



Virtual Box

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Agenda

- Virtual Box Installation
- Intel VT-x Virtualization and BIOS setting



VirtualBox

- ❑ VirtualBox is a general-purpose full virtualizer for x86 hardware, targeted at server, desktop and embedded use

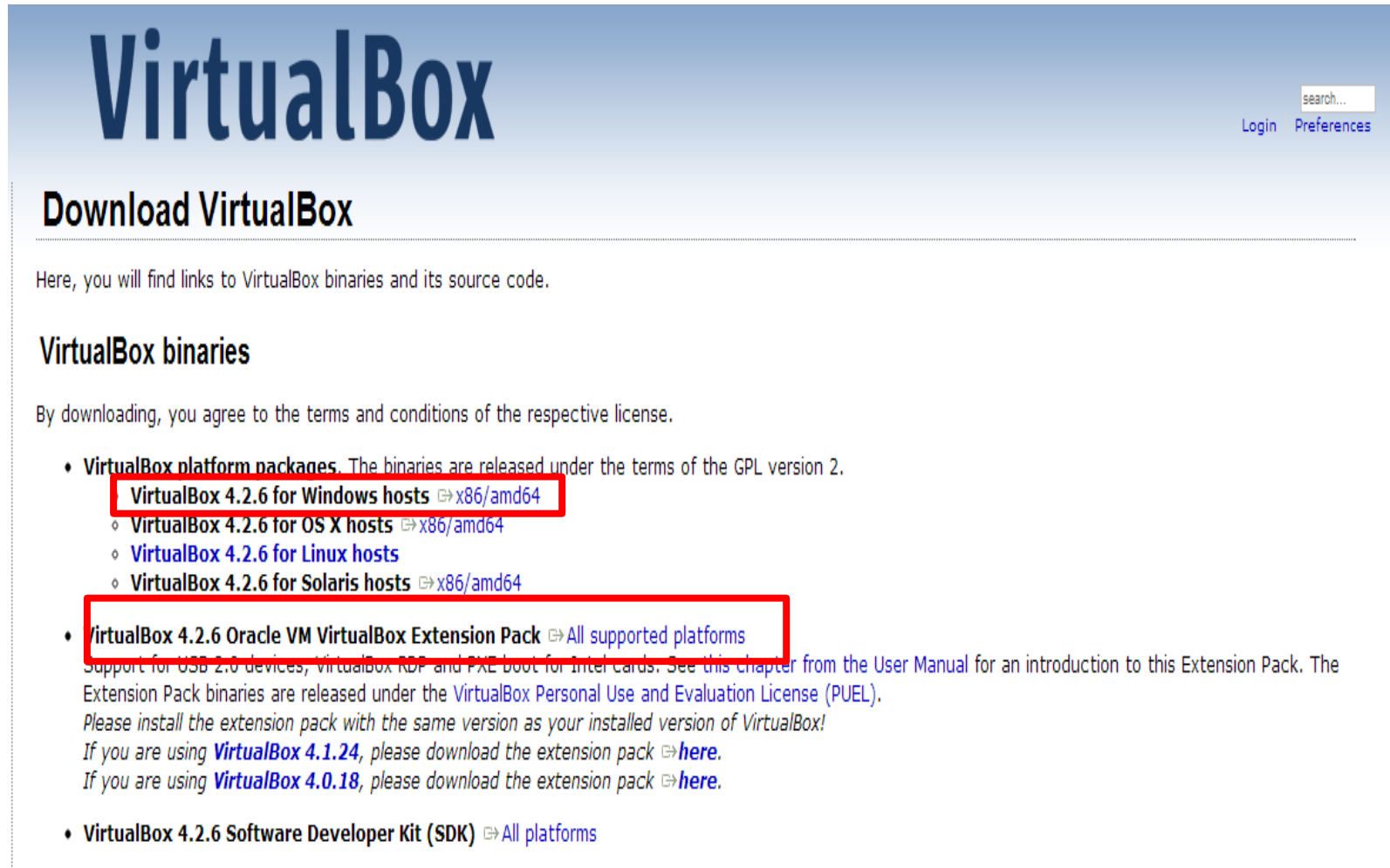


Download

- **Download VirtualBox (and extension pack) from the following website:**

<https://www.virtualbox.org/wiki/Downloads>

- ❑ Pick the one that matches your platform.
For example, Microsoft Windows



The screenshot shows the VirtualBox website's download page. At the top, the 'VirtualBox' logo is displayed in a large, dark blue font. To the right of the logo, there is a search bar with the placeholder text 'search...' and two links, 'Login' and 'Preferences', in a smaller blue font. Below the logo, the heading 'Download VirtualBox' is centered. A horizontal dotted line separates this heading from the text below. The text reads: 'Here, you will find links to VirtualBox binaries and its source code.' This is followed by the section title 'VirtualBox binaries'. Below this, another line of text states: 'By downloading, you agree to the terms and conditions of the respective license.' The main content is a bulleted list of download links. The first bullet point is 'VirtualBox platform packages. The binaries are released under the terms of the GPL version 2.' It contains four sub-links: 'VirtualBox 4.2.6 for Windows hosts ⇨ x86/amd64', 'VirtualBox 4.2.6 for OS X hosts ⇨ x86/amd64', 'VirtualBox 4.2.6 for Linux hosts', and 'VirtualBox 4.2.6 for Solaris hosts ⇨ x86/amd64'. The second bullet point is 'VirtualBox 4.2.6 Oracle VM VirtualBox Extension Pack ⇨ All supported platforms'. Below this link, there is a paragraph of text: 'Support for USB 2.0 devices, VirtualBox RDP and PXE boot for Intel cards. See this chapter from the User Manual for an introduction to this Extension Pack. The Extension Pack binaries are released under the VirtualBox Personal Use and