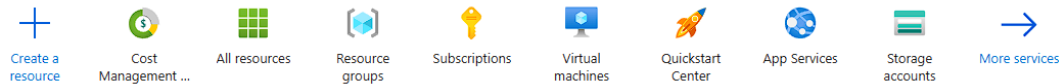


# AZURE LAB 3 (Linux VM)

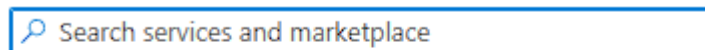
In this lab you will learn, how to create a Linux virtual machine by using SSH keys.

1. Log in to Azure Portal. Then click on Create resource.

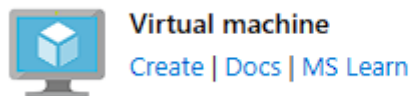
## Azure services



2. Then click on virtual machine.



Popular Azure services [See more in All services](#)



3. Select your subscription (if any), then select your resource group (If you have a resource group) or create a new resource group.

## Project details

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription \* ⓘ


Resource group \* ⓘ  [Create new](#)

4. Give your virtual machine a name, then select region, select availability option and security type same as shown below.
5. Now select the same image as shown below. If you have done previous lab then you might know about this image of ubuntu server 22.04 (this image will also be available in the recently used tab)

#### Instance details

Virtual machine name *	Linuxvm ✓
Region *	(Asia Pacific) Central India ▼
Availability options ⓘ	No infrastructure redundancy required ▼
Security type ⓘ	Standard ▼
Image *	Ubuntu Server 22.04 LTS - x64 Gen2 (free services eligible) ▼

[See all images](#) | [Configure VM generation](#)



 This image is compatible with additional security features. [Click here to swap to the Trusted launch security type.](#)

6. Moving forward, select the same size as Standard\_B1s

Size *	Standard_B1s - 1 vcpu, 1 GiB memory (₹642.10/month) (free services eligible) ▼
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[See all sizes](#)


Enable Hibernation (preview) ⓘ ☐

 To enable Hibernation, you must register your subscription. [Learn more](#) 

7. Then in administrator account select the options below, you'll get options by default, but if you want to change username or key pair name then you can do it on your behalf.

#### Administrator account

Authentication type ⓘ	<input checked="" type="radio"/> SSH public key <input type="radio"/> Password
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 Azure now automatically generates an SSH key pair for you and allows you to store it for future use. It is a fast, simple, and secure way to connect to your virtual machine.

Username *	azureuser ✓
SSH public key source	Generate new key pair ▼
Key pair name *	Linuxvm_key ✓

- Now keep every thing to default and go directly to the create and review page. There just create your virtual machine.
- Once click on create it will ask you to download the key pair, you have to download in order to ssh into your virtual machine.

## Generate new key pair



**i** An SSH key pair contains both a public key and a private key. **Azure doesn't store the private key.** After the SSH key resource is created, you won't be able to download the private key again. [Learn more](#)

[Download private key and create resource](#)

[Return to create a virtual machine](#)

10. Once the deployment is complete, go to resource page.

### ✓ Your deployment is complete

 Deployment name: CreateVm-canonical.0001-com-ubuntu-server-j... Start time: 12/22/2023, 12:40:10 PM  
Subscription: [Free Trial](#) Correlation ID: f38c8879-2138-4fbf-807c-713956c75021   
Resource group: [app-grp](#)

