

Azure Subnet Segmentation Plan

Project Title:

ERP System Migration & DR Implementation on Azure (Hub & Spoke Architecture)

Overview:

This document outlines the subnet segmentation design for the primary and DR regions within a multi-VNet Azure architecture.

Primary Region - Subnet Segmentation

► HUB-VNet (10.1.0.0/16)

Subnet Name	Address Range	Purpose
AzureFirewallSubnet	10.1.1.64/26	Required for Azure Firewall
AzureBastionSubnet	10.1.1.0/26	Required for Azure Bastion
GatewaySubnet	10.1.2.0/24	Required for VPN Gateway

► SQL-Server-VNet (10.2.0.0/16)

Subnet Name	Address Range	Purpose
SQL-Server-Subnet	10.2.0.0/24	Hosts SQL Server VMs

► App-Server-VNet (10.4.0.0/16)

Subnet Name	Address Range	Purpose
App-Server-Subnet	10.4.0.0/24	Hosts ERP Application VMs

► File-Server-VNet (10.3.0.0/16)

Subnet Name	Address Range	Purpose
File-Server-Subnet	10.3.0.0/24	Hosts File Server VMs

⚡ DR Region - Subnet Segmentation

▶ HUB-DR-VNet (10.10.0.0/16)

Subnet Name	Address Range	Purpose
AzureFirewallSubnet	10.10.1.0/26	Required for Azure Firewall
AzureBastionSubnet	10.10.2.0/27	Required for Azure Bastion
GatewaySubnet	10.10.3.0/27	Required for VPN Gateway

▶ SQL-Server-DR-VNet (10.11.0.0/16)

Subnet Name	Address Range	Purpose
SQL-Server-DR-Subnet	10.11.1.0/24	DR SQL Server Replicas

▶ App-Server-DR-VNet (10.12.0.0/16)

Subnet Name	Address Range	Purpose
App-Server-DR-Subnet	10.12.1.0/24	DR ERP Application Replicas

▶ File-Server-DR-VNet (10.13.0.0/16)

Subnet Name	Address Range	Purpose
File-Server-DR-Subnet	10.13.1.0/24	DR File Server Replicas

✓ Notes:

- All subnets follow non-overlapping IP ranges.
 - GatewaySubnet, AzureFirewallSubnet, and AzureBastionSubnet must retain exact names.
 - NSGs and UDRs to be applied separately for each subnet as per security design.
 - Each VNet is peered using Hub & Spoke model, centralized through HUB-VNet and HUB-DR-VNet.
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