

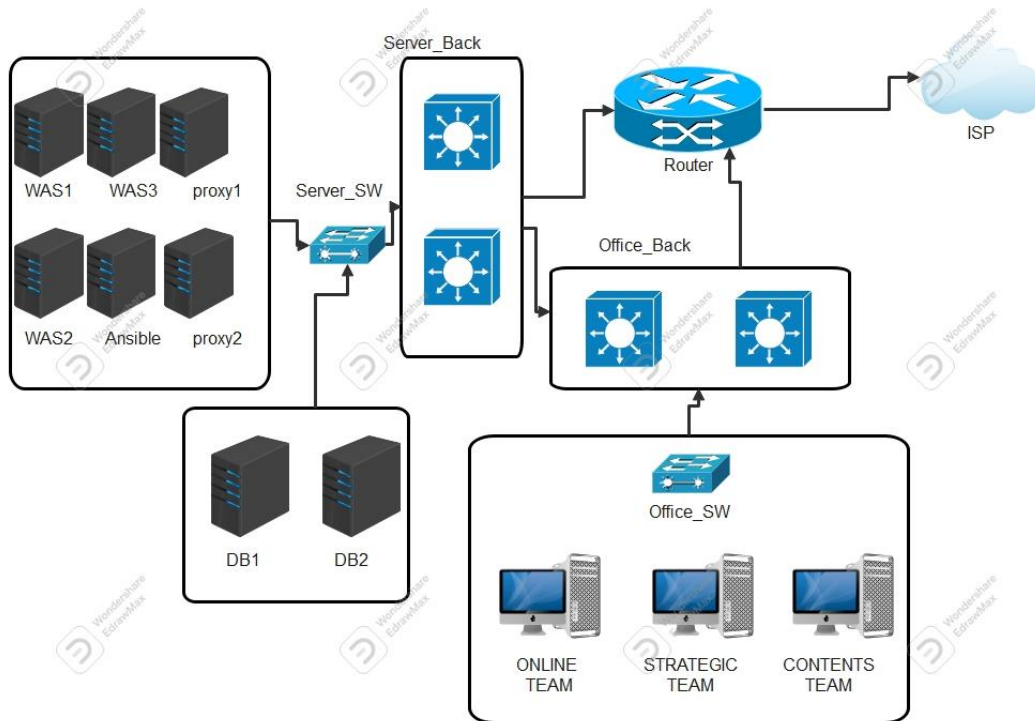
KG Concert

네트워크 기술문서

기술문서

A-1

2020-2-13



< 1. 장비 별 포트 현황 >

Router

[Fa 0/0] - VMnet8

[Fa 0/1] – Server_Back1 [E 0/0]

[Fa 1/0] - Server_Back2 [E 0/0]

[Fa 2/0] – Office_Back1 [E 0/0]

[Fa 3/0] – Office_Back2 [E 0/0]

]

Server_Back1

[E 0/0] – Router [Fa 0/1]

[E 0/1] – Server_Back2 [E 0/1]

[E 0/2] – Office_Back1 [E 0/2]

[E 0/3] – Office_Back2 [E 0/3]

[E 1/0] – Server_SW [E0/0]

[E 1/1] – Server_SW [E0/2]

Server_Back2

[E 0/0] – Router [Fa 1/0]

[E 0/1] – Server_Back1 [E 0/1]

[E 0/2] – Office_Back2 [E 0/2]

[E 0/3] – Office_Back1 [E 0/3]

[E 1/0] – Server_SW [E0/1]

[E 1/1] – Server_SW [E0/3]

Office_Back1

[E 0/0] – Router [Fa 2/0]

[E 0/1] – Office_Back2 [E 0/1]

[E 0/2] – Server_Back1 [E 0/2]

[E 0/3] – Server_Back2 [E 0/3]

[E 1/0] – Office_SW [E0/0]

[E 1/1] – Office_SW [E0/2]

Office_Back2

[E 0/0] – Router [Fa 3/0]

[E 0/1] – Office_Back1 [E 0/1]

[E 0/2] – Server_Back2 [E 0/2]

[E 0/3] – Server_Back1 [E 0/3]

[E 1/0] – Office_SW [E0/1]

[E 1/1] – Office_SW [E0/3]

