vSRX2.0 Junos 15.1-x49-d15.4 on VMware Fusion on MacOSX

Purpose: setup a vSRX2.0 image under VMware Fusion on a MacOSX

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Versions:
VMware Fusion version 7.1.2
vSRX 2.0 version Junos 15.1-x49-d15.4

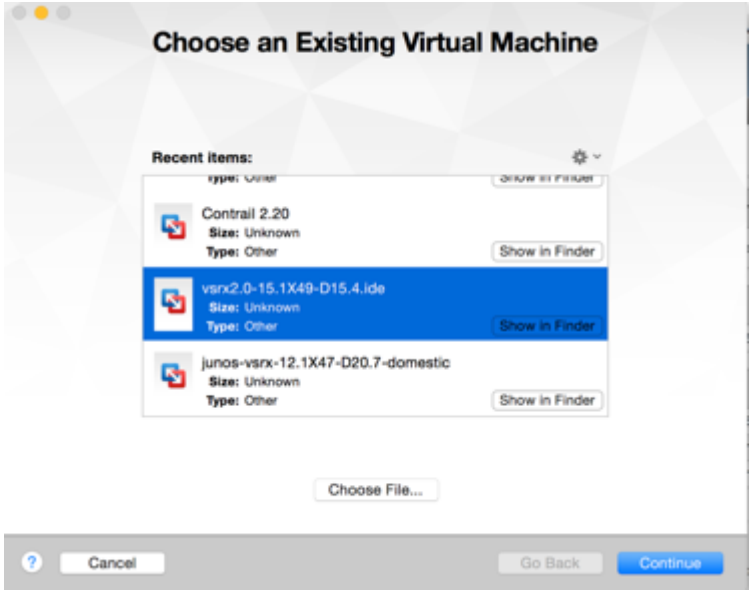
Release Note:
http://www.juniper.net/techpubs/en_US/vsrx15.1x49/information-products/topic-collections/release-notes/15.1x49/vsrx-release-notes.pdf

Virtual version vSRX:
http://www.juniper.net/support/downloads/?p=vsrx#sw
for VMware IDE drive version:
https://webdownload.juniper.net/swdl/dl/secure/site/1/record/59596.html

Overall procedure:
- import OVA
- use/create a Management network with your Mac (Host-only is ok)
- use/create a Left/Trust network for the other hosts behind the vSRX: do not use DHCP offer from VMware, vSRX will do it
- use/create a Right/Untrust network for the external interface of the vSRX, used to access internet (sharing the existing Bridge or Shared NAT is ok)
- customize the memory and cpu settings
- run the vSRX and customize it using the console
- set the minimal admin and network settings
- access using ssh and complete the configuration
- wait for all interfaces to come up
- create a client VM behind it and access internet

Step by step procedure:

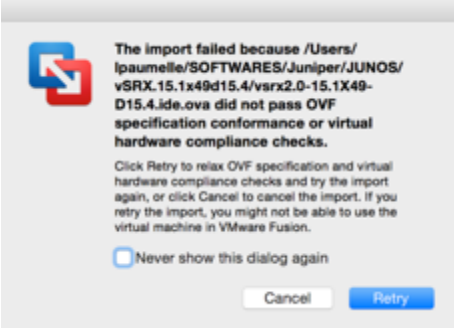
Import the OVA:



and specify the target new VM destination image.

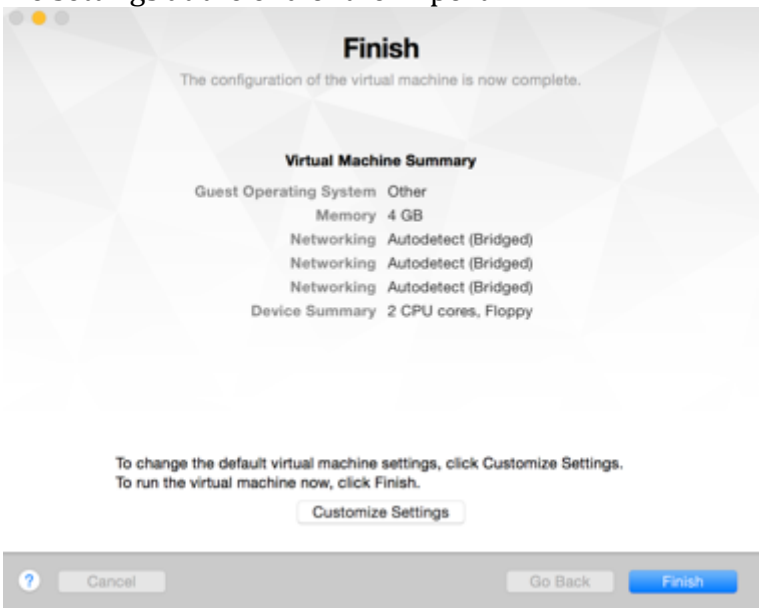
Accept the license agreement:

