CLI AUTOMATION


```
Ip sla 1
Icmp-echo x.x.x.x source-ip x.x.x.x
Frequency x

Ip sla schedule 1 start now life forever
```

```
DATACENTER-ROUTER(config)#
DATACENTER-ROUTER(config)#
DATACENTER-ROUTER(config)#ip sla 1
DATACENTER-ROUTER(config-ip-sla)#icmp-echo 22.255.200.14 source-ip 22.255.200.13
DATACENTER-ROUTER(config-ip-sla-echo)#frequency 5
DATACENTER-ROUTER(config-ip-sla-echo)#
DATACENTER-ROUTER(config-ip-sla-echo)#exit
DATACENTER-ROUTER(config)#
DATACENTER-ROUTER(config)#ip sla schedule 1 start now life forever
DATACENTER-ROUTER(config)#
```


```
Ip sla 1
Icmp-echo x.x.x.x source-interface xxx
Frequency x

Ip sla schedule 1 start now life forever
```

```
DATACENTER-ROUTER(config)#
DATACENTER-ROUTER(config)#ip sla 1
DATACENTER-ROUTER(config-ip-sla)#icmp-echo 22.255.200.14 source-interface g0/0/1.96
DATACENTER-ROUTER(config-ip-sla-echo)#frequency 10
DATACENTER-ROUTER(config-ip-sla-echo)#
DATACENTER-ROUTER(config-ip-sla-echo)#exi
DATACENTER-ROUTER(config)#
DATACENTER-ROUTER(config)#ip sla schedule 1 start now life forever
DATACENTER-ROUTER(config)#
```

Show ip sla statistics

```
DATACENTER-ROUTER#sh ip sla statistics
IPSLAs Latest Operation Statistics

IPSLA operation id: 1
        Latest RTT: 1 milliseconds
Latest operation start time: 19:05:05 UTC Fri May 1 2020
Latest operation return code: OK
Number of successes: 11
Number of failures: 3
Operation time to live: Forever
```

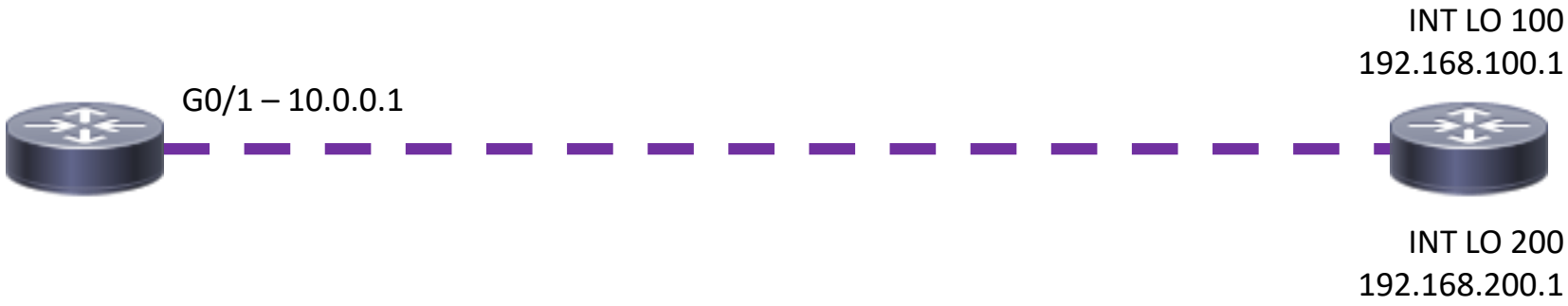
Show ip sla configuration

```
DATACENTER-ROUTER#sh ip sla configuration
IP SLAs Infrastructure Engine-III
Entry number: 1
Owner:
Tag:
Operation timeout (milliseconds): 5000
Type of operation to perform: icmp-echo
Target address/Source interface: 22.255.200.14/GigabitEthernet0/0/1.96
Type Of Service parameter: 0x0
Request size (ARR data portion): 28
Data pattern: 0xABCDABCD
Verify data: No
Vrf Name:
Schedule:
```

