

## MCSA: Windows Server 2012

### Objetivos Gerais

Garantir um percurso formativo e de aprendizagem de excelência, integrado e especializado, que propicie aos formandos o desenvolvimento e consolidação das competências necessárias ao pensamento crítico, à identificação e implementação de soluções inerentes à resolução de problemas técnicos, e que garanta o conhecimento prático dos equipamentos de redes;

Formar profissionais com elevados padrões de desempenho, suportados em competências técnicas gestão de redes, com o know-how e a qualificação necessários para exercer com sucesso a sua atividade profissional, relacionada com a administração e gestão de sistemas de informação, operando em ambientes que utilizem o sistema operativo de rede Microsoft Windows Server e a família de produtos de servidor integrados BackOffice;

Validar as competências técnicas adquiridas e potenciar o reconhecimento profissional e a empregabilidade dos formandos, através das Certificações Microsoft, reconhecidas internacionalmente.

### Objetivos Específicos:

No final do curso os formandos aptos a:

- Desenvolver competência a nível do Windows Server 2012;
- Configurar o Windows Server 2012;
- Implementar o Windows Server 2012.

### Destinatários:

Destina-se a todos os interessados em aprofundar conhecimentos e desenvolver competências na área de Redes e Sistemas, por forma a consolidar uma carreira profissional especializada em administração de redes, engenharia de sistemas ou noutras áreas relacionadas com as Tecnologias de Informação.

O perfil curricular do MCSA: Windows Server 2012 prepara profissionais para diversos Perfis Funcionais, entre as quais se destacam:

- Administrador de Sistemas Informáticos;
- Gestor de Sistemas Informáticos;
- Administrador de Redes;
- Administrador de Servidores Windows;
- Administrador de Servidores.

### Carga Horária:

90 Horas

## Conteúdo:

### **Módulo A – Installing and Configuring Windows Server 2012**

#### **Módulo I - Deploying and Managing Windows Server 2012**

- Windows Server 2012 Overview
- Overview of Windows Server 2012 Management
- Installing Windows Server 2012
- Post-Installation Configuration of Windows Server 2012
- Introduction to Windows PowerShell
- Deploying Windows Server 2012
- Configuring Windows Server 2012 Server Core
- Managing Servers
- Using Windows PowerShell to Manage Servers

#### **Módulo II - Introduction to Active Directory Domain Services**

- Overview of Active Directory Domain Services
- Overview of Domain Controllers
- Installing a Domain Controller
- Installing a Domain Controller
- Installing a Domain Controller by using IFM

#### **Módulo III - Managing Active Directory Domain Services Objects**

- Managing User Accounts
- Managing Groups Accounts
- Managing Computer Accounts
- Delegating Administration
- Delegating Administration for a Branch Office
- Creating and Configuring User Accounts in AD DS
- Managing Computer Objects in AD DS

#### **Módulo IV - Automating Active Directory Domain Services Administration**

- Using Command-line Tools for Administration
- Using Windows PowerShell for Administration
- Performing Bulk Operations with Windows PowerShell
- Creating User Accounts and Groups by Using Windows PowerShell
- Using Windows PowerShell to Create User Accounts in Bulk
- Using Windows PowerShell to Modify User Accounts in Bulk

### Módulo V - Implementing IPv4

- Overview of TCP/IP
- Understanding IPv4 Addressing
- Subnetting and Supernetting
- Configuring and Troubleshooting IPv4
- Identifying Appropriate Subnets
- Troubleshooting IPv4

### Módulo VI - Implementing DHCP

- Installing a DHCP Server Role
- Configuring DHCP Scopes
- Managing a DHCP Database
- Securing and Monitoring DHCP
- Implementing DHCP
- Implementing DHCP Relay

### Módulo VII - Implementing DNS

- Name Resolution for Windows Client and Servers
- Installing and Managing a DNS Server
- Managing DNS Zones
- Installing and Configuring DNS
- Creating Host Records in DNS
- Managing the DNS Server Cache

### Módulo VIII - Implementing IPv6

- Overview of IPv6
- IPv6 Addressing
- Coexistence with IPv4
- IPv6 Transition Technologies
- Configuring an IPv6 Network
- Configuring an ISATAP Router

### Módulo IX - Implementing Local Storage

- Overview of Storage
- Managing Disks and Volumes
- Implementing Storage Spaces
- Installing and Configuring a New Disk
- Resizing Volumes
- Configuring a Redundant Storage Space

## Módulo X - Implementing File and Print Services

- Securing Files and Folders
- Protecting File Shares with Shadow Copies
- Configuring Network Printing
- Creating and Configuring a File Share
- Configuring Volume Shadow Copy
- Creating and Configure a Printer Pool

