Microsoft Azure

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AZ – 800

Administering Windows Server Hybrid Core Infrastructure

Overview

This course teaches IT Professionals how to manage core Windows Server workloads and services using on-premises, hybrid, and cloud technologies. The course teaches IT Professionals how to implement and manage on-premises and hybrid solutions such as identity, management, compute, networking, and storage in a Windows Server hybrid environment.

Course Objectives

By the end of this course, participants will be able to:

- Deploy and manage Active Directory Domain Services (AD DS) in on-premises and cloud environments
- Manage Windows Servers and workloads in a hybrid environment
- Manage virtual machines and containers
- Implement and manage an on-premises and hybrid networking infrastructure
- Manage storage and file services

Prerequisites

Before attending this course, students must have:

- Experience with managing Windows Server operating system and Windows Server workloads in on-premises scenarios, including AD DS, DNS, DFS, Hyper-V, and File and Storage Services.

- Experience with common Windows Server management tools (implied in the first prerequisite).

- Basic knowledge of core Microsoft compute, storage, networking, and virtualization technologies (implied in the first prerequisite).

- Experience and an understanding of core networking technologies such as IP addressing, name resolution, and Dynamic Host Configuration Protocol (DHCP).

- Experience working with and an understanding of Microsoft Hyper-V and basic server virtualization concepts.

- Basic experience with implementing and managing IaaS services in Microsoft Azure.

- Basic knowledge of Microsoft Entra.

- Experience working hands-on with Windows client operating systems such as Windows 10 or Windows 11.

- Basic experience with Windows PowerShell.

Audience Profile

This four-day course is intended for Windows Server Hybrid Administrators who have experience working with Windows Server and want to extend the capabilities of their on-premises environments by combining on-premises and hybrid technologies. Windows Server Hybrid Administrators implement and manage on-premises and hybrid solutions such as identity, management, compute, networking, and storage in a Windows Server hybrid environment.
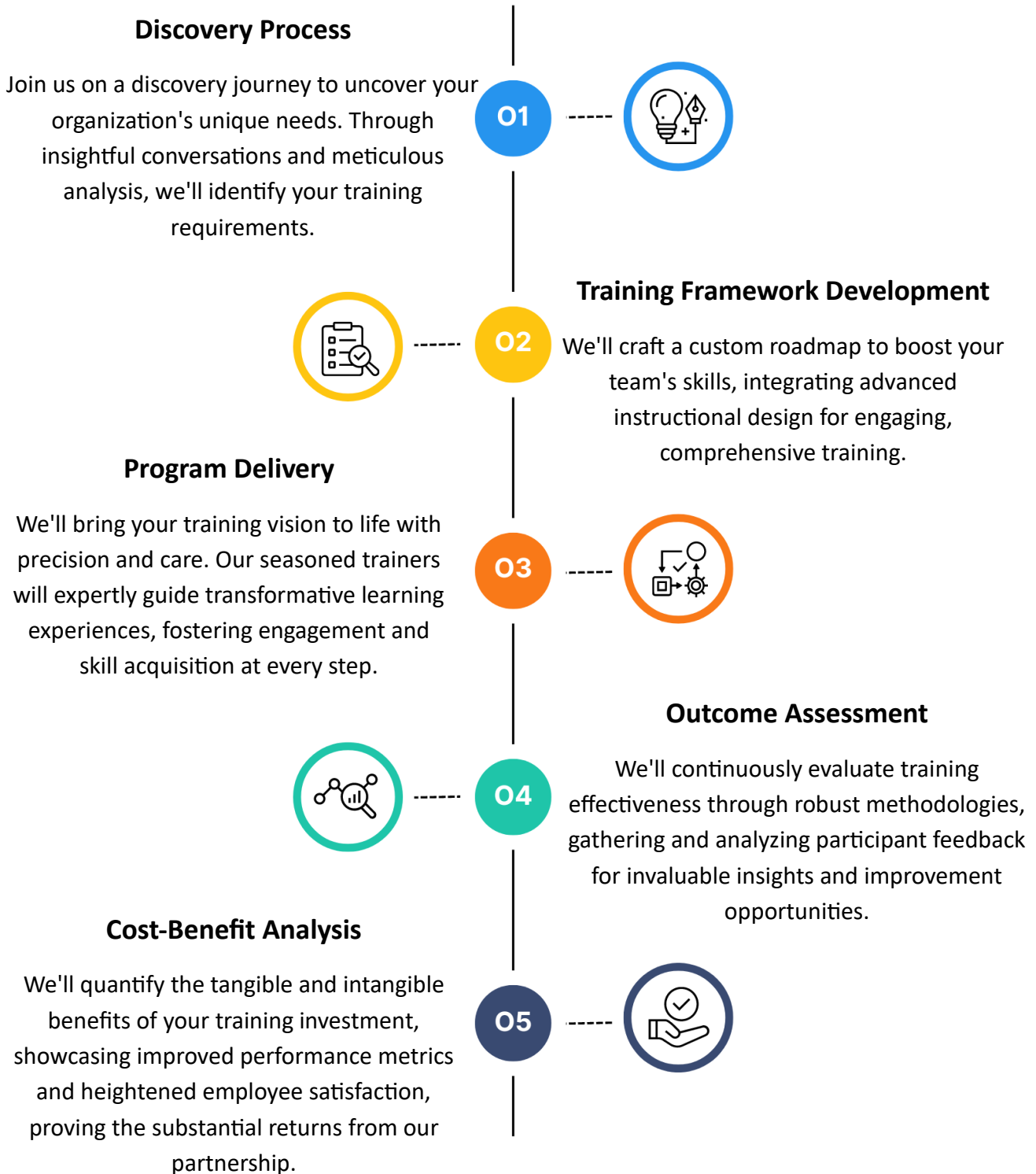
Course Level

