

# Release Notes for Cisco Enterprise Network Function Virtualization Infrastructure Software, Release 4.1.x

---

**First Published:** 2020-03-31

**Last Modified:** 2024-03-26

## About Cisco Enterprise NFVIS



**Note** To achieve simplification and consistency, the Cisco SD-WAN solution has been rebranded as Cisco Catalyst SD-WAN. In addition, from Cisco IOS XE SD-WAN Release 17.12.1a and Cisco Catalyst SD-WAN Release 20.12.1, the following component changes are applicable: **Cisco vManage** to **Cisco Catalyst SD-WAN Manager**, **Cisco vAnalytics** to **Cisco Catalyst SD-WAN Analytics**, **Cisco vBond** to **Cisco Catalyst SD-WAN Validator**, **Cisco vSmart** to **Cisco Catalyst SD-WAN Controller**, and **Cisco Controllers** to **Cisco Catalyst SD-WAN Control Components**. See the latest Release Notes for a comprehensive list of all the component brand name changes. While we transition to the new names, some inconsistencies might be present in the documentation set because of a phased approach to the user interface updates of the software product.

---

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

## What's New

### **New and Enhanced Features for Cisco Enterprise NFVIS Release 4.1.5**

NFVIS 4.1.5 release is a Wide Area Application Services (WAAS) Appliance specific release.

### **New and Enhanced Features for Cisco Enterprise NFVIS Release 4.1.4**

NFVIS 4.1.4 release is a Wide Area Application Services (WAAS) Appliance specific release.

### **New and Enhanced Features for Cisco Enterprise NFVIS Release 4.1.3**

NFVIS 4.1.3 release is a Wide Area Application Services (WAAS) Appliance specific release.

### **New and Enhanced Features for Cisco Enterprise NFVIS Release 4.1.2**

There are no new and enhanced features introduced for NFVIS 4.1.2 release.

### New and Enhanced Features for Cisco Enterprise NFVIS Release 4.1.1

Feature	Description	Where Documented
Storm control support	Storm control is used to monitor incoming traffic levels and limit excessive flow of packets on any user facing switch port that could cause a traffic storm.	<a href="#">Configuring storm Control Storm Control Commands</a>
hot-add and hot-delete support on DPDK interface	Support interface hot add and hot delete operations on DPDK networks.	<a href="#">Update VM Image</a>
VM backup and restore perserving MAC and UID	Specifying the unique MAC ID flag during VM import will ensure that the imported VM is not deployed with the same UID and interface MAC addresses.	<a href="#">Import and Export NFVIS VM</a>
Support placing VM's extra storage volumes to external datastore	This feature supports placing VNF volumes on external datastore storage locations	<a href="#">VNF Volumes</a>
PNIC promiscuous mode support	Enabling promiscuous mode on an interface can be used to monitor all incoming packets on the interface.	<a href="#">Promiscuous Mode</a>
CIMC TACACS support	TACACS authentication support for Cisco IMC	<a href="#">CIMC TACACS Support</a>

## 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.

Save Search Load Saved Search Clear Search Email Current Search

Search For:  Examples: CSCid10124, router crash, etc...

Product: Series/Model  Select from list

Releases: Affecting or Fixed in these Releases:

Filter: Modified Date:  Status:  Severity:  Rating:  Support Cases:  Bug Type: Customer Visible

Viewing 1 - 25 of 132 results Sort by  Export Results to Excel

### Resolved Bugs for Cisco Enterprise NFVIS Release 4.1.2

Caveat ID Number	Description
<a href="#">CSCvt00530</a>	we should limit the number of core file in CIMC
<a href="#">CSCvu26520</a>	Support SUDI-2099 for ENCS

### Open Bugs for Cisco Enterprise NFVIS Release 4.1.1

Caveat ID Number	Description
<a href="#">CSCvq11886</a>	pnv redirect fails due to sudi_sign_cmd.c:72:session init failed error - TAM_LIB_ERR_SESSION_IS_OPEN
<a href="#">CSCvr51855</a>	i40evf0000:00:03.1:PF returned error -5(I40E_ERR_PARAM)to our request 12 opcode 2 to PF, err I40E_E
<a href="#">CSCvr77081</a>	NFVIS-ESC-LITE: added volume did not support thick_disk_provisioning and eager_zero
<a href="#">CSCvs44341</a>	All configs for s/w on ENCS is intact after factory reset(except images and connectivity)
<a href="#">CSCvt00530</a>	we should limit the number of core file in CIMC
<a href="#">CSCvt22519</a>	NFVIS 4.1: Traffic fail on lan-net with dpdk enabled after factory reset
<a href="#">CSCvt22539</a>	NFVIS: factory-reset-all with VM having disk deployed on NFS
<a href="#">CSCvt35615</a>	OBS - 688452159 (upgrade from 3.12.1 -> 3.12.3 failed)
<a href="#">CSCvt40279</a>	NFVIS-4.1.1-RC1 is unreachable after a reboot
<a href="#">CSCvt50656</a>	NFVIS-4.1.1-FC1: Application timeout on hostaction mgmt-dhcp-renew
<a href="#">CSCvt53410</a>	Network config does not work after factory default reset is performed with vDaemon enabled
<a href="#">CSCvt54623</a>	NFVIS: config-only restore failed due to VMLC or upgrade package is changed.
<a href="#">CSCvt61948</a>	remote-system-ip-subnet as 0.0.0.0/0 gives error in creating secure overlay
<a href="#">CSCvt65059</a>	Firmware upgrade triggers from postreboot currently causing extra reboots and longer time

