ExecuTrain

Impulsamos tu talento tecnológico

| MICROSOFT	RED HAT	VIRTUALIZACIÓN
CIBERSEGURIDAD	DESARROLLO	OFFICE
BIG DATA	BLOCK CHAIN	BASES DE DATOS
GESTIÓN DE SERVICIOS IT	CLOUD COMPUTING	METODOLOGÍAS EN PROYECTOS
SISTEMAS OPERATIVOS	Y MÁS...	

¿Por qué ExecuTrain?

ExecuTrain es un proveedor de entrenamiento corporativo a nivel internacional y líder mundial en la capacitación empresarial. Contamos con más de 30 años de Experiencia y con más de 75 mil personas capacitadas a nivel Nacional.

Te guiamos en la definición de tus requerimientos de capacitación, en las diferentes etapas:

- ✓ Detección de necesidades, evaluación de conocimientos, plan de capacitación y seguimiento posterior para elegir el plan de capacitación como tú lo necesitas.
- ✓ El **más amplio catálogo de cursos**, desde un nivel básico hasta los niveles de conocimientos más especializados.
- ✓ En ExecuTrain el material y la **metodología están diseñados por expertos en aprendizaje humano**. Lo que te garantiza un mejor conocimiento en menor tiempo.
- ✓ Tú puedes confiar y estar seguro del aprendizaje porque nuestro **staff de instructores es de primer nivel**, algunos de los cuales son consultores en reconocidas empresas.
- ✓ No pierdas tu tiempo, los cursos están diseñados para un aprendizaje práctico.

Nuestro compromiso es que tú aprendas, si no quedas satisfecho con los resultados del programa, podrás volver a tomar los cursos hasta tu entera satisfacción o la devolución de tu dinero.

Modalidad de Servicio
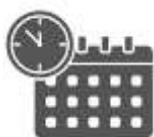
Cursos en Fecha Calendario

Súmate a nuestros grupos en fechas públicas.

Cursos Privados

On site, en nuestras instalaciones o en línea con instructor en vivo.

Autoestudio con soporte de instructor

Cursos en modalidad autoestudio, con acceso 24/7 a la plataforma de estudio, con soporte de instructor y foros de ayuda

ExecuTrain
Impulsamos tu talento tecnológico

20740WV / Installation, Storage, and Compute with Windows Server

This 5-day entry-level Windows Server 2022 course is designed for IT professionals who have minimal experience with Windows Server. It is designed for those who will be responsible for planning, installing, and managing storage and computing services, and who need to understand the scenarios, requirements, and options that are available and applicable to Windows Server 2022.

👥 Audience Profile

This course is intended for IT professionals who will be responsible for managing the installation of Windows Server as well as storage and computing services, and who need to understand the scenarios, requirements, and options that are available and applicable to Windows Server 2022.

✓ Required Prerequisites

- ✓ A basic understanding of networking fundamentals.
- ✓ An awareness and understanding of security best practices.
- ✓ An understanding of basic AD DS concepts.
- ✓ Basic knowledge of server hardware.
- ✓ Experience supporting and configuring Windows client operating systems such as Windows 8 or Windows 10.

🎯 Benefits

- ✓ Prepare and install Nano Server, a Server Core installation, and plan a server upgrade and migration strategy.
- ✓ Describe the various storage options, including partition table formats, basic and dynamic disks, file systems, virtual hard disks, and drive hardware, and explain how to manage disks and volumes.
- ✓ Describe enterprise storage solutions and select the appropriate solution for a given situation.
- ✓ Implement and manage Storage Spaces and Data Deduplication.
- ✓ Install and configure Microsoft Hyper-V.
- ✓ Deploy, configure, and manage Windows and Hyper-V containers.
- ✓ Describe the high availability and disaster recovery technologies in Windows Server 2016.
- ✓ Plan, create, and manage a failover cluster.
- ✓ Implement failover clustering for Hyper-V virtual machines.
- ✓ Configure a Network Load Balancing (NLB) cluster, and plan for an NLB implementation.
- ✓ Create and manage deployment images.
- ✓ Manage, monitor, and maintain virtual machine installations.

ExecuTrain
Impulsamos tu talento tecnológico

📝 Modules

Module 1: Install, upgrade, and migrate servers and workloads

This module describes the features of Windows Server from 2016 onward, with a focus on Windows Server 2022, and explains how to prepare for and install Windows Server, with graphics UI option and as a Server Core installation. This module also describes how to plan a server upgrade and migration strategy and explains how to perform a migration of server roles and workloads within and across domains. Finally, this module explains how to choose an activation model based on your environment characteristics.

