



Getting Started with the ADHD VM



Document Control

Version	Author	Change	Date
1			
2			
3			
4			
5	ChildOfAlliance HaircutFish Lavender	Fixed Common Errors & Scripts Document Formatting, Proof Reading	03/11/2024
6	ChildOfAlliance	Added step before running script	03/11/2024
7	ChildOfAlliance	Fixed script typo	4/11/2024



Contents

DOCUMENT CONTROL	2
CONTENTS	3
PURPOSE	4
BASIC SETUP AND INSTALL INSTRUCTIONS	4
INSTALL THE VM	5
NEXT STEPS.....	6
PREVENT BROKEN TERMINAL BY DISABLING VM WINDOWS UPDATE	7
BACKGROUND.....	7
SCRIPTED DISABLING	7
HYPER-V / VIRTUALIZATION ERRORS TROUBLESHOOTING & FIXES	9
INTRODUCTION	9
SYMPTOMS THIS GUIDE ADDRESSES	9
REMEDIATION	10
PASSWORD CRACKING LAB ERRORS OUT WITH "CL_DEVICE_NOT_AVAILABLE"	
ERROR.....	24
BACKGROUND / SYMPTOMS	24
REMEDIATION	25
CREDITS.....	31



Purpose

The purpose of this document is to guide you through the setup and common trouble shooting errors that happen with the ADHD virtual machine (VM) used in the Antisyphon Pay What You Can courses. As not every host machine has identical settings and hardware, please note that you may have slightly different experience than what is documented here. We attempted to compile the steps that work for most users.

Basic Setup and Install Instructions

Download the VM and required tools

1. Ensure you've got a compatible VM platform
 - a. You can use [VMware Workstation Player](#) (free), or you can download and use [the VMware Workstation Pro evaluation](#) (the eval for Workstation Pro is free to use for a limited time).
 - b. If you are using a Mac, you can use VMware Fusion:
 - i. <https://www.vmware.com/products/fusion.html>
 - ii. Sadly, if you are Mac user with an M processor the VM may not be compatible with your setup. If this applies to you, ask the class instructor or a tech support channel member about a cloud resource for the class.
 - c. *The VM is very large so best to download it before class if possible*
 - d. *Do not install updates to the VM unless specifically directed to do so updates tend to break labs.*

ALTERNATIVE: VIRTUALBOX

- 1. You can use VirtualBox, but it fails about 25% of the time on either networking or USB support. USB Support is necessary for the classes and labs. If you hate yourself, use VirtualBox. Otherwise, use VMware.*
 - 2. We only officially support VMWare for class troubleshooting.*
-

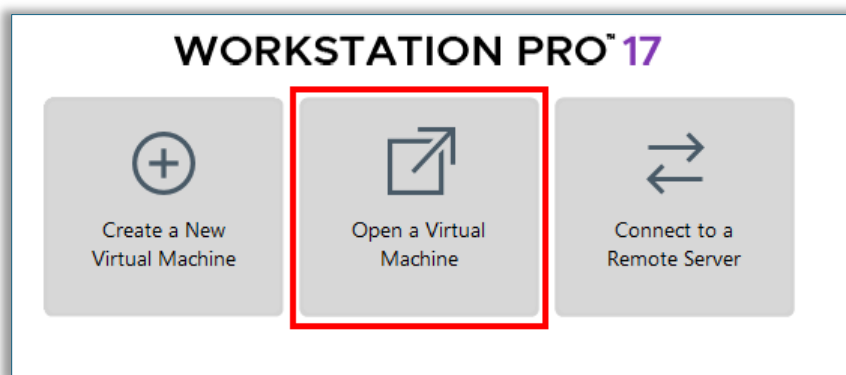
- e. Remember to get permission from your IT department if you are installing, running this software, or making any changes to your company's machine.*
2. Make sure you have a way to extract 7-zip files.



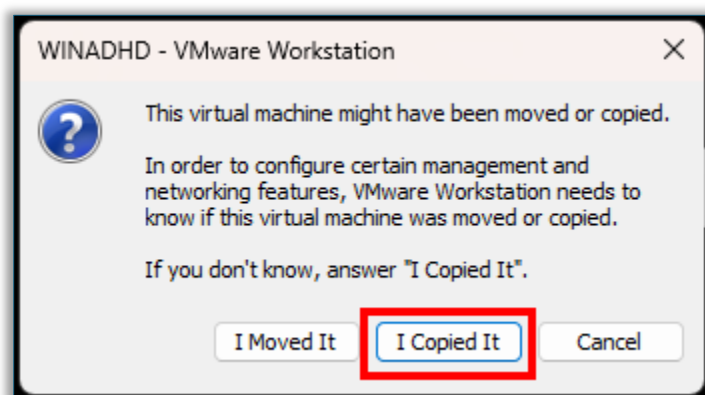
- a. *Recommendation*: Extract with the full 7-Zip application; **do not** extract the VM zip file with the native Windows extract process – it can fail / cause issues.
- b. **7-Zip**: <https://www.7-zip.org/download.html>
- c. **7-Zip support for Linux**: <https://itsfoss.com/use-7zip-ubuntu-linux/>
- d. **7-Zip utility for Mac**: <https://www.keka.io/en/>

Install the VM

1. Use 7-zip to extract the VM files to some folder of your choosing on your local file system.
2. Select "Open a Virtual Machine" in VMware.



3. When asked, select "I Copied It."



4. If you are using VMware Workstation Pro please use the "Take a snapshot of this virtual machine" icon in the toolbar to take a snapshot of the original working image. You may need this "clean" snapshot later



in case of troubleshooting VM errors.



5. **Note where your original download is located** in case you need to re-extract to setup the VM fresh as part of later troubleshooting.

Next Steps

1. Proceed to "[Prevent Broken Terminal by disabling VM Windows Update](#)"
2. **If you've received any errors related to Hyper-V or virtualization**, see [the Troubleshooting guide for Hyper-V and virtualization issues](#).
3. **If you have any other questions or issues** not covered here, ask in the **Tech Support channel** in discord (you should have been automatically added to it as part of your class registration).
 - a. *We can help you better when you share screenshots of your problem and share what steps you have taken up to that point!*



Prevent Broken Terminal by disabling VM Windows Update

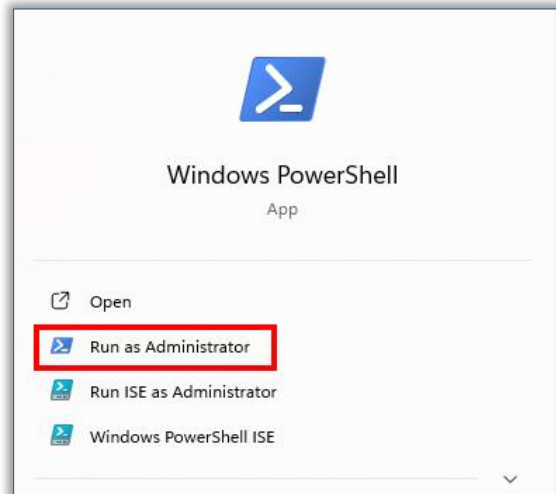
Background

Windows' auto-update feature can wreak havoc on the class VM by updating packages to newer versions that may not be compatible with the labs. Obviously in a "Real world" environment, you'd want to keep things updated through a proper change and vulnerability management program, but for a disposable lab VM, the effort is not worth it.

Given that, you'll want to disable windows update on the VM.

Scripted Disabling

1. Log into the ADHD VM using `adhd:adhd`
2. Open a PowerShell window as admin by searching for PowerShell in the Windows Start menu, then selecting Run as Administrator.