Evaluation License (PUEL). Please install the extension pack with the same version as your installed version of VirtualBox! If you are using VirtualBox 4.1.24, please download the extension pack ⇨ here. If you are using VirtualBox 4.0.18, please download the extension pack ⇨ here.' The third and final bullet point is 'VirtualBox 4.2.6 Software Developer Kit (SDK) ⇨ All platforms'.

VirtualBox

search...
Login Preferences

Download VirtualBox

Here, you will find links to VirtualBox binaries and its source code.

VirtualBox binaries

By downloading, you agree to the terms and conditions of the respective license.

- **VirtualBox platform packages.** The binaries are released under the terms of the GPL version 2.
 - **VirtualBox 4.2.6 for Windows hosts** ⇨ x86/amd64
 - VirtualBox 4.2.6 for OS X hosts ⇨ x86/amd64
 - VirtualBox 4.2.6 for Linux hosts
 - VirtualBox 4.2.6 for Solaris hosts ⇨ x86/amd64
 - **VirtualBox 4.2.6 Oracle VM VirtualBox Extension Pack** ⇨ All supported platforms
Support for USB 2.0 devices, VirtualBox RDP and PXE boot for Intel cards. See this chapter from the User Manual for an introduction to this Extension Pack. The Extension Pack binaries are released under the VirtualBox Personal Use and Evaluation License (PUEL). Please install the extension pack with the same version as your installed version of VirtualBox!
If you are using **VirtualBox 4.1.24**, please download the extension pack ⇨ [here](#).
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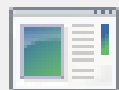
Installation

- The VirtualBox installation can be started by by double-clicking on the downloaded executable file.
- It will display the installation welcome dialog and allow you to choose where to install VirtualBox to and which components to install

Open File - Security Warning



Do you want to run this file?



Name: ...VirtualBox\4.2.6\VirtualBox-4.2.6-82870-Win.exe

Publisher: [Oracle Corporation](#)

Type: Application

From: D:\House\Tools\WWW\VirtualBox\4.2.6\VirtualB...

