



SMARTENTRY

IT Infrastructure Administration

Microsoft – Server Administrator

Title : Microsoft Server Administrator

Institute Certification : SmartEntry Certified Microsoft Server Administrator

Duration: 40 Hrs

Fees: 25K

Prerequisite : A+ & N+

Description

This course covers the importance of infrastructure administration in Microsoft Server and Client. This training model will enhance your career in Microsoft platform as Desktop or System Administrator.

Course Objectives

70-410 Installing and Configuring Windows Server 2012

70-411 Administering Windows Server 2012

70-412 Configuring Advanced Windows Server 2012 Services

Install and configure servers

- **Install servers**
 - ❖ Plan for a server installation, plan for server roles, plan for a server upgrade, install Server Core, optimize resource utilization by using Features on Demand, migrate roles from previous versions of Windows Server
- **Configure servers**
 - ❖ Configure Server Core, delegate administration, add and remove features in offline images, deploy roles on remote servers, convert Server Core to/from full GUI, configure services, configure NIC teaming, install and configure Windows PowerShell Desired State Configuration (DSC)
- **Configure local storage**
 - ❖ Design storage spaces, configure basic and dynamic disks, configure master boot record (MBR) and GUID partition table (GPT) disks, manage volumes, create and



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mount virtual hard disks (VHDs), configure storage pools and disk pools, create storage pools by using disk enclosures

Configure server roles and features

- **Configure file and share access**
 - ❖ Create and configure shares, configure share permissions, configure offline files, configure NTFS permissions, configure access-based enumeration (ABE), configure Volume Shadow Copy Service (VSS), configure NTFS quotas, create and configure Work Folders
- **Configure print and document services**
 - ❖ Configure the Easy Print print driver, configure Enterprise Print Management, configure drivers, configure printer pooling, configure print priorities, configure printer permissions
- **Configure servers for remote management**
 - ❖ Configure WinRM, configure down-level server management, configure servers for day-to-day management tasks, configure multi-server management, configure Server Core, configure Windows Firewall, manage non-domain joined servers

Deploy and configure core network services

- **Configure IPv4 and IPv6 addressing**
 - ❖ Configure IP address options, configure IPv4 or IPv6 subnetting, configure supernetting, configure interoperability between IPv4 and IPv6, configure Intra-site Automatic Tunnel Addressing Protocol (ISATAP), configure Teredo
- **Deploy and configure Dynamic Host Configuration Protocol (DHCP) service**
 - ❖ Create and configure scopes, configure a DHCP reservation, configure DHCP options, configure client and server for PXE boot, configure DHCP relay agent, authorize DHCP server
- **Deploy and configure DNS service**
 - ❖ Configure Active Directory integration of primary zones, configure forwarders, configure Root Hints, manage DNS cache, create A and PTR resource records

Install and administer Active Directory

- **Install domain controllers**
 - ❖ Add or remove a domain controller from a domain, upgrade a domain controller, install Active Directory Domain Services (AD DS) on a Server Core installation, install a domain controller from Install from Media (IFM), resolve DNS SRV record registration issues, configure a global catalogue server, deploy Active Directory infrastructure as a service (IaaS) in Microsoft Azure
- **Create and manage Active Directory users and computers**



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- ❖ Automate the creation of Active Directory accounts; create, copy, configure and delete users and computers; configure templates; perform bulk Active Directory operations; configure user rights; offline domain join; manage inactive and disabled accounts
- **Create and manage Active Directory groups and organizational units (OUs)**
 - ❖ Configure group nesting; convert groups, including security, distribution, universal, domain local and domain global; manage group membership using Group Policy; enumerate group membership; delegate the creation and management of Active Directory objects; manage default Active Directory containers; create, copy, configure and delete groups and OUs

Create and manage Group Policy

- **Create Group Policy objects (GPOs)**
 - ❖ Configure a Central Store, manage starter GPOs, configure GPO links, configure multiple local Group Policies
- **Configure security policies**
 - ❖ Configure User Rights Assignment, configure Security Options settings. Configure Security templates, configure Audit Policy, configure Local Users and Groups, configure User Account Control (UAC)
- **Configure application restriction policies**
 - ❖ Configure rule enforcement, configure AppLocker rules, configure Software Restriction Policies
- **Configure Windows Firewall**
 - ❖ Configure rules for multiple profiles using Group Policy; configure connection security rules; configure Windows Firewall to allow or deny applications, scopes, ports, and users; configure authenticated firewall exceptions; import and export settings

Deploy, manage and maintain servers

- **Deploy and manage server images**
 - ❖ Install the Windows Deployment Services (WDS) role; configure and manage boot, install and discover images; update images with patches, hotfixes and drivers; install features for offline images; configure driver groups and packages
- **Implement patch management**
 - ❖ Install and configure the Windows Server Update Services (WSUS) role, configure group policies for updates, configure client-side targeting, configure WSUS synchronization, configure WSUS groups, manage patch management in mixed environments



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- **Monitor servers**
 - ❖ Configure Data Collector Sets (DCS), configure alerts, monitor real-time performance, monitor virtual machines (VMs), monitor events, configure event subscriptions, configure network monitoring, schedule performance monitoring

