

Citrix NetScaler Standard Edition

INTEGRATED SOLUTION FOR TRAFFIC MANAGEMENT AND SERVER OPTIMIZATION

Citrix® NetScaler® Standard Edition provides small and medium enterprises comprehensive layer 4-7 traffic management, enabling increased Web application performance and availability and reduced application delivery costs. Citrix NetScaler Standard Edition is a highly integrated application delivery system that combines L4 load balancing, L7 content switching, and SSL encryption offload in an integrated, easy-to-use solution.

Offering the same Citrix NetScaler technology proven in large enterprise application infrastructures, NetScaler Standard Edition is a cost-effective solution for small and medium enterprises, or for larger enterprises that need to accelerate the performance of low-traffic intranet applications. It can be deployed within 30 minutes to enterprise applications such as ERP, CRM, HRM and data warehousing solutions, as well as internal and public-facing Web-based applications. The AppExpert Visual Policy Builder, system set-up wizard, load-balancing configuration wizard, intuitive performance dashboard and automated protocol optimization provide industry-leading deployment speed and management ease.

INTELLIGENT LOAD BALANCING AND CONTENT SWITCHING

Citrix NetScaler provides the industry's most comprehensive layer 4-7 traffic management. Deployed in front of application servers, NetScaler delivers fine-grained direction of client requests to ensure optimal distribution of traffic. In addition to Layer 4 information (protocol and port number), traffic management policies for TCP applications can be based upon any application-layer content. Administrators can granularly segment application traffic based upon information contained within an HTTP or TCP request's body, as well as L4-7 header information such as URL, application data type or cookie. Numerous load-balancing algorithms and extensive server health checks provide greater application availability by ensuring client requests are directed only to correctly behaving servers.

ACCELERATED APPLICATION PERFORMANCE

Citrix NetScaler Standard Edition delivers multiple TCP optimizations to improve the performance of the network and server infrastructure. For example, TCP connection multiplexing reduces thousands of short-lived client connections into a much smaller number of long-lived, persistent server connections. This and other TCP optimizations reduce server load, improving server performance and accelerating application response. NetScaler TCP optimizations are transparent to clients and servers, accelerating the delivery of any enterprise or Web-based application while requiring little or no configuration.



Key Benefits

Enhanced Application Availability

- Header-and payload-based L4-7 traffic management with comprehensive server health checks directs user requests to the optimal application server
- Protects applications from L4 denial-of-service (DoS) attacks
- Delivers robust high availability for any application infrastructure
- Highly integrated appliance reduces number of data path devices
- Provides global traffic management for multi-site enterprises via optional Global Server Load Balancing

Improved Datacenter Efficiency

- TCP optimizations offload costly networking connection management from servers
- Efficient traffic management optimizes server infrastructure
- Integrates hardware-based SSL acceleration for faster delivery of secure Web traffic (HTTPS)
- Optional data compression reduces usage of network bandwidth

Accelerated Application Performance

- TCP optimizations improve performance across high-latency and congested networks
- Optional data compression improves application response times for HTTP applications



The optional Citrix® AppCompress™ module improves end-user performance and reduces bandwidth consumption by compressing Web application data, regardless of whether it is encrypted or unencrypted, before it is sent to the client.

SSL ACCELERATION

NetScaler integrates hardware-based SSL acceleration to offload the compute-intensive processes of SSL connection setup and bulk encryption from Web servers. SSL acceleration reduces CPU utilization on servers, freeing server resources for other tasks. SSL acceleration is automatically enhanced by TCP optimizations and is fully integrated with the AppCompress option.

APPLICATION SECURITY

Patented Citrix® Request Switching® technology enables NetScaler to proxy legitimate client requests and block illegitimate requests. NetScaler Standard Edition includes always-active defenses against damaging denial of service (DoS) attacks without performance penalties. The network can be further secured via L3-4 access control lists.

