

DATASHEET  
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# WebScale Enterprise

World-class Cloud Hosting and Management  
for Global Brands

Delivering exceptional user experiences takes more than a great-looking website. Discerning consumers, particularly those loyal to global brands, demand an online shopping experience that is always available, no matter the volume of traffic, always fast and above all else, highly protective of their personal data.

Many ecommerce merchants, however, particularly those stuck in traditional static hosting or unmanaged cloud environments struggle with the same challenges: website downtime, slow page loads, lack of adequate security to defend against the latest cyber threats, and escalating costs. While many have transitioned to the cloud, the ongoing and efficient management of that infrastructure can be highly challenging without the support of an experienced service provider.

Merchants on Webscale, “the safest cloud hosting for ecommerce,” have access to the same technology stack, security and capabilities that global brands, like Amazon and Walmart, have built in-house, without having to invest in a huge team and spend hundreds of millions of dollars in infrastructure. They are also spared from management challenges, safe in the knowledge that Webscale’s world-class team of cloud-certified ecommerce experts are focused, 24x7x365, on delivering an experience that improves revenues, conversions, recall, and loyalty.

## WebScale Enterprise – Powering Global B2B enterprises and B2C Brands

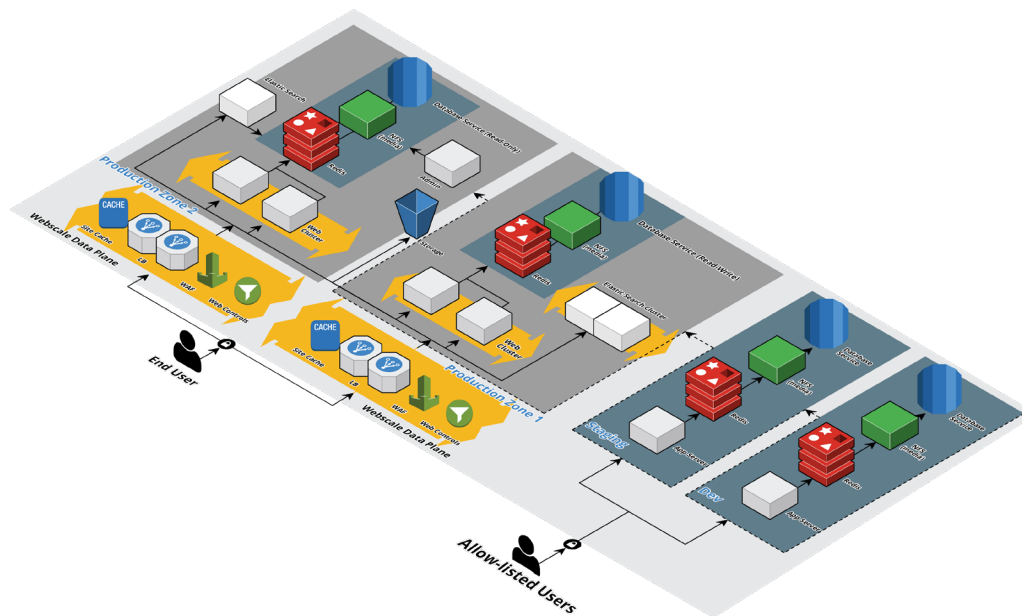
The Webscale Enterprise cloud hosting plan is the company’s flagship offering, with real-time, predictive auto-scaling and enhanced performance optimization and security features. Webscale Enterprise is custom-designed to deliver exceptional user experiences for large ecommerce businesses with high volumes of traffic, as well as B2B enterprises.

The Webscale brand is synonymous with hyperscale cloud hosting, automation and management, as well as its “customer-first” approach to support. With experience gained from managing thousands of storefronts globally on its platform, Webscale’s wide range of products and services address the challenges faced by ecommerce merchants today, while also preparing them for growth as their business scales.

## Plan Summary

- B2B or B2C
- Custom visitor counts per month
- **1 or more application clusters or backend instances**
- **1 production application cluster**
- **1 Cron/NFS single server**
- **1 staging application cluster**
- **1 development application cluster**
- *Optional PWA deployment*
- Elastic Data Plane (including Proxy, WAF, Load Balancer)
- HA Architecture
- Webscale Portal Access
- Daily or Premium Backup
- 24x7x365 Premium Support with 15-minute response time SLA for critical incidents
- Additional SaaS Functions

## Reference Architecture



In Webscale's decentralized architecture, the stateless application tier scales to a pre-set maximum depending on traffic demands. This configuration is based on a deployment within the public cloud to reduce overall costs and to take advantage of rapid scaling capabilities, if needed.

