

Release Notes: Junos® 15.1X53-D45

Release Notes for NFX250 Junos OS

Release 15.1X53-D45 for the NFX Series

November 17, 2016

These release notes accompany Junos OS Release 15.1X53-D45 for NFX250. They describe new and changed features, limitations, and known issues in hardware and software.

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Release Notes: Junos® Release Notes for NFX 250

These release notes accompany Junos OS Release 15.1X53-D45 for NFX250. They describe new and changed features, limitations, and known problems in the hardware and software. You can also find these release notes on the Juniper Networks Junos OS Documentation webpage, located at www.juniper.net/techpubs

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New and Changed Features for NFX250 Network Services Platform

This section describes the new features of the NFX250 platform, and enhancements to existing features in Junos OS Release 15.1X53-D45 for NFX250.

- **Hardware**
- **Juniper Device Manager**
- **vSRX**

Hardware

- **NFX250-LS1**—NFX250-LS1 is a new model with 1.6 GHz 4-core Intel CPU, 16 GB of memory, and 100 GB of enterprise grade solid-state drive (SSD) storage. NFX250-LS1 can be wall mounted using the separately orderable Juniper Networks wall-mount kit.

Juniper Device Manager

In this release, Juniper Device Manager (JDM) additionally provides support for the following features:

- Support for outbound SSH connections
- Authentication of users using TACACS+
- Configure SNMP, and handle SNMP queries and traps
- Enhanced CLI to support launching VNFs, service chaining VNFs, and configuring and monitoring various system parameters and statistics

vSRX

- vSRX offers the same capabilities as Juniper Networks SRX Series Services Gateways in a virtual form factor, providing perimeter security, IPsec connectivity, and filtering for malicious traffic without sacrificing reliability, visibility, and policy control. This virtual security and routing appliance ensures reliability for each application. The IPsec implementation for NFX250 platforms has been enhanced to protect the management traffic between JDM, VNFs and the remote SDN controller and other central servers. The IPsec implementation uses AutoKey IKE with preshared keys to authenticate the participants in an IKE session, each side must configure and securely exchange the preshared key in advance. IPsec for NFX250 devices supports only traffic selector based tunnels, multiple IPsec security associations are negotiated based on multiple traffic selectors configured. Configuration of interfaces and static routes is supported.



NOTE: By default, vSRX version 15.1X49-D61 is pre-loaded on NFX250 Network Services platform 15.1X53-D45 release. vSRX version 15.1X49-D61 is not compatible with the NFX250 15.1X53-D40 release.

Related Documentation

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Changes in Behavior and Syntax for NFX250 Network Services Platform

This section lists the changes in behavior of Junos OS features and changes in the syntax of Junos OS statements and commands from Junos OS Release 15.1X53-D45 for NFX250.

There are no changes in default behavior and syntax in Junos OS Release 15.1X53-D45 for NFX250.

Related Documentation

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Known Behavior for NFX250 Network Services Platform

This section lists known behavior, system maximums, and limitations in hardware and software in Junos OS Release 15X53-D45 for NFX250.

For the most complete and latest information about known Junos OS defects, use the Juniper Networks online [Junos Problem Report Search](#) application.

- [JDM](#)

JDM

- JDM shell configurations of interfaces override JDM CLI configurations. As a workaround, use the JDM CLI to configure interfaces. [PR1155749]
- SR-IOV interfaces do not support more than 64 VLANs on NFX250. [PR1156348]

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Known Issues in NFX250 Network Services Platform

This section lists the known issues in hardware and software in Junos OS Release 15X53-D45 for NFX250.

For the most complete and latest information about known Junos OS defects, use the Juniper Networks online [Junos Problem Report Search](#) application.

- [JDM](#)
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JDM

- Rebooting NFX250 from the JDM shell is not supported. Use the **request system reboot** command from the JDM CLI. [PR1146229]
- You might not be able to specify a definite interval for the **request system reboot** command. By default, the device waits for 30 seconds before rebooting. [PR1150400]
- There might be no checks when you configure the IP address on different logical units of interfaces. The commit will go through, and will be displayed in the configuration. [PR1150512]
- The following commands are not supported:
 - **clear system reboot** and **clear system commit**
 - **restart gracefully**, **restart immediately**, **restart init**, and **restart soft**[PR1154819]
- When you use the **netconf** command to display system information details such as model and OS, the system OS is displayed as QFX. [PR1160055]
- Ubuntu package does not successfully install on the JDM container. As a workaround, install the package **passwd** by using the **sudo apt-get install passwd** command, which enables the **useradd** command again. [PR1168680]