- Intermediate

Course Duration

- 4 Days – 32 Hours

Creating Tailor - Made Training Programs to Meet Your Specific Goals

Discovery Process

Join us on a discovery journey to uncover your organization's unique needs. Through insightful conversations and meticulous analysis, we'll identify your training requirements.

O1

Training Framework Development

O2

We'll craft a custom roadmap to boost your team's skills, integrating advanced instructional design for engaging, comprehensive training.

Program Delivery

We'll bring your training vision to life with precision and care. Our seasoned trainers will expertly guide transformative learning experiences, fostering engagement and skill acquisition at every step.

O3

Outcome Assessment

O4

We'll continuously evaluate training effectiveness through robust methodologies, gathering and analyzing participant feedback for invaluable insights and improvement opportunities.

Cost-Benefit Analysis

We'll quantify the tangible and intangible benefits of your training investment, showcasing improved performance metrics and heightened employee satisfaction, proving the substantial returns from our partnership.

O5

Course Outline

As a candidate for this exam, you're responsible for configuring and managing Windows Server on-premises, hybrid, and infrastructure as a service (IaaS) platform workloads. As a Windows Server hybrid administrator, you're tasked with:

- Integrating Windows Server environments with Azure services.
- Managing Windows Server in on-premises networks.

In this role, you manage and maintain Windows Server IaaS workloads in Azure as well as migrating and deploying workloads to Azure. You typically collaborate with:

- Azure administrators
- Enterprise architects
- Microsoft 365 administrators
- Network engineers

As a candidate for this exam, you deploy, package, secure, update, and configure Windows Server workloads using on-premises, hybrid, and cloud technologies. In this role, you implement and manage on-premises and hybrid solutions, such as identity, security, management, compute, networking, storage, monitoring, high availability, and disaster recovery.

You use administrative tools and technologies such as Windows Admin Center, PowerShell, Azure Arc, Azure Policy, Azure Monitor, Azure Automation Update Management, Microsoft Defender for Identity, Microsoft Defender for Cloud, and IaaS virtual machine (VM) administration.

As a candidate for this exam, you should have several years of experience with Windows Server operating systems.

Module 1: Deploy and manage identity infrastructure (Windows Server)
- Lesson: Introduction to AD DS
- Lesson: Manage AD DS domain controllers and FSMO roles
- Lesson: Implement Group Policy Objects
- Lesson: Manage advanced features of AD DS
- **Lab 01 –** Implement identity services and Group Policy

Module 2: Deploy and manage identity infrastructure (Hybrid scenarios)
- Lesson: Implement hybrid identity in Windows Server
- Lesson: Deploy and manage Azure IaaS Active Directory domain controllers in Azure
- **Lab 02 –** Implementing integration between AD DS and Microsoft Entra ID

Module 3: Administering Windows Server Hybrid Core Infrastructure (Windows Server administration)

- Lesson: Perform Windows Server secure administration
- Lesson: Windows Server administration tools
- Lesson: Post-installation configuration of Windows Server
- Lesson: Just Enough Administration in Windows Server
- **Lab 03 –** Managing Windows Server

Module 4: Administering Windows Server Hybrid Core Infrastructure (Facilitating hybrid management)

- Lesson: Administer and manage Windows Server IaaS virtual machines remotely
- Lesson: Manage hybrid workloads with Azure Arc
- **Lab 04 –** Using Windows Admin Center in Hybrid Scenarios

