

## KELOMPOK :

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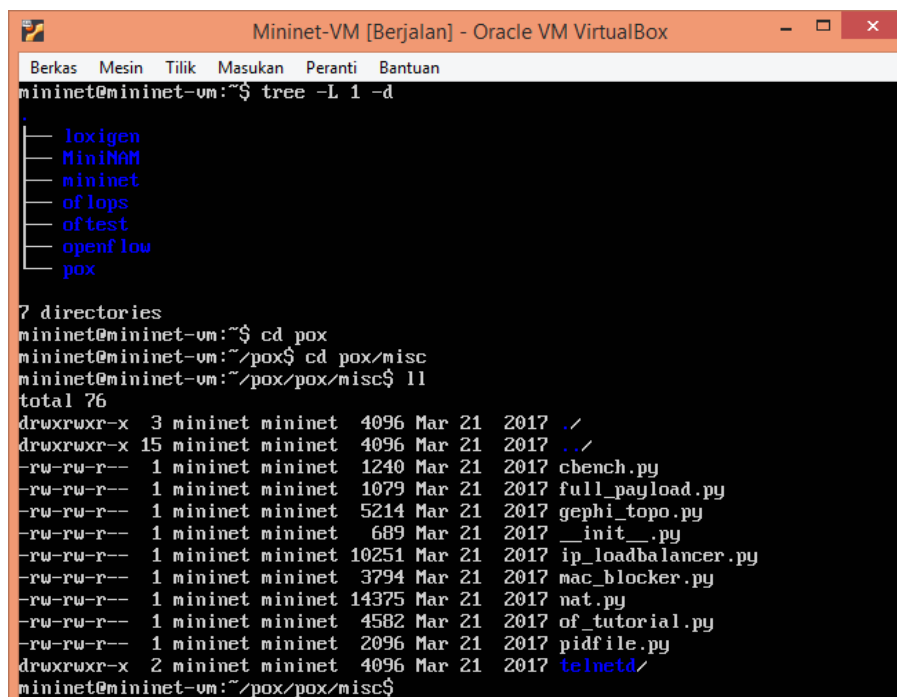
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## KOM B

