

Recommended Configuration Maximums

NSX-T Data Center 3.2.0
Updated on March 31, 2022



You can find the most up-to-date technical documentation on the VMware website at:

<https://docs.vmware.com/>

If you have comments about this documentation, submit your feedback to

configmaxtool@vmware.com

VMware, Inc.
3401 Hillview Ave.
Palo Alto, CA 94304
www.vmware.com

Copyright © 2021-2022 VMware, Inc. All rights reserved. [Copyright and trademark information.](#)

This Configuration Maximums document provides the recommended configuration limits for VMware products. When you configure, deploy and operate your virtual and physical equipment, it is highly recommended you stay within the limits supported by your product. The limits presented in the tool are tested, recommended limits, and are fully supported by VMware.

Disclaimer: The limits can be affected by other factors, such as hardware dependencies. For more information about the supported hardware, see the appropriate hardware compatibility guide. It might not be possible to maximize all configuration settings and expect your desired outcome. To ensure that you do not exceed supported configurations for your environment, consult individual solution limits. The recommended configuration limits do not represent the theoretical possibilities of your product.

Category		Limit	Description
General : Edge Nodes			
A core component of NSX is the Edge node which are formed into clusters to deliver physical connectivity as well as logical routing, load-balancing, NAT and other features.			
All Manager Sizes	Edge Nodes Per Cluster	10	
All Manager Sizes	Network Latency between Edge Nodes part of the same Edge Cluster	10ms	
Medium NSX Manager	Edge Clusters	12	
Medium NSX Manager	Edge Nodes	32	
Large NSX Manager	Edge Clusters	160	
Large NSX Manager	Edge Nodes	320	
Bare Metal Edge Node	Fast Path Physical NIC Ports	16	
General : Nodes			
NSX has a number of component nodes required for operation of the product. These include the NSX Manager, NSX Controllers and Hosts that are prepared for NSX. In addition, NSX supports some vCenter objects that are discovered from vCenter inventory.			
Nodes	NSX Managers	3	Please review the NSX-T Data Center Installation Guide for details on the various techniques on how to deploy the NSX Manager.
Nodes	Virtual Interfaces per Hypervisor Host	1,000	Maximum of 400 virtual interfaces per hypervisor host when doing in-place upgrades.
Nodes	Compute Managers per NSX Management Cluster	16	Used for inventory collection. Supports only vCenter compute managers.
Nodes	Physical Servers	1,024	Non-hypervisor and non-container host machines with at least 16Gb of RAM. Windows Servers can have a maximum of 100 firewall rules each.
Nodes	Hosts per vSphere Cluster	96	
Nodes	Discovered vSphere Clusters	640	
Nodes	NSX Instances per Compute Manager	1	
Nodes	Network Latency between NSX Management Nodes	10ms	
Nodes	Network Latency between the NSX Management Cluster and Transport Nodes	150ms	
Nodes	Concurrent Graphical User Interface Users per Manager	5	
Nodes	Audit Log Entries	1,000,000	
Nodes	Transport Nodes per NSX Instance	1600	
Medium NSX Manager	vSphere Clusters Prepared for NSX	5	
Medium NSX Manager	Hypervisor Hosts per NSX Management Cluster	128	Any mix of ESXi and/or KVM is supported.
Large NSX Manager	vSphere Clusters Prepared for NSX	256	
Large NSX Manager	Hypervisor Hosts per NSX Management Cluster	1,024	Any mix of ESXi and/or KVM is supported.
Layer 2 Networking			
NSX offers a layer 2 overlay networking solution as well as layer 2 bridging.			
Layer 2 Networking : General			

