**F5 NGINX**

# NGINX Today and Tomorrow

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**NGINX**
Part of F5

# Agenda

NGINX Open-Source Updates

Enterprise Use Cases

NGINX One

Roadmap – What is Coming

NGINX One Cloud Console Demonstration

# NGINX [**en**-jin-eks]

Web server software (available in open source and commercially supported versions) which can also be used as a reverse proxy, load balancer, API gateway, and content cache.

f5

# Open Source is still at the heart of what we do

**NGINX**

Open source changed the world. NGINX is proud to be part of that change, since 2004.

Fork 6.7k · Star 21k

**NGINX Ingress Controller**

Since 2014, the original Ingress Controller for Kubernetes.

Fork 8.2k · Star 17.2k

**NGINX JavaScript**

Extend NGINX functionality using familiar JS syntax

Fork 139 · Star 965

**Gateway Fabric**
An NGINX Project

NGINX Gateway Fabric is an open-source implementation of the Gateway API using NGINX.

Fork 90 · Star 463

**Unit**
An NGINX Project

NGINX Unit is a lightweight open-source server that runs application code in eight languages.

Fork 323 · Star 5.3k

**Agent**
An NGINX Project

NGINX Agent is a companion daemon for your NGINX Open Source or NGINX Plus instance

Fork 65 · Star 247

# The official repository of NGINX is now GitHub

**NGINX**

github.com/**nginx**

The NGINX repository has been in Mercurial for over 20 years.

We have maintained a read-only version in GitHub for some time.

With Git and GitHub specifically becoming the chosen location of so many of the world's developers, we will be officially moving NGINX Open-Source development to GitHub in September.

This will make the development of open-source NGINX more transparent and accessible.

After the migration, we will start accepting pull requests in GitHub, you can report a bug, submit an enhancement or feature request directly in GitHub using the "Issues" tab, ask a question or answer a question, participate in discussion using GitHub Discussions and more.

# Bring WASM applications to life with NGINX Unit



# Support for NGINX modules built in Rust



# Open Telemetry tracing in NGINX

# Enterprise

# Use Cases

# NGINX product portfolio

## USE CASES

- Application Delivery
- Kubernetes and Containers
- API Connectivity
- Application and API Security

**Secured by**
NGINX App Protect

**NGINX**
Part of F5

**Core | Data Plane**

**N+** NGINX Plus

**N** NGINX Open Source

**N** NGINX Gateway Fabric

NGINX Ingress Controller

Kubernetes Solutions

# NGINX as a Service on Microsoft Azure

Co-built by F5 and Microsoft, NGINXaaS is an as-a-service version of NGINX plus built to provide native Azure exp

- NGINX Plus configurations can be seamlessly ported and reused in NGINXaaS for Azure

- Leverage the Azure Portal, API/SDK, the CLI, and Terraform to manage your NGINXaaS deployment

- Tightly integrated with Azure 1st party services such as Key Vault, Monitor, Log Analytics, and Storage

- Available exclusively through the Azure marketplace
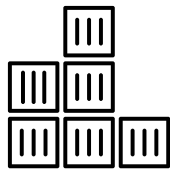
- NGINX App Protect WAF now available



