Microsoft Certified Solution Master (MCSM)
Windows Server 2012 Directory Services
Reading list (June 2013)

The Microsoft Certified Solutions Master: Directory Services certification validates comprehensive knowledge of the Windows Server Directory platform. This certification is designed to challenge the limits of most candidates. The reading list below provides an overview of topics covered during training and is not intended to be a conclusive set of reference material. You are encouraged to review the topics below in preparation for the training courses.

Core Directory Concepts & Key Items

- MCM Core AD Internals
- Core Concepts of Active Directory Domain Services
  - Attributes
  - Containers and Leaves
  - Object Names and Identities
  - Naming Contexts and Directory Partitions
  - Domain Trees
  - Forests
  - Active Directory Servers and Dynamic DNS
  - Replication and Data Integrity
- Active Directory
  - Active Directory Logical Structure
  - Active Directory Data Storage
  - Name Resolution in Active Directory
  - Active Directory Schema
  - Service Publication in Active Directory
  - Active Directory Replication
  - Managing Flexible Single-Master Operations
  - Monitoring Performance in Active Directory
  - Active Directory Backup and Restore
  - Active Directory Diagnostics, Troubleshooting, and Recovery
- Active Directory Collection
  - Active Directory on a Windows Server Network
  - Active Directory Application Mode
  - Structure and Storage Technologies
  - Domain Controller Roles
  - Replication Technologies
  - Search and Publication Technologies
  - Installation, Upgrade, and Migration Technologies
- AD Users, Computers, and Groups
  - Introduction
  - Active Directory User and Computer Accounts
  - Active Directory Groups User Authentication

    - User Authorization
    - Summary
    - Appendix A: Built-in, Predefined, and Special Groups
    - Appendix B: User Rights
- AD DS Design Guide
    - Understanding AD DS Design
    - Identifying Your AD DS Design and Deployment Requirements
    - Mapping Your Requirements to an AD DS Deployment Strategy
    - Designing the Logical Structure for Windows Server 2008 AD DS
    - Designing the Site Topology for Windows Server 2008 AD DS
    - Enabling Advanced Features for AD DS
    - Evaluating AD DS Deployment Strategy Examples
    - Appendix A: Reviewing Key AD DS Terms
- Distributed Systems Guide.
    - Active Directory Logical Structure
    - Active Directory Data Storage
    - Name Resolution in Active Directory
    - Active Directory Schema
    - Service Publication in Active Directory
    - Active Directory Replication
    - Managing Flexible Single-Master Operations
    - Monitoring Performance in Active Directory
    - Active Directory Backup and Restore
    - Active Directory Diagnostics, Troubleshooting, and Recovery
- Domain and Forest Trusts Technical Reference
    - What Are Domain and Forest Trusts?
    - How Domain and Forest Trusts Work
    - Domain and Forest Trust Tools and Settings
    - Security Considerations for Trusts
- Global Catalog Technical Reference
    - What Is the Global Catalog?
    - How the Global Catalog Works
    - Global Catalog Tools and Settings
- Operations Masters Technical Reference
    - What are Operations Masters?
    - How Operations Masters Work
    - Operations Masters Tools and Settings
- TCP/IP Technical Reference
    - What Is TCP/IP?
    - How TCP/IP Works
    - TCP/IP Tools and Settings
- Active Directory Domain Services in the Perimeter Network
    - Planning Deployment of AD DS in the Perimeter Network
    - Designing RODCs in the Perimeter Network

    - Deploying RODCs in the Perimeter Network
- Running Domain Controllers in Hyper-V
    - Planning to Virtualize Domain Controllers
    - Deployment Considerations for Virtualized Domain Controllers
    - Operational Considerations for Virtualized Domain Controllers
    - Backup and Restore Considerations for Virtualized Domain Controllers
    - USN and USN Rollback
- Distributed Link Tracking on Windows-based domain controllers
- Active Directory Schema Technical Reference
- Infrastructure Planning and Design Guides for Windows Server 2008
- Active Directory and Active Directory Domain Services Port Requirements
- DCDIAG Technical Reference: What does DCDIAG actually… do?
- High Water Mark and Up To Dateness Vector (These are the updates you are looking for)
- AdminSDHolder

