Create the JumpBox

This document shows you how to use the Azure Portal to create a Windows 10 virtual machine in Azure called "JumpBox". This virtual machine will be used to run PowerShell scripts that will initialize the remaining virtual machines required for the exercises and projects in the Intro to Cybersecurity Nanodegree program.

If you don't have an Azure subscription, create a [free account](#) before you begin. You will be given 30 free days and a $200 credit as a first-timer user. Note that once you pass 30 days or $200, [you will be prompted to upgrade your account](#) to "pay as you go" service model in order to maintain services with Azure. Learn more about Azure free account subscriptions here: https://azure.microsoft.com/en-us/free/free-account-faq/
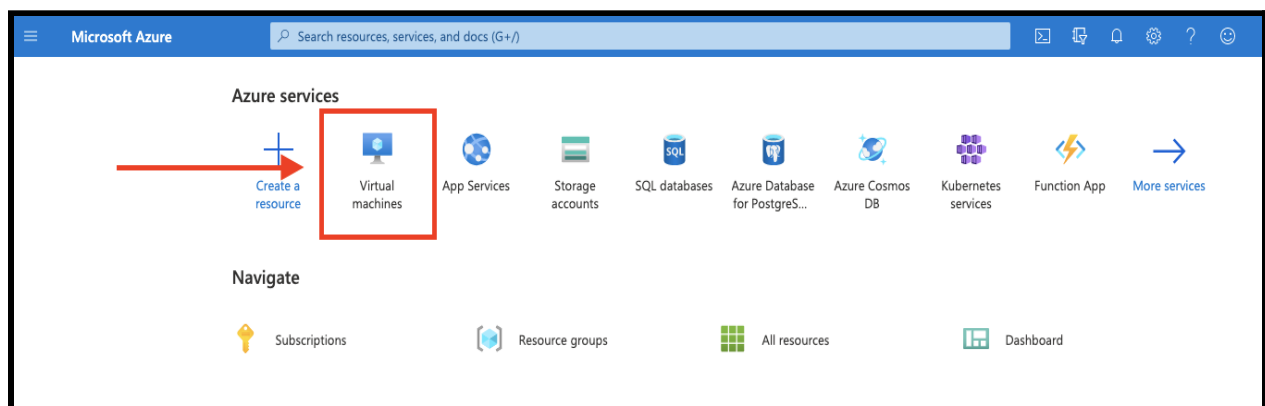
IMPORTANT: Please always remember to shut down the virtual machine when not in use to avoid charges on your Azure account.

Step 1. Sign in to Azure

1. Sign in to the Azure portal at https://portal.azure.com.

Step 2. Create a virtual machine

1. Select **"Virtual Machines"** from the Azure Services menu or type **virtual machines** in the search and select **Virtual Machines**.

2. In the **Virtual machines** page, select **Add**.

3. In the **Basics** tab, under **Project details**, note the subscription. If you just created a new account, then you should only have one subscription available. If you have used an Azure account for other projects and have multiple Azure subscriptions, make sure to choose the one you want.

4. Then choose to **Create new** resource group. Type *UdacityLabsJumpBox* for the name. Then click "OK."

5. Under **Instance details**, type *JumpBox* for the **Virtual machine name**, choose East US2 for your **Region**, then choose *Windows 10 Pro, Version 2004 - Gen2* for the **Image** and *Standard_B2s (2vCPU, 4GiB memory)* for the **Size.** Leave the other defaults.

Instance details	
Virtual machine name * ⓘ	JumpBox ✓
Region * ⓘ	(US) East US 2
Availability options ⓘ	No infrastructure redundancy required
Image * ⓘ	⊞ Windows 10 Pro, Version 2004 - Gen2
	See all images
Azure Spot instance ⓘ	☐
Size * ⓘ	Standard_B2s - 2 vcpus, 4 GiB memory (₹2,187.87/month)
	See all sizes

6. Under the **Administrator account**, provide a username, such as *cyberadmin* and a password. The password must be at least 12 characters long and meet the [defined complexity requirements](#).

Administrator account	
Username * ⓘ	cyberadmin ✓
Password * ⓘ	•••••••••••••••••• ⊕
Confirm password * ⓘ	•••••••••••••••••• ⊕

You will need this username and password for your VM later when connecting to the JumpBox - be sure to save it or write it down!

7. Under **Inbound port rules**, choose **Allow selected ports** and then select **RDP (3389)** and **HTTP (80)** from the drop-down.

Inbound port rules

Select which virtual machine network ports are accessible from the public internet. You can specify more limited or granular network access on the Networking tab.

