

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](https://azure.microsoft.com/en-us/free/free-account-faq/) 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](https://azure.microsoft.com/en-us/free/free-account-faq/) to maintain services with Azure. Learn more about Azure free account subscriptions here: <https://azure.microsoft.com/en-us/free/free-account-faq/>

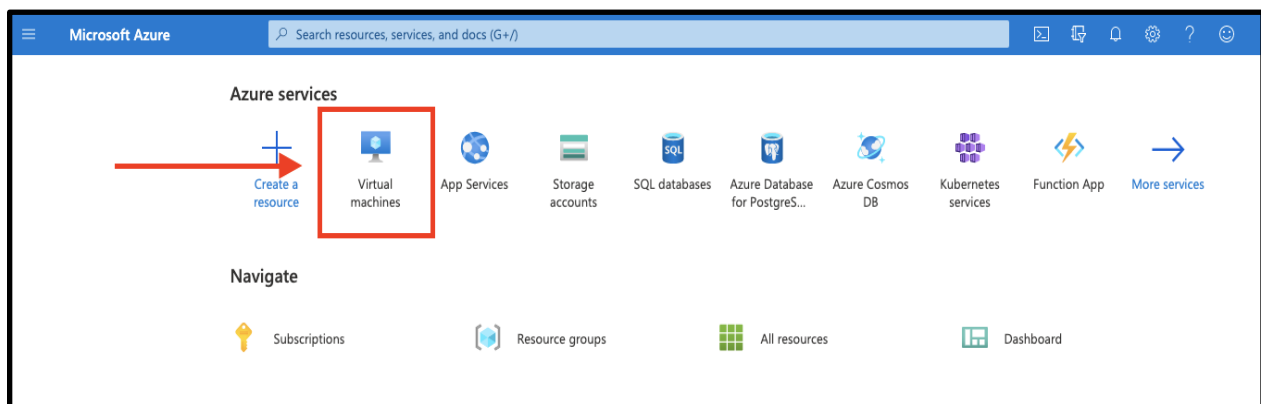
IMPORTANT: Please always remember to shut down the virtual machine when not in use to avoid charges on your Azure account.

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.”

The screenshot shows the 'Basics' tab of the Azure portal. The 'Project details' section is active, showing a dropdown for 'Subscription' set to 'Azure subscription 1' and a dropdown for 'Resource group' set to '(New) Resource group'. A 'Create new' link is visible below the resource group dropdown. A modal dialog is open in the center, titled 'A resource group is a container that holds related resources for an Azure solution.' It contains a 'Name' field with the text 'UdacityLabsJumpBox' and 'OK' and 'Cancel' buttons. The background form shows other fields like 'Virtual machine name', 'Region', 'Availability options', 'Image', and 'Size'.

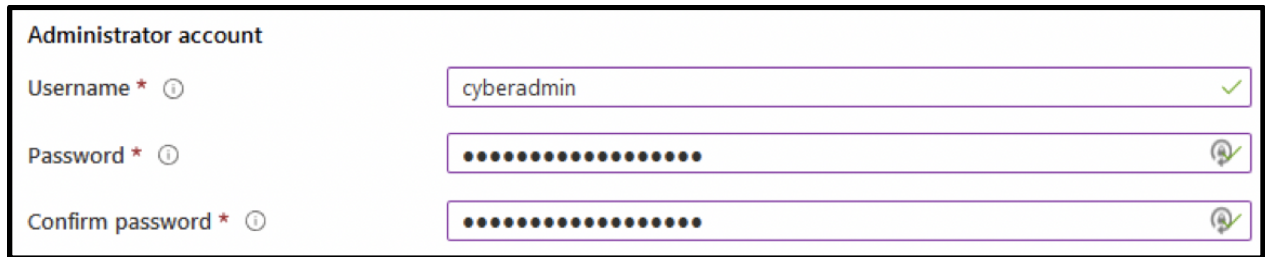
5. Under **Instance details**, type *JumpBox* for the **Virtual machine name**, choose *East US2* for your **Region**, then choose *Windows 10 Pro, Version 1809* for the **Image** and *Standard_B1s* for the **Size**. Leave the other defaults.

The screenshot shows the 'Instance details' section of the Azure portal. It contains the following fields and values:

Field	Value
Virtual machine name *	JumpBox
Region *	(US) East US 2
Availability options	No infrastructure redundancy required
Image *	Windows 10 Pro, Version 1809
Size *	Standard_B1s - 1 vcpu, 1 GiB memory (\$0.00/month)

Below the 'Image' and 'Size' fields, there are links: 'Browse all public and private images' and 'Select size'.

