



# Avi Controller Cluster Configuration in AWS

Avi Technical Reference (v17.2)

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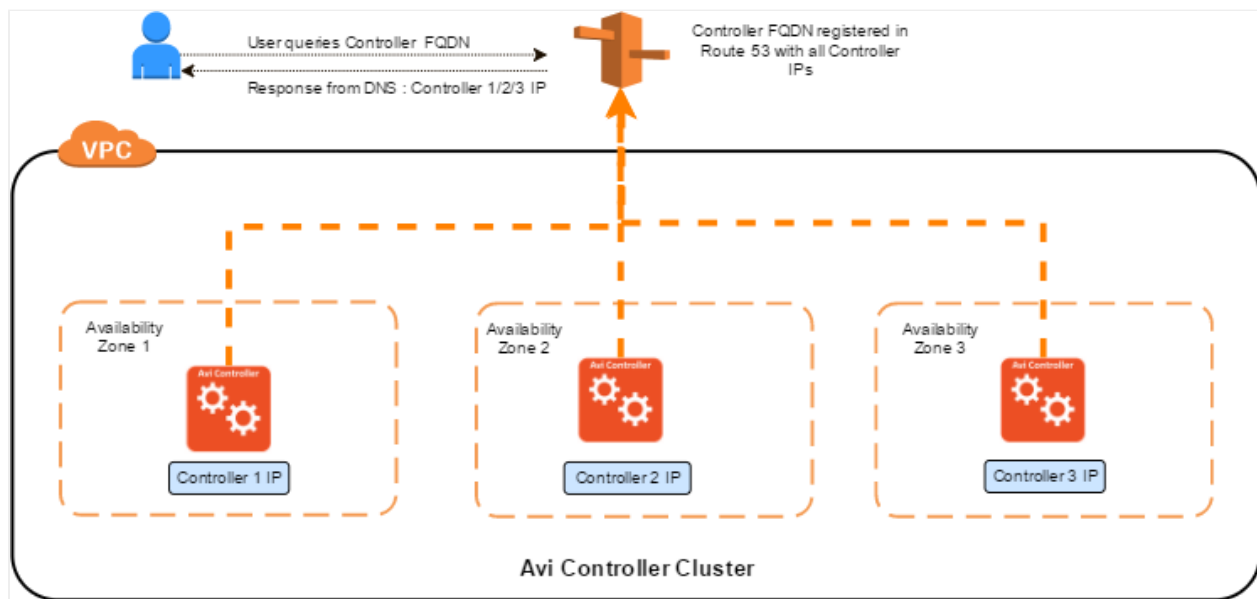
## Overview

The Avi Controller is the management and orchestration engine for Avi Vantage ADC. To provide high availability and resilience, it is recommended to deploy a cluster of three Avi Controller instances. Once the Avi Controller cluster is formed, the controllers synchronize the state, irrespective of the controller instance used to configure Avi features or retrieve operational data.

For more details regarding Controller cluster architecture, refer to [HA for Avi Controllers](#).

In AWS environments, AWS Availability Zones (AZs) provide redundancy and separate fault domains. All AWS regions support a minimum of two AZs. To leverage the high availability provided by AWS AZs, it is recommended to deploy different Avi Controller instances of a cluster in different AZs.

## Managing an Avi Controller Cluster across AZs



Each Avi Controller will receive an IP address from a different subnet given that an AWS subnet does not span across AZs.

In this scenario, it is recommended to create a FQDN in AWS Route 53, and associate all three Controller IPs with this FQDN. In addition, Route 53 health checks can be used in conjunction with multivalued routing when the FQDN is added to a public zone. This ensures that only healthy controller IPs are returned.