

REPORT



과 목 :	인터넷이론및실습
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실습 구성: RIP pdf 그림 8-12를 토대로 실습 진행하였으며, 1번 라우터의 구성을 맡았음.

1. 기본 RIP 설정

<show running-config 출력>

COM3 - PuTTY

```
R1#show ru
R1#show running-config
Building configuration...

Current configuration : 3030 bytes
!
! Last configuration change at 12:55:32 UTC Mon Apr 20 2020
!
version 15.2
no service pad
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
service compress-config
!
hostname R1
!
boot-start-marker
boot-end-marker
!
!
vrf definition Mgmt-vrf
!
address-family ipv4
exit-address-family
!
address-family ipv6
exit-address-family
!
!
no aaa new-model
switch 1 provision ws-c3650-24ts
!
!
!
!
ip routing
!
!
!
qos queue-softmax-multiplier 100
vtp domain ice
vtp mode transparent
!
!
diagnostic bootup level minimal
spanning-tree mode pvst
spanning-tree extend system-id
hw-switch switch 1 logging onboard message level 3
!
redundancy
mode sso
!
!
vlan 1
tb-vlan1 1002
tb-vlan2 1003
!
vlan 1002
```

조원의 모든 컴퓨터와 연결하기 위해, 1~4번 포트를 컴퓨터 연결에 사용하였으며, 서브네팅을 사용하여 네트워크를 할당하였음. Router 2번 3번과 통신하기 위한 포트는 5번, 6번을 사용하였음.

 COM3 - PuTTY

```
vlan 1003
    tb-vlan1 1
    tb-vlan2 1002
    parent 1005
!
!
class-map match-any non-client-nrt-class
!
policy-map port_child_policy
    class non-client-nrt-class
        bandwidth remaining ratio 10
!
!
!
!
!
!
!
!
!
!
interface GigabitEthernet0/0
    vrf forwarding Mgmt-vrf
    no ip address
    negotiation auto
!
interface GigabitEthernet1/0/1
    no switchport
    ip address 211.114.1.1 255.255.255.192
!
interface GigabitEthernet1/0/2
    no switchport
    ip address 211.114.1.65 255.255.255.192
!
interface GigabitEthernet1/0/3
    no switchport
    ip address 211.114.1.129 255.255.255.192
!
interface GigabitEthernet1/0/4
    no switchport
    ip address 211.114.1.193 255.255.255.192
!
interface GigabitEthernet1/0/5
    no switchport
    ip address 211.114.2.1 255.255.255.0
!
interface GigabitEthernet1/0/6
    no switchport
    ip address 211.114.6.2 255.255.255.0
!
interface GigabitEthernet1/0/7
!
interface GigabitEthernet1/0/8
!
interface GigabitEthernet1/0/9
!
```

211.114.1.0, 211.114.2.0, 211.114.6.0 네트워크의 라우팅을 router rip를 통해 시행한다고 정의 함.

