Imagen que contiene exterior, agua, hombre, vuelo

Descripción generada automáticamente

**Lab Details**

1. In this lab you will learn how to create an Azure Virtual machine for Window Server 2019 Datacenter image using Azure CLI, connect to a virtual machine using RDP.
2. Duration: **30 minutes**

**Introduction**

**What is an Azure virtual machine?**

* Azure virtual machine is a scalable and flexible computing solution provided by Microsoft Azure.
* It allows users to create and manage virtual machines in the cloud with customizable hardware configurations, operating systems, and networking options.
* Users can choose from a wide range of pre-configured virtual machine images or create custom images based on their specific needs.
* Azure virtual machines offer high availability and reliability, with automatic backup and disaster recovery options.
* It is a cost-effective solution, with users only paying for the resources they use and the ability to scale up or down as needed.

**Architecture Diagram**

**Interfaz de usuario gráfica, Aplicación

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**Task Details**

1. Sign to Azure Portal.
2. Create an Azure Virtual Machine using the Azure CLI.
3. RDP into the virtual machine
4. Validation test
5. Delete the Resources

# ****Lab Steps****

## ****Task 1: Sign in to Azure Portal****

1. Go to the Azure portal by using URL [https://portal.azure.com](https://portal.azure.com/).
2. Sign in with your **username** and **password** on Azure portal.

Interfaz de usuario gráfica, Texto, Aplicación

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## ****Task 2: Create Virtual Machine using Azure CLI****

1. First you have to click on the Azure Cloud shell icon in Azure Portal.

Interfaz de usuario gráfica, Aplicación, Chat o mensaje de texto

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1. Click on **Bash**.

Interfaz de usuario gráfica, Texto, Aplicación

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4. You have to fill in the details that are shown for mounting the storage account :

5. After Filling in all the details, click on **Create Storage** and wait for some time.

* Leave**Subscription** and **Cloud Shell region** as it is.
* For the **Resource group**: Use existing Resource Group and use the **rg\_eastus\_XXXXX**
* For details of the **Storage Account** :
  + Click on **Create New** and give a globally unique namefor the storage account.
* For details of the **File share**:
  + Click on **Create New** and give a namefor the file share.

1. For creating a virtual machine you need to provide the username and password.
   * One should not specify the username and password in the CLI command directly, Instead, they have to be stored in a variable for security/privacy reasons.
   * For that use the following commands :

username="demouser"  
password="XXXXXX"



1. Now coming to the main part of creating the virtual machine:
   * You can create a virtual machine using the command “**az vm create**” and you can specify the parameters after that with the sign “**--**”
2. Use the command given below and fill in the correct parameters like **resource group** etc. You need to replace the resource group name with the one you used above while creating the storage account. Copy the command below and paste it in your CLI.

az vm create --name MyVm --resource-group resourcegroup\_XXXXX --image win2019datacenter --size Standard\_B1s --admin-username $username --admin-password $password

Interfaz de usuario gráfica, Texto

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* There are many other parameters that can be mentioned like public ip address etc.
* But the parameters that are mentioned are good enough for the creation of a virtual machine.

1. After executing the command, wait for some time until the virtual machine is created.
   * It may take much more time than creating other resources because there are sub-resources that are created like Network Security Group, IP Address. Network Interface Card, Virtual Network and subnet.
2. After creating the virtual machine, you can see something like this on the Azure CLI.

## ****Task 3: RDP into Virtual Machine****

1. Go to the **Virtual Machine** section from the left panel menu.
2. You can see your virtual machine in the list, just click on it and you can see virtual machine details on your screen.

Interfaz de usuario gráfica, Texto, Aplicación

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1. Click on the connect button and select **RDP**. you can see your RDP connection details.

Interfaz de usuario gráfica, Texto, Aplicación

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1. **Windows PC**:
   * If you are a windows user, download the RDP file from the button **Download RDP File**.

Interfaz de usuario gráfica, Texto

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* + Connect to your virtual machine with your administrator username and password which you entered while creating the virtual machine.

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Interfaz de usuario gráfica, Texto, Aplicación, Correo electrónico

Descripción generada automáticamente

1. After successful login on the virtual machine, wait until Windows boots and is ready to use.
   * If you see this message **Do you want to allow your PC to be discoverable by other PCs and devices on this network?** Just click on **Yes**.

Interfaz de usuario gráfica, Aplicación

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1. Now your virtual machine is ready to use and you can look around inside the new Windows Virtual Machine.

### **Do You Know?**

RDP (Remote Desktop Protocol) is that it was originally developed by Microsoft and introduced in the late 1990s as a way to allow remote access to Windows-based computers.

## ****Task 4: Delete the Resources****

1. In the search box at the top of the Azure portal, enter **Resource groups**. Select **Resource groups** from the search results.
2. Click on the name of **Resource groups**

Interfaz de usuario gráfica, Texto, Aplicación, Correo electrónico

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1. Select all the Resoures in that **Resource groups**

Imagen que contiene Tabla

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1. Go to Three dots to the right and then click **Delete** button

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1. Now type **delete**
2. Confirm delete

Interfaz de usuario gráfica, Texto, Aplicación, Correo electrónico

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# ****Completion and Conclusions****

1. You have successfully signed into Azure Portal.
2. You have successfully configured and created windows virtual machine using Azure CLI.
3. You have successfully made an RDP connection into a new virtual machine that you created.
4. You have successfuly delted the resources.