

Juniper Networks WXC Application Acceleration Platforms



The Juniper Networks WXC™ application acceleration platforms provide distributed enterprises with a scalable approach to accelerating application delivery over the WAN. Based on the comprehensive WX Framework™, which delivers the elements needed to accelerate applications over wide-area links and optimize WAN performance, the WXC products help businesses make the most efficient use of their existing WAN resources and improve application response times for branch office users.

The WXC product family includes the WXC 250, the WXC 500, and the WXC Stack. The WXC family scales from 128 Kbps to 155 Mbps, with hard drive capacity from 40 GB to 3 TB.

The hard drives provide support for Network Sequence Caching technology that dramatically speeds the transfer of large files by eliminating repetitive data sequences. The hard-drive storage supplies the capacity needed to store long data sequences for long periods of time, enabling up to 100-fold increases in WAN capacity.

The WXC devices constantly communicate, exchanging vital information such as topology, accessibility, and path-performance metrics. The WXC platforms also interoperate with the Juniper Networks WX™ application acceleration platforms. In addition, the WXC Stack pairs WXC 500s with a WX 100 to extend support for the Sequence Caching function to 155 Mbps link speeds.

WXOS and WX CMS Software

The WXC products run the WX Operating System (WXOS™) software, which delivers the elements that comprise the WX Framework. These elements include Sequence Caching, Molecular Sequence Reduction™ (MSR™), Packet Flow Acceleration™ (PFA™), Application Flow Acceleration™ (AppFlow™), Quality of Service (QoS), and Policy-based Multipath™ technologies.

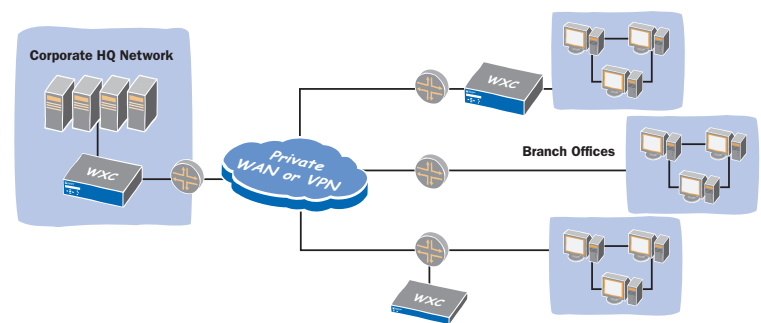
The WXOS software also provides visibility into and control over WXC and WX platforms via embedded WebView device management and the powerful WX Central Management System™ (CMS™) software. The WX CMS software provides visibility into application performance across multiple WXC and WX devices, enabling extensive configuration, monitoring, and management capabilities. Individual device monitoring and configuration can be performed via WebView device management or a command line interface (CLI).

Easy Installation and Configuration

WXC platforms can be installed and configured in just 10 minutes using a web-based installation wizard. Configuration can also be fully automated using the WXOS and WX CMS software. IT simply defines centralized configuration templates; when remote WXC devices boot up, they retrieve a network address, locate the WX CMS software server through the domain name service (DNS), download their configuration file, and begin operation.

The WXC platforms also support redundant configurations to ensure complete fail-safe operations. In the event of a failure, the WXC devices automatically convert to bypass mode, allowing traffic to pass through untouched.

Transparent to other network equipment, WXC devices can be installed directly inline between a LAN switch and WAN router, or they can be deployed offline by attaching to an available port on the switch or router. The WXC products also work effectively alongside VPN servers, firewalls, and other security devices, where they optimize traffic before it is encrypted.



Juniper WXC Deployment

WXC platforms are deployed on the LAN side of the WAN router, supporting flexible deployment options

Specifications

Performance	WXC 250	WXC 500	WXC Stack
Total reduction throughput speed	128 Kbps to 2 Mbps	512 Kbps to 20 Mbps	34 Mbps to 155 Mbps
Connections supported	Up to 15	Up to 60	Up to 510
Disk capacity	40 GB	500 GB	Up to 3 TB
Connections			
Network interfaces	Two copper 10/100 ports	Two copper 10/100/1000 ports	WXC Stack includes 1 WX 100 and up to 6 WXC 500s
Dimensions and Weight			
Height	1.8 in. (44 mm); 1 rack unit	3.44 in. (88 mm); 2 rack units	
Width	17.1 in. (435 mm)	17.1 in. (435 mm)	
Depth	14.3 in. (363 mm)	16.7 in. (425 mm)	
Weight	21 lb. (9.5 kg)	25 lb. (11.3 kg)	

WXC Application Acceleration Platform Functions

Product Features	Any IP-based traffic (TCP, UDP, etc.) Optional IPsec encryption	High Availability Fault-tolerant non-stop operation Load balancing Network upgradeable	Automatic bypass mode on any power, hardware, or software failure Active/active or active/passive, with passive in hot standby mode Via FTP, HTTP, and TFTP
Network Integration	Inline mode Installs inline between aggregation switch and edge router Packet-Interception mode Direct attachment to router or switch using RIPv2, WCCPv2, or External Mode	Operating Environment Temperature Humidity	41° F to 104° F (5° C to 40° C) Less than 90% relative humidity, non-condensing
Device Management	SNMP, syslog SNMPv2c, MIB II, WX Enterprise MIB local syslog Secure remote access SSH and HTTPS (SSL) Authentication, Authorization & Accounting AAA local database and RADIUS support	Regulations Emissions Safety	FCC Class A, EN 55022 Class A, EN 61000-3-2, EN 55024 Immunity CSA C22.2 No. 950, EN 60950
WAN and Device Monitoring	Reduction statistics Per device, per application, and per destination; real-time and historical WAN performance statistics Network latency, loss, and availability for SLA monitoring and enforcement QoS, bandwidth management Per destination, per traffic class; real-time and historical Acceleration Per destination, per traffic class; real-time and historical Data export Packet capture, CSV format, NetFlow v5 records Application reporting Detail by IP addresses, port numbers, IP protocol, DSCP/ToS value; greater detail by URL element or Citrix application type		



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