



NGINX Controller – Application Delivery Module

Mission Control for Your Applications

Enterprises everywhere are undergoing digital transformation and it's having a profound effect on how teams develop, deliver, and secure applications. The goal is to meet the ever-changing demands of customers and stand out from the competition while achieving the metric that matters most: speed to market. Crucial to this journey is the ability to deploy and manage applications rapidly and design an IT infrastructure to support these applications with advanced services that do not introduce additional complexity. And the stakes have never been higher: user tolerance for downtime or degradation in application performance is extremely low and can lead to misuse of IT resources, lost productivity, and reduced revenues.

Platform Operations and DevOps teams wrestle with many challenges (and competing priorities) as they transition toward becoming digital-native. Infrastructure must be configured and provisioned quickly across a mix of many on-prem, edge, and public and private cloud environments – all while maintaining consistency and security. To accelerate app deployments, teams need easy work-flows and self-service management capabilities for developers.

What happens when teams get it right? Enterprises innovate and bring better apps to market faster.

That's where NGINX Controller Application Delivery Module comes in.

With NGINX Controller Application Delivery Module, you can manage multiple NGINX Plus instances easily, wherever they're deployed. Using an intuitive graphical user interface or API-based workflow, you can take complete control of the entire lifecycle for all your NGINX Plus instances. Rich monitoring and alerting capabilities help ensure application availability, performance, and reliability. NGINX Controller Application Delivery provides deep visibility into key metrics and preemptive recommendations based on best practices, enabling the entire team to maintain performance and more quickly troubleshoot any issues that may arise. And NGINX Controller Application Delivery makes it easier than ever to take advantage of automation frameworks, CI/CD pipeline integrations, and Infrastructure-as-Code – helping accelerate app deployment velocity and make it more programmatic.

Benefits of Using NGINX Controller Application Delivery Module



Management at Scale

Easily monitor, manage, and automate multiple NGINX Plus instances and components using a centralized management interface or API.



Visibility

Gain deep insights and analytics into 200 performance KPIs for all your NGINX Plus instances, environments, gateways, and apps.



Control

Meet your SLAs, avoid performance issues, and troubleshoot faster with holistic per-app control.



Agility

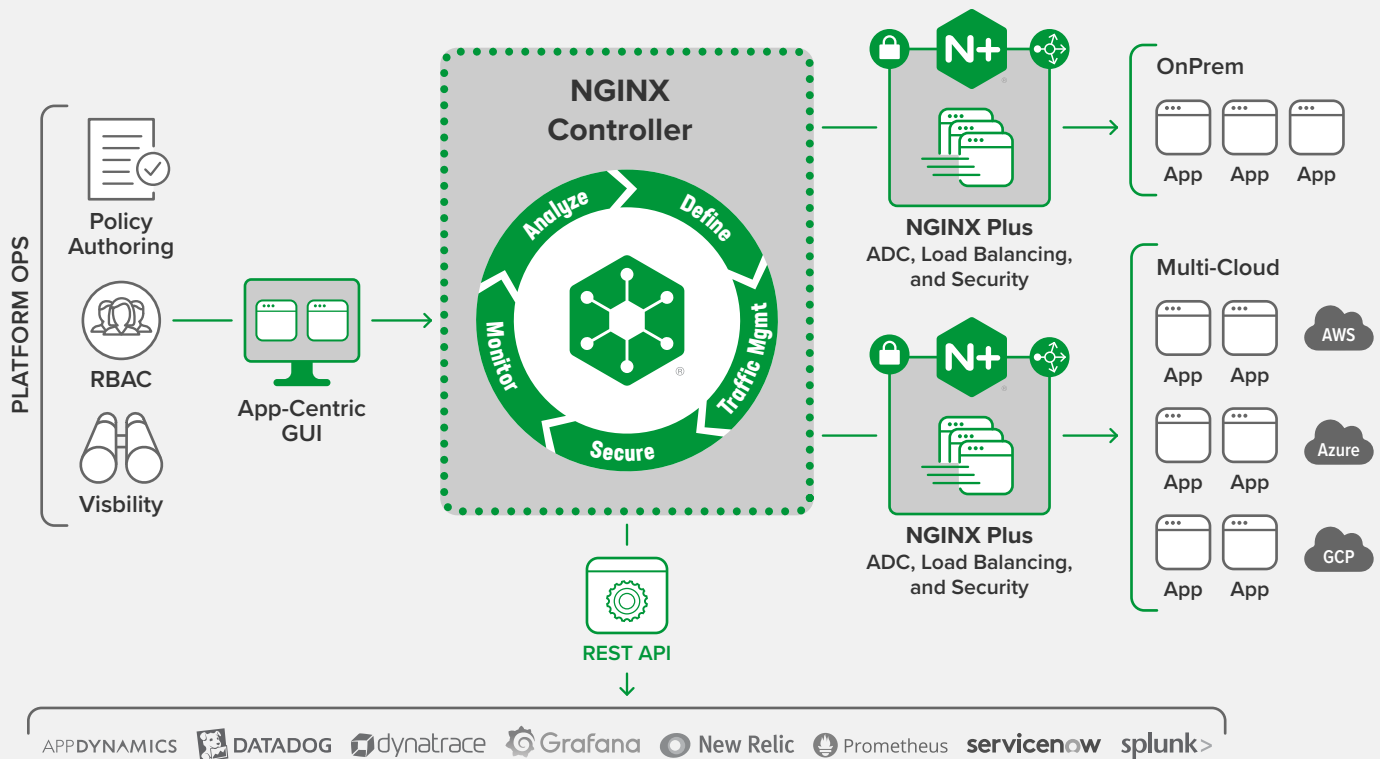
Enable application teams to deploy new applications faster by developing environment-specific policies, integrating with automation frameworks, and building self-service workflows.



