



Zeus Traffic Manager

Version 7.0

Zeus Load Balancer

Version 7.0

Features and specifications

Zeus. Why wait...

Zeus Traffic Manager and Zeus Load Balancer

Product specifications

	Zeus Load Balancer	Zeus Traffic Manager
Management:		
Clustered, web-based GUI	Yes	Yes
Standards-based SOAP Control API	Yes	Yes
CLI and command line tools	Yes	Yes
Clustering:		
Active/active and active/passive	Yes	Yes
Cluster size	2 active units	64 active units
Back-end nodes and applications	Unlimited	Unlimited
Load balancing:		
Supported protocols	All TCP and UDP protocols; IPv4 and IPv6; HTTP, HTTPS, SOAP, FTP, SMTP, SIP, RTSP, DNS, custom, etc.	
Layer-7 load balancing	Yes	Yes
Session persistence	Yes	Yes
Application health monitoring	Yes	Yes
Performance monitoring	Yes	Yes
Application acceleration	Yes	Yes
Content caching	Option	Yes
SSL acceleration	Yes	Yes
Service protection	Yes	Yes
Traffic management:		
Traffic management rules:	RuleBuilder™ rules	RuleBuilder™ & TrafficScript™ rules; Java™ Extensions
Entire request and response control	No	Yes
Rate shaping	No	Yes
XML processing	No	Yes
Real-time analytics	No	Option
Service level monitoring	No	Option
Bandwidth management	No	Option
Application auto-scaling	No	Option
Application Firewall Module	No	Option
Infrastructure management:		
Zeus Multi-Site Manager (MSM)	No	Option
Global Load Balancing (option to MSM)	No	Option
Global Load Balancing rules		RuleBuilder™ & TrafficScript™ rules; Java™ Extensions
Supported platforms:		
Software	Linux x86, Solaris x86, Solaris SPARC	
Virtual Appliance	VMware, XenServer, OracleVM	
Cloud	Any supported Cloud infrastructure platform including Amazon EC2	

Zeus Load Balancer can be upgraded to Zeus Traffic Manager seamlessly by means of a new license key. No software installs are required and no downtime is incurred.

Zeus Multi-Site Manager is a separate management product to manage clusters of Zeus Load Balancer and Zeus Traffic Manager distributed across multiple sites.



Zeus Traffic Manager and Zeus Load Balancer

Product features

Management	<ul style="list-style-type: none">• Secure, resilient, web-based GUI, with wizards to simplify common tasks• Catalogs for easy storage and re-use of common configuration• Open standards SOAP API for remote and automated management• Command line interface and configuration management tools• Integration with enterprise authentication services for administration
Clustering	<ul style="list-style-type: none">• TrafficCluster: Two Zeus Load Balancer units or unlimited Zeus Traffic Manager units in any combination of active and/or passive combinations• Automatic configuration replication and automatic aggregation of logs/status/performance data within cluster• Performance scales linearly with number of Zeus units and number of cores/processors• Multi-hosted IP addresses allow for address sharing between multiple traffic managers (not on Solaris software)• Protection from multiple compound failures (Zeus Traffic Manager)
Layer-7 load balancing	<ul style="list-style-type: none">• All TCP and UDP protocols, including any SSL or TLS-wrapped TCP protocol, IPv4 and IPv6• Choice of load balancing algorithms and parameters including: round-robin, weighted round-robin, least connections, weighted least connections, fastest response time, random and perceptible• Cache affinity load balancing methods improve performance• Slow start for node introduction/reintroduction (perceptible load balancing)• Connection draining for removing nodes from server pools non-disruptively• IP transparency preserves original source address of client (not on Solaris software)
Session persistence	<ul style="list-style-type: none">• Wide choice of predefined and customizable session persistence methods• Automatic session detection dynamically sets up cluster-aware persistence• Application-specific session persistence methods: JSESSIONID and ASP/ASP.NET
Application health monitoring and server failover	<ul style="list-style-type: none">• Continually monitors the health and status of servers using built-in and custom application health monitors• Routes requests away from overloaded or unavailable servers to healthy servers with available capacity• Powerful, customizable actions (including SNMP, email, SYSLOG, SOAP and script) in the event of a service, node, pool or machine failure• Configurable failure pools and priority lists give full control of failover between servers and pools• Recovered servers are automatically and gradually reintroduced• Full fault reporting for failed transactions
Performance monitoring	<ul style="list-style-type: none">• Comprehensive, GUI-based real-time performance monitoring of traffic management and back-end infrastructure• Historical trending of service activity• Performance data available through SNMP and Control API interfaces for external visualization and monitoring
Application acceleration	<ul style="list-style-type: none">• Optimized connection offloading removes the overhead of handling sessions with slow clients• HTTP Optimizations select the best possible HTTP support for clients and servers independently• HTTP Multiplexing ensures rapid responses while minimizing connection load on servers• On-the-fly content compression applied to any compressible content type
SSL acceleration	<ul style="list-style-type: none">• High-performance software SSL stack optimized for x86 and SPARC processors• SSL decryption and back-end encryption for end-to-end security• Allows traffic management intelligence and load balancing to be applied to encrypted traffic• Support for selected FIPS 140-2 compliant tamper-proof key management devices
Service protection	<ul style="list-style-type: none">• Limiting of client concurrent connections and connection rates protects servers against Denial of Service and Distributed Denial of Service attacks• Server Concurrency Limiting prevents server overload and provides optimal request distribution• Heuristics protect against malformed URL attacks, buffer over-run attempts and invalid HTTP requests• IP black- and white-lists for basic access control policies
RuleBuilder	<ul style="list-style-type: none">• GUI-based creation of traffic management rules• Content-based traffic routing• URL, HTTP header and HTTP cookie rewriting• Rules are stored in the Catalog for re-use and easy deployment to multiple virtual servers
Content Caching (option)	<ul style="list-style-type: none">• Improve end-user service level and reduce load on servers by automatically caching commonly accessed web content• High-speed in-memory caching may be optionally backed by high-capacity solid-state disk-based caching for less frequently requested content• Automatic management of page variants for compression, language negotiation etc

