

## 70-533 Implementing Microsoft Azure Infrastructure Solutions

Number: 70-533

Passing Score: 700

Time Limit: 120 min

File Version: 1.0

### **Sections**

1. (none)

## Exam A

### QUESTION 1

You administer an Azure Web Site named contosoweb that uses a production database. You deploy changes to contosoweb from a deployment slot named contosoweb-staging.

You discover issues in contosoweb that are affecting customer data.

You need to resolve the issues in contosoweb while ensuring minimum downtime for users.

You swap contosoweb to contosoweb-staging.

Which four steps should you perform next in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

#### Select and Place:

Actions	Answer Area
Swap contosoweb-staging to contosoweb.	
Point contosoweb to the production database.	
Point contosoweb-staging to the test database.	
Fix the issues in contosoweb.	
Fix the issues in contosoweb-staging.	
Point contosoweb-staging to the production database.	
Point contosoweb to the test database.	

#### Correct Answer:

Actions	Answer Area
	Point contosoweb-staging to the test database.
Point contosoweb to the production database.	Fix the issues in contosoweb-staging.
	Point contosoweb-staging to the production database.
Fix the issues in contosoweb.	Swap contosoweb-staging to contosoweb.
Point contosoweb to the test database.	

Section: (none)

Explanation

Explanation/Reference:

Explanation/Reference:

Reference: To Swap Deployment Slots

URL: <http://azure.microsoft.com/en-us/documentation/articles/web-sites-staged-publishing/#Swap>

## QUESTION 2

You manage an Azure Web Site named salessite1. You notice some performance issues with salessite1. You create a new database for salessite1.

You need to update salessite1 with the following changes, in the order shown:

1. Display the list of current connection strings.
2. Create a new connection string named conn1 with a value of:  
Server=tcp:sample1.database.windows.net,1433;Database=NewDB;User  
ID=User@sample1;Password=Password1;Trusted\_Connection=False;Encrypt=True;Connection Timeout=30;.
3. Download the application logs for analysis.

Which three xplat-cli commands should you perform in sequence? To answer, move the appropriate commands from the list of commands to the answer area and arrange them in the correct order.

### Select and Place:

Command	Answer Area
<code>site connectionstring show "conn1"</code> <code>"Server=tcp:sample1.database.windows.net,1433;Database=NewDB;User</code> <code>ID=User@sample1;Password=Password1;Trusted_Connection=False;Encrypt=True;Connection Timeout=30;"</code> <code>"SQLAzure" salessite1</code>	
<code>site log download salessite1</code>	
<code>site log tail salessite1</code>	
<code>site connectionstring show salessite1</code>	
<code>site connectionstring add "conn1"</code> <code>"Server=tcp:sample1.database.windows.net,1433;Database=NewDB;User</code> <code>ID=User@sample1;Password=Password1;Trusted_Connection=False;Encrypt=True;Connection Timeout=30;"</code> <code>"SQLAzure" salessite1</code>	
<code>site connectionstring list salessite1</code>	

**Correct Answer:**

Command	Answer Area
<pre>site connectionstring show "conn1" "Server=tcp:sample1.database.windows.net,1433;Database=NewDB;User ID=User@sample1;Password=Password1;Trusted_Connection=False;Encrypt=True;Connection Timeout=30;" "SQL Azure" salessite1</pre>	<pre>site connectionstring list salessite1</pre>
<pre>site log tail salessite1</pre>	<pre>site connectionstring add "conn1" "Server=tcp:sample1.database.windows.net,1433;Database=NewDB;User ID=User@sample1;Password=Password1;Trusted_Connection=False;Encrypt=True;Connection Timeout=30;" "SQL Azure" salessite1</pre>
<pre>site connectionstring show salessite1</pre>	<pre>site log download salessite1</pre>

**Section: (none)**

**Explanation**

**Explanation/Reference:**

### QUESTION 3

You manage an application hosted on cloud services. The development team creates a new version of the application. The updated application has been packaged and stored in an Azure Storage account.

You have the following requirements:

- Deploy the latest version of the application to production with the least amount of downtime.
- Ensure that the updated application can be tested prior to deploying to the Production site.
- Ensure that the original version of the application can be restored until the new version is verified.

Which four steps should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

**Select and Place:**

Action	Answer Area
Deploy the new package to the Staging slot.	
Create a new cloud service.	
Provide the URL to the development team.	
Deallocate the Staging deployment.	
Deploy the new package to the Production slot.	
Perform VIP Swap.	

Correct Answer:

Action	Answer Area
	Create a new cloud service.
	Provide the URL to the development team.
Deallocate the Staging deployment.	Deploy the new package to the Staging slot.
Deploy the new package to the Production slot.	
	Perform VIP Swap.

Section: (none)

Explanation

**Explanation/Reference:**

\* Cloud Services provides more control and improved access to service instances than the Azure Web Sites feature, with a cost for each role approximately the same as when using Web Sites Reserved mode. Applications can be staged for final testing before release.

\* Azure Cloud Services provides both a staging and a production area for roles you deploy; you can deploy an application to either a staging or a production environment within the same Cloud Service. A common scenario is to deploy first to the staging environment and then, at the appropriate time, move the new version to the production environment. The only

difference is in the URL you use to access them.

\* The operations staff can deploy a new version of the application to the staging deployment slot, perform some final tests, and then swap the production and staging slots to make the new version of the application available to users.

Reference: Moving to Microsoft Azure Cloud Services

URL: <http://msdn.microsoft.com/en-us/library/ff803371.aspx>

#### QUESTION 4

You administer an Azure Virtual Machine (VM) named server1. The VM is in a cloud service named ContosoService1.

You discover that the VM is experiencing storage issues due to increased application logging on the server.

You need to create a new 256-GB disk and attach it to the server.

Which PowerShell cmdlets should you use? To answer, drag the appropriate cmdlet to the correct location in the PowerShell command. Each cmdlet may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

Select and Place:

PowerShell cmdlets	PowerShell command
Add-AzureDisk	C:\PS> [PowerShell Command] "ContosoService1"
Add-AzureDataDisk	-Name "server1"   [PowerShell Command] -CreateNew -DiskSizeInGB 256
Add-AzureVhd	-DiskLabel "data1" -LUN 1   [PowerShell Command]
Get-AzureVM	
Get-AzureVMImage	
Update-AzureVM	
Update-AzureVMImage	

Correct Answer:

PowerShell cmdlets	PowerShell command
Add-AzureDisk	C:\PS> [Get-AzureVM] "ContosoService1"
Add-AzureDataDisk	-Name "server1"   [Add-AzureDataDisk] -CreateNew -DiskSizeInGB 256
Add-AzureVhd	-DiskLabel "data1" -LUN 1   [Update-AzureVM]
Get-AzureVMImage	
Update-AzureVMImage	

Section: (none)

Explanation

#### Explanation/Reference:

This example gets a virtual machine object for the virtual machine named "MyVM" in the "myservice" cloud service, updates the virtual machine object by attaching an existing data disk from the repository using the disk name, and then updates the Azure virtual machine.

Windows PowerShell

```
C:\PS>Get-AzureVM "myservice" -Name "MyVM" | Add-AzureDataDisk -Import -DiskName "MyExistingDisk" -LUN 0 |
```

```
Update-AzureVM
```

Reference: Add-AzureDataDisk

URL: <http://msdn.microsoft.com/en-us/library/dn495298.aspx>

#### QUESTION 5

You manage an Azure virtual machine (VM) named AppVM. The application hosted on AppVM continuously writes small

files to disk. Recently the usage of applications on AppVM has increased greatly.

You need to improve disk performance on AppVM.

Which Microsoft Azure Power Shell cmdlet should you use with each Power Shell command line? To answer, drag the appropriate Microsoft Azure Power Shell cmdlet to the correct location in the Power Shell code. Each Power Shell cmdlet may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

**Select and Place:**

cmdlets	PowerShell code
Set-AzureOSDisk	C:\PS>Get-AzureVM "AppService" -name
Set-AzureDataDisk	"AppVM"   <input type="text" value="cmdlet"/> -LUN 3
New-AzureVMConfig	-HostCaching <input type="text" value="cmdlet"/>   Update
ReadOnly	-AzureVM
WriteOnly	
None	

**Correct Answer:**

cmdlets	PowerShell code
Set-AzureOSDisk	C:\PS>Get-AzureVM "AppService" -name
	"AppVM"   <input type="text" value="Set-AzureDataDisk"/> -LUN 3
New-AzureVMConfig	-HostCaching <input type="text" value="ReadOnly"/>   Update
	-AzureVM
WriteOnly	
None	

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Example:

This command gets the "MyVM" virtual machine running on the "myservice" cloud service, and then sets the data disk at LUN 2 of the virtual machine to use ReadOnly host caching.

Windows PowerShell

```
C:\PS>Get-AzureVM "myservice" -name "MyVM" | Set-AzureDataDisk -LUN 2 -HostCaching ReadOnly | Update-AzureVM
```

Reference: Set-AzureDataDisk

<http://msdn.microsoft.com/en-us/library/dn495144.aspx>

#### QUESTION 6

You administer a virtual machine (VM) that is deployed to Azure. The VM hosts a web service that is used by several applications.

You need to ensure that the VM sends a notification in the event that the average response time for the web service exceeds a pre-defined response time for an hour or more.

Which three steps should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

**Select and Place:**

Action	Answer Area
From the Monitor page, add a metric for Response Time for the endpoint.	
From the Monitor page, add a rule for the Response Time of the endpoint.	
From the Dashboard page, add a rule for the endpoint status.	
From the Configure page, add a rule for the Response Time of the endpoint.	
From the Configure page, add a monitoring endpoint for the virtual machine.	
From the Endpoints page, add a monitoring endpoint for the virtual machine.	
From the Configure page, add a metric for Response Time for the endpoint.	

**Correct Answer:**

Action	Answer Area
	From the Monitor page, add a metric for Response Time for the endpoint.
From the Dashboard page, add a rule for the endpoint status.	From the Configure page, add a monitoring endpoint for the virtual machine.
From the Configure page, add a rule for the Response Time of the endpoint.	
	From the Monitor page, add a rule for the Response Time of the endpoint.
From the Endpoints page, add a monitoring endpoint for the virtual machine.	
From the Configure page, add a metric for Response Time for the endpoint.	

**Section: (none)**

**Explanation**

**Explanation/Reference:**

You administer a virtual machine (VM) that is deployed to Azure. The VM hosts a web service that is used by several applications.

You need to ensure that the VM sends a notification in the event that the average response time for the web service exceeds a pre-defined response time for an hour or more.

Which three steps should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

**QUESTION 7**



You administer an Azure Virtual Machine (VM) named CON-CL1. CON-CL1 is in a cloud service named ContosoService1. You discover unauthorized traffic to CON-CL1. You need to:

- Create a rule to limit access to CON-CL1.
- Ensure that the new rule has the highest precedence.

Which Azure Power Shell cmdlets and values should you use? To answer, drag the appropriate cmdlet or value to the correct location in the Power Shell command. Each cmdlet or value may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

**Select and Place:**

cmdlets and values	PowerShell command
Permit	C:\PS>\$acl= <input type="text" value="cmdlet or value"/>
Deny	C:\PS> <input type="text" value="cmdlet or value"/> -Addrule -ACL \$acl
New-AzureAclConfig	-order <input type="text" value="cmdlet or value"/> -Action <input type="text" value="cmdlet or value"/>
Set-AzureAclConfig	-RemoteSubnet "171.100.0.1/24"
100	
300	
-addrule	
-setrule	
0	
Update-AzureVM	

**Correct Answer:**

cmdlets and values	PowerShell command
	C:\PS>\$acl= <input type="text" value="New-AzureAclConfig"/>
Deny	C:\PS> <input type="text" value="Set-AzureAclConfig"/> -Addrule -ACL \$acl
	-order <input type="text" value="100"/> -Action <input type="text" value="Permit"/>
	-RemoteSubnet "171.100.0.1/24"
300	
-addrule	
-setrule	
0	
Update-AzureVM	

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Example 1

This example uses two commands:

The first command creates a new ACL object and stores it in a variable named \$acl1.

The second command updates the ACL object with a rule that permits incoming network traffic only from remote subnet 10.0.0.0/8.

Windows PowerShell

```
PS C:\> $acl1 = New-AzureAclConfigC:\PS> Set-AzureAclConfig -AddRule -ACL $acl1 -Order 100 -Action permit - RemoteSubnet "10.0.0.0/8" -
```

Reference: Set-AzureAclConfig

URL: <http://msdn.microsoft.com/en-us/library/dn495192.aspx>

### QUESTION 8

You have an Azure Virtual Network named fabVNet with three subnets named Subnet-1, Subnet-2 and Subnet-3. You have a virtual machine (VM) named fabVM running in the fabProd service. You need to modify fabVM to be deployed into Subnet-3. You want to achieve this goal by using the least amount of time and while causing the least amount of disruption to the existing deployment.

What should you do? To answer, drag the appropriate Power Shell cmdlet to the correct location in the Power Shell command. Each cmdlet may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

Select and Place:

PowerShell cmdlets	PowerShell Command
Get-AzureVM	PS C:\> \$VM = PowerShell cmdlet "fabProd" "fabVM"
Get-AzureVMImage	PS C:\> PowerShell cmdlet "Subnet-3" -VM \$VM
Set-AzureSubnet	PS C:\> PowerShell cmdlet "fabProd" "fabVM" -VM \$VM
Update-AzureVM	
New-AzureVM	
Set-AzureVNetConfig	
Update-AzureVMImage	

Correct Answer:

PowerShell cmdlets	PowerShell Command
	PS C:\> \$VM = Get-AzureVM "fabProd" "fabVM"
Get-AzureVMImage	PS C:\> Set-AzureSubnet "Subnet-3" -VM \$VM
	PS C:\> Update-AzureVM "fabProd" "fabVM" -VM \$VM
New-AzureVM	
Set-AzureVNetConfig	
Update-AzureVMImage	

Section: (none)

Explanation

Explanation/Reference:

This example changes the size of the virtual machine "MyVM3", running in "MySvc1", to "Medium".

Windows PowerShell

```
C:\PS>Get-AzureVM -ServiceName "MySvc1" -Name "MyVM3" `| Set-AzureVMSize -InstanceSize "Medium" `| Update-AzureVM
```

Reference: Update-AzureVM

URL: <http://msdn.microsoft.com/en-us/library/dn495230.aspx>

### QUESTION 9

You manage a solution deployed in two Azure subscriptions for testing and production. Both subscriptions have virtual networks named fabVNet.

You plan to add two new virtual machines (VMs) in a new subnet

You have the following requirements:

- Deploy the new VMs to the virtual network in the testing subscription.
- Minimize any errors in defining the network changes.
- Minimize the work that will be required when the change is made to the production virtual network.

Which three steps should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

#### Select and Place:

Action	Answer Area
Add an accessibility group to the network configuration file.	
Add a subnet to the Virtual Network using the Management Portal.	
Deploy the new VMs to the new subnet.	
Add an accessibility group to the Virtual Network using the Management Portal.	
Deploy the new VMs to the new accessibility group.	
Export the network configuration.	
Add a subnet to the network configuration file.	
Import the network configuration.	

#### Correct Answer:

Action	Answer Area
Add an accessibility group to the network configuration file.	Add a subnet to the network configuration file.
Add a subnet to the Virtual Network using the Management Portal.	
Deploy the new VMs to the new subnet.	Export the network configuration.
Add an accessibility group to the Virtual Network using the Management Portal.	Import the network configuration.
Deploy the new VMs to the new accessibility group.	

Section: (none)

#### Explanation

#### Explanation/Reference:

After you've configured your network configuration file, use the procedure below to import it into the Management Portal. To import a network configuration file:

1. Log on to the **Management Portal**.
2. In the navigation pane on the bottom left, click **New**.
3. Click **Network Services**-> **Virtual Network**-> **Import Configuration**.
4. On the **Import the network configuration file** page, browse to your network configuration file, and then click the **next arrow**.
5. Your virtual network is created.

Reference: Virtual Network Configuration Tasks

URL: <http://msdn.microsoft.com/en-us/library/azure/jj156206.aspx>

#### QUESTION 10

You manage an Azure Web Site in Standard mode at the following address: contoso.azurevwebsites.net.

Your company has a new domain for the site that needs to be accessible by Secure Socket Layer (SSL) encryption.

You need to be able to add a custom domain to the Azure Web Site and assign an SSL certificate.

Which three steps should you perform next in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order. More than one order of answer choices may be correct You will receive credit for any of the correct orders you select

#### Select and Place:

Actions	Answer Area
Create a CNAME record from www.contoso.com to contoso.azurewebsites.net.	
Add www.contoso.com to the list of domain names as a custom domain.	
Add an A record in your DNS for www.contoso.com to point to the Azure Web Site IP.	
Add SSL binding for the www.contoso.com domain with the IP-based SSL option selected.	
Add SSL binding for the www.contoso.com domain with the Server Name Indication (SNI) SSL option selected.	
Create a new file that will redirect the site to the new URL and upload it to the Azure Web Site.	

