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Labo 9.3.3

Packet Tracer - HSRP Configuration Guide4

Partie 1

Tracert depuis PC-A vers serveur

```
C:\>tracert 209.165.200.226

Tracing route to 209.165.200.226 over a maximum of 30 hops:

  1    0 ms      0 ms      0 ms      192.168.1.1
  2    0 ms      0 ms      0 ms      10.1.1.2
  3    *         0 ms      0 ms      10.100.100.2
  4    *         1 ms      0 ms      209.165.200.226

Trace complete.

C:\>
```

Tracert depuis PC-B vers serveur

```
C:\>tracert 209.165.200.226

Tracing route to 209.165.200.226 over a maximum of 30 hops:

  1    0 ms        1 ms        1 ms        192.168.1.3
  2    *           *           1 ms        10.1.1.2
  3    4294967294 ms0 ms         1 ms        10.100.100.2
  4    1 ms        0 ms        1 ms        209.165.200.226

Trace complete.

C:\>
```

Suppression du lien entre S3 et R3 , tracert échoue depuis PC-B , plus de connexion

```
C:\>tracert 209.165.200.226

Tracing route to 209.165.200.226 over a maximum of 30 hops:

  1    *           *           *           Request timed out.
  2    *           *           *           Request timed out.
  3    *           *           *           Request timed out.
  4    *           *           *           Request timed out.
  5    *           *           *           Request timed out.
  6
Control-C
^C
C:\>
```

Remise en place du câble entre S3 et R3 , ping et tracert depuis PC-B vers serveur

```
C:\>ping 209.165.200.226

Pinging 209.165.200.226 with 32 bytes of data:

Reply from 209.165.200.226: bytes=32 time<1ms TTL=125
Reply from 209.165.200.226: bytes=32 time<1ms TTL=125
Reply from 209.165.200.226: bytes=32 time<1ms TTL=125
Reply from 209.165.200.226: bytes=32 time<1ms TTL=125

Ping statistics for 209.165.200.226:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>tracert 209.165.200.226

Tracing route to 209.165.200.226 over a maximum of 30 hops:

  1    *          0 ms       0 ms        192.168.1.3
  2    1 ms       0 ms       0 ms        10.1.1.2
  3    0 ms       1 ms       0 ms        10.100.100.2
  4    0 ms       1 ms       0 ms        209.165.200.226

Trace complete.

C:\>
```

Partie 2

```
R1>enable
R1#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
R1(config)#interface gigabitEthernet 0/1
R1(config-if)#standby version 2
R1(config-if)#standby 1 ip 192.168.1.254
R1(config-if)#
%HSRP-6-STATECHANGE: GigabitEthernet0/1 Grp 1 state Init -> Init

R1(config-if)#standby 1 priority 150
R1(config-if)#standby 1 preempt
R1(config-if)#
%HSRP-6-STATECHANGE: GigabitEthernet0/1 Grp 1 state Speak -> Standby

%HSRP-6-STATECHANGE: GigabitEthernet0/1 Grp 1 state Standby -> Active

R1(config-if)#end
R1#
%SYS-5-CONFIG_I: Configured from console by console
```

Vérification HSRP sur R1

```
R1#show standby
GigabitEthernet0/1 - Group 1 (version 2)
  State is Active
    6 state changes, last state change 00:39:18
  Virtual IP address is 192.168.1.254
  Active virtual MAC address is 0000.0C9F.F001
    Local virtual MAC address is 0000.0C9F.F001 (v2 default)
  Hello time 3 sec, hold time 10 sec
    Next hello sent in 1.575 secs
  Preemption enabled
  Active router is local
  Standby router is 192.168.1.3
  Priority 150 (configured 150)
  Group name is hsrp-Gig0/1-1 (default)
R1#
```

```
R3>enable
R3#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
R3(config)#interface gigabitEthernet 0/0
R3(config-if)#standby version 2
R3(config-if)#standby 1 ip 192.168.1.254
R3(config-if)#
%HSRP-6-STATECHANGE: GigabitEthernet0/0 Grp 1 state Init -> Init

R3(config-if)#end
R3#
%SYS-5-CONFIG_I: Configured from console by console

R3#
```

