

MCITP Server Administrator Track

Windows Server 2008 Server Administrator

Validates your ability to handle day-to-day management of the server operating system, file structure, and directory services; handle software distribution and updates; monitor servers; provide tier-2 troubleshooting support; support engineering and change-management projects; build and configure servers; implement auditing policy; perform scheduled vulnerability-assessment scans; and monitor logs for firewalls and intrusion-detection systems.

Exam 70-640: Course: Windows Server 2008 Active Directory Configuration

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.

Configuring Domain Name System (DNS) for Active Directory (16 percent)

- **Configure zones.** Includes : Dynamic DNS (DDNS), Non-dynamic DNS (NDDNS), and Secure Dynamic DNS (SDDNS), Time to Live (TTL), GlobalNames, Primary, Secondary, Active Directory Integrated, Stub, SOA, zone scavenging, forward lookup, reverse lookup
- **Configure DNS server settings.** Includes : forwarding, root hints, configure zone delegation, round robin, disable recursion, debug logging, server scavenging
- **Configure zone transfers and replication.** Includes : configure replication scope (forestDNSzone, domainDNSzone), incremental zone transfers, DNS Notify, secure zone transfers, configure name servers, application directory partitions

Configuring the Active Directory infrastructure (25 percent)

- **Configure a forest or a domain.** Includes : remove a domain, perform an unattended installation, Active Directory Migration Tool (ADMT) v3 (pruning and grafting), raise forest and domain functional levels, interoperability with previous versions of Active Directory, alternate user principal name (UPN) suffix, forestprep, domainprep
- **Configure trusts.** Includes : forest trust, selective authentication versus forest-wide authentication, transitive trust, external trust, shortcut trust, SID filtering
- **Configure sites.** Includes : create Active Directory subnets, configure site links, configure site link costing, configure sites infrastructure
- **Configure Active Directory replication.** Includes : Distributed File System, one-way replication, bridgehead server, replication scheduling, configure replication protocols, force intersite replication
- **Configure the global catalog.** Includes : Universal Group Membership Caching (UGMC), partial attribute set, promote to global catalog
- **Configure operations masters.** Includes : seize and transfer, backup operations master, operations master placement, Schema Master, extending the schema, time service

Configuring additional Active Directory server roles (9 percent)

- **Configure Active Directory Lightweight Directory Service (AD LDS).** Includes : migration to AD LDS, configure data within AD LDS, configure an authentication server, server core, Windows Server 2008 Hyper-V
- **Configure Active Directory Rights Management Service (AD RMS).** Includes : certificate request and installation, self-enrollments, delegation, Active Directory Metadirectory Services (AD MDS), Windows Server virtualization
- **Configure the read-only domain controller (RODC).** Includes : unidirectional replication, Administrator role separation, read-only DNS, BitLocker, credential caching, password replication, syskey, Windows Server virtualization
- **Configure Active Directory Federation Services (AD FS).** Includes : install AD FS server role, exchange certificate with AD FS agents, configure trust policies, configure user and group claim mapping, Windows Server virtualization

Creating and maintaining Active Directory objects (24 percent)

- **Automate creation of Active Directory accounts.** Includes : bulk import, configure the UPN, create computer, user, and group accounts (scripts, import, migration), template accounts, contacts, distribution lists
- **Maintain Active Directory accounts.** Includes : configure group membership, account resets, delegation, AGDLP/AGGUDLP, deny domain local group, local versus domain, Protected Admin, disabling accounts versus deleting accounts, deprovisioning, contacts, creating organizational units (OUs), delegation of control
- **Create and apply Group Policy objects (GPOs).** Includes : enforce, OU hierarchy, block inheritance, and enabling user objects, Group Policy processing priority, WMI, Group Policy filtering, Group Policy loopback
- **Configure GPO templates.** Includes : user rights, ADMX Central Store, administrative templates, security templates, restricted groups, security options, starter GPOs, shell access policies
- **Configure GPO templates.** Includes : user rights, ADMX Central Store, administrative templates, security templates, restricted groups, security options, starter GPOs, shell access policies
- **Configure software deployment GPOs.** Includes : publishing to users, assigning software to users, assigning to computers, software removal
- **Configure account policies.** Includes : domain password policy, account lockout policy, fine-grain password policies
- **Configure audit policy by using GPOs.** Includes : audit logon events, audit account logon events, audit policy change, audit access privilege use, audit directory service access, audit object access