Correct Answer:

Actions	Answer Area
	Create a CNAME record from www.contoso.com to contoso.azurewebsites.net.
Add www.contoso.com to the list of domain names as a custom domain.	
Add an A record in your DNS for www.contoso.com to point to the Azure Web Site IP.	
	Create a new file that will redirect the site to the new URL and upload it to the Azure Web Site.
Add SSL binding for the www.contoso.com domain with the Server Name Indication (SNI) SSL option selected.	Add SSL binding for the www.contoso.com domain with the IP-based SSL option selected.

Section: (none)

Explanation

Explanation/Reference:

Step 1: When adding a CNAME record, you must set the **Host Name** field to the sub-domain you wish to use. For example, **www**Address field to the **.azurewebsites.net**contoso.azurewebsites.net. You must set the domain name of your Azure Website. For example, .

\* Step 2: Modify the service definition and configuration files

Your application must be configured to use the certificate, and an HTTPS endpoint must be added. As a result, the service definition and service configuration files need to be updated.

\* Step 3:

IP based SSL associates a certificate with a domain name by mapping the dedicated public IP address of the server to the domain name. This requires each domain name (contoso.com, fabricam.com, etc.) associated with your service to have a dedicated IP address. This is the traditional method of associating SSL certificates with a web server.

Reference: Enable HTTPS for an Azure website

URL: <http://azure.microsoft.com/en-us/documentation/articles/web-sites-configure-ssl-certificate/>

#### QUESTION 11

You manage an Azure Web Site named contososite.

You download the subscription publishing credentials named Contoso-Enterprise.publishsettings.

You need to use Azure Power Shell to achieve the following:

- Connect to the Contoso-Enterprise subscription.
- Create a new App Setting named CustomSetting with a value of True.
- Restart the website.

Which commands should you use? To answer, drag the appropriate Azure PowerShell command to the correct location in the solution. Each command may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

Select and Place:

##### Azure PowerShell Commands

Set-AzureWebsite

Get-AzurePublishSettingsFile

Import-AzurePublishSettingsFile

Start-AzureWebsite

Restart-AzureWebsite

Show-AzureWebsite

##### Solution

PS C:\>  c:\Contoso\Enterprise.publishsettings

PS C:\> Select-AzureSubscription Contoso-Enterprise

PS C:\> \$setting = @{"IsCustom" = "true"}

PS C:\>  contososite --AppSettings \$setting

PS C:\>  contososite

Correct Answer:

##### Azure PowerShell Commands

Get-AzurePublishSettingsFile

Start-AzureWebsite

Show-AzureWebsite

##### Solution

PS C:\>  c:\Contoso\Enterprise.publishsettings

PS C:\> Select-AzureSubscription Contoso-Enterprise

PS C:\> \$setting = @{"IsCustom" = "true"}

PS C:\>  contososite --AppSettings \$setting

PS C:\>  contososite

Section: (none)

Explanation

Explanation/Reference:

Reference: Azure Service Management Cmdlets

<http://msdn.microsoft.com/en-us/library/dn495240.aspx>

#### QUESTION 12

You administer an Azure SQL database named contosodb that is running in Standard/S1 tier. The database is in a server named server1 that is a production environment. You also administer a database server named server2 that is a test environment. Both database servers are in the same subscription and the same region but are on different physical clusters. You need to copy contosodb to the test environment.

Which three steps should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Select and Place:

Action	Answer Area
Use DB copy to create a copy of contosodb in server2 named contosodb.	
Set Export Status to Automatic for contosodb in server1.	
Use DB copy to create a copy of contosodb in server1 named contosodbtmp.	
Scale contosodb in server2 to Standard/S1.	
Import the BACPAC file to server2 as contosodb.	
Export contosodbtmp in server1 to a BACPAC file in Azure Blob storage.	
Rename contosodbtmp to contosodb in server1.	
Use Active Geo-Replication and replicate contosodb to server2.	

**Correct Answer:**

Action	Answer Area
Use DB copy to create a copy of contosodb in server2 named contosodb.	Use DB copy to create a copy of contosodb in server1 named contosodbtmp.
Set Export Status to Automatic for contosodb in server1.	
	Export contosodbtmp in server1 to a BACPAC file in Azure Blob storage.
Scale contosodb in server2 to Standard/S1.	Import the BACPAC file to server2 as contosodb.
Rename contosodbtmp to contosodb in server1.	
Use Active Geo-Replication and replicate contosodb to server2.	

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Incorrect:

Active Geo-Replication is available for databases in the Premium service tier only.

Reference: SQL Azure Import/Export Service has hit Production

How to: Use the Import and Export Service in Azure SQL Database

### QUESTION 13

You manage an application deployed to a cloud service that utilizes an Azure Storage account.

The cloud service currently uses the primary access key.

Security policy requires that all shared access keys are changed without causing application downtime.

Which three steps should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Select and Place:

Action	Answer Area
Update the cloud service configuration with the primary access key.	
Regenerate the primary access key.	
Regenerate the secondary access key.	
Update the cloud service configuration with the secondary access key.	

Correct Answer:

Action	Answer Area
	Update the cloud service configuration with the secondary access key.
	Regenerate the primary access key.
Regenerate the secondary access key.	
	Update the cloud service configuration with the primary access key.

Section: (none)

Explanation

Explanation/Reference:

1. Update the connection strings in your application code to reference the secondary access key of the storage account.
2. Regenerate the primary access key for your storage account. In the Management Portal, from the dashboard or the **Configure** page, click **Manage Keys** **Regenerate** under the **primary access key**, and then click **Yes to confirm you want to generate a new key**. . Click
3. Update the connection strings in your code to reference the new primary access key.
4. Regenerate the secondary access key.

### QUESTION 14

You administer an Azure Virtual Machine (VM) named CON-CL1. CON-CL1 is in a cloud service named ContosoService1. You want to create a new VM named MyApp that will have a fixed IP address and be hosted by an Azure Datacenter in the US West region.

You need to assign a fixed IP address to the MyApp VM.

Which Azure Power Shell cmdlets and values should you use? To answer, drag the appropriate cmdlet or value to the correct location in the PowerShell command. Each cmdlet or value may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content



### Select and Place:

#### cmdlets and values

West US  
Central US  
New-AzureReservedIP  
New-AzureInstanceLevelIP  
ReservedIP  
ReservedIPName  
Set-AzureReservedIP  
Set-AzureInstanceLevelIP

#### PowerShell Command

```
PS C:\> $ [cmdlet or value] = [cmdlet or value] - ReservedIPName "MyApp" -Label  
"WebAppMyApp" -Location " [cmdlet or value] "  
  
PS C:\> New-AzureVMConfig -Name "WebAppVM" -InstanceSize Small -ImageName $images[60].ImageName  
| Add-AzureProvisioningConfig -Windows -AdminUsername Administrator -Password Admin$Pwd  
| New-AzureVM -ServiceName "MyWebApp" [cmdlet or value]  
$ReservedIP -location " [cmdlet or value] "
```

### Correct Answer:

#### cmdlets and values

West US  
Central US  
New-AzureReservedIP  
New-AzureInstanceLevelIP  
ReservedIP  
ReservedIPName  
Set-AzureReservedIP  
Set-AzureInstanceLevelIP

#### PowerShell Command

```
PS C:\> $ ReservedIP = New-AzureReservedIP - ReservedIPName "MyApp" -Label  
"WebAppMyApp" -Location " West US "  
  
PS C:\> New-AzureVMConfig -Name "WebAppVM" -InstanceSize Small -ImageName $images[60].ImageName  
| Add-AzureProvisioningConfig -Windows -AdminUsername Administrator -Password Admin$Pwd  
| New-AzureVM -ServiceName "MyWebApp" ReservedIPName  
$ReservedIP -location " West US "
```

### Section: (none)

#### Explanation

#### Explanation/Reference:

Create a Reserved IP and associate it with a cloud service (Virtual Machines)

Use the following script as a template to create a Reserved IP and then use the Reserved IP to create a cloud service deployment (Virtual Machines).

```
$ReservedIP = New-AzureReservedIP -ReservedIPName "FirewallIP" -Label "WebAppFirewallIP" -Location "Japan West"  
New-AzureVMConfig -Name "WebAppVM" -InstanceSize Small -ImageName $images[60].ImageName | Add-  
AzureProvisioningConfig -Windows -AdminUsername cloudguy -Password Abc123 | New-AzureVM -ServiceName  
"WebApp" -ReservedIPName $ReservedIP -Location "Japan West"
```

Reference: New-AzureReservedIP

### QUESTION 15

You plan to deploy a cloud service named contosoapp. The service includes a web role named contosowebrole. The web role has an endpoint named restrictedEndpoint.

You need to allow access to restricted Endpoint only from your office machine using the IP address 145.34.67.82.

Which values should you use within the service configuration file? To answer, drag the appropriate value to the correct location in the service configuration file. Each value may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

### Select and Place:

### Values

### Service Configuration File

```

<NetworkConfiguration>
  <AccessControls>
    <AccessControl name="test">
      <Rule action=
remoteSubnet="
      " order="2'
    </Rule>
    <Rule action="
remoteSubnet="
      " order="1'
    </Rule>
    </AccessControl>
  </AccessControls>
  <EndpointAcls>
    <EndpointAcl
role="contosoWebrole" accessControl="test" endPoint=
"restrictedEndpoint"/>
  </EndpointAcls>
</NetworkConfiguration>

```

Correct Answer:

### Values

### Service Configuration File

```

<NetworkConfiguration>
  <AccessControls>
    <AccessControl name="test">
      <Rule action=
remoteSubnet="
      " order="2'
    </Rule>
    <Rule action="
remoteSubnet="
      " order="1'
    </Rule>
    </AccessControl>
  </AccessControls>
  <EndpointAcls>
    <EndpointAcl
role="contosoWebrole" accessControl="test" endPoint=
"restrictedEndpoint"/>
  </EndpointAcls>
</NetworkConfiguration>

```

Section: (none)

Explanation

#### Explanation/Reference:

\* Rule with lower order are applied first.

\* We can selectively permit or deny network traffic (in the management portal or from PowerShell) for a virtual machine input endpoint by creating rules that specify "permit" or "deny". By default, when an endpoint is created, all traffic is permitted to the endpoint. So for that reason, it's important to understand how to create permit/deny rules and place them in the proper order of precedence to gain granular control over the network traffic that you choose to allow to reach the virtual machine endpoint. Note that at the instant you add one or more "permit" ranges, you are denying all other ranges by default. Moving forward from the first permit range, only packets from the permitted IP range will be able to communicate with the virtual machine endpoint.

#### QUESTION 16

You plan to deploy a cloud service named contosoapp that has a web role named contosoWeb and a worker role named contosoImagePurge.

You need to ensure the service meets the following requirements:

- ContosoWeb can be accessed over the Internet by using http.
- ContosoImagePurge can only be accessed through tcp port 5001 from ContosoWeb.
- ContosoImagePurge cannot be accessed directly over the Internet.

Which configuration should you use? To answer, drag the appropriate configuration setting to the correct location in the service configuration file. Each configuration setting may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content

#### Select and Place:

##### Configuration Settings

```
<InputEndpoint name="Endpoint1" protocol="http" port="80" />
```

```
<InternalEndpoint name="Endpoint1" protocol="http" port="80" />
```

```
<InputEndpoint name="Endpoint1" protocol="tcp" port="5001" />
```

```
<Destinations>
  <RoleEndpoint endpointName="Endpoint1" roleName="ContosoImagePurge"/>
</Destinations>
<WhenSource matches="AnyRule">
  <FromRole roleName="ContosoWeb"/>
</WhenSource>
```

```
<Destinations>
  <RoleEndpoint endpointName="Endpoint1" roleName="ContosoImagePurge"/>
</Destinations>
<AllowAllTraffic/>
```

##### Service Configuration File

```
<ServiceDefinition name="ContosoApp">
  <WebRole name="ContosoWeb" vmSize="Small">
    Configuration setting
```

```
</Endpoints>
</WebRole>
<WorkerRole name="ContosoImagePurge" vmSize="Small">
  <Endpoints>
```

```
</Endpoints>
</WorkerRole>
<NetworkTrafficRules>
  <OnlyAllowTrafficTo>
```

```
</OnlyAllowTrafficTo>
</NetworkTrafficRules>
</ServiceDefinition>
```

**Correct Answer:**

## Configuration Settings

```
<InternalEndpoint name="endpoint1" protocol="http" port="80" />

<Destinations>
  <RoleEndpoint endpointName="EndPoint1" roleName="contosoimagepurge"/>
</Destinations>
<AllowAllTraffic/>
```

## Service Configuration File

```
<ServiceDefinition name="contosoapp"
  <WebRole name="contosoweb" vmSize="Small"

  <InputEndpoint name="endpoint1" protocol="http" port="80" />

</Endpoints>
</WebRole>
<WorkerRole name="contosoimagepurge" vmSize="Small"
  <Endpoints>

  <InputEndpoint name="endpoint1" protocol="tcp" port="5001" />

</Endpoints>
</WorkerRole>
<NetworkTrafficRules>
  <OnlyAllowTrafficTo>

  <Destinations>
    <RoleEndpoint endpointName="EndPoint1" roleName="contosoimagepurge"/>
  </Destinations>
  <FilterSource matches="AnyRule">
    <FromRole roleName="contosoweb"/>
  </FilterSource>

  </OnlyAllowTrafficTo>
</NetworkTrafficRules>
</ServiceDefinition>
```

Section: (none)

Explanation

Explanation/Reference:

### QUESTION 17

You administer two virtual machines (VMs) that are deployed to a cloud service. The VMs are part of a virtual network. The cloud service monitor and virtual network configuration are configured as shown in the exhibits. (Click the Exhibits button.)

You need to create an internal load balancer named fabLoadBalancer that has a static IP address of 172.16.0.100.

Which value should you use in each parameter of the Power Shell command?

To answer, drag the appropriate value to the correct location in the Power Shell command. Each value may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

img-041 (exhibit):



img-042 (exhibit):

fabrikamvnet

DASHBOARD CONFIGURE CERTIFICATES

dns servers

ENTER NAME IP ADDRESS

point-to-site connectivity

CONNECTION ☐ Configure point-to-site connectivity

virtual network address spaces

img-043 (exhibit):

ADDRESS SPACE	STARTING IP	CIDR (ADDRESS COUNT)	USABLE ADDRESS RANGE
172.16.0.0/23	172.16.0.0	/23 (507)	172.16.0.4 - 172.16.1.254
SUBNETS			
Subnet-1	172.16.0.0	/26 (59)	172.16.0.4 - 172.16.0.62
Subnet-2	172.16.0.64	/26 (59)	172.16.0.68 - 172.16.0.126
add subnet			
add address space			

Select and Place:

Values	PowerShell command parameter
fabSvc1	Add-AzureInternalLoadBalancer
fabSvc2	-InternalLoadBalancerName fabLoadBalancer
fabSvc	-ServiceName <input type="text" value="Value"/>
fabrikamVNet	-SubnetName <input type="text" value="Value"/>
Subnet-1	-StaticVNetIPAddress 172.16.0.100
Subnet-2	

Correct Answer:

Values	PowerShell command parameter
fabSvc1	Add-AzureInternalLoadBalancer
fabSvc2	-InternalLoadBalancerName fabLoadBalancer
	-ServiceName <input type="text" value="fabSvc"/>
	-SubnetName <input type="text" value="Subnet-2"/>
fabrikamVNet	-StaticVNetIPAddress 172.16.0.100
Subnet-1	

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 18

Your development team has created a new solution that is deployed in a virtual network named fabDevVNet.

Your testing team wants to begin testing the solution in a second Azure subscription.

You need to create a virtual network named fabTestVNet that is identical to fabDevVNet. You want to achieve this goal by using the least amount of administrative effort.

Which three steps should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Select and Place:

Action	Answer Area
In the Management Portal, rename the virtual network to fabTestVNet in the testing subscription.	
In the development subscription, import the network configuration.	
In the testing subscription, import the network configuration.	
In the development subscription, export the network configuration.	
Create a virtual network by using the Management Portal in the testing subscription.	
In the network configuration file, set the name attribute of the VirtualNetworkSite to fabTestVNet.	
In the testing subscription, export the network configuration.	

Correct Answer:

Action

In the Management Portal, rename the virtual network to fabTestVNet in the testing subscription.

In the development subscription, import the network configuration.

Create a virtual network by using the Management Portal in the testing subscription.

In the testing subscription, export the network configuration.

Answer Area

In the development subscription, export the network configuration.

In the network configuration file, set the name attribute of the VirtualNetworkSite to fabTestVNet.

In the testing subscription, import the network configuration.

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 19

You have a solution deployed into a virtual network in Azure named fabVNet. The fabVNet virtual network has three subnets named Apps, Web, and DB that are configured as shown in the exhibit. (Click the Exhibits button.)

