

IEG3821 N1:Introduction of Router Emulator and Fundamentals of IOS Laboratory Report

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Task 1: Construct the Network file of Dynagen

According to the network structure diagram, the modified `lab1.net` is shown following.

```
# IEG3821 - Lab1
# GUAN Hao, hguan5@ie.cuhk.edu.hk
autostart = false
ghostios = true
ghostsize = 128
mmap = true
sparsemem = true

[127.0.0.1]
workingdir = c:\temp\mydir\ieg3821\lab1

[[ETHSW SW]]
1 = access 177
2 = access 77
3 = access 77
4 = access 77
5 = access 77
7 = access 77
8 = access 177
17 = access 177

[[FRSW FR]]
2:216 = 16:612
3:316 = 16:613
4:406 = 6:604
5:516 = 16:615

[[3660]]
idlepc = 0x60529294
image = c:\temp\MyDir\IEG3821\images\c3660-jk9o3s-mz.124-12.image
```

ram = 128

R1 ####
[[ROUTER R1]]
console = 2001
model = 3660
F0/0 = SW 1

R2 ####
[[ROUTER R2]]
console = 2002
model = 3660
F0/0 = SW 2
S1/0 = FR 2

R3 ####
[[ROUTER R3]]
console = 2003
model = 3660
F0/0 = SW 3
S1/0 = FR 3

R4 ####
[[ROUTER R4]]
console = 2004
model = 3660
F0/0 = SW 4
S1/0 = FR 4

R5 ####
[[ROUTER R5]]
console = 2005
model = 3660
F0/0 = SW 5
S1/0 = FR 5

R6 ####
[[ROUTER R6]]
console = 2006
model = 3660
S1/0 = FR 6
S1/1 = FR 16

R7 ####
[[ROUTER R7]]
console = 2007
model = 3660
F0/0 = SW 7
F1/0 = SW 17

```
#### R8 ####  
[[ROUTER R8]]  
console = 2008  
model = 3660  
F0/0 = SW 8
```

Task 2: Basic Network Configurations

a) hostname and domain name

- **R1**

```
hostname R1  
ip domain name ie.cuhk.edu.hk
```

- **R2**

```
hostname R2  
ip domain name ie.cuhk.edu.hk
```

- **R3**

```
hostname R3  
ip domain name ie.cuhk.edu.hk
```

- **R4**

```
hostname R4  
ip domain name ie.cuhk.edu.hk
```

- **R5**

```
hostname R5  
ip domain name ie.cuhk.edu.hk
```

- **R6**

```
hostname R6  
ip domain name ie.cuhk.edu.hk
```

- **R7**

```
hostname R7  
ip domain name ie.cuhk.edu.hk
```

- **R8**

```
hostname R8  
ip domain name ie.cuhk.edu.hk
```

b) Username / Password for remote login

• R1..R8

```
username hello password world
line vty 0 4
  login local
!
```

c) IP Address on LAN interface R1, R7 and R8

• R1

```
int f0/0
ip addr 177.51.7.1 255.255.255.240
no shut
!
```

• R7

```
int f0/0
ip addr 77.51.7.7 255.255.255.0
no shut
!
int f1/0
ip addr 177.51.7.7 255.255.255.240
no shut
!
```

• R8

```
int f0/0
ip addr 177.51.7.8 255.255.255.240
no shut
!
```

• Capture

```
R1#sh ip route
Gateway of last resort is not set

177.51.0.0/28 is subnetted, 1 subnets
C      177.51.7.0 is directly connected, FastEthernet0/0

R7#sh ip route
Gateway of last resort is not set

77.0.0.0/24 is subnetted, 1 subnets
C      77.51.7.0 is directly connected, FastEthernet0/0
177.51.0.0/28 is subnetted, 1 subnets
C      177.51.7.0 is directly connected, FastEthernet1/0

R8#sh ip route
```