AD Database

- How the Data Store Works
    - Data Store Architecture
    - Data Store Protocols
    - Data Store Interfaces
    - Data Store Logical Structure
    - Data Store Physical Structure
    - Data Store Processes and Interactions
    - Network Ports Used by the Data Store
    - Related Information
- Data Storage
    - Directory Tree
    - Storage Limits
    - Directory Data Store
    - Object-Based Security
    - Growth Estimates for Active Directory Users and Organizational Units
    - Data Characteristics
    - Windows 2000 SAM Storage
    - Data Model
    - Container Objects and Leaf Objects
    - Directory Partitions
- Extensible Storage Engine Files
    - Transaction Log Files
    - Temporary Transaction Log Files
    - Reserved Transaction Log Files
    - Checkpoint Files
    - Database Files

    - Temporary Databases
- Active Directory Domain Services Database Mounting Tool (Snapshot Viewer or Snapshot Browser) Step-by-Step Guide
- MCM: Active Directory Indexing For the Masses

ADFS

- Overview of Active Directory Federation Services (ADFS) in Windows Server 2003 R2
- Active Directory Federation Services (AD FS) Overview
- ADFS Design Guide
    - Understanding the ADFS Design Process
    - Identifying Your ADFS Deployment Goals
    - Mapping Your Deployment Goals to an ADFS Design
    - Evaluating ADFS Design Examples
    - Planning Partner Organization Deployments
    - Designing a Federated Application Strategy
    - Planning ADFS-Enabled Web Server Placement
    - Planning Federation Server Placement
    - Planning Federation Server Proxy Placement
    - Planning for ADFS Capacity
    - Finding Additional ADFS Resources
    - Appendix A: Reviewing ADFS Requirements
    - Appendix B: Reviewing Key ADFS Concepts
    - Appendix C: Documenting Your ADFS Design
- ADFS Deployment Guide
    - Planning to Deploy ADFS
    - Implementing Your ADFS Design Plan
    - Checklist: Implementing a Web SSO Design
    - Checklist: Implementing a Federated Web SSO Design
    - Checklist: Implementing a Federated Web SSO with Forest Trust Design
    - Deploying Partner Organizations
    - Deploying Federated Applications
    - Deploying ADFS-Enabled Web Servers
    - Deploying Federation Servers
    - Deploying Federation Server Proxies
    - Finding Additional ADFS Resources
- AD FS 2.0 Claims Rule Language Primer
    - An Introduction to Claims
    - Security Briefs: Exploring Claims-Based Identity
    - AD FS 2.0 Content Map
    - Understanding Claim Rule Language in AD FS 2.0
    - When to Use a Custom Claim Rule
    - The Role of the Claim Rule Language
    - The Role of the Claims Engine

    - The Role of the Claims Pipeline
- AD FS 2.0 Claims Rule Language Part 2
- AD FS 2.0: Using RegEx in the Claims Rule Language
- AD FS 2.0 RelayState

Authentication & Logon

- Logon and Authentication Technologies
    - Digest Authentication Technical Reference
    - Interactive Logon Technical Reference
    - Kerberos Authentication Technical Reference
        - What Is Kerberos Authentication?
        - How the Kerberos Version 5 Authentication Protocol Works
        - Kerberos Authentication Tools and Settings
    - TLS/SSL Technical Reference
- Windows Kerberos Authentication
    - Introduction
    - Overview of the Kerberos Protocol
    - Kerberos Components in Windows 2000
    - Authorization Data
    - Interactive Logon
    - Remote Logon
    - Interoperability
- Kerberos Protocol Transition and Constrained Delegation
    - Introduction (Kerberos Protocol Transition and Constrained Delegation)
    - Authenticating Web Application Users
    - Windows Server 2003 Kerberos Extensions
    - Sample Scenario Source Files
    - Summary (Kerberos Protocol Transition and Constrained Delegation)
    - Conclusion (Kerberos Protocol Transition and Constrained Delegation)
- Kerberos for the Busy Admin
- Understanding Kerberos Double Hop
- Kerberos errors in network captures
- [MS-NLMP]: NT LAN Manager (NTLM) Authentication Protocol
- Authorization and Access Control Technologies
    - Security Descriptors and Access Control Lists Technical Reference
    - Access Tokens Technical Reference
    - Permissions Technical Reference
    - Security Principals Technical Reference
    - Security Identifiers Technical Reference
- Interactive Logon Technical Reference
    - What is Interactive Logon?
    - How Interactive Logon Works