COM3 - PuTTY

```
interface GigabitEthernet1/1/1
interface GigabitEthernet1/1/2
interface GigabitEthernet1/1/3
interface GigabitEthernet1/1/4

interface Vlan1
no ip address
shutdown

router rip
network 211.114.1.0
network 211.114.2.0
network 211.114.6.0

ip forward-protocol nd
ip http server
ip http authentication local
ip http secure-server

line con 0
stopbits 1
line aux 0
line vty 5 15

vsma agent exec
profile httplistener
profile httpslistener

vsma agent config
profile httplistener
profile httpslistener

vsma agent filesys
profile httplistener
profile httpslistener

vsma agent notify
profile httplistener
profile httpslistener

vsma profile listener httplistener
transport http

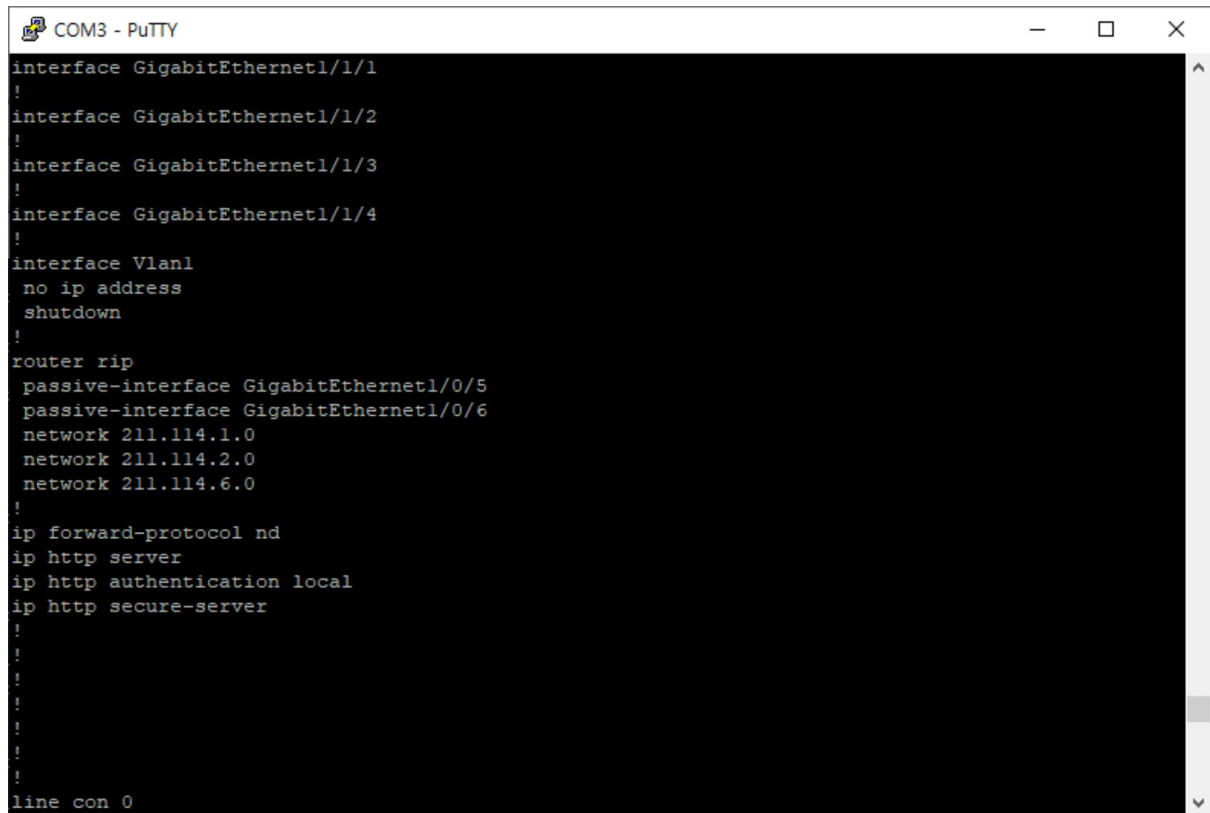
vsma profile listener httpslistener
transport https

ap group default-group
end

R1#
```

2. Passive interface 설정

<show running-config 출력>



```
COM3 - PuTTY
interface GigabitEthernet1/1
!
interface GigabitEthernet1/2
!
interface GigabitEthernet1/3
!
interface GigabitEthernet1/4
!
interface Vlan1
  no ip address
  shutdown
!
router rip
  passive-interface GigabitEthernet1/0/5
  passive-interface GigabitEthernet1/0/6
  network 211.114.1.0
  network 211.114.2.0
  network 211.114.6.0
!
ip forward-protocol nd
ip http server
ip http authentication local
ip http secure-server
!
!
!
!
!
!
line con 0
```

위에서 구성한 내용과 동일하며, 캡처 시 1번 2번 라우터만 passive-interface를 시행하여, ping, 채팅 프로그램이 작동하는 것을 확인하였음.

<RIP 실습 show running-config> 인터페이스 부분만 조금 지웠습니다.

```
R1#show running-config
```

```
Building configuration...
```

```
Current configuration : 3030 bytes
```

```
!
```

```
! Last configuration change at 12:55:32 UTC Mon Apr 20 2020
```

```
!
```

```
version 15.2
```

```
no service pad
```

```
service timestamps debug datetime msec
```

```
service timestamps log datetime msec
```

```
no service password-encryption
```

```
service compress-config
```

```
!
```

```
hostname R1
```

```
!
```

```
boot-start-marker
```

```
boot-end-marker
```

```
!
```

```
!
```

```
vrf definition Mgmt-vrf
```

```
!
```

```
address-family ipv4
```

```
exit-address-family
```

```
!
```

address-family ipv6

exit-address-family

!

!

no aaa new-model

switch 1 provision ws-c3650-24ts

!

ip routing

!

qos queue-softmax-multiplier 100

vtp domain ice

vtp mode transparent

!

!

diagnostic bootup level minimal

spanning-tree mode pvst

spanning-tree extend system-id

hw-switch switch 1 logging onboard message level 3

!

redundancy

mode sso

!

!

!

!

vlan 1

tb-vlan1 1002

tb-vlan2 1003

!

vlan 1002

tb-vlan1 1

tb-vlan2 1003

!

vlan 1003

tb-vlan1 1

tb-vlan2 1002

parent 1005

!

!

class-map match-any non-client-nrt-class

!

policy-map port_child_policy

class non-client-nrt-class

bandwidth remaining ratio 10

!

!