Retry the OVA check that seems to block but actually pass:



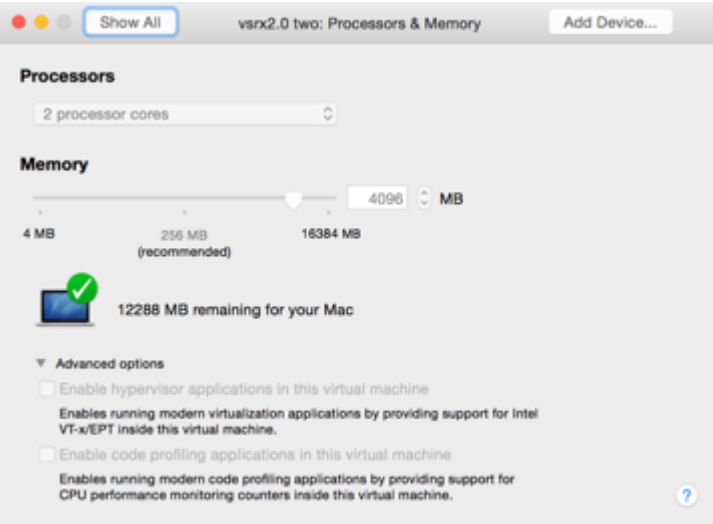
Importation in progress:

Then customize settings at the end of the import:



Processors and Memory:
Minimum required (release notes):

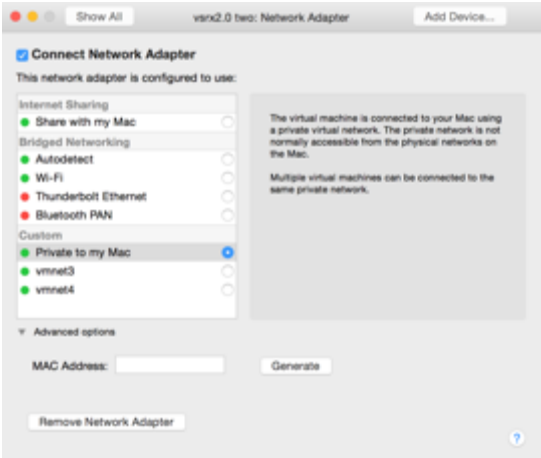
- 2 cores
- 4G RAM



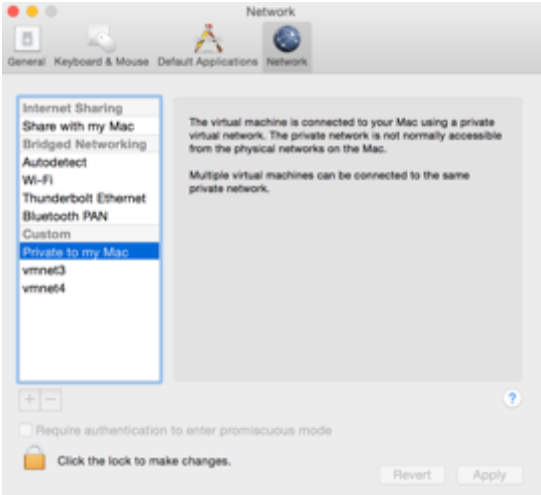
Not specified is the “Enable hypervisor”. But it does work also without, though the Junos itself is also a VM inside the base linux OS.
Tested on an other vSRX VM with the VT-x turned on also worked normally.

