# Installation of VM-Ware Workstation Pro & Installation of Kali Linux

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## Introduction

This manual will show you how to download, install, and setup not only VM-Ware Workstation Pro but also the installation of Kali Linux on a Virtual Machine Platform. We will first go through the installation and set-up of VM-Ware. Then we'll follow up with the setup for a Virtual Machine Interface. Then we will finish with how to download and install Kali Linux into our newly created VM (Virtual Machine).

# Description

Before getting too much into detail we will break this down into three (3) sections.

- 1. Downloading & Installing the VM-Ware Workstation Pro Interface.
- 2. Set-up & Configure a Virtual Machine Platform.

#### 1: Installation of the VM-Ware Workstation Software

We will begin with downloading VM-Ware Workstation Pro from the VM-Ware website. (https://my.vmware.com/web/vmware/downloads/#all\_products).

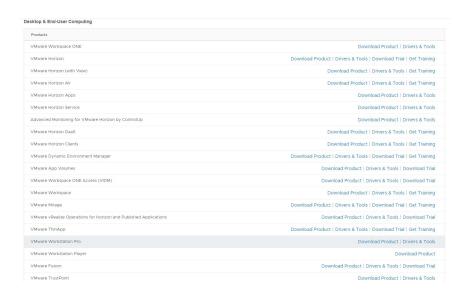


Figure 1: Download Location on VM-Ware Website

In the prior image you can see there are many options for downloads with-in VM-Ware. Here, we are going to select either VM-Ware Workstation Pro or VM-Ware Workstation Player. The setup is very similar with each. However, in this manual we will be looking at VM-Ware's Workstation Pro.

- \*\*\* Please Note: Workstation Pro has a license that must be purchased for continued usage. It has an evaluation period and is fully functional during that period.
- \*\* VM-Ware Workstation Player is absolutely free to use FOR PERSONAL USE ONLY. So it is your decision which product you wish to use.

Once you have chosen your product to download you will be brought to the next screen in the download process. You will notice that you have a choice of Operating Systems that you can install VM-Ware to. In this manual we will be using the Microsoft Windows © Operating System.

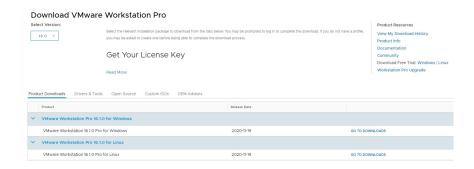


Figure 2: Download for Workstation Pro on VM-Ware Website

After choosing the correct Operating System by clicking on the "GO TO DOWNLOADS". We will be brought to the final page to complete the download process.

\*\*\*PLEASE NOTE — You will have to "Log-In" or "Create An Account" to proceed with the download of the program. You will also have to accept the "End User License Agreement" to start the download.



Figure 3: Completion Step for VM-Ware Download

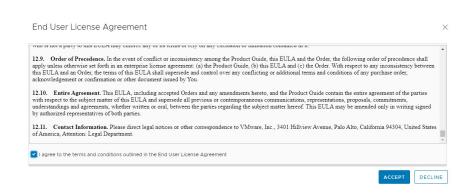


Figure 4: Acceptance of End User License Agreement

Once the download is complete we can locate the file in our "Downloads" Folder. (Linux operating systems will also have a similar location depending on the Distribution Type.) After locating the downloaded file we just need to "double-click" on the file to start the installation process.

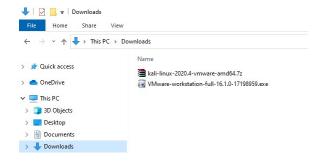


Figure 5: VM-Ware Installation File

Once we start the installation process it is just a matter of following the onscreen prompts. There will be a few selections that we will take a closer look at as we progress through the installation.

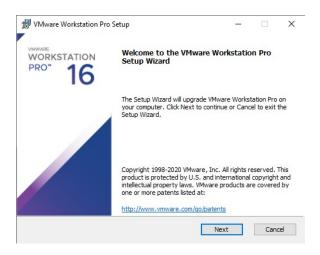


Figure 6: Initial setup Dialog

This is the initial dialog that will show up to begin the installation. Just click next once it runs its test on the system and the button becomes active.

