

AZ-100: MICROSOFT AZURE INFRASTRUCTURE AND DEPLOYMENT

WHY AZURE?

Whether it is a Simple Website or Ecommerce Portal or CRM or Office Automation tools or DevOps tools or anything which needs Server Infrastructure - all are now finding their space in Cloud. Every organization, small, medium or large is now moving towards cloud computing platforms.

Microsoft Azure is the fastest growing platform in today's date. It's a perfect blend of all the tree major cloud computing service models – IAAS, PAAS and SAAS.

Azure is available in **150 countries**, including China, and supports 10 languages and 24 currencies, all backed by Microsoft's **\$15 billion** (USD) investment in global datacenter infrastructure.

Azure is currently available in 54 regions around the world.

95% of Fortune 500 companies use Azure

120,000 new Azure customer subscriptions per month

COURSE OVERVIEW

This course teaches IT Professionals how to manage their Azure Infrastructure including Manage Subscriptions and Resources, Configure and Manage Virtual Network, Implement and Manage Storage, Deploy and manage with VM, Manage Identities using Azure Active Directory

This, Microsoft Azure training is targeted for ANYONE who wants to move their current skillset to Microsoft Azure cloud, taking the benefit of unlimited computing, storing and networking power, for the personal career growth.

WHY ONE SHOULD LEARN AZURE?

Are you moving with the pace of the industry?

Are you not getting the sense of being outdated?

Is stagnation not bother you?

Is your Job Secured?

Actually, you don't have choice!!!

For every IT professional, it has now become **MANDATORY** to have **KNOWLEDGE OF CLOUD COMPUTING**.

You can choose: Microsoft Azure OR Amazon AWS OR Google Cloud?

But anyone is must...Then why not choose the one with is **FASTEST growing...**

For Years to come...Azure will stay...

Align to technology growth?

Remain Updated...Learn Azure...

-Sandeep Soni.

PREREQUISITES:

This course is an essential for all those I.T Professionals or Administrators who either directly or indirectly work on or provides solutions on Microsoft Platform for building, maintaining and monitoring enterprise scale applications using latest Cloud Computing features and services.

Applicable careers include

- Solution Architects / Enterprise Architects / Team Leads
- Storage Administrators / Security Administrators
- Network Engineers / Server Engineers / Virtualization Engineers

OUR TRAINING METHODOLOGY?

Our **star trainer Mr. Sandeep Soni** having 22 years of experience in IT industry has compiled these courses and he will be himself delivering it.

Teaching methodology of Mr. Sandeep Soni, is very **simple but comprehensive**, every topic begins with concepts, to position the candidate in a comfortable state about what is being talked about, followed by that **practical demos** as in real-time on every topic is taken explaining how the feature can be incorporated in real-time situations.

Our course will enable you to design, build, maintain and monitor robust and scalable cloud solutions and most important you will **start thinking BIG**. This course also focuses on the architectural considerations and decisions necessary when building a highly available solution in the cloud.

WHAT YOU'LL LEARN / COURSE OBJECTIVE

- Manage Azure subscriptions and billing, and implement Azure policies.
- Implement access management with Azure users, groups, and role-based access control.
- Use Azure Monitor to configure Azure alerts and review the Azure Activity Log.
- Query and analyze Log Analytics data.
- Deploy resources with ARM templates and organize Azure resources.
- Optimize your use of Azure tools like the Azure portal, Azure PowerShell, Cloud Shell and the Azure CLI.
- Create Azure storage accounts for different data replication, pricing, and content scenarios.

