# How to install Sun Solaris 10 inside VMware Workstation 5.5

(v1.0 written by Alessandro Perilli and published on 11/27/05)

*For this How-To we'll use VMware Workstation 5.5 RTM (build 18463) and Sun Solaris 10 release 03/05 x86/x64 DVD ISO image (Sun Solaris 10 SPARC edition will not install inside VMware Workstation).*
*VMware Workstation is installed on a Microsoft Windows XP Professional with Service Pack 2.*

*At the end of the work you'll be able to run your Sun Solaris 10 virtual machine also inside VMware Player 1.0 and use it without any licensing cost.*

- *Part 1 - Preparing your virtual machine hardware*
- *Part 2 – Installing the Sun Solaris 10 operating system*
- *Part 3 (optional) – Running virtual machine inside VMware Player*
- *Final Notes*

## Part 1 - Preparing your virtual machine hardware

First of all grab your evaluation copy of VMware Workstation 5.5 and your copy of Sun Solaris 10 DVD image:
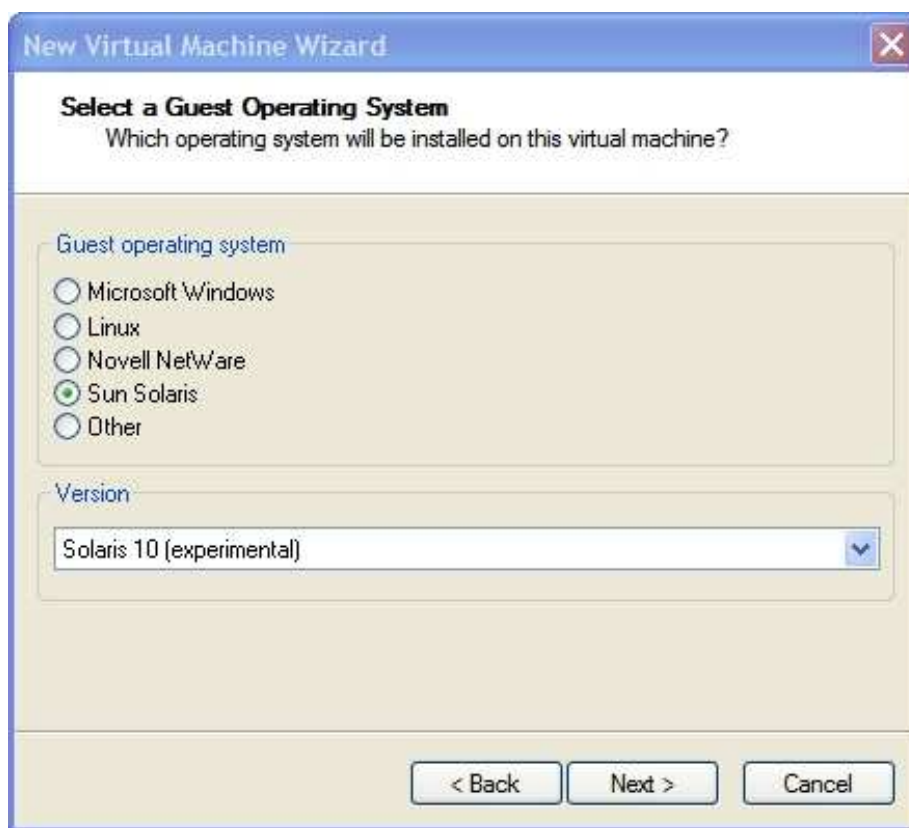
*VMware Workstation 5.5* - http://www.vmware.com/download/ws/eval.html
*Sun Solaris 10* - http://www.sun.com/software/solaris/get.jsp

Be sure to check the Solaris DVD image CRC before starting because the image parts can be downloaded corrupted.
You don't need to burn the DVD image since we'll map it directly inside our virtual machine.

Create a new virtual machine with **Typical** configuration.

