



Cisco Cloud Services Platform 2100 Release Notes, Release 2.2.4

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Cisco Cloud Services Platform 2100 Release Notes

This document describes the features and limitations for the Cisco Cloud Services Platform 2100, Release 2.2.4.

Information About Cisco Cloud Services Platform 2100

Cisco Cloud Services Platform 2100 (Cisco CSP 2100) is a software and hardware platform for data center network functions virtualization. This open kernel virtual machine (KVM) platform, with Red Hat Enterprise Linux (RHEL) 7.3 as the base operating system, is designed to host networking virtual services. Cisco CSP 2100 provides REST APIs, a web interface, and a CLI for creating and managing the virtual machine (VM) lifecycle.

Supported Cisco Networking Services

Cisco CSP 2100 supports the following Cisco networking services:

- Cisco Virtual Supervisor Module (VSM) for Cisco Nexus 1000V Switch deployments (VMware vSphere, KVM, and Microsoft Hyper-V).
- Cisco Virtual Security Gateway (VSG) for Cisco Nexus 1000V Switch deployments.
- Cisco Cloud Services Router (CSR) 1000V Series.
- Cisco Adaptive Security Virtual Appliance (ASAv), supports QCOW image only.
- Cisco Prime Data Center Network Manager (DCNM).
- Cisco Virtual Network Analysis Module (vNAM).

Cisco CSP 2100 also supports services from other third-party vendors including application firewalls, application delivery controllers, and value-added mobility services. Any third-party service that is supported on KVM is supported on Cisco CSP 2100.

New Features and Enhancements

Cisco CSP 2100, Release 2.2.4 includes bug fixes and the following features and enhancements.

Feature	Description
Performance Improvements	Provides multiple performance optimization improvements for dedicated allocation of CPU resources across VNFs and host processes.
Port isolation for VNF management interfaces	Provides VNF management port isolation to disallow communication among management ports on the shared VNF management bridge. Management interfaces are only reachable through uplink switch.
Support for up to 24 vNICs	Provides support for up to 24 vNICs for each service.
Support for mapping additional ISO, QCOW2, or RAW storage disks	Provides support for adding up to two additional disk storage during service creation. Additional storage can be in ISO, QCOW2, or RAW image format. You can specify local or NFS mounted location for the image. A QCOW2 or RAW image is mounted as disk and an ISO image is mounted as CDROM.
Support for obtaining MAC addresses of vNICs and VFs	Provides support for obtaining the MAC addresses of vNICs and VFs associated with a service.
Support for resizing QCOW2 boot disk images	Provides support for specifying the size for the bootable QCOW2 image during service creation.
Support for disk I/O statistics	Provides support for obtaining disk I/O statistics.

Configuration Limits

Use the following configuration limits for Cisco CSP 2100.

Component	Supported Limits
Number of services in a node with hyperthreading disabled	<ul style="list-style-type: none"> For Cisco CSP 2100 with 8 or less than 8 cores, you can deploy the following number of VM cores: <i>Number of Cores – 1</i> For example, for Cisco CSP 2100 with 8 cores, you can deploy 7 VM cores. For Cisco CSP 2100 with greater than 8 and less than or equal to 16 cores, you can deploy the following number of VM cores: <i>Number of Cores – 2</i> For example, for Cisco CSP 2100 with 16 cores, you can deploy 14 VM cores. For Cisco CSP 2100 with greater than 16 cores, you can deploy the following number of VM cores: <i>Number of Cores – 4</i> For example, for Cisco CSP 2100 with 36 cores, you can deploy 32 VM cores.
Total number of nodes in a cluster	5
Number of vNICs per service	24

Important Notes and Restrictions

The following topics provide important notes and restrictions for Cisco CSP 2100.

