



# Create & Connect to Ubuntu 18.04 Machine on Azure Cloud

[Edition 6]

[Last Update 200721]

For any issues/help contact : support@k21academy.com







# Contents

1	Introduction	3
	Documentation 2.1 Microsoft Documentation	4 4
3	Pre-Requisite	5
	Create Virtual Machine On Azure Portal	
5 !	Connect to Ubuntu Server Using Password & SSH Keys	11 12 15
6		19
	Reset Virtual Machine Password	
8	How to open ports in azure	24
9	How to remove Reserve Ip Option	28
10	Summary	34





### **1 INTRODUCTION**

Azure Virtual Machines (VM) is one of several types of on-demand, scalable computing resources that Azure offers. Typically, you choose a VM when you need more control over the computing environment than the other choices offer. This article gives you information about what you should consider before you create a VM, how you create it, and how you manage it.

An Azure VM gives you the flexibility of virtualization without having to buy and maintain the physical hardware that runs it. However, you still need to maintain the VM by performing tasks, such as configuring, patching, and installing the software that runs on it.

Azure virtual machines can be used in various ways. Some examples are:

- **Development and test** Azure VMs offer a quick and easy way to create a computer with specific configurations required to code and test an application.
- Applications in the cloud Because demand for your application can fluctuate, it might make economic sense to run it on a VM in Azure. You pay for extra VMs when you need them and shut them down when you don't.
- **Extended datacenter** Virtual machines in an Azure virtual network can easily be connected to your organization's network.
- The number of VMs that your application uses can scale up and out to whatever is required to meet your needs.

Note: Stop The Virtual Machine if you are not using the machine.





## 2 DOCUMENTATION

#### 2.1 Microsoft Documentation

1. Create a Virtual Machine using Azure Portal <a href="https://docs.microsoft.com/en-us/azure/virtual-machines/windows/quick-create-portal">https://docs.microsoft.com/en-us/azure/virtual-machines/windows/quick-create-portal</a>





### 3 PRE-REQUISITE

Ensure that you have an account (Trail or Paid) in Azure Cloud.

**Note**: Follow Activity Guide **Register\_For\_Azure\_Cloud\_Account\_Accessing\_Console\_ed**\*\* from portal

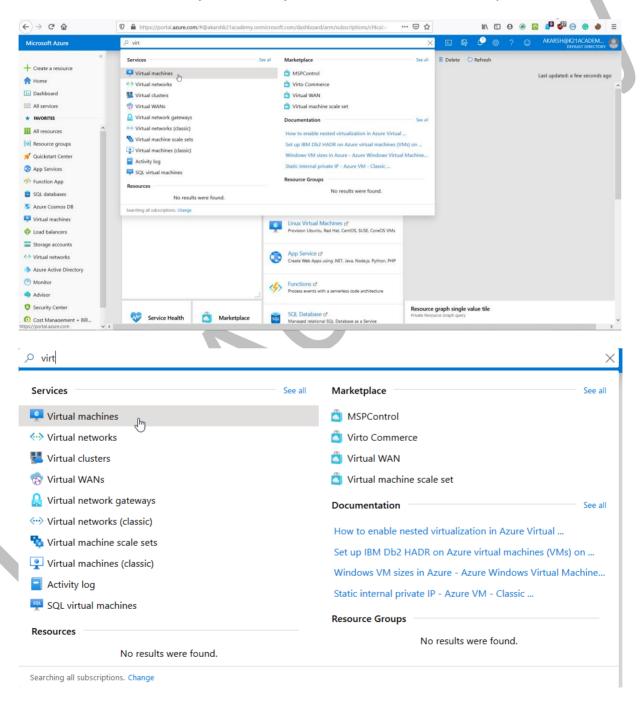




### 4 CREATE VIRTUAL MACHINE ON AZURE PORTAL

1. In the Azure portal, search for Virtual Machine and select Virtual Machine.

Make sure you have an active subscription before doing all this. If you created a free account for the first time, you'll already have a FREE TRIAL subscription for 1 month.







#### 2. Select Add.

fault Directory							Documentation @	N
Add (S) Reservations ≡≣ I	dit columns	Assign tags	Start 🤇 Restart 🗌	Stop 📗 Delete 🗐	Services			
bscriptions: Free Trial								
ilter by name	All resource groups	✓ All types		II locations	✓ All tags	→ No gr	ouping	$\sim$
tems Name ↑↓	Type ↑↓	Status	Resource group ↑↓	Location ↑↓	Source	Maintenance status	Subscription $\uparrow \downarrow$	
			_					
la l								
			No virtual machines	to display				
	Create a vi	rtual machine that runs Linu	x or Windows. Select an ima image.	age from the marketplac	e or use your own customiz	red		
		Learn more about Wind	ows virtual machines 🗗 Le	earo more about Linux vi	irtual machines 🕫			
			Create virtual ma					
								_
Dashboard >	/irtual machin	ies						
		es						
Dashboard > Y		es						
		es						
Virtual mae	chines				4			
Virtual mac Default Directory + Add			lumns 💍	Refresh	Assign	tags ▷ Si	tart ( <sup>2</sup> Re	25
Virtual mae	chines		lumns 🖒	Refresh	Assign	tags Þ St	tart 🤇 Re	25
Virtual mac Default Directory	<b>chines</b> Reservations		lumns 🖒	Refresh	Assign	tags ▷ Si	tart 🤇 Re	25
Virtual mac Default Directory + Add Subscr New Vir	<b>chines</b> Reservations tual machine	≡≡ Edit co					tart 🤇 Re	2.5
Virtual mac Default Directory	<b>chines</b> Reservations tual machine	≡≡ Edit co	lumns 💍 resource gro			tags ▷ St	tart 🤇 Re	22
Virtual mac Default Directory + Add Subscr New Vir Filter by name	<b>chines</b> Reservations tual machine	≡≡ Edit co					tart 🤇 Re	22
Virtual mac Default Directory + Add Subscr New Vir	<b>chines</b> Reservations tual machine	≡≡ Edit co					tart 🤇 Re	22
Virtual mac Default Directory + Add Subscr New Vir Filter by name	chines Reservations tual machine	Edit co					tart ( Re	

#### 3. Enter the following values:

- Subscription: Select your Azure subscription
- **Resource group**: Enter a new resource group name (*Note: If this is first time you are creating any resource then select Create New to create a new resource group*)
- Virtual Machine name: It should be a unique name throughtout the Azure network.
- Region: Select an Azure location, such as Western India, Central US etc.





# Home > Virtual machines > Create a virtual machine

Basics	Disks	Networking	Managament	Advanced	Taga	Review + create	
Dasics	DISKS	Networking	Management	Advanced	Tags	Review + create	
image. C	omplete t		n Review + create t			re marketplace or use your own customiz hine with default parameters or review ea	
Project	details						
Select th your rese		otion to manage d	leployed resources	and costs. Use	resource	groups like folders to organize and mana	ge
Subscrip	otion * 🕕	)	Azure for	Students			
F	Resource	group * i	k21-demo Create new	-			
Instance	e details						
Virtual n	nachine n	ame * 🕕	DockerM	achine			
Region *	• ()		(US) West	: US			_
Availabil	lity option	ns (i)	No infras	tructure redund	lancy requ	uired	
lmage *	0			erver 18.04 LTS			
			Browse all	public and priv	/ate imag	es	_
		K					

Earn Cloud from Experts	Standard_D2s_v3 - 2 vcpus, 8 GiB memory (₹5,307.53/month) ∨ Select size
Administrator account	
Authentication type (i)	SSH public key   Password
Username * 🥡	AzureUser
Password * (i)	
Confirm password * ①	
• -	
Inbound port rules	
Select which virtual machine netwo network access on the Networking	ork ports are accessible from the public internet. You can specify more limited or granular tab.
Public inbound ports * ①	None      Allow selected ports
Select inbound ports *	HTTP (80), SSH (22)
	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.
	< Previous Next : Disks >
Review + create	

c In

Optional: Using SSH Key pair in place of username/password to connect to Ubuntu

machine

Another way to connect to machine is using SSH key pair and if you prefer SSH Key pair

then select this option





Home > Virtual machines >

#### Create a virtual machine

Size * (i)	Standard_D2s_v3 - 2 vcpus, 8 G	GiB memory (₹5,645.28/month)	$\checkmark$	
Administrator account				
Authentication type ①	● SSH public key ○ Passw	ord		
Username * 🛈	AzureUser			
SSH public key * ①		AAQEAgYZbb+pCu5FNiHV4bskJ MUtXYgNv4Zmc9tQrf+y+0rwrsm		$\mathbf{\mathbf{N}}$
	Learn more about creating a	nd using SSH keys in Azure		
Inbound port rules				
Select which virtual machine network port network access on the Networking tab.	s are accessible from the public in	ternet. You can specify more limi	ited or granular	
Public inbound ports * ①	○ None ● Allow selected	ports		
Select inbound ports *	HTTP (80), SSH (22)		~	
	This will allow all IP addresse recommended for testing. Us create rules to limit inbound t	se the Advanced controls in the Ne		
Review + create < Prev	vious Next : Disks >			
Your deployment is ι	underway			
Deployment name: CreateVm Subscription: Azure for Students Resource group: k21-demo-rg	UbuntuServer-18.04-LTS	Start time: 6/11/2020, 7:10:1 Correlation ID:	2 PM	
↑ Deployment details (Download)				
Resource	Туре	Status	Operation detai	ls
No results.				

Note: Stop The Virtual Machine if you are not using the machine.

