

# Cisco Catalyst Center 2.3.7 Virtual Appliance on VMware ESXi

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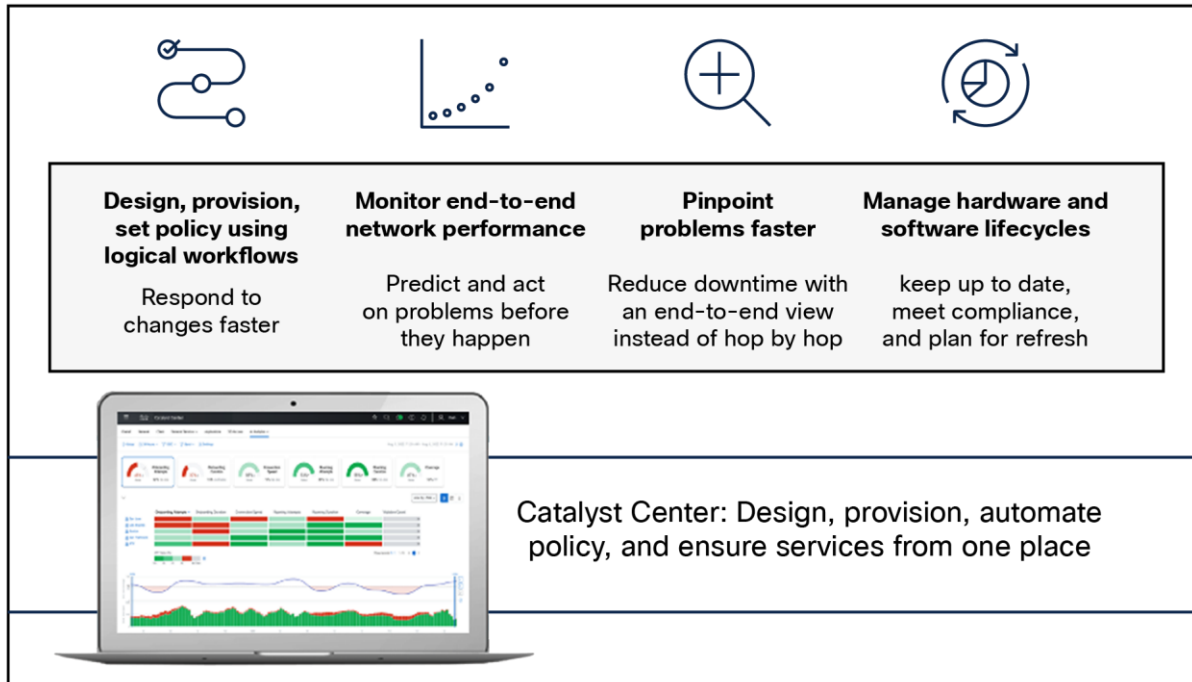
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## Introduction

Cisco® Catalyst Center, formerly Cisco DNA Center™, is a powerful network controller and management dashboard that empowers you to take charge of your network, optimize your Cisco investment, and lower your IT spending. Catalyst® Center provides a single dashboard for every fundamental management task to simplify running your network. With this platform, IT can respond to changes and challenges faster and more intelligently.

## Catalyst Center Capabilities

- **Design:** Design your network using intuitive workflows, starting with locations where your network devices will be deployed.
- **Policy:** Define user and device profiles that facilitate highly secure access and network segmentation based on business needs. Application policies enable your business-critical applications to provide a consistent level of performance regardless of network congestion.
- **Provision:** Use policy-based automation to deliver services to the network based on business priority and to simplify device deployment. Zero-touch device provisioning and software image management features reduce device installation or upgrade time from hours to minutes and bring new remote offices online with plug-and-play ease from an off-the-shelf Cisco device. Additionally, the Cisco Secure Network Analytics (formerly Cisco Stealthwatch®) service provisions network elements to send NetFlow and Encrypted Traffic Analytics (ETA) to the analytics service.
- **Assurance:** Enable every point on the network to become a sensor, sending continuous streaming telemetry on application performance and user connectivity in real time. This, coupled with automatic path-trace visibility and guided remediation, means network issues are resolved in minutes—before they become problems. Automated NetFlow switch configuration for Cisco Secure Network Analytics provides detection and mitigation of threats, even when they are hidden in encrypted traffic.
- **Platform:** An open and extensible platform allows third-party applications and processes to exchange data and intelligence with Catalyst Center. This improves IT operations by automating workflow processes based on network intelligence coming from Catalyst Center.



**Figure 1.**  
Catalyst Center

Catalyst Center is a centralized network management system to bring all this functionality into an integrated controller and present it through a single pane of glass.