    - Interactive Logon Tools and Settings
- User Data and Settings Management
    - User Profiles Overview in User Data and Settings Management
    - User Profile Structure
    - Enhancements to User Profiles in Windows Server 2003 and Windows XP
    - How to Configure a Roaming User Profile
    - Security Considerations when Configuring Roaming User Profiles
    - Best Practices for User Profiles
    - Folder Redirection Overview
    - How to Configure Folder Redirection
    - Security Considerations when Configuring Folder Redirection
    - Best Practices for Folder Redirection in User Data and Settings Management
    - Related Technologies: Offline Files and Synchronization Manager
    - Common Scenarios for IntelliMirror User Data and Settings Features
    - Appendix: Group Policy Settings for Roaming User Profiles
    - Related Links for User Data and Settings Management
- Problems with Kerberos authentication when a user belongs to many groups (Article ID: 327825)
- Users who are members of more than 1,015 groups may fail logon authentication (Article ID: 328889)
- MaxTokenSize and Windows 8 and Windows Server 2012

Backup and Disaster Recovery

- AD DS Backup and Recovery Step-by-Step Guide
    - What's New in AD DS Backup and Recovery?
    - Known Issues for AD DS Backup and Recovery
    - Best Practices for AD DS Backup and Recovery
    - General Requirements for Backing Up and Recovering AD DS
    - Scenario Overviews for Backing Up and Recovering AD DS
    - Steps for Backing Up and Recovering AD DS
- Planning for Active Directory Forest Recovery
    - New Features, Assumptions, and Prerequisites for Using This Guide for Planning Active Directory Forest Recovery
    - Devising a Custom Forest Recovery Plan
    - Recovering Your Active Directory Forest
    - Appendix A: Forest Recovery Procedures
    - Appendix B: Frequently Asked Questions
    - Appendix C: Recovering a Single Domain within a Multidomain Forest
    - Appendix D: Forest Recovery with Windows Server 2003 Domain Controllers
    - Additional Resources
- Windows Server 2012: Planning for Active Directory Forest Recovery (Word doc download)
- Recovering Missing FRS Objects and FRS Attributes in Active Directory
- Performing an Authoritative Restore of Active Directory Objects

    - Restore Active Directory from backup
    - Mark the object or objects authoritative
    - Synchronize replication with all partners
    - Run an LDIF file to recover back-links
    - Restart the domain controller in Directory Services Restore Mode locally
    - Create an LDIF file for recovering back-links for authoritatively restored objects
    - Turn off inbound replication
    - Turn on inbound replication
- How to Force a Non-Authoritative Restore of the Data in the SYSVOL Folder on a Domain Controller in Windows 2000 Server and in Windows Server 2003
- How to Perform an Authoritative Restore to a Domain Controller in Windows 2000
- Performing a Non-Authoritative Restore of a Domain Controller
- How to Remove Data in Active Directory After an Unsuccessful Domain Controller Demotion
- Using Ntdsutil.exe to transfer or seize FSMO roles to a domain controller
- How to perform a disaster recovery restoration of Active Directory on a computer with a different hardware configuration
- How to restore deleted user accounts and their group memberships in Active Directory
- Active Directory Database Mounting Tool Step-by-Step Guide

Certificate Services

- Best Practices for Implementing a Microsoft Windows Server 2003 Public Key Infrastructure
    - About This Document (Best Practices for Implementing a Microsoft Windows Server 2003 Public Key Infrastructure)
    - Overview of the PKI Design Process (Best Practices for Implementing a Microsoft Windows Server 2003 Public Key Infrastructure)
    - Integration Into Existing Environments (Best Practices for Implementing a Microsoft Windows Server 2003 Public Key Infrastructure)
    - Windows Server 2003 PKI and Dependencies (Best Practices for Implementing a Microsoft Windows Server 2003 Public Key Infrastructure)
    - Deployment Planning (Best Practices for Implementing a Microsoft Windows Server 2003 Public Key Infrastructure)
    - Creating Certificate Policies and Certificate Practice Statements
    - Example Scenario for Contoso
    - Stand-alone Offline Intermediate CA (IntermediateCA1)
    - Stand-alone Offline Intermediate CA (CorporateSub2CA)
    - Online Enterprise Issuing CAs (CorporateEnt1CA)
    - Certification Authority Maintenance
    - Appendix A: Directory Objects
    - Contents of \\Localhost\CertConfig and \\Localhost\CertEnroll
    - Relationship of the Configuration Container and Certificate Store
    - Default CA Certificate and CRL Storage
    - Mapping Custom Object Identifiers to Friendly Names
    - CAPolicy.inf Syntax

