VMWare 3.0 - 3.2 - 4.0

- - Install wmware package either from Internet or from SuSE CDs.
- - To install VMWare run the program: `/usr/bin/vmware-config.pl`
- - To De-Install VMWare , run the program : `/usr/bin/vmware-uninstall.pl`
- - Answer yes to networking and set the IP manually or by auto scanning.
- - Do not configure a second virtual Networking device.
- - Drivers fro guests OSs:
  - **Windows:**
    - Get the Windows drivers from VMWare and copy
      then to a directory in C: (eg. `C:\vmware-drivers`)
    - When booting Windows select this directory for
      needed new drivers of Network and Video cards.
  - **Linux:**
    - Download the precompiled module `vmware_drv.o`
    - Copy the module into place.

```
cp vmware_drv.o /usr/X11R6/lib/modules/drivers/vmware_drv.o
```

  -Modify the XF86Config.
  This is likely `/etc/X11/XF86Config-4`
  You need to add a Device section that looks like this:

```
Section "Device"
Identifier   "VMware SVGA"
Driver       "vmware"
BusID        "PCI:0:15:0"
EndSection
```

  You then need to make sure that your Screen sections specify:

```
Device "VMware SVGA"
```

  - The VMWare Virtual Network card is called:
  - Vendor: `Advanced Micro Devices`
    Bus: `PCI`
    Bus identification: `1022:2000`
    Location on the bus: `0:11:0`
    Description: `79c970 [PCnet LANCE]`
    Module: `pcnet32`
    Media class: `NETWORK_ETHERNET`

- If you have SuSE8.1 with kernel 2.4.19-4GB then make sure the apic is enabled as follows: (It will make sure that vmware runs ok without crashing)
  - Booting with lilo:
    - enter : `append="apic"`
      in the individual boot section of `/etc/lilo.conf`
    - run the command: `lilo`
  - Booting with GRUB:
  - enter: `apic` in the line of `vga=xxx` of `/boot/grub/menu.lst`
  noneed to run any other command.

Configuring a Linux Host
From: `http://www.vmware.com/support/ws4/doc/disks_dualmult_ws.html#1046324`

1. If you are running a Windows guest operating system, read <u>Setting Up Hardware Profiles in Virtual Machines</u>. You should boot the guest operating system natively on the computer and create a hardware profile for the virtual machine before proceeding.

2. Create a separate configuration for each guest operating system.

3. Check operating system partition mounts. **Be sure the existing disk partitions that you plan to configure the virtual machine to use are not mounted by Linux.**

4. Set the device group membership or device ownership.

   The master raw disk device or devices need to be readable and writable by the user who runs VMware Workstation. On most distributions, the raw devices, such as `/dev/hda` (IDE raw disk) and `/dev/sda` (SCSI raw disk) belong to group-id `disk`. If this is the case, you can add VMware Workstation users to the `disk` group. Another option is to change the owner of the device. Please think carefully about security issues when exploring different options here.

   Often, the most convenient approach is to grant VMware Workstation users access to all `/dev/hd[abcd]` raw devices that contain operating systems or boot managers and then rely on VMware Workstation's raw disk configuration files to guard access. This provides boot managers access to configuration files and other files they may need to boot the operating systems. For example, LILO needs to read `/boot` on a Linux partition to boot a non-Linux operating system that may be on another drive. As noted above, you should consider the security implications of the configuration you choose.

5. If you plan to run a second Linux installation from an existing partition as a guest operating system and your physical computer's `/etc/lilo.conf` has a memory register statement such as `Append= "mem..."`, you may want to adjust the append memory parameter or create a new entry in LILO for running Linux in a virtual machine.

   If the amount of memory configured in `lilo.conf` exceeds the amount of memory assigned to the virtual machine, then when the virtual machine tries to boot the second Linux installation, the guest operating system will most likely panic.

   You can create another entry in `lilo.conf` for running Linux in a virtual machine by specifying a different amount of memory than what would normally be recognized when Linux boots directly on the physical machine.

6. To configure a virtual machine to run from a raw disk partition, start the New Virtual Machine Wizard (**File** > **New** > **New Virtual Machine**) and select **Custom**.