Run

Cancel



Always ask before opening this file



While files from the Internet can be useful, this file type can potentially harm your computer. Only run software from publishers you trust. [What's the risk?](#)

Oracle VM VirtualBox 4.2.6 Setup



Welcome to the Oracle VM VirtualBox 4.2.6 Setup Wizard

The Setup Wizard will install Oracle VM VirtualBox 4.2.6 on your computer. Click Next to continue or Cancel to exit the Setup Wizard.

Version 4.2.6

Next >

Cancel



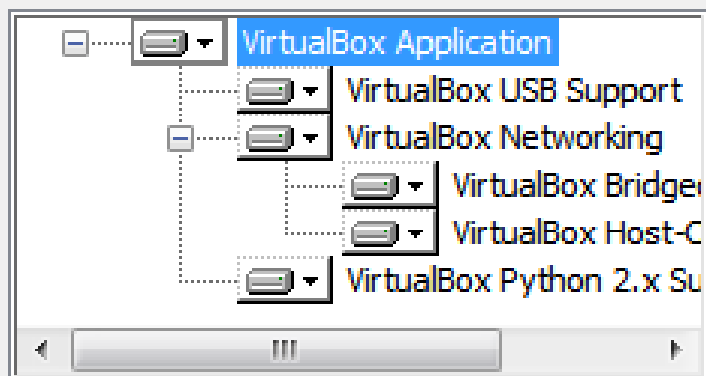
Oracle VM VirtualBox 4.2.6 Setup



Custom Setup

Select the way you want features to be installed.

Click on the icons in the tree below to change the way features will be installed.



Oracle VM VirtualBox 4.2.6 application.

This feature requires 4776KB on your hard drive. It has 3 of 3 subfeatures selected. The subfeatures require 0KB on your ...

Location: C:\Program Files\Oracle\VirtualBox\

Browse

Version 4.2.6

Disk Usage

< Back

Next >

Cancel



Oracle VM VirtualBox 4.2.6 Setup



Custom Setup

Select the way you want features to be installed.

Please choose from the options below:

- ☒ Create a shortcut on the desktop
- ☒ Create a shortcut in the Quick Launch Bar

Version 4.2.6

< Back

Next >

Cancel



Oracle VM VirtualBox 4.2.6 Setup



Ready to Install

The Setup Wizard is ready to begin the Custom installation.

