

MCITP Server and Enterprise Administrator Certification Boot Camp

12 Day Program

Course Description

Our MCITP Server and Enterprise Administrator boot camp is an extremely intensive 12-day program. It will prepare you for passing the following six exams. This program is designed to send you home MCITP Server Administrator **and** MCITP Enterprise Administrator certified.

- Windows Server 2008 Active Directory, Configuring (70-640)
- Windows Server 2008 Network Infrastructure, Configuring (70-642)
- Windows Server 2008, Server Administrator (70-646)
- Windows Server 2008 Applications Infrastructure, Configuring (70-643)
- Windows 7, Configuring (70-680)
- Windows Server 2008, Enterprise Administrator (70-647)

Course Outline/Topic List

Day1 and Day 2:

Configuring Domain Name System (DNS) for Active Directory

- Configure zones.
May include but is not limited to: 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.
May include but is not limited to: forwarding, root hints, configure zone delegation, round robin, disable recursion, debug logging, server scavenging
- Configure zone transfers and replication.
May include but is not limited to: configure replication scope (forestDNSzone, domainDNSzone), incremental zone transfers, DNS Notify, secure zone transfers, configure name servers, application directory partitions

Configuring the Active Directory infrastructure

Configure a forest or a domain.
May include but is not limited to: 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.
May include but is not limited to: forest trust, selective authentication versus forest-wide authentication, transitive trust, external trust, shortcut trust, SID filtering
- Configure sites.
May include but is not limited to: create Active Directory subnets, configure site links, configure site link costing, configure sites infrastructure
- Configure Active Directory replication.
May include but is not limited to: Distributed File System, one-way replication, bridgehead server, replication scheduling, configure replication protocols, force intersite replication
- Configure the global catalog.
May include but is not limited to: Universal Group Membership Caching (UGMC), partial attribute set, promote to global catalog
- Configure operations masters.
May include but is not limited to: seize and transfer, backup operations master, operations master placement, Schema Master, extending the schema, time service

Configuring additional Active Directory server roles

- Configure Active Directory Lightweight Directory Service (AD LDS).
May include but is not limited to: 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).

May include but is not limited to: certificate request and installation, self-enrollments, delegation, Active Directory Metadirectory Services (AD MDS), Windows Server virtualization

- Configure the read-only domain controller (RODC).
May include but is not limited to: unidirectional replication, Administrator role separation, read-only DNS, BitLocker, credential caching, password replication, syskey, Windows Server virtualization
- Configure Active Directory Federation Services (AD FS).
May include but is not limited to: 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

- Automate creation of Active Directory accounts.
May include but is not limited to: bulk import, configure the UPN, create computer, user, and group accounts (scripts, import, migration), template accounts, contacts, distribution lists
- Maintain Active Directory accounts.
May include but is not limited to: 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).
May include but is not limited to: enforce, OU hierarchy, block inheritance, and enabling user objects, Group Policy processing priority, WMI, Group Policy filtering, Group Policy loopback
- Configure GPO templates.
May include but is not limited to: user rights, ADMX Central Store, administrative templates, security templates, restricted groups, security options, starter GPOs, shell access policies
- Configure GPO templates.
May include but is not limited to: user rights, ADMX Central Store, administrative templates, security templates, restricted groups, security options, starter GPOs, shell access policies
- Configure software deployment GPOs.
May include but is not limited to: publishing to users, assigning software to users, assigning to computers, software removal
- Configure account policies.
May include but is not limited to: domain password policy, account lockout policy, fine-grain password policies
- Configure audit policy by using GPOs.
May include but is not limited to: 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

- Configure backup and recovery.
May include but is not limited to: 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.
May include but is not limited to: offline defragmentation and compaction, Restartable Active Directory, Active Directory database storage allocation
- Monitor Active Directory.
May include but is not limited to: Network Monitor, Task Manager, Event Viewer, ReplMon, RepAdmin, Windows System Resource Manager, Reliability and Performance Monitor, Server Performance Advisor, RSOP

Configuring Active Directory Certificate Services

- Install Active Directory Certificate Services.
May include but is not limited to: standalone versus enterprise, CA hierarchies—root versus subordinate, certificate requests, certificate practice statement
- Configure CA server settings.
May include but is not limited to: key archival, certificate database backup and restore, assigning administration roles
- Manage certificate templates.
May include but is not limited to: certificate template types, securing template permissions, managing different certificate template versions, key recovery agent
- Manage enrollments.
May include but is not limited to: network device enrollment service (NDES), autoenrollment, Web enrollment, smart card enrollment, creating enrollment agents
- Manage certificate revocations.

