How to create and configure a virtual adapter

- Steps:
- 1- Run Command Prompt as administrator and run the command hdwwiz.exe:

Administrator: Command Prompt	—	\times
Microsoft Windows [Version 10.0.22631.2428] (c) Microsoft Corporation. All rights reserved.		
C:\Windows\System32>hdwwiz.exe		
C:\Windows\System32>		

2- Click Next:

Add Hardware	
	Welcome to the Add Hardware Wizard
	This wizard helps you install driver software to support older devices that do not support Plug-and-Play and which are not automatically recognized by Windows.
	You should only use this wizard if you are an advanced user or you have been directed here by technical support.
	If your hardware came with an installation CD, it is recommended that you click Cancel to close this wizard and use the manufacturer's CD to install this hardware.
	To continue, click Next.
	< <u>B</u> ack <u>N</u> ext > Cancel

3- Select Install the hardware that I manually select from a list (Advanced), Then Click Next:

Add Hardware
The wizard can help you install other hardware
The wizard can search for other hardware and automatically install it for you. Or, if you know exactly which hardware model you want to install, you can select it from a list.
What do you want the wizard to do?
\bigcirc Search for and install the hardware automatically (Recommended)
Install the hardware that I manually select from a list (Advanced)
< Back Next > Cancel

4- Scroll down the list and go till you see Network adapters in the list, and when you see, select it as shown below. Then Click Next:

lf you	do not see the hardware category you want, click Show All Devices.	
Comn	non hardware types:	
The N	liracast display devices	
- N	lixed Reality devices	
- N	lodems	
🛛 🖗 N	lulti-port serial adapters	
💻 N	etwork adapters	
	eural processors	
💷 N	vModuleTracker	
¢ 0	POS Legacy Device	
E P	CMCIA adapters	

5- On the left-hand panel (Manufacturer list), scroll down and look out for Microsoft:

Add Hardware	
Select the device driver you wa	nt to install for this hardware.
Select the manufacturer a disk that contains the driv	nd model of your hardware device and then click Next. If you have a er you want to install, click Have Disk.
Manufacturer Microsoft Microsoft Corporation Oracle Corporation Realtek	Model Generic Mobile Broadband Adapter Generic Virtual Network Channel Device Hyper-V Virtual Switch Extension Adapter Microsoft Hyper-V CDMA MBB Network Adapter
This driver is digitally signed. <u>Tell me why driver signing is in</u>	Have Disk
	< Back Next > Cancel

6- Now scroll down the right-hand side list and look for Microsoft KM-TEST Loopback Adapter in the list. Select it as shown below. Then Click Next:

Add Hardware	
Select the device driver you wan	t to install for this hardware.
Select the manufacturer and disk that contains the driver	I model of your hardware device and then click Next. If you have a you want to install, click Have Disk.
Manufacturer Microsoft Microsoft Corporation Oracle Corporation Realtek	Model Microsoft Hyper-V VPN Network Adapter Microsoft Hyper-V WiFi Network Adapter Microsoft KM-TEST Loopback Adapter UsbNcm Host Device
This driver is digitally signed. Tell me why driver signing is imp	ertant
	< Back Next > Cancel

7- Once you click Next, windows will create the adapter and the finish window will appear as below:

Add Hardware			
The wizard is ready to install your hardware			
Hardware to install:			
Microsoft KM-TEST Loopback Adapter			
To start installing your new hardware, click Next.			
	< Back	Next >	Cancel

8- Click Finish in the last window.



9- Check the adapter is created.



• <u>Method 2 :</u>

- 1- Open Command Prompt as administrator.
- 2- Using the cd command to change folder to

mtf_tutorials\mtf_basic_tuto\microsoft_loopback_ethernet_adapter .

3- Run bat file "add_loopback_ethernet_adapter.bat":



4- Check the adapter is created:



The second step changing the naming of the adapter created by the last step, Then configure the needed IP address

1- Changing the naming of the adapter to Ethernet_MTF



- Open Command Prompt as administrator. 2-
- 3- Run python script mtf_tutorials\mtf_basic_tuto\microsoft_loopback_ethernet_adapter\set_ips_address.py which is located under microsoft_loopback_ethernet_adapter folder.

Administrator: Command Prompt	-	×
D:\>cd mtf_tutorials\mtf_basic_tuto\microsoft_loopback_ethernet_adapter		
D:\mtf_tutorials\mtf_basic_tuto\microsoft_loopback_ethernet_adapter: <mark>python_set_ips_address.py</mark>		
New 160.48.199.58 is added New 160.48.199.64 is added		
New 160.48.199.33 is added		
D:\mtf_tutorials\mtf_basic_tuto\microsoft_loopback_ethernet_adapter>_		