Server_SW

[E 0/0] – Server_Back1 [E 1/0]

[E 0/1] – Server_Back2 [E 1/0]

[E 0/2] – Server_Back1 [E 1/1]

[E 0/3] – Server_Back2 [E 1/1]

[E 1/0] - Proxy

[E 1/1] - WEB

[E 1/2] - WAS

[E 2/0] – DB1

[E 2/1] – DB2

Office_SW

[E 0/0] – Office_Back1 [E 1/0]

[E 0/1] – Office_Back2 [E 1/0]

[E 0/2] – Office_Back1 [E 1/1]

[E 0/3] – Office_Back2 [E 1/1]

[E 1/0] - Online

[E 1/1] – Planning

[E 1/2] - Contents

< 2. IP 현황 >

Router

[Fa 0/0] - DHCP

[Fa 0/1] – 10.1.100.1/30

[Fa 1/0] – 10.1.100.5/30

[Fa 2/0] – 10.1.100.9/30

[Fa 3/0] – 10.1.100.13/30

Server_Back1

[E 0/0] - 10.1.100.2/30

[E 0/1] - 10.1.100.17/30

[E 0/2] – 10.1.100.21/30

[E 0/3] - 10.1.100.25/30

Sever_Back2

[E 0/0] - 10.1.100.6/30

[E 0/1] - 10.1.100.18/30

[E 0/2] – 10.1.100.29/30

[E 0/3] - 10.1.100.33/30

Office_Back1

[E 0/0] - 10.1.100.10/30

[E 0/1] - 10.1.100.37/30

[E 0/2] – 10.1.100.22/30

[E 0/3] - 10.1.100.34/30

Office_Back2

[E 0/0] - 10.1.100.14/30

[E 0/1] - 10.1.100.38/30

[E 0/2] – 10.1.100.30/30

[E 0/3] - 10.1.100.26/30

End-Device

PC-Online – 10.1.10.1/24 GW:10.1.10.254

PC-Planning – 10.1.20.1/24 GW:10.1.20.254

PC-Contents – 10.1.30.1/24 GW:10.1.30.254

PROXY - 10.1.40.1/24 GW:10.1.40.254

WEB - 10.1.40.2/24 GW:10.1.40.254

WAS - 10.1.40.3/24 GW:10.1.40.254

DB1 - 10.1.50.1/24 GW:10.1.50.254

DB2 - 10.1.50.2/24 GW:10.1.50.254

< 3. 장비 설정 >

Router 기본 설정

Router#conf t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#hostname Router

Router(config)#enable se concert112

Router(config)#no ip domain lookup

Router(config)#line con 0

Router(config-line)#logging sync

Router(config-line)#exec-time 0 0

Router(config-line)#password concert112

Router(config-line)#login

Router(config-line)#exit

Switch 기본 설정 (공통)

#enable se concert112

#no ip domain lookup

#line con 0

#logging synch

#exec-time 0 0

#password concert112

#login

#exit

#int range e 0/0-3,e 1/0-3,e 2/0-3,e 3/0-3

#sh

#end

#wr

Office_SW 설정

[VLAN 설정]

Office_SW(config)#hostname Office_SW

Office_SW(config)#vlan 10

Office_SW(config-vlan)#name online

Office_SW(config-vlan)#vlan 20

Office_SW(config-vlan)#name planning

Office_SW(config-vlan)#vlan 30

Office_SW(config-vlan)#name contents

Office_SW(config-vlan)#exit

[VLAN Access Link 설정]

Office_SW(config)#int e 1/0

Office_SW(config-if)#desc ##online_PC##

Office_SW(config-if)#swi mode acc

Office_SW(config-if)#swi acc vlan 10

Office_SW(config-if)#spanning-tree portfast

Office_SW(config-if)#int e 1/1

Office_SW(config-if)#desc ##planning_PC##

Office_SW(config-if)#swi mod acc

Office_SW(config-if)#swi acc vlan 20

Office_SW(config-if)#spanning-tree portfast

Office_SW(config-if)#int e 1/2

Office_SW(config-if)#swi mod acc

Office_SW(config-if)#swi acc vlan 30

Office_SW(config-if)#spanning-tree portfast

[VLAN Trunk Link 설정 및 Port Channel 구성]