May include but is not limited to: configure Online Responders, Certificate Revocation List (CRL), CRL Distribution Point (CDP), Authority Information Access (AIA)

Exam 70-640

Day 3 and Day 4:

Configuring IP Addressing and Services

- Configure IPv4 and IPv6 addressing. May include but is not limited to: configure IP options, subnetting, supernetting, alternative configuration
- Configure Dynamic Host Configuration Protocol (DHCP). May include but is not limited to: 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. May include but is not limited to: static routing, persistent routing, Routing Internet Protocol (RIP), Open Shortest Path First (OSPF)
- Configure IPsec. May include but is not limited to: create IPsec policy, IPsec Authentication Header (AH), IPsec Encapsulating Security Payload (ESP)

Configuring Name Resolution

- Configure a Domain Name System (DNS) server. May include but is not limited to: conditional forwarding, external forwarders, root hints, cache-only, server core, WINS and DNS integration, Windows Server virtualization
- Configure DNS zones. May include but is not limited to: 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. May include but is not limited to: record types, host, pointer, MX, SRV, NS, dynamic updates, Time to Live (TTL)
- Configure DNS replication. May include but is not limited to: DNS secondary zones, DNS stub zones, DNS scavenging interval, replication scope
- Configure name resolution for client computers. May include but is not limited to: 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

- Configure remote access. May include but is not limited to: 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). May include but is not limited to: network layer protection, DHCP enforcement, VPN enforcement, configure NAP health policies, IPsec enforcement, 802.1x enforcement, flexible host isolation
- Configure network authentication. May include but is not limited to: 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. May include but is not limited to: 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. May include but is not limited to: 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

- Configure a file server. May include but is not limited to: file share publishing, Offline Files, share permissions, NTFS permissions, encrypting file system (EFS)
- Configure Distributed File System (DFS). May include but is not limited to: DFS namespace, DFS configuration and application, creating and configuring targets, DFS replication
- Configure shadow copy services. May include but is not limited to: recover previous versions, set schedule, set storage locations
- Configure backup and restore. May include but is not limited to: backup types, backup schedules, managing remotely, restoring data
- Manage disk quotas. May include but is not limited to: quota by volume or quota by user, quota entries, quota templates
- Configure and monitor print services. May include but is not limited to: 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

- Configure Windows Server Update Services (WSUS) server settings. May include but is not limited to: update type selection, client settings, Group Policy object (GPO), client targeting, software updates, test and approval, disconnected networks
- Capture performance data. May include but is not limited to: Data Collector Sets, Performance Monitor, Reliability Monitor, monitoring System Stability Index

- Monitor event logs. May include but is not limited to: custom views, application and services logs, subscriptions, DNS log
- Gather network data. May include but is not limited to: Simple Network Management Protocol (SNMP), Baseline Security Analyzer, Network Monitor

Exam 70-642

Day 5 and Day 6:

Planning for Server Deployment

- Plan server installations and upgrades. May include but is not limited to: Windows Server 2008 edition selection, rollback planning, Bitlocker implementation requirements
- Plan for automated server deployment. May include but is not limited to: standard server image, automation and scheduling of server deployments
- Plan infrastructure services server roles. May include but is not limited to: address assignment, name resolution, network access control, directory services, application services, certificate services
- Plan application servers and services. May include but is not limited to: virtualization server planning, availability, resilience, and accessibility
- Plan file and print server roles. May include but is not limited to: access permissions, storage quotas, replication, indexing, file storage policy, availability, printer publishing

Planning for Server Management

- Plan server management strategies. May include but is not limited to: remote administration, remote desktop, server management technologies, Server Manager and ServerManagerCMD, delegation policies and procedures
- Plan for delegated administration. May include but is not limited to: delegate authority, delegate Active Directory objects, application management
- Plan and implement group policy strategy. May include but is not limited to: GPO management, GPO backup and recovery, group policy troubleshooting, group policy planning