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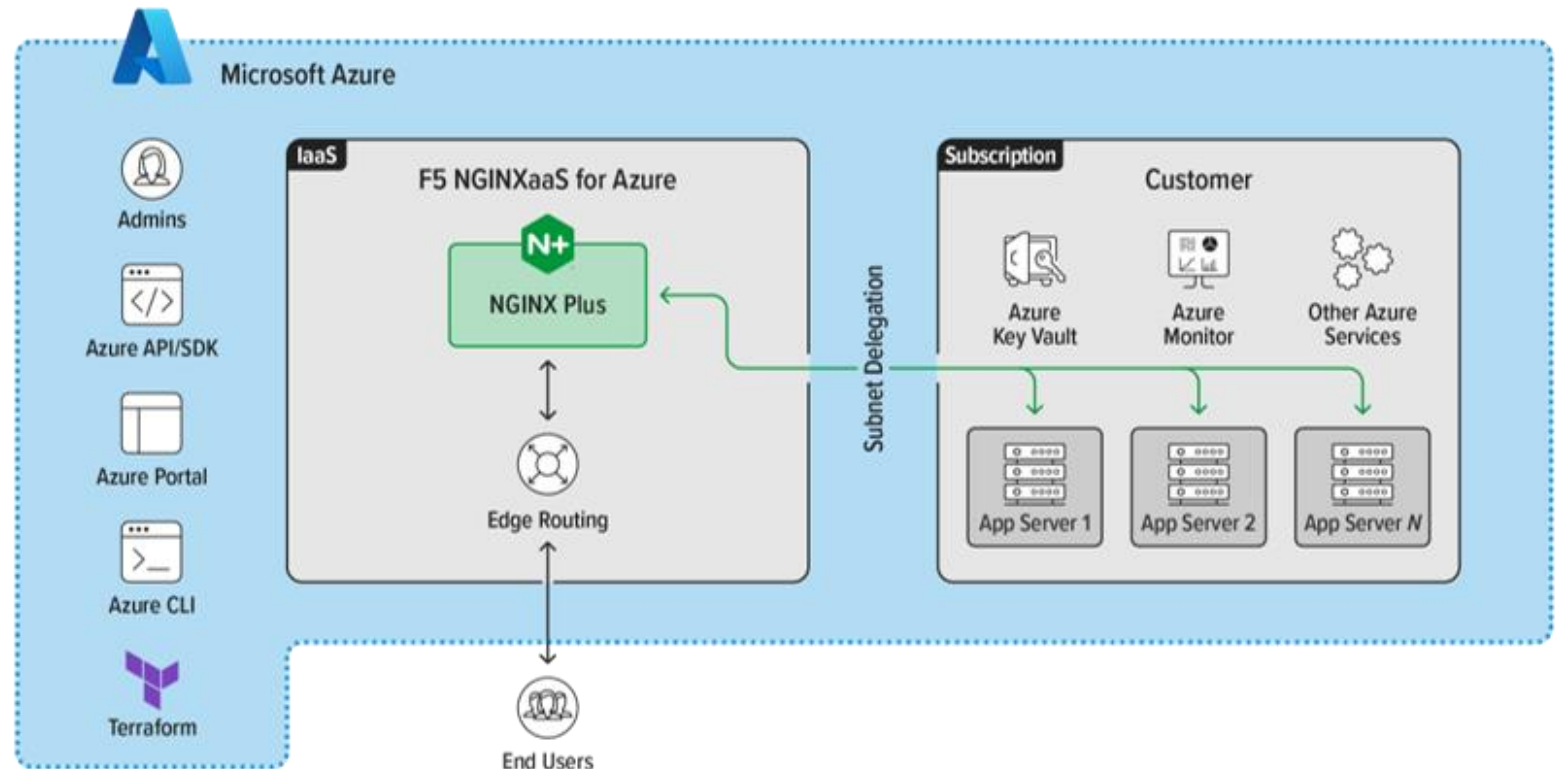
# Prominent Customer Use Cases

## Reducing Risk with NGINX Plus

A major technology company deploys their application stack for each customer to reduce exposure and ensure strict data controls. They have deployed over 50,000 NGINX Plus instances in containers to achieve this more secure posture.
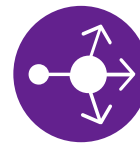
**50,000+**

NGINX Plus
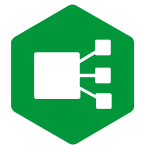
## Kubernetes Ingress behind BIG-IP