7. When you reach the Select a Disk step, select **Use a physical disk**.

8. Complete the wizard steps, specifying the appropriate disk or partition to use for this virtual machine.

   Caution: Corruption is possible if you allow the virtual machine to modify a partition that is simultaneously mounted under Linux. Since the virtual machine and guest operating system access an existing partition while the host continues to run Linux, it is critical that the virtual machine not be allowed to modify any partition mounted under Linux or in use by another virtual machine.

To safeguard against this problem, be sure the partition you use in the virtual machine is not mounted under the Linux host.

9. Complete the remaining steps in the wizard.

10.If you have multiple IDE drives configured on a system, the VMware BIOS normally attempts to boot them in this sequence:
   A. Primary master
   B. Primary slave
   C. Secondary master
   D. Secondary slave

   If you have multiple SCSI drives configured on a system, the VMware BIOS normally attempts to boot them in the order of the SCSI device number.

   If you have both SCSI and IDE drives configured, the VMware BIOS normally attempts to boot SCSI drives followed by IDE drives, in the order described above.

   You can change the boot sequence using the Boot menu of the virtual machine's Phoenix BIOS. To enter the BIOS setup utility, power on the virtual machine and press F2 as the virtual machine begins to boot.

11.Power on the virtual machine. Click the **Power On** button. The virtual machine starts, runs the Phoenix BIOS, then boots from the master boot record (MBR).

   Choose the target operating system from the list of options offered by the boot manager.

12.Remember that your virtual machine hardware environment, which the guest operating system is about to run in for the first time, probably differs significantly from the physical hardware of your machine.

   For Windows guest operating systems, Plug and Play reconfigures Windows. Set up your virtual hardware profile with the devices found and configured by Plug and Play. See Setting Up Hardware Profiles in Virtual Machines for more information.

13.Install VMware Tools in your guest operating system.

Warning: If you take a snapshot while using your raw disk, you must either revert to the snapshot or remove the snapshot before you reboot your guest operating system natively. This is necessary because any changes to sectors on the physical disk that have been modified on the disk invalidate the snapshot for the disk.

VMWare 5.0 For linux - Installation (SuSE 9.3)

(as root)
1 - Install the `kernel-source` and `gcc` packages from CD/DVD
2 - Install the VMWare 5.0.*xxx*.rpm.
3 - Make an Online Update of the kernel.
       The `kernel-source` package will be also automatically updated.
4 - Copy the actual kernel `.config` file to the kernel source directory:
```
cp /boot/config-$(uname -r) /usr/src/linux/.config
```
5 - Copy the kernel symbol file the to the kernel source directory:
```
cp /boot/symvers-Kernelversion-i386-default \
     /usr/src/linux/Module.symvers
```
6 - Execute the following commands:
```
cd /usr/src/linux
make cloneconfig
make prepare-all
```

7 - Run the program: `vmware-config.pl`

7 - Answer the appropriate answers (by pressing the Enter or typing 'yes' key) to all
     questions till the network questions appear.

8 - At the networking questions answer the following:
       Bridge networking: YES
       Host only Networking: NO
       File sharing between host and client machine: NO

9 - Start VMWare(as user or root) with the command:
```
vmware
```

Installing VMware on SuSE 10.0

- Normally the compilation of the modules of VMware under SuSE 10.0 doesn't work.
   Here is the solution:

    - Download the latest version of:
       at `http://ftp.cvut.cz/vmware/vmware-any-any-updatexx.tar.gz`
       `xx` = Latest version of the fix pcakage

    - Make sure the following SuSE packages are installed:
         VMware 5.0 workstation
         kernel-source
         gcc
         gcc-c++
         make

    - Issue the commands:
```
cd /usr/src/linux
make cloneconfig ; make prepare-all
```

    - Unpack the file `vmware-any-any-updatexx.tar.gz` into for example

```
/usr/local. eg.
tar fvxz  vmware-any-any-update96.tar.gz -C /usr/local/
```

- Issue the following commands:
  ```
  cd /usr/local/vmware-any-any-update96
  ./runme.pl
  ```
  It will replace the appropriate files and will start the `vmware-config.pl`.

- Answer the questions as usual and it should this time compile properly.

-

```
/usr/local. eg.
tar fvxz  vmware-any-any-update96.tar.gz -C /usr/local/
```