Recommended Configuration Limits

Category		Limit	Description
General	MAC Identifiers per Overlay Logical Switch (VNI)	2,048	Exceeding the maximum MAC identifiers per VNI may lead to flooding and can impact packet performance.
General	MAC Identifiers per Overlay Segment (VNI)	2,048	Exceeding the maximum MAC identifiers per VNI may lead to flooding and can impact packet performance.
General	IP Address Bindings used in ARP Discovery	256	
Medium NSX Manager	Logical Switches	1,000	
Medium NSX Manager	System Wide Logical Switch Ports	2,500	
Medium NSX Manager	Segments	1,000	
Medium NSX Manager	System Wide Segment Ports	2,500	
Large NSX Manager	Logical Switches	10,000	
Large NSX Manager	System Wide Logical Switch Ports	25,000	
Large NSX Manager	Segments	10,000	
Large NSX Manager	System Wide Segment Ports	25,000	
Layer 2 Networking : Bridging			
Bridging	MAC Identifiers per VLAN / Segment Pair	2,048	
Bridging	Bridging Profiles	128	
Bridging	Bridge Profiles per Edge Cluster	32	
Bridging	Segment to VLAN Pairs	4,096	Bridge between overlay segment (VNI ID) and VLAN ID
Bridging	Segment to VLAN Pairs per Edge Node	512	
Layer 3 Networking : DHCP			
NSX provides a DHCP server and relay to deliver IP addresses to DHCP clients.			
DHCP	DHCP Relays	4,000	
DHCP	DHCP Servers in DHCP Server Group	10	Used by DHCP relay.
DHCP	DHCP Server Instances	10,000	
DHCP	Static Bindings per DHCP Server Instance	512	
DHCP	DHCP Ranges / Pools per DHCP Server Instance	5	
DHCP	System Wide DHCP Pools	20,000	
Layer 3 Networking : Logical Routing			
NSX provides a multi-tier, in-kernel distributed logical routing system.			
Logical Routing	Tier-0 Gateways	160	Up to 8 service routers with ECMP in active/active high availability mode per Tier-0 gateway. Up to 2 service routers in active/standby high availability mode per Tier-0 gateway.
Logical Routing	Tier-0 Logical Routers	160	Up to 8 service routers with ECMP in active/active high availability mode per Tier-0 logical router. Up to 2 service routers in active/standby high availability mode per Tier-0 logical router.

Recommended Configuration Limits

Category		Limit	Description
Logical Routing	Tier-1 Gateways	4,000	Up to 2 service routers in active/standby high availability mode per Tier-1 gateway.
Logical Routing	Tier-1 Logical Routers	4,000	Up to 2 service routers in active/standby high availability mode per Tier-1 logical routers.
Logical Routing	Tier-1 Gateways per Tier-0 Gateway	1,000	This limit applies to Tier-0 gateway and all the configured VRF on the Tier-0 gateway i.e. this limit is shared for a given Tier-0 gateway and all the configured VRFs on this Tier-0 gateway.
Logical Routing	Tier-1 Logical Routers per Tier-0 Logical Router	1,000	
Logical Routing	Gateways per Hypervisor Host	1,000	
Logical Routing	Logical Routers per Hypervisor Host	1,000	
Logical Routing	Linked Segments per Tier-0 Gateway	400	This limit applies to Tier-0 gateway and all the configured VRF on the Tier-0 gateway i.e. this limit is shared for a given Tier-0 gateway and all the configured VRFs on this Tier-0 gateway.
Logical Routing	Downlink per Tier-0 Logical Router	400	
Logical Routing	Linked Segments and Service Interfaces per Tier-1 Gateway	1,000	
Logical Routing	Downlink and CSP Ports per Tier-1 Logical Router	1,000	
Logical Routing	VRFs per Edge Node	100	vRF Lite
Logical Routing	ARP Entries per Tier-1 Gateway	50,000	
Logical Routing	ARP Entries per Tier-1 Logical Router	50,000	
Logical Routing	Routes Per Distributed Router	1,000	
Logical Routing	IPv4 Routes Per Edge Node	500,000	Requires large, extra large or bare-metal Edge nodes.
Logical Routing	BGP Peers per Tier-0 Gateway Service Router	640	This limit applies to Tier-0 gateway and all the configured VRF on the Tier-0 gateway i.e. this limit is shared for a given Tier-0 gateway and all the configured VRFs on this Tier-0 gateway.
Logical Routing	BGP Peers per Tier-0 Logical Router Service Router	640	
Logical Routing	Route-maps per Tier-0 Gateway	1,280	
Logical Routing	Route-maps per Tier-0 Logical Router	1,280	
Logical Routing	Route-map Rules per Route-map	1,000	
Logical Routing	Prefix-lists per Tier-0 Gateway	500	
Logical Routing	Prefix-list Entries per Prefix-list	50	
Logical Routing	ECMP Paths	8	This limit applies independently to Gateway Distributed Router (DR) and Gateway Service Router (SR), i.e. a DR can load-balance the traffic towards 8 different SR, then on a given SR it can have up to 8 different paths.
Logical Routing	Service Ports per Trunk per Service Router	4,000	When used with EVPN.