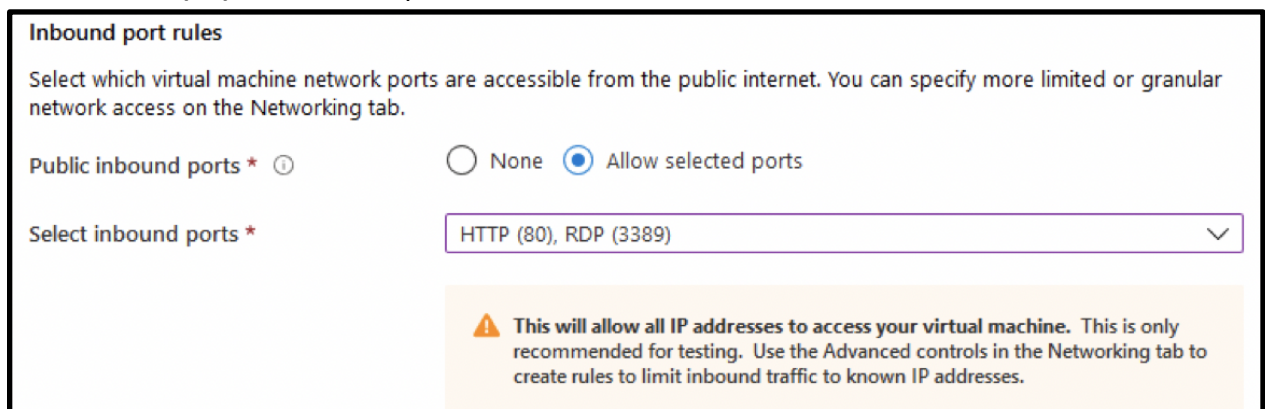
6. Under **Administrator account**, provide a username, such as *cyberadmin* and a password. The password must be at least 12 characters long and meet the [defined complexity requirements](#).



The screenshot shows the 'Administrator account' section of a form. It contains three input fields: 'Username' with the value 'cyberadmin', 'Password' with masked characters, and 'Confirm password' with masked characters. Each field has a green checkmark icon on the right, indicating successful validation.

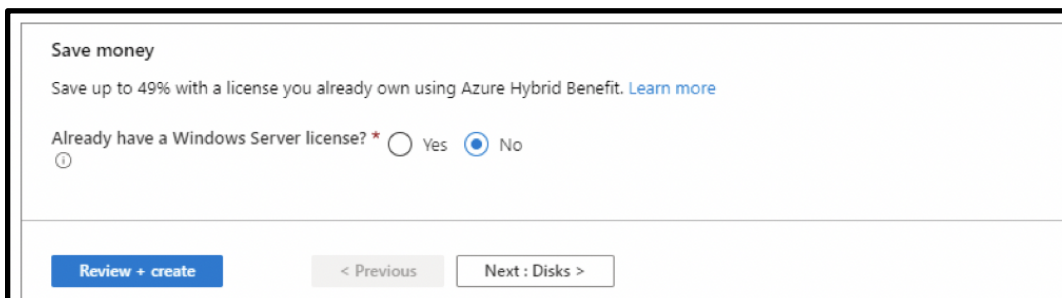
You will need this username and password for your VM later when connecting to the JumpBox - be sure to save it or write it down!

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



The screenshot shows the 'Inbound port rules' section. It includes a description: '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.' Below this, there are two radio buttons: 'None' and 'Allow selected ports', with 'Allow selected ports' selected. A dropdown menu labeled 'Select inbound ports' shows 'HTTP (80), RDP (3389)'. A warning message at the bottom states: '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 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.



The screenshot shows the 'Review + create' step. It includes a 'Save money' section with a link to 'Learn more' about Azure Hybrid Benefit. Below this, there is a question: 'Already have a Windows Server license?' with 'Yes' and 'No' radio buttons, where 'No' is selected. At the bottom, there are three buttons: 'Review + create' (highlighted in blue), '< Previous', and 'Next : Disks >'.

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...

Subscription: [Azure subscription 1](#)

Resource group: [UdacityLabsJumpBox](#)

Start time: 6/18/2020, 11:27:32 AM

Correlation ID: fa86722d-670e-43e6-add4-3c0e1c834db4

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.