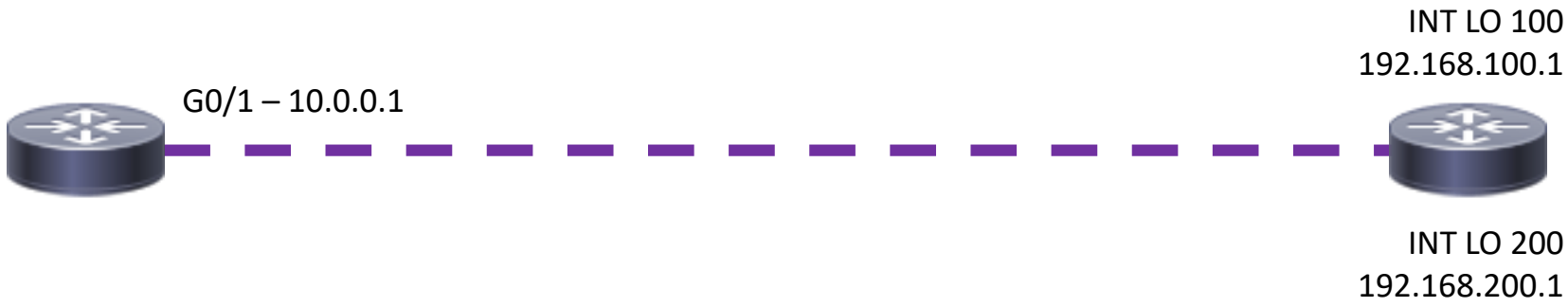
Track 10 ip sla 1

Show track

```
DATACENTER-ROUTER(config)#
DATACENTER-ROUTER(config)#track 10 ip sla 1
DATACENTER-ROUTER(config-track)#end
DATACENTER-ROUTER#
DATACENTER-ROUTER#show track
Track 10
  IP SLA 1 state
  State is Up
    1 change, last change 00:00:24
  Latest operation return code: OK
  Latest RTT (millisecs) 1
DATACENTER-ROUTER#
```

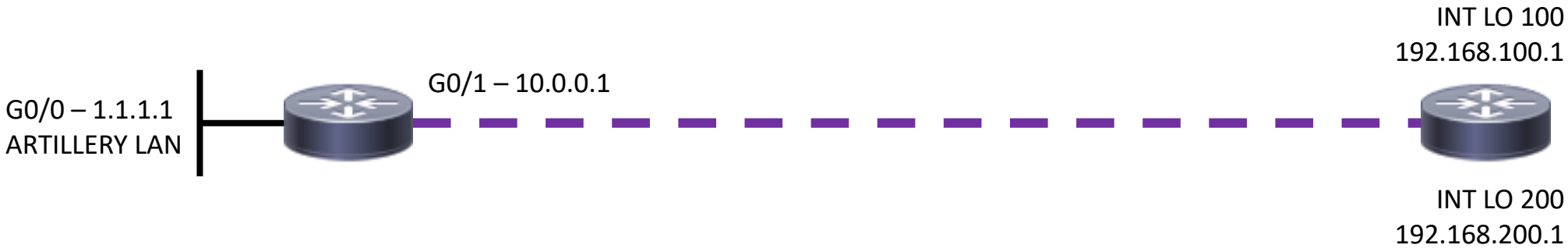



```
Ip sla 1
Icmp-echo 192.168.100.1 source-ip 10.0.0.1
Frequency 5

Ip sla 2
Icmp-echo 192.168.200.1 source-interface g0/1
Frequncy 10


Ip sla schedule 1 start now lifetime forever
Ip sla schedule 2 start now lifetime forever
```




```
Track 10 ip sla 1

Track 50 ip sla 2



Track 77 list Boolean or
Object 10
Object 50

Track 78 list Boolean and
Object 10 not
Object 50

Track 79 list Boolean or
Object 10 not
Object 50 not
```

```
DATACENTER-ROUTER(config)#track 77 list boolean or
DATACENTER-ROUTER(config-track)#object 10
DATACENTER-ROUTER(config-track)#object 50
DATACENTER-ROUTER(config-track)#end
DATACENTER-ROUTER#
DATACENTER-ROUTER#show track 77
Track 77
  List boolean or
  Boolean OR is Up
    2 changes, last change 00:00:10
    object 10 Up
    object 50 Up
DATACENTER-ROUTER#
DATACENTER-ROUTER#
DATACENTER-ROUTER#
```




```
Track 10 ip sla 1

Track 50 ip sla 2



Track 77 list Boolean or
Object 10
Object 50

Track 78 list Boolean and
Object 10 not
Object 50

Track 79 list Boolean or
Object 10 not
Object 50 not
```

```
Event manager applet WOBC-RC
Event track 10 state down
Action 1.0 cli command "enable"
Action 2.0 cli command "config t"
Action 3.0 cli command "interface g0/0"
Action 4.0 cli command "shutdown"
Action 5.0 syslog msg ARTILLERY_LAN_DOWN


Event manager applet WOBC-RC_1
Event track 10 state up
Action 1.0 cli command "enable"
Action 2.0 cli command "config t"
Action 3.0 cli command "interface g0/0"
Action 4.0 cli command "no shutdown"
Action 5.0 syslog msg ARTILLERY_LAN_OPERATIONAL
```

