



# Release Notes for Cisco Nexus 1000V InterCloud Release 5.2(1)IC1(1.2)

November 11, 2013  
Release 5.2(1)IC1(1.2)  
OL-30318-01

## Contents

This document describes the limitations and caveats for the Cisco Nexus 1000V InterCloud Software. Use this document in combination with documents listed in the "Related Documentation" section.

Part number	Revision	Date	Description
OL-30318-01	AO	October 14, 2013	Created Release Notes for Release 5.2(1)IC1(1.2).
	BO	November 11, 2013	Added note about unavailability of Amazon Marketplace support.

## Introduction

Hybrid cloud is an interaction between private and public clouds where private clouds extend to public clouds and utilize public cloud resources in a secure and scalable way. Cisco Nexus 1000V InterCloud provides the architectural foundation for secure hybrid clouds, allowing enterprises to easily and securely connect the enterprise data center to the public cloud. With a hybrid cloud, enterprises can combine the benefits of public and private clouds.

Cisco Nexus 1000V InterCloud provides the following benefits:

- Provides a highly secure Layer 2 connectivity between the enterprise data center and the public cloud.
- Provides a single pane of management across enterprise data centers and public clouds through Cisco Prime Network Services Controller.



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- Enables use of same network policies and services across private and public clouds.

## Cisco Nexus 1000V InterCloud Architecture

Cisco Nexus 1000V InterCloud is a hybrid cloud solution deployed as virtual machines in the enterprise data center and in the public cloud. In the Cisco Nexus 1000V InterCloud solution, one or more Virtual Ethernet Module (VEM) is deployed in the cloud as an extension of a Cisco Nexus 1000V. Cisco Nexus 1000V InterCloud solution consists of the following components:

- Cisco Prime Network Services Controller
- InterCloud Switch (ICS)
- InterCloud Extender (ICX)
- InterCloud Agent (ICA)
- Cisco Nexus 1000V VSM

For more information about installing and configuring the components of Cisco Nexus 1000V InterCloud, see the *Cisco Nexus 1000V InterCloud Installation Guide*.

## Software Features

This section describes the following new or changed software features:

- Installer Automation and Packaging
- Upgrade
- Licensing model changes
- NetFlow
- ACL
- New Troubleshooting commands

## Installer Automation

Importing the Platform Images to create an InterCloud link is now simplified. The Cisco Prime Network Services Controller enables you to create an InterCloud link by importing a single zipped file from [www.cisco.com](http://www.cisco.com). The zipped file contains the following images:

- InterCloud Extender image for the gateway on the enterprise network
- InterCloud Switch Image for the gateway on the cloud
- Cloud VM driver images

The Cisco Prime Network Services Controller places the imported files in their appropriate locations, verifies the versions of compatible images, and initiates the Add InterCloud Link Wizard to complete your installation.

For more information about the Installation enhancements and Importing Platform Images, see the *Cisco Nexus 1000V InterCloud Installation Guide*.

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## Upgrade

You can upgrade to the Cisco Nexus 1000V InterCloud Software version 5.2(1)IC1(1.2) from the earlier version. You have to complete the following steps to upgrade to Cisco Nexus 1000V InterCloud, Release 5.2(1)IC1(1.2):

- Upgrade the Cisco Prime Network Services Controller.
- Upgrade the Cisco Nexus 1000V Virtual Supervisor Module (VSM) for InterCloud.
- Upload the latest version of the InterCloud Extender and InterCloud Switch images to Cisco Prime Network Services Controller.
- Update an InterCloud link to update the images for an InterCloud Extender and InterCloud Switch.

For detailed instructions to upgrade your InterCloud Software, see the *Cisco Nexus 1000V InterCloud Installation Guide*.

## Licensing Model Changes

The Cisco Nexus 1000V InterCloud is now available in the following licensing models:

- Cisco Nexus 1000V InterCloud VSM licensing model—In this model, the Cisco Nexus 1000V InterCloud VSM enforces the number of licenses purchased. For every active VM in the cloud, you require one Cisco Nexus 1000V InterCloud license. You also require licenses for the Cisco Nexus 1000V in the enterprise.
- Cisco Prime Network Services Controller licensing model—In this model, the Cisco Prime Network Services Controller enforces the number of licenses purchased. For more information about this licensing model, see the *Cisco Prime Network Services Controller User Guide*.



**Note**

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**Cisco Prime Network Services Controller does not support the Provider Licensing model.**

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For detailed information about how to install and configure the licenses, and the licensing terminology for Cisco Nexus 1000V InterCloud Software, see the *Cisco Nexus 1000V InterCloud License Configuration Guide*.