Recommended Configuration Limits

Category		Limit	Description
Logical Routing	Tier-0 Gateways per Edge Node	1	
Logical Routing	Tier-0 Logical Routers per Edge Node	1	
Logical Routing	Tier-1 Gateways per Edge Node	1,000	
Logical Routing	Tier-1 Logical Routers per Edge Node	1,000	
Logical Routing	Combined External and Service Interfaces per Tier-0 Gateway Service Router	4,000	This limit applies to Tier-0 gateway and all the configured VRF on the Tier-0 gateway i.e. this limit is shared for a given Tier-0 gateway and all the configured VRFs on this Tier-0 gateway.
Logical Routing	Prefix-lists per Tier-0 Logical Router	500	
Logical Routing	IPv6 Routes Per Edge Node	100,000	
Logical Routing	BFD Peers per Tier-0 Gateway Service Router	320	
Logical Routing	BFD Peers per Tier-0 Logical Router Service Router	320	
Logical Routing	OSPFv2 Neighbors per Tier-0 Gateway Service Router	40	
Logical Routing	OSPFv2 Router Learned from Neighbors per Tier-0 Gateway Service Router	50,000	
Logical Routing	OSPFv2 Routes Advertised to Neighbors	10,000	
Logical Routing	IPv4 Prefix-lists per NSX Domain	4,200	
Logical Routing	EVPN L2VNI per Tier-0 Gateway Service Router	200	
Logical Routing	EVPN L3VNI per Tier-0 Gateway Service Router	200	
Logical Routing	EVPN Route-Type-5 IPv4 Routes per Tier-0 Gateway Service Router	400,000	
Logical Routing	EVPN Route-Type-5 IPv6 Routes per Tier-0 Gateway Service Router	100,000	
Logical Routing	EVPN Route-Type-3 Routes per Tier-0 Gateway Service Router	600	
Logical Routing	EVPN Route-Type-2 Routes per Tier-0 Gateway Service Router	800	
Layer 3 Networking : Multicast			
Multicast	System Wide Multicast Groups	2,000	
Multicast	Hosts Participating in Multicast Networking	200	
Multicast	Virtual Interfaces per Host Participating in Multicast Networking	80	
Multicast	Logical Segments per Logical Gateway Participating in Multicast Networking	100	
Multicast	Number of IGMP Groups to which a Virtual NIC can Join in IGMP Snooping	256	
Multicast	Number of IGMP Groups to which a Virtual NIC can Join in Basic Mode	16	
Layer 3 Networking : NAT			

