Azure Certification BootCamp for Exam 70-473 (Data Platform)

Course Duration: 5 Days - New

Course Authored by Microsoft

Description

Cloud changes everything, including how the data is ingested, stored, processed and how reports are generated from the data.

This hands-on course is designed to get knowledge to be able to clear the 70-473 : Designing and Implementing Cloud Data Platform Solutions Exam.

This hands-on course focuses on designing and implementing Cloud Data Platform Solutions on Microsoft Azure cloud by using SQL Server on-premises, SQL Server on Azure VM, Azure SQL, and Hybrid solutions where both on-premises and Azure cloud are used.

As a participant you will learn how to design, implement and optimize data workloads in cloud, native and hybrid scenarios with on-premise SQL Server, SQL Server on Azure VM and Azure SQL. You will also learn about implementing high-availability data solutions and disaster recovery options for your data platform. We would also discuss features such as data security, monitoring and managing database in cloud.

We will spend about half the time in this course doing hands-on labs using our custom curriculum.

Objectives

- To attain a comprehensive understanding of Cloud Data Platform Solutions
- Understanding various deployment scenario of SQL Server, Azure SQL database
- Create databases for cloud or on premise use, migrate on premise SQL server database to Azure SQL Database
- Learn how to design data solutions and implement with different architecture pattern
- Configure and implement HA/DR solutions for SQL server and Azure SQL database

Who Should Attend
Database professionals who want to enhance their existing SQL Server skills with Microsoft Azure cloud and hybrid solutions
IT Professionals and Architects who want to get hands-on experience on Cloud Data Platform Solutions
Professionals who want to jump start their career in Cloud Data Platform
Candidates looking to get certified on 70-473: Designing and Implementing Cloud Data Platform Solutions Exam

Prerequisites

Fundamental knowledge of Cloud Computing
Basic understanding of SQL Server
Some experience with database administration

Course Outline

Day 1

Azure Fundamentals
  Introduction to Azure
  Different segments SaaS, PaaS, and IaaS
  Azure Regions and Data Centers
  Overview of all Azure services
  Azure portal
Microsoft Azure Virtual Networks Overview
  IP Addressing
  What is a Virtual Network?
  Understanding Network ACL and Network Security Group
  Why is it needed?
  Creating Virtual Networks in Azure
  VPN options:
    Architectural difference between Azure VPNs like VNET to VNET, point – to - site and site – to - site.
Endpoints
Private and Public IP
ExpressRoute

Day 2

Microsoft Azure Storage
  Understanding Storage Account
  Features
  Storage Account Replication Techniques: LRS, ZRS, GRS &RA-?GRS
  Protocols
  Consistency Model
Azure File Storage
  Use cases for Azure File Storage
  Share, Files and Folders
  Access Control
Azure Blob Storage
  Use cases for Azure Blob Storage
  Containers
  Block Blob
  Page Blob
  Access Control
  Shared Access Signatures
Azure Table Storage
  Brief intro to NoSQL
  Use cases for Azure Table Storage
  Scaling Tables
Azure Storage Queues
  Need for Queues
  Understanding Azure Queues
Azure ARM (Azure Resource Manager)
Comparison between ASM and ARM
Why ARM? (Advantages of ARM)
New features available in ARM

Microsoft Azure Virtual Machines
Understanding VM architecture
Types of OS supported Images by Azure
Virtual Machine instances
Pricing
Understanding OS disk and Data disk
Understanding Custom Image
Understanding concepts of: Load balancing, Availability Set and Auto-Scaling
Types of Provisioning
Disks & Images
Virtual Machine management, automation and scripting
Endpoints
Load Balanced Endpoint

Day 3

Implementing SQL Database on Azure VM
Suitable Scenarios
Provision a SQL Server (IaaS)
Configure and Optimize Storage
Migrate an On-premise database to SQL Server VM
Optimizing workloads for SQL Server VM (size to workload)
Implementing SQL Database on Azure SQL
Suitable Scenarios
Provision a SQL Server (PaaS)
Migrate on premise database to Azure SQL
Configuring Active-Geo Replication
Scaling Azure SQL Database
SQL Database Security
Configure Firewall for SQL Server Database Security
Managing Users, Logins and Roles for SQL Server Database Security
Configure Auditing for SQL Server Database Security
Configure Transparent Database Encryption
Managing Users, Logins and Roles for SQL Azure Database
Configure Auditing for Azure SQL Database
Configure Row-Level Security for Azure SQL
Configure Data Encryption for Azure SQL
Configure Data Masking
Configure Always Encrypted