Office_SW(config-if)#int range e 0/0,e 0/2

Office_SW(config-if-range)#desc ##OfficeBack1_Up_Trunk##

Office_SW(config-if-range)#swi trunk encap dot1q

Office_SW(config-if-range)#swi trunk allow vlan 10,20,30

Office_SW(config-if-range)#swi mod trunk

Office_SW(config-if-range)#swi none

Office_SW(config-if-range)#channel-group 1 mode passive

Office_SW(config-if-range)#no sh

Office_SW(config-if-range)#exit

Office_SW(config)#int range e 0/1,e0/3

Office_SW(config-if-range)#desc ##OfficeBack2_Up_Trunk##

Office_SW(config-if-range)#swi trunk encap dot1q

Office_SW(config-if-range)#swi trunk allow vlan 10,20,30

Office_SW(config-if-range)#swi mod trunk

Office_SW(config-if-range)#swi none

Office_SW(config-if-range)#channel-group 2 mod passive

Office_SW(config-if-range)#no sh

Office_SW(config-if-range)#exit

Office_SW(config)#end

Office_SW#wr

Server_SW 설정

[VLAN 설정]

```
Server_SW#conf t
```

```
Server_SW(config)#hostname Server_SW
```

```
Server_SW(config)#vlan 40
```

```
Server_SW(config-vlan)#name Server
```

```
Server_SW(config-vlan)#vlan 50
```

```
Server_SW(config-vlan)#name DB
```

```
Server_SW(config-vlan)#exit
```

```
Server_SW(config)#
```

[VLAN Access Link 설정]

```
Server_SW(config)#int e 1/0
```

```
Server_SW(config-if)#desc ##Proxy##
```

```
Server_SW(config-if)#swi mod acc
```

```
Server_SW(config-if)#swi acc vlan 40
```

```
Server_SW(config-if)#spanning-tree portfast
```

```
Server_SW(config-if)#no sh
```

```
Server_SW(config-if)#int e 1/1
```

```
Server_SW(config-if)#desc ##WEB##
```

```
Server_SW(config-if)#swi mod acc
```

```
Server_SW(config-if)#swi acc vlan 40
```

Server_SW(config-if)#spanning-tree portfast

Server_SW(config-if)#no sh

Server_SW(config-if)#exit

Server_SW(config)#int e 1/2

Server_SW(config-if)#desc ##WAS##

Server_SW(config-if)#swi mod acc

Server_SW(config-if)#swi acc vlan 40

Server_SW(config-if)#spanning-tree portfast

Server_SW(config-if)#no sh

Server_SW(config-if)#exit

Server_SW(config)#int e 2/0

Server_SW(config-if)#desc ##DB1##

Server_SW(config-if)#swi mod acc

Server_SW(config-if)#swi acc vlan 50

Server_SW(config-if)#spanning-tree portfast

Server_SW(config-if)#no sh

Server_SW(config-if)#exit

Server_SW(config)#int e 2/1

Server_SW(config-if)#swi mod acc

Server_SW(config-if)#swi acc vlan 50

Server_SW(config-if)#spanning-tree portfast

```
Server_SW(config-if)#no sh
```

```
Server_SW(config-if)#exit
```

[VLAN Trunk Link 설정 및 Port Channel 구성]

```
Server_SW(config)#int range e 0/0,e 0/2
```

```
Server_SW(config-if-range)#desc ##ServerBack1_Up_Trunk##
```

```
Server_SW(config-if-range)#swi tru encap dot1q
```

```
Server_SW(config-if-range)#swi tru allow vlan 40,50
```

```
Server_SW(config-if-range)#swi mod trunk
```

```
Server_SW(config-if-range)#swi none
```

```
Server_SW(config-if-range)#channel-group 1 mod passive
```

Creating a port-channel interface Port-channel 1

```
Server_SW(config-if-range)#no sh
```

```
Server_SW(config-if-range)#exit
```

```
Server_SW(config)#int range e 0/1, e 0/3
```

```
Server_SW(config-if-range)#desc ##ServerBack2_Up_Trunk##
```

```
Server_SW(config-if-range)#swi tru encap dot1q
```

```
Server_SW(config-if-range)#swi tru allow vlan 40,50
```

```
Server_SW(config-if-range)#swi mod trunk
```

```
Server_SW(config-if-range)#swi none
```

```
Server_SW(config-if-range)#channel-group 2 mod passive
```

```
Server_SW(config-if-range)#no sh
```

```
Server_SW(config-if-range)#exit
```

```
Server_SW(config)#end
```

```
Server_SW#wr
```

