

NetScaler software models

Enabling high-performance multi-cloud application delivery with software and containerized form factors

NetScaler is an application security and delivery platform that helps you scale and protect your applications using data and insights to enable peak performance. Whether you're delivering applications to your customers, your workforce, or both, NetScaler helps you do it reliably and securely.

NetScaler is built on a single operating system, so no matter which ADC form factor you choose — hardware or software or a mix — you'll manage them from one place. The operational consistency and deep observability you get with NetScaler makes it easier to apply consistent security policies and to troubleshoot faster.

NetScaler offers pooled-capacity licensing, which allows you to reallocate capacity to wherever you need it, whenever you need it, no matter where you choose to deploy your ADCs — on-premises or public cloud or both — your NetScaler subscription price will remain the same.

NetScaler software form factors



NetScaler VPX

NetScaler VPX is a virtual form factor that provides capabilities typically offered only on specialized, high-end network devices. Deploy NetScaler VPX on your preferred hypervisor and achieve high SSL performance with no hardware acceleration.



NetScaler CPX

NetScaler CPX is a containerized form factor that provides load balancing and traffic management for your containerized applications. You can deploy one or more NetScaler CPXs as standalone instances on a Docker host.



NetScaler BLX

NetScaler BLX for bare metal runs as a Linux process on your hardware of choice. Because NetScaler BLX is a lightweight software package with no hypervisor or container overhead, you get extraordinarily fast performance. And there's no additional cost for hypervisor software.



NetScaler for public cloud

NetScaler is easy to deploy across on-premises and public cloud environments including [AWS](#), [Azure](#), and [Google Cloud Platform](#). Purchase licenses from the cloud marketplaces or simply bring your own.

NetScaler VPX for on-premises

Model	Minimum memory ¹	vCPUs ²	ESXi	KVM	XenServer	Hyper-V	Recommended network driver
VPX 100G	2 GB	2-20	•	•			PCI passthrough
VPX 40G	2 GB	2-20	•	•	•		SRI-IOV
VPX 25G	2 GB	2-16	•	•	•		
VPX 15G	2 GB	2-12	•	•	•		VMXNET ³ or SR-IOV ⁴
VPX 10G	2 GB	2-10	•	•	•		
VPX 8000	2 GB	2-6	•	•	•		VMXNET ³ or paravirtualization
VPX 5000	2 GB	2-6	•	•	•		
VPX 3000	2 GB	2-4	•	•	•	•	
VPX 1000	2 GB	2-4	•	•	•	•	
VPX 200	2 GB	2	•	•	•	•	

Performance ⁴	Minimum	Maximum
System throughput	200 Mbps	100 Gbps
SSL transactions/sec (2k key certificates)	1,100	20,000
SSL ECDHE transactions/sec (2k key certificates)	880	17,280
SSL throughput	200 Mbps	30 Gbps

More info: [NetScaler VPX production documentation](#)

- Note:
- Hypervisor versions: For details on hypervisor support, visit the [Support matrix and usage guidelines](#) on the NetScaler documentation site.
 - 1 For the optimal performance, irrespective of the license, we recommend 4 GB memory per vCPU (e.g., for a VPX with 6 vCPUs, we recommend having 24GB memory allocated).
 - 2 Processors supported: Intel VTx and AMD processors on ESXi from 13.1-4.x release.
 - 3 VMXNET3 is supported on ESXi versions only.
 - 4 Performance validated for XenServer using SR-IOV only.
 - 5 For each VPX, one vCPU will be allotted to MGMT and all others are PE(s).

NetScaler VPX for public cloud

Models ¹	AWS	Azure	GCP
VPX 40000	• ²	• ²	• ²
VPX 25000	• ³	• ²	• ²
VPX 15000	• ³	• ⁴	• ²
VPX 10000	• ³	• ⁵	• ⁴
VPX 8000	• ³	• ⁵	• ⁴
VPX 5000	••	•• ⁵	••
VPX 3000	••	•• ²	••
VPX 1000	••	••	••
VPX 200	••	••	••

More info: [NetScaler VPX production documentation](#)

Note: • — means support for BYOL only and •• — means support for BYOL & cloud marketplace subscription

- vCPU licenses are also supported and available as part of vCPU pooled.
- Higher bandwidth BYOL VPX license will not support the bandwidth as per license but CPU intensive work loads will get higher performance.
- AWS — VPX 8000, VPX 10G, VPX 15G, and VPX 25G, VPX40G and VPX 100G are applicable for BYOL only on AWS. With larger BYOL licenses, VPX can achieve up to 30 Gbps Max throughput and higher SSL TPS. EC2 instances should be selected based on the performance requirement. C5,C5n and M5 instance families are recommended for higher performance.
- GCP — VPX 8000, VPX 10G, VPX 15G, and VPX 25G, VPX40G and VPX 100G are applicable for BYOL only on GCP. With larger BYOL licenses, VPX can achieve up to 15 Gbps Max throughput and higher SSL TPS.
- Azure — VPX 3000,VPX 5000, VPX 8000, VPX 10000, VPX 15000 needs an Azure instance which support accelerated networking (Standard_D4s_v4 and above). Cloud instance should also support the throughput as per license.

NetScaler CPX for containers

Model	Minimum memory	vCPUs	Throughput	Supported container managers
CPX	1 GB	1-7	1-10 Gbps	<ul style="list-style-type: none"> • Docker version 1.12 and above • Kubernetes • Red Hat OpenShift • Amazon Elastic Kubernetes Service (EKS) • Azure Kubernetes Service (AKS) • Google Kubernetes Engine (GKE) • Rancher • Pivotal Container Service (PKS)

	1 Core	1 Core (Sidecar CPX)	3 Cores	7 Cores
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System resources

Maximum vCPUs	1	1	3	7
Maximum memory	2	1	6	14

Performance¹

HTTP throughput (Gbps) ²	4.6	4.6	6.5	11.3
SSL 2k throughput (Gbps)	1.17	1.17	2.07	5.4
HTTP requests/sec	193,500	193,500	303,300	577,800
SSL transactions/sec (2k key certificates)	1,125	1,197	2,250	6,520
SSL transactions/sec (ECDHE- RSA[2k])	1,004	1,020	1,962	3,987

More info: [NetScaler CPX production documentation](#)

Note:

- 1 Network Driver: 2x Xeon CPU E5-2687W v3 20 Physical Cores @ 3.0 GHz, OS: Centos 7.6, CPX version: 13.0-39.4, NIC: 2x40 Gbps XL710 (Dual Port).
- 2 This is network I/O bound performance. You may achieve higher performance based on packet processing size.

NetScaler BLX for bare metal

BLX models	Minimum memory	vCPUs	Throughput	Supported Linux distribution
Non-DPDK	4 GB	1–28	1–12 Gbps	CentOS, Oracle Linux, Ubuntu Linux, Red Hat Enterprise Linux (RHEL), Linux, Amazon Linux
DPDK	4 GB	1–28	1–100 Gbps	CentOS, Oracle Linux, Ubuntu Linux, Red Hat Enterprise Linux (RHEL), Linux, Amazon Linux

More info: [NetScaler BLX production documentation](#)

Note: All BLX vCPUs are allocated as PEs.

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Locations

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