

MS - Azure



Quality Thought[®]

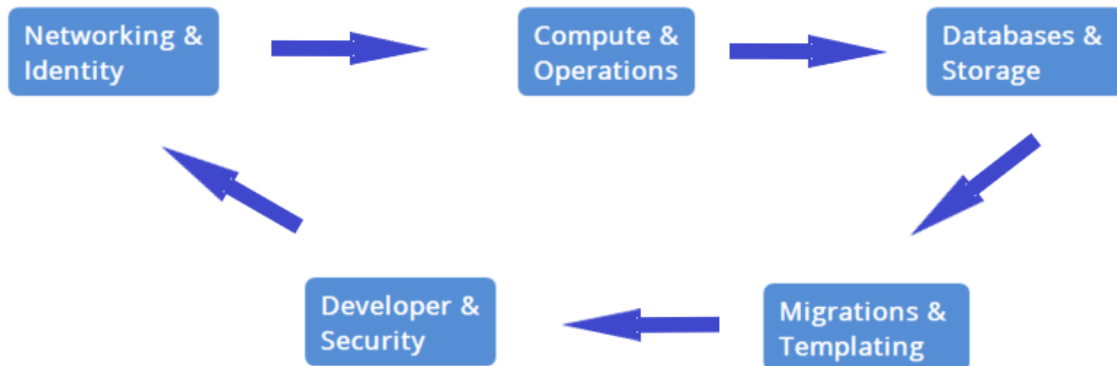
The Leader in Software Training

Hyderabad

We are ready to serve Latest IT Trends, Are you ready to learn??

START DATE :
TIMINGS :
DURATION :
TYPE OF BATCH :
FEE :
FACULTY NAME : Khaja

ARCHITECTURE / ADMINISTRATION / DEVELOPMENT:

**Networking**

- Networking Basics
- Virtual Network
- Subnets
- Network Security Groups
- Application Security Groups
- Routing
- Service Endpoints
- Service Endpoint Polices
- VNET Peering
- Virtual Network TAP
- Virtual Networking for Azure Services
- Container & Kubernetes networking
- VNET Replication for Business Continuity
- IP Addressing
- Public IP prefix
- IpV6 for Azure VNet
- DDoS protection
- Cross network Connectivity
- Backend Connectivity Interoperability
- Trouble shooting
- VPN Gateway
 - Creating & Managing a VPN Gateway
 - Site to Site Connections
 - Multiple Site to Site Connections
 - VNET to VNET Connections
 - Zone Redundant Gateways
 - BGP and VPN Gateway
- AZURE Express Route

- Operating Modes
 - Portal
 - CLI
 - PowerShell
 - ARM Templates

Azure DNS

- Overview
- Public DNS
 - Zones & Records
 - Alias Records
 - Revers DNS
 - Disaster Recovery
- Private DNS

Azure Load balancers & Application Gateway

- Azure Load Balancer Overview
- Basic Load Balancer
- Standard Load Balancer
- Health probes
- High Availability ports
- Multiple frontends
- Outbound Connections
- Outbound Rules
- Load Balancer Metrics
- Azure Application Gateway Overview
- Application Gateway Components
- Routing
- SSL
- WAF
- Health Monitoring
- App Service Web app & VMSS integrations
- WebSocket Support

Azure Traffic Manager

- Overview
- Routing Methods
- Traffic Manager Profiles
- Endpoint Types
- Traffic View
- Disaster Recovery using Azure DNS & Traffic Manager

Azure Active Directory

- Overview
- What is Azure Active Directory
- Group and Access Management

- Group-based licensing
- Azure AD architecture
- Default User Permissions
- Organization
- Groups
- Users
- Authentication
 - Multifactor
 - Self Service Password Reset
- Azure RBAC
- Custom Roles in Azure
- Privileged Identity Management

Azure Active Directory B2B

- B2B guest user access
- Compare B2B with B2C
- B2B licensing & invitations
- Conditional Access & User Tokens

Azure Active Directory B2C

- What is AAD B2C
- Application Types
- Authentication Protocols
 - OAuth
 - OpenId
 - Tokens
- User flow & Policy
- App Integration

Hybrid Identity

- What is hybrid Identity
- Azure AD Connect
- Password hash synchronization
- Pass-through authentication
- Federation
- Single-Sign On
- Azure AD Connect Sync

Azure Virtual Machines & Scale Sets

- How Azure VM's Work internally
- VM Types & Sizes
- Virtualization technologies in azure
- Creation & Management of VM's
- Creating VM Images
- High Available VM's
- Availability Sets & Availability Zones

