



Google Cloud Platform Support in Avi Vantage

Avi Technical Reference (v21.1)

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Overview

Avi Vantage supports integration with Google Cloud Platform (GCP). Avi Vantage offers elastic application services that extend beyond load balancing to deliver real-time application and security insights, simplify troubleshooting, auto scale predictively, and enable developer self-service and automation for applications hosted on Google Cloud Platform.

Notes: 1. Starting with Avi Vantage version 20.1.1, full access mode is recommended for GCP deployments. 2. Starting with Avi Vantage version 20.1.1, GCP deployments using Linux Server Cloud (LSC) mode is deprecated. Support for this functionality will be removed in a future release. 3. Starting with Avi Vantage version 20.1.3, Linux Server Cloud and GCP IPAM on GCP are not supported.

Features

Avi Vantage for GCP provides the following functionalities:

- Starting with Avi Vantage release 18.2.5, full automation on the GCP cloud is available. You can create a virtual service and the Service Engines get automatically spun up in GCP.
- A role is a group of permissions that can be assigned to members. You can set up custom roles in GCP projects. These roles will be assigned to the service account for Avi Vantage to create resources in GCP.
- Google Cloud Platform (GCP) firewall rules let you allow or deny traffic to and from your virtual machine (VM) instances based on a configuration you specify. By creating a firewall rule, you specify a Virtual Private Cloud (VPC) network and a set of components that define what the rule does.
- Avi Vantage can run with a single Avi Controller (single-node deployment) or with a three-node Avi Controller cluster. In a deployment that uses a single Avi Controller, the Avi Controller performs the administrative functions as well as all analytics, data gathering, and processing.
- The Customer Managed Encryption Key (CMEK) supports encrypting Service Engine (SE) disks for GCP cloud.
- Starting with Avi Vantage 18.2.9 version, VIP as GCP Internal Load Balancer (ILB) is supported. With this the VIP reachability is through ILB, where VIP will be allocated from a GCP subnet and the VIP will be frontend IP of the ILB. The ILB backends will have all the Service Engines on which the virtual service is placed.
- Avi Vantage allows GCP cloud network configuration

The following table provides a comprehensive list of links to documentation for Google Cloud Platform integration with Avi Vantage:

Deployment References

[GCP Full Access Cloud Deployment Guide](#)
[Roles and Permissions for GCP Full Access](#)
[Controller Cluster IP in GCP](#)
[Configuring Firewall Rules in GCP](#)
[CMEK support for Encrypting SE Disks for GCP Cloud](#)
[GCP VIP as Internal Load Balancer and BYOIP](#)
[GCP Cloud Network Configuration](#)
[Route Aggregation for Google Cloud Platform](#)
[Troubleshooting GCP Cloud](#)
[Avi Vantage Integration with GCP Instance Groups](#)

The following KB articles cover Avi Vantage GCP deployment via Linux Server Cloud:

LSC Deployment References

[Deploying Avi Vantage in GCP with BYOIP](#)
[Avi Deployment Guide for Google Cloud Platform \(GCP\)](#)
[Deploying Avi Vantage in GCP for Network Load Balancing](#)
[Server Autoscaling in Google Cloud Platform](#)
[IPAM Provider \(Google Cloud Platform\)](#)
[Configuring Instances with Multiple Interfaces](#)
[Google Cloud Platform Roles and Permissions](#)
[Configuring Firewall Rules in GCP](#)
[Controller Cluster IP in GCP](#)