Exam Session - Knowledge Check: AZ-900 Overview of Azure Services (1 of 2)

cloudacademy.com/quiz/exam/3758916/results

#1

What Azure Cloud compute service is useful when planning a 'lift-and-shift" migration of an application from an on-premises environment to the Azure Cloud?

✓ Azure Virtual Machines

✗ Azure Functions

✗ Azure Container Instances

✗ Azure DevOps

Explanation

If you currently have an application running on a Windows or Linux server, then the most straightforward way to migrate it to Azure is to do what's called a "lift and shift" migration. That is, you simply lift the application from your on-premises server and shift it to a virtual server in the cloud. Azure VMs are known as Infrastructure-as-a-Service because they're traditional IT infrastructure components that are offered as a service.

/course/overview-of-azure-services/azure-overview/
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Azure Overview
Course:Overview of Azure Services

8m

#2

Which of the following services is an example of 'Infrastructure-as-a-Service' or IaaS on Microsoft Azure?

✓
Azure Virtual Machines

✗
Azure App Service

✗
Azure Functions

✗
Azure Kubernetes Service

Explanation

If you currently have an application running on a Windows or Linux server, then the most straightforward way to migrate it to Azure is to do what's called a "lift and shift" migration. That is, you simply lift the application from your on-premises server and shift it to a virtual server in the cloud. Azure VMs are known as Infrastructure-as-a-Service because they're traditional IT infrastructure components that are offered as a service.

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#3

Which of the following statements about Azure Cloud Shell is correct?

✗
It only supports Azure Powershell

✗
It only supports Bash

✗
It is an easier way to navigate through Azure resources than the Azure Portal.

✓

It is a more efficient way to manage Azure resources than the Azure Portal.

Explanation

Cloud Shell supports both PowerShell and the Bash shell. You can switch between them using this menu. We're going to use the Bash Shell because the commands are simpler. If you're familiar with Linux commands, then it will be especially easy.

It's pretty easy to use the portal to create Azure resources but it's definitely not the most efficient way to do it because it requires a lot of pointing and clicking. An alternative is to use the command line. Although it can be more difficult since you have to know the exact names of all the command line options.

/course/overview-of-azure-services/using-azure-cli/
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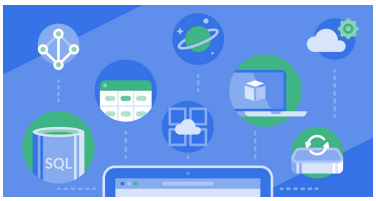
Using the Azure CLI
Course:Overview of Azure Services



6m

#4

What is an Azure resource group?

An Azure-defined set of Azure resources located in the same region.

A container that holds related resources for an Azure solution.

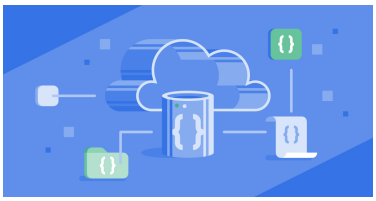
A user-defined set of Azure resources located in the same availability zone.

A JSON file used to deploy Azure resources.

Explanation

A resource group holds related resources for an Azure solution. It can include all the resources for the solution, or only those resources that you want to manage as a group. You decide how you want to allocate resources to resource groups based on what makes the most sense for your organization.

https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-group-overview#terminology
Covered in this lecture
Overview of Resource Groups
Course:Managing Azure Subscriptions and Resource Groups



3m

#5

Which blob access storage tier would you use when dealing with a large amount of data that is rarely used, and mainly stored for compliance or tax purposes?

✗ Hot

✗ Cool

✓ Archive

✗ Deep Archive

Explanation

Blob storage has multiple access tiers: hot, cool, and archive. The hot tier is for frequently accessed files. The cool tier is for files you expect to access only about once a month or less. The advantage is that it costs less than the hot tier as long as you don't access it frequently. The archive tier is for files that are rarely accessed, such as backup files. It has the lowest storage costs but the highest retrieval costs. It also takes several hours to retrieve files from the archive tier.

