F5 NGINX Solutions

Cloud-Native, Kubernetes-Friendly Open Source and
Enterprise Solutions to Deliver Apps and APIs

What Is NGINX?

In developer communities, NGINX is synonymous with NGINX Open Source, the most-used web server and reverse proxy in the world. NGINX is known for being lightweight, reliable, high-performance, and of exceptional quality.

However, NGINX embodies these qualities in more use cases than just proxying. We provide a suite of free and paid solutions that help everyone from start-ups to tech giants securely deliver apps and APIs from edge to cloud.

NGINX is for organizations that:

- Prioritize lightweight, hardware-agnostic infrastructure as code
- Value and use open source software across their stack
- Need a high degree of control over how their technology stack is deployed
- Require their tech stack to "fit" across any deployment model or cloud provider

NGINX is known for being lightweight, reliable, high-performance, and of exceptional quality.

Why Use NGINX

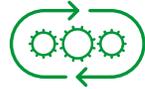**Choose Open Source When Your Project Requires Simple, Flexible, and Powerful Tools**
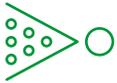
Adaptable
Reduce complexity and tool sprawl with a consolidated stack

- Portable and vendor-agnostic
- Deploy anywhere
- Multi-purpose proxy

Stable
Focus on apps and APIs, not the tools used to deliver them.

- Stable development philosophy
- Production-ready
- Reliable and resilient

Lightweight
Achieve better performance for less money.

- Lower resource costs
- More simultaneous connections
- Complex use cases without complexity

Use a Commercial Solution When the App Is Business-Critical

Scalability
Intelligently scale NGINX instances and services.

- Configuration management
- Adapt to traffic surges
- High availability

Insights
Improve business decisions, troubleshooting, and SLAs.

- 200+ metrics
- Forecast future demand
- Visualize security

Governance
Ensure consistent oversight and empower developers.

- RBAC and policy controls
- Developer self-service
- Compliance

Security
Achieve the robust security your enterprise demands.

- End-to-end encryption
- CI/CD WAF and DDoS defense
- CVE and cert management

App Connectivity Stack

The Goal: Deliver Monolithic and Microservices Apps with Reliability, Speed, and Security

App Challenges

Delivering apps in hybrid-cloud and multi-cloud environments is critical to the growth of your business, but presents significant barriers:

- **Complexity** – Distributed environments generate tool sprawl, steep learning curves, and visibility issues

- **Legacy technology** – Monolithic apps lack the agility and resilience needed to fulfill user expectations for digital experience

- **Inadequate security** – Traditional security models do not protect distributed apps from dynamic, emerging threats

- **Inefficient practices** – Teams waste time manually configuring tools and building non-functional requirements into apps

The Solution

The NGINX App Delivery Stack gives distributed teams holistic control of app development and delivery through:

- **Scale** – Automate and affordably maintain a consistent user experience regardless of traffic fluctuations

- **Observe** – Gain actionable insights into app traffic, resource usage, and infrastructure health

- **Secure** – Integrate comprehensive security and identity controls into pipelines and full application lifecycles

- **Govern** – Ensure consistent traffic management and security policies across the enterprise

Key NGINX Use Cases

- Load balancing
- Web 2.0, including QUIC
- Security as code
- Observability

Products in the Stack

NGINX Open Source and NGINX Plus (as web server, load balancer and reverse proxy, content cache, and media server), NGINX Management Suite Instance Manager, NGINX Management Suite App Delivery Manager, NGINX App Protect

API Connectivity Stack

The Goal: Deploy, Configure, Manage, and Secure APIs Across Multiple Environments

API Challenges

Without an effective API strategy in place, organizations can't realize the full value of their APIs because of problems like:

- **No single source of truth** – Developers struggle to find APIs and up-to-date documentation

- **Inefficient development** – Functionality is duplicated across APIs and services

- **Reduced visibility** – Level of visibility into API traffic and configurations is inconsistent