Home >

Virtual machines

Documentation

Add Reservations Edit columns Refresh Assign tags Start Restart Stop Delete Services

Subscriptions: Azure subscription 1

1 items

<input type="checkbox"/> Name ↑↓	Type ↑↓	Status	Resource group ↑↓	Location ↑↓	Source	Maintenance status	Subscription ↑↓
<input type="checkbox"/> JumpBox	Virtual machine	Running	UdacityLabsJumpBox	East US	Marketplace	-	Azure subscription 1

2. Click JumpBox. Go to Reset password

Home >

JumpBox

Virtual machine

Insights

Alerts

Metrics

Diagnostic settings

Logs

Connection monitor

Support + troubleshooting

Resource health

Boot diagnostics

Performance diagnostics (Preview)

Reset password

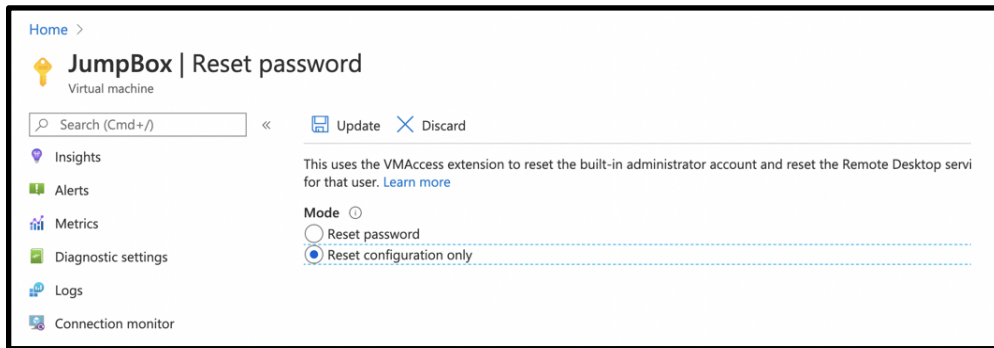
Redeploy

Maintenance

Serial console

Connection troubleshoot

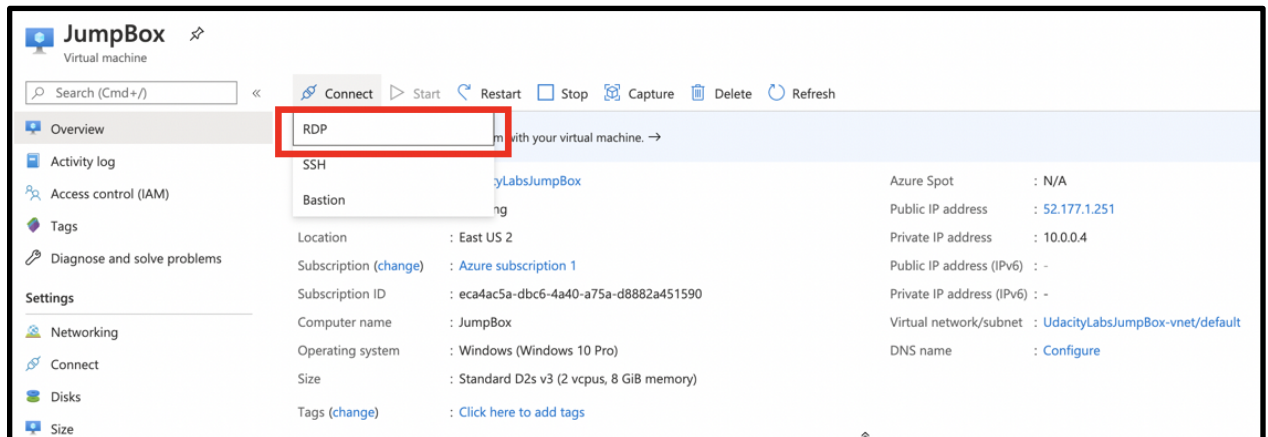
3. Choose **Reset configuration only** and click **update**



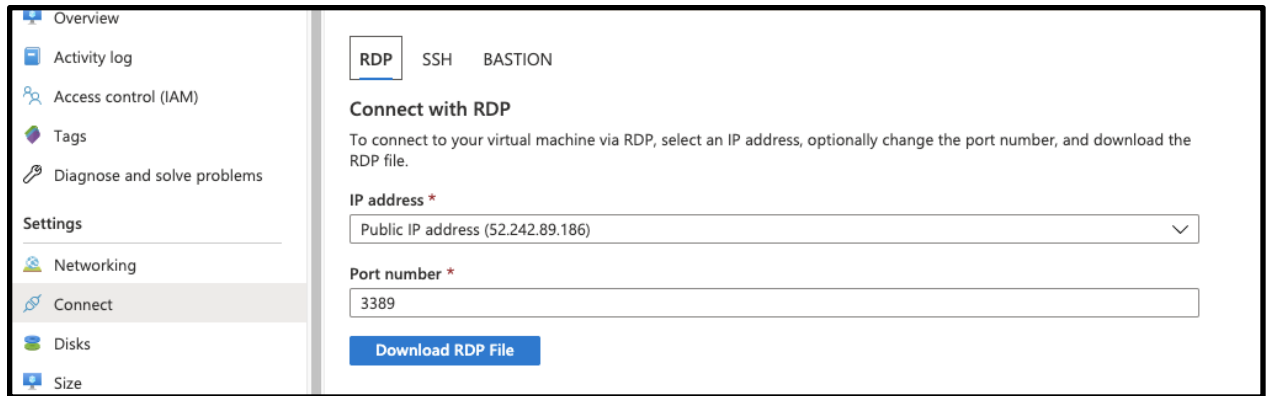
Step 4. Connect to your JumpBox

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.



