Release Notes for Cisco NFV SD-Branch features in Cisco vManage Release 20.1.1.1

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About Cisco NFV SD-Branch Support in Cisco vManage

Note
The documentation set for this product strives to use bias-free language. For purposes of this documentation set, bias-free is defined as language that does not imply discrimination based on age, disability, gender, racial identity, ethnic identity, sexual orientation, socioeconomic status, and intersectionality. Exceptions may be present in the documentation due to language that is hardcoded in the user interfaces of the product software, language used based on standards documentation, or language that is used by a referenced third-party product.

Cisco Network Function Virtualization Software-Defined Branch (NFV SD-Branch) features in Cisco vManage are a collection of capabilities that allow you to use Cisco vManage as a single centralized orchestrator to manage both the Cisco NFV hardware platforms powered by Cisco NFVIS hypervisor software, and the virtualized network function (VNF) based network services that run as guest virtual machines (VMs). SD-Branch in Cisco vManage provides a three-step user experience of design, deploy and monitor that enables you to deploy networking services efficiently across all sites within your enterprise network infrastructure.

The Cisco vManage portal supports:

1. Design - A network architect can graphically create a parameterized network design template that captures the enterprise networking standards and best practices including WAN circuits and VNF service chains.
2. Deploy - A network operator can use the pre-defined network design templates to deploy and configure network devices and services in multiple locations in an automated and secure manner without making any design decisions.
3. Monitor - A network auditor can monitor and manage both the hardware platforms and the virtualized network services VMs that are running on them, without the fear of making accidental configuration changes.

Note
Cisco NFV SD-Branch features in Cisco vManage are only supported for greenfield deployments of the ENCS 5400 Series and the C8200-uCPE platforms.
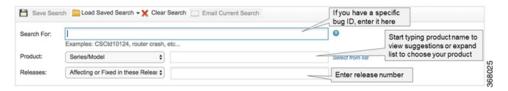
What's New

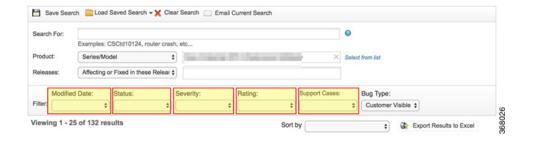| Feature	Description	Where Documented
Zero Touch Provisioning for NFVIS using PnP and vManage	The Cisco NFVIS SD-Branch solution provides automatic discovery and provisioning of NFVIS WAN Edge devices through the Zero-Touch Provisioning (ZTP) process.	Define Cisco NFVIS SD-Branch Solution
VNF packaging and virtual images repository	vManage supports customization of VNF packages to allow VNF provisioning.	Create VNF Image Packages
Network Design - intent based workflow that ganerates templates and configs	This section provides information on how to configure network design elements such as circuits, branch sites, global parameters and device profiles. You can then design your network to create and manage an overlay network topology.	Network Design
Deploy NFVIS SD-Branch	This section covers the prerequisites to onboard NFVIS WAN Edge devices, followed by the different on-boarding options and on-boarding verification.	Deploy SD-Branch Solution
Cisco ENCS 5400 Platform and VNF Monitoring	This section covers some of the common troubleshooting and monitoring steps. Using vManage, you can monitor, troubleshoot and manage the NFVIS WAN Edge devices.	Operate SD-Branch Solution

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 NFVIS SD-Branch Release 4.1.1

Caveat ID Number	Description
CSCvp92742	Kepler: show version console hang
CSCvr52579	vManage network template allows vlan range "-" (vlan 71 - 75) on OVS network setting
CSCvr74841	network design does not support to config static route on ENCS 5400 device
CSCvs26366	Offline device is not shown in detach table list
CSCvs54182	Dashboard-> main dashboard number of control up does not count encs control up connection
CSCvs54574	Monitor->Network->encs device-> real time -> device uptime does not show correct uptime
CSCvs71996	Enhancement: support enable/disable spanning tree per port in Network Design (ND)
CSCvs72538	When configured user name with "_", we get error in preview error
CSCvs77128	network design does not support to config default gateway on ENCS 5400
CSCvs77383	network design does not support to config global vlan on ENCS 5400
CSCvs96126	Fail to detach offline device
CSCvt22455	unable to close netconf session when push config
CSCvt28154	Scalability: Fail to push topo1 ND temaplte on 10 ENCS units in one branch
CSCvt40068	NIM info not available in hardware inventory - Support NIM API and add info in hardware inventory
CSCvt40083	Add switch info in hardware inventory for ENCS
CSCvt40088	Support to show ENCS switch interface stats in vManage -> Monitor -> Network -> [ENCS] -> Interface
CSCvt43828	UI: enforce users to enter vlaid VLAN ID range instead of remove ID(s) and allow to save

Caveat ID Number	Description
CSCvt44304	Need show color icon for "State" column and remove "Color" column in Monitor-> Network -> VNF status
CSCvt49269	ND->branchsites->create profile->only the 1st LAN interface set access mode as default
CSCvt60595	vBranch: Incorrect chart and vnic info in Monitor page for ENCS -> ROUTER_1 (vEdge) or Linux VM
CSCvt68916	Advance Mode: Missing management interface IP variable
CSCvt74754	After add new user, ALL previous AAA users' passwords are changed automatically to unknown password
CSCvt76428	ND:"Confirm" button is grayed out if select network from "New Network" instead of predefined network

Software Upgrade

Note NFVIS 4.1.1 release or later on ENCS 5400 devices are supported on Cisco SD-Branch solution.

For more details on the NFVIS software upgrade, see Upgrade Cisco NFVIS.

For more details on vManage software upgrade, see vManage Software Upgrade.

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.

- 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(9.20191113183312)
	WAN Port Driver	1.63-0x80000e2f
	LAN Port Driver	5.04-0x800027d4

Guest VNFs

For the supported VNFs that can be orchestrated through Cisco vManage, see the Guest VNFs section of NFVIS 4.1.x Release Notes.

Related Documentation

- Design and Deployment of Cisco NFVIS SD-Branch using Cisco vManage

- Cisco Enterprise Network Function Virtualization Infrastructure Software Configuration Guide, Release 4.x

- SD-WAN Configuration Guides