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VirtualBox On FC6 / CentOS 4 / OpenSuSE 10.2

What is VirtualBox?

InnoTek VirtualBox is a family of powerful x86<u>virtualization</u> products for enterprise as well as home use. Not only is VirtualBox an extremely feature rich, high performance product for enterprise customers, it is also the only professional solution that is freely available as Open Source Software under the terms of the GNU Public License (GPL). See "<u>About VirtualBox</u>" for an introduction; see "<u>InnoTek</u>" for more about our company.

>>READ FIRST<<>> The **VirtualBox** binaries are available free of charge for personal and evaluation use. By downloading from the below links, you agree to the terms and conditions set forth by the <u>VirtualBox</u> Personal Use and Evaluation License (PUEL). <<

>><u>Download</u> << >><u>Screen Shots</u><< >><u>Home Page</u><< >><u>User Manual</u><<

Just a personal note: I found the VirtualBox to be like VMware workstation so if you how know to use that you will be right at home with VirtualBox.

Right. Onto the hit list of what we need. What We Need

- VirtualBox :: about 10 MB
- and test CD / ISO file (something small and easy and light to install)
- 5 GB of hdd space
- root user access
- 300 MB of free memory
- about 45mins
- some nice music to listen to (if you like :))
- kernel source / devel files
- User Manual :: about 2.1 mb

Tested on:

- FC 6 32 bit
- CentOS
- RedHat (should work on this because the CentOS and Fedora are based on RedHat)
- OpenSuSE ver 10.2 (32bit)

Step 01

Installing on Linux hosts Prerequisites

Qt3.3.5 or higher; SDL1.2.7 or higher (this graphics library is typically called libsdl or similar).

So make sure you got them installed. I did by default so I guess you should as well.

We need to install the kernel source / devel files for your OS. If you are on OpenSuSE, use yast to install them. For Fedora/CentOS try the package manager to find and install them.

Step 02

Download a copy of VirtualBox.

** If you downloaded this to your non-Linux PC then copy it over to the Linux PC via WinSCP or Samba.

Then open up a terminal window.

Type the path where you downloaded / copied the file to - like:

```
cd /home/zcworld/desktop
```

su

password

sh VirtualBox_1.3.2_Linux_x86.run install /opt/innotek/VirutalBox

It may take 2 to 5 mins to install. :) So its a good time to get a drink.

Step 03

We need to add our username to the *vboxgroup* to be able to run the program or we are going to get errors that are going to cook your noodle. Fedora / CentOS

In Fedora / CentOS we do this:

CentOS : go to the Applications menu, then system settings and do the rest. :)

 $Go \ to \ System \ -> \ Administration \ -> \ Users \ and \ Groups:$



Double-click on the users, then go to the groups tab, find *vboxusers*, click ok .. log out and then back in.

	📁 User Properties	
	User Data Account Info Password Info Groups	
U <u>s</u> ers Gr <u>o</u> ups	Select the groups that the user will be a member of:	
User Name User ID 🔻	utmp	
Zcworld 503		
	✓ vboxusers	
	🗆 vcsa	
	webalizer	
	wheel	=
	□ xfs	
	Primary Group: Zcworld	
	X <u>C</u> ancel	🧳 <u>о</u> к

OpenSuSE

Way to add users to the group for the VirtualBox to run:

Log in as root user, then type

yast

Go down to Security and Users, pick Group Managerment from the list:

Pick from the list the *vboxusers* group, then push ALT + I:

User and Group Administration () Users(x) Groups Filter: Custom			
Group Name ircadmin users	Group ID 1000 100	Group Members ircadmin defualt.games.zcworld	
vboxusers	1001		

Then ALT + M, then pick the member users you want to be able to run the VirtualBox program by pushing the spacebar key on the user name, then the up or down arrow to find another user.



Once done push ALT +A.

User and Group Administration () Users(x) Groups			
Group Name Gr ircadmin 10 users 10 vhoxusers 10	coup ID 000 00	Group Members ircadmin defualt,games,zcworld defualt	

Then press ALT + F, then ALT + Q. If the user is logged in on the desktop, then log out and log in again.

Step 04Fedora / CentOS

After VirtualBox is installed:

I'm on a FC 6 / Gnome desktop.

Go to Applications - > System Tools - > VirtualBox. Then click on New.



Click on the Computer icon, then on More Applications...:

		More Applications
📃 Computer		

The InnoTek VirtualBox should be at the top of the list under *New Applications* (if you want it in the start menu, right-click, then add to favourites or drag onto desktop).

		Application Browser
Filter	New Applic	ations
	\mathbb{M}	InnoTek VirtualBox Virtual Machine
Groups	Application	S
New Applications	~	
Applications	\bigcirc	CD-ROM Information
Development		
Games	an -	DMA-Channels

Step 05

Click Next:

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create New Virtual Machine

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Welcome to the New Virtual Machine Wizard!



This wizard will guide you through the steps that are necessary to create a new virtual machine for VirtualBox.

Use the **Next** button to go the next page of the wizard and the **Back** button to return to the previous page.

< <u>B</u> ack	<u>N</u> ext >	<u>C</u> ancel

Step 06

Pick a name and the OS type:

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Create New Virtual Machine

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VM Name and OS Type



Enter a name for the new virtual machine and select a type of the guest operating system you plan to install in the machine.

The name of the virtual machine usually indicates its software and hardware configuration. It will be used by all VirtualBox products to identify the created virtual machine.