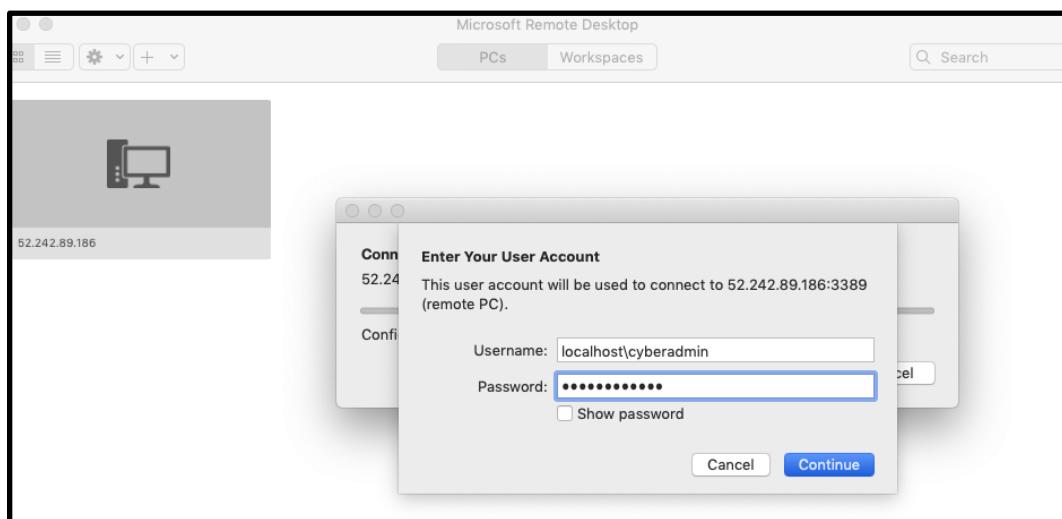
2. In the **Connect** page, keep the default options to connect by **Public IP address**, over port 3389, and click **Download RDP file**.



3. Open the downloaded RDP file and click **Connect** when prompted.

4. **If you are on a 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**.

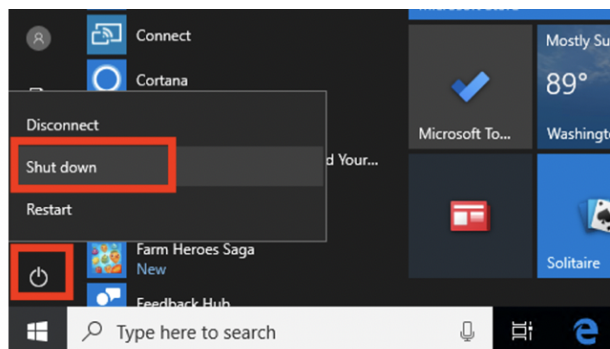


5. You may receive a certificate warning during the sign-in process. Click **Yes** or **Continue** to create the connection.

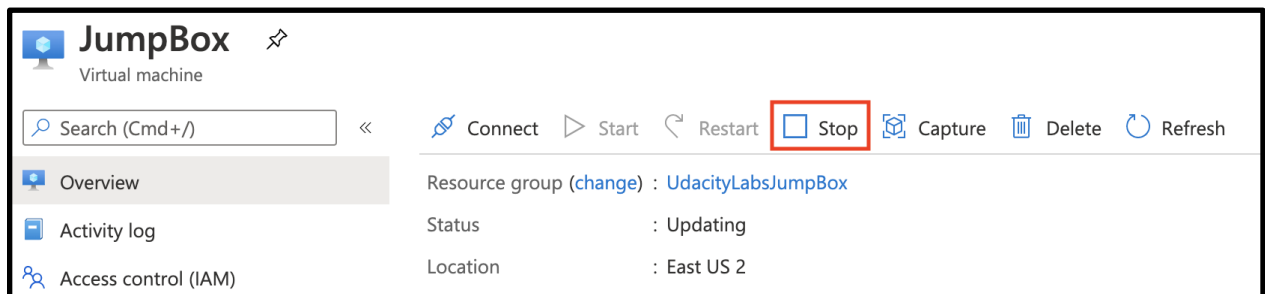
Congratulations! Your JumpBox VM is ready!!!

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 VM 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**.

<input type="checkbox"/> Name ↑↓	Type ↑↓	Status	Resource group ↑↓	Location ↑↓
<input type="checkbox"/> JumpBox	Virtual machine	Stopped	UdacityLabsJumpBox	East US 2