

VMware Cloud on AWS - Reference Architecture

High Availability Leveraging AWS Multi-Availability Zones for VMware Cloud SDDC's

This Reference Architecture indicates a High Availability option for a single VMware Cloud on AWS SDDC by leveraging multiple Availability Zones (AZ) from Native AWS while maintaining a "3-Tier App" environment On-Premises.

- 1 The VMware Cloud on AWS SDDC is deployed in the desired region and "Stretched" between multiple Availability Zones (AZ) within AWS for high availability as a part of the Managed Service.
- 2 Within the VMware Cloud on AWS service, Elastic Network Interfaces (ENI) are deployed in each AWS Availability Zone.
- 3 VMware Cloud on AWS service instances (vSphere, vSAN, NSX) are deployed in the same Availability Zone as the "Active Elastic Interface..
- 4 Network Services are deployed between On-Premises and VMware Cloud on AWS (i.e. Route / Policy-Based L3VPN) for end-to-end connectivity.
- 5 The On-Premises "3-Tier App" is extended to VMware Cloud on AWS using the single SDDC that is stretched between two AWS Availability Zones.
- 6 Backend services can be deployed within Native AWS such as Relational Database Services (RDS) for billing with "Active" and "Standby" instances in each Availability Zone.
- 7 The "Standby" Relational Database Service is connected via the Native AWS Virtual Private Cloud (VPC) Router.
- 8 The On-Premises "Cloud Administrator" is able to verify the VMware Cloud on AWS with Multi-AZ deployment via the VMware Cloud Console.
- 9 During a Native AWS Availability Zone failure, the Elastic Network Interfaces (ENI) update between "Active" and "Inactive".
- 10 During a Native AWS Availability Zone failure, the VMware Cloud on AWS instances are migrated to another Availability Zone.