### Administrasi dan Desain Jaringan

### POX CONTROLLER

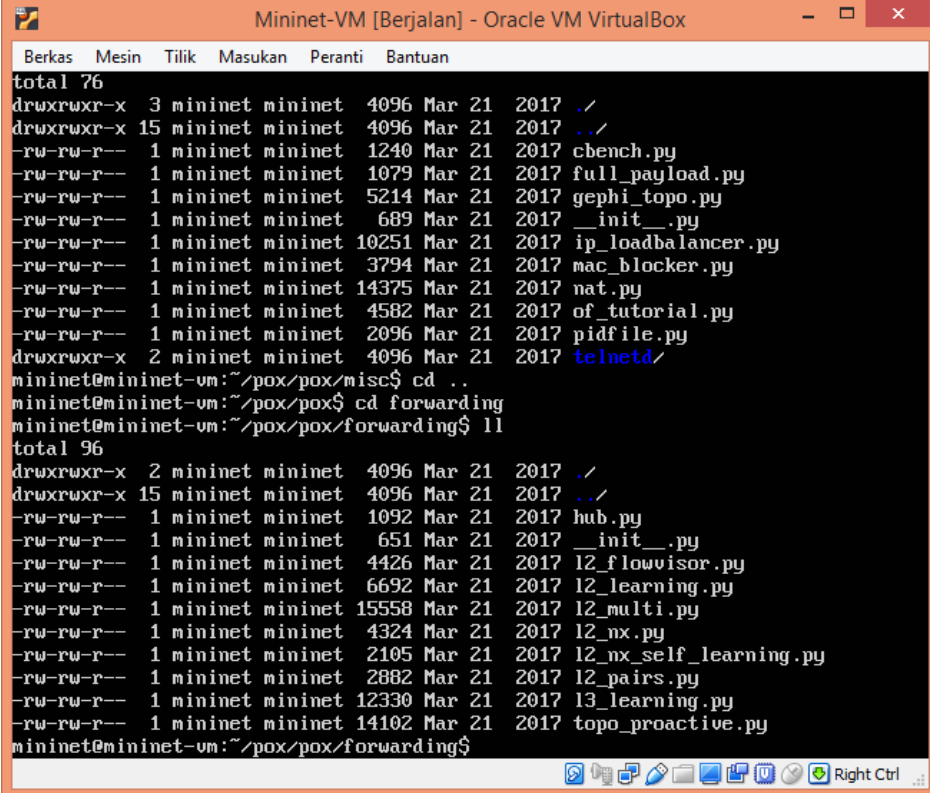
Melihat pox controller file pada Mininet dengan mengetik “tree -L 1 -d” kemudian masuk ke folder misc, lalu ketik ll. Jika berhasil akan tampil seperti ini :



```
Mininet-VM [Berjalan] - Oracle VM VirtualBox
Berkas  Mesin  Tilik  Masukan  Peranti  Bantuan
mininet@mininet-vm:~$ tree -L 1 -d
.
├── loxigen
├── MiniNAM
├── mininet
├── oflops
├── oftest
├── openflow
└── pox

7 directories
mininet@mininet-vm:~$ cd pox
mininet@mininet-vm:~/pox$ cd pox/misc
mininet@mininet-vm:~/pox/pox/misc$ ll
total 76
drwxrwxr-x  3 mininet mininet 4096 Mar 21 2017 ./
drwxrwxr-x 15 mininet mininet 4096 Mar 21 2017 ../
-rw-rw-r--  1 mininet mininet 1240 Mar 21 2017 cbench.py
-rw-rw-r--  1 mininet mininet 1079 Mar 21 2017 full_payload.py
-rw-rw-r--  1 mininet mininet 5214 Mar 21 2017 gephi_topo.py
-rw-rw-r--  1 mininet mininet  689 Mar 21 2017 __init__.py
-rw-rw-r--  1 mininet mininet 10251 Mar 21 2017 ip_loadbalancer.py
-rw-rw-r--  1 mininet mininet  3794 Mar 21 2017 mac_blocker.py
-rw-rw-r--  1 mininet mininet 14375 Mar 21 2017 nat.py
-rw-rw-r--  1 mininet mininet  4582 Mar 21 2017 of_tutorial.py
-rw-rw-r--  1 mininet mininet  2096 Mar 21 2017 pidfile.py
drwxrwxr-x  2 mininet mininet 4096 Mar 21 2017 telnetd/
mininet@mininet-vm:~/pox/pox/misc$
```

