

#50604A: FIRST LOOK: MICROSOFT WINDOWS SERVER 8

Available Dates: [Call for Availability](#)

Class Length: **1 day**

Cost: **\$499**

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Class Outline:

Description:

This one-day instructor-led course is intended for IT professionals, administrators and decision makers, who are interested to get a overview about the new features of Microsoft Windows Server 8.

In this course students get an impression about new features of Windows Server 8.

In this course students learn about the new ways to implement, manage and administer Windows Server 8 in an existing or new network environment with and without cloud-integration. The focus of the course is about the main changes from Windows Server 2008 / R2 to Window Server 8.

Course Outline

Module 1: Overview about the new features of Windows Server 8

This module explains the main lessons of the course and gives a fast overview about the topics. At the end of the module students explore the new Server Manager of Windows Server 8 in a practical lab.

Lessons

- Requirements, Installation and Multi-Server Management
- Configuring Core Network infrastructure services
- Windows Server 8 File and storage services
- Exploring Windows Server 8 Hyper-V vNext
- Windows Server 8 Remote Desktop Services
- Exploring Windows Server 8 Active Directory
- Claims-based access control with dynamic access control
- Windows Server 8 Unified Remote Access (Direct Access and NAP)
- Group Policy in Windows Server 8
- Automating Windows Server 8 with Powershell 3.0

Module 2: Requirements, Installation and Multi-Server Management Tasks

This module explains how to use Powershell 3.0 and WMI for centralized server management in Windows Server 8. It shows the new Dashboard Server Manager, which will help to reduce the expenditure of time in scenario-based deployments. Students accomplish a scenario-based deployment of a server role on multiple servers in a practical lab.

Lessons

- Overview about Windows Server 8 multi-server management features
- Powershell 3.0 and WMI
- Multi-Server Management with Powershell 3.0
- Working with the Server Manager Dashboard of Windows Server 8
- Scenario-Based Deployment of Server Roles and Features

Module 3: Core Network infrastructure services

This module explains the changes in Windows Server 8 DNS and DHCP Server. Students learn about IPAM-Management and how IPAM is implemented in Windows Server 8 for centralized management of this core network services. They learn about automatic zone signing with DNSSec in Windows Server 8. They get to know about DHCP failover and load balancing feature and DHCP policy-assignment.

Lessons

- Overview about Windows Server 8 core networking services enhancements
- Centralized Management of DNS and DHCP with IPAM
- Automatically zone signing with DNSSec (NSec3)
- DNS- and DHCP powershell 3.0 cmdlets
- DHCP hot standby failover
- DHCP active/active load balancing
- DHCP policy-based assignment

Module 4: Windows Server 8 File and storage services

This module explains the advantages of the new Microsoft File System ReFS. The students will get an overview about the new possibilities of storage spaces and pools and learn about the advantages of these features. They learn about the enhanced capabilities of DFS-N and DFS-R, SMB 2.2, de-duplication and branch cache in Windows Server 8.

Lessons

- Overview about Windows Server 8 File server and storage management enhancements
- ReFS - the new file system
- Storage spaces
- DFS-N and DFS-R
- SMB 2.2
- De-duplication
- Branch Cache

Module 5: Exploring Windows Server 8 Hyper-V

This module explains the new features of Hyper-V in Windows Server 8. Students learn how Windows Server 8 Hyper-V can be used for building, configuring and administering cloud-based networks and services. Students learn about the enhanced host and virtual machine improvements like the new vhdx-Format, which supports up to 16TB virtual hard disk space for every virtual disk. Students learn about new Hyper-V network improvements like network virtualization, extensible virtual switch, PVLANs, DHCP Guard and IPSec Task Offload. They learn also about Hyper-V clustering improvements like Storage Live Migration, Hyper-V Replica, how to migrate multiple virtual machines at the same time and Cluster shared volume improvements. They learn about Hyper-V storage improvements like deduplication and virtual fibre channel. In this module they get knowledge about improved management capabilities with Hyper-V Powershell 3.0 cmdlets. At the end they get an overview about the possibilities of SCVMM 2012.

Lessons

- Overview about the new features of Windows Server 8 Hyper-V
- Using Windows Server 8 Hyper-V in the cloud
- Hyper-V Performance and scale
- Hyper-V Host improvements
- Hyper-V Virtual machine improvements
- Hyper-V Networking improvements
- Hyper-V Clustering improvements
- Hyper-V Storage improvements
- Hyper-V Management improvements
- Hyper-V HA and Data improvements
- Overview about using SCVMM 2012

Module 6: Unified remote access in Windows Server 8

This module gives an overview about the key components of Windows Server 8 unified remote access and Direct Access. Students learn how to setup a Windows Server 8 Direct Access server. This module explains how to use Windows Server 8 unified remote access with Direct Access, so that a user-initiated VPN-connection is not longer needed. Students learn how to use Windows Server 8 Direct Access to connect remote clients to private or public clouds and how Direct Access can be used to easily and securely connect remote clients to Intranet, File Server or other internal resources. Students discover, how to use Windows 8 Direct Access entry points for easily switching between a private and public cloud in a multi-site cross-connectivity scenario and learn about new monitoring capabilities for direct access remote connections.