    - CRL Distribution Point Replacement Token
    - CRL Publishing Properties
    - AIA Publishing Properties
    - Sample Script to Configure CorporateRootCA
    - Sample Script to Configure IntermediateCA
    - Sample Script to Configure the EnterpriseSubCA
    - Appendix B: Parameters for a Three-Tier CA Topology
    - Appendix C: Additional Information
- Best Practices for Certificate Management
- Designing and Implementing a PKI: A 5 Part Article
    - Designing and Implementing a PKI: Part I Design and Planning
    - Designing and Implementing a PKI: Part II Implementation Phases and Certificate Authority Installation
    - Designing and Implementing a PKI: Part III Certificate Templates
    - Designing and Implementing a PKI: Part IV Configuring SSL for Web Enrollment and Enabling Key Archival
    - Designing and Implementing a PKI: Part V Disaster Recovery
- Windows XP: Certificate Status and Revocation Checking
- Certificate Revocation Checking in Windows Vista and Windows Server 2008
    - What's New in Certificate Revocation in Windows Vista and Windows Server 2008
    - How Certificate Revocation Works
    - Pre-Fetching
    - Support for Independent OCSP Signer and Custom OCSP URLs
    - Optimizing the Revocation Experience
    - Appendix A: Managing OCSP Settings with Group Policy
    - Appendix B: Configuring ETag and Max-Age in IIS
    - Appendix C: Certificate Revocation References
- Public Key Infrastructure (PKI)
    - CA Certificates Technical Reference
    - Certificates Technical Reference
    - Certificate Services Technical Reference
- CA Certificates Technical Reference (similar to the next TR)
    - What Are CA Certificates?
    - How CA Certificates Work
    - CA Certificates Tools and Settings
- Certificate Service Technical Reference (similar to the previous TR)
    - What Is Certificate Services?
    - How Certificate Services Works
    - Certificate Services Tools and Settings

Client Interaction

- Locating Active Directory Servers
    - Domain Controller Name Registration
    - SRV Resource Records

    - Domain Controller Location Process
    - Finding a Domain Controller in the Closest Site
    - Types of Locators
- IP/DNS DC Locator Algorithm (This is also a great general DNS review, but review this specific named section)
- Domain Locator Across a Forest Trust
- How Domain Controllers are Located Across Trusts
- DsgetDCname – particularly the piece about the new stickiness feature

DFS Namespaces (DFSN) & DFS Replication (DFSR)

- Distributed File System (DFS) Technical Reference
    - What Is DFS?
    - How DFS Works
    - DFS Tools and Settings
- How DFS Works
    - DFS Terminology
    - DFS Client and Server Compatibility
    - Characteristics of Namespace Types
    - DFS Architecture
    - DFS Physical Structures and Caches
    - DFS Processes and Interactions
    - DFS Protocols
    - DFS Interfaces
    - Network Ports Used by DFS
    - Related Information
- Designing Distributed File Systems
- Tuning DFS Namespaces
    - Enable Access-Based Enumeration on a Namespace
    - Enable or Disable Referrals and Client Failback
    - Change the Amount of Time That Clients Cache Referrals
    - Set the Ordering Method for Targets in Referrals
    - Set Target Priority to Override Referral Ordering
    - Optimize Namespace Polling
    - Using Inherited Permissions with Access-Based Enumeration
- Common DFSN Configuration Mistakes and Oversights
- DFS Replication: What's new in Windows Server™ 2008
- DFS Replication: Frequently Asked Questions (FAQ)
- Schema Extension Requirements for running Windows Server 2008 DFSR
- The Case for Migrating SYSVOL to DFSR
- SYSVOL Replication Migration Guide: FRS to DFS Replication
    - SYSVOL Migration Conceptual Information
    - SYSVOL Migration Procedure
    - Troubleshooting SYSVOL Migration