Server_Back1 설정

[VLAN 설정]

```
Server_Back1#conf t
```

```
Server_Back1(config)#hostname Server_Back1
```

```
Server_Back1(config)#vlan 40
```

```
Server_Back1(config-vlan)#name Server
```

```
Server_Back1(config-vlan)#vlan 50
```

```
Server_Back1(config-vlan)#name DB
```

```
Server_Back1(config-vlan)#exit
```

[VLAN Trunk Link 설정 및 Port Channel 구성]

```
Server_Back1(config)#int range e 1/0-1
```

```
Server_Back1(config-if-range)#desc ##Server_SW_Trunk##
```

```
Server_Back1(config-if-range)#swi tru encap dot1q
```

```
Server_Back1(config-if-range)#swi trunk allow vlan 40,50
```

```
Server_Back1(config-if-range)#swi mod trunk
```

```
Server_Back1(config-if-range)#swi none
```

Server_Back1(config-if-range)#channel-group 1 mode active

Creating a port-channel interface Port-channel 1

Server_Back1(config-if-range)#no sh

Server_Back1(config-if-range)#exit

[Inter-VLAN 설정 및 VRRP 구현]

Server_Back1(config)#track 1 int e 0/1 line-protocol

Server_Back1(config-track)#exit

Server_Back1(config-if)#desc ##vlan 40 GW

Server_Back1(config-if)#ip add 10.1.40.252 255.255.255.0

Server_Back1(config-if)#vrrp 40 ip 10.1.40.254

Server_Back1(config-if)#vrrp 40 priority 110

Server_Back1(config-if)#vrrp 40 track 1 decrement 50

Server_Back1(config-if)#vrrp 40 preempt delay mini 30

Server_Back1(config-if)#no sh

Server_Back1(config-if)#exit

Server_Back1(config-if)#desc ##vlan 50 GW##

Server_Back1(config-if)#ip add 10.1.50.252 255.255.255.0

Server_Back1(config-if)#vrrp 50 ip 10.1.50.254

Server_Back1(config-if)#vrrp 50 preempt

Server_Back1(config-if)#no sh


```
Server_Back1(config-if)#exit
```

[Router Connection 설정]

```
Server_Back1(config)#int e 0/0
```

```
Server_Back1(config-if)#desc ##Router Conn##
```

```
Server_Back1(config-if)#no swi
```

```
Server_Back1(config-if)#ip add 10.1.100.2 255.255.255.252
```

```
Server_Back1(config-if)#duplex full
```

```
Server_Back1(config-if)#no sh
```

```
Server_Back1(config-if)#exit
```

[Server_Back2 Connection 설정]

```
Server_Back1(config)#int e 0/1
```

```
Server_Back1(config-if)#desc ##ServerBack2 Conn##
```

```
Server_Back1(config-if)#no swi
```

```
Server_Back1(config-if)#ip add 10.1.100.17 255.255.255.252
```

```
Server_Back1(config-if)#duplex full
```

```
Server_Back1(config-if)#no sh
```

```
Server_Back1(config-if)#exit
```

[Office_Back1,2 connnection 설정]

```
Server_Back1(config)#int e 0/2
```

```
Server_Back1(config-if)#no swi
```

```
Server_Back1(config-if)#ip add 10.1.100.21 255.255.255.252
```

```
Server_Back1(config-if)#duplex full
```

```
Server_Back1(config-if)#no sh
```

```
Server_Back1(config-if)#exit
```

```
Server_Back1(config)#int e 0/3
```

```
Server_Back1(config-if)#no swi
```

```
Server_Back1(config-if)#ip add 10.1.100.25 255.255.255.252
```

```
Server_Back1(config-if)#no sh
```

```
Server_Back1(config-if)#exit
```

[RSTP 기본값 동작, VLAN 40 우선순위(Root Bridge)]

```
Server_Back1(config)#spanning-tree vlan 40 priority 4096
```

