HƯỚNG DẪN XÂY DỰNG MÁY ẢO

Bước 1: Cài máy ảo Vmware workstation 17

Trước khi cài tắt phần mềm Virus và ngắt kết nối Internet



VMware Workstation Pro Setup	-		\times
User Experience Settings Edit default settings that can improve your user experience.			þ
 Check for product updates on startup When VMware Workstation Pro starts, check for new versions of and installed software components. Ioin the VMware Customer Experience Improvement Program 	of the ap	plication	
VMware's Customer Experience Improvement Pr ("CEIP") provides VMware with information that VMware to improve its products and services, to problems, and to advise you on how best to depl our products. As part of the CEIP, VMware collect	ogram enable fix oy and s techr	use nical	-
Learn More			
Back	t	Car	icel

Sau khi cài xong vào key chọn vào một trong các key sau Copy

··· VMware-wor	Search VM	File	Edit	View
<u>م</u>) ه (Details	4A4RR	-813DK-	M81A9-4U35H-06KND
□ Name		NZ4RR	-FTK5H-	H81C1-Q30QH-1V2LA
🔽 📄 Key.txt		JU090	-6039P-	08409-8J0QH-2YR7F
🤯 VMware-workstatio	on-full-17.0.0-20	4Y09U	- AJK97-	089Z0-A3054-83KLA
	1	4C21U	-2KK9Q-	M8130-4V2QH-CF810

Sau đó vào Help chọn Enter a license key và dán vào

ile Edit View VM Tabs	Help 🕨 🔹 🛱	🕰 🕰 🔲
Home × 🖸 Win2022 ×	Help Topics Online Documentation	F1
Win2022	Support	>
Power on this virtual mach	Hints	>
Edit virtual machine settin	Enter a License Key	



BƯỚC 3: - Giải nén File WIN2022_WIN10

🔁 🚟 WIN2022_WIN10.rar	17-03-2023 1:10 PM	WinRAR archive	7,045,131
	Extracting from WI	- 🗆 ×	
	Archive F:\1_MÁY_ÅO\1_VMw extracting	a\WIN2022_WIN10.rar	
	Win2022-s001.vmdk	84%	
	Elapsed time	00:00:19	
	Time left	00:01:11	
	Processed	21%	
	Background	Pause	
	Cancel	Mode Help	

Đối với File WIN2019_WIN7 cũng tương tự

🗹 🚟 WIN2019_WIN7.rar

<u>BƯỚC 4</u>: Sau khi giải nén ta có các thư mục



Tìm đến thư mục W2022 sau đó chọn file Win2022.vmx



Có thể tùy chỉnh RAM tùy thuộc vào cấu hình máy

☆ Home × □ Win2022 >	K								
Win2022									
Power on this virtual m	achine	Virtual Machine Setting	Virtual Machine Settings						
General Content of the set of the	tings	Hardware Options							
 Devices 		Device	Summary	Memory					
🕮 Memory	2 GB	📟 Memory	2 GB	Specify the a size must be	amount of memory a a multiple of 4 MB.	Ilocated to this virtual machine. The memory			
Processors	4 150 GB	Hard Disk (NVMe)	4 150 GB Custom (VMnet1)	Memory for	this virtual machine:	2048 🔶 MB			
Network Adapter Network Adapter 2 Network Adapter 3 Network Adapter 3 Network Adapter 4	Custom (VMnet Custom (VMnet Bridged (Autom NAT Present	Network Adapter 2 Network Adapter 3 Network Adapter 4 Sutwork Adapter 4 Sutwork Adapter 4 Sound Card Printer	Custom (VMnet1) Bridged (Automatic) NAT Present Auto detect Present Auto detect	128 GB - 64 GB - 32 GB - 16 GB - 8 GB - 4 GB -	•	 Maximum recommended memory (Memory swapping may occur beyond this size.) 			
🕸 Sound Card	Auto detect			2 GB -	•	20.8 GB			
🖨 Printer 🖵 Display	Present Auto detect			1 GB - 512 MB - 256 MB - 128 MB -	•	Recommended memory 2 GB			
 Description Type here to enter a descrimachine. 	ption of this virtual			64 MB - 32 MB - 16 MB - 8 MB - 4 MB -		Guest OS recommended minimum 1 GB			