- VM Scale Sets
- VM Scale Sets with Load balancers & application gateways
- Dedicated hosts
- Maintenance & Updates
- VM Extensions
- Cloud-Init
- Maintenance & updates
- Accelerated Networking
- Operating Modes
 - CLI
 - PowerShell
 - ARM Templates

Operations

Azure Batch

- Overview
- Creation of Batch Job
- Execution of Batch Job

Azure Monitor

- Overview
- Log Analytics
- Log Queries
- Visualize log data
- Alerts
 - Metric Alerts
 - Log alerts
 - Activity log alerts
 - Change analysis
- Application Insights
- Metrics
- Continuous monitoring with Azure Monitor

Azure Site Recovery

- Overview
- Business Continuity and Disaster Recovery (BCDR)
- Replication of Azure VMs to different Regions
- Failover of Azure VMs
- Disaster Recovery for Apps

Azure Backup Service

- Overview
- Backup Azure VMs
- Restoring disks
- Backup from On-prem to Azure

Azure Policy

- Overview
- Policy Definitions
- Policy Effects
- Custom Policy Definitions

Azure Blueprints

- Overview
- Creating blueprints
- Stages of Blueprints
- Lifecycle of Blue Prints
- Protecting & Locking resources

Azure Storage**Azure Storage Accounts**

- Overview
- Storage account types
- Blob Storage
- Page Blobs
- Block Blobs
- Table Storage
- Queue Storage
- File Storage
- Data Redundancy
- Access Tiers
- Performance & Scaling
- Concurrency
- Static Websites using Storage Accounts
- Event Handling
- Page Blobs
- Transferring Data using AzCopy

Azure Managed Disks

- Overview
- Benefits of Using Managed Disks
- Disk Types
- Disk SKU's
- Temp Disk
- Data Disk
- OS Disk
- Backup & Recovery of Disks

Azure StorSimple and Data Box

- StorSimple Overview
- StorSimple Virtual Array
- StorSimple Data Manager

- Azure Data Box

Azure SQL

- Overview
- Azure SQL Database
- Azure SQL Manged Instance
- Single Database
- Elastic Pool
- Purchasing Models
- Service Tiers

Azure MySQL

- Overview
- Database & Servers
- Resources
- Data access & Security
- Backup & Replications

Azure Redis Cache

- Overview
- Cache Tier
- Geo-Replications
- Import/Export Data
- Schedule Updates

Azure Cosmos DB

- Overview
- Global distribution
- Partitioning throughput
- SQL query reference
- Cassandra API
- MongoDB API

**ARM Templates**

- Overview
- JSON
- Resources
- Parameters
- Variables
- Functions
- Resources
- Outputs
- Template File Structure
- Template reference
- Template Functions

- Linked Templates
- Deployment Manager

Azure Migrate

- Overview
- Migrate On-premise VMWare VMs to Azure
- Migrate On-premise Hyper-V VMS to Azure
- Migrate physical servers and VMs

Azure Database Migration Service

- Overview
- Migrate On-premise SQL Server to Azure SQL DB
- Migrate On-Premise SQL Server to Azure SQL Managed Instance

Azure Platform as a Service**Azure App Service Web Apps**

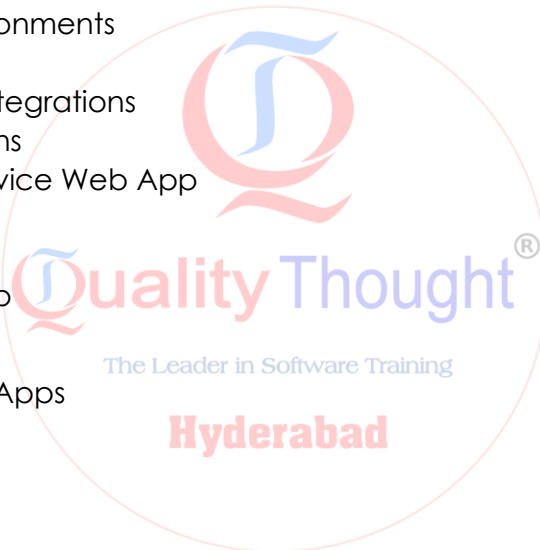
- Overview
- App Service Environments
- App Service Plans
- Virtual Network Integrations
- Hybrid connections
- Creating App Service Web App
 - CLI
 - Portal
 - Docker Hub

Azure Mobile Apps

- What are Mobile Apps
- Android Apps
- Cordova
- iOS

Azure Functions

- Overview
- Creating Functions
 - Python
 - PowerShell
 - Java
 - C#
- Triggers and Bindings
- Integrate
 - Storage
 - Cosmos DB
- Scale & Hosting
- Events & messaging