Maintaining the Active Directory environment (13 percent)

- **Configure backup and recovery.** Includes : using Windows Server Backup, backup files and system state data to media, backup and restore by using removable media, perform an authoritative or non-authoritative Active Directory restore, linked value replication, Directory Services Recovery Mode (DSRM) (reset admin password), back up and restore GPOs
- **Perform offline maintenance.** Includes : offline defragmentation and compaction, Restartable Active Directory, Active Directory database storage allocation

- **Monitor Active Directory.** Includes : Network Monitor, Task Manager, Event Viewer, RepMon, RepAdmin, Windows System Resource Manager, Reliability and Performance Monitor, Server Performance Advisor, RSOP

Configuring Active Directory Certificate Services (13 percent)

- **Install Active Directory Certificate Services.** Includes : standalone versus enterprise, CA hierarchies—root versus subordinate, certificate requests, certificate practice statement
- **Configure CA server settings.** Includes : key archival, certificate database backup and restore, assigning administration roles
- **Manage certificate templates.** Includes : certificate template types, securing template permissions, managing different certificate template versions, key recovery agent
- **Manage enrollments.** Includes : network device enrollment service (NDES), auto-enrollment, Web enrollment, smart card enrollment, creating enrollment agents
- **Manage certificate revocations.** Includes : configure Online Responders, Certificate Revocation List (CRL), CRL Distribution Point (CDP), Authority Information Access (AIA)

Course: Windows Server 2008 Network Infrastructure Configuration

Exam 70-642:

TS: Windows Server 2008 Network Infrastructure, Configuring

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.

Configuring IP Addressing and Services (24 percent)

- **Configure IPv4 and IPv6 addressing.** Includes: configure IP options, subnetting, supernetting, alternative configuration
- **Configure Dynamic Host Configuration Protocol (DHCP).** Includes: DHCP options, creating new options, PXE boot, default user profiles, DHCP relay agents, exclusions, authorize server in Active Directory, scopes, server core, Windows Server Hyper-V
- **Configure routing.** Includes: static routing, persistent routing, Routing Internet Protocol (RIP), Open Shortest Path First (OSPF)
- **Configure IPsec.** Includes: create IPsec policy, IPsec Authentication Header (AH), IPsec Encapsulating Security Payload (ESP)

Configuring Name Resolution (27 percent)

- **Configure a Domain Name System (DNS) server.** Includes: conditional forwarding, external forwarders, root hints, cache-only, server core, WINS and DNS integration, Windows Server virtualization
- **Configure DNS zones.** Includes: DNS Refresh no-refresh, intervals, DNS listserv address (NSLOOKUP), primary/secondary zones, Active Directory integration, Dynamic Domain Name System (DDNS), GlobalNames, SOA refresh
- **Configure DNS records.** Includes: record types, host, pointer, MX, SRV, NS, dynamic updates, Time to Live (TTL)
- **Configure DNS replication.** Includes: DNS secondary zones, DNS stub zones, DNS scavenging interval, replication scope
- **Configure name resolution for client computers. Includes:** DNS and WINS integration, configuring HOSTS file, LMHOSTS, node type, Link-Local Multicast Name Resolution (LLMNR), broadcasting, resolver cache, DNS Server list, Suffix Search order,

manage client settings by using group policy

Configuring Network Access (22 percent)

