Microsoft SQL Server Reference Architecture

AWS and VMware Cloud Environment

Provides high performance and availability in a hybrid environment with the SQL Server Always On Availability Group feature.

1. AWS Directory Service for Microsoft Active Directory (AWS Microsoft AD) provides a managed AD for the Customer VPC and the VMware Cloud VPC.
2. .NET applications are seamlessly domain-joined and multi-AZ.
3. Users of Amazon Workspaces have their cloud desktops seamlessly domain-joined.
4. Microsoft SQL Server is deployed on VMware Cloud VPC with local NVMe SSDs.
5. The SQL Server Always On Availability Group feature is deployed on a stretched cluster in an availability group.
6. Route 53 updates the DNS A record of the listener from Primary to Secondary (or vice versa) in the event of a failover.
7. An Elastic Load Balancer distributes traffic across multi-AZ .NET applications.
8. Amazon S3 is used to back up SQL Server.
9. Cloudwatch is used to monitor and provide metrics on instances, the load balancer, and network devices.