Public inbound ports * ⓘ	◯ None ⦿ Allow selected ports
Select inbound ports *	HTTP (80), RDP (3389)

⚠ **This will allow all IP addresses to access your virtual machine.** This is only recommended for testing. Use the Advanced controls in the Networking tab to create rules to limit inbound traffic to known IP addresses.

8. Leave the remaining defaults and *check the confirmation box*. Then click on the **Next: Disks** button at the bottom right.

Licensing

Already have a Windows 10 Enterprise E3/E5 license or Window Virtual Desktop license?
☑ I confirm I have an eligible Windows 10 license with multi-tenant hosting rights. *

Review multi-tenant hosting rights for Windows 10 compliance

Review + create   < Previous   Next : Disks >

9. Choose **Standard HDD** as the OS disk type and then select the **Review + create** button at the bottom of the page. Once the page updates, select **Create** to finalize deployment of your Virtual Machine.

Basics   **Disks**   Networking   Management   Advanced   Tags   Review + create

Azure VMs have one operating system disk and a temporary disk for short-term storage. You can attach additional data disks. The size of the VM determines the type of storage you can use and the number of data disks allowed. Learn more

Disk options

OS disk type * ⓘ   Standard HDD   ⌄

The selected VM size supports premium disks. We recommend Premium SSD for high IOPS workloads. Virtual machines with Premium SSD disks qualify for the 99.9% connectivity SLA.

It will take approximately 10 minutes for your deployment to complete. When your deployment is complete, select Go To Resource to continue with the steps below.

✅ Your deployment is complete

Deployment name: CreateVm-MicrosoftWindowsDesktop.Window...   Start time: 6/18/2020, 11:27:32 AM
Subscription: Azure subscription 1   Correlation ID: fa86722d-670e-43e6-add4-3c0e1c834db4
Resource group: UdacityLabsJumpBox

∨ **Deployment details** (Download)

∧ **Next steps**

Setup auto-shutdown   Recommended

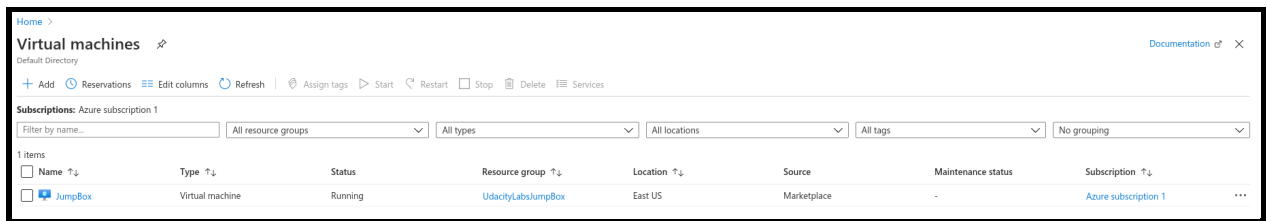Monitor VM health, performance and network dependencies   Recommended

Run a script inside the virtual machine   Recommended
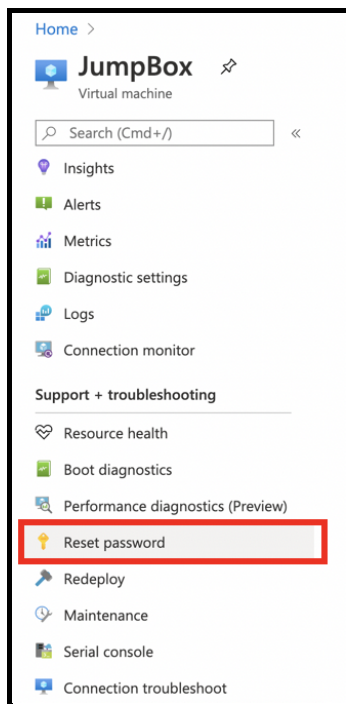
Go to resource   Create another VM