- SYSVOL Migration Reference Information
- SYSVOL Migration Series (5 parts)
  - 1: SYSVOL Migration Series: Part 1 – Introduction to the SYSVOL migration process
  - 2: SYSVOL Migration Series: Part 2 - Dfsrmig.exe: The SYSVOL migration tool
  - 3: SYSVOL Migration Series: Part 3 - Migrating to the Prepared State
  - 4: SYSVOL Migration Series: Part 4 – Migrating to the 'REDIRECTED' state
  - 5: SYSVOL Migration Series: Part 5 – Migrating to the 'ELIMINATED' state
- Distributed File System Consolidation of a Standalone Namespace to a Domain-Based Namespace

DNS & Name Resolution

- How DNS Works – (a bit lengthy)
  - DNS Architecture
  - DNS Protocol
  - DNS Physical Structure
  - DNS Processes and Interactions
  - Network Ports Used By DNS
  - Related Information
- DNS Technical Reference
  - What Is DNS?
  - How DNS Works
  - DNS Tools and Settings
- How DNS Support for Active Directory Works
  - DNS Support for Active Directory Architecture
  - DNS Physical Structure in Support of Active Directory
  - DNS Support for Active Directory Processes and Interactions
  - Network Ports Used by DNS in Support of Active Directory
  - Related Information
- Windows 2000 DNS
  - Introduction
  - DNS Fundamentals
  - New Features of the Windows 2000 DNS
  - Designing a DNS Namespace for the Active Directory
  - Summary
  - Glossary
- DNS Support for Active Directory
  - What Is DNS Support for Active Directory?
  - How DNS Support for Active Directory Works
  - DNS Support for Active Directory Tools and Settings
- GlobalNames Zone Deployment (document download)
- Description of the netmask ordering feature and the round robin feature in Windows Server 2003 DNS

- How to reconfigure an _msdcs subdomain to a forest-wide DNS application directory partition when you upgrade from Windows 2000 to Windows Server 2003
- Event ID 4515 is logged in the DNS Server log in Windows Server 2003
- Tools / concepts to be familiar with: NSLOOKUP, DNSCMD (all), DNSLINT, etc

Deployment

- How to use the Install from Media feature to promote Windows Server 2003-based domain controllers
- Installing an Additional Domain Controller by Using IFM
    - Create Installation Media by Using Ntdsutil
    - Install an Additional Domain Controller by Using Installation Media
- Infrastructure Planning and Design (Windows Server 2008 Active Directory Domain Services)

Domain Migration

- ADMT Guide: Migrating and Restructuring Active Directory Domains
    - ADMT versions
    - Best Practices for Active Directory Migration
    - Interforest Active Directory Domain Restructure
    - Intraforest Active Directory Domain Restructure
    - Appendix: Advanced Procedures
    - Troubleshooting ADMT
    - Additional Resources

File Replication Service (FRS)

- How FRS works
    - FRS Terminology
    - FRS Architecture
    - FRS Protocols
    - FRS Interfaces
    - FRS Physical Structures
    - FRS Processes and Interactions
    - Network Ports Used by FRS
    - Related Information
- FRS Tools and Registry Settings
    - FRS Tools
    - FRS Registry Entries
    - Network Ports Used by FRS
- File Replication Service (FRS) Technical Reference
    - What Is FRS?
    - How FRS Works

- FRS Tools and Settings

Group Policy

- Core Group Policy Technical Reference
  - How Core Group Policy Works
    - Core Group Policy Architecture
    - Core Group Policy Physical Structure
    - Core Group Policy Processes and Interactions
    - Network Ports Used by Group Policy
    - Related Information
  - What is Core Group Policy
    - Change and Configuration Management
    - Core Group Policy Infrastructure
    - Core Group Policy Scenarios
    - Core Group Policy Dependencies
    - Related Information
  - Core Group Policy Tools and Settings
    - Group Policy Tools
    - Group Policy Settings
    - Group Policy WMI Classes
    - Related Information
- Group Policy Components
- Group Policy Preferences Overview Whitepaper (download)
- (Vista) - Troubleshooting Group Policy Using Event Logs
- Interpreting Userenv log files
- Designing a Group Policy Infrastructure
    - Overview of Group Policy
    - Planning Your Group Policy Design
    - Designing Your Group Policy Model
    - Deploying Group Policy
    - Maintaining Group Policy
    - Additional Resources for Group Policy Infrastructure
- Group Policy Management ConsolE Technical Reference
    - What Is Group Policy Management Console?
    - How Group Policy Management Console Works
    - Group Policy Management Console Tools and Settings
- Group Policy Object Editor
    - What Is Group Policy Object Editor?
    - How Group Policy Object Editor Works
    - Group Policy Object Editor Tools and Settings
- Group Policy Loopback processing
    - Part 1: Circle Back to Loopback