A global shipping company is using F5 BIG-IP for coarse load balancing and WAF, with NGINX Ingress Controller to route traffic to specific applications. With a single vendor they can achieve all their use cases.
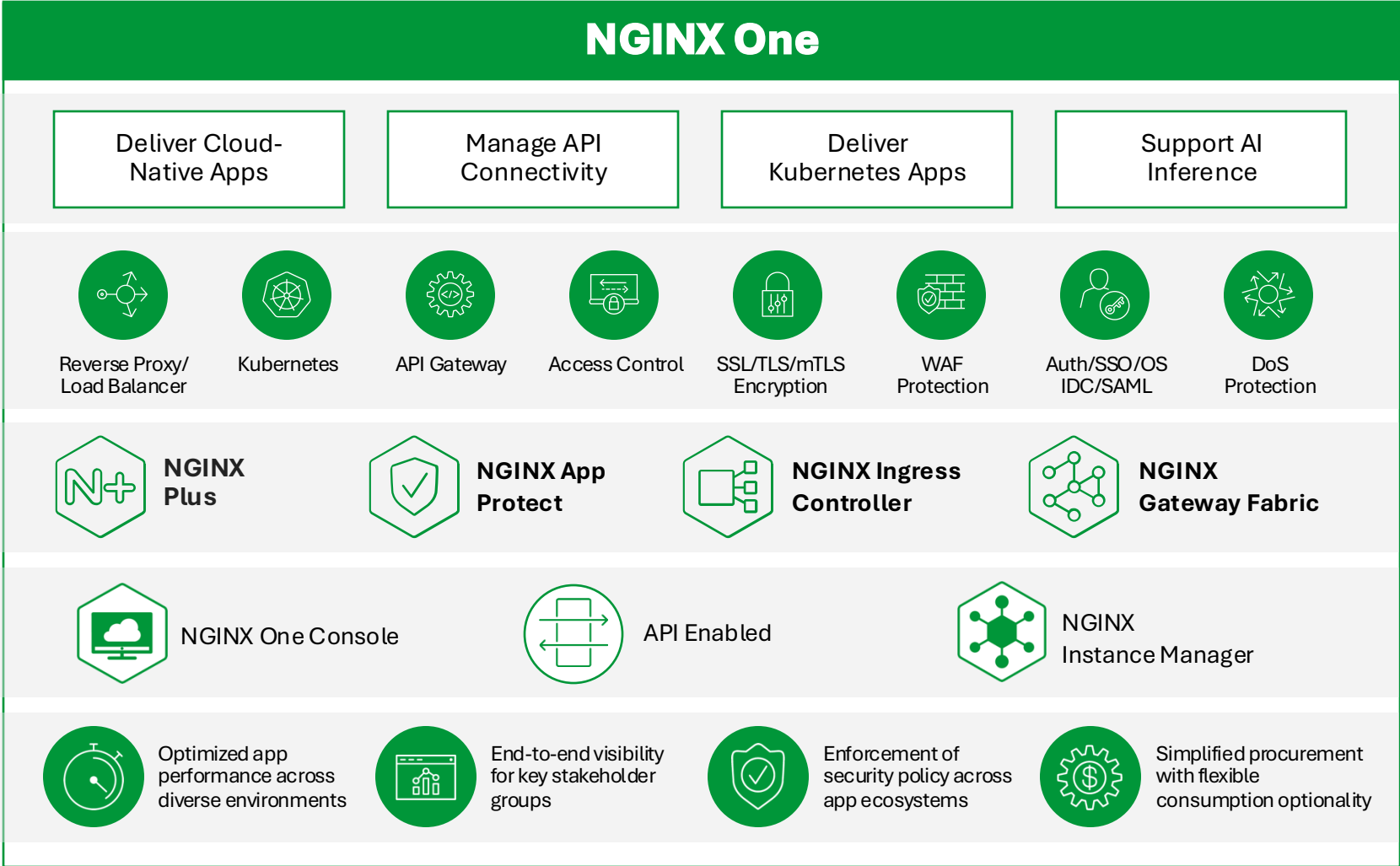
BIG-IP LTM