You want to deploy two new VMs to the DB subnet.

You need to modify the virtual network to expand the size of the DB subnet to allow more IP addresses.

Which three steps should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

img-048 (exhibit):

virtual network address spaces

ADDRESS SPACE	STARTING IP	CIDR (ADDRESS COUNT)	USABLE ADDRESS RANGE
10.0.0.0/23	10.0.0.0	/23 (507)	10.0.0.4 - 10.0.1.254
SUBNETS			
Apps	10.0.0.0	/26 (59)	10.0.0.4 - 10.0.0.62
Web	10.0.0.64	/29 (3)	10.0.0.68 - 10.0.0.70
DB	10.0.0.72	/29 (3)	10.0.0.76 - 10.0.0.78
add subnet			
add address space			




img-049 (exhibit):

fabvnet

[DASHBOARD](#) [CONFIGURE](#) [CERTIFICATES](#)

virtual network

 fabVNet

resources

NAME	ROLE	IP ADDRESS	SUBNET NAME	
fabApps1	Virtual Machine	10.0.0.4	Apps	
fabDB1	Virtual Machine	10.0.0.76	DB	
fabDB2	Virtual Machine	10.0.0.77	DB	
Svc2WebRole_IP1_0	Svc2WebRole	10.0.0.68	Web	

Select and Place:

Action	Answer Area
Empty and delete the Web Subnet.	
Empty and reconfigure the DB subnet to be larger.	
Empty and delete the Virtual Network.	
Empty and reconfigure the Web subnet to be larger.	
Recreate the Virtual Network as now required.	
Create the Web subnet to be larger.	
Empty and delete the DB Subnet.	
Create the DB subnet to be larger.	

Correct Answer:



Action	Answer Area
	Empty and delete the Web Subnet.
Empty and reconfigure the DB subnet to be larger.	
Empty and delete the Virtual Network.	Create the DB subnet to be larger.
Empty and reconfigure the Web subnet to be larger.	Recreate the Virtual Network as now required.
Create the Web subnet to be larger.	
Empty and delete the DB Subnet.	

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 20

You manage two solutions in separate Azure subscriptions.

You need to ensure that the two solutions can communicate on a private network.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Select and Place:

Action	Answer Area
Check ExpressRoute on the virtual network configuration page.	
Update the connection certificate.	
Create the static routing gateways.	
Connect the VPN gateways.	
Add local networks to the VNets.	
Run Set-AzureVNetIP PowerShell cmdlet.	
Create the dynamic routing gateways.	
Edit the ACL on the virtual network gateway to accept connections.	

**Correct Answer:**

Action	Answer Area
Check ExpressRoute on the virtual network configuration page.	Add local networks to the VNets.
Update the connection certificate.	
Create the static routing gateways.	Create the dynamic routing gateways.
	Connect the VPN gateways.
Run Set-AzureVNetIP PowerShell cmdlet.	
Edit the ACL on the virtual network gateway to accept connections.	

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Configure a VNet to VNet connection

There are 5 sections to plan and configure. Configure each section in the order listed below:

1. Plan your IP address ranges
2. Create your virtual networks
3. Add local networks
4. Create the dynamic routing gateways for each VNet.
5. Connect the VPN gateways

Note: In this procedure, we'll walk you through connecting two virtual networks, VNet1 and VNet2. You'll need to be comfortable with networking in order to substitute the IP address ranges that are compatible with your network design requirements. From an Azure virtual network, connecting to another Azure virtual network is the same as connecting to an on premises network via Site-to-site (S2S) VPN.

This procedure primarily uses the Management Portal, however, you must use Microsoft Azure PowerShell cmdlets to connect the VPN gateways.

Reference: Configure a VNet to VNet Connection

URL: <http://msdn.microsoft.com/en-us/library/azure/dn690122.aspx>

#### QUESTION 21

Your company network includes a single forest with multiple domains. You plan to migrate from On-Premises Exchange to Exchange Online.

You want to provision the On-Premises Windows Active Directory (AD) and Azure Active Directory (Azure AD) service accounts.

You need to set the required permissions for the Azure AD service account.

Which settings should you use? To answer, drag the appropriate permission to the service account. Each permission may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

**Select and Place:**

Permissions	Service Account
Enterprise Admin	Azure AD
Domain Admin	Permission
Global Admin	Permission
Password Admin	
IIS Admin	

**Correct Answer:**

Permissions	Service Account
	Azure AD
Domain Admin	Enterprise Admin
	Global Admin
Password Admin	
IIS Admin	

Section: (none)

Explanation

**Explanation/Reference:**

When you run the Directory Sync tool Configuration Wizard, you must provide the following information:

Enterprise admin credentials for the on-premises Active Directory schema

Global admin credentials for the Microsoft cloud service

**QUESTION 22**

You publish a multi-tenant application named MyApp to Azure Active Directory (Azure AD).

You need to ensure that only directory administrators from the other organizations can access MyApp's web API.

How should you configure MyApp's manifest JSON file? To answer, drag the appropriate PowerShell command to the correct location in the application's manifest JSON file. Each value may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

Select and Place:

PowerShell command	Manifest JSON file
user_impersonation	<pre>service on behalf of the signed-in user",   "directAccessGrantTypes": [],   "displayName": "Have full access to the Todo List service",   "impersonationAccessGrantTypes": [     {       "impersonated": "User",       "impersonator": "Application"     }   ],   "isDisabled": <input type="text" value="PowerShell command"/>,   "origin": "Application",   "permissionId": "b69ee3c9-c40d-4f2a-ac80-961cd1534e40",   "resourceScopeType": "<input type="text" value="PowerShell command"/>,    "userConsentDescription": "Allow the application full access to the   todo service on your behalf",   "userConsentDisplayName": "Have full access to the todo service" }, ],</pre>
application_impersonation	
False	
True	
Personal	
Global	

Correct Answer:

PowerShell command	Manifest JSON file
user_impersonation	<pre>service on behalf of the signed-in user",   "directAccessGrantTypes": [],   "displayName": "Have full access to the Todo List service",   "impersonationAccessGrantTypes": [     {       "impersonated": "User",       "impersonator": "Application"     }   ],   "isDisabled": <input type="text" value="False"/>,   "origin": "Application",   "permissionId": "b69ee3c9-c40d-4f2a-ac80-961cd1534e40",   "resourceScopeType": "<input type="text" value="Global"/>,    "userConsentDescription": "Allow the application full access to the   todo service on your behalf",   "userConsentDisplayName": "Have full access to the todo service" }, ],</pre>
application_impersonation	
<input type="text"/>	
True	
Personal	
<input type="text"/>	

Section: (none)

Explanation

Explanation/Reference:

### QUESTION 23

Your company manages several Azure Web Sites that are running in an existing web-hosting plan named plan1.

You need to move one of the websites, named contoso, to a new web-hosting plan named plan2.

Which Azure PowerShell cmdlet should you use with each PowerShell command line? To answer, drag the appropriate Azure PowerShell cmdlet to the correct location in the PowerShell code. Each PowerShell cmdlet may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

Select and Place:

#### PowerShell cmdlets

New-AzureResource

Set-AzureResource

plan1

plan2

Microsoft.Web/serverFarms

Microsoft.Web/sites

#### PowerShell code

PS C:\> \$props = @{"serverfarm" = " PowerShell cmdlet "};

PS C:\> PowerShell cmdlet -name contoso

-ResourceGroup group1 -PropertyObject \$props -ResourceType

PowerShell cmdlet -apiversion 2014-04-01

Correct Answer:

#### PowerShell cmdlets

New-AzureResource

plan1

Microsoft.Web/serverFarms

#### PowerShell code

PS C:\> \$props = @{"serverfarm" = " plan2 "};

PS C:\> Set-AzureResource -name contoso

-ResourceGroup group1 -PropertyObject \$props -ResourceType

Microsoft.Web/sites -apiversion 2014-04-01

Section: (none)

Explanation

#### Explanation/Reference:

Example:

The following command is actually a series of commands (delimited by semi-colons) that change the values of the properties in the \$p variable.

Windows PowerShell

```
PS C:\> $p.siteMode = "Basic"; $p.sku = "Basic"; $p.computeMode = "Dedicated"; $p.serverFarm = "Default2"
```

The next command uses the Set-AzureResource cmdlet to change the change the properties of the ContosoLabWeb2 web site. The value of the PropertyObject parameter is the \$p variable that contains the Properties object and the new values. The command saves the output (the updated resource) in the \$r2 variable.

Windows PowerShell

```
PS C:\> $r2 = Set-AzureResource -Name ContosoLabWeb2 -ResourceGroupName ContosoLabsRG -ResourceType "Microsoft.Web/sites" -ApiVersion 2014-04-01 -PropertyObject $p
```

### QUESTION 24

You administer a cloud service named contosoapp that has a web role and worker role.

Contosoapp requires you to perform an in-place upgrade to the service.

You need to ensure that at least six worker role instances and eight web role instances are available when you apply upgrades to the service. You also need to ensure that updates are completed for all instances by using the least amount of time.

Which value should you use with each configuration? To answer, drag the appropriate value to the correct configuration.

Each value may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

**Select and Place:**

Values	Configuration
<div>1</div> <div>3</div>	Web role instances <div>Value</div>
<div>4</div> <div>6</div>	Worker role instances <div>Value</div>
<div>8</div> <div>9</div>	Upgrade domains <div>Value</div>
<div>12</div>	

**Correct Answer:**

Values	Configuration
<div>1</div>	Web role instances <div>12</div>
<div>4</div> <div>6</div>	Worker role instances <div>9</div>
<div>8</div>	Upgrade domains <div>3</div>
<div></div>	

**Section: (none)**

**Explanation**

**Explanation/Reference:**

\* Scenario:

You need to ensure that at least six worker role instances and eight web role instances are available when you apply upgrades to the service.

\* You can decide whether you want to update all of the roles in your service or a single role in the service. In either case, all instances of each role that is being upgraded and belong to the first upgrade domain are stopped, upgraded, and brought back online. Once they are back online, the instances in the second upgrade domain are stopped, upgraded, and brought back online.

Reference: Update an Azure Service

URL: <http://msdn.microsoft.com/en-us/library/azure/hh472157.aspx#proceed>

## Exam

### QUESTION 1

You manage an Azure Web Site for a consumer-product company. The website runs in Standard mode on a single medium instance. You expect increased traffic to the website due to an upcoming sale during a holiday weekend. You need to ensure that the website performs optimally when user activity is at its highest. Which option should you select? To answer, select the appropriate option in the answer area.

#### Hot Area:

INSTANCE SIZE: Small (1 core, 1.75 GB Memory)

EDIT SCALE SETTINGS FOR SCHEDULE: Recurring schedules (Weekday, Weekend)

SCALE BY METRIC: NONE CPU

INSTANCES: 1

set up schedule times

#### Correct Answer:

INSTANCE SIZE: Small (1 core, 1.75 GB Memory)

EDIT SCALE SETTINGS FOR SCHEDULE: Recurring schedules (Weekday, Weekend)

SCALE BY METRIC: NONE CPU

INSTANCES: 1

set up schedule times

#### Section: (none)

#### Explanation

##### Explanation/Reference:

Note: The 'small' instance is selected. This setting would be for the weekdays. Then you would select a larger instance for the 'weekend' schedule setting to cover the increased activity.

Reference: Azure, How to Scale Websites

URL: <http://azure.microsoft.com/en-us/documentation/articles/web-sites-scale/>

### QUESTION 2

Your company network has two branch offices. Some employees work remotely, including at public locations. You manage an Azure environment that includes several virtual networks.

All users require access to the virtual networks.

In the table below, identify which secure cross-premise connectivity option is needed for each type of user. Make only one selection in each column.

#### Hot Area:

Secure cross-premise connectivity method	Branch Office Users	Remote Users
Site-to-site	<input type="checkbox"/>	<input type="checkbox"/>
Multi-site	<input type="checkbox"/>	<input type="checkbox"/>
Point-to-site	<input type="checkbox"/>	<input type="checkbox"/>

**Correct Answer:**

Secure cross-premise connectivity method	Branch Office Users	Remote Users
Site-to-site	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Multi-site	<input type="checkbox"/>	<input type="checkbox"/>
Point-to-site	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Section: (none)**

**Explanation**

**Explanation/Reference:**

\* A site-to-site VPN allows you to create a secure connection between your on-premises site and your virtual network.

\* A point-to-site VPN also allows you to create a secure connection to your virtual network. In a point-to-site configuration, the connection is configured individually on each client computer that you want to connect to the virtual network.

Reference: About Secure Cross-Premises Connectivity

URL: <http://msdn.microsoft.com/en-us/library/azure/dn133798.aspx>

### QUESTION 3

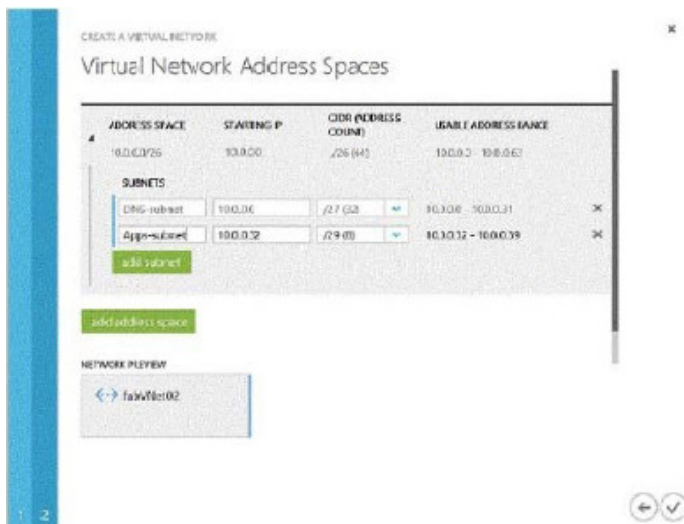
You create a virtual network named fabVNet01.

You design the virtual network to include two subnets, one named DNS-subnet and one named Apps-subnet, as shown in the exhibit. (Click the Exhibits button.)

In the table below, identify the number of IP addresses that will be available for virtual machines (VMs) or cloud services in each subnet. Make only one selection in each column.

**Exhibit:**





Hot Area:

#### Answer Area

Available IP Addresses	DNS-subnet	Apps-subnet
3	<input type="radio"/>	<input type="radio"/>
8	<input type="radio"/>	<input type="radio"/>
27	<input type="radio"/>	<input type="radio"/>
32	<input type="radio"/>	<input type="radio"/>

Correct Answer:

#### Answer Area

Available IP Addresses	DNS-subnet	Apps-subnet
3	<input type="radio"/>	<input checked="" type="radio"/>
8	<input type="radio"/>	<input type="radio"/>
27	<input checked="" type="radio"/>	<input type="radio"/>
32	<input type="radio"/>	<input type="radio"/>

Section: (none)

Explanation

#### Explanation/Reference:

In the table below, identify the number of IP addresses that will be available for virtual machines (VMs) or cloud services in each subnet. Make only one selection in each column.

#### QUESTION 4

You manage an Azure Web Site named contosoweb.

Some users report that they receive the following error when they access contosoweb: "http Status 500.0 - Internal Server Error."

You need to view detailed diagnostic information in XML format.

Which option should you enable? To answer, select the appropriate option in the answer area.

Hot Area:

**Answer Area**

Application diagnostics

APPLICATION LOGGING (FILESYSTEM) ☐ OFF ☐ ON

Site diagnostics

WEB SERVER LOGGING ☐ OFF ☐ ON

DETAILED ERROR MESSAGES ☐ OFF ☐ ON

FAILED REQUEST TRACING ☐ OFF ☐ ON

Correct Answer:

**Answer Area**

Application diagnostics

APPLICATION LOGGING (FILESYSTEM) ☐ OFF ☐ ON

Site diagnostics

WEB SERVER LOGGING ☐ OFF ☐ ON

DETAILED ERROR MESSAGES ☐ OFF ☐ ON

FAILED REQUEST TRACING ☐ OFF ☒ ON

Section: (none)

Explanation

Explanation/Reference:

URL: <http://www.iis.net/learn/troubleshoot/using-failed-request-tracing/troubleshoot-with-failed-request-tracing>  
<http://blogs.msdn.com/b/benjaminperkins/archive/2013/08/01/enabling-failed-request-logging-on-a-windows-azure-web-site.aspx>

**QUESTION 5**

You manage two websites for your company. The sites are hosted on an internal server that is beginning to experience performance issues due to high traffic.

You plan to migrate the sites to Azure Web Sites.

The sites have the following configurations: (click exhibits)

In the table below, identify the web hosting plan with the lowest cost for each site. Make only one selection in each column.