- Part 2: Back to the Loopback: Troubleshooting Group Policy loopback processing

Lightweight Directory Services (AD-LDS)

- Introduction to Windows Server 2003 Active Directory Application Mode (download)
- 2008 & 2012 Active Directory Lightweight Directory Services Overview
- AD LDS Getting Started Step-by-Step Guide
  - Step 1: Install the AD LDS Server Role
  - Step 2: Practice Working with AD LDS Instances
  - Step 3: Practice Using AD LDS Administration Tools
  - Step 4: Practice Managing AD LDS Organizational Units, Groups, and Users
  - Step 5: Practice Working with Application Directory Partitions
  - Step 6: Practice Managing Authorization
  - Step 7: Practice Managing Authentication
  - Step 8: Practice Managing Configuration Sets
  - Appendix A: Configuring LDAP over SSL Requirements for AD LDS
  - Appendix B: Upgrading from ADAM to AD LDS.
- AD LDS Replication Step-by-Step Guide
  - Step 1: Practice Managing Replica AD LDS Instances
  - Step 2: Practice Managing Site Objects
  - Step 3: Practice Managing Site Link Objects
- AD LDS Backup and Restore Step-by-Step Guide
  - Step 1: Back Up AD LDS Instance Data
  - Step 2: Restore AD LDS Instance Data
  - Appendix A: Metadata Cleanup for the Retired AD LDS Instances
  - Appendix B: Restore an AD LDS Instance with a Backup Taken with Dsdbutil.exe
- Understanding ADAM replication and configuration sets

Replication

- How Active Directory Replication Topology Works
  - Active Directory KCC Architecture and Processes
  - Replication Topology Physical Structure
  - Performance Limits for Replication Topology Generation
  - Goals of Replication Topology
  - Topology-Related Objects in Active Directory
  - Replication Transports
  - Replication Between Sites
  - KCC and Topology Generation
  - Network Ports Used by Replication Topology
  - Related Information
- Active Directory Replication Model

        - What Is the Active Directory Replication Model?
        - How the Active Directory Replication Model Works
        - Active Directory Replication Tools and Settings
- Active Directory Replication Topology
        - What Is Active Directory Replication Topology?
        - How Active Directory Replication Topology Works
        - Active Directory Replication Tools and Settings
- AD Branch Office Guide (download)
- Microsoft Active Directory Topology Diagrammer
- The Role of the Inter-Site Topology Generator in Active Directory Replication
- How to view and set LDAP policy in Active Directory by using Ntdsutil.exe
- How to configure the Windows Time service against a large time offset
- BridgeHead Server Selection
- Active Directory Load Balancing Tool (ADLB)
- Configuring Change Notification on a MANUALLY created Replication partner

AD Sites & Services

Familiarity with the following (most concepts covered in the Distributed Systems Guide linked above):

- Architecture
- BASL
- BH Failover/1311
- Firewall
- Optimization-CN on link
- Tools Review
- Site link bridging
- UGC
- BODG – Options

RODC – Deployment

- (Physical Security/Compromise)

KCC/ISTG

Server 2008 AD Features

- Changes in Functionality from Windows Server 2003 with SP1 to Windows Server 2008
- AD DS Fine-Grained Password and Account Lockout Policy Step-by-Step Guide
- Fine-Grained Password Policy and “Urgent Replication”
- What's New in AD DS: Active Directory Best Practices Analyzer
- AD DS Auditing Step-by-Step Guide
- Managed Service Accounts
- Managed Service Accounts: Understanding, Implementing, Best Practices, and Troubleshooting

- Changes in Functionality from Windows Server 2003 with SP1 to Windows Server 2008 (doc download)
- What's New in Active Directory Domain Services in Win2008
- What's New in Active Directory Domain Services in Win2008 R2
- Changes in Functionality from Windows Server 2008 to Windows Server 2008 R2
- Getting the Effective Audit Policy in Windows 7 and 2008 R2
- What's New in AD DS: Active Directory Module for Windows PowerShell
- The AD Recycle Bin: Understanding, Implementing, Best Practices, and Troubleshooting