Module 5: Manage virtualization and containers in a hybrid environment (Hyper-V virtualization in Windows Server)

- Lesson: Configure and manage Hyper-V
- Lesson: Configure and manage Hyper-V virtual machines
- Lesson: Securing virtualization in Windows Server
- Lesson: Run containers on Windows Server
- Lesson: Orchestrate containers on Windows Server using Kubernetes
- **Lab 05 –** Implementing and configuring virtualization in Windows Server

Module 6: Manage virtualization and containers in a hybrid environment (Deploying and configuring Azure VMs)

- Lesson: Plan and deploy Windows Server IaaS Virtual Machines
- Lesson: Customize Windows Server IaaS Virtual Machine images
- Lesson: Automate the configuration of Windows Server IaaS Virtual Machines
- **Lab 06 –** Deploying and configuring Windows Server on Azure VMs

Module 7: Implement and manage an on-premises and hybrid networking infrastructure (Network infrastructure services in Windows Server)

- Lesson: Deploy and manage DHCP
- Lesson: Implement Windows Server DNS
- Lesson: Implement IP address management
- Lesson: Implement remote access
- **Lab 07 –** Implementing and configuring network infrastructure services in Windows Server

Module 8: Implement and Manage an on-premises and Hybrid Networking Infrastructure (Implementing hybrid networking infrastructure)

- Lesson: Implement hybrid network infrastructure
- Lesson: Implement DNS for Windows Server IaaS VMs
- Lesson: Implement Windows Server IaaS VM IP addressing and routing
- **Lab 08 –** Implementing Hybrid Networking Infrastructure

Module 9: Configure Storage and File Services (File servers and storage management in Windows Server)

- Lesson: Manage Windows Server file servers
- Lesson: Implement Storage Spaces and Storage Spaces Direct
- Lesson: Implement Windows Server Data Deduplication
- Lesson: Implement Windows Server iSCSI
- Lesson: Implement Windows Server Storage Replica
- **Lab 09 –** Implementing Storage Solutions in Windows Server

Module 10: Configure Storage and File Services (Implementing a hybrid file server infrastructure)

- Lesson: Overview of Azure file services
- Lesson: Implementing Azure File Sync
- **Lab 10 –** Implementing Azure File Sync

Indus Tech Services

Who We Are….

Indus Tech Services is an IT company that specializes in providing comprehensive training, consulting & implementation services for software solutions designed to address the diverse business challenges faced by organizations today. With a passion for technology and a deep understanding of business processes, Indus Tech is committed to empowering businesses to optimize their operations, boost productivity, and drive sustainable growth.

Indus Tech Services and Microsoft Partnership

As a proud **Microsoft Partner**, **Indus Tech Services** is uniquely equipped to deliver top-tier training and certification programs designed to meet the evolving needs of today's workforce. Our partnership with Microsoft allows us to offer direct access to the latest tools, resources, and industry insights, ensuring that our courses are aligned with the most current technology trends. This collaboration enables us to provide unparalleled support to our students, helping them gain the skills and knowledge required to excel in their careers. By choosing Indus Tech Services, you're not just learning; you're gaining a competitive edge with Microsoft-backed expertise and certification.

Why Choose Us…

From time to time, life serves up a profound nudge, urging us to step beyond our routines and make a difference in the world. Indus Tech Services emerged from one such compelling wake-up call. We are not just a company; we are a dedicated force with a belief in providing solutions to organizations, regardless of their size, and we infuse a human touch into everything we do.

Our Expertise

With over 25 years of collective experience navigating the intricacies of daily business transactions, irrespective of geographical, cultural, time zone, or language barriers, our team has honed their expertise to meet any challenge head-on. This wealth of experience has armed our resources with an unparalleled understanding and skill set to tackle a broad spectrum of obstacles.

Training

With two decades of unwavering commitment and a global footprint, our company is a true pioneer in the fields of linguistic, transactional, technical, and behavioural training for some of the world's largest corporate entities. Our unparalleled expertise has been refined through years of dedication and innovation, making us the go-to choice for businesses seeking transformative training solutions.

Consulting

Our company has been at the forefront of providing world-class IT consulting services to organizations spanning the globe. With an extensive and proven track record, we have honed our expertise to meet the ever-evolving technological needs and challenges faced by businesses, regardless of their scale or industry.

Implementation

Our experience covers a broad spectrum of IT implementation services, including system integration, software deployment, network architecture, cloud migration, and infrastructure setup. We understand that the successful execution of IT projects is pivotal to an organization's growth and efficiency. Therefore, we bring a depth of knowledge and a commitment to delivering results that set us apart.

To know more contact us at info@industechservices.com or call us at +91 - 99961 61170.