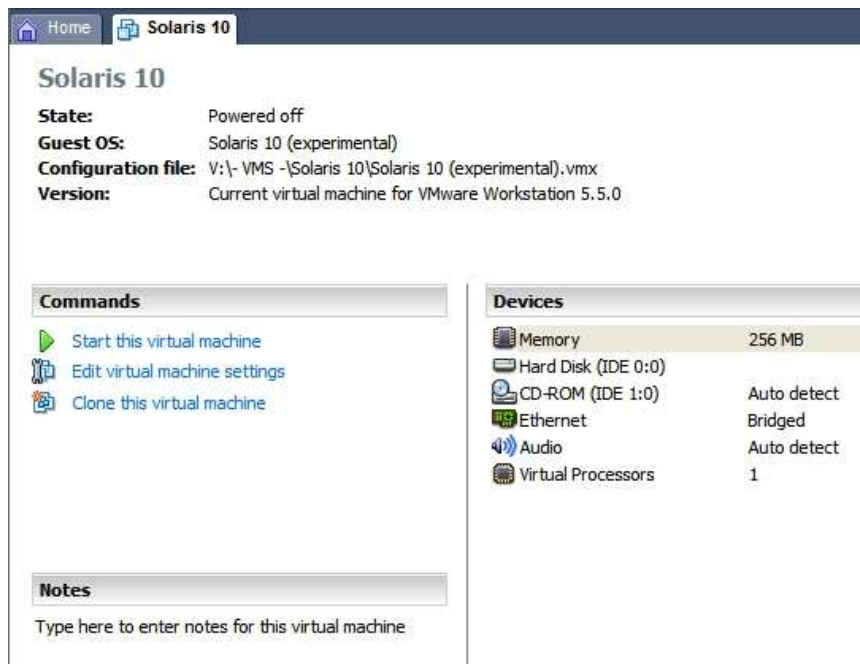Then be sure to choose **Solaris 10 (experimental)** Guest operating system.



Name the virtual machine as you like and choose your preferred locations for files.
I usually put virtual machines in a **VMs** directory excluded from antivirus real-time check.

Configure your network connection with **Use bridged networking** only if there sure there is no way to arrive on the virtual machine from Internet: immediately after the initial installation any guest OS could be feasible of attacks since unpatched. Patch it, eventually configure a firewall and then permit it to connect to Internet.

Configure your disk capacity to **4 GB Disk Size** (you can check the **Allocate all disk space now** box if you have enough space, a fully defragmented hard disk and want to have better performances for guest OS).



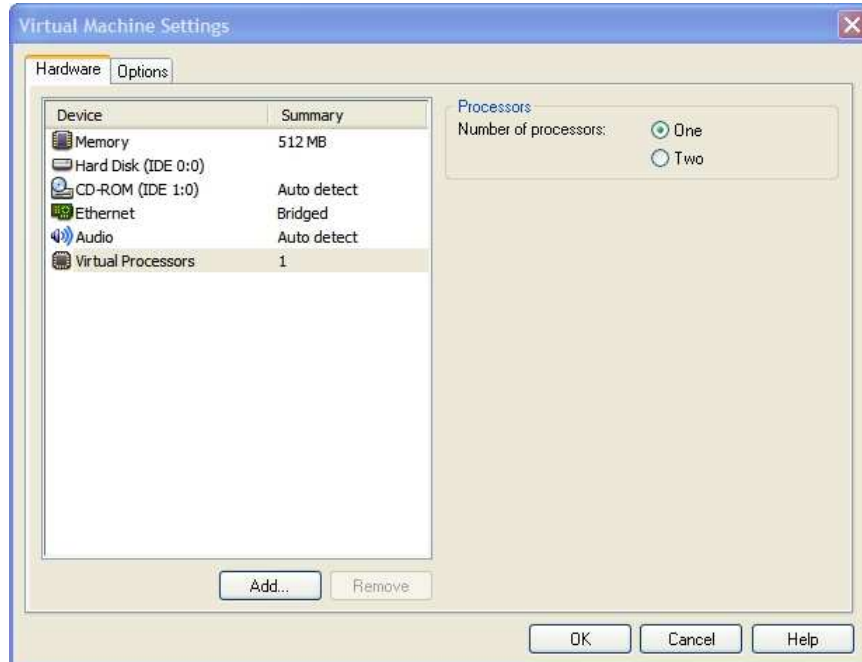Now you should have finished and a virtual machine summary will appear.



You can change some settings seconding your needs simply clicking on **Edit virtual machine settings**.
Two virtual components are very important: RAM and Processors.