Multi-cloud Support

Deploy NGINX Controller on any public or private cloud to manage NGINX Plus instances operating across a multi-cloud environment.





NGINX Controller Features

Real-Time Monitoring and Alerting

Get critical insights into application performance:

- Graphs of key metrics such as requests per second, active connections, and bandwidth usage
- Alerts on more than 200 metrics such as CPU usage, 4xx and 5xx errors, bytes in and out, and health check failures based on thresholds you define
- Easy integration with third-party monitoring tools using REST API

App-Centric User Interface

Define, configure, monitor, and troubleshoot NGINX Plus instances quickly with:

- Per-app, end-to-end, multi-environment policy definition and configuration for staging, production, and specific lines of business
- An overview dashboard that aggregates metrics across load balancers
- An Application Health Score that measures successful requests and timely responses
- Customizable dashboards to monitor metrics specific to your environment

Self-Service Workflows for DevOps

Empower DevOps teams to deploy and manage NGINX Plus instances:

- Fine-grained RBAC enforces appropriate permissions
- Self-service portal removes operational bottlenecks
- Automation enables fast, simple deployment of NGINX Plus in cloud and on-prem environments

Simplified Configuration Management

Navigate a simple and intuitive wizard-like user interface for:

- Guided workflow for NGINX Plus configuration
- Config analyzer offers preemptive, actionable recommendations based on best practices to improve SLAs
- Push-button deployment of NGINX Plus instances
- Simple and intuitive SSL key and certificate management via centralized interface or API

Controller Application Security

Bridge the divide between DevOps and SecOps teams:

- Centralized WAF management and visibility for app protection and threat visibility
- App-centric and self-service security workflows
- Out-of-the-box protection from OWASP Top 10 and other threats, based on F5's market-leading WAF technology
- DevOps can bake security into their application workflows to save time and effort while increasing overall security posture

Minimum NGINX Controller Technical Requirements

NGINX Controller Manages NGINX Plus Instances

RAM	8GB
CPU (speed, number of cores)	8+ Cores on a +2.40 GHz or similar
Host Volume/Partition Size	155 – 255 GB of free disk space
Environment	Can be deployed either on premise or on any public cloud environment that provides for CPU/RAM/disk space specs mentioned above
Docker versions supported	17.x, 18.x
docker-compose	1.13.0 and newer
PostgreSQL DB	Either internal with NFS or remote

Agent Technical Specifications

A lightweight agent needs to be installed on each NGINX Plus instance under management.

The agent is currently officially packaged and supported for several operating systems, including Amazon Linux, Debian, RHEL/CentOS, and Ubuntu.

For more information on technical requirements for NGINX Controller, please visit

<https://docs.nginx.com/nginx-controller/admin-guides/install/nginx-controller-tech-specs/>

About NGINX Controller

NGINX Controller is part of the NGINX Application Platform, a suite of products that together form the core of what organizations need to create applications with performance, reliability, security, and scale. The NGINX Application Platform includes NGINX Plus for load balancing and application delivery, NGINX App Protect for security, and NGINX Unit to run the application code, all monitored and managed by NGINX Controller. Controller Application Delivery is one of two modules that enable teams to zero in on what matters most to them.

About NGINX

NGINX is the heart of the modern web, powering more of the world's busiest sites and applications than any other server. The NGINX open source project started in 2002 and has grown exponentially, thanks to the vision of Igor Sysoev and the enthusiasm and support of our loyal community of users. Today, millions of innovators choose NGINX and NGINX Plus to deliver their sites and applications with performance, reliability, security, and scale.

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