Hyper-Threading Technology Support

Cisco CSP 2100 natively has the Hyper-Threading Technology (HTT) capability. However, by default, hyper-threading is disabled in Cisco CSP 2100. In HTT, one physical core appears as two processors to the operating system (two virtual or logical cores), allowing concurrent scheduling of two processes per core. This means you can have two different virtual network functions (VNFs) sharing the same physical core and its resources, such as cache and memory bus. However, VNFs are designed for dedicated resources and are CPU-intensive. When VNFs share resources such as CPU, it can cause stalling or latency inside the VNF data plane leading to jitters. In low-utilization environment, hyper-threading does not impact the performance. However, in high-throughput environment, hyper-threading can cause resource starvation leading to significant performance degradation.

Changing IP Address of the Management Interface for NFS Configurations

If NFS is configured on the system, note the following:

- Changing the management IP address causes an outage of the VNC console and stats collection for 15 to 30 minutes.
- Reboot of the system can take up to 30 minutes.

As a workaround, you can unconfigure the NFS mount before performing these operations and reconfigure the NFS mount after the operation is complete. You can also reboot the system from the Cisco CSP 2100 CIMC connection.

Configuring Passthrough Interfaces

When a service has passthrough as well as non-passthrough vNICs, we recommend that you first define the non-passthrough vNICs and then define the passthrough vNICs.

Running config terminal Command After Initial Setup

The **config terminal** command fails when you run it after performing the initial setup for a new installation. This happens because the admin user is not assigned to a group at the initial login. To run this command and configure Cisco CSP 2100 features, you must log out and then log in to the Cisco CSP 2100.

Restrictions

Cisco CSP 2100 has the following restrictions:

- Management interfaces cannot be configured as passthrough interfaces.
- Only local admin users have the functionality to autcopy images in repositories across the Cisco CSP 2100 nodes in a cluster. This functionality is not available for the TACACS+ or RADIUS admin users.
- Only local users can log in to the Cisco CSP 2100 using CIMC console. Remote TACACS+ users cannot log in to the Cisco CSP 2100 using CIMC console.
- Only the vNIC e1000 model is supported with Cisco VSM and Cisco VSG services.
- Only ISO image files are supported with Cisco VSM and Cisco VSG services.

Using the Bug Search Tool

Use the Bug Search Tool to search for a specific bug or to search for all bugs in a release.

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- Step 1** Go to the [Cisco Bug Search Tool](#).
- Step 2** In the Log In screen, enter your registered Cisco.com username and password, and then click **Log In**. The Bug Search page opens.
- Note** If you do not have a Cisco.com username and password, you can register for them at <https://tools.cisco.com/RPF/register/register.do>.
- Step 3** To search for a specific bug, enter the bug ID in the **Search For** field and press **Enter**.
- Step 4** To search for bugs related to a specific release, do the following:

- a) In the Product field, choose **Series/Model** from the drop-down list and then enter **Cisco Cloud Services Platform 2100** in the text field.
- b) In the Releases field, choose a criteria from the drop-down list and then enter a release number in the text field.
- c) Press **Enter**.

When the search results are displayed, use the filter tools to find the types of bugs you are looking for. You can search for bugs by status, severity, modified date, and so on.

Tip To export the results to a spreadsheet, click the **Export Results to Excel** link.

Related Documentation for Cisco Cloud Services Platform 2100

This section lists the documents used with the Cisco Cloud Services Platform 2100 and available on Cisco.com at the following URL:

<https://www.cisco.com/c/en/us/support/switches/cloud-services-platform-2100/tsd-products-support-series-home.html>

General Information

Cisco Cloud Services Platform 2100 Release Notes

Install and Upgrade

Cisco Cloud Services Platform 2100 Quick Start Guide

Cisco Cloud Services Platform 2100 Hardware Installation Guide

Regulatory Compliance and Safety Information for Cisco Cloud Services Platform 2100

Configuration Guide

Cisco Cloud Services Platform 2100 Configuration Guide

Reference Guides

Cisco Cloud Services Platform 2100 Command Reference Guide

Cisco Cloud Services Platform 2100 REST API Guide

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](#).

To receive new and revised Cisco technical content directly to your desktop, you can subscribe to the [What's New in Cisco Product Documentation RSS feed](#). RSS feeds are a free service.

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