If you have at least 768MB physical RAM increase your virtual machine memory from 256 MB to 512MB (this will greatly speed up the installation process).
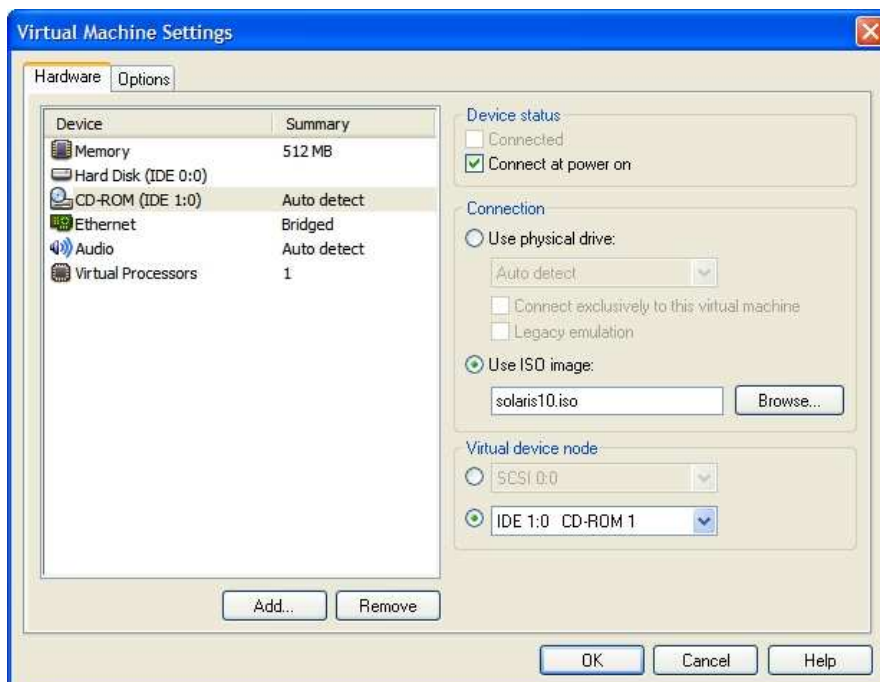
If you have an Intel CPU with HyperThreading enabled or an AMD64 Dual Core CPU you could choose to assign two virtual processors to this virtual machine.

Be sure to choose the correct number of virtual processors before starting the Solaris installation. Passing from one virtual processor to two virtual processors (or vice versa) will require reinstalling the whole operating system.

You can also choose to delete the virtual sound card (**Audio** device) if you don't plan to use Solaris 10 as a desktop operating system.

Now change the virtual device CD-ROM Connection from **Use physical drive** to **Use ISO image** and browse for your Sun Solaris 10 DVD ISO image previously downloaded.

We are finally ready now.

## Part 2 – Installing the Sun Solaris 10 operating system

Launch the just prepared virtual machine and let the DVD ISO image boot.
When required press **1** for **Solaris Interactive**.

Choose your preferred language.

Now choose **Networked Connectivity.** Then specify if your virtual network interface card
(recognized as **pcn0**) will grab an IP address by DHCP or not.
If you chosen not detail your virtual machine **hostname**, **IP address**, **subnet mask**, **IPv6
support** and **default route**.

Enable or not **Kerberos**, detail your eventual **name service system**.
If you chosen DNS as name service system detail your domain name and at least one **DNS
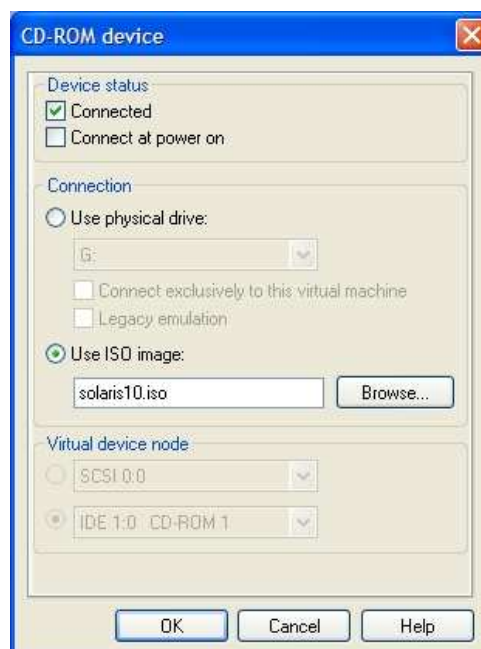server IP address**.

Choose your **Time Zone** and **Date & Time**.

Choose your Root **password**.

Finally accept your summary settings page.

