

Release Notes for Cisco Enterprise Network Function Virtualization Infrastructure Software, Release 3.12.x

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About Cisco Enterprise NFVIS

Find all the information you need about this release—new features, known behavior, resolved and open bugs, and related information.



Note

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What's New

New and Enhanced Features for Cisco Enterprise NFVIS Release 3.12.3

- Secure Tunnel enhancements for PKI and EAP
- APC UPS support
- SNMP support for CPU usage
- AAA auth-order
- Console login when NFVIS down

New and Enhanced Features for Cisco Enterprise NFVIS Release 3.12.2

- ENCS 5400 supports 24 LAN SRIOV networks.

New and Enhanced Features for Cisco Enterprise NFVIS Release 3.12.1

- DPDK enhancements
 - ENCS PMD driver support

- Migration for VMs with PNIC associated to DPDK bridge
- Service bridge extension to platforms: UCSC, UCSE, CSP
- Non-ENCS DPDK PMD driver support
- Dynamic SR-IOV support on UCSC-M5, UCSE-M3, and CSP platforms
- ENCS 5400 supports 12 LAN SRIOV networks.

Resolved and Open Bugs

About the Cisco Bug Search Tool

Use the [Cisco Bug Search Tool](#) to access open and resolved bugs for a release.

The tool allows you to search for a specific bug ID, or for all bugs specific to a product and a release.

You can filter the search results by last modified date, bug status (open, resolved), severity, rating, and support cases.

Open Bugs for Cisco Enterprise NFVIS Release 3.12.3

Caveat ID Number	Description
CSCvr49551	PNIC track state does not sustain after Power cycle
CSCvr64064	NFVIS AAA AUTH-ORDER: same user id can login to NFVIS with either local or tacacs password.
CSCvr83044	NFVIS: "factory-reset all" failed if we have VM added volume on NFS
CSCvr93504	ERROR: Class:3000000; Subclass:50000; Operation: D
CSCvs44341	All configs for s/w on ENCS is intact after factory reset(except images and connectivity)
CSCvs45600	NFVIS - 3.12.3 RC5 - SPAN stops working after reboot the VM

Caveat ID Number	Description
CSCvs57164	Traffic fail on lan-net with dpdk enabled after upgrade
CSCvs70784	3.12.3-FC1: Upgrade Status Invalid
CSCvs71064	3.12.3-FC1 - vnic not coming up when there is an error in track-state configuration
CSCvs79898	Unable to do pnp on ENCS 3.12.3 RC9 using MSX to set admin password, potential Confid issue

Resolved Bugs for Cisco Enterprise NFVIS Release 3.12.2

Caveat ID Number	Description
CSCvq66963	Change in NFVIS 3.12.1 platform-detail API cause NFVIS Devices 'Partial Collection Failure' on DNAC
CSCvq82509	Handle TACACS encrypted shared-secret with \\
CSCvq86428	PNIC ALLMULTI is changed to off when PNIC SRIOV switchmode VEB is configured.
CSCvq91412	Increase LAN-SRIOV network number to 24 on encs
CSCvq93639	Switch daemon - Restart failed due to unclosed socket
CSCvq94002	NFVIS SNMPTrap is not generated
CSCvq94855	Application error after performing "factory-default-reset all" action post NFVIS 3.12.1 FCS upgrade

Open Bugs for Cisco Enterprise NFVIS Release 3.12.1

Caveat ID Number	Description
CSCvo84097	Frame errors on some ENCS5400 units that causes OS2BMC channel to be DOWN
CSCvq35365	Cannot Disable/Enable SRIOV on interface eth2-1 to eth2-4 with driver i40e on UCS-C M5
CSCvq48983	Getting error when dragging the VM and connecting the links too quickly
CSCvq49883	ISRv with SRIOV goes to ERROR state after VM restart, reboot, or upgrade if pnic is admin down
CSCvq51263	Portal Switch page takes up to 20 seconds to load or refresh
CSCvq56915	ping fail after update vnic from lan-sriov to lan-br on encs
CSCvq59803	Factory Reset Except-Images gives error after enabling sriov with maxvfs and cant login after that

Caveat ID Number	Description
CSCvq65951	Delete rbac user "administrator" (role:admin) and cause vbmd service NOT OK after NFVIS reboot

Limitations with Host Driver on ENCS Platforms

When the interface is shutdown in an ISRv VM the input packet count increases. This is an Intel firmware and host driver defect. When the interface is shutdown on the ISRv VM, the i40e VF driver sends a message to the i40e PF host driver to delete the MAC filters. This stops the shutdown interface from receiving unicast traffic. However for ISRv, if the multicast and broadcast promiscuous mode is set on the VF, it allows the multicast and broadcast packets to be received on the VF. Since there is no specific command to the firmware from the host driver which indicates to the firmware that the VF is shutdown, the system continues to receive multicast and broadcast packets.