Service Fabric

- Overview
- Create and Manage a Cluster
- Create a standalone cluster
- Deploy a .NET app
- Deploy a Java app
- Application Scenarios

Authentication and Data Security

- Managed Identity
- Key Vault
- Azure Disk Encryption

Message-based Services

- Event Grid
- Notification Hub
- Event Hub
- Service Bus
- Azure Relay

API Gateways

- Overview
- API Gateway Policies



Foundation Course for DevOps, AWS & AZURE

Linux

- Overview
- Understanding Linux Architecture
- Shell and Kernel Overview
- Linux Distributions
- Using Shell
- Exploring Filesystems
- Working with Text Files
- Process Management
- Package Management
 - RPM
 - DEB
 - YUM
 - APT
 - SNAP
- Managing User Accounts
- Disk & Filesystem management
 - Disk Storage
 - Partitions
 - LVM
 - Mounts
- Linux Networking
- Service Management in Linux
 - Init
 - systemd
- Server Configurations in Linux **Hyderabad**
 - Web Server
 - Application Server
 - Syslog
 - Database Servers
- Troubleshooting in Linux

Shell Scripting

- Why and What of Shell Scripting
- Shell Terminals
- Creation & Execution of Shell Scripts
- Variables & Variable Scopes
- Conditions in Shell Scripts
- Iterating with loops
- Functions in Shell Scripts
- Regular Expressions
- Command Piping with grep
- Stream Editor
 - Understanding basics of sed

- Sed commands
- AWK Fundamentals

Python

- Introduction
 - Why Python?
 - Installing Python
 - Python 2 vs Python 3
- Types in Python
 - Integers & Floats
 - String
 - Booleans
 - None
 - Lists
 - Dictionary
 - Other Data Types
- Statements in Python
 - If
 - Loops
 - Break & Continue
 - While
- Exceptions in Python
- Functions
- File Management in Python
- Yield
- Lambda Functions
- Object Oriented Programming with Python
 - Classes
 - Methods
 - Constructors
 - Instance & Class Attributes
 - Inheritance & Polymorphism
- Python Tips & Tricks
- Strings & Collections
- Modularity
- Handling Exceptions

Networking

- Basic Networking Concepts
 - Computer Network
 - Terminology
 - Network Protocol
 - Ping & Traceroute
 - What is IP address
 - Network Categories and Components

- Domain Naming System
- OSI Model
 - Layers
 - Application Layer
 - Presentation Layer
 - Session Layer
 - Transport & Other lower layers
 - TCP vs OSI Model
- Binary Compute Basics
- Hexadecimal Compute Basics
- IP Addressing
 - Overview & Demonstration
 - IPV4 Address Format
 - Network vs Host portion
 - Class A, B,C,D,E address
 - Classless Inter-Domain Routing (CIDR) Notation
- IP Subnetting
- Routing
- Switching
- NAT Server
- DNS
- DHCP Server

Windows Server

- Setup
- Understanding the Client Server Architecture
- Server Manager
- Managing Local User Accounts
- Task Manager
- Windows Administrative Tools
- Active Directory
- DHCP
- DNS and Name Resolution
- IIS Services and Configuration
- Active Directory Groups & OU
- Group Policy Management
- Windows Server Backups Overview

PowerShell

- Introduction to PowerShell
 - What is PowerShell
 - PowerShell Editors
 - Getting Help
 - Command Naming & Discovery
 - Parameters & Parameter Sets

- Introduction to Providers
- Modules & Snap-ins
 - Introducing Modules
 - PowerShell Core & the Windows Compatibility Module
 - Snap-ins
- Objects in PowerShell
 - Pipelines
 - Members
 - Enumerating & Filtering
 - Selecting & Sorting
 - Grouping & Measuring
 - Comparing
- Operators
 - Arithmetic Operators
 - Assignment Operators
 - Comparison Operators
 - Regular Expression based Operators
 - Binary Operators
 - Logical Operators
 - Type Operators
 - Other Operators
- Variables, Arrays and Hashtables
- Branching & Looping
- Strings, Numbers & Dates
- Files, Folders & Registry
- Web Requests & Web Services
- Remoting & Remote Management
- Scripts, Functions & Filters
- Parameters, Validation & Dynamic Parameters
- Testing, Troubleshooting & Error Handling

PowerShell DSC

- Introduction & Overview of PowerShell DSC
- DSC Architecture
- DSC Configuration Files
- DSC Resources
- Pushing DSC Configurations
- DSC Cross Platform Support

Others

- Kafka Configuration
- Vagrant
- Virtualization
- Groovy Scripting