- a. Select Yes that you will allow this program to make changes to your device when prompted to continue.
3. Run the below command to pull down the update-disabling script.

```
Invoke-WebRequest -Uri  
https://raw.githubusercontent.com/deterministicj/AntiS  
yphonTraining-VM-Fix-Menu/refs/heads/main/ADHD-Fix-  
Menu.ps1 -OutFile C:\ADHD-Fix-Menu.ps1
```

4. In the same PowerShell window, type the line below and press enter:
`C:\ADHD-Fix-Menu.ps1`



5. A simple menu should pop up and ask whether you'd like to disable updates (Option 1) or Fix the HashCat lab (Option 2).

```
ADHD Fix Menu

Options
-----
1. Disable automatic updates
2. Fix Hashcat lab - CL_DEVICE_NOT_AVAILABLE error
-----

Which option would you like to select? (1,2, or q to exit): 3
Invalid option. Please select a valid option.
Which option would you like to select? (1,2, or q to exit): q
```

- a. For now, Select Option 1, and if prompted, "Q" to quit afterward.
6. That's all! Now your VM should automatically check Windows Update and Windows Store Updates to make sure they are off on each log in.



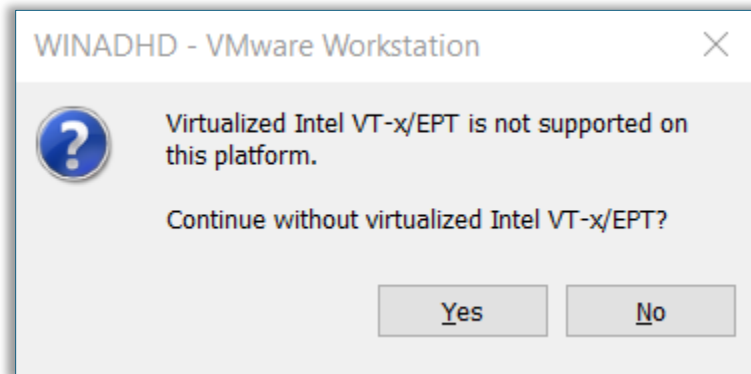
Hyper-V / Virtualization Errors Troubleshooting & Fixes

Introduction

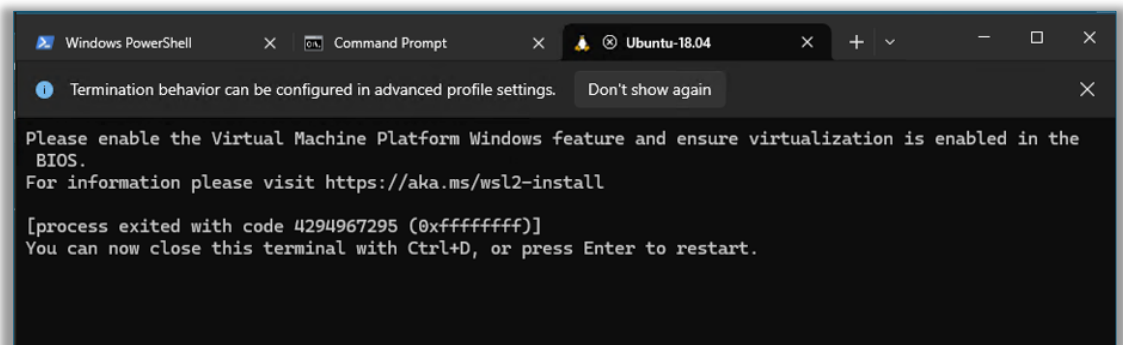
Virtualization Problems may occur depending on the host Hardware and Software settings and how they interact with the ADHD VM. The following directions are to be followed if you are experiencing Hyper-V or virtualization errors on your ADHD VM.

Symptoms This Guide Addresses

- A message when trying to open the VM stating "Virtualized Intel VT-x/EPT is not supported on this platform."



- Once the VM is running there is an error in Ubuntu in the Windows Terminal stating, "Please enable the Virtual Machine Platform Windows feature and ensure virtualization is enabled in BIOS."



- Other messages related to Virtualized Intel VT, Hyper-V, Virtualization, etc. *may* also be resolved by the below.



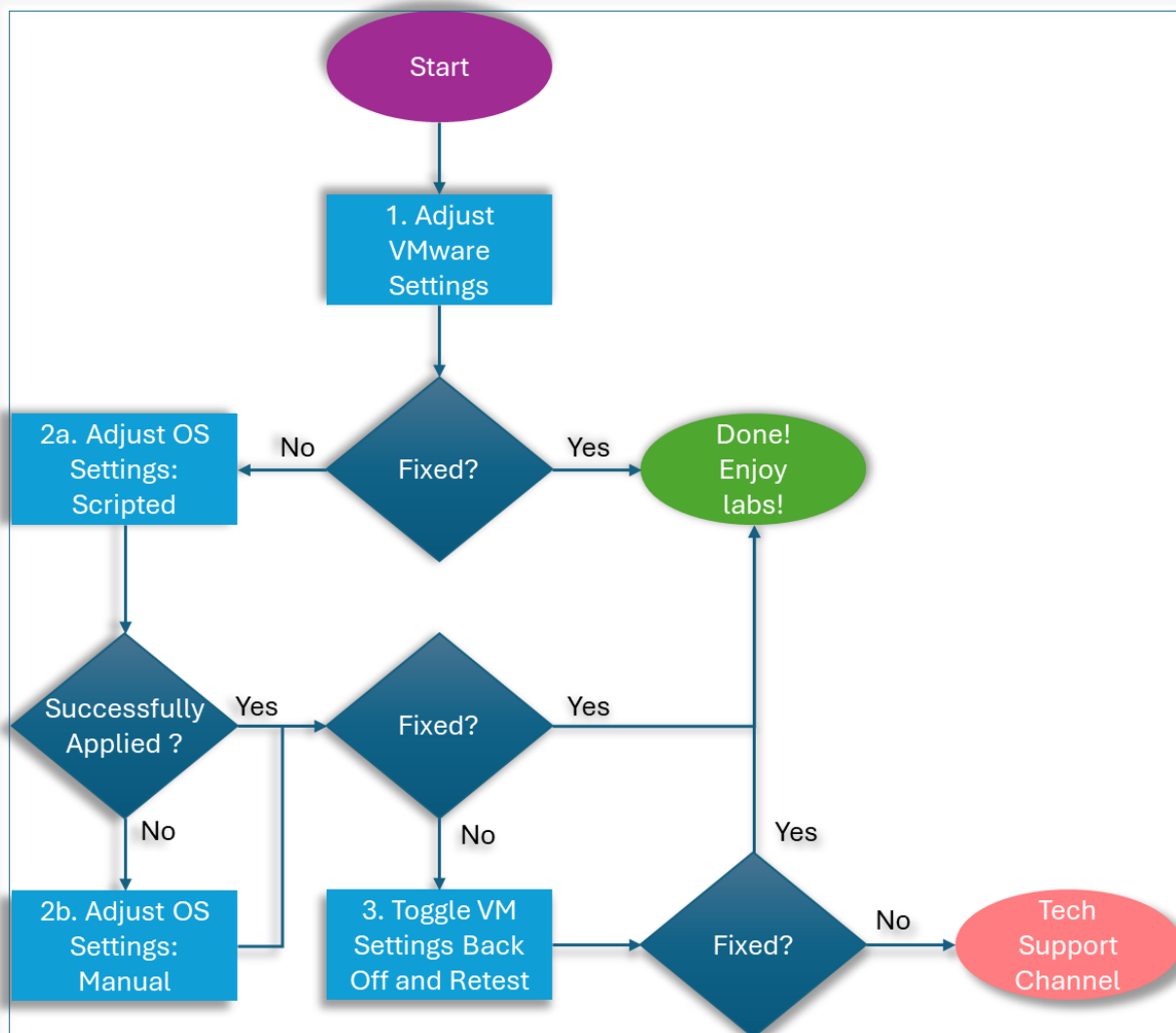
Remediation

A Quick Overview

Addressing Virtualization errors has a couple of components

1. [Adjust VMWare Settings](#)
2. Adjust OS settings (and Windows features)
 - a. [Scripted](#) or
 - b. [Manual](#)
3. [Optional: Toggle VMWare settings back](#)