Gateway of last resort is not set

177.51.0.0/28 is subnetted, 1 subnets

C 177.51.7.0 is directly connected, FastEthernet0/0

d) IP Address on loopback interfaces

- **R1**

```
int lo0
ip addr 150.51.1.1 255.255.255.0
!
```

- **R8**

```
int lo0
ip addr 150.51.8.8 255.255.255.0
!
```

- **Capture**

```
R1#sh ip route
Gateway of last resort is not set

177.51.0.0/28 is subnetted, 1 subnets
C 177.51.7.0 is directly connected, FastEthernet0/0
150.51.0.0/24 is subnetted, 1 subnets
C 150.51.1.0 is directly connected, Loopback0
```

```
R8#sh ip route
Gateway of last resort is not set

177.51.0.0/28 is subnetted, 1 subnets
C 177.51.7.0 is directly connected, FastEthernet0/0
150.51.0.0/24 is subnetted, 1 subnets
C 150.51.8.0 is directly connected, Loopback0
```

The default link status of the loopback interface is *up*.

e) Default route and Static route

- **R1**

```
ip route 77.51.7.0 255.255.255.0 177.51.7.7
```

- **R7**

```
ip route 0.0.0.0 0.0.0.0 177.51.7.0
```

- **R8**

```
ip route 77.51.7.0 255.255.255.0 177.51.7.7
```

• Capture

```
R1#sh ip route
Gateway of last resort is not set

77.0.0.0/24 is subnetted, 1 subnets
S       77.51.7.0 [1/0] via 177.51.7.7
177.51.0.0/28 is subnetted, 1 subnets
C       177.51.7.0 is directly connected, FastEthernet0/0
150.51.0.0/24 is subnetted, 1 subnets
C       150.51.1.0 is directly connected, Loopback0
```

```
R7#sh ip route
Gateway of last resort is 177.51.7.0 to network 0.0.0.0

77.0.0.0/24 is subnetted, 1 subnets
C       77.51.7.0 is directly connected, FastEthernet0/0
177.51.0.0/28 is subnetted, 1 subnets
C       177.51.7.0 is directly connected, FastEthernet1/0
S*    0.0.0.0/0 [1/0] via 177.51.7.0
```

```
R8#sh ip route
Gateway of last resort is not set

77.0.0.0/24 is subnetted, 1 subnets
S       77.51.7.0 [1/0] via 177.51.7.7
177.51.0.0/28 is subnetted, 1 subnets
C       177.51.7.0 is directly connected, FastEthernet0/0
150.51.0.0/24 is subnetted, 1 subnets
C       150.51.8.0 is directly connected, Loopback0
```

• Verify and capture

```
R7#ping 150.51.1.1 source f0/0

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 150.51.1.1, timeout is 2 seconds:
Packet sent with a source address of 77.51.7.7
!!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 12/71/148
ms
R7#ping 150.51.8.8 source f0/0

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 150.51.8.8, timeout is 2 seconds:
Packet sent with a source address of 77.51.7.7
!!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 32/80/144
ms
```

f) Configure Timezone, Date and Time, NTP Server address

- **R8**

```
clock timezone HK 8
ntp master
```

- **Capture**

```
R8#show clock
00:07:07.907 HK Sun Feb 10 2008
```

- **R1 and R7**

```
clock timezone HK 8
ntp server 177.51.7.8
```

- **Verify and capture**

```
R7#show clock
00:07:14.528 HK Sun Feb 10 2008
R1#show clock
00:07:29.473 HK Sun Feb 10 2008
```

Task 3: Configuration of DNS Server at R8

- **R8**

```
ip dns server
no ip domain lookup
ip domain name ie.cuhk.edu.hk
ip host R1.ie.cuhk.edu.hk 177.51.7.1
ip host R2.ie.cuhk.edu.hk 77.51.7.2
ip host R3.ie.cuhk.edu.hk 77.51.7.3
ip host R4.ie.cuhk.edu.hk 77.51.7.4
ip host R6-4.ie.cuhk.edu.hk 66.51.46.6
ip host R6-5.ie.cuhk.edu.hk 66.51.56.6
ip host R6-23.ie.cuhk.edu.hk 66.52.236.6
ip host R77.ie.cuhk.edu.hk 77.51.7.7
ip host R177.ie.cuhk.edu.hk 177.51.7.7
ip host R8.ie.cuhk.edu.hk 177.51.7.8
```

- **R1 and R7**

```
ip name-server 177.51.7.8
```

- **Verify and capture**

```
R1#ping 77.51.7.7 source lo0
```

```
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 77.51.7.7, timeout is 2 seconds:
```

```

Packet sent with a source address of 150.51.1.1
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 16/74/136
ms
R1#ping R77 source lo0

Translating "R77"...domain server (177.51.7.8) [OK]

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 77.51.7.7, timeout is 2 seconds:
Packet sent with a source address of 150.51.1.1
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 16/100/144
ms

```

The difference between these two commands is that `ping R77` need DNS server(R8) to resolve the domain name before packet is sent.

