

HSRP Load Balancing Lab

Part 1

Introduction

The purpose of these exercises is to deploy and test HSRP load balancing in a redundant network utilizing the concepts explained in today's design presentations. Students will see how HSRP is put to work

The Lab builds on the previous lab exercises and requires that those configurations are properly functioning.

There will be 5 groups of students, with 4 switches per group. The distribution of IP address space for the building (Layer 2) networks will be as follows:

- Group 1: 10.1.64.0/24
- Group 2: 10.2.64.0/24
- Group 3: 10.3.64.0/24
- Group 4: 10.4.64.0/24
- Group 5: 10.5.64.0/24

Switch types used in the lab

Cisco 3750

Lab access instructions

Refer to the file called [lab-access-dynamips.htm](#)

HSRP CONFIGURATION

Interface Configuration

1. Configure HSRP the interface on RX2 as follows: Replace the "X" with your group number

```
int FastEthernet0/0.64
standby group 1 ip 10.X.64.20
standby 1 priority 200
standby 1 preempt
end
```

```

int FastEthernet0/0.65
  standby group 1 ip 10.X.65.20
  standby 1 priority 200
  standby 1 preempt
end

```

2. Configure HSRP the interface on RX3 as follows:

```

int FastEthernet0/0.64
  standby group 1 ip 10.X.64.20
  standby 1 priority 100
  standby 1 preempt
end

```

```

int FastEthernet0/0.65
  standby group 1 ip 10.X.65.20
  standby 1 priority 100
  standby 1 preempt
end

```

HSRP VERIFICATION

show standby brief

Configure your PC as a user on VLAN 64 and 65 with the appropriate default gateway 10.X.64.20 and 10.X.65.20

ping 5.5.5.5 Traceroute 5.5.5.5

Shutdown Int f0/0/0 on BBX1 connected to R2

ping 5.5.5.5 Traceroute 5.5.5.5

What do you observe?

HSRP LOAD BALANCING CONFIGURATION

1. Configure HSRP the interface on RX2 as follows:

```

int FastEthernet0/0.64
  standby group 1 ip 10.X.64.20
  standby 1 priority 200
  standby 1 preempt
  standby group 1 ip 10.X.64.21
  standby 1 priority 100
  standby 1 preempt
end

```

```

int FastEthernet0/0.65
  standby group 1 ip 10.X.65.20
  standby 1 priority 200
  standby 1 preempt
  standby group 1 ip 10.X.65.20
  standby 1 priority 100
  standby 1 preempt
end

```

2. Configure HSRP the interface on RX3 as follows:

```

int FastEthernet0/0.64
  standby group 1 ip 10.X.64.20
  standby 1 priority 100
  standby 1 preempt
  standby group 1 ip 10.X.64.21
  standby 1 priority 200
  standby 1 preempt
end

```

```

int FastEthernet0/0.65
  standby group 1 ip 10.X.65.20
  standby 1 priority 100
  standby 1 preempt
  standby group 1 ip 10.X.65.21
  standby 1 priority 200
  standby 1 preempt
end

```

Verify your configuration

```
sh standby brief
```

Connect 2 PCs on VLAN 64 and 65. Give the 2 different gateway IPs to each PC.

Trace 5.5.5.5

Simulate a link outage and test results.

Trace 5.5.5.5