In some cases, simply adjusting VMWare settings may be sufficient, in others, the latter steps may be required. The overall flow is as below:





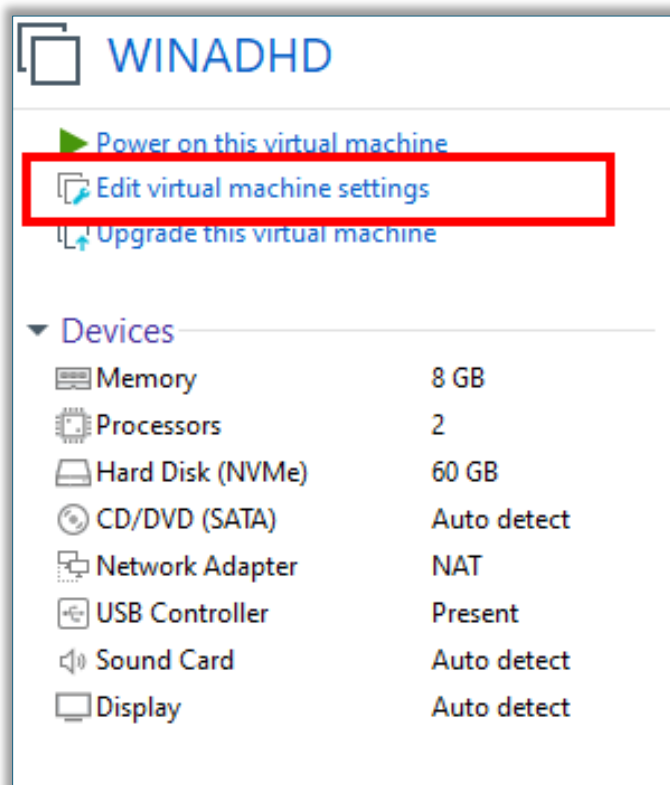
1. Adjust VMWare Settings

The below changes will need to be made on your host machine, not the VM. Ensure you have administrator rights before you begin.

WARNING

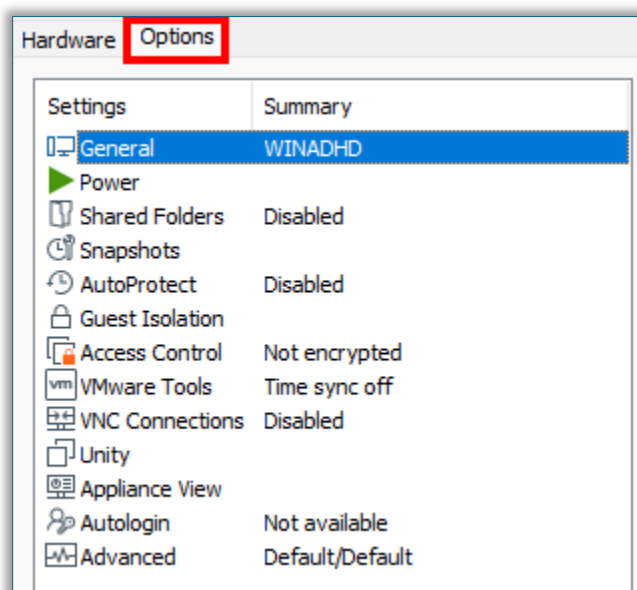
*Retain records of your **current** system settings as you proceed, you may need to revert these changes in the future for other projects.*

1. If you are running VMware Workstation Player, skip these first steps and start by [checking Memory Integrity](#).
2. First, with your VM shutdown, click on Edit virtual machine settings.

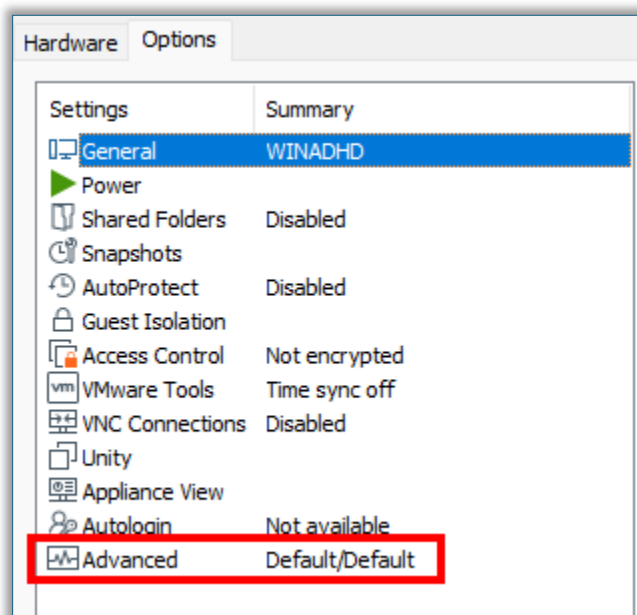




3. Select the Options Tab.

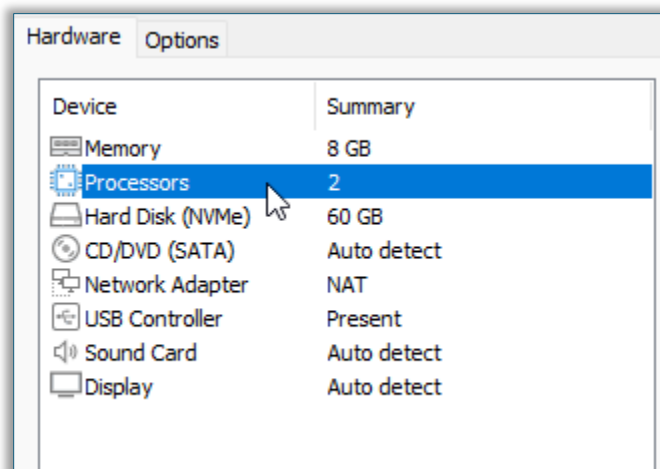


4. Select Advanced from the Options menu.

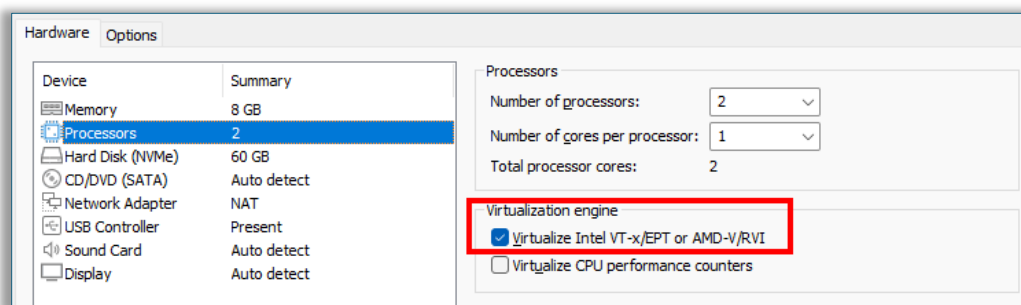


5. If your version of VMware Workstation has an option to **Enable VBS (Virtualization Based Security) Support**, ensure the box is NOT checked. Not all versions of VMware will have the VBS as an option.

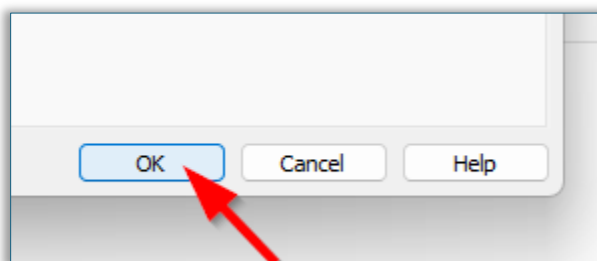
6. Next, on the Hardware tab, select Processors.