Configure File and Print Services

- **Configure Distributed File System (DFS)**
 - ❖ Install and configure DFS namespaces, configure DFS Replication Targets, configure Replication Scheduling, configure Remote Differential Compression settings, configure staging, configure fault tolerance, clone a DFS database, recover DFS databases, optimize DFS replication
- **Configure File Server Resource Manager (FSRM)**
 - ❖ Install the FSRM role service, configure quotas, configure file screens, configure reports, configure file management tasks
- **Configure file and disk encryption**
 - ❖ Configure BitLocker encryption; configure the Network Unlock feature; configure BitLocker policies; configure the EFS recovery agent; manage EFS and BitLocker certificates, including backup and restore
- **Configure advanced audit policies**
 - ❖ Implement auditing using Group Policy and AuditPol.exe, create expression-based audit policies, create removable device audit policies

Configure network services and access

- **Configure DNS zones**
 - ❖ Configure primary and secondary zones, configure stub zones, configure conditional forwards, configure zone and conditional forward storage in Active Directory, configure zone delegation, configure zone transfer settings, configure notify settings
- **Configure DNS records**
 - ❖ Create and configure DNS Resource Records (RR), including A, AAAA, PTR, SOA, NS, SRV, CNAME and MX records; configure zone scavenging; configure record options, including Time To Live (TTL) and weight; configure round robin; configure secure dynamic updates
- **Configure virtual private networks (VPN) and routing**
 - ❖ Install and configure the Remote Access role, implement Network Address Translation (NAT), configure VPN settings, configure remote dial-in settings for users, configure routing, configure Web Application proxy in passthrough mode
- **Configure DirectAccess**
 - ❖ Implement server requirements, implement client configuration, configure DNS for Direct Access, configure certificates for Direct Access



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Configure and manage Active Directory

- **Configure service authentication**
 - ❖ Create and configure Service Accounts, create and configure Group Managed Service Accounts, configure Kerberos delegation, manage Service Principal Names (SPNs), configure virtual accounts
- **Configure domain controllers**
 - ❖ Transfer and seize operations master roles, install and configure a read-only domain controller (RODC), configure domain controller cloning
- **Maintain Active Directory**
 - Back up Active Directory and SYSVOL, manage Active Directory offline, optimize an Active Directory database, clean up metadata, configure Active Directory snapshots, perform object- and container-level recovery, perform Active Directory restore, configure and restore objects by using the Active Directory Recycle Bin
- **Configure account policies**
 - ❖ Configure domain and local user password policy settings, configure and apply Password Settings Objects (PSOs), delegate password settings management, configure account lockout policy settings, configure Kerberos policy settings

Configure and manage Group Policy

- **Configure Group Policy processing**
 - ❖ Configure processing order and precedence, configure blocking of inheritance, configure enforced policies, configure security filtering and Windows Management Instrumentation (WMI) filtering, configure loopback processing, configure and manage slow-link processing and Group Policy caching, configure client-side extension (CSE) behaviour, force Group Policy Update
- **Configure Group Policy settings**
 - ❖ Configure settings, including software installation, folder redirection, scripts, and administrative template settings; import security templates; import custom administrative template file; configure property filters for administrative templates
- **Manage Group Policy objects (GPOs)**
 - ❖ Back up, import, copy and restore GPOs; create and configure Migration Table; reset default GPOs; delegate Group Policy management
- **Configure Group Policy preferences (GPP)**
 - ❖ Configure GPP settings, including printers, network drive mappings, power options, custom registry settings, Control Panel settings, Internet Explorer



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settings, file and folder deployment and shortcut deployment; configure item-level targeting

Configure file and storage solutions

- **Configure advanced file services**
 - ❖ Configure Network File System (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)**
 - ❖ Configure user and device claim types, implement policy changes and staging, perform access-denied remediation, configure file classification, create and configure Central Access rules and policies, create and configure resource properties and lists
- **Configure and optimise storage**
 - ❖ Configure iSCSI target and initiator, configure Internet Storage Name server (iSNS), implement thin provisioning and trim, manage server free space using Features on Demand, configure tiered storage

Implement business continuity and disaster recovery

- Configure and manage backups
 - ❖ Configure Windows Server backups, configure Microsoft Azure backups, configure role-specific backups, manage VSS settings using VSSAdmin
- Recover servers
 - ❖ Restore from backups, perform a Bare Metal Restore (BMR), recover servers using Windows Recovery Environment (Win RE) and safe mode, configure the Boot Configuration Data (BCD) store
- Configure site-level fault tolerance
 - ❖ Configure Hyper-V Replica, including Hyper-V Replica Broker and VMs; configure multi-site clustering, including network settings, Quorum and failover settings; configure Hyper-V Replica extended replication; configure Global Update Manager; recover a multi-site failover cluster

Configure Network Services

- **Implement an advanced Dynamic Host Configuration Protocol (DHCP) solution**
 - ❖ Create and configure superscopes and multicast scopes; implement DHCPv6; configure high availability for DHCP, including DHCP failover and split scopes; configure DHCP Name Protection; configure DNS registration
- **Implement an advanced DNS solution**
 - ❖ Configure security for DNS, including Domain Name System Security Extensions (DNSSEC), DNS Socket Pool, and cache locking; configure DNS logging; configure delegated administration; configure recursion; configure netmask ordering; configure a GlobalNames zone; analyse zone level statistics



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- **Deploy and manage IP Address Management (IPAM)**
 - ❖ Provision IPAM manually or by using Group Policy, configure server discovery, create and manage IP blocks and ranges, monitor utilisation of IP address space, migrate to IPAM, delegate IPAM administration, manage IPAM collections, configure IPAM database storage

International Certification

SmartEntry is the authorized certification center, after training you can register and appear for the exam. The fees for the examination is differs depends on Dollar. Please check our Exam Admin.