- **Elevated threats** – Unsecured API endpoints are easy targets for attacks

The Solution

The NGINX API Connectivity Stack enables developers to discover, use, publish, and manage APIs while providing Platform Ops with:

- **Scale** – Deliver uncompromised performance and reliability with lightweight, real-time NGINX API gateways

- **Observe** – Gain visibility into API traffic and configurations across distributed teams and environments

- **Secure** – Ensure consistent oversight for APIs with global policies and fine-grained controls for API owners

- **Govern** – Protect API endpoints from unauthorized access with authorization and authentication policies

Key NGINX Use Cases

- API security
- API management
- API governance
- API gateway

Products in the Stack

NGINX Open Source and NGINX Plus (as API gateway),
NGINX Management Suite API Connectivity Manager, NGINX App Protect

Connectivity Stack for Kubernetes

The Goal: Reduce Kubernetes Complexity and Improve Customer Experiences with Better Visibility, Uptime, and Security

Kubernetes Challenges

Though it's a powerful solution for container management and orchestration, Kubernetes can cause:

- **Insufficient visibility** – Incomplete app health and performance data causes downtime and difficult troubleshooting
- **Inadequate security** – Traditional security models don't apply to Kubernetes
- **Slow app releases** – Developers are stalled by limited governance and self-service capabilities
- **Complexity and tool sprawl** – Distributed environments are harder to operate, manage, and troubleshoot

The Solution

The NGINX Connectivity Stack for Kubernetes enables organizations to scale, observe, secure, and govern Kubernetes apps via:

- **Scale** – Deliver improved customer experiences under peak workloads
- **Observe** – Gain better visibility and insight into app health and performance with granular real-time and historical metrics
- **Secure** – Streamline and unify protection of your apps no matter where you run Kubernetes
- **Govern** – Improve governance and self-service capabilities across multi-tenant development teams with fine-grained access control

Key NGINX Use Cases

- Zero-trust security
- API gateway
- Load balancing
- Observability

Products in the Stack

NGINX Open Source, NGINX Ingress Controller, NGINX Service Mesh, NGINX Kubernetes Gateway, NGINX Management Suite Instance Manager, NGINX App Protect

About the Products

NGINX Develops and Maintains Eight Free Tools:

- **NGINX Open Source** – Simplify traffic management with a proxy that can handle everything from web serving to API traffic

- **NGINX JavaScript** – Extend NGINX with sophisticated configuration solutions for server-side use cases and per-request processing

- **NGINX Agent** – Manage NGINX deployments with companion software that provides observability and a config API

- **NGINX Unit** – A lightweight and versatile solution for running web applications and APIs

- **NGINX Amplify** – Get real-time diagnostics for NGINX Open Source and NGINX Plus

- **NGINX Ingress Controller** – Manage app connectivity at the edge of a Kubernetes cluster

- **NGINX Kubernetes Gateway** – Experiment with the new Gateway API using NGINX as the data plane

- **NGINX Service Mesh** – Implement developer-friendly service-to-service connectivity, security, orchestration, and observability

NGINX Offers Four Paid Products:

- **NGINX Plus** – Achieve granular traffic management with dynamic load balancing and low-latency API gateways

- **NGINX App Protect** – Ensure consistent oversight for apps and APIs with Layer 7 WAF and DDoS protection

- **NGINX Ingress Controller** – Manage app connectivity at the edge of a Kubernetes cluster with API gateway, identity, and observability capabilities

- **NGINX Management Suite** – Simplify large deployments of NGINX instances with centralized management, troubleshooting, security, and visibility

Purchase software and SaaS options, including support, direct from F5 and through major cloud marketplaces.

SECURELY DELIVER APPS AND APIs FROM EDGE TO CLOUD

Consolidate your stack with the NGINX portfolio of cloud-native,
Kubernetes-friendly open source and enterprise solutions for apps and APIs.

Find out more at **nginx.com/solutions**