Lessons

- Introducing Windows Server
- Prepare and install Server Core
- Prepare for upgrades and migrations
- Windows Server activation models

Lab 1: Install and configure Windows Server

- Exercise 1: Install Windows Server Core
- Exercise 2: Perform post-installation tasks
- Exercise 3: Perform remote management

After completing this module, students will be able to:

- Describe Windows Server.
- Prepare and install Server Core.
- Prepare for upgrades and migrations.
- Explain Windows Server activation models.

Module 2: Configure local storage

This module explains how to manage disks and volumes in Windows Server. It also explains RAID and RAID levels that you use and configure in Windows Server.

Lessons

- Manage discs in Windows Server
- Manage volumes in Windows Server

Lab 1: Manage disks and volumes in Windows Server

- Exercise 1: Create and manage volumes
- Exercise 2: Resize volumes
- Exercise 3: Manage virtual hard disks

After completing this module, students will be able to:

- Explain how to manage disks in Windows Server.
- Explain how to manage volumes in Windows Server.

Module 3: Implement enterprise storage solutions

This module discusses direct-attached storage (DAS), network-attached storage (NAS), and storage area networks (SANs). It also explains the purpose of Microsoft Internet Storage Name Service (iSNS) Server, data center bridging (DCB), and Multipath I/O (MPIO). Additionally, this topic compares Fibre Channel, Internet Small Computer System Interface (iSCSI), and Fibre Channel over Ethernet (FCoE), and describes how to configure sharing in Windows Server.

Lessons

- Overview of direct-attached storage, network-attached storage, and storage area networks
- Compare Fibre Channel, iSCSI, and Fibre Channel over Ethernet
- Understanding iSNS, data center bridging, and MPIO
- Configure sharing in Windows Server

Lab 1: Plan and configure storage technologies and components

- Exercise 1: Plan storage requirements
- Exercise 2: Configure iSCSI storage

- Exercise 3: Configure and manage the share infrastructure

After completing this module, students will be able to:

- Describe DAS, NAS, and SANs.
- Compare Fibre Channel iSCSI, and FCoE.
- Explain the use of iSNS, DCB, and MPIO.
- Configure sharing in Windows Server.

Module 4: Implement Storage Spaces and Data Deduplication

This module describes how to implement and manage Storage Spaces and Data Deduplication.

Lessons

- Implement Storage Spaces
- Manage Storage Spaces
- Implement Data Deduplication

Lab 1: Implement Storage Spaces

- Exercise 1: Create a Storage Space
- Exercise 2: Enable and configure storage tiering

Lab 2: Implement Data Deduplication

- Install Data Deduplication
- Configure Data Deduplication

After completing this module, students will be able to:

- Describe and implement the Storage Spaces feature in the context of enterprise storage needs.
- Manage and maintain Storage Spaces.
- Describe and implement Data Deduplication.

Module 5: Install and configure Hyper-V and virtual machines

This module provides an overview of Hyper-V and virtualization. It explains how to install Hyper-V, and how to configure storage and networking on Hyper-V host servers. Additionally,

it explains how to configure and manage Hyper-V virtual machines.

Lessons

- Overview of Hyper-V
- Install Hyper-V
- Configure storage on Hyper-V host servers
- Configure networking on Hyper-V host servers
- Configure Hyper-V VMs
- Manage Hyper-V VMs

Lab 1: Install and configure Hyper-V

- Exercise 1: Verify installation of the Hyper-V server role
- Exercise 2: Configure Hyper-V networks
- Exercise 3: Create and configure a virtual machine
- Exercise 4: Enable nested virtualization for a virtual machine

After completing this module, students will be able to:

- Describe the Hyper-V platform.
- Install Hyper-V.
- Configure storage on Hyper-V host servers.
- Configure networking on Hyper-V host servers.
- Configure Hyper-V VMs.
- Manage Hyper-V VMs.

Module 6: Deploy and manage Windows Server and Hyper-V containers

This module provides an overview of containers in Windows Server. Additionally, this topic explains how to deploy Windows Server and Hyper-V containers. It also explains how to install, configure, and manage containers by using Docker.

Lessons

- Overiview of containers in Windows Server
- Prepare for containers deployment

- Install, configure, and manage containers

Lab 1: Install and configure containers

- Exercise 1: Install and configure Windows Server containers by using Windows PowerShell
- Exercise 2: Install and configure Windows Server containers by using Docker

After completing this module, students will be able to:

- Describe containers in Windows Server.
- Deploy containers.
- Explain how to install, configure, and manage containers using Docker.