Sau đó chọn Power on this virtual machine để mở máy sau đó chọn I copied It

1	☆ Home × □ Win2022 ×							
Win2022								
Power on this virtual machine								
Win2022 - VMware Workstation X								
?	This virtual machine might have been moved or copied.							
	In order to configure certain management and networking features, VMware Workstation needs to know if this virtual machine was moved or copied.							
	If you don't know, answer "I Copied It".							
	I Moved It I Copied It Cancel							

Khi logon vào máy nhấn CTRL+ALT+INSERT



Chuyển sang chế độ toàn màn hình: CTRL+ALT+ENTER

Di chuột khỏi màn hình máy ảo để về màn hình máy thật: Alt + Ctrl +di chuyển chuột

BƯỚC 6: Clone để tạo thêm máy ảo vào VM chọn Manage chọn Clone...

Trước khi Clone.. ta Shut down máy ảo



- Vào Vitual machine name đặt tên máy là Server_1
- Vào Browse tìm thư mục Server1 sau đó nhấn OK và chọn Finish và Close

Clone Virtual Machine Wizard	×
Name of the New Virtual Machine What name would you like to use for this virtual machine	?
Virtual machine name SERVER_1	
Location C:\Users\Admin\Downloads\DESTOP\SERVER_1	Browse
Browse For Folder	×
Virtual Machine Location Server1 Server1 Server1 Server1 Server1 Server1	ancel
Make New Folder OK C	ancel
Sau khi làm xong ta có Server_1 SERVER_1 - VMware Workstation	

SERVER_1 - VMware Work	station
File Edit View VM Tabs	Help 🕨 🕶 🛱 🖗 🚇
ि Home × □ Win2022 ×	🗗 SERVER_1 ×
SERVER_1	
Power on this virtual mach Edit virtual machine settin Upgrade this virtual mach	hine Igs ine
 Devices 	
🕮 Memory	2 GB
Processors	4
Hard Disk (NVMe)	150 GB

- Tiếp tục xây dựng thêm một Server 2 nữa
- Ta chọn vào Win2022



- Vào Vitual machine name đặt tên máy là Server 2
- Vào Browse tìm thư mục Server2 sau đó nhấn OK và chọn Finish và Close

Clone Virtual Machine Wizard		\times
Name of the New Virtual Machine What name would you like to use for this virtual machine?		
Virtual machine name SERVER_2		
Location D:\w2022\WIN2022_WIN10\1_W2022\Server2	Browse	
Browse For Folder	×	
Virtual Machine Location		
✓		
✓ [™] 1_W2022		
> Server1	Icel	

Ta đã Clone...thêm 2 máy ảo Server sau này sẽ thực hành trên 2 máy ảo này



<u>Bước 7:</u> Mở thêm máy ảo Windows 10 để dùng máy Client Tìm đến thư mục WIN10 sau đó chọn file Windows 10.vmx

UMware Workstatio	on				
File Edit View VM	Tabs	Help	•	E	
「다 New Virtual Machi . [구 New Window	ne		Ctrl+N		
Open]		Ctrl+O		
[™] ≪ 2_WIN10 → WIN10			\sim	С	Sea
folder					
1	*	N	ame		^
	*	Ð	Windows	10.vmx	:

Bước 8: Sau đó ta Clone... hai máy ảo là Client1 và Client2

Ð	Windo	ows 10 -	VMw	are Wo	rkstation						
File	Edit	View	VM	Tabs	Help 🕨	•	Φ	🍳 🔓			ĕ
ŵ۲	lome 🗦		Win202	2 ×	SERVER_1	× 🗗 s	SERVER_2	2 ×	🔲 Windo	ows 10 🛛 🗙	

Clone để tạo thêm máy ảo vào VM chọn Manage chọn Clone...