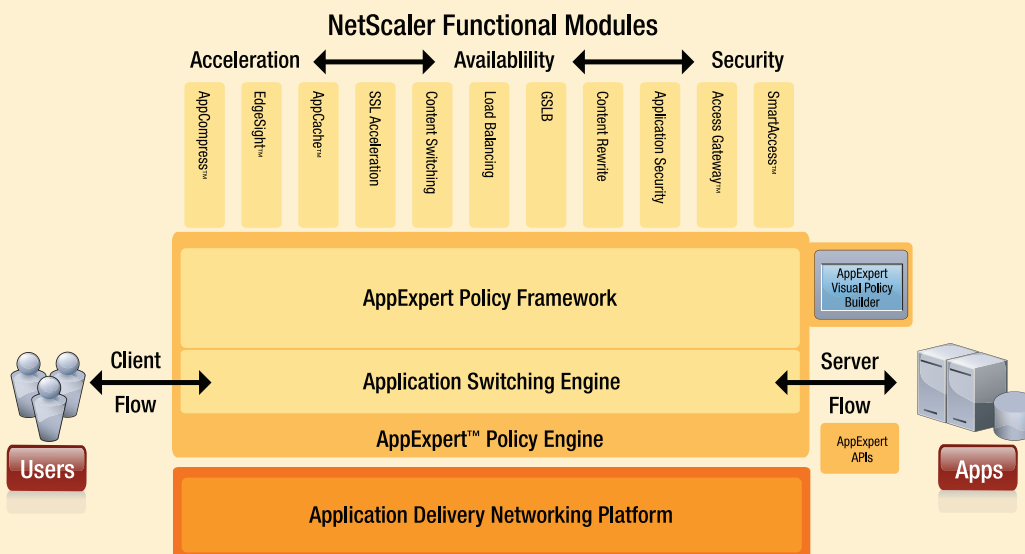
REDUCED DEPLOYMENT AND OPERATING COSTS

Citrix NetScaler reduces application delivery costs by reducing the number of required servers and by optimizing usage of available network bandwidth. The intuitive AppExpert Visual Policy Builder enables application delivery policies to be created without the need for coding complex programs or scripts. In addition, NetScaler reduces ongoing operational expenses by consolidating multiple capabilities in a single solution managed with either a Web-based graphical user interface (GUI) or a powerful command-line interface (CLI). For multiple NetScaler appliances, the separately available NetScaler Command Center provides centralized administration of system configuration, event management, performance management and SSL certificate administration.

As the complexity of network traffic and application deployments increases, NetScaler Standard Edition can be upgraded to NetScaler Enterprise Edition or NetScaler Platinum Edition, protecting investments in Citrix NetScaler solutions.



NETSCALER SYSTEM ARCHITECTURE



Citrix NetScaler application delivery solutions are purpose-built using an advanced, multi-layered system architecture. At the core of this architecture is the AppExpert Policy Engine, which provides full, bi-directional visibility of Web application traffic and a common policy framework used by all NetScaler functional modules.

KEY FEATURES

<p>TRAFFIC MANAGEMENT</p> <p>Layer 4 Load Balancing</p> <ul style="list-style-type: none"> • Protocols supported: TCP, UDP, FTP, HTTP, HTTPS, DNS and SIP (over UDP) • Algorithms: Round Robin, Least Packets, Least Bandwidth, Least Connections, Response Time, Hashing (URL, Domain, Source IP, Destination IP, and CustomID), SNMP-provided metrics, Server Application State Protocol (SASP) • Session Persistence: Source IP, Cookie, Server, Group, SSL Session, SIP CALLID, Token-based • Server Monitoring: Ping, TCP, URL, ECV, Scriptable Health Checks, Dynamic Server Response Time • Link load balancing <p>Layer 7 Content Switching</p> <ul style="list-style-type: none"> • Policies: URL, URL Query, URL Wildcard, Domain, Source/Destination IP, HTTP Header, Custom, Payload values 	<p>Global Server Load Balancing (Optional)</p> <ul style="list-style-type: none"> • Algorithms: Site health, geographic proximity, network proximity • Site health checking on status, connection load, packet rate, SNMP-provided metrics <p>HTTP Rewrite</p> <ul style="list-style-type: none"> • Policy-based bidirectional rewriting of HTTP header and payload elements <p>APPLICATION ACCELERATION</p> <p>TCP Optimization</p> <ul style="list-style-type: none"> • TCP multiplexing • TCP buffering • Client connection keep-alive • TCP Windows Scaling • TCP Selective Acknowledgement <p>Citrix AppCompress (Optional)</p> <ul style="list-style-type: none"> • Flexible HTTP traffic compression (GZIP) • Compression of secure (encrypted) data 	<p>APPLICATION SECURITY</p> <p>DoS Attack Defense</p> <ul style="list-style-type: none"> • Continue service to legitimate users while protecting servers from attacks such as: SYN Flood, Tear Drop, Land, Fraggle, Zombie Connection, Ping of Death, and ICMP attacks <p>Packet Filtering</p> <ul style="list-style-type: none"> • Layer 3 and 4 Access Control Lists (ACL) • Network Address Translation (NAT) • Positive security via denial of non-configured services <p>NETWORK INTEGRATION</p> <ul style="list-style-type: none"> • Static routes • VLAN 802.3Q • Link Aggregation 802.3ad 	<p>SIMPLIFIED INSTALLATION AND MANAGEMENT</p> <p>User Interface</p> <ul style="list-style-type: none"> • AppExpert Visual Policy Builder • System set-up wizard • Load-balancing configuration wizard • Secure Web-based GUI • Dual-mode CLI, Telnet, SSH, Console • Real-time performance dashboard <p>Third-party Management Support</p> <ul style="list-style-type: none"> • SNMPv1, SNMPv2 and SNMPv3: NetScaler MIB and MIB-II support • API for automated application-driven configuration • Real-time Consolidated Logging • Offloads logging from application server to central location
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FEATURE SUMMARY