7. Currently, it is likely that Virtualize Intel VT-x/EPT or AMD-V/RVI is checked. Uncheck the box.



Click Okay and attempt to start your VM. For some users, this is sufficient



8. If changing the VM Virtualization settings did not successfully resolve the virtualization problem, continue to the following section to adjust OS Features.



2a. Adjust OS Settings: Scripted (Preferred Path)

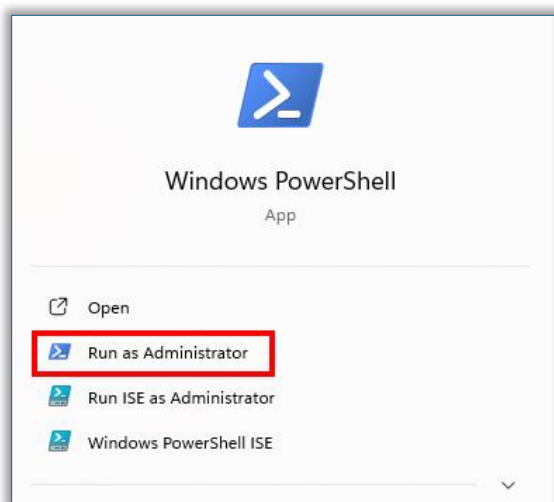
The below changes will need to be made on your host machine, not the VM. Ensure you have administrator rights before you begin.

WARNING

It is advisable to create a System Restore point and/or back up your registry before making changes.

*Similarly, retain records of your **current** system settings as you proceed, you may need to revert these changes in the future for other projects.*

1. Ensure your VM class is powered off, ideally exit VMWare altogether.
2. Start a PowerShell window in Admin mode **on your host / desktop**



- a. Select Yes that you will allow this program to make changes to your device when prompted to continue.
3. Run the below command to pull down the scripts that will automatically adjust your system settings for VM compatibility.

```
Invoke-WebRequest -Uri  
https://raw.githubusercontent.com/krooth/Antisyphon_l  
a_b_scripts/main/WinADHD/Disable_Hyper_V_and_Dev  
ice_Guard.ps1 -OutFile C:\Disable_Hyper_V_and_Dev  
ice_Guard.ps1
```



4. Change directory to C:\ with the following command.

Cd C:\

5. Execute this command whilst in the administrator PowerShell session to remove the execution policy:

```
Set-ExecutionPolicy -ExecutionPolicy Unrestricted -
Scope Process
```

6. Run the actual script. When prompted, choose "Y" to disable settings.

.\Disable Hyper V And Device Guard.ps1

```
PS C:\> .\Disable_Hyper_V_and_Device_Guard.ps1
```

When Prompted, type "Y" and hit enter

Do you want to disable features/settings or reverse the settings? (Y) to disable (R) to reverse the process:

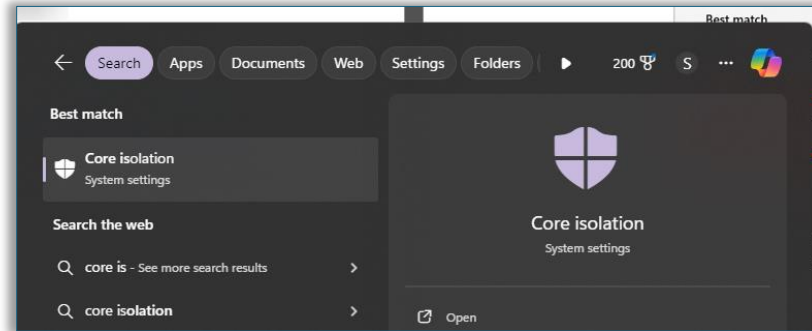
7. Reboot your host machine when prompted.
8. Restart the VM and confirm Hyper-V errors are no longer present
9. If errors remain, check the below manual settings / troubleshooting guide.
10. If all else fails, contact the **tech-support** Discord channel for the class.



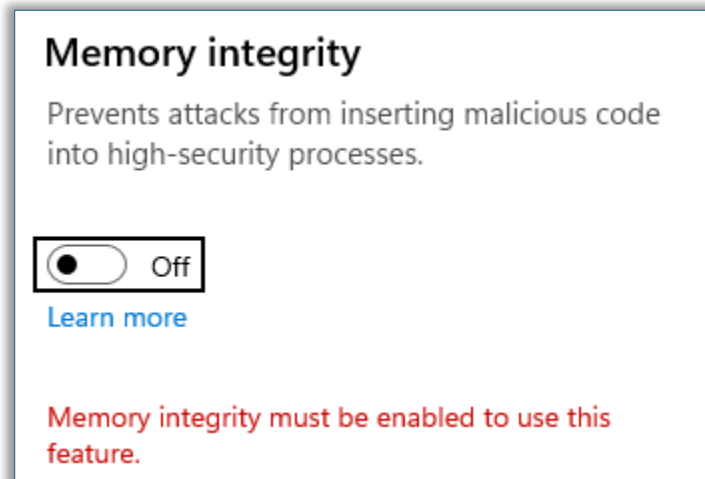
2b. Adjust OS Settings: Manual (Backup play)

Check Memory Integrity Settings

1. In **Core Isolation Settings**, verify *Memory Integrity* is set to Off.
 - a. Start menu → search “Core Isolation” → open the settings menu



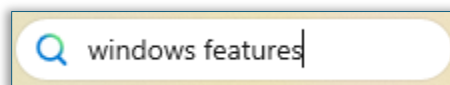
- b. Ensure memory integrity is toggled “off”, toggle it if not.



- c. Please remember that if your *Memory Integrity* is set to On, and you switch it Off to use this VM, you should undo your changes when you are finished using the ADHD VM

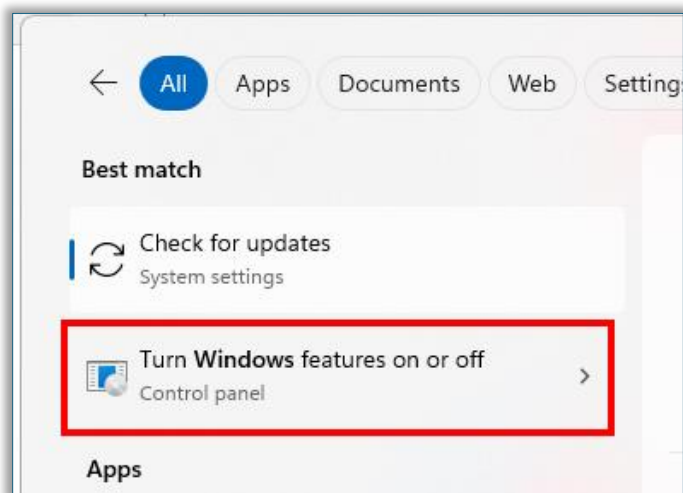
Disabling select Virtualization related Windows Feature

1. After ensuring Memory Integrity is off, please open your Windows Optional features.
 - a. On Windows 11: In your search bar type in Windows Features.



