

VMware vSphere 7 U3 + Horizon + Nvidia Tesla K80 Complete Installation and Setup Guide for Gaming



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ESX 7.0 U3 ENABLE PASSTHROUGH FOR NVIDIA TESLA K80

The screenshot displays the VMware vSphere Client interface for an ESX host named 'esx-2'. The left-hand 'Navigator' pane shows the 'Host' section with the 'Manage' button highlighted by a red box. The main content area provides a comprehensive overview of the host's status and configuration.

Host Overview:

- Version: 7.0 Update 3
- State: Normal (connected to vCenter Server at 10.1.0.30)
- Uptime: 0.29 days

Resource Usage:

- CPU:** 3% Free, 1.3 GHz Used, 60.4 GB Capacity
- MEMORY:** 16% Free, 41.4 GB Used, 255.66 GB Capacity
- STORAGE:** 14% Free, 4.37 TB Used, 30.89 TB Capacity

Alerts:

- This host is being managed by vCenter Server. Actions may be performed automatically by vCenter Server without your knowledge.
- The ESXi shell is enabled on this host. You should disable the shell unless it is necessary for administrative purposes.
- SSH is enabled on this host. You should disable SSH unless it is necessary for administrative purposes.

Hardware Configuration:

Manufacturer	Supermicro
Model	Super Server
CPU	28 CPUs x
Memory	255.66 GB
Virtual flash	6.28 GB used, 103.5 GB capacity
Networking	
Hostname	esx-2
IP addresses	1. vmk0: 10.1.0.22 2. vmk0: fe80::ae1f6bff.fe6a:ca4a 3. vmk2: 10.1.0.52 4. vmk2: fe80::250:56ff:fe61:7f24 5. vmk1: 10.1.0.42 6. vmk1: fe80::250:56ff:fe6a:a4d2 7. vmk3: 10.1.0.70

Configuration:

Image profile	(Updated) VMware Lifecycle Manager Generated Image (VMware, Inc.)
vSphere HA state	Not configured
vmotion	Supported

System Information:

Date/time on host	Saturday, June 25, 2022, 20:50:10 UTC
Install date	Thursday, October 14, 2021, 16:28:13 UTC
Asset tag	To be filled by O.E.M.
Serial number	0123456789
BIOS version	2.1
BIOS release date	Thursday, June 14, 2018, 03:00:00 +0300

Recent tasks:

Task	Target	Initiator	Queued	Started	Result	Completed
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ESX 7.0 U3 ENABLE PASSTHROUGH FOR NVIDIA TESLA K80

The screenshot shows the vSphere Client interface for managing hardware on an ESX host. The 'PCI Devices' tab is selected and highlighted with a red box. Below the tab, there are several action buttons: 'Toggle passthrough', 'Configure SR-IOV', 'Hardware label', 'Reboot host', and 'Refresh'. A search bar is also present. The main area displays a table of PCI devices with the following columns: Address, Description, SR-IOV, Passthrough, and Hardware Label. The table contains 167 items, with the first 15 rows visible. All 'Passthrough' values are currently 'Not capable'.

Address	Description	SR-IOV	Passthrough	Hardware Label
<input type="checkbox"/> 0000:00:00.0	Intel Corporation Sky Lake-E DMI3 Registers	Not capable	Not capable	
<input type="checkbox"/> 0000:00:04.0	Intel Corporation Sky Lake-E CBDMA Registers	Not capable	Not capable	
<input type="checkbox"/> 0000:00:04.1	Intel Corporation Sky Lake-E CBDMA Registers	Not capable	Not capable	
<input type="checkbox"/> 0000:00:04.2	Intel Corporation Sky Lake-E CBDMA Registers	Not capable	Not capable	
<input type="checkbox"/> 0000:00:04.3	Intel Corporation Sky Lake-E CBDMA Registers	Not capable	Not capable	
<input type="checkbox"/> 0000:00:04.4	Intel Corporation Sky Lake-E CBDMA Registers	Not capable	Not capable	
<input type="checkbox"/> 0000:00:04.5	Intel Corporation Sky Lake-E CBDMA Registers	Not capable	Not capable	
<input type="checkbox"/> 0000:00:04.6	Intel Corporation Sky Lake-E CBDMA Registers	Not capable	Not capable	
<input type="checkbox"/> 0000:00:04.7	Intel Corporation Sky Lake-E CBDMA Registers	Not capable	Not capable	
<input type="checkbox"/> 0000:00:05.0	Intel Corporation Sky Lake-E MMIO-d Configuration Registers	Not capable	Not capable	
<input type="checkbox"/> 0000:00:05.2	Intel Corporation Sky Lake-E RAS	Not capable	Not capable	
<input type="checkbox"/> 0000:00:05.4	Intel Corporation Sky Lake-E IOAPIC	Not capable	Not capable	
<input type="checkbox"/> 0000:00:08.0	Intel Corporation Sky Lake-E Ubox Registers	Not capable	Not capable	
<input type="checkbox"/> 0000:00:08.1	Intel Corporation Sky Lake-E Ubox Registers	Not capable	Not capable	
<input type="checkbox"/> 0000:00:08.2	Intel Corporation Sky Lake-E Ubox Registers	Not capable	Not capable	

Quick filters... 167 items

Recent tasks

Task	Target	Initiator	Queued	Started	Result	Completed
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ESX 7.0 U3 ENABLE PASSTHROUGH FOR NVIDIA TESLA K80

The screenshot displays the VMware vSphere Client interface for managing an ESX host. The 'Hardware' tab is active, showing a list of PCI devices. Two NVIDIA Corporation GK210GL [Tesla K80] GPUs are selected, and their 'Passthrough' status is set to 'Disabled'. A red box highlights the 'Toggle passthrough' button, and another red box highlights the 'Disabled' status for the selected GPUs.

Address	Description	SR-IOV	Passthrough	Hardware Label
<input type="checkbox"/> 0000:66:10.0	PLX Technology, Inc. PEX 8747 48-Lane, 5-Port PCI Express Gen 3 (8.0 GT/s) Switch	Not capable	Not capable	
<input checked="" type="checkbox"/> 0000:68:00.0	NVIDIA Corporation GK210GL [Tesla K80]	Not capable	Disabled	
<input type="checkbox"/> 0000:66:08.0	PLX Technology, Inc. PEX 8747 48-Lane, 5-Port PCI Express Gen 3 (8.0 GT/s) Switch	Not capable	Not capable	
<input checked="" type="checkbox"/> 0000:67:00.0	NVIDIA Corporation GK210GL [Tesla K80]	Not capable	Disabled	
<input type="checkbox"/> 0000:64:05.0	Intel Corporation Sky Lake-E vGPU	Not capable	Not capable	
<input type="checkbox"/> 0000:64:05.2	Intel Corporation Sky Lake-E RAS Configuration Registers	Not capable	Not capable	
<input type="checkbox"/> 0000:64:05.4	Intel Corporation Sky Lake-E IOxAPIC Configuration Registers	Not capable	Not capable	
<input type="checkbox"/> 0000:64:08.0	Intel Corporation Sky Lake-E Integrated Memory Controller	Not capable	Not capable	
<input type="checkbox"/> 0000:64:09.0	Intel Corporation Sky Lake-E Integrated Memory Controller	Not capable	Not capable	
<input type="checkbox"/> 0000:64:0a.0	Intel Corporation Sky Lake-E Integrated Memory Controller	Not capable	Not capable	
<input type="checkbox"/> 0000:64:0a.1	Intel Corporation Sky Lake-E Integrated Memory Controller	Not capable	Not capable	
<input type="checkbox"/> 0000:64:0a.2	Intel Corporation Sky Lake-E Integrated Memory Controller	Not capable	Not capable	
<input type="checkbox"/> 0000:64:0a.3	Intel Corporation Sky Lake-E Integrated Memory Controller	Not capable	Not capable	
<input type="checkbox"/> 0000:64:0a.4	Intel Corporation Sky Lake-E Integrated Memory Controller	Not capable	Not capable	
<input type="checkbox"/> 0000:64:0a.5	Intel Corporation Sky Lake-E LM Channel 1	Not capable	Not capable	

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ESX 7.0 U3 ENABLE PASSTHROUGH FOR NVIDIA TESLA K80

Successfully toggled passthrough for devices. - dismiss

Host | Manage | Monitor

- Virtual Machines (23)
- Storage (5)
 - NVME-1TB ESX-2 fast
- Networking (13)
 - DSwitch

System | **Hardware** | Licensing | Packages | Services | Security & users

PCI Devices | Power Management

Toggle passthrough | Configure SR-IOV | Hardware label | Reboot host | Refresh

Address	Description	SR-IOV	Passthrough	Hardware Label
<input type="checkbox"/> 0000:66:10.0	PLX Technology, Inc. PEX 8747 48-Lane, 5-Port PCI Express Gen 3 (8.0 GT/s) Switch	Not capable	Not capable	
<input type="checkbox"/> 0000:68:00.0	NVIDIA Corporation GK210GL [Tesla K80]	Not capable	Active	
<input type="checkbox"/> 0000:66:08.0	PLX Technology, Inc. PEX 8747 48-Lane, 5-Port PCI Express Gen 3 (8.0 GT/s) Switch	Not capable	Not capable	
<input type="checkbox"/> 0000:67:00.0	NVIDIA Corporation GK210GL [Tesla K80]	Not capable	Active	
<input type="checkbox"/> 0000:64:05.0	Intel Corporation Sky Lake-E VT-d	Not capable	Not capable	
<input type="checkbox"/> 0000:64:05.2	Intel Corporation Sky Lake-E RAS Configuration Registers	Not capable	Not capable	
<input type="checkbox"/> 0000:64:05.4	Intel Corporation Sky Lake-E IOxAPIC Configuration Registers	Not capable	Not capable	
<input type="checkbox"/> 0000:64:08.0	Intel Corporation Sky Lake-E Integrated Memory Controller	Not capable	Not capable	
<input type="checkbox"/> 0000:64:09.0	Intel Corporation Sky Lake-E Integrated Memory Controller	Not capable	Not capable	
<input type="checkbox"/> 0000:64:0a.0	Intel Corporation Sky Lake-E Integrated Memory Controller	Not capable	Not capable	
<input type="checkbox"/> 0000:64:0a.1	Intel Corporation Sky Lake-E Integrated Memory Controller	Not capable	Not capable	
<input type="checkbox"/> 0000:64:0a.2	Intel Corporation Sky Lake-E Integrated Memory Controller	Not capable	Not capable	
<input type="checkbox"/> 0000:64:0a.3	Intel Corporation Sky Lake-E Integrated Memory Controller	Not capable	Not capable	
<input type="checkbox"/> 0000:64:0a.4	Intel Corporation Sky Lake-E Integrated Memory Controller	Not capable	Not capable	
<input type="checkbox"/> 0000:64:0a.5	Intel Corporation Sky Lake-E LM Channel 1	Not capable	Not capable	

Quick filters... | 167 items

Recent tasks

Task	Target	Initiator	Queued	Started	Result	Completed
Update Passthru Config	esx-2	root	08/25/2022 23:53:11	08/25/2022 23:53:11	Completed successfully	08/25/2022 23:53:12

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VSPHERE 7.0 U3 ENABLE PASSTHROUGH FOR NVIDIA TESLA K80

The screenshot shows the vSphere Client interface for host `esx-2.home.lab`. The `Configure` tab is active, and the `Graphics Devices` section is expanded. The `Graphics` option in the left-hand navigation menu is also highlighted. The `Graphics Devices` table contains the following data:

Name	Device ID	Vendor	Active Type	Configured Type	Memory
<input type="radio"/> GK210GL [Tesla K80]	0000:67:00.0	NVIDIA Corporation	Direct	Shared	0 B
<input type="radio"/> GK210GL [Tesla K80]	0000:68:00.0	NVIDIA Corporation	Direct	Shared	0 B

At the bottom of the interface, the `Recent Tasks` table shows the following entries:

Task Name	Target	Status	Details	Initiator	Queued For	Start Time	Completion Time	Server
Refresh PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:54:35 ...	06/25/2022, 11:54:35 ...	vCenter.home.lab
Refresh PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:54:27 ...	06/25/2022, 11:54:27 ...	vCenter.home.lab
Update PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	5 ms	06/25/2022, 11:54:26 ...	06/25/2022, 11:54:27 ...	vCenter.home.lab
Validate the cluster speci...	Home Lab	Completed		com.vmware.vsan.health	8 ms	06/25/2022, 11:54:14 ...	06/25/2022, 11:54:14 ...	vCenter.home.lab

VSPHERE 7.0 U3 ENABLE PASSTHROUGH FOR NVIDIA TESLA K80

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vSphere Client Search in all environments vAndu.tech

esx-2.home.lab ACTIONS

Summary Monitor **Configure** Permissions VMs Datastores Networks Updates

Certificate
Power Management
Advanced System Settings
System Resource Reservati...
Firewall
Services
Security Profile
System Swap
Packages
Hardware
Overview
Graphics
PCI Devices
Firmware
Virtual Flash
Virtual Flash Resource Man...
Virtual Flash Host Swap Ca...
Alarm Definitions
Scheduled Tasks

PCI Devices [REFRESH](#)

PASSTHROUGH-ENABLED DEVICES ALL PCI DEVICES

TOGGLE PASSTHROUGH CONFIGURE SR-IOV HARDWARE LABEL

ID	Passthrough	SR-IOV	Hardware Label	Vendor Name	Device Name
0000:01:00.0	Enabled	Not Configurable	--	Samsung Electronics Co Ltd	NVMe SSD Controller SM981/PM981/PM983

No items selected

Recent Tasks Alarms

Task Name	Target	Status	Details	Initiator	Queued For	Start Time	Completion Time	Server
Refresh PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:54:35 ...	06/25/2022, 11:54:35 ...	vCenter.home.lab
Refresh PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:54:27 ...	06/25/2022, 11:54:27 ...	vCenter.home.lab
Update PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	5 ms	06/25/2022, 11:54:26 ...	06/25/2022, 11:54:27 ...	vCenter.home.lab
Validate the cluster speci...	Home Lab	Completed		com.vmware.vsan.health	8 ms	06/25/2022, 11:54:14 ...	06/25/2022, 11:54:14 ...	vCenter.home.lab

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VSPHERE 7.0 U3 ENABLE PASSTHROUGH FOR NVIDIA TESLA K80

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esx-2.home.lab ACTIONS

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Overview
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PCI Devices
Firmware
Virtual Flash
Virtual Flash Resource Man...
Virtual Flash Host Swap Ca...
Alarm Definitions
Scheduled Tasks

PCI Devices [REFRESH](#)

PASSTHROUGH-ENABLED DEVICES **ALL PCI DEVICES**

TOGGLE PASSTHROUGH CONFIGURE SR-IOV HARDWARE LABEL

ID	Passthrough	SR-IOV	Hardware Label	Vendor Name	Device Name
0000:01:00.0	Enabled	Not Configurable	--	Samsung Electronics Co Ltd	NVMe SSD Controller SM981/PM981/PM983

No items selected

Task Name	Target	Status	Details	Initiator	Queued For	Start Time	Completion Time	Server
Refresh PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:54:35 ...	06/25/2022, 11:54:35 ...	vCenter.home.lab
Refresh PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:54:27 ...	06/25/2022, 11:54:27 ...	vCenter.home.lab
Update PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	5 ms	06/25/2022, 11:54:26 ...	06/25/2022, 11:54:27 ...	vCenter.home.lab
Validate the cluster speci...	Home Lab	Completed		com.vmware.vsan.health	8 ms	06/25/2022, 11:54:14 ...	06/25/2022, 11:54:14 ...	vCenter.home.lab

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VSPHERE 7.0 U3 ENABLE PASSTHROUGH FOR NVIDIA TESLA K80

New vCenter server updates are available [VIEW UPDATES](#)

vSphere Client Search in all environments vAndu.tech

esx-2.home.lab ACTIONS

Summary Monitor **Configure** Permissions VMs Datastores Networks Updates

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Firewall
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Security Profile
System Swap
Packages
Hardware
Overview
Graphics
PCI Devices
Firmware
Virtual Flash
Virtual Flash Resource Man...
Virtual Flash Host Swap Ca...
Alarm Definitions
Scheduled Tasks

PCI Devices **ALL PCI DEVICES** REFRESH

PASSTHROUGH-ENABLED DEVICES

TOGGLE PASSTHROUGH CONFIGURE SR-IOV HARDWARE LABEL

ID	Passthrough	SR-IOV	Hardware Label	Vendor Name	Device Name
0000:16:09.7	Not Configurable	Not Configurable	N/A	Intel Corporation	Sky Lake-E CHA Registers
0000:16:09.6	Not Configurable	Not Configurable	N/A	Intel Corporation	Sky Lake-E CHA Registers
0000:00:17.0	Not Configurable	Not Configurable	N/A	Intel Corporation	Lewisburg SATA AHCI Controller
0000:16:09.3	Not Configurable	Not Configurable	N/A	Intel Corporation	Sky Lake-E CHA Registers
0000:16:09.2	Not Configurable	Not Configurable	N/A	Intel Corporation	Sky Lake-E CHA Registers

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Recent Tasks Alarms

Task Name	Target	Status	Details	Initiator	Queued For	Start Time	Completion Time	Server
Refresh PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:54:35 ...	06/25/2022, 11:54:35 ...	vCenter.home.lab
Refresh PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:54:27 ...	06/25/2022, 11:54:27 ...	vCenter.home.lab
Update PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	5 ms	06/25/2022, 11:54:26 ...	06/25/2022, 11:54:27 ...	vCenter.home.lab 22/06/26 10
Validate the cluster speci...	Home Lab	Completed		com.vmware.vsan.health	8 ms	06/25/2022, 11:54:14 ...	06/25/2022, 11:54:14 ...	vCenter.home.lab

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VSPHERE 7.0 U3 ENABLE PASSTHROUGH FOR NVIDIA TESLA K80

The screenshot displays the vSphere Client interface for the host 'esx-2.home.lab'. The 'Configure' tab is active, showing the 'PCI Devices' section. A 'TOGGLE PASSTHROUGH' button is highlighted with a red box. Below it, a table lists PCI devices with columns for ID, Passthrough, SR-IOV, Hardware Label, Vendor Name, and Device Name. Two NVIDIA Tesla K80 devices are selected, indicated by blue checkmarks in the 'Passthrough' column. A 'Recent Tasks' table at the bottom shows several completed tasks related to refreshing and updating PCI passthrough settings.

ID	Passthrough	SR-IOV	Hardware Label	Vendor Name	Device Name
0000:67:00.0	Disabled	Not Configurable	--	NVIDIA Corporation	GK210GL [Tesla K80]
0000:66:10.0	Not Configurable	Not Configurable	N/A	PLX Technology, Inc.	PEX 8747 48-Lane, 5-Port PCI Express Gen 3 (...)
0000:68:00.0	Disabled	Not Configurable	--	NVIDIA Corporation	GK210GL [Tesla K80]
0000:B2:00.0	Not Configurable	Not Configurable	N/A	Intel Corporation	Sky Lake-E PCI Express Root Port A
0000:B3:00.0	Disabled	Disabled	--	Mellanox Technologies	MT27700 Family [ConnectX-4]

Task Name	Target	Status	Details	Initiator	Queued For	Start Time	Completion Time	Server
Refresh PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:54:35 ...	06/25/2022, 11:54:35 ...	vCenter.home.lab
Refresh PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:54:27 ...	06/25/2022, 11:54:27 ...	vCenter.home.lab
Update PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	5 ms	06/25/2022, 11:54:26 ...	06/25/2022, 11:54:27 ...	vCenter.home.lab
Validate the cluster speci...	Home Lab	Completed		com.vmware.vsan.health	8 ms	06/25/2022, 11:54:14 ...	06/25/2022, 11:54:14 ...	vCenter.home.lab

VSPHERE 7.0 U3 ENABLE PASSTHROUGH FOR NVIDIA TESLA K80

The screenshot shows the vSphere Client interface for an ESX host named 'esx-2.home.lab'. The 'Configure' tab is active, and the 'PCI Devices' section is expanded. A green notification banner at the top of the PCI Devices section states 'Passthrough has been enabled for 2 devices.' Below this, a table lists the PCI devices with their IDs, passthrough status, and hardware labels. Two NVIDIA GK210GL [Tesla K80] devices are selected, and a 'Multiple items selected' message is displayed below the table. The bottom of the screen shows a 'Recent Tasks' table with a list of completed tasks related to updating and refreshing PCI passthrough settings.

esx-2.home.lab | ACTIONS

Summary Monitor **Configure** Permissions VMs Datastores Networks Updates

Certificate
Power Management
Advanced System Settings
System Resource Reservati...
Firewall
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Firmware
Virtual Flash
Virtual Flash Resource Man...
Virtual Flash Host Swap Ca...
Alarm Definitions
Scheduled Tasks

PCI Devices REFRESH

PASSTHROUGH-ENABLED DEVICES ALL PCI DEVICES

✓ Passthrough has been enabled for 2 devices.

TOGGLE PASSTHROUGH CONFIGURE SR-IOV HARDWARE LABEL

<input type="checkbox"/>	ID	Passthrough	SR-IOV	Hardware Label	Vendor Name	Device Name
<input checked="" type="checkbox"/>	0000:67:00.0	Disabled	Not Configurable	--	NVIDIA Corporation	GK210GL [Tesla K80]
<input type="checkbox"/>	0000:66:10.0	Not Configurable	Not Configurable	N/A	PLX Technology, Inc.	PEX 8747 48-Lane, 5-Port PCI Express Gen 3 (...)
<input checked="" type="checkbox"/>	0000:68:00.0	Disabled	Not Configurable	--	NVIDIA Corporation	GK210GL [Tesla K80]
<input type="checkbox"/>	0000:B2:00.0	Not Configurable	Not Configurable	N/A	Intel Corporation	Sky Lake-E PCI Express Root Port A

Multiple items selected

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Task Name	Target	Status	Details	Initiator	Queued For	Start Time	Completion Time	Server
Refresh PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:54:35 ...	06/25/2022, 11:54:35 ...	vCenter.home.lab
Refresh PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:54:27 ...	06/25/2022, 11:54:27 ...	vCenter.home.lab
Update PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	5 ms	06/25/2022, 11:54:26 ...	06/25/2022, 11:54:27 ...	vCenter.home.lab
Validate the cluster speci...	Home Lab	Completed		com.vmware.vsan.health	8 ms	06/25/2022, 11:54:14 ...	06/25/2022, 11:54:14 ...	vCenter.home.lab
Update PCI passthrough ...	esx-2.home.lab	Queued		HOME.LAB\Administrator				vCenter.home.lab

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VSPHERE 7.0 U3 ENABLE PASSTHROUGH FOR NVIDIA TESLA K80

The screenshot displays the vSphere Client interface for configuring PCI passthrough on an ESXi host. The left sidebar shows the navigation tree with 'esx-2.home.lab' selected. The main panel is in the 'Configure' tab, specifically the 'PCI Devices' section. A red box highlights the 'PASSTHROUGH-ENABLED DEVICES' tab, which is active. A green notification bar at the top of the table area states 'Passthrough has been enabled for 2 devices.' Below this, a table lists the enabled devices:

ID	Passthrough	SR-IOV	Hardware Label	Vendor Name	Device Name
0000:01:00.0	Enabled	Not Configurable	--	Samsung Electronics Co Ltd	NVMe SSD Controller SM981/PM981/PM983
0000:67:00.0	Enabled	Not Configurable	--	NVIDIA Corporation	GK210GL [Tesla K80]
0000:68:00.0	Enabled	Not Configurable	--	NVIDIA Corporation	GK210GL [Tesla K80]

Below the table, it indicates 'No items selected'.

At the bottom of the interface, the 'Recent Tasks' pane shows a list of completed tasks related to PCI passthrough configuration:

Task Name	Target	Status	Details	Initiator	Queued For	Start Time	Completion Time	Server
Refresh PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	2 ms	06/25/2022, 11:57:43 ...	06/25/2022, 11:57:43 ...	vCenter.home.lab
Update PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:57:42 ...	06/25/2022, 11:57:42 ...	vCenter.home.lab
Refresh PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:54:35 ...	06/25/2022, 11:54:35 ...	vCenter.home.lab
Refresh PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:54:27 ...	06/25/2022, 11:54:27 ...	vCenter.home.lab
Update PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	5 ms	06/25/2022, 11:54:26 ...	06/25/2022, 11:54:27 ...	vCenter.home.lab
Validate the cluster speci...	Home Lab	Completed		com.vmware.vsan.health	8 ms	06/25/2022, 11:54:14 ...	06/25/2022, 11:54:14 ...	vCenter.home.lab

VSPHERE 7.0 U3 PASSTHROUGH NVIDIA TESLA K80 TO VM

The screenshot displays the vSphere Client interface for a virtual machine named 'Game-2'. The interface is in dark mode and shows various configuration and monitoring tabs. The 'Summary' tab is active, displaying the following information:








- Compute Policies:** A section with a 'VIEW ALL POLICIES' link.
- Guest OS:** Includes a screenshot of the Windows 10 desktop, 'Power Status' (Powered On), 'Guest OS' (Microsoft Windows 10 (64-bit)), 'VMware Tools' (Running, version:11360 (Current)), 'DNS Name (1)' (DESKTOP-MFKH27C), 'IP Addresses (2)' (10.3.0.160, fe80::300d:ae91:ba66:b11b), and 'Encryption' (Not encrypted). There are buttons for 'LAUNCH REMOTE CONSOLE' and 'LAUNCH WEB CONSOLE'.
- Capacity and Usage:** Shows 'CPU' usage at 2.916 GHz used out of 20 CPUs allocated.
- VM Hardware:** Shows 'CPU' as 20 CPU(s) at 2916 MHz used and 'Memory' as 10 GB, with 6 GB active.
- Related Objects:** Lists the 'Cluster' as 'Home Lab'.
- Tags:** A section for managing tags.

At the bottom of the interface, there is a 'Recent Tasks' table:

Task Name	Target	Status	Details	Initiator	Queued For	Start Time	Completion Time	Server
Refresh PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	2 ms	06/25/2022, 11:57:43 ...	06/25/2022, 11:57:43 ...	vCenter.home.lab
Update PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:57:42 ...	06/25/2022, 11:57:42 ...	vCenter.home.lab
Refresh PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:54:35 ...	06/25/2022, 11:54:35 ...	vCenter.home.lab
Refresh PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:54:27 ...	06/25/2022, 11:54:27 ...	vCenter.home.lab
Update PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	5 ms	06/25/2022, 11:54:26 ...	06/25/2022, 11:54:27 ...	vCenter.home.lab
Validate the cluster speci...	Home Lab	Completed		com.vmware.vsan.health	8 ms	06/25/2022, 11:54:14 ...	06/25/2022, 11:54:14 ...	vCenter.home.lab

Additional information visible in the interface includes the user 'vAndu.tech' in the top right, a search bar, and a 'CUSTOMIZE VIEW' button. The 'Game-2' VM name is highlighted in the left-hand navigation pane.

VSPHERE 7.0 U3 PASSTHROUGH NVIDIA TESLA K80 TO VM

Game-2 |  |  |  |  |  |  |  | ACTIONS

Summary | Monitor | **Configure** | Permissions | Datastores | Networks | Snapshots | Updates

Compute Policies

Guest OS

Power Status: Powered On
Guest OS: Microsoft Windows 10 (64-bit)
VMware Tools: Running, version:11360 (Current)
DNS Name (1): DESKTOP-MFKH27C
IP Addresses (2): 10.3.0.160, fe80::300d:ae91:ba66:b11b
Encryption: Not encrypted

LAUNCH REMOTE CONSOLE
LAUNCH WEB CONSOLE

Capacity and Usage
Last updated at 11:58 PM
CPU: 2.916 GHz used (20 CPUs allocated)

VM Hardware
CPU: 20 CPU(s), 2916 MHz used
Memory: 10 GB, 6 GB memory active

Related Objects
Cluster: Home Lab

Tags

Task Name	Target	Status	Details	Initiator	Queued For	Start Time	Completion Time	Server
Refresh PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	2 ms	06/25/2022, 11:57:43 ...	06/25/2022, 11:57:43 ...	vCenter.home.lab
Update PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:57:42 ...	06/25/2022, 11:57:42 ...	vCenter.home.lab
Refresh PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:54:35 ...	06/25/2022, 11:54:35 ...	vCenter.home.lab
Refresh PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:54:27 ...	06/25/2022, 11:54:27 ...	vCenter.home.lab
Update PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	5 ms	06/25/2022, 11:54:26 ...	06/25/2022, 11:54:27 ...	vCenter.home.lab
Validate the cluster speci...	Home Lab	Completed		com.vmware.vsan.health	8 ms	06/25/2022, 11:54:14 ...	06/25/2022, 11:54:14 ...	vCenter.home.lab

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VSPHERE 7.0 U3 PASSTHROUGH NVIDIA TESLA K80 TO VM

Confirm Guest Shut Down | Game-2

Shut down the guest operating systems for the selected virtual machine?

NO YES

Power Status: Powered On
Guest OS: Microsoft Windows 10 (64-bit)
VMware Tools: Running, version:11360 (Current)
DNS Name (1): DESKTOP-MFKH27C
IP Addresses (2): 10.3.0.160, fe80::300d:ae91:ba66:b11b
Encryption: Not encrypted

Capacity and Usage
Last updated at 11:58 PM
CPU: 2.916 GHz used, 20 CPUs allocated
Memory: 10 GB, 6 GB memory active

Task Name	Target	Status	Details	Initiator	Queued For	Start Time	Completion Time	Server
Refresh PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	2 ms	06/25/2022, 11:57:43 ...	06/25/2022, 11:57:43 ...	vCenter.home.lab
Update PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:57:42 ...	06/25/2022, 11:57:42 ...	vCenter.home.lab
Refresh PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:54:35 ...	06/25/2022, 11:54:35 ...	vCenter.home.lab
Refresh PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:54:27 ...	06/25/2022, 11:54:27 ...	vCenter.home.lab
Update PCI passthrough ...	esx-2.home.lab	Completed		HOME.LAB\Administrator	5 ms	06/25/2022, 11:54:26 ...	06/25/2022, 11:54:27 ...	vCenter.home.lab
Validate the cluster speci...	Home Lab	Completed		com.vmware.vsan.health	8 ms	06/25/2022, 11:54:14 ...	06/25/2022, 11:54:14 ...	vCenter.home.lab

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VSPHERE 7.0 U3 PASSTHROUGH NVIDIA TESLA K80 TO VM

The screenshot shows the vSphere Client interface for a VM named 'Game-2'. The left sidebar contains a navigation tree with folders like DCIM, Discover, ESX Age, MGM, Monitor, SIEM, and Test. A context menu is open over the 'Game-2' folder, with 'Edit Settings...' highlighted. The main panel shows the VM's configuration, including Compute Policies, Guest OS (Microsoft Windows 10), Capacity and Usage (3.024 GHz used, 20 CPUs allocated), and VM Hardware (20 CPU(s), 10 GB memory). A table at the bottom lists recent tasks.

Task Name	Status	Details	Initiator	Queued For	Start Time	Completion Time	Server
Initiate guest OS shutd	Completed		HOME.LAB\Administrator	5 ms	06/25/2022, 11:59:17 ...	06/25/2022, 11:59:18 ...	vCenter.home.lab
Refresh PCI passthrou	Completed		HOME.LAB\Administrator	2 ms	06/25/2022, 11:57:43 ...	06/25/2022, 11:57:43 ...	vCenter.home.lab
Update PCI passthrou	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:57:42 ...	06/25/2022, 11:57:42 ...	vCenter.home.lab
Refresh PCI passthrou	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:54:35 ...	06/25/2022, 11:54:35 ...	vCenter.home.lab
Refresh PCI passthrou	Completed		HOME.LAB\Administrator	4 ms	06/25/2022, 11:54:27 ...	06/25/2022, 11:54:27 ...	vCenter.home.lab
Update PCI passthrou	Completed		HOME.LAB\Administrator	5 ms	06/25/2022, 11:54:26 ...	06/25/2022, 11:54:27 ...	vCenter.home.lab
Validate the cluster spe	Completed		com.vmware.vsan.health	8 ms	06/25/2022, 11:54:14 ...	06/25/2022, 11:54:14 ...	vCenter.home.lab

VSPHERE 7.0 U3 PASSTHROUGH NVIDIA TESLA K80 TO VM

The screenshot displays the vSphere Client interface. In the foreground, the 'Edit Settings' dialog for VM 'Game-2' is open, showing the 'Virtual Hardware' tab. The 'ADD NEW DEVICE' button is highlighted with a red box. The background shows the vSphere interface with a list of VMs and a task history table.

Task Name	Target	Status
Initiate guest OS shutdo...	Game-2	Completed
Refresh PCI passthrough ...	esx-2.home.lab	Completed
Update PCI passthrough ...	esx-2.home.lab	Completed
Refresh PCI passthrough ...	esx-2.home.lab	Completed
Refresh PCI passthrough ...	esx-2.home.lab	Completed
Update PCI passthrough ...	esx-2.home.lab	Completed

VSPHERE 7.0 U3 PASSTHROUGH NVIDIA TESLA K80 TO VM

The screenshot shows the vSphere Client interface with the 'Edit Settings' dialog for a virtual machine named 'Game-2'. The 'Virtual Hardware' tab is selected. The 'ADD NEW DEVICE' dropdown menu is open, and 'PCI Device' is highlighted with a red box. The background shows the vSphere inventory tree on the left and the VM's configuration details on the right.

Task Name	Target	Status
Initiate guest OS shutdo...	Game-2	Completed
Refresh PCI passthrough ...	esx-2.home.lab	Completed
Update PCI passthrough ...	esx-2.home.lab	Completed
Refresh PCI passthrough ...	esx-2.home.lab	Completed
Refresh PCI passthrough ...	esx-2.home.lab	Completed
Update PCI passthrough ...	esx-2.home.lab	Completed

VSPHERE 7.0 U3 PASSTHROUGH NVIDIA TESLA K80 TO VM

The screenshot displays the vSphere Client interface. In the center, the 'Edit Settings' dialog for VM 'Game-2' is open, showing the 'Virtual Hardware' tab. A warning message at the top states: 'Full memory reservation will be applied automatically, it is required for PCI device'. The hardware configuration includes:

- CPU: 20
- Memory: 10 GB
- Hard disk 1: 100 GB
- Hard disk 2: 300 GB
- SCSI controller 0: LSI Logic SAS
- Network adapter 1: VLAN 30 (Connect checked)
- CD/DVD drive 1: Client Device (Connect checked)
- USB xHCI controller: USB 3.1

A new PCI device has been added with the following details:

- Device ID: 0000:01:00.0 | NVMe SSD Controller SM981/PM981/PM983 Samsung Electronics Co Ltd
- Options: DirectPath IO, Dynamic DirectPath IO, NVIDIA GRID vGPU

The 'PCI Device' dropdown menu is open, showing the following options:

- 0000:01:00.0 | NVMe SSD Controller SM981/PM981/PM983 Samsung Electronics Co Ltd
- 0000:67:00.0 | GK210GL [Tesla K80] NVIDIA Corporation** (highlighted with a red box)
- 0000:68:00.0 | GK210GL [Tesla K80] NVIDIA Corporation

The background shows the vSphere Client interface with a list of VMs on the left and a task log at the bottom. The task log shows several 'Update PCI passthrough' tasks for 'esx-2.home.lab' completed successfully.

VSPHERE 7.0 U3 PASSTHROUGH NVIDIA TESLA K80 TO VM

Edit Settings | Game-2

CPU: 20
Memory: 10 GB
Hard disk 1: 100 GB
Hard disk 2: 300 GB
SCSI controller 0: LSI Logic SAS
Network adapter 1: VLAN 30 (Connect...)
CD/DVD drive 1: Client Device (Connect...)
USB xHCI controller: USB 3.1

New PCI device: 0000:67:00.0 | GK210GL [Tesla K80] NVIDIA Corporation

DirectPath IO Dynamic DirectPath IO NVIDIA GRID vGPU

PCI Device: 0000:67:00.0 | GK210GL [Tesla K80] NVIDIA Corporation

Note: Some virtual machine operations are unavailable when PCI/PCIe passthrough devices are present. Consult user guide for virtual machine operation limitations with PCI/PCIe passthrough devices.

