

Four Ways NGINX Excels at Handling Retail Traffic Spikes

For online retailers, every second counts. Downtime or slow website performance translates directly to lost revenue. According to [Gremlin](#), Amazon.com loses more than \$220,000 every minute the site is down. Downtime sends dollars out the virtual door, with more than 40% of consumers saying they permanently abandon a webpage that takes more than 3 seconds to load.

Fortunately, NGINX has the easy-to-deploy tools your DevOps team needs to create a seamless and secure shopping experience for your customers.

“(It’s) about making sure we’re up when everybody wants to buy things, and as a global company, that’s really at any point in the day. . . Our web server shouldn’t be an issue, and that’s why we use NGINX.”

- Principal Engineer for global e-commerce retailer

Four Ways to Optimize Your Site and Prevent Server Overload with NGINX



1. Improve web page response times with caching

When visitors flock to your website, the traffic can overload your servers. Reduce the strain with NGINX [content caching](#). NGINX stores server responses and serves subsequent requests for the same information directly from the cache. Caching gets responses to users faster and removes process redundancies to reduce the load on your upstream servers. Depending on your application, [content caching can reduce the volume of internal traffic by a factor of up to 100](#), reducing the hardware capacity needed to serve your app.



2. Manage visitor traffic with traffic control

At the busiest shopping times, you need to prevent server overload. NGINX Plus and NGINX Ingress Controller offer a range of methods to limit online traffic so each active request has the resources it needs.

- [Concurrency limits](#) restrict the number of concurrent requests forwarded to each server.
- [Rate limits](#) restrict the number of requests from each client per second or per minute.
- [Bandwidth limits](#) control the amount of data a client can download on each connection.



3. Increase agility with on-demand elastic scaling

If you simply don’t have enough resources to handle the load, caching and traffic control only help so much. NGINX’s [lightweight, event-driven architecture](#) maximizes app delivery performance with your existing infrastructure. Deploy NGINX and your apps in cloud or Kubernetes environments to take advantage of autoscaling, and use the NGINX Plus API to [dynamically scale](#) backend servers.



4. Protect customer data with built-in security

In 2020, online retailers experienced more than [twice as many account takeover \(ATO\) attacks as any other industry](#). Criminals used leaked credentials in 79% of the attacks because that method has a higher success rate. [NGINX Ingress Controller](#) and [NGINX Service Mesh](#) give you visibility to catch vulnerabilities early. [NGINX Plus](#) and NGINX Ingress Controller support a robust single sign-on (SSO) option that’s easy to configure, and [NGINX App Protect](#) is a lightweight, powerful WAF that protects above and beyond current compliance requirements.

To discover how NGINX can help you, visit nginx.com.

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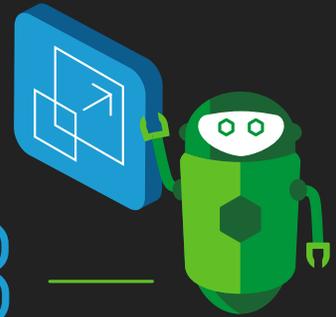
01

Improve web page response times with caching



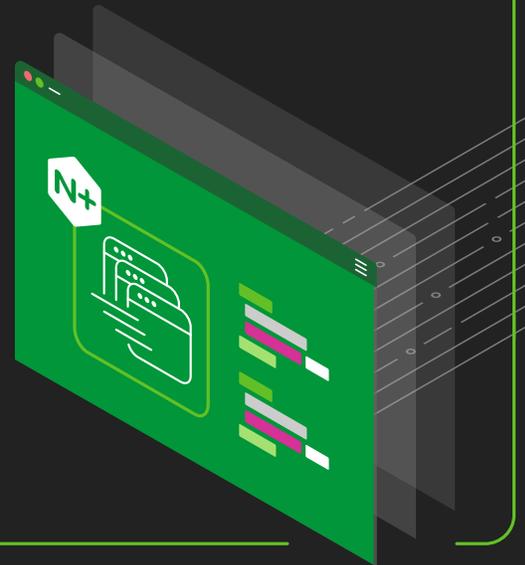
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Manage visitor traffic with traffic control



03

Increase agility with on-demand elastic-scaling



04

Protect customer data with built-in security



Click here to learn more at nginx.com.