Recommended Configuration Limits

Category		Limit	Description
NAT	Tier-1 Logical Routers with NAT Enabled	4,000	
NAT	NAT Rules per Tier-1 Logical Router	8,192	
NAT	System-Wide NAT Rules	25,000	
NAT	Tier-1 Gateways with NAT Enabled	4,000	
NAT	NAT Rules per Tier-1 Gateway	8,192	
NAT	Total NAT Connections per Edge Node	4,000,000	Requires Large or X-Large or Bare-Metal Edge node.
Firewall : Intrusion Detection			
Intrusion Detection	Hypervisor Hosts	512	
Intrusion Detection	IDS Profiles	25	Excluding the default.
Intrusion Detection	IDS Rules	1,000	
Intrusion Detection	Events Recorded	2,000,000	Up to 14 days of events stored.
Firewall : Identity Firewall			
Identity Firewall	VDI Virtual Machines per Host	250	Note that the maximum VMs per host where both RDSH and VDI are in present is 30.
Identity Firewall	Virtual Machines using Terminal Services per Host	8	Note maximum VMs per host where both RDSH and VDI are in present is 30.
Identity Firewall	RDSH Sessions per RDSH Virtual Machine	75	
Identity Firewall	Active Directory Domains	8	
Identity Firewall	Active Directory Groups	200,000	
Identity Firewall	Hypervisor Hosts	512	For the Identity Firewall use case.
Identity Firewall	Virtual Machines per NSX Management Cluster	15,000	For the Identity Firewall use case.
Identity Firewall	Total Users in all Active Directory Domains	500,000	
Identity Firewall	Active Directory Groups per Individual User	600	
Firewall : Grouping and Tagging			
NSX supports adding metadata to objects in the form of a tag.			
Grouping and Tagging	Groups Based on IP Sets	10,000	
Grouping and Tagging	IP Addresses per IP Set	4,000	
Grouping and Tagging	Tags per Object	30	Please see other sections for details on Tags per Virtual Machine or Tags per Logical Port.
Grouping and Tagging	IP Sets	10,000	
Grouping and Tagging	Groups Based on Tags	8,000	
Grouping and Tagging	Groups	20,000	
Grouping and Tagging	Static Members in a Group	500	Static members such as segments, segment ports, virtual machines, and physical server in a group.
Grouping and Tagging	Effective Members in a Group	8,000	Effective members are the result of dynamic inclusion criteria (e.g. tag, name) or child groups.
Grouping and Tagging	Group Membership Criteria	5	Such as tagging expression or virtual machine.
Grouping and Tagging	Nested Level of Groups	3	

Category		Limit	Description
Firewall : Edge Firewall			
NSX provides a north / south high-performance Edge based firewall.			
Edge Firewall	Firewall Rules per Tier-0 Logical Router	5,000	IP sets and groups with static membership only.
Edge Firewall	Firewall Rules per Tier-1 Logical Router	5,000	IP sets and groups with static membership only.
Edge Firewall	System Wide Tier-0 Logical Router Firewall Rules	20,000	IP sets and groups with static membership only.
Edge Firewall	Firewall Rules per Tier-0 Gateway	5,000	IP sets and groups with static membership only.
Edge Firewall	Firewall Rules per Tier-1 Gateway	5,000	IP sets and groups with static membership only.
Edge Firewall	System Wide Tier-1 Logical Router Firewall Rules	55,000	IP sets and groups with static membership only.
Edge Firewall	System Wide Tier-0 Gateway Firewall Rules	20,000	
Edge Firewall	System Wide Tier-1 Gateway Firewall Rules	55,000	
Firewall : Distributed Firewall			
NSX provides a distributed, in-kernel hypervisor host based firewall to achieve micro-segmentation of workloads at the virtual NIC level.			
Distributed Firewall	Logical Ports with Groups Applied	25,000	
Distributed Firewall	System Wide Stateful Firewall Rules	100,000	
Distributed Firewall	Rules per Firewall Section	1,000	
Distributed Firewall	Rules per Group	512	
Distributed Firewall	Firewall Sections	10,000	A Firewall Section equates to an OpenStack Security Group.
Distributed Firewall	Rules per Hypervisor Host	120,000	Total rules across virtual NICs on a Hypervisor Host.
Distributed Firewall	Rules per Virtual NIC	4,000	
Distributed Firewall	Saved Firewall Rule Configurations	100	Only for automatically created drafts configurations.
Distributed Firewall	Services	8,000	
Load Balancing : Pool Members per Edge Node			
Pool Members per Edge Node	Pool Members per Medium Edge Node	2,000	
Pool Members per Edge Node	Pool Members per Large Edge Node	7,500	
Pool Members per Edge Node	Pool Members per Bare-Metal Edge Node	30,000	
Pool Members per Edge Node	Pool Members per Extra Large Edge Node	10,000	
Load Balancing : Load Balancer Instances			
Load Balancer Instances	Small Load Balancer Instances per Small Edge Node in VM Form Factor	1	
Load Balancer Instances	Small Load Balancer Instances per Medium Edge Node in VM Form Factor	10	
Load Balancer Instances	Medium Load Balancer Instances per Medium Edge Node in VM Form Factor	1	