Task 4: Configuration of DHCP Server and Client

a) Manual IP mapping to DHCP client

- **R7**

```

service dhcp
ip dhcp pool R2
 host 77.51.7.2 255.255.255.0
 client-identifier 0100.0022.2222.22
 domain-name ie.cuhk.edu.hk
 dns-server 177.51.7.8
 default-router 77.51.7.7
 lease infinite
!
ip dhcp pool R3
 host 77.51.7.3 255.255.255.0
 client-identifier 0100.0033.3333.33
 domain-name ie.cuhk.edu.hk
 dns-server 177.51.7.8
 default-router 77.51.7.7
 lease infinite
!
ip dhcp pool R4
 host 77.51.7.4 255.255.255.0
 client-identifier 0100.0044.4444.44
 domain-name ie.cuhk.edu.hk
 dns-server 177.51.7.8
 default-router 77.51.7.7
 lease infinite
!
ip dhcp excluded-address 77.51.7.2 77.51.7.4

```

- **R2, R3 and R4**


```

int f0/0
ip addr dhcp client-id f0/0
no shut
!

```

b) Dynamic IP mapping to DHCP client

• R7

```

ip dhcp pool R5
network 77.51.7.0 255.255.255.0
default-router 77.51.7.7
dns-server 177.51.7.8
lease infinite
!

```

• R5

```

int f0/0
ip address dhcp
no shut
!

```

c) DHCP binding at DHCP Server

The table of DHCP binding at the DHCP server(R7).

```
R7#show ip dhcp binding
```

Bindings from all pools not associated with VRF:

IP address	Client-ID/ Hardware address/ User name	Lease expiration	Type
77.51.7.1	0063.6973.636f.2d30. 3030.302e.3535.3535. 2e35.3535.352d.4661. 302f.30	Infinite	Automatic
77.51.7.2	0100.0022.2222.22	Infinite	Manual
77.51.7.3	0100.0033.3333.33	Infinite	Manual
77.51.7.4	0100.0044.4444.44	Infinite	Manual

At R5, the IP addresss obtained by DHCP is 77.51.7.1. At the DHCP server(R7), the Client-ID of the IP address released to R5 is 0063.6973.636f.2d30.3030.302e.3535.3535.2e35.3535.352d.4661.302f.30. Decoding the Client-ID from ASCII code into TEXT, it is cisco-0000.5555.5555-Fa0/0.

Task 5: Configuration of Frame Relay on Serial Interface

a) Configuration of Frame Relay on main serial interface

• R4

```

int s1/0
ip addr 66.51.46.4 255.255.255.248
encapsulation frame-relay
frame-relay map ip 66.51.46.6 406
no frame-relay inverse-arp
no shut
!

```

• R6

```

int s1/0
ip addr 66.51.46.6 255.255.255.248
encapsulation frame-relay
frame-relay map ip 66.51.46.4 604
no frame-relay inverse-arp
no shut
!

```

• Capture

```

R6#show ip route
Gateway of last resort is not set

66.0.0.0/29 is subnetted, 1 subnets
C      66.51.46.0 is directly connected, Serial1/0
R6#show frame-relay map
Serial1/0 (up): ip 66.51.46.4 dlci 604(0x25C,0x94C0), static,
                CISCO, status defined, active

R4#show ip route
Gateway of last resort is 77.51.7.7 to network 0.0.0.0

66.0.0.0/29 is subnetted, 1 subnets
C      66.51.46.0 is directly connected, Serial1/0
77.0.0.0/24 is subnetted, 1 subnets
C      77.51.7.0 is directly connected, FastEthernet0/0
S*    0.0.0.0/0 [254/0] via 77.51.7.7

R4#show frame-relay map
Serial1/0 (up): ip 66.51.46.6 dlci 406(0x196,0x6460), static,
                CISCO, status defined, active

```

b) Configuration of Frame Relay using point-to-point sub-interface of serial interface

• R5

```

int s1/0
encapsulation frame-relay
no frame-relay inverse-arp
no shut
!