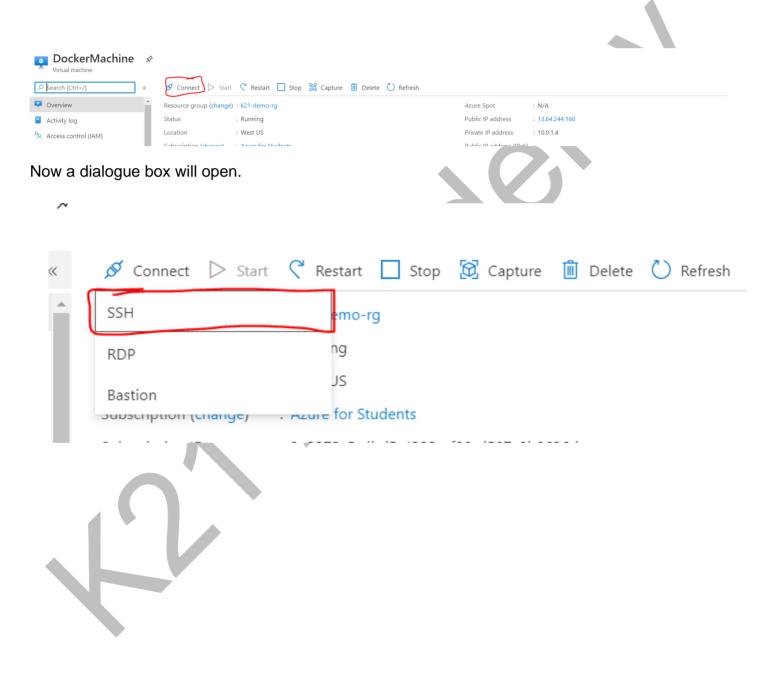




# 5 CONNECT TO UBUNTU SERVER USING PASSWORD & SSH KEYS

There are two ways to connect to machine Using SSH and using Password.

After you create a Virtual Machine, click on the newly created Virtual Machine. Click on Connect.







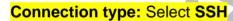
# 5.1 Connect Using the Password

S Dockermachine   C	Connect	
	${f \Lambda}$ To improve security, enable just-in-time access on this VM. $ ightarrow$	
Overview		
Activity log	RDP SSH BASTION	
Access control (IAM)	Connect via SSH with client	
Tags		
Diagnose and solve problems	Open the client of your choice, e.g. PuTTY or other clients .     Ensure you have read-only access to the private key.	
Settings	chmod 400 AzureUser.pem	D
🙇 Networking	3. Provide a path to your SSH private key file. $\textcircled{0}$	
🖉 Connect	Private key path	
🛢 Disks	~/.ssh/AzureUser	
📮 Size	4. Run the example command below to connect to your VM.	
Security	ssh -i <private key="" path=""> AzureUser@40.122.207.189</private>	D
Advisor recommendations		
Extensions	Can't connect?	
🐔 Continuous delivery	Test your connection     Troubleshoot SSH connectivity issues	
Availability + scaling		

- 1. Open **putty.exe** in your system
  - 1. Enter the following

#### Host Name (or IP Address): Enter Public IP of your instance

#### Port: Enter 22



Category:		
Session     Logging     Terminal     Keyboard     Bell     Features     Window     Appearan     Behaviour     Translation     Selection     Colours     Colours     Colours     Colours     Colours     Colours     Selection     Data     Proxy     Telnet     Rlogin     SSH     Serial	your PuTTY sessio ant to connect to Pc 22 Rlogin • SSH d session	ort
About	Only on clean	exit

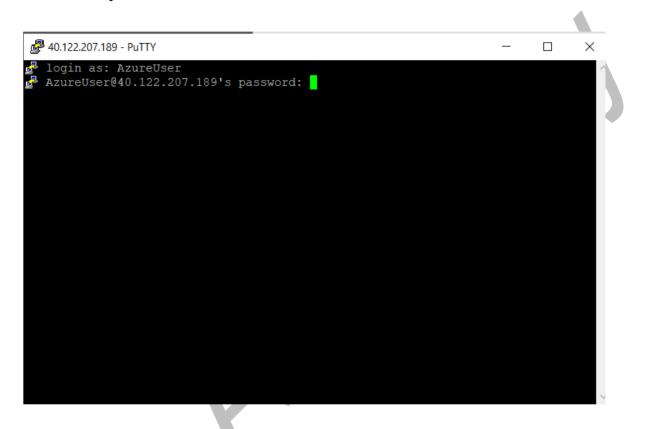




2. Enter the following

#### Login id: AzureUser

Password: your Password



Note: Stop The Virtual Machine if you are not using the machine.





🛃 login as: AzureUser AzureUser@40.122.207.189's password: Welcome to Ubuntu 18.04.4 LTS (GNU/Linux 5.3.0-1028-azure x86 64) \* Documentation: https://help.ubuntu.com \* Management: https://landscape.canonical.com \* Support: https://ubuntu.com/advantage System information as of Fri Jun 26 10:55:50 UTC 2020 System load: 0.07 Processes: 121 Usage of /: 4.4% of 28.90GB Users logged in: Memory usage: 4% IP address for eth0: 10.0.2.4 Swap usage: 0% 0 packages can be updated. 0 updates are security updates. Last login: Fri Jun 26 10:47:44 2020 from 47.31.49.160 To run a command as administrator (user "root"), use "sudo <command>". See "man sudo root" for details. AzureUser@Dockermachine:~\$





# 5.2 Connect Using SSH Keys

igta To improve security, enable just-in-time access on this VM. $ ightarrow$		
RDP SSH BASTION		
Connect via SSH with client		
1. Open the client of your choice, e.g. PuTTY or other clients .		
2. Ensure you have read-only access to the private key.		
chmod 400 AzureUser.pem	D	
3. Provide a path to your SSH private key file. ①		• •
Private key path		
~/.ssh/AzureUser		
4. Run the example command below to connect to your VM.		
ssh -i <private key="" path=""> AzureUser@13.64.244.160</private>		
Can't connect?		
S Test your connection		
Troubleshoot SSH connectivity issues		
<ol> <li>Open <b>putty.exe</b> in your system</li> <li>Enter the following</li> </ol>		
Host Name (or IP Address): Enter username@Public	: IP AzureUser@	213.64.244.160of

Port: Enter 22

#### Connection type: Select SSH





ategory:			
Session Connection Co	Basic options for your PuTTY ses Specify the destination you want to connect to Host Name (or IP address) AzureUser@13.64.244.160 Connection type: O Raw O Telnet O Rlogin O SSH Load, save or delete a stored session Saved Sessions Default Settings demo kirti mv2adb zdm	Port	
<ul> <li>Host keys</li> <li>Cipher</li> <li>Auth</li> <li>TTY</li> <li>X11</li> </ul>	Close window on exit. Always Never Only on cle	ean exit	
About He	p Open	Cancel	

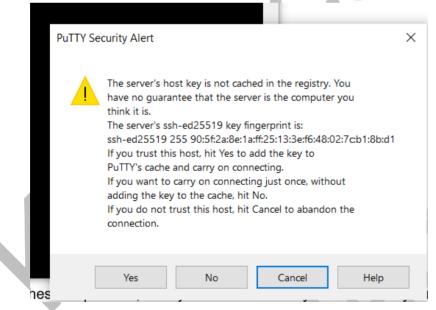
4. Now, expand SSH and select auth and Browse your Private key and click open





Category:	
Session     Session     Cogging     Terminal     Keyboard     Bell     Features     Window     Appearance     Behaviour     Translation     Selection     Colours     Connection     Data     Proxy     Telnet     Rlogin     SSH     Kex     Host keys     Cipher     Auth     TTY     X11     X11	Options controlling SSH authentication <ul> <li>Display pre-authentication banner (SSH-2 only)</li> <li>Bypass authentication entirely (SSH-2 only)</li> </ul> Authentication methods <ul> <li>Attempt authentication using Pageant</li> <li>Attempt TIS or CryptoCard auth (SSH-1)</li> <li>Attempt "keyboard-interactive" auth (SSH-2)</li> </ul> Authentication parameters       Allow agent forwarding         Allow agent forwarding       Browse         C:\Users\piyus\Desktop\Keys\piyush_privar       Browse

5. Now, it will display the below message, then click on Yes



6. Once these steps done, Now you are successfully connected to your instance.





AzureUser@DockerMachine: ~

Using username "AzureUser". Authenticating with public key "rsa-key-20190505" Welcome to Ubuntu 18.04.4 LTS (GNU/Linux 5.3.0-1022-azure x86\_64) \* Documentation: https://help.ubuntu.com \* Management: https://landscape.canonical.com \* Support: https://lubuntu.com/advantage System information as of Thu Jun 11 13:49:28 UTC 2020 System load: 0.08 Processes: 117 Usage of /: 4.3% of 28.90GB Users logged in: 0 Memory usage: 3% IP address for eth0: 10.0.1.4 Swap usage: 0% 0 packages can be updated. 0 updates are security updates.

The programs included with the Ubuntu system are free software; the exact distribution terms for each program are described in the individual files in /usr/share/doc/\*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by applicable law.

To run a command as administrator (user "root"), use "sudo <command>". See "man sudo\_root" for details.

AzureUser@DockerMachine:~\$



Note: Stop The Virtual Machine if you are not using the machine.