D Win2022	Win2022 - VMware Workstation							
File Edit V	iew 🚺	VM	Tabs Help 🕨 🗸	÷ 🗘 🕰 🕰	E			
	E.	\bigcirc	Power	>				
10 Home A	· 🗆	\bigcirc	Removable Devices	>				
🗋 Winź	202		Pause	Ctrl+Shift+P				
D		4	Send Ctrl+Alt+Del					
Edit virt	ualm.		Grab Input	Ctrl+G				
🕞 Upgrade	e this l		Snapshot	>				
			Capture Screen	Ctrl+Alt+PrtScn				
▼ Devices –		Þ	Manage	>		Change Hardware Compatibility		
Process	ors -		Install VMware Tools		5	Clone		
Hard Di	sk (N	,	Settings	Ctrl+D		Upload		

- Vào Vitual machine name đặt tên máy là Client_1
- Vào Browse tìm thư mục Client_1 sau đó nhấn OK và chọn Finish chọn Close

Clone Virtual Machine Wizard		×
Name of the New Virtual Machine What name would you like to use for this virtual machine?		
Virtual machine name Client_1		
Location D:\w2022\WIN2022_WIN10\2_WIN10\Client_1	Br	rowse
Browse For Folder	\times	
Virtual Machine Location		
<pre>> 1_W2022 > 2 WIN10 Client_1 Client_2 WIN10 > WIN2022_WIN10 </pre>	I	Cancel
Folder: Client_1	_	
Make New Folder OK Cancel		

Tiếp theo tạo thêm máy ảo Client_2 ta chọn Windows 10

ø	Windows 10 - VMware Workstation											
File	Edit	View	VM	Tabs	Help 🕨	•	₽	4	₽ 🗆		2 1-	
	Home	×	Win202	2 ×	SERVER_1	. × 🗗	SERVER	_2 ×	📋 Winde	ows 10 🗙	Client_1	×

Clone để tạo thêm máy ảo vào VM chọn Manage chọn Clone...

📴 Win2022 - VN	Win2022 - VMware Workstation							
File Edit View	VM	Tabs Help 🕨 🗸	5 🖓 🕰 🕰	E				
	(Power	>					
The Home I	°)	Removable Devices	>					
Win202		Pause	Ctrl+Shift+P					
	귝	Send Ctrl+Alt+Del						
Edit virtual m		Grab Input	Ctrl+G					
🕞 Upgrade this	[<mark>]</mark>	Snapshot	>					
		Capture Screen	Ctrl+Alt+PrtScn					
▼ Devices	B	Manage	>		Change Hardware Compatibility			
Memory Processors		Install VMware Tools		陷	Clone			
Hard Disk (N	₽.	Settings	Ctrl+D		Upload			

- Vào Vitual machine name đặt tên máy là Client_2

- Vào Browse tìm thư mục Client_2 sau đó nhấn OK và chọn Finish và Close

Clone Virtu	al Machine Wizard	\times				
Name of th What na	e New Virtual Machine me would you like to use for this virtual machine?					
Virtual mach Client_2	ine name					
Location D:\w2022\\	WIN2022_WIN10\2_WIN10\Client_2	Browse				
	Browse For Folder					
	Virtual Machine Location					
	✓ 2_WIN10 Client 1					
	Client_2					

Như vậy ta đã xây dựng xong 4 máy ảo



Bước 9: Đặt lại tên máy ảo ta chọn vào SERVER_1 chọn This PC chọn Properties



Ta chọn vào **Rename this PC** sau đó chọn vào **Change...** vào Mục **Computer name** gõ **server1** chọn **OK**

System Properties	×
Computer Name Hardware Advanced Remote	Computer Name/Domain Changes X
Windows uses the following information to identify your computer on the network.	You can change the name and the membership of this computer. Changes might affect access to network resources.
Computer description: For example: "IIS Production Server" or	Computer name:
"Accounting Server". Full computer name: server	server1
Workgroup: WORKGROUP	server1
To rename this computer or change its domain or workgroup, click Change	More Member of Domain: Workgroup: WORKGROUP OK Cancel
OK Cancel Apply	Remote desktop
	System protection
📼 Storage	Advanced system settings
다. Tablet	Rename this PC (advanced)

