

Module 2: Implement VMs for Windows and Linux

Review Questions

Review Question 1

A company you are advising is planning to use a line-of-business, third-party software package to perform complicated data analysis. The software will use 350 VMs that are based on an Azure Marketplace VM image. You are asked to design the infrastructure for the software application server. The solution should meet the following needs:

The number of VMs that are running at any time must change when the user workload changes.

When a new version of the application is available in the Azure Marketplace it must be deployed without causing application downtime.

Use VM scale sets.

Minimize the need for ongoing maintenance.

Which two technologies would you recommend?

- A. A single placement group
- B. Managed disks
- C. Autoscale
- D. A single storage account
- E. A point-to-site VPN

Answer: B, C

Explanation:

Autoscale facilitates horizontal scaling of VMs depending on a metric such as processor usage or memory usage.

Managed disks automate the provisioning of storage capacity for the VMs.

Review Question 2

An organization you are advising is running a single application that runs on a VM. The traffic to the application as recently been on the increase and continues to rise.

The application cannot experience downtime must scale dynamically. You are asked to recommend an auto-scale approach so the VM can respond well to the workload requirements.

Which three options would you recommend?

- A. Deploy application automatic horizontal scaling
- B. Implement custom auto-scale
- C. Create a VM scale set
- D. Implement an Azure Load Balancer

Answer: A,B,C

Explanation

Correct Answers: Deploy application automatic horizontal scaling, Implement custom auto-scale, and Create a VM scale set.

Review Question 3

You are researching Microsoft Azure for your company. The company is considering deploying Windows-based VMs in Azure. However, before moving forward, the management team has asked you to research the costs associated with Azure VMs. You need to document the configuration options that are likely to save the company money on their Azure VMs. Which options should you document? (Each answer presents part of the solution. Select four.

- A. Use HDD instead of SSD for VM storage.
- B. Use unmanaged premium storage instead of managed standard storage.
- C. Bring your own Windows custom images.
- D. Use different Azure regions.
- E. Use the least powerful VMs that meet your requirements.
- F. Place all VMs in the same resource group.
- G. Bring your own Windows license for each VM.

Answer : A, D, E, G

Explanation

In this scenario, you need to document which of the options presented are likely to save the company money for their Azure VMs. While this isn't an exhaustive list, the correct money-saving configuration options are: Use HDD instead of SSD, use different Azure regions, use the least powerful VMs that meet your requirements, and bring your own Windows license (instead of paying for a license with the VM). The other options usually increase cost.

Review Question 4

Customer would like to reduce the compute costs of his production VMs without making any configuration changes. What solution would you recommend without affecting the performance?

- A. Resize the VM to a smaller size
- B. Change disks from SSD to HDD to reduce cost
- C. Opt for Dynamic IP to save the cost
- D. Purchase Reserved instances
- E. Enable auto shutdown

Answer: D

Explanation:

RI can reduce compute cost

Review Question 5

Customer would like to disable SSE on his subscription as it's affecting the overall read/write performance of their storage. What would be the best method to accomplish this with the zero downtime

- A. Cannot be disabled without zero downtime. Disabling SSE will cause downtime.
- B. Take a backup of the storage with SSE disabled and delete the old storage
- C. Write a PowerShell script to automate the task
- D. None of the above

Answer: D

Explanation:

SSE cannot be disabled

Review Question 6

Another IT administrator creates an Azure virtual machine scale set with 5 VMs. Later, you notice that the VMs are all running at max capacity with the CPU being fully consumed. However, additional VMs are not deploying in the scale set. You need to ensure that additional VMs are deployed when the CPU is 75% consumed. What should you do? Select one.

- A. Enable the autoscale option.
- B. Increase the instance count.
- C. Add the scale set automation script to the library.
- D. Deploy the scale set automation script.

Answer: A

Explanation

When you have a scale set, you can enable automatic scaling with the autoscale option. When you enable the option, you define the parameters for when to scale. To meet the requirements of this scenario, you need to enable the autoscale option so that additional VMs are created when the CPU is 75% consumed. Note that the automation script is used to automate the deployment of scale sets and not related to automating the building of additional VMs in the scale set.

Review Question 7

Your company is preparing to deploy an application to Microsoft Azure. The app is a self-contained unit that runs independently on several servers. The company is moving the app to the cloud to provide better performance. To get better performance, the team has the following requirements:

If the CPU across the servers goes above 85%, a new VM should be deployed to provide additional resources.

If the CPU across the servers drops below 15%, an Azure VM running the app should be decommissioned to reduce costs.

You need to deploy a solution to meet the requirements while minimizing the administrative overhead to implement and manage the solution. What should you do? Select one.

- A. Deploy the app in a virtual machine scale set.
- B. Deploy the app in a virtual machine availability set.
- C. Deploy the app by using a resource manager template.
- D. Deploy the app and use PowerShell Desired State Configuration (DSC).

Answer: A

Explanation

In this scenario, you should use a scale set for the VMs. Scale sets can scale up or down, based on defined criteria (such as the existing set of VMs using a large percentage of the available CPU). This meets the scenario's requirements.