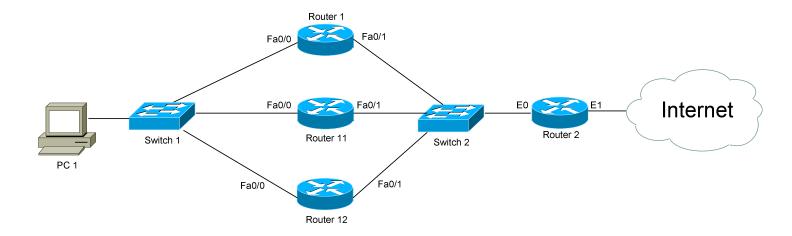
# - Hot Standby Routing Protocol (HSRP) Lab -

### Hot Standby Routing Protocol (HSRP) - Lab



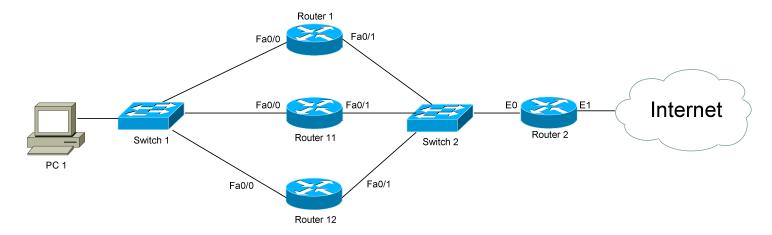
#### **Basic Objectives:**

- 1. Configure and cable the Ethernet interfaces as indicated in the above diagram.
- 2. Configure the IP addresses on the routers as follows:

Router1 $fa0/0 = 192.168.1.1/24$	Router1 $fa0/1 = 192.168.123.1/24$
Router2 e0 = $192.168.123.2/24$	Router2 e1 = $66.1.1.1/28$
Router11 $fa0/0 = 192.168.1.11/24$	Router11 fa $0/1 = 192.168.123.11/24$
Router12 $fa0/0 = 192.168.1.12/24$	Router12 fa $0/1 = 192.168.123.12/24$
PC1 - 192 168 1 100/24	

3. Use an operating system of your choice on PC1. Ensure that it is running the TCP/IP stack.

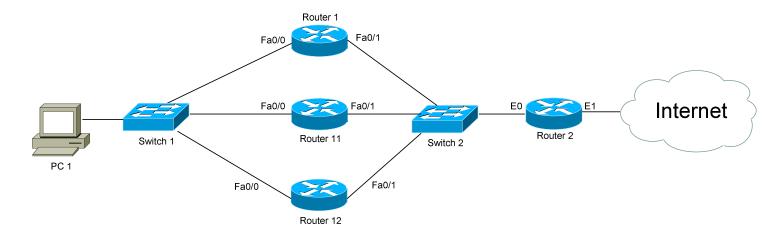
# Hot Standby Routing Protocol (HSRP) - Lab (continued)



#### **HSRP Objectives:**

4.	Configure Router 1, Router 11, and Router 12 to use HSRP. Use a standby group number of "1".
5.	Use a virtual IP address of 192.168.1.5/24, and a virtual MAC address of 1111.2222.3333.
6.	Ensure that Router 11 becomes the Active router, and Router 1 becomes the Standby router.
7.	Ensure that hello packets are sent every 5 seconds on every router.
8.	Ensure that the router with the highest priority is <i>always</i> the Active router.

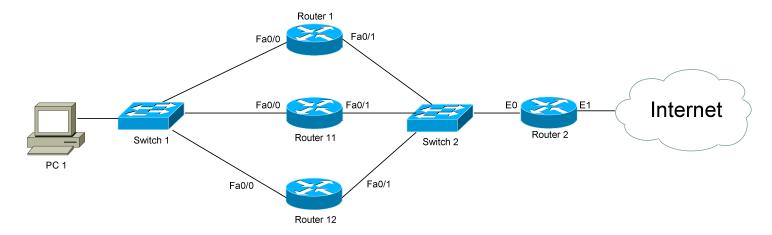
# Hot Standby Routing Protocol (HSRP) - Lab (continued)



## **HSRP Objectives:**

Authenticate each router in the HSRP group with a password of "CISCO".
Ensure that if any router is the Active router, and its fa0/1 interfaces goes down, that it will relinquish its Active status.
Configure routing between all four routers, ensuring connectivity to the Internet. Use a routing protocol of your choice, or static routing.
Ensure that Router 2 is NAT'ing traffic to the Internet.

# Hot Standby Routing Protocol (HSRP) - Lab (continued)



#### **HSRP Objectives:**

13.	Configure PC 1's default gateway with the appropriate address, and ensure connectivity to the Internet.
14.	Ensure that if any one (or two) HSRP router(s) is powered off, that PC 1 still has connectivity to the Internet.
15.	Ensure that if the Active router's Fa0/1 interface goes down, that PC 1 still has connectivity to the Internet.
16.	View the status of the HSRP group on each router.