- Implement virtual machine storage, blob storage, Azure files, and structured storage.
- Secure and manage storage with shared access keys, Azure backup, and Azure File Sync.
- Store and access data using Azure Content Delivery Network, and the Import and Export service.
- Monitor Azure storage with metrics and alerts, and the Activity Log.
- Understand virtual networking components, IP addressing, and network routing options.
- Implement Azure DNS domains, zones, record types, and resolution methods.
- Configure network security groups, service endpoints, logging, and network troubleshooting.
- Implement site connectivity schemas including VNet-to-VNet connections and virtual network peering.
- Explain virtual machine usage cases, storage options, pricing, operating systems, networking capabilities, and general planning considerations.
- Create Windows virtual machines in the Azure Portal, with Azure PowerShell, or using ARM Templates.
- Deploy custom server images and Linux virtual machines.
- Configure virtual machine networking and storage options.
- Implement virtual machine high availability, scalability, and custom scripts extensions.
- Backup, restore, and monitor virtual machines.
- Implement Azure Active Directory, Self-Service Password Reset, Azure AD Identity Protection, and integrated SaaS applications.
- Configure domains and tenants, users and groups, roles, and devices.
- Implement and manage Azure Active Directory integration options and Azure AD Application Proxy.

CERTIFICATION



Part of requirements for : Azure Administrator

With Microsoft Certification, technology professionals are more likely to get hired, demonstrate clear business impact, and advance their careers.

[ABOUT THE CERTIFICATION](#)

WHAT WILL YOU GET?

- Exhaustive training by Microsoft Certified Trainer, **Mr. Sandeep Soni** having **22 years** of experience.
- You will get in-detailed and **Complete Courseware** prepared by Mr. Sandeep Soni himself and same can be used as for practice and reference.
- **FREE Microsoft Official Courseware (MOC)** for any one course, AZ-100 or AZ-101 or AZ-200 or AZ-201. This will also help you to prepare for Azure Certification.
- Guidance and support towards **Microsoft Certification Exams** will be provided by Mr. Sandeep Soni himself.
- You can buy **Certification Voucher** at discounted price.

- **Placement assistance** will be provided to **deserving** candidates.

SPECIAL OFFER for LIMITED PERIOD

- Azure Pass for practicing Lab exercise worth \$100/- (or one month) will provided absolutely free.
- 2-Months Access to online video Azure course on <http://www.bestdotnettraining.com> so that participants can revise the topic.
- **Most important of all: NO EXTRA FEES WILL BE CHARGED FOR REVISION UP TO 3 TIMES WITHIN A YEAR**

COURSE SYLLABUS

Cloud Computing Introduction

- What is Cloud Computing
- Cloud Characteristics
- Cloud Computing Service Models
- Deployment Models in Cloud Computing
- Advantages and Disadvantages of Cloud Computing
- Cloud Computing Job Roles.
- Cloud Computing Platforms and Certifications.

Getting Starting with Azure

- Introduction to Azure
- Why, What and Benefits of Azure
- Azure Hosting Models
- Azure Services
- Subscribing to Microsoft Azure
- Azure Portals
- Azure Key Concepts
- Azure Resource Group
- Installing Microsoft Azure SDK

Configure and Manage Azure Virtual Networks

- Overview of Azure Networking
- Virtual Network Benefits
- Understanding Network Resources
- Implement and manage virtual networking

- Create a VNet using Azure Portal
 - Create a Subnet
 - Configure private and public IP addresses
 - Create Network Interface Card with public, and private IP addresses
 - Create a Virtual Machine
- Setup Network Security Group
 - Create security rules
 - Associate NSG to a subnet or network interface
 - Identify required ports
 - Evaluate effective security rules
- Understanding Azure DNS
 - Configure Azure DNS
 - Public and Private DNS Zones
- Create connectivity between virtual networks
 - Create and configure VNET peering
 - Create and configure VNET to VNET
 - Verify virtual network connectivity

Managing Azure with Windows PowerShell and Azure CLI.