BIG-IP Advanced WAF
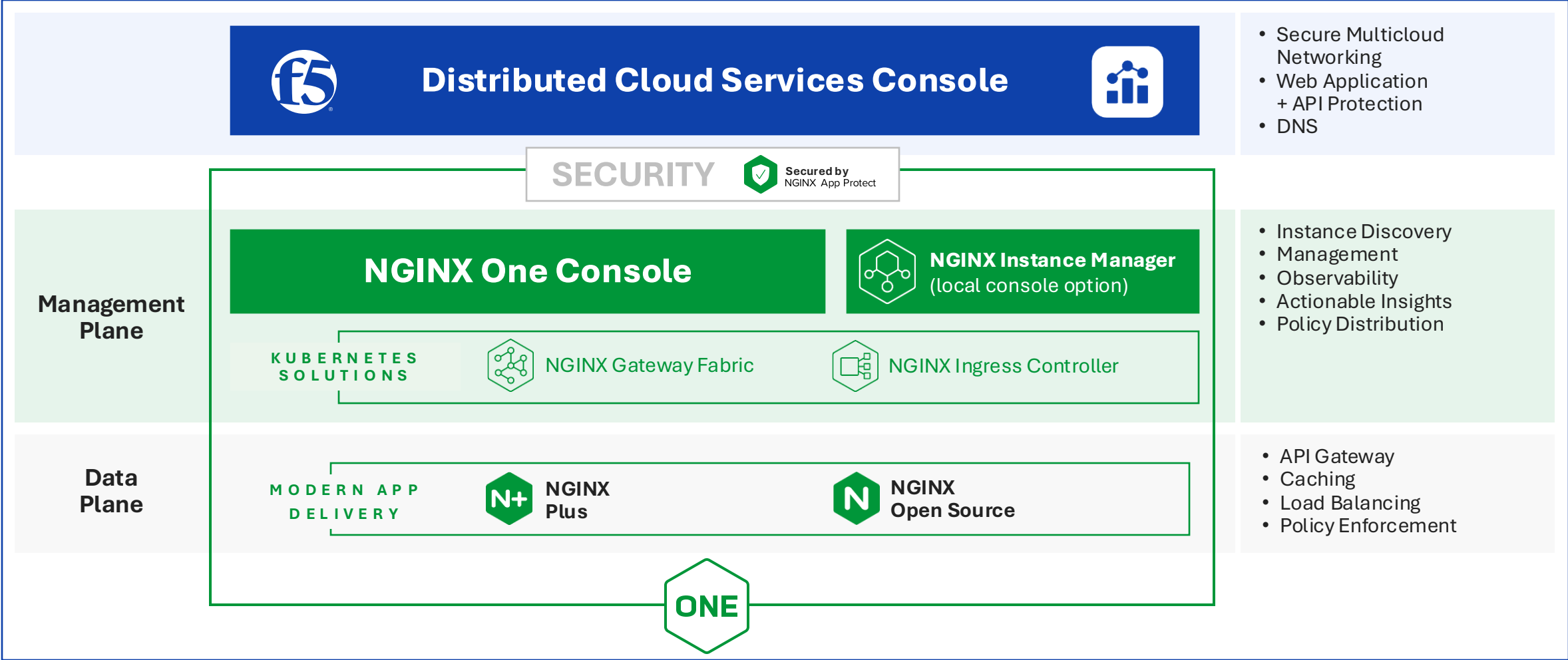
NGINX Ingress Controller

# Introducing...

ONE NGINX One

# NGINX One is all in one to address multiple use cases in any environment

## NGINX One

| | | | |
|---|---|---|---|
| Determine the critical enterprise function you need to address | Deliver Cloud-Native Apps | Manage API Connectivity | Deliver Kubernetes Apps | Support AI Inference |

**Choose from over 100 NGINX functional use cases**

| Reverse Proxy/ Load Balancer | Kubernetes | API Gateway | Access Control | SSL/TLS/mTLS Encryption | WAF Protection | Auth/SSO/OS IDC/SAML | DoS Protection |

**Match the right NGINX components for the job**

- **NGINX Plus**
- **NGINX App Protect**
- **NGINX Ingress Controller**
- **NGINX Gateway Fabric**

**Get unified visibility, management, and control across stakeholders**

- NGINX One Console
- API Enabled
- NGINX Instance Manager

**Raise your modern App and API delivery and security game**

- Optimized app performance across diverse environments
- End-to-end visibility for key stakeholder groups
- Enforcement of security policy across app ecosystems
- Simplified procurement with flexible consumption optionality

# Better together



**USE CASES**

**Distributed Cloud Services Console**

- Secure Multicloud Networking
- Web Application + API Protection
- DNS

**SECURITY** — Secured by NGINX App Protect

**Management Plane**

**NGINX One Console**

**NGINX Instance Manager** (local console option)

- Instance Discovery
- Management
- Observability
- Actionable Insights
- Policy Distribution

KUBERNETES SOLUTIONS — NGINX Gateway Fabric — NGINX Ingress Controller

**Data Plane**

MODERN APP DELIVERY — **N+ NGINX Plus** — **N NGINX Open Source**

- API Gateway
- Caching
- Load Balancing
- Policy Enforcement

**ONE**

# Cloud Console Early Access

NGINX One Cloud Console Early Access program ran from February through end of August.

Primary features available in Early Access:

- CVE Monitoring
- Configuration Analysis and Recommendations
- TLS/SSL Certificate Monitoring
- Configure NGINX Remotely
  - Via UI or API

When an NGINX expert at financial services organization found out they were being promoted, initially they were concerned about his colleagues being able to take on all their NGINX work.

With the introduction of the NGINX One Cloud Console, they was relieved that their specific expertise would not be needed as much as features in the Cloud Console, such as configuration analysis, would make it easy for their colleagues to take over managing the organization's NGINX Plus and Open-Source instances.