Vérification HSRP sur R3

```
R3#show standby
GigabitEthernet0/0 - Group 1 (version 2)
  State is Standby
    5 state changes, last state change 00:40:43
  Virtual IP address is 192.168.1.254
  Active virtual MAC address is 0000.0C9F.F001
    Local virtual MAC address is 0000.0C9F.F001 (v2 default)
  Hello time 3 sec, hold time 10 sec
    Next hello sent in 0.935 secs
  Preemption disabled
  Active router is 192.168.1.1
  Standby router is local
  Priority 100 (default 100)
  Group name is hsrp-Gig0/0-1 (default)
R3#
```

show standby brief sur R1 :

```
R1#show standby brief
                     P indicates configured to preempt.
                     |
Interface   Grp  Pri P State    Active         Standby         Virtual IP
Gig0/1      1    150 P Active   local          192.168.1.3     192.168.1.254
R1#
```

```
R3#show standby brief
                    P indicates configured to preempt.
                    |
Interface   Grp  Pri P State    Active         Standby         Virtual IP
Gig0/0      1    100  Standby  192.168.1.1     local           192.168.1.254
R3#
```

PC-A et PC-B gateway : 192.168.1.254

Sur S1 et S3 : ip default-gateway 192.168.1.254

```
C:\>ping 209.165.200.226

Pinging 209.165.200.226 with 32 bytes of data:

Reply from 209.165.200.226: bytes=32 time=5ms TTL=125
Reply from 209.165.200.226: bytes=32 time=1ms TTL=125
Reply from 209.165.200.226: bytes=32 time<1ms TTL=125
Reply from 209.165.200.226: bytes=32 time<1ms TTL=125

Ping statistics for 209.165.200.226:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 5ms, Average = 1ms

C:\>
```

```
C:\>ipconfig

FastEthernet0 Connection:(default port)

   Connection-specific DNS Suffix..:
   Link-local IPv6 Address.........: FE80::2E0:8FFF:FE82:DD0C
   IPv6 Address....................: ::
   IPv4 Address....................: 192.168.1.101
   Subnet Mask.....................: 255.255.255.0
   Default Gateway.................: ::
                                     192.168.1.254
```

```
C:\>ping 209.165.200.226

Pinging 209.165.200.226 with 32 bytes of data:

Reply from 209.165.200.226: bytes=32 time<1ms TTL=125
Reply from 209.165.200.226: bytes=32 time=1ms TTL=125
Reply from 209.165.200.226: bytes=32 time=1ms TTL=125
Reply from 209.165.200.226: bytes=32 time<1ms TTL=125

Ping statistics for 209.165.200.226:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>
```

ipconfig sur PC-B:

```
C:\>ipconfig

FastEthernet0 Connection:(default port)

   Connection-specific DNS Suffix..:
   Link-local IPv6 Address.........: FE80::201:63FF:FEA2:5345
   IPv6 Address....................: ::
   IPv4 Address....................: 192.168.1.103
   Subnet Mask.....................: 255.255.255.0
   Default Gateway.................: ::
                                     192.168.1.254
```

show running-config sur S1 :

```
S1#show running-config | include default
ip default-gateway 192.168.1.254
S1#
```

show running-config sur S3 :

```
S3#show running-config | include default
ip default-gateway 192.168.1.254
S3#
```

Partie 3

```
C:\>tracert 209.165.200.226

Tracing route to 209.165.200.226 over a maximum of 30 hops:

  1    0 ms      0 ms      0 ms      192.168.1.1
  2    0 ms      0 ms      0 ms      10.1.1.2
  3    0 ms      0 ms      0 ms      10.100.100.2
  4    0 ms     10 ms      0 ms      209.165.200.226

Trace complete.

C:\>
```

Suppression du câble entre S1 et R1

```
C:\>tracert 209.165.200.226

Tracing route to 209.165.200.226 over a maximum of 30 hops:

  1    0 ms      0 ms      1 ms      192.168.1.3
  2    0 ms      0 ms      0 ms      10.1.1.2
  3    0 ms      0 ms      0 ms      10.100.100.2
  4    0 ms      0 ms      0 ms      209.165.200.226

Trace complete.

C:\>
```

Tracer PC-B vers serveur   Passe par R1 (192.168.1.1)

```
C:\>tracert 209.165.200.226

Tracing route to 209.165.200.226 over a maximum of 30 hops:

  1    0 ms       1 ms       1 ms        192.168.1.1
  2    1 ms       1 ms       0 ms        10.1.1.2
  3    *          1 ms       1 ms        10.100.100.2
  4    *          11 ms      11 ms       209.165.200.226

Trace complete.

C:\>
```