**Cloud Hosting options:** Any cloud provider, including AWS, Google Cloud Platform, Microsoft Azure, Alibaba Cloud, etc.

**Ecommerce Platforms:** : Magento 2.x Open Source and Commerce, WordPress, WooCommerce, Drupal, Joomla, HCL Commerce (formerly IBM WebSphere), SAP Hybris, Oracle Commerce, custom applications, etc.

# Key Features



## Availability

### Predictive Application Auto-scaling

Webscale offers unlimited, real-time, and predictive auto-scaling, capable of forecasting traffic surges and scaling ahead of demand automatically to ensure 100% uptime, at all times. Webscale technology keeps page load times consistent, and websites fast and available, regardless of the increasing traffic volume.

### End-to-end High Availability

The entire Webscale application is architected with N+1 redundancy, is split across two availability zones and uses fault-tolerant cloud services to ensure application uptime even around cloud provider outages. Webscale uses a database service that is synchronously replicated across the two zones to ensure transaction consistency.

### Rate Limiting

Webscale's rate-limiting protects the application and infrastructure from sudden increases in site traffic due to Distributed Denial of Service (DDoS) attacks, brute-force login attempts, etc. by setting a limit on it.

### Daily Application Backup

Webscale makes a copy of a customer's entire backend – both the application and data tiers – on a periodic basis. This makes it easier to overcome downtime caused by code errors, by instantly rolling back to a pristine application backup.

### L7 Load Balancing

Webscale, in its role as a reverse proxy to the application, distributes the load evenly across the application servers, ensuring no one server is overloaded at any point. This load balancing maximizes efficiency of the application, reduces future infrastructure spend, and more importantly, ensures high uptime and performance.

### Custom Maintenance Mode

Webscale can enable a customer-branded microsite as a custom maintenance page for shoppers. This provides a more positive user experience and reduces bounce rate.



## Security

### OWASP Protection

Webscale automatically protects web applications from the most common vulnerabilities, such as SQL Injections, Cross-Site Scripting (XSS), and other OWASP Top 10 threats.

### Web Controls

Web Controls provide a powerful way of setting up unlimited custom rules that define how to handle web traffic and the nature of your site's response to specific behavioral patterns. It is a limitless custom rules engine that lets merchants set up and automate many routine tasks like redirects and security protections; without such a tool, merchants would need to create large quantities of custom code to set up behaviors on the frontend and backend of their sites and applications.

### Application-specific WAF Rules

Webscale's security stack has application awareness, including specific optimizations for ecommerce and enterprise web applications. Each application may have different security needs and the ability to apply custom security policies is critical for application owners and IT. Webscale enables pre-defined, pre-tested security rules based on the application, minimizing the need for administrators to discover, define, and maintain the rules themselves.

### DDoS Shield Mode

Webscale identifies and blocks millions of attacks daily from all over the world, automatically learning from each new threat. Webscale's DDoS Shield Mode offers single-click protection when under a suspected DDoS attack or a flood of bots by instantly forcing a challenge that only humans can validate.

### App Shielding

App Shielding ensures attackers cannot circumvent Webscale's security solutions to access and exploit the backend directly. It is a single-click security mechanism that only allows traffic from the Webscale Data Plane to access the application, while blocking all other access paths.



## Performance

### HTTP/2

Webscale supports HTTP/2, by mandating support for TLS, enabling full request and response multiplexing, minimizing protocol overhead via efficient compression of HTTP header fields, and adding support for request prioritization and server push.

### CDN Caching and Cache Control

Webscale accelerates sites and applications with in-built intelligent caching in its data plane, and by including a globally deployed cloud CDN. Merchants can also specify browser caching policies in both client requests and server responses. Policies can include how a resource is cached, where it's cached, and for how long.

### Site Splice

Site Splice enables intelligent “routing” of traffic to specific components running within the backend infrastructure or through 3rd party applications. This enables the use of cloud services for storage and the caching of 3rd party libraries to improve performance and allow flexible architectures.

### Content Optimization

Webscale uses advanced content optimization techniques such as JavaScript minification or combining of assets, to optimize web page asset delivery, reduce round trips and page size, and improve performance. Webscale's Web Controls give administrators the ability to further enhance performance by configuring third-party assets to be deferred or downloaded in parallel.

### TLS Offload

Enabling TLS offload terminates all HTTPS traffic at Webscale's data plane, thus freeing the web server to handle other application delivery requirements, and improving site performance. Security, in turn, is not compromised as the Webscale Data Plane and the application backend are in the same zone and regions of the cloud provider.

