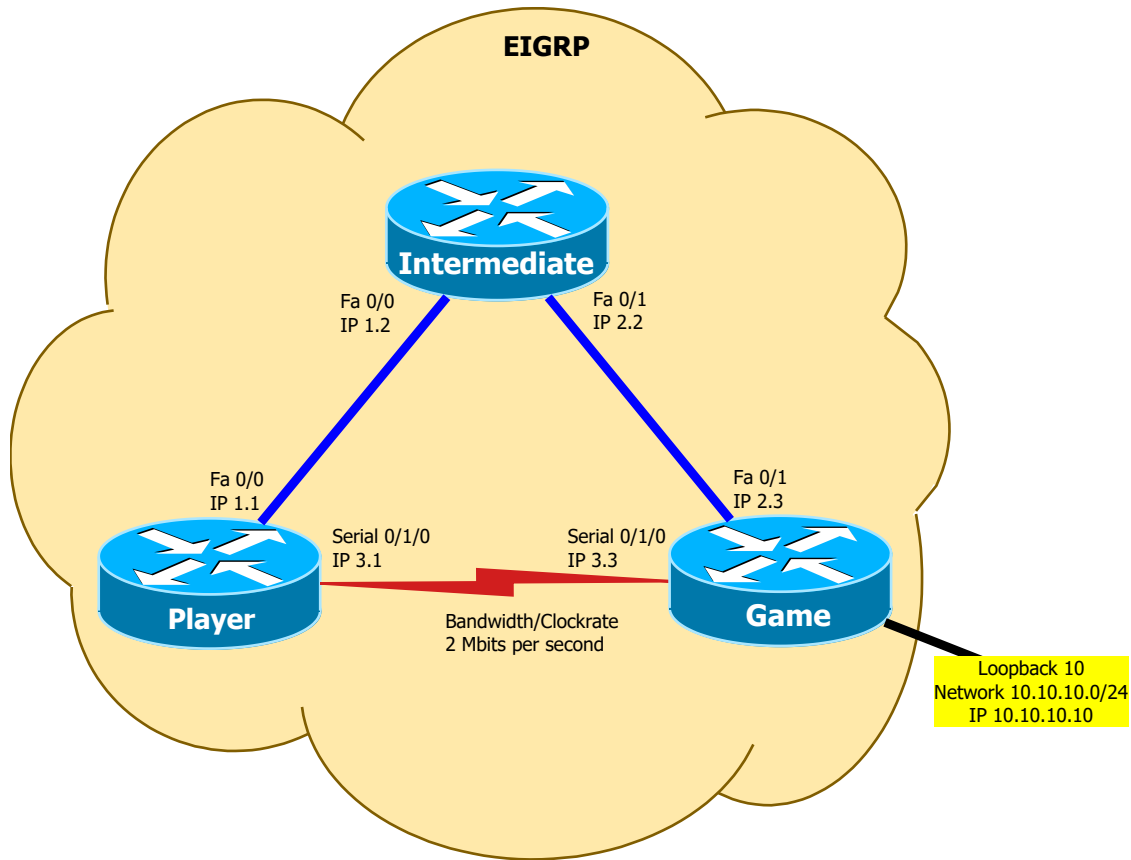


Challenge 4 © CATC, Robert Andersson
SLA



1. Do basic configuration: Interface description, no DNS lookup, synchronous logging
2. Do basic management: passwords (and, if applicable, users), ssh version 2, no telnet, no http
3. Configure EIGRP everywhere; no auto summary, default passive interfaces
4. Check the routing table on PLAYER so that it routes the 10.10.10.0/24 _network_ over ethernet
5. Now create a static route for the 10.10.10.10/32 _host_ over the serial link that is used only if the ping-time is lower than ~15 ms
6. Monitor "Number of successes" for a couple of minutes.
7. Change the serial link configuration so that the static route is used
8. Check RTT with ping, and path with RoutingTable and traceroute
9. Double check with `show ip sla statistics / show ip sla configuration`
10. Change the serial link configuration so that the static route is _not_ used (try 9600 bps)
11. Check RTT with ping, and path with RT and trace
12. Double check with `show ip sla ...`
13. What do you change to make the SLA run every 20 seconds?
14. Do you really need both timeout and threshold, or do you need only one? Which one?

```
ip sla 1
icmp-echo 10.10.3.3
timeout 16
threshold 15
frequency 20
!
ip sla schedule 1 life forever start now
ip route "host 10.10.10.3.3 ?" "if sla 1"
```

```
router#show ip sla statistics 1
Round Trip Time (RTT) for Index 55
Latest RTT: 1 ms
Latest operation start time: *23:43:31.845 UTC Thu Feb 3 2005
Latest operation return code: OK
RTT Values:
Number Of RTT: 10 RTT Min/Avg/Max: 1/1/1 milliseconds
Latency one-way time:
Number of Latency one-way Samples: 0
Source to Destination Latency one way Min/Avg/Max: 0/0/0 milliseconds
Destination to Source Latency one way Min/Avg/Max: 0/0/0 milliseconds
Jitter time:
Number of Jitter Samples: 9
Source to Destination Jitter Min/Avg/Max: 0/0/0 milliseconds
Destination to Source Jitter Min/Avg/Max: 1/1/1 milliseconds
Packet Loss Values:
Loss Source to Destination: 0 Loss Destination to Source: 0
Out Of Sequence: 0 Tail Drop: 0 Packet Late Arrival: 0
Voice Score Values
Calculated Planning Impairment Factor (ICPIF): 0
Mean Opinion Score (MOS): 0
Number of successes: 1
Number of failures: 0
Operation time to live: 3591 s
```

```
Robert#show ip sla configuration
IP SLAs Infrastructure Engine-II
Entry number: 1
Owner:
Tag:
Type of operation to perform: icmp-echo
Target address/Source address: 193.10.236.1/0.0.0.0
Operation timeout (milliseconds): 5000
Type Of Service parameters: DxD
Vrf Name:
Request size (ARR data portion): 1500
Verify data: No
Schedule:
Operation frequency (seconds): 60 (not considered if randomly scheduled)
Next Scheduled Start Time: Pending trigger
Group Scheduled : FALSE
Randomly Scheduled : FALSE
Life (seconds): 3600
Entry Agout (seconds): never
Recurring (Starting Everyday): FALSE
Status of entry (SNMP RowStatus): notInService
Threshold (milliseconds): 5000
Distribution Statistics:
Number of statistic hours kept: 2
Number of statistic distribution buckets kept: 1
Statistic distribution interval (milliseconds): 20
History Statistics:
Number of history Lives kept: 0
Number of history Buckets kept: 15
History Filter Type: None
Enhanced History:
```