70-537
Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack Hub

The content of this exam changed on January 14, 2020. Please continue scrolling to the red line section below to view the changes.

Target Audience

This exam is designed for Azure administrators and Azure Stack Hub operators who use Azure Stack Hub to provide cloud services to their end users or customers from within their own data center.

Candidates for this exam should have significant experience managing and operating Azure Stack Hub environments. Candidates should have a strong understanding of Azure as well as some knowledge of virtualization, networking, and identity management. Candidates should also understand how Azure Stack Hub enables DevOps processes and the hybrid development model.

Candidates for this exam are expected to demonstrate the ability to plan, deploy, package, update, and maintain the Azure Stack Hub infrastructure. Candidates must also demonstrate the ability to offer hybrid cloud resources and requested services, and to manage infrastructure as a service (IaaS) and platform as a service (PaaS).

Objective Domain

NOTE: The bullets that appear below each of the skills measured are intended to illustrate how we are assessing that skill. This list is not definitive or exhaustive.

NOTE: In most cases, exams do NOT cover preview features, and some features will only be added to an exam when they are GA (General Availability).

Deploying and Integrating an Azure Stack Hub Environment (20-25%)

Build test environments by using the Azure Stack Hub Development Kit (ASDK).
   This objective may include but is not limited to: use PowerShell commands; install updated ASDK; troubleshoot failed installs; post-deployment registration

Configure identity and PKI for data center integration.

This objective may include but is not limited to: integrate Azure Stack Hub with AD FS, create custom RBAC roles for Azure Stack registration, validate Azure identity, validate AD FS integaration, validate graph integration, generate PKI certificates, validate PKI certificates, remediate PKI certificates

Configure DNS for data center integration.

This objective may include but is not limited to: configure external DNS name resolution from within Azure Stack Hub; configure Azure Stack Hub DNS names from outside Azure Stack Hub

Configure connectivity for data center integration.

This objective may include but is not limited to: manage firewall ports needed at the edge; configure connectivity to the data center; install and renew certificates for public endpoints, connect to Azure by using ExpressRoute,

Connect to and perform API-based administration on Azure Stack Hub.

This objective may include but is not limited to: connect to the stack by using PowerShell; configure client certificates; configure firewall to support remote administration; establish RBAC roles for the Azure Stack Hub fabric; create subscriptions for end users

Configuring PaaS and IaaS for an Azure Stack Hub Environment (25-30%)

Configure and administer the App Service resource provider.

This objective may include but is not limited to: configure system; configure source control; configure worker tiers; configure subscription quotas; scale worker tiers and App Service infrastructure roles; add custom software; configure Azure Stack Hub networking security

Configure and administer database resource providers.

This objective may include but is not limited to: configure and administer the SQL adapter; configure and administer the MySQL adapter; set up SKUs; set up additional hosting capacity

Configure and administer IaaS services.

This objective may include but is not limited to: implement virtual machine images; prepare Linux and Windows images; prepare a custom image; upload an image

Providing Services to and Enabling DevOps for Azure Stack Hub Users (25-30%)

Create and manage quotas, plans, and offers.

This objective may include but is not limited to: create quotas; configure plans; configure offers; configure delegated offers; create add-on plans

Manage tenants and users.

This objective may include but is not limited to: configure multi-tenancy in Azure Stack; remove tenants; manage authentication and authorization; establish RBAC roles for the user space

Manage the Azure Marketplace.

This objective may include but is not limited to: enable Azure Marketplace on Azure Stack Hub; plan new packages; create and publish new packages; download Azure Marketplace items

Enable DevOps for users.

This objective may include but is not limited to: enable version control for users; enable CLI for users, manage ARM templates; deploy ARM templates; debug ARM templates; use Azure DevOps to connect to Azure Stack Hub; use continuous integration and continuous deployment to automate a pipeline that targets Azure Stack Hub, configure app identity to access resources using Azure AD and AD FS service principals

Maintaining and Monitoring an Azure Stack Hub Environment (20-25%)

Plan and implement a backup-recovery and a disaster-recovery solution.

This objective may include but is not limited to: back up Azure Stack Hub infrastructure services; perform cloud recovery of Azure Stack Hub, replicate and fail over Azure Stack Hub VMs to Azure; back up and restore PaaS resource data; back up and restore backup and restore of user Azure Stack Hub VM-OS, disks, volumes, and apps;

Manage and monitor capacity, performance, updates, and alerts.

This objective may include but is not limited to: manage storage; monitor available storage; integrate existing monitoring services; manage public IP address ranges; monitor infrastructure component health; monitor Azure Stack Hub memory, public IP addresses, and storage user consumption; apply updates; update system firmware; review and react to alerts; configure external auditing and syslog forwarding; replace hardware

Manage usage reporting and log collection

This objective may include but is not limited to: provide access to the usage database; test usage by using the ASDK; collect the usage data by using the Provider Resource Usage API and the Tenant Resource Usage API; investigate the usage time versus the reported time

See below changes as of January 14, 2020…

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Manage usage reporting and log collection.

This objective may include but is not limited to: ~~query the usage database;~~ provide access to the usage database~~configure access to the usage database~~; test usage by using the ASDK; collect the usage data by using the Provider Resource Usage API and the Tenant Resource Usage API; investigate the usage time versus the reported time