- Installing the required modules
- Login to Azure Portal
- Managing Resource Group and Resources
- Azure CLI Introduction and Setup
- Creating Resources
- Listing and Formatting output
- Connect a Web App to SQL Database
- Deleting Resources
- Interactive Mode

Azure Storage

- Importance of Azure Storage Service
- **Configure network access to the storage account**
- Creating Storage Account
- Install and use Azure Storage Explorer
- Manage access keys

- Implement Storage Replication Models
 - Locally Redundant Storage
 - Zone Redundant Storage
 - Geo Redundant Storage
 - Read Access Geo Redundant Storage
- Implement Azure storage blobs
 - Read data, change data, set metadata on a container, store data using block and page blobs, stream data using blobs, access blobs securely, implement async blob copy, configure a Content Delivery Network (CDN), design blob hierarchies, configure custom domains, scale blob storage
- Configure Azure Files
 - Create Azure file share
 - Create Azure File Sync service
 - Create Azure sync group
 - Troubleshoot Azure File Sync
- Manage Access
 - Create and manage shared access signatures, use stored access policies, regenerate keys.
 - Configure and use Cross-Origin Resource Sharing (CORS)
- Azure Table Storage
- Azure Queue Storage
- Monitor activity log by using Log Analytics

Deploy and Manage Virtual Machines

- About Virtual Machine Workloads
- Create and configure VM
 - Create a Virtual Machine using Portal
 - Create a Virtual Machine using PowerShell
 - Understand and Capture VM Images
 - Upload an on-premise VHD to Storage Account
 - Deploy a New VM from the Captured Image
 - **Configure high availability**
 - Virtual Machine Scale Sets
- Automate deployment of VMs
 - Modify ARM Templates
 - Configure Location of new VMs
 - Configure VHD template

- Save and Deploy from template
- Manage Azure VM
 - Virtual Machine Sizes
 - Virtual Machine Disks
 - **Redeploy VMs**
- Perform configuration management
 - VM Extensions & VM Agents
 - Custom Script Extensions
 - Desired State Configuration (DSC)
- Monitoring, Debugging and Diagnosis
 - Retrieve Diagnostics data
 - View Streaming Logs
 - Configure endpoint monitoring
 - Configuring Alerts
 - Configure diagnostics
 - Use remote debugging
 - Monitor Web App resources
 - Azure Application Insights
- Configure serverless computing
 - Create and manage objects;
 - Manage a Logic App resource;
 - Manage Azure Function app settings
 - Manage Event Grid
 - Manage Service Bus

Manage resource groups

- Use Azure policies for resource groups
- Configure resource locks
- Configure resource policies
- Implement and set tagging on resource groups
- Move resources across resource groups
- Remove resource groups

Manage Azure Subscriptions

- Assign administrator permissions

- Configure cost center quotas and tagging
- Configure Azure subscription policies at Azure subscription level

Analyze resource utilization and consumption

- Configure diagnostic settings on resources
- Create baseline for resources
- Create and test alerts.
- Analyze alerts across subscription
- Analyze metrics across subscription
- Create action groups
- Monitor for unused resources
- Monitor spend; report on spend;
- Utilize Log Search query functions
- View alerts in Log Analytics

Implement Azure backup

- Configure VM backup
- Perform backup operation
- Create Recovery Services Vault
- Create and configure backup policy
- Perform a restore operation
- Configure and review backup reports

Managing Identities

- Manage Azure Active Directory (AD)
 - Azure AD Introduction
 - Adding a custom domain name to Azure AD
 - Multiple Active Directories
 - Configure Azure AD Identity Protection
 - Azure AD Join, and Enterprise State Roaming
 - Configure self-service password reset
 - Implement conditional access policies
 - Perform an access review
- Manage Azure AD Objects
 - Managing Users, Groups and Devices

- Manage user and group properties
 - Manage device settings
 - Perform bulk user updates
- Implement and manage hybrid identities
 - Synchronizing On-Premise AD Identities with Azure AD Connect
 - Using Single Sign-On with Azure AD
 - Manage Azure AD Connect
 - Manage Password Sync and Writeback
- Integrating Gallery Applications with Azure AD