

# Configuring Advanced Windows Server 2012 Services

## Exam 70-412

### Skills Being Measured

This exam measures your ability to accomplish the technical tasks listed below. The percentages indicate the relative weight of each major topic area on the exam. The higher the percentage, the more questions you are likely to see on that content area on the exam.

The information after “This objective may include but is not limited to” is intended to further define or scope the objective by describing the types of skills and topics that may be tested for the objective. However, it is not an exhaustive list of skills and topics that could be included on the exam for a given skill area. You may be tested on other skills and topics related to the objective that are not explicitly listed here.

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#### Configure and Manage High Availability (16%)

- Configure Network Load Balancing (NLB).
- This objective may include but is not limited to: Install NLB nodes; configure NLB prerequisites; configure affinity; configure port rules; configure cluster operation mode; upgrade an NLB cluster
- Configure failover clustering.
- This objective may include but is not limited to: Configure Quorum; configure cluster networking; restore single node or cluster configuration; configure cluster storage; implement Cluster Aware Updating; upgrade a cluster
- Manage failover clustering roles.
- This objective may include but is not limited to: Configure role-specific settings including continuously available shares; configure VM monitoring; configure failover and preference settings
- Manage Virtual Machine (VM) movement.
- This objective may include but is not limited to: Perform Live Migration; perform quick migration; perform storage migration; import, export, and copy VMs; migrate from other platforms (P2V and V2V)

### **Configure File and Storage Solutions (15%)**

- Configure advanced file services.
- This objective may include but is not limited to: Configure NFS data store; configure BranchCache; configure File Classification Infrastructure (FCI) using File Server Resource Manager (FSRM); configure file access auditing
- Implement Dynamic Access Control (DAC).
- This objective may include but is not limited to: Configure user and device claim types; implement policy changes and staging; perform access-denied remediation; configure file classification
- Configure and optimize storage.
- This objective may include but is not limited to: Configure iSCSI Target and Initiator; configure Internet Storage Name server (iSNS); implement thin provisioning and trim; manage server free space using Features on Demand

### **Implement Business Continuity and Disaster Recovery (16%)**

- Configure and manage backups.
- This objective may include but is not limited to: Configure Windows Server backups; configure Windows Online backups; configure role-specific backups; manage VSS settings using VSSAdmin; create System Restore snapshots
- Recover servers.
- This objective may include but is not limited to: Restore from backups; perform a Bare Metal Restore (BMR); recover servers using Windows Recovery Environment (Win RE) and safe mode; apply System Restore snapshots; configure the Boot Configuration Data (BCD) store
- Configure site-level fault tolerance.
- This objective may include but is not limited to: Configure Hyper-V Replica including Hyper-V Replica Broker and VMs; configure multi-site clustering including network settings, Quorum, and failover settings

### **Configure Network Services (17%)**

- Implement an advanced Dynamic Host Configuration Protocol (DHCP) solution.
- This objective may include but is not limited to: Create and configure superscopes and multicast scopes; implement DHCPv6; configure high availability for DHCP including DHCP failover and split scopes; configure DHCP Name Protection
- Implement an advanced DNS solution.
- This objective may include but is not limited to: Configure security for DNS including DNSSEC, DNS Socket Pool, and cache locking; configure DNS logging; configure delegated administration; configure recursion; configure netmask ordering; configure a GlobalNames zone
- Deploy and manage IPAM.
- This objective may include but is not limited to: Configure IPAM manually or by using Group Policy; configure server discovery; create and manage IP blocks and ranges; monitor utilization of IP address space; migrate to IPAM; delegate IPAM administration; manage IPAM collections

### **Configure the Active Directory Infrastructure (18%)**

- Configure a forest or a domain.
- This objective may include but is not limited to: Implement multi-domain and multi-forest Active Directory environments including interoperability with previous versions of Active Directory; upgrade existing domains and forests including environment preparation and functional levels; configure multiple user principal name (UPN) suffixes
- Configure trusts.
- This objective may include but is not limited to: Configure external, forest, shortcut, and realm trusts; configure trust authentication; configure SID filtering; configure name suffix routing
- Configure sites.
- This objective may include but is not limited to: Configure sites and subnets; create and configure site links; manage site coverage; manage registration of SRV records; move domain controllers between sites
- Manage Active Directory and SYSVOL replication.

- This objective may include but is not limited to: Configure replication to Read-Only Domain Controllers (RODCs); configure Password Replication Policy (PRP) for RODCs; monitor and manage replication; upgrade SYSVOL replication to Distributed File System Replication (DFSR)

#### **Configure Identity and Access Solutions (15%)**

- Implement Active Directory Federation Services 2.1 (AD FSv2.1).
  - This objective may include but is not limited to: Implement claims-based authentication including Relying Party Trusts; configure Claims Provider Trust rules; configure attribute stores including Active Directory Lightweight Directory Services (AD LDS); manage AD FS certificates; configure AD FS proxy; integrate with Cloud Services
  - Install and configure Active Directory Certificate Services (AD CS).
  - This objective may include but is not limited to: Install an Enterprise Certificate Authority (CA); configure CRL distribution points; install and configure Online Responder; implement administrative role separation; configure CA backup and recovery
  - Manage certificates.
  - This objective may include but is not limited to: Manage certificate templates; implement and manage certificate deployment, validation, and revocation; manage certificate renewal; manage certificate enrollment and renewal to computers and users using Group Policies; configure and manage key archival and recovery
  - Install and configure Active Directory Rights Management Services (AD RMS).
  - This objective may include but is not limited to: Install a licensing or certificate AD RMS server; manage AD RMS Service Connection Point (SCP); manage AD RMS client deployment; manage Trusted User Domains; manage Trusted Publishing Domains; manage Federated Identity support; manage RMS templates; configure Exclusion Policies
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