## Módulo XI - Implementing a Group Policy Infrastructure

- Overview of Group Policy
- Group Policy Processing
- Implementing a Central Store for Administrative Templates
- Configuring a Central Store
- Creating GPOs

## Módulo XII - Securing Windows Servers by Using Group Policy Objects

- Windows Security Overview
- Configuring Security Settings
- Restricting Software
- Configuring Windows Firewall with Advanced Security
- Using Group Policy to Secure Member Servers
- Auditing File System Access
- Auditing Domain Logons
- Configuring AppLocker Policies
- Configuring Windows Firewall

## Módulo XIII - Implementing Server Virtualization with Hyper-V

- Overview of Virtualization Technologies
- Implementing Hyper-V
- Managing Virtual Machine Storage
- Managing Virtual Networks
- Installing the Hyper-V Server Role
- Configuring Virtual Networking
- Creating and Configuring a Virtual Machine
- Using Virtual Machine Snapshots

## **Módulo B – Administering Windows Server 2012**

### **Módulo I - Implementing a Group Policy Infrastructure**

- Understanding Group Policy
- Implementing GPOs
- Managing Group Policy Scope
- Group Policy Processing
- Troubleshooting Policy Application
- Creating and Configuring Group Policy Objects
- Managing Group Policy Scope
- Verifying Group Policy Application
- Managing Group Policy Objects

### **Módulo II - Managing User Desktops with Group Policy**

- Implementing Administrative Templates
- Configuring Group Policy Preferences
- Managing Software with GPSI
- Deploying Software Using Group Policy
- Implementing Settings Using Group Policy Preferences
- Configuring Folder Redirection

### **Módulo III - Managing User and Service Accounts**

- Creating and Administering User Accounts
- Configuring User Object Attributes
- Automating User Account Creation
- Configuring Managed Service Accounts
- Configuring Password Policy and Account Lockout Settings
- Creating and Associating a Managed Service Account

### **Módulo IV - Maintaining Active Directory Domain Services**

- Implementing Virtualized Domain Controllers
- Implementing Read Only Domain Controllers
- Administering AD DS
- Managing the AD DS Database
- Deploying a Virtualized Domain Controller Clone
- Installing and Configuring a Read Only Domain Controller
- Configuring and Viewing Active Directory Snapshots
- Configuring the Active Directory Recycle Bin

### **Módulo V - Configuring and Troubleshooting DNS**

- Installing the DNS Server Role
- Configuring the DNS Server Role
- Configuring DNS Zones
- Configuring DNS Zone Transfers
- Managing and Troubleshooting DNS
- Configuring DNS Resource Records
- Configuring DNS Conditional Forwarding
- Installing and Configuring DNS Zones
- Troubleshooting DNS

### **Módulo VI - Configuring and Troubleshooting Remote Access**

- Configuring Network Access
- Configuring VPN Access
- Overview of Network Policies
- Troubleshooting Routing and Remote Access
- Configuring DirectAccess
- Configuring a VPN Server
- Configuring a Network Policy for VPN Clients
- Configuring Direct Access

### **Módulo VII - Installing, Configuring, and Troubleshooting the Network Policy Server Role**

- Installing and Configuring a Network Policy Server
- Configuring RADIUS Clients and Servers
- NPS Authentication Methods
- Monitoring and Troubleshooting a Network Policy Server
- Installing and Configuring NPS to Support RADIUS
- Configuring a RADIUS Client

### **Módulo VIII - Implementing Network Access Protection**

- Overview of Network Access Protection
- How NAP Works
- Configuring NAP
- Monitoring and Troubleshooting NAP
- Configuring NAP Components
- Configuring the Client Settings to Support NAP

### **Módulo IX - Optimizing File Services**

- Overview of FSRM

- Using FSRM to Manage Quotas, File Screens, and Storage Reports
- Implementing Classification Management and File Management Tasks
- DFS Overview
- Configuring DFS Namespaces
- Configuring and Troubleshooting DFS Replication
- Configuring FSRM Quotas
- Configuring File Screening
- Installing and Configuring the DFS Namespaces Server Role
- Configuring DFS Folder Targets
- Configuring DFS Replication

### **Módulo X - Configuring Encryption and Advanced Auditing**

- Encrypting Network Files with EFS
- Configuring Advanced Auditing
- Encrypting and Recovering Files
- Configuring Advanced Audit Policy Configuration

### **Módulo XI - Deploying and Maintaining Server Images**

- Overview of WDS
- Implementing Deployment with WDS
- Administering WDS
- Installing and Configuring Windows Deployment Services
- Deploying a Server Image

### **Módulo XII - Implementing Update Management**

- Overview of WSUS
- Deploying Updates with WSUS
- Implementing the WSUS Server Role
- Configuring Update Settings
- Approving and Deploying an Update using WSUS

