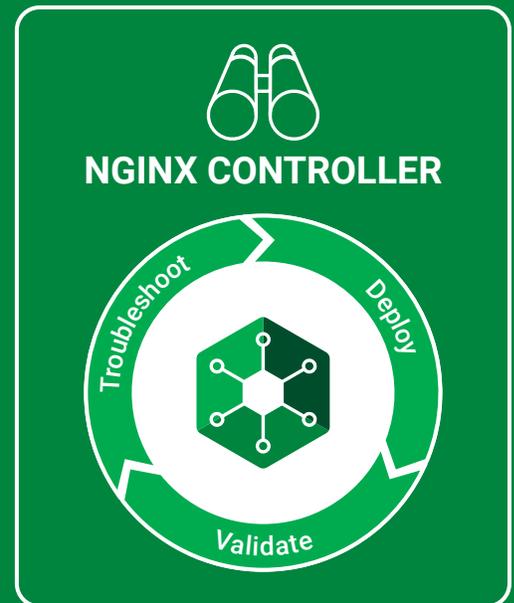# N Controller

MISSION CONTROL FOR YOUR APPLICATIONS

Enterprises everywhere are undergoing digital transformation. The goal is to meet the ever-changing demands of customers and stand out from the competition. Crucial to this journey is the ability to deploy and manage applications rapidly, as well as design an IT infrastructure that supports these applications. Any downtime or degradation in application performance results in inefficient use of IT resources, lost productivity, and reduced revenues.

Infrastructure & Operations and DevOps teams wrestle with many challenges as they make this transition and advance toward becoming digital-native. Infrastructure must be configured and provisioned quickly across multiple public and private clouds. There's ever-increasing pressure to maintain reliability, performance, and availability of business applications across this disparate infrastructure. And to accelerate app deployments, these teams need easy workflows and self-service management capabilities for developers. What happens when teams get it right? Enterprises innovate and bring apps to market faster.

That's where NGINX Controller comes in.

With NGINX Controller, you can manage multiple NGINX Plus servers easily across a multi-cloud environment. Using an intuitive wizard style interface, you can configure features such as load balancing, URL routing, and SSL termination for all your NGINX Plus instances. Rich monitoring and alerting capabilities help ensure application availability, performance, and reliability. NGINX Controller provides deep visibility into key metrics and preemptive recommendations based on best practices, enabling Infrastrastructure & Operations and DevOps teams to avoid performance issues in the first place and more quickly troubleshoot any issues that may arise.

NGINX Controller supports a policy driven approach to management. You can create specific configurations for staging, production or any application. This helps accelerate application deployment.

NGINX CONTROLLER


Troubleshoot · Deploy · Validate

Benefits of using NGINX Controller

- **Management at scale** – Easily monitor and manage multiple NGINX Plus instances using a centralized management interface.

- **Visibility** – Gain deep insights into 200 performance KPIs for all your NGINX Plus instances and underlying Systems (OS).

- **Control** – Meet your SLAs, avoid performance issues, and troubleshoot faster by following best practices.

- **Agility** – Enable application teams to deploy new applications faster by developing environment-specific policies.