	OPTIMIZATION FEATURES	SECURITY FEATURES	SWITCHING FEATURES
Standard Features	<ul style="list-style-type: none"> • TCP offload • TCP buffering 	<ul style="list-style-type: none"> • Attack protection • SSL offload • Packet/Content filtering 	<ul style="list-style-type: none"> • Layer 4-7 load balancing • Layer 7 content switching
Optional Features	<ul style="list-style-type: none"> • Compression (HTTP) 		<ul style="list-style-type: none"> • Global Server Load Balancing

PLATFORM SPECIFICATIONS—NETSCALER APPLICATION SWITCH MODEL 7000

Dimensions

- 1.75"H x 17.25"W x 18.75"D
- 4.4cm H x 43.8cm W x 47.6cm D

Weight

- 28 Lbs (12.7 kg)

Power Supply

- 90-264VAC Full Range
- 47-63 Hz, 250W

Interface Ports

- 6x 10/100 BASE-T
- 2x 10/100/1000 BASE-T

Operating Ranges

- Temperature and Humidity 0-50C; 5%-95%

Certifications

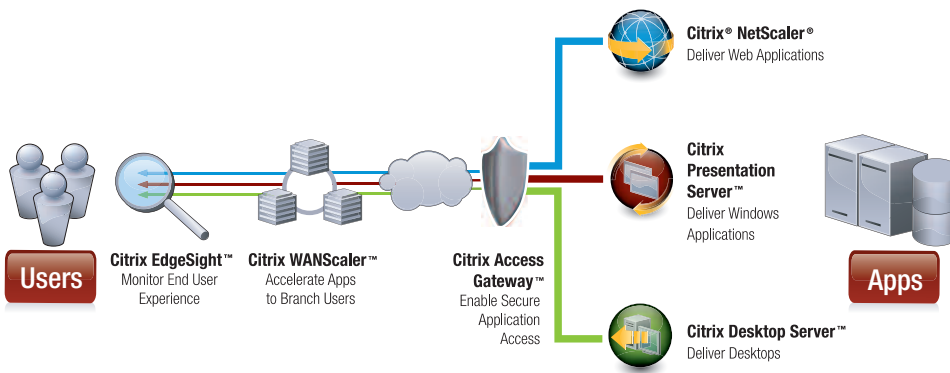
- Emissions: FCC (Part 15 Class A), DoC, CE, VCCI, CNS, AN/NES
- Safety: TUV-C, US
- Compliance: RoHS

Warranty

- 1 year hardware; 90 days software; extended support plans available.

Six Keys to Successful Application Delivery

Deliver Any Application to Any User with the Best Performance, Security, Cost and Agility



Citrix® NetScaler® for delivering Web-based applications — Optimize all web applications with an integrated networking solution that accelerates performance, improves security, and substantially reduces load on servers.

Citrix Presentation Server™ for delivering Windows-based Applications — Save millions in management costs and eliminate data security risks by installing all Windows applications in the datacenter and virtualizing or streaming them to end users over the network.

Citrix Desktop Server™ for delivering desktops — Reduce the cost, management and security risk of desktop computing by delivering Windows desktops virtually from the datacenter in a way that actually improves the end user experience.

Citrix Access Gateway™ for enabling secure application access — Provide a secure single point of access to all applications that automatically customizes access policies based on user scenarios.

Citrix WANScaler™ for accelerating applications to branch users — Instantly improve the performance of applications delivered over the wide area network while reducing bandwidth by up to 75%.

Citrix EdgeSight™ for monitoring end user experience — Ensure applications are meeting business metrics at all times by monitoring performance from the user's perspective.



About Citrix: Citrix Systems, Inc. (Nasdaq:CTXS) is the global leader and the most trusted name in application delivery infrastructure. More than 180,000 organizations worldwide rely on Citrix to deliver any application to users anywhere with the best performance, highest security and lowest cost. Citrix customers include 100% of the Fortune 100 companies and 98% of the Fortune Global 500, as well as hundreds of thousands of small businesses and prosumers. Citrix has approximately 6,200 channel and alliance partners in more than 100 countries. Annual revenue in 2006 was \$1.1 billion. Learn more at www.citrix.com.

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Optimize your applications

Find out how Citrix NetScaler application delivery solutions can make your Web applications run up to 15 times faster, while enhancing application security and dramatically reducing operational expenses.

Visit us at
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