Adding a Network Card to CentOS Linux

Detect & Configure The New Network Adapter

1. Determine existing network interfaces

```
ifconfig -a
```

2. Change directory to the network scripts folder

```
cd /etc/sysconfig/network-scripts
```

3. Clone the existing eth0 device network script

```
cp ifcfg-eth0 ifcfg-eth1 # this assumes the old card was eth0 and the new one is eth1
```

4. Get the Hardware Address for the eth1 network card, again this assumes the new card is eth1

```
grep eth1 /etc/udev/rules.d/70-persistent-net.rules
#you can get fancy and use awk and cut to isolate the string containing the Hardware Address
grep eth1 /etc/udev/rules.d/70-persistent-net.rules | awk -F"," '{print $4}' | cut -d= -f3
```

5. Replace all occurences of eth0 with eth1 in the new network configuration script

```
sed -i 's/eth0/eth1/g' ifcfg-eth1 # or edit it by hand and change eth0 to eth1 where it appears
```

6. Edit the eth1 network configuration script and replace the Hardware Address with the one in the 70-persistent-net-rules file

```
vi ifcfg-eth1
```

7. Bring the eth1 interface up

```
ifup eth1
```

CentOS 6 64-bit on ESXi 5.0 – No Network After Cloning

Scenario: Installed CentOS 6.x x86_64 on VMWare ESXI 5.5

Upon login, noticed no NICS detected

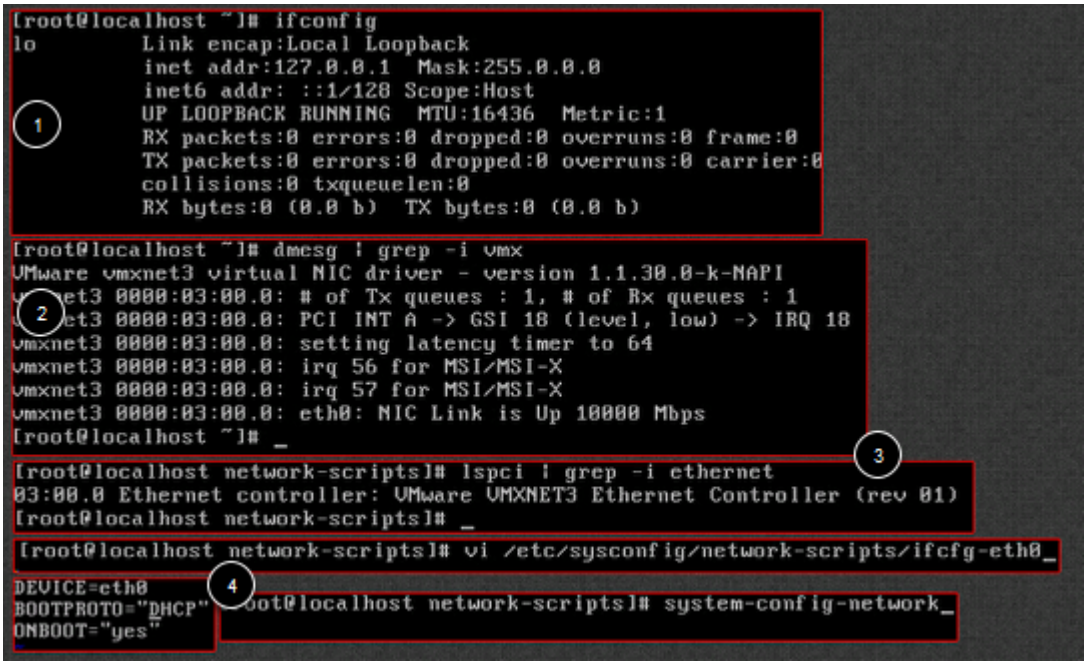
see:{Centos 6.2 set static IP@https://www.linuxquestions.org/questions/linux-server-73/centos-6-2-set-static-ip-931188/

see:{Settimg up a new network device in CentOS@http://linuxtoolkit.blogspot.com/2013/09/settimg-up-new-network-device-in-centos.html

Regenerate the Persistent Network Rules Using udevadm

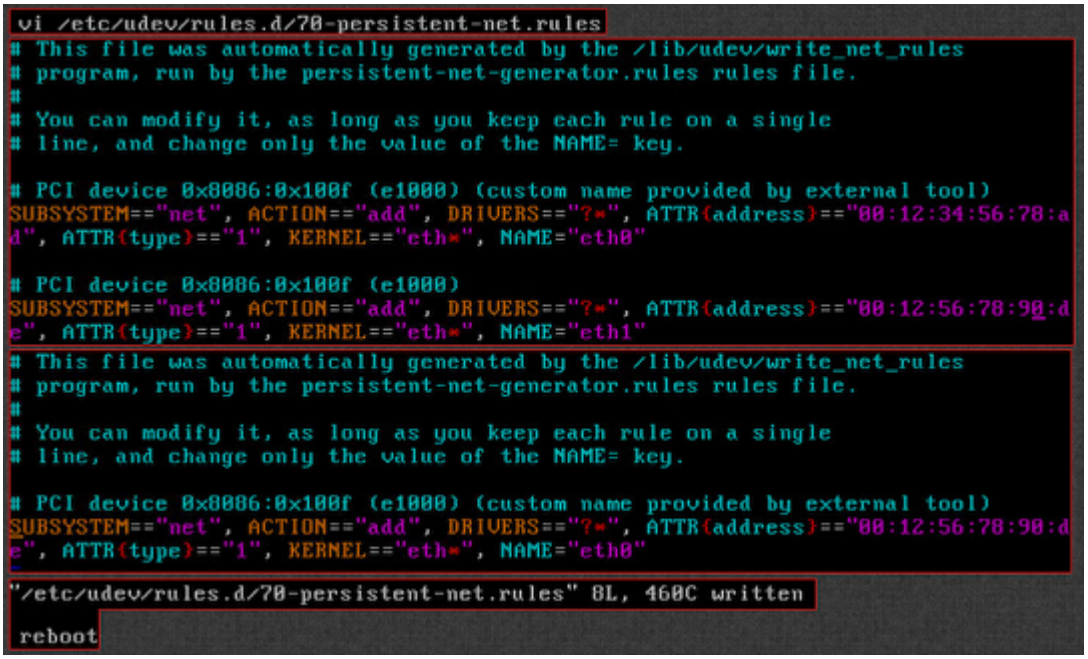
[code language=””]
#Regenerate the file using udevadm
rm -f /etc/udev/rules.d/70-persistant-net.rules
udevadm trigger –action=add
reboot
[/code]

