

Hands-On

# Administering Windows Server 2012 R2 vD



## Course Description

Get Hands-On instruction and practice administering Windows Server 2012, including Windows Server 2012 R2, in this 5-day Microsoft Official Course.

This course is part two in a series of three courses that provides the skills and knowledge necessary to implement a core Windows Server 2012 infrastructure in an existing enterprise environment.

This course maps directly to and is the preferred choice for Hands-On preparation for Microsoft Certified Solutions Associate (MCSA) Exam 411 Administering Windows Server 2012, which is the second of three exams required for MCSA Windows Server 2012 credential. Labs in this course are based on Windows Server 2012 R2 and Windows 8.1.

## Students Will Learn

- **Configure and Troubleshoot Domain Name System**
- **Maintain Active Directory Domain Services**
- **Manage User and Service Accounts**
- **Implement Group Policy Infrastructure**
- **Manage User Desktops using Group Policy**
- **Install, Configure and Troubleshoot Network Policy Server**
- **Implement Network Access Protection**
- **Implement Remote Access**
- **Optimize File Services**
- **Configure Encryption and Advanced Auditing**
- **Deploy and Maintain Server Images**
- **Implement Update Managements**
- **Monitor Windows Server 2012**

## Target Audience

This course is intended for Information Technology (IT) Professionals with hands on experience working in a Windows server 2008 or Windows Server 2012 environment who wish to acquire the skills and knowledge necessary to be able to manage and maintain the core infrastructure required for a Windows Server 2012 and Windows Server 2012 R2 environment.

## Prerequisites

Knowledge and skills concerning the initial implementation and configuration of core Windows Server services including Active Directory Domain Services (AD DS), Networking Services and Microsoft Hyper-V.

## Course Outline

### Module 1: Configuring and Troubleshooting Domain Name System

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

### Module 2: Maintaining Active Directory Domain Services

- Overview of AD DS
- Implementing Virtualized Domain Controllers
- Implementing RODCs
- Administering AD DS
- Managing the AD DS Database
- Lab : Maintaining AD DS
- Installing and Configuring a RODC
- Configuring AD DS Snapshots
- Configuring the Active Directory Recycle Bin
- Optional Exercise- Cloning a domain controller

### Module 3: Managing User and Service Accounts

- Configuring Password Policy and User Account Lockout Settings
- Configuring Managed Service Accounts
- Lab : Managing User and Service Accounts
- Configuring Password Policy and Account Lockout Settings
- Creating and Associating a Managed Service Account

### Module 4: Implementing a Group Policy Infrastructure

- Introducing Group Policy
- Implementing and Administering GPOs
- Group Policy Scope and Group Policy Processing

- Troubleshooting the Application of GPOs
- Lab : Implementing a Group Policy Infrastructure
- Creating and Configuring Group Policy Objects
- Managing GPO Scope
- Verify GPO Application
- Managing GPOs

#### **Module 5: Managing User Desktops with Group Policy**

- Implementing Administrative Templates
- Configuring Folder Redirection and Scripts
- Configuring Group Policy Preferences
- Managing Software with Group Policy
- Lab : Managing User Desktops with Group Policy
- Implement Settings by Using Group Policy Preferences
- Managing Office 2013 by using Administrative Templates
- Deploying Software by using Group Policy
- Configuring Folder Redirection

#### **Module 6: 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
- Lab : Installing and Configuring a Network Policy Server
- Installing and Configuring NPS to Support RADIUS
- Configuring and Testing a RADIUS Client

#### **Module 7: Implementing Network Access Protection**

- Overview of Network Access Protection
- Overview of NAP Enforcement Processes
- Configuring NAP
- Configuring IPSec Enforcement for NAP
- Monitoring and Troubleshooting NAP
- Lab : Implementing Network Access Protection
- Configuring NAP Components
- Configuring Virtual Private Network Access
- Configuring the Client Settings to Support NAP

#### **Module 8: Implementing Remote Access**

- Overview of Remote Access
- Implementing DirectAccess by Using the Getting Started Wizard
- Implementing and Managing an Advanced DirectAccess Infrastructure
- Implementing VPN
- Implementing Web Application Proxy
- Lab : Implementing DirectAccess by Using the Getting Started Wizard
- Verifying Readiness for a DirectAccess Deployment
- Configuring DirectAccess
- Validating the DirectAccess Deployment
- Lab : Deploying an Advanced DirectAccess Solution
- Preparing the Environment for DirectAccess
- Implementing the Advanced DirectAccess Infrastructure
- Validating the DirectAccess Deployment
- Lab : Implementing VPN
- Implementing VPN
- Validating the VPN Deployment
- Lab : Implementing Web Application Proxy
- Implementing Web Application Proxy
- Validating the Web Application Proxy Deployment

### **Module 9: Optimizing File Services**

- Overview of FSRM
- Using FSRM to Manage Quotas, File Screens, and Storage Reports
- Implementing Classification and File Management Tasks
- Overview of DFS
- Configuring DFS Namespaces
- Configuring and Troubleshooting DFS Replication
- Lab : Configuring Quotas and File Screening Using File Server Resource Manager
- Configuring File Server Resource Manager Quotas
- Configuring File Screening and Storage Reports
- Lab : Implementing Distributed File System
- Installing the DFS role service
- Configuring a DFS Namespace
- Configuring DFS Replication

### **Module 10: Configuring Encryption and Advanced Auditing**

- Encrypting Drives by Using BitLocker
- Encrypting Files by Using EFS
- Configuring Advanced Auditing
- Lab : Configuring Encryption and Advanced Auditing
- Using Windows BitLocker Drive Encryption to Secure Data Drives
- Encrypting and Recovering Files
- Configuring Advanced Auditing

### **Module 11: Deploying and Maintaining Server Images**

- Overview of Windows Deployment Services
- Managing Images
- Implementing Deployment with Windows Deployment Services
- Administering Windows Deployment Services
- Lab : Using Windows Deployment Services to Deploy Windows Server 2012
- Installing and Configuring Windows Deployment Services
- Creating Operating System Images with Windows Deployment Services
- Configuring Custom Computer Naming
- Deploying Images with Windows Deployment Services

### **Module 12: Implementing Update Management**

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

### **Module 13: Monitoring Windows Server 2012**

- Monitoring Tools
- Using Performance Monitor
- Monitoring Event Logs
- Lab : Monitoring Windows Server 2012
- Establishing a Performance Baseline
- Identifying the Source of a Performance Problem
- Viewing and Configuring Centralized Event Logs

### **Notes**

Customer On-Site equipment is needed for Non-Intrusive training.

### **Delivery Method**

Instructor-Led with numerous Hands-On Labs and exercises.

## **Equipment Requirements**

**(This apply's to our hands-on courses only)**

Customer On-Site equipment is needed for Non-Intrusive training.

BTS always provides equipment to have a very successful Hands-On course. BTS also encourages all attendees to bring their own equipment to the course. This will provide attendees the opportunity to incorporate their own gear into the labs and gain valuable training using their specific equipment.

## **Course Length**

5 Days