### **Módulo XIII - Monitoring Windows Server 2012**

- Monitoring Tools
- Using Performance Monitor
- Monitoring Event Logs
- Establishing a Performance Baseline
- Identifying the Source of a Performance Problem
- Viewing and Configuring Centralized Event Logs

## **Módulo C – Configuring Advanced Windows Server 2012 Services**

### **Módulo I - Implementing Advanced Network Services**

- Configuring Advanced DHCP Features
- Configuring Advanced DNS Settings
- Implementing IP Address Management
- Configuring Advanced DHCP Settings
- Configuring Advanced DNS Settings
- Configuring IP Address Management

### **Módulo II - Implementing Advanced File Services**

- Configuring iSCSI Storage
- Configuring Branch Cache
- Optimizing Storage Usage
- Configuring iSCSI Storage
- Configuring BranchCache
- Configuring File Classification Infrastructure

### **Módulo III - Implementing Dynamic Access Control**

- Overview of Dynamic Access Control
- Planning for a Dynamic Access Control Implementation
- Configuring Dynamic Access Control
- Planning the DAC implementation
- Configuring User and Device Claims
- Configuring Resource Property Definitions
- Configuring Central Access Rules and Policies
- Validating and Remediating Access Control
- Implementing New Resource Policies

### **Módulo IV - Implementing Network Load Balancing**

- Network Load Balancing Overview
- Configuring a Network Load Balancing Cluster
- Planning a Network Load Balancing Implementation
- Implementing an NLB Cluster
- Configuring and Managing the NLB Cluster
- Validating High Availability for the NLB Cluster

### **Módulo V - Implementing Failover Clustering**

- Overview of Failover Clustering



- Implementing a Failover Cluster
- Configuring Highly-Available Applications and Services on a Failover Cluster
- Maintaining a Failover Cluster
- Implementing a Multi-Site Failover Cluster
- Configuring a Failover Cluster
- Deploying and Configuring a Highly-Available File Server
- Validating the Deployment of the Highly-Available File Server
- Configuring Cluster-Aware Updating on the Failover Cluster

### **Módulo VI - Implementing Failover Clustering with Hyper-V**

- Overview of the Integration of Hyper-V with Failover Clustering
- Implementing Hyper-V Virtual Machines on Failover Clusters
- Implementing Hyper-V Virtual Machine Movement
- Managing Hyper-V Virtual Environments by Using System Center Virtual Machine Manager
- Configuring Hyper-V Replicas
- Configuring a Failover Cluster for Hyper-V
- Configuring a Highly Available Virtual Machine

### **Módulo VII - Implementing Disaster Recovery**

- Disaster Recovery Overview
- Implementing Windows Server Backup
- Implementing Server and Data Recovery
- Backup Windows Server 2012
- Restore Files using Windows Server Backup
- Recovering a Failed Server
- Implementing Microsoft Online Backup and Restore

### **Módulo VIII - Implementing Distributed AD DS Deployments**

- Overview of Distributed AD DS Deployments
- Implementing a Distributed AD DS Deployment
- Configuring AD DS Trusts
- Implementing Child Domains in AD DS
- Implementing Forest Trusts

### **Módulo IX - Implementing AD DS Sites and Replication**

- Overview of AD DS Replication
- Configuring AD DS Sites
- Configuring and Monitoring AD DS Replication
- Modifying the Default Site
- Creating Additional Sites and Subnets
- Configuring AD DS Replication

### Módulo X - Implementing AD CS

- Public Key Infrastructure Overview
- Deploying Certification Authorities
- Deploying and Managing Certificate Templates
- Implementing Certificate Distribution and Revocation
- Managing Certificate Recovery
- Deploying a standalone root CA
- Deploying an Enterprise Subordinate CA
- Configuring Certificate Templates
- Configuring Certificate Enrollment
- Configuring Certificate Revocation
- Configuring Key Recovery

### Módulo XI - Implementing AD RMS

- Active Directory Rights Management Overview
- Deploying and Managing an AD RMS Infrastructure
- Configuring AD RMS Content Protection
- Configuring External Access to AD RMS
- Installing and Configuring AD RMS
- Configuring AD RMS Templates
- Implementing the AD RMS Trust Policies

### Módulo XII - Implementing AD FS

- Overview of Active Directory Federation Services
- Deploying Active Directory Federation Services
- Implementing AD FS for a Single Organization
- Deploying AD FS in a Business to Business Federation Scenario
- Configuring AD FS Prerequisites
- Installing and Configuring AD FS
- Configuring AD FS for a Single Organization
- Configuring AD FS for Federated Business Partners