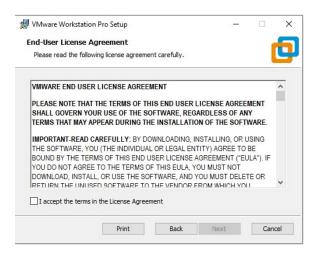


Figure 7: License Agreement Dialog

This dialog is where we will need to agree to the "End User License Agreement" for the installation. Activate the check box and select "Next".

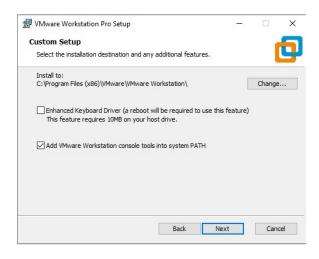


Figure 8: Installation Path and Special Selections

This dialog gives you the ability to change the path of the installation. Should you choose to do so, just click on the "change" button to specify the path of your choosing. The "Enhanced Keyboard Driver" is ONLY CHECKED if you are using an enhanced keyboard. (You probably are not so leave it unchecked). "Add tools to system path" should remain checked to ensure VM-Ware functions accordingly. So from here, once you specify the path, enhanced keyboard, and tools, or choose to leave them as default...click "Next".

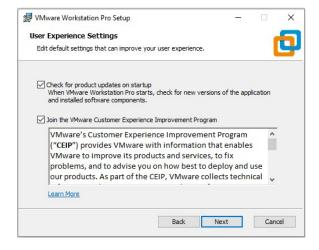


Figure 9: Updates & Customer Experience

This dialog allows for the options for the system to check for updates on startup of the application as

well as the option to join the customer experience. These are both "Optional" and then click "Next".

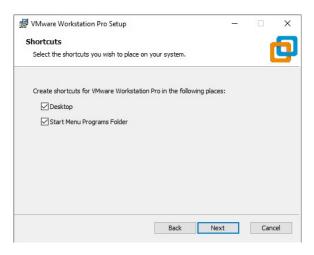


Figure 10: Desktop & Start Menu Items

This dialog allows you to select if you would like a Desktop Icon as well as Start Menu Items. Once chosen, click "Next".

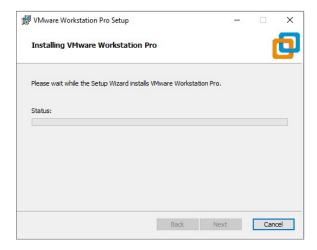


Figure 11: Installation Progress

This dialog is where the installation progress takes over. So just sit back and relax as the installation process happens with all the options you have selected.

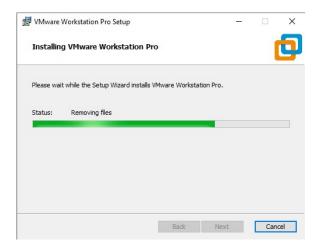


Figure 12: Installation Progress

This dialog also shows the installation progress. Once finished you will see the next dialog saying whether the installation was a success or not. If successful, click "Finish".

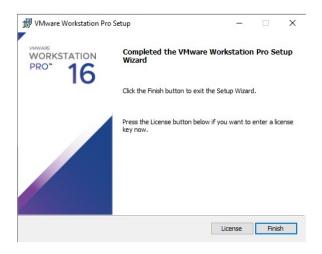


Figure 13: VM-Ware setup

You have successfully installed the VM-Ware Workstation Pro. In the next section we will go through an actual creation and installation of a Virtual Machine.

Once your installation is complete you should be able to run the Virtual Machine Interface. You can find this under your start menu or if you opted for a desktop icon. Figure 14 shows a similar location on the start menu. Figure 15 shows the initial interface after start-up. Here is where you will set-up and configure your virtual machines. This process we will continue in the next section.