[Routing Rip 설정]

```
Server_Back1(config)#router rip
```

```
Server_Back1(config-router)#version 2
```

```
Server_Back1(config-router)#no auto-summary
```

```
Server_Back1(config-router)#network 10.0.0.0
```

```
Server_Back1(config-router)#exit
```

```
Server_Back1(config)#no ip cef
```

```
Server_Back1(config)#exit
```

```
Server_Back1#wr
```

Server_Back2 설정

[VLAN 설정]

```
Server_Back2#conf t
```

```
Server_Back2(config)#hostname Server_Back2
```

```
Server_Back2(config)#vlan 40
```

```
Server_Back2(config-vlan)#name server
```

```
Server_Back2(config-vlan)#vlan 50
```

```
Server_Back2(config-vlan)#name DB
```

```
Server_Back2(config-vlan)#exit
```

[VLAN Trunk Link 설정 및 Port Channel 구성]

```
Server_Back2(config)#int range e 1/0-1
```

```
Server_Back2(config-if-range)#desc ##Server_SW_Trunk##
```

```
Server_Back2(config-if-range)#swi tru encap dot1q
```

```
Server_Back2(config-if-range)#swi trunk allow vlan 40,50
```

```
Server_Back2(config-if-range)#swi mod trunk
```

Server_Back2(config-if-range)#swi none

Server_Back2(config-if-range)#channel-group 1 mode active

Creating a port-channel interface Port-channel 1

Server_Back2(config-if-range)#no sh

Server_Back2(config-if-range)#exit

[Inter-VLAN 설정 및 VRRP 구현]

Server_Back2(config)#int vlan 40

Server_Back2(config-if)#desc ##vlan 40 GW##

Server_Back2(config-if)#ip add 10.1.40.253 255.255.255.0

Server_Back2(config-if)#vrrp 40 ip 10.1.40.254

Server_Back2(config-if)#vrrp 40 preempt

Server_Back2(config-if)#no sh

Server_Back2(config-if)#exit

Server_Back2(config)#int vlan 50

Server_Back2(config-if)#desc ##Vlan 50 GW##

Server_Back2(config-if)#ip add 10.1.50.153 255.255.255.0

Server_Back2(config-if)#vrrp 50 ip 10.1.50.254

Server_Back2(config-if)#vrrp 50 priority 110-

Server_Back2(config-if)#vrrp 50 track 1 decrement 50

Server_Back2(config-if)#vrrp 50 preempt delay mini 30

Server_Back2(config-if)#no sh

Server_Back2(config-if)#exit

[Router Connection 설정]

Server_Back2(config)#int e 0/0

Server_Back2(config-if)#desc ##Router Conn##

Server_Back2(config-if)#no swi

Server_Back2(config-if)#ip add 10.1.100.6 255.255.255.252

Server_Back2(config-if)#duplex full

Server_Back2(config-if)#no sh

Server_Back2(config-if)#exit

[Server_Back1 Connection 설정]

Server_Back2(config)#int e 0/1

Server_Back2(config-if)#desc ##Server_Back1 Conn##

Server_Back2(config-if)#no swi

Server_Back2(config-if)#ip add 10.1.100.18 255.255.255.252

Server_Back2(config-if)#duplex full

Server_Back2(config-if)#no sh

Server_Back2(config-if)#exit

[Office_Back1,2 connnection 설정]

```
Server_Back2(config)#int e 0/2
```

```
Server_Back2(config-if)#desc ##officeBack2 Conn##
```

```
Server_Back2(config-if)#no swi
```

```
Server_Back2(config-if)#ip add 10.1.100.29 255.255.255.252
```

```
Server_Back2(config-if)#d
```

```
Server_Back2(config-if)#duplex full
```

```
Server_Back2(config-if)#no sh
```

```
Server_Back2(config-if)#exit
```

```
Server_Back2(config)#in e 0/3
```

```
Server_Back2(config-if)#desc ##OfficeBack1 Conn##
```

```
Server_Back2(config-if)#no swi
```

```
Server_Back2(config-if)#ip add 10.1.100.33 255.255.255.252
```

```
Server_Back2(config-if)#no sh
```

```
Server_Back2(config-if)#exit
```