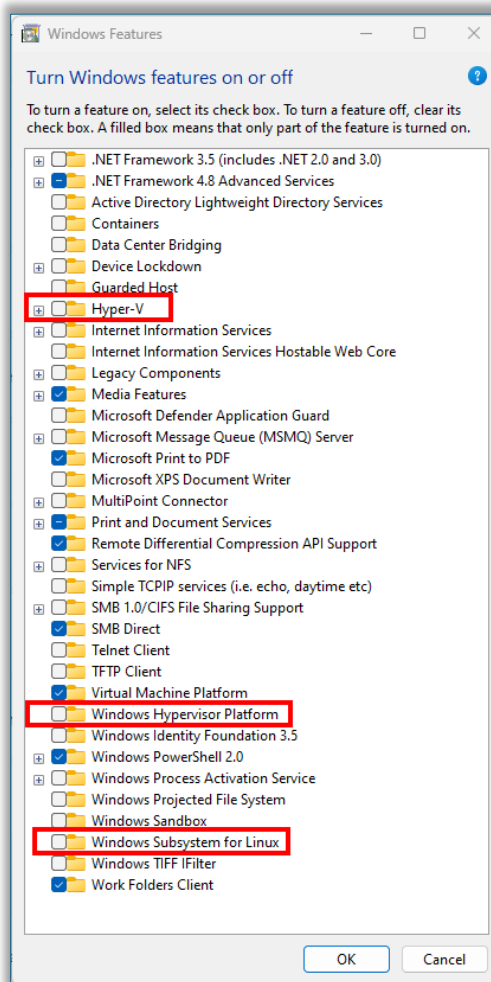


2. Select Turn Windows Features on or off from the Windows Start menu that appears.

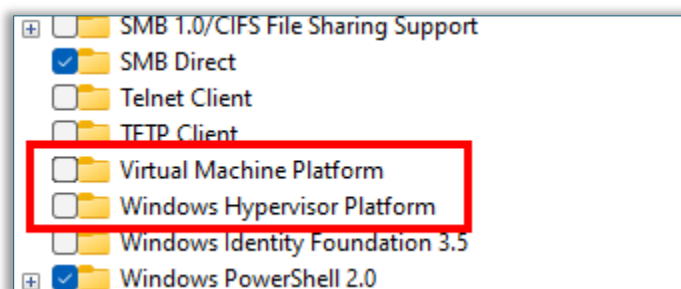




3. Locate the Hyper-V, Windows Hypervisor Platform, and if present Windows Subsystem for Linux settings.
 - a. Turn these features off by clearing the checkbox if they are currently enabled.



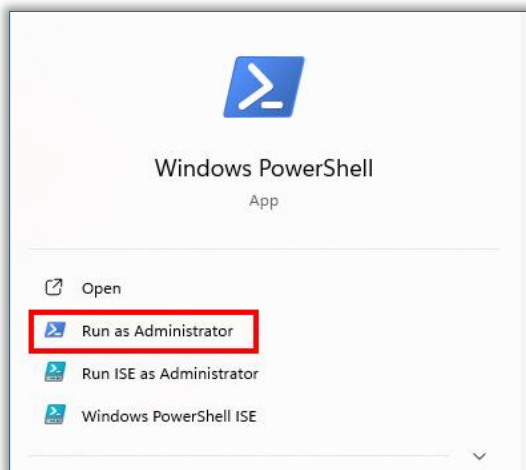
4. Some users may also need to turn off Virtual Machine Platform, located above the Windows Hypervisor Platform.





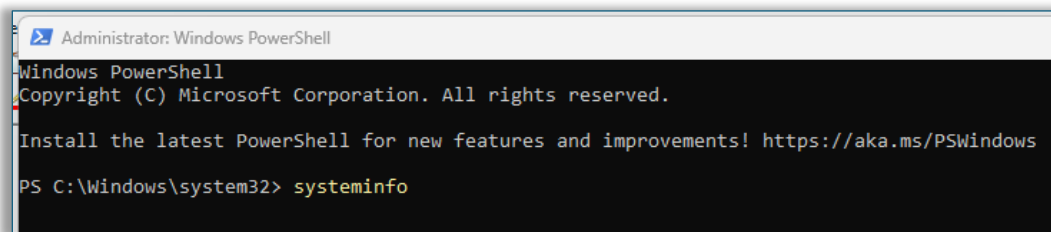
5. ***Restart your host machine.***

6. Next, open PowerShell with administrator privileges.

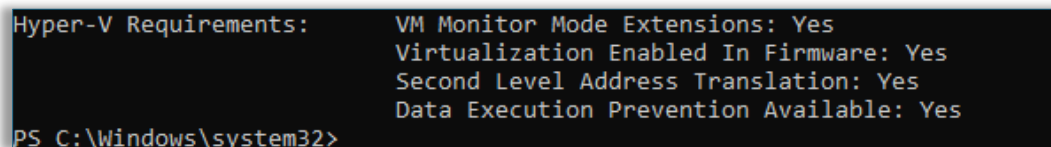


a. Select Yes that you will allow this program to make changes to your device when prompted to continue.

7. At the prompt type `systeminfo` and press enter.



8. If you see the following for Hyper-V settings, then success! You may now return to attempt to start your ADHD.



9. If you receive any other message next to the Hyper-V Requirements, please continue to the following directions.



Troubleshooting / Manual Resolution

The below instructions are alternate methods to manually disable relevant windows features that may be negatively impacting virtualization

1. In PowerShell, with administrative rights, run the following, in order, and afterwards restart your host. You may choose to copy and paste directly from this document, if you do so do line by line. You may notice >> characters if you copy and paste as a group. Do not be alarmed. They should not interfere with this process.

```
Disable-WindowsOptionalFeature -Online -FeatureName  
Microsoft-Hyper-V-All  
bcdedit /set hypervisorlaunchtype off  
bcdedit /set vsmlaunchtype off
```

```
PS C:\Windows\system32> Disable-WindowsOptionalFeature -Online -FeatureName Microsoft-Hyper-V-All  
>> bcdedit /set hypervisorlaunchtype off  
>> bcdedit /set vsmlaunchtype off  
>>
```

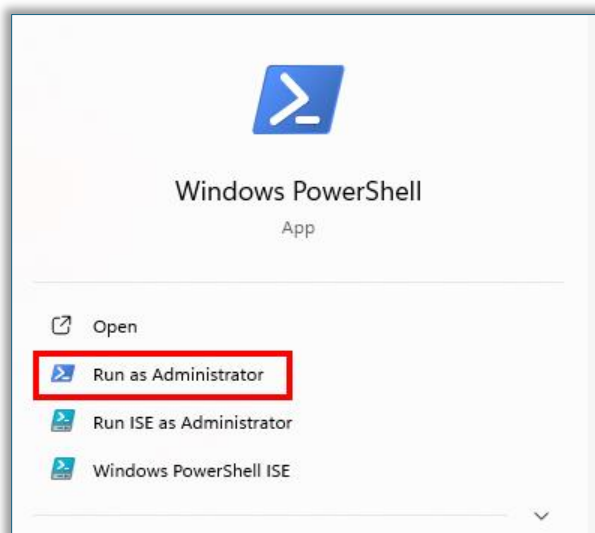
- a. You should now receive a message that the operation was completed successfully and you need to restart the computer to complete the operation.

```
PS C:\Windows\system32> Disable-WindowsOptionalFeature -Online -FeatureName  
Microsoft-Hyper-V-All  
>> bcdedit /set hypervisorlaunchtype off  
>> bcdedit /set vsmlaunchtype off  
>>  
Do you want to restart the computer to complete this operation now?  
[Y] Yes [N] No [?] Help (default is "Y"): n  
  
Path :  
Online : True  
RestartNeeded : True  
  
The operation completed successfully.  
The operation completed successfully.  
  
PS C:\Windows\system32>
```

2. Restart your host machine, then attempt to start your VM.
3. If the ADHD VM gives a Hyper-V or virtualization error continue with the following directions. (At this point you may want to establish the restore point, or back up your Registry, the following edits will be done in PowerShell but they are registry edits.)

