Cisco Extensible Network Controller Release Notes, Release 1.7

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This document describes the features, system requirements, resolved caveats, open caveats, and limitations for the Cisco Extensible Network Controller (XNC), Release 1.7.

Contents

This document includes the following sections:

Introduction

Cisco XNC provides automation and orchestration of the network fabric, and allows dynamic, application-based configuration of networks and services. Cisco XNC enables programmability of the network using the Software Defined Networking (SDN) approach.

Cisco XNC is based on OpenDaylight and is built for extensibility using the Java Open Services Gateway initiative (OSGi) framework. This framework provides the flexibility needed for Cisco and Cisco partners and customers to extend the functions of the controller based on business needs. Cisco XNC also provides northbound Representational State Transfer (REST) APIs for business applications to access and program policies.

Cisco XNC has the capability to support multiple protocols to communicate with the devices. In Release 1.7, Cisco XNC supports OpenFlow version 1.0 and Cisco One Platform Kit (onePK) SDK version 1.3.

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Note Not all service sets or onePK APIs are supported in the current onePK protocol plug-in.

Scale Information

Table 1 lists the scale limits for Cisco XNC.

Table 1 Scale Limits

Description	Small	Medium	Large
Number of devices	100	300	500
Number of TIF policies	400	2000	4000
Number of slices	25	100	200
Number of proactive flows	10,000	50,000	100,000

System Requirements

Table 2 lists the system requirements for Cisco XNC.

Table 2 System Requirements per Deployment Size

Description	Small	Medium	Large
CPUs (virtual or physical)	6-core	12-core	18-core
Memory	8 GB RAM	16 GB RAM	24 GB RAM
Hard disk	Minimum of 40 GB of free space available on the partition on which the Cisco XNC software is installed.		
Operating system	A recent 64-bit Linux distribution that supports Java, preferably Ubuntu, Fedora, or Red Hat.		
Other	Java Virtual Machine 1.7 or later.		

Supported Web Browsers

The following web browsers are supported for Cisco XNC:

- Firefox 18.x and later versions
- Chrome 24.x and later versions

Note Javascript 1.5 or a later version must be enabled in your browser.

Resolved Caveats

Table 3 lists that caveats that are resolved in Cisco XNC 1.7.

Table 3 Resolved Caveats in Cisco XNC 1.7

Defect ID	Symptom	Found in Release	Resolved in Release
CSCup32639	ResourceManager documentation is missing from northbound API UI.	1.6	1.7

Open Caveats

Table 4 lists that caveats that are open in Cisco XNC 1.7.

Table 4 Open Caveats in Cisco XNC 1.6

Defect ID	Symptom	Workaround
CSCup16875	When Cisco XNC is upgraded from version 1.5 to version 1.6, the controller does not reconnect to onePK devices that were configured in XNC 1.5, even though configuration was explicitly saved before upgrading.	After completing the upgrade process and starting XNC 1.6, reconfigure connections to onePK devices using the GUI.
CSCup22283	When Cisco XNC is restarted, saved Cisco XNC Monitor Manager rules capturing edge ports with assigned VLAN ID will be installed as if Q-in-Q support is not configured. This happens even if the connection to the switch with the onePK interface (onePK node) is up and dot1q tunneling is configured on the switch ports of the switch. This is because Cisco XNC Monitor Manager reads and applies the port configuration before the connection to the onePK nodes is fully up. Therefore, after topology is stabilized and rule installation is attempted, Q-in-Q functionality is determined to be unavailable. This causes the (multi)point-to-(multi)point rules capturing from the affected edge ports to perform a VLAN rewrite on the incoming frames.	1. Uninstall the affected rules. 2. Reconfigure the edge port VLAN IDs: a. Remove the VLAN and submit the change. b. Assign desired VLAN ID and submit the change.

Related Documentation

For more information, see the related documents at the following link:

http://www.cisco.com/c/en/us/support/cloud-systems-management/extensible-network-controller-xnc/tsd-products-support-series-home.html

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* at: http://www.cisco.com/c/en/us/td/docs/general/whatsnew/whatsnew.html.

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This document is to be used in conjunction with the documents listed in the "Open Caveats" section.