## NetFlow

The Cisco Nexus 1000V InterCloud now supports the NetFlow feature. NetFlow lets you evaluate IP traffic and understand how and where it flows. NetFlow also provides visibility into traffic transiting the virtual switch by characterizing IP traffic based on its source, timing, and application information.

For detailed information about configuring and enabling NetFlow on the Cisco Nexus 1000V InterCloud, and the guidelines and limitations for configuring NetFlow, see the *Cisco Nexus 1000V InterCloud System Management Configuration Guide*.

## Logging ACL Statistics

The Cisco Nexus 1000V InterCloud logs and maintains the statistics for each rule that you configure in IPv4 ACLs. If an ACL is applied to multiple interfaces, the maintained rule statistics are the sum of packet matches (hits) on all interfaces on which that ACL is applied. However, the Cisco Nexus 1000V InterCloud does not support interface-level ACL statistics.

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For more information about configuring ACLs, see the *Cisco Nexus 1000V InterCloud Security Configuration Guide*.

## Software Compatibility

Table 1 lists the minimum supported versions of the services required for the Cisco Nexus 1000V InterCloud deployment.

**Table 1 Minimum versions supported by Cisco Nexus 1000V InterCloud Release 5.2(1)IC1(1.2)**

Services	Minimum versions supported by the Cisco Nexus 1000V InterCloud Release 5.2(1)IC1(1.2)
Cisco Prime Network Services Controller (PNSC)	3.0
VMware ESX and ESXi	5.0/5.1
Cisco Nexus 1000V	4.2(1)SV2(1.1a)

## Limitations and Restrictions

Cisco Nexus 1000V InterCloud has the following limitations and restrictions:

- Cisco Prime Network Services Controller does not support Amazon Marketplace functionality.
- Cisco Prime Network Services Controller does not support the Provider Licensing model.
- An InterCloud Switch can support up to a maximum of 64 VMs.
- Cisco Nexus 1000V InterCloud Release 5.2(1)IC1(1.2) supports only the features documented in the product documentation for this release. CLI commands might be present in the software for some features that are currently not supported. If a feature is not documented, it is not supported in Release 5.2(1)IC1(1.2). See the [Related Documentation](#) section for a complete list of Cisco Nexus 1000V InterCloud product documentation.

## Caveats

The following are descriptions of the open caveats in Cisco Nexus 1000V InterCloud Release 5.2(1)IC1(1.2).

**Table 2 Release Caveats**

Bug ID	Description
<a href="#">CSCuj81102</a>	Configuring rules with the TOS/Precedence/DSCP field results in an ACL security hole and incorrect application of the ACL when traffic is sent.  Workaround: Avoid using the TOS/Precedence/DSCP field to configure rules.
<a href="#">CSCuj25980</a>	TCP or UPD traffic at bandwidths of 40 MB or higher causes InterCloud Link module flaps after ACL is applied.

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**Table 2 Release Caveats**

<b>Bug ID</b>	<b>Description</b>
<a href="#">CSCuj43913</a>	After a switchover of the InterCloud VSM, the active VSM does not display updated license information.
<a href="#">CSCuj70745</a>	When all licenses are used up on an active InterCloud Link, a switchover powers off the VM in the cloud. Workaround: Use the Cisco Prime Network Services Controller GUI to power on the VM on the cloud.
<a href="#">CSCuj70746</a>	InterCloud Link modules go offline when the <b>statistics per-entry</b> command is added to the ACL.
<a href="#">CSCuh80055</a>	The InterCloud Switch flaps frequently when there is high network traffic.
<a href="#">CSCui67905</a>	The public gateway for the VM in the cloud is not restored after the default gateway is configured for an overlay interface of a VM in the cloud using the Cisco Prime Network Services Controller. Workaround: Reboot the VM in the cloud and run the service network restart service to restart all interfaces.
<a href="#">CSCui77582</a>	NetFlow statistics packets are displayed on the VM's interfaces when the NetFlow collector is configured in a VLAN different from the InterCloud Extender IP address. Workaround: Ping the NetFlow Collector from the InterCloud Extender to stop the statistics packets from appearing.
<a href="#">CSCuj23119</a>	ACL statistics do not increase on the InterCloud VSM after the InterCloud Switch is rebooted.
<a href="#">CSCuj33711</a>	Flow validation drops are observed in multicast traffic in the ACL/IGMP or IGMP/NetFlow combinations. Workaround: Avoid using the IGMP/ACL or IGMP/NetFlow combinations. If you do, disable or enable IGMP snooping after an ACL or Netflow configuration change on IGMP-related ports.
<a href="#">CSCui79010</a>	DNS entries of a Windows VM in the enterprise are lost when migrated to the Cloud. This symptom occurs only on VMs with a static IP configuration. Workaround: Manually input the DNS records on the Cisco Prime Network Services Controller while initiating the VM migration. If the migration is already complete, update the DNS information on the Cisco Prime Network Services Controller UI.
<a href="#">CSCug56679</a>	The <b>show ip igmp snooping querier detail</b> command output does not display the querier details.
<a href="#">CSCug77270</a>	The <b>show processes cpu</b> command output displays incorrect CPU utilization statistics in the InterCloud Switch.
<a href="#">CSCuh56317</a>	In rare instances, the Access Tunnel (AT) fails to start up when the InterCloud Switch is rebooted.
<a href="#">CSCui82672</a>	Exporter static routes and configuration settings in Netflow collector are not cleared on the InterCloud Switch when the NetFlow collector is configured on a different subnet.

