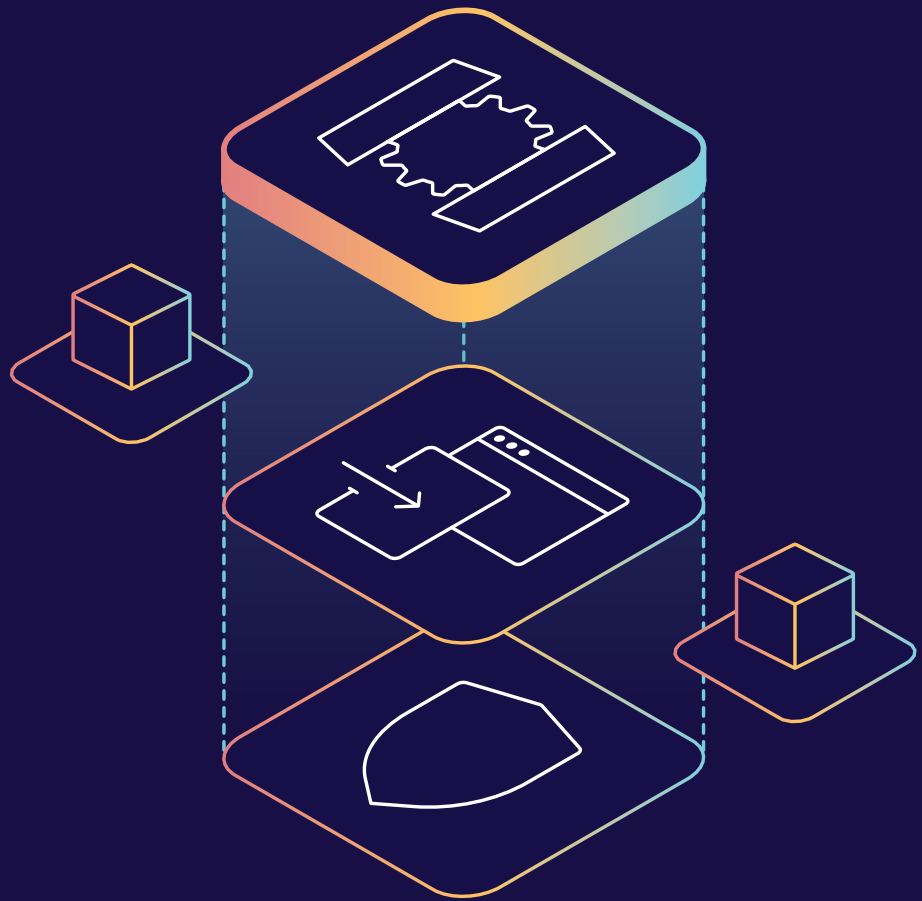


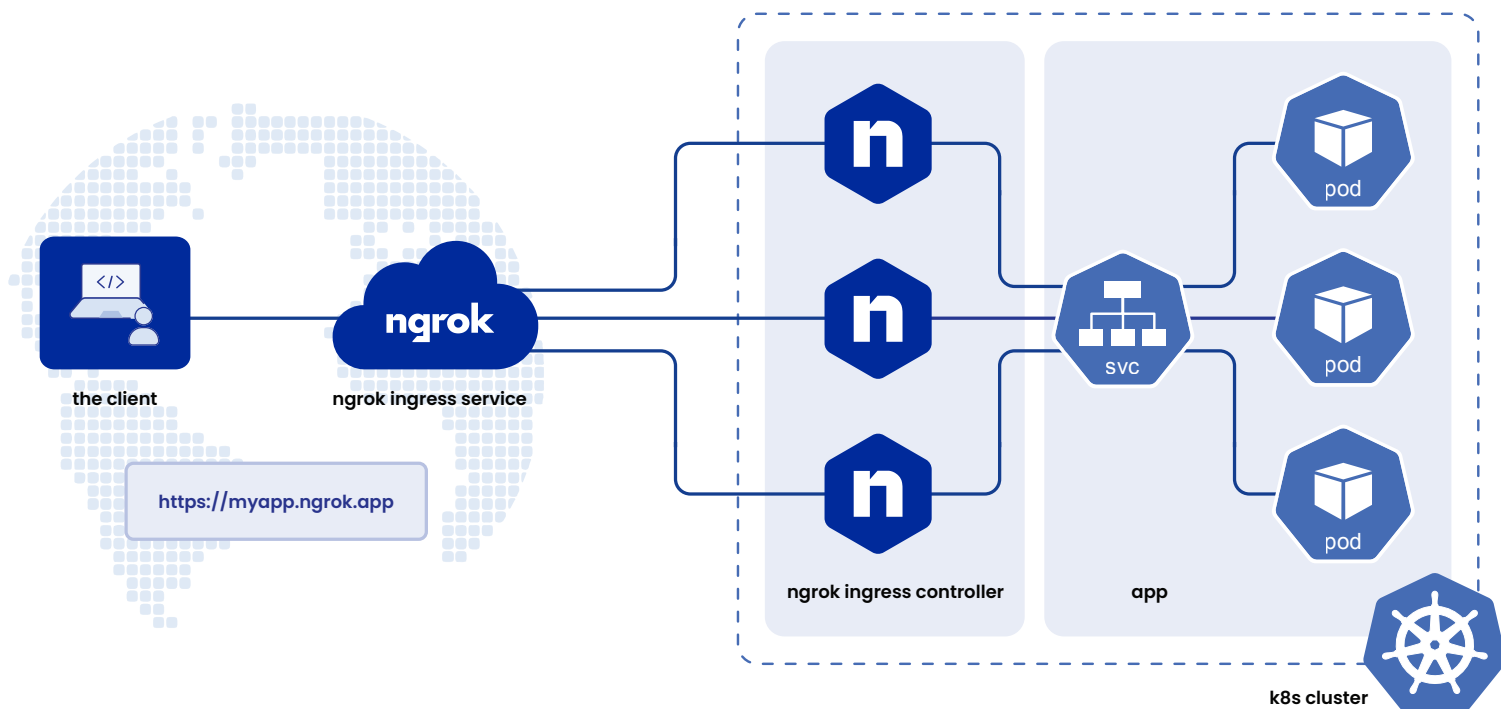
**ngrok**



# ngrok Kubernetes Operator

**Trusted by Cloud 100 enterprises and over 5 million developers**

ngrok provides ingress-as-a-service with both our Kubernetes Gateway API and Ingress Controller for Kubernetes. The operator delivers ingress to your Kubernetes clusters by offloading traffic management, performance, and security to ngrok's global Points of Presence (PoPs). It equips you to serve apps and APIs without needing to configure networking details such as Load Balancers, IPs, network interfaces, or VPC routing, radically simplifying ingress into Kubernetes.



## Ingress Controller for Kubernetes

ngrok leverages native Kubernetes tooling allowing you to configure the route, host, and downstream service via the standard Kubernetes ingress object and deploy it to your cluster with a Helm chart. Once deployed to your cluster, the ingress controller monitors ingress objects and connects to ngrok's cloud service. You can easily integrate our ingress-as-a-service into your existing tech stack without friction.

## Accelerate performance and enhance security with policies

With ngrok's ingress-as-a-service, you can enable additional capabilities by specifying policies in your Kubernetes manifest.



### Single sign-on

Protect your services using built-in social IdPs, integrate with a SAML or OIDC-compliant IdP, or use OAuth 2.0.



### Compression

Automatically compress requests that include an Accept-Encoding header and add Content-Encoding response headers.