#### ▼ Deployment details

#### ^ 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](#)

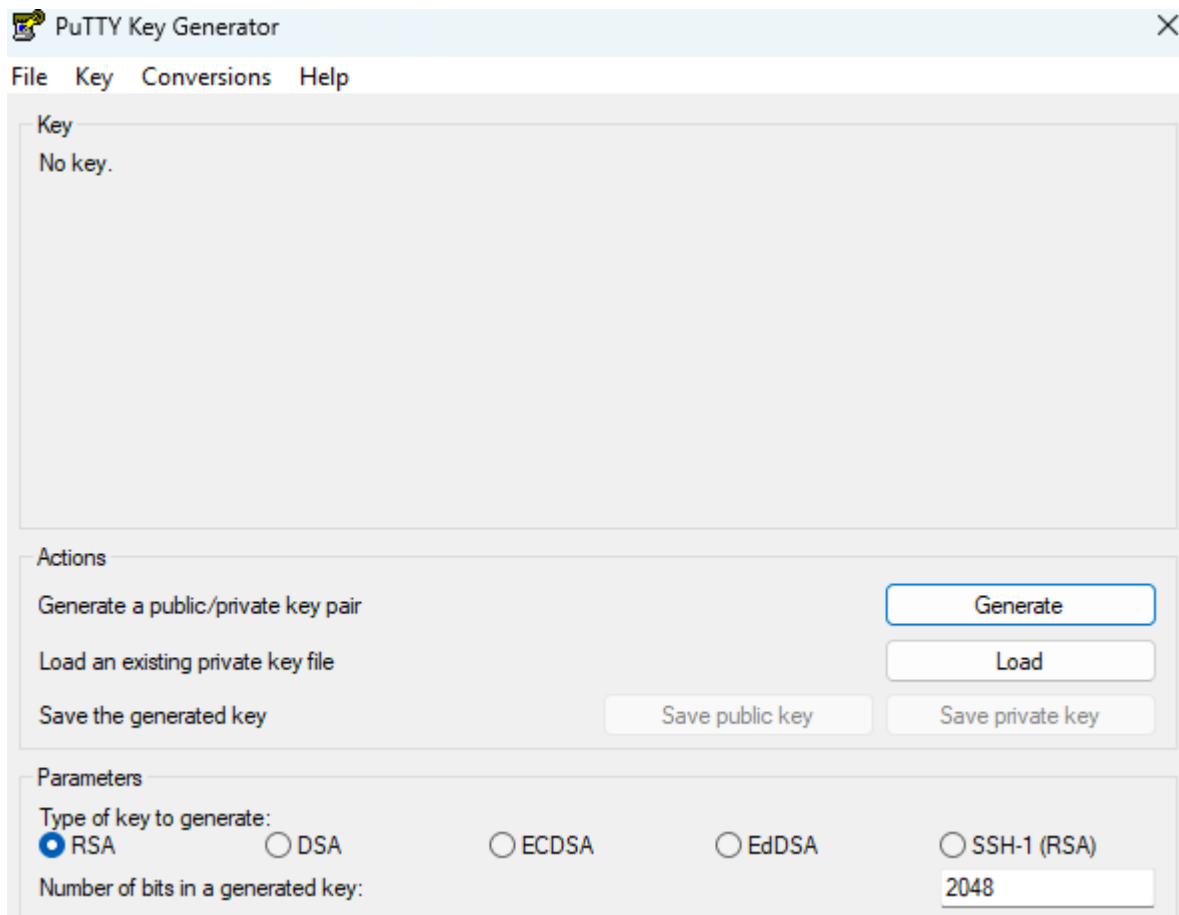
[Create another VM](#)

11. Now you have to do one thing, you to download a tool called as putty gen. This tool will help to convert our **.pem** file into **.ppk** file, because putty does not support **.pem** files.

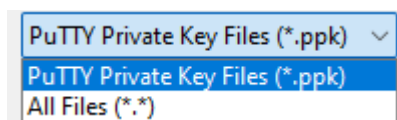
12. This is the website from where you can download putty gen tool.

<https://www.puttygen.com/>

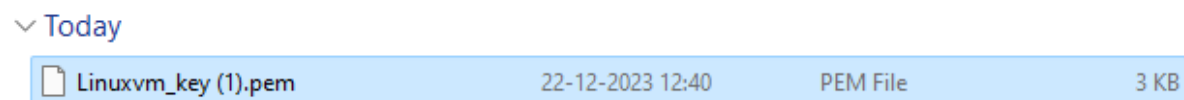
13. Now open putty gen tool, this how it looks like. Now you need to click on load.



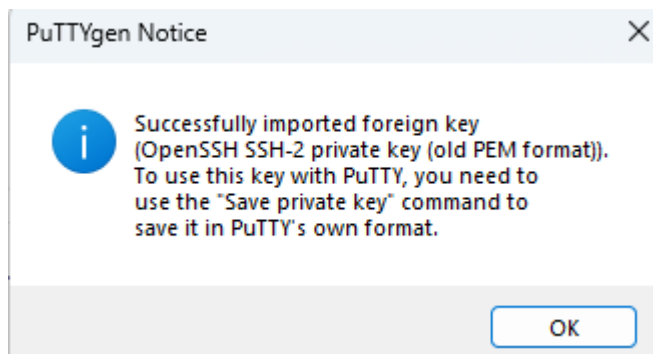
14. Once you click on load, you'll see that your key is now showing on the folder where you have downloaded it. For that you need to select All files, then it will pop up in the folder.