### Dynamic Site Cache

Webscale's Dynamic Site Cache delivers lightning fast page loads for users when they visit a storefront for the first time, by allowing caching of HTML pages and content for anonymous or non-logged in sessions.



## Security

### Address Sets

Address Sets are groups of IP addresses on which site administrators can perform specific actions based on business and security needs. These enable site owners or administrators to easily configure security policies, identify trusted sources as well as attackers, group suspicious intent, create block/allow lists, block certain types of threats, etc.

### Malware Scanner

The Webscale Malware Scanner automatically detects several types of malicious threats, including viruses, trojans, malware, and spyware, across platforms. Our 24x7 security operations team uses it to scan the entire web application environment, alert site administrators to security threats lurking within, and implement measures to mitigate them.



## Industry-leading Support

Webscale's award-winning 24x7x365 DevSecOps support team is staffed by multi-cloud certified, ecommerce experts that have migrated, and manage, thousands of online storefronts, across platforms such as Magento, WordPress, SAP Hybris, Oracle Commerce, Drupal, Joomla, Ruby and custom applications. Unlike many traditional hosting providers, Webscale's team is certified in complicated, multi-cloud and scalable environments, including Amazon Web Services (AWS), Google Cloud Platform, and Microsoft Azure. With more than 50 cloud accreditations and certifications, industry-leading response time SLAs, and seven years of flawless execution, particularly around the holidays, Webscale offers the industry's highest standards of support. This delivers the perfect extension to a merchant's technology and support teams.



### The World's Fastest Cloud Migration

Webscale has redefined cloud migration with a new standard for simplicity, predictability, and ongoing management of your application in the cloud. The Webscale architecture auto-provisions your system so future deployments, staging environments, rebuilds, and new sites will be simple, one-click, painless procedures.

Other benefits include:

- True conversion of your site to cloud-ready
- Scale-out instead of traditional hardware hosting scale-up
- Hassle-free, seamless transitions to stateless application architecture
- Experienced project management
- Proven migration plans that minimize downtime

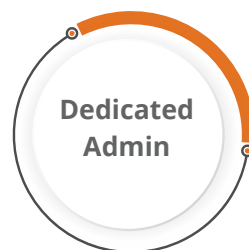
During the migration process, your current environment continues to function at all times, while we build your new hosting environment in the cloud. Once the new environment is complete or "Webscale Ready," we allow you to test and confirm its functionality. At the right time, we work with you to schedule a zero-downtime cutover.



### Visibility and Control Portal

Webscale's visibility and control portal is the only solution that delivers an integrated view of the ecommerce application, including site infrastructure, logs, traffic, security posture, cyber threats, good and bad actors/bots, availability, performance, and more – through a single pane of glass. It replaces the need for broader application tools for infrastructure or application visibility alone, where the diagnosis of issues becomes a complicated triangulation process.

## Optional Add-ons



### • Cloud Security Suite

Webscale Cloud Security Suite is a comprehensive security add-on that enables 360-degree security protecting applications from cyber threats from the browser all the way to the backend. It includes managing content security policies (CSP) and its violations, to protect against cross-site scripting (XSS) attacks. It also protects the application backend with App Shielding and Intrusion Detection. Bot Management is also an included feature of Cloud Security Suite.

- **Re-platforming**

Webscale provides infrastructure support when merchants are migrating across major versions, or from one ecommerce platform to another, while providing complete application visibility through the Webscale portal and working with them through the entire re-platforming process.

- **Bot Management**

Webscale Cloud Bot Manager offers robust protection against the threat of malicious bots. A cloud-native security solution, it monitors the behavior of bots accessing any web-based application, identifies anomalous activity, and takes the appropriate action. The identification of good and bad bots is automated and occurs in real-time, ensuring high application availability to real users.

- **Image Management**

Webscale's Cloud Image Manager automates image optimization and management for merchants, ensuring online buyers receive the right image for their specific device, every time, and ideally always from the cache closest to the end user. Cloud Image Manager compresses images and reduces bytes delivered, improving site speed and conversion rates especially for mobile users, while saving costs related to performing these tasks manually.

- **Application Load Testing**

Webscale Application Load Testing service is aimed at ensuring an online storefront's code works from the front door to the checkout, and does not lead to potential outages.

- **Premium Support**

Support response times delivered to merchants that opt for Webscale Premium Support are significantly faster (guaranteed by SLAs). Their cases (issues) and calls get routed to the top of the support queue.