Configuración de redes en KVM y en Vagrant

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Red Privada de tipo NAT

QEMU/KVM + Libvirt

```
<network>
  <name>red-nat</name>
  <bridge name='virbr1'/>
  <forward/>
  <ip address='192.168.200.1' netmask='255.255.255.0'>
    <dhcp>
      <range start='192.168.200.2' end='192.168.200.254'/>
    </dhcp>
  </ip>
</network>
```

Vagrant

```
...
config.vm.network :private_network,
    :type => "dhcp",
    :libvirt__network_name => 'red_nat_vagrant',
    :libvirt__network_address => '192.168.200.0',
    :libvirt__netmask => '255.255.255.0'
...
```

Vagrant

```
...
config.vm.network :private_network,
    :type => "dhcp",
    :libvirt__network_name => 'red_nat_vagrant',
    :libvirt__network_address => '192.168.200.0',
    :libvirt__netmask => '255.255.255.0',
    :libvirt__host_ip => '192.168.200.1',
    :libvirt__dhcp_start => '192.168.200.2',
    :libvirt__dhcp_stop => '192.168.200.254'
...
```

Red Privada de tipo NAT sin DHCP

QEMU/KVM + Libvirt

```
<network>
  <name>red-nat</name>
  <bridge name='virbr1'/>
  <forward/>
  <ip address='192.168.200.1' netmask='255.255.255.0'/>
</network>
```

Vagrant

```
...
 config.vm.network :private_network,
    :libvirt__network_name => 'red_nat_sin_dhcp_vagrant',
    :libvirt__dhcp_enabled => false,
    :ip => "192.168.200.100"
```

Red Privada aislada

QEMU/KVM + Libvirt

```
<network>
  <name>red_aislada</name>
  <bridge name='virbr2'/>
  <ip address='192.168.123.1' netmask='255.255.255.0'>
    <dhcp>
      <range start='192.168.123.2' end='192.168.123.254'/>
    </dhcp>
  </ip>
</network>
```

Vagrant

```
...
    nodo1.vm.network :private_network,
      :libvirt__network_name => "red_aislada",
      :type => "dhcp",
      :libvirt__network_address => '192.168.123.0',
      :libvirt__netmask => '255.255.255.0',
      :libvirt__forward_mode => "none"
...
    nodo2.vm.network :private_network,
      :libvirt__network_name => "red_aislada",
      :type => "dhcp",
      :libvirt__network_address => '192.168.123.0',
      :libvirt__netmask => '255.255.255.0',
      :libvirt__forward_mode => "none"
...
```

Red Privada aislada sin DHCP

QEMU/KVM + Libvirt

```
<network>
  <name>red_aislada</name>
  <bridge name='virbr2'/>
  <ip address='192.168.123.1' netmask='255.255.255.0'/>
</network>
```

Vagrant

```
...
    nodo1.vm.network :private_network,
      :libvirt__network_name => "red_aislada2",
      :libvirt__dhcp_enabled => false,
      :ip => "192.168.123.100",
      :libvirt__forward_mode => "none"
...
    nodo2.vm.network :private_network,
      :libvirt__network_name => "red_aislada2",
      :libvirt__dhcp_enabled => false,
      :ip => "192.168.123.101",
      :libvirt__forward_mode => "none"
...
```

Red Privada muy aislada

QEMU/KVM + Libvirt

```
<network>
  <name>red_muy_aislada</name>
  <bridge name='virbr3'/>
</network>
```

Vagrant

```
...
    nodo1.vm.network :private_network,
      :libvirt__network_name => "red1",
      :libvirt__dhcp_enabled => false,
      :ip => "192.168.200.100",
      :libvirt__forward_mode => "veryisolated"
...
    nodo2.vm.network :private_network,
      :libvirt__network_name => "red1",
      :libvirt__dhcp_enabled => false,
      :ip => "192.168.200.101",
      :libvirt__forward_mode => "veryisolated"
...
```

Red Pública

QEMU/KVM + Libvirt

```
<network>
  <name>red-bridge</name>
  <forward mode="bridge"/>
  <bridge name="br0"/>
</network>
```

Vagrant

```
...
  config.vm.network :public_network,
    :dev => "bro",
    :mode => "bridge",
    :type => "bridge"
...
```

Configuración de la puerta de enlace

Vagrant

- Por defecto la puerta de enlace de las máquinas Vagrant es `192.168.121.1` por `eth0`. Para cambiar la puerta de enlace y que la máquina salga por otra interfaz:

```
...
config.vm.network :private_network,
   :type => "dhcp",
   :libvirt__network_name => 'red_nat_vagrant',
   :libvirt__network_address => "192.168.202.0",
   :libvirt__netmask => '255.255.255.0',
   use_dhcp_assigned_default_route: true
```