

# Hybrid Server Pro II: Advanced (V1)

## Competency Assessment Objectives

### Hybrid Infrastructure Administration

#### Perform Administrative Tasks

- Manage Event Logs
- Manage Services
- Collect data with Log Analytics Agents
- Collect performance counters in Azure
- Manage Alerts
- Collect monitoring data from VMs using Azure Diagnostics Extension
- Collect performance data from VMs using VM Insights

#### Migrate on-premises to Azure

- Migrate file shares to Azure
- Migrate Hyper-V hosts to Azure
- Migrate virtual machines
- Migrate virtual machine storage

### Secure and Update Windows

#### Secure Windows

- Implement exploit mitigation policies
- Protect systems with Windows Defender for Endpoint
- Protect applications with Windows Defender Application Control
- Enable Windows Defender SmartScreen
- Implement group security policies

## **Secure Active Directory User Accounts**

- Protect user credentials with Windows Defender Credential Guard
- Implement password policies
- Implement password block lists
- Deploy user rights policies
- Configure account security policy settings
- Delegate administrative control
- Implement authentication policies and silos for administrative accounts

## **Secure Active Directory Groups**

- Audit group policies
- Manage Active Directory Administrator security groups

## **Secure Domain Controllers and VMs**

- Harden domain controllers
- Use Azure Sentinel to monitor physical and virtual servers
- Use Azure Security Center to resolve security issues

## **Implement storage security**

- Encrypt storage with Windows BitLocker
- Use Azure Disk Encryption
- Manage disk encryption keys in an IaaS VM environment

# **Backup and Disaster Recovery**

## **Backup Windows Servers**

- Use Azure Recovery Services Vault to backup files and folders
- Create a new backup policy
- Use the Built-in backup agent to backup Azure VMs
- Modify a backup policy in Azure Recovery Services Vault

## **Recover Windows Servers**

- Use Azure Recovery Services Vault to restore files and folders
- Recover a VM from a snapshot
- Recover a VM as a new Azure VM
- Restore a VM from backup
- Create a recovery plan for Azure
- Configure on-premises VM for site recovery
- Configure Azure VM for site recovery
- Restore objects from the Active Directory Recycle Bin

## **Replicate Windows Servers**

- Configure VM replication for offsite or an Azure region
- Configure Hyper-V VM replication
- Manage a Hyper-V replica server
- Failover a VM

# High Availability and Failover Cluster Management

## **Configure failover clusters**

- Configure a Network Load Balancing cluster
- Create a failover cluster
- Configure a quorum in a failover cluster
- Setup a Floating IP address for a cluster
- Add a failover cluster role
- Configure a failover cluster
- Create a Scale-Out File Server

## **Manage failover clusters**

- Manage cluster workload
- Implement load balancing for a cluster
- Add storage to a cluster
- Use Windows Admin Center to manage failover clusters
- Recover a failed node in the cluster
- Upgrade the operating system for a node in the cluster
- Initiate a workload failover
- Install Windows Updates on nodes in a cluster
- Configure and manage Storage Spaces Direct

## **Troubleshoot Windows Servers**

### **Troubleshoot Windows**

- Troubleshoot connectivity in a Hybrid environment
- Troubleshoot and resolve a boot failure

### **Troubleshoot Virtual Machines**

- Troubleshoot VM performance
- Troubleshoot connectivity with VMs