- **Configure remote access.** Includes: dial-up, Remote Access Policy, Network Address Translation (NAT), Internet Connection Sharing (ICS), VPN, Routing and Remote Access Services (RRAS), inbound/outbound filters, configure Remote Authentication Dial-In User Service (RADIUS) server, configure RADIUS proxy, remote access protocols, Connection Manager
- **Configure Network Access Protection (NAP).** Includes: network layer protection, DHCP enforcement, VPN enforcement, configure NAP health policies, IPsec enforcement, 802.1x enforcement, flexible host isolation
- **Configure network authentication.** Includes: LAN authentication by using NTLMv2 and Kerberos, WLAN authentication by using 802.1x, RAS authentication by using MS-CHAP, MS-CHAP v2, and EAP
- **Configure wireless access.** Includes: Set Service Identifier (SSID), Wired Equivalent Privacy (WEP), Wi-Fi Protected Access (WPA), Wi-Fi Protected Access 2 (WPA2), ad hoc versus infrastructure mode, group policy for wireless
- **Configure firewall settings.** Includes: incoming and outgoing traffic filtering, Active Directory account integration, identify ports and protocols, Microsoft Windows Firewall versus Windows Firewall with Advanced Security, configure firewall by using group policy, isolation policy

Configuring File and Print Services (13 percent)

- **Configure a file server.** Includes: file share publishing, Offline Files, share permissions, NTFS permissions, encrypting file system (EFS)
- **Configure Distributed File System (DFS).** Includes: DFS namespace, DFS configuration and application, creating and configuring targets, DFS replication
- **Configure shadow copy services.** Includes: recover previous versions, set schedule, set storage locations
- **Configure backup and restore.** Includes: backup types, backup schedules, managing remotely, restoring data
- **Manage disk quotas.** Includes: quota by volume or quota by user, quota entries, quota templates
- **Configure and monitor print services.** Includes: printer share, publish printers to Active Directory, printer permissions, deploy printer connections, install printer drivers, export and import print queues and printer settings, add counters to Reliability and

Performance Monitor to monitor print servers, print pooling, print priority

Monitoring and Managing a Network Infrastructure (14 percent)

- **Configure Windows Server Update Services (WSUS) server settings.** Includes: update type selection, client settings, Group Policy object (GPO), client targeting, software updates, test and approval, disconnected networks
- **Capture performance data. Includes:** Data Collector Sets, Performance Monitor, Reliability Monitor, monitoring System Stability Index
- **Monitor event logs.** Includes: custom views, application and services logs, subscriptions, DNS log
- **Gather network data.** Includes: Simple Network Management Protocol (SNMP), Baseline Security Analyzer, Network Monitor

Exam 70-646: Windows Server 2008, Server Administrator

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.

Planning for Server Deployment (19 percent)

- **Plan server installations and upgrades.** Includes: Windows Server 2008 edition selection, rollback planning, Bitlocker implementation requirements
- **Plan for automated server deployment.** Includes: standard server image, automation and scheduling of server deployments
- **Plan infrastructure services server roles.** Includes: address assignment, name resolution, network access control, directory services, application services, certificate services
- **Plan application servers and services.** Includes: virtualization server planning, availability, resilience, and accessibility
- **Plan file and print server roles.** Includes: access permissions, storage quotas, replication, indexing, file storage policy, availability, printer publishing

Planning for Server Management (23 percent)

- **Plan server management strategies.** Includes: remote administration, remote desktop, server management technologies, Server Manager and ServerManagerCMD, delegation policies and procedures
- **Plan for delegated administration.** Includes: delegate authority, delegate Active Directory objects, application management
- **Plan and implement group policy strategy.** Includes: GPO management, GPO backup and recovery, group policy troubleshooting, group policy planning

Monitoring and Maintaining Servers (20 percent)

- **Implement patch management strategy.** Includes: operating system patch level maintenance, Windows Server Update Services (WSUS), application patch level maintenance
- **Monitor servers for performance evaluation and optimization.** Includes: server and service monitoring, optimization, event management, trending and baseline analysis
- **Monitor and maintain security and policies.** Includes: remote access, monitor and maintain NPAS, network access, server security, firewall rules and policies,

authentication and authorization, data security, auditing

Planning Application and Data Provisioning (19 percent)

- **Provision applications.** Includes: presentation virtualization, terminal server infrastructure, resource allocation, application virtualization alternatives, application deployment, System Center Configuration Manager
- **Provision data.** Includes: shared resources, offline data access

Planning for Business Continuity and High Availability (19 percent)

- **Plan storage.** Includes: storage solutions, storage management
- **Plan high availability.** Includes: service redundancy, service availability
- **Plan for backup and recovery.** Includes: data recovery strategy, server recovery strategy, directory service recovery strategy, object level recovery