Software Upgrade

The Cisco Enterprise NFVIS upgrade image is available as a *.nfvispkg* file. Currently, downgrade is not supported.

For more details on the software upgrade, see the Upgrading Cisco Enterprise NFVIS section in the [Cisco Enterprise Network Function Virtualization Infrastructure Software Configuration Guide](#).



Note

NFVIS 3.12.3 supports upgrade from NFVIS 3.11.x.

System Requirements

The following resources are required for a standalone Cisco Enterprise NFVIS:

- For a system that has 16 or less CPU cores, one CPU core is reserved for NFVIS. For a system that has more than 16 CPU cores, 2 CPU cores are reserved for NFVIS.
- For a system that has 32 GB or less of RAM, 3 GB is reserved for NFVIS. For a system that has more than 32 GB of RAM, 4 GB is reserved for NFVIS.
- 20 GB storage



Note

More memory and disk space are required to be added to the system, depending on VM deployments.

Supported Programs and Platforms

Supported Platforms and Firmware

The following table lists the only supported platforms and firmware for Cisco ENFV

Platform	Firmware	Version
ENCS 5406, ENCS 5408, and ENCS 5412	BIOS	ENCS54_2.9
	CIMC	3.2.(8.20190624114303)
	WAN Port Driver	1.63-0x80000e2f
	LAN Port Driver	5.04-0x80004abc
ENCS 5104	BIOS	V010
	MCU	1.1
	WAN Port Driver	5.2.20-k/1.63, 0x80000f76
UCS-E160S-M3/K9	BIOS	UCSEM3_2.6
	CIMC	3.2(8.20190624114303)
UCS-E140S-M2/K9	BIOS	UCSES_1.5.0.8
	CIMC	3.2(8.20190624114303)
UCS-E160D-M2/K9	BIOS	UCSED_3.5.0.1
	CIMC	3.2(8.20190624114303)
UCS-E180D-M2/K9	BIOS	UCSED_3.5.0.1
	CIMC	3.2(8.20190624114303)
UCS-E180D-M3/K9	BIOS	UCSEDM3_2.6
	CIMC	3.2(8.20190624114303)
UCS-E1120D-M3/K9	BIOS	UCSEDM3_2.6
	CIMC	3.2(8.20190624114303)
UCS-C220-M4	BIOS	3.0.3a
	CIMC	3.0(3c)
CSP-2100-X1	BIOS	3.0.3a
	CIMC	3.0(3a)
UCS-C220-M5	BIOS	C220M5.3.1.3c.0.0307181404
	CIMC	3.1(3a)
CSP-5228	BIOS	C220M5.4.0.4c.0.0506190754
	CIMC	4.0(4c)

Platform	Firmware	Version
CSP-5436	BIOS	C240M5.4.0.1c.0.0627180945
	CIMC	4.0(1a)

Supported VMs

The following table lists the verified versions of supported VMs for NFVIS 3.12.x release:

VM	Version
Cisco ISRv	16.10.2
	16.11.1b
	16.12.1
Cisco ASAv	9.12.1
Cisco vWAAS	6.4.3b-b-53
Cisco NGFWv	6.3.0-83
Viptela vEdge	18.4.1
cEdge	16.10.2
eWLC	16.10.1
ThousandEyes	Agent 1.27.4
Fortinet	Fortigate 5.6.2
PaloAlto	PAN-OS 8.0.5
InfoVista	Ipanema VNF vipe_kvm v9.1.6.6
CTERA	6.0.4



Note Windows and Linux VMs are also supported.

Related Documentation

- [API Reference for Cisco Enterprise Network Function Virtualization Infrastructure Software](#)
- [Cisco Enterprise Network Function Virtualization Infrastructure Software Command Reference](#)
- https://www.cisco.com/c/en/us/td/docs/routers/nfvis/release_notes/3-10-1/cisco-enterprise-nfvis-release-notes-3-10-1.html
- [Cisco 5400 Enterprise Network Compute System Hardware Installation Guide](#)

- [Cisco 5400 Enterprise Network Compute System Data Sheet](#)
- [Getting Started Guide for Cisco UCS E-Series Servers and the Cisco UCS E-Series Network Compute Engine](#)
- [Cisco UCS C220 M4 Server Installation and Service Guide](#)
- [Configuration Guide for Cisco Network Plug and Play on Cisco APIC-EM](#)

