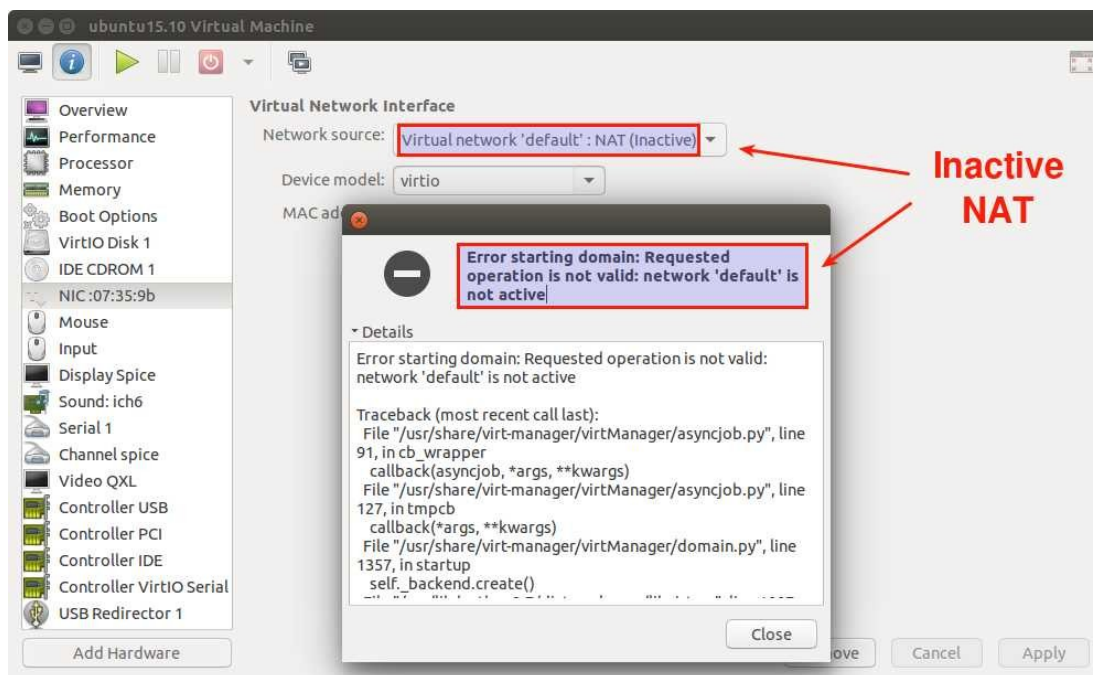


How to fix "network 'default' is not active" error in libvirt

Question: When I am trying to start a guest VM on QEMU/KVM via virt-manager, it fails to start with the error:

"Error starting domain: Requested operation is not valid: network 'default' is not active"

How can I fix this error?



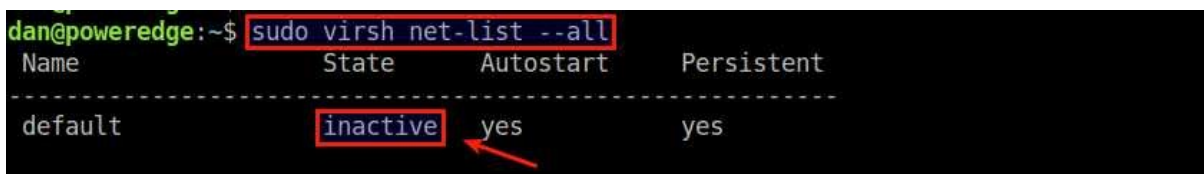
When you install QEMU/KVM in Linux, the default NAT network is created automatically by libvirtd daemon. The properties of the default network are defined in the libvirt's default network template (located at `/etc/libvirt/qemu/networks/default.xml`). This default network is used to interconnect guest VMs's virtual NICs in NAT mode.

If, for whatever reason, the default network is deactivated, you won't be able to start any guest VMs which are configured to use the network.

When you check the state of existing networks, you will see inactive state for the default network.

```
sudo virsh net-list --all;
```

```
dan@poweredge:~$ sudo virsh net-list --all
Name          State      Autostart   Persistent
-----
default       inactive   yes         yes
```



Here we show how to solve the default network stuck in inactive state.

Solution One

Your first attempt can be simply trying to start the network with `virsh`.

```
sudo virsh net-start default;
```

If you encounter the following error, go to the next solution.

```
internal error: Network is already in use by interface virbr0
```

Solution Two

Identify the name of the bridge associated with the default network. You can find out the bridge name in the default network template (`/etc/libvirt/qemu/networks/default.xml`). In most cases, the bridge name is `virbr0`.

Remove that bridge as follows.

```
sudo ifconfig virbr0 down;  
sudo brctl delbr virbr0;
```

Now start the default network using `virsh` command.

```
sudo virsh net-start default;
```

This will automatically re-create the `virbr0` bridge.

```

dan@poweredge:~$
dan@poweredge:~$
dan@poweredge:~$ sudo ifconfig virbr0 down
dan@poweredge:~$ sudo brctl delbr virbr0
dan@poweredge:~$ virsh net-list --all

```

Name	State	Autostart	Persistent
default	inactive	yes	yes

```

dan@poweredge:~$ virsh net-start default
Network default started

dan@poweredge:~$ ifconfig virbr0
virbr0: Link encap:Ethernet HWaddr 52:54:00:a5:19:aa
          inet addr:192.168.122.1 Bcast:192.168.122.255 Mask:255.255.255.0
          UP BROADCAST MULTICAST MTU:1500 Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:0 (0.0 B) TX bytes:0 (0.0 B)

```

virbr0 automatically recreated

Verify the state of the default network.

sudo virsh net-list --all;

```

dan@poweredge:~$ sudo virsh net-list --all

```

Name	State	Autostart	Persistent
default	active	yes	yes