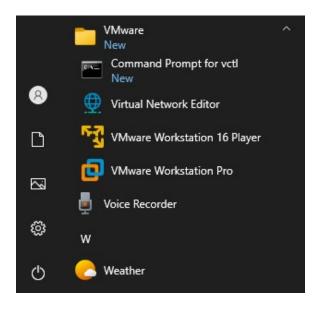


Figure 14: VM-Ware Start Menu Location

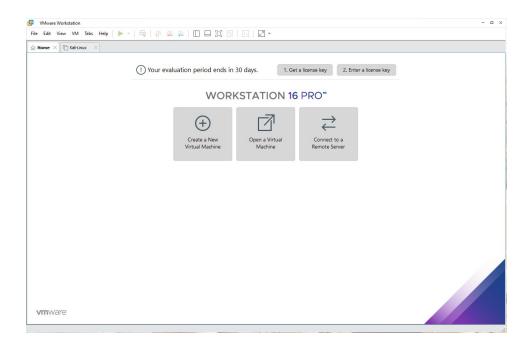


Figure 15: VM-Ware User Interface

### 2. Set-up & Configure a Virtual Machine Platform

#### 2.1 Settings for Specific Virtual Machine Compatibility & Various Operating Systems

This is where we will begin our adventures in setting up a virtual machine. Once the Virtual Machine Interface is open as in the previous section Figure 15, we will begin by clicking on "Create a New Virtual Machine". This will begin our process with the "Virtual Machine Wizard". As you can see in Figure 16, there are two options for configuring a virtual machine. For the purposes of this report, we will be choosing a "custom" setup to show the available options for the virtual machines. Future installations may be done with the "Typical" installation method with changes made after the machine is created.



Figure 16: Virtual Machine Setup

Once we choose our installation type, we can select "Next" to continue to the next steps of the configuration. The next window will be the hardware compatibility options. This is where you will select the appropriate workstation environment. By default, VM-Ware automatically sets to the most current version. However, you may choose to setup with a different version depending on your requirements for the virtual machine. We will be just using the default or current version settings in this project.

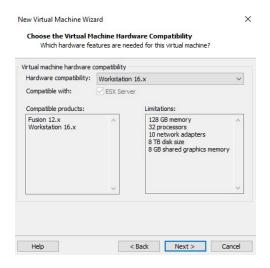


Figure 17: Virtual Machine Hardware Compatibility Default

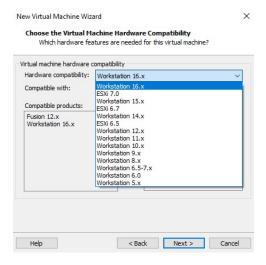


Figure 18: Virtual Machine Hardware Compatibility Options

Continuing on we will now select the operating system that we are going to install. Using the .iso disc image file that we downloaded previously, we will use this image as the "Installer Disc Image File (ISO)". Selecting "Browse" will allow you access to finding the image file that was downloaded. You may also choose to install an Operating System at a later date. (ISO install jump to section 2.2)

If we choose to install an Operating System at a later date. This particular dialog will appear allowing us to choose the "Base" configuration for the type of Operating System we will use.

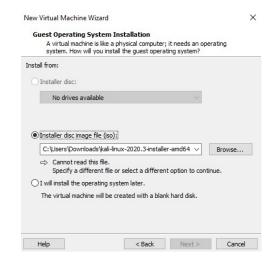


Figure 19: Setup using an ISO Image

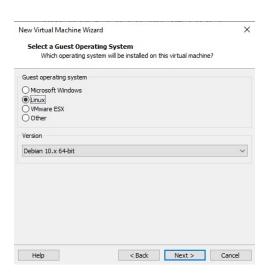


Figure 20: Selections of Operating Systems

The next four (4) figures show the various different types of Operating Systems that can be chosen from when installing the OS at a later time.

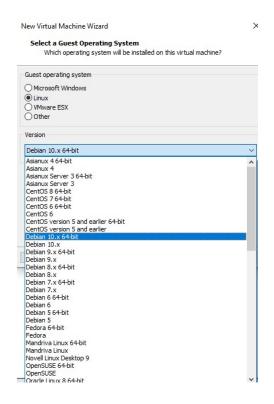


Figure 21: Selection of Various Linux Distributions

Figure 21 shows the various different types of Linux Systems that can be chosen. Debian is the most common when installing a "Kali" Distribution.