## Catalyst Center Virtual Appliance

Cisco Catalyst Center can be deployed as a Virtual Appliance either in the cloud with Amazon Web Services (AWS), or on-premises with VMware ESXi. Virtualization gives customers operational flexibility, and improves time to value. The Virtual Appliance supports fabric and non-fabric deployments.

With the Virtual Appliance on ESXi, customers can reduce CapEx, while simplifying hardware lifecycles. Deployments benefit from the high availability capabilities of ESXi.

## Virtual Appliance scale

**Table 1.** Scale and hardware specifications

SKU	DN-SW-APL
Description	Catalyst Center Virtual Appliance
Devices <sup>1</sup> (switch, router, wireless controller) (non-fabric)	1000
Devices <sup>1</sup> (switch, router, wireless controller) (fabric)	2000
Wireless access points (non-fabric)	4000
Wireless access points (fabric)	3000

SKU	DN-SW-APL
Wireless sensors	600
Concurrent endpoints	25,000
Transient endpoints (over 14-day period)	75,000
Ratio of endpoints to wired wireless	Any Any
Site elements	2500
Wireless controllers	500
Ports <sup>2</sup>	48,000
API rate limit	50 APIs/min
NetFlow flows/sec	30,000
Concurrent software image updates	100
<b>Catalyst Center SD-Access scale</b>	
Devices <sup>1</sup> (switch, router, wireless controller)	2000
Wireless access points	3000
Fabric domains	10
Fabric sites	500
Layer 3 virtual networks	64/site
Fabric devices	500/site
Scalable groups	4000
Access contracts	500
Group-based policies	25,000
IP pools <sup>3, 4, 5</sup>	100 <sup>6</sup>
Layer 2 virtual networks <sup>3, 4, 5</sup>	100 <sup>6</sup>

## Notes:

- <sup>1</sup> Switch stacks, StackWise Virtual pairs, Virtual Switching System (VSS) pairs, and Wireless LAN Controller High Availability Single Sign-On (WLC HA SSO) pairs each count as a single device.
- <sup>2</sup> Includes all physical ports except the console ports. Includes Redundancy Ports (RPs) on WLCs.
- <sup>3</sup> Adding additional Fabric Sites to a SD-Access deployment does not increase any Catalyst Center system scale parameter. For example, 1000 concurrent endpoints spread over 10 Fabric Sites and 1000 concurrent endpoints in a single Fabric Site both contribute equally to system scale.
- <sup>4</sup> Catalyst Center supports a maximum of 1.5 million separate interfaces on managed devices. Interfaces include both physical and virtual interfaces such as Switched Virtual Interfaces (SVIs), loopbacks, tunnels, Locator ID Separation Protocol (LISP), and so on.
- <sup>5</sup> A Layer 2 Virtual Network is a Layer 2 segment in SD-Access with no Anycast Gateway in the Fabric Site; a Layer 2 Virtual Network does not use an IP pool.
- <sup>6</sup> Per Fabric Site, the sum of IP pools plus Layer 2 Virtual Networks must not exceed 200.
- <sup>7</sup> Per Fabric Site, the sum of IP pools plus Layer 2 Virtual Networks must not exceed 600.
- <sup>8</sup> Per Fabric Site, the sum of IP pools plus Layer 2 Virtual Networks must not exceed 1000.

## Virtual Appliance on VMware ESXi requirements

For the system requirements, see Table 2.

**Table 2.** Virtual appliance minimum requirements

Specification	Requirement
<b>Processors</b>	32 vCPUs with 64-GHz reservation dedicated to the VM
<b>Memory</b>	256-GB Dynamic Random Access Memory (DRAM) with 256-GB reservation must be dedicated to the VM
<b>Storage</b>	3-TB
<b>ESXi</b>	VMware vSphere (which includes ESXi and vCenter Server) 7.0.x or later, including all patches
<b>I/O bandwidth</b>	180 MB/sec
<b>Input/output Operations Per Second (IOPS)</b>	2000-2500
<b>Network Interface Card (NIC)</b>	1Gbps network per network port

## Product usage telemetry

Product usage telemetry provides valuable information about the status and capabilities of Cisco Catalyst Center. Catalyst Center is configured to automatically connect and transmit product usage data to Cisco. Collecting this data helps the product teams serve customers better. This data and related insights enable Cisco to proactively identify potential issues, improve services and support, facilitate discussions to gather additional value from new and existing features, and assist IT teams with inventory report of license entitlement and upcoming renewals.

For information on Catalyst Center privacy, please refer to [Cisco Catalyst Center Privacy Data Sheet](#).

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## For more information

See how Catalyst Center helps you move faster, lower costs, and reduce risk:

<https://cisco.com/go/catalystcenter>.

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