Installing vSphere Hypervisor

For the free video please see
http://itfreetraining.com/lab#vsphere-install

This video looks at installing the free vSphere Hypervisor 5.1 from VMWare. The hypervisor requires a dedicated computer to run on. Once installed you can run virtual machines on the vSphere hypervisor and control these virtual machines from remote. For example run Windows and Linux computer in a virtual machine. Using a Hypervisor gives better performance than if the virtualization solution was to be run on top of an existing operating system.

vSphere Hypervisor Requirements

- 64bit CPU with 2 or more cores
  - NX/XD, LAHF and SAHF
- Virtualization needs to be enabled in the bios
- 2GB of RAM

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         Error(s)/Warning(s) Found During System Scan

The system encountered the following warning(s).

                        Warning(s)

<HARDWARE_VIRTUALIZATION WARNING: Hardware Virtualization is not
a feature of the CPU, or is not enabled in the BIOS>




                Use the arrow keys to scroll

      (Esc) Cancel    (F9) Back    (Enter) Continue
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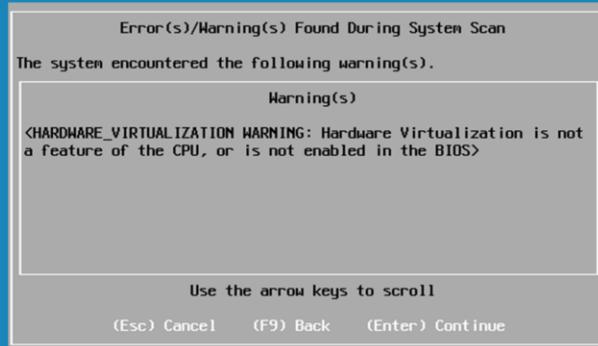
vSphere Hypervisor Requirements
The main requirement for vSphere is with the CPU. AMD CPU need to support NX (Never eXecute) and Intel needs to support XD (eXecute Disable). Both CPU's need to support LAHF (Load AH from Flags) and SAHF (Store AH into Flags). You can download the following tool from VMWare to test a CPU to see if it supports these features.
https://my.vmware.com/web/vmware/details/processor_check_5_5_dt/dCpiQGhkYmRAZQ==
The Bios also needs to be configured to allow virtualization. If either the CPU does not support the required features or virtualization is not enabled, you will receive and error message during the install. The install will still be allowed to continue, however before vSphere can be used on that system, the problem needs to be corrected either by changing the configuration in the Bios or replacing the CPU.

Demonstration

Demonstration installing vSphere Hypervisor

The vSphere Hypervisor and client software to administrator vSphere need to be download from the VMWare web site. http://www.vmware.com/ From the main page, select the link Trial and Free Products. The product that I want to download is found in the section "Download Free products". Select the link "vSphere Hypervisor 5 (64bit)".

Before you can download any software, you first need to register on the web site. Registration is free and also the download is free.

Once logged in, take note on the vSphere Hypervisor page for the license key. This will need to be entered in later on when you install the software.

The two downloads that will be downloaded in this case are "VMWare vSphere Hypervisor 5.1 Update 1 binaries" and "VMware vSphere client 5.1 Update 1". There may be a newer version of this software available when you download it yourself. You should always download the newest version.

The vSphere Hypervisor is in ISO format which most burning software should be able to burn to an optical disc. In this case I will use a USB Key to perform the install. In order to do this, I will run software from http://pendrivelinux.com From the main page select the option Universal USB Installer. On the download page there will be a link to download the software.

Once the software is run, from the pull down list select the option "Unlisted Linux ISO". Once selected, it is just a matter of browsing to the ISO file and then selecting the USB key that you want to copy of the ISO to.

Once the USB key has been configured, it needs to be put in the computer that you want to perform the install on.

In this BIOS, if F12 is pressed during boot up, the menu will appear that the administrator can use to select the boot device.

The first screen of the installer will ask if you want to boot the installer or the local disk. This option is available in case you leave the media in the drive after that install. This gives you the chance to boot from the local drive rather than start the vSphere installer.

The welcome screen will give you a link to the compatibility guide http://www.vmware.com/resources/compatibility You should check you hardware to see if it is compatible with VMWare. This is particular important if you use fiber cards or other hardware in the vSphere server.

The next screen will ask you to accept the license agreement. It is just a matter of pressing F11 on this screen.

The next screen will show you the disks that are available to be installed on to. If your drive does not appear here, check the compatibility guide to see if your hardware is supported.

The screen will ask you which keyboard that you want to use. The default is US default.

The next screen will ask you for a root password. This password is required later on in the client to access the system.

The next will ask to confirm that you want to perform the install to the selected drive. The process will repartition that drive which will effectively remove all the data on the drive.

Once the install has completed, it is just a matter for rebooting the system. Once rebooted, some additional configuration needs to be performed so the system can be managed from remote. Once booted, press F2 to customize the options. There are few options here, but the main one is "Configure Management Network". In this screen, configure the network settings to a free IP Address on your network.

Once the vSphere Server has been installed, the next step is to install the client to administrator the vSphere Server. This is just a matter of running the install executable to the computer you want to install the client on. The install is very simple. The only option you can configure is where to install the files.

Once installed, the client can be run and the IP Address of the install, username and password need to entered in to connect to the vSphere install.

The last step of the install is to enter in the license key. To do this, select the vSphere server and then select the tab configuration. In configuration select the option under software called "Licensed Features". The select the option at the top right edit. In the next screen select enter key and enter in the product key that was obtained from the VMWare page where the software was downloaded from. Once entered in the vSphere install is complete.

See http://YouTube.com/ITFreeTraining or http://itfreetraining.com for our always free training videos. This is only one video from the many free courses available on YouTube.

References
https://my.vmware.com/web/vmware/details/processor_check_5_5_dt/dCpiQGhkYmRAZQ==
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