Exhibit:

Name	Purpose	Characteristics
Site 1	Public-facing forum for clients and customers to interact	<ul style="list-style-type: none"><li>Developed in Node.JS</li><li>Contains 11GB of data</li><li>Deployed to two (2) instances</li></ul>
Site 2	Public-facing portal for users to access their customer records	<ul style="list-style-type: none"><li>Developed in ASP.NET 4.0</li><li>Contains 9GB of data</li><li>Deployed to three (3) instances</li></ul>

Hot Area:

**Answer Area**

Web Hosting Plan	Site 1	Site 2
FREE	<input type="checkbox"/>	<input type="checkbox"/>
SHARED	<input type="checkbox"/>	<input type="checkbox"/>
BASIC	<input type="checkbox"/>	<input type="checkbox"/>
STANDARD	<input type="checkbox"/>	<input type="checkbox"/>

Correct Answer:

**Answer Area**

Web Hosting Plan	Site 1	Site 2
FREE	<input type="checkbox"/>	<input type="checkbox"/>
SHARED	<input type="checkbox"/>	<input type="checkbox"/>
BASIC	<input type="checkbox"/>	<input checked="" type="checkbox"/>
STANDARD	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Section: (none)

**Explanation****Explanation/Reference:**

Site 2 contains 9 GB of data so Basic mode is enough as it provided 10 GB of data (FREE and Shared only provide 1 GB of data).

Site 1 contains 11 GB of data so Standard mode is adequate as it provided 50 GB of data.

Reference: Azure, Websites Pricing Details

**QUESTION 6**

You manage two cloud services named Service1 and Service2. The development team updates the code for each application and notifies you that the services are packaged and ready for deployment.

Each cloud service has specific requirements for deployment according to the following table.

In the table below, identify the deployment method for each service. Make only one selection in each column.

**Exhibit:**

Name	Deployment requirements
Service1	<ul style="list-style-type: none"><li>You must be able to re-deploy the service using a previous package.</li><li>The package must be retained for disaster recovery purposes.</li></ul>
Service2	<ul style="list-style-type: none"><li>Maintaining the existing service package is not required.</li></ul>

Hot Area:

**Answer Area**

Deployment method	Service1	Service2
Manually update DLL on cloud service by means of RDP.	<input type="checkbox"/>	<input type="checkbox"/>
Update by using package in Azure Storage.	<input type="checkbox"/>	<input type="checkbox"/>
Update by using package from your local computer.	<input type="checkbox"/>	<input type="checkbox"/>

Correct Answer:

**Answer Area**

Deployment method	Service1	Service2
Manually update DLL on cloud service by means of RDP.	<input type="checkbox"/>	<input type="checkbox"/>
Update by using package in Azure Storage.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Update by using package from your local computer.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 7**









You manage an Azure subscription.

You develop a storage plan with the following requirements:









- Database backup files that are generated once per year are retained for ten years.
- High performance system telemetry logs are created constantly and processed for analysis every month.

In the table below, identify the storage redundancy type that must be used. Make only one selection in each column.

Hot Area:

Redundancy	DB Backups	Telemetry Logs
Locally redundant storage (LRS)		
Zone-redundant storage (ZRS)		
Geo-redundant storage (GRS)		
Read-access geo-redundant storage (RA-GRS)		

**Correct Answer:**

Redundancy	DB Backups	Telemetry Logs
Locally redundant storage (LRS)		
Zone-redundant storage (ZRS)		
Geo-redundant storage (GRS)		
Read-access geo-redundant storage (RA-GRS)		

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 8

You have an Azure SQL Database named Contosodb. Contosodb is running in the Standard/S2 tier and has a service level objective of 99 percent.

You review the service tiers in Microsoft Azure SQL Database as well as the results of running performance queries for the usage of the database for the past week as shown in the exhibits. (Click the Exhibits button.)

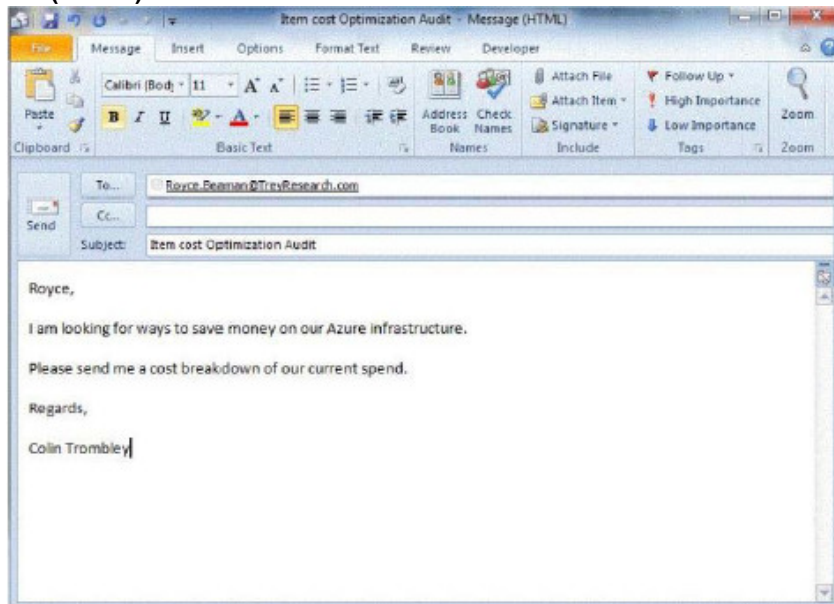
For each of the following statements, select Yes if the statement is true. Otherwise, select No.

**img-082 (exhibit):**

Average CPU Utilization In Percent	Maximum CPU Utilization In Percent	Average Physical Data Read Utilization In Percent	Maximum Physical Data Read Utilization In Percent	Average Log Write Utilization In Percent	Maximum Log Write Utilization In Percent
23.4	93.1	21.0	48.0	21.7	61.0

CPU Fit Percent	Log Write Fit Percent	Physical Data Read Fit Percent
99.7	99.8	99.6

102 (exhibit):



Hot Area:

	Yes	No
The database can be moved to the Basic tier without compromising performance.	<input type="radio"/>	<input type="radio"/>
The database can be moved to the Standard/S1 tier without compromising performance.	<input type="radio"/>	<input type="radio"/>
The database must be moved to the Premium/P1 tier to satisfy the service level objective.	<input type="radio"/>	<input type="radio"/>

Correct Answer:

	Yes	No
The database can be moved to the Basic tier without compromising performance.	<input type="radio"/>	<input checked="" type="radio"/>
The database can be moved to the Standard/S1 tier without compromising performance.	<input checked="" type="radio"/>	<input type="radio"/>
The database must be moved to the Premium/P1 tier to satisfy the service level objective.	<input type="radio"/>	<input checked="" type="radio"/>

**Section: (none)**

**Explanation**

**Explanation/Reference:**

\* The P1 performance level has 100 DTUs compared to the 200 DTUs of the P2 performance level. That means that the P1 performance level provides half the performance of the P2 performance level. So 50% of CPU utilization in P2 equals 100% CPU utilization in P1. As long as the application does not have timeouts, it may not matter if a big job takes 2 hours or 2.5 hours to complete as long as it gets done today. An application in this category can probably just use a P1 performance level. You can take advantage of the fact that there are periods of time during the day where resource usage is lower, meaning that any "big peak" might spill over into one of the

\*

Reference: Azure SQL Database Performance Guidance

URL: <http://msdn.microsoft.com/en-us/library/azure/dn369873.aspx>

#### **QUESTION 9**

You manage a public-facing web application which allows authenticated users to upload and download large files. On the initial public page there is a promotional video.

You plan to give users access to the site content and promotional video.

In the table below, identify the access method that should be used for the anonymous and authenticated parts of the application. Make only one selection in each column.

**Hot Area:**

Access Method	Anonymous	Authenticated
Create an Access Policy per user and provide Read and Write access to the blob files by using Shared Access Signatures.	<input type="radio"/>	<input type="radio"/>
Create Ad-Hoc Shared Access Signatures to provide read-only access to the blob files.	<input type="radio"/>	<input type="radio"/>
Create Ad-Hoc Shared Access Signatures to provide Read and Write access to the blob files.	<input type="radio"/>	<input type="radio"/>
Make the blob container public.	<input type="radio"/>	<input type="radio"/>

Correct Answer:

Access Method	Anonymous	Authenticated
Create an Access Policy per user and provide Read and Write access to the blob files by using Shared Access Signatures.	<input type="radio"/>	<input checked="" type="radio"/>
Create Ad-Hoc Shared Access Signatures to provide read-only access to the blob files.	<input type="radio"/>	<input type="radio"/>
Create Ad-Hoc Shared Access Signatures to provide Read and Write access to the blob files.	<input type="radio"/>	<input type="radio"/>
Make the blob container public.	<input checked="" type="radio"/>	<input type="radio"/>



Section: (none)  
Explanation

Explanation/Reference:

**QUESTION 10**

You administer an Azure Active Directory (Azure AD) tenant.

You add a custom application to the tenant.

The application must be able to:

- Read data from the tenant directly.
- Write data to the tenant on behalf of a user.

In the table below, identify the permission that must be granted to the application. Make only one selection in each column.

**Hot Area:**

Permission	Application Permission	Delegated Permission
Read and write directory data.	<input type="radio"/>	<input type="radio"/>
Read directory data.	<input type="radio"/>	<input type="radio"/>
Access your organization's directory.	<input type="radio"/>	<input type="radio"/>
Enable sign-on and read users' profiles.	<input type="radio"/>	<input type="radio"/>

**Correct Answer:**

Permission	Application Permission	Delegated Permission
Read and write directory data.	<input type="radio"/>	<input checked="" type="radio"/>
Read directory data.	<input checked="" type="radio"/>	<input type="radio"/>
Access your organization's directory.	<input type="radio"/>	<input type="radio"/>
Enable sign-on and read users' profiles.	<input type="radio"/>	<input type="radio"/>

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 11

You manage an Internet Information Services (IIS) 6 website named contososite1. Contososite1 runs a legacy ASP.NET 1.1 application named LegacyApp1. LegacyApp1 does not contain any integration with any other systems or programming languages.

You deploy contososite1 to Azure Web Sites.

You need to configure Azure Web Sites. You have the following requirements:

LegacyApp1 runs correctly.

The application pool does not recycle.

Which settings should you configure to meet the requirements? To answer, select the appropriate settings in the answer area.

**Hot Area:**

## general

.NET FRAMEWORK VERSION

☐ V3.3 ☒ V4.5

PHP VERSION

☐ OFF ☐ 5.3 ☒ 5.4 ☐ 5.5

JAVA VERSION

☒ OFF ☐ 1.7.0\_51

PYTHON VERSION

☒ OFF ☐ 2.7.3 ☐ 3.4.0

MANAGED PIPELINE MODE

☐ CLASSIC ☒ INTEGRATED

PLATFORM

☒ 32-BIT ☐ 64-BIT

WEB SOCKETS

☐ ON ☒ OFF

ALWAYS ON

☐ ON ☒ OFF

**Correct Answer:**

general

---

.NET FRAMEWORK VERSION ☒ V3.5 ☐ V4.5

---

PHP VERSION ☒ OFF ☐ 5.3 ☐ 5.4 ☐ 5.5

---

JAVA VERSION ☒ OFF ☐ 1.7.0\_51

---

PYTHON VERSION ☒ OFF ☐ 2.7.3 ☐ 3.4.0

---

MANAGED PIPELINE MODE ☒ CLASSIC ☐ INTEGRATED

---

PLATFORM ☒ 32-BIT ☐ 64-BIT

---

WEB SOCKETS ☐ ON ☒ OFF

---

ALWAYS ON ☒ ON ☐ OFF

**Section: (none)**

**Explanation**

**Explanation/Reference:**

\* Managed Pipeline Mode. Sets the IIS pipeline mode. Leave this set to Integrated (the default) unless you have a legacy website that requires an older version of IIS

\* Always on: ON

Always On. By default, websites are unloaded if they are idle for some period of time. This lets the system conserve resources. In Basic or Standard mode, you can enable Always On to keep the site loaded all the time. If your site runs continuous web jobs, you should enable Always On, or the web jobs may not run reliably

Reference: Azure, How to Configure Websites

**QUESTION 12**

You manage an Azure Service Bus for your company. You plan to enable access to the Azure Service Bus for an application named ContosoLOB.







You need to create a new shared access policy for subscriptions and queues that has the following requirements:

- Receives messages from a queue
- Deadletters a message
- Defers a message for later retrieval
- Enumerates subscriptions
- Gets subscription description

In the table below, identify the permission you need to assign to ensure that ContosoLOB is able to accomplish the above requirements. Make only one selection in each column.







**Hot Area:**

**Answer Area**

Access Level	Queues	Subscriptions
Send		
Listen		
Manage		

**Correct Answer:**

**Answer Area**

Access Level	Queues	Subscriptions
Send		
Listen		
Manage		

**Section: (none)**

**Explanation****Explanation/Reference:**

For Service Bus, the three permission claims are 'Send' for all send operations, 'Listen' to open up listeners or receive messages, and 'Manage' to observe or manage the state of the Service Bus tenant.

Reference: Service Bus Authentication and Authorization with the Access Control Service

URL: <http://msdn.microsoft.com/en-us/library/azure/hh403962.aspx>

## Exam C

### QUESTION 1

Your network includes a legacy application named LegacyApp1. The application only runs in the Microsoft .NET 3.5 Framework on Windows Server 2008.

You plan to deploy to Azure Cloud Services.

You need to ensure that LegacyApp1 will run correctly in the new environment. What are two possible ways to achieve this goal? Each Answer presents a complete solution.

- A. Upload a VHD with Windows Server 2008 installed.
- B. Deploy LegacyApp1 to a cloud service instance configured with Guest OS Family 2.
- C. Deploy LegacyApp1 to a cloud service instance configured with Guest OS Family 1.
- D. Deploy LegacyApp1 to a cloud service instance configured with Guest OS Family 3.

**Correct Answer:** BC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Guest OS Family 1 and Guest OS Family 2 supports .NET 3.5 and .Net 4.0. Guest OS Family 3 and Guest OS Family 4 supports .NET 4.0 and .Net 4.5.

<http://msdn.microsoft.com/en-us/library/azure/ee924680.aspx>

### QUESTION 2

You migrate a Windows Server .NET web application to Azure Cloud Services.

You need enable trace logging for the application.

Which two actions should you perform? Each Answer presents part of the solution.

- A. Update the application web.config file.
- B. Update the service configuration file.
- C. Update the service definition file.
- D. Enable verbose monitoring.
- E. Update the Azure diagnostics configuration.

**Correct Answer:** CE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

You can use Azure logging right out of the box--it's part of Azure SDK.

1º: Azure Service Definition Schema (.csdef File)

The service definition file defines the service model for an application. The file contains the definitions for the roles that are available to a cloud service, specifies the service endpoints, and establishes configuration settings for the service.

2º: Take Control of Logging and Tracing in Microsoft Azure The Microsoft.WindowsAzure.Diagnostics namespace, which inherits from and extends standard System.Diagnostics classes, enables the use of System.Diagnostics as a logging framework in Azure environment.

URLs:

<http://msdn.microsoft.com/en-us/library/azure/ee758711.aspx> <http://msdn.microsoft.com/en-us/magazine/ff714589.aspx>

### QUESTION 3

You manage a cloud service that is running in two small instances. The cloud service hosts a help desk application. The application utilizes a virtual network connection to synchronize data to the company's internal accounting system.

You need to reduce the amount of time required for data synchronization.

What should you do?

- A. Increase the processors allocated to the instances.
- B. Configure the servers as large instances and re-deploy.
- C. Increase the instance count to three.
- D. Deploy the application to Azure Web Sites.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

Explanation:

<http://msdn.microsoft.com/en-us/library/azure/dn197896.aspx>

#### QUESTION 4

You manage a cloud service that has a web application named WebRole1. WebRole1 writes error messages to the Windows Event Log.

Users report receiving an error page with the following message: "Event 26 has occurred. Contact your system administrator."

You need to access the WebRole1 event log.

Which three actions should you perform? Each Answer presents part of the solution.

- A. Run the Enable-AzureWebsiteApplicationDiagnostic PowerShell cmdlet.
- B. Enable verbose monitoring.
- C. Create a storage account.
- D. Run the Set-AzureVMDiagnosticsExtension PowerShell cmdlet.
- E. Update the WebRole1 web.config file.
- F. Update the cloud service definition file and the service configuration file.

**Correct Answer:** BCF

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

Explanation:

1º: You can monitor key performance metrics for your cloud services in the Azure Management Portal. You can set the level of monitoring to minimal and verbose for each service role, and can customize the monitoring displays. Verbose monitoring data is stored in a storage account, which you can access outside the portal.

2º:

\* The service configuration file specifies the number of role instances to deploy for each role in the service, the values of any configuration settings, and the thumbprints for any certificates associated with a role. If the service is part of a Virtual Network, configuration information for the network must be provided in the service configuration file, as well as in the virtual networking configuration file. The default extension for the service configuration file is .cscfg.

\* The service definition file defines the service model for an application. The file contains the definitions for the roles that are available to a cloud service, specifies the service endpoints, and establishes configuration settings for the service.