!

interface GigabitEthernet0/0

vrf forwarding Mgmt-vrf

no ip address

negotiation auto

!


```
interface GigabitEthernet1/0/1
```

```
no switchport
```

```
ip address 211.114.1.1 255.255.255.192
```

```
!
```

```
interface GigabitEthernet1/0/2
```

```
no switchport
```

```
ip address 211.114.1.65 255.255.255.192
```

```
!
```

```
interface GigabitEthernet1/0/3
```

```
no switchport
```

```
ip address 211.114.1.129 255.255.255.192
```

```
!
```

```
interface GigabitEthernet1/0/4
```

```
no switchport
```

```
ip address 211.114.1.193 255.255.255.192
```

```
!
```

```
interface GigabitEthernet1/0/5
```

```
no switchport
```

```
ip address 211.114.2.1 255.255.255.0
```

```
!
```

```
interface GigabitEthernet1/0/6
```

```
no switchport
```

```
ip address 211.114.6.2 255.255.255.0
```

```
!
```

```
!
```

```
interface Vlan1
```

no ip address

shutdown

!

router rip

network 211.114.1.0

network 211.114.2.0

network 211.114.6.0

!

ip forward-protocol nd

ip http server

ip http authentication local

ip http secure-server

!

!

!

line con 0

stopbits 1

line aux 0

line vty 5 15

!

wsma agent exec

profile httplistener

profile httpslistener

!

wsma agent config

profile httplistener

profile httpslistener

!

wsma agent filesys

profile httplistener

profile httpslistener

!

wsma agent notify

profile httplistener

profile httpslistener

!

!

wsma profile listener httplistener

transport http

!

wsma profile listener httpslistener

transport https

!

ap group default-group

end

<Passive-interface show running-config>

R1#show running-config

Building configuration...

Current configuration : 3110 bytes

!

! Last configuration change at 13:16:04 UTC Mon Apr 20 2020

!

version 15.2

no service pad

service timestamps debug datetime msec

service timestamps log datetime msec

no service password-encryption

service compress-config

!

hostname R1

!

boot-start-marker

boot-end-marker

!

!

vrf definition Mgmt-vrf

!

address-family ipv4

exit-address-family

!

address-family ipv6

exit-address-family

!

no aaa new-model

switch 1 provision ws-c3650-24ts

!

!

!

ip routing

!

!

!

qos queue-softmax-multiplier 100

vtp domain ice

vtp mode transparent

!

!

diagnostic bootup level minimal

spanning-tree mode pvst

spanning-tree extend system-id

hw-switch switch 1 logging onboard message level 3

!

redundancy

mode sso

!

!

```
vlan 1

    tb-vlan1 1002

    tb-vlan2 1003

!

vlan 1002

    tb-vlan1 1

    tb-vlan2 1003

!

vlan 1003

    tb-vlan1 1

    tb-vlan2 1002

    parent 1005

!

!

class-map match-any non-client-nrt-class

!

policy-map port_child_policy

    class non-client-nrt-class

        bandwidth remaining ratio 10

!

!

interface GigabitEthernet0/0

    vrf forwarding Mgmt-vrf

    no ip address

    negotiation auto

!
```

```
interface GigabitEthernet1/0/1
```

```
no switchport
```

```
ip address 211.114.1.1 255.255.255.192
```

```
!
```

```
interface GigabitEthernet1/0/2
```

```
no switchport
```

```
ip address 211.114.1.65 255.255.255.192
```

```
!
```

```
interface GigabitEthernet1/0/3
```

```
no switchport
```

```
ip address 211.114.1.129 255.255.255.192
```

```
!
```

```
interface GigabitEthernet1/0/4
```

```
no switchport
```

```
ip address 211.114.1.193 255.255.255.192
```

```
!
```

```
interface GigabitEthernet1/0/5
```

```
no switchport
```

```
ip address 211.114.2.1 255.255.255.0
```

```
!
```

```
interface GigabitEthernet1/0/6
```

```
no switchport
```

```
ip address 211.114.6.2 255.255.255.0
```

```
!
```

```
!
```

```
!
```

interface Vlan1

no ip address

shutdown

!

router rip

passive-interface GigabitEthernet1/0/5

passive-interface GigabitEthernet1/0/6

network 211.114.1.0

network 211.114.2.0

network 211.114.6.0

!

ip forward-protocol nd

ip http server

ip http authentication local

ip http secure-server

!

line con 0

stopbits 1

line aux 0

line vty 5 15

!

wsma agent exec

profile httplistener

profile httpslistener

!

wsma agent config

profile httplistener

profile httpslistener

!

wsma agent filesys

profile httplistener

profile httpslistener

!

wsma agent notify

profile httplistener

profile httpslistener

!

!

wsma profile listener httplistener

transport http

!

wsma profile listener httpslistener

transport https

!

ap group default-group

end