Video card: Specify custom settings
Security Devices: Not Configured
VMCI device

CANCEL OK

Task List:

Task Name	Target	Status
Initiate guest OS shutdo...	Game-2	Completed
Refresh PCI passthrough ...	esx-2.home.lab	Completed
Update PCI passthrough ...	esx-2.home.lab	Completed
Refresh PCI passthrough ...	esx-2.home.lab	Completed
Refresh PCI passthrough ...	esx-2.home.lab	Completed
Update PCI passthrough ...	esx-2.home.lab	Completed

VM Details:

- Status: Powered Off
- OS: Microsoft Windows 10 (64-bit)
- Tools: Not running, version:11360 (Current)
- Device: DESKTOP-MFKH27C
- Encryption: Not encrypted

Tags: Home Lab

Server: vCenter.home.lab

Date: 22/06/26

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ESX 7.0 U3 PASSTHROUGH NVIDIA TESLA K80 TO VM

vmware ESXi vAndu.tech | Help | Search

esx-2 - Virtual Machines

Create / Register VM | Console | Power on | Power off | Suspend | Refresh | Actions

Virtual machine	Status	Used space	Guest OS	Host name	Host CPU	Host memory
	Invalid	Unknown		Unknown	0 MHz	0 MB
	Normal	67.07 GB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
	Normal	1.02 TB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
	Normal	293.09 GB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
	Invalid	Unknown		Unknown	0 MHz	0 MB
	Invalid	Unknown		Unknown	0 MHz	0 MB
	Normal	340.49 GB	VMware ESXi 7.0 or later	Unknown	0 MHz	0 MB
	Normal	270.9 GB	VMware ESXi 7.0 or later	Unknown	0 MHz	0 MB
	Normal	338.83 GB	VMware ESXi 7.0 or later	Unknown	0 MHz	0 MB
	Normal	58.8 GB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
	Normal	64.28 GB	Ubuntu Linux (64-bit)	Unknown	0 MHz	0 MB
	Normal	38.87 GB	Microsoft Windows Server 2022 (64-bit)	Unknown	0 MHz	0 MB
	Invalid	Unknown		Unknown	0 MHz	0 MB
	Invalid	Unknown		Unknown	0 MHz	0 MB
	Normal	2.14 GB	Red Hat Enterprise Linux 7 (64-bit)	Unknown	0 MHz	0 MB
	Normal	8.28 GB	Red Hat Enterprise Linux 8 (64-bit)	Unknown	0 MHz	0 MB
	Normal	5.8 GB	Red Hat Enterprise Linux 8 (64-bit)	Unknown	0 MHz	0 MB
	Normal	11.86 GB	Red Hat Enterprise Linux 8 (64-bit)	Unknown	0 MHz	0 MB
	Normal	14.09 GB	Red Hat Enterprise Linux 8 (64-bit)	Unknown	0 MHz	0 MB
	Normal	2.86 GB	Red Hat Enterprise Linux 7 (64-bit)	Unknown	0 MHz	0 MB
	Normal	16.73 GB	Microsoft Windows Server 2022 (64-bit)	DESKTOP-MFKH27C	3 GHz	10.1 GB
	Normal	4.49 GB	Other 3.x or later Linux (64-bit)	localhost	195 MHz	2.05 GB
Game-2	Normal	15.9 GB	Microsoft Windows Server 2022 (64-bit)	Unknown	0 MHz	0 MB

Quick filters... 23 items

Recent tasks

Task	Target	Initiator	Queued	Started	Result	Completed
Update Passthru Config	esx-2	root	06/25/2022 23:53:11	06/25/2022 23:53:11	Completed successfully	06/25/2022 23:53:11
Update Passthru Config	esx-2	root	06/25/2022 23:51:53	06/25/2022 23:51:53	Completed successfully	06/25/2022 23:51:54

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ESX 7.0 U3 PASSTHROUGH NVIDIA TESLA K80 TO VM

The screenshot shows the VMware ESXi interface. The top navigation bar includes the VMware ESXi logo, a search bar, and user information (vAndu.tech). The left sidebar shows the 'Navigator' pane with 'Virtual Machines' selected. The main area displays a table of virtual machines with columns for 'Virtual machine', 'Status', 'Used space', 'Guest OS', 'Host name', 'Host CPU', and 'Host memory'. A context menu is open over the 'Game-2' VM, with 'Edit settings' highlighted in a red box. Below the VM list, a 'Recent tasks' pane shows two tasks: 'Update Passthru Co' for 'esx-2', both completed successfully on 06/25/2022.

Virtual machine	Status	Used space	Guest OS	Host name	Host CPU	Host memory
Game-2	Invalid	Unknown		Unknown	0 MHz	0 MB
	Normal	67.07 GB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
	Normal	1.02 TB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
	Normal	293.09 GB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
	Invalid	Unknown		Unknown	0 MHz	0 MB
	Invalid	Unknown		Unknown	0 MHz	0 MB
	Normal	340.49 GB	VMware ESXi 7.0 or later	Unknown	0 MHz	0 MB
	Normal	270.9 GB	VMware ESXi 7.0 or later	Unknown	0 MHz	0 MB
	Normal	338.83 GB	VMware ESXi 7.0 or later	Unknown	0 MHz	0 MB
	Normal	58.8 GB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
	Normal	64.28 GB	Ubuntu Linux (64-bit)	Unknown	0 MHz	0 MB
	Normal	38.87 GB	Microsoft Windows Server 2022 (64-bit)	Unknown	0 MHz	0 MB
	Invalid	Unknown		Unknown	0 MHz	0 MB
	Invalid	Unknown		Unknown	0 MHz	0 MB
	Normal	2.14 GB	Red Hat Enterprise Linux 7 (64-bit)	Unknown	0 MHz	0 MB
	Normal	8.28 GB	Red Hat Enterprise Linux 8 (64-bit)	Unknown	0 MHz	0 MB
	Normal	5.8 GB	Red Hat Enterprise Linux 8 (64-bit)	Unknown	0 MHz	0 MB
	Normal	11.86 GB	Red Hat Enterprise Linux 8 (64-bit)	Unknown	0 MHz	0 MB
	Normal	14.09 GB	Red Hat Enterprise Linux 8 (64-bit)	Unknown	0 MHz	0 MB
	Normal	2.86 GB	Red Hat Enterprise Linux 7 (64-bit)	Unknown	0 MHz	0 MB
	Normal	16.73 GB	Microsoft Windows Server 2022 (64-bit)	DESKTOP-MFKH27C	3 GHz	10.1 GB
	Normal	4.49 GB	Other 3.x or later Linux (64-bit)	localhost	195 MHz	2.05 GB
	Normal	15.9 GB	Microsoft Windows Server 2022 (64-bit)	Unknown	0 MHz	0 MB

Target	Initiator	Queued	Started	Result	Completed
esx-2	root	06/25/2022 23:53:11	06/25/2022 23:53:11	Completed successfully	06/25/2022 23:53:12
esx-2	root	06/25/2022 23:51:53	06/25/2022 23:51:53	Completed successfully	06/25/2022 23:51:54

ESX 7.0 U3 PASSTHROUGH NVIDIA TESLA K80 TO VM

The screenshot shows the VMware ESXi vSphere Client interface. In the background, a table lists virtual machines with columns for Virtual machine, Status, Used space, Guest OS, Host name, Host CPU, and Host memory. The 'Game-2' VM is selected. A dialog box titled 'Edit settings - Game-2 (ESXi 7.0 U2 virtual machine)' is open, showing the 'Virtual Hardware' tab. The 'Add other device' menu is open, and 'PCI device' is highlighted with a red box. The 'Recent tasks' table at the bottom shows two successful 'Update Passthru Config' tasks.

Virtual machine	Status	Used space	Guest OS	Host name	Host CPU	Host memory
	Invalid	Unknown		Unknown	0 MHz	0 MB
	Normal	67.07 GB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
	Normal	1.02 TB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
	Normal	293.09 GB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB

Task	Target	Initiator	Queued	Started	Result	Completed
Update Passthru Config	esx-2	root	08/25/2022 23:53:11	08/25/2022 23:53:11	Completed successfully	22/06/26 08:25:25
Update Passthru Config	esx-2	root	08/25/2022 23:51:53	08/25/2022 23:51:53	Completed successfully	08/25/2022 23:51:54

ESX 7.0 U3 PASSTHROUGH NVIDIA TESLA K80 TO VM

The screenshot shows the VMware ESXi interface with a list of virtual machines. A modal window titled "Edit settings - Game-2 (ESXi 7.0 U2 virtual machine)" is open, displaying hardware configuration options. The "New PCI device" section is expanded, showing a list of available devices. A red box highlights the entry "GK210GL [Tesla K80] - 0000:67:00.0".

Virtual machine	Status	Used space	Guest OS	Host name	Host CPU	Host memory
	Invalid	Unknown		Unknown	0 MHz	0 MB
	Normal	67.07 GB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
	Normal	1.02 TB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
	Normal	293.09 GB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB

Task	Target	Initiator	Queued	Started	Result	Completed
Update Passthru Config	esx-2	root	06/25/2022 23:53:11	06/25/2022 23:53:11	Completed successfully	22/06/26 06:27
Update Passthru Config	esx-2	root	06/25/2022 23:51:53	06/25/2022 23:51:53	Completed successfully	27 06:27/2022 23:51:54

ESX 7.0 U3 PASSTHROUGH NVIDIA TESLA K80 TO VM

vmware ESXi vAndu.tech | Help | Search

Virtual machine Game-2 was successfully reconfigured - dismiss

Create / Register VM | Console | Power on | Power off | Suspend | Refresh | Actions

Virtual machine	Status	Used space	Guest OS	Host name	Host CPU	Host memory
<input type="checkbox"/>	Invalid	Unknown		Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	67.07 GB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	1.02 TB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	293.09 GB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Invalid	Unknown		Unknown	0 MHz	0 MB
<input type="checkbox"/>	Invalid	Unknown		Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	340.49 GB	VMware ESXi 7.0 or later	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	270.9 GB	VMware ESXi 7.0 or later	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	338.83 GB	VMware ESXi 7.0 or later	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	58.8 GB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	64.28 GB	Ubuntu Linux (64-bit)	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	38.87 GB	Microsoft Windows Server 2022 (64-bit)	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Invalid	Unknown		Unknown	0 MHz	0 MB
<input type="checkbox"/>	Invalid	Unknown		Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	2.14 GB	Red Hat Enterprise Linux 7 (64-bit)	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	8.28 GB	Red Hat Enterprise Linux 8 (64-bit)	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	5.8 GB	Red Hat Enterprise Linux 8 (64-bit)	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	11.86 GB	Red Hat Enterprise Linux 8 (64-bit)	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	14.09 GB	Red Hat Enterprise Linux 8 (64-bit)	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	2.86 GB	Red Hat Enterprise Linux 7 (64-bit)	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	16.73 GB	Microsoft Windows Server 2022 (64-bit)	DESKTOP-MFKH27C	3 GHz	10.1 GB
<input type="checkbox"/>	Normal	4.49 GB	Other 3.x or later Linux (64-bit)	localhost	195 MHz	2.05 GB
<input checked="" type="checkbox"/>	Normal	15.9 GB	Microsoft Windows Server 2022 (64-bit)	Unknown	0 MHz	0 MB

Quick filters... 23 items

Recent tasks

Task	Target	Initiator	Queued	Started	Result	Completed
Reconfig VM	Game-2	root	06/26/2022 00:02:19	06/26/2022 00:02:19	Completed successfully	06/26/2022 00:02:19
Update Passthru Config	esx-2	root	06/25/2022 23:53:11	06/25/2022 23:53:11	Completed successfully	06/25/2022 23:53:12
Update Passthru Config	esx-2	root	06/25/2022 23:51:53	06/25/2022 23:51:53	Completed successfully	06/25/2022 23:51:54

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VSPHERE 7.0 U3 ENABLE 64-BIT MEMORY MAPPED I/O (MMIO)

The screenshot displays the vSphere Client interface for a virtual machine named 'Game-2'. The interface is in a dark theme. On the left, a navigation pane shows the hierarchy: vCenter.home.lab > Fast Micro DataCenter > vAndu.tech > Game-2. The main content area is divided into several sections: 'Compute Policies' (empty), 'Guest OS' (Powered Off), 'Capacity and Usage' (20 CPUs allocated, 0 MHz used), 'VM Hardware' (20 CPU(s), 0 MHz used; 10 GB, 0 GB memory active), 'Related Objects' (Home Lab), and 'Tags'. A 'Recent Tasks' table at the bottom shows a failed task: 'Power On virtual machine' for target 'Game-2', initiated by 'HOME.LAB\Administrator' at 12:04:12 on 06/26/2022. An error message box in the top right corner states: 'Operation failed! Task name: Power On virtual machine, Target: Game-2, Status: Module DevicePowerOn power on failed.' The user 'vAndu.tech' is logged in, and the date '22/06/26' and time '30' are shown in the bottom right.

Task Name	Target	Status	Details	Initiator	Queued For	Start Time	Completion Time	Server
Power On virtual machine	Game-2	Module DevicePowerOn pow	Powering on the new Virtual...	HOME.LAB\Administrator	4 ms	06/26/2022, 12:04:12 ...		vCenter.home.lab

VSPHERE 7.0 U3 ENABLE 64-BIT MEMORY MAPPED I/O (MMIO)

The screenshot shows the vSphere Client interface for a virtual machine named 'Game-2'. The 'Edit Settings...' option in the left-hand menu is highlighted with a red box. An 'Operation failed!' notification is visible in the top right corner, indicating a power-on failure. The main panel displays VM details such as 'Powered Off', 'Microsoft Windows 10 (64-bit)', and 'VMware Tools'. The bottom section shows a task log with the following data:

Task Name	Status	Details	Initiator	Queued For	Start Time	Completion Time	Server
Power On virtual machine	Failed	Module DevicePowerOn power...	HOME.LAB\Administrator	4 ms	06/26/2022, 12:04:12 ...	06/26/2022, 12:04:21 ...	vCenter.home.lab
Initialize powering On	Completed		HOME.LAB\Administrator	4 ms	06/26/2022, 12:04:12 ...	06/26/2022, 12:04:12 ...	vCenter.home.lab
Reconfigure virtual machine	Completed		HOME.LAB\Administrator	5 ms	06/26/2022, 12:00:09...	06/26/2022, 12:00:09...	vCenter.home.lab
Initiate guest OS shut	Completed		HOME.LAB\Administrator	5 ms	06/25/2022, 11:59:17 ...	06/25/2022, 11:59:18 ...	vCenter.home.lab
Refresh PCI passthro	Completed		HOME.LAB\Administrator	2 ms	06/25/2022, 11:57:43 ...	06/25/2022, 11:57:43 ...	vCenter.home.lab

VSPHERE 7.0 U3 ENABLE 64-BIT MEMORY MAPPED I/O (MMIO)

The screenshot displays the vSphere Client interface with the 'Edit Settings' dialog for a virtual machine named 'Game-2'. The 'Virtual Hardware' tab is active, showing various configuration options. Two settings are highlighted with red boxes:

- Expose hardware assisted virtualization to the guest OS:** This checkbox is checked, indicating that hardware-assisted virtualization is exposed to the guest operating system.
- Reserve all guest memory (All locked):** This checkbox is checked, indicating that all guest memory is reserved and locked.

Other visible settings include:

- CPU:** 20 vCPUs, 10 Cores per Socket, 2 Sockets.
- Reservation:** 0 MHz.
- Limit:** Unlimited MHz.
- Shares:** Normal, 20000.
- Hardware virtualization:** Expose hardware assisted virtualization to the guest OS (checked).
- Performance Counters:** Enable virtualized CPU performance counters (checked).
- Scheduling Affinity:** (Info icon).
- I/O MMU:** Enabled.
- Memory:** 20 GB.
- Reservation:** 20 MB.
- Limit:** Unlimited MB.
- Shares:** Normal, 204800.
- Memory Hot Plug:** Enable.

The background shows the vCenter home lab environment with a tree view on the left and a task list at the bottom. The task list includes tasks such as 'Power On virtual machine', 'Initialize powering On', 'Reconfigure virtual mach...', 'Initiate guest OS shutdo...', and 'Refresh PCI passthrough...'. The user 'vAndu.tech' is logged in.

VSPHERE 7.0 U3 ENABLE 64-BIT MEMORY MAPPED I/O (MMIO)

The screenshot shows the vSphere Client interface with the 'Edit Settings' dialog for a virtual machine named 'Game-2'. The 'VMX Options' tab is selected and highlighted with a red box. The dialog lists various hardware settings for the VM.

Device	Value	Unit
CPU	20	
Memory	20	GB
Hard disk 1	100	GB
Hard disk 2	300	GB
SCSI controller 0	LSI Logic SAS	
Network adapter 1	VLAN 30	<input checked="" type="checkbox"/> Connect...
CD/DVD drive 1	Client Device	<input checked="" type="checkbox"/> Connect...
USB xHCI controller	USB 3.1	
PCI device 0	0000:67:00.0 GK210GL [Tesla K80] NVIDIA Corporation	
Video card	Specify custom settings	
Security Devices	Not Configured	
VMCI device		
SATA controller 0	AHCI	
Other	Additional Hardware	

At the bottom of the dialog, there are 'CANCEL' and 'OK' buttons. The background shows the vSphere Client interface with the 'Game-2' VM selected in the left-hand navigation pane.

VSPHERE 7.0 U3 ENABLE 64-BIT MEMORY MAPPED I/O (MMIO)

The screenshot displays the vSphere Client interface. In the foreground, the 'Edit Settings' dialog for VM 'Game-2' is open, showing the 'VM Options' tab. The 'Advanced' option is highlighted with a red box. The background shows the vSphere Client interface with the 'Game-2' VM selected in the left-hand navigation pane. The right-hand pane shows the VM's status as 'Powered Off' and its operating system as 'Microsoft Windows 10 (64-bit)'. The bottom of the screen shows the date '22/06/26' and the page number '34'.

Category	Setting	Value
General Options	VM Name	Game-2
VMware Remote Console Options	Lock the guest operating system when the last remote user disconnects	<input type="checkbox"/>
Encryption	Expand for encryption settings	
Power management	Expand for power management settings	
VMware Tools	Expand for VMware Tools settings	
Virtualization Based Security	Enable	<input checked="" type="checkbox"/>
Boot Options	Expand for boot options	
Advanced	Expand for advanced settings	
Fibre Channel NPIV	Expand for Fibre Channel NPIV settings	

VSPHERE 7.0 U3 ENABLE 64-BIT MEMORY MAPPED I/O (MMIO)

The screenshot displays the vSphere Client interface with the 'Edit Settings' dialog for a virtual machine named 'Game-2'. The dialog is open to the 'Advanced' section, which is expanded to show various settings. The 'EDIT CONFIGURATION...' button is highlighted with a red box, indicating the next step in the process. The background shows the vSphere Client interface with a search bar, user profile 'vAndu.tech', and a list of virtual machines including 'Game-2'.

Edit Settings | Game-2

- > Power management Expand for power management settings
- > VMware Tools Expand for VMware Tools settings
- Virtualization Based Security Enable
- > Boot Options Expand for boot options
- ▼ **Advanced**
- Settings Disable acceleration Enable logging
- Debugging and statistics Run normally
- Swap file location Default
Use the settings of the cluster or host containing the virtual machine.
 Virtual machine directory
Store the swap files in the same directory as the virtual machine.
 Datastore specified by host
Store the swap files in the datastore specified by the host to be used for swap files. If not possible, store the swap files in the same directory as the virtual machine. Using a datastore that is not visible to both hosts during vMotion might affect the vMotion performance for the affected virtual machines.
- Configuration Parameters **EDIT CONFIGURATION...**
- Latency Sensitivity Normal
- > Fibre Channel NPIV Expand for Fibre Channel NPIV settings

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VSPHERE 7.0 U3 ENABLE 64-BIT MEMORY MAPPED I/O (MMIO)

The screenshot shows the vSphere Client interface with the Configuration Parameters dialog box open for the virtual machine 'Game-2'. The dialog box has a title bar 'Configuration Parameters' and a close button. Below the title bar is a warning icon and text: 'Modify or add configuration parameters as needed for experimental features or as instructed by technical support. Empty values will be removed (supported on ESXi 6.0 and later)'. A red box highlights the 'ADD CONFIGURATION PARAMS' button. Below this is a table of configuration parameters.

Name	Value
tools.guest.desktop.autolock	FALSE
nvram	Game-2.nvram
svga.present	TRUE
pciBridge0.present	TRUE
pciBridge4.present	TRUE
pciBridge4.virtualDev	pcieRootPort
pciBridge4.functions	8
pciBridge5.present	TRUE
pciBridge5.virtualDev	pcieRootPort
pciBridge5.functions	8
pciBridge6.present	TRUE
pciBridge6.virtualDev	pcieRootPort
pciBridge6.functions	8
pciBridge7.present	TRUE

At the bottom of the dialog are 'CANCEL' and 'OK' buttons. The background shows the vSphere Client interface with the 'Game-2' VM selected in the left-hand pane. The right-hand pane shows the VM's details, including its status (Powered Off), OS (Microsoft Windows 10 (64-bit)), and hardware details (Not running, version:1360 (Current), DESKTOP-MFKH27C, Not encrypted). The date '22/06/26' and page number '36' are visible in the bottom right corner.

VSPHERE 7.0 U3 ENABLE 64-BIT MEMORY MAPPED I/O (MMIO)

The screenshot shows the vSphere Client interface with a 'Configuration Parameters' dialog box open for a virtual machine named 'Game-2'. The dialog box contains a warning message and an 'ADD CONFIGURATION PARAMS' button. Below this is a table of configuration parameters.

Configuration Parameters

⚠ Modify or add configuration parameters as needed for experimental features or as instructed by technical support. Empty values will be removed (supported on ESXi 6.0 and later).

ADD CONFIGURATION PARAMS

Add New Configuration Params

Name	Value
tools.guest.desktop.autolock	FALSE
nvram	Game-2.nvram
svga.present	TRUE
pciBridge0.present	TRUE
pciBridge4.present	TRUE
pciBridge4.virtualDev	pcieRootPort
pciBridge4.functions	8
pciBridge5.present	TRUE
pciBridge5.virtualDev	pcieRootPort
pciBridge5.functions	8

CANCEL OK

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VSPHERE 7.0 U3 ENABLE 64-BIT MEMORY MAPPED I/O (MMIO)

The screenshot shows the vSphere Client interface with the Configuration Parameters dialog box open for the virtual machine 'Game-2'. The dialog box has a warning icon and text: 'Modify or add configuration parameters as needed for experimental features or as instructed by technical support. Empty values will be removed (supported on ESXi 6.0 and later)'. There is an 'ADD CONFIGURATION PARAMS' button. Below this, there is a section 'Add New Configuration Parameters' with a table:

Name	Value
pciPassthru.use64bitMMIO	TRUE

A red box highlights the 'pciPassthru.use64bitMMIO' row, and a red arrow points to it from a text box containing 'pciPassthru.use64bitMMIO'. Below this table is a scrollable list of configuration parameters:

Name	Value
tools.guest.desktop.autolock	FALSE
nvram	Game-2.nvram
svga.present	TRUE
pciBridge0.present	TRUE
pciBridge4.present	TRUE
pciBridge4.virtualDev	pcieRootPort
pciBridge4.functions	8
pciBridge5.present	TRUE
pciBridge5.virtualDev	pcieRootPort
pciBridge5.functions	8

At the bottom of the dialog, there are 'CANCEL' and 'OK' buttons. The 'OK' button is highlighted with a red box and a mouse cursor. The background shows the vSphere Client interface with a list of virtual machines, including 'Game-2' which is selected. The date '22/06/26' and the number '38' are visible in the bottom right corner.

VSPHERE 7.0 U3 ENABLE 64-BIT MEMORY MAPPED I/O (MMIO)

The screenshot displays the vSphere Client interface with the 'Edit Settings' dialog for a virtual machine named 'Game-2'. The dialog is open to the 'Advanced' section, which is expanded to show the 'Settings' option. The 'Settings' option is checked, and the 'Enable logging' checkbox is also checked. The 'OK' button at the bottom right of the dialog is highlighted with a red box, indicating the next step in the process.

Edit Settings | Game-2

- Power management: Expand for power management settings
- VMware Tools: Expand for VMware Tools settings
- Virtualization Based Security: Enable
- Boot Options: Expand for boot options
- Advanced**
 - Settings: Disable acceleration, Enable logging
 - Debugging and statistics: Run normally
 - Swap file location: Default, Virtual machine directory, Datastore specified by host
- Configuration Parameters: EDIT CONFIGURATION...
- Latency Sensitivity: Normal
- Fibre Channel NPIV: Expand for Fibre Channel NPIV settings

OK

VSPHERE 7.0 U3 ENABLE 64-BIT MEMORY MAPPED I/O (MMIO)

The screenshot displays the vSphere Client interface for a virtual machine named 'Game-2'. The interface is in a dark theme. At the top, the 'vSphere Client' logo and a search bar are visible. The user 'vAndu.tech' is logged in. The left sidebar shows a navigation tree with folders like 'DCIM', 'Discovered virtual machine', 'ESX Agents', 'MGM', 'Monitoring', 'SIEM', 'vAndu.tech', 'Template', and 'Test'. Under 'Test', 'Game-2' is selected. The main content area shows the 'Summary' tab for 'Game-2'. A red box highlights the 'Power On' button in the 'ACTIONS' menu. The 'Guest OS' section shows the VM is 'Powered Off' and running 'Microsoft Windows 10 (64-bit)'. Below this, there are buttons for 'LAUNCH REMOTE CONSOLE' and 'LAUNCH WEB CONSOLE'. The 'Capacity and Usage' section shows '20 CPUs allocated'. The 'VM Hardware' section shows '20 CPU(s), 0 MHz used' and '20 GB, 0 GB memory active'. The 'Related Objects' section shows 'Cluster: Home Lab'. At the bottom, there is a table for 'Recent Tasks' with columns for Task Name, Target, Status, Details, Initiator, Queued For, Start Time, Completion Time, and Server. The table is currently empty, displaying 'No items found'.

Task Name	Target	Status	Details	Initiator	Queued For	Start Time	Completion Time	Server
No items found								

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VSPHERE 7.0 U3 ENABLE 64-BIT MEMORY MAPPED I/O (MMIO)

The screenshot displays the vSphere Client interface for a virtual machine named 'Game-2'. The interface is in dark mode and shows various configuration panels. The 'Guest OS' panel is the primary focus, displaying the following information:

- Power Status:** Powered On
- Guest OS:** Microsoft Windows Server 2022 (64-bit)
- VMware Tools:** Not running, version:11360 (Current)
- DNS Name:**
- IP Addresses:**
- Encryption:** Not encrypted

Two buttons are visible in the Guest OS panel: 'LAUNCH REMOTE CONSOLE' and 'LAUNCH WFB CONSOLE'. The 'LAUNCH WFB CONSOLE' button is highlighted with a red rectangular box, and a mouse cursor is pointing at it.

Below the Guest OS panel, there are several summary cards:

- Capacity and Usage:** Last updated at 12:19 AM. CPU: 20 CPUs allocated.
- VM Hardware:** CPU: 20 CPU(s), 0 MHz used. Memory: 20 GB, 0 GB memory active.
- Related Objects:** Cluster: Home Lab
- Tags:**

At the bottom of the interface, there is a 'Recent Tasks' table with columns: Task Name, Target, Status, Details, Initiator, Queued For, Start Time, Completion Time, and Server. The table is currently empty, displaying 'No items found'.

The top right corner of the interface shows the user 'vAndu.tech' and a search bar.