URLs:

<http://azure.microsoft.com/en-us/documentation/articles/cloud-services-how-to-monitor/> <http://msdn.microsoft.com/en-us/library/azure/ee758710.aspx> <http://msdn.microsoft.com/en-us/library/azure/ee758711.aspx>

#### QUESTION 5

You manage a cloud service that utilizes data encryption. You need to ensure that the certificate used to encrypt data can be accessed by the cloud service application.

What should you do?

- A. Upload the certificate's public key referenced in the application package.
- B. Deploy the certificate as part of the application package.
- C. Upload the certificate referenced in the application package.
- D. Use RDP to install the certificate.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

The developer must deploy the public key with their application so that, when Windows Azure spins up role instances, it will match up the thumbprint in the service definition with the uploaded service certificate and deploy the private key to the role instance. The private key is intentionally non-exportable to the .pfx format, so you won't be able to grab the private key through an RDC connection into a role instance. Reference: Field Note: Using Certificate-Based Encryption in Windows Azure Applications

#### QUESTION 6

You administer a Windows Server virtual machine (VM).

You upload the VM to Azure.

You need to ensure that you are able to deploy the BGInfo and VMAccess extensions.

What should you do?

- A. Install the VM Agent MSI and execute the following Power Shell commands: `$vm = Get-AzureVM - serviceName $svc - Name $name $vm.VM.ProvisionGuestAgent = $true Update-AzureVM -Name $name -VM $vm.VM -ServiceName $svc`
- B. Select the Enable the VM Extensions checkbox while provisioning a VM based on your uploaded VHD.
- C. Select the Install the VM Agent checkbox while provisioning a VM based on your uploaded VHD.
- D. Install the VM Agent MSI and execute the following Power Shell commands: `$vm = Get-AzureVM - serviceName $svc - Name $name Set-AzureVMBGInfoExtension -VM $vm.VM Set-AzureVM Access Extension -VM $vm.VM Update-AzureVM -Name $name -VM $vm.VM -ServiceName $svc`

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

The VM Agent can be enabled by manually downloading and installing the VM Agent (either the Windows or Linux version) on an existing VM instance and then setting the ProvisionGuestAgent value to true using Powershell or a REST call. (If you do not set this value after manually installing the VM Agent, the addition of the VM Agent is not detected properly.) The following code example shows how to do this using PowerShell where the \$svc and \$name arguments have already been determined.

```
$vm = Get-AzureVM serviceName $svc Name $name
$vm.VM.ProvisionGuestAgent = $TRUE
Update-AzureVM Name $name VM $vm.VM ServiceName $svc
Reference: VM Agent and VM Extensions Overview
```

#### QUESTION 7

You manage a cloud service that supports features hosted by two instances of an Azure virtual machine (VM). You discover that occasional outages cause your service to fail. You need to minimize the impact of outages to your cloud service. Which two actions should you perform? Each Answer presents part of the solution.

- A. Configure the VMs to belong to an Availability Set.
- B. Deploy a third instance of the VM.
- C. Redeploy the VMs to belong to an Affinity Group.
- D. Configure Load Balancing on the VMs.

**Correct Answer:** AD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

Adding your virtual machine to an availability set helps your application stay available during network failures, local disk hardware failures, and any planned downtime. Combine the Azure Load Balancer with an Availability Set to get the most application resiliency. The Azure Load Balancer distributes traffic between multiple virtual machines.

Incorrect

Not Redeploy the VMs to belong to an Affinity Group.: Affinity groups allow you to optimize performance by grouping the services that need to work together in the same data center.

Reference: Manage the availability of virtual machines, Understand planned versus unplanned maintenance

#### QUESTION 8

You administer an Azure subscription with an existing cloud service named contosocloudservice. Contosocloudservice contains a set of related virtual machines (VMs) named ContosoDC, ContosoSQL and ContosoWeb1.

You want to provision a new VM within contosocloudservice. You need to use the latest gallery image to create a new



Windows Server 2012 R2 VM that has a target IOPS of 500 for any provisioned disks.  
Which PowerShell command should you use?

A.

```
PS C:\> $image = (Get-AzureVMImage | ? { $_.OS -eq "Windows" -and $_.ImageFamily -eq "Windows Server 2012 R2 Datacenter" } | Sort-Object PublishDate -Descending | Select-Object -First 1).ImageName
PS C:\> New-AzureVMConfig -Name "ContosoWeb2" -InstanceSize Small -ImageName $image | Add-AzureProvisioningConfig -Windows -AdminUser $adminUser -Password $adminPassword | New-AzureVM
```

B.

```
PS C:\> $image = (Get-AzureVMImage | ? { $_.OS -eq "Windows" -and $_.ImageFamily -eq "Windows Server 2012 R2 Datacenter" } | Sort-Object PublishDate -Descending | Select-Object -First 1).ImageName
PS C:\> New-AzureVMConfig -Name "ContosoWeb2" -InstanceSize Basic_A1 -ImageName $image | Add-AzureProvisioningConfig -Windows -AdminUser $adminUser -Password $adminPassword | New-AzureVM -ServiceName "contosocloudservice"
```

C.

```
PS C:\> New-AzureQuickVM -Windows -ServiceName "contosocloudservice" -Name "ContosoWeb2" -ImageName (Get-AzureVMImage | ? { $_.OS -eq "Windows" -and $_.ImageFamily -eq "Windows Server 2012 R2 Datacenter" }).ImageName -Password $adminPasswd -InstanceSize Small
```

D.

```
PS C:\> $image = (Get-AzureVMImage | ? { $_.OS -eq "Windows" -and $_.ImageFamily -eq "Windows Server 2012 R2 Datacenter" } | Sort-Object PublishDate -Descending | Select-Object -First 1).ImageName
PS C:\> New-AzureQuickVM -Windows -ServiceName "contosocloudservice" -Name "ContosoWeb2" -ImageName $image -Password $adminPasswd -InstanceSize Small
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

This example creates a new Windows virtual machine configuration with operating system disk, data disk and provisioning configuration. This configuration is then used to create a new virtual machine.

