(a Howto by bias for Hacking-Lab 2014)

Virtualbox Server simple or comfortable

(RemoteBox) (phpVirtualbox)

For testing purpose, using virtual machines is really useful. As soon as you have many of them and want to access them from everywhere (or from different machines) without exporting/importing them everytime, Oracle's VirtualBox + phpVirtualBox or RemoteBox reveals itself very useful and simple (compared to ESX, Hyper-V, XEN Server, ...).

I'm gonna show both ways, based on a ubuntu 12.04.3 Server. But the same solution work if it is installed in a desktop environment with VirtualBox GUI

Virtualbox : https://www.virtualbox.org/

Let's first install VirtualBox:

root@ubuntu:/\$ sudo su

root@ubuntu:/# cd /tmp

<u>root@ubuntu:/tmp# wget http://download.virtualbox.org/virtualbox/4.3.8/virtualbox-4.3_4.3.8-92456~Ubuntu~precise i386.deb</u>

root@ubuntu:/tmp# apt-get install make gcc unzip

root@ubuntu:/tmp# dpkg -i virtualbox-4.3 4.3.8-92456~Ubuntu~precise i386.deb

There are some dependencies missing, so:

<u>root@ubuntu</u>:/tmp# apt-get install -f (to install the dependencies)

...

(Lecture de la base de données... 59494 fichiers et répertoires déjà installés.)

Préparation du remplacement de virtualbox-4.3 4.3.8-92456~Ubuntu~precise (en utilisant virtualbox-4.3_4.3.8-92456~Ubuntu~precise_i386.deb) ...

Stopping VirtualBox kernel modules ...done.

Dépaquetage de la mise à jour de virtualbox-4.3 ...

Depaquetage de la mise a jour de virtualbox-4.3 ...
Paramétrage de virtualbox-4.3 (4.3.8-92456~Ubuntu~precise) ...

addgroup: Le groupe « vboxusers » existe déjà en tant que groupe système. Fin de la procédure.

Stopping VirtualBox kernel modules ...done.

Removing old VirtualBox pci kernel module ...done.

Recompiling VirtualBox kernel modules

...done.

Starting VirtualBox kernel modules ...done.

Traitement des actions différées (« triggers ») pour « ureadahead »...

ureadahead will be reprofiled on next reboot

From that point VirtualBox is installed but it's now only usable locally in headless mode (in this server-installation). If installed on a Ubuntu Desktop (or Windows or Mac), you can from now on make or manage your Virtual Machines with the GUI but only locally.

The VirtualBox extension pack provides features such as remote desktop display which RemoteBox requires in order to be fully functional. So lets install it:

root@ubuntu:/tmp# wget
http://download.virtualbox.org/virtualbox/4.3.8/Oracle_VM_VirtualBox_Extension_Pack-4.3.8-92456.vbox-extpack
root@ubuntu:/tmp# VBoxManage extpack install --replace Oracle_VM_VirtualBox_Extension_Pack-4.3.8-92456.vbox-extpack
0%...10%...20%...30%...40%...50%...60%...70%...80%...90%...100%
Successfully installed "Oracle VM VirtualBox Extension Pack".

The VirtualBox webservice requires a user to run with, let's add it:

```
root@ubuntu:/tmp# adduser vbox
Ajout de l'utilisateur « vbox » ...
Ajout du nouveau groupe « vbox » (1001) ...
Ajout du nouvel utilisateur « vbox » (1001) avec le groupe « vbox » ...
Création du répertoire personnel « /home/vbox »...
Copie des fichiers depuis « /etc/skel »...
Entrez le nouveau mot de passe UNIX :
Retapez le nouveau mot de passe UNIX :
passwd: password updated successfully
Changing the user information for vbox
Enter the new value, or press ENTER for the default
       Full Name []:
       Room Number []:
        Work Phone []:
       Home Phone []:
        Other []:
Ces informations sont-elles correctes ? [O/n]
```

A configuration file that's not automatically installed is also needed to run the VBOX webservice:

<u>root@ubuntu</u>:/tmp# echo -e 'VBOXWEB_USER=vbox\nVBOXWEB_HOST=0.0.0.0' > /etc/default/virtualbox <u>root@ubuntu</u>:/tmp# service vboxweb-service start Starting VirtualBox web service ...done.

Let's test if it's now listening : (standard Vbox webservice listening port is 18083)

REMOTEBOX

RemoteBox is an open-source software with a GTK GUI written in perl. It's a bit lighter than the original VirtualBox GUI but works in a similar way and uses the RDP Protocol to allow remote console view.