# 6 STOP OR TERMINATE UBUNTU MACHINE

#### 1. Go to the Machine Overview page

ctivity log	Resource group (change) : Dockermachine_group	Operating system : Lin	ux (ubuntu 18.04)
	Status : Running	Size : Sta	ndard D2s v3 (2 vcpus, 8 GiB memory)
ess control (IAM)	Location : Central US	Public IP address : 40.	122.207.189
5	Subscription (change) : Azure for Students	Colocation status : N/	ł
, gnose and solve problems	Subscription ID : 3e2272c5-dbd5-4322-af00-d507c9b0626d	Virtual network/subnet : Do	ckermachine_group-vnet/default
gnose and solve problems		DNS name : Co	nfigure
	Tags (change) : Click here to add tags		
vorking		*	
onnect			
isks	Properties Monitoring Capabilities Tutorials		
ize	Virtual machine	Networking	
ecurity	Computer name Dockermachine	Public IP address	40.122.207.189
dvisor recommendations	Operating system Linux (ubuntu 18.04)	Public IP address (IPv6)	-
xtensions	SKU 18.04-LTS	Private IP address	10.0.2.4
	Publisher Canonical	Private IP address (IPv6)	-
Continuous delivery	VM generation V1	Virtual network/subnet	Dockermachine_group-vnet/default
Availability + scaling	Agent status Ready	DNS name	Configure
onfiguration	Agent version 2.2.48.1	Size	
dentity	Host ID None	Size	Standard D2s v3
roperties	Proximity placement group N/A	vCPUs	2
ocks	Availability + scaling	RAM	8 GiB



3. Status will change to Stop now click on Start to start machine.





#### 💶 Dockermachine 👒

💶 Overview	Resource group (change)	: Dockermachine_group	Operating system	: Linux
Activity log	Status	: Stopped (deallocated)	Size	: Standard D2s v3 (2 vcpus, 8 GiB memory)
Access control (IAM)	Location	: Central US	Public IP address	: 40.122.207.189
Tags	Subscription (change)	: Azure for Students	Colocation status	: N/A
Diagnose and solve problems	Subscription ID	: 3e2272c5-dbd5-4322-af00-d507c9b0626d		: Dockermachine_group-vnet/default
Settings	Tags (change)	: Click here to add tags	DNS name	: Configure
A Networking	lags (change)	. Click here to add tags	*	
Ø Connect				
Disks	Properties Monitorin	ng Capabilities Tutorials		
Size	A Matural and a Maria		G. Networks	
	Virtual machine Computer name	(start VM to view)	Public IP address	40.122.207.189
Security	Operating system	Linux	Public IP address (I	
Advisor recommendations	SKU	18.04-LTS	Private IP address	10.0.2.4
Extensions	Publisher	Canonical	Private IP address (	
🐔 Continuous delivery	VM generation	V1	Virtual network/sub	
<ul> <li>Availability + scaling</li> </ul>	Host ID	None	DNS name	Configure
🚔 Configuration	Proximity placement			
% Identity			Size	
Properties	🚯 Availability + scaling		Size	Standard D2s v3
A Locks	Availability zone	N/A	vCPUs RAM	2 8 GiB
Dockermachine	*	click on Delete	) Refresh	
Dockermachine	<ul> <li>✓ Connect ▷ Start </li> <li>Delete virtual machii This action will permanent!</li> </ul>	ر Restart 🗌 Stop 😥 Capture 👔 Delete ر		s, etc) will not be deleted and can be removed manua
	<ul> <li></li></ul>	ر Restart 🗌 Stop 😥 Capture 👔 Delete ر		s, etc) will not be deleted and can be removed manua
	<ul> <li>✓ Connect ▷ Start </li> <li>Delete virtual machii This action will permanent!</li> </ul>	ر Restart 🗌 Stop 😥 Capture 👔 Delete ر		s, etc) will not be deleted and can be removed manua
	<ul> <li>✓ Connect ▷ Start </li> <li>✓ Delete virtual machi This action will permanent Do you want to continue?</li> </ul>	ر Restart 🗌 Stop 😥 Capture 👔 Delete ر	ociated resources (disks, virtual networks	
		* Restart Stop 🔀 Capture 💼 Delete C ne y delete the virtual machine 'Dockermachine'. Association (Context)	ociated resources (disks, virtual networks	s, etc) will not be deleted and can be removed manua
		ر Restart 🗌 Stop 😥 Capture 👔 Delete ر	ociated resources (disks, virtual networks	
<ul> <li>Dockermachine</li> <li>Virtual machine</li> <li>Search (Ctrl+/)</li> <li>Overview</li> <li>Activity log</li> <li>Activity log</li> <li>Access control (IAM)</li> <li>Tags</li> <li>Diagnose and solve problems</li> <li>Settings</li> <li>Networking</li> </ul>		* Restart Stop 🔀 Capture 💼 Delete C ne y delete the virtual machine 'Dockermachine'. Association (Context)	ociated resources (disks, virtual networks DNS name : Cou	
		* Restart Stop 🔀 Capture 💼 Delete C ne y delete the virtual machine 'Dockermachine'. Association (Context)	ociated resources (disks, virtual networks DNS name : Cou	
<ul> <li>Dockermachine <ul> <li>Virtual machine</li> </ul> </li> <li>Search (Ctrl+/)</li> <li>Overview</li> <li>Activity log</li> <li>Activity log</li> <li>Access control (IAM)</li> <li>Tags</li> <li>Diagnose and solve problems</li> </ul> Settings Networking <ul> <li>Connect</li> <li>Disks</li> </ul>	Connect Start Connect Start Connect Start Control of the start of the	" Restart       Stop       Stop       Capture       Delete       Capture         ne         y delete the virtual machine 'Dockermachine'. Asso         lick here to add tags	ociated resources (disks, virtual networks DNS name : Cor	
	Connect Start Connect Start Connect Start Content Continue Contin	" Restart       Stop       Stop       Capture       Delete       Capture         ne         y delete the virtual machine 'Dockermachine'. Asso         lick here to add tags	ociated resources (disks, virtual networks DNS name : Cou	
<ul> <li>Dockermachine <ul> <li>Virtual machine</li> <li>Search (Ctrl+/)</li> <li>Overview</li> <li>Activity log</li> <li>Activity log</li> <li>Access control (IAM)</li> <li>Tags</li> <li>Diagnose and solve problems</li> </ul> </li> <li>Settings <ul> <li>Networking</li> <li>Connect</li> <li>Disks</li> <li>Size</li> <li>Security</li> </ul> </li> </ul>		Restart       Stop       Stop       Capture       Delete       C         ne         y delete the virtual machine 'Dockermachine'. Asso         lick here to add tags         Capabilities       Tutorials	DNS name : Co	ifigure
<ul> <li>Dockermachine <ul> <li>Virtual machine</li> </ul> </li> <li>Search (Ctrl+/)</li> <li>Overview</li> <li>Activity log</li> <li>Activity log</li> <li>Access control (IAM)</li> <li>Tags</li> <li>Diagnose and solve problems</li> <li>Settings</li> <li>Networking</li> <li>Connect</li> <li>Disks</li> <li>Size</li> <li>Security</li> <li>Advisor recommendations</li> </ul>		Restart       Stop       Stop       Capture       Delete       C         ne         y delete the virtual machine 'Dockermachine'. Asso         lick here to add tags         Capabilities       Tutorials         (start VM to view)	DNS name : Co	ifigure
<ul> <li>Dockermachine <ul> <li>Virtual machine</li> </ul> </li> <li>Search (Ctrl+/)</li> <li>Overview</li> <li>Activity log</li> <li>Activity log</li> <li>Access control (IAM)</li> <li>Tags</li> <li>Diagnose and solve problems</li> <li>Settings</li> <li>Networking</li> <li>Connect</li> <li>Disks</li> <li>Size</li> <li>Security</li> <li>Advisor recommendations</li> <li>Extensions</li> </ul>	Connect Start  Connect Start  Connect Start  Control	" Restart       Stop       Stop       Capture       Delete       Capabilities         ne         y delete the virtual machine 'Dockermachine'. Assoc         lick here to add tags         Capabilities       Tutorials         (start VM to view)         Linux	DNS name : Co NE Networking Public IP address Public IP address Public IP address Public IP address (IPv6)	40.122.207.189
<ul> <li>Dockermachine <ul> <li>Virtual machine</li> <li>Search (Ctrl+/)</li> <li>Overview</li> <li>Activity log</li> <li>Activity log</li> <li>Access control (IAM)</li> <li>Tags</li> <li>Diagnose and solve problems</li> </ul> </li> <li>Settings <ul> <li>Networking</li> <li>Connect</li> <li>Disks</li> <li>Size</li> <li>Security</li> <li>Advisor recommendations</li> <li>Extensions</li> <li>Continuous delivery</li> </ul> </li> </ul>	Connect Start  Connect Start  Connect Start  Control	" Restart       Stop       Stop       Capture       Delete       Capture         ne         y delete the virtual machine 'Dockermachine'. Asso         lick here to add tags         Capabilities       Tutorials         (start VM to view)         Linux         18.04-LTS	DNS name : Col Networking Public IP address Private IP address	40.122.207.189
<ul> <li>Dockermachine <ul> <li>Virtual machine</li> </ul> </li> <li>Search (Ctrl+/)</li> <li>Overview</li> <li>Activity log</li> <li>Activity log</li> <li>Access control (IAM)</li> <li>Tags</li> <li>Diagnose and solve problems</li> <li>Settings</li> <li>Networking</li> <li>Connect</li> <li>Disks</li> <li>Size</li> <li>Security</li> <li>Advisor recommendations</li> <li>Extensions</li> </ul>	Connect Start Connect Start Connect Start Control of the start Control of the start Control of the start Computer name Coperating system SKU Publisher Control of the start o	" Restart       Stop       Stop       Capture       Delete       Capabilities         " delete the virtual machine 'Dockermachine'. Asso         " delete the virtual machine'. Dockermachine'. Dockermachine'. A	DNS name : Col Networking Public IP address Private IP address	40.122.207.189 - 10.0.2.4 -
<ul> <li>Dockermachine <ul> <li>Virtual machine</li> <li>Search (Ctrl+/)</li> <li>Overview</li> <li>Activity log</li> <li>Activity log</li> <li>Access control (IAM)</li> <li>Tags</li> <li>Diagnose and solve problems</li> </ul> </li> <li>Settings <ul> <li>Networking</li> <li>Connect</li> <li>Disks</li> <li>Size</li> <li>Security</li> <li>Advisor recommendations</li> <li>Extensions</li> <li>Continuous delivery</li> </ul> </li> </ul>	Connect Start Connect Start Connect Start Content Initial and this Content Initial and this Computer name Computer name Computer name Sku Publisher VM generation	** Restart       Stop       Stop       Capture       Delete       C         ne         y delete the virtual machine 'Dockermachine'. Asso         Tick here to add tags         Tick here to add tags         (start VM to view)         Linux         18.04-LTS         Canonical         V1	DNS name : Cor  Networking Public IP address Public IP address Private IP address Privat	1figure 40.122.207.189 - 10.0.2.4 - Dockermachine_group-vnet/default
<ul> <li>Dockermachine <ul> <li>Virtual machine</li> <li>Search (Ctrl+/)</li> <li>Overview</li> <li>Activity log</li> <li>Activity log</li> <li>Access control (IAM)</li> <li>Tags</li> <li>Diagnose and solve problems</li> </ul> </li> <li>Settings <ul> <li>Networking</li> <li>Connect</li> <li>Disks</li> <li>Size</li> <li>Security</li> <li>Advisor recommendations</li> <li>Extensions</li> <li>Continuous delivery</li> </ul> </li> </ul>	Connect Start Connect Start Connect Start Content Initial and this Content Initial and this Computer name Computer name Computer name Sku Publisher VM generation	** Restart       Stop       Stop       Capture       Delete       C         ne         y delete the virtual machine 'Dockermachine'. Asso         Tick here to add tags         Tick here to add tags         (start VM to view)         Linux         18.04-LTS         Canonical         V1	DNS name : Cor  Networking Public IP address Public IP address Private IP address Privat	1figure 40.122.207.189 - 10.0.2.4 - Dockermachine_group-vnet/default
<ul> <li>Dockermachine <ul> <li>Virtual machine</li> <li>Search (Ctrl+/)</li> <li>Overview</li> <li>Activity log</li> <li>Activity log</li> <li>Access control (IAM)</li> <li>Tags</li> <li>Diagnose and solve problems</li> </ul> </li> <li>Settings <ul> <li>Networking</li> <li>Connect</li> <li>Disks</li> <li>Size</li> <li>Security</li> <li>Advisor recommendations</li> <li>Extensions</li> <li>Continuous delivery</li> </ul> </li> </ul>	Connect Start Connect Start Connect Start Content Initial and this Content Initial and this Computer name Computer name Computer name Sku Publisher VM generation	** Restart       Stop       Stop       Capture       Delete       C         ne         y delete the virtual machine 'Dockermachine'. Asso         Tick here to add tags         Tick here to add tags         (start VM to view)         Linux         18.04-LTS         Canonical         V1	DNS name : Cor  Networking Public IP address Public IP address Private IP address Privat	1figure 40.122.207.189 - 10.0.2.4 - Dockermachine_group-vnet/default





