765
Provisioning SQL Databases

Exam number: 70-765

Exam title: Provisioning SQL Databases

Publish date:

GUID:

Language(s) this exam will be available in:

Audience (IT professionals, Developers, Information workers, etc.)**:**

Technology:

Credit type (example: MCSA)**:**

Exam provider (VUE, Certiport, or both)**:**

Exam Design

Audience Profile
This exam is intended for architects, senior developers, infrastructure specialists, and development leads. Candidates have a working knowledge of the various cloud service models and service model architectures, data storage options, and data synchronization techniques. Candidates also have a working knowledge of deployment models, upgrading and migrating databases, applications and services, as well as integrating Azure applications with external resources.

Skills measured

This document shows changes to objectives and functional groupings. These changes are effective as of March 2017.

Implement SQL in Azure (40-45%)

- Deploy a Microsoft Azure SQL database
  - Choose a service tier; create servers and databases; create a sysadmin account; configure elastic pools
- Plan for SQL Server installation
  - Plan for an IaaS or on-premises deployment; select the appropriate size for a virtual machine; plan storage pools based on performance requirements; evaluate best practices for installation; design a storage layout for a SQL Server virtual machine
- Deploy SQL Server instances
  - Deploy a SQL Server instance in IaaS and on-premises; manually install SQL Server on an Azure virtual machine; provision an Azure virtual machine to host a SQL Server instance; automate the deployment of SQL Server databases; deploy SQL Server by using templates
- Deploy SQL Server databases to Azure virtual machines
  - Migrate an on-premises SQL Server database to an Azure virtual machine; generate benchmark data for performance needs; perform performance tuning on Azure IaaS; support availability sets in Azure

Manage databases and instances (30-35%)

- Configure secure access to Microsoft Azure SQL databases
  - Configure firewall rules; configure Always Encrypted for Azure SQL Database; configure cell-level encryption; configure dynamic data masking; configure transparent data encryption (TDE)
- Configure SQL Server performance settings
  - Configure database performance settings; configure max server memory; configure the database scope; configure operators and alerts
- Manage SQL Server instances
  - Create databases; manage files and file groups; manage system database files; configure tempdb

~~**Deploy and migrate applications**~~**Manage Storage (30-35%)**

- Manage SQL Storage
  - Manage SMB file shares; manage stretch databases; configure Azure storage; change service tiers; review wait statistics; manage storage pools; recover from failed storage
- Perform database maintenance
  - Monitor DMVs; maintain indexes; automate maintenance tasks; update statistics; verify database integrity; recover from database corruption
- ~~Deploy applications to Microsoft Azure SQL Database~~

- ~~Manage deployments that support multiple tenants; migrate on-premises SQL Server to Azure SQL Database; migrate data to Azure SQL Database~~

~~Deploy applications to SQL Server on Azure virtual machines~~

- ~~Migrate an on-premises SQL Server database to an Azure virtual machine; generate benchmark data for performance needs; perform performance tuning on Azure IaaS; support availability sets in Azure~~

~~Migrate client applications~~

- ~~Configure application connection strings; manage traffic between on-premises applications and Azure services; develop application retry connection logic; identify application patterns that must be migrated with SQL Server data; evaluate network performance between applications and databases~~