Course duration

- 3 days

Course Benefits

- Describe the foundational principles of Azure IaaS, including compute, storage, and networking.
- Identify tools used to implement hybrid solutions, including Windows Admin Center and PowerShell.
- Implement identity in Hybrid scenarios, including Azure AD DS on Azure IaaS and managed AD DS.
- Integrate Azure AD DS with Azure AD.
- Manage and monitor hybrid scenarios using WAC, Azure Arc, Azure Automation and Azure Monitor.
- Enhance hybrid security using Azure Security Center, Azure Sentinel, and Windows Update Management.
- Implement File Services in hybrid scenarios, using Azure Files and Azure File Sync.
- Plan and implement hybrid and cloud-only migration, backup, and recovery scenarios.
- Deploy Azure VMs running Windows Server 2019, and configure networking, storage, and security.
- Manage and maintain Azure VMs running Windows Server 2019.

Microsoft Certified Partner

Webucator is a Microsoft Certified Partner for Learning Solutions (CPLS). This class uses official Microsoft courseware and will be delivered by a Microsoft Certified Trainer (MCT).

Course Outline

1. Introducing Azure Hybrid IaaS with Windows Server 2019
    1. Overview of Azure IaaS
    2. Overview of the Azure hybrid model
    3. Using hybrid admin tools
2. Implementing identity in hybrid scenarios
    1. Implementing AD DS on Azure IaaS
    2. Integrating AD DS with Azure AD
    3. Implementing managed AD DS environments
    4. Lab: Implementing integration between AD DS and Azure AD
        1. Preparing Azure AD for integration with AD DS

2. Preparing on-premises AD DS for Azure AD integration
3. Downloading, installing, and configuring Azure AD Connect
4. Verifying integration between AD DS and Azure AD
5. Implementing Azure AD integration features in AD DS
3. Facilitating hybrid management and operational monitoring in hybrid scenarios
   1. Windows Admin Center
   2. Azure Arc
   3. Azure Monitor
   4. Azure Automation
   5. Lab: Using Windows Admin Center in hybrid scenarios
      1. Provisioning Azure VMs running Windows Server 2019
      2. Implementing hybrid connectivity via Azure Network Adapter
      3. Deploying Windows Admin Center gateway in Azure
      4. Verifying functionality of Windows Admin Center gateway in Azure
4. Implementing security solutions in hybrid scenarios
   1. Azure Security Center
   2. Azure Sentinel
   3. Managing Windows Updates
   4. Lab: Using Azure Security Center in hybrid scenarios
      1. Provisioning Azure VMs running Windows Server 2019
      2. Configuring Azure Security Center
      3. Onboarding on-premises Windows Server 2019 into Azure Security Center
      4. Verifying the hybrid capabilities of Azure Security Center
5. Implementing file services in hybrid scenarios
   1. Implementing Azure Files
   2. Implementing Azure File Sync
   3. Lab: Implementing Azure File Sync
      1. Implementing DFS Replication in your on-premises environment
      2. Creating and configuring a sync group
      3. Replacing DFS Replication with File Sync–based replication
      4. Verifying replication and enabling cloud tiering
      5. Troubleshooting replication issues
6. Deploying and configuring Azure VMshis module describes how to deploy and configure Azure VMs running Windows Server 2019. The module covers how to configure Azure VM networking, storage, and security.Lessons
   1. Deploying Azure VMs
   2. Configuring Azure VM networking
   3. Configuring Azure VM storage
   4. Configuring Azure VM security
   5. Lab: Deploying and configuring Windows Server 2019 on Azure VMs
      1. Authoring ARM templates for Azure VM deployment
      2. Modifying ARM templates to include VM extension-based configuration
      3. Deploying Azure VMs running Windows Server 2019 by using ARM templates
      4. Configuring administrative access to Azure VMs running Windows Server 2019

  5. Configuring Windows Server 2019 security in Azure VMs
7. Managing and maintaining Azure VMs
  1. Managing Azure VMs running Windows Server 2019
  2. Maintaining Azure VMs running Windows Server 2019
  3. Lab: Managing Azure VMs running Windows Server 2019
    1. Provisioning Azure VMs running Windows Server 2019
    2. Managing Windows Server 2019 in Azure VMs by using Windows Admin Center
    3. Managing Windows Server 2019 in Azure VMs from Cloud Shell by using PowerShell Remoting
    4. Managing Windows Server 2019 in Azure VMs by using Run Command
    5. Managing Windows Server 2019 in Azure VMs by using the serial console
    6. Managing Windows Server 2019 in Azure VMs by using Azure Policy Guest Configuration
8. Planning and implementing migration and recovery services in hybrid scenarios
  1. Azure Migrate
  2. Storage Migration Server
  3. Azure Site Recovery
  4. Storage Replica
  5. Azure Backup
  6. Lab: Implementing Azure-based recovery services
    1. Implementing the lab environment
    2. Creating and configuring an Azure Site Recovery vault
    3. Implementing Hyper-V VM protection by using Azure Site Recovery vault
    4. Implementing Azure Backup

Class Materials

Each student will receive a comprehensive set of materials, including course notes and all the class examples.