Lessons

- Overview about unified remote access in Windows Server 8
- Key components of Windows Server 8 Direct Access
- How to setup and configure Windows Server 8 Direct Access with the Direct Access and Remote access services configuration wizard in an edge topology scenario
- Determine the powershell cmdlets behind the setup of Windows Server 8 Direct Access (InstallRemoteAccess, SetRemoteAccess, SetDAClientExperienceSettings)
- Using Windows Server 8 Direct Access entry points
- Advanced monitoring of Windows Server 8 direct access connections

Module 7: Exploring Windows Server 8 Active Directory

This module explains some new features of Windows Server 8 Active Directory. Students learn how to use the

enhancements of Active Directory Administrative Center (ADAC) in Windows Server 8, like GUI-based configuration of the AD Recycle Bin and fine-grained password policies feature. They learn about the integration of Powershell into ADAC and Windows powershell history. Also Students get an overview about the enhancements in dcpromo, like remote dcpromo and built-in troubleshooting possibilities inside dcpromo for performing an easier domain controller installation. The students get an overview about DC-cloning and the capabilities of it and they learn about the simplified possibility to perform Microsoft product activation easier through Active Directory with use of Volume activation services.

Lessons

- Overview about Windows Server 8 Active Directory improvements
- Improved Active Directory Administrative Center (ADAC) of Windows Server 8
- Remote dcpromo and dcpromo built-in troubleshooting
- Active Directory snapshot
- DC-cloning with the use of virtualization
- LDAP-based AD-integrated product activation

Module 8: Claims-based access control with dynamic access control

This module explains the Windows Server 8 claims-based access control through Windows Server 8 File Classification and Windows Server 8 Dynamic Access Control. It gives an overview about the key concepts of automating file classification through the Windows Server 8 File Classification feature and shows, how to combine it with Dynamic Access Control, to improve the centrally management of file system authorization. In this module students learn how to use and configure central access policies at the domain level. Students learn how Dynamic Access Control provides additional security to any existing share and NTFS permission, which ensures that regardless of how the share and NTFS permissions might be changing on a day-to-day basis, this central overriding policy will still be enforced. Students learn how Dynamic Access Control and File Classification Service are integrated into Active Directory. They see how FCI and DAC work together, to improve file authorization security.

Lessons

- Overview about claims-based access control with Dynamic Access Control
- Overview about Windows Server 8 File Classification Infrastructure
- Active Directory integration of Dynamic Access Control and File classification Service
- Windows Server 8 central access and audit policies
- Windows 8 user- and device claims
- Classifications and expression-based ACLs

Module 9: Windows Server 8 Remote Desktop Services

This module explains the new features of Windows Server 8 Remote Desktop Services. This module gives an overview about the most important new features of Windows Server (and client) 8 Remote Desktop Service. It treats the installation and configuration of the Remote Desktop Session Host, Gateway, Web Access and Session Broker. The students learn about the new remote desktop experience like RemoteFX adaptive graphics, media remoting, multi-touch and USB-redirectation. They also learn about Metro Style Remote Desktop App and how to use it. At the end of the module they have the opportunity to trial some powershell 3.0 cmdlets for Windows Server 8 Remote Desktop Service.

Lessons

- Overview about what`s new in Windows Server 8 Remote Desktop Services
- Windows Server 8 Remote Desktop Session Host and Gateway
- Windows Server 8 Remote Desktop Web Access
- Windows Server 8 Remote Desktop Session Broker
- Windows 8 Metro Style Remote Desktop App
- How Windows Server 8 supports RDP 8.0
- RemoteFX for WAN
- RemoteFX adaptive graphics
- RemoteFX media remoting
- RemoteFX multi-touch
- RemoteFX USB-redirectation
- Choice of software or physical GPU
- Availability for sessions, VMs and physical machines
- Ubiquitous access

Module 10: Group Policy in Windows Server 8

This module gives an overview about new capabilities of Windows Server 8 group policy. Students will see the improved group policy replication status; learn about the possibility to centrally enforce group policy settings to the clients. They will get an overview of some interesting new group policy settings, like customizing of default error messages, configuring file classification infrastructure settings or control AppX-packages. They learn about new group policy preferences like Internet Explorer 9 and get the possibility to test some new group policy settings.

Lessons

- Overview about Windows Server 8 group policy
- Group Policy infrastructure status
- Centralized group policy update
- Group policy preference settings for Internet Explorer 9
- New group policy ADMX-templates
- Learn about 100 new group policy settings

Module 11: Automating Windows Server 8 with Powershell 3.0

This module explains how to use the new enhancements of powershell ISE, the new integrated powershell modules and how to configure and use Powershell Web Access to administer a server. The students learn the advantages of powershell 3.0 workflows and get the opportunity to test some of the most important new powershell 3.0 cmdlets.

Lessons

- Overview about new possibilities of Powershell in Windows Server 8
- Enhanced Powershell ISE
- New integrated Powershell Modules
- Using Powershell Web Access for administrative tasks
- Managing Windows Server 8 with powershell 3.0 workflows
- Important new powershell 3.0 cmdlets