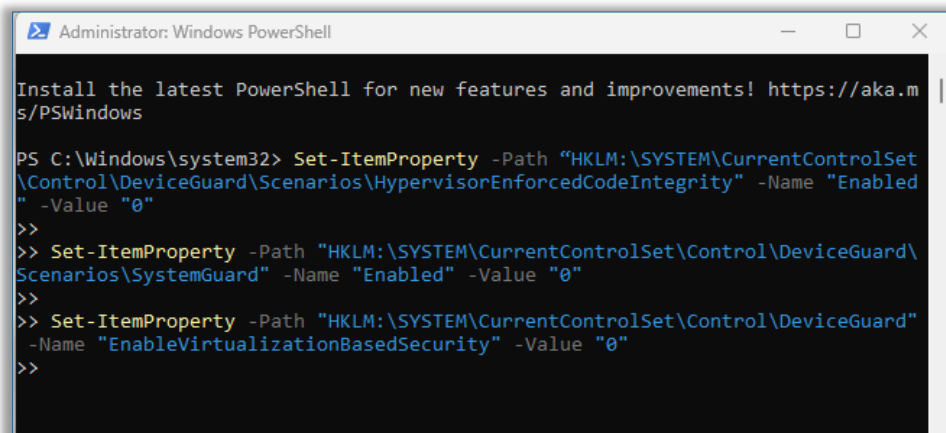


4. Open PowerShell with administrative privileges.



5. Enter the following into PowerShell, copy and paste is recommended, then press Enter to run. You may notice >> characters if you copy & paste; that is okay, run anyway.

```
Set-ItemProperty -Path  
"HKLM:\SYSTEM\CurrentControlSet\Control\DeviceGuard\Sc  
enarios\HypervisorEnforcedCodeIntegrity" -Name  
"Enabled" -Value "0"  
  
Set-ItemProperty -Path  
"HKLM:\SYSTEM\CurrentControlSet\Control\DeviceGuard\Sc  
enarios\SystemGuard" -Name "Enabled" -Value "0"  
  
Set-ItemProperty -Path  
"HKLM:\SYSTEM\CurrentControlSet\Control\DeviceGuard" -  
Name "EnableVirtualizationBasedSecurity" -Value "0"
```



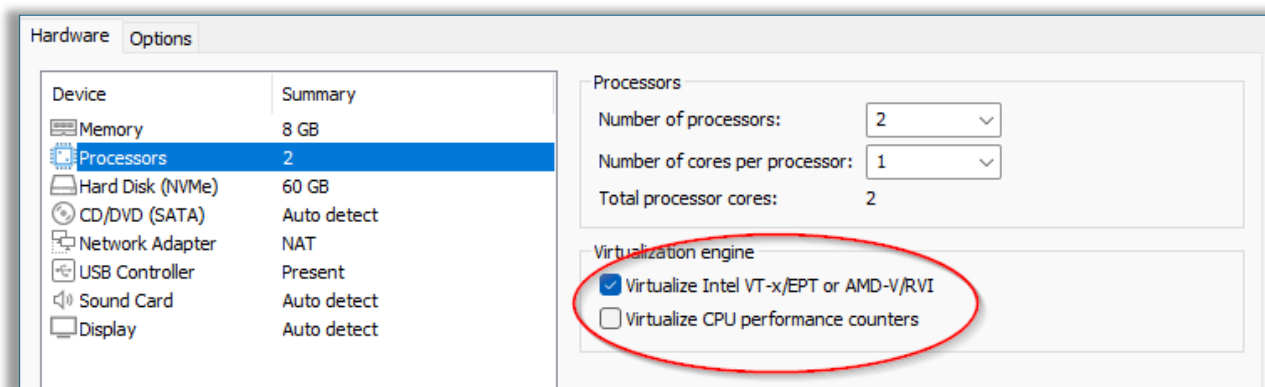


- a. *Note: As not all host machines are identical, you may receive an error message with one or more of the above PowerShell scripts depending on your setup.*
6. ***Restart your host machine and test. If still not resolved, continue to section 3.***



3. Optional: Toggle VMWare settings back

After you restart, if there is still an error you may need to toggle the processor hardware setting for virtualization in your VM - something you may have already unchecked - back on. For some machines it must be off, for others it must be on.



Remember once you get the ADHD VM setup, do not allow it to run updates or you may need to setup your VM fresh. See previous directions to stop updates for Microsoft Windows and Windows Store.

4. A Final Note

One last note, some users may need to Enable or Disable Virtualization in their BIOS. These settings are usually found in an Advanced tab in the BIOS settings. These settings may vary by manufacturer.



Password Cracking Lab Errors out with “CL_DEVICE_NOT_AVAILABLE” error

Background / Symptoms

Some users have seen the below error when trying to run HashCat during the Password Cracking lab:

```
clCreateContext(): CL_DEVICE_NOT_AVAILABLE.
```

```
Watchdog: Hardware monitoring interface not found on your system.  
Watchdog: Temperature abort trigger disabled.  
  
clCreateContext(): CL_DEVICE_NOT_AVAILABLE  
  
Started: Tue Jun 11 10:48:01 2024  
Stopped: Tue Jun 11 10:48:01 2024
```

The problem appears for some, but not all, users, with no discernable pattern in terms of operating system, processor make, model or any other discerned metadata.

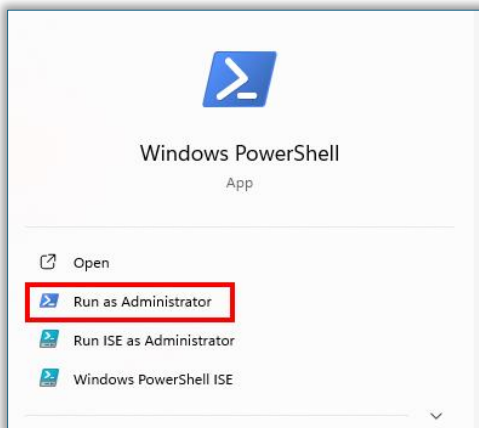
The solution is to update the OpenCL software from Intel.



Remediation

Preferred: Scripted Remediation

1. Log into the ADHD VM using the usual adhd username & password
2. Open a PowerShell window as admin



- a. Select Yes that you will allow this program to make changes to your device when prompted to continue.
3. Run the below command to pull down the CLI version updating script.

```
Invoke-WebRequest -Uri  
https://raw.githubusercontent.com/deterministicj/AntiS  
yphonTraining-VM-Fix-Menu/refs/heads/main/ADHD-Fix-  
Menu.ps1 C:\ADHD-Fix-Menu.ps1
```

4. In the same PowerShell window, type the line below and press enter:

```
C:\ADHD-Fix-Menu.ps1
```

5. A simple menu should pop up and ask whether you'd like to disable updates (Option 1) or Fix the Hashcat lab (Option 2)



```
ADHD VM

Options
-----
1. Disable automatic updates
2. Fix Hashcat lab - CL_DEVICE_NOT_AVAILABLE error
-----

Which option would you like to select? (1,2, or q to exit): 3
Invalid option. Please select a valid option.
Which option would you like to select? (1,2, or q to exit): q
```

- a. Select Option 2, and if prompted, "Q" to quit afterward.
6. Go back to your Command Prompt and attempt to continue the lab, it should now move forward without error.

```
31d6cfe0d16ae931b73c59d7e0c089c0:
c4ddb64252adfc9e0558353099ded495:freedom
1c2f7f3b20a7a3c512c72c6551d5c8ae:8675309
8846f7eaae8fb117ad06bdd830b7586c:password
08942f2b090225613f4da5ae3e920bc5:fender
3ceb5ce361663e50b09a7768e5770e0e:rabbit1
Approaching final keyspace - workload adjusted.

Session.....: hashcat
Status.....: Exhausted
Hash.Type.....: NTLM
Hash.Target.....: sam.txt
Time.Started.....: Tue Jun 11 11:53:58 2024 (2 secs)
Time.Estimated...: Tue Jun 11 11:54:00 2024 (0 secs)
Guess.Base.....: File (password.lst)
Guess.Mod.....: Rules (rules\Incisive-leetspeak.rule)
Guess.Queue.....: 1/1 (100.00%)
Speed.Dev.#1.....: 20256.3 kH/s (6.16ms) @ Accel:256 Loops:256 Thr:1 Vec:8
Recovered.....: 6/7 (85.71%) Digests, 0/1 (0.00%) Salts
Progress.....: 55087259/55087259 (100.00%)
Rejected.....: 0/55087259 (0.00%)
Restore.Point....: 3557/3557 (100.00%)
Candidates.#1....: ma++1ngly -> sss
HWMon.Dev.#1.....: N/A

Started: Tue Jun 11 11:53:57 2024
Stopped: Tue Jun 11 11:54:01 2024

C:\tools\hashcat-4.1.0>
```

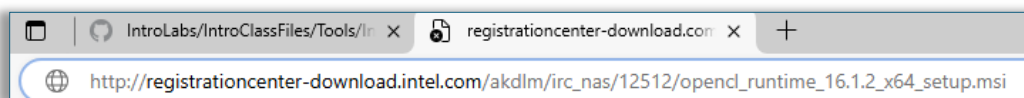
7. In the event you are still having issues, you can also try the manual install below to see if that works.