Caveat ID Number	Description
<a href="#">CSCvt68582</a>	after encls device controlled by vmanage, CLI is still allow to config and commit on NFVIS

## 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 4.1.1 supports upgrade from NFVIS 3.12.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.
- For NFVIS portal, the minimum supported version of browsers are:
  - Mozilla Firefox 66
  - Google Chrome 71
  - Windows 10 Edge
  - MacOS 10.15 Safari




---

**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_BIOS_2.9.SPA
	CIMC	CIMC_3.2.9.bin
	WAN Port Driver	1.63-0x80000e2f
	LAN Port Driver	5.04-0x800027d4
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)

## Guest VNFs

This section provides support statements for different guest Virtual Network Functions (VNFs) that you can run on Cisco Routing virtual platforms enabled by the NFVIS 4.1.x releases.

### Cisco Router VNFs



- Note**
- Cisco provides support for deployment and configuration of the VNF versions listed below, when deployed on Cisco Routing virtual platforms, enabled by this release of NFVIS.
  - Cisco provides support on a case-by-case basis for unlisted combinations of NFVIS release + VNF version.

Product homepage	Software download
<a href="#">Cisco ISRv</a>	17.2.1r 16.12.1a 16.12.1b
<a href="#">Cisco vEdge</a>	20.1 19.2.1

### Other Cisco Owned VNFs



- Note**
- Limited testing is done to ensure you can create a guest VM instance using the software download image for these versions, as posted on Cisco Software download page.
  - For full-support statement see the individual product release documentation.

Product homepage	Software download
Security VNFs	
<a href="#">Cisco NGFW (FTDv)</a>	6.4
<a href="#">Cisco ASA v</a>	9.13.1
WAN Optimization VNFs	
<a href="#">Cisco vWAAS</a>	6.4.3c-b-42

### Non-Cisco Vendor Owned VNFs

You can run VNFs owned by various vendors on Cisco's NFV platforms enabled by NFVIS . Formal support for these VNFs requires a joint effort between Cisco and the VNF vendor.

Cisco offers VNF vendors a "for-fee" [NFVIS 3rd-party certification program](#) to test and certify their VNFs on Cisco's virtualized platforms. After testing and certification is complete, the results are published on this page- [Cisco Enterprise NFV Open Ecosystem and Qualified VNF Vendors](#).

For more specific support details about VNF versions and test compatibility matrix with NFVIS releases, see the VNF release documentation on the vendor support site.

As a NFVIS customer, if you need a unique combination of NFVIS release and a specific VNF version, you may submit your certification request to Cisco at [nfv-ecosystem@cisco.com](mailto:nfv-ecosystem@cisco.com) or reach out to the VNF vendor support team asking them to initiate a certification on the Cisco platform.

## Related Documentation

- [Cisco Network Function Virtualization Infrastructure Software Getting Started Guide](#)
- [API Reference for Cisco Enterprise Network Function Virtualization Infrastructure Software](#)
- [Cisco Enterprise Network Function Virtualization Infrastructure Software Configuration Guide, Release 4.x](#)
- [Cisco Enterprise Network Function Virtualization Infrastructure Software Command Reference](#)
- [Release Notes for Cisco NFV SD-Branch features in Cisco vManage Release 20.12.x](#)
- [Design and Deployment Guide of Cisco NFVIS SD-Branch using Cisco SD-WAN Manager](#)
- [Cisco Catalyst 8200 Series Edge uCPE Data Sheet](#)
- [Cisco Cloud Services Platform 5000 Series Data Sheet](#)
- [Cisco 5400 Enterprise Network Compute System Hardware Installation Guide](#)
- [Cisco 5400 Enterprise Network Compute System Data Sheet](#)
- [Configuration Guide for Cisco Network Plug and Play on Cisco APIC-EM, Release 1.5.x](#)
- [Cisco SD-WAN Controller Compatibility Matrix and Recommended Computing Resources, Cisco SD-WAN Release 20.12.x](#)