- NETCONF configuration for port, and limiting number of connections and rate for sessions are not supported. [PR1169898]
- When you configure a static route on JDM in enhanced-orchestration disabled mode, there might not be an explicit check to validate the IP address. [PR1173039]
- System Host bridge uses a default MTU of 1500 and does not support Jumbo frames. Currently there is no CLI to configure the MTU on the host bridge. [PR1192169]
- The Network Service Orchestrator module commits the configuration on JDM, Junos Control Plane, and IPSec-NM sequentially. If the commit fails on any one of these system VNFs, the Network Service Orchestrator module automatically rolls back to the older configuration on the VNF where the commit error is seen. But, all prior Network Service Orchestrator module configuration commits on the earlier VNFs continue to exist and is not reversed. [PR1196253]
- There is no commit check if the PCI address is reused for different interfaces in a VNF. It is recommend to stop the VNF and then add or delete interfaces [PR1205497]
- A dhcp daemon running on the host assigns IP addresses for internal management interfaces of the VNF mapped to virbr0 bridge. The same dhcp assigned IP address is updated in the `/etc/hosts` file on JDM, and in turn updates the liveness state of each VNF. Under scenarios where the VNFs are deleted and re-launched multiple times the DHCP IP address assigned might be different from what is updated in `/etc/hosts`. This condition results in an unreliable liveness state, and an SSH connection to the VNF from JDM fails. [PR1212722]
- Certain VNFs support hot plugging of virtio interfaces when the VNF is running. When a VLAN mapped interface is hot plugged to VNFs such as Centos, it is seen that the interface is not reachable from the vjunos0 VM. As a workaround, delete the VNF configuration and re-commit the complete configuration along with the new interface. [PR1213451]
- After enabling or disabling the ipsec-nm service on the NFX250 platform, a warning message might not be displayed asking for a consent to reboot the device. The enabling or disabling action will be effective only after the device is rebooted. Similarly, no warning is displayed when Enhanced orchestration is either enabled or disabled. [PR1213489]
- Pre-allocation of hugepages might not consider the available memory and proper commit check is required. It is advisable to use the feature based on free system memory availability. By default, the system requires up to 6 to 7 gigabytes of memory for various operations. The system might not function properly if more memory than what is available is allocated. [1213944]
- If the NFX250 platform image is upgraded using the CLI upgrade option with vSRX VNF running, certain SCSI errors might be seen on the vSRX console. As a workaround, delete and launch the vSRX VNF again. [PR1218039]
- Passwords that are pushed by the Network Activator might have a new line character in the encrypted password, and these encrypted passwords might corrupt some of the critical files on JDM. As a workaround, perform an USB upgrade of the platform. It is recommended to avoid such passwords being pushed from the Network Activator; these passwords and can be added later over CLI or Netconf sessions. [PR1219625]

- There is no commit check currently on JDM to prevent a configuration commit having a native-vlan-id configuration on VNF interfaces when the mode is access. [PR1221136]
- While spawning a VNF, there might not be a commit check for the valid image type supported. [PR1221642]
- If a VNF requests for more memory than the available system memory, commit might go through without any errors resulting in VNF going into a shut off state. As a workaround, use the show system visibility memory command to check the available free memory before spawning a VNF. Alternatively, check the log files and the VNF shut off reason will be captured in /var/log/syslog file. [PR1221647]
- The following commands are not supported:
 - show host
 - request system software delete
 - request system software rollback
 - request system storage cleanup[PR1219972]
- DHCP service can be configured on custom system bridges for service chaining. There might be no commit check if the lower and higher values of the pool range are swapped. [PR1223247]
- If the configured TACACS+ server has an IP that can be accessed from JDM, the tacplus pam might not wait till timeout in case TACACS+ server is unreachable. [PR1224420]
- The Swap memory information displays incorrect values in the **show system visibility jdm** command output for NFX250 platforms with optimized SSD layouts. [PR1227528]
- Configuration of a vlan-tagged IPv6 interface on the jsxe0 interface is not supported on the JDM. [PR1232778]
- With enhanced-orchestration mode enabled and routing over management configured on vSRX for WAN redundancy for critical traffic, the system CPU utilization will reach 100% if WAN link goes down and traffic routes through out-of-band management. vSRX may not respond to ping or management requests. Egress traffic through management might be throttled. [PR1233478]
- There is a mismatch in MD5 values on the CLI upgraded image and USB image of this release. This might lead to the Network Activator enforcing the CLI upgrade to the same image version again during the Zero-touch provisioning process. [PR1233479]

IPSec

- When ipsec-nm is configured with scaled IPSec tunnels (5-10) with Dead Peer Detection (DPD) and a failover is triggered, the Key Management daemon (KMD) might not work. [PR1211981]
- If the MTU is modified while sending UDP packets on ipsec-nm, the SRX PFE might not work on a NFX250-LS1 device. [PR1213837]
- There is no CLI command to clear interface flow-statistics on ipsec-nm. [PR1216474]

JCP

Infrastructure

- The Alarm LED might not reflect the link state of the management port. [PR1146307]
- Configuring DSCP and DSCPv6 classifiers together on a Layer 2 interface is not supported. [PR1169529]
- When the option **accept-source-mac mac-address** is configured on an interface and then deleted, no additional MAC's will be learnt on the interface. Only the MAC's which were earlier configured will be available. [PR1168197]
- When LLDP is configured on vjunos0 on an NFX250 Network Services platform, the system name TLV(5) might not be advertised. [PR1169479]

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Resolved Issues

This section lists the issues fixed in hardware and software in Junos OS Release 15.1X53-D45 for NFX250.

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Resolved Issues

JDM

- User defined login class is not supported. [PR1155965]
- **ping** command when initiated with **record route** option on virtIO interfaces, returns no results. [PR1162659]
- Clients that are connected via the front panel ports are assigned the default gateway 10.10.10.254 by Network Service Activator. [PR1168284]
- The CLI to configure the time zone is not functional. [PR1169675]
- JDM SNMP traps have limited support on interfaces only. [PR1173216]

JCP

- You cannot configure a transmit rate of **0** for class-of-service schedulers. [PR1158085]
- If a cable is not connected to the front panel RJ-45 ports, the status led will blink. [PR1168054]
- SFP-T transceivers are not supported. [PR1151575, PR1166808, PR1168203]

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