# Achieve Your Business Outcomes Quicker with the NGINX One Cloud Console

## Implement New Use Cases

## Easily and Securely Scale Operations

**CURRENT STATE**

Configuration analysis and recommendations: Security, Optimizations, & Best Practices

Remote configuration with easy-to-use web portal

Instance availability and usage

CI/CD workflow integration

Metrics and statistics

System resource monitoring

**FUTURE STATE***

Configuration template library

AI Chatbot for configuration assistance

Integrated TLS/SSL certificate provisioning

Proactive monitoring and alerts

AI based predictions and insights

Web Application and API Protection Monitoring and Management

*This product roadmap sets forth F5's current intention and is subject to change at any time without explicit notice. No purchases are contingent upon F5 delivering any feature or functionality depicted on this roadmap.

# What is Coming

# Simplify Managing All Your F5 Products and Services with F5 Distributed Cloud

BIG-IP administrators with NGINX backends have more visibility into the NGINX operations.

Notifications and Alerts for NGINX, BIG-IP, and F5 Distributed Cloud services all from one place.

Monitor security events and manage policies for all F5 security products regardless of if they are on BIG-IP, F5 Distributed Cloud, or NGINX from within F5 Distributed Cloud.

Easily integrate NGINX with various F5 Distributed Cloud services such as DNS and Multi-Cloud Networking.

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Home > Web App & API Protection > default > Apps & APIs

Support

**Select Service**

**Web App & API Protection**

P default
Namespace

Overview
  Security
  Performance

Application Delivery
HTTP Load Balancer, CDN...

Security
App Firewall, Service Pol...

Network?
App Site Map, App Site List, App T...

Manage?
App Site Map, App Site List, App T...

Notifications
Alerts, Audit Logs

Workspace Info
About

## Security

Dashboard | Malicious Users | Threat Campaign

Distributed Cloud | All Application Delivery

Export PDF | Application Delivery (5) | Last 24 hours | Refresh

### Threat Intelligence
Threat Campaigns
**10K**
IP Reputation
**1K**

### API Classification
API Endpoints
**50**
PII Detected
**20**

### Security Events
☑ WAF
**123.45K**
☑ API
**123.45K**

### Top Attack Sources    Source IP

| Source IP | Country Code | Security Events |
|---|---|---|
| 141.94.78.167 | USA | 47K |
| 51.178.37.65 | ITA | 35K |
| 51.178.38.202 | KOR | 21K |
| 221.110.245.123 | TGO | 18K |
| 35.193.249.222 | PHL | 2K |
| 35.193.245.78 | USA | 1K |
| 23.193.259.34 | KEN | 1K |

### Top Attacked Paths

| Path | Domain | Method | Security Events |
|---|---|---|---|
| /foo/bar/baz.. | www.unibet.fr | 47K | 40K |
| /bar/baz/abc/.. | www.unibet.fr | 35K | 40K |
| /zones/exam.. | www.foo.com | 21K | 7K |
| /ping/identit.. | www.bar.com | 18K | 6K |
| /test/path/a.. | foo.baz | 2K | 3K |
| /test/path/a.. | foo.baz | 1K | 1K |
| /test/path/a.. | foo.baz | 1K | 1K |

### Events by Country
> 300  151 - 300  50 - 150  < 50
Security Events
**128**
DDoS
**16**

### Active Configuration
Total Load Balancers
**23**

Security Configuration | Protected Load Balancers

WAF    6
Bot Defense    1
API Discovery    2
DDoS Detecation    0

### Application Delivery
All
4 Items
Search

# Simple Configuration & Self-Service through Templates

**Simplify Configurations**

Templatized configurations make using NGINX extremely easy. Provide only the required parameters via the UI or API.

**Ensure Standards**

Maintain consistency and best practices across your NGINX estate by managing crucial settings centrally.

**Empower App Dev Teams**

Allow teams to manage and own the contents of their own location or server blocks.

**Provided Common Use Cases**

Load balancing and API gateway templates from F5 NGINX included.

**Maximum Flexibility**

Customize existing templates or build your own to suit your needs.

# AI Predictive Operations

Using Machine Learning, NGINX One will be able to provide proactive recommendations around:

- Upstream performance and scaling

- Traffic behaviors and patterns

- System performance

All of this will allow you to have better insight into your traffic and application performance ensuring peak performance and avoiding outages, while spending less time on analysis.

# NGINX One Cloud Console

# Demonstration

# Q & A