

安裝Ubuntu開發機環境 在Windows系統

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- 開發設計階段需要Ubuntu 20.04+(不建議Ubuntu 22.04以上)實體機器或是虛擬機器,建議 入門開發者可使用VirtualBox虛擬機,開發過程可以搭配虛擬機的擷取快照功能做開發版本 紀錄及恢復,方便開發管理
 - 下載並安裝Windows VirtualBox:<u>tinyurl.com/2p8erwwf</u>
 - 下載並安裝Windows VirtualBox Extension Pack:<u>tinyurl.com/2s4b4vve</u>
- 安裝VirtualBox後,可以直接下載已包裝成VirtualBox格式的Ubuntu 20.04.4映像檔 <u>tinyurl.com/2jnams5r</u> 解壓縮後點選vbox檔案可被VirtualBox開啟,此 Ubuntu_20.04.4_VB虛擬機的預設登入帳密都是ubuntu

ኝ Oracle VM VirtualBox 管理員		
檔案(F) 機器(M) 快照(S) 說明(H)		
1 2 工具	(1) (1) </th <th></th>	
Ubuntu_20.04.4_VB_LinuxVMImages.COM		大小 類型
	Ubuntu_20.04.4_VB_LinuxVMImages.COM.vbox	4.03 KB VirtualBox Machine Definition
	📽 Ubuntu 20.04.4 VB LinuxVMImages.COM.vdi	7.77 GB Virtual Disk Image



優化Ubuntu_20.04.4_VB虛擬機設定, 先確定虛擬機是已關閉電源, 點選右鍵後點設定 >系統, 視實體機器資源可以調整增加記憶體(預設是4GB)





 新增Ubuntu_20.04.4_VB虛擬機網路, 檔案 -> 主機網路管理員 -> 如果沒有VirtualBox Host-Only Ethernet Adapter請點選建立後並啟用DHCP

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檔到	案(F) 機器(M) 快照(S)	說明(H)						
S	喜好設定(O)	Ctrl+G		詞 主機網路管理員		—		\times
9	匯入應用裝置(I)	Ctrl+I		網路(N)				
	匯出應用裝置(E) 新増雲端虛擬機器(N)	Ctrl+E	-					
D	虛擬媒體管理員(V)	Ctrl+D		建立(C) 杨陈(R) 内谷(P)				
	主機網路管理員(H)	Ctrl+H		名構 VirtualRev Uest Ophy Ethernet Adepter	IPv4 位址/遮亭	IPv6 位址/遮罩		可服器
5	雲端設定檔管理員(C)	Ctrl+P		VirtualBox Host-Only Ethernet Adapter	192.108.50.1/24		ど 咸用	
些	網路操作管理員(N)							
G	檢查更新(H)							
	重設所有警告(R)							
ധ	結束(X)	Ctrl+O						







 ・ 啟動Ubuntu_20.04.4_VB虛擬機,以密碼ubuntu登入,開啟terminal -> 執行ifconfig ->
 找到目前虛擬機是透過192.168.56.13(此IP在每個人的虛擬機應該都不同,請找到自己虛
 擬機的IP)與實體機器連接

🜍 Oracle VM VirtualBox 管理員			<mark>7</mark> Ubuntu_20.04.4_VB_Linu	uxVMImages.COM [執行中] - Oracle VM VirtualB	ох	-	- 🗆 X
檔案(F) 機器(M) 快照(S) 說明(H)			檔案 機器 檢視 輸入	装置的明	- 1		
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⁶⁴ Ubuntu 20.04.4 VB I [™] Ubuntu_20.04.4_VB_LinuxVMImages.CC	DM [執行中] - Oracle VM VirtualBox	– 🗆 X	ubuntu				
● 已關閉電源 檔案機器 檢視 輸入 裝置 說明					untu@ubuntu2004: ~	Q = _ 0 😣	
Q Not listed?	Feb 28 01:23	ř • A 40 40 •	Trash	<pre>ubuntu@ubuntu2004:-\$ ifconfig enp0s3: flags=4163<up,broadcast,rl inet 10.0.2.15 netmask 25 inet6 fe80::c6e:61a8:8337 ether 08:00:27:9f:2f:af RX packets 34 bytes 5800 RX errors 0 dropped 0 ov TX packets 109 bytes 1137 TX errors 0 dropped 0 ov enp0s8: flags=4163<up,broadcast,rl inet 192.168.56.13 netmas inet6 fe80::ff3d:8cfa:40ff ether 08:00:27:78:23:a9 ft RX packets 167 bytes 2200 RX errors 0 dropped 0 ov TX packets 71 bytes 7892 TX errors 0 dropped 0 ov Ex errors 0 dropped 0 ov TX packets 71 bytes 7892 TX errors 0 dropped 0 ov Ex errors 0 dropped 0 dropped 0 ov Ex errors 0 dropped 0 ov Ex errors 0 dropped 0 droppe</up,broadcast,rl </up,broadcast,rl </pre>	JNNING, MULTICAST> mtu 1 55.255.255.0 broadcast igac0 prefixlen 64 sco txqueuelen 1000 (Ethern (5.8 KB) verruns 0 frame 0 74 (11.3 KB) erruns 0 carrier 0 col JNNING, MULTICAST> mtu 1 sk 255.255.255.0 broadc a:60982 preftxlen 64 sc txqueuelen 1000 (Ethern 05 (22.0 KB) verruns 0 frame 0 (7.8 KB) erruns 0 carrier 0 col mtu 65536 55.0.0.0 scopeid 0x10 <host> ocal Loopback) 74 (14.9 KB)</host>	500 10.0.2.255 peid 0x20 <link/> et) lisions 0 500 ast 192.168.56.255 opeid 0x20 <link/> et) lisions 0	
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 下載安裝MobaXterm:<u>tinyurl.com/72ft894r</u> 開啟Session, 連接到192.168.56.13以帳密 ubuntu登入, 開始進行專案開發

Session settings X Session settings SSH Telnet Rsh Xdmcp RDP VNC FTP SFTP Serial File Shell Browser Mosh Aws S3 WSL	<pre>LINOVMINACS.COM +-+-+++++++++++++++++++++++++++++++++</pre>
Remote host * 192.168.56.13 Specify username ubuntu Port Port	<pre>? MobaXterm Personal Edition v22.0 ? (SSH client, X server and network tools) > SSH session to ubuntu@192.168.56.13 ? Direct SSH : * ? SSH compression : * ? SSH compression : * ? SSH-browser : * ? X11-forwarding : * (remote display is forwarded through SSH) > For more info, ctrl+click on help or visit our website. Welcome to Ubuntu 20.04.4 LTS (GNU/Linux 5.13.0-30-generic x86_64) * Documentation: https://help.ubuntu.com * Management: https://landscape.canonical.com * Support: https://lubutu.com/advantage 367 updates can be applied immediately. 273 of these updates are standard security updates. To see these additional updates run: apt listupgradable New release '22.04.2 LTS' available.</pre>
♥ OK ♥ Cancel	Run 'do-release-upgrade' to upgrade to it. Your Hardware Enablement Stack (HWE) is supported until April 2025. +-+-+-+++++++++++++++++++++++++++++++



避免MobaXterm SSH閒置時斷線, MobaXterm Settings -> Configuration > 勾選SSH keepalive(閒置時不斷線)

General	🚺 Termina	I 🗙 X11	SSH	👤 Display	🔑 Toolbar	🎗 Misc	
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