[RSTP 기본값 동작, VLAN 50 우선순위(Root Bridge)]

```
Server_Back2(config-if)#spanning-tree vlan 50 priority 4096
```

[Routing Rip 설정]

Server_Back2(config)#router rip

Server_Back2(config-router)#version 2

Server_Back2(config-router)#no auto-summary

Server_Back2(config-router)#network 10.0.0.0

Server_Back2(config-router)#exit

Server_Back2(config)#no ip cef

Server_Back2(config)#exit

Server_Back2#wr

Office_Back1 설정

[VLAN 설정]

Office_Back1#conf t

Office_Back1(config)#hostname Office_Back1

Office_Back1(config)#vlan 10

Office_Back1(config-vlan)#name Oline

Office_Back1(config-vlan)#vlan 20

Office_Back1(config-vlan)#name Planning

Office_Back1(config-vlan)#vlan 30

Office_Back1(config-vlan)#name Contents

```
Office_Back1(config-vlan)#exit
```

[VLAN Trunk Link 설정 및 Port Channel 구성]

```
Office_Back1(config)#int range e 1/0-1
```

```
Office_Back1(config-if-range)#desc ##Office_SW Trunk##
```

```
Office_Back1(config-if-range)#swi trunk encap dot1q
```

```
Office_Back1(config-if-range)#swi trunk allow vlan 10,20,30
```

```
Office_Back1(config-if-range)#swi mod trunk
```

```
Office_Back1(config-if-range)#swi none
```

```
Office_Back1(config-if-range)#channel-group 1 mode active
```

Creating a port-channel interface Port-channel 1

```
Office_Back1(config-if-range)#no sh
```

```
Office_Back1(config-if-range)#exit
```

[Inter-VLAN 설정 및 VRRP 구현]

```
Office_Back1(config)#track 1 int e 0/1 line-protocol
```

```
Office_Back1(config-track)#exit
```

```
Office_Back1(config)#int vlan 10
```

```
Office_Back1(config-if)#desc ##vlan 10 GW##
```

```
Office_Back1(config-if)#ip add 10.1.10.252 255.255.255.0
```

```
Office_Back1(config-if)#vrrp 10 ip 10.1.10.254
```


Office_Back1(config-if)#vrrp 10 priority 110

Office_Back1(config-if)#vrrp 10 track 1 decrement 50

Office_Back1(config-if)#vrrp 10 preempt delay mini 30

Office_Back1(config-if)#no sh

Office_Back1(config-if)#exit

Office_Back1(config)#int vlan 20

Office_Back1(config-if)#ip add 10.1.20.252 255.255.255.0

Office_Back1(config-if)#vrrp 20 ip 10.1.20.254

Office_Back1(config-if)#vrrp 20 priority 110

Office_Back1(config-if)#vrrp 20 track 1 decrement 50

Office_Back1(config-if)#vrrp 20 preempt delay mini 30

Office_Back1(config-if)#no sh

Office_Back1(config-if)#exit

Office_Back1(config)#int vlan 30

Office_Back1(config-if)#ip add 10.1.30.252 255.255.255.0

Office_Back1(config-if)#vrrp 30 ip 10.1.30.254

Office_Back1(config-if)#vrrp 30 preempt

Office_Back1(config-if)#no sh

Office_Back1(config-if)#exit

[Router Connection 설정]

Office_Back1(config)#int e 0/0

Office_Back1(config-if)#desc ##Router Conn##

Office_Back1(config-if)#no swi

Office_Back1(config-if)#ip add 10.1.100.10 255.255.255.252

Office_Back1(config-if)#duplex full

Office_Back1(config-if)#no sh

Office_Back1(config-if)#exit

[Office_Back2 Connection 설정]

Office_Back1(config)#int e 0/1

Office_Back1(config-if)#desc ##Office_Back2 Conn##

Office_Back1(config-if)#no swi

Office_Back1(config-if)#ip add 10.1.100.37 255.255.255.252

Office_Back1(config-if)#duplex full

Office_Back1(config-if)#no sh

Office_Back1(config-if)#exit

[Server_Back1,2 Connection 설정]

