



Cisco Cloud Network Controller Verified Scalability Guide, Release 25.0(5)

[Overview](#) 2

[Scalability Limits](#) 2

[Trademarks](#) 4

Revised: February 26, 2024,

Overview



Note Beginning with release 25.0(5), Cisco Cloud APIC is renamed as Cisco Cloud Network Controller.

This guide contains the maximum verified scalability limits for Cisco Cloud Network Controller release 25.0(5):

These values are based on a profile where each feature was scaled to the numbers specified in the tables. These numbers do not represent the theoretically possible Cisco Cloud Network Controller scale.



Note For Cisco APIC verified scalability limits, visit: https://www.cisco.com/c/en/us/support/cloud-systems-management/application-policy-infrastructure-controller-apic/tsd-products-support-series-home.html#Verified_Scalability_Guides.
For Cisco Nexus Dashboard Orchestrator verified scalability limits, visit <https://www.cisco.com/c/en/us/support/cloud-systems-management/multi-site-orchestrator/products-device-support-tables-list.html>.

New and Changed Information

The following changes have been made to this document since initial release:

| Date | Changes |
|---------------|---|
| July 30, 2022 | Cisco Cloud APIC is renamed as Cisco Cloud Network Controller. No scalability limits are changed in this release relative to Cisco Cloud APIC Release 25.0(4). |

Scalability Limits

This section contains scalability numbers for Cisco Cloud Network Controller deployments. The scalability limits differ based on whether it's a single cloud site or a multi-cloud deployment.

Single Cloud Site

This section contains scalability numbers for a single cloud site deployment.

Table 1: Single AWS Cloud Site

| Configurable Options | Scale |
|--------------------------------|-------|
| Number of Tenants | 20 |
| Number of Application Profiles | 500 |
| Number of EPGs | 500 |
| Number of cloud Endpoints | 1000 |

| Configurable Options | Scale |
|---|--|
| Number of VRFs | 20 |
| Cloud Context Profiles | 40 |
| Number of Contracts | 1000 |
| Number of L4-L7 Service Graphs | 200 |
| Number of L4-L7 Services Devices (AWS ALB) | 100 |
| Number of Policy Rules | 70,000 |
| Number of Regions | 16 <ul style="list-style-type: none"> • Of the 16, only 4 regions can be external connectivity • All 16 regions can be used for workload deployment. |
| Number of CSRs per Region | 4 |
| Number of CSRs per Site | 16 |
| Number of hub networks for Transit Gateway (TGW) | 2 |
| Number of Transit Gateways per hub network | 2 |
| Number of restricted domains (security domain with restricted role) | 32 |

Table 2: Single Azure Cloud Site

| Configurable Options | Scale |
|----------------------------------|--------------|
| Number of Tenants | 20 |
| Number of Application Profiles | 2000 |
| Number of EPGs | 2000 |
| Number of cloud Endpoints | 3500 |
| Number of VRFs | 60 |
| Cloud Context Profiles | 100 |
| Number of Contracts | 1000 |
| Number of L4-L7 Service Graphs | 200 |
| Number of L4-L7 Services Devices | 100 |
| Number of Policy Rules | 125,000 |

| Configurable Options | Scale |
|---|--|
| Number of Regions | 16 <ul style="list-style-type: none"> • Of the 16, only 4 regions can be external connectivity • All 16 regions can be used for workload deployment. |
| Number of CSRs per Region | 8 |
| Number of CSRs per Site | 32 |
| Number of restricted domains (security domain with restricted role) | 32 |

Multi-Cloud Deployments

This section contains scalability numbers for multi-cloud deployments. The same scale numbers apply to each cloud site (AWS or Azure) with intersite connectivity provided by the Cisco Nexus Dashboard Orchestrator. Total number of stretched and non-stretched objects must not exceed the maximum verified scalability limit for that object.

Table 3: Multi-Cloud Deployments

| Configurable Options | Scale |
|------------------------------------|-------|
| Number of cloud sites | 2 |
| Number of on-premises sites | 2 |
| Number of managed regions per site | 4 |
| Number of CSRs per site | 4 |
| Number of CSRs per region | 2 |
| Number of Tenants | 5 |
| Number of EPGs | 250 |
| Number of cloud endpoints | 500 |
| Number of VRFs | 10 |
| Cloud Context Profiles (VPC/VNET) | 40 |
| Number of Contracts | 200 |

Trademarks

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