Monitoring and Maintaining Servers

- Implement patch management strategy. May include but is not limited to: operating system patch level maintenance, Windows Server Update Services (WSUS), application patch level maintenance
- Monitor servers for performance evaluation and optimization. May include but is not limited to: server and service monitoring, optimization, event management, trending and baseline analysis
- Monitor and maintain security and policies. May include but is not limited to: 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

- Provision applications. May include but is not limited to: presentation virtualization, terminal server infrastructure, resource allocation, application virtualization alternatives, application deployment, System Center Configuration Manager
- Provision data. May include but is not limited to: shared resources, offline data access

Planning for Business Continuity and High Availability

- Plan storage. May include but is not limited to: storage solutions, storage management
- Plan high availability. May include but is not limited to: service redundancy, service availability
- Plan for backup and recovery. May include but is not limited to: data recovery strategy, server recovery strategy, directory service recovery strategy, object level recovery

Exam 70-646

Day 7, Day 8 and morning of Day 9:

Deploying Servers

- Deploy images by using Windows Deployment Services.
May include but is not limited to: Install from media (IFM), configure Windows Deployment Services, capture Windows Deployment Services images, deploy Windows Deployment Services images, server core
- Configure Microsoft Windows activation.
May include but is not limited to: install a KMS server, create a DNS SRV record, replicate volume license data
- Configure Windows Server Hyper-V and virtual machines.
May include but is not limited to: virtual networking, virtualization hardware requirements, Virtual Hard Disks, migrate from physical to virtual, VM additions, backup, optimization, server core

- Configure high availability.
May include but is not limited to: failover clustering, Network Load Balancing, hardware redundancy
- Configure storage.
May include but is not limited to: RAID types, Virtual Disk Specification (VDS) API, Network Attached Storage, iSCSI and Fibre Channel storage area networks, mount points

Configuring Terminal Services

- Configure Windows Server 2008 Terminal Services RemoteApp (TS RemoteApp).
May include but is not limited to: Configuring Terminal Services Web Access, configuring Terminal Services Remote Desktop Web Connection
- Configure Terminal Services Gateway.
May include but is not limited to: certificate configuration, Terminal Services Gateway Manager (TS Gateway Manager), specifying resources that users can access through TS Gateway by using Terminal Services resource authorization policy (TS RAP) and Terminal Services connection authorization policy (TS CAP), Terminal Services group policy
- Configure Terminal Services load balancing.
May include but is not limited to: Terminal Services Session Broker redirection modes, DNS registration, setting through group policy
- Configure and monitor Terminal Services resources.
May include but is not limited to: allocate resources by using Windows Server Resource Manager, configure application logging
- Configure Terminal Services licensing.
May include but is not limited to: deploy licensing server, connectivity between terminal servers and Terminal Services licensing server, recovering Terminal Services licensing server, managing Terminal Services client access licenses (TS CALs)
- Configure Terminal Services client connections.
May include but is not limited to: connecting local devices and resources to a session, Terminal Services profiles, Terminal Services home folders, Remote Desktop Connection (RDC), single sign-on, Remote Desktop Snap-In, MSTSC.exe
- Configure Terminal Services server options.
May include but is not limited to: logoff, disconnect, reset, remote control, monitor, Remote Desktop Protocol (RDP) permissions, connection limits, session time limits, managing by using GPOs, viewing processes, session permissions, display data prioritization

Configuring a Web Services Infrastructure

- Configure Web applications.
May include but is not limited to: directory-dependent, publishing, URL-specified configuration, Microsoft .NET components, for example, .NET and .aspx, configure application pools
- Manage Web sites.
May include but is not limited to: migrate sites and Web applications, publish IIS Web sites, configure virtual directories
- Configure a File Transfer Protocol (FTP) server.
May include but is not limited to: configure for extranet users, configure permissions
- Configure Simple Mail Transfer Protocol (SMTP).
May include but is not limited to: setting up smart hosts, configuring size limitations, setting up security and authentication to the delivering server, creating proper service accounts, authentication, SMTP relay
- Manage Internet Information Services (IIS).
May include but is not limited to: Web site content backup and restore, IIS configuration backup, monitor IIS, configure logging, delegation of administrative rights
- Configure SSL security.
May include but is not limited to: configure certificates, requesting SSL certificate, renewing SSL certificate, exporting and importing certificates
- Configure Web site authentication and permissions.
May include but is not limited to: configure site permissions and authentication, configure application permissions, client certificate mappings

