

TOC for L2 to L3

Windows & AD

Versions to be covered: Windows 2012/2016/2019/2022

Module 1: Advanced administration of Windows Server

- Troubleshooting Windows installation and Windows Server issues
- Backup and Recovery of Windows Server
- Troubleshoot Server patching issues
- Securing data using Encrypted file systems
- Troubleshooting Windows servers using
 - Best Practices Analyzer
 - Events and Errors
 - Knowledge Articles
- Configure Bare-metal, system state recovery in Windows Server
- Recover servers using Bare-metal and system state backup
- Configure File and Share Permissions in Windows Server
- Disaster Recovery in Windows Server
- Recovering Windows File servers
- Troubleshoot Windows server Blue Screen Errors
- Troubleshoot server Hardware Issues.
- Troubleshoot File server Permissions issues
- Performance monitoring and tuning.
- Troubleshoot Windows server Patching issues
- Configuring backup (native backup if there is no 3rd party software's available)
- Scheduling, configuring & verifying backup jobs

Module 2: Advanced Deployment and Administration of AD

- Deploying AD DS
- Deploying and Cloning Virtual Domain Controllers
- Deploying Domain Controllers in Windows Azure
- Administering AD DS
- Installing and administrating DFS (Distributed file system)
- Administration of DFSN & DFSR
- Upgrading Active Directory
- Adding a child domain
- Decommissioning of Domain Controller
- AD Domain or Forest Recovery
- Creating and managing Trusts
- Recovering AD objects from System state backup
- AD object recovery scenarios
- Planning for schema or Domain Upgrade

- Delegation of Control
- Import and export AD objects using CSVDE and LDIFDE
- Active Directory Migration Tool
- Securing Domain Controllers
- Implementing Account Security
- Implementing Audit Authentication
- Configuring and Administrating AD DS Sites & Subnets
- Configuring and troubleshooting AD DS Replication
- Troubleshoot AD/DC performance issues
- What Audit policies and SACL's to be enabled for forensic investigations
- Configure Recycle-bin
- Recovering AD objects using AD recycle Bin and Using System State Backup
- Troubleshoot Sysvol replication issues
- Recover Sysvol using Authoritative and Non-authoritative backups
- Troubleshoot AD Authentication issues across the Trusts
- Configure Monitoring of AD DS
- Managing the AD DS Database

Module 3: Managing Group Policies

- Implementing Administrative Templates
- Configuring Folder Redirection and Scripts
- Configuring Group Policy
- Installing Group Policy
- Enforcing and Blocking Group Policy inheritance
- Configure Group Policy Loopback
- Configuring group policy processing Preferences
- Creating Starter GPO's
- Filtering Group Policy
- Configuring Restricted Groups
- Local Group Management with Preferences
- Software installation using Group policy
- Configure AppLocker
- Troubleshooting Group Policy
- Creating Security Templates
- Security Configuration Wizard
- Configuring Auditing
- Auditing Active Directory
- Auditing Files
- Create Active Directory Password Policy
- Create Fine-Grained Password Policy
- Deny Domain Local Group

- Setting up Security with Group Policy Objects and Organizational Units in Windows Server 2012
- Windows Server 2012 Group Policy Management
- Enable GPSVC logs for troubleshooting GPO issues

Module 4: Configuration and administration of DHCP

- Configure High availability of DHCP
- Troubleshooting DHCP
- Backup and recovery of DHCP Server

Module 5: Configuration and administration of Domain Name System (DNS)

- Configure Zone Replication and Zone Delegation
- Define backup strategies for DNS zone
- Backup and recovery of DNS server and DNS zones
- Configure DNS Scavenging and Aging
- Troubleshooting DNS name resolution issues

Module 6: Implementing and Administering AD RMS

- Deploying and Managing an AD RMS Infrastructure
 - Install a licensing or certificate AD RMS server
 - Manage AD RMS Service Connection Point (SCP)
 - Manage AD RMS client deployment
- Configuring AD RMS Content Protection
 - Manage RMS templates
- Configuring External Access to AD RMS
 - Manage Trusted User Domains
 - manage Trusted Publishing Domains
 - Manage Federated Identity support
 - Configure Exclusion Policies

Module 7: Implementing and Administering AD FS

- Deploying AD FS
- Implementing AD FS for a Single Organization
- Deploying AD FS in a Business-to-Business Federation Scenario
 - Install AD FS
 - Configure authentication policies
 - Configure Workplace Join
 - configure multi-factor authentication
 - 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

Module 8: Implementing and Administering AD LDS

- Deploying AD LDS
- Configuring AD LDS Instances and Partitions
- Configuring AD LDS Replication
- Integrating AD LDS with AD DS

Module 9: PowerShell

- Variables
- Alias
- Files and Folder Operations in Scripts
- Date and Time Operations in scripts
- File I/O Operations in scripts
- Advanced Cmdlets
- Operators
- Looping & Branching
- Functions
- Conditions
- Array & Hash table handling