# 7 RESET VIRTUAL MACHINE PASSWORD

1. Select Virtual Machine and goto the Support+Troubleshooting-> Reset Password

+ Add 🕓 Reservations …	🔎 Search (Ctrl+/) «	🖫 Update 🗙 Discard		
Filter by name	Policies     Thi	his uses the VMAccessForLinux extension to reset the crea	dentials of an existing user or create a new user with sud	to privileges, and reset the SSH configuration. Learn more
Name ↑↓	Mo Sup command	lode ①		
DockerMachine ····	Manaharian C	Reset password Reset SSH public key		
Dockermachine		Reset configuration only		
	Vs Alerts	sername * ()		
	- 11 March -	assword *		
	Diagnostic settings	assword -		
	👷 Logs Co	onfirm password *		
	S Connection monitor			
	Support + troubleshooting			
	Boot diagnostics			
	Reformance diagnostics (Pre			
	📍 Reset password			
	A Redeploy			
	Ubuntu Advantage support pl			
	Maintenance     ■			
	Serial console			
	Connection troubleshoot			
DockerMachine			2) préside	
Virtual machine Search (Ctrl+/)	« 🔗 Connect ▷ Start 🤇 Re	estart 🗌 Stop 😥 Capture 💼 Delete	-	
Virtual machine  Search (Ctrl+/)  Vorview	≪	erMachine	Operating system : L	.inux (ubuntu 18.04)
Virtual machine Search (Ctrl+/)	<ul> <li>≪ Ø Connect ▷ Start ♥ Re</li> <li>Aresource group (change) : Docket</li> <li>Status : Running</li> </ul>	erMachine	Operating system : L Size : S	Standard D2s v3 (2 vcpus, 8 GiB memory)
Virtual machine  Search (Ctrl+/)  Vorview	≪ Ø Connect ▷ Start ♥ Re	erMachine ing JS	Operating system : L Size : S Public IP address : 4	Standard D2s v3 (2 vcpus, 8 GiB memory) 40.114.104.144
Virtual machine    Search (Ctrl+/)    Overview   Activity log	<ul> <li>✓ Connect ▷ Start ♥ Resource group (change) : Docke</li> <li>Status : Runnii</li> <li>Location : East U</li> <li>Subscription (change) : Azure</li> </ul>	erMachine ing JS for Students	Operating system : L Size : S Public IP address : 4 Virtual network/subnet : D	Standard D2s v3 (2 vcpus, 8 GiB memory) 40.114.104.144 DockerMachine-vnet/default
✓         Virtual machine           (♪         Search (Ctrl+/)           ✓         Overview           ■         Activity log           冬         Access control (IAM)	<ul> <li>Connect &gt; Start C Resource group (change) : Docke</li> <li>Status : Runnii</li> <li>Location : East U</li> <li>Subscription (change) : Azure</li> <li>Subscription ID : 3e227</li> </ul>	erMachine ing JS e for Students 72c5-dbd5-4322-af00-d507c9b0626d	Operating system : L Size : S Public IP address : 4 Virtual network/subnet : D	Standard D2s v3 (2 vcpus, 8 GiB memory) 40.114.104.144
Virtual machine       Search (Ctrl+/)       Overview       Activity log       Access control (IAM)       Tags       Diagnose and solve problems	<ul> <li>Connect &gt; Start C Resource group (change) : Docke</li> <li>Status : Runnii</li> <li>Location : East U</li> <li>Subscription (change) : Azure</li> <li>Subscription ID : 3e227</li> </ul>	erMachine ing JS for Students	Operating system : L Size : S Public IP address : 4 Virtual network/subnet : C DNS name : C	Standard D2s v3 (2 vcpus, 8 GiB memory) 40.114.104.144 DockerMachine-vnet/default
Virtual machine  Search (Ctrl+/)  Overview  Activity log  Activity log  Access control (IAM)  Tags  Diagnose and solve problems  Settings	<ul> <li>Connect &gt; Start C Resource group (change) : Docke</li> <li>Status : Runnii</li> <li>Location : East U</li> <li>Subscription (change) : Azure</li> <li>Subscription ID : 3e227</li> </ul>	erMachine ing JS e for Students 72c5-dbd5-4322-af00-d507c9b0626d	Operating system : L Size : S Public IP address : 4 Virtual network/subnet : D	Standard D2s v3 (2 vcpus, 8 GiB memory) 40.114.104.144 DockerMachine-vnet/default
Virtual machine       Search (Ctrl+/)       Overview       Activity log       Access control (IAM)       Tags       Diagnose and solve problems	<ul> <li>Start C Resource group (change) : Docke</li> <li>Resource group (change) : Docke</li> <li>Status : Runni</li> <li>Location : East U</li> <li>Subscription (change) : Azure</li> <li>Subscription ID : 3e227</li> <li>Tags (change) : Click I</li> </ul>	erMachine ing JS e for Students 72c5-dbd5-4322-af00-d507c9b0626d	Operating system : L Size : S Public IP address : 4 Virtual network/subnet : C DNS name : C	Standard D2s v3 (2 vcpus, 8 GiB memory) 40.114.104.144 DockerMachine-vnet/default
Virtual machine  Search (Ctrl+/)  Overview  Activity log  Activity log  Access control (IAM)  Tags  Diagnose and solve problems  Settings	<ul> <li>Connect &gt; Start C Resource group (change) : Docke</li> <li>Status : Runnii</li> <li>Location : East U</li> <li>Subscription (change) : Azure</li> <li>Subscription ID : 3e227</li> </ul>	erMachine ing JS e for Students 72c5-dbd5-4322-af00-d507c9b0626d	Operating system : L Size : S Public IP address : 4 Virtual network/subnet : C DNS name : C	Standard D2s v3 (2 vcpus, 8 GiB memory) 40.114.104.144 DockerMachine-vnet/default
Virtual machine Search (Ctrl+/) Coverview Coverview Activity log Activity log Access control (IAM) Tags Diagnose and solve problems Settings Networking Networking	<ul> <li>Start C Resource group (change) : Docke</li> <li>Resource group (change) : Docke</li> <li>Status : Runni</li> <li>Location : East U</li> <li>Subscription (change) : Azure</li> <li>Subscription ID : 3e227</li> <li>Tags (change) : Click I</li> </ul>	erMachine ing JS e for Students 72c5-dbd5-4322-af00-d507c9b0626d here to add tags	Operating system : L Size : S Public IP address : 4 Virtual network/subnet : C DNS name : C	Standard D2s v3 (2 vcpus, 8 GiB memory) 40.114.104.144 DockerMachine-vnet/default
Virtual machine         ✓ Search (Ctrl+/)         ✓ Overview         ■ Activity log         % Access control (IAM)         ♦ Tags         Ø Diagnose and solve problems         Settings         ▲ Networking         Ø Connect	<ul> <li>Start Start Resource group (change) : Docke</li> <li>Resource group (change) : Docke</li> <li>Status : Runni</li> <li>Location : East U</li> <li>Subscription (change) : Azure</li> <li>Subscription ID : 3e227</li> <li>Tags (change) : Click I</li> <li>Properties Monitoring C</li> <li>Virtual machine</li> </ul>	erMachine ing JS e for Students 72c5-dbd5-4322-af00-d507c9b0626d here to add tags	Operating system : L Size : S Public IP address : 4 Virtual network/subnet : E DNS name : C	Standard D2s v3 (2 vcpus, 8 GiB memory) 40.114.104.144 DockerMachine-vnet/default
<ul> <li>Virtual machine</li> <li>Search (Ctrl+/)</li> <li>Overview</li> <li>Activity log</li> <li>Access control (IAM)</li> <li>Tags</li> <li>Diagnose and solve problems</li> <li>Settings</li> <li>Networking</li> <li>Connect</li> <li>Disks</li> <li>Size</li> </ul>	<ul> <li>Start Start Resource group (change) : Docke</li> <li>Resource group (change) : Docke</li> <li>Status : Runni</li> <li>Location : East U</li> <li>Subscription (change) : Azure</li> <li>Subscription ID : 3e227</li> <li>Tags (change) : Click I</li> <li>Properties Monitoring C</li> <li>Virtual machine</li> </ul>	erMachine ing JS e for Students 72c5-dbd5-4322-af00-d507c9b0626d here to add tags Username	Operating system : L Size : S Public IP address : 4 Virtual network/subnet : [ DNS name : C NS name : C	Standard D2s v3 (2 vcpus, 8 GiB memory) 40.114.104.144 Docker/Machine-vnet/default Configure 40.114.104.144
<ul> <li>Virtual machine</li> <li>Search (Ctrl+/)</li> <li>Overview</li> <li>Activity log</li> <li>Access control (IAM)</li> <li>Tags</li> <li>Diagnose and solve problems</li> <li>Settings</li> <li>Networking</li> <li>Connect</li> <li>Disks</li> <li>Size</li> <li>Security</li> </ul>	<ul> <li>Start Start Resource group (change) : Docket</li> <li>Resource group (change) : Docket</li> <li>Status : Runnii</li> <li>Location : East U</li> <li>Subscription (change) : Azure</li> <li>Subscription ID : 3e227</li> <li>Tags (change) : Click f</li> <li>Properties Monitoring C</li> <li>Virtual machine</li> <li>Computer name</li> <li>Operating system</li> </ul>	erMachine ing JS e for Students 72c5-dbd5-4322-af00-d507c9b0626d here to add tags Username	Operating system : L Size : S Public IP address : 4 Virtual network/subnet : [ DNS name : C Networking Public IP address	Standard D2s v3 (2 vcpus, 8 GiB memory) 40.114.104.144 Docker/Machine-vnet/default Configure 40.114.104.144