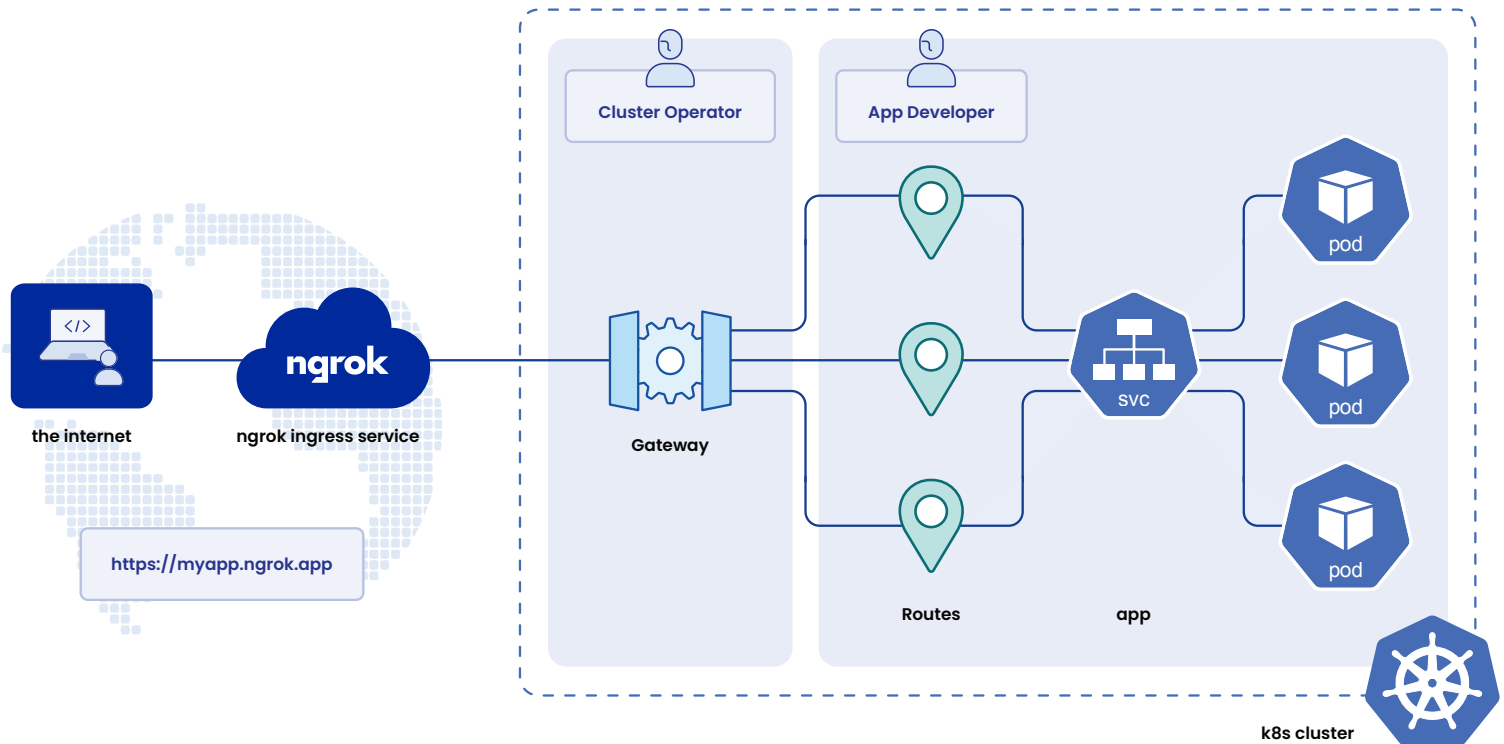
### Circuit breaker

Protect upstream servers by rejecting traffic when servers become overwhelmed, preventing a DDoS attack.



### IP restrictions

Allow or deny traffic based on source IP addresses.



# Kubernetes Gateway API

Kubernetes Gateway API embraces a role-oriented design for Kubernetes service networking that strikes a balance between distributed flexibility and centralized control. The API enables the use of shared network infrastructure such as load balancers, cloud networking software, and other proxies. The Gateway API is also more expressive than Kubernetes Ingress, allowing policies to be natively included rather than stitched together with annotations.



## TLS/mTLS support

Protect your services with TLS or mTLS. Terminate TLS for HTTP traffic at the ngrok Edge.



## JWT validation

Integrate your existing JWT infrastructure to enhance the security of your API endpoints.



## Traffic policies

Add custom Traffic Policy actions using a Common Expression Language (CEL) to configure and manage traffic to your services.



## Rate limiting

Prioritize fairness to ensure clients remain within their agreed-upon usage, scale efficiently, and protect your services from DDoS.

# Key benefits of the ngrok Kubernetes Operator

## Improved performance

Rely on ngrok's built-in global server load balancer, powered by a network of PoPs, to automatically route traffic to the PoP with the lowest latency.

## Enhanced security

Enforce authentication and authorization at the ngrok edge, preventing unauthorized traffic from ever reaching your cluster and rogue webhooks from looping and spamming your service.

## Reduced complexity

Bring secure ingress to your applications in Kubernetes, even if they are deployed behind a NAT. Consolidate multiple tools for traffic management, DNS, certificate management, and security into one easy-to-consume service.

## Works everywhere

Save time and effort by maintaining a single Kubernetes manifest that runs identically on EKS, GKE, OpenShift, K3s, or Minikube. With vendor-agnostic networking configuration, all you need is egress to ngrok's servers.

## Pay only for what you use

Reduce the overhead of setting up and maintaining ingress-related services with our pay-as-you-go subscription plan. Your monthly spend will be based on your actual usage—the active endpoints sending or receiving data via ngrok service in a billing cycle.

## About ngrok

ngrok is the leading way to make any application, device, or service securely available on its global edge in seconds. ngrok wraps the complexity of authentication, remote management, load balancing, and networking into a programmable component embeddable into any stack. ngrok is used by over 5 million developers and is recommended by category leaders including Twilio, GitHub, Okta, Microsoft, Zoom, and Shopify.



Sign up for ngrok today at [ngrok.com](https://ngrok.com) or email us at [hello@ngrok.com](mailto:hello@ngrok.com) to chat with a member of our team.

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