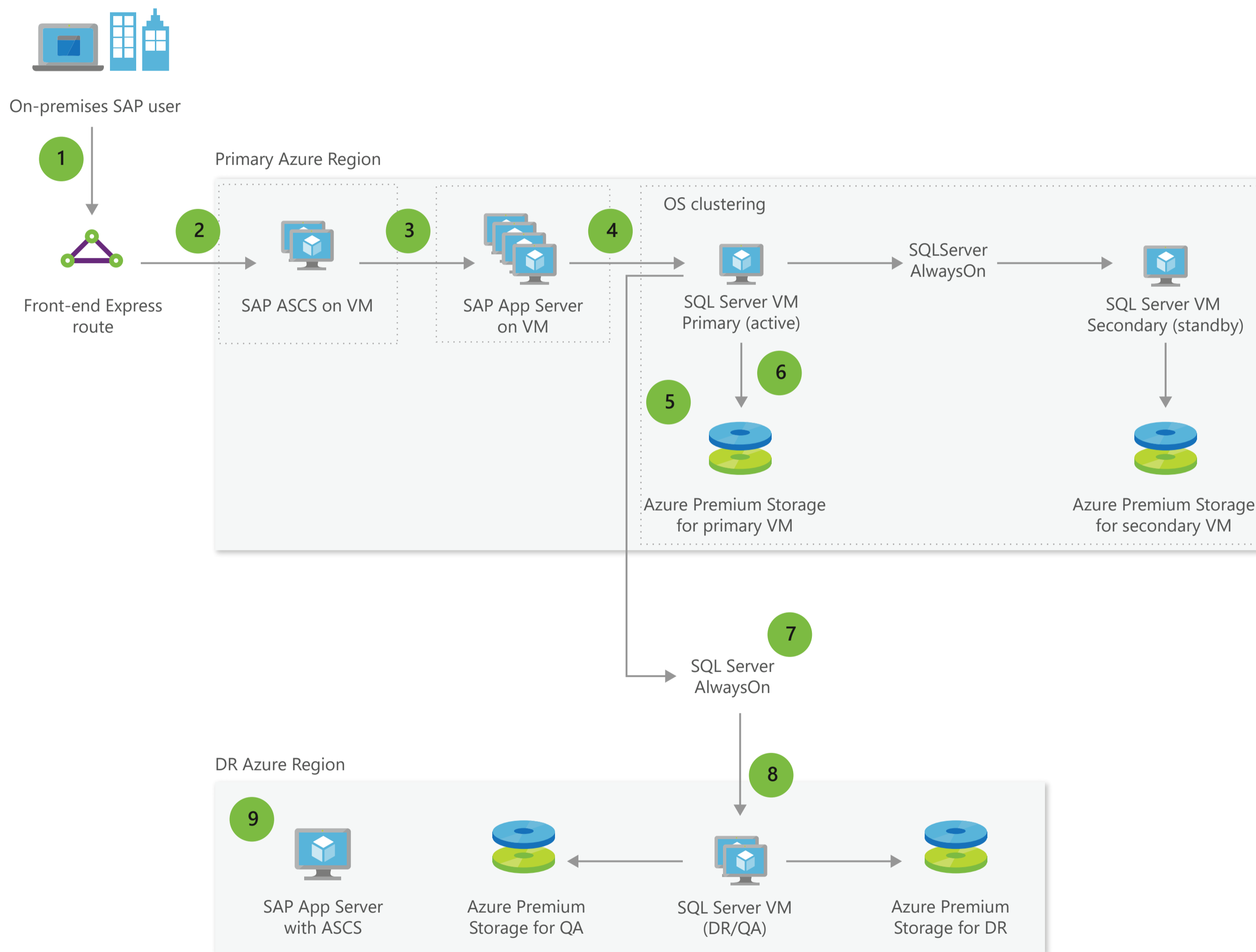


# SAP NetWeaver on SQLServer



## Architecture overview

This NetWeaver on SQL Server application solution illustrates how a user request flows through an SAP landscape built on NetWeaver using Azure Virtual Machines to host SAP applications and a SQL Server database. This system takes advantage of OS clustering for high availability, premium storage for faster storage performance and scalability, SQL Server AlwaysOn capability for replication, and a full disaster recovery (DR) configuration for system availability.

- Using Azure Active Directory synchronized with On-Premises Active Directory, SAP application user authenticates from On-Premises to SAP landscape on Azure with single SignOn credentials.
- Azure high speed Express Route Gateway connects on-premises network to Azure virtual machines and other resources securely.
- Sales order request flows into highly available SAP ABAP SAP Central Services (ASCS), and then through SAP application servers running on Azure Virtual Machines scale out file server in an Azure VM Availability Set uptime SLA set at 99.95 percent.
- The request moves from the SAP app server to SQL Server running on a primary high-performance Azure VM.
- Primary (active) and secondary (standby) servers running on SAP certified virtual machines are clustered at OS level for 99.95 percent availability. Data replication is handled through SQL Server AlwaysOn in synchronous mode from primary to secondary, enabling zero Recovery Point Objective (RPO).
- SQL Server data is persisted to high-performance Azure Premium Storage.
- SQL Server data is replicated to Disaster recovery virtual machine in another Azure region through Azure's high speed backbone network and using SQL Server's AlwaysOn replication in asynchronous mode. The disaster recovery VM can be smaller than the production VM to save costs.
- VMs on the disaster recovery region can be used for non-production work to save costs.
- SAP app server with ASCS on disaster recovery side can be in standby shutdown mode, and can be started when needed to save costs.

## Products