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#6

Which of the following Azure storage services specializes in object storage with a flat structure, and is ideal for unstructured data such as logs, videos, and photos?

✓ Blob Storage

✗ Azure Data Lake

✗ Azure SQL Database

✗ Azure Synapse Analytics

Explanation

The simplest form of storage is called Blob storage. It's referred to as object storage, but really it's just a collection of files. It's not like a normal file system, though, because it doesn't have a hierarchical folder structure. It has a flat structure. It's typically used for unstructured data, such as images, videos, and log files.

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#7

Which Azure Storage access tiers are designed for infrequently accessed data? (Choose 2 answers)

✓ Cool

✗ Deep archive

Archive

Hot

Explanation

The hot access tier is really used for data that is accessed frequently. The cool access tier is typically used for infrequently access data. Archive storage is an offline tier for storing data that is rarely accessed.

https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-storage-tiers

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DEMO: Creating a Storage Account
Course:Introduction to Azure Storage

9m

#8

Which Azure service allows you to host web and mobile applications using virtual machines without configuring and administrating the underlying aspects of the service, such as the operating system or security patches?

Azure App Service

Azure Virtual Machines

Azure Functions

Azure Batch

Explanation

Azure App Service. This platform lets you host web and mobile applications without having to worry about the underlying infrastructure. After doing a minor amount of configuration, you can just upload your code to an App Service instance and let Azure take care of the

details. In most cases, this is a better solution than using virtual machines.

/course/overview-of-azure-services/azure-overview/

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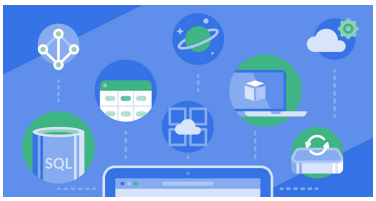

#9

Which blob access storage tier would you use when dealing with a large amount of data that is actively used?

✕
Cold

✕
Archive

✓
Hot

✕
Deep archive

Explanation

The hot access tier is used for data that is accessed frequently. The cool access tier is typically used for infrequently access data. The Archive access tier can only be set at the Blob level and not on the actual storage account level.

https://docs.microsoft.com/en-us/azure/storage/storage-blob-storage-tiers

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DEMO: Creating a Storage Account
Course:Introduction to Azure Storage

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#10

Which Azure service can help you specifically manage the process of moving on-premise applications to the Azure cloud?

✓ Azure Migrate

✗ Azure Functions

✗ Azure Monitor

✗ Azure Active Directory

Explanation

If your organization is just getting started with Azure, then one of the first things you'll want to do is figure out how you can migrate at least some of your existing applications to Azure. Microsoft provides a great tool for this called Azure Migrate.

First, it discovers your on-premises servers, both physical and virtual. On the virtual side, this includes both Hyper-V and VMware. Then it assesses these machines. For each one, it tells you whether or not it's ready to migrate, how big the Azure VM will be, how much it will cost, and any dependent servers that will also need to be migrated. When you're ready, it will even help you do the migration. Azure Migrate is also integrated with other tools to help you migrate SQL Server databases, web apps, and data. Also, if you have a virtual desktop infrastructure, there's a tool that will do an assessment to help you migrate it to Windows Virtual Desktop, which is hosted on Azure.

/course/overview-of-azure-services/azure-service-categories/

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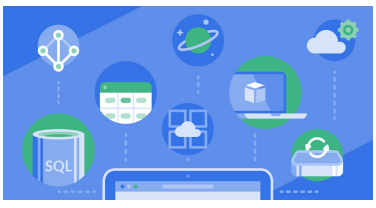
Service Categories
Course:Overview of Azure Services



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#11

If you have built a complex microservice application with multiple types of containers working together, which Azure compute service would you choose to host your application on the Azure cloud?