```
C:\PS> $image = (Get-AzureVMImage)[4].ImageName
```

```
C:\PS> New-AzureVMConfig -Name "MyVM1" -InstanceSize ExtraSmall -ImageName $image | Add-AzureProvisioningConfig -Windows -Password $adminPassword | Add-AzureDataDisk -CreateNew -DiskSizeInGB 50 -DiskLabel 'datadisk1' -LUN 0 | New-AzureVM -ServiceName "MySvc1" Reference: New-AzureVMConfig
```

URL: <http://msdn.microsoft.com/en-us/library/dn495159.aspx>

## QUESTION 9

Your company has two cloud services named CS01 and CS02. You create a virtual machine (VM) in CS02 named Accounts. You need to ensure that users in CS01 can access the Accounts VM by using port 8080. What should you do?

- A. Configure port redirection.
- B. Configure load balancing.
- C. Configure port forwarding.
- D. Create an end point.
- E. Create a firewall rule.

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

## Explanation

### Explanation/Reference:

All virtual machines that you create in Azure can automatically communicate using a private network channel with other virtual machines in the same cloud service or virtual network. However, other resources on the Internet or other virtual networks require endpoints to handle the inbound network traffic to the virtual machine.

Reference: How to Set Up Endpoints to a Virtual Machine

URL: <http://azure.microsoft.com/en-us/documentation/articles/virtual-machines-set-up-endpoints/>

### QUESTION 10

You administer a solution deployed to a virtual machine (VM) in Azure. The VM hosts a web service that is used by several applications. You are located in the US West region and have a worldwide user base. Developers in Asia report that they experience significant delays when they execute the services. You need to verify application performance from different locations.

Which type of monitoring should you configure?

- A. CPU
- B. Average Response Time
- C. Network Out
- D. Disk Read
- E. Endpoint

**Correct Answer: B**

**Section: (none)**

### Explanation

### Explanation/Reference:

Section: (none)

### Explanation

### Explanation/Reference:

Example:

Incorrect:

NOT Endpoint : Health Endpoint Monitoring Pattern is used for checking the health of the program:

Implement functional checks within an application that external tools can access through exposed endpoints at regular intervals. This pattern can help to verify that applications and services are performing correctly.

Reference: How to Monitor and Analyze Performance of the Windows Azure Storage Service

### QUESTION 11

You are the administrator for three Azure subscriptions named Dev, Test, and Prod. Your Azure Power Shell profile is configured with the Dev subscription as the default. You need to create a new virtual machine in the Test subscription by using the least administrative effort. Which Power Shell command should you use?

- ☒ A. `PS C:\> Select-AzureSubscription -SubscriptionName "Test"`
- ☐ B. `PS C:\> Set-AzureSubscription -SubscriptionName "Test" -CurrentStorageAccountName "teststorage"`  
`PS C:\> Select-AzureSubscription "Test"`
- ☐ C. `PS C:\> Set-AzureSubscription "Test" -CurrentStorageAccountName "teststorage"`
- ☐ D. `PS C:\> Select-AzureSubscription -SubscriptionName "Test" -Default`

- A. Option A
- B. Option B
- C. Option C
- D. Option D

**Correct Answer: A**

**Section: (none)**

### Explanation

### Explanation/Reference:

Section: (none)

Explanation

Explanation/Reference:

Example: Set the current subscription

This command makes "ContosoEngineering" the current subscription.

Windows PowerShell

C:\PS> Select-AzureSubscription -SubscriptionName ContosoEngineering -Current Reference: Select-AzureSubscription

URL: <http://msdn.microsoft.com/en-us/library/dn722499.aspx>

#### QUESTION 12

You administer an Azure solution that uses a virtual network named fabVNet. FabVNet has a single subnet named Subnet-1. You discover a high volume of network traffic among four virtual machines (VMs) that are part of Subnet-1. You need to isolate the network traffic among the four VMs. You want to achieve this goal with the least amount of downtime and impact on users.

What should you do?

- A. Create an availability set and associate the four VMs with that availability set.
- B. Create a new virtual network and move the VMs to the new network.
- C. Create a new subnet in the existing virtual network and move the four VMs to the new subnet.
- D. Create a site-to-site virtual network and move the four VMs to your datacenter.

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

Windows Azure provides routing across subnets within a single virtual network. Reference: Network Isolation Options for Machines in Windows Azure Virtual Networks Incorrect:

not B: A site-to-site VPN allows you to create a secure connection between your on-premises site and your virtual network.

Use a site-to-site connection when:

\* You want to create a branch office solution.

\* You want a connection between your on-premises location and your virtual network that's available without requiring additional client-side configurations.

#### QUESTION 13

You administer an Azure virtual network named fabrikamVNet.

You need to deploy a virtual machine (VM) and ensure that it is a member of the fabrikamVNet virtual network. What should you do?

- A. Run the New-AzureQuickVM Power Shell cmdlet.
- B. Run the New-AzureAffinityGroup Power Shell cmdlet.
- C. Update fabrikamVNet's existing Availability Set.
- D. Run the New-AzureVM Power Shell cmdlet.

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

The New-AzureQuickVM cmdlet sets the configuration for a new virtual machine and creates the virtual machine. You can create a new Azure service for the virtual machine by specifying either the Location or AffinityGroup parameters, or deploy the new virtual machine into an existing service.

Reference: New-AzureQuickVM

URL: <http://msdn.microsoft.com/en-us/library/dn495183.aspx>

#### QUESTION 14

You manage a large datacenter that has limited physical space. You plan to extend your datacenter to Azure. You need to create a connection that supports a multiprotocol label switching (MPLS) virtual private network. Which connection type should you use?

- A. Site-to-peer

- B. ExpressRoute.
- C. VNet-VNet
- D. Site-to-site

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

ExpressRoute provides even richer capabilities by allowing a dedicated MPLS connection to Azure. Reference:

ExpressRoute: An MPLS Connection to Microsoft Azure

#### **QUESTION 15**

You manage a cloud service named fabrikam Reports that is deployed in an Azure data center. You deploy a virtual machine (VM) named fabrikamSQL into a virtual network named fabrikamVNet.

FabrikamReports must communicate with fabrikamSQL.

You need to add fabrikam Reports to fabrikamVNet.

Which file should you modify?

- A. the network configuration file for fabrikamVNet
- B. the service configuration file (.cscfg) fabrikamSQL
- C. the service definition file (.csdef) for fabrikamSQL
- D. the service definition file (.csdef) for fabrikamReports
- E. the service configuration file (.cscfg) for fabrikamReports

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

Azure Service Definition Schema (.csdef File)

The service definition file defines the service model for an application. The file contains the definitions for the roles that are available to a cloud service, specifies the service endpoints, and establishes configuration settings for the service.

Incorrect:

not D, not E: The service configuration file (.cscfg) specifies the number of role instances to deploy for each role in the service, the values of any configuration settings, and the thumbprints for any certificates associated with a role.

Reference: Azure Service Definition Schema (.csdef File)

<http://msdn.microsoft.com/en-us/library/azure/ee758711.aspx>

#### **QUESTION 16**

You manage an application deployed to virtual machines (VMs) on an Azure virtual network named corpVnet1.

You plan to hire several remote employees who will need access to the application on corpVnet1. You need to ensure that new employees can access corpVnet1. You want to achieve this goal by using the most cost effective solution.

Which two actions should you perform? Each Answer presents part of the solution.

- A. Convert corpVnet1 to a regional virtual network.
- B. Create a gateway subnet.
- C. Enable point-to-site connectivity for corpVnet1.
- D. Enable point-to-point connectivity for corpVnet1.
- E. Enable site-to-site connectivity for corpVnet1.
- F. Create a VPN subnet.

**Correct Answer: BCF**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

On the Virtual Network Address Spaces page, specify the address range that you want to use for your virtual network. These are the dynamic IP addresses (DIPS) that will be assigned to the VMs and other role instances that you deploy to this virtual network.

Enter the following information, and then click the checkmark on the lower right to configure your network.

\* Address Space - including Starting IP and Address Count. Verify that the address spaces you specify don't overlap any of the address spaces that you have on your on-premises network.

\* Add subnet - including Starting IP and Address Count. Additional subnets are not required, but you may want to create a separate subnet for VMs that will have static DIPS. Or you might want to have your VMs in a subnet that is separate from your other role instances.

\* Add gateway subnet - Click to add the gateway subnet. The gateway subnet is used only for the virtual network gateway and is required for this configuration.

Reference: Configure a Site-to-Site VPN in the Management Portal URL: <http://msdn.microsoft.com/en-us/library/azure/dn133795.aspx>

#### QUESTION 17

Your company has a subscription to Azure. You plan to deploy 10 websites.

You have the following requirements:

Each website has at least 15 GB of storage.

All websites can use azurewebsite.net.

You need to deploy the 10 websites while minimizing costs.

Which web tier plan should you recommend?

- A. Free
- B. Small Business
- C. Standard
- D. Basic

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

Standard offers 50 GB of storage space, while Basic only gives 10 GB:

Reference: Websites Pricing Details

URL: <http://azure.microsoft.com/en-us/pricing/details/websites/>

#### QUESTION 18

You administer an Azure Web Site named contoso. The development team has implemented changes to the website that need to be validated.

You need to validate and deploy the changes with minimum downtime to users.

What should you do first?

- A. Back up the contoso website to a deployment slot.
- B. Create a deployment slot named contosoStaging.
- C. Create a new website named contosoStaging.
- D. Configure Remote Debugging on contoso.
- E. Create a new Linked Resource.

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

When you deploy your application to Azure Websites, you can deploy to a separate deployment slot instead of the default production slot, which are actually live sites with their own hostnames. Furthermore, you can swap the sites and site configurations between two deployment slots, including the production slot. Deploying your application to a deployment slot has the following benefits:

\* You can validate website changes in a staging deployment slot before swapping it with the production slot.

\* After a swap, the slot with previously staged site now has the previous production site. If the changes swapped into the production slot are not as you expected, you can perform the same swap immediately to get your "last known good site" back.

\* Deploying a site to a slot first and swapping it into production ensures that all instances of the slot are warmed up before being swapped into production. This eliminates downtime when you deploy your site. The traffic redirection is seamless, and no requests are dropped as a result of swap operations.

Reference: Staged Deployment on Microsoft Azure Websites

#### QUESTION 19

You manage an Azure Web Site that is running in Shared mode. You discover that the website is experiencing increased average response time during periods of heavy user activity. You need to update the website configuration to address the performance issues as they occur. What should you do?

- A. Set the website to Standard mode and configure automatic scaling based on CPU utilization.
- B. Configure automatic seating during specific dates.
- C. Modify the website instance size.
- D. Configure automatic scaling based on memory utilization.
- E. Set the website to Basic mode and configure automatic scaling based on CPU utilization.

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

Scaling to Standard Plan Mode

Selecting Standard expands the Capacity section to reveal the Instance Size and Instance Count options, which are also available in Basic mode. The Edit Scale Settings for Schedule and Scale by Metric options are available only in Standard mode.

Note:

\* For increased performance and throughput for your websites on Microsoft Azure, you can use the Azure Management Portal to scale your Web Hosting Plan mode from Free to Shared, Basic, or Standard.

\* There are 2 options for scaling:

Based on a Schedule

Based on CPU usage

Reference: Azure, How to Scale Websites

#### QUESTION 20

You manage an Azure Web Site named contosoweb. Logging is enabled for contosoweb. You need to view only errors from your log files in a continuous stream as they occur. Which Windows Power Shell command should you execute?

- A. Get-AzureWebSiteLog -Name contosoweb -OutBuffer Error
- B. Save-AzureWebSiteLog -Name contosoweb -Output Errors
- C. Get-AzureWebSiteLog -Name contosoweb -Tail Message Error
- D. Get-Azure WebSiteLog -Name contosoweb -Message Error

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

Example

This example starts log streaming and show error logs only.

Windows PowerShell

C:\PS>Get-AzureWebsiteLog -Tail -Message Error

Reference: Get-AzureWebsiteLog

URL: <http://msdn.microsoft.com/en-us/library/dn495187.aspx>

#### QUESTION 21

You administer an Azure Web Site named contoso. You create a job named Cleanlogs.cmd that will be executed manually, twice a week. You need to deploy the job. To which folder location should you deploy CleanLogs.cmd?

- A. ./App\_Data/jobs/triggered/clean Logs/Clean Logs.cmd
- B. ./App\_Code/jobs/triggered/cleanLogs/CleanLogs.cmd
- C. ./App\_Code/jobs/continuous/cleanLogs/CleanLogs.cmd
- D. ./App\_Data/jobs/continuous/cleanLogs/CleanLogs.cmd

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

A WebJob is stored under the following directory in your site:

site\wwwroot\App\_Data\jobs\[job type]\[job name]

Where {job type} can be either continuous for a job that is always running or triggered for a job that starts from an external trigger (on demand / scheduler).

Reference: How to deploy Azure WebJobs

URL: [http://blog.amitapple.com/post/74215124623/deploy-azure-webjobs/#.VDZam\\_mSx8E](http://blog.amitapple.com/post/74215124623/deploy-azure-webjobs/#.VDZam_mSx8E)

## QUESTION 22

Your company network includes an On-Premises Windows Active Directory (AD) that has a DNS domain named contoso.local and an email domain named contoso.com. You plan to migrate from On-Premises Exchange to Office 365. You configure DirSync and set all Azure Active Directory (Azure AD) usernames as %username% @contoso.onmicrosoft.com.

You need to ensure that each user is able to log on by using the email domain as the username. Which two actions should you perform? Each Answer presents part of the solution.

- A. Run the Set-MsolUserPrincipalName -UserPrincipalName %username%@contoso.onmicrosoft.com -NewUserPrincipalName %username%@contoso.com Power Shell cmdlet.
- B. Edit the ProxyAddress attribute on the On-Premises Windows AD user account.
- C. Update the On-Premises Windows AD user account UPN to match the email address
- D. Verify the Windows AD DNS domain in Azure AD domains.
- E. .Verify the email domain in Azure AD domains.

**Correct Answer: CD**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

\* There are two main traffic flows originating from the server hosting the Azure Active Directory Sync tool:

The Azure Active Directory Sync tool queries a domain controller on the on-premises network for changes to accounts and passwords.

The Azure Active Directory Sync tool sends the changes to accounts and passwords to the Azure AD instance of your Office 365 subscription. These changes are sent through the on-premises network's proxy server.

\* Verify that your virtual machine is joined to the domain by checking your internal DNS to make sure that an Address (A) record was added for the virtual machine with the correct IP address from Azure. For the Azure Active Directory Sync tool to gain access to Internet resources, you must configure the server that runs the Azure Active Directory Sync tool to use the on-premises network's proxy server. Reference: Deploy Office 365 Directory Synchronization in Microsoft Azure

## QUESTION 23

You develop a Windows Store application that has a web service backend. You plan to use the Azure Active Directory Authentication Library to authenticate users to Azure Active Directory (Azure AD) and access directory data on behalf of the user. You need to ensure that users can log in to the application by using their Azure AD credentials. Which two actions should you perform? Each Answer presents part of the solution.

- A. Configure directory integration.
- B. Configure an Access Control namespace.
- C. Create a native client application in Azure AD.
- D. Enable workspace join.
- E. Create a web application in Azure AD.

**Correct Answer: AE**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

B: An application that wants to outsource authentication to Azure AD must be registered in Azure AD, which registers and uniquely identifies the app in the directory.

C (not A): NativeClient-WindowsStore

A Windows Store application that calls a web API that is secured with Azure AD.

Reference: AzureADSamples/NativeClient-WindowsStore

Authentication Scenarios for Azure AD, Basics of Authentication in Azure AD [http://msdn.microsoft.com/en-us/library/azure/dn499820.aspx#BKMK\\_Auth](http://msdn.microsoft.com/en-us/library/azure/dn499820.aspx#BKMK_Auth) <https://github.com/AzureADSamples/NativeClient-WindowsStore>

#### QUESTION 24

Your company plans to migrate from On-Premises Exchange to Office 365. The existing directory has numerous service accounts in your On-Premises Windows Active Directory (AD), stored in separate AD Organizational Units (OU) for user accounts. You need to prevent the service accounts in Windows AD from syncing with Azure AD. What should you do?

- A. Create an OU filter in the Azure AD Module for Windows PowerShell.
- B. Configure directory partitions in miisclient.exe.
- C. Set Active Directory ACLs to deny the DirSync Windows AD service account MSOL\_AD\_SYNC access to the service account OUs.
- D. Create an OU filter in the Azure Management Portal.

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

One customer, who was looking for OU level filtering to import selected users from On-Premises active directory to Office365.

Configure OU level filtering for Office365 directory synchronization.

1. Logged in to your Domain controller

2. Created an OU (Organisational Unit) from your AD (Active Directory) DirSync"

a. In my case I named it "

DirSync OU.

3. Move all those users you want to sync, to that

4. From your DirSync Server navigate to <Drive>\Program Files\Microsoft Online Directory Sync \SYNCBUS \Synchronization Service\UIShell

miisclient.exe

5. Double click on

6. This opens a console something similar to the below screen capture

Identity Manager, click Management Agents, and then double-click SourceAD.

8. Click Configure Directory Partitions, and then click Containers, as shown in the below screen capture.

11. Click OK on the SourceAD Properties page.

12. Perform a full sync: on the Management Agent tab, right-click SourceAD, click Run, click Full Import Full Sync, and then click OK.

Etc.

Reference: Installing and Configure DirSync with OU level filtering for Office365 URL: <http://blogs.msdn.com/b/denotation/archive/2012/11/21/installing-and-configure-dirsync-with-ou-level-filtering-for-office365.aspx>

#### QUESTION 25

You manage an Azure Active Directory (AD) tenant

You plan to allow users to log in to a third-party application by using their Azure AD credentials. To access the application, users will be prompted for their existing third-party user names and passwords. You need to add the application to Azure AD. Which type of application should you add?

- A. Existing Single Sign-On with identity provisioning
- B. Password Single Sign-On with identity provisioning
- C. Existing Single Sign-On without identity provisioning
- D. Password Single Sign-On without identity provisioning

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:



\* Azure AD supports two different modes for single sign-on:

/ Federation using standard protocols

Configuring Federation-based single sign-on enables the users in your organization to be automatically signed in to a third-party SaaS application by Azure AD using the user account information from Azure AD.

/ Password-based single sign-on

\* Support for user provisioning

User provisioning enables automated user provisioning and deprovisioning of accounts in third-party SaaS applications from within the Azure Management Portal, using your Windows Server Active Directory or Azure AD identity information. When a user is given permissions in Azure AD for one of these applications, an account can be automatically created (provisioned) in the target SaaS application.

Reference: Application access enhancements for Azure AD

URL: <http://msdn.microsoft.com/en-us/library/azure/dn308588.aspx>

#### QUESTION 26

You plan to use Password Sync on your DirSync Server with Azure Active Directory (Azure AD) on your company network. You configure the DirSync server and complete an initial synchronization of the users. Several remote users are unable to log in to Office 365. You discover multiple event log entries for "Event ID 611 Password synchronization failed for domain." You need to resolve the password synchronization issue. Which two actions should you perform? Each Answer presents part of the solution.

- A. Add the DirSync service account to the Schema Admins domain group.
- B. Restart Azure AD Sync Service.
- C. Force a manual synchronization on the DirSync server.
- D. Run the Set-FullPasswordSync Power Shell cmdlet.

**Correct Answer:** BD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

On the computer that has the Azure Active Directory Sync tool installed, follow these steps:

1. Perform a full password sync for all users who are synced through directory synchronization. To do this, follow these steps: a. Open Windows PowerShell, type `Import-Module DirSync`, and then press Enter. b. After the Windows PowerShell session starts, run the following cmdlet:

`Set-FullPasswordSync`

Restart the Forefront Identity Manager Synchronization Service. To do this, follow these steps: . Click Start, click Run, type `services.msc`, and then click OK.

Forefront Identity Manager Synchronization Service, and

a. In the list of services, right-click

Restart.

then click

Reference: User passwords don't sync if your organization is using Azure Active Directory synchronization <http://support2.microsoft.com/kb/2915221>

#### QUESTION 27

You administer an Access Control Service namespace named `contosoACS` that is used by a web application. `ContosoACS` currently utilizes Microsoft and Yahoo accounts. Several users in your organization have Google accounts and would like to access the web application through `ContosoACS`. You need to allow users to access the application by using their Google accounts. What should you do?

- A. Register the application directly with Google.
- B. Edit the existing Microsoft Account identity provider and update the realm to include Google.
- C. Add a new Google identity provider.
- D. Add a new WS-Federation identity provider and configure the WS-Federation metadata to point to the Google sign-in URL.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

Configuring Google as an identity provider eliminates the need to create and manage authentication and identity

management mechanism. It helps the end user experience if there are familiar authentication procedures.  
Reference: How to: Configure Google as an Identity Provider URL: <http://msdn.microsoft.com/en-us/library/azure/gg185976.aspx>

#### QUESTION 28

You publish an application named MyApp to Azure Active Directory (Azure AD). You grant access to the web APIs through OAuth 2.0. MyApp is generating numerous user consent prompts. You need to reduce the amount of user consent prompts. What should you do?

- A. Enable Multi-resource refresh tokens.
- B. Enable WS-federation access tokens.
- C. Configure the Open Web Interface for .NET.
- D. Configure SAML 2.0.

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

When using the Authorization Code Grant Flow, you can configure the client to call multiple resources. Typically, this would require a call to the authorization endpoint for each target service. To avoid multiple calls and multiple user consent prompts, and reduce the number of refresh tokens the client needs to cache, Azure Active Directory (Azure AD) has implemented multi-resource refresh tokens. This feature allows you to use a single refresh token to request access tokens for multiple resources. Reference: Azure, OAuth 2.0, Refresh Tokens for Multiple Resources

#### QUESTION 29

Your company network includes users in multiple directories. You plan to publish a software-as-a-service application named SaaSApp1 to Azure Active Directory.

You need to ensure that all users can access SaaSApp1. What should you do?

- A. Configure the Federation Metadata URL
- B. Register the application as a web application.
- C. Configure the application as a multi-tenant.
- D. Register the application as a native client application.

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

\* When you get deeper into using Windows Azure Active Directory, you'll run into new terminology. For instance, is called "directory" is also referred to as a Windows Azure AD Tenant or simply as "tenant." This stems from the fact that WAAD () Windows Azure Active Directory is a shared service for many clients. In this service, every client gets its own separate space for which the client is the tenant. In the case of WAAD this space is a directory. This might be a little confusing, because you can create multiple directories, in WAAD terminology multiple tenants, even though you are a single client.

\* Multitenant Applications in Azure

A multitenant application is a shared resource that allows separate users, or "tenants," to view the application as though it was their own. A typical scenario that lends itself to a multitenant application is one in which all users of the application may wish to customize the user experience but otherwise have the same basic business requirements. Examples of large multitenant applications are Office 365, Outlook.com, and visualstudio.com.

Reference: Multitenant Applications in Azure

#### QUESTION 30

You are migrating a local virtual machine (VM) to an Azure VM. You upload the virtual hard disk (VHD) file to Azure Blob storage as a Block Blob.

You need to change the Block Blob to a page blob.

What should you do?

- A. Create a new empty page blob and use the Azure Blob Copy Power Shell cmdlet to copy the current data to the new blob.

- B. Update the type of the blob programmatically by using the Azure Storage .NET SDK.
- C. Delete the Block Blob and re-upload the VHD as a page blob.
- D. Update the metadata of the current blob and set the Blob-Type key to Page.

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

\* To copy the data files to Windows Azure Storage by using one of the following methods: AzCopy Tool, Put Blob (REST API) and Put Page (REST API), or Windows Azure Storage Client Library for .NET or a third-party storage explorer tool. Important: When using this new enhancement, always make sure that you create a page blob not a block blob.

\* Azure has two main files storage format:

Page blob : mainly used for vhd's (CloudPageBlob)

Block Blob : for other files (CloudBlockBlob)

Reference: Move your data files to Windows Azure Storage

<http://msdn.microsoft.com/en-us/library/dn466429.aspx>

### QUESTION 31

You administer a Microsoft Azure SQL Database data base in the US Central region named contosodb. Contosodb runs on a Standard tier within the SI performance level. You have multiple business-critical applications that use contosodb. You need to ensure that you can bring contosodb back online in the event of a natural disaster in the US Central region. You want to achieve this goal with the least amount of downtime. Which two actions should you perform? Each Answer presents part of the solution.

- A. Upgrade to S2 performance level.
- B. Use active geo-replication.
- C. Use automated Export.
- D. Upgrade to Premium tier.
- E. Use point in time restore.
- F. Downgrade to Basic tier.

**Correct Answer: BD**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

B: The Active Geo-Replication feature implements a mechanism to provide database redundancy within the same Microsoft Azure region or in different regions (geo-redundancy). One of the primary benefits of Active Geo-Replication is that it provides a database-level disaster recovery solution. Using Active Geo-Replication, you can configure a user database in the Premium service tier to replicate transactions to databases on different Microsoft Azure SQL Database servers within the same or different regions. Cross-region redundancy enables applications to recover from a permanent loss of a datacenter caused by natural disasters, catastrophic human errors, or malicious acts.

D: Active Geo-Replication is available for databases in the Premium service tier only.

Reference: Active Geo-Replication for Azure SQL Database

Question: 47

<http://msdn.microsoft.com/en-us/library/azure/dn741339.aspx>

### QUESTION 32

You manage two datacenters in different geographic regions and one branch office. You plan to implement a geo-redundant backup solution. You need to ensure that each datacenter is a cold site for the other. You create a recovery vault. What should you do next?

- A. Install the provider.
- B. Upload a certificate to the vault.
- C. Generate a vault key.
- D. Set all virtual machines to DHCP.
- E. Prepare System Center Virtual Machine Manager (SCVMM) servers.
- F. Create mappings between the virtual machine (VM) networks.

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

1. Within the Azure Portal screen, scroll down to Recovery Services (on the left menu), and click on "Create a New Vault" (this is where your VMs will be replicated to) which will bring up a Data Services / Recovery Services / Site Recovery Vault option, select Quick Create
2. For the name of the Vault, give it something you'd remember, in my case, I'll call it RandsVault, and I'll choose the Region West US since I'm in the Western United States, then click Create Vault
3. Once the Vault has been created, click on the Right Arrow next to the name of your vault. Under Setup Recovery, choose "Between an on-premise site and Microsoft Azure" so that you are telling the configuration settings that you are going to be replicating between your on-premise datacenter and Azure in the cloud.
4. You will now see a list of things you need to do which the first thing is to create a key exchange of certificates between Microsoft Azure and your VMM server. Reference: Leveraging Microsoft Azure as your disaster recovery/failover data center

### QUESTION 33

You manage a collection of large video files that is stored in an Azure Storage account. A user wants access to one of your video files within the next seven days. You need to allow the user access only to the video file, and then revoke access once the user no longer needs it.

What should you do?

- A. Create an access policy on the blob. Give the external user access by using the policy. Once the user is done with the file, delete the policy.
- B. Create an Ad-Hoc Shared Access Signature for the Blob resource. Set the Shared Access Signature to expire in seven days.
- C. Give the user the secondary key for the storage account. Once the user is done with the file, regenerate the secondary key.
- D. Create an access policy on the container. Give the external user a Shared Access Signature for the blob by using the policy. Once the user is done with the file, delete the policy.

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

By default, only the owner of the storage account may access blobs, tables, and queues within that account. If your service or application needs to make these resources available to other clients without sharing your access key, you have the following options for permitting access:

1. You can set a container's permissions to permit anonymous read access to the container and its blobs.

This is not allowed for tables or queues.

2. You can expose a resource via a shared access signature, which enables you to delegate restricted access to a container, blob, table or queue resource by specifying the interval for which the resources are available and the permissions that a client will have to it.

3. You can use a stored access policy to manage shared access signatures for a container or its blobs, for a queue, or for a table. The stored access policy gives you an additional measure of control over your shared access signatures and also provides a straightforward means to revoke them.

Reference: Manage Access to Azure Storage Resources

### QUESTION 34

You administer an Azure Storage account named contoso storage. The account has queue containers with logging enabled. You need to view all log files generated during the month of July 2014.

Which URL should you use to access the list?

- A. <http://contosostorage.blob.core.windows.net/Slogs?restype=container&comp=list&prefix=blob/2014/07>
- B. <http://contosostorage.queue.core.windows.net/Sfiles?restype=container&comp=list&prefix=queue/2014/07>
- C. <http://contosostorage.blob.core.windows.net/Sfiles?restype=container&comp=list&prefix=blob/2014/07>
- D. <http://contosostorage.queue.core.windows.net/Slogs?restype=container&comp=list&prefix=queue/2014/07>

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

All logs are stored in block blobs in a container named \$logs, which is automatically created when Storage Analytics is enabled for a storage account. The \$logs container is located in the blob namespace of the storage account, for example: [http://<accountname>.blob.core.windows.net/\\$logs](http://<accountname>.blob.core.windows.net/$logs). This container cannot be deleted once Storage Analytics has been enabled, though its contents can be deleted.

Note: Each log will be written in the following format:

<service-name>/YYYY/MM/DD/hhmm/<counter>.log

Reference: About Storage Analytics Logging

URL: <http://msdn.microsoft.com/library/azure/hh343262.aspx>

### QUESTION 35

Your company has two physical locations configured in a geo-clustered environment that includes:

System Center Virtual Machine Manager 2012 R2 System Center Data Protection Manager 2012 R2 SQL Server 2012

Windows Server 2012 R2 Hyper-V Over 100 virtual machines (VMs) in each physical location Your company has recently signed up for Azure.

You plan to leverage your current network environment to provide a backup solution for your VMs. You need to recommend a solution that ensures all VMs are redundant and deployable between locations. You also want the solution to minimize downtime in the event of an outage at either physical location.

Which solution should you recommend?

- A. Configure a backup vault in Azure and use Data Protection Manager to back up The Windows Servers.
- B. Use Data Protection Manager and back up the VMs in each location.
- C. Use Azure site recovery in an on-premises to Azure protection configuration.
- D. Use Azure site recovery in an on-premises to on-premises protection configuration.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

### QUESTION 36

You manage an application running on Azure Web Sites Standard tier. The application uses a substantial amount of large image files and is used by people around the world. Users from Europe report that the load time of the site is slow. You need to implement a solution by using Azure services. What should you do?

- A. Configure Azure blob storage with a custom domain.
- B. Configure Azure CDN to cache all responses from the application web endpoint.
- C. Configure Azure Web Site auto-scaling to increase instances at high load.
- D. Configure Azure CDN to cache site images and content stored in Azure blob storage.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

You can configure a custom domain for accessing blob data in your Azure storage account. The default endpoint for the Blob service is <https://<mystorageaccount>.blob.core.windows.net>. If you map a custom domain and subdomain such as [www.contoso.com](http://www.contoso.com) to the blob endpoint for your storage account, then your users can also access blob data in your storage account using that domain. Reference: Configure a custom domain name for blob data in an Azure storage account URL: <http://azure.microsoft.com/en-us/documentation/articles/storage-custom-domain-name/>

### QUESTION 37

You manage a set of virtual machines (VMs) deployed to the cloud service named fabrikamVM. You configure auto scaling according to the following parameters:

With an instance range of two to six instances To maintain CPU usage between 70 and 80 percent To scale up one instance at a time With a scale up wait time of 30 minutes To scale down one instance at a time With a scale down wait time of 30 minutes

You discover the following usage pattern of a specific application:

The application peaks very quickly, and the peak lasts for several hours. CPU usage stays above 90 percent for the first 1 to 1.5 hours after usage increases. After 1.5 hours, the CPU usage falls to about 75 percent until application usage begins to decline. You need to modify the auto scaling configuration to scale up faster when usage peaks. What are two possible ways to achieve this goal? Each Answer presents a complete solution.

- A. Increase the scale up wait time.
- B. Increase the maximum number of instances.
- C. Increase the number of scale up instances.
- D. Decrease the scale down wait time.
- E. Decrease the scale up wait time.

**Correct Answer:** CE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 38

Your company network has two physical locations configured in a geo-clustered environment. You create a Blob storage account in Azure that contains all the data associated with your company. You need to ensure that the data remains available in the event of a site outage.

Which storage option should you enable?

- A. Locally redundant storage
- B. Geo-redundant storage
- C. Zone-redundant storage
- D. Read-only geo-redundant storage

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

Introducing Read-only Access to Geo Redundant Storage (RA-GRS):

RA-GRS allows you to have higher read availability for your storage account by providing "read only" access to the data replicated to the secondary location. Once you enable this feature, the secondary location may be used to achieve higher availability in the event the data is not available in the primary region. This is an "opt-in" feature which requires the storage account be geo-replicated. Reference: Windows Azure Storage Redundancy Options and Read Access Geo Redundant Storage

#### QUESTION 39

You develop a set of Power Shell scripts that will run when you deploy new virtual machines (VMs). You need to ensure that the scripts are executed on new VMs. You want to achieve this goal by using the least amount of administrative effort.

What should you do?

- A. Create a new virtual hard disk (VHD) that contains the scripts.
- B. Create a SetupComplete.cmd batch file to call the scripts after the VM starts.
- C. Set the VMs to execute a custom script extension.
- D. Load the scripts to a common file share accessible by the VMs.
- E. Create a new GPO to execute the scripts as a logon script.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

## Explanation

### Explanation/Reference:

After you deploy a Virtual Machine you typically need to make some changes before it's ready to use. This is something you can do manually or you could use Remote PowerShell to automate the configuration of your VM after deployment for example.

But now there's a third alternative available allowing you customize your VM: the CustomScript extension. This CustomScript extension is executed by the VM Agent and it's very straightforward: you specify which files it needs to download from your storage account and which file it needs to execute. You can even specify arguments that need to be passed to the script. The only requirement is that you execute a .ps1 file.

Reference: Customizing your Microsoft Azure Virtual Machines with the new CustomScript extension

## QUESTION 40

You manage a virtual Windows Server 2012 web server that is hosted by an on-premises Windows Hyper-V server. You plan to use the virtual machine (VM) in Azure. You need to migrate the VM to Azure Storage to add it to your repository. Which Azure Power Shell cmdlet should you use?

- A. Add-AzureVhd
- B. New-AzureVM
- C. Add-AzureDisk
- D. Import-AzureVM
- E. Add-AzureWebRole

**Correct Answer: A**

**Section: (none)**

### Explanation

### Explanation/Reference:

Section: (none)

### Explanation

### Explanation/Reference:

Add-AzureVhd

Uploads a virtual hard disk (in .vhd file format) from an on-premises virtual machine to a blob in a cloud storage account in Azure.

The Add-AzureVhd cmdlet allows you to upload on-premises virtual hard disks (in .vhd file format) to a blob storage account as fixed virtual hard disks. You can configure the number of uploader threads that will be used or overwrite an existing blob in the specified destination URI. Also supported is the ability to upload a patched version of an on-premises .vhd file: When a base virtual hard disk has already been uploaded, you can upload differencing disks that use the base image as the parent. Shared access signature (SAS URI) is supported as well.

Reference: Add-AzureVhd

URL: <http://msdn.microsoft.com/en-us/library/dn495173.aspx>

## QUESTION 41

You administer a set of virtual machine (VM) guests hosted in Hyper-V on Windows Server 2012 R2. The virtual machines run the following operating systems:

Windows Server 2008 Windows Server 2008 R2 Linux (openSUSE 13.1) All guests currently are provisioned with one or more network interfaces with static bindings and VHDX disks. You need to move the VMs to Azure Virtual Machines hosted in an Azure subscription. Which three actions should you perform? Each Answer presents part of the solution.

- A. Install the WALinuxAgent on Linux servers.
- B. Ensure that all servers can acquire an IP by means of Dynamic Host Configuration Protocol (DHCP).
- C. Upgrade all Windows VMs to Windows Server 2008 R2 or higher.
- D. Sysprep all Windows servers.
- E. Convert the existing virtual disks to the virtual hard disk (VHD) format.

**Correct Answer: ACD**

**Section: (none)**

### Explanation

### Explanation/Reference:

Section: (none)

### Explanation

### Explanation/Reference:

\* A: Azure Linux Agent

This agent is installed on the Linux VM and is responsible to communicate with the Azure Fabric Controller.

\* UPLOADING A VIRTUAL MACHINE TO WINDOWS AZURE

Assumption: A Windows Server (2008 R2 or 2012) is created and running as a virtual machine in Hyper-V.

(C)

Log onto the Windows Server hosted in Hyper-V you'd like to upload to Windows Azure and open a command prompt (I'm using Windows Server 2012 R2).  
Navigate to c:\Windows\System32\Sysprep  
Type in sysprep.exe and select enter: (D)

#### QUESTION 42

You administer a virtual machine (VM) that is deployed to Azure. You configure a rule to generate an alert when the average availability of a web service on your VM drops below 95 percent for 15 minutes. The development team schedules a one-hour maintenance period.

You have the following requirements:

No alerts are created during the maintenance period. Alerts can be restored when the maintenance is complete. You want to achieve this goal by using the least amount of administrative effort.

What should you do from the Management Portal?

- A. Select and disable the rule from the Dashboard page of the virtual machine.
- B. Select and delete the rule from the Configure page of the virtual machine.
- C. Select and disable the rule from the Monitor page of the virtual machine.
- D. Select and disable the rule on the Configure page of the virtual machine.

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

You can configure virtual machine alert rules on:

/ Monitoring metrics from the virtual machine host operating system / Web endpoint status metrics

Reference: Understanding Monitoring Alerts and Notifications in Azure

#### QUESTION 43

You manage an Azure subscription with virtual machines (VMs) that are running in Standard mode. You need to reduce the storage costs associated with the VMs.

What should you do?

- A. Locate and remove orphaned disks.
- B. Add the VMs to an affinity group.
- C. Change VMs to the Basic tier.
- D. Delete the VHD container.

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

Standard offers 50 GB of storage space, while Basic only gives 10 GB but it will save costs.

Reference: Websites Pricing Details

URL: <http://azure.microsoft.com/en-us/pricing/details/websites/>

#### QUESTION 44

You manage several Azure virtual machines (VMs). You create a custom image to be used by employees on the development team.

You need to ensure that the custom image is available when you deploy new servers.

Which Azure Power Shell cmdlet should you use?

- A. Update-AzureVMImage
- B. Add-AzureVMImage
- C. Update-AzureDisk
- D. Add-AzureDataDisk
- E. Add-AzureVhd

**Correct Answer: B**

**Section: (none)**



## Explanation

### Explanation/Reference:

Section: (none)

Explanation

Explanation/Reference:

The Add-AzureVMImage cmdlet adds an operating system image to the image repository. The image should be a generalized operating system image, using either Sysprep for Windows or, for Linux, using the appropriate tool for the distribution.

Example

This example adds an operating system image to the repository.

Windows PowerShell

