# **FHRP**

#### FHRP이란

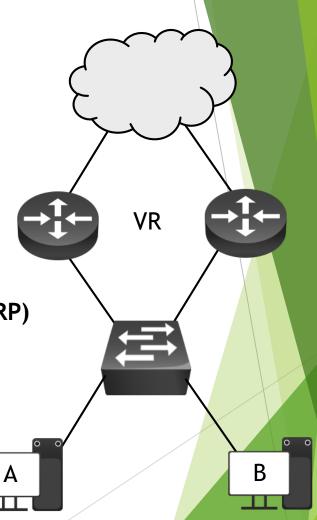
✓ Gateway를 이중화 하기 위한 기술

✓ FHRP의 종류

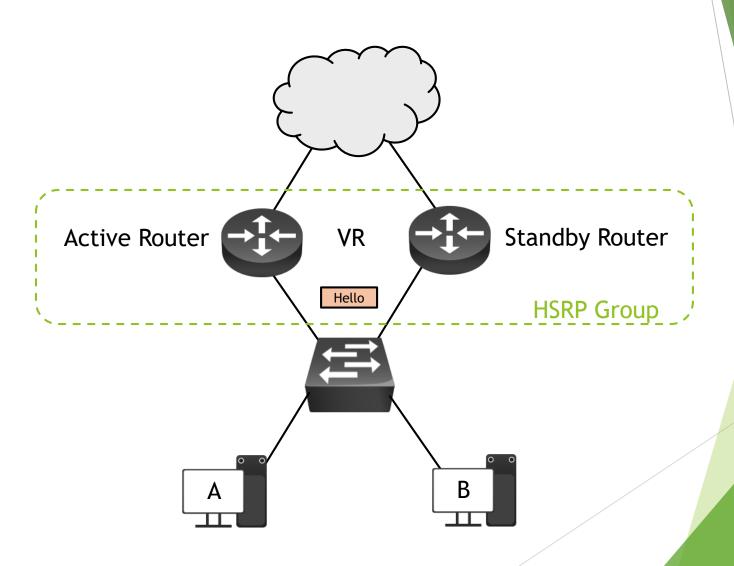
✓ Hot Standby Router Protocol (HSRP)

√ Virtual Router Redundancy Protocol (VRRP)

√ Gateway Load Balancing Protocol (GLBP)



# HSRP 동작



#### HSRP 설정

1. HSRP 설정 (Active Router)

```
R1(config)# interface g0/0
R1(config-if)# ip address 192.168.1.253 255.255.0.0
R1(config-if)# standby 1 ip 192.168.1.1
R1(config-if)# standby 1 priority 200
R1(config-if)# standby 1 preempt
```

2. HSRP 설정 (Standby Router)

```
R2(config)# interface g0/0
R2(config-if)# ip address 192.168.1.254.255.255.25
R2(config-if)# standby 1 ip 192.168.1.1
```

### HSRP 확인(Active Router)

```
R1# show standby
GigabitEthernet0/0 - Group 1
 State is Active
  2 state changes, last state change 00:11:51
 Virtual IP address is 192.168.1.1
 Active virtual MAC address is 0000.0c07.ac01
 Local virtual MAC address is 0000.0c07.ac01 (v1 default)
 Hello time 3 sec, hold time 10 sec
 Next hello sent in 1.232 secs
 Preemption enabled
 Active router is local
 Standby router is 192.168.1.254, priority 100 (expires in 9.808 sec)
 Priority 200 (configured 200)
 Group name is "hsrp-Gi0/0-1" (default)
R1# show standby brief
            P indicates configured to preempt.
           Grp Pri P State Active Standby
Interface
                                                   Virtual IP
             200 Active local 192.168.1.254 192.168.1.1
Gi0/0
```

## HSRP 확인(Standby Router)

```
R2# show standby
GigabitEthernet0/0 - Group 1
 State is Standby
   1 state change, last state change 00:15:23
 Virtual IP address is 192.168.1.1
 Active virtual MAC address is 0000.0c07.ac01
   Local virtual MAC address is 0000.0c07.ac01 (v1 default)
 Hello time 3 sec, hold time 10 sec
  Next hello sent in 1.008 secs
 Preemption disabled
 Active router is 192.168.1.253, priority 200 (expires in 8.624 sec)
 Standby router is local
 Priority 100 (default 100)
 Group name is "hsrp-Gi0/0-1" (default)
R2# show standby brief
             P indicates configured to preempt.
                                            Standby
           Grp Pri P State Active
                                                         Virtual IP
Interface
Gi0/0
               100 Standby 192.168.1.253
                                                        192.168.1.1
                                              local
```