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Additional product specifications

TrafficScript	<ul style="list-style-type: none">• Build sophisticated policies to inspect, manipulate and route transactions• Full transaction inspection for all TCP/UDP traffic• Automatically applies all HTTP/1.1 optimizations, including keepalive handling and decompression/reassembly of compressed and chunked HTTP content• Native processing of XML data using XPath, XSLT and Schema and DTD validation• TrafficScript allows for fine-grained control of content caching, with differentiated caching of pages to ensure separation of public/private content, user access rights, etc
TrafficScript use cases	<ul style="list-style-type: none">• Analyze and rewrite client requests and server responses to optimize transactions, detect protocol and security anomalies, work around server errors and to perform response assembly• Base traffic decisions on origin, destination, content type or any part of the transaction data• Prioritize and manage traffic based on context, e.g. transaction value, client location, user activity, service performance• Apply session persistence and routing based on any parameter or value in the request
Java Extensions	<ul style="list-style-type: none">• Develop traffic management policies using Java or any JVM-based language• High-performance integration with the Zeus traffic management kernel• Allows for use of any Java class libraries, e.g. database access, document watermarking etc
Request rate shaping	<ul style="list-style-type: none">• Protect application infrastructure from being overwhelmed with high volumes of requests• Define maximum limits on request rates, globally or per user and per request-type• Apply rate limits conditionally based on context using TrafficScript• Enforce differentiated levels of service per user or by class of users• Prevent malicious or over-active clients from impacting shared services
Real-time analytics (option)	<ul style="list-style-type: none">• Understand end-user transactions and their effect on your application in real-time• Record and visualize full transaction headers and detailed timing information for each transaction• Allows operational staff to drill down into recent transactions to identify anomalies and faults• Gives development staff full visibility of client-server interactions, optimize cache and compression policies, etc• Rapidly fix problems and deal with problem traffic based on real-time analysis
Service level monitoring (option)	<ul style="list-style-type: none">• Monitor compliance to user-defined service levels on a real-time basis• Select transactions to be monitored on a per-service basis or using TrafficScript/RuleBuilder• Monitor performance using GUI, SOAP and SNMP• Configure alerting and custom remedial actions if performance falls outside of service level limits• Apply traffic management policies selectively based on service performance, e.g. to prioritize key transactions and limit others
Bandwidth management (option)	<ul style="list-style-type: none">• Maintain level of service for key users, control bandwidth usage in a shared environment and restrict impact of busy clients or data-heavy services• Apply bandwidth limits on a per-connection, per group of connections or per service basis• Apply bandwidth classes selectively to traffic using TrafficScript; for example, apply a total limit for all video downloads• Bandwidth limits may be applied per-traffic-manager or may be cluster-wide
Application auto-scaling (option)	<ul style="list-style-type: none">• Maintain service levels and manage costs by automatically scaling applications up or down on Virtual and Cloud infrastructures in response to user load• Monitors service performance against desired SLA thresholds to determine when to add or remove application units• Fully integrated with selected elastic platforms, including Amazon EC2, Rackspace, VMware vCloud Express beta; additional platforms supported via partner integration
Application Firewall Module (option)	<ul style="list-style-type: none">• Deploy a PCI DSS compliant Web Application Firewall to secure your application against OWASP Top 10 and other vulnerabilities• Refer to Zeus Application Firewall Module brochure for further information



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