<ul> <li>Virtual machine</li> <li>➢ Search (Ctrl+/)</li> <li>Overview</li> <li>Activity log</li> <li>Access control (IAM)</li> <li>Tags</li> <li>Diagnose and solve problems</li> <li>Settings</li> <li>Metworking</li> <li>Connect</li> <li>Disks</li> <li>Size</li> <li>Security</li> <li>Advisor recommendations</li> </ul>	<ul> <li>Start Start Resource group (change) : Docket</li> <li>Resource group (change) : Docket</li> <li>Status : Runnit</li> <li>Location : East U</li> <li>Subscription (change) : Azure</li> <li>Subscription ID : 3 e227</li> <li>Tags (change) : Click f</li> <li>Properties Monitoring C</li> <li>Virtual machine</li> <li>Computer name</li> <li>Computer name</li> <li>SKU 1</li> </ul>	erMachine ing JS e for Students 72c5-dbd5-4322-af00-d507c9b0626d here to add tags Username SockerMachine inux (ubunto 18.04)	Operating system : L Size : S Public IP address : 4 Virtual network/subnet : [ DNS name : C Networking Public IP address Public IP address (Pv6)	Standard D2s v3 (2 vcpus, 8 GiB memory) 40.114.104.144 Docker/Machine-vnet/default Configure 40.114.104.144 ) - 10.0.3.4
<ul> <li>Virtual machine</li> <li>➢ Search (Ctrl+/)</li> <li>Overview</li> <li>Activity log</li> <li>Access control (IAM)</li> <li>Tags</li> <li>Ø Diagnose and solve problems</li> <li>Settings</li> <li>Metworking</li> <li>Connect</li> <li>Disks</li> <li>Size</li> <li>Size</li> <li>Security</li> <li>Advisor recommendations</li> <li>Extensions</li> </ul>	<ul> <li>Start Start Resource group (change) : Docket</li> <li>Resource group (change) : Docket</li> <li>Status : Runnit</li> <li>Location : East U</li> <li>Subscription (change) : Azure</li> <li>Subscription ID : 3e227</li> <li>Tags (change) : Click f</li> <li>Properties Monitoring C</li> <li>Virtual machine</li> <li>Computer name</li> <li>SKU 1</li> <li>Publisher</li> </ul>	erMachine ing JS tor Students 72c5-dbd5-4322-af00-d507c9b0626d here to add tags Username Js SockerMachine SockerMachi	Operating system : L Size : S Public IP address : 4 Virtual network/subnet : C DNS name : C	Standard D2s v3 (2 vcpus, 8 GiB memory) 40.114.104.144 Docker/Machine-vnet/default Configure 40.114.104.144 ) - 10.0.3.4 5) -
<ul> <li>Virtual machine</li> <li>➢ Search (Ctrl+/)</li> <li>Overview</li> <li>Activity log</li> <li>Access control (IAM)</li> <li>Tags</li> <li>Diagnose and solve problems</li> <li>Settings</li> <li>Metworking</li> <li>Connect</li> <li>Disks</li> <li>Size</li> <li>Security</li> <li>Advisor recommendations</li> </ul>	<ul> <li>Start Start C Resource group (change) : Docket</li> <li>Resource group (change) : Docket</li> <li>Status : Runnit</li> <li>Location : East U</li> <li>Subscription (change) : Azure</li> <li>Subscription ID : 3e227</li> <li>Tags (change) : Click I</li> <li>Properties Monitoring O</li> <li>Virtual machine</li> <li>Computer name</li> <li>Operating system</li> <li>SKU 1</li> <li>Publisher C</li> <li>VM generation V</li> </ul>	erMachine ing JS for Students 72c5-dbd5-4322-af00-d507c9b0626d here to add tags Username als SockerMachine inux (ubonto 18:0) 18.04-LTS Canonical	Operating system : L Size : S Public IP address : 4 Virtual network/subnet : C DNS name : C NEtworking Public IP address Public IP address Public IP address Private IP address Private IP address (PVG)	Standard D2s v3 (2 vcpus, 8 GiB memory) 40.114.104.144 Docker/Machine-vnet/default Configure 40.114.104.144 ) - 10.0.3.4 5) -
<ul> <li>Virtual machine</li> <li>➢ Search (Ctrl+/)</li> <li>Overview</li> <li>Activity log</li> <li>Access control (IAM)</li> <li>Tags</li> <li>Ø Diagnose and solve problems</li> <li>Settings</li> <li>Metworking</li> <li>Connect</li> <li>Disks</li> <li>Size</li> <li>Size</li> <li>Security</li> <li>Advisor recommendations</li> <li>Extensions</li> </ul>	<ul> <li>Start Start C Resource group (change) : Docket Status : Runnit Location : East U Subscription (change) : Azure Subscription ID : 3e227 Tags (change) : Click t</li> <li>Properties Monitoring C Properties Monitoring C Operating system</li> <li>Virtual machine C Operating system</li> <li>SKU 1</li> <li>Publisher C VM generation V Agent status R</li> </ul>	erMachine ing JS for Students 72c5-dbd5-4322-af00-d507c9b0626d here to add tags Username als OckerMachine drux (uborto 1860) 18.04-LTS Canonical /1	Operating system : L Size : S Public IP address : 4 Virtual network/subnet : D DNS name : C	Standard D2s v3 (2 vcpus, 8 GiB memory)           40.114.104.144           Docker/Machine-vnet/default           Configure           40.114.104.144           )           -           10.0.3.4           5)           -           Docker/Machine-vnet/default
<ul> <li>✓ Virtual machine</li> <li>✓ Search (Ctrl+/)</li> <li>✓ Overview</li> <li>✓ Activity log</li> <li>Access control (IAM)</li> <li>✓ Tags</li> <li>Ø Diagnose and solve problems</li> <li>✓ Diagnose and solve problems</li> <li>✓ Settings</li> <li>✓ Networking</li> <li>✓ Connect</li> <li>✓ Disks</li> <li>✓ Size</li> <li>✓ Size</li> <li>✓ Size</li> <li>✓ Security</li> <li>Advisor recommendations</li> <li>✓ Extensions</li> <li>✓ Continuous delivery</li> </ul>	<ul> <li>Connect &gt; Start Resource group (change) : Docket Status : Runnit Location : East U Subscription (change) : Azure Subscription ID : 3e227 Tags (change) : Click It</li> <li>Properties Monitoring Properties Monitoring Computer name Computer</li></ul>	erMachine ing JS for Students 72c5-dbd5-4322-ar00-d507c9b0626d here to add tags Username SockerMachine Grux (ubuntu 1860) 18.04-LTS Canonical V1 Ready	Operating system : L Size : S Public IP address : 4 Virtual network/subnet : D DNS name : C	Standard D2s v3 (2 vcpus, 8 GiB memory) 40.114.104.144 DockerMachine-vnet/default Configure 40.114.104.144 ) - 10.0.3.4 5) - t DockerMachine-vnet/default Configure
Virtual machine	<ul> <li>Connect &gt; Start Resource group (change) : Docket Status : Runnit Location : East U Subscription (change) : Azure Subscription ID : 3e227 Tags (change) : Click It</li> <li>Properties Monitoring Properties Monitoring Computer name Computer</li></ul>	erMachine ing JS for Students 72c5-dbd5-4322-af00-d507c9b0626d here to add tags Username SockerMachine inux (uburlu 1864) 18.04-LTS Canonical /1 Ready 22.48.1 None	Operating system : L Size : S Public IP address : 4 Virtual network/subnet : C DNS name : C	Standard D2s v3 (2 vcpus, 8 GiB memory) 40.114.104.144 DockerMachine-vnet/default Configure 40.114.104.144 ) - 10.0.3.4 5) - t DockerMachine-vnet/default Configure Standard D2s v3
<ul> <li>Virtual machine</li> <li>Search (Ctrl+/)</li> <li>Overview</li> <li>Activity log</li> <li>Access control (IAM)</li> <li>Tags</li> <li>Diagnose and solve problems</li> <li>Settings</li> <li>Networking</li> <li>Connect</li> <li>Disks</li> <li>Size</li> <li>Security</li> <li>Advisor recommendations</li> <li>Extensions</li> <li>Extensions</li> <li>Continuous delivery</li> <li>Availability + scaling</li> <li>Configuration</li> <li>Identity</li> </ul>	<ul> <li>✓ Connect ▷ Start ♥ Resource group (change) : Docke Status : Runni Location : East U Subscription ID : 3e227 Tags (change) : Click I</li> <li>Properties Monitoring Ø Properties Monitoring Ø Virtual machine Computer name Ø Operating system U SkU 1 Publisher 0 VM generation V Agent status R Agent version 2 Host ID N</li> </ul>	erMachine ing JS for Students 72c5-dbd5-4322-af00-d507c9b0626d here to add tags Username SockerMachine inux (uburlu 1864) 18.04-LTS Canonical /1 Ready 22.48.1 None	Operating system : L Size : S Public IP address : 4 Virtual network/subnet : C DNS name : C	Standard D2s v3 (2 vcpus, 8 GiB memory) 40.114.104.144 DockerMachine-vnet/default Configure 40.114.104.144 ) - 10.0.3.4 ) - 10.0.3.4 ) - DockerMachine-vnet/default Configure Standard D2s v3 2
<ul> <li>Virtual machine</li> <li>Search (Ctrl+/)</li> <li>Overview</li> <li>Activity log</li> <li>Access control (IAM)</li> <li>Tags</li> <li>Diagnose and solve problems</li> <li>Settings</li> <li>Networking</li> <li>Connect</li> <li>Disks</li> <li>Size</li> <li>Security</li> <li>Advisor recommendations</li> <li>Extensions</li> <li>Extensions</li> <li>Continuous delivery</li> <li>Availability + scaling</li> <li>Configuration</li> </ul>	<ul> <li>✓ Connect ▷ Start ♥ Resource group (change) : Docke Status : Runni Location : East U Subscription ID : 3e227 Tags (change) : Click I</li> <li>Properties Monitoring Ø Properties Monitoring Ø Virtual machine Computer name Ø Operating system U SkU 1 Publisher 0 VM generation V Agent status R Agent version 2 Host ID N</li> </ul>	erMachine ing JS for Students Z2c5-dbd5-4322-af00-d507c9b0626d here to add tags Username Js SockerMachine Linux (ubunto 18.04) Scanonical /1 Ready 22.248.1 None V/A	Operating system : L Size : S Public IP address : 4 Virtual network/subnet : C DNS name : C	Standard D2s v3 (2 vcpus, 8 GiB memory) 40.114.104.144 DockerMachine-vnet/default Configure 40.114.104.144 ) - 10.0.3.4 5) - t DockerMachine-vnet/default Configure Standard D2s v3

