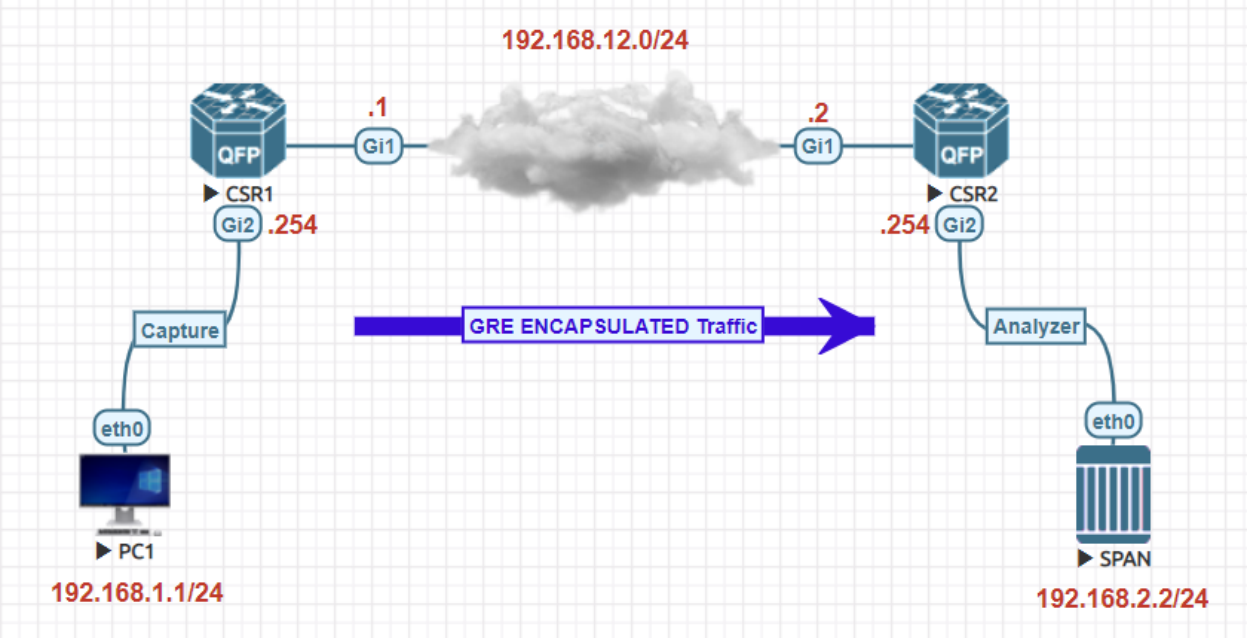
ERSPAN Lab:



CSR1 Basic Configuration
Router(config)#hostname CSR1
CSR1(config)#interface gigabitEthernet 1
CSR1(config-if)#ip address 192.168.12.1 255.255.255.0
CSR1(config-if)#no shutdown
CSR1(config)#interface gigabitEthernet 2
CSR1(config-if)#ip add 192.168.1.254 255.255.255.0
CSR1(config-if)#no shutdown
CSR1(config)#ip route 0.0.0.0 0.0.0.0 192.168.12.2

CSR2 Basic Configuration
CSR1(config)#hostname CSR2
CSR2(config)#interface gigabitEthernet 1
CSR2(config-if)#ip address 192.168.12.2 255.255.255.0
CSR2(config-if)#no shutdown
CSR2(config)#interface gigabitEthernet 2
CSR2(config-if)#ip add 192.168.2.254 255.255.255.0
CSR2(config-if)#no shutdown
CSR2(config)#ip route 0.0.0.0 0.0.0.0 192.168.12.1

PC1 Configuration
VPCS> set pcname PC1 PC1> ip 192.168.1.1/24 192.168.1.254 PC1> save
SPAN Wireshark Configuration
ip addr add 192.168.2.2/24 dev eth0 ||true ip route add default via 192.168.2.254||true cat>/etc/resolv.conf<<EOF nameserver 8.8.8.8 EOF