1st Network Adapter : fxp0 (management)

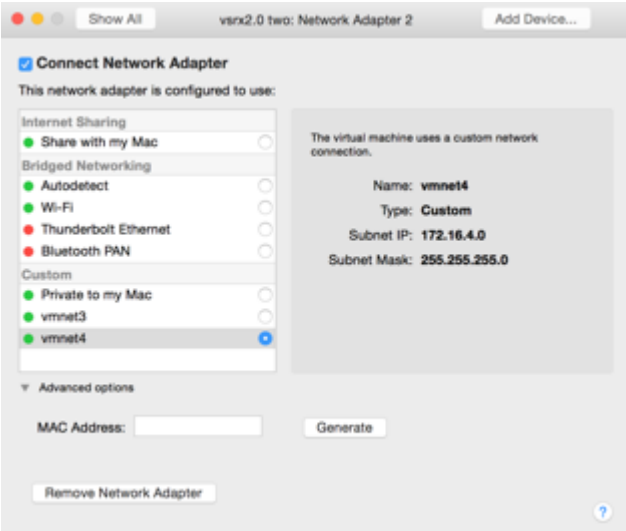
it can be set to communicate with the Mac only so “Private to my Mac” is a perfect use.



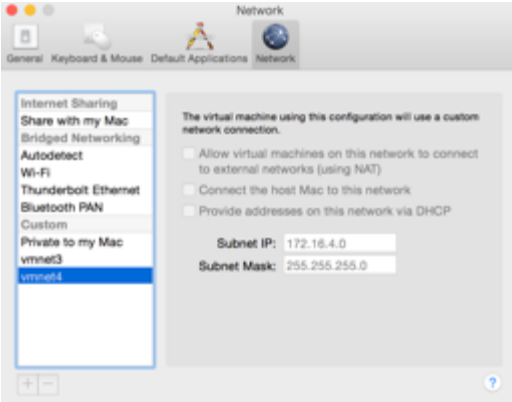
Settings for that network (Vmware Fusion preferences menu):
Require authentication to enter for Promiscuous mode was set to false as it is needed for the fxp0.



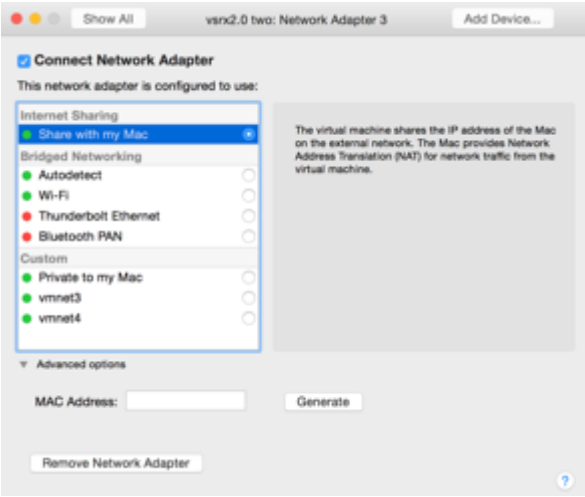
2nd Network Adapter : ge-0/0/0 (trust)



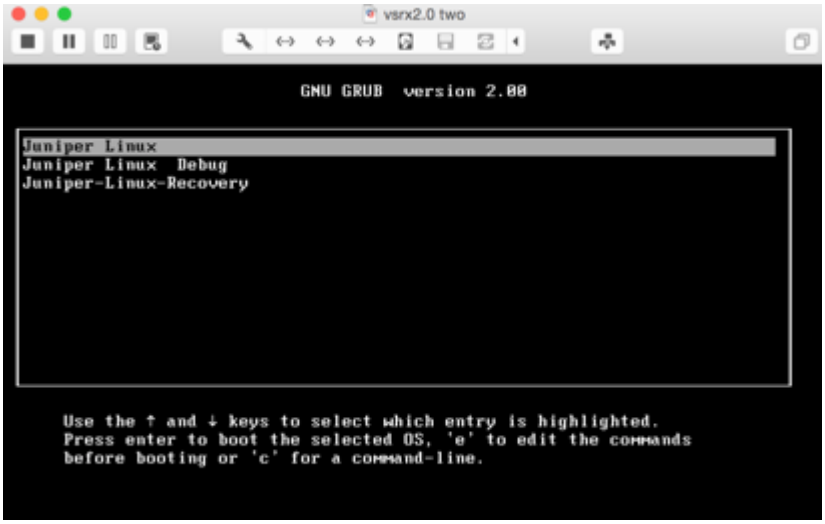
Settings for that network (Vmware Fusion preferences menu):
new vmnet4 not shared with the Mac but with other VMs as client/protected by the vSRX.