- Username: DockerMachine
- Password: Enter your password
- Confirm Password: Confirm Enter your password
- Click on Update





 $\times$ 

• DockerMachine | Reset password

Virtual machine	
	« 🔚 Update 🗙 Discard
<ul> <li>Policies</li> </ul>	This uses the VMAccessForLinux extension to reset the credentials of an existing user or create a new user with sudo privileges, and reset the SSH configuration. Learn more
Run command	Mode ① Reset password
Monitoring	Reset SSH public key     Reset configuration only
Insights	Username * ①
Alerts	DockerMachine
Metrics	Password *
Diagnostic settings	· · · · · · · · · · · · · · · · · · ·
₽ Logs	Confirm password *
Connection monitor	
Support + troubleshooting	
℅ Resource health	
Boot diagnostics	
Rerformance diagnostics (Pre	
Reset password	

Ubuntu Advantage support pl...
 Maintenance

E Corial concola

Redeploy



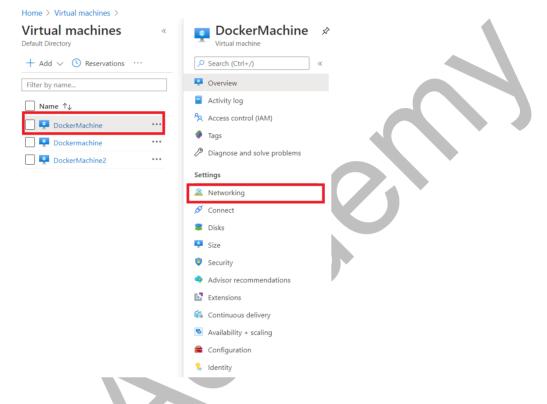






### 8 HOW TO OPEN PORTS IN AZURE

1. Reach the home page of Azure and select Virtual Machines and click on your VM and then click on Networking.



2. By opening networking section, you will see this on your screen and also a button called Add inbound port rule, click on that and you will see an Add inboubd security rule window.







#### Home > Virtual machines >

#### 👧 DockerMachine | Networking Virtual machines × Default Directory Virtual machine + Add $\lor$ () Reservations ... Ø Attach network interface S<sup>♥</sup> Detach network interface Search (Ctrl+/) Overview dockermachine49 Filter by name... Activity log Name ↑↓ IP configuration ① Access control (IAM) ipconfig1 (Primary) $\sim$ DockerMachine Tags Dockermachine Network Interface: dockermachine49 Effective security rules Topology Diagnose and solve problems Virtual network/subnet: DockerMachine-vnet/default NIC Public IP: DockerMachine-ip NIC Private IP: 10.0.3.4 DockerMachine2 ... Accelerated networking: Disabled Settings Inbound port rules Outbound port rules Application security groups Load balancing 🙆 Networking 🖉 Connect Network security group DockerMachine-nsg (attached to network interface: dockermachine49) Impacts 0 subnets, 1 network interfaces Add inbound port r Disks Priority Name Port Protocol Source Destination Size 300 🔺 SSH 22 тср Any Any Security HTTP 80 TCP 320 Anv Anv Advisor recommendations 340 HTTPS 443 TCP Any Any Extensions 65000 AllowVnetInBound VirtualNetwork VirtualNetwork Any Any G Continuous deliverv 65001 AllowAzureLoadBalancerinBound Any Any AzureLoadBalancer Any S Availability + scaling 65500 DenvAllinBound Anv Any Anv Anv 🚔 Configuration 4 % Identity Home > Virtual machines > Add inbound security rule × DockerMachine | Networking 6

Virtual machines 🤌 Basic + Add  $\vee$  (§ Reservations  $\cdots$ Search (Ctrl+/) 🖉 Attach network interface 🔗 Detach ne Source \* 🕕 Overview dockermachine49 Filter by name..  $\sim$ Any Activity log IP configuration Name ↑↓ Source port ranges \* 🕕 Access control (IAM) ipconfig1 (Primary)  $\sim$ DockerMachine 🗳 Tags Network Interface: dockermachine49 Destination \* Dockermachine Effec Virtual network/subnet: DockerMachine Accelerated networking: Disabled Diagnose and solve problems Any  $\sim$ DockerMachine2 ... Settings Destination port ranges \* 8080 Inbound port rules Outbound port rules Appli 🚨 Networking Protocol \* S Connect Network security group DockerMachine-nsg (attack Impacts 0 subnets, 1 network interfaces Any TCP UDP Disks Priority Name Action \* Size Allow Deny 300 A SSH Security Priority \* ① 320 нттр Advisor recommendation 350 340 HTTPS Extensions Name \* 65000 Allow\/netInBound 🐔 Continuous delivery Port\_8080 65001 AllowAzurel oadBalancerInB Availability + scaling Description 65500 DenvAllinBound Configuration 4 🚷 Identity Properties Add A Locks

