



Avi Multi-Cluster Kubernetes Operator

Avi Technical Reference (v21.1)

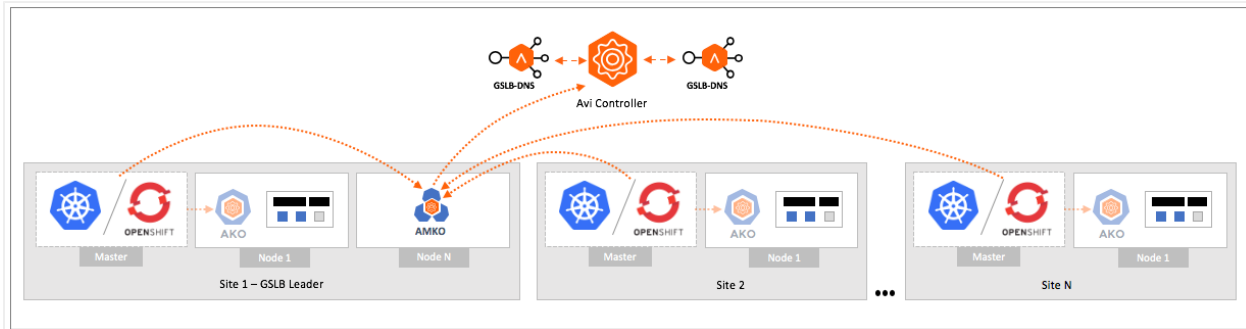
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Overview

The Avi Vantage platform integration with OpenShift/ Kubernetes an operator called Avi Multi-Cluster Kubernetes Operator (AMKO) is to facilitate multi-cluster application deployments. The following illustration outlines the components of the Avi Kubernetes integration.



Avi Multi-Cluster Kubernetes Operator (AMKO)

The Avi Multi-Cluster Kubernetes Operator is an operator for Kubernetes/OpenShift that facilitates application delivery across multiple clusters. AMKO runs as a pod in one of the clusters and provides DNS-based Global Server Load Balancing for an application that is deployed across multiple clusters. AMKO automates the GSLB configuration and operations on the Avi Vantage platform. Together with the Avi Kubernetes operator (AKO) in each cluster, AKO and AMKO provide application deployment and operations through familiar Kubernetes/OpenShift objects and Avi CRDs.

The Avi Controller

The Avi Controller provides the central control, management, and observability functions in the Avi architecture. It manages the lifecycle of the Service Engines, their configurations, and provides centralized analytics and observability. The Avi Controller here acts as the control and management plane entity for the GSLB configurations that AMKO automates.

The Avi Service Engines (cluster-external)

The Avi Service Engines are the data-plane engines that implement the virtual services for Kubernetes ingresses. These SEs handle all the data plane responsibilities in the platform. The Service Engines here act as the data plane entity which actually handles the data plane traffic of the DNS based GSLB solution.

The following table provides a comprehensive list of documentation for the Avi OpenShift/Kubernetes integration using AMKO:

AMKO Document References

[AMKO Release Notes](#)

[Installation Guide](#)

[Compatibility Guide](#)