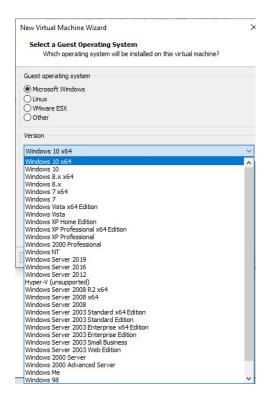


Figure 22: Selection of Various Windows Distributions

Figure 22 shows the various different types of Microsoft Windows Systems that can be chosen.

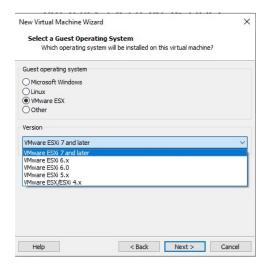


Figure 23: Selection of Various VM-Ware ESX Distributions

Figure 23 shows the various different types of VM-Ware ESX Systems that can be chosen. And Figure 24 shows "Other" Operating Systems that are supported as well.

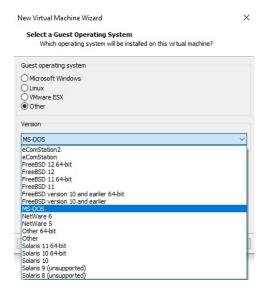


Figure 24: Selection of Various Other Distributions

#### 2.2 Configuration Settings for the Virtual Machine

Figure 25 shows us what the name of the Virtual Machine will be called and the location path where it will be stored on our system. We can change these parameters if we like. The name should be changed if you are going to have multiple "Linux" type installations. Therefore, reducing the risk of improper functionality within same types of VMs. Location can be changed to an external drive or secondary internal drive if disk space on the main drive is a concern as well.

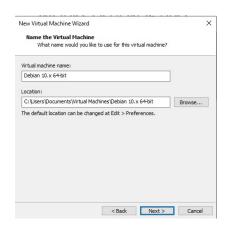


Figure 25: Setting the Name & Location of the VM

Next, we will be configuring our processing power required for our VM. Please understand that you are limited to a maximum based on your "physical" machine's processor.

Please use only the minimal recommended requirements for your Operating System Installation until you fully understand how the Virtual Machine needs to respond to further operations.

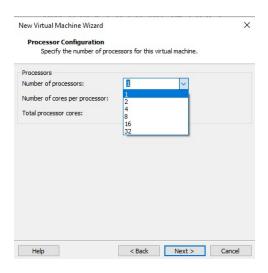


Figure 26: Setting the Number of Processors

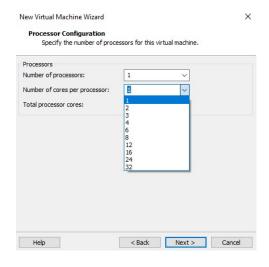


Figure 27: Setting the Number of Cores for the Processor(s)

Continuing on we can select the amount of memory that will be used for our virtual machine. Here you have the choices of between 4MB up to 128GB. However, please choose wisely as your existing physical

machine may limit the amount of memory you may allocate to this virtual machine. (Sometimes, more is not better) Once we have chosen our memory amount, we will continue on to choosing our Network type.

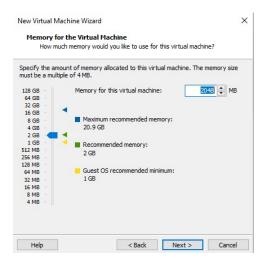


Figure 28: Setting the Memory Allocation of the VM

Here you have the options of having no network connection to having a bridged connection within the host (this requires a distinct IP Address). Here we will just use the default (NAT) "network address translation" which is just using the host's IP address to access the network.

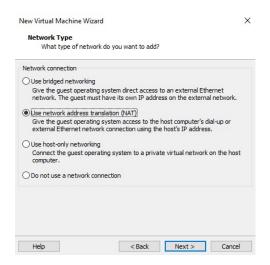


Figure 29: Setting the Network Type of the VM

Next will be the I/O controller types, we will use the recommended LSI Logic for this particular project. Continuing on we will select the type of Disk for our Operating System, using SCSI is recommended, which is what we will be using. This particular interface known as "Scuzzy" is a very reliable disk for VMs.

