



COMPREHENSIVE NUCLEAR-TEST-BAN TREATY ORGANIZATION

Possible issues of the Virtual Machine running on OS Windows

Online Training Course on NDC Capacity Building: Introductory Training Course on Radionuclide IMS Data and IDC Products (particulates and noble gas), 7 – 18 March 2022

Alexander Poplavskiy, Services Officer, IDC/CBT alexander.poplavskiy@ctbto.org

1. VT-x/AMD-V is not enabled



VT-x is disabled in the BIOS for both all CPU modes (VERR_VMX_MSR_ALL_VMX_DIS ABLED)

🦸 VirtualBox - Error	?	×
Failed to open a session machine SAS Universi	for the v i ty Editic	virtual on.
✓ Details		
VT-x is disabled in the BIOS for (VERR_VMX_MSR_ALL_VMX_DI	all CPU m SABLED).	odes
Result Code: E_FAIL (0x80 Component: ConsoleWrap Interface: IConsole {872da6 bee2-5585105b9e	004005; ;45-4a9b- eed}	•1727-
ОК СС	ору	

VT-x/AMD-V hardware acceleration is not available on your system. Your 64-bit guest will fail to detect a 64-bit CPU and will not be able to boot.



CTBTO.ORG

1. VT-x/AMD-V is not enabled



Visit the page to find a way on how to enable a Virtualization in your hardware: https://2nwiki.2n.cz/pages/viewpage.action?pageId=75202968

EPP			
 Fan Always on while on A Data Execution Prevention 	C Power		
SATA Device Mode AHCI IDE RAID			
 HP DayStarter Secondary Battery Fast Ch HP QuickLook • Preboot Authentication on HP QuickWeb HP QuickWeb: Write Prot 	arge HP QuickLook Boot ect	R	
Virtualization Technology		A SALE REPORT OF A SALE OF	
TXT Technology Enabled Disabled			
Multi Core CPU Intel (R) HT Technology			

PUTTING AN END TO NUCLEAR EXPLOSIONS

CTBTO.ORG

2. VirtualBox and Hyper-V conflict

In some cases Oracle VM VirtualBox cannot be used on a Windows host where Hyper-V is running. When using this feature, some host systems might experience significant Oracle VM VirtualBox performance degradation or fail to run with the error message.



The solution might be Disabling Hyper-V.

- Press Windows logo key + X, then press A key to run Command Prompt as administrator.
- In Command Prompt window, type bcdedit /set hypervisorlaunchtype off and press Enter key to execute this command.



3. Small size of the VM Desktop



CTBT0.0RG

Some NDC-in-a-Box applications require a screen with HD resolution to accommodate the entire GUI: panels, buttons, maps, etc. In case the native resolution of your monitor lower than HD, it still can be used in Scaled Mode:

- Select from the main menu of VirtualBox: View->Scaled Mode
- From the main menu of the Virtual Machine select: Applications-> System Tools-> Settings



3. Small size of the VM Desktop



- From the left panel of Settings window choose Devices, then Displays.
- Click on the Resolution parameters and select a better resolution which fits your screen ratio. Click Apply changes.