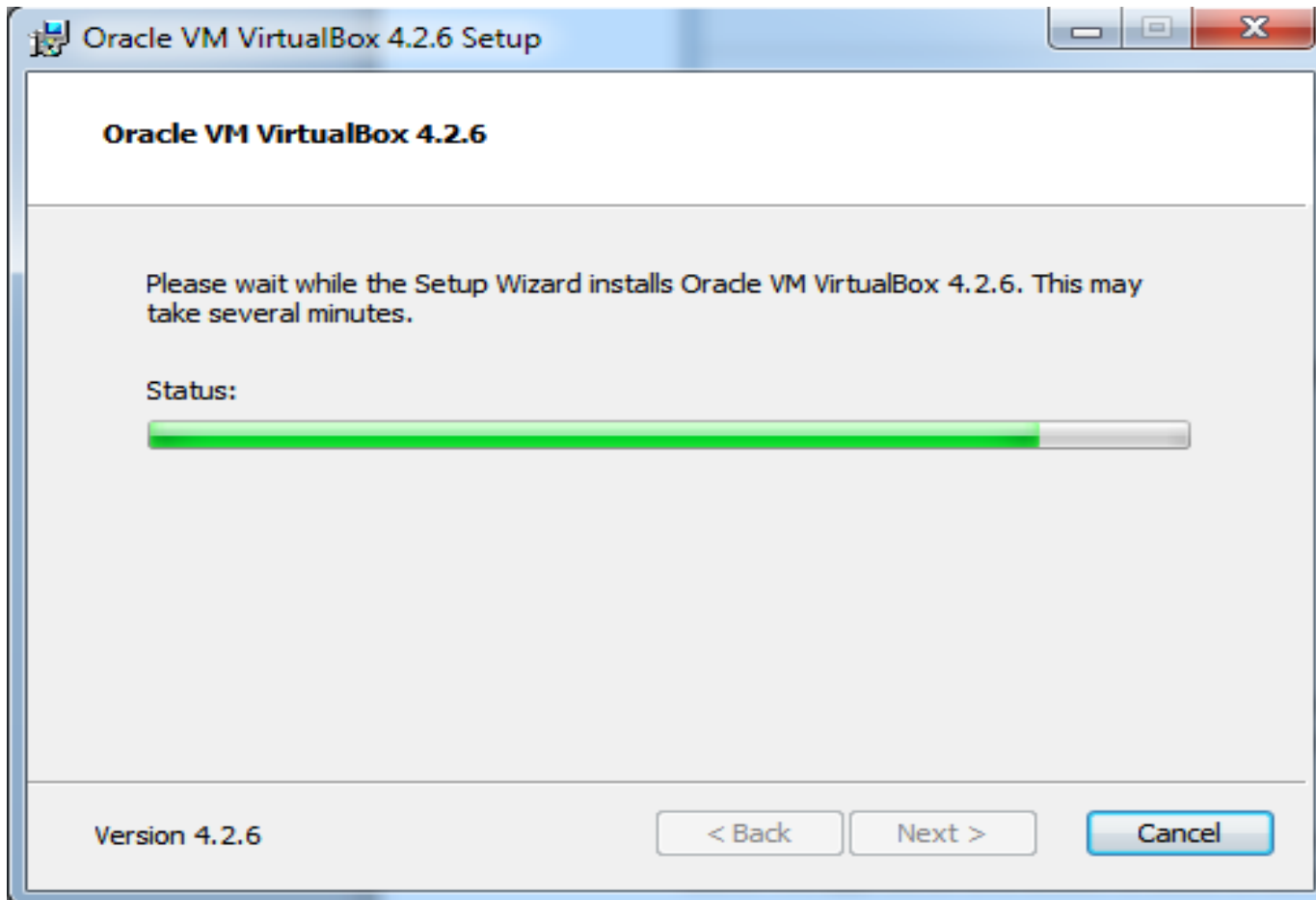
Click Install to begin the installation. If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.