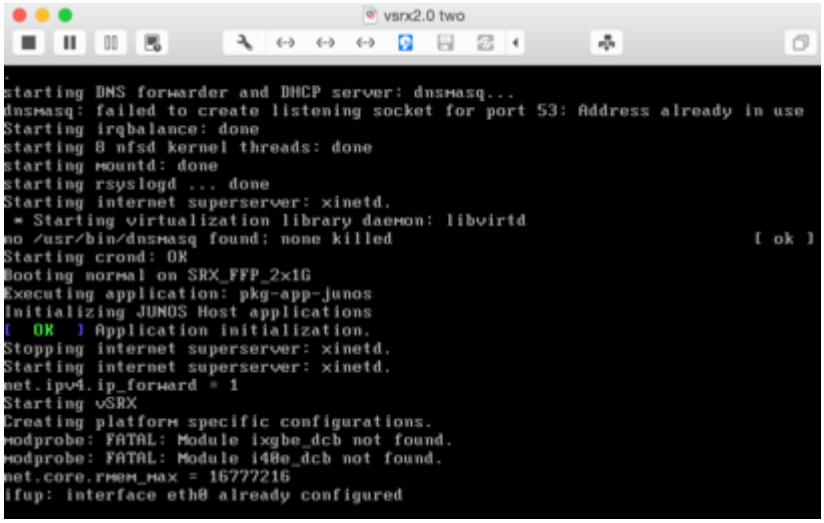


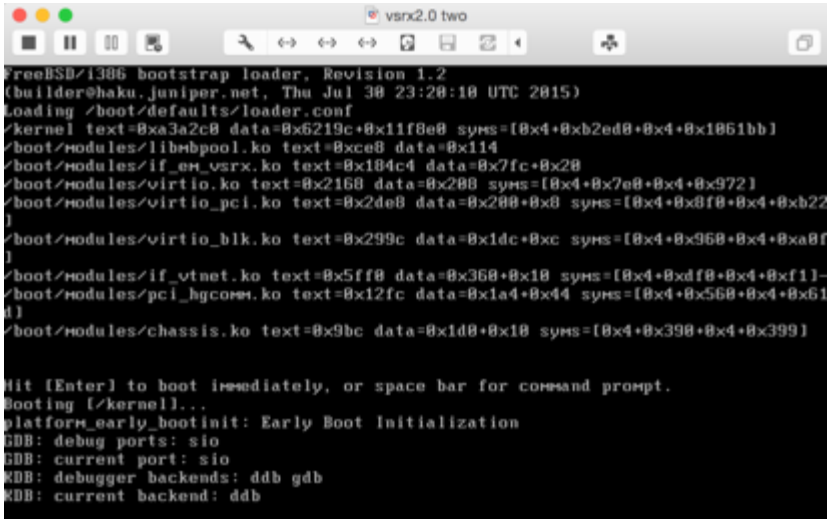
3rd Network Adapter : ge-0/0/1 (untrust)



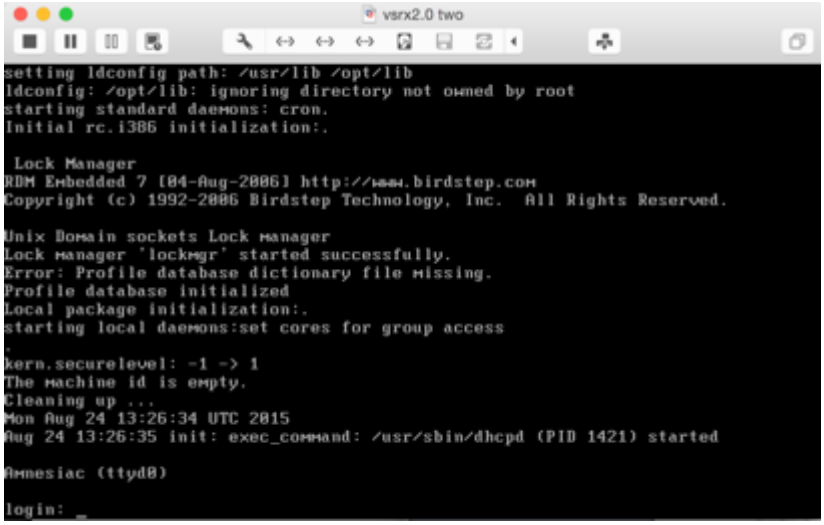
Booting vSRX2.0:



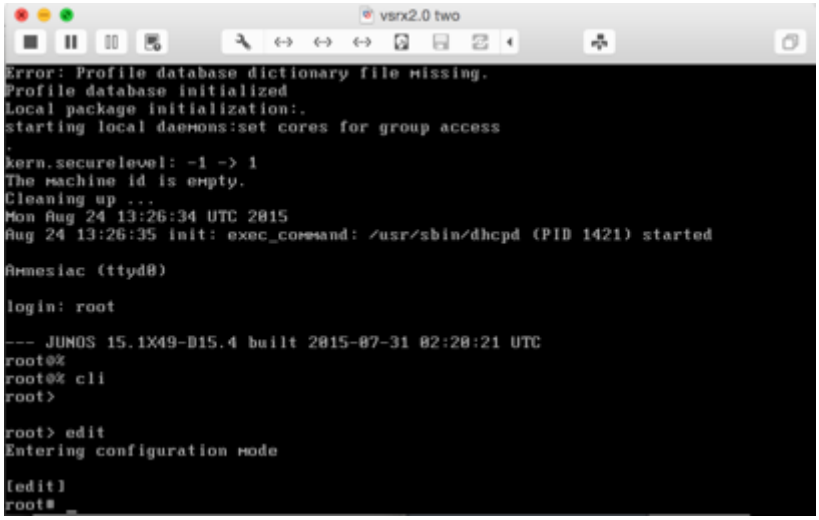




some minutes later, after generating RSA private and public keys and launching services, it gets to the console login:



Enter the root (no password for first run) and cli as of anu standard first boot Junos:



and set all necessary parameters such as the below for example:

```
roott# set system root-authentication plain-text-password
New password:
Retype new password:
```

And some basic configuration (network, zones):

```
set system name-server 8.8.8.8

set security zones security-zone trust interfaces ge-0/0/0.0 host-inbound-
traffic system-services all

set security zones security-zone untrust interfaces ge-0/0/1.0 host-inbound-
traffic system-services dhcp
set security zones security-zone untrust interfaces ge-0/0/1.0 host-inbound-
traffic system-services ping

set interfaces ge-0/0/0 unit 0 family inet address 192.168.0.1/24
set interfaces ge-0/0/1 unit 0 family inet dhcp
set interfaces fxp0 unit 0 family inet dhcp

commit check
commit and-quit
```

Admin connection via fxp0:

Via the command line tools under Macosx (terminal or iterm):

```
bash
bash-3.2$ ssh root@192.168.70.130
The authenticity of host '192.168.70.130 (192.168.70.130)' can't be established.
RSA key fingerprint is de:cb:73:6c:e5:62:00:b3:0b:88:f7:24:ac:54:08:55.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '192.168.70.130' (RSA) to the list of known hosts.
Password:
--- JUNOS 15.1X49-D15.4 built 2015-07-31 02:20:21 UTC
```

ssh to the device :

Check connectivity to internet and name resolution, time, etc:

```
root> show interfaces terse | match inet
ge-0/0/0.0              up    up   inet     192.168.130.1/24
sp-0/0/0.0              up    up   inet
                                   inet6
sp-0/0/0.16383          up    up   inet
ge-0/0/1.0              up    up   inet     172.16.30.140/24
em0.0                   up    up   inet     128.0.0.1/2
em1.32768               up    up   inet     192.168.1.2/24
fxp0.0                  up    up   inet     192.168.70.130/24
lo0.16384               up    up   inet     127.0.0.1           --> 0/0
lo0.16385               up    up   inet     10.0.0.1            --> 0/0

root> show route

inet.0: 7 destinations, 7 routes (7 active, 0 holddown, 0 hidden)
+ = Active Route, - = Last Active, * = Both

0.0.0.0/0          *[Access-internal/12] 00:02:57
                    > to 172.16.30.2 via ge-0/0/1.0
172.16.30.0/24     *[Direct/0] 00:02:57
                    > via ge-0/0/1.0
172.16.30.140/32   *[Local/0] 00:02:57
                       Local via ge-0/0/1.0
192.168.70.0/24    *[Direct/0] 00:02:57
                    > via fxp0.0
192.168.70.130/32  *[Local/0] 00:02:57
                       Local via fxp0.0
192.168.130.0/24   *[Direct/0] 00:03:06
                    > via ge-0/0/0.0
192.168.130.1/32   *[Local/0] 00:03:06
                       Local via ge-0/0/0.0

root> ping www.cnn.con
^C
root> ping www.cnn.com
ping: cannot resolve www.cnn.com: Host name lookup failure

root> ping 4.2.2.3
PING 4.2.2.3 (4.2.2.3): 56 data bytes
64 bytes from 4.2.2.3: icmp_seq=0 ttl=128 time=53.133 ms
^C
--- 4.2.2.3 ping statistics ---
2 packets transmitted, 1 packets received, 50% packet loss
round-trip min/avg/max/stddev = 53.133/53.133/53.133/0.000 ms

root> show system license
License usage:
                                  Licenses     Licenses    Licenses    Expiry
  Feature name                        used    installed      needed
  Virtual Appliance                      1            1           0    59 days

Licenses installed:
  License identifier: E420588955
  License version: 4
  Software Serial Number: 20150625
  Customer ID: vSRX-JuniperEval
  Features:
```

```
    Virtual Appliance - Virtual Appliance
      count-down, Original validity: 60 days
```