Recommended Configuration Limits

Category		Limit	Description
Load Balancer Instances	Small Load Balancer Instances per Large Edge Node in VM Form Factor	40	
Load Balancer Instances	Medium Load Balancer Instances per Large Edge Node in VM Form Factor	4	
Load Balancer Instances	Large Load Balancer Instances per Large Edge Node in VM Form Factor	1	
Load Balancer Instances	Small Load Balancer Instances per Extra Large Edge Node in VM Form Factor	80	
Load Balancer Instances	Medium Load Balancer Instances per Extra Large Edge Node in VM Form Factor	8	
Load Balancer Instances	Large Load Balancer Instances per Extra Large Edge Node in VM Form Factor	2	
Load Balancer Instances	Extra Large Load Balancer Instances per Extra Large Edge Node in VM Form Factor	1	
Load Balancer Instances	Small Load Balancer Instances per Bare-Metal Edge Node	750	
Load Balancer Instances	Medium Load Balancer Instances per Bare-Metal Edge Node	75	
Load Balancer Instances	Large Load Balancer Instances per Bare-Metal Edge Node	18	
Load Balancer Instances	Extra Large Load Balancer Instances per Bare-Metal Edge Node	9	
Load Balancing : Pool Members			
Pool Members	Pool Members per Small Load Balancer	300	
Pool Members	Pool Members per Medium Load Balancer	2,000	
Pool Members	Pool Members per Large Load Balancer	7,500	
Pool Members	Pool Members per Extra Large Load Balancer	10,000	
Load Balancing : Pools			
Pools	Pools per Small Load Balancer	60	
Pools	Pools per Medium Load Balancer	300	
Pools	Pools per Large Load Balancer	3,000	
Pools	Pools per Extra Large Load Balancer	4,000	
Load Balancing : Virtual Servers			
Virtual Servers	Virtual Servers per Small Load Balancer	20	
Virtual Servers	Virtual Servers per Medium Load Balancer	100	
Virtual Servers	Virtual Servers per Large Load Balancer	1,000	
Virtual Servers	Virtual Servers per Extra Large Load Balancer	2,000	

Recommended Configuration Limits

Category		Limit	Description
VPN : Layer 2 VPN			
L2 VPN	Server Sessions per Medium Edge Node in VM Form Factor	128	
L2 VPN	Server Sessions per Large Edge Node in VM Form Factor	256	
L2 VPN	Client Sessions per Small Edge Node in VM Form Factor	1	
L2 VPN	Client Sessions per Medium Edge Node in VM Form Factor	1	
L2 VPN	Client Sessions per Large Edge Node in VM Form Factor	1	
L2 VPN	Client Sessions per Bare Metal Edge Node	1	
L2 VPN	Logical Segments per Session per Medium Edge Node in VM Form Factor	512	
L2 VPN	Logical Segments per Session per Large Edge Node in VM Form Factor	512	
L2 VPN	Logical Segments per Session per Bare Metal Edge Node	512	
L2 VPN	Server Sessions per Extra Large Edge Node in VM Form Factor	256	
L2 VPN	Server Sessions per Bare Metal Edge Node	256	
L2 VPN	Client Sessions per Extra Large Edge Node in VM Form Factor	1	
L2 VPN	Server Sessions per Small Edge Node in VM Form Factor	64	
VPN : IPsec VPN			
IPsec VPN	Sessions per Small Edge Node in VM Form Factor	128	
IPsec VPN	Sessions per Medium Edge Node in VM Form Factor	256	
IPsec VPN	Sessions per Large Edge Node in VM Form Factor	512	
IPsec VPN	Sessions per Bare Metal Edge Node	512	
IPsec VPN	IPsec Tunnels per Session on Medium Edge Node in VM Form Factor	256	
IPsec VPN	IPsec Tunnels per Session on Large Edge Node in VM Form Factor	256	
IPsec VPN	IPsec Tunnels per Session on Bare Metal Edge Node	512	
IPsec VPN	IPsec Tunnels per Small Edge Node in VM Form Factor	2,048	
IPsec VPN	IPsec Tunnels per Medium Edge Node in VM Form Factor	4,096	
IPsec VPN	IPsec Tunnels per Large Edge Node in VM Form Factor	8,192	
IPsec VPN	IPsec Tunnels per Bare Metal Edge Node	8,192	
IPsec VPN	Sessions per Extra Large Edge Node in VM Form Factor	512	

