BLACKBIRD FOR TRAINING

Advanced Azure Cloud Course: Modern Introduction

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Introduction

The Advanced Azure Cloud Course is designed to provide participants with an in-depth understanding of cutting-edge concepts, tools, and services within Microsoft Azure Cloud. This comprehensive program enables learners to acquire essential skills to leverage Azure cloud technologies efficiently across various scenarios, focusing on performance, Azure cloud security, and cost optimization. Whether you're looking to advance your career or enhance your organization's Azure cloud management, this course delivers the expertise required to excel in the cloud computing landscape.

Course Objectives

By the end of this course, participants will:

- Develop a solid understanding of cloud computing principles and the advantages of using Microsoft Azure Cloud.
- Explore advanced Azure cloud services and solutions and learn how they address real-world challenges.
- Gain skills to design, deploy, and manage highly available, scalable, and secure applications on Azure Cloud.
- Master Azure cloud security, compliance, and best practices for cost management.
- Learn to implement Azure DevOps, automation, and Azure cloud functions for streamlined application development.
- Enhance abilities in Azure cloud monitoring, troubleshooting, and optimizing resources for peak efficiency.
- Understand advanced networking concepts and establish secure connections between on-premises and Azure cloud environments.
- Implement advanced Azure cloud security measures and compliance standards to safeguard data and applications.
- Prepare for Azure cloud certification, including Azure cloud security certification and Azure cloud practitioner roles.

Course Outlines

Day 1: Introduction to Azure Cloud

- Overview of cloud computing and Azure cloud basic concepts.
- Subscription models and Azure cloud management.
- Azure Resource Groups and role-based access control RBAC.
- Azure Virtual Networks and connectivity options.
- Azure cloud storage and data management solutions.

Day 2: Advanced Azure Services

- Azure App Service and serverless computing.
- Using Azure cloud functions and Logic Apps for event-driven architectures.
- Azure Kubernetes Service AKS for container management.
- Databases and data analytics on Azure Cloud.
- Machine learning and AI services within the Azure ecosystem.

Day 3: Infrastructure as Code and Automation

- Introduction to Infrastructure as Code IaC with Azure Resource Manager ARM.
- Azure DevOps for continuous integration and deployment.
- Automation with Azure Automation and PowerShell scripting.
- Azure Kubernetes Service AKS and container orchestration.

Day 4: Monitoring, Security, and Compliance

- Azure cloud monitoring: logging, metrics, and alerts using Azure Monitor.
- Azure Security Center for threat protection and vulnerability management.
- Identity and Access Management IAM with Azure.
- Azure Policy and Compliance Center.
- Disaster Recovery and Backup Solutions on Azure Cloud.

Day 5: Advanced Networking and Hybrid Connectivity

- Virtual Network VNet peering and network gateways.
- Site-to-Site and Point-to-Site VPN connections.
- Azure ExpressRoute for secure and private connectivity.
- Load Balancer and Traffic Manager for high availability.
- Azure Front Door for global load balancing and Web Application Firewall WAF.

Why Attend this Course: Wins & Losses!

- Master advanced Azure cloud technologies to design, deploy, and manage enterprise-level cloud solutions.
- Gain hands-on experience in Azure cloud security, ensuring compliance and safeguarding sensitive data.
- Understand the advantages of Azure cloud including scalability, flexibility, and cost efficiency.
- Learn Azure cloud best practices for performance optimization and resource management.
- Prepare for Azure cloud certification to advance your career, including roles like Azure cloud practitioner and Azure cloud administration.
- Explore Azure cloud migration strategies for seamless transition from on-premises to cloud environments.
- Enhance your skills in Azure cloud monitoring, troubleshooting, and cost optimization.
- Build expertise in Azure cloud development, automation, and Infrastructure as Code IaC.
- Understand Azure cloud sustainability practices to align IT operations with environmental goals.
- Gain knowledge of Azure cloud types and how to select the right services for different business needs.

Conclusion

By the end of this Advanced Azure Cloud Course, participants will have the skills to design, implement, and manage cloud applications aligned with industry best practices. With a focus on Azure cloud security, resource management, and cost efficiency, learners will also gain the knowledge to troubleshoot, monitor, and optimize Azure cloud environments effectively. This course positions participants to attain advanced Azure cloud certification and prepares them to handle complex, enterprise-level projects with confidence.

Join us to elevate your cloud expertise and unlock the full potential of Azure Cloud technologies!