And copy/paster whatever is missing (DNS, Time, NAT, DHCP services…).
Sample config:

```
set system time-zone Europe/Paris
set system name-server 8.8.8.8
set system name-server 4.2.2.2
set system name-server 4.2.2.1
set system login user laurent uid 2000
set system login user laurent class super-user
set system login user laurent authentication encrypted-password
"$1$4kJP6e24$wEeSC7QbHoI62pRFK7CUV."
set system login user laurent authentication ssh-rsa "ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAABAQDe8Hr1x+zwnPYQda58287fJr4jCnoAYqVS0viK5rezqg8K4B
qKb5cRxTHV3HKKykCneRqRYz+jxncXbV6R3tdfYIoAYaZAbiH5GZqL+8f/xljhdxTq2ncIyjIubpID
ekWIoJkPp+WLJkoplSktGyVfpgGmt8DSEXZcRB4UKPwbPLjcQ8qk5ewuur161l+w414SvFCJbPlIep
bg4XXcRjsnNAIo36hLL/L09mB6dJbociUvOCk3p6ehlAsZ04VxLeOnhnynC0yz300rIw62uJsfXPVE
sxO0/UQE2dz2PVp4HUYCtiNbWPIqDMmi1fAER0XeVPfy2mkiPxjxlk8lDUBN
lpaumelle@juniper.net"

set system services dhcp name-server 4.2.2.1
set system services dhcp name-server 4.2.2.2
set system services dhcp domain-search juniper.net
set system services dhcp router 192.168.0.1
set system services dhcp pool 192.168.0.0/24 address-range low 192.168.0.100
set system services dhcp pool 192.168.0.0/24 address-range high 192.168.0.200

set system ntp server 81.170.151.60
set system ntp server 195.46.37.22

set security nat source rule-set Zone_trust-Zone_untrust from zone trust
set security nat source rule-set Zone_trust-Zone_untrust to zone untrust
set security nat source rule-set Zone_trust-Zone_untrust rule Group-
Nat2Internet match source-address 0.0.0.0/0
set security nat source rule-set Zone_trust-Zone_untrust rule Group-
Nat2Internet match destination-address 0.0.0.0/0
set security nat source rule-set Zone_trust-Zone_untrust rule Group-
Nat2Internet then source-nat interface

set security zones security-zone trust tcp-rst
set security zones security-zone trust interfaces ge-0/0/0.0 host-inbound-
traffic system-services all

set security zones security-zone untrust screen untrust-screen
set security zones security-zone untrust interfaces ge-0/0/1.0 host-inbound-
traffic system-services dhcp
set security zones security-zone untrust interfaces ge-0/0/1.0 host-inbound-
traffic system-services ping

set interfaces ge-0/0/0 unit 0 family inet address 192.168.0.1/24
set interfaces ge-0/0/1 unit 0 family inet dhcp
set interfaces fxp0 unit 0 family inet dhcp

commit check
commit and-quit
```

Wait a little bit before being able to go to internet for the interfaces to come up.

Create an other client VM and place it on the same vmnet4 network and try to access internet from it.

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