Ingress Controllers

In order for an Ingress to work in your cluster, there must be an *ingress controller* running. You need to select at least one ingress controller and make sure it is set up in your cluster. This page lists common ingress controllers that you can deploy.

> **Note:**
> The Kubernetes project recommends using Gateway instead of Ingress. The Ingress API has been frozen.
>
> This means that:
>
> - The Ingress API is generally available, and is subject to the stability guarantees for generally available APIs. The Kubernetes project has no plans to remove Ingress from Kubernetes.
> - The Ingress API is no longer being developed, and will have no further changes or updates made to it.

Ingress controllers

Kubernetes as a project supports and maintains AWS, and GCE ingress controllers.

Third party ingress controllers

> **Note:** This section links to third party projects that provide functionality required by Kubernetes. The Kubernetes project authors aren't responsible for these projects, which are listed alphabetically. To add a project to this list, read the content guide before submitting a change. More information.

- AKS Application Gateway Ingress Controller is an ingress controller that configures the Azure Application Gateway.
- Alibaba Cloud API Gateway Ingress is an ingress controller that configures the Alibaba Cloud Native API Gateway, which is also the commercial version of Higress.
- Apache APISIX ingress controller is an Apache APISIX-based ingress controller.
- Avi Kubernetes Operator provides L4-L7 load-balancing using VMware NSX Advanced Load Balancer.
- BFE Ingress Controller is a BFE-based ingress controller.
- BunkerWeb Ingress Controller is an ingress controller for BunkerWeb, WAF (Web Application Firewall) based on nginx.
- Cilium Ingress Controller is an ingress controller powered by Cilium.
- The Citrix ingress controller works with Citrix Application Delivery Controller.
- Contour is an Envoy based ingress controller.
- Emissary-Ingress API Gateway is an Envoy-based ingress controller.
- EnRoute is an Envoy based API gateway that can run as an ingress controller.
- F5 BIG-IP Container Ingress Services for Kubernetes lets you use an Ingress to configure F5 BIG-IP virtual servers.
- FortiADC Ingress Controller support the Kubernetes Ingress resources and allows you to manage FortiADC objects from Kubernetes
- Gloo is an open-source ingress controller based on Envoy, which offers API gateway functionality.
- HAProxy Ingress is an ingress controller for HAProxy.
- Higress is an Envoy based API gateway that can run as an ingress controller.
- The HAProxy Ingress Controller for Kubernetes is also an ingress controller for HAProxy.
- Istio Ingress is an Istio based ingress controller.
- The Kong Ingress Controller for Kubernetes is an ingress controller driving Kong Gateway.
- Kusk Gateway is an OpenAPI-driven ingress controller based on Envoy.
- The NGINX Ingress Controller for Kubernetes works with the NGINX webserver (as a proxy).
- The ngrok-operator is a controller for ngrok that supports both Ingress and Gateway API for adding secure public access to your K8s Services.

- The OCI Native Ingress Controller is an Ingress controller for Oracle Cloud Infrastructure which allows you to manage the OCI Load Balancer.
- OpenNJet Ingress Controller is a OpenNJet-based ingress controller.
- The Pomerium Ingress Controller is based on Pomerium, which offers context-aware access policy.
- Skipper HTTP router and reverse proxy for service composition, including use cases like Kubernetes Ingress, designed as a library to build your custom proxy.
- The Traefik Kubernetes Ingress provider is an ingress controller for the Traefik proxy.
- Tyk Operator extends Ingress with Custom Resources to bring API Management capabilities to Ingress. Tyk Operator works with the Open Source Tyk Gateway & Tyk Cloud control plane.
- Voyager is an ingress controller for HAProxy.
- Wallarm Ingress Controller is an Ingress Controller that provides WAAP (WAF) and API Security capabilities.

Using multiple Ingress controllers

You may deploy any number of ingress controllers using ingress class within a cluster. Note the `.metadata.name` of your ingress class resource. When you create an ingress you would need that name to specify the `ingressClassName` field on your Ingress object (refer to IngressSpec v1 reference). `ingressClassName` is a replacement of the older annotation method.

If you do not specify an IngressClass for an Ingress, and your cluster has exactly one IngressClass marked as default, then Kubernetes applies the cluster's default IngressClass to the Ingress. You mark an IngressClass as default by setting the `ingressclass.kubernetes.io/is-default-class` annotation on that IngressClass, with the string value `"true"`.

Ideally, all ingress controllers should fulfill this specification, but the various ingress controllers operate slightly differently.

> **Note:**
> Make sure you review your ingress controller's documentation to understand the caveats of choosing it.

What's next

- Learn more about Ingress.

Items on this page refer to third party products or projects that provide functionality required by Kubernetes. The Kubernetes project authors aren't responsible for those third-party products or projects. See the CNCF website guidelines for more details.

You should read the content guide before proposing a change that adds an extra third-party link.

Feedback

Was this page helpful?

Yes No

Last modified December 19, 2025 at 5:39 PM PST: Update Alibaba Cloud Ingress provider reference (486ea03aeb)