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## Resolved Caveats

The following are descriptions of the caveats resolved in the Cisco Nexus 1000V InterCloud Release 5.2(1)IC1(1.2):

**Table 3**      **Resolved Caveats**

Bug ID	Description
<a href="#">CSCud02132</a>	The Cisco Nexus 1000V InterCloud VSM displays the last known port state as UP in the output for show commands even after the module goes offline. Workaround: Use the <b>show modules</b> and <b>show interface brief</b> commands to determine the offline module and their associated ports.
<a href="#">CSCuh01339</a>	Cisco Nexus 1000V InterCloud VSM deployment on a Cisco Nexus Cloud Services Platform hangs at the 'VSB DEPLOY IN PROGRESS' state when the domain ID is greater than 1024.
<a href="#">CSCug77246</a>	Static multicast entries are not configured on the InterCloud Switch after a vlan is deleted and recreated. Workaround: Delete and re-program the static IGMP entries.
<a href="#">CSCug31353</a>	Unable to delete dynamic group entries which are discovered on a vEth interface.
<a href="#">CSCuh61619</a>	Changes in the InterCloud Extender management IP address from a Cisco Prime Network Services Controller are not reflected in the Cisco Nexus 1000V InterCloud VSM commands.
<a href="#">CSCuh70926</a>	InterCloud Agents attached to older InterCloud Extenders are displayed when the <b>show module</b> command fails.
<a href="#">CSCuh73323</a>	The InterCloud Agent Access Tunnel status appears as "failed" for an UP tunnel in the Cisco Prime Network Services Controller, when you stop and start the InterCloud Agent.
<a href="#">CSCuh75074</a>	Changing the InterCloud Switch/InterCloud Extender gateway IP address through the Cisco Prime Network Services Controller is unsuccessful. Workaround: Manually update the gateway IP address on the InterCloud Switch/InterCloud Extender.
<a href="#">CSCuh73663</a>	The <b>show module service intercloud detail</b> command displays incorrect high availability (HA) status when an InterCloud Link has been converted from a standalone to HA mode.

## Related Documentation

This section lists the documents used with the Cisco Nexus 1000V InterCloud and available on [Cisco.com](#) at the following URL:

[http://www.cisco.com/en/US/products/ps12904/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/ps12904/tsd_products_support_series_home.html)

### General Information

*Cisco Nexus 1000V InterCloud Release Notes*

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## **Install and Upgrade**

*Cisco Nexus 1000V InterCloud Installation Guide*

## **Configuration Guides**

*Cisco Nexus 1000V InterCloud License Configuration Guide*

*Cisco Nexus 1000V InterCloud High Availability and Redundancy Configuration Guide*

*Cisco Nexus 1000V InterCloud Interface Configuration Guide*

*Cisco Nexus 1000V InterCloud Layer2 Configuration Guide*

*Cisco Nexus 1000V InterCloud Port Profile Configuration Guide*

*Cisco Nexus 1000V InterCloud Security Configuration Guide*

*Cisco Nexus 1000V InterCloud System Management Configuration Guide*

## **Reference Guides**

*Cisco Nexus 1000V InterCloud Command Reference*

*Cisco Nexus 1000V MIB Quick Reference*

*Cisco Nexus 1000V InterCloud Resource Availability Reference*

## **Troubleshooting, Password Recovery, System Messages Guides**

*Cisco Nexus 1000V Password Recovery Guide*

*Cisco Cisco Nexus 1000V InterCloud NX-OS System Messages Reference*

## **Cisco Prime Network Services Controller Documentation**

*[Cisco Prime Network Services Controller Documentation](#)*

## **Cisco Nexus 1000V Documentation**

*[Cisco Nexus 1000V for VMware vSphere Documentation](#)*

# **Obtaining Documentation and Submitting a Service Request**

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

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