Recommended Configuration Limits

Category		Limit	Description
IPsec VPN	IPsec Tunnels per Extra Large Edge Node in VM Form Factor	4,096	
IPsec VPN	IPsec Tunnels per Session on Extra Large Edge Node in VM Form Factor	256	
Guest Introspection			
Guest Introspection	Virtual Machines per Host	250	
Guest Introspection	Application Virtual Machines per Host	40	
Guest Introspection	Hosts	512	For the guest introspection use case.
Guest Introspection	System Wide Virtual Machines	15,000	For the guest introspection use case.
Cloud Native : vSphere with Kubernetes			
vSphere with Kubernetes	Hypervisor Hosts	500	ESXi hypervisor hosts only.
vSphere with Kubernetes	vSphere (ESXi) Clusters Enabled with vSphere with Kubernetes per NSX Instance	50	
vSphere with Kubernetes	Supervisor Namespaces per NSX Instance	500	
vSphere with Kubernetes	vSphere Pods (PodVM) per NSX Instance	15,000	
vSphere with Kubernetes	Services of Type Cluster IP across per NSX Instance	5,000	Distributed Load Balancer Virtual Servers
vSphere with Kubernetes	Services Exposed via Ingress per NSX Instance	4,000	Layer 7 Rules on Edge Load Balancer
vSphere with Kubernetes	Services of Type Load Balancer per NSX Instance	3,250	Layer 4 Virtual Servers on Edge Load Balancer
vSphere with Kubernetes	Network Policies per NSX Instance	10,000	
vSphere with Kubernetes	Firewall Rules across all Network Policies per NSX Instance	100,000	
vSphere with Kubernetes	Hypervisor Hosts per Supervisor Cluster	64	ESXi hypervisor hosts only.
vSphere with Kubernetes	vSphere Pods (PodVM) per Supervisor Cluster	8,000	
vSphere with Kubernetes	Services of Type ClusterIP in one Supervisor Cluster	2,000	Distributed Load Balancer Virtual Servers
vSphere with Kubernetes	Services Exposed via Service of Type Load Balancer in one Supervisor Cluster	1,000	Layer 4 Virtual Servers on Edge Load Balancer
vSphere with Kubernetes	Services Exposed via Ingress in one Supervisor Cluster	2,000	Layer 7 Rules on Edge Load Balancer
vSphere with Kubernetes	Policies in one Supervisor Cluster	5,000	
vSphere with Kubernetes	Firewall Rules in one Network Policy	900	
vSphere with Kubernetes	Firewall Rules across all Network Policies in one Supervisor Cluster	50,000	
Cloud Native : Tanzu Kubernetes Grid Integrated			
Tanzu Kubernetes Grid Integrated (TKGI)	Kubernetes PODs	50,000	
Tanzu Kubernetes Grid Integrated (TKGI)	Kubernetes Clusters	160	

