

## Installing and Configuring Windows Server 2019

This course is part one of a three-part series that provides the skills and knowledge necessary to implement a core Windows Server 2019 infrastructure in an existing enterprise environment.

The three courses collectively cover implementing, managing, maintaining, and provisioning services and infrastructure in a Windows Server 2019 environment.

While there is some cross-over in skills and tasks across the courses, this course primarily covers the initial implementation and configuration of core services including Active Directory Domain Services (AD DS), networking services, and Microsoft Hyper-V Server 2019 configuration.

### Détails

- **Code** : IWS2019
- **Durée** : 4 jours ( 28 heures )
- **Public**
  - IT Professionals
- **Pré-requis**
  - An understanding of basic Active Directory Domain Services (AD DS) concepts.

### Objectifs

- Install and Configure Windows Server 2019
- Describe AD DS.
- Manage Active Directory objects.
- Automate Active Directory administration.
- Implement IPv4.

### Programme

#### 1 – Windows Server Administration Overview

- Introducing Windows Server 2019
- Windows Server Core Overview
- Windows Server administration principles and tools overview
- Installing Windows Server 2019

#### 2 – Identity Services in Windows Server

- AD DS Overview
- Deploying Windows Server domain controllers
- Azure AD overview
- Implementing Group Policy
- Active Directory Certificate Services overview

#### 3 – Network Infrastructure Services in Windows Server

- Deploying and managing DHCP
- Deploying and managing DNS service
- Deploying and managing IPAM
- Remote Access Services in Windows Server

#### 4 – File Servers and Storage Management in Windows Server

- Volumes and File Systems in Windows Server
- Implementing sharing in Windows Server
- Implementing Storage Spaces in Windows Server
- Implementing Data Deduplication
- Implementing iSCSI
- Deploying Distributed File System

#### 5 – Hyper-v Virtualization And Containers In Windows

#### Server

- Hyper-V in Windows Server
- Configuring VMs
- Securing virtualization in Windows Server
- Containers in Windows Server
- Overview of Kubernetes

#### 6 – High Availability In Windows Server

- Planning for failover clustering implementation
- Creating and configuring failover cluster
- Overview of stretch clusters
- High availability and disaster recovery solutions with Hyper-V VMs

#### 7 – Disaster Recovery In Windows Server

- Hyper-V Replica
- Backup and restore infrastructure in Windows Server

#### 8 – Windows Server Security

- Credentials and privileged access protection
- Hardening Windows Server
- JEA in Windows Server
- Securing and analyzing SMB traffic
- Windows Server update management

#### 9 – RDS In Windows Server

- Overview of RDS
- Configuring a session-based desktop deployment
- Overview of personal and pooled virtual desktops

## 10 – Remote Access And Web Services In Windows Server

- Implementing VPNs
- Implementing Always On VPN
- Implementing NPS
- Implementing Web Server in Windows Server

## 11 – Server And Performance Monitoring In Windows

## Server

- Overview of Windows Server monitoring tools
- Using Performance Monitor
- Monitoring event logs for troubleshooting

## 12 – Upgrade And Migration In Windows Server

- AD DS migration
- Storage Migration Service
- Windows Server migration tools

### Modalités

- **Type d'action** :Acquisition des connaissances
- **Moyens de la formation** :Formation présentielle – 1 poste par stagiaire – 1 vidéo projecteur – Support de cours fourni à chaque stagiaire
- **Modalités pédagogiques** :Exposés – Cas pratiques – Synthèse
- **Validation** :Exercices de validation – Attestation de stages