CSR1 ERSPAN Configuration
CSR1(config)#monitor session 1 type erspan-source CSR1(config-mon-erspan-src)#source interface GigabitEthernet 2 rx CSR1(config-mon-erspan-src)#no shutdown CSR1(config-mon-erspan-src)#destination CSR1(config-mon-erspan-src-dst)#erspan-id 100 CSR1(config-mon-erspan-src-dst)#ip address 192.168.2.2 CSR1(config-mon-erspan-src-dst)#origin ip address 192.168.12.1 CSR1(config-mon-erspan-src-dst)#exit CSR1(config-mon-erspan-src)#exit
CSR1#show monitor session 1

CSR2 ERSPAN Configuration
CSR2(config)#monitor session 1 type erspan-destination CSR2(config-mon-erspan-dst)#no shutdown CSR2(config-mon-erspan-dst)#destination interface GigabitEthernet 2 CSR2(config-mon-erspan-dst)#source CSR2(config-mon-erspan-dst-src)#erspan-id 100 CSR2(config-mon-erspan-dst-src)#ip address 192.168.2.2 CSR2(config-mon-erspan-dst-src)#exit CSR2(config-mon-erspan-dst)#exit
CSR2#show monitor session 1

Test and Verification:

Let's ping from PC1 to CSR1 local interface IP which is 192.168.1.254

PC1

```
PC1>
PC1> ping 192.168.1.254

192.168.1.254 icmp_seq=1 timeout
84 bytes from 192.168.1.254 icmp_seq=2 ttl=255 time=1.483 ms
84 bytes from 192.168.1.254 icmp_seq=3 ttl=255 time=7.739 ms
84 bytes from 192.168.1.254 icmp_seq=4 ttl=255 time=7.921 ms
84 bytes from 192.168.1.254 icmp_seq=5 ttl=255 time=1.884 ms
```

After ping from PC to CSR1 local interface CSR1, encapsulate the traffic and send to Wireshark.

SPAN

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icmp

No.	Time	Source	Destination	Protocol	Length	Info
3	1.988871159	192.168.1.1	192.168.1.254	ICMP	148	Echo (ping) request id=0x0929, seq=2/512, ttl=64 (no
4	1.988930994	192.168.2.2	192.168.12.1	ICMP	176	Destination unreachable (Protocol unreachable)
5	3.007971019	192.168.1.1	192.168.1.254	ICMP	148	Echo (ping) request id=0x0a29, seq=3/768, ttl=64 (no
6	3.008019888	192.168.2.2	192.168.12.1	ICMP	176	Destination unreachable (Protocol unreachable)
7	4.015426697	192.168.1.1	192.168.1.254	ICMP	148	Echo (ping) request id=0x0b29, seq=4/1024, ttl=64 (no
8	4.015471648	192.168.2.2	192.168.12.1	ICMP	176	Destination unreachable (Protocol unreachable)
9	5.019616019	192.168.1.1	192.168.1.254	ICMP	148	Echo (ping) request id=0x0c29, seq=5/1280, ttl=64 (no
10	5.019656175	192.168.2.2	192.168.12.1	ICMP	176	Destination unreachable (Protocol unreachable)

```
    Checksum: 0x1a1b [correct]
    [Checksum Status: Good]
    Unused: 00000000
  ▸ Internet Protocol Version 4, Src: 192.168.12.1, Dst: 192.168.2.2
  ▾ Generic Routing Encapsulation (ERSPAN)
    ▸ Flags and Version: 0x1000
      Protocol Type: ERSPAN (0x88be)
      Sequence Number: 2
  ▸ Encapsulated Remote Switch Packet ANalysis Type II
  ▸ Ethernet II, Src: Private_66:68:04 (00:50:79:66:68:04), Dst: 50:00:00:01:00:01 (50:00:00:01:00:01)
  ▸ Internet Protocol Version 4, Src: 192.168.1.1, Dst: 192.168.1.254
  ▾ Internet Control Message Protocol
      Type: 8 (Echo (ping) request)
      Code: 0
```

CSR1

```
CSR1#show monitor session 1
Session 1
---------
Type                        : ERSPAN Source Session
Status                      : Admin Enabled
Source Ports                :
    RX Only                 : Gi2
Destination IP Address      : 192.168.2.2
MTU                         : 1464
Destination ERSPAN ID       : 100
Origin IP Address           : 192.168.12.1
```