```

```

int s1/0.51 point-to-point
ip address 66.51.56.5 255.255.255.252
frame-relay interface-dlci 516
!

```

- **R6**

```

int s1/1
encapsulation frame-relay
no frame-relay inverse-arp
no shut
!
int s1/1.51 point-to-point
ip address 66.51.56.6 255.255.255.252
frame-relay interface-dlci 615
!

```

- **Capture**

```

R6#show ip route
Gateway of last resort is not set

    66.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C       66.51.56.4/30 is directly connected, Serial1/1.51
C       66.51.46.0/29 is directly connected, Serial1/0
R6#show frame-relay map
Serial1/0 (up): ip 66.51.46.4 dlci 604(0x25C,0x94C0), static,
                CISCO, status defined, active
Serial1/1.51 (up): point-to-point dlci, dlci 615(0x267,0x9870), broadcast
                status defined, active

R5#show ip route
Gateway of last resort is 77.51.7.7 to network 0.0.0.0

    66.0.0.0/30 is subnetted, 1 subnets
C       66.51.56.4 is directly connected, Serial1/0.51
    77.0.0.0/24 is subnetted, 1 subnets
C       77.51.7.0 is directly connected, FastEthernet0/0
S*    0.0.0.0/0 [254/0] via 77.51.7.7
R5#show frame-relay map
Serial1/0.51 (up): point-to-point dlci, dlci 516(0x204,0x8040), broadcast
                status defined, active
R6#ping 66.51.56.5

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 66.51.56.5, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 32/68/96 ms

```

c) Configuration of Frame Relay using point-to-multipoint sub-interface of serial interface

- **R2**

```

int s1/0
ip addr 66.52.236.2 255.255.255.248
encapsulation frame-relay
frame-relay map ip 66.52.236.6 216
no frame-relay inverse-arp
no shut
!

```

• R3

```

int s1/0
ip addr 66.52.236.3 255.255.255.248
encapsulation frame-relay
frame-relay map ip 66.52.236.6 316
no frame-relay inverse-arp
no shut
!

```

• R6

```

int s1/1.52 multipoint
ip addr 66.52.236.6 255.255.255.248
frame-relay map ip 66.52.236.2 612
frame-relay map ip 66.52.236.3 613
!

```

• Capture

```

R2#show ip route
Gateway of last resort is 77.51.7.7 to network 0.0.0.0

    66.0.0.0/29 is subnetted, 1 subnets
C       66.52.236.0 is directly connected, Serial1/0
    77.0.0.0/24 is subnetted, 1 subnets
C       77.51.7.0 is directly connected, FastEthernet0/0
S*    0.0.0.0/0 [254/0] via 77.51.7.7
R2#show frame map
Serial1/0 (up): ip 66.52.236.6 dlci 216(0xD8,0x3480), static,
                CISCO, status defined, active

```

```

R3#show ip route
Gateway of last resort is 77.51.7.7 to network 0.0.0.0

    66.0.0.0/29 is subnetted, 1 subnets
C       66.52.236.0 is directly connected, Serial1/0
    77.0.0.0/24 is subnetted, 1 subnets
C       77.51.7.0 is directly connected, FastEthernet0/0
S*    0.0.0.0/0 [254/0] via 77.51.7.7
R3#show frame map
Serial1/0 (up): ip 66.52.236.6 dlci 316(0x13C,0x4CC0), static,
                CISCO, status defined, active

```

```

R6#show ip route

```

Gateway of last resort is not set

```
        66.0.0.0/8 is variably subnetted, 3 subnets, 2 masks
C        66.51.56.4/30 is directly connected, Serial1/1.51
C        66.51.46.0/29 is directly connected, Serial1/0
C        66.52.236.0/29 is directly connected, Serial1/1.52
R6#show frame map
Serial1/0 (up): ip 66.51.46.4 dlci 604(0x25C,0x94C0), static,
                CISCO, status defined, active
Serial1/1.52 (up): ip 66.52.236.2 dlci 612(0x264,0x9840), static,
                CISCO, status defined, active
Serial1/1.52 (up): ip 66.52.236.3 dlci 613(0x265,0x9850), static,
                CISCO, status defined, active
Serial1/1.51 (up): point-to-point dlci, dlci 615(0x267,0x9870), broadcast
                status defined, active
R6#ping 66.52.236.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 66.52.236.2, timeout is 2 seconds:
!!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 28/64/104
ms
R6#ping 66.52.236.3

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 66.52.236.3, timeout is 2 seconds:
!!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 8/56/136 ms
```