Configuring Network Application Services

- Configure Windows Media server.
May include but is not limited to: on-demand replication, configure time-sensitive content, caching and proxy
- Configure Digital Rights Management (DRM).
May include but is not limited to: encryption, sharing business rules, configuring license delivery, configuring policy templates
- Configure Microsoft Windows SharePoint Services server options.
May include but is not limited to: site permissions, backup, antivirus, configuring Windows SharePoint Services service accounts
- Configure Windows SharePoint Services e-mail integration.
May include but is not limited to: configuring a document library to receive e-mail, configuring incoming versus outgoing e-mail

Exam 70-643

Afternoon Day 9, and Day 10:

Installing, Upgrading, and Migrating to Windows 7

- Perform a clean installation.
This objective may include but is not limited to: identifying hardware requirements; setting up as the sole operating system; setting up as dual boot; installation methods; boot from the source of installation, preparing the installation source: USB, CD, network share, WDS
- Upgrade to Windows 7 from previous versions of Windows.
This objective may include but is not limited to: upgrading from Windows Vista; migrating from Windows XP; upgrading from one edition of Windows 7 to another edition of Windows 7
- Migrate user profiles.
This objective may include but is not limited to: migrating from one machine to another; migrating from previous versions of Windows; side-by-side vs. wipe and load

Deploying Windows 7

- Capture a system image.
This objective may include but is not limited to: preparing system for capture; creating a WIM file; automated capture; manual capture
- Prepare a system image for deployment.
This objective may include but is not limited to: inserting an application into a system image; inserting a driver into a system image; inserting an update into a system image; configuring tasks to run after deployment
- Deploy a system image.
This objective may include but is not limited to: automated deployment methods; manually deploying a customized image
- Configure a VHD.
This objective may include but is not limited to: creating, deploying, booting, mounting, and updating VHDs; offline updates; offline servicing

Configuring Hardware and Applications

- Configure devices.
This objective may include but is not limited to: updating, disabling, and uninstalling drivers; signed drivers; conflicts between drivers; configuring driver settings; resolving problem device driver
- Configure application compatibility.
This objective may include but is not limited to: setting compatibility mode; implementing shims; compatibility issues with Internet Explorer
- Configure application restrictions.
This objective may include but is not limited to: setting software restriction policies; setting application control policies; setting through group policy or local security policy
- Configure Internet Explorer.
This objective may include but is not limited to: configuring compatibility view; configuring security settings; configuring providers; managing add-ons; controlling InPrivate mode; certificates for secure Web sites

Configuring Network Connectivity

- Configure IPv4 network settings.
This objective may include but is not limited to: connecting to a network; configuring name resolution; setting up a connection for a network; network locations; resolving connectivity issues; APIPA
- Configure IPv6 network settings.
This objective may include but is not limited to: configuring name resolution; connecting to a network; setting up a connection for a network; network locations; resolving connectivity issues; link local multicast name resolution
- Configure networking settings.
This objective may include but is not limited to: adding a physically connected (wired) or wireless device; connecting to a wireless network; configuring security settings on the client; set preferred wireless networks; configuring network adapters; configuring location-aware printing
- Configure Windows Firewall.
This objective may include but is not limited to: configuring rules for multiple profiles; allowing or denying an application; network-profile-specific rules; configuring notifications; configuring authenticated exceptions
- Configure remote management.
This objective may include but is not limited to: remote management methods; configuring remote management tools; executing PowerShell commands

Configuring Access to Resources

- Configure shared resources.