NVIDIA TESLA K80 DRIVER INSTALLATION WINDOWS 11 N

Game-2

Enforce US Keyboard Layout View Fullscreen Send Ctrl+ALT+Delete

vAndu.tech

2:19

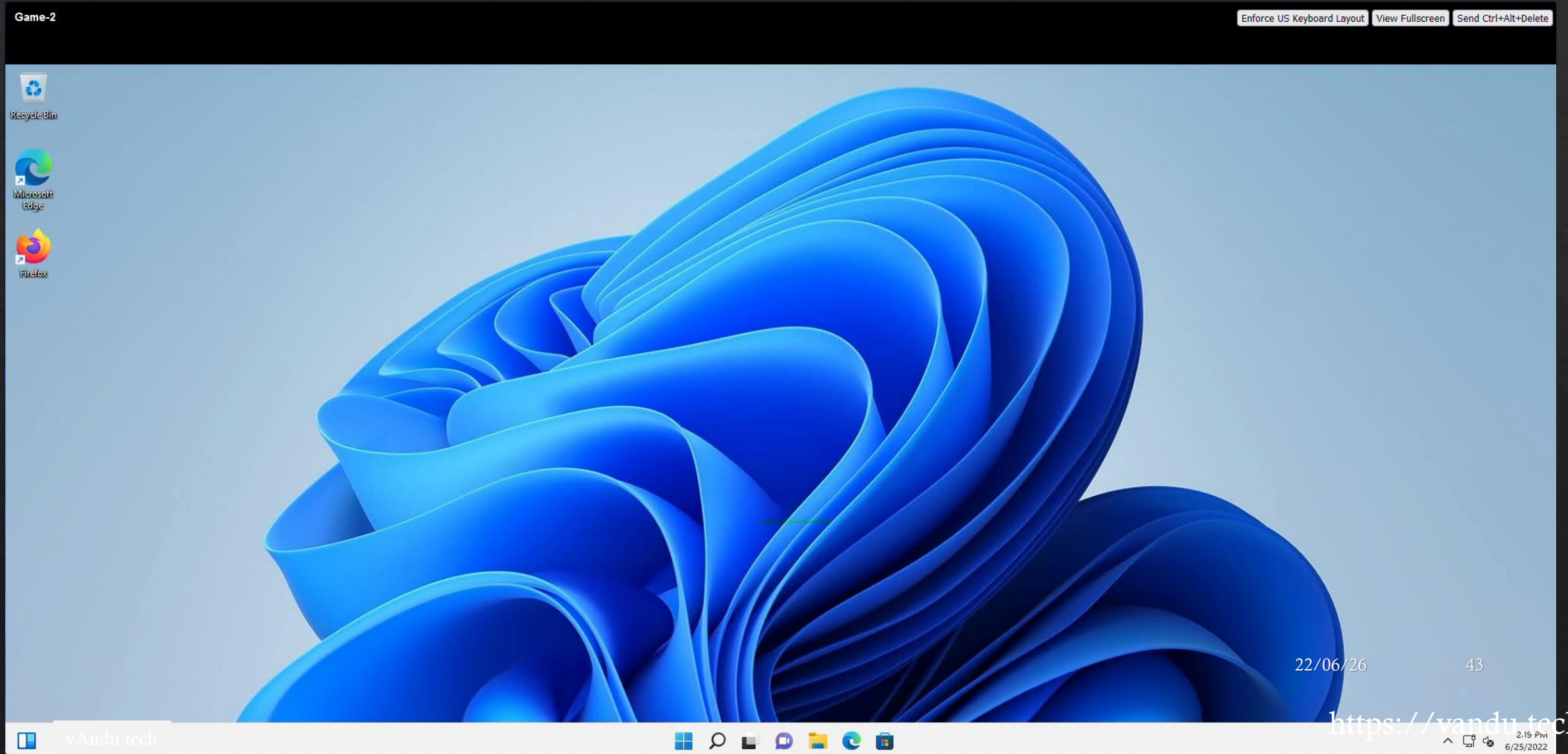
Saturday, June 25

22/06/26

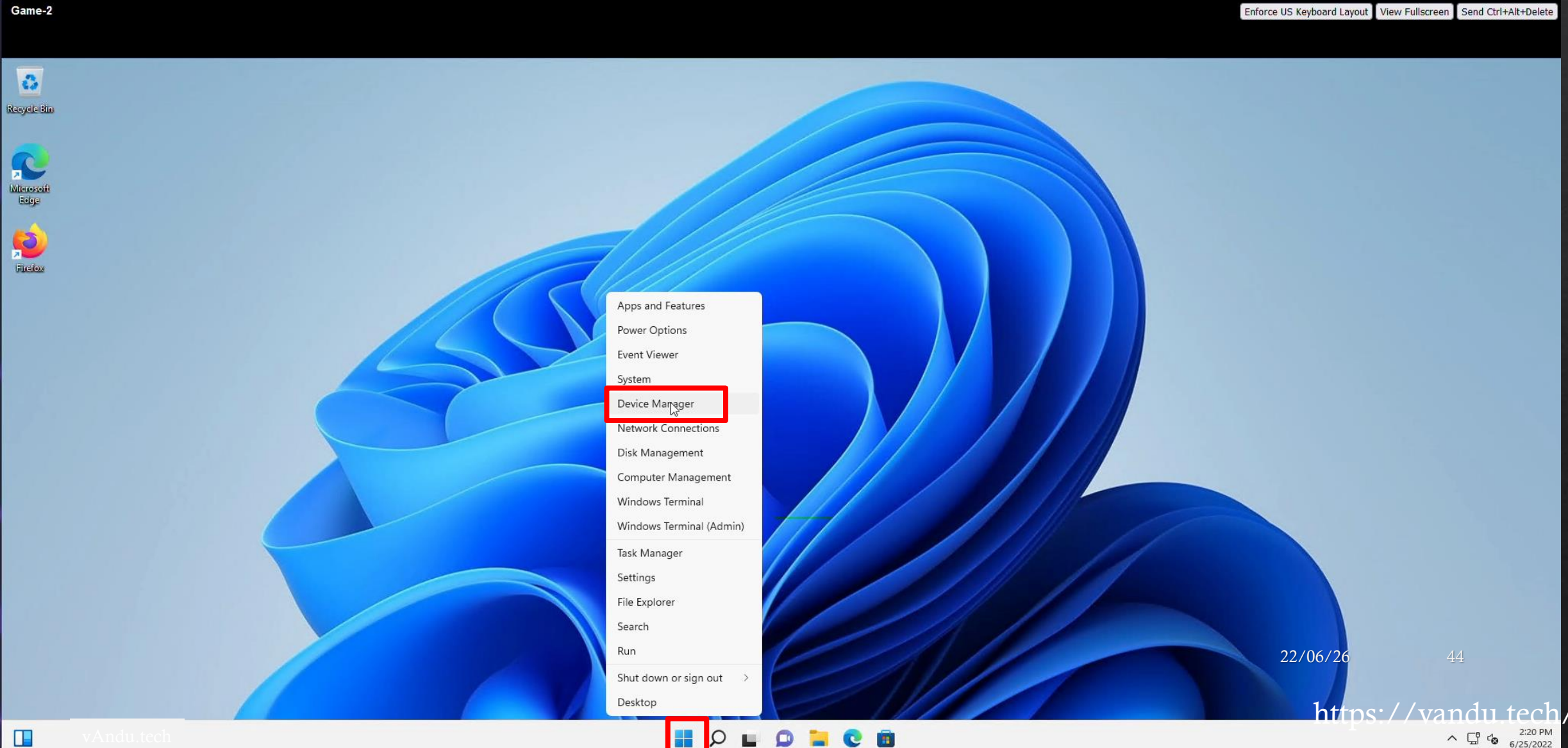
42

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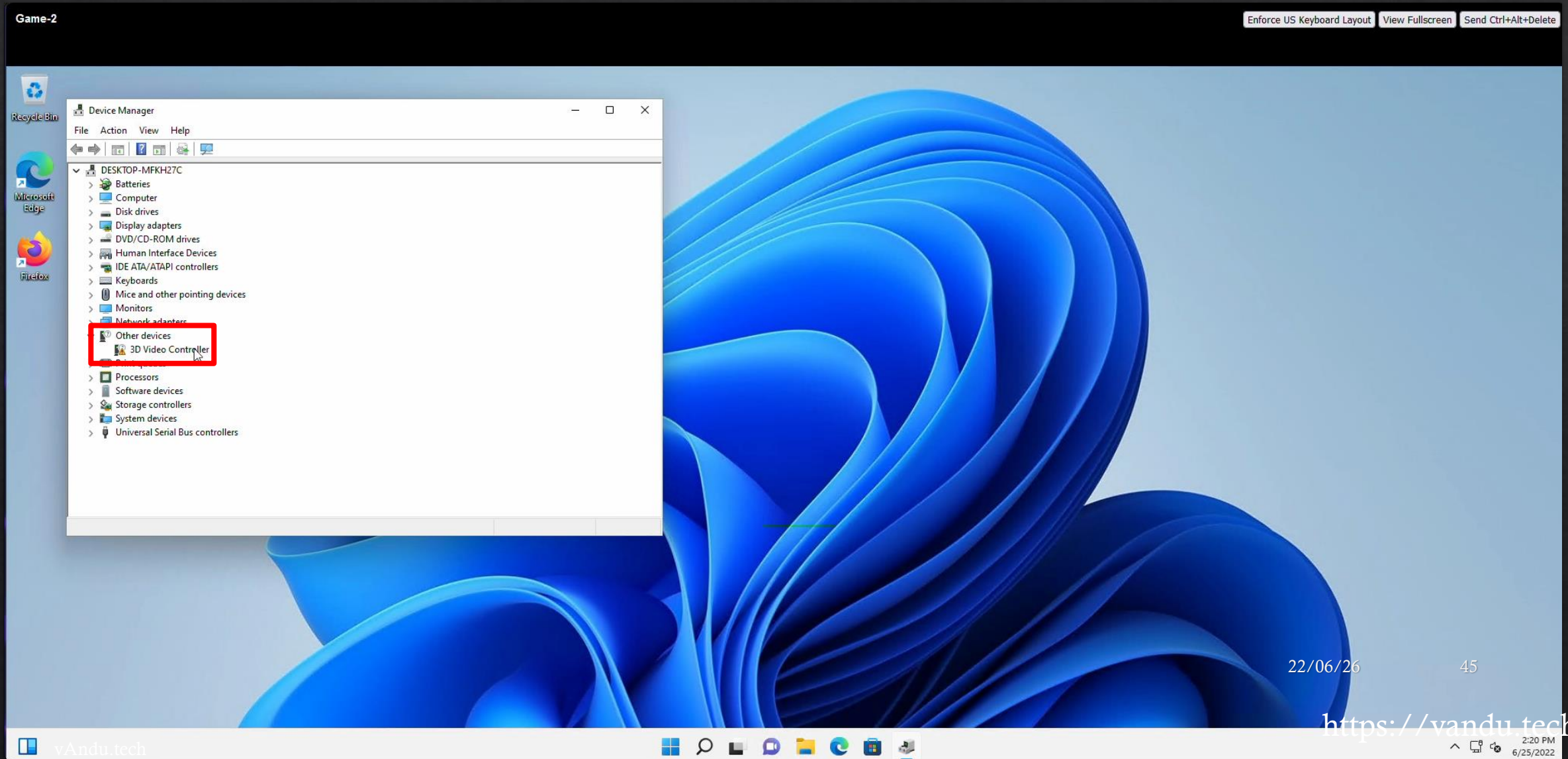
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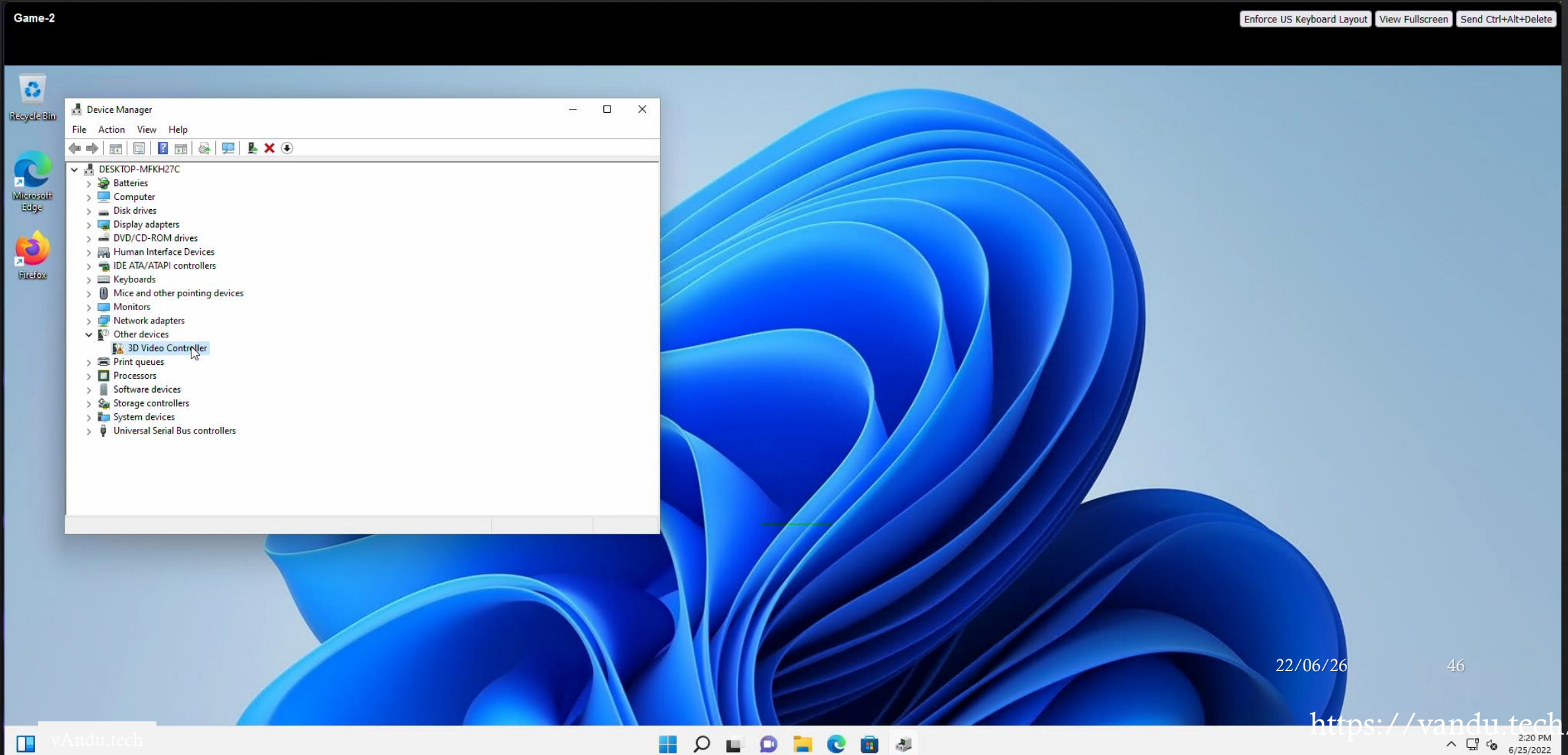
NVIDIA TESLA K80 DRIVER INSTALLATION WINDOWS 11 N



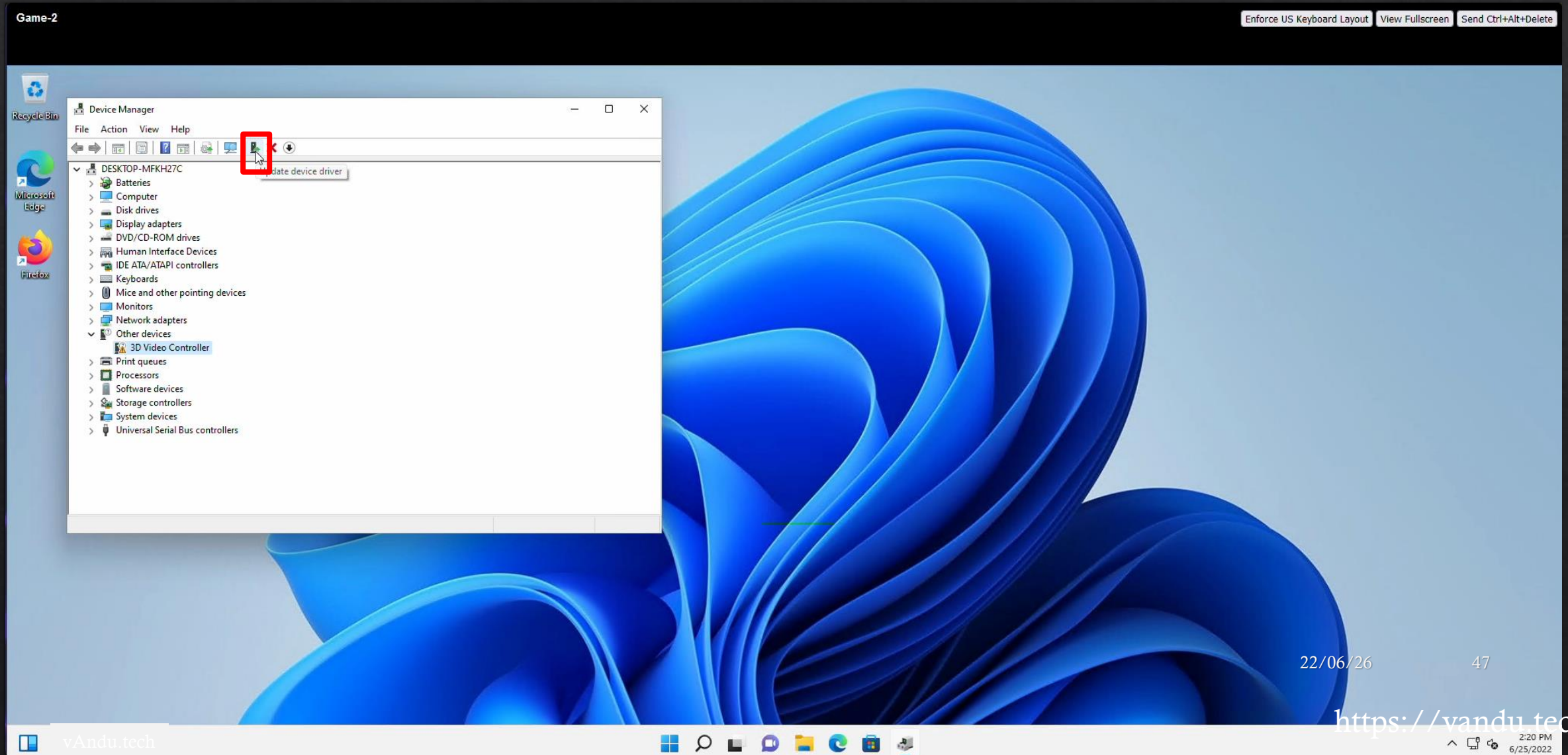
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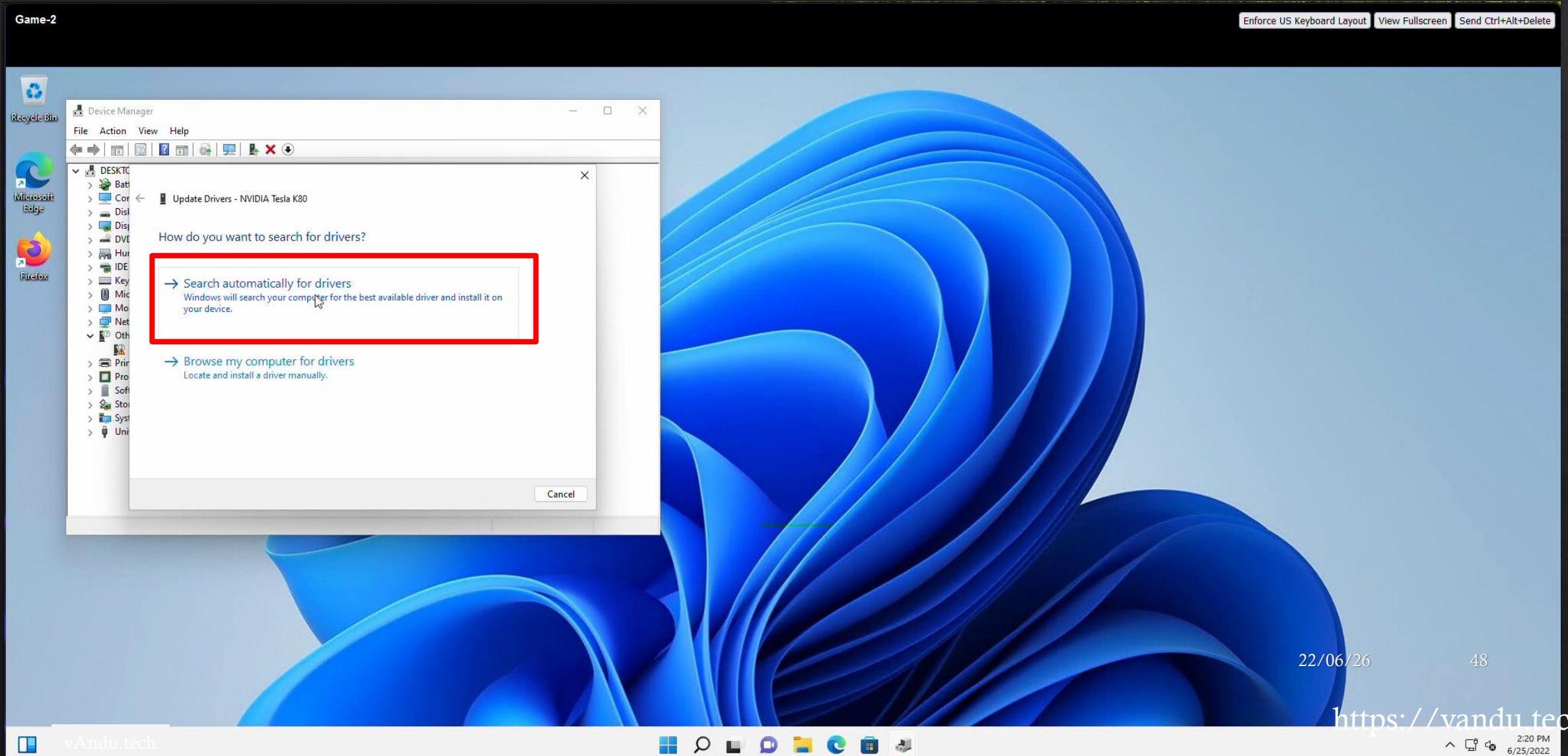
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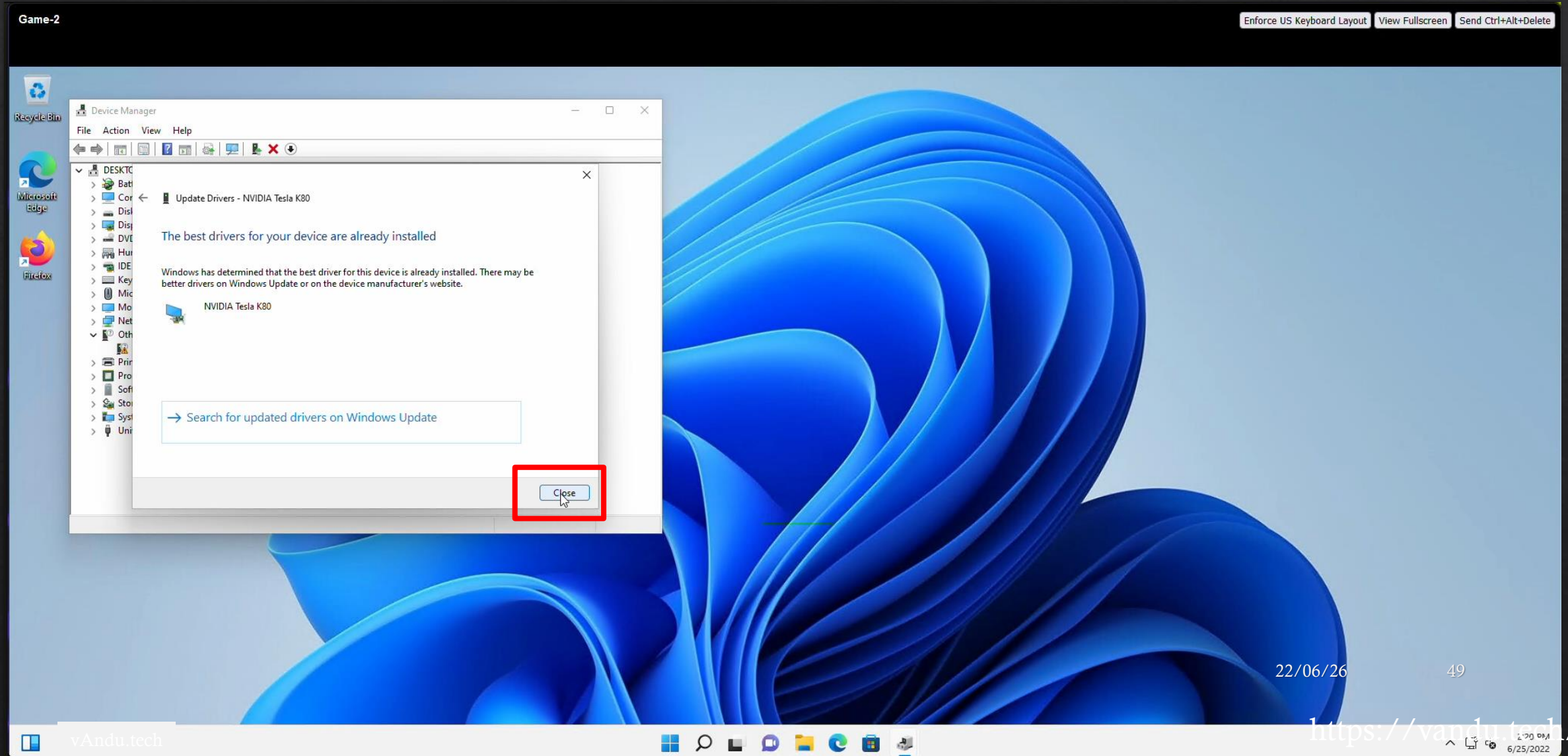
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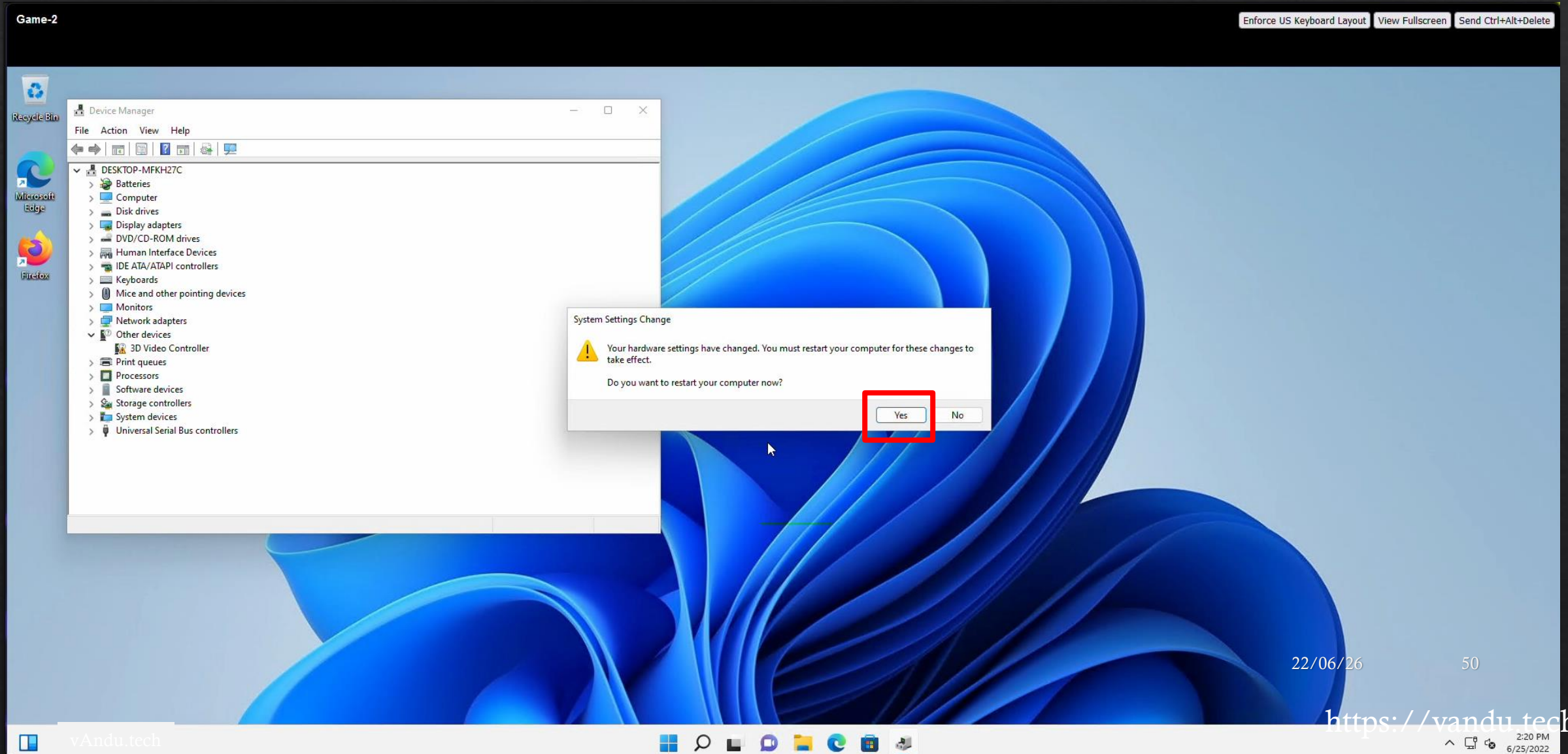
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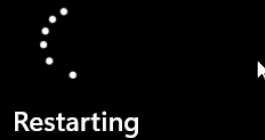
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NVIDIA TESLA K80 DRIVER INSTALLATION WINDOWS 11 N

Game-2

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22/06/26

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NVIDIA TESLA K80 DRIVER INSTALLATION WINDOWS 11 N

Game-2

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2:21

Saturday, June 25

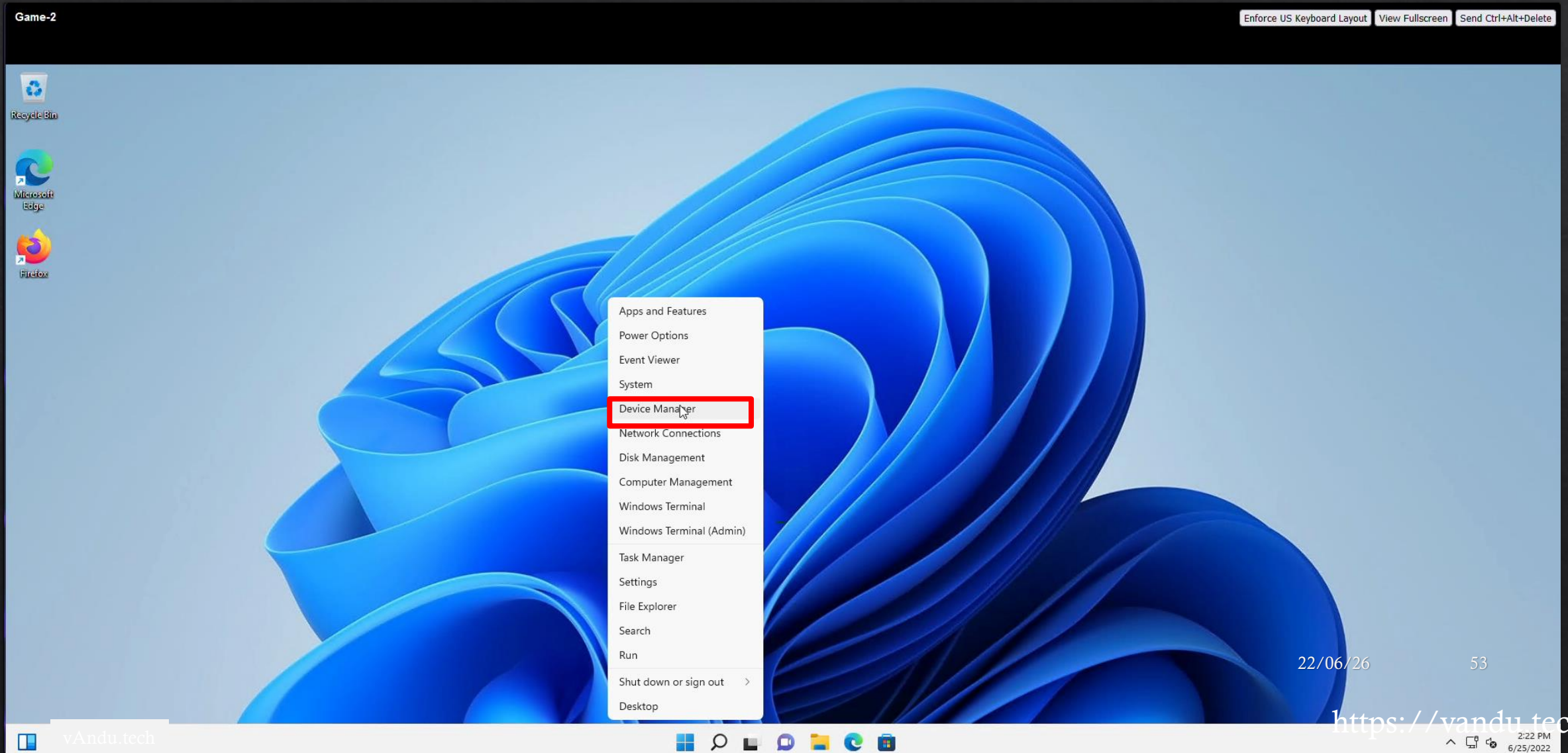
22/06/26

52

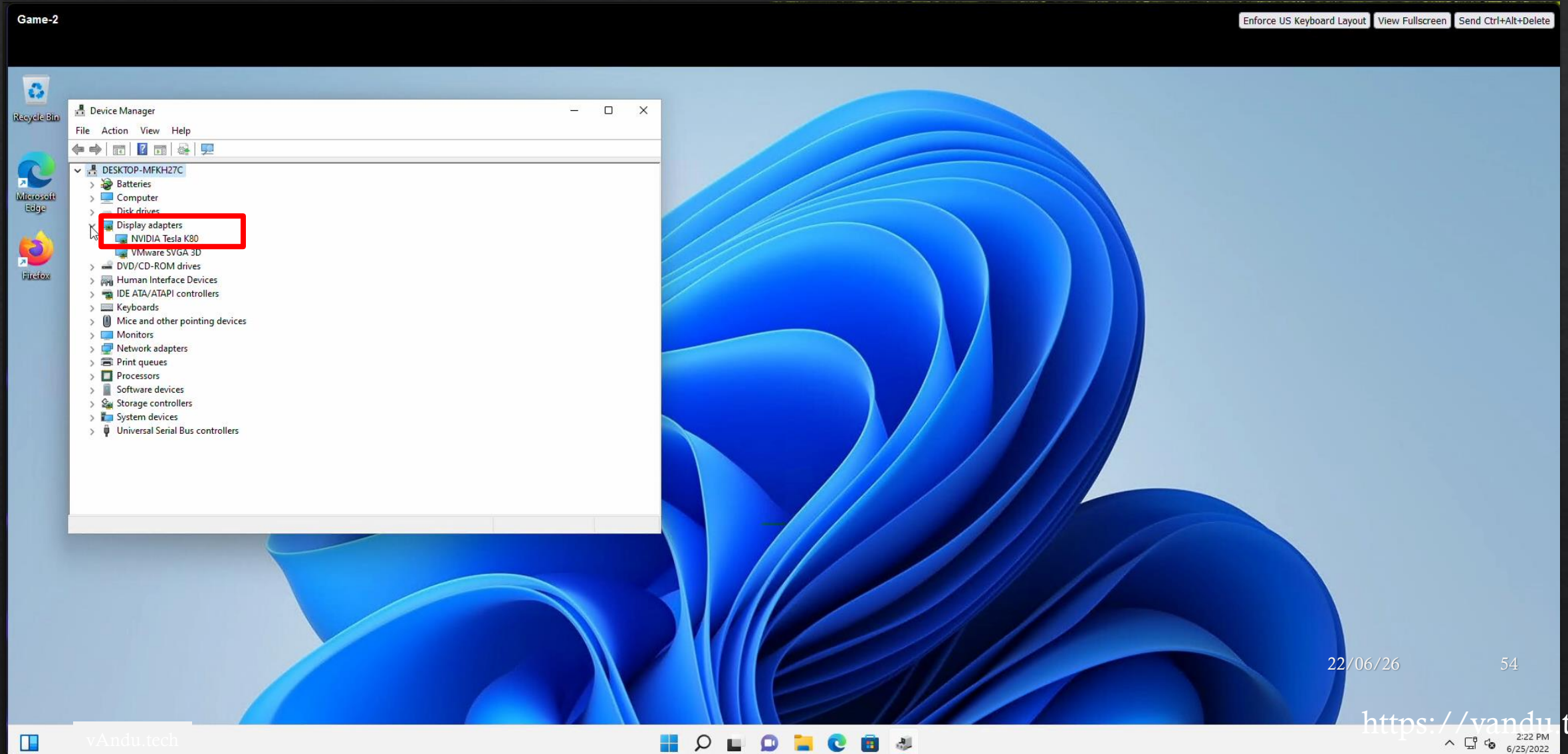


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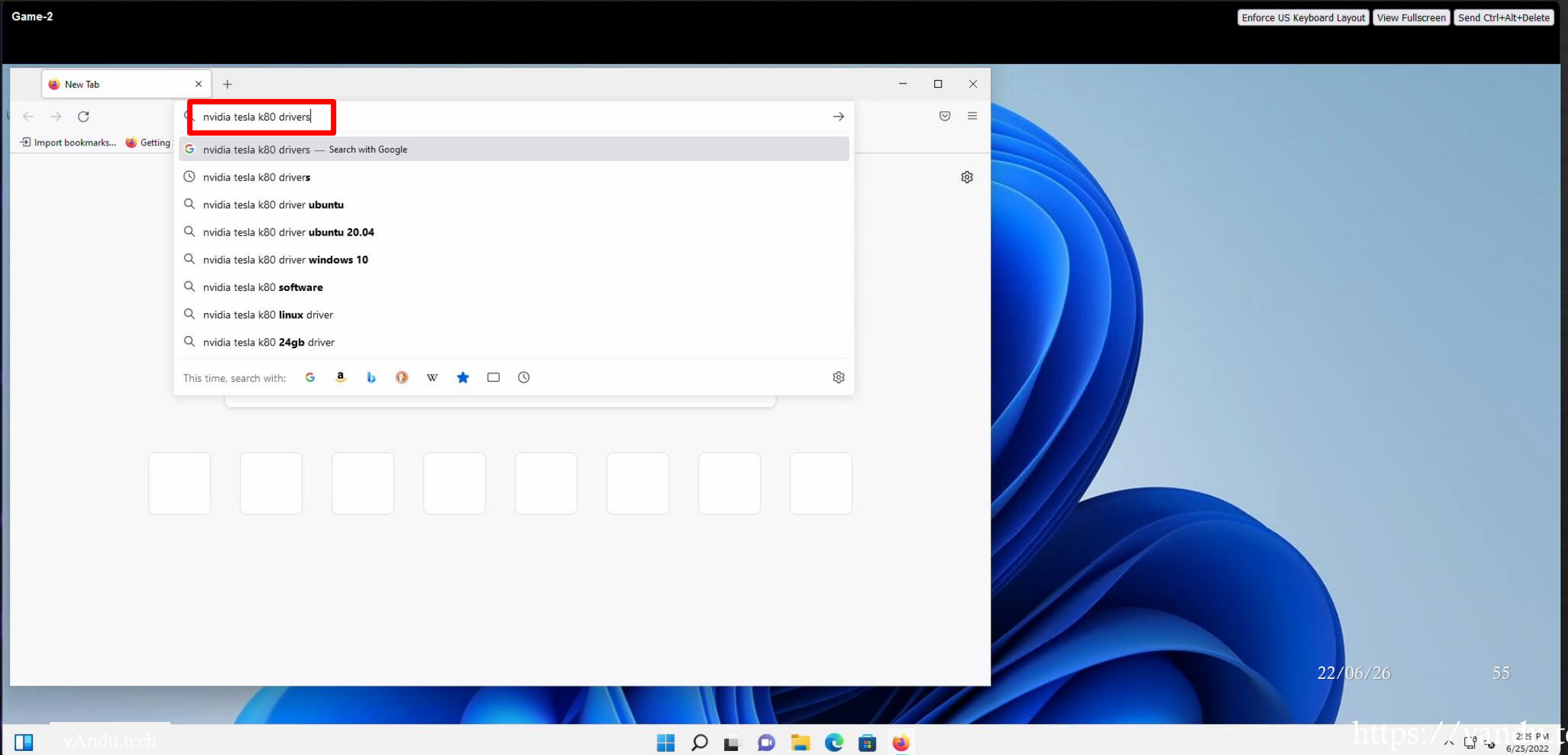
NVIDIA TESLA K80 DRIVER INSTALLATION WINDOWS 11 N



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Version 473.47

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Install

Finish

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- 473.47-data
- Firefox Inst

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NVIDIA Installer

NVIDIA Graphics Driver
Version 473.47

System Check
 License Agreement

Installation options

Express (Recommended)
Upgrades existing drivers and retains current NVIDIA settings.

Custom (Advanced)
Allows you to select the components you want to install and provides the option for a clean installation.

Note: Some flashing might occur during the installation.

Options

Install

Finish

[BACK](#) [NEXT](#) [CANCEL](#)

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NVIDIA TESLA K80 DRIVER INSTALLATION WINDOWS 11 N

The screenshot shows a Windows 11 N desktop environment. In the background, a web browser window displays the NVIDIA website's driver download page. Overlaid on this is a File Explorer window showing the 'Downloads' folder, which contains a file named '473.47-data-center'. In the foreground, the 'NVIDIA Installer' window is open, displaying a 'Script Error' dialog box. The error message reads: 'An error has occurred in the script on this page.' The details provided are: Line: 452, Char: 9, Error: Object doesn't support this action, Code: 0, and URL: https://www.nvidia.com/etc/designs/nvidiaGDC/clientlibs_foundation.min.as9db37b34f3f1b420b86a227e330ad.js. The dialog box asks 'Do you want to continue running scripts on this page?' with 'Yes' and 'No' buttons. A large orange arrow points from the right towards the dialog box with the text 'Ignore. Don't do anything'. The taskbar at the bottom shows the Start button, search icon, and several application icons. The system tray in the bottom right corner displays the date '22/06/26', time '2:31 PM', and date '6/25/2022'. The watermark 'vAndu.tech' is visible in the bottom left corner, and 'https://vandu.tech/' is in the bottom right corner.

NVIDIA TESLA K80 DRIVER INSTALLATION WINDOWS 11 N

The screenshot displays a Windows 11 desktop environment. In the background, a web browser window shows the NVIDIA website's 'DOWNLOAD DRIVERS' section. Overlaid on this is a File Explorer window showing the 'Downloads' folder, with a file named '473.47-data-center' selected. In the foreground, the 'NVIDIA Installer' window is open, displaying the NVIDIA logo and the text 'Installing Graphics Driver...' with a progress bar. The desktop taskbar at the bottom includes the Start button, search icon, and several application icons. The system tray shows the date '22/06/26' and time '2:32 PM 3/15/22'. The bottom right corner features a URL 'https://vandu.tech/'.

Game-2

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NVIDIA Installer

Installing Graphics Driver...