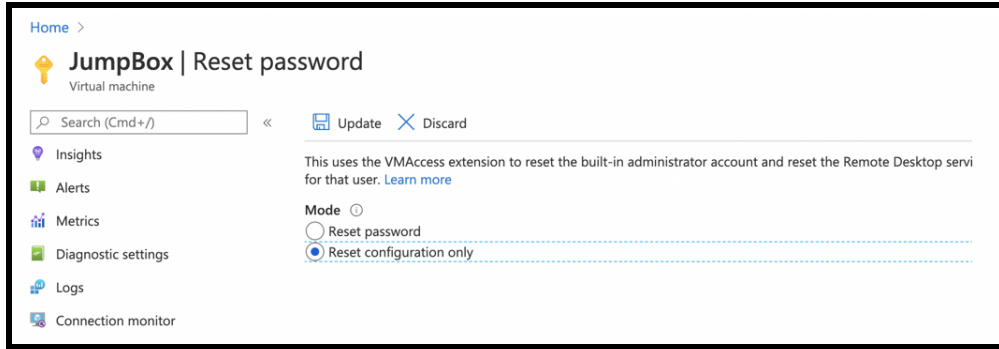# Step 3. Configure the virtual machine

1. Return to the **Virtual machines** page.
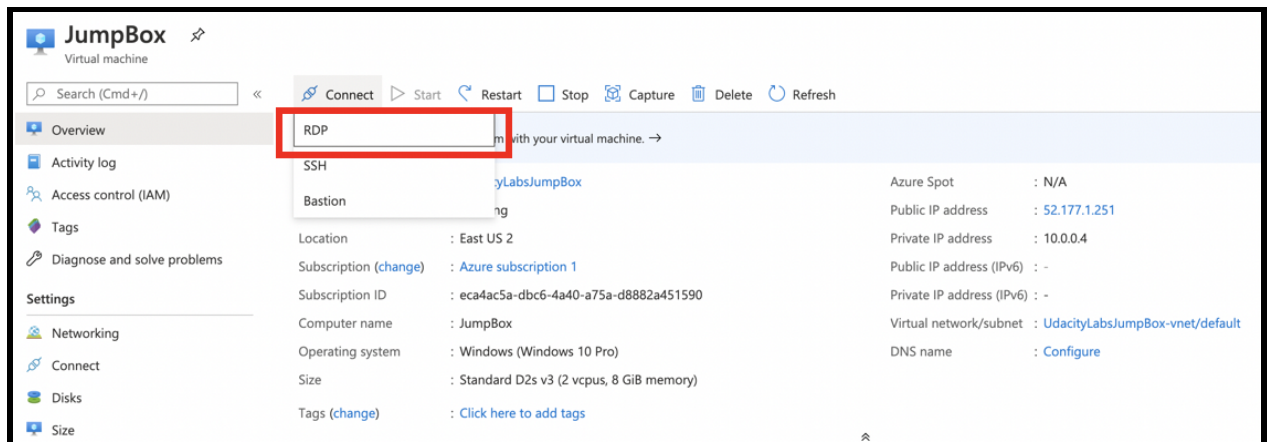

2. Click **JumpBox**. Go to **Reset password**

3. Choose **Reset configuration only** and click **update**

Step 4. Connect to your JumpBox

Mac Users: Before you begin, you need an RDP client such as this Remote Desktop Client from the Mac App Store.

1. Click the **Connect** button on the overview page for your virtual machine and **select RDP** from the dropdown menu.


2. In the **Connect** page, keep the default options to connect by **Public IP address,** over port 3389, and click **Download RDP file**.
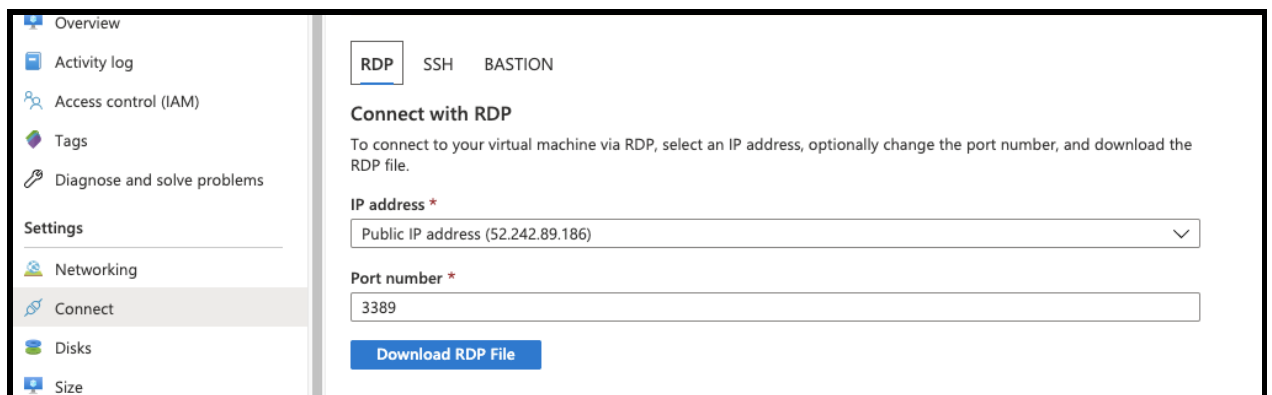
3. Open the downloaded RDP file and click **Connect** when prompted.

4. **If you are on a Windows PC:** In the **Windows Security** window, select **More choices** and then select **Use a different account**. Using the administrator account username and password **you created** for your Virtual Machine in Step 2, type the username as **localhost***username*, and enter the password you created, and then click **OK**.