Office_Back1(config)#int e 0/2

Office_Back1(config-if)#desc ##ServerBack1 Conn##

Office_Back1(config-if)#no swi

Office_Back1(config-if)#ip add 10.1.100.22 255.255.255.252

Office_Back1(config-if)#duplex full

Office_Back1(config-if)#no sh

Office_Back1(config-if)#exit

Office_Back1(config)#int e 0/3

Office_Back1(config-if)#desc ##ServerBack2 Conn##

Office_Back1(config-if)#no swi

Office_Back1(config-if)#ip add 10.1.100.34 255.255.255.252

Office_Back1(config-if)#duplex full

Office_Back1(config-if)#no sh

Office_Back1(config-if)#exit

[RSTP 기본값 동작, VLAN 10,20 우선순위(Root Bridge)]

Office_Back1(config)#spanning-tree vlan 10 priority 4096

Office_Back1(config)#spanning-tree vlan 20 priority 4096

[Routing Rip 설정]

Office_Back1(config)#router rip

Office_Back1(config-router)#version 2

Office_Back1(config-router)#no auto-summary

Office_Back1(config-router)#network 10.0.0.0

Office_Back1(config-router)#exit

Office_Back1(config)#no ip cef

Office_Back1(config)#exit

Office_Back1#wr

Office_Back2 설정

[VLAN 설정]

Office_Back2#conf t

Office_Back2(config)#hostname Office_Back2

Office_Back2(config)#vlan 10

Office_Back2(config-vlan)#name Online

Office_Back2(config-vlan)#vlan 20

Office_Back2(config-vlan)#name Planning

Office_Back2(config-vlan)#vlan 30

Office_Back2(config-vlan)#name Contents

Office_Back2(config-vlan)#exit

[VLAN Trunk Link 설정 및 Port Channel 구성]

Office_Back2(config)#int range e 1/0-1

Office_Back2(config-if-range)#desc ##Office_SW Trunk##

Office_Back2(config-if-range)#swi trunk encap dot1q

Office_Back2(config-if-range)#swi trunk allow vlan 10,20,30

Office_Back2(config-if-range)#swi mod trunk

Office_Back2(config-if-range)#swi none

Office_Back2(config-if-range)#channel-group 1 mode active

Creating a port-channel interface Port-channel 1

Office_Back2(config-if-range)#no sh

Office_Back2(config-if-range)#exit

[Inter-VLAN 설정 및 VRRP 구현]

Office_Back2(config-if)#desc ##vlan 10 GW##

Office_Back2(config-if)#ip add 10.1.10.253 255.255.255.0

Office_Back2(config-if)#vrrp 10 ip 10.1.10.254

Office_Back2(config-if)#vrrp 10 preempt

Office_Back2(config-if)#no sh

Office_Back2(config-if)#exit

Office_Back2(config)#int vlan 20

Office_Back2(config-if)#ip add 10.1.20.253 255.255.255.0

Office_Back2(config-if)#vrrp 20 ip 10.1.20.254

Office_Back2(config-if)#vrrp 20 preempt

Office_Back2(config-if)#no sh

Office_Back2(config-if)#exit

Office_Back2(config)#int vlan 30

Office_Back2(config-if)#ip add 10.1.30.253 255.255.255.0

Office_Back2(config-if)#vrrp 30 ip 10.1.30.254

Office_Back2(config-if)#vrrp 30 priority 110

Office_Back2(config-if)#vrrp 30 track 1 decrement 50

Office_Back2(config-if)#vrrp 30 preempt delay mini 30

Office_Back2(config-if)#no sh

Office_Back2(config-if)#exit

[Router Connection 설정]

Office_Back2(config)#int e 0/0

Office_Back2(config-if)#desc ##Router Conn##

Office_Back2(config-if)#no swi

Office_Back2(config-if)#ip add 10.1.100.14 255.255.255.252

Office_Back2(config-if)#duplex full

Office_Back2(config-if)#no sh

Office_Back2(config-if)#exit

[Office_Back1 Connection 설정]

Office_Back1(config)#int e 0/1

Office_Back1(config-if)#desc ##Office_Back2 Conn##

Office_Back1(config-if)#no swi

Office_Back1(config-if)#ip add 10.1.100.37 255.255.255.252

Office_Back1(config-if)#duplex full

Office_Back1(config-if)#no sh

Office_Back1(config-if)#exit

[Server_Back1,2 Connection 설정]