2 items 1 item selected 560 MB

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NVIDIA TESLA K80 DRIVER INSTALLATION WINDOWS 11 N

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Today (2)

- 473.47-dat
- Firefox Inst

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NVIDIA Installer

NVIDIA Graphics Driver
Version 473.47

NVIDIA Installer has finished

- System Check
- License Agreement
- Options
- Install

Finish

Component	Version	Status
Graphics Driver	473.47	Installed

CLOSE

22/06/26 62

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Name	Date modified	Type	Size
Today (2)			
473.47-data-center-tesla-desktop-win10-...	6/25/2022 2:30 PM	Application	574,159 KB
Firefox Installer	6/25/2022 1:39 PM	Application	341 KB

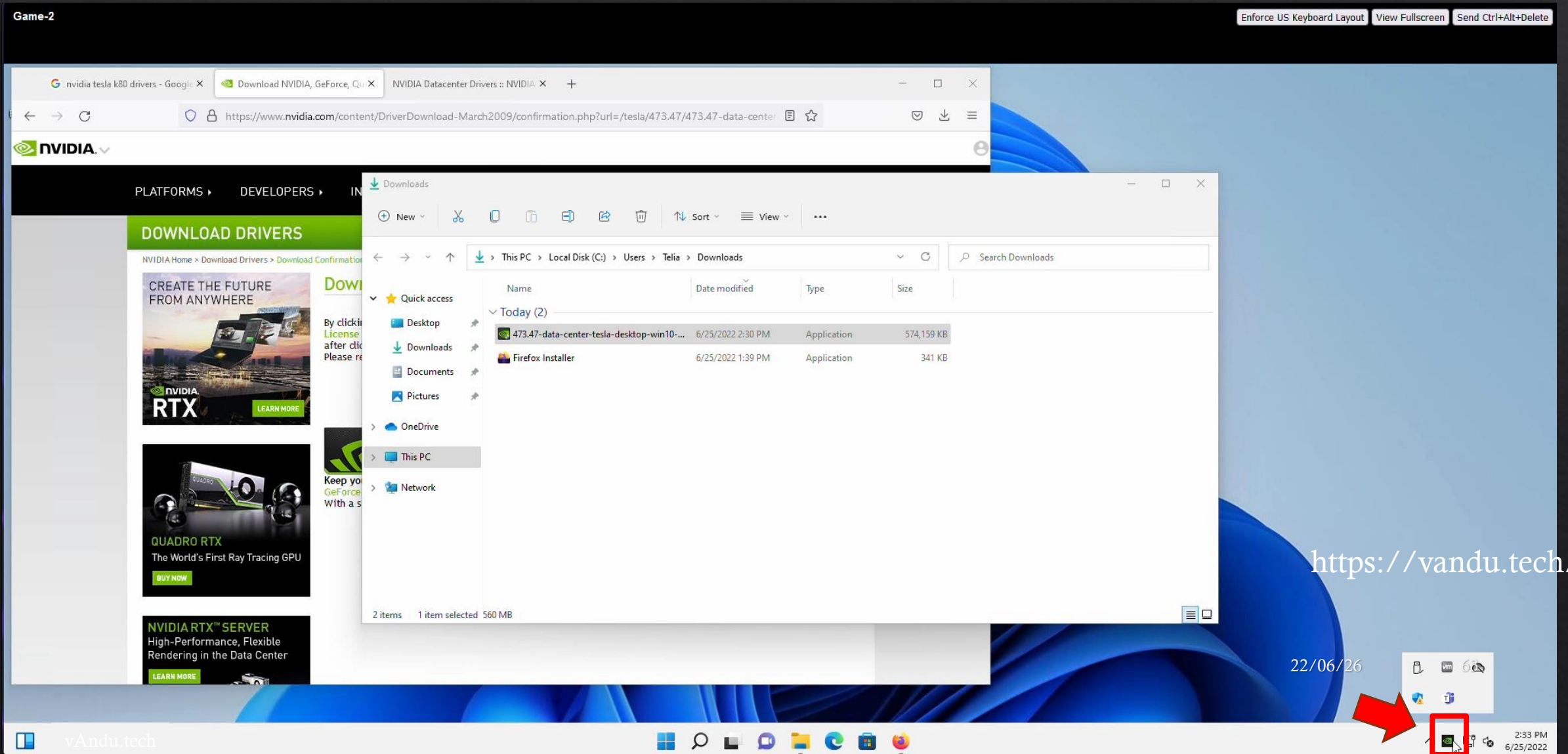
2 items 1 item selected 560 MB

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NVIDIA TESLA K80 DRIVER INSTALLATION WINDOWS 11 N

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- Downloads
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Today (2)

- 473.47-data-center
- Firefox Install

2 items | 1 item selected 560 MB

NVIDIA Control Panel

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[Agree and Continue](#) [Cancel](#)

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NVIDIA TESLA K80 DRIVER INSTALLATION WINDOWS 11 N

The screenshot displays a Windows 11 N desktop environment. In the foreground, the NVIDIA Control Panel is open, showing the 'NVIDIA CONTROL PANEL' title and 'Production Branch Version 473.47 Tesla K80' information. To the right, a File Explorer window shows a list of files in the 'Downloads' folder:

Type	Size
Application	574,159 KB
Application	341 KB

The desktop background features a blue abstract design. The taskbar at the bottom includes the Start button, search icon, and several application icons. The system tray shows the date '22/06/26' and time '9:18 PM 6/25/2022'. A watermark 'vAndu.tech' is visible in the bottom left corner, and a URL 'https://vandu.tech/' is in the bottom right corner.

NVIDIA TESLA K80 DRIVER INSTALLATION WINDOWS 11 N

The screenshot displays a Windows 11 N desktop environment. In the background, a web browser window shows the NVIDIA website's 'DOWNLOAD DRIVERS' section. A File Explorer window is open to the 'Downloads' folder, showing a file named '473.47-data-center-tesla-desktop-win10-...' selected. The NVIDIA Control Panel is open, with the 'Manage GPU Performance Counters' tab active. The 'Allow access to the GPU performance counters to all users' option is selected and highlighted with a red box. The 'Apply' button at the bottom right of the Control Panel is also highlighted with a red box. The system tray at the bottom shows the date '22/06/26' and the time '66'. The taskbar includes the Start button and several application icons.

Game-2 Enforce US Keyboard Layout View Fullscreen Send Ctrl+Alt+Delete

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Downloads

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Name	Date modified
473.47-data-center-tesla-desktop-win10-...	6/25/2022 2:30 PM
Firefox Installer	6/25/2022 1:39 PM

2 items 1 item selected 560 MB

NVIDIA Control Panel

Select a Task...

- Developer
- Manage GPU Performance Counters

Manage GPU Performance Counters

GPU performance counters are used by NVIDIA GPU profiling tools such as NVIDIA Nsight. These tools enable developers to debug, p develop software for NVIDIA GPUs.

Select access option:

- Restrict access to the GPU performance counters to admin users only (recommended)
- Allow access to the GPU performance counters to all users

[Learn more](#)

Description:

To access advanced features like GPU performance counters, you need to launch NVIDIA control panel signed in as an administrator on system.

Apply Cancel

22/06/26 66

vAndu.tech Windows Taskbar https://vandu.tech/

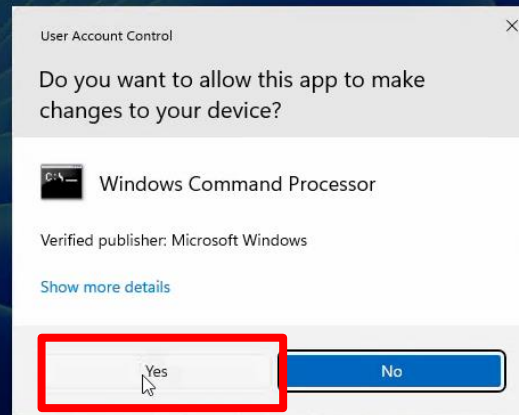
NVIDIA TESLA K80 DRIVER INSTALLATION WINDOWS 11 N

The screenshot shows a Windows 11 N desktop environment during the installation of the NVIDIA Tesla K80 driver. The background is the NVIDIA website's 'DOWNLOAD DRIVERS' page. A File Explorer window is open to the 'Downloads' folder, showing a search for 'cmd'. The search results for 'Command Prompt' are displayed, with the 'Run as administrator' option highlighted by a red box. In the bottom-left corner, the Windows Start button is also highlighted with a red box. On the right side, the 'NVIDIA Control Panel' is open, showing the 'Change GPU Performance Counters' dialog box. This dialog box has a 'Yes' button highlighted, indicating the user's choice to allow admin users only access to the GPU performance counters. The system tray at the bottom shows the date '22/06/26' and the time '2:33 PM'. The taskbar includes icons for File Explorer, Microsoft Edge, and other applications. The top of the screen shows the 'Game-2' title bar and system tray options like 'Enforce US Keyboard Layout', 'View Fullscreen', and 'Send Ctrl+Alt+Delete'.

NVIDIA TESLA K80 DRIVER INSTALLATION WINDOWS 11 N

Game-2

Enforce US Keyboard Layout View Fullscreen Send Ctrl+Alt+Delete



22/06/26

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NVIDIA TESLA K80 DRIVER INSTALLATION WINDOWS 11 N

The screenshot displays a Windows 11 N desktop environment during the NVIDIA driver installation process. The desktop background is blue with abstract shapes. In the top right corner, there are three buttons: "Enforce US Keyboard Layout", "View Fullscreen", and "Send Ctrl+Alt+Delete".

Open windows include:

- Browser:** Shows the NVIDIA website page for downloading drivers. The address bar contains the URL: `https://www.nvidia.com/content/DriverDownload-March2009/confirmation.php?url=/tesla/473.47/473.47-data-center`.
- NVIDIA Control Panel:** Open to the "Manage GPU Performance Counters" section. It provides instructions on GPU performance counters and offers two access options:
 - Restrict access to the GPU performance counters to admin users only (recommended)
 - Allow access to the GPU performance counters to all users
- Command Prompt (Administrator):** Shows the command `nvidia-smi` being entered at the prompt, highlighted with a red box. The prompt is located at `C:\Windows\system32`.
- System Information:** A small window showing system details, including "2 items", "1 item selected", and "560 MB".

At the bottom of the screen, the taskbar shows the Start button, search icon, and several application icons. The system tray in the bottom right corner displays the date "22/06/26", the time "2:34 PM", and the date "5/25/2025".

Watermarks for "vAndu.tech" are visible in the bottom left and bottom right corners of the image.

NVIDIA TESLA K80 DRIVER INSTALLATION WINDOWS 11 N

Game-2 Enforce US Keyboard Layout View Fullscreen Send Ctrl+Alt+Delete

nvdi... Download NVIDIA, GeForce, Qu... NVIDIA Datacenter Drivers :: NVIDIA

https://www.nvidia.com/content/DriverDownload-March2009/confirmation.php?url=/tesla/473.47/473.47-data-center

Administrator: Command Prompt

```
Microsoft Windows [Version 10.0.22000.778]
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C:\Windows\system32>nvidia-smi
Sat Jun 25 14:34:18 2022

+-----+
| NVIDIA-SMI 473.47      Driver Version: 473.47      CUDA Version: 11.4     |
+-----+-----+
| GPU   Name           TCC/WDDM  Bus-Id  Disp.A   Volatile Uncorr. ECC  |
| Fan  Temp  Perf  Pwr:Usage/Cap  Memory-Usage  GPU-Util  Compute M.  |
|-----+-----+-----+-----+-----+-----+-----+
| 0     Tesla K80      TCC      00000000:1B:00:0  Off      0%          Default    |
| N/A   42C    P8     25W / 149W      9MiB / 11448MiB      0%          MIG M.     |
+-----+-----+-----+-----+-----+-----+
| Processes:                                                       GPU Memory |
|  GPU   GI    CI          PID    Type   Process name          Usage     |
|-----+-----+-----+-----+-----+-----+
| No running processes found                                     |
+-----+-----+-----+-----+-----+

C:\Windows\system32>
```

Manage GPU Performance Counters

GPU performance counters are used by NVIDIA GPU profiling tools such as NVIDIA Nsight. These tools enable developers to debug, p... develop software for NVIDIA GPUs.

Select access option:

- Restrict access to the GPU performance counters to admin users only (recommended) [Learn more](#)
- Allow access to the GPU performance counters to all users

Description:

2 items 1 item selected 560 MB

System Information

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SWITCH THE GPU FROM COMPUTE (TCC) TO GRAPHICS (WDDM) MODE

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https://www.nvidia.com/content/DriverDownload-March2009/confirmation.php?url=/tesla/473.47/473.47-data-center

Administrator: Command Prompt - nvidia-smi -L

```
Microsoft Windows [Version 10.0.22000.778]
(c) Microsoft Corporation. All rights reserved.

C:\Windows\system32>nvidia-smi
Sat Jun 25 14:34:18 2022

+-----+
| NVIDIA-SMI 473.47      Driver Version: 473.47      CUDA Version: 11.4     |
+-----+-----+-----+-----+-----+-----+
| GPU Name   TCC/WDDM | Bus-Id  Disp.A | Volatile Uncorr. ECC |
| Fan  Temp  Perf  Pwr:Usage/Cap |      Memory-Usage | GPU-Util  Compute M. |
|-----+-----+-----+-----+-----+-----+
| 0   Tesla K80   TCC      | 00000000:1B:00:0  Off |          0%      Default |
| N/A   42C    P8   25W / 149W |  9MiB / 11448MiB |          0%      Default |
+-----+-----+-----+-----+-----+-----+

Processes:
GPU  GI  CI      PID  Type  Process name          GPU Memory
 ID  ID  ID                                     Usage
+-----+-----+-----+-----+-----+-----+
No running processes found

C:\Windows\system32>nvidia-smi -L
```

Manage GPU Performance Counters

GPU performance counters are used by NVIDIA GPU profiling tools such as NVIDIA Nsight. These tools enable developers to debug, profile, and develop software for NVIDIA GPUs.

Select access option:

- Restrict access to the GPU performance counters to admin users only (recommended) [Learn more](#)
- Allow access to the GPU performance counters to all users

Description:

2 items | 1 item selected 560 MB

System Information

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SWITCH THE GPU FROM COMPUTE (TCC) TO GRAPHICS (WDDM) MODE

The screenshot shows a Windows desktop environment with several open windows:

- Browser:** Open to the NVIDIA website, displaying the download page for the 473.47 driver.
- Administrator: Command Prompt:** Shows the execution of `nvidia-smi` and `nvidia-smi -L`. The output of `nvidia-smi` is as follows:

```
Microsoft Windows [Version 10.0.22000.778]
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C:\Windows\system32>nvidia-smi
Sat Jun 25 14:34:18 2022

+-----+
| NVIDIA-SMI 473.47      | Driver Version: 473.47      | CUDA Version: 11.4   |
+-----+-----+
| GPU   Name           | TCC/WDDM | Bus-Id      | Volatile Uncorr. ECC |
| Fan  Temp  Perf    Pwr:Usage/Cap |      Memory Usage |         GPU-Util  Compute M. |
|-----+-----+-----+-----+-----+-----+-----+
|   0   Tesla K80      |   TCC    | 00000000:1B:00:0 Off |             0      |
| N/A   42C    P8     25W / 149W |  9MiB / 11448MiB |             0%    Default  |
+-----+-----+-----+-----+-----+-----+
| Processes:                       |
| GPU   GI   CI          PID    Type   Process name                      | GPU Memory |
| ID   ID   ID             |    |              |                               | Usage      |
+-----+-----+-----+-----+-----+-----+
| No running processes found      |
+-----+

C:\Windows\system32>nvidia-smi -L
GPU 0: Tesla K80 (UUID: GPU-8d1e1a71-912c-382e-a68b-0ec1bd517753)

C:\Windows\system32>
```
- NVIDIA Control Panel:** The 'Manage GPU Performance Counters' window is open, showing the 'Select access option' section. The option 'Allow access to the GPU performance counters to all users' is selected.

The taskbar at the bottom shows the system tray with the date 22/06/26, time 2:34 PM, and date 6/25/2022. The vAndu.tech logo is visible in the bottom left corner.

SWITCH THE GPU FROM COMPUTE (TCC) TO GRAPHICS (WDDM) MODE

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https://www.nvidia.com/content/DriverDownload-March2009/confirmation.php?url=/tesla/473.47/473.47-data-center

NVIDIA Control Panel

Administrator: Command Prompt

```
Microsoft Windows [Version 10.0.22000.778]
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C:\Windows\system32>nvidia-smi
Sat Jun 25 14:34:18 2022

+---+
| NVIDIA-SMI 473.47      Driver Version: 473.47      CUDA Version: 11.4     |
+---+
| GPU   Name           TCC/WDDM | Bus-Id  Disp.A | Volatile Uncorr. ECC |
| Fan  Temp  Perf    Pwr:Usage/Cap |      Memory-Usage | GPU-Util  Compute M. |
|-----+-----+-----+-----+-----+-----+-----+-----+
|   0   Tesla K80      TCC      | 00000000:1B:00:0 Off |   0%      Default  |
| N/A   42C    P8     25W / 149W |  9MiB / 11448MiB |           | MIG M. |
+---+
| Processes:                                                       GPU Memory |
|  GPU   GI    CI          PID    Type   Process name          Usage   |
|-----+-----+-----+-----+-----+-----+
| No running processes found.                                     |
+---+

C:\Windows\system32>nvidia-smi -L
GPU 0: Tesla K80 (UUID: GPU-8d1e1a71-912c-382e-a68b-0ec1bd517753)

C:\Windows\system32>nvidia-smi -g GPU-8d1e1a71-912c-382e-a68b-0ec1bd517753 -dm 0
```

*Untitled - Notepad

GPU-8d1e1a71-912c-382e-a68b-0ec1bd517753


System Information Ln 1, Col 41 100% Windows (CRLF) UTF-8

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SWITCH THE GPU FROM COMPUTE (TCC) TO GRAPHICS (WDDM) MODE

Game-2 Enforce US Keyboard Layout View Fullscreen Send Ctrl+Alt+Delete

Administrator: Command Prompt

```
Sat Jun 25 14:34:18 2022
-----
 NVIDIA-SMI 473.47      Driver Version: 473.47      CUDA Version: 11.4
-----+-----
 GPU Name      TCC/WDDM  Bus-Id      Disp.A   Volatile Uncorr. ECC
 Fan Temp Perf  Pwr:Usage/Cap  Memory-Usage  GPU-Util  Compute M.
                               Memory-Usage
-----+-----+-----
    0  Tesla K80      TCC        00000000:1B:00.0  Off          0
 N/A  42C   P8    25W / 149W      9MiB / 11448MiB      0%      Default
                               MIG M.
-----+-----
Processes:
 GPU  GI  CI      PID  Type  Process name          GPU Memory
 ID  ID  ID
-----+-----
No running processes found
-----

C:\Windows\system32>nvidia-smi -L
GPU 0: Tesla K80 (UUID: GPU-8d1e1a71-912c-382e-a68b-0ec1bd517753)

C:\Windows\system32>nvidia-smi -g GPU-8d1e1a71-912c-382e-a68b-0ec1bd517753 -dm 0
Set driver model to WDDM for GPU 00000000:1B:00.0.
All done.
Reboot required.

C:\Windows\system32>
```

*Untitled - Notepad

GPU-8d1e1a71-912c-382e-a68b-0ec1bd517753

System Information

Ln 1, Col 41 | 100% | Windows (CRLF) | UTF-8

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2 items | 1 item selected | 560 MB

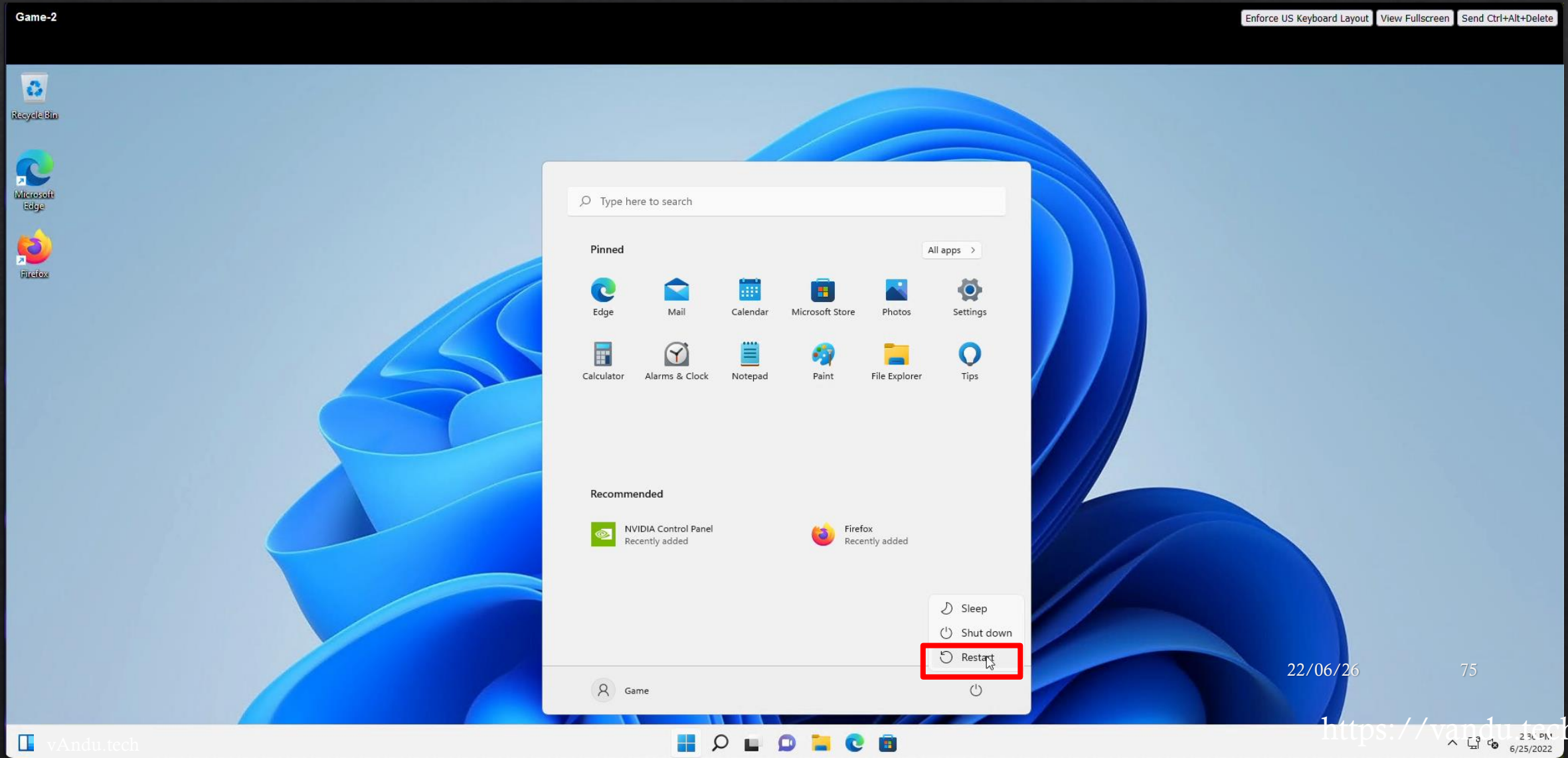
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SWITCH THE GPU FROM COMPUTE (TCC) TO GRAPHICS (WDDM) MODE



SWITCH THE GPU FROM COMPUTE (TCC) TO GRAPHICS (WDDM) MODE

Game-2

Enforce US Keyboard Layout View Fullscreen Send Ctrl+Alt+Delete



Restarting

22/06/26

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SWITCH THE GPU FROM COMPUTE (TCC) TO GRAPHICS (WDDM) MODE

Game-2 Enforce US Keyboard Layout View Fullscreen Send Ctrl+Alt+Delete

Recycle Bin
Microsoft Edge
Firefox

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22/06/26

NVIDIA Settings

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2:37 PM
6/25/2022

NVIDIA TESLA K80 CONTROL PANEL

The screenshot shows a Windows 10 desktop environment. In the top right corner, there are three utility buttons: "Enforce US Keyboard Layout", "View Fullscreen", and "Send Ctrl+Alt+Delete". The desktop background is a blue abstract pattern. On the left side, there are icons for Recycle Bin, Microsoft Edge, and Firefox. The NVIDIA Control Panel window is open in the center-right, displaying the "Set PhysX configuration" page. The page title is "Set PhysX configuration" with a "Restore Defaults" link. Below the title, there is a description: "NVIDIA® PhysX® is a powerful physics engine that can utilize GPU acceleration to provide amazing real-time physics effects." A section titled "Select a PhysX processor:" contains a dropdown menu with three options: "CPU", "Tesla K80", and "CPU". The "CPU" option is currently selected and highlighted with a red rectangular box. Below the dropdown, there are two buttons: "PhysX" and "Tesla K80". At the bottom of the window, there is a "Description:" section with text: "Selecting a GPU allows an increase in PhysX processing and may improve overall performance in games or programs that support PhysX. Choose Auto-select to let NVIDIA use the best processor for PhysX." and a "Typical usage scenarios:" section. The taskbar at the bottom shows the Start button, search icon, and several application icons. The system tray in the bottom right corner displays the date "22/06/26", the time "2:37 PM", and the date "6/25/2023".

Game-2

Enforce US Keyboard Layout View Fullscreen Send Ctrl+Alt+Delete

Recycle Bin

Microsoft Edge

Firefox

NVIDIA Control Panel

File Edit Desktop 3D Settings Help

Back

Select a Task...

3D Settings

- Adjust image settings with preview
- Manage 3D settings
- Set PhysX Configuration

Video

- Adjust video color settings
- Adjust video image settings

System Information

Set PhysX configuration

Restore Defaults

NVIDIA® PhysX® is a powerful physics engine that can utilize GPU acceleration to provide amazing real-time physics effects.

Select a PhysX processor:

- CPU
- Tesla K80
- CPU

PhysX

Tesla K80

Description:

Selecting a GPU allows an increase in PhysX processing and may improve overall performance in games or programs that support PhysX. Choose Auto-select to let NVIDIA use the best processor for PhysX.

Typical usage scenarios:

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2:37 PM 6/25/2023

<https://vandu.tech>

NVIDIA TESLA K80 CONTROL PANEL

The screenshot shows a Windows desktop with a blue abstract background. In the foreground, the NVIDIA Control Panel window is open, displaying the 'Set PhysX configuration' page. The window title is 'NVIDIA Control Panel' and it has a menu bar with 'File', 'Edit', 'Desktop', '3D Settings', and 'Help'. The left sidebar shows a tree view with '3D Settings' expanded, and 'Set PhysX Configuration' selected. The main content area is titled 'Set PhysX configuration' and includes a 'Restore Defaults' link. Below the title, there is a description of PhysX and a section 'Select a PhysX processor:' with a dropdown menu showing 'Tesla K80'. A diagram below shows a 'PhysX' box connected to a 'Tesla K80' box. At the bottom right of the window, the 'Apply' button is highlighted with a red rectangle. The desktop taskbar at the bottom shows the Start button, search icon, and several application icons. The system tray on the right shows the date '22/06/26', time '2:37 PM', and date '6/25/21, 22'. The watermark 'vAndu.tech' is visible in the bottom left corner.

NVIDIA TESLA K80 CONTROL PANEL

Game-2

Enforce US Keyboard Layout View Fullscreen Send Ctrl+Alt+Delete



Recycle Bin



Microsoft Edge



Firefox

NVIDIA Control Panel

File Edit Desktop 3D Settings Help

Back

Select a Task...

- 3D Settings
 - Adjust image settings with preview
 - Manage 3D settings
 - Set PhysX Configuration
- Video
 - Adjust video color settings
 - Adjust video image settings

Adjust Image Settings with Preview

Restore Defaults

This page allows you to preview changes you make to the image and rendering settings. These will be your default settings for your hardware-accelerated 3D applications that utilize Direct3D or OpenGL.

Performance:

Quality:

What do I look for?
Moving towards the Performance side will increase frame rate, but curved lines will appear jagged.
Moving towards the Quality side will improve the smoothness you can see on curved lines.

Let the 3D application decide
 Use the advanced 3D image settings. [Take me there](#)
 Use my preference emphasizing: **Quality**

Performance Quality

Description:
This setting allows you to simply decide if you would prefer performance, quality, or a balance between the two. The NVIDIA Control Panel will make all of the appropriate 3D image adjustments based on your preference.

System Information

Apply Cancel

22/06/26

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<https://vandu.tech/>

2:17 PM
6/25/2022

VMWARE HORIZON AGENT INSTALLATION

The screenshot displays a Windows desktop environment. In the top right, a Notepad window titled '*Untitled - Notepad' contains the following instructions:

- 1) Download the newest VMware Horizon Agent
- 2) Download VMware Horizon Agent Direct Connection
- 3) Install VMware Horizon Agent
- 4) Install VMware Horizon Agent Direct Connection

Below the list, the text reads: "Now install your computer Newest Horizon Client and enjoy".

In the center, a File Explorer window titled 'Soft' is open, showing the contents of the 'C:\Soft' directory. The files listed are:

Name	Date modified	Type	Size
VMware-Horizon-Agent-Direct-Connection-x86_64-8.3.0-18287218	7/8/2021 2:24 PM	Application	34,687 KB
VMware-Horizon-Agent-x86_64-2106-8.3.0-18287218	7/8/2021 2:24 PM	Application	243,671 KB

The second file is highlighted with a red rectangle.

The desktop background is a blue abstract design. The taskbar at the bottom shows the Start button, search icon, and several application icons. The system tray on the right shows the date '22/06/26', time '2:51 PM', and language 'ENG'. The URL 's://vandu.tech/' is visible in the bottom right corner.

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VMWARE HORIZON AGENT INSTALLATION

*Untitled - Notepad

File Edit View

- 1) Download the newest VMware Horizon Agent
- 2) Download VMware Horizon Agent Direct Connection
- 3) Install VMware Horizon Agent
- 4) Install VMware Horizon Agent Direct Connection
- 5) Now install your computer Newest Horizon Client and enjoy

Ln 1, Col 5 | 100% | Windows (CRLF) | UTF-8

Soft

This PC > Local Disk (C:) > Soft

Name
VMware-Horizon-Agent-Direct-Connection-x86_64-8.3.0-18287218
VMware-Horizon-Agent-x86_64-2106-8.3.0-18287218

VMware Horizon* Agent

vmware

VMware Product Installation

Preparing 'VMware Horizon Agent' for installation...

22/06/26 Cancel

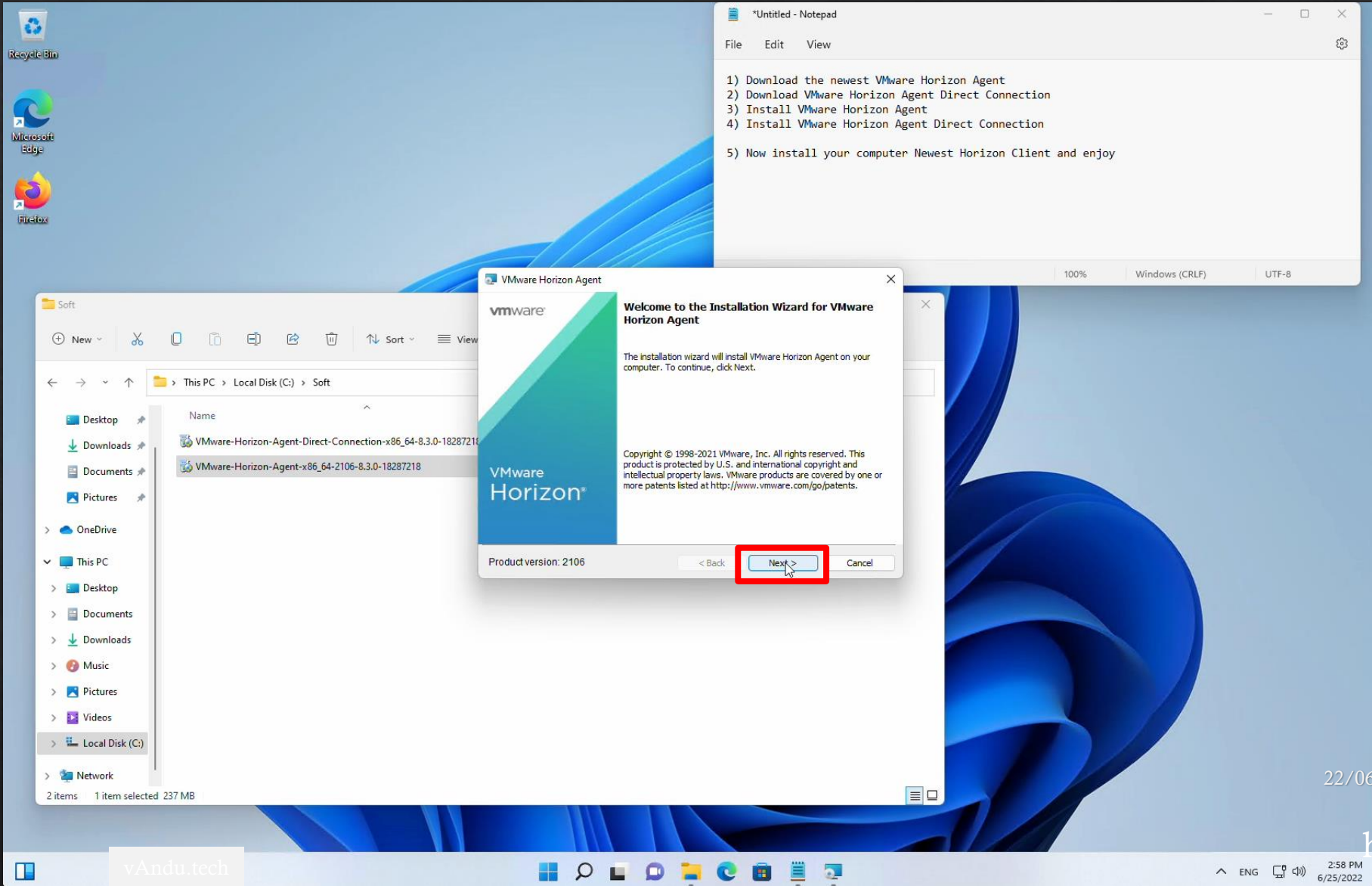
vAndu.tech

<https://vandu.tech/>

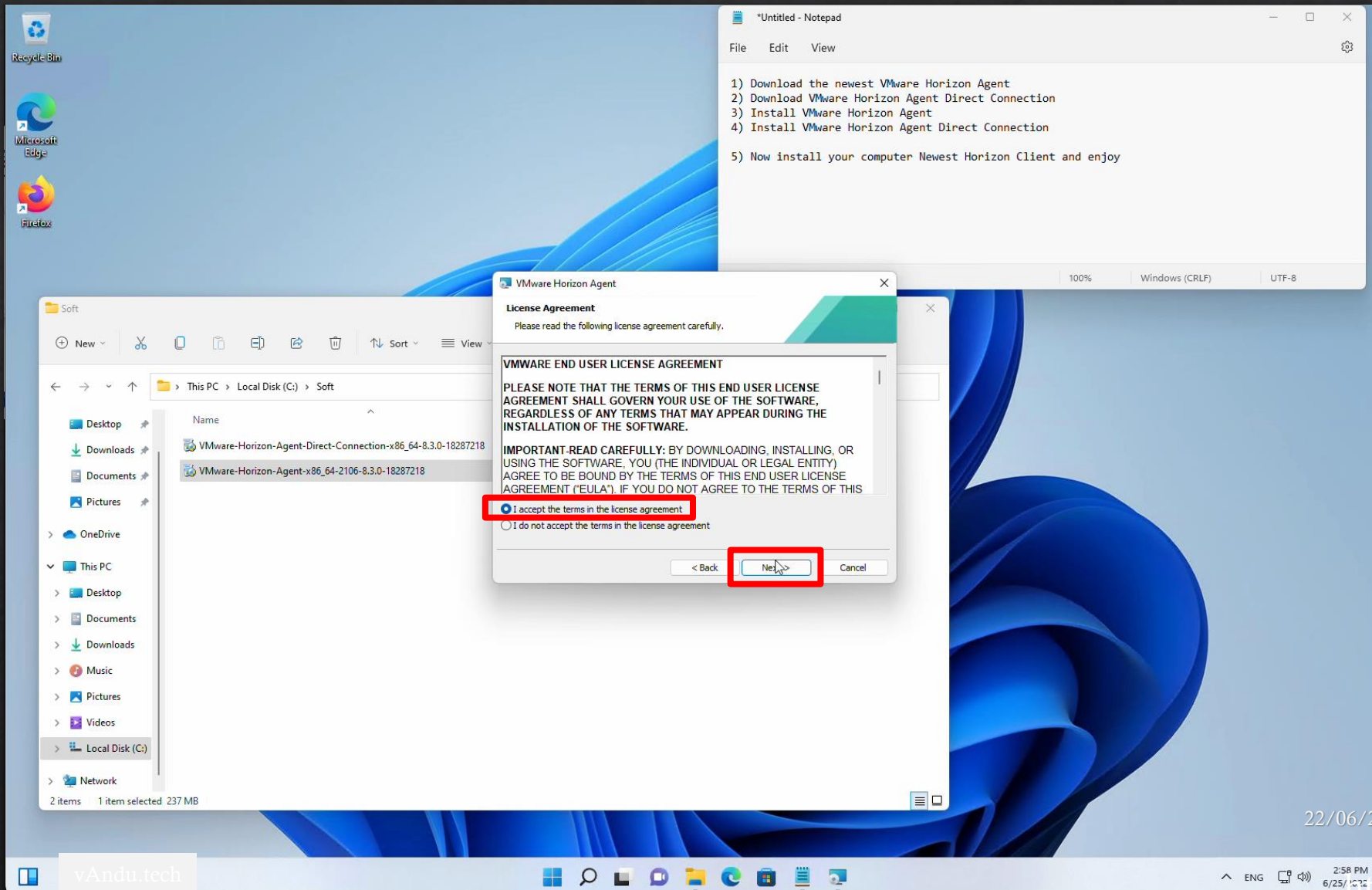
2:57 PM
6/25/2022

82

VMWARE HORIZON AGENT INSTALLATION



VMWARE HORIZON AGENT INSTALLATION



22/06/26

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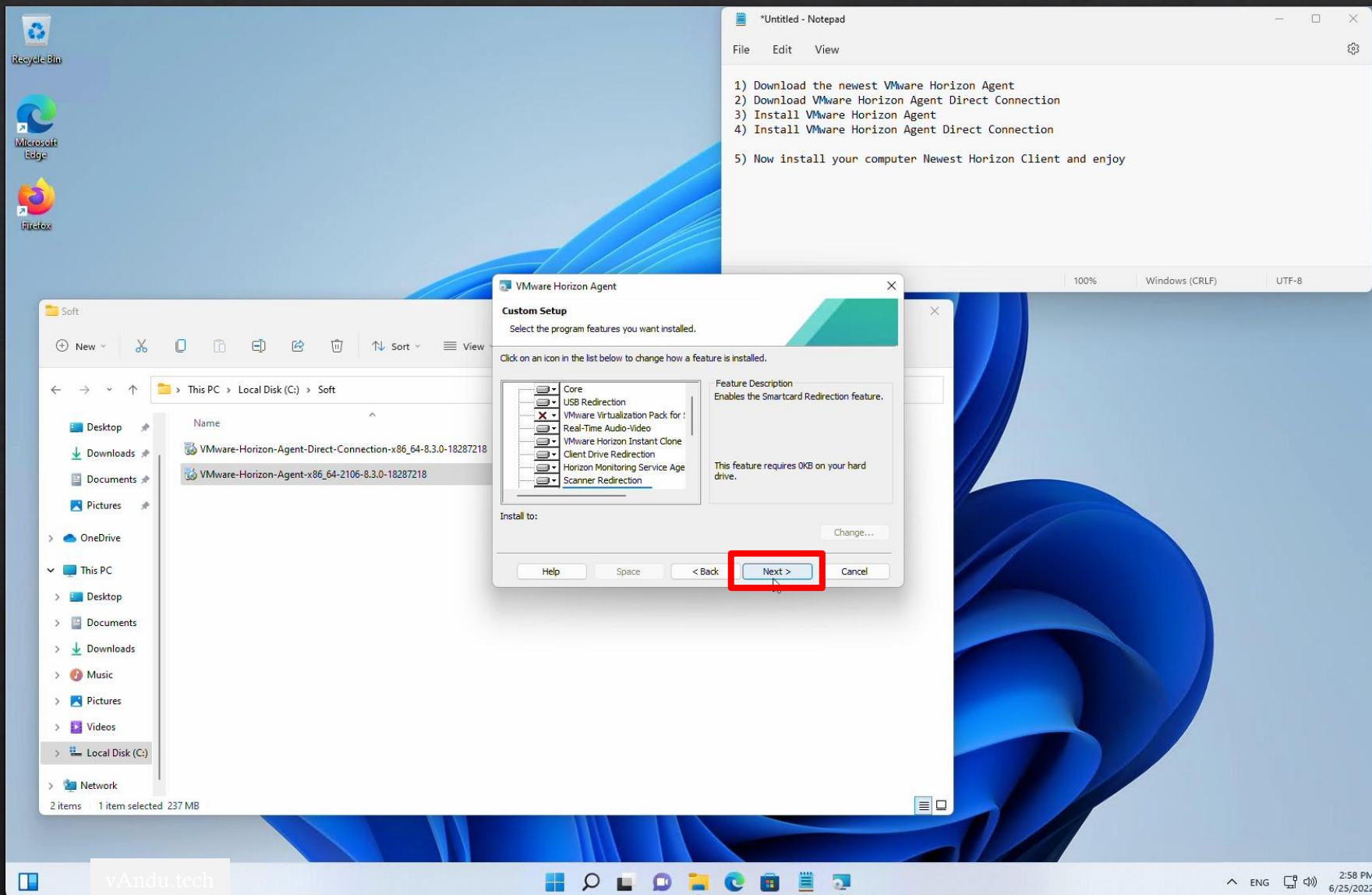
VMWARE HORIZON AGENT INSTALLATION