Module 7: Overview of high availability and disaster recovery

This module provides an overview of high availability and high availability with failover clustering in Windows Server. It further explains how to plan high availability and disaster recovery solutions with Hyper-V virtual machines (VMs). Additionally, this topic explains how to back up and restore the Windows Server operating system and data by using Windows Server Backup.

Lessons

- Define levels of availability
- Plan high availability and disaster recovery solutions with Hyper-V VMs
- Network Load Balancing overview
- Backup and restore with Windows Server Backup
- High availability with failover clustering in Windows Server

Lab 1: Plan and implement a high-availability and disaster recovery solution

- Exercise 1: Determine the appropriate high availability and disaster recovery solution
- Exercise 2: Implement storage migration
- Exercise 3: Configure Hyper-V replicas

After completing this module, students will be able to:

- Describe levels of availability.
- Plan for high availability and disaster recovery solutions with Hyper-V VMs.
- Describe Network Load Balancing (NLB).
- Backup and restore data by using Windows Server Backup.
- Describe high availability with failover clustering in Window Server.

Module 8: Implement and manage failover clustering

This module explains how to plan for failover clustering. It also explains how to create, manage, and troubleshoot a failover cluster.

Lessons

- Plan for a failover cluster
- Create and configure a new failover cluster
- Maintain a failover cluster
- Troubleshoot a failover cluster

Lab 1: Implement a failover cluster

- Exercise 1: Create a failover cluster
- Exercise 2: Verify quorum settings and adding a node

Lab 2: Manage a failover cluster

- Exercise 1: Evict a node and verify quorum settings
- Exercise 2: Change the quorum from Disk Witness to File Share Witness, and define node voting
- Exercise 3: Verify high availability

After completing this module, students will be able to:

- Plan for a failover-clustering implementation.
- Create and configure a failover cluster.
- Maintain a failover cluster.
- Troubleshoot a failover cluster.

Module 9: Implement failover clustering for Hyper-V virtual machines

This module describes how Hyper-V integrates with failover clustering. It also explains how to implement Hyper-V virtual machines (VMs) in failover clusters.

Lessons

- Overview of integrating Hyper-V in Windows Server with failover clustering
- Implement and maintain Hyper-V VMs on failover clusters
- Key features for VMs in a clustered environment

Lab 1: Implement failover clustering with Hyper-V

- Exercise 1: Configure virtual environment and iSCSI storage
- Exercise 2: Configure a failover cluster for Hyper-V
- Exercise 3: Configure a highly available VM

After completing this module, students will be able to:

- Explain integrating Hyper-V in Windows Server with failover clustering.
- Implement and maintain Hyper-V virtual machines on failover clusters.
- Describe key features for VMs in a clustered environment.

Module 10: Create and manage deployment images

This module provides an overview of the Windows Server image deployment process. It also explains how to create and manage deployment images by using the Microsoft Deployment Toolkit (MDT). Additionally, it describes different workloads in the virtual machine environment.

Lessons

- Introduction to deployment images

- Create and manage deployment images by using the MDT
- VM Environments for difference workloads

Lab 1: Use the MDT to deploy Windows Server

- Exercise 1: Configure MDT
- Exercise 2: Create and deploy an image

After completing this module, students will be able to:

- Describe the Windows Server image-deployment process.
- Create and manage deployment images by using the MDT.
- Describe VM environments for different workloads.

Module 11: Maintain and monitor Windows Server installations

This module provides an overview on Windows Server Update Services (WSUS) and the requirements to implement WSUS. It explains how to manage the update process with WSUS. Additionally, this topic provides an overview of Windows PowerShell Desired State Configuration (DSC) and Windows Server monitoring tools. Finally, this topic describes how to use Performance Monitor, and how to manage event logs.

Lessons

- WSUS overview and deployment options
- Update management process with WSUS
- Overview of PowerShell Desired State Configuration
- Overview of Windows Server monitoring tools
- Use Performance Monitor
- Monitor Event Logs

Lab 1: Implement WSUS and deploy updates

- Exercise 1: Implement WSUS
- Exercise 2: Configure update settings
- Exercise 3: Approve and deploy an update by using WSUS

After completing this module, students will be able to:

- Describe the purpose of WSUS and the requirements to implement WSUS.
- Manage the update process with WSUS.
- Describe the purpose and benefits of Windows PowerShell DSC.
- Describe the monitoring tools available in Windows Server.
- Use Performance Monitor.
- Manage event logs.