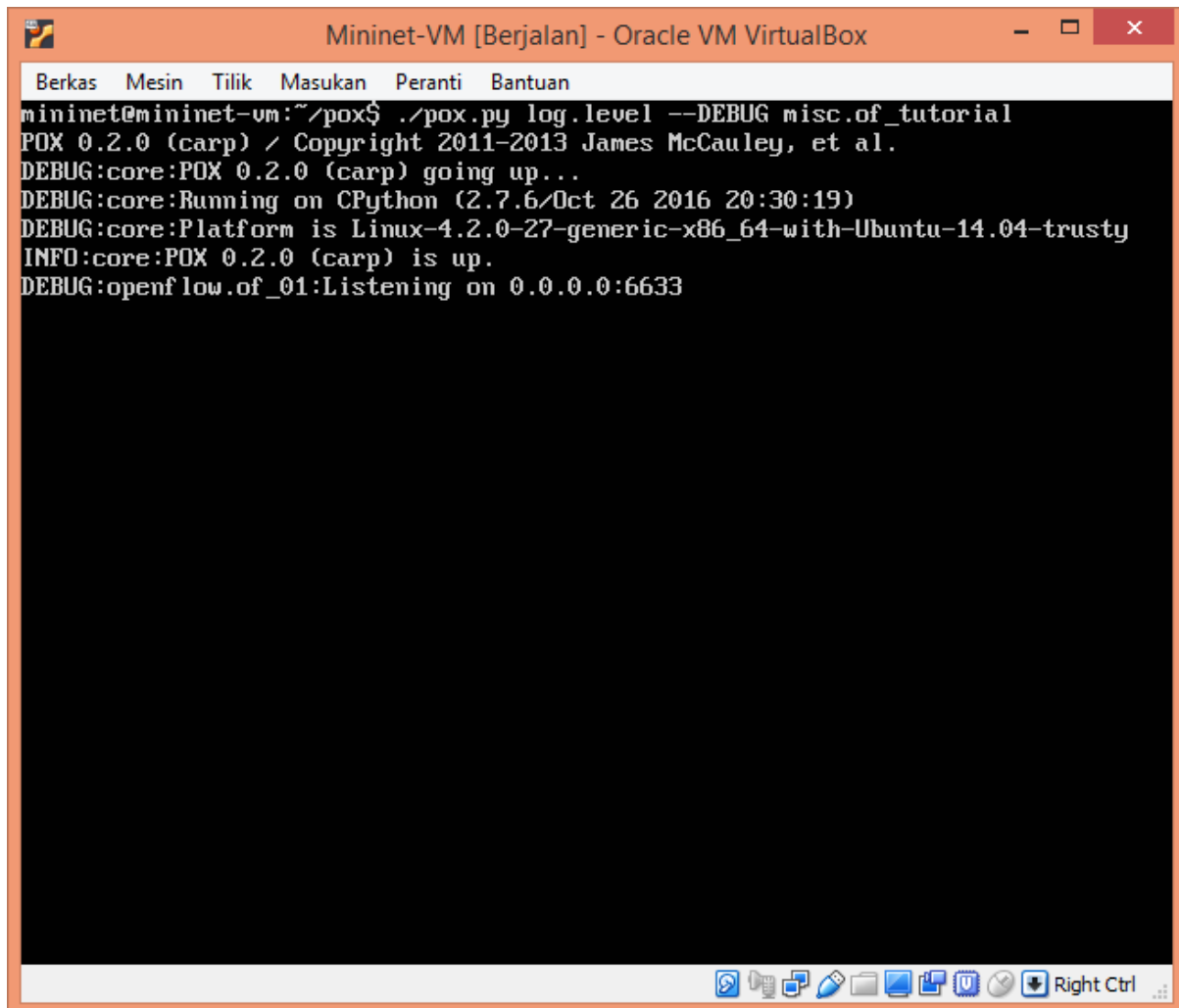
Dan kemudian masuk ke folder forwarding dan ketik “ll”.