This objective may include but is not limited to: folder virtualization; shared folder permissions; printers and queues; configuring HomeGroup settings

- Configure file and folder access.
This objective may include but is not limited to: encrypting files and folders by using EFS; configuring NTFS permissions; resolving effective permissions issues; copying files vs. moving files
- Configure user account control (UAC).
This objective may include but is not limited to: configuring local security policy; configuring admin vs. standard UAC prompt behaviors; configuring Secure Desktop
- Configure authentication and authorization.
This objective may include but is not limited to: resolving authentication issues; configuring rights; managing credentials; managing certificates; smart cards with PIV; elevating user privileges; multifactor authentication
- Configure BranchCache.
This objective may include but is not limited to: distributed cache mode vs. hosted mode; network infrastructure requirements; configuring settings; certificate management

Configuring Mobile Computing

- Configure BitLocker and BitLocker To Go.
This objective may include but is not limited to: configuring BitLocker and BitLocker To Go policies; managing Trusted Platform Module (TPM) PINs; configuring startup key storage; data recovery agent support
- Configure DirectAccess.
This objective may include but is not limited to: configuring client side; configuring authentication; network infrastructure requirements
- Configure mobility options.
This objective may include but is not limited to: configuring offline file policies; transparent caching; creating and migrating power policy
- Configure remote connections.
This objective may include but is not limited to: establishing VPN connections and authentication; enabling a VPN reconnect; advanced security auditing; NAP quarantine remediation; dial-up connections; remote desktop; published apps

Monitoring and Maintaining Systems that Run Windows 7

- Configure updates to Windows 7.
This objective may include but is not limited to: configuring update settings; determining source of updates; configuring Windows Update policies; reviewing update history; checking for new updates; rolling back updates
- Manage disks.
This objective may include but is not limited to: managing disk volumes; managing file system fragmentation; RAID; removable device policies
- Monitor systems.
This objective may include but is not limited to: configuring event logging; filtering event logs; event subscriptions; data collector sets; generating a system diagnostics report
- Configure performance settings.
This objective may include but is not limited to: configuring page files; configuring hard drive cache; updated drivers; configuring networking performance; configuring power plans; configuring processor scheduling; configuring desktop environment; configuring services and programs to resolve performance issues; mobile computing performance issues; configuring power

Configuring Backup and Recovery Options

- Configure backup.
This objective may include but is not limited to: creating a system recovery disk; backing up files, folders, or full system; scheduling backups
- Configure system recovery options.
This objective may include but is not limited to: configuring system restore points; restoring system settings; last known good configuration; complete restore; driver rollback
- Configure file recovery options.
This objective may include but is not limited to: configuring file restore points; restoring previous versions of files and folders; restoring damaged or deleted files by using shadow copies; restore user profiles

Exam 70-680

Day 11 and Day 12

Planning network and application services

- Plan for name resolution and IP addressing. May include but is not limited to: internal and external naming strategy, naming resolution support for legacy clients, naming resolution for directory services, IP addressing scheme, TCP/IP version coexistence
- Design for network access. May include but is not limited to: network access policies, remote access strategy, perimeter networks, server and domain isolation
- Plan for application delivery. May include but is not limited to: application virtualization, presentation virtualization, locally installed software, Web-based applications
- Plan for Terminal Services. May include but is not limited to: Terminal Services licensing, Terminal Services infrastructure

Designing core identity and access management components

- Design Active Directory forests and domains. May include but is not limited to: forest structure, forest and domain functional levels, intra-organizational authorization and authentication, schema modifications
- Design the Active Directory physical topology. May include but is not limited to: placement of servers, site and replication topology, printer location policies
- Design the Active Directory administrative model. May include but is not limited to: delegation, group strategy, compliance auditing, group administration, organizational structure
- Design the enterprise-level group policy strategy. May include but is not limited to: group policy hierarchy and scope filtering, control device installation, authentication and authorization

Designing support identity and access management components

- Plan for domain or forest migration, upgrade, and restructuring. May include but is not limited to: cross-forest authentication, backward compatibility, object migration, migration planning, implementation planning, environment preparation
- Design the branch office deployment. May include but is not limited to: authentication strategy, server security
- Design and implement public key infrastructure. May include but is not limited to: certificate services, PKI operations and maintenance, certificate life cycle management
- Plan for interoperability. May include but is not limited to: inter-organizational authorization and authentication, application authentication interoperability, cross-platform interoperability

Designing for business continuity and data availability

- Plan for business continuity. May include but is not limited to: service availability, directory service recovery
- Design for software updates and compliance management. May include but is not limited to: patch management and patch management compliance, Microsoft Update and Windows Update, security baselines, system health models
- Design the operating system virtualization strategy. May include but is not limited to: server consolidation, application compatibility, virtualization management, placement of servers
- Design for data management and data access. May include but is not limited to: data security, data accessibility and redundancy, data collaboration

Exam 70-647