Content Displays Image: Displays VBX Image: Displays VBX Image: Displays VBX Image: Displays Orientation Image: Displays UBX Image: Displays Orientation Image: Displays UBX Image: Displays Orientation Image: Displays UBX Image: D	File Machine View Input Devices He	1p	Sun 22:58 📑 🐠 😃
Displays VBX Image: Keyboard Orientation Landscape Image: Mouse & Touchpad Orientation Landscape Image: Printers Resolution 968 × 507 Image: Removable Media 1920 × 1200 (16: Image: Printers 1920 × 1000 (16: Image: Wacom Tablet 1680 × 1050 (16: Image: Color 1400 × 1050 (16:	< Devices	Displays	_ [
Keyboard Orientation Mouse & Touchpad Resolution Printers Resolution Removable Media 1920 × 1020 (165) Thunderbolt Night Light Macom Tablet 1660 × 1050 (165) Color 1600 × 1050 (165)	Displays	VBX	
Image: Mouse & Touchpad Image: Mouse &	🕅 Keyboard	Orientation	Landscane
Printers Resolution 968 × 507 Removable Media 1920 × 1200 (168 Thunderbolt 1920 × 1200 (168 Wacom Tablet 1680 × 1050 (168 Color 1680 × 1050 (168	🗳 Mouse & Touchpad	Orientation	Landscape
Removable Media 1920 × 1200 (16) Thunderbolt Night Light 1920 × 1080 (16) Macom Tablet 1600 × 1020 (43) 1600 × 1050 (43) Color 1400 × 1050 (16) 1600 × 1050 (16)	膏 Printers	Resolution	968 × 507
Image: Product of the second	Removable Media		1920 × 1200 (16:10)
Interview Interview <t< td=""><td>分 Thunderbolt</td><td>Night Light</td><td>1920 × 1080 (16:9)</td></t<>	分 Thunderbolt	Night Light	1920 × 1080 (16:9)
Wacom Tablet 1680 × 1050 (16: 1400 × 1050 (4:3) Color 1400 × 005 (4:3) 1600 × 900 (16:9) 1600 × 900 (16:9)	·		1600 × 1200 (4:3)
Cotor 1400 × 1050 (4:3 1600 × 900 (16:9	🖄 Wacom Tablet		1680 × 1050 (16:10)
1600 × 900 (16:9	🔏 Color		1400 × 1050 (4:3)
			1600 × 900 (16:9)
c ^a 💥 Settings	🗗 🔀 Settings		

4. Setting your keyboard layout



If your keyboard layout is different from the English QWERTY as preconfigured in the provided VM, you can easily change it by following the steps:

• From the left panel of the Settings window choose "Region & Language" item and click "+" button under the Input Sources panel.



Double-click this icon on the desktop

۹	Settings		Region & Language	Login Screen	-	×
(10	Wi-Fi					
*	Bluetooth	Language		English (United States)		
9	Background	Formats		United States (English)		
À	Notifications	land Causes				
Q	Search	Input Sources				
0	Region & Language	English (US)				
0	Universal Access	+ -	^ ~	E		
€	Online Accounts					
Ш	Privacy					

4. Setting your keyboard layout



• Select first your language and then a keyboard layout. Click Add button.

٩	Settings		Region & La	nguage	Login Scre	en 🗕	• ×			
((=	Wi-Fi	Cancel	Add an Input Source	Add						
*	Bluetooth		Arabic (Egypt)		United St	ates)				
			Chinese (China)							
0	Background	English (United Kingdom)		tates (En	glish)					
À	Notifications		English (United States)							
۹	Search		French (France)			Cancel	_	Add an Input Source	Add	
	Region & Language		German (Germany)			Canadiar	ı Muttiinguat ((1st part)		
~			Japanese			Canadiar	n Multilingual ((2nd part)		
0	Universal Access		Russian (Russian Federation) Spanish (Spain)			English (intl., with AltGr dead keys)				
₹Ds	Online Accounts					French				
ш	Privacy	: · · · · ·				French (AZERTY)			
-	,					French (Bepo, ergonor	mic, Dvorak way)		
						French (Bepo, ergonor	mic, Dvorak way, Latin-9 only)		
This is an example of setting					French (Breton) French (Cameroon)					
	FIERCII (AZERTY) layout					French (Canada)			

PUTTING AN END TO NUCLEAR EXPLOSIONS

CTBT0.0RG

4. Setting your keyboard layout



 You can further remove the English (US) layout by selecting it in the Input Sources panel and clicking "-" button below.

٩	Settings	Region & Language Login Screen	-	×
((1*	Wi-Fi			
*	Bluetooth	Language English (United States)		
4	Background	Formats United States (English)		
Ą	Notifications			
۹	Search	Input Sources Options	;	
9	Region & Language	English (US)		
Ø	Universal Access	French (AZERTY)		
Ð₂	Online Accounts	+ - ~ ~	2	
	Privacy		_	

PUTTING AN END TO NUCLEAR EXPLOSIONS

CTBTO.ORG

Thank you!