Version 4.2.6

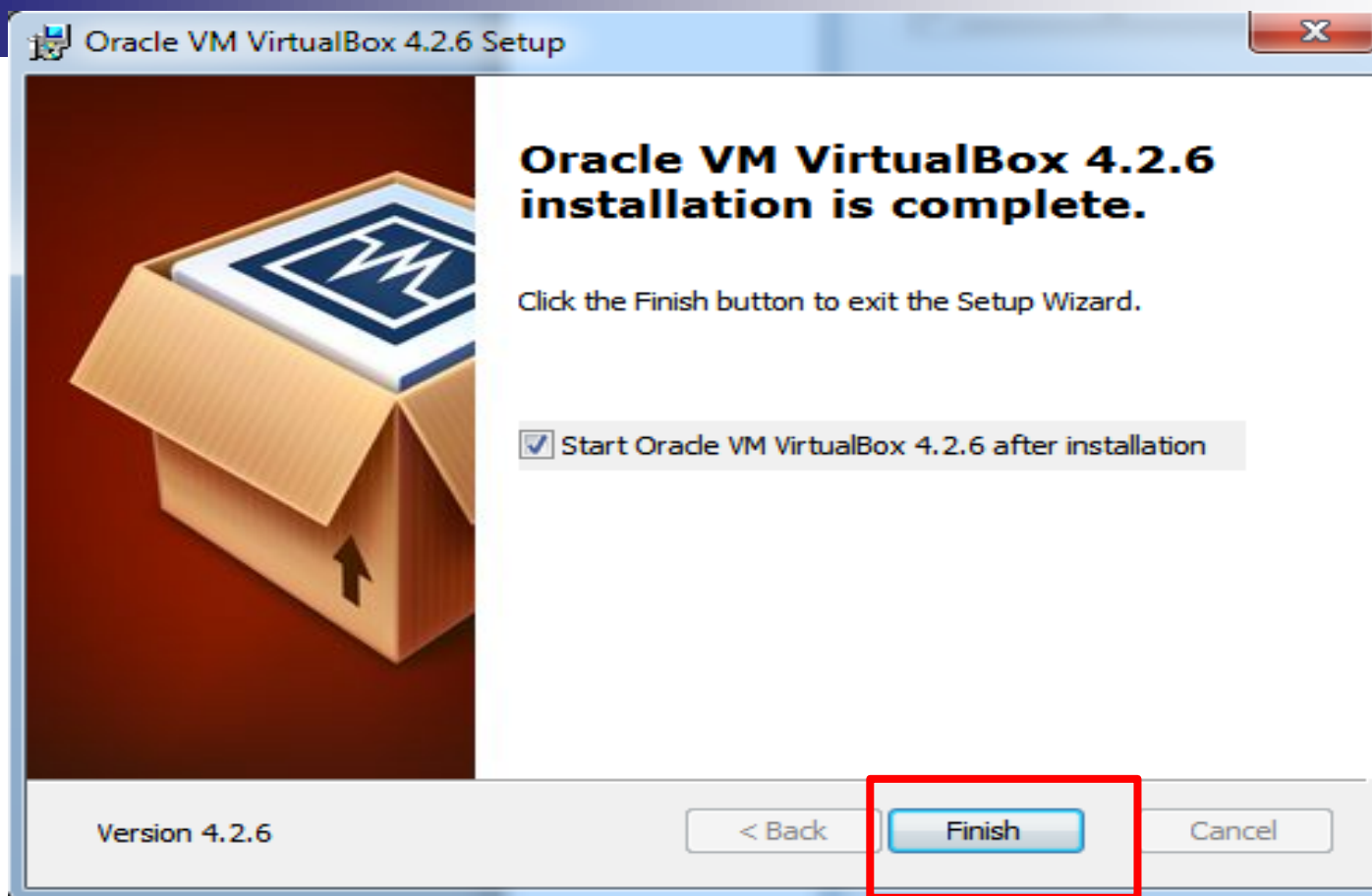
< Back

Install

Cancel



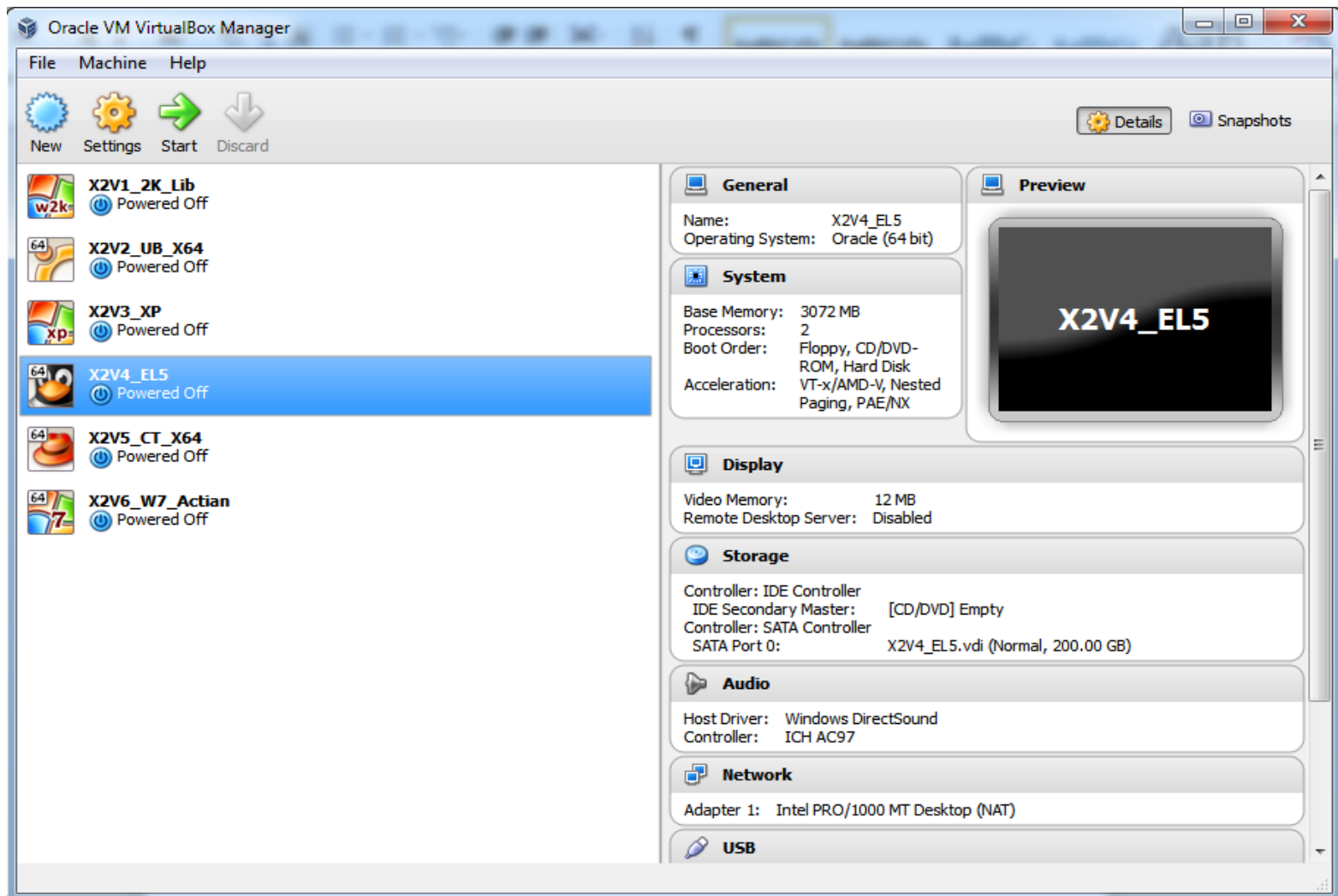
- Depending on your Windows configuration, you may see warnings about "unsigned drivers" or similar. Select "Continue" on these warnings as otherwise VirtualBox might not function correctly after installation



- The installer creates a "VirtualBox" group in the Windows "Start" menu which allows you to launch the application and access its documentation

Extension packages

- VirtualBox extension packages have a .vbox-extpack file name extension.
- To install an extension, simply double-click on the package file, and the VirtualBox Manager will guide you through the required steps





Intel VT-x Virtualization

- It is mandatory to check VT-x/AMD-V under General setting
- Otherwise the 64bit guest will fail to detect the CPU and won't be able to boot
- This feature should be enabled in Host's BIOS



BIOS

- In IBM PC compatible computers, the Basic Input / Output System (BIOS), also known as the system BIOS or ROM BIOS, is a de facto standard defining a firmware interface

BIOS

- As your host computer boots up, look for one of the BIOS manufacturer's names to flash on the screen.
- The BIOS manufacturer name usually appears as a logo in the top-left corner or as text at the very bottom of the screen



BIOS

- After verifying the creator of the BIOS on your system, reference/Google the appropriate keyboard command to access the BIOS setup utility



Access BIOS

- **AMI (American Megatrends) - AMIBIOS, AMI BIOS**
 - Press **Del** when after powering on the computer.
 - Some older motherboards that use AMIBIOS may prompt for the **F1** or F2 key instead.
- **Award Software (now part of Phoenix Technologies) - AwardBIOS, Award BIOS**
 - Press the Del key to enter the BIOS Setup Utility on nearly all AwardBIOS powered motherboards.
 - Some older systems using Award's BIOS software asked for Ctrl+Alt+Esc to enter BIOS

Example of Changing the VT-X setting

- This setting is found under 'Advanced Chipset settings' in AWARD BIOS. It will be different for each motherboard. Check your mother board manual