✓ Azure Kubernetes Service

✗ Azure Container Instances

✗ Azure App Service

✗ Azure Functions

Explanation

Microsoft provides a variety of ways to run containers.

If you have a more complex application that involves multiple containers, then you'll probably want to use Azure Kubernetes Service, which is what's known as a container orchestrator. It makes it easy to deploy and manage multi-container applications.

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#12

Which service simplifies the process of configuring, deploying, and managing a simple containerized application on the Azure cloud?

✓ Azure Container Instances

✗ Azure Functions

✗ Azure App Service

Azure Pipelines

Explanation

Containers are somewhat like virtual machines except they don't include the operating system. This makes it easy to deploy them because they're very lightweight compared to virtual machines. In fact, containers run on virtual machines.

Microsoft provides a variety of ways to run containers. The simplest way is to use Azure Container Instances. This service lets you run a container using a single command.

/course/overview-of-azure-services/azure-overview/
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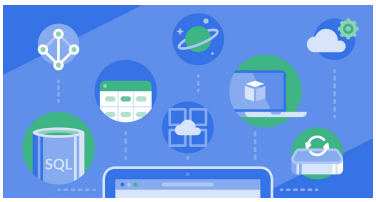

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#13

The _____ is the graphic user interface (GUI) for Microsoft Azure that runs in a web browser.

Azure Portal

Azure Powershell

Azure CLI

Azure SDK

Explanation

Suppose you have a server application that you want to migrate to the cloud. As I mentioned earlier, the most straightforward way to do this is to move the application to a virtual machine on Azure.

There are many ways to interact with Azure, the Azure portal runs in a browser, so you don't need to install anything to use it. Alternatively, you can install the CLI, which stands for command-line interface, or Azure PowerShell or the SDK, which stands for Software Development Kit.

/course/overview-of-azure-services/using-azure-cli/

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Using the Azure CLI
Course:Overview of Azure Services

6m

#14

You have a web application that you want to host on Microsoft Azure, but you do not have the time or budget to manage the compute resources closely, or to hire someone to manage the detailed configurations required for scaling and monitoring your application in the cloud. What service is ideal in this case?

✓ Azure App Service

✗ Azure Virtual Machines

✗ Azure Kubernetes Service

✗ Azure Functions

Explanation

Azure App Service lets you host web and mobile applications without having to worry about the underlying infrastructure. After doing a minor amount of configuration, you can just upload your code to an App Service instance and let Azure take care of the details.

/course/overview-of-azure-services/azure-overview/

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Course:Overview of Azure Services

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#15

What is more frequently cited as the easiest way to interact with Microsoft Azure?

✓ Using the Azure Portal

✗ Using Azure Powershell

✗ Using the Azure CLI

✗ Using the Azure SDK

Explanation

There are many ways to interact with Azure; the Azure portal runs in a browser, so you don't need to install anything to use it. Alternatively, you can install the CLI (the command-line interface), Azure PowerShell, or the SDK (Software Development Kit). The Azure portal is frequently cited as the easiest way to get started, though.

/course/overview-of-azure-services/azure-overview/

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#16

You have designed lines of code ideal for deployment as individual, event-based functions. What Azure compute service should you use to deploy your code?

✓ Azure Functions

Azure Virtual Machines

Azure Kubernetes Service

Azure App Service

Explanation

It's called Azure Functions, and it's Microsoft's main "serverless" offering. Azure Functions is kind of like Azure App Service except that it executes individual functions rather than entire applications, and you only pay for it when it gets used. When you provision an App Service instance, it runs until you shut it down, and you pay for it the whole time it's running. Although it's possible to configure Azure Functions in the same way, it's usually better to use the Consumption plan, which means that it only uses resources when a function is running, so you only pay when a function is running.

/course/overview-of-azure-services/azure-overview/

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Azure Overview
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