

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.

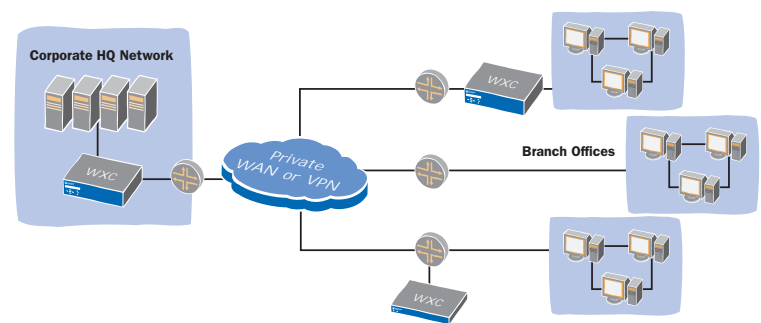
The WXOS software also provides visibility into and control over WXC and WX platforms via embedded WebView device management and the powerful WX Central Management System™ (CMS™) software. The WX CMS software provides visibility into application performance across multiple WXC and WX devices, enabling 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
Tunnels supported	Up to 15	Up to 60	Up to 300
Disk capacity	40 GB	500 GB	Up to 3 TB
Connections			WXC Stack includes 1 WX 100 and up to 6 WXC 500s
Network interfaces	Two copper 10/100 ports	Two copper 10/100/1000 ports	
Power			
Power Requirement	110-240VAC, 50-60Hz, 150 Watts max or 510 BTU/hr	110-240VAC, 50-60Hz, 150 Watts max or 510 BTU/hr	
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		High Availability	
Protocols supported	Any IP-based traffic (TCP, UDP, etc.)	Fault-tolerant non-stop operation	Automatic bypass mode on any power, hardware, or software failure
Security	Optional IPsec encryption	Load balancing	Active/active or active/passive, with passive in hot standby mode
Network Integration		Network upgradeable	Via FTP, HTTP, and TFTP
Inline mode	Installs inline between aggregation switch and edge router	Operating Environment	
Packet-Interception mode	Direct attachment to router or switch using RIPv2, WCCPv2, or External Mode	Temperature	41° F to 104° F (5° C to 40° C)
Device Management		Humidity	Less than 90% relative humidity, non-condensing
SNMP, syslog	SNMPv2c, MIB II, WX Enterprise MIB local syslog	Regulations	
Secure remote access	SSH and HTTPS (SSL)	Emissions	FCC Class A, EN 55022 Class A, EN 61000-3-2, EN 55024 Immunity
Authentication, Authorization & Accounting	AAA local database and RADIUS support	Safety	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		



CORPORATE HEADQUARTERS AND SALES HEADQUARTERS FOR NORTH AND SOUTH AMERICA
 Juniper Networks, Inc.
 1194 North Mathilda Avenue
 Sunnyvale, CA 94089 USA
 Phone: 888-JUNIPER (888-586-4737) or 408-745-2000
 Fax: 408-745-2100
 www.juniper.net

EAST COAST OFFICE
 Juniper Networks, Inc.
 10 Technology Park Drive
 Westford, MA 01886-3146 USA
 Phone: 978-589-5800
 Fax: 978-589-0800

ASIA PACIFIC REGIONAL SALES HEADQUARTERS
 Juniper Networks (Hong Kong) Ltd.
 Suite 2507-11, Asia Pacific Finance Tower
 Citibank Plaza, 3 Garden Road
 Central, Hong Kong
 Phone: 852-2332-3636
 Fax: 852-2574-7803

EUROPE, MIDDLE EAST, AFRICA REGIONAL SALES HEADQUARTERS
 Juniper Networks (UK) Limited
 Juniper House
 Guildford Road
 Leatherhead
 Surrey, KT22 9JH, U. K.
 Phone: 44(0)-1372-385500
 Fax: 44(0)-1372-385501

Copyright 2005, Juniper Networks, Inc. All rights reserved.
 Juniper Networks and the Juniper Networks logo are registered trademarks of Juniper Networks, Inc. in the United States and other countries. All other trademarks, service marks, registered trademarks, or registered service marks in this document are the property of Juniper Networks or their respective owners. All specifications are subject to change without notice. Juniper Networks assumes no responsibility for any inaccuracies in this document or for any obligation to update information in this document. Juniper Networks reserves the right to change, modify, transfer, or otherwise revise this publication without notice.