Office_Back2(config)#int e 0/2

Office_Back2(config-if)#desc ##ServerBack2 Conn##

Office_Back2(config-if)#no swi

Office_Back2(config-if)#ip add 10.1.100.30 255.255.255.252

Office_Back2(config-if)#duplex full

Office_Back2(config-if)#no sh

Office_Back2(config-if)#exit

Office_Back2(config)#int e 0/3

Office_Back2(config-if)#desc ##SeverBack1 Conn##

Office_Back2(config-if)#no swi

Office_Back2(config-if)#ip add 10.1.100.26 255.255.255.252

Office_Back2(config-if)#duplex full

Office_Back2(config-if)#no sh

Office_Back2(config-if)#exit

[RSTP 기본값 동작, VLAN 30 우선순위(Root Bridge)]

```
Office_Back2(config)#spanning-tree vlan 30 priority 4096
```

[Routing Rip 설정]

```
Office_Back2(config)#router rip
```

```
Office_Back2(config-router)#version 2
```

```
Office_Back2(config-router)#no auto-summary
```

```
Office_Back2(config-router)#network 10.0.0.0
```

```
Office_Back2(config-router)#exit
```

```
Office_Back2(config)#no ip cef
```

```
Office_Back2(config)#exit
```

```
Office_Back2#wr
```

Router 설정

[InterFace 설정]

```
Router(config)#int fa 0/0
```

```
Router(config-if)#desc ##ISP Conn##
```

```
Router(config-if)#ip add dhcp
```


Router(config-if)#duplex full

Router(config-if)#no sh

Router(config-if)#exit

Router(config)#int fa 0/1

Router(config-if)#desc ##ServerBack1 Conn##

Router(config-if)#ip add 10.10.100.1 255.255.255.252

Router(config-if)#duplex full

Router(config-if)#no sh

Router(config-if)#exit

Router(config)#int fa 1/0

Router(config-if)#desc ##ServerBack2 Conn##

Router(config-if)#ip add 10.1.100.5 255.255.255.252

Router(config-if)#duplex full

Router(config-if)#no sh

Router(config-if)#exit

Router(config)#int fa 2/0

```
Router(config-if)#desc ##OfficeBack1 Conn##
```

```
Router(config-if)#ip add 10.1.100.9 255.255.255.252
```

```
Router(config-if)#duplex full
```

```
Router(config-if)#no sh
```

```
Router(config-if)#exit
```

```
Router(config)#int fa 3/0
```

```
Router(config-if)#desc ##OfficeBack2 Conn##
```

```
Router(config-if)#ip add 10.1.100.13 255.255.255.252
```

```
Router(config-if)#duplex full
```

```
Router(config-if)#no sh
```

```
Router(config-if)#exit
```

```
Router(config)#router rip
```

```
Router(config-router)#version 2
```

```
Router(config-router)#no auto-summary
```

```
Router(config-router)#network 10.0.0.0
```

```
Router(config-router)#default-information originate
```

```
Router(config-router)#exit
```

[NAT 및 ACL 설정]

```
Router(config)# ip nat pool PUBLIC_IP 192.168.10.20 192.168.10.150 netmask  
255.255.255.0
```

```
Router(config)# acc-list 10 permit 10.1.10.0 0.0.0.255
```

```
Router(config)# acc-list 10 permit 10.1.20.0 0.0.0.255
```

```
Router(config)# acc-list 10 permit 10.1.30.0 0.0.0.255
```

```
Router(config)# acc-list 10 permit 10.1.40.0 0.0.0.255
```

```
Router(config)# ip nat inside source list 10 pool PUBLIC_IP
```

```
Router(config)# int f 0/0
```

```
Router(config-if)# ip nat outside
```

```
Router(config-if)# int f 0/1
```

```
Router(config-if)# ip nat inside
```

```
Router(config-if)# int f 1/0
```

```
Router(config-if)# ip nat inside
```

```
Router(config-if)# int f 2/0
```

```
Router(config-if)# ip nat inside
```

```
Router(config-if)# int f 3/0
```

```
Router(config-if)# ip nat inside
```

```
Router(config-if)# end
```

```
Router# wr
```