```
C:\PS>Add-AzureVMImage -ImageName imageName -MediaLocation http://yourstorageaccount.blob.core.azure.com/container/sampleImage.vhd -Label Reference: Add-AzureVMImage
```

### QUESTION 45

You administer a cloud service. You plan to host two web applications named contosoWeb and contosoWebSupport. You need to ensure that you can host both applications and qualify for the Azure Service Level Agreement. You want to achieve this goal while minimizing costs. How should you host both applications?

- A. in different web roles with two instances in each web role
- B. in the same web role with two instances
- C. in different web roles with one instance in each web role
- D. in the same web role with one instance

**Correct Answer: B**

**Section: (none)**

**Explanation**

### Explanation/Reference:

Section: (none)

Explanation

Explanation/Reference:

A cloud service must have at least two instances of every role to qualify for the Azure Service Level Agreement, which guarantees external connectivity to your Internet-facing roles at least 99.95 percent of the time.

Reference: Azure, What is a cloud service?

### QUESTION 46

You manage a cloud service that utilizes an Azure Service Bus queue. You need to ensure that messages that are never consumed are retained. What should you do?

- A. Check the move to the dead-letter subqueue option for Expired Messages in the Azure Portal.
- B. From the Azure Management Portal, create a new queue and name it Dead-Letter.
- C. Execute the Set-AzureServiceBus PowerShell cmdlet.
- D. Execute the New-AzureSchedulerStorageQueueJob PowerShell cmdlet.

**Correct Answer: A**

**Section: (none)**

**Explanation**

### Explanation/Reference:

Section: (none)

Explanation

Explanation/Reference:

The EnableDeadLetteringOnMessageExpiration property allows to enable\disable the dead-lettering on message expiration.

Reference: Azure, Managing and Testing Topics, Queues and Relay Services with the Service Bus Explorer Tool

### QUESTION 47

You manage a web application published to Azure Cloud Services. Your service level agreement (SLA) requires that you are notified in the event of poor performance from customer locations in the US, Asia, and Europe. You need to configure the Azure Management Portal to notify you when the SLA performance targets are not met.

What should you do?

- A. Add an endpoint monitor and alert rule to the Notification Hub.
- B. Create a Notification Hub alert with response time metrics.
- C. Create an alert rule to monitor web endpoints.
- D. Configure the performance counter on the cloud service.

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

An alert rule enables you to monitor an available metric within a supported Azure service. When the value of a specified metric violates the threshold assigned for a rule, the alert rule becomes active and registers an alert. When you create an alert rule, you can select options to send an email notification to the service administrator and co-administrators, or another administrator, when the rule becomes active, and when an alert condition is resolved.

Reference: Understanding Monitoring Alerts and Notifications in Azure URL: <http://msdn.microsoft.com/en-us/library/azure/dn306639.aspx>

#### **QUESTION 48**

You manage a cloud service that hosts a customer-facing application. The application allows users to upload images and create collages. The cloud service is running in two medium instances and utilizes Azure Queue storage for image processing. The storage account is configured to be locally redundant. The sales department plans to send a newsletter to potential clients. As a result, you expect a significant increase in global traffic.

You need to recommend a solution that meets the following requirements:

Configure the cloud service to ensure the application is responsive to the traffic increase.

Minimize hosting and administration costs.

What are two possible ways to achieve this goal? Each Answer presents a complete solution.

- A. Configure the cloud service to run in two Large instances.
- B. Configure the cloud service to auto-scale to three instances when processor utilization is above 80%.
- C. Configure the storage account to be geo-redundant
- D. Deploy a new cloud service in a separate data center. Use Azure Traffic Manager to load balance traffic between the cloud services.
- E. Configure the cloud service to auto-scale when the queue exceeds 1000 entries per machine.

**Correct Answer: BE**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 49**

You manage a cloud service on two instances. The service name is Service1 and the role name is ServiceRole1.

Service1 has performance issues during heavy traffic periods. You need to increase the existing deployment of Service1 to three instances.

Which Power Shell cmdlet should you use?

- A. PS C:\>Set-AzureRole -ServiceName "Service1" -Slot "Production" -RoleName "ServiceRole1" - Count
- B. PS C:\>Set-AzureService -ServiceName "Service1" -Label "ServiceRole1" -Description "Instance count=3"
- C. PS C:\>Add-AzureWebRole -Name 'ServiceRole1' -Instances 3
- D. PS C:\> \$instancecount = New-Object Hashtable\$settings['INSTANCECOUNT=3'] PS C:\> Set- AzureWebsite - AppSettings \$instancecount ServiceRole1

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

The Set-AzureRole cmdlet sets the number of instances of a specified role to run in an Azure deployment Example This command sets the "MyTestRole3" role running in production on the "MySvc1" service to three instances.

Windows PowerShell

C:\PS>Set-AzureRole ServiceName "MySvc1" Slot "Production" RoleName "MyTestRole3" Count 3 Reference: Set-AzureRole

### QUESTION 50

Your company network includes two branch offices. Users at the company access internal virtual machines (VMs). You want to ensure secure communications between the branch offices and the internal VMs and network. You need to create a site-to-site VPN connection. What are two possible ways to achieve this goal? Each Answer presents a complete solution.

- A. a private IPv4 IP address and a compatible VPN device
- B. a private IPv4 IP address and a RRAS running on Windows Server 2012
- C. a public-facing IPv4 IP address and a compatible VPN device
- D. a public-facing IPv4 IP address and a RRAS running on Windows Server 2012

**Correct Answer:** CD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

C (not A): VPN Device IP Address - This is public facing IPv4 address of your on-premises VPN device that you'll use to connect to Azure. The VPN device cannot be located behind a NAT. D (Not B): At least one or preferably two publicly visible IP addresses: One of the IP addresses is used on the Windows Server 2012 machine that acts as the VPN device by using RRAS. The other optional IP address is to be used as the Default gateway for out-bound traffic from the on-premises network. If the second IP address is not available, it is possible to configure network address translation (NAT) on the RRAS machine itself, to be discussed in the following sections. It is important to note that the IP addresses must be public. They cannot be behind NAT and/or a firewall. Reference: Configure a Site-to-Site VPN in the Management Portal Site-to-Site VPN in Azure Virtual Network using Windows Server 2012 Routing and Remote Access Service (RRAS)

### QUESTION 51

You manage an Azure virtual network that hosts 15 virtual machines (VMs) on a single subnet which is used for testing a line of business (LOB) application. The application is deployed to a VM named TestWebServiceVM. You need to ensure that TestWebServiceVM always starts by using the same IP address. You need to achieve this goal by using the least amount of administrative effort. What should you do?

- A. Use the Management Portal to configure TestWebServiceVM.
- B. Use RDP to configure TestWebServiceVM.
- C. Run the Set-AzureStaticVNetIP PowerShell cmdlet.
- D. Run the Get-AzureReservedIP PowerShell cmdlet.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

Specify a static internal IP for a previously created VM

If you want to set a static IP address for a VM that you previously created, you can do so by using the following cmdlets. If you already set an IP address for the VM and you want to change it to a different IP address, you'll need to remove the existing static IP address before running these cmdlets. See the instructions below to remove a static IP.

For this procedure, you'll use the Update-AzureVM cmdlet. The Update-AzureVM cmdlet restarts the VM as part of the update process. The DIP that you specify will be assigned after the VM restarts. In this example, we set the IP address for VM2, which is located in cloud service StaticDemo. Get-AzureVM -ServiceName StaticDemo -Name VM2 | Set-AzureStaticVNetIP -IPAddress 192.168.4.7 | Update-AzureVM

Reference: Configure a Static Internal IP Address (DIP) for a VM URL: <http://msdn.microsoft.com/en-us/library/azure/dn630228.aspx>

### QUESTION 52

Your network environment includes remote employees. You need to create a secure connection for the remote employees who require access to your Azure virtual network. What should you do?

- A. Configure a site-to-site VPN.
- B. Configure a point-to-site VPN.
- C. Configure an ExpressRoute.

D. Deploy Windows Server 2012 RRAS.

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

Azure Virtual Network easily extends your on-premises network through site-to-site VPN, much the way you'd set up and connect to a remote branch office. You control the network topology, including configuration of DNS and IP address ranges, and manage it just like your on-premises infrastructure.

Reference: Azure, Extend your datacenter into the cloud

#### QUESTION 53

You manage a cloud service that has a web role named fabWeb. You create a virtual network named fabVNet that has two subnets defined as Web and Apps. You need to be able to deploy fabWeb into the Web subnet. What should you do?

- A. Run the Set-AzureVNetConfig PowerShell cmdlet.
- B. Run the Set-AzureSubnet PowerShell cmdlet.
- C. Modify the service configuration (cscfg) for the fabWeb web role.
- D. Modify the service definition (csdef) for the cloud service.
- E. Modify the network configuration file.

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

Azure Service Definition Schema (.csdef File)

The service definition file defines the service model for an application. The file contains the definitions for the roles that are available to a cloud service, specifies the service endpoints, and establishes configuration settings for the service.

#### QUESTION 54

Your company has recently signed up for Azure.

You plan to register a Data Protection Manager (DPM) server with the Azure Backup service. You need to recommend a method for registering the DPM server with the Azure Backup vault. What are two possible ways to achieve this goal? Each Answer presents a complete solution.

- A. Import a self-signed certificate created using the makecert tool.
- B. Import a self-signed certificate created using the createcert tool.
- C. Import an X.509 v3 certificate with valid clientauthentication EKU.
- D. Import an X.509 v3 certificate with valid serverauthentication EKU.

**Correct Answer: AC**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

A: You can create a self-signed certificate using the makecert tool, or use any valid SSL certificate issued by a Certification Authority (CA) trusted by Microsoft, whose root certificates are distributed via the Microsoft Root Certificate Program.

C: The certificate must have a valid ClientAuthentication EKU.

Reference: Prerequisites for Azure Backup

URL: <http://technet.microsoft.com/en-us/library/dn296608.aspx>

#### QUESTION 55

You administer an Azure Storage account named contosostorage. The account has a blob container to store image files.

A user reports being unable to access an image file. You need to ensure that anonymous users can successfully read image files from the container.

Which log entry should you use to verify access?

☐ A.