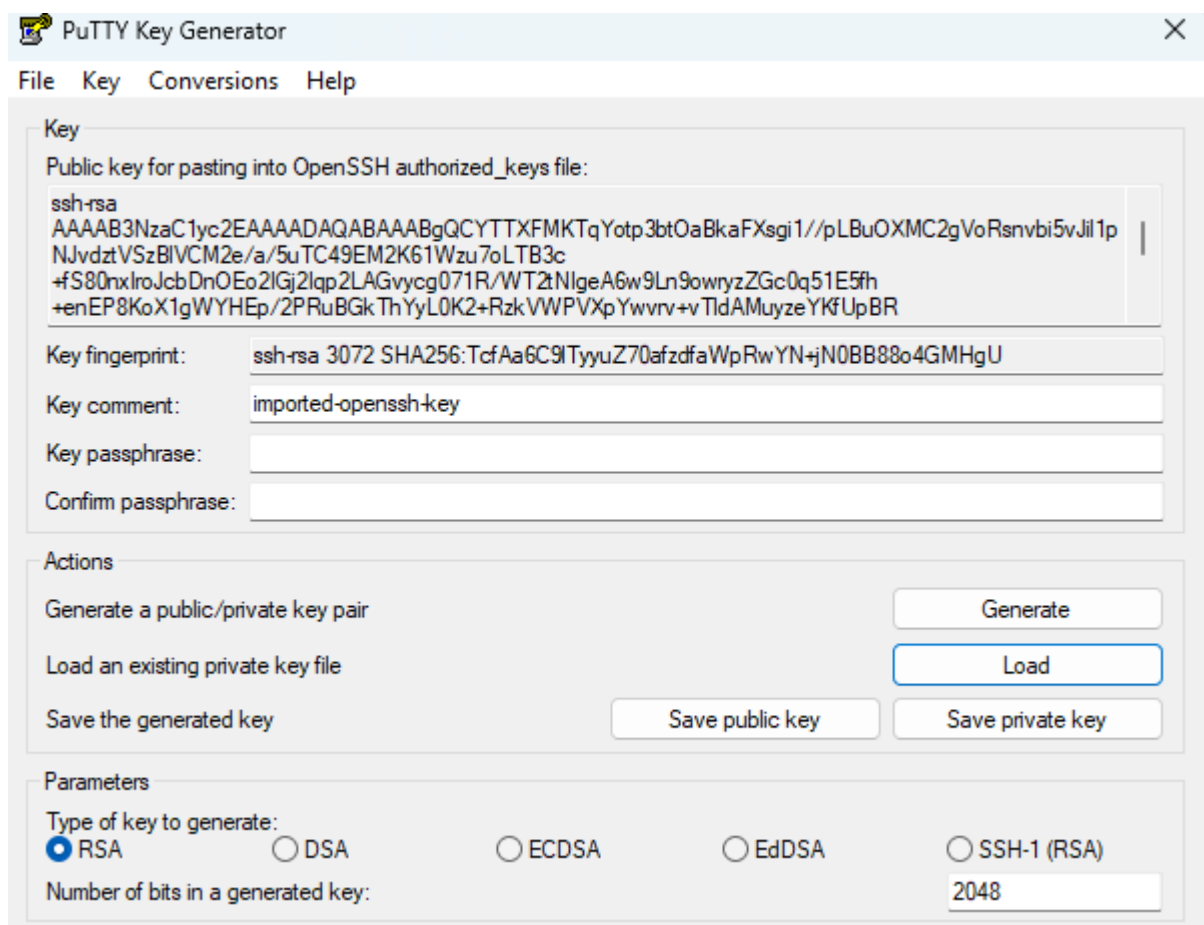
15. As you can see now the file is visible, you need to select this file and click on open.



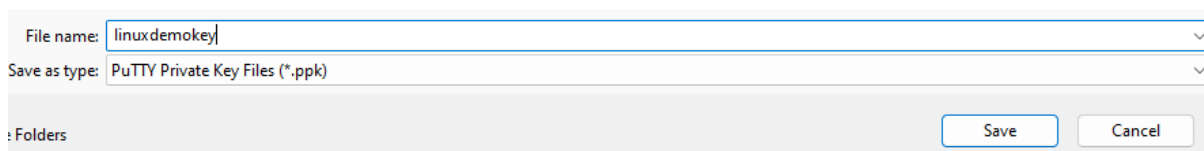
16. Once you have opened the file you will get a pop up message like this, you need to click on Ok here.



17. In the putty gen tool, you can see that you file is now in the tool. Here in the tool you need to click on **Save private key** option.