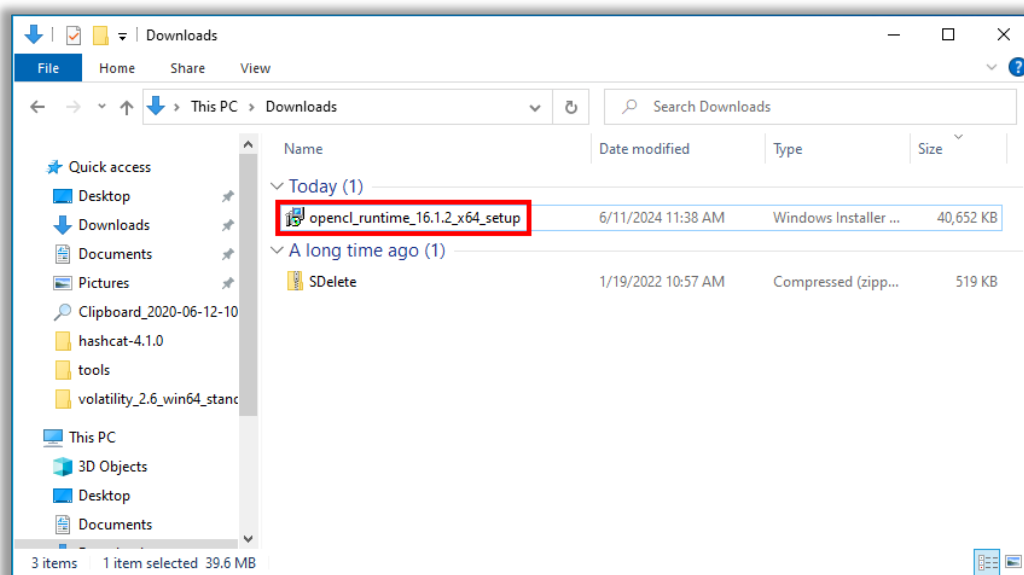
Backup: Manual Remediation

These steps must be completed **within** the VM.

1. In an internet browser (ex. Edge) copy and paste, or type, in the following in the address bar:
 - a. http://registrationcenter-download.intel.com/akdlm/irc_nas/12512/openc1_runtime_16.1.2_x64_setup.msi

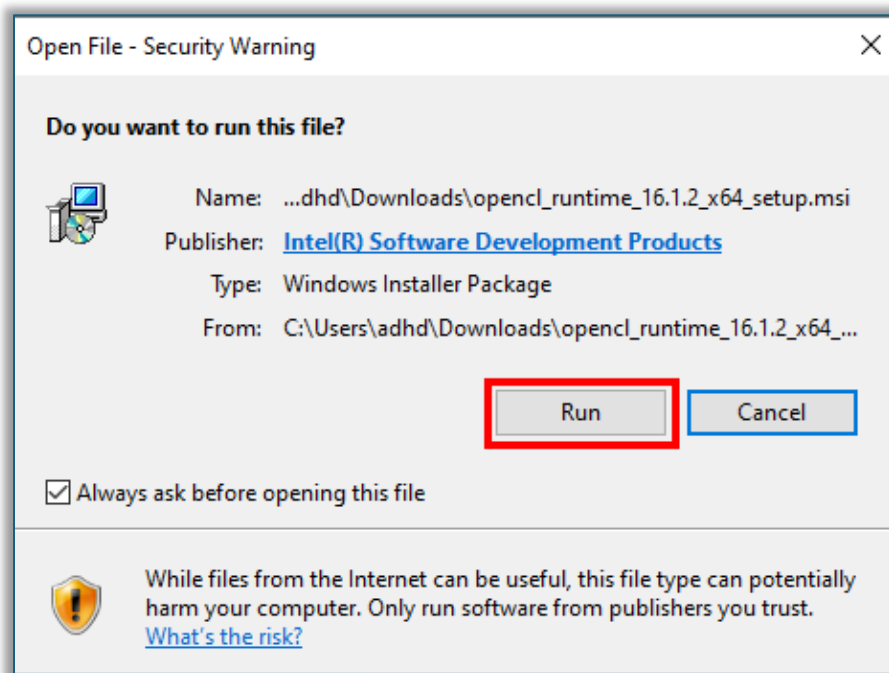


2. Open File Explorer, C:\ drive, and then Click Downloads.
 - a. Double click on the openc1_runtime_16.1.2_x64_setup file to run.