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

NGINX

Learn more at **nginx.com**
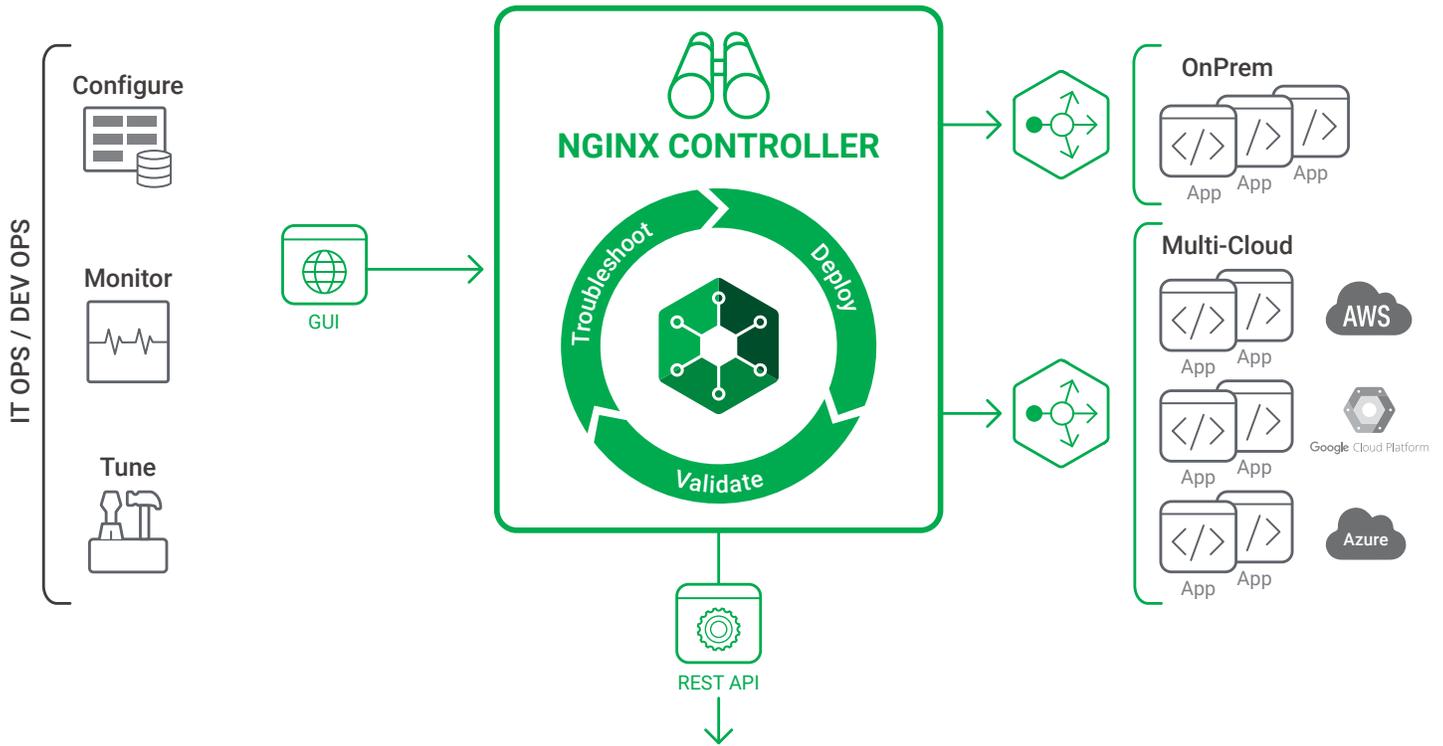
NGINX CONTROLLER FEATURES

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 100 metrics such as CPU usage, 400/500 errors, and health check failures based on pre-defined thresholds
- Easy integration with any monitoring tool of your choice using REST API

Dashboards

Monitor and troubleshoot NGINX Plus instances quickly with:

- 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
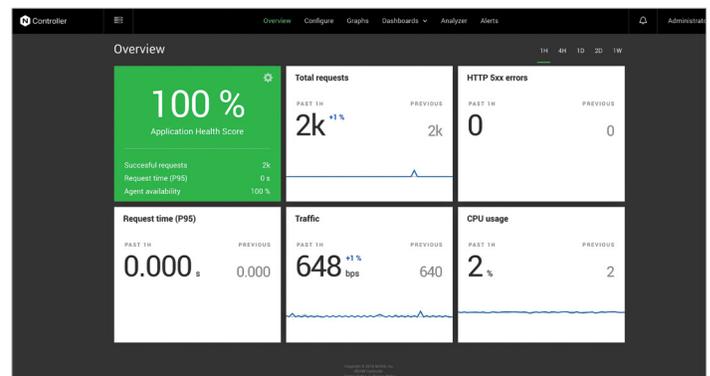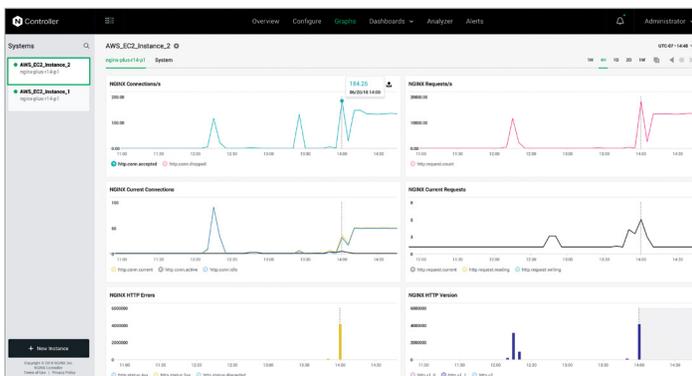
NGINX CONTROLLER FEATURES

Preemptive Recommendations

Use the built-in configuration analyzer to get:

- Enhanced performance and security based on learnings from thousands of customers
- Better SLAs by following built-in best practices. Preemptive and actionable recommendations for:
  – Configuration
  – Security
  – SSL status
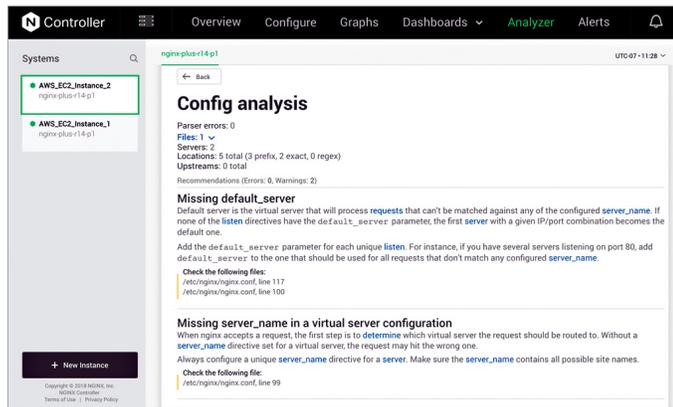
Simplified Config Management