If you are on a Mac: The Microsoft Remote Desktop Client will open when you open the RDP file. Using the administrator account username and password **you created** for your Virtual Machine in Step 2, type the username as **localhost***username*, and enter the password you created for the virtual machine, and then click **Continue**.
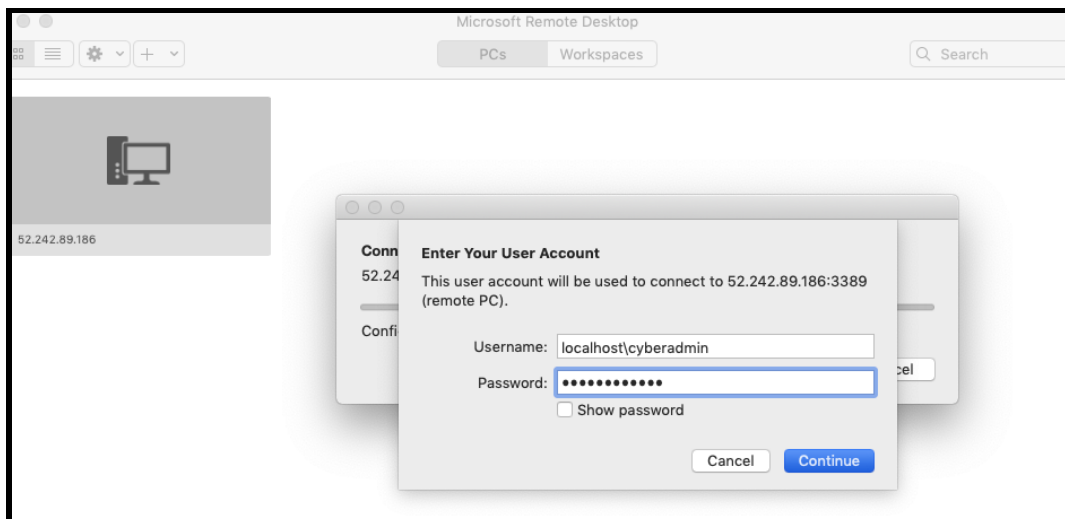

5. You may receive a certificate warning during the sign-in process. Click **Yes** or **Continue** to create the connection.

Congratulations! Your JumpBox VM is ready!!!

IMPORTANT: Please always remember to shut down the virtual machine when not in use to avoid charges in your Azure account. The status of the ALL VMs should be stopped

You can shut down the VM by clicking the **Power** button and **"shut down"** inside the VM or click on the **"Stop"** button on the VM overview page.
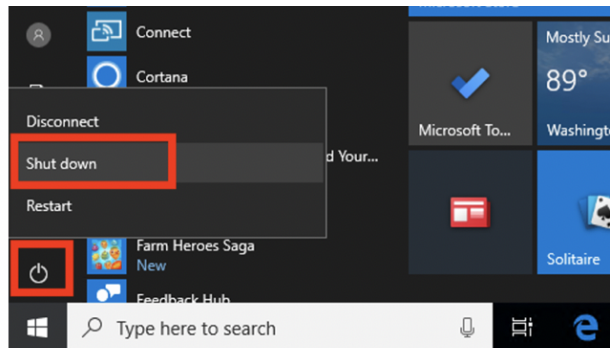
Click the Power icon and click "shut down" inside the VM
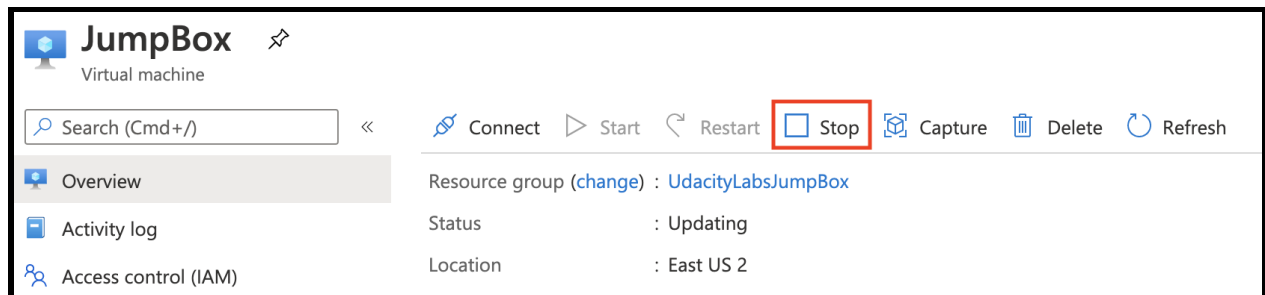
Click the Stop button on the VM overview page

Make sure the status is **Stopped.**