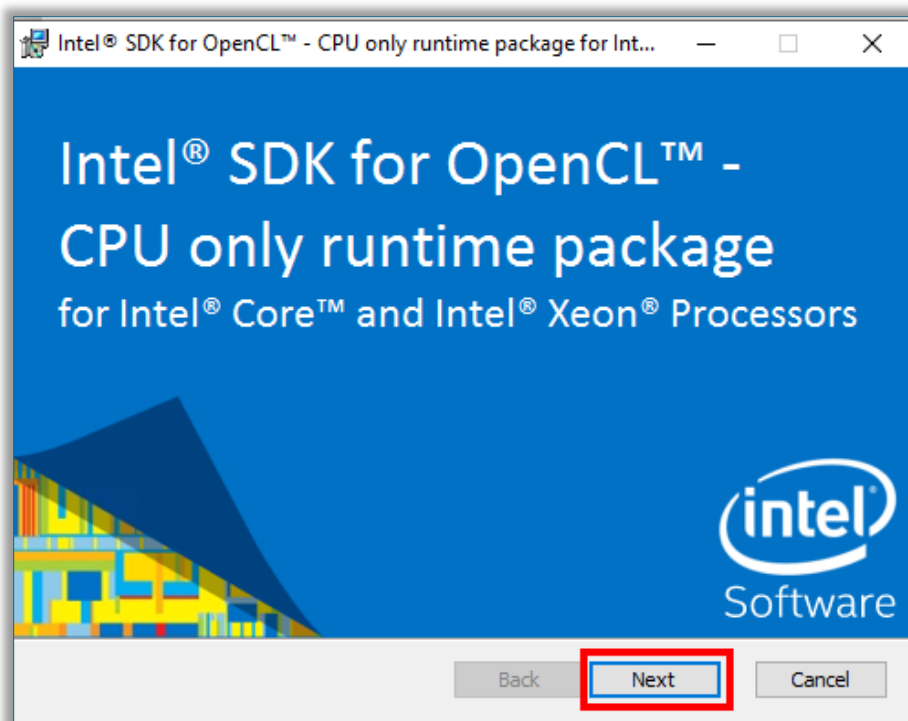




3. Click Run when prompted by the Security Warning

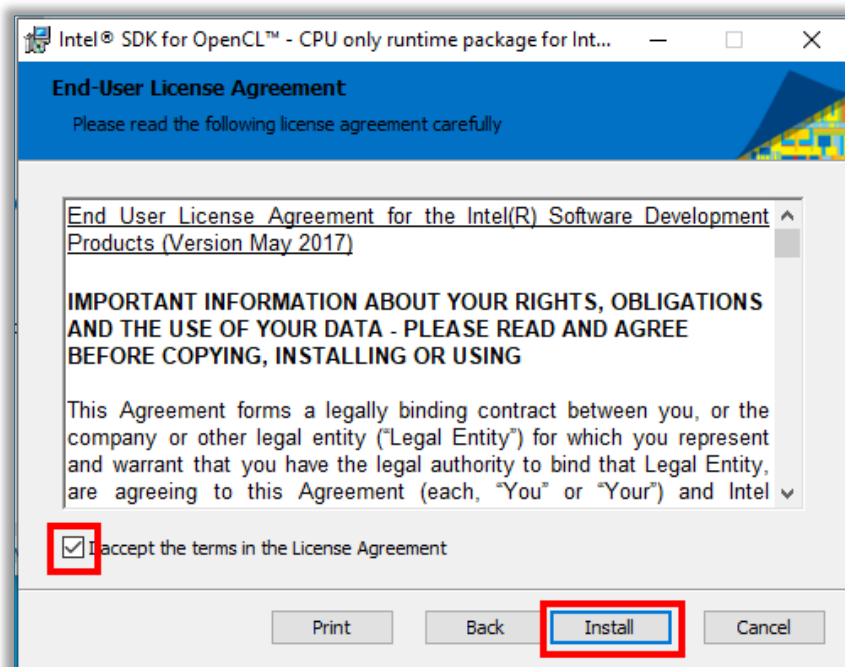


4. Click Next to begin installation.

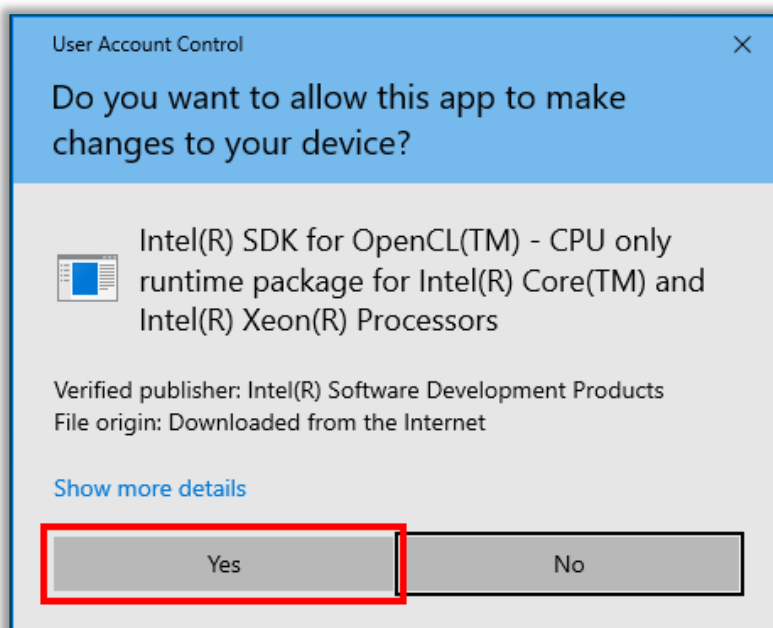




5. Check the box to accept agreement and click Install.

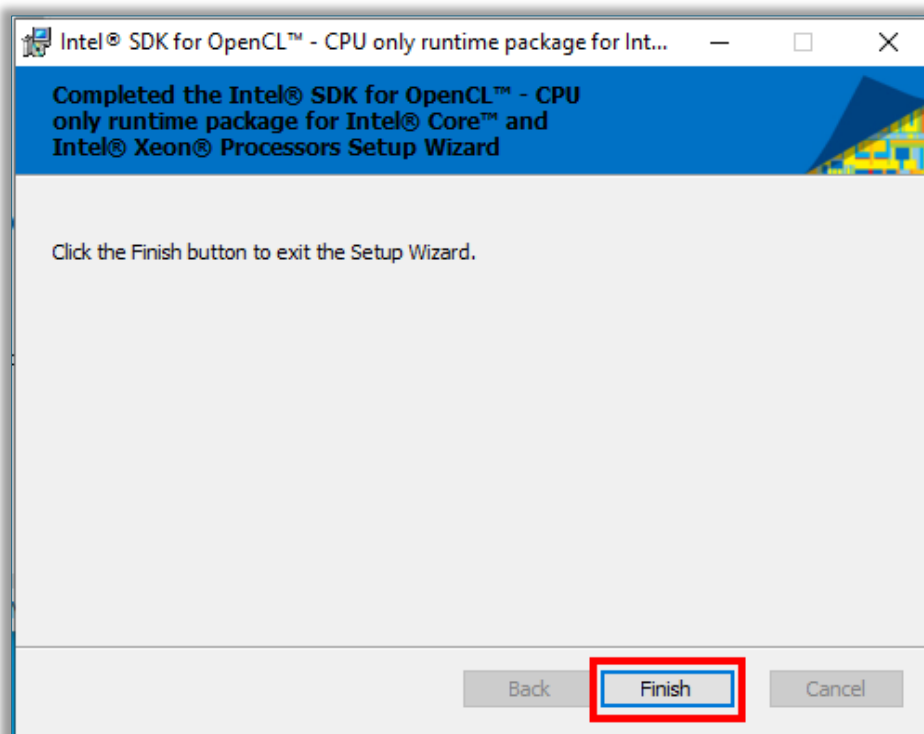


6. If prompted by User Account Control, select **Yes** for it to make changes to the device.





7. Click the Finish button to exit the setup Wizard



8. Go back to your Command Prompt and attempt to continue the lab, it should now move forward without error.

```
31d6cfe0d16ae931b73c59d7e0c089c0:
c4ddb64252adfc9e0558353099ded495:freedom
1c2f7f3b20a7a3c512c72c6551d5c8ae:8675309
8846f7eaae8fb117ad06bdd830b7586c:password
08942f2b090225613f4da5ae3e920bc5:fender
3ceb5ce361663e50b09a7768e5770e0e:rabbit1
Approaching final keyspace - workload adjusted.

Session.....: hashcat
Status.....: Exhausted
Hash.Type.....: NTLM
Hash.Target.....: sam.txt
Time.Started.....: Tue Jun 11 11:53:58 2024 (2 secs)
Time.Estimated...: Tue Jun 11 11:54:00 2024 (0 secs)
Guess.Base.....: File (password.lst)
Guess.Mod.....: Rules (rules\Incisive-leetspeak.rule)
Guess.Queue.....: 1/1 (100.00%)
Speed.Dev.#1.....: 20256.3 kH/s (6.16ms) @ Accel:256 Loops:256 Thr:1 Vec:8
Recovered.....: 6/7 (85.71%) Digests, 0/1 (0.00%) Salts
Progress.....: 55087259/55087259 (100.00%)
Rejected.....: 0/55087259 (0.00%)
Restore.Point....: 3557/3557 (100.00%)
Candidates.#1....: ma++ingly -> sss
HWMon.Dev.#1.....: N/A

Started: Tue Jun 11 11:53:57 2024
Stopped: Tue Jun 11 11:54:01 2024

C:\tools\hashcat-4.1.0>
```



Credits

This unified ADHD VM How-To Guide, Common Errors, and How to Fix Them document was created from the experience of many users.

To all those who came to the Tech Support Channel, thank you for letting us help you. May the trials we all faced in the past help those in the future.

Sincere thanks to the Discord users **.lokihakanin**, **deterministicj**, **krooth**, **childofalliance**, **HaircutFish**, and **Lavender** for contributing time, code, and screenshots into this document.

Many thanks to all the NerdHerders who contributed their time to Antisyphon Tech Support, and who at one point we all had to learn from.