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

- Guided workflow for NGINX Plus configuration
- Push-button deployment of load balancers
- Traffic routing to upstream servers
- SSL key and certificate management
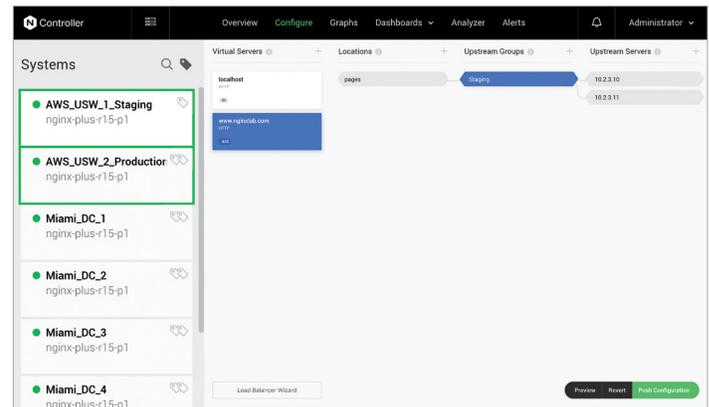
Policy-Driven Management

Accelerate application deployment by developing multiple environment-specific policies. Create configuration environments for:

- Staging
- Production
- Specific lines of business
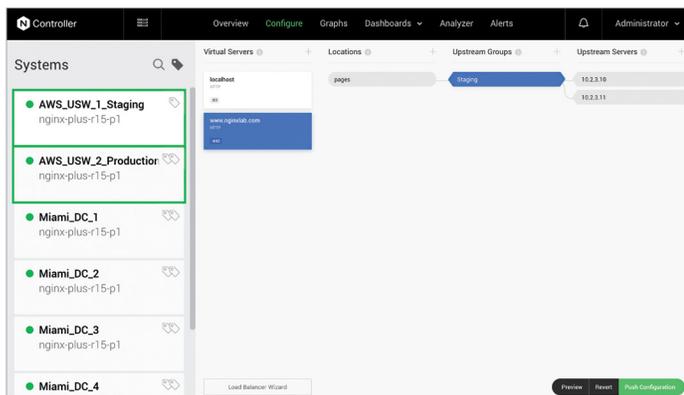
NGINX Controller is part of the NGINX Application Platform; a suite of products that together form the core of what organizations need to create applications with performance, reliability, security, and scale. The NGINX Application Platform includes NGINX Plus for load balancing and application delivery, the NGINX WAF for security, and NGINX Unit to run the application code, all monitored and managed by the NGINX Controller.

About NGINX

NGINX is the heart of the modern web, powering half of the world's busiest sites and applications. The NGINX open source project started in 2002 and has grown exponentially over the past 10+ years, 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 for delivering their sites and applications with performance, reliability, security, and scale.

NGINX CONTROLLER TECHNICAL SPECIFICATIONS

NGINX Controller can manage NGINX Plus instances.

Controller Technical Specifications	
RAM	8GB
CPU (speed, number of cores)	8+ Cores on a +2GHz CPU
Host Volume/Partition Size	40 GB for app volume
Firewall	• DB: 5432TCP (incoming from controller host) • Controller: 443TCP (incoming from customers network) • Controller: 8443TCP (incoming from agents network) • Controller Swagger API: 5003 • Controller Install/Upgrade: 5001
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
Postgres DB	Yes
Postgres DB versions supported	9.5, 9.6
Postgres DB config needed	User with write permissions on the following dbs: analytics,common_1,data_1,system

Agent Technical Specifications A lightweight agent needs to be installed on target NGINX Plus instances for these instances to be managed.	
The agent is currently officially packaged and supported for the following Linux flavors:	• Ubuntu 14.04 "trusty" (i386/amd64/arm64) • Ubuntu 16.04 "xenial" (i386/amd64/arm64) • Ubuntu 18.04 "bionic" (amd64) • Debian 8 "jessie" (i386/amd64) • Debian 9 "stretch" (i386/amd64) • RHEL/CentOS/OEL 6 (i386/amd64) • RHEL/CentOS/OEL 7 (i386/amd64) • Amazon Linux 2017.09 (amd64)

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