3. Change the Destination port ranges from 8080 to \* and also the Name from Port\_8080 to All Ports and click on Add.





Basic		
Source * 🕕		
Any	$\sim$	
Source port ranges * 🕕		
*		
Destination * 🕕		
Any	$\sim$	
Destination port ranges * ①		
*	<u> </u>	
Protocol *		
Any TCP UDP ICMP		
Action *		
Allow Deny		
Priority * ①		
350		
Name *		
All_Ports	<u> </u>	
Description		

# Note: For poc purposes we are opening all the ports in Azure cloud.

4. On successful creation you will see the new All\_Ports in the list of Inbound port rules like in the below image.







 $\times$ 

#### Home > Virtual machines >

Virtual machines	~
+ Add $\sim$ ( Reservations $\cdots$	
Filter by name	
□ Name ↑↓	
DockerMachine	
Dockermachine	
DockerMachine2	

#### 🙍 DockerMachine | Networking

Overview	dockermachine49					
Activity log	IP configuration ①					
Access control (IAM)	ipconfig1 (Primary)	$\sim$				
Tags	Network Interface	: dockermachine49 Effective	e security rules Top	ology		
Diagnose and solve problems	Virtual network/subnet: Accelerated netwo		NIC Public IP: DockerMac	chine-ip NIC Private	IP: 10.0.3.4	
Settings						
🚨 Networking	Inbound port rules	Outbound port rules Appli	cation security groups	Load balancing		
S Connect	Network security a	roup DockerMachine-nsg (attach	ed to network interface	v dockormachino(0)	_	
			ed to network interface	. dockermachine+3)		Add inbound port rul
B Disks	Impacts 0 subnets, 1			e. dockermachine43)		Add inbound port rul
			Port	Protocol	Source	Add inbound port rul Destination
	Impacts 0 subnets, 1	network interfaces				Add inbound port rul Destination Any
👤 Size	Impacts 0 subnets, 1 Priority	network interfaces Name	Port	Protocol	Source	Destination
<ul> <li>Size</li> <li>Security</li> <li>Advisor recommendations</li> </ul>	Impacts 0 subnets, 1 Priority 300	Name	Port 22	Protocol TCP	Source Any	Destination Any
<ul> <li>Security</li> <li>Advisor recommendations</li> </ul>	Impacts 0 subnets, 1 Priority 300 320	network interfaces Name SSH HTTP	Port 22 80	Protocol TCP TCP	Source Any Any	Destination Any Any
Size Security Advisor recommendations EEExtensions Continuous delivery	Impacts 0 subnets, 1 Priority 300 320 340	Name SSH HTTP HTTPS	Port 22 80 443	Protocol TCP TCP TCP	Source Any Any Any	Destination Any Any Any
Size Security Advisor recommendations Extensions	Impacts 0 subnets, 1 Priority 300 320 340 350	Name SSH HTTP HTTPS All_Ports	Port           22           80           443           Any	Protocol TCP TCP TCP Any	Source Any Any Any Any	Destination Any Any Any Any



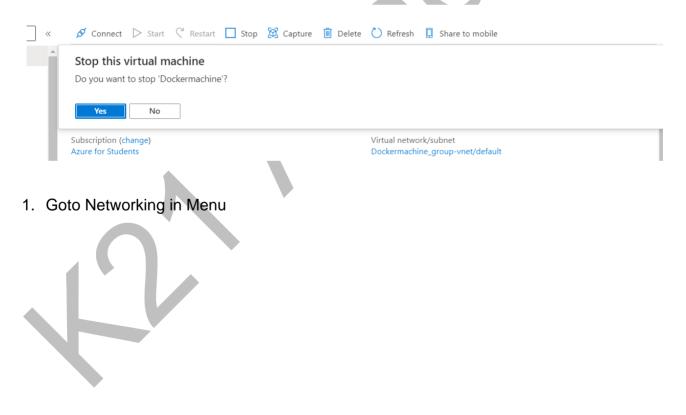


# 9 HOW TO REMOVE RESERVE IP OPTION

If you Accidently Saved IP while Stopping a virtual machine then next time you will not get the option for "**reserve the Public IP**".

Public IP address '52.165.37.49' will be lost if this VM is stopped
Do you want to reserve the Public IP address?
Do you want to stop 'Dockermachine'?

Next we will not get the option for "Reserve public IP address"







✓ Search (Ctrl+/) «	🖉 Connect ▷ Start 🦿 Restart 🔲 Stop 🔯 Capture 💼 D	Delete 💍 Refresh 🔋 Share to mobile
Overview	Resource group (change)	Operating system
<ul> <li>Activity log</li> </ul>	Dockermachine_group Status	Linux Size
Access control (IAM)	Running	Standard D2s v3 (2 vcpus, 8 GiB memory)
Tags	Location Central US	Public IP address 40.122.207.189
Diagnose and solve problems	Subscription (change) Azure for Students	Virtual network/subnet Dockermachine_group-vnet/default
Settings	Subscription ID	DNS name
🚨 Networking	3e2272c5-dbd5-4322-af00-d507c9b0626d	Configure
🖉 Connect	Tags (change) Click here to add tags	
🛢 Disks		*
📮 Size		
Security	Properties Monitoring Capabilities Recommendations (0)	) Tutorials
Advisor recommendations	👤 Virtual machine	🙆 Networking
Extensions	Computer name (start VM to view)	Public IP address 40.122.207.189
🐔 Continuous delivery	Operating system Linux	Public IP address (IPv6) -
Availability + scaling	SKU 18.04-LTS	Private IP address 10.0.2.4
	Publisher Canonical	Drivato ID addrace (IDu6) -

	<i>d</i>					
✓ Search (Ctrl+/) «	Attach netwo	ork interface 🔗 Detach network	interface			
Overview	dockermachin	e867				
Activity log	IP configuration	0				
Access control (IAM)	ipconfig1 (Prima	ary) 🗸 🗸				
Tags	Network Interview	erface dockermachine867	Effective security rule	s Topology		
Diagnose and solve problems	Virtual network/s	ubnet: Dockermachine_group-vnet/ networking: Disabled		1 59	NIC Private IP: 10.0.2.4	
Settings						
Networking	Inbound port	rules Outbound port rules	Application security	groups Load balance	ing	
Networking Sonnect	Network secu	urity group Dockermachine-nsg (a			5	Add inbound p
Ø Connect	Network secu				5	Add inbound p
Connect     Disks	Network secu	urity group Dockermachine-nsg (a			5	Add inbound p Destinatio
<ul> <li>Connect</li> <li>Disks</li> <li>Size</li> </ul>	Network secu Impacts 0 sub	urity group Dockermachine-nsg (a nets, 1 network interfaces	attached to network i	nterface: dockermachine	e867)	
<ul> <li>Connect</li> <li>Disks</li> <li>Size</li> </ul>	<ul> <li>Network sect Impacts 0 sub</li> <li>Priority</li> </ul>	urity group Dockermachine-nsg (a nets, 1 network interfaces Name	attached to network i Port	nterface: dockermachine Protocol	2867) Source	Destinatio
<ul> <li>Connect</li> <li>Disks</li> <li>Size</li> <li>Security</li> </ul>	Network sect Impacts 0 sub Priority 300	urity group Dockermachine-nsg (an nets, 1 network interfaces Name A SSH	Port 22	nterface: dockermachine Protocol TCP	2867) Source Any	Destinatio Any
<ul> <li>Connect</li> <li>Disks</li> <li>Size</li> <li>Security</li> <li>Advisor recommendations</li> <li>Extensions</li> </ul>	<ul> <li>Network sect Impacts 0 sub</li> <li>Priority</li> <li>300</li> <li>320</li> </ul>	urity group Dockermachine-nsg (a nets, 1 network interfaces Name A SSH HTTP	Port 22 80	nterface: dockermachine Protocol TCP TCP	Source Any Any	Destinatio Any Any
<ul> <li>Connect</li> <li>Disks</li> <li>Size</li> <li>Security</li> <li>Advisor recommendations</li> <li>Extensions</li> </ul>	<ul> <li>Network sect Impacts 0 sub</li> <li>Priority</li> <li>300</li> <li>320</li> <li>900</li> </ul>	Interstand Sector Action Content of	Port 22 80 3389	Protocol TCP TCP Any	2867) Source Any Any Any	Destinatio Any Any Any