The screenshot shows a Windows 10 desktop with a blue abstract background. In the top right, a Notepad window titled '*Untitled - Notepad' contains a list of five steps: 1) Download the newest VMware Horizon Agent, 2) Download VMware Horizon Agent Direct Connection, 3) Install VMware Horizon Agent, 4) Install VMware Horizon Agent Direct Connection, and 5) Now install your computer Newest Horizon Client and enjoy. In the center, a File Explorer window is open to 'C:\Soft', showing two files: 'VMware-Horizon-Agent-Direct-Connection-x86_64-8.3.0-18287218' and 'VMware-Horizon-Agent-x86_64-2106-8.3.0-18287218'. Overlaid on the File Explorer is the 'VMware Horizon Agent' installation wizard, specifically the 'Network protocol configuration' step. It asks to 'Specify the protocol to be used to configure this Horizon Agent instance:' and has two radio buttons: 'IPv4' (selected) and 'IPv6'. A red box highlights the 'Next >' button at the bottom of the wizard. The system tray at the bottom shows the date '22/06/22', time '2:58 PM', and language 'ENG'. A watermark 'vAndu.tech' is visible in the bottom left, and a URL 'https://vandu.tech/' is in the bottom right.

22/06/22 2:58 PM ENG

<https://vandu.tech/>

VMWARE HORIZON AGENT INSTALLATION



VMWARE HORIZON AGENT INSTALLATION

The screenshot shows a Windows desktop environment with a blue background. In the top right corner, a Notepad window titled '*Untitled - Notepad' contains a list of five steps for installation:

- 1) Download the newest VMware Horizon Agent
- 2) Download VMware Horizon Agent Direct Connection
- 3) Install VMware Horizon Agent
- 4) Install VMware Horizon Agent Direct Connection
- 5) Now install your computer Newest Horizon Client and enjoy

In the center, a File Explorer window is open to 'C:\Soft', showing two files: 'VMware-Horizon-Agent-Direct-Connection-x86_64-8.3.0-18287218' and 'VMware-Horizon-Agent-x86_64-2106-8.3.0-18287218'. The second file is selected.

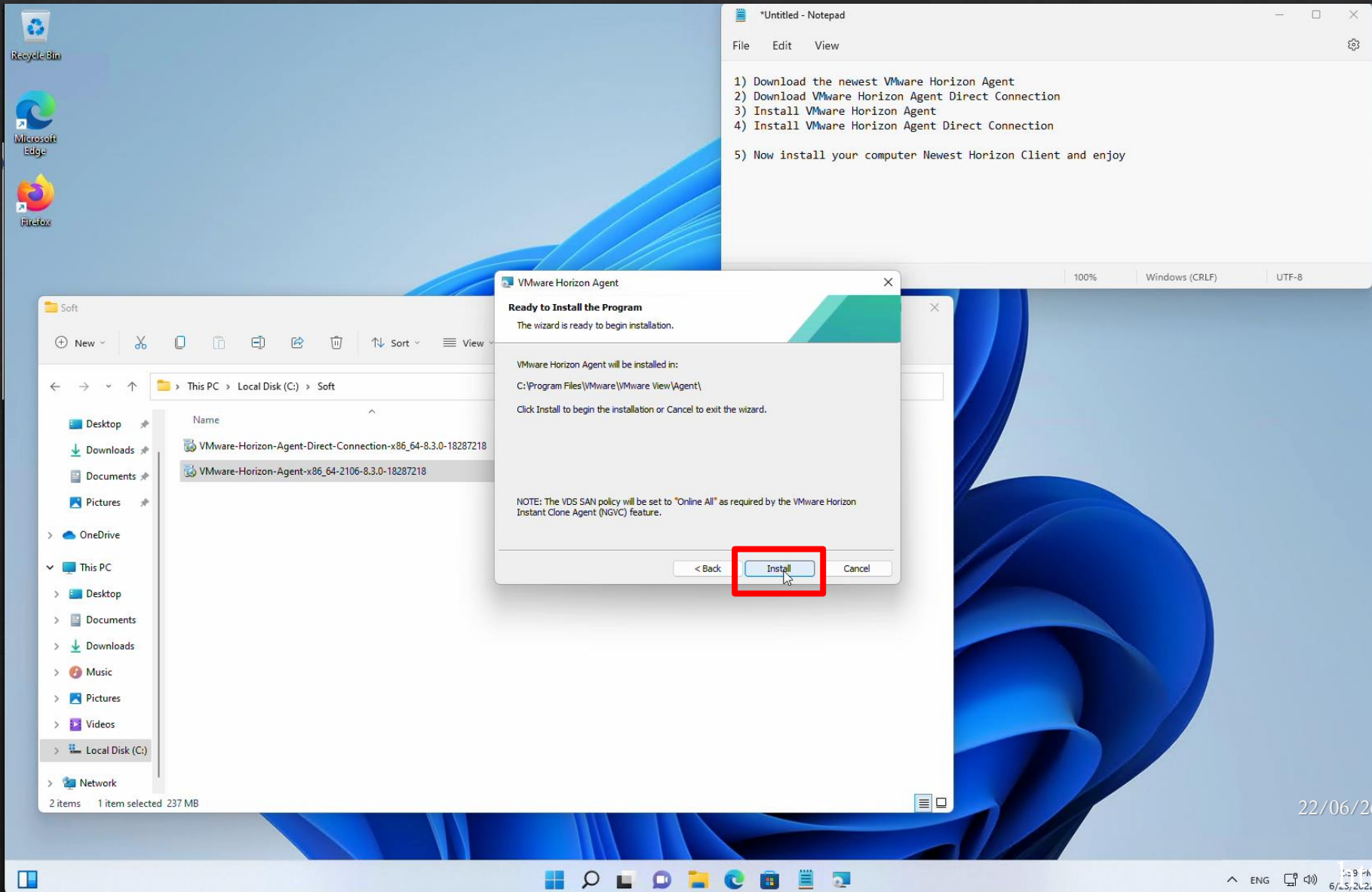
Overlaid on the File Explorer is the 'VMware Horizon Agent' 'Custom Setup' dialog box. It prompts the user to 'Select the program features you want installed.' A table lists features, with 'VMware Horizon Agent' selected. A warning message is displayed: 'Refer to the VMware Horizon Security document for guidance on using USB redirection securely.' The 'OK' button is highlighted with a red rectangle.

At the bottom right of the desktop, the system tray shows the date '22/06/26' and time '2:51 PM 6/25/2022'. The taskbar includes the Start button, search icon, and several application icons. A watermark 'vAndu.tech' is visible in the bottom left corner, and a URL 'https://vandu.tech/' is in the bottom right corner.

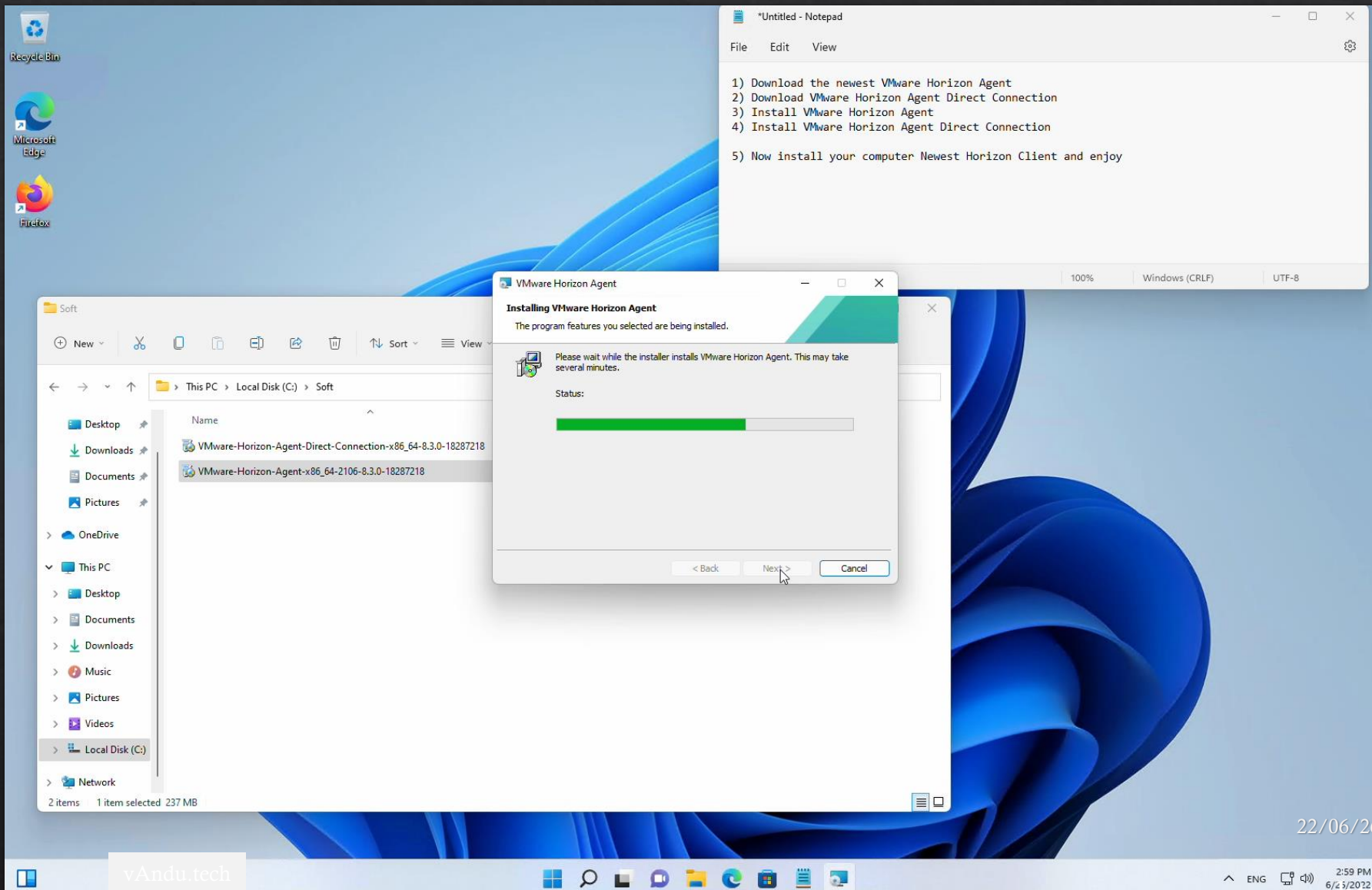
22/06/26

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VMWARE HORIZON AGENT INSTALLATION



VMWARE HORIZON AGENT INSTALLATION



VMWARE HORIZON AGENT INSTALLATION

*Untitled - Notepad

File Edit View

- 1) Download the newest VMware Horizon Agent
- 2) Download VMware Horizon Agent Direct Connection
- 3) Install VMware Horizon Agent
- 4) Install VMware Horizon Agent Direct Connection
- 5) Now install your computer Newest Horizon Client and enjoy

VMware Horizon Agent

vmware

Installer Completed

The installer has successfully installed VMware Horizon Agent. Click Finish to exit the wizard.

< Back **Finish** Cancel

Settings

Restart required

Your PC needs to be restarted to finish setting up this device:

VMware Horizon Indirect Display Driver

22/06/26 2:59 PM 6/25/2022

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VMWARE HORIZON AGENT INSTALLATION

The screenshot displays a Windows 10 desktop environment during the VMware Horizon Agent installation. In the top right, a Notepad window titled '*Untitled - Notepad' contains the following instructions:

- 1) Download the newest VMware Horizon Agent
- 2) Download VMware Horizon Agent Direct Connection
- 3) Install VMware Horizon Agent
- 4) Install VMware Horizon Agent Direct Connection
- 5) Now install your computer Newest Horizon Client and enjoy

In the center, a File Explorer window is open to the 'Soft' folder on the Local Disk (C:). It contains two files:

- VMware-Horizon-Agent-Direct-Connection-x86_64-8.3.0-18287218
- VMware-Horizon-Agent-x86_64-2106-8.3.0-18287218

A 'VMware Horizon Agent Installer Information' dialog box is overlaid on the File Explorer. It contains the message: 'You must restart your system for the configuration changes made to VMware Horizon Agent to take effect. Click Yes to restart now or No if you plan to restart later.' The 'Yes' button is highlighted with a red rectangle.

The taskbar at the bottom shows the system tray with the date '22/06/26', time '2:59 PM', and date '6/25/2022'. The watermark 'vAndu.tech' is visible in the bottom left corner.

VMWARE HORIZON AGENT INSTALLATION



VMWARE HORIZON AGENT DIRECT CONNECTION INSTALLATION

The screenshot displays a Windows 10 desktop environment. In the foreground, a File Explorer window is open to the 'Soft' folder on the C: drive. It contains two files:

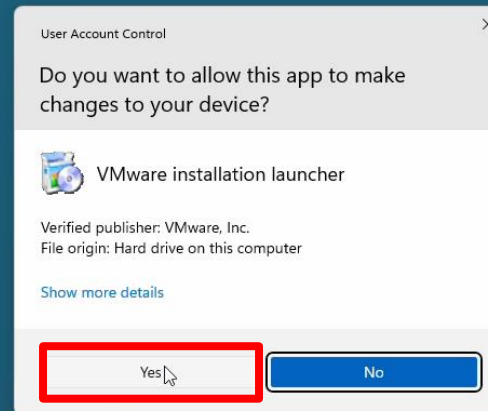
Name	Date modified	Type	Size
VMware-Horizon-Agent-DirectConnection-x86_64-8.3.0-18287218	7/8/2021 2:24 PM	Application	34,687 KB
VMware-Horizon-Agent-x86_64-2106-8.3.0-18287218	7/8/2021 2:24 PM	Application	243,671 KB

Simultaneously, a Notepad window titled '*Untitled - Notepad' is open, displaying the following installation steps:

- 1) Download the newest VMware Horizon Agent
- 2) Download VMware Horizon Agent Direct Connection
- 3) Install VMware Horizon Agent
- 4) Install VMware Horizon Agent Direct Connection
- 5) Now install your computer Newest Horizon Client and enjoy

The desktop background is a blue abstract design. The taskbar at the bottom shows the Start button, search icon, and several application icons. The system tray on the right indicates the date and time as 22/06/26 3:0 PM 6/25/2022.

VMWARE HORIZON AGENT DIRECT CONNECTION INSTALLATION



VMWARE HORIZON AGENT DIRECT CONNECTION INSTALLATION

The screenshot displays a Windows 10 desktop environment. In the top right, a Notepad window titled '*Untitled - Notepad' contains a list of five steps for installation:

- 1) Download the newest VMware Horizon Agent
- 2) Download VMware Horizon Agent Direct Connection
- 3) Install VMware Horizon Agent
- 4) Install VMware Horizon Agent Direct Connection
- 5) Now install your computer Newest Horizon Client and enjoy

In the center, a File Explorer window is open to the 'Soft' folder on the C: drive. It shows two files:

- VMware-Horizon-Agent-Direct-Connection-x86_64-8.3.0-18287218
- VMware-Horizon-Agent-x86_64-2106-8.3.0-18287218

Overlaid on the File Explorer is a VMware logo and the text: 'VMware Horizon™ View Agent Direct-Connection Plugin'. In the bottom right corner, a 'VMware Product Installation' dialog box is active, showing a progress bar and the text: 'Preparing VMware Horizon Agent Direct-Connection Plugin for installation...'. The taskbar at the bottom shows the date and time as 3:01 PM on 6/25/2022.

22/06/26

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VMWARE HORIZON AGENT DIRECT CONNECTION INSTALLATION

The screenshot displays a Windows desktop environment with a blue background. In the top-left corner, there are icons for Recycle Bin, Microsoft Edge, Firefox, and VMware Horizon. A Notepad window titled '*Untitled - Notepad' is open in the top-right, containing a list of five steps:

- 1) Download the newest VMware Horizon Agent
- 2) Download VMware Horizon Agent Direct Connection
- 3) Install VMware Horizon Agent
- 4) Install VMware Horizon Agent Direct Connection
- 5) Now install your computer Newest Horizon Client and enjoy

A File Explorer window is open, showing the 'Soft' folder on the Local Disk (C:). It contains two files:

- VMware-Horizon-Agent-Direct-Connection-x86_64-8.3.0-18287218
- VMware-Horizon-Agent-x86_64-2106-8.3.0-18287218

The 'VMware Horizon Agent Direct-Connection Plugin Setup' wizard is the central focus. It features the VMware logo and the text: 'Welcome to the Installation Wizard for VMware Horizon Agent Direct-Connection Plugin'. Below this, it states: 'The Setup Wizard will install VMware Horizon Agent Direct-Connection Plugin on your computer. Click Next to continue or Cancel to exit the Setup Wizard.' At the bottom, there are three buttons: 'Back', 'Next', and 'Cancel'. The 'Next' button is highlighted with a red square, and a mouse cursor is pointing at it. The product version '8.3.0.18287218' is displayed at the bottom left of the wizard window.

VMWARE HORIZON AGENT DIRECT CONNECTION INSTALLATION

The screenshot displays a Windows desktop environment with a blue abstract background. In the top-left corner, there are icons for Recycle Bin, Microsoft Edge, Firefox, and VMware Horizon. A File Explorer window is open to the 'Soft' folder on the C: drive, showing two files: 'VMware-Horizon-Agent-Direct-Connection-x86_64-8.3.0-18287218' and 'VMware-Horizon-Agent-x86_64-2106-8.3.0-18287218'. A Notepad window titled '*Untitled - Notepad' contains a list of five steps: 1) Download the newest VMware Horizon Agent, 2) Download VMware Horizon Agent Direct Connection, 3) Install VMware Horizon Agent, 4) Install VMware Horizon Agent Direct Connection, and 5) Now install your computer Newest Horizon Client and enjoy. The fourth step is highlighted. The VMware Horizon Agent Direct-Connection Plugin Setup dialog box is the central focus, showing the 'End-User License Agreement' with the text: 'VMWARE END USER LICENSE AGREEMENT PLEASE NOTE THAT THE TERMS OF THIS END USER LICENSE AGREEMENT SHALL GOVERN YOUR USE OF THE SOFTWARE, REGARDLESS OF ANY TERMS THAT MAY APPEAR DURING THE INSTALLATION OF THE SOFTWARE. IMPORTANT-READ CAREFULLY: BY DOWNLOADING, INSTALLING, OR USING THE SOFTWARE, YOU (THE INDIVIDUAL OR LEGAL ENTITY) AGREE TO BE BOUND BY THE TERMS OF THIS END USER LICENSE AGREEMENT ("EULA"). IF YOU DO NOT AGREE TO THE TERMS OF THIS EULA, YOU MUST NOT DOWNLOAD, INSTALL, OR'. The checkbox 'I accept the terms in the License Agreement' is checked and highlighted with a red box. The 'Next' button is also highlighted with a red box. The date '22/06/26' and page number '97' are visible in the bottom right corner. A URL 'https://vandu.tech/' is at the bottom right.

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<https://vandu.tech/>

VMWARE HORIZON AGENT DIRECT CONNECTION INSTALLATION

The screenshot displays a Windows 10 desktop environment. In the foreground, the 'VMware Horizon Agent Direct-Connection Plugin Setup' wizard is open, showing the 'Configuration Information' step. The wizard prompts the user to specify port information and includes a checkbox for 'Configure Windows Firewall automatically', which is checked. A red rectangular box highlights the 'Next' button at the bottom of the wizard. In the background, a Notepad window titled '*Untitled - Notepad' contains a list of five steps: 1) Download the newest VMware Horizon Agent, 2) Download VMware Horizon Agent Direct Connection, 3) Install VMware Horizon Agent, 4) Install VMware Horizon Agent Direct Connection (highlighted in blue), and 5) Now install your computer Newest Horizon Client and enjoy. Below the Notepad window, a File Explorer window shows the 'Soft' folder on the local disk (C:), containing two files: 'VMware-Horizon-Agent-Direct-Connection-x86_64-8.3.0-18287218' and 'VMware-Horizon-Agent-x86_64-2106-8.3.0-18287218'. The desktop background is a blue abstract design. The system tray in the bottom right corner shows the date '22/06/26' and the page number '98'. The URL 'https://vandu.tech/' is visible in the bottom right corner.

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<https://vandu.tech/>

VMWARE HORIZON AGENT DIRECT CONNECTION INSTALLATION

The screenshot displays a Windows desktop environment with the following elements:

- Notepad Window:** A text document titled "*Untitled - Notepad" containing a list of five steps:
 - 1) Download the newest VMware Horizon Agent
 - 2) Download VMware Horizon Agent Direct Connection
 - 3) Install VMware Horizon Agent
 - 4) Install VMware Horizon Agent Direct Connection
 - 5) Now install your computer Newest Horizon Client and enjoy
- File Explorer Window:** A window titled "vAndu.tech" showing the "Soft" folder on the Local Disk (C:). It contains two files:
 - VMware-Horizon-Agent-Direct-Connection-x86_64-8.3.0-18287218
 - VMware-Horizon-Agent-x86_64-2106-8.3.0-18287218
- Installation Wizard Window:** A window titled "VMware Horizon Agent Direct-Connection Plugin Setup" with the heading "Ready to install VMware Horizon Agent Direct-Connection Plugin". It includes instructions: "Click Install to begin the installation. Click Back to review or change any of your installation settings. Click Cancel to exit the wizard." At the bottom, there are three buttons: "Back", "Install" (highlighted with a red box), and "Cancel".

VMWARE HORIZON AGENT DIRECT CONNECTION INSTALLATION

The screenshot displays a Windows desktop environment with several open windows:

- Notepad Window:** Titled "*Untitled - Notepad", it contains a list of five steps for installation:
 - 1) Download the newest VMware Horizon Agent
 - 2) Download VMware Horizon Agent Direct Connection
 - 3) Install VMware Horizon Agent
 - 4) Install VMware Horizon Agent Direct Connection
 - 5) Now install your computer Newest Horizon Client and enjoy
- File Explorer Window:** Shows the "Soft" folder on the local disk (C:). It contains two files:
 - VMware-Horizon-Agent-Direct-Connection-x86_64-8.3.0-18287218
 - VMware-Horizon-Agent-x86_64-2106-8.3.0-18287218
- VMware Horizon Agent Direct-Connection Plugin Setup Wizard:** A dialog box titled "Completed the VMware Horizon Agent Direct-Connection Plugin Setup Wizard". It instructs the user to "Click the Finish button to exit the Setup Wizard." The "Finish" button is highlighted with a red rectangle.

VMWARE HORIZON AGENT DIRECT CONNECTION INSTALLATION

The screenshot displays a Windows desktop environment. In the top-left corner, there are icons for Recycle Bin, Microsoft Edge, Firefox, and VMware Horizon. A Notepad window titled '*Untitled - Notepad' is open, showing a list of five steps for installation. Step 4, 'Install VMware Horizon Agent Direct Connection', is highlighted. Below the Notepad window, a File Explorer window is open, showing the contents of the 'Soft' folder on the C: drive. Two files are listed: 'VMware-Horizon-Agent-Direct-Connection-x86_64-8.3.0-18287218' (34,687 KB) and 'VMware-Horizon-Agent-x86_64-2106-8.3.0-18287218' (243,671 KB). The desktop background is a blue abstract design.

*Untitled - Notepad

File Edit View

- 1) Download the newest VMware Horizon Agent
- 2) Download VMware Horizon Agent Direct Connection
- 3) Install VMware Horizon Agent
- 4) Install VMware Horizon Agent Direct Connection
- 5) Now install your computer Newest Horizon Client and enjoy

Ln 4, Col 50 100% Windows (CRLF) UTF-8

vAndu.tech

This PC > Local Disk (C:) > Soft

Name	Date modified	Type	Size
VMware-Horizon-Agent-Direct-Connection-x86_64-8.3.0-18287218	7/8/2021 2:24 PM	Application	34,687 KB
VMware-Horizon-Agent-x86_64-2106-8.3.0-18287218	7/8/2021 2:24 PM	Application	243,671 KB

