



Exam Code: 070-487

# Developing Windows Azure and Web Services

## Module 1: Overview of service and cloud technologies

- Key Components of Distributed Applications
- Data and Data Access Technologies
- Service Technologies
- Cloud Computing
- Exploring Blue Yonder Airlines' Travel Companion Application

## Module 2: Querying and manipulating data using Entity Framework

- ADO.NET overview
- Creating an entity data model
- Querying data
- Manipulating data

### Module 3: Creating and consuming ASP.NET Web API services

- What are HTTP services?
- Creating an ASP.NET Web API service
- Handling HTTP requests and responses
- Hosting and consuming ASP.NET Web API services

### Module 4: Extending and securing ASP.NET Web API services

- The ASP.NET Web API request pipeline
- The ASP.NET Web API response pipeline
- Creating OData services
- Implementing Security in ASP.NET Web API services
- Injecting dependencies into controllers

### Module 5: Creating WCF services

- Advantages of creating services with WCF
- Creating and implementing a contract
- Configuring and hosting WCF services
- Consuming WCF services

### Module 6: Designing and extending WCF services

- Applying design principles to service contracts
- Handling distributed transactions
- WCF pipeline architecture
- Extending the WCF pipeline

### Module 7: Implementing Security in WCF services

- Transport security
- Message security
- Configuring service authentication and authorization

### Module 8: Windows Azure Service Bus

- Windows Azure Service Bus Relays
- Windows Azure Service Bus Queues
- Windows Azure Service Bus Topics

### Module 9: Hosting services

- Hosting services on-premises
- Hosting services in Windows Azure

### Module 10: Deploying Services

- Web Deployment with Visual Studio
- Creating and deploying Web Application packages
- Deploying to Windows Azure
- Continuous delivery with TFS and GIT
- Best practices for production deployment

- Command-line tools for web deployment packages

### Module 11: Windows Azure Storage

- Introduction to Windows Azure storage
- Windows Azure Blob Storage
- Windows Azure Table Storage
- Windows Azure Queue Storage



- Restricting access to Windows Azure Storage
- **Module 12: Monitoring and diagnostics**
  - Performing diagnostics using tracing
  - Configuring service diagnostics
  - Monitoring IIS
- **Module 13: Identity management and access control**
  - Claim-based identity concepts
  - Access Control Service
- **Module 14: Scaling Services**
  - Introduction to scalability
  - Load balancing
  - Scaling on-premises services with distributed cache
- Monitoring services using Windows Azure diagnostics
- Debugging using IntelliTrace
- Collecting Windows Azure metrics
- Configuring services to use federated identities
- Handling federated identities in the client side
- Windows Azure caching
- Caveats of scaling services
- Scaling globally