

NetScaler CPX

Bring the power of advanced Layer 4 to Layer 7 application delivery services to containerized microservices infrastructures

NetScaler CPX is a cloud-ready, container-based application delivery controller that can be provisioned on a Docker host. It is built from the same code base as NetScaler ADC. NetScaler CPX joins NetScaler VPX, MPX, and SDX in providing a cloud-ready ADC with a consistent set of ADC services to application developers and network operations teams unified through a single API, management console, and policies that can run on premises and in the cloud.

It's designed to be inserted early in the application development process to ease the deployment of applications into production. NetScaler CPX is managed by NetScaler Management and Analytics System (MAS), an orchestration, automation, visualization, and analytics platform that abstracts L4-L7 platforms into a set of resources that enables agile application delivery. Through

NetScaler MAS, NetScaler CPX interfaces with container management systems and auto-configures based on dynamic changes in the microservices infrastructure.

NetScaler CPX provides web and application load balancing, acceleration, security, and offload features in a simple, easy-to-install container. Enterprises and cloud and eBiz service providers can deploy NetScaler CPX in Docker containers managed by popular container management systems.

Deploying applications can be time-consuming, complex, and costly. Applications need to be continually iterated, built, and deployed. DevOps professionals using containers to speed up delivery and shipment of applications will benefit from NetScaler CPX to insert load balancing early in the development cycle to accelerate

Enabling microservices infrastructure

NetScaler CPX makes functionality typically only offered on specialized, high-end network devices available as a Docker container that can be easily and dynamically deployed in a container for microservices applications. NetScaler CPX acts as an app-to-app proxy, load balancing applications and inserting security policies to ensure applications are protected. The flexibility of NetScaler CPX makes it easy and cost effective to fully optimize every application type. For example:

- Manage east-west traffic between containerized apps with sophisticated load balancing, SSL offloading and DDoS protection.
- Act as an application control point providing strong application security with app-to-app authentication and mutual TLS
- Enable in service, zero-downtime deploys for canary testing, rolling, and blue-green deployments.
- Deliver exceptional application performance with multi-core NetScaler CPX as an ingress device to handle north-south traffic for popular cluster management tools such as Kubernetes.

Advantages for IT teams

- IT teams can run NetScaler CPX on any Linux host, easing its deployment in a public, private, or hybrid cloud.
- IT teams can deploy a Platform-as-a-Service (PaaS) for their internal app developers and production apps that includes automated configuration of load balancing.
- IT teams can use the same management platforms and tooling to manage app delivery control and load balancing across all form factors—container, virtual machine, and physical appliance.

Advantages for developers

- CPX allows developers to transition their services built using three-tiered layered applications into containerized and microservices applications.
- DevOps teams can use NetScaler in development and push verified load balancing configurations all the way into production, working with IT teams.
- Developers can apply approved security policies and SSL/TLS ciphers early in the development cycle.

L4 - L7 Features

- Content switching – present different content to different users based on policies.
- Responder – direct users to a different server based who sent the request and where it was sent from.
- Redirect – redirect user requests to the cache.

Technical Requirements

CPX models	Minimum Memory ¹	vCPUs	Throughput	Supported Container Managers
CPX	1GB	1-7	1-9 Gbps	Kubernetes, Mesosphere DCOS, Apache Mesos Marathon

1. The minimum memory requirement is 1 GB.

Enterprise Sales

North America | 800-424-8749
Worldwide | +1 408-790-8000

Locations

Corporate Headquarters | 851 Cypress Creek Road, Fort Lauderdale, FL 33309, United States
Silicon Valley | 4988 Great America Parkway, Santa Clara, CA 95054, United States

© 2018 Citrix Systems, Inc. All rights reserved. Citrix, the Citrix logo, and other marks appearing herein are property of Citrix Systems, Inc. and/or one or more of its subsidiaries, and may be registered with the U.S. Patent and Trademark Office and in other countries. All other marks are the property of their respective owner(s).

- Rewrite – create rules to change an HTTP request action.
- TCP optimization – accelerate TCP requests.
- SSL offloading – off load SSL processing to NetScaler from the server.
- DDoS – protect against distributed denial of service attacks.
- DNS load balancing – load balance to multiple DNS servers.

Deploying an agile application environment

With NetScaler CPX, DevOps, application business owners, developers, and IT operations can deploy containerized applications and microservices architecture that keeps pace with changes in the infrastructure. NetScaler CPX integrates with container management systems through NetScaler MAS and adapts to changes in the app environment to add to or delete apps from a VIP, create a new VIP for an app, or transfer a VIP to another NetScaler CPX. As NetScaler CPX creates a VIP, NetScaler MAS can automatically push an A/AAAA DNS entry to open source or commercial DNS servers.

Immediate visibility and analytics

IT organizations and services need immediate visibility into the health of containerized apps and microservices. NetScaler CPX streams its numerous counters and transaction data into NetScaler MAS for visibility and automated troubleshooting. Machine learning algorithms are used to identify events beyond normal trend lines alerting IT Ops, DevOps, developers, and network ops teams of problems.