```
1.0;2014-06-19T01:33:54.0926521Z;GetBlob;AnonymousSuccess;201;197;54;anonymous;contosostorage;contosostorage;blob;"https://contosostorage.blob.core.windows.net/images/00001.jpg";"/contosostorage/images/00001.jpg";a200be85-1c98-4dd9-918e-f13d8c0538e0;0;192.100.0.102:4362;2014-02-14;460;23;225;0;23;"DrPO6z1f00SCsomhaf+J/A=";"DrPO6z1f00SCsomhaf+J/A=";"&quot;0x8D15975AA456EA4&quot;";Thursday, 19-Jun-14 01:33:53 GMT;;"WA-Storage/4.0.1 (.NET CLR 4.0.30319.34014;Win32NT 6.3.9600.0)";;"1fe6814a-e4cb-4195-a3cf-837dc7120f68"
```

☐ B.

```
1.0;2014-06-19T01:33:54.0926521Z;GetBlobProperties;AnonymousSuccess;201;197;54;anonymous;contosostorage;contosostorage;blob;"https://contosostorage.blob.core.windows.net/images/00001.jpg";"/contosostorage/images/00001.jpg";a200be85-1c98-4dd9-918e-f13d8c0538e0;0;192.100.0.102:4362;2014-02-14;460;23;225;0;23;"DrPO6z1f00SCsomhaf+J/A=";"DrPO6z1f00SCsomhaf+J/A=";"&quot;0x8D15975AA456EA4&quot;";Thursday, 19-Jun-14 01:33:53 GMT;;"WA-Storage/4.0.1 (.NET CLR 4.0.30319.34014;Win32NT 6.3.9600.0)";;"1fe6814a-e4cb-4195-a3cf-837dc7120f68"
```

☐ C.

```
1.0;2014-06-19T01:33:54.0926521Z;GetBlob;Success;201;197;54;authenticated;contosostorage;contosostorage;blob;"https://contosostorage.blob.core.windows.net/images/00001.jpg";"/contosostorage/images/00001.jpg";a200be85-1c98-4dd9-918e-f13d8c0538e0;0;192.100.0.102:4362;2014-02-14;460;23;225;0;23;"DrPO6z1f00SCsomhaf+J/A=";"DrPO6z1f00SCsomhaf+J/A=";"&quot;0x8D15975AA456EA4&quot;";Thursday, 19-Jun-14 01:33:53 GMT;;"WA-Storage/4.0.1 (.NET CLR 4.0.30319.34014;Win32NT 6.3.9600.0)";;"1fe6814a-e4cb-4195-a3cf-837dc7120f68"
```

☐ D.

```
1.0;2014-06-19T01:33:54.0926521Z;GetBlobProperties;Success;201;197;54;authenticated;contosostorage;contosostorage;blob;"https://contosostorage.blob.core.windows.net/images/00001.jpg";"/contosostorage/images/00001.jpg";a200be85-1c98-4dd9-918e-f13d8c0538e0;0;192.100.0.102:4362;2014-02-14;460;23;225;0;23;"DrPO6z1f00SCsomhaf+J/A=";"DrPO6z1f00SCsomhaf+J/A=";"&quot;0x8D15975AA456EA4&quot;";Thursday, 19-Jun-14 01:33:53 GMT;;"WA-Storage/4.0.1 (.NET CLR 4.0.30319.34014;Win32NT 6.3.9600.0)";;"1fe6814a-e4cb-4195-a3cf-837dc7120f68"
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

Check for GetBlob and for AnonymousSuccess.

Example: Get Blob AnonymousSuccess:

1.0;2011-07-

28T18:52:40.9241789Z;GetBlob;AnonymousSuccess;200;18;10;anonymous;;sally;blob;"http:// sally.blob.core.windows.net/thumbnails/lake.jpg?timeout=30000";"/sally/thumbnails/lake.jpg";a84aa705- 8a85-48c5-b064-

b43bd22979c3;0;123.100.2.10;2009-09-19;252;0;265;100;0;;;;"0x8CE1B6EA95033D5";Thursday, 28-Jul-11 18:52:40 GMT;;;;"7/28/2011 6:52:40 PM ba98eb12-700b-4d53-9230-33a3330571fc"

Incorrect:

Not C: Check for AnonymousSuccess not Access.

Not B, not D: Check for GetBlob not GetBlobProperties

Reference: Windows Azure Storage Logging: Using Logs to Track Storage Requests URL: <http://blogs.msdn.com/b/windowsazurestorage/archive/2011/08/03/windows-azure-storage-logging-using-logs-to-track-storage-requests.aspx>

#### QUESTION 56

You administer an Azure Storage account with a blob container. You enable Storage account logging for read, write and delete requests. You need to reduce the costs associated with storing the logs. What should you do?

- A. Execute Delete Blob requests over https.
- B. Create an export job for your container.
- C. Set up a retention policy.
- D. Execute Delete Blob requests over http.

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

To ease the management of your logs, we have provided the functionality of retention policy which will automatically cleanup 'old' logs without you being charged for the cleanup. It is recommended that you set a retention policy for logs such that your analytics data will be within the 20TB limit allowed for analytics data (logs and metrics combined).

Reference: Windows Azure Storage Logging: Using Logs to Track Storage Requests, How do I cleanup my logs?

URL: <http://blogs.msdn.com/b/windowsazurestorage/archive/2011/08/03/windows-azure-storage-logging-using-logs-to-track-storage-requests.aspx>

#### QUESTION 57

Your company is launching a public website that allows users to stream videos. You upload multiple video files to an Azure storage container. You need to give anonymous users read access to all of the video files in the storage container. What should you do?

- A. Edit each blob's metadata and set the access policy to Public Blob.
- B. Edit the container metadata and set the access policy to Public Container.
- C. Move the files into a container sub-directory and set the directory access level to Public Blob.
- D. Edit the container metadata and set the access policy to Public Blob.

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

By default, the container is private and can be accessed only by the account owner. To allow public read access to the blobs in the container, but not the container properties and metadata, use the "Public Blob" option. To allow full public read access for the container and blobs, use the "Public Container" option.

#### QUESTION 58

Your company plans to migrate from On-Premises Exchange to Exchange Online in Office 365. You plan to integrate your existing Active Directory Domain Services (AD DS) infrastructure with Azure AD. You need to ensure that users can log in by using their existing AD DS accounts and passwords. You need to achieve this goal by using minimal additional systems. Which two actions should you perform? Each answer presents part of the solution.

- A. Configure Password Sync.
- B. Set up a DirSync Server.
- C. Set up an Active Directory Federation Services Server.
- D. Set up an Active Directory Federation Services Proxy Server.

**Correct Answer: AB**

**Section: (none)**

## Explanation

### Explanation/Reference:

Section: (none)

Explanation

Explanation/Reference:

Directory Sync with Password Sync Scenario'

Applies To: Azure, Office 365, Windows Intune

Password sync is an extension to the Directory Sync Scenario. With directory sync, you can manage the entire lifecycle of your cloud user and group accounts using your on-premise Active Directory management tools.

When password sync is enabled on your directory sync computer, your users will be able to sign into Microsoft cloud services, such as Office 365, Dynamics CRM, and Windows Intune, using the same password as they use when logging into your on-premises network. When your users change their passwords in your corporate network, those changes are synchronized to the cloud.

Reference: Directory Sync with Password Sync Scenario'

URL: <http://technet.microsoft.com/en-us/library/dn441214.aspx>

### QUESTION 59

You manage a software-as-a-service application named SaaSApp1 that provides user management features in a multi-directory environment. You plan to offer SaaSApp1 to other organizations that use Azure Active Directory. You need to ensure that SaaSApp1 can access directory objects. What should you do?

- A. Configure the Federation Metadata URL
- B. Register SaaSApp1 as a native client application.
- C. Register SaaSApp1 as a web application.
- D. Configure the Graph API.

**Correct Answer: D**

**Section: (none)**

**Explanation**

### Explanation/Reference:

Section: (none)

Explanation

Explanation/Reference:

The Azure Active Directory Graph API provides programmatic access to Azure AD through REST API endpoints.

Applications can use the Graph API to perform create, read, update, and delete (CRUD) operations on directory data and objects. For example, the Graph API supports the following common operations for a user object:

/ Create a new user in a directory

/ Get a user's detailed properties, such as their groups

/ Update a user's properties, such as their location and phone number, or change their password / Check a user's group membership for role-based access

/ Disable a user's account or delete it entirely

Reference: Azure AD Graph API

URL: <http://msdn.microsoft.com/en-us/library/azure/hh974476.aspx>

### QUESTION 60

You administer an Azure Active Directory (Azure AD) tenant where Box is configured for:

Application Access

Password Single Sign-on

An employee moves to an organizational unit that does not require access to Box through the Access Panel.

You need to remove only Box from the list of applications only for this user.

What should you do?

- A. Delete the user from the Azure AD tenant.
- B. Delete the Box Application definition from the Azure AD tenant.
- C. From the Management Portal, remove the user's assignment to the application.
- D. Disable the user's account in Windows AD.

**Correct Answer: C**

**Section: (none)**

**Explanation**

### Explanation/Reference:

Section: (none)

Explanation

Explanation/Reference:

Note: Use Azure AD to manage user access, provision user accounts, and enable single sign-on with Box.

Requires an existing Box subscription.

#### QUESTION 61

You administer an Azure Active Directory (Azure AD) tenant that has a SharePoint web application named TeamSite1. TeamSite1 accesses your Azure AD tenant for user information. The application access key for TeamSite1 has been compromised. You need to ensure that users can continue to use TeamSite1 and that the compromised key does not allow access to the data in your Azure AD tenant. Which two actions should you perform? Each Answer presents part of the solution.

- A. Generate a new application definition for TeamSite1.
- B. Delete the application definition for TeamSite1.
- C. Generate a new application key for TeamSite1.
- D. Update the existing application key.
- E. Remove the compromised key from the application definition for TeamSite1.

**Correct Answer:** CE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

One of the security aspects of Windows Azure storage is that all access is protected by access keys. It is possible to change the access keys (e.g. if the keys become compromised), and if changed, we'd need to update the application to have the new key.

#### QUESTION 62

You administer a DirSync server configured with Azure Active Directory (Azure AD). You need to provision a user in Azure AD without waiting for the default DirSync synchronization interval. What are two possible ways to achieve this goal? Each Answer presents a complete solution.

- A. Run the Azure AD Sync tool Configuration Wizard.
- B. Restart the DirSync server.
- C. Run the Enable-SyncShare PowerShell cmdlet.
- D. Replicate the Directory in Active Directory Sites and Services.
- E. Run the Start-OnlineCoexistenceSync PowerShell cmdlet.

**Correct Answer:** AE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

If you don't want to wait for the recurring synchronizations that occur every three hours, you can force directory synchronization at any time.

1° Force directory synchronization using Windows PowerShell

2° Azure Active Directory Sync Services (AAD Sync)

In September 2014 the Microsoft Azure AD Sync tool was released. This changed how manual sync requests are issued.

To perform a manual update we now use the DirectorySyncClientCmd.exe tool. The Delta and Initial parameters are added to the command to specify the relevant task.

This tool is located in:

C:\Program Files\Microsoft Azure AD Sync\Bin

You can use the directory synchronization Windows PowerShell cmdlet to force synchronization. The cmdlet is installed when you install the Directory Sync tool. On the computer that is running the Directory Sync tool, start PowerShell, type Import-Module DirSync, and then press ENTER.

Type Start-OnlineCoexistenceSync, and then press ENTER.

#### QUESTION 63

You administer an Azure Web Site named contosoweb that is used to sell various products. Contosoweb experiences heavy traffic during weekends. You need to analyze the response time of the product catalog page during peak times, from different locations.

What should you do?

- A. Turn on Detailed Error Messages.
- B. Configure endpoint monitoring.



- C. Turn on Failed Request Tracing.
- D. Add the Requests metric.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

Endpoint monitoring configures web tests from geo-distributed locations that test response time and uptime of web URLs. The test performs an HTTP get operation on the web URL to determine the response time and uptime from each location. Each configured location runs a test every five minutes. After you configure endpoint monitoring, you can drill down into the individual endpoints to view details response time and uptime status over the monitoring interval from each of the test location

#### **QUESTION 64**

Your company has a subscription to Azure.

You configure your contoso.com domain to use a private Certificate Authority. You deploy a web site named MyApp by using the Shared (Preview) web hosting plan. You need to ensure that clients are able to access the MyApp website by using https. What should you do?

- A. Back up the Site and import into a new website.
- B. Use the internal Certificate Authority and ensure that clients download the certificate chain.
- C. Add custom domain SSL support to your current web hosting plan.
- D. Change the web hosting plan to Standard.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

Enabling HTTPS for a custom domain is only available for the Standard web hosting plan mode of Azure websites.  
Exam D