GNU/Linux Administration - Feature #594

VirtualBox Host-Only Network With Internet Access

04/11/2015 08:20 AM - Daniel Curtis

Status:	Closed		Start date:	04/11/2015
Priority:	Normal		Due date:	
Assignee:	Daniel Curtis		% Done:	100%
Category:	Virtualization		Estimated time:	0.50 hour
Target version:	*nix		Spent time:	1.00 hour

Description

I use VirtualBox for a lot of development on my laptop, and as such I do not always have Internet access; and not always connected via ethernet. For the primary network interface, I use a **Host-only** network type to connect with the VMs when disconnected from the Internet; however I also need Internet access when I am connected via WiFi or ethernet. To do this just add a second network interface to the VM in use and make sure to sure set the network type to **NAT**.

VirtualBox GUI

In this example the host-only network is called *vboxnet0*, and I configured the network to another network instead of the default *192.168.56.0* network.

- Configure the Host-only network in VirtualBox -> File -> Preferences -> Network -> Host-only Networks and click **[+] Add host-only network**. Click **OK** when finished.

- Configure the primary network interface for the VM by going to Settings -> Network Adapter 1 and change Attached to to **Host-only Adapter**, then change the Name to **vboxnet0**.

- Configure the secondary network interface for the VM by going to Settings -> Network Adapter 2 and change Attached to to **NAT**.

- Click **OK** when finished.

Now the VM will have two interfaces; one for the connection to the host machine and one to connect to the Internet using NAT. Keep in mind that the VM will need to have the extra network interface configured accordingly or else network connectivity will not work as expected.

VBoxManage

In this example the host-only network is called *vboxnet1*, and I configured the network to another network instead of the default *192.168.56.0* network.

- Create the Host-only network interface:

```
VBoxManage hostonlyif create
```

  - *Example output*

```
0%...10%...20%...30%...40%...50%...60%...70%...80%...90%...100%
Interface 'vboxnet1' was successfully created
```

- Set the host-only network interface IP address:

```
VBoxManage hostonlyif ipconfig vboxnet1 --ip 192.168.88.1
```

- (Optional) Setup a DHCP server for the host-only network:

```
VBoxManage dhcpserver add --ifname vboxnet1 --ip 192.168.88.1 --netmask 255.255.255.0 --loweri
p 192.168.88.100 --upperip 192.168.88.150 --enable
```

- Configure the primary network interface for the VM

```
VBoxManage modifyvm "ExampleVM" --nic1 hostonly --hostonlyadapter1 vboxnet1
```

- Configure the secondary network interface for the VM

```
VBoxManage modifyvm "ExampleVM" --nic2 nat
```

Now the VM will have two interfaces; one for the connection to the host machine and one to connect to the Internet using NAT. Keep in mind that the VM will need to have the extra network interface configured accordingly or else network connectivity will not work as expected.

Resources

- https://www.virtualbox.org/manual/ch06.html#network_hostonly
- https://geert.vanderkelen.org/virtualbox-give-host-only-access-to-internet/
- http://precisionsec.com/virtualbox-host-only-network-cuckoo-sandbox-0-4-2/

History

#1 - 04/11/2015 11:42 AM - Daniel Curtis

- Description updated

- Status changed from New to In Progress

- % Done changed from 0 to 50

#2 - 04/11/2015 12:00 PM - Daniel Curtis

- Description updated

- Status changed from In Progress to Resolved

- % Done changed from 50 to 100

#3 - 04/11/2015 12:02 PM - Daniel Curtis

- Description updated

#4 - 04/11/2015 01:25 PM - Daniel Curtis

- Status changed from Resolved to Closed