Manually Verify and Correct NIC Device



[code language="bash"]
#1. Verify problem (no ethNn present)
ifconfig
#2. Verify system detects ethernet hardware
dmesg | grep -e 'vmx\|eth'
#3. Verify ethernet driver is loaded
lspci | grep -i ethernet
#4. If not already present, create generic eth0 config file
vi /etc/sysconfig/network-scripts/ifcfg-eth0
#If there is already a UUID line, Delete it, save, exit
#5. If this system was cloned, you'll need to remove the old MAC address reference.
#See next step
[/code]

Manually Correct NIC MAC Address After Cloning



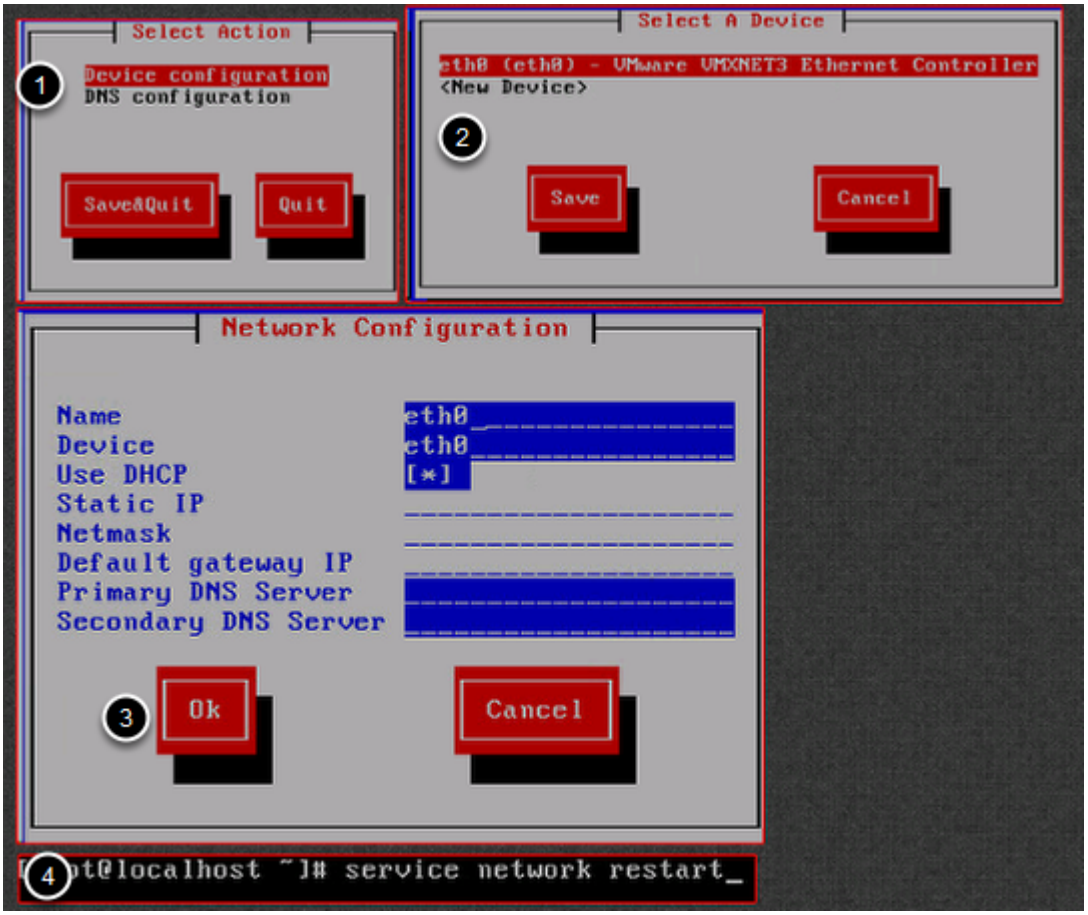
After cloning a CentOS 6.x machine, you may find that connectivity is limited to only the loopback (127.x.x.x) interface

This is likely because the system has retained the MAC address specification of the machine from which it was cloned

You can correct this by modifying the Persistent Network Rules File

[code language=”bash”]
vi /etc/udev/rules.d/70-persistant-net.rules
[/code]

Configure NIC Device Using System Config Network Utility



1. Launch the System Network Configuration Utility

[code language="bash"]
system-config-network
[/code]

2. Choose 'Device configuration' in the dialog

3. Fill in settings accordingly (e.g. Name:eth0;Device:eth0;DHCP:enabled. Press OK

You'll be taken back to the original dialog

4. Press Save&Quit. Restart networking services

Settings should persist even after reboot