Say yes to both **Reboot automatically after software installation** and Eject **additional
CDs/DVDs automatically after software installation**.

Before saying **OK** on the final Notice window be sure to modify your VMware virtual CD-ROM
device to have checked **Connected** and unchecked **Connect at power on** checkboxes.



Now let's start the software packages installation.

Let unmodified to **CD/DVD** as **Media**.

**Accept** the License Agreement and choose **Custom Install**.
Select your **Software Localizations** region only if you want Solaris 10 in your national
language. **English** will be installed by default.

Select **Products** to install as you need. Remember we set up a small 4GB virtual disk so you couldn't be able to install everything now.
Select **None** as **Additional Product** to install.
Now you need to select how many Solaris software packages install. I personally suggest choosing **End User Group** (2141.4 GB occupied).

On **Disk Selection** just hit **Next** since our virtual disk (recognized as **c0d0 (bootdisk)**) is already selected.
On **fdisk Partition Customization** hit **Next** as well.
On **Customize fdisk Partitions** you'll see a single Solaris partition of 4095 MB size. If you are unsure on how to partition your virtual hard disk just hit **Next**.
If you hit Next on the previous screen a default **File System Lay Out** will appear. Just hit **Next**.

Now the packages installation starts. It will take some time.

At the end Solaris Installer will inform you the system is configured to run NFS v4 asking if you need to **override default settings**. Say **No** and let the OS restart.

After reboot Sun Solaris 10 will arrive at console login asking for name login and password.

After logging in launch **kdmconfig** from the shell.
At the X Server Selection be sure to choose **Xsun server**.
On the next screen the system will have already recognized your VMware virtual video card with a default resolution of 1024x768 and 256 colors @ 70 Hz.
If you want different settings move on **Change Video Device/Monitor** and press **Space**.
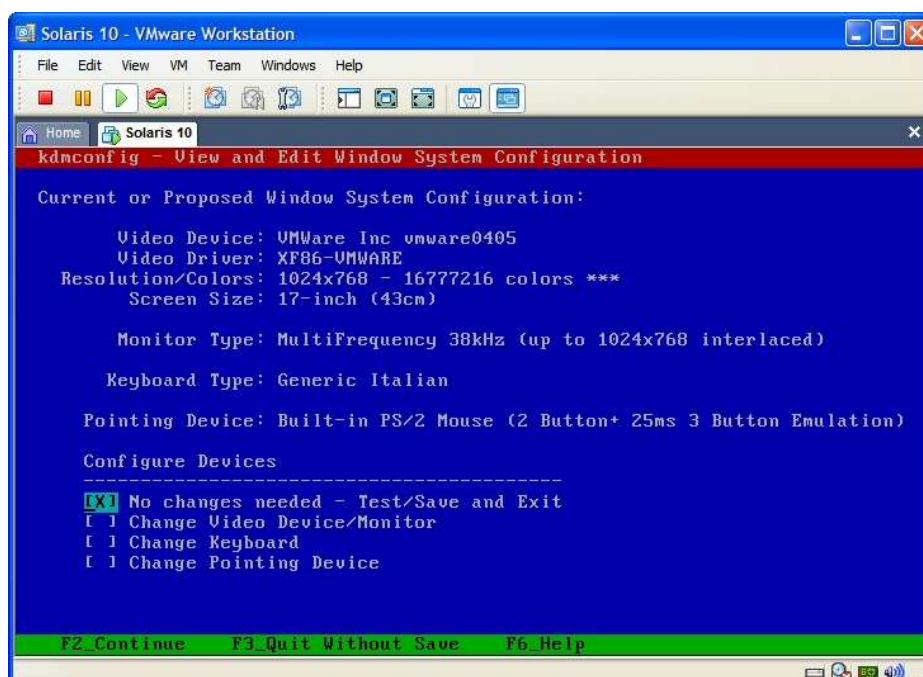Then hit **F2** and arrive at the **Video Device Selection**: be sure to untouch **XF86-VMware VMware Inc vmware0405**. Press **F2** again.
On **Monitor Type Selection** be sure to choose a **Multifrequency Monitory** with no more resolution of your physical monitor.
On the **Screen Size Selection** choose **17-inch**.
On the **Resolution/Colors Selection** I suggest you to choose a resolution a bit smaller than your physical maximum (I personally run every VM on 1024x768 with a physical resolution of 1400x1050) and your preferred amount of colors.