18. Once you have clicked on save private key, it will ask you to give it a new name and then save it.



19. Once you have done all that you see your .ppk file ready.

▼ Today

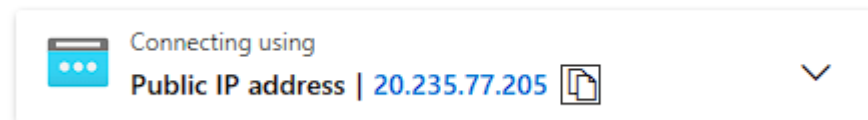


linuxdemokey

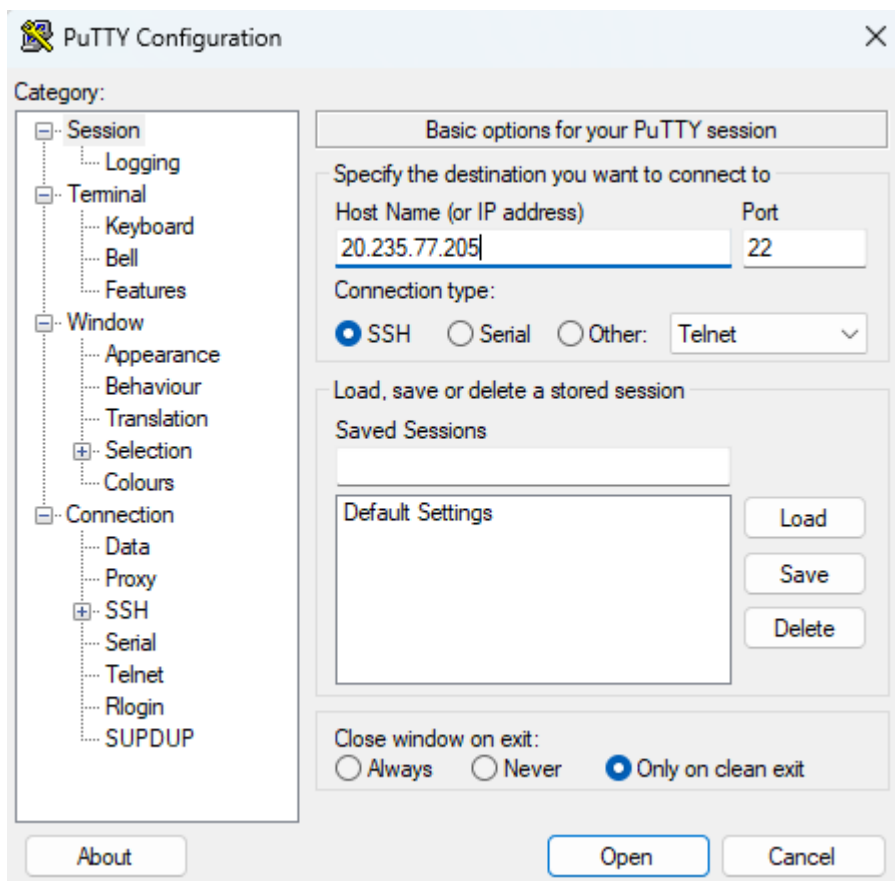


Linuxvm\_key  
(1).pem

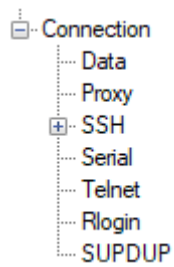
20. Now go back to the portal, from there copy your public IP address.



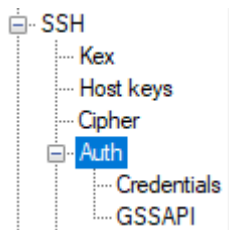
21. Now open Putty copy your public IP in Host name.



22. Then in connection you can see an option for SSH, click on it.



23. In SSH, click on Auth, then click on credentials. In credentials you will have to browse to the folder where you have saved you .ppk file which you create using putty gen tool. Select it, then click on Open.



24. Once you have clicked on open, you'll be inside your server. There you just need to write your username and just like that you'll be inside your Linux server.

**(NOTE: IF YOU WANT TO KNOW YOUR USERNAME YOU CAN SCROLL UP TO STEP 7)**

azureuser@Linuxvm: ~

login as: azureuser

Authenticating with public key "imported-openssh-key"

Welcome to Ubuntu 22.04.3 LTS (GNU/Linux 6.2.0-1018-azure x86\_64)

\* Documentation: <https://help.ubuntu.com>  
\* Management: <https://landscape.canonical.com>  
\* Support: <https://ubuntu.com/advantage>

System information as of Fri Dec 22 07:26:16 UTC 2023

System load:	0.0	Processes:	98
Usage of /:	5.1% of 28.89GB	Users logged in:	0
Memory usage:	31%	IPv4 address for eth0:	10.0.0.4
Swap usage:	0%		

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.  
See <https://ubuntu.com/esm> or run: `sudo pro status`

The list of available updates is more than a week old.  
To check for new updates run: `sudo apt update`

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@Linuxvm:~\$ █