Day 4

Backup and Restore – SQL Server
Implementing a backup and restore strategy for SQL Server as VMs
Backup and Restore SQL databases with Azure SQL
High Availability and Disaster Recovery – SQL Databases
Implementing hybrid High Availability solution
Define a High Availability solution topology
Monitoring SQL Workloads
Monitor Database and Instance activity of SQL implementation as a VM
Monitor using Dynamic Management Views and Dynamic Management Functions
Monitor Performance and Scalability

Day 5

Scaling SQL Workloads
Scaling SQL Servers.
Design a Scale-Out Solution
Implement Database Multi-Master Database Replication
Implement Elastic Scale for Azure SQL Database
Data warehousing with SQL
Concept of Data Warehouse
Introduction to SQL Server Integration Services (SSIS)
Introduction to Azure SQL Data Warehouse
Working with Power BI
Best Practices for Cloud Data Platform Solutions
Case studies – Activity
Get Certified: MCSA & MCSE
MCSA

Pass any two of:

- 70-532: Developing Windows Applications
- 70-533: Implementing and Administering Microsoft Exchange Server
- 70-534: Architecting Microsoft SharePoint
- 70-473: Designing a Data Platform
About The Trainer

Bhavesh Goswami Co-Founder & CEO

Bhavesh Goswami the Co-Founder & CEO of CloudThat Technologies, is a leading expert in Cloud Computing space with over a decade of experience. He was in the initial development team of Amazon Simple Storage Service (S3) at Amazon Web Services (AWS) in Seattle. He honed his Cloud Computing skills at Amazon where he helped ship the first version of S3 in 2006. Later he moved to Microsoft after over three years at Amazon to take up the challenge to help manage Cosmos, the Cloud storage and Big Data computational engine that power all of the Microsoft’s Online Services, including Bing.

In 2010, after living in USA over 10 years, he came to India in search of a challenge. He realized that the rapidly changing technology landscape and the busy schedule of IT professionals were not conducive to acquire new skills. Thus, he started CloudThat Technologies, a company focused on quickly empowering professionals & corporates on Cloud & Big Data through training & consulting services. He has personally trained over 1000 people on various Cloud technologies like AWS, Microsoft Azure, Google App Engine and more since early 2012.

Bhavesh has spoken at various Cloud and Big Data conferences and events like ‘7th Cloud Computing & Big Data’ and have been the Key Note Speaker at ‘International Conference on Computer Communication and Informatics’. He has authored numerous research papers and patents in various fields. He is passionate about technology and keeps the company up to date on latest Cloud technologies & market trends.

Bhavesh earned MS in Computer Science from University of South Florida, where he was awarded Scholarships for Teaching Assistantship and Research Assistantship in 2003. He gained his Bachelor of Engineering in Information Technology from Nirma University in 2001.

View Linkedin Profile

Jigar Pathak Senior Cloud Solutions Architect

Jigar has 9+ years of experience in Web & Mobile application development, IT Infrastructure domain with skills in Cloud Computing. As a Senior Cloud Solution Architect at CloudThat, he is responsible for deploying, supporting and managing client infrastructures on Azure and AWS. Responsibilities also include training individuals and corporates on Azure and AWS.

He holds a MCSD: Azure Solutions Architect & Microsoft Certified Trainer. Microsoft Specialist: Architecting Microsoft Azure Solutions (70-534), Microsoft Specialist: Implementing Microsoft Azure Infrastructure Solutions (70-533) & Microsoft Specialist: Developing Microsoft Azure Solutions (70-532) certification.

View Linkedin Profile
Arzan Amaria Cloud Solutions Architect

Arzan has 7+ years of experience in Microsoft Infrastructure technology stack including setting up Windows servers, designing Active Directory and managing various domain services, including Hyper-V virtualization. As a Cloud Solution Architect at CloudThat, he is responsible for deploying, supporting and managing client infrastructures on Azure. Having core training and consulting experience, he is also involved in delivering training to corporate and individuals on Azure.

He holds a MCSE (Server Track), MCSD: Azure Solutions Architect, Microsoft Certified Trainer, Microsoft Specialist: Architecting Microsoft Azure Solutions (70-534), Microsoft Specialist: Implementing Microsoft Azure Infrastructure Solutions (70-533) & Microsoft Specialist: Developing Microsoft Azure Solutions (70-532) certification. Other certification include VCA-DCV (Datacenter Virtualization – Associate) & CTT+ (Certified Technology Trainer).

View Linkedin Profile

Other Details

Questions? For latest batch dates, fees, location, technical queries and general inquiries, contact our sales team at: +91 8880002200 or email at sales@cloudthat.in

Course taken from CloudThat Technologies - Specialists in Cloud Computing, AWS, Azure, and Big Data training in India - https://cloudthat.in
URL to Course: https://cloudthat.in/course/azure-certification-boot-camp-for-exam-70-473/