- Tiếp theo đặt lại tên máy ảo cho SERVER_2 ta chọn SERVER_2 chọn This PC chọn Properties
- Ta chọn vào **Rename this PC** sau đó chọn vào **Change...** vào Mục **Computer name** gõ **server2** chọn **OK**

	Client		VER_1 × 🕼	server_2 ×	Client_2 X	
	System Properties		×			
	Computer Name Hardware Adv	vanced Remote		Computer Na	me/Domain Changes	×
	Windows uses the follo on the network.	owing information to iden	tify your computer	You can chan computer. Cha	ge the name and the member inges might affect access to r	ship of this network resources.
	Computer description: For exa "Accol	ample: "IIS Production S unting Server".	erver" or	Computer nam	e:	
	Full computer name: server			Full computer r	name:	
	Workgroup: WORk	GROUP		server2		
	To rename this computer or chan workgroup, click Change.	ige its domain or	Member of Domain: Workgroup: WORKGROUP OK Cancel			
		OK Cance	el Apply			
Ì	Telet		nemote desite	ъp		
	lablet		System protec	ction		
	Multitasking		Advanced syst	tem settings		
	Projecting to this PC		Rename this P	PC (advanced)		

<u>Bước 10</u>: Đặt lại tên máy ảo Client_1 chọn This PC chọn Properties chọn Change settings chọn change... vào computer name: nhập client1 chọn OK



Đặt lại tên máy ảo Client_2 chọn This PC chọn Properties chọn Change settings chọn change... vào computer name: nhập client2 chọn OK

	Client_1	× SERVER_1	× 🕼 Server_2 ×	🕼 Client_2 🗙	
	lotepad				
System					- L X
$\leftarrow \rightarrow \checkmark \uparrow$	Control Pane	el > All Control Panel Items	> System	✓ Ö Search Con	trol Panel 🔎
Control Pane Device Mana Remote setti System prote	el Home Iger ngs ection stem settings	View basic informat Windows edition Windows 10 Lite Editio © WhiteDeath - 2019 - reserved.	n v9 . All rights	Wind	ows 10
		System			
		Processor:	Intel(R) Core(TM) i7-10 GHz	0750H CPU @ 2.60GHz 2	2.59 Support Information
System Propertie Computer Name	es Hardware Advanced	System Protection Remote	MB (511 MB usabl bit Operating Syste Pen or Touch Input	e) m, x64-based processor t is available for this Disp	lay
Wind on the	lows uses the following in	formation to identify your compu	ter group settings		
Computer descr	intion:		КТОР-01ЕК83О		Change settings
Full computer n Workgroup:	For example: Computer". ame: DESKTOP-01 WORKGROU	'Kitchen Computer'' or ''Mary's EK830 P	KTOP-01EK83O		
To use a wizard Network ID. To rename this workgroup, clici	l to join a domain or work computer or change its d k Change.	group, click Network ID.	. I the Microsoft Soft	tware License Terms	Sectivate Windows
stem Properties		×	Computer Name/Domain	n Changes	×
omputer Name Hardwa	are Advanced System	Protection Remote	You can change the name computer. Changes might a	and the membership of this ffect access to network res	ources.
on the network	ς.				
Computer description:			Computer name: client2		
	For example: "Kitchen Computer".	Computer'' or ''Mary's	Full computer name:		
Full computer name:	DESKTOP-01EK83O		client2		
Workgroup:	WORKGROUP			Mc	ore WS IU
To use a wizard to join a Network ID.	domain or workgroup, cli	ck Network ID	Member of O Domain:		
To rename this computer workgroup, click Change	r or change its domain or e.	Change	Workgroup: WORKGROUP	OK Ca	Support Informatio
			ain and workerson estimation		
				30 J	Change settings
			DESKIOP-VIEKO		Change settings