Ipcop - test	
OS <u>T</u> ype Linux 2.2	LINUX

Step 07

Specify the memory for the virtual machine:

<u>.</u>	Create New Virtual Machine
Memory	
tek Virtue	Select the amount of base memory (RAM) in megabytes to be allocated to the virtual machine. The recommended base memory size is 64 MB. Base Memory Size 64 MB 4 MB 2000 MB
	< <u>B</u> ack <u>N</u> ext > <u>C</u> ancel

Step 08

Setting up a hard drive image for the virtual machine. :)

Click on New:

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Create New Virtual Machine

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Virtual Hard Disk



Select a hard disk image to be used as a boot hard disk of the virtual machine. You can either create a new hard disk using the **New** button or select an existing hard disk image from the drop-down list or by pressing the **Existing** button (to invoke the Virtual Disk Manager dialog).

If you need a more complicated hard disk setup, you can also skip this step and attach hard disks later using the VM Settings dialog.

The recommended size of the boot hard disk is 2000 MB.

N <u>e</u> w	E <u>x</u> isting	
[

Step 09

Click Next:

Welcome to the C	reate New Virtual Disk Wizard!
	This wizard will help you to create a new virtual hard disk image for your virtual machine. Use the Next button to go to the next page of the wizard and the Back button to return to the previous page.
	< <u>B</u> ack <u>N</u> ext > <u>C</u> ancel

Create New Virtual Disk

Step 10

Pick the type of hard drive image you are wanting. Read the page when it comes up for what each one does. :) Then click Next:

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₹.

Create New Virtual Disk

Virtual Disk Image Type



Select the type of virtual hard disk image you want to create.

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A **dynamically expanding image** initially occupies a very small amount of space on your physical hard disk. It will grow dynamically (up to the size specified), as the Guest OS makes the usage of the disk space.

A **fixed-size image** does not grow up. It is stored in the file of approximately the same size as the size of the virtual hard disk.

-	Image Type
	Dynamically expanding image
	<u>Fixed-size image</u>
	< <u>B</u> ack <u>N</u> ext > <u>C</u> ancel

Step 11

Pick the size of the drive you are wanting, then click on Next:

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Create New Virtual Disk

Virtual Disk Location and Size



Press the **Select** button to select the location and name of the file to store the virtual hard disk image or type a file name in the entry field.

Image File Name	
Ipcop - test	à

Select the size of the virtual hard disk image in megabytes. This size will be reported to the Guest OS as the size of the virtual hard disk.

Image <u>S</u> iz 4.00 MB	e	2.00 TB	950 MB
	< <u>B</u> ack	<u>N</u> ext >	<u>C</u> ancel

Step 12

Click on *Finish* if you are happy with the hard drive info there. If not click *Back* and change it:

http://www.howtoforge.com/

Create New Virtual Disk

Summary

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You are going to create a new virtual hard disk image with the following parameters:

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Гуре:	Fixed-size image
ocation:	/root/.VirtualBox/VDI/Ipcop - test.vdi
Size:	950 MB

If the above settings are correct, press the **Finish** button. Once you press it, a new hard disk image will be created.



Step 13

We are back at the virtual machine settings. Click on Next:

Create New Virtual Machine

Boot Hard Disk (Primary Master)

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Virtual Hard Disk



Select a hard disk image to be used as a boot hard disk of the virtual machine. You can either create a new hard disk using the **New** button or select an existing hard disk image from the drop-down list or by pressing the **Existing** button (to invoke the Virtual Disk Manager dialog).

If you need a more complicated hard disk setup, you can also skip this step and attach hard disks later using the VM Settings dialog.

The recommended size of the boot hard disk is 2000 MB.

N <u>e</u> w E <u>x</u> isting			
	N <u>e</u> w	Existing	

Step 14

Click on *Finish* to save the settings. :)

Summary

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You are going to create a new virtual machine with the following parameters:

Create New Virtual Machine

Name:	Ipcop - test
OS Type:	Linux 2.2
Base Memory:	64 MB
Boot Hard Disk:	Ipcop - test.vdi (/root/.VirtualBox/VDI)

If the above is correct press the **Finish** button. Once you press it, a new virtual machine will be created.

Note that you can alter these and all other setting of the created virtual machine at any time using the **Settings** dialog accessible through the menu of the main window.

< <u>B</u>ack

Finish

<u>C</u>ancel

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This is what we should get:



Ok, time to change some of the settings. So we click on Settings, then we change what we want to change. When you're finished click on OK.

http://www.howtoforge.com/

*	Ipcop - test - Settings
General Image: Arrow of the second system I	General Basic Advanced Identification Name Ipcop - test OS Type Linux 2.2 Base Memory Size Image: Displays the name of the virtual machine.
Help	<u>O</u> K Cancel

http://www.howtoforge.com/

*	Ipcop - test - Settings 🛛 🗙
 General Hard Disks Floppy CD/DVD-ROM Audio Network USB 	CD/DVD-ROM Mount CD/DVD Drive Host CD/DVD Drive /dev/cdrom ISO Image File
	Select a settings category from the list on the left side and move the mouse over a settings item to get more information.
Help	<u>O</u> K Cancel

We pick here the /dev/cdrom drive to boot from OR the place where an ISO file is to loaded from. Then we click on OK



Now that you've made all wanted changes, click on *Start* to run the virtual machine. That's it. :)

TIP

To get out of the VirtualBox window, push the right *ctrl* key once and you will get your mouse pointer back. :)

If you have problems starting up the VirtualBox if you have a normal account, do this:

Make a new account and add it to the the vboxusers group. Log into that account and try again. See if that works. If not have a look at the user manual.

Links

- VirtualBox: <u>http://www.virtualbox.org</u>