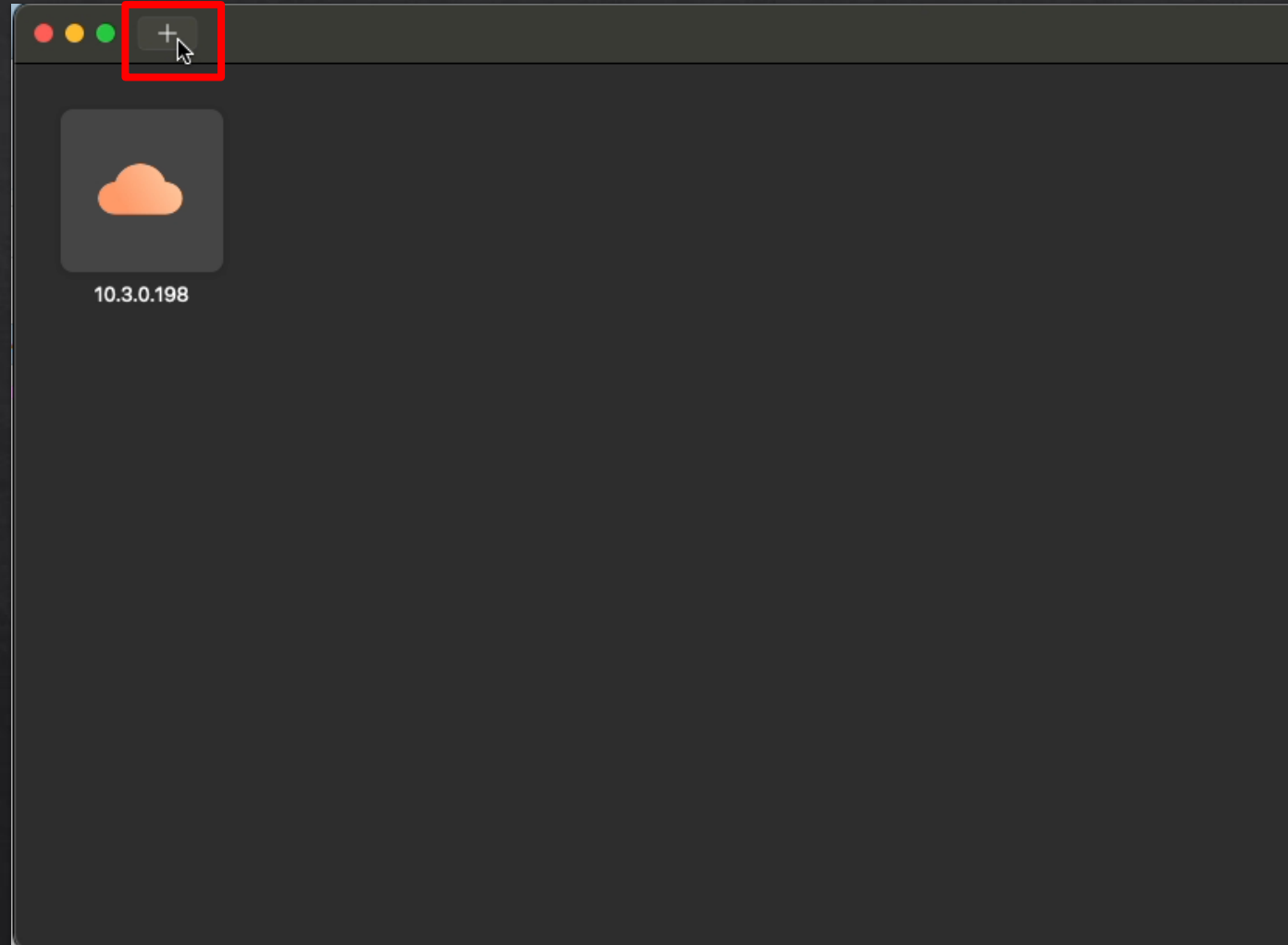
2 items 1 item selected 33.8 MB

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<https://vandu.tech/>

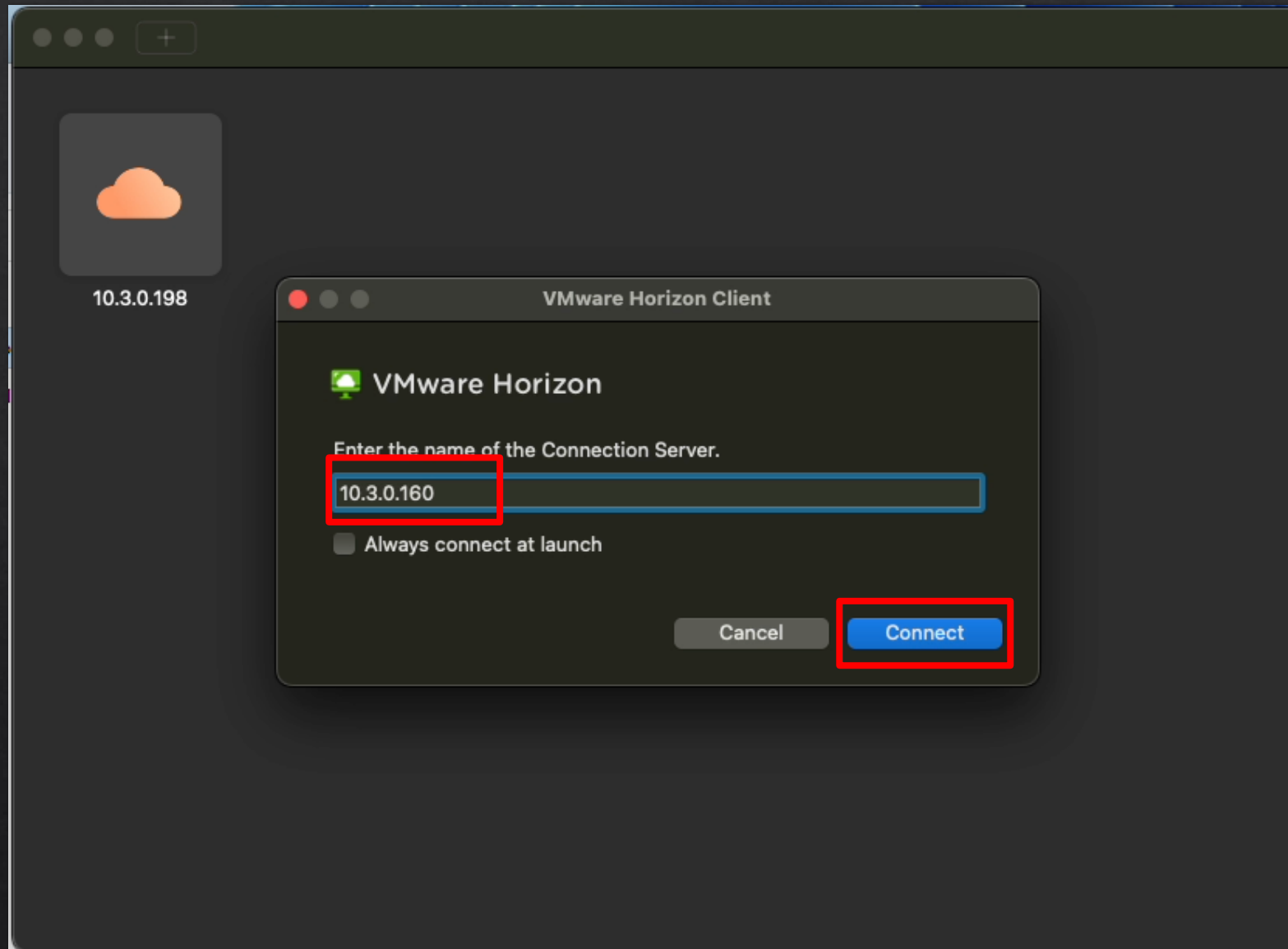
VMWARE HORIZON CLIENT INSTRUCTION

macOS MONTEREY V12.4 *APPLE SILICON*



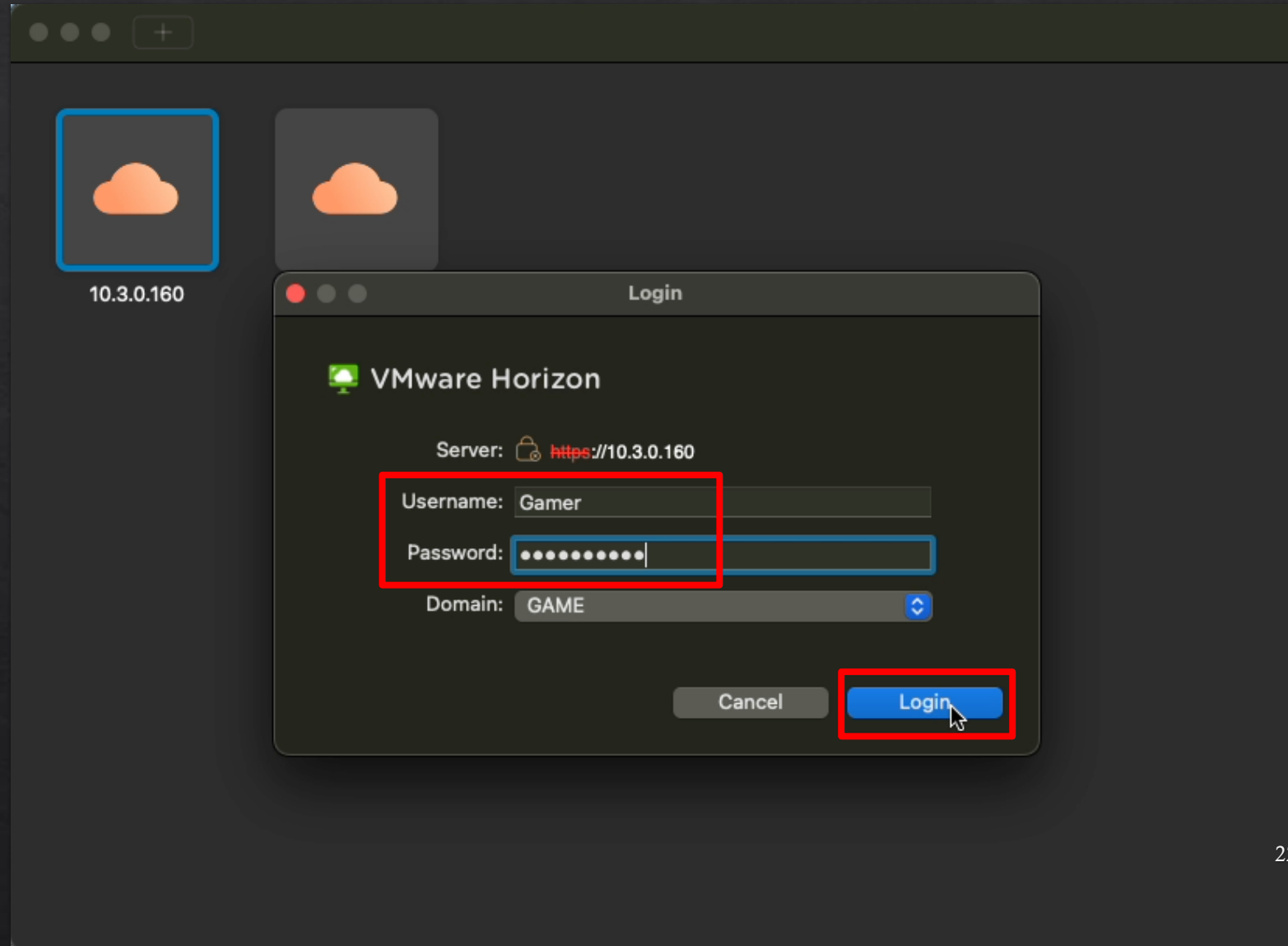
VMWARE HORIZON CLIENT INSTRUCTION

macOS MONTEREY V12.4 *APPLE SILICON*



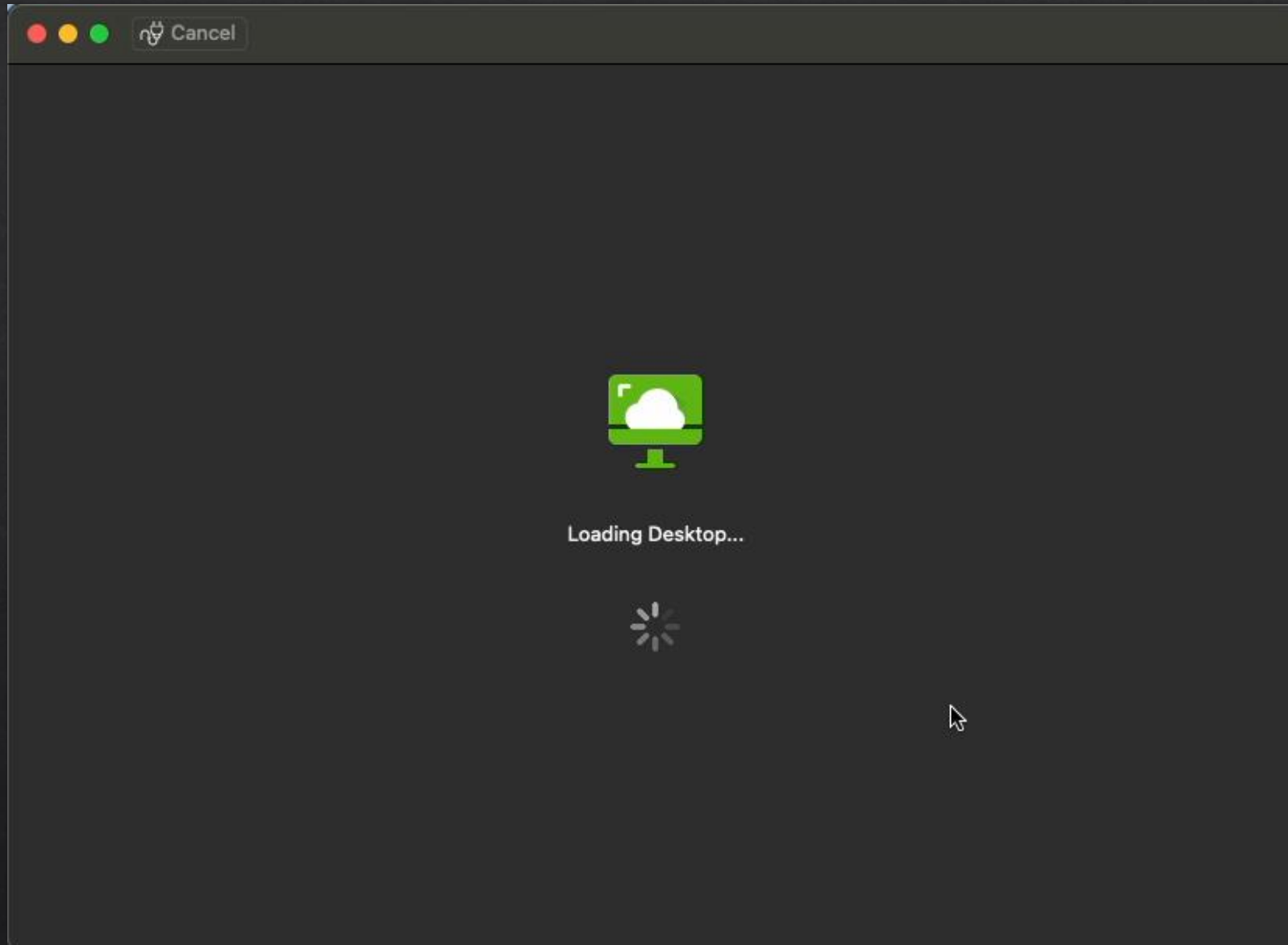
VMWARE HORIZON CLIENT INSTRUCTION

macOS MONTEREY V12.4 APPLE SILICON



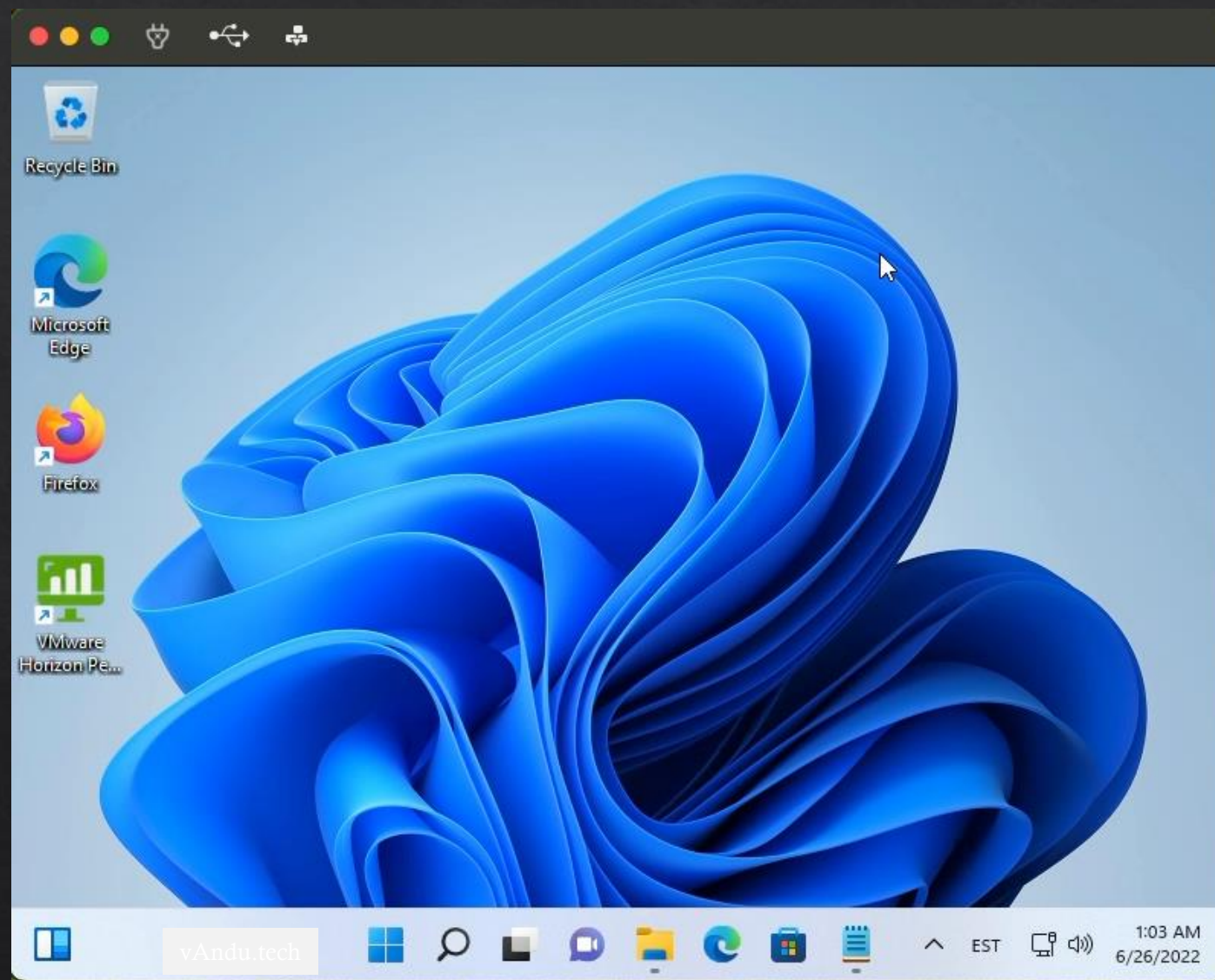
VMWARE HORIZON CLIENT INSTRUCTION

macOS MONTEREY V12.4 *APPLE SILICON*



VMWARE HORIZON CLIENT INSTRUCTION

macOS MONTEREY V12.4 *APPLE SILICON*

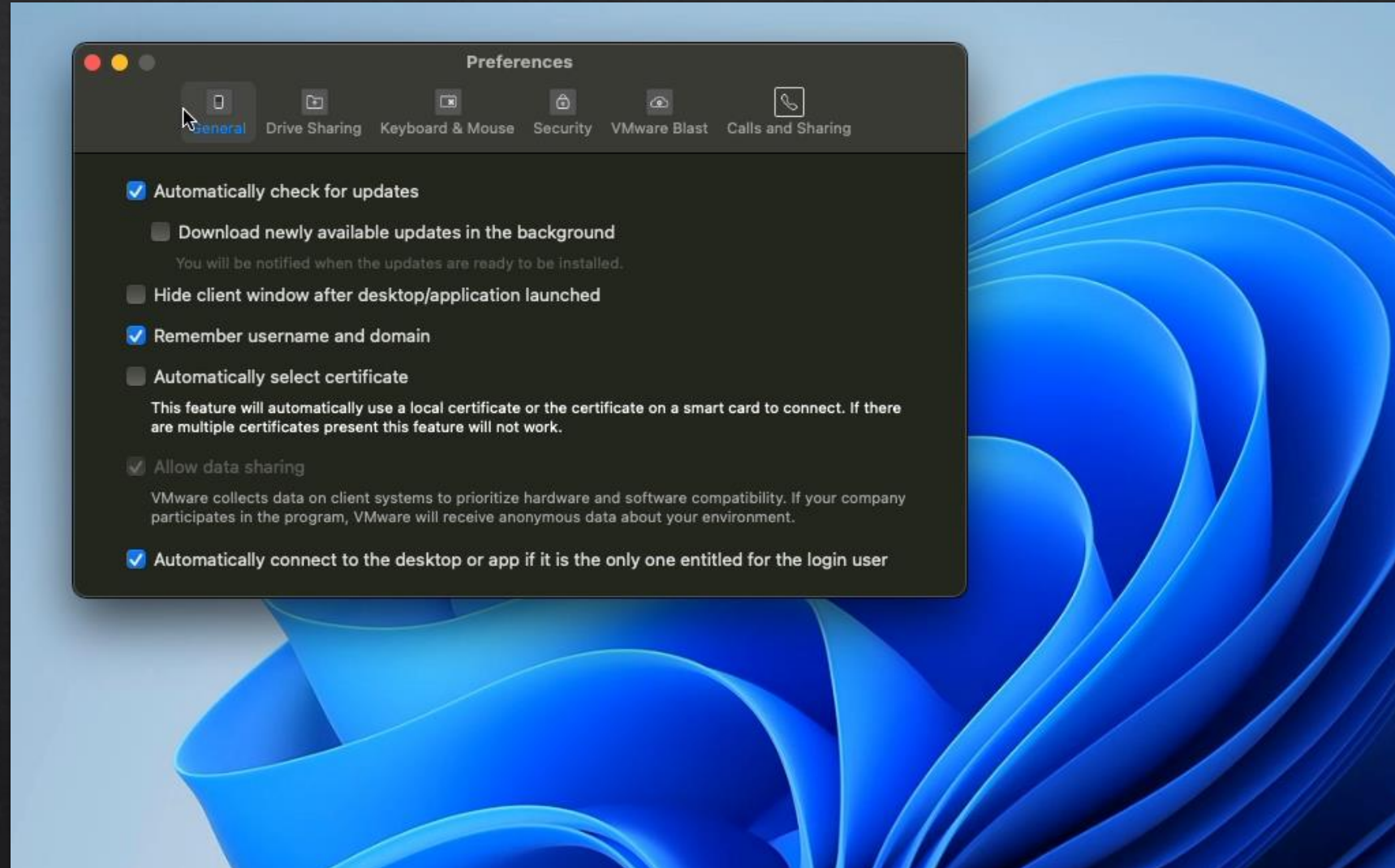


22/06/26

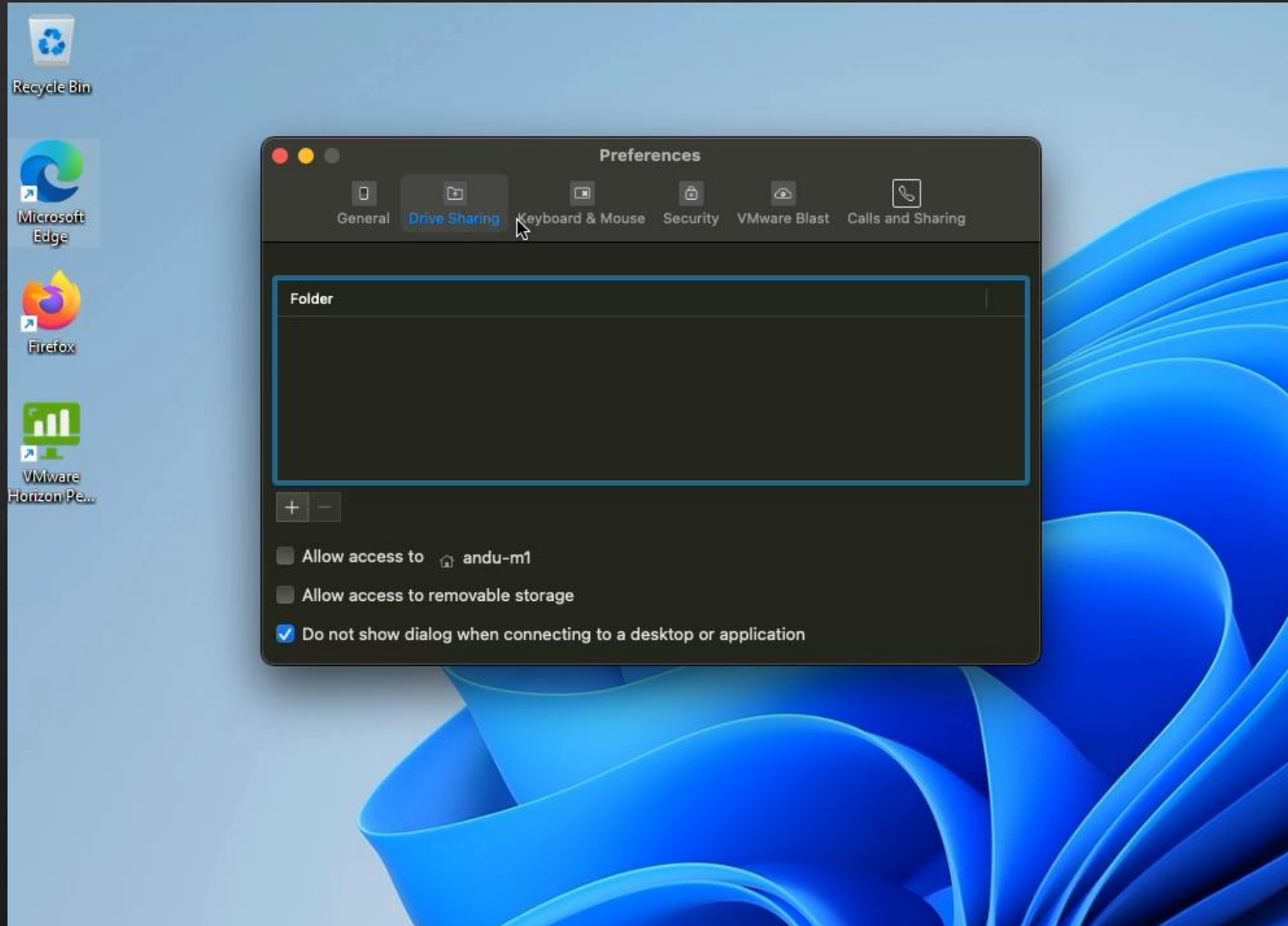
106

<https://vandu.tech/>

VMWARE HORIZON CLIENT PREFERENCES ON macOS MONTEREY V12.4 *APPLE SILICON*



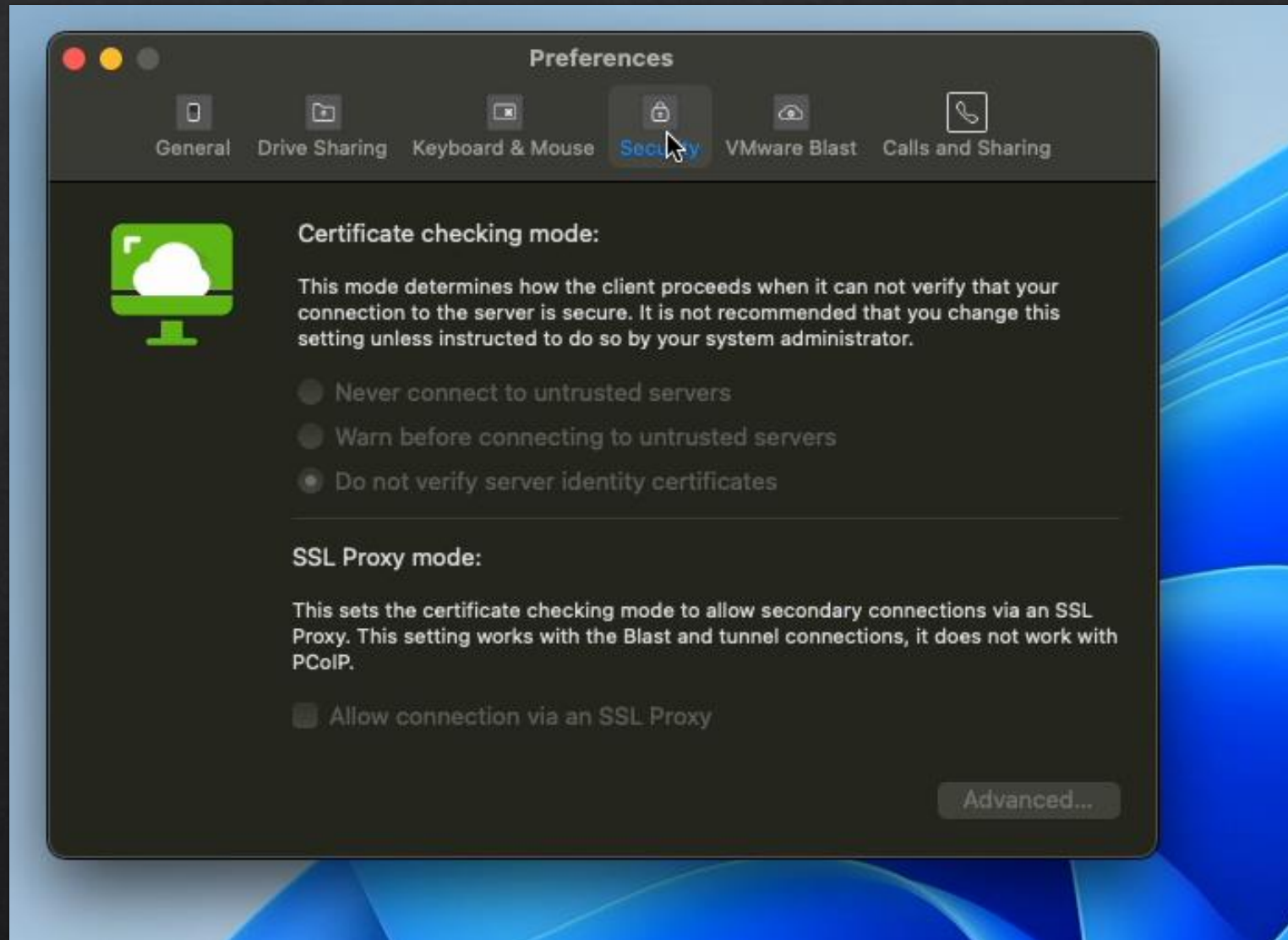
VMWARE HORIZON CLIENT PREFERENCES ON macOS MONTEREY V12.4 *APPLE SILICON*



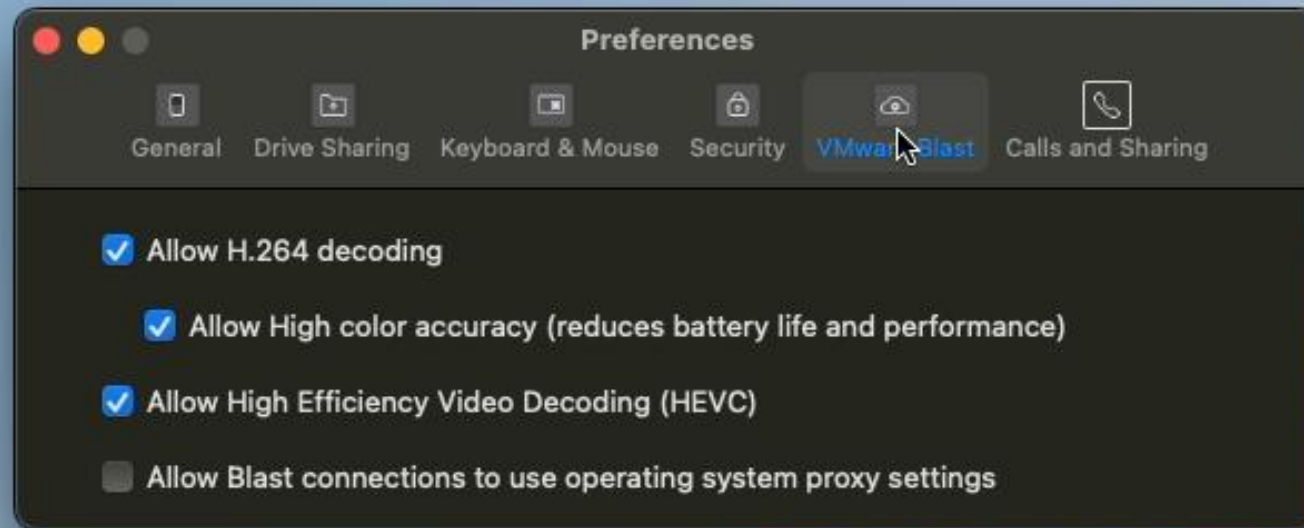
VMWARE HORIZON CLIENT PREFERENCES ON macOS MONTEREY V12.4 APPLE SILICON



VMWARE HORIZON CLIENT PREFERENCES ON macOS MONTEREY V12.4 APPLE SILICON



VMWARE HORIZON CLIENT PREFERENCES ON macOS MONTEREY V12.4 *APPLE SILICON*



GAMING: VMWARE HORIZON CLIENT: Fixing the mouse cursor

The screenshot shows the Overwatch game running in a VMware Horizon Client window. The game interface includes a health bar (500/500), a shield (1600/1600), and a 15% shield regeneration gauge. A yellow prompt reads "PRESS H TO CHANGE HERO".

Overlaid on the right side are two system monitoring windows:

- HWINFO64 v7.26-4800 - Sensors Status**: A table showing various hardware sensors and their current, minimum, maximum, and average values.
- Task Manager**: The Performance tab showing GPU usage at 51% for an NVIDIA Tesla K8.

Sensor	Current	Minimum	Maximum	Average
GPU [#1]: NVIDIA Tesla ...				
GPU Temperature	65 °C	40 °C	68 °C	43 °C
GPU Core Voltage	0.850 V	0.837 V	1.050 V	0.851 V
GPU Power	76.674 W	25.010 W	124.131 W	31.639 W
GPU Clock	587.9 MHz	324.0 MHz	875.7 MHz	357.7 MHz
GPU Memory Clock	1,252.8 MHz	162.0 MHz	1,252.8 MHz	285.2 MHz
GPU Video Clock	540.0 MHz	405.0 MHz	540.0 MHz	420.2 MHz
GPU Effective Clock	587.9 MHz	324.0 MHz	875.7 MHz	357.7 MHz
GPU Core Load	46.0 %	0.0 %	73.0 %	8.8 %
GPU Memory Controller L...	20.0 %	0.0 %	43.0 %	6.5 %
GPU Video Engine Load	33.0 %	0.0 %	57.0 %	11.4 %
GPU Bus Load	2.0 %	0.0 %	11.0 %	0.6 %
GPU Memory Usage	10.7 %	4.7 %	11.1 %	5.9 %
GPU D:3D Usages	0.0 %	0.0 %	65.9 %	0.0 %
Total GPU Power (normal...	50.8 %	16.8 %	83.3 %	21.3 %
Total GPU Power [% of T...	51.5 %	16.8 %	83.3 %	21.2 %
GPU Memory Allocated	1,235 MB	537 MB	1,281 MB	679 MB
GPU D:3D Memory Dedica...	1,192 MB	493 MB	1,239 MB	637 MB
GPU D:3D Memory Dynamic	83 MB	33 MB	123 MB	52 MB
Pcie Link Speed	5.0 GT/s	5.0 GT/s	5.0 GT/s	5.0 GT/s
GPU [#1]: NVIDIA Tesla ...				
GPU Voltage	0.863 V	0.856 V	1.069 V	0.869 V
GPU Current	1.076 A	1.072 A	1.078 A	1.075 A
GPU VRM Power Out (PO...	0.925 W	0.914 W	1.135 W	0.932 W

Task Manager Performance tab data:

- CPU: 11% (1.8C)
- Memory: 9.0/20.0 GB
- Disk 0 (SSD): 0%
- Disk 1 (SSD): 0%
- Ethernet: Ethernet S: 23.0 R
- GPU 0 (NVIDIA...): 51%

GPU Performance (NVIDIA Tesla K8):

- 3D: 51% Copy
- Video Encode: 34%
- Video Decode: 0%
- Dedicated GPU memory usage: 11.5 GB
- Shared GPU memory usage: 10.0 GB

GAMING: VMWARE HORIZON CLIENT: Fixing the mouse cursor

The screenshot shows the Overwatch game running in a VMware Horizon Client window. The game is in a lobby, and the player's health is at 500/500. A yellow prompt says "PRESS H TO CHANGE HERO".

Overlaid on the game are two windows:

- HWINFO64 v7.26-4800 - Sensors Status**: A table showing various system sensors and their current, minimum, maximum, and average values.
- Task Manager**: The Performance tab is active, showing system resource usage for CPU, Memory, Disk, Ethernet, and GPU. The GPU usage is 50%.

Sensor	Current	Minimum	Maximum	Average
GPU [#1]: NVIDIA Tesla ...				
GPU Temperature	64 °C	40 °C	68 °C	43 °C
GPU Core Voltage	0.850 V	0.837 V	1.050 V	0.851 V
GPU Power	75.155 W	25.010 W	124.131 W	31.655 W
GPU Clock	587.9 MHz	324.0 MHz	875.7 MHz	357.7 MHz
GPU Memory Clock	1,252.8 MHz	152.0 MHz	1,252.8 MHz	285.5 MHz
GPU Video Clock	540.0 MHz	405.0 MHz	540.0 MHz	420.3 MHz
GPU Effective Clock	587.9 MHz	324.0 MHz	875.7 MHz	357.7 MHz
GPU Core Load	47.0 %	0.0 %	73.0 %	8.8 %
GPU Memory Controller L...	21.0 %	0.0 %	43.0 %	6.5 %
GPU Video Engine Load	32.0 %	0.0 %	57.0 %	11.4 %
GPU Bus Load	2.0 %	0.0 %	11.0 %	0.6 %
GPU Memory Usage	10.7 %	4.7 %	11.1 %	5.9 %
GPU D:3D Usages		0.0 %	65.9 %	
Total GPU Power (normal...	50.2 %	16.8 %	83.3 %	21.3 %
Total GPU Power [% of T...	50.2 %	16.8 %	83.3 %	21.2 %
GPU Memory Allocated	1,235 MB	537 MB	1,281 MB	680 MB
GPU D:3D Memory Dedicat...	1,192 MB	493 MB	1,239 MB	637 MB
GPU D:3D Memory Dynamic	83 MB	33 MB	123 MB	52 MB
PCIe Link Speed	5.0 GT/s	5.0 GT/s	5.0 GT/s	5.0 GT/s
GPU [#1]: NVIDIA Tesla ...				
GPU Voltage	0.869 V	0.856 V	1.069 V	0.869 V
GPU Current	1.075 A	1.072 A	1.078 A	1.075 A
GPU VRM Power Out (PO...	0.922 W	0.914 W	1.135 W	0.932 W

Task Manager Performance Tab:

- CPU: 12% 1.8C
- Memory: 9.0/20.0
- Disk 0 (SSD): 0%
- Disk 1 (SSD): 0%
- Ethernet Ethernet (Si: 21.8 R):
- GPU 0 (NVIDIA...): 50%

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GAMING: VMWARE HORIZON CLIENT: Fixing the mouse cursor

The screenshot shows the Overwatch game interface within a VMware Horizon Client window. The game is running on a Windows VM. Overlaid on the game are three windows: HWINFO64 v7.26-4800 - Sensors Status, Task Manager, and vAndu.tech GPU monitoring.

HWINFO64 v7.26-4800 - Sensors Status

Sensor	Current	Minimum	Maximum	Average
GPU [#1]: NVIDIA Tesla ...				
GPU Temperature	67 °C	40 °C	68 °C	43 °C
GPU Core Voltage	1.050 V	0.837 V	1.069 V	0.851 V
GPU Power	99.979 W	25.010 W	124.131 W	31.714 W
GPU Clock	875.7 MHz	324.0 MHz	875.7 MHz	358.1 MHz
GPU Memory Clock	1,252.8 MHz	162.0 MHz	1,252.8 MHz	286.2 MHz
GPU Video Clock	540.0 MHz	405.0 MHz	540.0 MHz	420.4 MHz
GPU Effective Clock	875.7 MHz	324.0 MHz	875.7 MHz	358.1 MHz
GPU Core Load	36.0 %	0.0 %	73.0 %	8.9 %
GPU Memory Controller L...	22.0 %	0.0 %	43.0 %	6.5 %
GPU Video Engine Load	25.0 %	0.0 %	57.0 %	11.4 %
GPU Bus Load	1.0 %	0.0 %	11.0 %	0.6 %
GPU Memory Usage	11.0 %	4.7 %	11.1 %	5.9 %
GPU D3D Usages	0.0 %	0.0 %	65.9 %	
Total GPU Power (norma...	67.1 %	16.8 %	83.3 %	21.3 %
Total GPU Power (% of T...	67.1 %	16.8 %	83.3 %	21.3 %
GPU Memory Allocated	1,269 MB	537 MB	1,281 MB	680 MB
GPU D3D Memory Dedicat...	1,227 MB	493 MB	1,239 MB	637 MB
GPU D3D Memory Dynamic	85 MB	33 MB	123 MB	52 MB
PCIe Link Speed	5.0 GT/s	5.0 GT/s	5.0 GT/s	5.0 GT/s

Task Manager

Performance - GPU vAndu.tech NVIDIA Tesla K8

CPU 11% 1.80
Memo 9.0/20.0
Disk 0 SSD 0%
Disk 1 SSD 0%
Ethernet Ethernet S: 17.8 R:
GPU 0 NVIDIA... 42%

vAndu.tech GPU Monitoring

GPU vAndu.tech NVIDIA Tesla K8

3D 42% Copy 0

Video Encode 32% Video Decode 0

Dedicated GPU memory usage 11.5 G

Shared GPU memory usage 22.7 G / 26

GAMING: VMWARE HORIZON CLIENT:

Fixing the mouse cursor -> **Enable Relative Mouse**

The screenshot shows the VMware Horizon Client interface. The 'Connection' menu is open, and the 'Enable Relative Mouse' option is highlighted with a red box. The background is an Overwatch game window. Two performance monitoring windows are open on the right side of the screen.

Sensors Status Window:

Sensor	Current	Minimum	Maximum	Average
GPU [#1]: NVIDIA Tesla ...				
GPU Temperature	66 °C	40 °C	68 °C	43 °C
GPU Core Voltage	0.887 V	0.837 V	1.050 V	0.851 V
GPU Power	82.250 W	25.010 W	124.131 W	31.777 W
GPU Clock	653.7 MHz	324.0 MHz	875.7 MHz	358.5 MHz
GPU Memory Clock	1,252.8 MHz	162.0 MHz	1,252.8 MHz	287.3 MHz
GPU Video Clock	540.0 MHz	405.0 MHz	540.0 MHz	420.5 MHz
GPU Effective Clock	653.7 MHz	324.0 MHz	875.7 MHz	358.5 MHz
GPU Core Load	51.0 %	0.0 %	73.0 %	8.9 %
GPU Memory Controller L...	25.0 %	0.0 %	43.0 %	6.5 %
GPU Video Engine Load	24.0 %	0.0 %	57.0 %	11.4 %
GPU Bus Load	1.0 %	0.0 %	11.0 %	0.6 %
GPU Memory Usage	11.0 %	4.7 %	11.1 %	5.9 %
GPU D3D Usages	0.0 %	0.0 %	65.9 %	
Total GPU Power (normal...	55.2 %	16.8 %	83.3 %	21.3 %
Total GPU Power [% of T...	55.2 %	16.8 %	83.3 %	21.3 %
GPU Memory Allocated	1,266 MB	537 MB	1,281 MB	681 MB
GPU D3D Memory Dedicat...	1,223 MB	493 MB	1,239 MB	638 MB
GPU D3D Memory Dynamic	82 MB	33 MB	123 MB	52 MB
PCIe Link Speed	5.0 GT/s	5.0 GT/s	5.0 GT/s	5.0 GT/s
GPU [#1]: NVIDIA Tesla ...				
GPU Voltage	0.900 V	0.856 V	1.069 V	0.870 V
GPU Current	1.074 A	1.072 A	1.078 A	1.075 A
GPU VRM Power Out (PC...	0.962 W	0.914 W	1.135 W	0.932 W

Task Manager Window:

GPU vAndu.tech NVIDIA Tesla K8

- 3D: 50% Copy
- Video Encode: 25%
- Video Decode: 0
- Dedicated GPU memory usage: 11.5 C
- Shared GPU memory usage: 10.0 C

GAMING: VMWARE HORIZON CLIENT: Fixing the mouse cursor

The screenshot displays the VMware Horizon Client interface. The main window shows the game Overwatch, with a yellow prompt that reads "PRESS H TO CHANGE HERO". The game's HUD shows a health bar at 200/200 and a shield at 2%. The system monitoring windows are open on the right side of the screen.

