NGINX and Signal Sciences

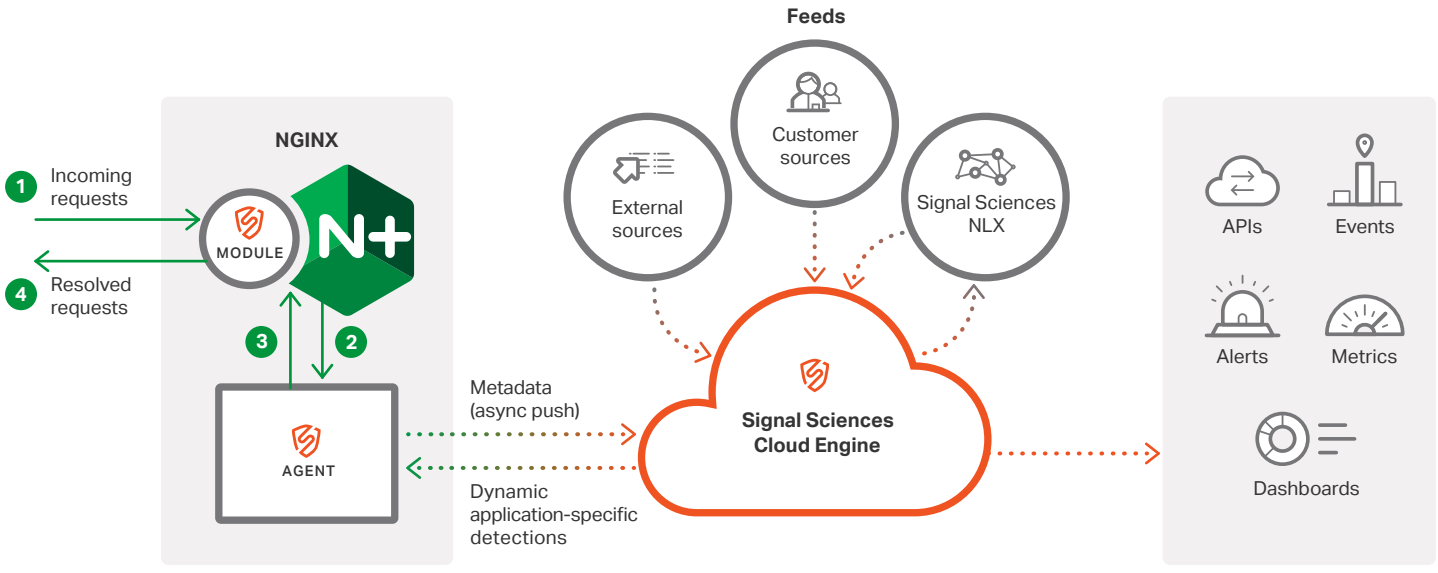
HIGH-PERFORMANCE APPLICATION DELIVERY AND SECURITY

As companies look to utilize the public cloud and microservices, they need a new set of tools. Hardware load balancers and web application firewalls (WAFs) can take weeks to update and are difficult to manage, slowing down business operations and frustrating engineers.

NGINX and Signal Sciences have joined together to create a combined API gateway, web server, software load balancer and next-gen WAF technology offering. The joint solution is DevOps-friendly and can be updated in seconds, and the Signal Sciences proprietary SmartParse detection method blocks attacks with little or no maintenance and tuning.

Joint Benefits

- **Autoscaling:**
  - Software that elastically scales and provisions automatically with your application using config management tools
- **Agility:**
  - NGINX Plus and Signal Sciences can be up and running in minutes, compared to 4–6 weeks for other products
- **Improved Performance**
  - Signal Sciences installs natively within NGINX and doesn't introduce another network hop
  - With SmartParse detection technology instead of regexes, detection is fast and accurate
- **Cost Savings**
  - More than 80% cost savings compared to F5 BIG-IP with ASM module
- **Flexibility**
  - Use anywhere, unlike virtual appliances with limited feature sets and same pricing as hardware
  - Signal Sciences Power Rules provides a flexible user interface to define, monitor, and take action on any web application or API transaction, providing protection beyond OWASP injection attacks that comes standard out of the box



Protect and deliver your applications with NGINX Plus and the Signal Sciences WAF module

Learn more at **nginx.com**

How it Works

Incoming user requests are handled by NGINX Plus. NGINX Plus performs SSL termination, rate limiting, authentication, routing, and load balancing for all traffic. NGINX Controller provides centralized monitoring and management of NGINX Plus. Before being routed to the backend application, requests are first sent to Signal Sciences modules and agents.

Signal Sciences agents are binaries designed to handle heavy loads while making quick and accurate detections and decisions locally. Agents sit in the flow of traffic and provide visibility into not only requests that come in, but also server responses and anomalies that show how the application is behaving.

Coupled with Signal Sciences' lightweight dynamic module for NGINX Plus, the agent-module pair ensures performance and reliability of the protected site. The module's sole job is to pass requests through to the agent and receive and enforce decisions from the agent to allow the request through to the application or log/block it (depending on the mode set in Signal Sciences Console). NGINX Plus will return a 406 response if in blocking mode, or it will allow the request through to the client.

Signal Sciences Cloud Engine continues to update the agent with intelligence out of band. Data sources include insights from data collected from agents deployed across all Signal Sciences customers, forming its Network Learning Exchange (NLX).