Recommended Configuration Limits

Category		Limit	Description
Tanzu Kubernetes Grid Integrated (TKGI)	Kubernetes Namespaces	900	Dedicated Tier-1 Gateway per Namespace.
Tanzu Kubernetes Grid Integrated (TKGI)	Kubernetes Worker Nodes	650	In single Kubernetes cluster or system wide across all clusters.
Tanzu Kubernetes Grid Integrated (TKGI)	PODs per Kubernetes Worker Node	100	
Tanzu Kubernetes Grid Integrated (TKGI)	Kubernetes Network Policies	5,000	
Tanzu Kubernetes Grid Integrated (TKGI)	Hypervisor Hosts	200	
Tanzu Kubernetes Grid Integrated (TKGI)	Kubernetes Worker Nodes per Hypervisor Host	100	
Tanzu Kubernetes Grid Integrated (TKGI)	Containers / PODs per Hypervisor Host	2,000	On ESXi 6.7 hosts (The limit on ESXi 6.5 is 1,000.)
Tanzu Kubernetes Grid Integrated (TKGI)	L7 Kubernetes Services via Ingress Resource per Small Load Balancer	60	
Tanzu Kubernetes Grid Integrated (TKGI)	L7 Kubernetes Services via Ingress Resource per Medium Load Balancer	300	
Tanzu Kubernetes Grid Integrated (TKGI)	L7 Kubernetes Services via Ingress Resource per Large Load Balancer	512	
Tanzu Kubernetes Grid Integrated (TKGI)	L4 Kubernetes Services per Small Load Balancer	20	Automatically scales after reaching this limit.
Tanzu Kubernetes Grid Integrated (TKGI)	L4 Kubernetes Services per Medium Load Balancer	100	Automatically scales after reaching this limit.
Tanzu Kubernetes Grid Integrated (TKGI)	L4 Kubernetes Services per Large Load Balancer	1,000	Automatically scales after reaching this limit.
Tanzu Kubernetes Grid Integrated (TKGI)	Kubernetes Namespaces with Shared Tier-1 Gateway	4,000	Namespaces with shared Tier-1 Gateway per Kubernetes cluster.
Cloud Native : Tanzu Application Service			
NSX integrates with Tanzu Application Service and provides logical networking and security to Cloud Foundry applications.			
Tanzu Application Service	Cloud Foundry Orgs	900	
Tanzu Application Service	Cloud Foundry Spaces	5,000	
Tanzu Application Service	Cloud Foundry Applications	10,000	
Tanzu Application Service	Cloud Foundry Application Instances	25,000	
Tanzu Application Service	Cloud Foundry Application Security Groups	5,000	
Tanzu Application Service	Cloud Foundry Rules Across all Application Security Groups	20,000	
Tanzu Application Service	Cloud Foundry Network Policies	5,000	
Tanzu Application Service	Cloud Foundry Diego Cells	300	
Tanzu Application Service	Overlay Logical Switches	900	
Tanzu Application Service	Logical Ports with Firewall Enabled	25,000	
Tanzu Application Service	Tier-0 Logical Routers	2	
Tanzu Application Service	Tier-1 Logical Routers	900	
Tanzu Application Service	Hypervisor Hosts	200	Only ESXi hypervisor hosts are supported.
Tanzu Application Service	Networking and Security Groups with Tags	10,000	
Tanzu Application Service	System Wide Firewall Rules	30,000	
Tanzu Application Service	Firewall Sections	10,000	
Tanzu Application Service	Rules per Firewall Section	4	