Sensors Status

Sensor	Current	Minimum	Maximum	Average
GPU [#1]: NVIDIA Tesla ...				
GPU Temperature	65 °C	40 °C	68 °C	43 °C
GPU Core Voltage	0.862 V	0.837 V	1.050 V	0.851 V
GPU Power	81.899 W	25.010 W	124.131 W	31.813 W
GPU Clock	601.2 MHz	324.0 MHz	875.7 MHz	358.7 MHz
GPU Memory Clock	1,252.8 MHz	162.0 MHz	1,252.8 MHz	288.0 MHz
GPU Video Clock	540.0 MHz	405.0 MHz	540.0 MHz	420.6 MHz
GPU Effective Clock	601.2 MHz	324.0 MHz	875.7 MHz	358.7 MHz
GPU Core Load	58.0 %	0.0 %	73.0 %	9.0 %
GPU Memory Controller L...	27.0 %	0.0 %	43.0 %	6.5 %
GPU Video Engine Load	29.0 %	0.0 %	57.0 %	11.4 %
GPU Bus Load	2.0 %	0.0 %	11.0 %	0.6 %
GPU Memory Usage	11.0 %	4.7 %	11.1 %	5.9 %
GPU D3D Usages	0.0 %	0.0 %	65.9 %	21.3 %
Total GPU Power (normal...	55.0 %	16.8 %	83.3 %	21.4 %
Total GPU Power (% of T...	55.0 %	16.8 %	83.3 %	21.3 %
GPU Memory Allocated	1,266 MB	537 MB	1,281 MB	681 MB
GPU D3D Memory Dedica...	1,224 MB	493 MB	1,239 MB	638 MB
GPU D3D Memory Dynamic	82 MB	33 MB	123 MB	52 MB
PCIe Link Speed	5.0 GT/s	5.0 GT/s	5.0 GT/s	5.0 GT/s
GPU [#1]: NVIDIA Tesla ...				
GPU Voltage	0.875 V	0.856 V	1.069 V	0.870 V
GPU Current	1.076 A	1.072 A	1.078 A	1.075 A
GPU VRM Power Out (PO...	0.937 W	0.914 W	1.135 W	0.932 W

Task Manager - GPU

GPU	3D	Copy	Video Encode	Video Decode	Dedicated GPU memory usage	Shared GPU memory usage
NVIDIA Tesla K8	55%	0	28%	0	11.5 G	10.0 G

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GAMING: VMWARE HORIZON CLIENT: Fixing the mouse cursor

The image shows a first-person view from the game Overwatch, played within a VMware Horizon Client. The player is using the character Soldier: 76. The game interface includes a health bar (500/500), a shield (1600/1600), and a shield percentage (29%). A message "ELIMINATED TRAINING BOT" is visible on the ground. In the background, a training bot is visible. The system monitoring overlays include:

- HWINFO64 v7.26-4000 - Sensors Status:** A table showing various sensors and their current, minimum, maximum, and average values.
- Task Manager - Performance - GPU:** A window showing GPU performance metrics for an NVIDIA Tesla K80.

Sensor	Current	Minimum	Maximum	Average
GPU [#1]: NVIDIA Tesla ...				
GPU Temperature	69 °C	40 °C	69 °C	43 °C
GPU Core Voltage	1.050 V	0.837 V	1.050 V	0.852 V
GPU Power	107.513 W	25.010 W	124.131 W	32.045 W
GPU Clock	875.7 MHz	324.0 MHz	875.7 MHz	360.2 MHz
GPU Memory Clock	1,252.8 MHz	162.0 MHz	1,252.8 MHz	290.9 MHz
GPU Video Clock	540.0 MHz	405.0 MHz	540.0 MHz	420.9 MHz
GPU Effective Clock	875.7 MHz	324.0 MHz	875.7 MHz	360.2 MHz
GPU Core Load	51.0 %	0.0 %	75.0 %	9.1 %
GPU Memory Controller L...	28.0 %	0.0 %	43.0 %	6.6 %
GPU Video Engine Load	33.0 %	0.0 %	57.0 %	11.5 %
GPU Bus Load	3.0 %	0.0 %	11.0 %	0.6 %
GPU Memory Usage	10.9 %	4.7 %	11.1 %	5.9 %
GPU D3D Usages	0.0 %	0.0 %	65.9 %	
Total GPU Power (norma...	70.1 %	16.8 %	83.3 %	21.5 %
Total GPU Power (% of T...	70.1 %	16.8 %	83.3 %	21.5 %
GPU Memory Allocated	1,260 MB	537 MB	1,281 MB	683 MB
GPU D3D Memory Dedicat...	1,218 MB	493 MB	1,239 MB	640 MB
GPU D3D Memory Dynamic	83 MB	33 MB	123 MB	53 MB
PCIe Link Speed	5.0 GT/s	5.0 GT/s	5.0 GT/s	5.0 GT/s
GPU [#1]: NVIDIA Tesla ...				
GPU Voltage	1.069 V	0.856 V	1.069 V	0.870 V
GPU Current	1.074 A	1.072 A	1.078 A	1.075 A
GPU VRM Power Out (PO...	1.143 W	0.914 W	1.143 W	0.933 W

Task Manager - Performance - GPU:

Metric	Value
CPU	14% 1.88
Memory	9.0/20.0
Disk 0 (SSD)	0%
Disk 1 (SSD)	0%
Ethernet	22.3 R
GPU 0 (NVIDIA)	48%

GPU Performance Summary:

- 3D: 48% Copy
- Video Encode: 26%
- Video Decode: 0%
- Dedicated GPU memory usage: 11.5 C
- Shared GPU memory usage: 10.0 C

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GAMING: Need for Speed Payback (max. graphics)

VMware vSphere 7 U3 + Horizon + Nvidia Tesla K80

The screenshot displays a Windows desktop environment with the game *Need for Speed Payback* running in a virtual machine. The game window shows a first-person perspective of a car driving on a road. Overlaid on the desktop are three windows:

- HWiNFO64 v7.26-4800 - Sensors Status:** A window showing detailed GPU sensor data for the NVIDIA Tesla K80. The data is as follows:

Sensor	Current	Minimum	Maximum	Average
GPU [#1]: NVIDIA Tesla K80				
GPU Temperature	83 °C	44 °C	83 °C	68 °C
GPU Core Voltage	1.050 V	0.837 V	1.050 V	1.018 V
GPU Power	139.472 W	26.015 W	150.230 W	120.963 W
GPU Clock	875.7 MHz	324.0 MHz	875.7 MHz	799.5 MHz
GPU Memory Clock	1,252.8 MHz	162.0 MHz	1,252.8 MHz	1,116.4 MHz
GPU Video Clock	540.0 MHz	405.0 MHz	540.0 MHz	523.1 MHz
GPU Effective Clock	875.7 MHz	324.0 MHz	875.7 MHz	799.5 MHz
GPU Core Load	98.0 %	0.0 %	99.0 %	75.6 %
GPU Memory Controller Load	31.0 %	0.0 %	41.0 %	27.3 %
GPU Video Engine Load	24.0 %	0.0 %	39.0 %	21.7 %
GPU Bus Load	10.0 %	0.0 %	10.0 %	4.4 %
GPU Memory Usage	19.7 %	3.7 %	19.8 %	11.9 %
GPU D3D Usages	0.0 %	0.0 %	100.0 %	
Total GPU Power (normal)	93.6 %	17.5 %	100.8 %	80.8 %
Total GPU Power [% of Total]	93.6 %	17.5 %	100.8 %	80.8 %
GPU Memory Allocated	2,268 MB	423 MB	2,277 MB	1,369 MB
GPU D3D Memory Dedicated	2,227 MB	375 MB	2,235 MB	1,325 MB
GPU D3D Memory Dynamic	304 MB	77 MB	305 MB	176 MB
PCIe Link Speed	5.0 GT/s	5.0 GT/s	5.0 GT/s	5.0 GT/s
- Task Manager:** A window showing system performance metrics. The GPU section is highlighted, showing 100% utilization for the vAndu.tech IA Tesla K80. Other metrics include CPU at 46%, Memory at 9.5/20.0 GB, and Disk usage at 0%.
- Windows Task Manager GPU Performance Monitor:** A window showing detailed GPU performance metrics for the vAndu.tech IA Tesla K80. The GPU is running at 100% utilization. Other metrics include 3D utilization at 100%, Video Encode at 24%, and Video Decode at 0%. Dedicated GPU memory usage is 11.5 GB, and Shared GPU memory usage is 10.0 GB.

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GAMING: Need for Speed Payback (max. graphics) VMware vSphere 7 U3 + Horizon + Nvidia Tesla K80

The screenshot shows the game *Need for Speed Payback* running on a virtual machine. The game view shows a white classic car driving on a road with power lines and a sign that says "AHEAD SIGNAL". A speedometer in the bottom right corner shows 53 MPH. A mini-map is visible in the bottom left corner.

Overlaid on the game are two performance monitoring windows:

- GPU Sensor Window:** Displays real-time GPU metrics for the NVIDIA Tesla K80. The data is as follows:

Sensor	Current	Minimum	Maximum	Average
GPU Temperature	88 °C	44 °C	89 °C	81 °C
GPU Core Voltage	1.050 V	0.837 V	1.050 V	1.039 V
GPU Power	134.713 W	26.015 W	150.230 W	131.392 W
GPU Clock	875.7 MHz	324.0 MHz	875.7 MHz	848.8 MHz
GPU Memory Clock	1,252.8 MHz	162.0 MHz	1,252.8 MHz	1,204.7 MHz
GPU Video Clock	540.0 MHz	405.0 MHz	540.0 MHz	534.0 MHz
GPU Effective Clock	875.7 MHz	324.0 MHz	875.7 MHz	765.1 MHz
GPU Core Load	99.0 %	0.0 %	99.0 %	91.3 %
GPU Memory Controller L...	27.0 %	0.0 %	41.0 %	29.2 %
GPU Video Engine Load	26.0 %	0.0 %	39.0 %	22.3 %
GPU Bus Load	5.0 %	0.0 %	10.0 %	5.7 %
GPU Memory Usage	22.0 %	3.7 %	22.3 %	17.8 %
GPU D:3D Usages	0.0 %	0.0 %	100.0 %	0.0 %
Total GPU Power (normali...	88.2 %	17.5 %	100.8 %	88.1 %
Total GPU Power [% of T...	88.2 %	17.5 %	100.8 %	88.1 %
GPU Memory Allocated	2,532 MB	423 MB	2,567 MB	2,048 MB
GPU D:3D Memory Dedicat...	2,491 MB	375 MB	2,525 MB	2,004 MB
GPU D:3D Memory Dynamic	367 MB	77 MB	385 MB	283 MB
PCIe Link Speed	5.0 GT/s	5.0 GT/s	5.0 GT/s	5.0 GT/s
- Task Manager Performance Window:** Shows system-wide performance for the vAndu.tech VM. The GPU section is highlighted, showing 98% utilization for 3D rendering. Other metrics include CPU at 34%, Memory at 9.6/20.0 GB, and Disk usage at 0%.

GAMING: Apex Legends (max. graphics) VMware vSphere 7 U3 + Horizon + Nvidia Tesla K80



GAMING: Deus Ex Mankind Divided (max. graphics) VMware vSphere 7 U3 + Horizon + Nvidia Tesla K80

The screenshot displays the game Deus Ex Mankind Divided running in a virtual machine. The game window shows a first-person view of a character in a dark, industrial environment. A text overlay in the center of the game screen reads "Press [SHIFT] to sprint." The game's HUD is visible in the bottom right corner, showing a "RELOAD" button, a "REVOLVER" with 18 rounds, and a "FRAG" button with 2 rounds. A health bar is at the bottom left, and a mini-map is in the top right.

Overlaid on the right side of the screen are two performance monitoring windows:

- HWINFO64 v7.26-4800 - Sensors Status**: A table showing various GPU metrics for the NVIDIA Tesla K80.
- Task Manager**: A window showing system performance, including CPU usage (7%), memory usage (7.5/20.0 GB), and GPU usage (100%).

Sensor	Current	Minimum	Maximum	Average
GPU [#1]: NVIDIA Tesla K80				
GPU Temperature	72 °C	44 °C	88 °C	75 °C
GPU Core Voltage	1.050 V	0.825 V	1.050 V	0.981 V
GPU Power	144.448 W	25.915 W	150.230 W	106.502 W
GPU Clock	875.7 MHz	324.0 MHz	875.7 MHz	744.2 MHz
GPU Memory Clock	1,252.8 MHz	162.0 MHz	1,252.8 MHz	1,125.0 MHz
GPU Video Clock	540.0 MHz	405.0 MHz	540.0 MHz	524.2 MHz
GPU Effective Clock	875.7 MHz	324.0 MHz	875.7 MHz	700.7 MHz
GPU Core Load	100.0 %	0.0 %	100.0 %	64.6 %
GPU Memory Controller L...	74.0 %	0.0 %	87.0 %	27.1 %
GPU Video Engine Load	13.0 %	0.0 %	62.0 %	20.6 %
GPU Bus Load	2.0 %	0.0 %	10.0 %	2.8 %
GPU Memory Usage	56.1 %	3.5 %	70.2 %	24.6 %
GPU D3D Usages				
GPU D3D Usages	0.0 %	0.0 %	100.0 %	100.0 %
Total GPU Power (normal...	96.9 %	17.4 %	100.8 %	71.5 %
Total GPU Power (% of T...	96.9 %	17.4 %	100.8 %	71.5 %
GPU Memory Allocated	6,464 MB	409 MB	7,897 MB	2,829 MB
GPU D3D Memory Dedicat...	6,427 MB	362 MB	8,061 MB	2,787 MB
GPU D3D Memory Dynamic	186 MB	47 MB	385 MB	199 MB
PCIe Link Speed	5.0 GT/s	5.0 GT/s	5.0 GT/s	5.0 GT/s
GPU [#2]: NVIDIA Tesla K80				
GPU Voltage	1.056 V	0.844 V	1.069 V	0.989 V
GPU Current	1.074 A	1.072 A	1.076 A	1.075 A
GPU VRM Power Out (PO...	1.123 W	0.901 W	1.145 W	1.059 W

GAMING: Deus Ex Breach (max. graphics) VMware vSphere 7 U3 + Horizon + Nvidia Tesla K80

The screenshot displays a Windows desktop environment. The desktop background is a blue abstract design. On the left side, there is a taskbar with various application icons including Recycle Bin, Overwatch, Microsoft Edge, EA, Firefox, VMware Horizon Player, Need for Speed, Battlefield, Deus Ex: Breach, Apex Legends, Steam, Deus Ex: Breach, and Rings of Elysium.

The central window is the game "Deus Ex: Breach v1.15 build 758.0". The game interface shows a first-person view of a character in a futuristic, industrial setting. The top of the screen displays a timer at 0:22.01, a health bar, and an objective "OBJECTIVE 10 TB". A mini-map is visible in the top right corner. The bottom right corner shows a score of 1.47 x 2426 and a "Data Extraction +900" notification. A health bar at the bottom left is at 100.

On the right side, there are two windows. The top window is "HWINFO64 v7.26-4800 - Sensors Status". It displays a table of sensor data for two NVIDIA Tesla K80 GPUs.

Sensor	Current	Minimum	Maximum	Average
GPU [#1]: NVIDIA Tesla K80				
GPU Temperature	76 °C	44 °C	89 °C	76 °C
GPU Core Voltage	1.050 V	0.825 V	1.050 V	0.984 V
GPU Power	142.865 W	25.915 W	150.761 W	107.571 W
GPU Clock	875.7 MHz	324.0 MHz	875.7 MHz	751.9 MHz
GPU Memory Clock	1,252.8 MHz	162.0 MHz	1,252.8 MHz	1,140.4 MHz
GPU Video Clock	540.0 MHz	405.0 MHz	540.0 MHz	526.1 MHz
GPU Effective Clock	875.7 MHz	324.0 MHz	875.7 MHz	718.3 MHz
GPU Core Load	99.0 %	0.0 %	100.0 %	64.3 %
GPU Memory Controller L...	42.0 %	0.0 %	92.0 %	31.8 %
GPU Video Engine Load	39.0 %	0.0 %	62.0 %	19.8 %
GPU Bus Load	2.0 %	0.0 %	11.0 %	2.4 %
GPU Memory Usage	13.6 %	3.5 %	76.4 %	27.0 %
GPU D3D Usages	0.0 %	0.0 %	100.0 %	
Total GPU Power (norma...	95.9 %	17.4 %	101.2 %	72.2 %
Total GPU Power [% of T...	95.9 %	17.4 %	101.2 %	72.2 %
GPU Memory Allocated	1,567 MB	409 MB	8,799 MB	3,105 MB
GPU D3D Memory Dedicat...	1,523 MB	362 MB	8,763 MB	3,064 MB
GPU D3D Memory Dynamic	118 MB	47 MB	385 MB	180 MB
PCIe Link Speed	5.0 GT/s	5.0 GT/s	5.0 GT/s	5.0 GT/s
GPU [#2]: NVIDIA Tesla K80				
GPU Voltage	1.050 V	0.844 V	1.069 V	0.992 V
GPU Current	1.074 A	1.072 A	1.076 A	1.075 A
GPU VRM Power Out (PO...	1.125 W	0.901 W	1.145 W	1.062 W

The bottom window is "Task Manager" showing the "Performance" tab. It displays various system metrics: CPU at 13%, Memory at 5.5/20.0 GB, Disk 0 (SSD) at 0%, Disk 1 (SSD) at 1%, Ethernet at 16.8 R/s, and GPU 0 (NVIDIA) at 99%. The GPU section shows a graph of GPU usage and a table of memory usage.

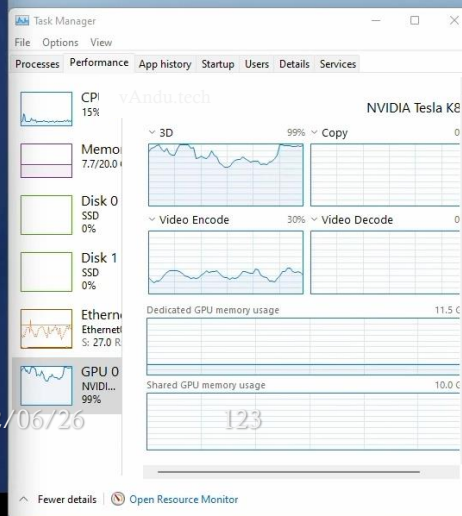
GPU	Dedicated GPU memory usage	Shared GPU memory usage
GPU 0 (NVIDIA)	11.5 GB	10.0 GB

The date and time shown in the Task Manager window are 22/06/26 and 12:22.

GAMING: Overwatch (max. graphics) VMware vSphere 7 U3 + Horizon + Nvidia Tesla K80



Sensor	Current	Minimum	Maximum	Average
GPU [#1]: NVIDIA Tesla ...				
GPU Temperature	89 °C	44 °C	89 °C	76 °C
GPU Core Voltage	1.050 V	0.825 V	1.050 V	0.987 V
GPU Power	135.088 W	25.915 W	150.761 W	108.850 W
GPU Clock	875.7 MHz	324.0 MHz	875.7 MHz	761.5 MHz
GPU Memory Clock	1,252.8 MHz	162.0 MHz	1,252.8 MHz	1,155.8 MHz
GPU Video Clock	540.0 MHz	405.0 MHz	540.0 MHz	528.0 MHz
GPU Effective Clock	437.8 MHz	324.0 MHz	875.7 MHz	735.3 MHz
GPU Core Load	99.9 %	0.0 %	100.0 %	62.9 %
GPU Memory Controller L...	44.0 %	0.0 %	92.0 %	31.2 %
GPU Video Engine Load	29.0 %	0.0 %	62.0 %	21.5 %
GPU Bus Load	4.0 %	0.0 %	11.0 %	2.2 %
GPU Memory Usage	20.4 %	3.5 %	76.4 %	23.8 %
GPU D3D Usages	0.0 %	0.0 %	100.0 %	0.0 %
Total GPU Power (norma...	90.7 %	17.4 %	101.2 %	73.1 %
Total GPU Power [% of T...	90.7 %	17.4 %	101.2 %	73.1 %
GPU Memory Allocated	2,353 MB	409 MB	8,799 MB	2,747 MB
GPU D3D Memory Dedica...	2,311 MB	362 MB	8,763 MB	2,705 MB
GPU D3D Memory Dynamic	97 MB	47 MB	385 MB	162 MB
PCIe Link Speed	5.0 GT/s	5.0 GT/s	5.0 GT/s	5.0 GT/s
GPU [#2]: NVIDIA Tesla ...				
GPU Voltage	1.056 V	0.844 V	1.069 V	0.996 V
GPU Current	1.074 A	1.072 A	1.076 A	1.075 A
GPU VRM Power Out (PO...	1.127 W	0.901 W	1.145 W	1.065 W



GAMING: Overwatch (max. graphics) VMware vSphere 7 U3 + Horizon + Nvidia Tesla K80

The screenshot shows the Overwatch game running in a virtual machine. The game is in progress, with the player character, a tank, positioned in a blue barrier field. The game interface shows a score of 1540, a health bar at 500/500, and a shield at 1540/1600. The game is running on a VMware vSphere 7 U3 environment with Horizon and Nvidia Tesla K80 graphics. The performance monitoring overlays include:

- Sensors Status:** A table showing various GPU metrics for the NVIDIA Tesla K80.
- Task Manager:** A window showing system performance metrics for the GPU.

Sensor	Current	Minimum	Maximum	Average
GPU [#1]: NVIDIA Tesla ...				
GPU Temperature	89 °C	44 °C	89 °C	77 °C
GPU Core Voltage	1.050 V	0.825 V	1.050 V	0.990 V
GPU Power	138.490 W	25.915 W	150.761 W	110.022 W
GPU Clock	875.7 MHz	324.0 MHz	875.7 MHz	766.5 MHz
GPU Memory Clock	1,252.8 MHz	162.0 MHz	1,252.8 MHz	1,160.1 MHz
GPU Video Clock	540.0 MHz	405.0 MHz	540.0 MHz	528.5 MHz
GPU Effective Clock	437.8 MHz	324.0 MHz	875.7 MHz	729.1 MHz
GPU Core Load	99.0 %	0.0 %	100.0 %	64.4 %
GPU Memory Controller L...	47.0 %	0.0 %	92.0 %	31.7 %
GPU Video Engine Load	18.0 %	0.0 %	62.0 %	21.9 %
GPU Bus Load	4.0 %	0.0 %	11.0 %	2.3 %
GPU Memory Usage	21.5 %	3.5 %	76.4 %	23.7 %
GPU D3D Usages	0.0 %	0.0 %	100.0 %	0.0 %
Total GPU Power (norma...	92.9 %	17.4 %	101.2 %	73.9 %
Total GPU Power [% of T...	92.9 %	17.4 %	101.2 %	73.8 %
GPU Memory Allocated	2,480 MB	409 MB	8,799 MB	2,735 MB
GPU D3D Memory Dedicat...	2,437 MB	362 MB	8,763 MB	2,693 MB
GPU D3D Memory Dynamic	102 MB	47 MB	385 MB	159 MB
PCIe Link Speed	5.0 GT/s	5.0 GT/s	5.0 GT/s	5.0 GT/s

Process	CPU	GPU
CPU	14% 1.8G	
GPU		99% 1.8G

Benchmark: Heaven Benchmark 4.0 (max. graphics) VMware vSphere 7 U3 + Horizon + Nvidia Tesla K80

The screenshot displays a Windows desktop environment with three main windows open:

- Unigine Heaven Benchmark 4.0 Basic (Direct3D11):** Shows the benchmark in progress. The FPS is 47. GPU temperature is 89°C. Other metrics include GPU Core Voltage (1.025V), GPU Power (139.562W), GPU Clock (862.2MHz), GPU Memory Clock (1,252.8MHz), GPU Video Clock (540.0MHz), GPU Effective Clock (862.2MHz), GPU Core Load (99.0%), GPU Memory Controller Load (46.0%), GPU Video Engine Load (24.0%), GPU Bus Load (2.0%), GPU Memory Usage (12.3%), GPU D3D Usages (0.0%), Total GPU Power (93.7%), Total GPU Power [% of TDP] (16.8%), GPU Memory Allocated (1,415MB), GPU D3D Memory Dynamic (1,371MB), and PCIe Link Speed (5.0).
- HWINFO64 v7.26-4800 - Sensors Status:** Provides a detailed table of GPU sensor data for the NVIDIA Tesla K80. The table includes columns for Sensor, Current, Minimum, Maximum, and Average values.
- Task Manager:** Shows the GPU usage at 100%.

Sensor	Current	Minimum	Maximum	Average
GPU (#1): NVIDIA Tesla K80				
GPU Temperature	88 °C	39 °C	89 °C	68 °C
GPU Core Voltage	1.025 V	0.825 V	1.050 V	0.956 V
GPU Power	139.562 W	25.014 W	150.761 W	89.909 W
GPU Clock	862.2 MHz	324.0 MHz	875.7 MHz	655.0 MHz
GPU Memory Clock	1,252.8 MHz	162.0 MHz	1,252.8 MHz	896.6 MHz
GPU Video Clock	540.0 MHz	405.0 MHz	540.0 MHz	465.9 MHz
GPU Effective Clock	862.2 MHz	324.0 MHz	875.7 MHz	613.6 MHz
GPU Core Load	99.0 %	0.0 %	100.0 %	50.3 %
GPU Memory Controller Load	46.0 %	0.0 %	92.0 %	24.9 %
GPU Video Engine Load	24.0 %	0.0 %	62.0 %	18.1 %
GPU Bus Load	2.0 %	0.0 %	14.0 %	1.9 %
GPU Memory Usage	12.3 %	3.5 %	76.4 %	17.3 %
GPU D3D Usages	0.0 %	0.0 %	100.0 %	0.0 %
Total GPU Power (normal...)	93.7 %	16.8 %	101.2 %	60.4 %
Total GPU Power [% of TDP]	93.7 %	16.8 %	101.2 %	60.4 %
GPU Memory Allocated	1,415 MB	409 MB	8,799 MB	1,996 MB
GPU D3D Memory Dynamic	1,371 MB	362 MB	8,763 MB	1,957 MB
GPU Memory Allocated	Total amount of allocated GPU memory.			
GPU Voltage	1.025 V	0.844 V	1.069 V	0.966 V
GPU Current	1.074 A	1.072 A	1.078 A	1.075 A
GPU VRM Power Out (PC...	1.096 W	0.901 W	1.145 W	1.024 W

Benchmark: Heaven Benchmark 4.0 (max. graphics) VMware vSphere 7 U3 + Horizon + Nvidia Tesla K80

The screenshot displays the Heaven Benchmark 4.0 Basic (Direct3D11) interface. The main window shows a 3D scene of a medieval town at night. The top right corner of the benchmark window displays the following performance metrics:

- FPS: 47
- Tesla K80
- Graphics: 875 MHz
- Memory: 2505 MHz
- Temperature: 89 °C

Overlaid on the benchmark are two system monitoring windows:

- HWINFO64 v7.26-4800 - Sensors Status:** A table showing various GPU sensors for the NVIDIA Tesla K80.
- Task Manager - Performance:** A window showing system performance metrics, including CPU (7% at 1.80 GHz), Memory (4.9/20.0 GB), and GPU (100% utilization).

Sensor	Current	Minimum	Maximum	Average
GPU [#1]: NVIDIA Tesla K80				
GPU Temperature	89 °C	39 °C	89 °C	68 °C
GPU Core Voltage	1.050 V	0.825 V	1.050 V	0.958 V
GPU Power	140.454 W	25.014 W	150.761 W	91.252 W
GPU Clock	875.7 MHz	324.0 MHz	875.7 MHz	660.9 MHz
GPU Memory Clock	1,252.8 MHz	162.0 MHz	1,252.8 MHz	906.4 MHz
GPU Video Clock	540.0 MHz	405.0 MHz	540.0 MHz	497.1 MHz
GPU Effective Clock	437.8 MHz	324.0 MHz	875.7 MHz	613.9 MHz
GPU Core Load	99.0 %	0.0 %	100.0 %	51.6 %
GPU Memory Controller L...	49.0 %	0.0 %	92.0 %	25.5 %
GPU Video Engine Load	23.0 %	0.0 %	62.0 %	18.2 %
GPU Bus Load	3.0 %	0.0 %	14.0 %	1.9 %
GPU Memory Usage	11.3 %	3.5 %	76.4 %	17.2 %
GPU D3D Usages				
Total GPU Power (normal...	93.5 %	16.8 %	101.2 %	61.3 %
Total GPU Power [% of T...	93.5 %	16.8 %	101.2 %	61.3 %
GPU Memory Allocated	1,305 MB	409 MB	8,799 MB	1,979 MB
GPU D3D Memory Dedicat...	1,261 MB	362 MB	8,763 MB	1,837 MB
GPU D3D Memory Dynamic				
PCIe Link Speed	5.0			
GPU [#2]: NVIDIA Tesla K80				
GPU Voltage	1.056 V	0.844 V	1.069 V	0.968 V
GPU Current	1.074 A	1.072 A	1.078 A	1.075 A
GPU VRM Power Out (PO...	1.127 W	0.901 W	1.145 W	1.036 W

The Task Manager Performance window shows the following GPU details for vAndu.tech:

- GPU: NVIDIA Tesla K80
- 3D: 100% Copy
- Video Encode: 23%
- Video Decode: 0%
- Dedicated GPU memory usage: 11.5 GB
- Shared GPU memory usage: 10.0 GB
- Utilization: 100%
- Dedicated GPU memory: 1.2/11.5 GB
- GPU Memory: 1.3/21.5 GB
- Shared GPU memory: 0.1/10.0 GB

Benchmark: Heaven Benchmark 4.0 (max. graphics) VMware vSphere 7 U3 + Horizon + Nvidia Tesla K80

The screenshot displays the Unigine Heaven Benchmark 4.0 results window over a game scene. The results show a score of 1035 and an FPS of 41.1. System and settings information are also visible. In the background, the Windows Task Manager Performance tab is open, showing GPU usage at 100% for the NVIDIA Tesla K80. The GPU details window is also visible, showing 100% utilization and 1.4/11.5 GB of dedicated GPU memory usage.

Unigine Heaven Benchmark 4.0 Results:

- FPS: 41.1
- Score: 1035
- Min FPS: 18.8
- Max FPS: 110.2

System Information:

- Platform: Windows NT 6.2 (build 9200) 64bit
- CPU model: 1799MHz MMX SSE SSE2 SSE3 SSSE3 SSE41 SSE42 AVX HTT (1799MHz) x20
- GPU model: VMware Horizon Indirect Display Driver 1.4.16.0/NVIDIA Tesla K80 30.0.14.7347/VMware SVGA 3D 8.17.3.1 (4095MB) x1

Settings:

- Render: Direct3D11
- Mode: 1600x900 8xAA windowed
- Preset: Extreme

Task Manager Performance - GPU (NVIDIA Tesla K80):

- 3D: 100% Copy
- Video Encode: 21% Video Decode: 0
- Dedicated GPU memory usage: 11.5 GB
- Shared GPU memory usage: 10.0 GB
- Utilization: 100%
- Dedicated GPU memory: 1.4/11.5 GB
- GPU Memory: 1.4/21.5 GB
- Shared GPU memory: 0.1/10.0 GB

Benchmark: 3DMark- Time Spy VMware vSphere 7 U3 + Horizon + Nvidia Tesla K80



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Benchmark: 3DMark- Time Spy VMware vSphere 7 U3 + Horizon + Nvidia Tesla K80



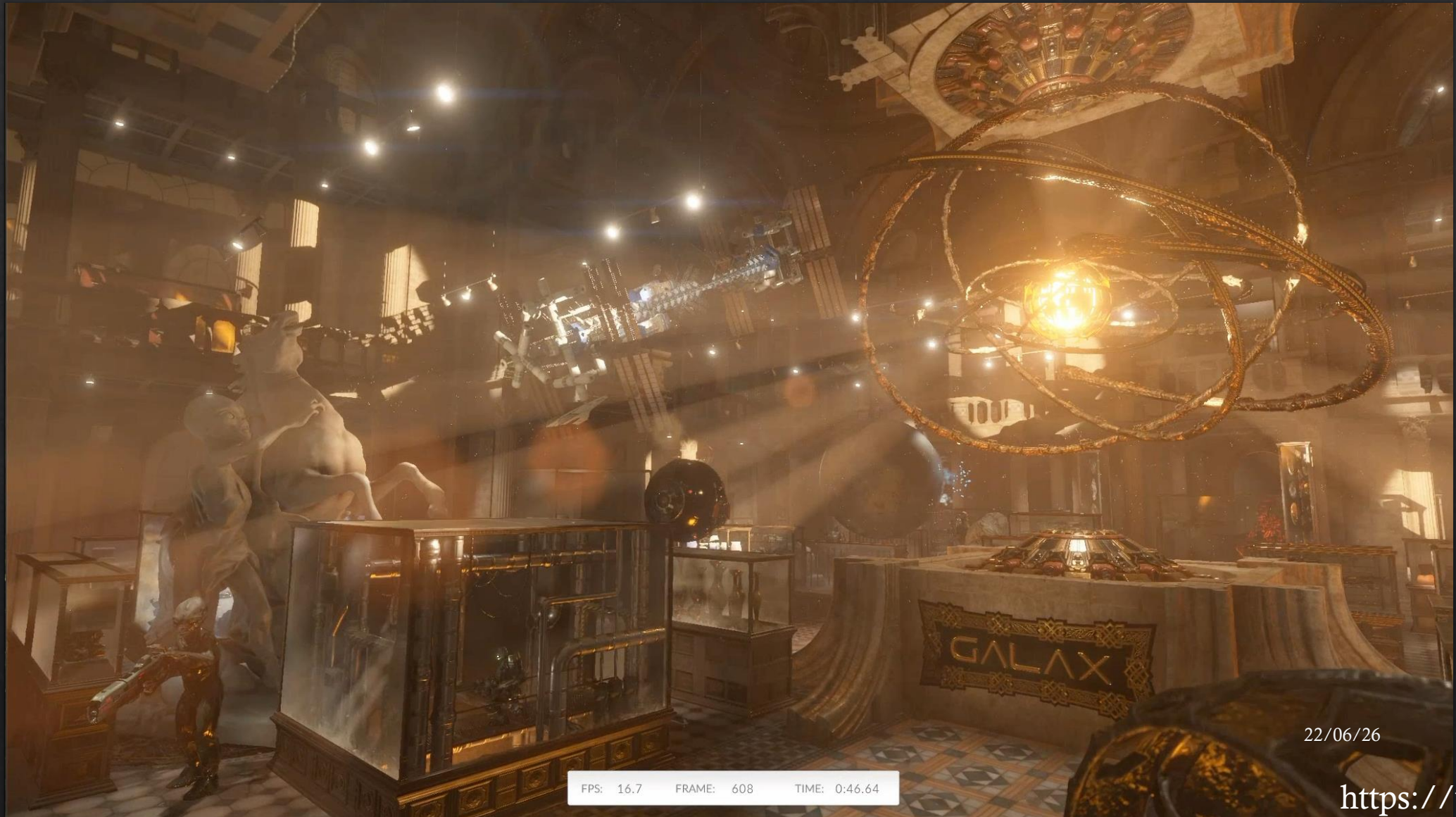
FPS: 15.2 FRAME: 520 TIME: 0:34.57

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Benchmark: 3DMark- Time Spy VMware vSphere 7 U3 + Horizon + Nvidia Tesla K80



FPS: 16.7 FRAME: 608 TIME: 0:46.64

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Benchmark: 3DMark- Time Spy

VMware vSphere 7 U3 + Horizon + Nvidia Tesla K80

The image displays a 3DMark Basic Edition benchmark result for a system with an NVIDIA Tesla K80 GPU. The main score is 2742, with a Graphics score of 2430 and a CPU score of 10069. The system information shows the GPU is an NVIDIA Tesla K80, the display is \\.\DISPLAY10 (2130 x 1333, 100% DPI scaling), and the GUI is v2.22.7359 s64. The benchmark was run on 2022-06-26 at 08:17 +03:00.