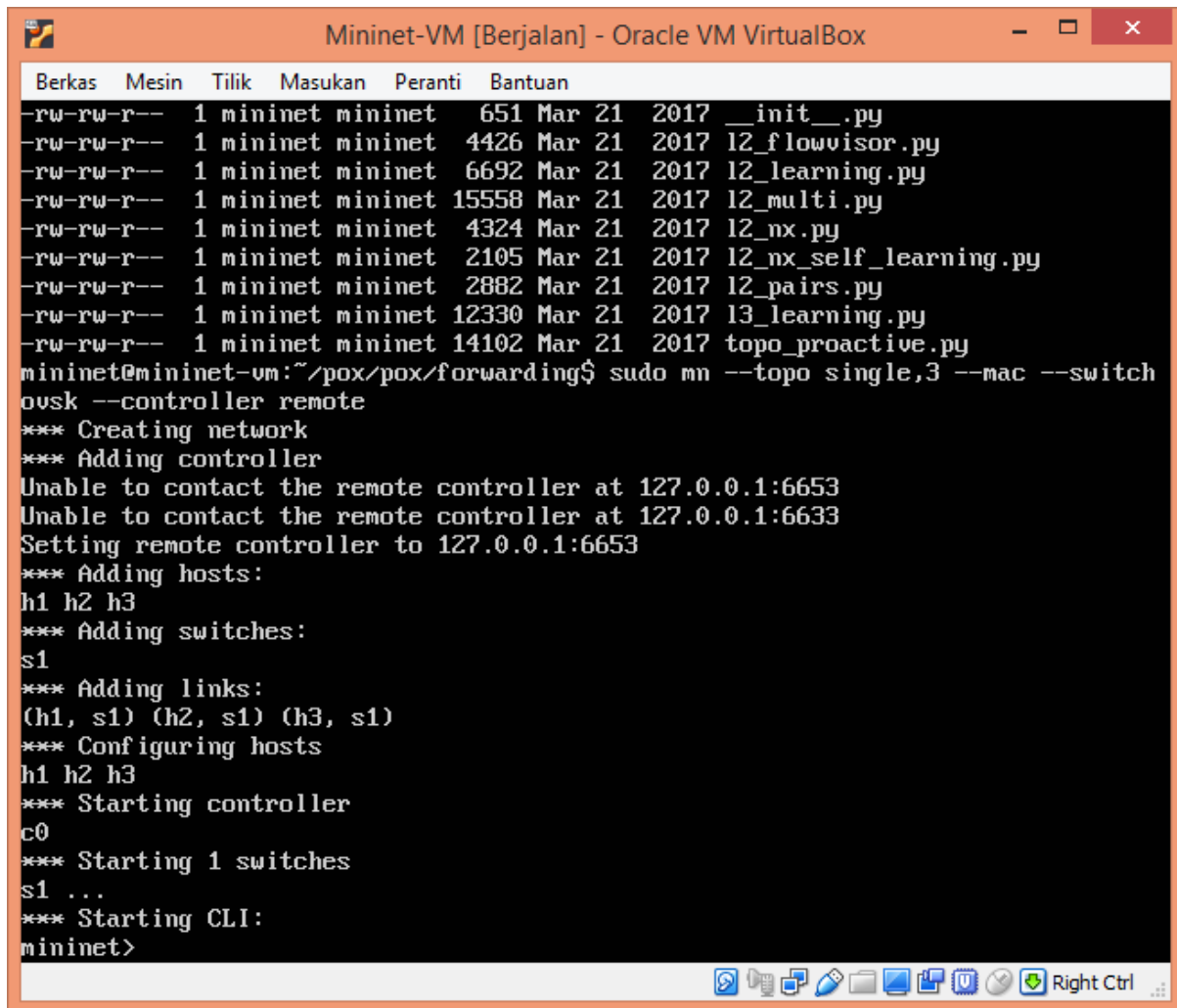
```
Mininet-VM [Berjalan] - Oracle VM VirtualBox
Berkas  Mesin  Tilik  Masukan  Peranti  Bantuan
total 76
drwxrwxr-x  3 mininet mininet  4096 Mar 21 2017 ./
drwxrwxr-x 15 mininet mininet  4096 Mar 21 2017 ../
-rw-rw-r--  1 mininet mininet  1240 Mar 21 2017 cbench.py
-rw-rw-r--  1 mininet mininet  1079 Mar 21 2017 full_payload.py
-rw-rw-r--  1 mininet mininet  5214 Mar 21 2017 gephi_topo.py
-rw-rw-r--  1 mininet mininet   689 Mar 21 2017 __init__.py
-rw-rw-r--  1 mininet mininet 10251 Mar 21 2017 ip_loadbalancer.py
-rw-rw-r--  1 mininet mininet  3794 Mar 21 2017 mac_blocker.py
-rw-rw-r--  1 mininet mininet 14375 Mar 21 2017 nat.py
-rw-rw-r--  1 mininet mininet  4582 Mar 21 2017 of_tutorial.py
-rw-rw-r--  1 mininet mininet  2096 Mar 21 2017 pidfile.py
drwxrwxr-x  2 mininet mininet  4096 Mar 21 2017 telnetd/
mininet@mininet-vm:~/pox/pox/misc$ cd ..
mininet@mininet-vm:~/pox/pox$ cd forwarding
mininet@mininet-vm:~/pox/pox/forwarding$ ll
total 96
drwxrwxr-x  2 mininet mininet  4096 Mar 21 2017 ./
drwxrwxr-x 15 mininet mininet  4096 Mar 21 2017 ../
-rw-rw-r--  1 mininet mininet  1092 Mar 21 2017 hub.py
-rw-rw-r--  1 mininet mininet   651 Mar 21 2017 __init__.py
-rw-rw-r--  1 mininet mininet  4426 Mar 21 2017 l2_flowvisor.py
-rw-rw-r--  1 mininet mininet  6692 Mar 21 2017 l2_learning.py
-rw-rw-r--  1 mininet mininet 15558 Mar 21 2017 l2_multi.py
-rw-rw-r--  1 mininet mininet  4324 Mar 21 2017 l2_nx.py
-rw-rw-r--  1 mininet mininet  2105 Mar 21 2017 l2_nx_self_learning.py
-rw-rw-r--  1 mininet mininet  2882 Mar 21 2017 l2_pairs.py
-rw-rw-r--  1 mininet mininet 12330 Mar 21 2017 l3_learning.py
-rw-rw-r--  1 mininet mininet 14102 Mar 21 2017 topo_proactive.py
mininet@mininet-vm:~/pox/pox/forwarding$
```

