility@cisco.com

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see [What's New in Cisco Product Documentation](#)

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