Read Only Domain Controller

- Read-Only Domain Controller Planning and Deployment Guide
    - Understanding Planning and Deployment for Read-Only Domain Controllers
    - RODC Branch Office Guide
    - Appendix A: RODC Technical Reference Topics
    - Appendix B: RODC-Related Events
    - Appendix C: Acronyms Used in This Guide
- RODC Administration
    - Installing Remote Server Administration Tools
    - Administering the Password Replication Policy
- Read-only Domain Controllers Step-by-Step Guide
    - Who Should Use This Guide?
    - What Is an RODC?
    - RODC Placement Considerations for Windows Server 2003 Domains
    - Prerequisites for Deploying an RODC
    - Known Issues for Deploying an RODC
    - Steps for Deploying an RODC
    - Steps for Administering an RODC
    - RODC Frequently Asked Questions
    - Appendix A: Client Operations
    - Appendix B: How the Authentication Process Works with RODCs
    - Appendix C: Application Compatibility with RODCs
    - Appendix D: Steps to Add an Attribute to the RODC Filtered Attribute Set
- RODC Frequently Asked Questions
- Adding Attributes to the RODC Filtered Attribute Set
- Description of the Windows Server 2008 read-only domain controller compatibility pack for Windows
- Adding Attributes to the RODC Filtered Attribute Set
- Using the confidentiality bit in 203 SP1
- RODC DNS Client Update Mechanism
- The RODC requests the update using a special operation called replicateSIngleObject:
- BitLocker implementation for RODC.

Windows 2012 Features

- TechED: What's New in Active Directory in Windows Server 2012 (Dean Wells' presentation at TechEd)
- How many Windows Server 2012 domain controllers do I need initially and where should I put them?
- PowerShell version 3 commandlets including Active Directory Replication and Topology: Introduction & Advanced Topics

Group Managed Service Accounts (gMSA)

- Getting Started with Group Managed Service Accounts
- Group Managed Service Accounts Overview
- Windows Server 2012: Group Managed Service Accounts

RID Protection

- TechNet Article: Managing RID Issuance
- ASKDS Blog Article: Managing RID Issuance in Windows Server 2012

DC Cloning & SafeGuarding

- Virtual Domain Controller Cloning in Windows Server 2012
- Microsoft Article: Introduction to Active Directory Domain Services (AD DS) Virtualization (Level 100)
- Microsoft Virtual Machine Generation ID Whitepaper document
- Virtualize your Windows Server 2012 domain controllers
- Things to consider when you host Active Directory domain controllers in virtual hosting environments
- Virtualized Domain Controller Deployment and Configuration
- ms-DS-Generation-Id Attribute
- Virtual Domain Controller Cloning in Windows Server 2012
- Safely Cloning an Active Directory Domain Controller with Windows Server 2012 – Step-by-Step
- Virtualized Domain Controller Deployment and Configuration
- New-ADDCCloneConfigFile

Dynamic Access Control (DAC)

- Introduction to Windows Server 2012 Dynamic Access Control
- Understand and Troubleshoot Dynamic Access Control in Windows Server 2012 (Word doc download)
- Getting started with Central Access Policies - Reducing security group complexity and achieving data access compliance using Dynamic Access Control

- MSDN Article on Dynamic Access Control (DAC)
- DAC Scenario

Kerberos FAST

- RFC6113 A Generalized Framework for Kerberos Pre-Authentication
- What's New in Kerberos Authentication
- Access Control and Authorization Overview – covers domain requirements for Kerberos armoring and group policy settings.

Kerberos Constrained Delegation Enhancements

- Kerberos Constrained Delegation Overview
- How Windows Server 2012 Eases the Pain of Kerberos Constrained Delegation
  - Part 1
  - Part 2
- [MS-SFU]: Kerberos Protocol Extensions: Service for User and Constrained Delegation Protocol Specification

Kerberos Proxy

- Kerberos Authentication Overview
- Enriched Remote Access experience in Windows Server 2012
- Delegation of Authentication
- [MS-KKDCP]: Kerberos Key Distribution Center (KDC) Proxy Protocol