? RHEL5 Xen ??? Virtual machine ? Network ?????. 1.Virtual network 2.Shared physical device ???????.

? RHEL5 Xen ?????????? bridge,????? QEMU ?????? virbr0,?????? Xen ????? xenbr0,??? Virtual machine ???? ?????????. 1.Virtual network 2.Shared physical device??????????????,?????? virbr0.

- **Virtual network - virbr0**
  1.QEMU ???? Dom0 ???? bridge ???? "virbr0" .virbr0 ??????? NAT ??,???? NAT + DHCP ???,??? Virtual machine(DomU) ???? virbr0 ????????? (private IP).??? 192.168.122.2 ~ 192.168.122.254 (???? ???????? DHCP ???? IP ??).
  2.???? default gateway ? 192.168.122.1/24 ,???????? domU ???????????? dom0 ? NAT ?????????.
  3. ????? NAT ?? domU ???????????? private ????,???????????? DomU ??????.

     ????? Qemu ??????????? Xen ??????? (/etc/xen) ????? /etc/libvirt/qemu/networks/default.xm

```
<network>
 <name>default</name>
 <uuid>49a0ceb-5662-4a61-8149-98ea750d393b</uuid>
 <bridge name="virbr0" />
 <forward/>
 <ip address="192.168.122.1" netmask="255.255.255.0">
  <dhcp>
   <range start="192.168.122.2" end="192.168.122.254" />
```

```
    </dhcp>
   </ip>
</network>
```

??? ip address ? default gateway IP,range ??DHCPclients ???????,??????????.

- **Shared physical device - xenbr0**

??? Virtual machine(DomU) ? Dom0 ?????????????? Hub ?? Switch ?,??????? IP ?????.

???? XEN ? Network ??? : http://benjr.tw/?q=node/215

???????????????? Virtual machine ????(?? /etc/xen ????),Virtual machine ?????????? Virtual machine ?? "system Name"???.???? Virtual machine ? system name ? rhel4 ???????????? /etc/xen/rhel4,???? vif ?? virbr0 ?? xenbr0
1.Virtual network - virbr0
vif =[bridge=virbr0]
??
2.Shared physical device - xenbr0
vif =[bridge=xenbr0]

???? Guest OS ?????? Virtual Machine Manager ? Details / hardware ?? NIC ???? NAT ?? Bridge ???! XEN ??? ?????????? Virtual machinet ? NIC ????????.?????????? Guest OS ????!!
???????? rhel4(Dom 3) ? rhel5(Dom 4) ??,????? networking ?????,????????.??????????? Dom ID ??!

virbr0 ??? **NAT networking** ,???? vif3.0 ?? Dom3(rhel4) ???? eth0 ???? NAT networking.

xenbr0 ??? **bridge networking**,vif0.0 / vif4.0?? Dom0(RHEL5 ??)? Dom4(rhel5) ???? eth0 ????bridge networking.

note:???????? RHEL5 ???????? 4 ? Xen bridge.??????????? 4 ?,??????,?????????4? port ? Server ??,??? port ?? ????,???????????? port ????,???????????.????????? port ????????.?? RHEL ?? RHEL5 U3 ??????.

- **Set fixed MAC address for your virtual system**

??????????????????????? MAC address ,?????????? mac ?????????. mac :XY:XX:XX:XX:XX:XX ,mac ??16????? X ?????16??(0~9,A,B,C,D,E,F), Y ????? 2, 6, A ? E. ?? Xen ??????? 00:16:3e:xx:xx:xx. ???????? Xen ???. ???????? ??????? Virtual machine ??????????????? /etc/xen/ ?.

```
[root@benjr ~]# vi /etc/xen/rhel4
name = "rhel4"
uuid = "cf67710d-b756-086b-8cde-be61d2faca1b"
maxmem = 512
memory = 512
vcpus = 1
bootloader = "/usr/bin/pygrub"
on_poweroff = "destroy"
on_reboot = "restart"
on_crash = "restart"
vfb = [ "type=vnc,vncunused=1,keymap=en-us" ]
disk = [ "phy:/dev/sda5,xvda,w" ]
vif = [ "mac=00:16:3e:27:95:c0,ip=10.0.0.1" ]
```

? vif = ["mac=XY:XX:XX:XX:XX:XX"] ???? mac ???.

???? : http://blog.ithome.com.tw/index.php?op=ViewArticle&articleId=21580&blogId=257