AD on IAAS Introduction

This guide provides an introduction to some basic Azure VM concepts. In this demonstration you will show how to

* Set DNS settings for a machine
* Deploy a machine to the same subnet
* Ensure that the DNS settings on VNET are the same as the DC to allow it to join the domain
* Join the machine to the domain and log on as a new domain account

Contents

[Pre-Requisites 1](#_Toc427562301)

[Setup 1](#_Toc427562302)

[Demo Steps 2](#_Toc427562303)

[Clean Up 4](#_Toc427562304)

## Pre-Requisites

This section lists the pre-requisites required for this demonstration.

* An Azure subscription
* Visual Studio 2015
  + Make sure you have the Azure Tools installed.
  + Install the PowerShell tools for Visual Studio from [here](https://visualstudiogallery.msdn.microsoft.com/c9eb3ba8-0c59-4944-9a62-6eee37294597).

## Setup

Estimated time: 15 minutes

|  |  |
| --- | --- |
| 1. Open Windows Explorer. 2. Copy the folder **.\Demos\2C\_AAD\_Connect\_Custom\_Settings** to **c:\azurecoe\demos\identity**. 3. Open Visual Studio. 4. Create a **v1 storage account (classic)** in your Azure subscription that you can use for deployment purposes. It won’t be used by the resources in the environment. This is just for deploying artifacts to during deployment so Locally Redundant is fine. |  |
| 1. Open the solution at **c:\azurecoe\demos\identity\AAD\_Connect\_Custom\_Settings\AAD\_Connect-Demo-Solution.sln**. 2. Right-click the project in Solution Explorer and select **Deploy > New Deployment**. 3. Select the option to **Create a new resource group** in the **Resource group** field. 4. Set the **Artifacts storage account** to the storage account you created in step 2 that is used for deployment purposes. |  |
| 1. Click **Deploy**. 2. In the Edit Parameters dialog, set the adVNETLocation to the location closest to you. Leave the <auto-generated> fields alone. 3. Click **Save**. |  |
| 1. Wait about 20 minutes for the deployment to finish. |  |
| 1. Open the Azure portal. 2. Go to the **adVNET** blade and then to the **DNS Servers** blade. 3. Configure DNS Servers in the adVNET resource.    1. In the AADconnect-Demo-Solution resource group blade, click on **adVNET** in the Summary part.    2. In the adVNET blade, click on **Settings** in the toolbar.    3. In the Settings blade, click on **DNS Servers**.    4. In the DNS Servers blade:       1. Set **DNS servers** to **Custom DNS**.       2. Set **Primary DNS** sever to **10.0.0.4**.       3. Set **Secondary DNS** server to **10.0.1.4**.       4. Click the **Save** button in the toolbar. |  |
| 1. **Restart** the **adVM1** and **adVM2** virtual machines.    1. In the virtual machine blade, click the Restart button in the toolbar.   Wait for **adVM1** and **adVM2** to restart before continuing. |  |
| 1. Navigate to compute and create a new Windows Virtual Machine |  |
| 1. Enter a name for the machine and enter a local user name. Enter a password |  |
| 1. IMPORTANT: Select the same resource group as the domain controller created above |  |
| 1. Choose a virtual machine size. Select view all to see all of the configurations. |  |
| 1. Point out that different configurations have different disk, cores, IOPS, costs and load balancing configuration choices |  |
| 1. Select a D Series machine that allows premium disks |  |
| 1. Create a new storage account and make sure you have selected SSD/Premium |  |
| 1. Select the same VNET as the AD Domain controllers |  |
| 1. Click ok to create. This takes around 10 mins to complete |  |
| **The demo will continue from here.** |  |

## Demo Steps

Estimated time: 8 mins

|  |  |
| --- | --- |
| 1. Open the new Azure Portal |  |
| 1. Navigate to compute and create a new Windows Virtual Machine |  |
| 1. Enter a name for the machine and enter a local user name. Enter a password |  |
| 1. IMPORTANT: Select the same resource group as the domain controller created above |  |
| 1. Choose a virtual machine size. Select view all to see all of the configurations. |  |
| 1. Point out that different configurations have different disk, cores, IOPS, costs and load balancing configuration choices |  |
| 1. Select a D Series machine that allows premium disks |  |
| 1. Create a new storage account and make sure you have selected SSD/Premium |  |
| 1. Select the same VNET as the AD Domain controllers |  |
| 1. Click ok to create. DO NOT WAIT FOR THIS to provision. Use the image you created as part of the prereqs |  |
| 1. Log on to the domain controller |  |
| 1. Go to Tools, AD Users and Computers |  |
| 1. Create a new user called SQL-ADMIN |  |
| 1. Add the new account to the domain admin group. This will allow the account to join the SQL machine to the domain. Note that in production, domain admins is a protected group. We are only doing this to allow us to join the domain |  |
| 1. Navigate back to the portal and select the SQL machine you provisioned |  |
| 1. Navigate to the network interface of the SQL machine Expand the DNS settings |  |
| 1. Note that the DNS is set to Azure DNS. This allows the machine to look to the VNET for it’s settings instead of locally. Point out that you could configure DNS on each interface or on the VNET directly. |  |
| 1. Navigate to the VNET |  |
| 1. Show the different IP addresses that were set for the machines. Point out the DNS settings on the VNET instead of the machine. This allows the new machine to “see” the DC on the same network in order to join the domain |  |
| 1. Connect to the SQL machine using RDP |  |
| 1. Open Server Manager and select the Local Server option |  |
| 1. Select the workgroup link and click change |  |
| 1. Change the domain to same as the domain you deployed by entering the FQDN |  |
| 1. When prompted, enter the new SQL admin account you created |  |
| 1. If you authenticate successfully, you should see the following |  |
| 1. When prompted to reboot, click ok. |  |

## Clean Up

To clean up this environment delete the resource group you created in the Setup section.