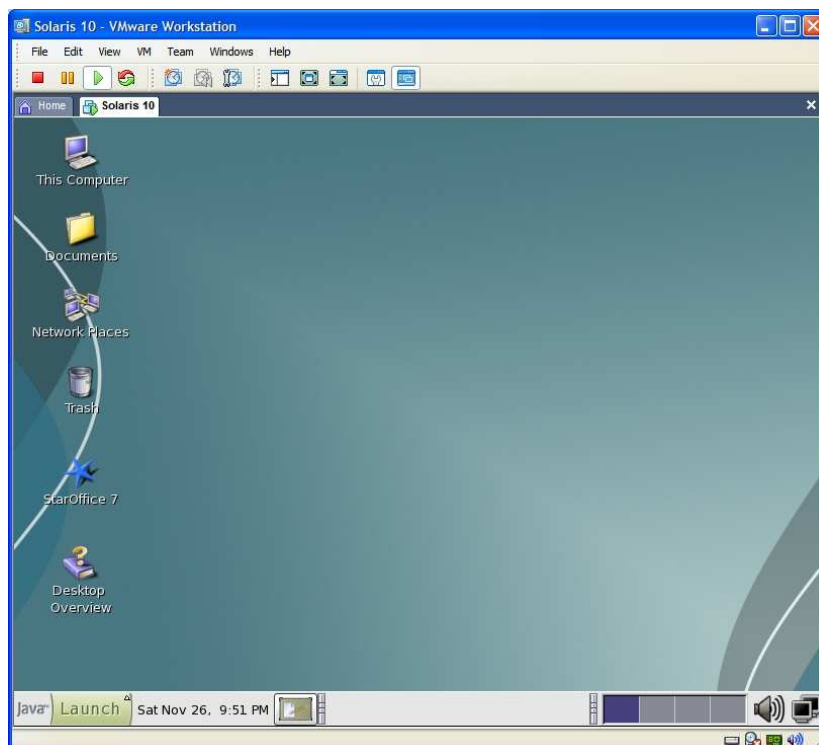Now you're back to **kdmconfig** system configuration summary.

Hit **F2** to test the configuration, save and exit to the console (if something goes wrong simply relaunch kdmconfig and start over).
Now write **Exit** on the console and, if you did a correct configuration, the system will automatically launch the graphical login screen (it could take some seconds).



Now, from the **Options** menu, you can choose if run a **Common Desktop Environment** (CDE) or **Java Desktop System** 3 graphical session (I strongly recommend the last one).

Login and enjoy your Sun Solaris 10 virtual machine.

## Part 3 (optional) – Running virtual machine inside VMware Player

As you probably know Sun Solaris 10 is free to use even for commercial environments.
So you could want to have a virtual machine of it for any case.

Since some times VMware offers everybody the possibility to use its virtualization technology for free anywhere with the new VMware Player.
So you could want to have a Solaris 10 virtual machine with a copy of VMware Player for any case.

First of all download VMware Player here:
http://www.vmware.com/download/player/

Now burn it with your whole Sun Solaris 10 virtual machine directory in a DVD.

Copy Sun Solaris 10 virtual machine directory on the new hard disk of a different computer and install VMware Player: VMware Player cannot be installed on the same machine where is VMware Workstation.

Start your VMware Player and point to the directory where you copied your Sun Solaris 10 virtual machine.

At the warning about creating a new **UUID** answer **Create**.

Done! You have a free fully working virtual machine with a free fully working enterprise operating system inside.

## Final Notes

First of all thanks for reading this How-To.

If you find some errors or would suggest some further steps please drop a comment on the related blog post:
http://www.virtualization.info/2005/11/how-to-install-sun-solaris-10-inside.html

To experience better virtual machine performance you could want to review another post titled:
***How to improve disk I/O performances with VMware Workstation 5***
http://www.virtualization.info/2005/11/how-to-improve-disk-io-performances.html

If you find interesting the use of VMware Player you could want to review another couple of posts titled:
***How to launch ISO and use LiveCDs inside VMware Player***
http://www.virtualization.info/2005/10/how-to-launch-iso-and-use-livecds.html

***How to create a new virtual machine with VMware Player***
http://www.virtualization.info/2005/10/how-to-create-new-virtual-machine-with.html

And finally if you want to stay informed about virtualization technologies, products and market trends you could want to visit the first blog about virtualization:
http://www.virtualization.info