3. Under Network Inerface click on IP Configurations





Home > Virtual machines > Dockermachine | Networking >

Source group (change) Dockermachine.group   Private IP address : 10.2.4   Activity log Location : Central US   Access control (IAM) Subscription (change) : Azure for Students   Pags Subscription ID : 3e2272c5-dbd5-4322-af00-d507c9b0626d   Private IP address (IPV6) : -   Virtual network/submet : Dockermachine.group-wnet/default   Swerres Rags (change) : Click here to add tags   Poprietis :   I proprietis : Click here to add tags   I cocks : Septent Hermathing   I cocks : Septent Hermathing   I cocks : Septent Hermathing	Public IP address       : 40.122.207.189 (Dockermachine-ip)         Private IP address (IPv6)       :         Public IP address (IPv6)       :         Virtual network/subnet       : Dockermachine_group-vnet/default         Network security group       : Dockermachine-nsg
Access control (IAM)     Subscription (change)     : Azure for Students     Private IP address (IPv6)     :       Tags     Subscription ID     : 3e2272c5-dbd5-43222-af00-d507c9b0626d     Public IP address (IPv6)     :       Settings     IP configurations     : Dockermachine_group-vnet/default       IP configurations     Iags (change)     : Click here to add tags     Xutched to     : Dockermachine       Network security group     : Rags (change)     : Click here to add tags     Image: Click here to add tags     Image: Click here to add tags       Image: Click here to add tags     Image: Click here to add tags     Image: Click here to add tags     Image: Click here to add tags       Image: Click here to add tags     Image: Click here to add tags     Image: Click here to add tags     Image: Click here to add tags       Image: Click here to add tags     Image: Click here to add tags     Image: Click here to add tags     Image: Click here to add tags       Image: Click here to add tags     Image: Click here to add tags     Image: Click here to add tags     Image: Click here to add tags       Image: Click here to add tags     Image: Click here to add tags     Image: Click here to add tags     Image: Click here to add tags	Private IP address (IPv6) : - Public IP address (IPv6) : - Virtual network/subnet : Dockermachine_group-vnet/default Network security group : Dockermachine-nsg
Access control (LAW)     Subscription ID     : 3e2272c5-dbd5-4322-af00-d507c9b0626d     Public IP address (Pv6)     : -       Tags     Subscription ID     : 3e2272c5-dbd5-4322-af00-d507c9b0626d     Public IP address (Pv6)     : -       Settings     Virtual network/subert     : Dockermachine_group-wnet/default       IP configurations     Attached to     : Dockermachine       IP configurations     Tags (change)     : Click here to add tags       Network security group     *     *       IP roperties     *     *       I locks     Locks     *	Public IP address (IPv6) : - Virtual network/subnet : Dockermachine_group-vnet/default Network security group : Dockermachine-nsg
I Tags Virtual network/subrel: Dockermachine_group-wnet/default   Settings Network security group Dockermachine_nsg   I Ponfigurations Attached to Dockermachine   DNS servers Tags (change) : Click here to add tags   Network security group * *   I Properties * *   A tocks Locks *	Virtual network/subnet : Dockermachine_group-vnet/default Network security group : Dockermachine-nsg
Settings       Virtual network/subnet i Dockermachine_group-vnet/default         I P configurations       Network security group       : Dockermachine-nsg         DNS servers       Tags (change) : Click here to add tags       : Dockermachine         Network security group       *       *         Properties       -       *         Locks       Locks       -	Network security group : Dockermachine-nsg
IP configurations     Attached to     : Dockermachine       DNS servers     Tags (change)     : Click here to add tags       Network security group     *       IP properties       A Locks	
DNS servers     Tags (change)     : Click here to add tags       DNS security group     A       Image: Properties     A       Image: Locks     Image: Locks	Attached to : Dockermachine
Network security group Ill Properties Locks	
Network security group     Properties     Locks	
A Locks	*
🖳 Export template	
Support + troubleshooting	

# 4. Under IP Configuration select Ipconfig

Search (Ctrl+/) «	🕂 Add 📙 Sav	/e 🗙 Discard				
Overview	IP forwarding setti					
Activity log	IP forwarding			Disabled Enabled		
Access control (IAM)						
Tags	Virtual network			Dockermachine_group-vnet		
	IP configurations					
lettings	Subnet *			default (10.0.2.0/24)		
IP configurations	Search IP config					
DNS servers	Name	IP Version	Туре	Private IP address	Public IP address	
Network security group		IP version				
Properties	ipconfig1	1974	Primary	10.0.2.4 (Dynamic)	40.122.207.189 (Dockermachine-ip)	
Locks						
Export template upport + troubleshooting  Feffertive convrite ruler  Click on IP addr	ress					
upport + troubleshooting		> dockermachine867	IP configurations >	,		
typert + troubleshooting  full terms - Effective centrity rules  Click on IP addr Home > Virtual machines > Dockerma ipconfig1		<ul> <li>dockermachine867  </li> </ul>	IP configurations >	·		
tripport + troubleshooting  t		dockermachine867	IP configurations >	,		
tripport + troubleshooting  file Effertive security rules  Click on IP addre  Home > Virtual machines > Dockerma  ipconfig1 dockermachine87  Save × Discard  Public IP address settings  Public IP address		dockermachine867	IP configurations >	,		
troubleshooting  fiftertice ceruithe rules  Click on IP addre  home > Virtual machines > Dockerme  ipconfig1  dockermachine607  Save X Discard  Public IP address settings		dockermachine867	IP configurations >			
tripport + troubleshooting  file Effertive security rules  Click on IP addre  Home > Virtual machines > Dockerma  ipconfig1 dockermachine87  Save × Discard  Public IP address settings  Public IP address		dockermachine867	IP configurations >	,		
wapport + troubleshooting         ▲ Effartika security rular         Click on IP addres         Home > Virtual machines > Dockernar         ipconfig1         dockermachine87          Save × Discard         Public IP address         Public IP address         Disassociate ∧sociate		dockermachine867	IP configurations >			
troubleshooting  Tiffartice caruthu rules  Click on IP addres  Click on S Dockerne  Dockernachine607  Save C Discard  Public IP address  *IP address		dockermachine867	(P configurations >			
Aupport + troubleshooting ■ Effortike carvitiv rular Click on IP addres ipconfig1 dockermachine67 ■ Save × Discard Public IP address Public IP address Public IP address Public IP address Public IP address Public IP address		dockermachine867	(P configurations >			

6. Click on Create new

5.





23.99.192.199 (Static)

 $\times$ 

Home > Virtual machines > Dockermachine | Networking > dockermachine867 | IP configurations > ipconfig1 >
Choose public IP address
Dynamic public IP addresses that are not in use won't have an IP address assigned to them.

These are the public IP addresses in the selected subscription and location 'Central US'.

Create new

for Create new

for Dockermachine\_group

Text

- 7. Under create IP:
  - Name: New\_1
  - SKU: Select Basic
  - Assignemt: Dynamic
  - Click Ok

Create public IP address

Name * New_1	
SKU () Basic (	) Standard
Assignment <ul> <li>Dynamic</li> </ul>	◯ Static



#### 8. Click on Save

support@k21academy.com





Home > Virtual machines > Dockermachine | Networking > dockermachine867 | IP configurations >

ipconfig1 dockermachine867	
🔚 Save 🗙 Discard	
Public IP address settings	
Public IP address Disassociate Associate	
*IP address New_1 (New)	
Private IP address settings Virtual network/subnet	
Dockermachine_group-vnet/default Assignment Oynamic Static	
IP address	
10.0.2.4	

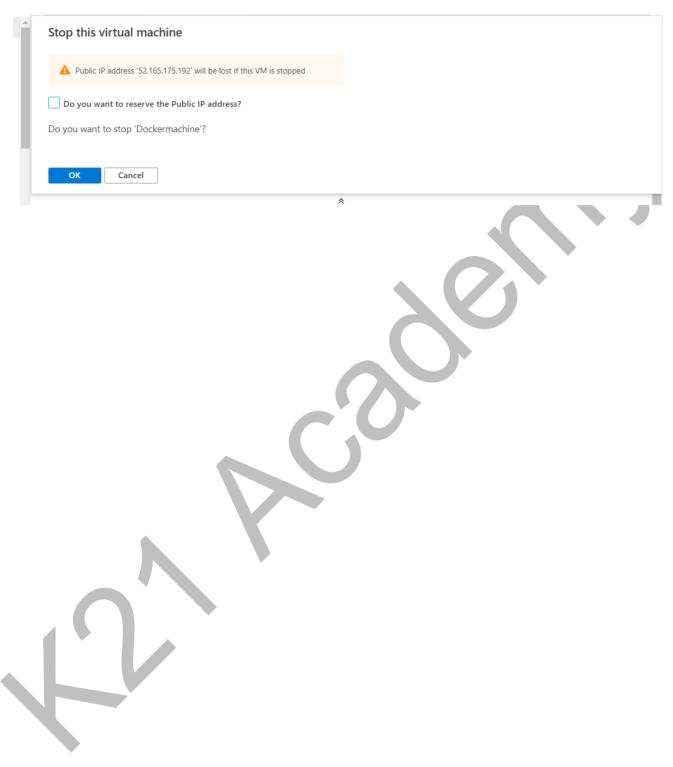
9. Go to the **Overview** page click on **STOP Virtual machine** 

Dockermachine	~		
Virtual machine	×		
✓ Search (Ctrl+/)	« 🔗 Connect ▷ Start 🦿 Restart 🔲	Stop 🔯 Capture 📋 Delete 🖒 Refresh 🔋 Share to mobile	
📮 Overview	Resource group (change)	Operating system	
Activity log	Dockermachine_group Status	Linux (ubuntu 18.04) Size	
Access control (IAM)	Running	Standard D2s v3 (2 vcpus, 8 GiB memory)	)
Tags	Location Central US	Public IP address 52.165.175.192	
Diagnose and solve problems	Subscription (change) Azure for Students	Virtual network/subnet Dockermachine_group-vnet/default	
Settings	Subscription ID	DNS name	
Networking	3e2272c5-dbd5-4322-af00-d507c9b0626d	Configure	
ダ Connect	Tags (change) Click here to add tags		
🛢 Disks		*	
Size			
Security	Properties Monitoring Capabilities	s Recommendations (0) Tutorials	
Advisor recommendations	👤 Virtual machine	🙇 Networking	
Extensions	Computer name Dockermachine	e Public IP address 52.165.175.1	192
🐔 Continuous delivery	Operating system Linux (ubuntu 1	18.04) Public IP address (IPv6) -	
Availability + scaling	SKU 18.04-LTS	Private IP address 10.0.2.4	
and Avandonity + scaling	Publisher Canonical	Private IP address (IPv6) -	

10. Now you can stop the VM without Reserve the IP address.











#### 10 SUMMARY

In this activity Guide we learned:

- How to create a Virtual Machine on Azure Portal.
- How to Connect to Virtual Machine Using Putty.
- How to Update VM Password.
- How to Open ports on Azure Cloud.
- How To Remove Reserve IP Option