RemoteBox Website http://knobgoblin.org.uk/

RemoteBox 1.7 Documentation http://knobgoblin.org.uk/docs/remotebox.pdf

Lets download and install it:

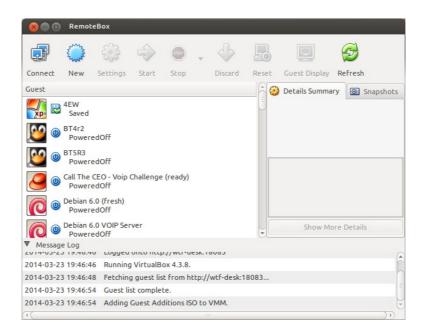
<u>root@ubuntu</u>:/tmp# wget <u>http://remotebox.knobgoblin.org.uk/downloads/RemoteBox-1.7.tar.gz</u>
<u>root@ubuntu</u>:/tmp# cd /opt
<u>root@ubuntu</u>:/opt# tar xvzf /tmp/RemoteBox-1.7.tar.gz
<u>root@ubuntu</u>:/opt/# cd RemoteBox-1.7
<u>root@ubuntu</u>:/opt/RemoteBox-1.7/# ./remotebox

We can now connect on our Vbox Server with it:

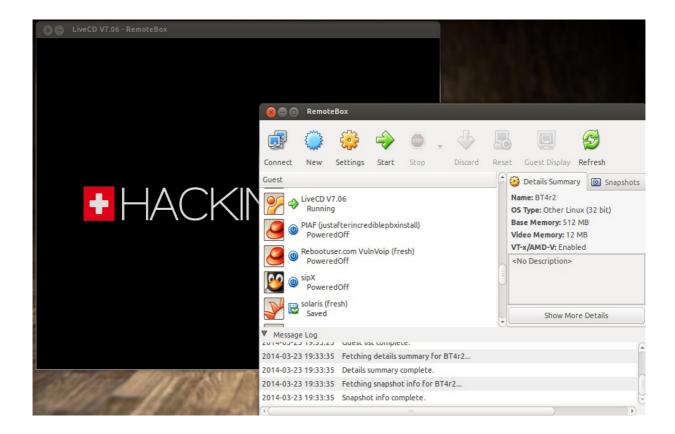
Connection Dialog



RemoteBox GUI



Starting the HackingLab LiveCD in a VM



phpVIRTUALBOX

For phpVirtualbox, running a independant webserver is a prerequisite

root@ubuntu:/tmp# apt-get install apache2 php5

<u>root@ubuntu</u>:/tmp# wget <u>http://downloads.sourceforge.net/project/phpvirtualbox/phpvirtualbox-4.3-1.zip</u>

root@ubuntu:/tmp# cd /var/www

root@ubuntu:/var/www# unzip /tmp/phpvirtualbox-4.3-1.zip

root@ubuntu:/var/www# mv phpvirtualbox-4.3.1.zip phpvirtualbox

root@ubuntu:/var/www# chown www-data:www-data phpvirtualbox -R

root@ubuntu:/var/www# mv phpvirtualbox/config.php-example phpvirtualbox/config.php

root@ubuntu:/var/www# vi phpvirtualbox/config.php

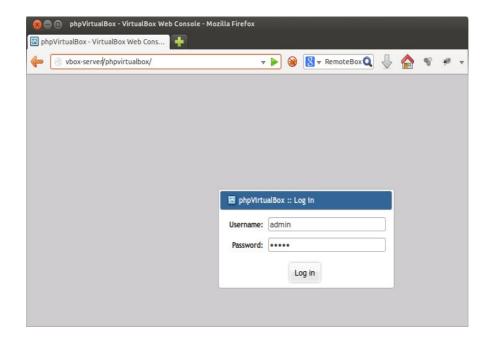
set username and password with the vbox user and the password chosen when adding the linux vbox user above

Browse to your vbox server:

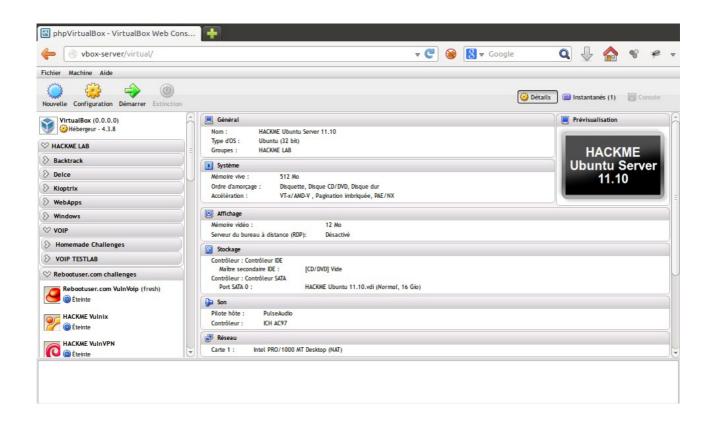
http://vbox-server/phpvirtual

login wtih **admin/admin** and modify the user credentials in the **File/preferences** menu or uncomment the line var \$noAuth = true ; in the /var/www/phpvirtualbox/config.php file for no authentication

phpVirtualBox Login Screen



phpVirutalBox Browser Control Interface



Voilà, that's it... two ways to control your newly installed VirtualBox Server.

Personnally, I prefer the phpVirtualBox way because I had many groups set in my original VirtualBox GUI (about 30 VM's) and this feature is unfortunately not yet present in the RemoteBox software

Have fun!

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