Task 6: Configuration of NAT

a) Verification of source IP address from TELNET

```
R2#telnet R8
Translating "R8"...domain server (177.51.7.8) [OK]
Trying R8.ie.cuhk.edu.hk (177.51.7.8)... Open
```

User Access Verification

```
Username: hello
Password:
R8>show user
Line          User          Host(s)          Idle          Location
0 con 0              idle            02:24:09
*226 vty 0      hello          idle            00:00:00 R2.ie.cuhk.edu.hk

Interface      User          Mode          Idle          Peer Address

R8>exit

[Connection to R8 closed by foreign host]
```

The source IP address of R2 when telnet to R8 is 77.51.7.2 (R2.ie.cuhk.edu.hk).

b) Configuration of PAT

• R7

```
int f0/0
 ip nat inside
!
int f1/0
 ip nat outside
!
access-list 1 permit 77.51.7.0 0.0.0.255
ip nat inside source list 1 interface FastEthernet1/0 overload
```

• Capture

```
R2#telnet R8
Translating "R8"...domain server (177.51.7.8) [OK]
Trying R8.ie.cuhk.edu.hk (177.51.7.8)... Open
```

User Access Verification

Username: hello

Password:

R8>show user

Line	User	Host(s)	Idle	Location
0 con 0		idle	00:09:11	
*226 vty 0	hello	idle	00:00:00	R177.ie.cuhk.edu.hk

Interface	User	Mode	Idle	Peer Address
-----------	------	------	------	--------------

R8>exit

[Connection to R8 closed by foreign host]

R7#show ip nat trans

Pro	Inside global	Inside local	Outside local	Outside global
udp	177.51.7.7:49997	77.51.7.2:49997	177.51.7.8:53	177.51.7.8:53
tcp	177.51.7.7:55229	77.51.7.2:55229	177.51.7.8:23	177.51.7.8:23

c) Configuration of Static PAT

• R7

```
ip nat inside source static tcp 77.51.7.3 23 177.51.7.7 3003
ip nat inside source static tcp 77.51.7.4 23 177.51.7.7 3004
```

• Verify and capture

```
R8#telnet R177 3003
Trying R177.ie.cuhk.edu.hk (177.51.7.7, 3003)... Open
```

User Access Verification

```
Username: hello
Password:
```

```
R3>show user
```

Line	User	Host(s)	Idle	Location
0 con 0		idle	00:24:06	
*226 vty 0	hello	idle	00:00:00	R8.ie.cuhk.edu.hk

Interface	User	Mode	Idle	Peer Address
-----------	------	------	------	--------------

```
R3>exit
```

[Connection to R177 closed by foreign host]

```
R8#telnet R177 3004
```

```
Trying R177.ie.cuhk.edu.hk (177.51.7.7, 3004)... Open
```

User Access Verification

```
Username: hello
Password:
```

```
R4>show user
```

Line	User	Host(s)	Idle	Location
0 con 0		idle	00:46:03	
*226 vty 0	hello	idle	00:00:00	R8.ie.cuhk.edu.hk

Interface	User	Mode	Idle	Peer Address
-----------	------	------	------	--------------

```
R4>exit
```

[Connection to R177 closed by foreign host]

```
R8#
```

```
R7#show ip nat trans
```

Pro	Inside global	Inside local	Outside local	Outside global
tcp	177.51.7.7:3003	77.51.7.3:23	177.51.7.8:34046	177.51.7.8:34046
tcp	177.51.7.7:3003	77.51.7.3:23	---	---
tcp	177.51.7.7:3004	77.51.7.4:23	---	---

d) Configuration of Static NAT

- R7

```
ip nat inside source static 77.51.7.2 177.51.7.2
```

- Verify and capture

```
R2# telnet R8
```

Translating "R8"...domain server (177.51.7.8) [OK]
Trying R8.ie.cuhk.edu.hk (177.51.7.8)... Open