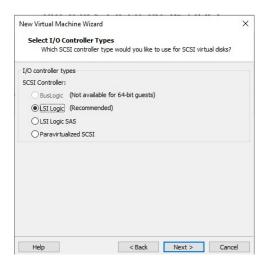


Figure 30: Setting the I/O Controllers of the VM



Figure 31: Setting the Disk Type of the VM

Next we will be creating the virtual disk. You can opt to use an existing disk if you have one, you can also choose to use a physical disk as well (This requires administrator privileges). We will be creating a "new virtual disk" and clicking "Next".

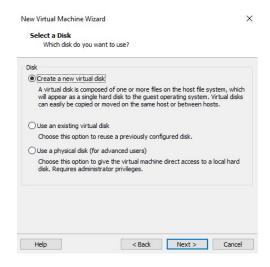


Figure 32: Setting the Disk Type of the VM

Next we will be selecting the size capacity that we would like this disk to have. Keep in mind again, that more is not always better, however be diligent on choosing an adequate size for what your intentions are for the virtual machine. Usually the recommended size is adequate. You will also have the options of Allocating the full capacity (which allows the drive to "grow" as system requirements change). However, using this method does require that the amount of disk space "MUST" be available at that moment. Using the "Store virtual disk as a single file" is the safest and easiest way to create your disk drive. Then, click "Next".



Figure 33: Setting the Disk Size of the VM

The next step is to Specify the Disk File. You can choose to leave the default name or you can choose your own name for the file. This file is what VM-Ware uses when initializing the virtual machine at startup. This file contains all necessary data for the virtual machine to perform to the specifications selected during the setup process.

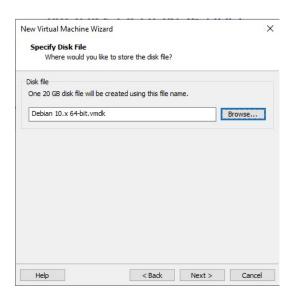


Figure 34: Setting the Disk File of the VM

The last screen required for the completion of the virtual machine creation is to verify all settings. If there is anything that you would like to change, here is the place to do it. You can change the hardware settings if needed. Once we proceed to click "Finish" and the check mark is placed for "Power on this virtual machine after creation", we have successfully setup our Virtual Machine. Next it will continue with the setup of the Operating System that we have chosen. In this case, we have chosen Kali Linux to be installed. Figure 35 shows the screen to change any hardware configurations is needed prior to finishing the creation and installation of the Virtual Machine.

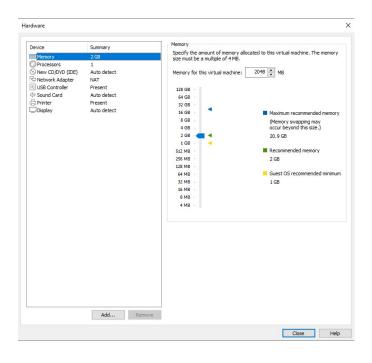


Figure 35: Changing Hardware Settings Prior to Finishing

On power up of the Virtual Machine, it will install the chosen Operating System. This will take some time to complete. When finished you should see the "Log-In" screen for Kali-Linux.

PLEASE NOTE : The Log in credentials are...

User : kali Password : kali

these are default settings and the password should be changed once the user is logged in.

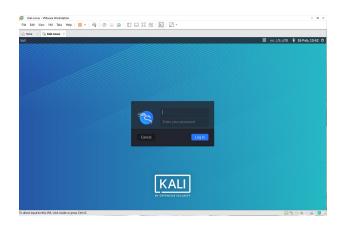


Figure 36: Kali Linux Start-up Screen

Now that our installation is complete and we now have a fully functional Kali Linux Virtual Machine. You should now see the main user interface as depicted in the following figure.



Figure 37: Kali Linux User Interface

# Conclusion

I hope this manual will help you with your installations of VM-Ware's VM Workstation Pro / Player. As well as the installation of Kali Linux into your newly created VM. Best of Luck with all you do !!

Thank