System information:

GPU #1	NVIDIA Tesla K80	CPU #1		Time	2022-06-26 08:17 +03:00
Display #1	\\.\DISPLAY10 (2130 x 1333, 100% DPI scaling)	CPU #2		SystemInfo	v5.50.1092
GPU #2	VMware SVGA 3D	GUI	v2.22.7359 s64		

Settings used:

GPU	NVIDIA Tesla K80
Display	\\.\DISPLAY10 Generic Non-DeP Monitor

Monitoring graph showing Frequency (MHz) over time (00:00 to 05:00). The graph shows a significant spike in CPU Clock Frequency (MHz) during the Graphics test phase, reaching approximately 1200 MHz.

HWINFO64 v7.26-4900 - Sensors Status:

Sensor	Current	Minimum	Maximum	Average
GPU [#1]: NVIDIA Tesla ...				
GPU Temperature	48 °C	39 °C	89 °C	69 °C
GPU Core Voltage	0.837 V	0.825 V	1.050 V	0.954 V
GPU Power	26.825 W	25.014 W	151.513 W	91.077 W
GPU Clock	324.0 MHz	324.0 MHz	875.7 MHz	654.8 MHz
GPU Memory Clock	162.0 MHz	162.0 MHz	1,252.8 MHz	898.4 MHz
GPU Video Clock	405.0 MHz	405.0 MHz	540.0 MHz	496.1 MHz
GPU Effective Clock	324.0 MHz	324.0 MHz	875.7 MHz	600.8 MHz
GPU Core Load	13.0 %	0.0 %	100.0 %	52.0 %
GPU Memory Controller L...	9.0 %	0.0 %	92.0 %	25.1 %
GPU Video Engine Load	11.0 %	0.0 %	62.0 %	18.1 %
GPU Bus Load	2.0 %	0.0 %	20.0 %	1.9 %
GPU Memory Usage	5.2 %	3.5 %	76.4 %	15.9 %
GPU D3D Usages	0.0 %	0.0 %	100.0 %	
Total GPU Power (normal...	18.0 %	16.8 %	101.7 %	61.2 %
Total GPU Power [% of T...	18.0 %	16.8 %	101.7 %	61.1 %
GPU Memory Allocated	602 MB	409 MB	8,799 MB	1,826 MB
GPU D3D Memory Dedicat...	596 MB	362 MB	8,763 MB	1,783 MB
GPU D3D Memory Dynamic	90 MB	16 MB	385 MB	107 MB
PCIe Link Speed	5.0 GT/s	5.0 GT/s	5.0 GT/s	5.0 GT/s

Task Manager Performance tab showing GPU utilization at 30% and 0.5/11.5 GB of dedicated GPU memory used.

Benchmark: 3DMark- Fire Strike VMware vSphere 7 U3 + Horizon + Nvidia Tesla K80



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Benchmark: 3DMark- Fire Strike

VMware vSphere 7 U3 + Horizon + Nvidia Tesla K80



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Benchmark: 3DMark- Fire Strike

VMware vSphere 7 U3 + Horizon + Nvidia Tesla K80



Benchmark: 3DMark- Fire Strike VMware vSphere 7 U3 + Horizon + Nvidia Tesla K80

The screenshot displays the 3DMark Basic Edition interface showing benchmark results for a VMware SVGA 3D environment using an NVIDIA Tesla K80 GPU. The main score is 7211, with sub-scores for Graphics (7635), Physics (16565), and Combined (3186). A monitoring graph shows various system metrics over time, and system information is provided at the bottom.

3DMark Basic Edition Results:

- Fire Strike Score: 7 211
- Graphics score: 7 635
- Physics score: 16 565
- Combined score: 3 186
- Estimated game performance: This feature is not available in 3DMark Basic Edition.

Monitoring Graph:

The graph tracks the following metrics over time (00:00 to 05:00):

- Frame rate (FPS)
- GPU Temperature (°C)
- GPU Load (%)
- CPU Clock Frequency (MHz)
- GPU Memory Clock Frequency (MHz)
- GPU Clock Frequency (MHz)

System Information:

GPU #1	VMware SVGA 3D	CPU #1		Time	2022-06-26 08:26 +03:00
GPU #2	NVIDIA Tesla K80	CPU #2		SystemInfo	v5.50.1092
Display #1	\\.\DISPLAY10 (2130 x 1333, 100% DPI scaling)	GUI	v2.22.7359 s64		

HWINFO64 v7.26-4800 - Sensors Status:

Sensor	Current	Minimum	Maximum	Average
GPU Temperature	62 °C	39 °C	89 °C	69 °C
GPU Core Voltage	0.825 V	0.825 V	1.050 V	0.954 V
GPU Power	26.219 W	25.014 W	153.014 W	91.568 W
GPU Clock	324.0 MHz	324.0 MHz	875.7 MHz	656.0 MHz
GPU Memory Clock	162.0 MHz	162.0 MHz	1,252.8 MHz	903.8 MHz
GPU Video Clock	405.0 MHz	405.0 MHz	540.0 MHz	496.8 MHz
GPU Effective Clock	324.0 MHz	324.0 MHz	875.7 MHz	604.3 MHz
GPU Core Load	2.0 %	0.0 %	100.0 %	52.3 %
GPU Memory Controller L...	3.0 %	0.0 %	92.0 %	25.2 %
GPU Video Engine Load	13.0 %	0.0 %	62.0 %	18.0 %
GPU Bus Load	0.0 %	0.0 %	20.0 %	1.9 %
GPU Memory Usage	5.1 %	3.5 %	76.4 %	15.7 %
GPU D3D Usages	0.0 %	0.0 %	100.0 %	
Total GPU Power (normal...	17.6 %	16.8 %	102.7 %	61.5 %
Total GPU Power [% of T...	17.6 %	16.8 %	102.7 %	61.5 %
GPU Memory Allocated	590 MB	409 MB	8,799 MB	1,808 MB
GPU D3D Memory Dedicat...	544 MB	362 MB	8,763 MB	1,764 MB
GPU D3D Memory Dynamic	39 MB	16 MB	385 MB	107 MB
PCIe Link Speed	5.0 GT/s	5.0 GT/s	5.0 GT/s	5.0 GT/s

Task Manager Performance - GPU:

GPU: vAndu.tech NVIDIA Tesla K80

- 3D: 0%
- Copy: 0%
- Video Encode: 2%
- Video Decode: 0%

Utilization: 2%
Dedicated GPU memory: 0.5/11.5 GB
GPU Memory: 0.6/21.5 GB
Shared GPU memory: 0.0/10.0 GB

ESX/VSPHERE 7.0 U3 REMOVE PASSTHROUGH NVIDIA TESLA K80

Virtual machine Game-2 was successfully reconfigured - dismiss

Host: Manage, Monitor

Virtual Machines: 23, Storage: 5, Networking: 13

Virtual machine	Status	Used space	Guest OS	Host name	Host CPU	Host memory
<input type="checkbox"/>	Invalid	Unknown		Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	67.07 GB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	1.02 TB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	293.09 GB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Invalid	Unknown		Unknown	0 MHz	0 MB
<input type="checkbox"/>	Invalid	Unknown		Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	340.49 GB	VMware ESXi 7.0 or later	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	270.9 GB	VMware ESXi 7.0 or later	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	338.83 GB	VMware ESXi 7.0 or later	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	58.8 GB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	64.28 GB	Ubuntu Linux (64-bit)	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	38.87 GB	Microsoft Windows Server 2022 (64-bit)	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Invalid	Unknown		Unknown	0 MHz	0 MB
<input type="checkbox"/>	Invalid	Unknown		Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	2.14 GB	Red Hat Enterprise Linux 7 (64-bit)	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	8.28 GB	Red Hat Enterprise Linux 8 (64-bit)	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	5.8 GB	Red Hat Enterprise Linux 8 (64-bit)	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	11.86 GB	Red Hat Enterprise Linux 8 (64-bit)	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	14.09 GB	Red Hat Enterprise Linux 8 (64-bit)	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	2.86 GB	Red Hat Enterprise Linux 7 (64-bit)	Unknown	0 MHz	0 MB
<input type="checkbox"/>	Normal	16.73 GB	Microsoft Windows Server 2022 (64-bit)	DESKTOP-MFKH27C	3 GHz	10.1 GB
<input type="checkbox"/>	Normal	4.49 GB	Other 3.x or later Linux (64-bit)	localhost	195 MHz	2.05 GB
<input checked="" type="checkbox"/>	Normal	15.9 GB	Microsoft Windows Server 2022 (64-bit)	Unknown	0 MHz	0 MB

Quick filters...

23 items

Recent tasks

Task	Target	Initiator	Queued	Started	Result	Completed
Reconfig VM	Game-2	root	06/26/2022 00:02:19	06/26/2022 00:02:19	Completed successfully	06/26/2022 00:02:19
Update Passthru Config	esx-2	root	06/25/2022 23:53:11	06/25/2022 23:53:11	Completed successfully	06/25/2022 23:53:12
Update Passthru Config	esx-2	root	06/25/2022 23:51:53	06/25/2022 23:51:53	Completed successfully	06/25/2022 23:51:54

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ESX/VSPHERE 7.0 U3 REMOVE PASSTHROUGH NVIDIA TESLA K80

The screenshot displays the VMware ESXi 7.0 U3 interface. The main window shows a list of virtual machines with columns for Virtual machine, Status, Used space, Guest OS, Host name, Host CPU, and Host memory. A context menu is open over the 'Game-2' VM, with 'Edit settings' highlighted in a red box. The bottom panel shows a task history table with columns for Target, Initiator, Queued, Started, Result, and Completed.

Virtual machine	Status	Used space	Guest OS	Host name	Host CPU	Host memory
	Invalid	Unknown		Unknown	0 MHz	0 MB
	Normal	67.07 GB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
	Normal	1.02 TB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
	Normal	293.09 GB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
	Invalid	Unknown		Unknown	0 MHz	0 MB
	Invalid	Unknown		Unknown	0 MHz	0 MB
	Normal	340.49 GB	VMware ESXi 7.0 or later	Unknown	0 MHz	0 MB
	Normal	270.9 GB	VMware ESXi 7.0 or later	Unknown	0 MHz	0 MB
	Normal	338.83 GB	VMware ESXi 7.0 or later	Unknown	0 MHz	0 MB
	Normal	58.8 GB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
	Normal	64.28 GB	Ubuntu Linux (64-bit)	Unknown	0 MHz	0 MB
	Normal	38.87 GB	Microsoft Windows Server 2022 (64-bit)	Unknown	0 MHz	0 MB
	Invalid	Unknown		Unknown	0 MHz	0 MB
	Invalid	Unknown		Unknown	0 MHz	0 MB
	Normal	2.14 GB	Red Hat Enterprise Linux 7 (64-bit)	Unknown	0 MHz	0 MB
	Normal	8.28 GB	Red Hat Enterprise Linux 8 (64-bit)	Unknown	0 MHz	0 MB
	Normal	5.8 GB	Red Hat Enterprise Linux 8 (64-bit)	Unknown	0 MHz	0 MB
	Normal	11.86 GB	Red Hat Enterprise Linux 8 (64-bit)	Unknown	0 MHz	0 MB
	Normal	14.09 GB	Red Hat Enterprise Linux 8 (64-bit)	Unknown	0 MHz	0 MB
	Normal	2.86 GB	Red Hat Enterprise Linux 7 (64-bit)	Unknown	0 MHz	0 MB
	Normal	16.73 GB	Microsoft Windows Server 2022 (64-bit)	DESKTOP-MFKH27C	3 GHz	10.1 GB
	Normal	4.49 GB	Other 3.x or later Linux (64-bit)	localhost	195 MHz	2.05 GB
	Normal	15.9 GB	Microsoft Windows Server 2022 (64-bit)	Unknown	0 MHz	0 MB

Task	Target	Initiator	Queued	Started	Result	Completed
Reconfig VM	Game-2	root	06/26/2022 00:02:19	06/26/2022 00:02:19	Completed successfully	06/26/2022 00:02:19
Update Passthru Cor	esx-2	root	06/25/2022 23:53:11	06/25/2022 23:53:11	Completed successfully	06/25/2022 23:53:11
Update Passthru Cor	esx-2	root	06/25/2022 23:51:53	06/25/2022 23:51:53	Completed successfully	06/25/2022 23:51:54

ESX/VSPHERE 7.0 U3 REMOVE PASSTHROUGH NVIDIA TESLA K80

Edit settings - Game-2 (ESXi 7.0 U2 virtual machine)

Device	Configuration	Remove
Hard disk 1	100 GB	✕
Hard disk 2	300 GB	✕
SCSI Controller 0	LSI Logic SAS	✕
SATA Controller 0		✕
USB controller 1	USB 3.1	✕
Network Adapter 1	VLAN 30 <input checked="" type="checkbox"/> Connect	✕
CD/DVD Drive 1		✕
Video Card	Specify custom settings	
PCI device 1	GK210GL [Tesla K80] - 0000:57:00.0	✕
PCI device 2	GK210GL [Tesla K80] - 0000:58:00.0	<input checked="" type="checkbox"/>

Save Cancel

Task	Target	Initiator	Queued	Started	Result	Completed
Reconfig VM	Game-2	root	06/26/2022 00:02:19	06/26/2022 00:02:19	Completed successfully	22/06/26 138
Update Passthru Config	esx-2	root	06/25/2022 23:53:11	06/25/2022 23:53:11	Completed successfully	06/25/2022 23:53:12
Update Passthru Config	esx-2	root	06/25/2022 23:51:53	06/25/2022 23:51:53	Completed successfully	06/25/2022 23:51:54

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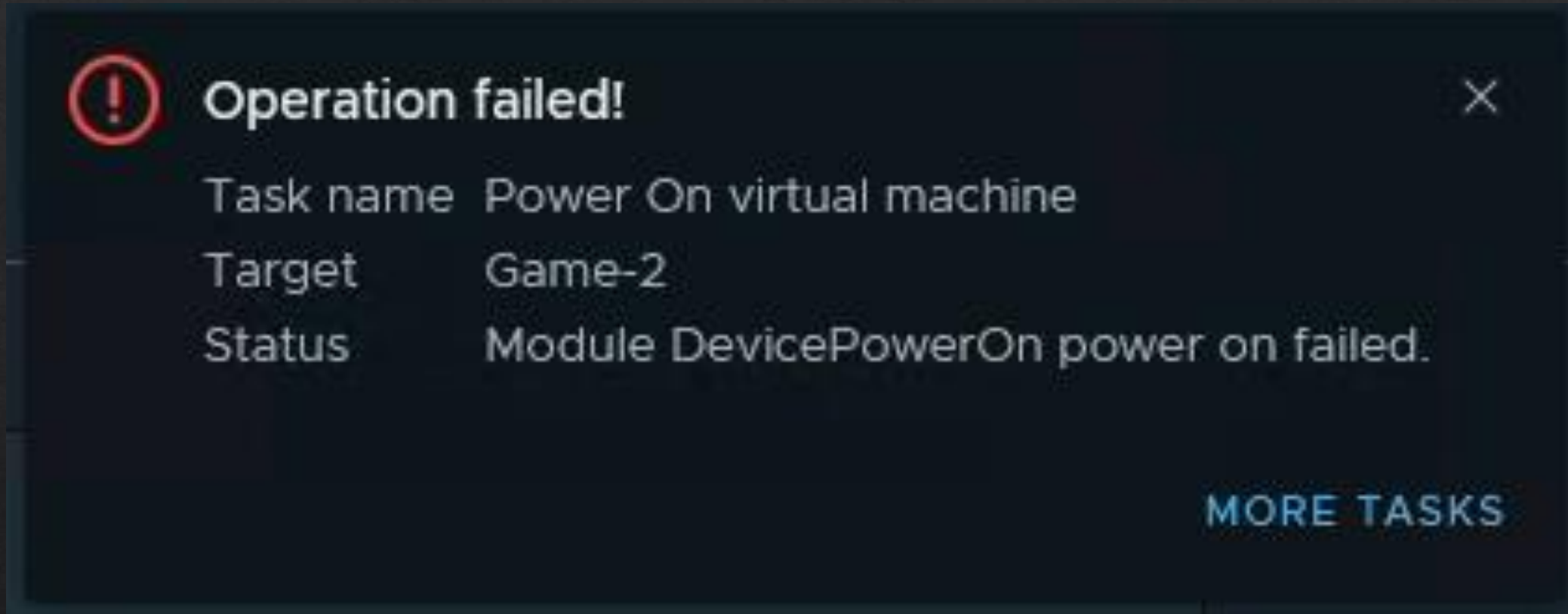
ESX/VSPHERE 7.0 U3 REMOVE PASSTHROUGH NVIDIA TESLA K80

The screenshot displays the VMware ESXi vSphere Client interface. At the top, a notification states: "Virtual machine Game-2 was successfully reconfigured - dismiss". The left sidebar shows navigation options: Host, Manage, Monitor, Virtual Machines (23), Storage (5), and Networking (13). The main area features a table of virtual machines with columns for Virtual machine, Status, Used space, Guest OS, Host name, Host CPU, and Host memory. The VM "Game-2" is selected and highlighted in blue, showing a status of "Normal" and a used space of 15.9 GB. Below the table, a "Quick filters..." dropdown is visible. At the bottom, the "Recent tasks" section shows a list of tasks with columns for Task, Target, Initiator, Queued, Started, Result, and Completed. The tasks include "Reconfig VM" and "Update Passthru Config" for "Game-2" and "esx-2", all of which are marked as "Completed successfully".

Virtual machine	Status	Used space	Guest OS	Host name	Host CPU	Host memory
	Invalid	Unknown		Unknown	0 MHz	0 MB
	Normal	67.07 GB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
	Normal	1.02 TB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
	Normal	293.09 GB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
	Invalid	Unknown		Unknown	0 MHz	0 MB
	Invalid	Unknown		Unknown	0 MHz	0 MB
	Normal	340.49 GB	VMware ESXi 7.0 or later	Unknown	0 MHz	0 MB
	Normal	270.9 GB	VMware ESXi 7.0 or later	Unknown	0 MHz	0 MB
	Normal	338.83 GB	VMware ESXi 7.0 or later	Unknown	0 MHz	0 MB
	Normal	58.8 GB	Other 3.x or later Linux (64-bit)	Unknown	0 MHz	0 MB
	Normal	64.28 GB	Ubuntu Linux (64-bit)	Unknown	0 MHz	0 MB
	Normal	38.87 GB	Microsoft Windows Server 2022 (64-bit)	Unknown	0 MHz	0 MB
	Invalid	Unknown		Unknown	0 MHz	0 MB
	Invalid	Unknown		Unknown	0 MHz	0 MB
	Normal	2.14 GB	Red Hat Enterprise Linux 7 (64-bit)	Unknown	0 MHz	0 MB
	Normal	8.28 GB	Red Hat Enterprise Linux 8 (64-bit)	Unknown	0 MHz	0 MB
	Normal	5.8 GB	Red Hat Enterprise Linux 8 (64-bit)	Unknown	0 MHz	0 MB
	Normal	11.86 GB	Red Hat Enterprise Linux 8 (64-bit)	Unknown	0 MHz	0 MB
	Normal	14.09 GB	Red Hat Enterprise Linux 8 (64-bit)	Unknown	0 MHz	0 MB
	Normal	2.86 GB	Red Hat Enterprise Linux 7 (64-bit)	Unknown	0 MHz	0 MB
gaming.vandu.lab	Normal	16.73 GB	Microsoft Windows Server 2022 (64-bit)	DESKTOP-MFKH27C	3 GHz	10.1 GB
vSAN File Service Node (19)	Normal	4.49 GB	Other 3.x or later Linux (64-bit)	localhost	195 MHz	2.05 GB
Game-2	Normal	15.9 GB	Microsoft Windows Server 2022 (64-bit)	Unknown	0 MHz	0 MB

Task	Target	Initiator	Queued	Started	Result	Completed
Reconfig VM	Game-2	root	06/26/2022 00:03:01	06/26/2022 00:03:01	Completed successfully	06/26/2022 00:03:01
Reconfig VM	Game-2	root	06/26/2022 00:02:19	06/26/2022 00:02:19	Completed successfully	06/26/2022 00:02:19
Update Passthru Config	esx-2	root	06/25/2022 23:53:11	06/25/2022 23:53:11	Completed successfully	06/25/2022 23:53:12
Update Passthru Config	esx-2	root	06/25/2022 23:51:53	06/25/2022 23:51:53	Completed successfully	06/25/2022 23:51:54

ERROR: OPERATION FAILED: MODULE DEVICEPOWERON POWER ON FAILED.



Operation failed!

Task name Power On virtual machine

Target Game-2

Status Module DevicePowerOn power on failed.

[MORE TASKS](#)

OPERATION FAILED: MODULE DEVICEPOWERON POWER ON FAILED.

The screenshot displays the vSphere Client interface for a virtual machine named 'Game-2'. The interface is in a dark theme. On the left, a navigation pane shows a folder hierarchy: vCenter.home.lab > Fast Micro DataCenter > vAndu.tech > Game-2. The 'Game-2' folder is highlighted with a red rectangle. The main content area shows the 'Game-2' summary page, which is currently in a 'Powered Off' state. The 'Power Status' is 'Powered Off', and the 'Guest OS' is 'Microsoft Windows 10 (64-bit)'. Below the main content, there are several summary cards: 'Capacity and Usage' (20 CPUs allocated, 0 MHz used), 'VM Hardware' (20 CPU(s), 0 MHz used; 10 GB, 0 GB memory active), 'Related Objects' (Home Lab), and 'Tags'. A 'Recent Tasks' table is visible at the bottom, showing a failed task: 'Power On virtual machine' for target 'Game-2', with status 'Module DevicePowerOn pow' and details 'Powering on the new Virtual...'. The error message 'Operation failed!' is displayed in a toast notification in the top right corner, stating: 'Task name: Power On virtual machine, Target: Game-2, Status: Module DevicePowerOn power on failed.'

Task Name	Target	Status	Details	Initiator	Queued For	Start Time	Completion Time	Server
Power On virtual machine	Game-2	Module DevicePowerOn pow	Powering on the new Virtual...	HOME.LAB\Administrator	4 ms	06/26/2022, 12:04:12 ...		vCenter.home.lab

OPERATION FAILED: MODULE DEVICEPOWERON POWER ON FAILED.

The screenshot shows the vSphere Client interface for a virtual machine named 'Game-2'. The VM is currently powered off. An error message is displayed in the top right corner, stating 'Operation failed!' with details: Task name: Power On virtual machine, Target: Game-2, Status: Module DevicePowerOn power on failed. The left sidebar shows the 'Actions' menu for 'Game-2', with 'Edit Settings...' highlighted in a red box. The main area displays VM details such as 'Powered Off', 'Microsoft Windows 10 (64-bit)', and 'VMware Tools' status. At the bottom, a task history table shows the failed operation.

Task Name	Status	Details	Initiator	Queued For	Start Time	Completion Time	Server
Power On virtual machine	Failed	Module DevicePowerOn power on failed.	HOME.LAB\Administrator	4 ms	06/26/2022, 12:04:12 ...	06/26/2022, 12:04:21 ...	vCenter.home.lab
Initialize powering On	Completed		HOME.LAB\Administrator	4 ms	06/26/2022, 12:04:12 ...	06/26/2022, 12:04:12 ...	vCenter.home.lab
Reconfigure virtual machine	Completed		HOME.LAB\Administrator	5 ms	06/26/2022, 12:00:09...	06/26/2022, 12:00:09...	vCenter.home.lab
Initiate guest OS shutdown	Completed		HOME.LAB\Administrator	5 ms	06/25/2022, 11:59:17 ...	06/25/2022, 11:59:18 ...	vCenter.home.lab
Refresh PCI passthrough	Completed		HOME.LAB\Administrator	2 ms	06/25/2022, 11:57:43 ...	06/25/2022, 11:57:43 ...	vCenter.home.lab

OPERATION FAILED: MODULE DEVICEPOWERON POWER ON FAILED.

The screenshot shows the vSphere Client interface with the 'Edit Settings' dialog for a virtual machine named 'Game-2'. The 'Virtual Hardware' tab is active. Two settings are highlighted with red boxes:

- Expose hardware assisted virtualization to the guest OS** (checked)
- Reserve all guest memory (All locked)** (checked)

The background shows the vCenter inventory tree on the left and a task log at the bottom. The task log shows a failed task: 'Power On virtual machine' for 'Game-2' with the error message 'Module DevicePowerOn po...'. Other tasks are marked as 'Completed'.

Task Name	Target	Status
Power On virtual machine	Game-2	Module DevicePowerOn po...
Initialize powering On	Fast Micro DataCent...	Completed
Reconfigure virtual mach...	Game-2	Completed
Initiate guest OS shutdo...	Game-2	Completed
Refresh PCI passthrough ...	esx-2.home.lab	Completed

OPERATION FAILED: MODULE DEVICEPOWERON POWER ON FAILED.

The screenshot shows the vSphere Client interface with the 'Edit Settings' dialog for a virtual machine named 'Game-2'. The 'Virtual Hardware' tab is selected, and the 'VMX Options' sub-tab is highlighted with a red box. The dialog lists various hardware components and their settings:

Component	Value	Unit	Additional Info
CPU	20		
Memory	20	GB	
Hard disk 1	100	GB	
Hard disk 2	300	GB	
SCSI controller 0	LSI Logic SAS		
Network adapter 1	VLAN 30		<input checked="" type="checkbox"/> Connect...
CD/DVD drive 1	Client Device		<input checked="" type="checkbox"/> Connect...
USB xHCI controller	USB 3.1		
PCI device 0	0000:67:00:0 GK210GL [Tesla K80] NVIDIA Corporation		
Video card	Specify custom settings		
Security Devices	Not Configured		
VMCI device			
SATA controller 0	AHCI		
Other	Additional Hardware		

At the bottom of the dialog, there are 'CANCEL' and 'OK' buttons. The background shows the vSphere Client interface with the 'Game-2' VM selected in the left-hand pane. The date '22/06/26' and the number '145' are visible in the bottom right corner of the interface.

OPERATION FAILED: MODULE DEVICEPOWERON POWER ON FAILED.

The screenshot shows the vSphere Client interface with the 'Edit Settings' dialog for a virtual machine named 'Game-2'. The dialog is open to the 'VM Options' tab. The 'Advanced' option is highlighted with a red box. The background shows the vSphere Client interface with the 'Game-2' VM selected in the left-hand navigation pane. The right-hand pane shows the VM's status as 'Powered Off' and the operating system as 'Microsoft Windows 10 (64-bit)'. The bottom of the screen shows the date '22/06/26' and the page number '146'.

Section	Option	Value/Action
General Options	VM Name	Game-2
VMware Remote Console Options	Lock the guest operating system when the last remote user disconnects	<input type="checkbox"/>
Encryption	Expand for encryption settings	Expand
Power management	Expand for power management settings	Expand
VMware Tools	Expand for VMware Tools settings	Expand
Virtualization Based Security	Enable	<input checked="" type="checkbox"/>
Boot Options	Expand for boot options	Expand
Advanced	Expand for advanced settings	Expand
Fibre Channel NPIV	Expand for Fibre Channel NPIV settings	Expand

OPERATION FAILED: MODULE DEVICEPOWERON POWER ON FAILED.

The screenshot displays the vSphere Client interface. On the left, a navigation pane shows a folder structure including 'vAndu.tech' and 'Test', with 'Game-2' selected. The main area shows the 'Edit Settings' dialog for 'Game-2'. The 'Advanced' section is expanded, showing options like 'Disable acceleration' (disabled) and 'Enable logging' (checked). The 'Swap file location' section is also expanded, showing 'Default' as the selected option. A red box highlights the 'EDIT CONFIGURATION...' button in the 'Configuration Parameters' section. At the bottom right of the dialog are 'CANCEL' and 'OK' buttons. The background shows a summary page for the VM, including its status (Powered Off) and hardware details.

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OPERATION FAILED: MODULE DEVICEPOWERON POWER ON FAILED.

The screenshot shows the vSphere Client interface with a 'Configuration Parameters' dialog box open for the virtual machine 'Game-2'. The dialog box contains a table of configuration parameters and a button to add more parameters.

Configuration Parameters

Modify or add configuration parameters as needed for experimental features or as instructed by technical support. Empty values will be removed (supported on ESXi 6.0 and later).

ADD CONFIGURATION PARAMS

Name	Value
tools.guest.desktop.autolock	FALSE
nvram	Game-2.nvram
svga.present	TRUE
pciBridge0.present	TRUE
pciBridge4.present	TRUE
pciBridge4.virtualDev	pcieRootPort
pciBridge4.functions	8
pciBridge5.present	TRUE
pciBridge5.virtualDev	pcieRootPort
pciBridge5.functions	8
pciBridge6.present	TRUE
pciBridge6.virtualDev	pcieRootPort
pciBridge6.functions	8
pciBridge7.present	TRUE

CANCEL **OK**

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OPERATION FAILED: MODULE DEVICEPOWERON POWER ON FAILED.

The screenshot shows the vSphere Client interface with a 'Configuration Parameters' dialog box open. The dialog box contains a warning message and a table of configuration parameters. The background shows a virtual machine named 'Game-2' with various system details.

Configuration Parameters

⚠️ Modify or add configuration parameters as needed for experimental features or as instructed by technical support. Empty values will be removed (supported on ESXi 6.0 and later).

ADD CONFIGURATION PARAMS

Add New Configuration Params

Name	Value
tools.guest.desktop.autolock	FALSE
nvram	Game-2.nvram
svga.present	TRUE
pciBridge0.present	TRUE
pciBridge4.present	TRUE
pciBridge4.virtualDev	pciRootPort
pciBridge4.functions	8
pciBridge5.present	TRUE
pciBridge5.virtualDev	pciRootPort
pciBridge5.functions	8

CANCEL OK

Virtual Machine Details:

- Status: Powered Off
- OS: Microsoft Windows 10 (64-bit)
- Tools: Not running, version:11260 (Current)
- Name: DESKTOP-MFKH27C
- Encryption: Not encrypted

Footer: 22/06/26 149 <https://vandu.tech/>

OPERATION FAILED: MODULE DEVICEPOWERON POWER ON FAILED.

The screenshot shows the vSphere Client interface with a 'Configuration Parameters' dialog box open for the virtual machine 'Game-2'. The dialog box contains a table of configuration parameters. A red box highlights the parameter 'pciPassthru.use64bitMMIO' with a value of 'TRUE'. A red arrow points from a text box containing 'pciPassthru.use64bitMMIO' to this parameter. At the bottom right of the dialog, the 'OK' button is highlighted with a red box. The background shows the vSphere Client interface with a list of virtual machines and a task bar at the bottom.

Configuration Parameters

Modify or add configuration parameters as needed for experimental features or as instructed by technical support. Empty values will be removed (supported on ESXi 6.0 and later).

ADD CONFIGURATION PARAMS

Add New Configuration Parameters

Name	Value
pciPassthru.use64bitMMIO	TRUE
tools.guest.desktop.autolock	FALSE
nvram	Game-2.nvram
svga.present	TRUE
pciBridge0.present	TRUE
pciBridge4.present	TRUE
pciBridge4.virtualDev	pcieRootPort
pciBridge4.functions	8
pciBridge5.present	TRUE
pciBridge5.virtualDev	pcieRootPort
pciBridge5.functions	8

CANCEL OK

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OPERATION FAILED: MODULE DEVICEPOWERON POWER ON FAILED.

The screenshot displays the vSphere Client interface with the 'Edit Settings' dialog for a virtual machine named 'Game-2'. The dialog is open to the 'Advanced' section, which includes settings for 'Disable acceleration', 'Enable logging', and 'Swap file location'. The 'OK' button is highlighted with a red box.

Edit Settings | Game-2

- > Power management Expand for power management settings
- > VMware Tools Expand for VMware Tools settings
- Virtualization Based Security Enable
- > Boot Options Expand for boot options
- ▼ **Advanced**
- Settings Disable acceleration Enable logging
- Debugging and statistics Run normally
- Swap file location Default
Use the settings of the cluster or host containing the virtual machine.
 Virtual machine directory
Store the swap files in the same directory as the virtual machine.
 Datastore specified by host
Store the swap files in the datastore specified by the host to be used for swap files. If not possible, store the swap files in the same directory as the virtual machine. Using a datastore that is not visible to both hosts during vMotion might affect the vMotion performance for the affected virtual machines.
- Configuration Parameters [EDIT CONFIGURATION...](#)
- Latency Sensitivity Normal
- > Fibre Channel NPIV Expand for Fibre Channel NPIV settings

Buttons: CANCEL, **OK**

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OPERATION FAILED: MODULE DEVICEPOWERON POWER ON FAILED.

The screenshot shows the vSphere Client interface for a virtual machine named "Game-2". The VM is currently in a "Powered Off" state. A red box highlights the "Power On" button in the Actions menu. The interface displays various VM details, including Compute Policies, Guest OS, Capacity and Usage, and VM Hardware.

Compute Policies

Guest OS

- Power Status: Powered Off
- Guest OS: Microsoft Windows 10 (64-bit)
- VMware Tools: Not running, version:11360 (Current)
- DNS Name (1): DESKTOP-MFKH27C
- IP Addresses
- Encryption: Not encrypted

Capacity and Usage

Last updated at 12:19 AM

CPU

0 MHz used

20 CPUs allocated

VM Hardware

CPU

20 CPU(s), 0 MHz used

Memory

20 GB, 0 GB memory active

Related Objects

Cluster: Home Lab

Tags

Recent Tasks

Task Name	Target	Status	Details	Initiator	Queued For	Start Time	Completion Time	Server
No items found								

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OPERATION FAILED: MODULE DEVICEPOWERON POWER ON FAILED.

The screenshot displays the vSphere Client interface for a virtual machine named 'Game-2'. The interface is in a dark theme. At the top, there's a search bar and the user 'vAndu.tech'. The left sidebar shows a navigation tree with folders like 'DCIM', 'Discovered virtual machine', 'ESX Agents', 'MGM', 'Monitoring', 'SIEM', 'vAndu.tech', 'Template', and 'Test'. The main area shows the VM 'Game-2' with tabs for 'Summary', 'Monitor', 'Configure', 'Permissions', 'Datastores', 'Networks', 'Snapshots', and 'Updates'. The 'Summary' tab is active, showing 'Compute Policies' and 'Guest OS' details. The 'Guest OS' section includes a screenshot of the Windows logo, 'Power Status' (Powered On), 'Guest OS' (Microsoft Windows Server 2022 (64-bit)), 'VMware Tools' (Not running, version:11360 (Current)), 'DNS Name', 'IP Addresses', and 'Encryption' (Not encrypted). Two buttons are visible: 'LAUNCH REMOTE CONSOLE' and 'LAUNCH WEB CONSOLE', with the latter highlighted by a red box. Below this, there are sections for 'Capacity and Usage', 'VM Hardware', 'Related Objects', and 'Tags'. At the bottom, there's a 'Recent Tasks' table with columns for Task Name, Target, Status, Details, Initiator, Queued For, Start Time, Completion Time, and Server. The table is currently empty, showing 'No items found'.

Task Name	Target	Status	Details	Initiator	Queued For	Start Time	Completion Time	Server
No items found								

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OPERATION FAILED: MODULE DEVICEPOWERON POWER ON FAILED.

Game-2

Enforce US Keyboard Layout View Fullscreen Send Ctrl+Alt+Delete

vAndu.tech

2:19

Saturday, June 25

22/06/26

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