User Access Verification

Username: hello
Password:

R8>show user

Line	User	Host(s)	Idle	Location
0 con 0		idle	00:00:37	
*226 vty 0	hello	idle	00:00:00	177.51.7.2

Interface	User	Mode	Idle	Peer Address
-----------	------	------	------	--------------

R8>exit

[Connection to R8 closed by foreign host]

R8#telnet 177.51.7.2
Trying 177.51.7.2 ... Open

User Access Verification

Username: hello
Password:

R2>show user

Line	User	Host(s)	Idle	Location
0 con 0		R8	00:00:18	
*226 vty 0	hello	idle	00:00:00	R8.ie.cuhk.edu.hk

Interface	User	Mode	Idle	Peer Address
-----------	------	------	------	--------------

R2>exit

[Connection to 177.51.7.2 closed by foreign host]

R7(config)#do show ip nat trans

Pro	Inside global	Inside local	Outside local	Outside global
tcp	177.51.7.2:23	77.51.7.2:23	177.51.7.8:14858	177.51.7.8:14858
tcp	177.51.7.2:23	77.51.7.2:23	177.51.7.8:19347	177.51.7.8:19347
tcp	177.51.7.2:45372	77.51.7.2:45372	177.51.7.8:23	177.51.7.8:23
udp	177.51.7.2:54727	77.51.7.2:54727	177.51.7.8:53	177.51.7.8:53
---	177.51.7.2	77.51.7.2	---	---
tcp	177.51.7.7:3003	77.51.7.3:23	---	---
tcp	177.51.7.7:3004	77.51.7.4:23	---	---

Task 7: Configuration of Network Security

- **R7**

```
access-list 2 permit 177.51.7.8
access-list 2 permit 77.51.7.0 0.0.0.255
line vty 0 4
  access-class 2 in
!
```

- **Verify and capture**

```
R2#telnet R77
Translating "R77"...domain server (177.51.7.8) [OK]
Trying R77.ie.cuhk.edu.hk (77.51.7.7)... Open
```

User Access Verification

```
Username: hello
Password:
R7>exit
```

[Connection to R77 closed by foreign host]

```
R8#telnet R177
Trying R177.ie.cuhk.edu.hk (177.51.7.7)... Open
```

User Access Verification

```
Username: hello
Password:
R7>exit
```

[Connection to R177 closed by foreign host]

```
R1# telnet R177
Translating "R177"...domain server (177.51.7.8) [OK]
Trying R177.ie.cuhk.edu.hk (177.51.7.7)...
% Connection refused by remote host
```

Task 8: Configuration of System logging

- **R7**

```
logging facility sys9
logging 77.51.7.250
```

- **Verify and capture**

```

R7#show logging
Syslog logging: enabled (11 messages dropped, 0 messages rate-limited,
                  0 flushes, 0 overruns, xml disabled, filtering disabled)
  Console logging: level debugging, 21 messages logged, xml disabled,
                  filtering disabled
  Monitor logging: level debugging, 0 messages logged, xml disabled,
                  filtering disabled
  Buffer logging: disabled, xml disabled,
                  filtering disabled
  Logging Exception size (4096 bytes)
  Count and timestamp logging messages: disabled

No active filter modules.

  Trap logging: level informational, 25 message lines logged
    Logging to 77.51.7.250 (udp port 514, audit disabled, link up),
    25 message lines logged, xml disabled,
    filtering disabled

```

Task 9: Configuration of SNMP support

- R7

```

access-list 3 permit 77.51.7.3
access-list 3 permit 77.51.7.2
snmp-server community HELLOWORLD RO 3

```

- Verify and capture

```

R7#show snmp community

Community name: ILMI
Community Index: cisco0
Community SecurityName: ILMI
storage-type: read-only active

Community name: HELLOWORLD
Community Index: cisco1
Community SecurityName: HELLOWORLD
storage-type: nonvolatile active access-list: 3

```

A Declaration

I declare that the assignment here submitted is original except for source material explicitly acknowledged, and that the same or related material has not been previously submitted for another course. I also acknowledge that I am aware of University policy and regulations on honesty in academic work, and of the disciplinary guidelines and procedures applicable to breaches of such policy and regulations, as contained in the website <http://www.cuhk.edu.hk/policy/academichonesty/>