Setelah itu, mulai pox controller dengan './pox.py log.level --DEBUG misc.of\_tutorial pada directory pox'. kita coba membuat network pada terminal

lain dengan mengetik “sudo mn --topo single,3 --mac --witch ovsk --controller remote”.



```
mininet@mininet-vm:~/pox$ ./pox.py log.level --DEBUG misc.of_tutorial
POX 0.2.0 (carp) / Copyright 2011-2013 James McCauley, et al.
DEBUG:core:POX 0.2.0 (carp) going up...
DEBUG:core:Running on CPython (2.7.6/Oct 26 2016 20:30:19)
DEBUG:core:Platform is Linux-4.2.0-27-generic-x86_64-with-Ubuntu-14.04-trusty
INFO:core:POX 0.2.0 (carp) is up.
DEBUG:openflow.of_01:Listening on 0.0.0.0:6633
```



```
Berkas  Mesin  Tilik  Masukan  Peranti  Bantuan
-rw-rw-r--  1 mininet mininet  651 Mar 21 2017 __init__.py
-rw-rw-r--  1 mininet mininet  4426 Mar 21 2017 l2_flowvisor.py
-rw-rw-r--  1 mininet mininet  6692 Mar 21 2017 l2_learning.py
-rw-rw-r--  1 mininet mininet 15558 Mar 21 2017 l2_multi.py
-rw-rw-r--  1 mininet mininet  4324 Mar 21 2017 l2_nx.py
-rw-rw-r--  1 mininet mininet  2105 Mar 21 2017 l2_nx_self_learning.py
-rw-rw-r--  1 mininet mininet  2882 Mar 21 2017 l2_pairs.py
-rw-rw-r--  1 mininet mininet 12330 Mar 21 2017 l3_learning.py
-rw-rw-r--  1 mininet mininet 14102 Mar 21 2017 topo_proactive.py
mininet@mininet-vm:~/pox/pox/forwarding$ sudo mn --topo single,3 --mac --switch
ovsk --controller remote
*** Creating network
*** Adding controller
Unable to contact the remote controller at 127.0.0.1:6653
Unable to contact the remote controller at 127.0.0.1:6633
Setting remote controller to 127.0.0.1:6653
*** Adding hosts:
h1 h2 h3
*** Adding switches:
s1
*** Adding links:
(h1, s1) (h2, s1) (h3, s1)
*** Configuring hosts
h1 h2 h3
*** Starting controller
c0
*** Starting 1 switches
s1 ...
*** Starting CLI:
mininet>
```

Kemudian mulai membuka terminal untuk node 1,2, dan 3 dengan perintah 'xterm h1 h2 h3' pada console jaringan yang akan memunculkan 3 terminal untuk masing-masing node.

Berikan perintah 'tcpdump -XX -n -i h2-eth0 > h2.txt' pada terminal node 2, dan 'tcpdump -XX -n -i h3-eth0 > h3.txt' pada terminal node 3, perintah tersebut memerintahkan terminal node untuk merekam aktivitas node dan menyimpannya pada file h2.txt dan h3.txt.