Exam 70-533: Implementing Microsoft Azure Infrastructure Solutions

The Microsoft Azure environment is constantly evolving. This document includes the most recent updates to Exam 70-533 that address both deprecated and new technologies and processes. These changes are effective as of March 10, 2016.

Skills measured

Implement ~~Websites~~ Web Apps (15-20%)

1.1. Deploy ~~websites~~ Web Apps.
This objective may include but is not limited to: Define deployment slots; roll back deployments, configure and deploy packages, deploy web jobs, schedule web jobs

1.2. Configure ~~websites~~ Web Apps.
This objective may include but is not limited to: Configure app settings, connection strings, handlers, and virtual directories; configure certificates, custom domains, and traffic manager; configure SSL bindings and runtime configurations; manage ~~websites~~ Web Apps by using ~~Windows powershell~~ Azure PowerShell and Xplat-CLI

1.3. Configure diagnostics, monitoring, and analytics.
This objective may include but is not limited to: Retrieve diagnostics data; view streaming logs; configure endpoint monitoring, alerts, and diagnostics; monitor web app resources

1.4. Configure scale and resilience.
This objective may include but is not limited to: Configure auto-scale using built-in and custom schedules; configure by metric; change the size of an instance

1.5. Manage ~~Hosting~~ App Service plans.
This objective may include but is not limited to: Create ~~Hosting~~ App Service plans; migrate ~~websites~~ Web Apps between ~~Hosting~~ App Service plans; create a web app within an ~~Hosting~~ App Service plan

2. **Implement Virtual Machines (15-20%)**

2.1. Deploy workloads on Azure Virtual Machines (VMs).
This objective may include but is not limited to: Identify supported Microsoft workloads; deploy and connect to a Linux VM; create VMs

2.2. Implement images and disks.
This objective may include but is not limited to: Create specialized and generalized images for Windows and Linux; copy images between storage accounts and subscriptions; upload VHDs

2.3. Perform configuration management.

This objective may include but is not limited to: Automate configuration management by using PowerShell Desired State Configuration and custom script extensions; enable puppet and chef extensions

2.4. Configure VM networking.

This objective may include but is not limited to: Settings include reserved IP addresses, access control lists, internal name resolution, DNS at the ~~cloud~~ virtual network ~~service~~ level, load balancing endpoints, HTTP and TCP health probes, public IPs, firewall rules, direct server return, and Keep Alive

2.5. Configure VM resiliency.

This objective may include but is not limited to: Scale up and scale down VM sizes; auto-scale; configure availability sets

2.6. Design and implement VM storage.

This objective may include but is not limited to: Configure disk caching; plan storage capacity; configure operating system disk redundancy; configure shared storage using Azure File service; configure geo-replication; encrypt disks

2.7. Monitor VMs.

This objective may include but is not limited to: Configure endpoint monitoring, alerts, and diagnostics

3. **Implement Cloud Services (15-20%)**

3.1. Configure cloud services and roles.

This objective may include but is not limited to: Configure instance count and size, operating system version and family, upgrade and fault domains, implement ~~ACLs~~ Network Security Groups (NSG) and reserved IPs~~, and network access rules~~, and network access rules; configure local storage; configure dedicated and co-located caching, local and cloud configurations, and local disks; configure multiple ~~websites~~ Web Apps; configure custom domains

3.2. Deploy and manage cloud services.

This objective may include but is not limited to: Upgrade a deployment; VIP swap a deployment; package a deployment; modify configuration files; perform in-place updates; perform runtime configuration changes using the portal; scale a cloud service; create service bus namespaces and choose a tier; apply scalability targets

3.3. Monitor cloud services.

This objective may include but is not limited to: Monitor service bus queues, topics, relays, and notification hubs; configure diagnostics

4. **Implement Storage (15-20%)**

4.1. Implement blobs and Azure files.

This objective may include but is not limited to: Read data; change data; set metadata on a container; use encryption (SSL); perform an async blob copy; configure a Content Delivery Network (CDN); implement storage for backup and disaster recovery; configure Azure Backup; define blob hierarchies; configure custom domains; configure the Import and Export Service; implement Premium storage

4.2. Manage access.

This objective may include but is not limited to: Create and manage shared access signatures; use stored access policies; regenerate keys

4.3. Configure diagnostics, monitoring, and analytics.

This objective may include but is not limited to: Configure retention policies and logging levels; analyze logs

4.4. Implement SQL databases.

This objective may include but is not limited to: Choose the appropriate database tier and performance level; configure point in time recovery, geo-replication, and data sync; import and export data and schema; design a scaling strategy

4.5. Implement recovery services.

This objective may include but is not limited to: Create a backup vault; deploy a backup agent; back up and restore data

5. Implement an Azure Active Directory (15-20%)

5.1. Integrate an Azure AD with existing directories.

This objective may include but is not limited to: Implement ~~dirsync~~ Azure AD Connect, Office 365 integration, and single sign-on with on-premises Windows Server 2012 R2; add custom domains; monitor Azure AD

5.2. Configure the Application Access Panel.

This objective may include but is not limited to: Configure single sign-on with SaaS applications using federation and password based; add users and groups to applications; revoke access to SaaS applications; configure access; federation with Facebook and Google ID

5.3. Integrate an app with Azure AD.

This objective may include but is not limited to: ~~websites~~ web applications (WS-federation); desktop apps (OAuth); graph API

6. Implement Virtual Networks (15-20%)

6.1. Configure a virtual network.

This objective may include but is not limited to: Deploy a VM into a virtual network; deploy a cloud service into a virtual network; configure static IPs; configure internal load balancing; design subnets

6.2. Modify a network configuration.

This objective may include but is not limited to: Modify a subnet; import and export a network configuration

6.3. Design and implement a multi-site or hybrid network.
This objective may include but is not limited to: Choose the appropriate solution between ExpressRoute, site-to-site, and point-to-site; choose the appropriate gateway; identify supported devices and software VPN solutions; identify networking prerequisites; configure regional virtual networks and multi-site virtual networks