Recommended Configuration Limits

Category		Limit	Description
Tanzu Application Service	Rules per Hypervisor Host	800	Only ESXi hypervisor hosts are supported.
Tanzu Application Service	Containers / Application Instance per Hypervisor Host	250	Only ESXi hypervisor hosts are supported.
Network Introspection : N-S for Tier-0 Gateways			
N-S for Tier-0 Gateways	Service Insertion Services	4	Registration of different partner services.
N-S for Tier-0 Gateways	Service Virtual Machines	8	Consisting of four pairs with one pair per Edge node.
N-S for Tier-0 Gateways	Network Introspection Policies	1,000	
N-S for Tier-0 Gateways	Network Introspection Redirection Rules per Policy	1,000	
N-S for Tier-0 Gateways	Network Introspection Redirection Rules	10,000	
Network Introspection : N-S for Tier-1 Gateways			
N-S for Tier-1 Gateways	Partner Services	4	Registration of different partner services.
N-S for Tier-1 Gateways	Service Virtual Machines	200	Consisting of 100 pairs with one pair per Tier-1 Gateway.
N-S for Tier-1 Gateways	Network Introspection Policies	1,000	
N-S for Tier-1 Gateways	Network Introspection Redirection Rules per Policy	1,000	
N-S for Tier-1 Gateways	Network Introspection Redirection Rules	10,000	
Network Introspection : E-W			
E-W	Partner Services	8	
E-W	Service Chains	24	Four services per chain.
E-W	Service Virtual Machines in a Cluster Based Deployment	512	Eight service virtual machines per hypervisor host.
E-W	Network Introspection Policies	1,000	
E-W	Network Introspection Redirection Rules per Policy	1,000	
E-W	Network Introspection Redirection Rules	10,000	
Network Introspection : General			
General	Logical Ports with Network Introspection Enabled	25,000	
General	Hosts with Network Introspection Rules Enabled	512	Hypervisor hosts that participate in redirecting traffic to service virtual machines.
General	Logical Ports per Host with Network Introspection Enabled	1,000	
Federation : General			
General	Locations	8	
General	Hypervisor Hosts Across all Locations	1,024	
Federation : Networking			
Networking	RTEP-RTEP Tunnels per Edge Node	120	

Recommended Configuration Limits

Category		Limit	Description
Federation : Layer 2			
Layer 2	Global Segments	2,000	
Layer 2	Stretched Segments	2,000	Stretched segments and local segments can't exceed maximum local segments.
Layer 2	Stretched Segments Ports	34,000	Number of ports across stretched segments for all locations.
Layer 2	MAC Identifiers per Overlay Segment (VNI)	1,024	
Layer 2	Global Segment Ports	60,000	Number of ports across stretched and non-stretched segments for all locations
Federation : Layer 3			
Layer 3	Number of Locations per Stretched Tier-0 Gateway	4	
Layer 3	Stretched Tier-0 Gateways per Location	24	
Layer 3	Locations per Stretched Tier-1 Gateway	4	
Layer 3	Stretched Tier-1 Gateways per Location	620	
Layer 3	Tier-1 Gateways across all Locations	620	Consisting of 2 Service Routers in Active/Standby mode
Federation : DHCP			
DHCP	DHCP Server Instances	4,000	
Federation : Grouping and Tagging			
Grouping and Tagging	Groups Based on Tags across all Locations	8,000	Total number of [Location + Regional + Global Region] Groups based on Tag.
Grouping and Tagging	Groups across Locations	10,000	Total number of [Location + Regional + Global Region] Groups of all Type.
Grouping and Tagging	Global Groups based on Tag	5,400	Total number of Global Region Groups based on Tag.
Grouping and Tagging	Global Groups	6,000	Total number of Global Region Groups of all Type.
Grouping and Tagging	Groups based on Tags per Location	4,000	Total number of Location specific Groups based on Tags per Location.
Grouping and Tagging	Groups per Location	5,000	Total number of Location specific Groups of all Type per Location.
Grouping and Tagging	Groups Based on IP Sets across all Locations	3,900	Total number of [Location + Regional + Global Region] Groups based on IP Sets.
Grouping and Tagging	Virtual Machines per Group	9,000	Satisfying the tagging expression. Note that this assumes one virtual interface per virtual machine. It is possible to have virtual machines with more than one virtual interface. Total virtual interfaces must not be more than 9,000.
Federation : Global Firewall			
Global Firewall	Federation Wide Rules per Section	1,000	

Recommended Configuration Limits

Category		Limit	Description
Global Firewall	Federation Wide Firewall Sections	7,000	
Federation : Distributed Firewall			
Distributed Firewall	Federation wide Stateful Firewall Rules	50,000	
Distributed Firewall	Stateful Firewall Rules across all Global Firewall Policies	50,000	Rules applied to all locations.
Distributed Firewall	Stateful Firewall Rules Applied to a Location	19,000	
Distributed Firewall	Logical Ports with Security Groups Applied	60,000	
Federation : Gateway Firewall			
Gateway Firewall	Federation Wide Gateway Firewall Rules	6,800	