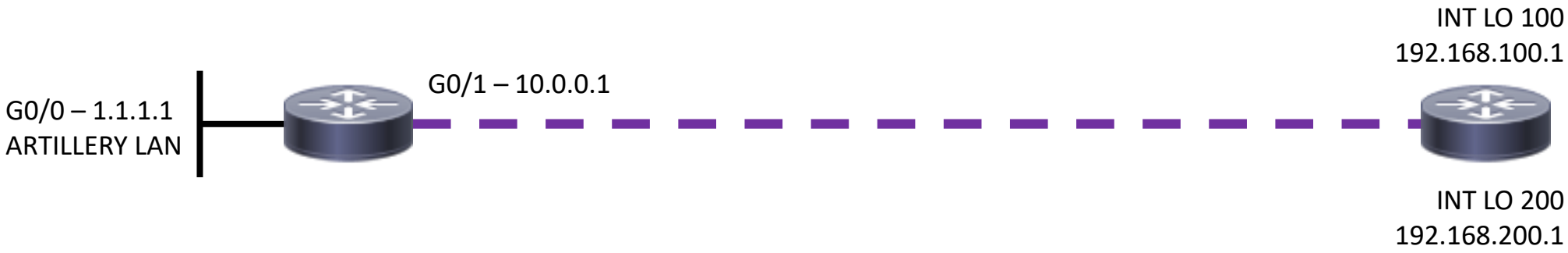
```
DATACENTER-ROUTER(config)#event manager applet ABC-123
DATACENTER-ROUTER(config-applet)#event track 77 state down
DATACENTER-ROUTER(config-applet)#action 1.0 cli command "enable"
DATACENTER-ROUTER(config-applet)#action 2.0 cli command "config t"
DATACENTER-ROUTER(config-applet)#action 3.0 cli command "interface g0/0/1.96"
DATACENTER-ROUTER(config-applet)#action 4.0 cli command "description 26A CLASS!"
DATACENTER-ROUTER(config-applet)#action 5.0 cli command "exit"
DATACENTER-ROUTER(config-applet)#exi
```

WHAT IS HAPPENING IN THE BACKGROUND?

STEP 1. THE IP SLAs THAT ARE BEING MONITORED BY TRACK 77 STOP RETURNING A CODE OF “OK”

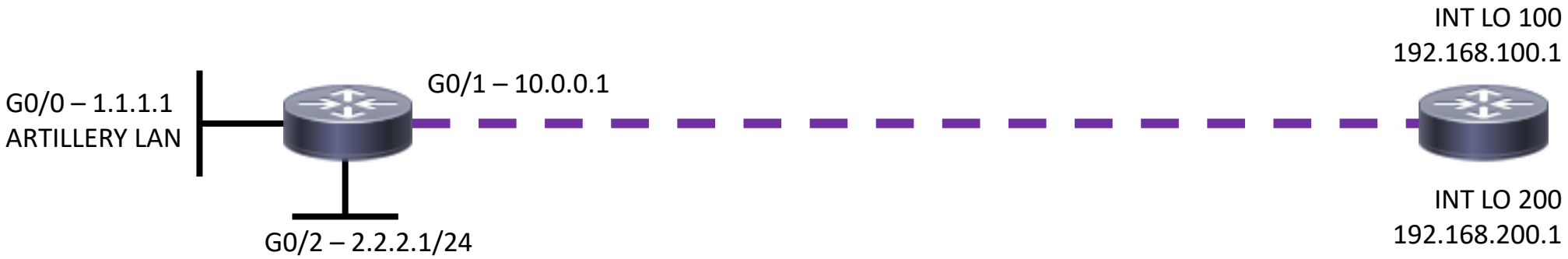
STEP 2. THE STATE OF TRACK 77 GOES FROM UP TO DOWN

STEP 3. THE EVENT MANAGER EXECUTES THE SERIES OF “ACTION” COMMANDS IN NUMERICAL ORDER




```
Track 10 ip sla 1

Track 50 ip sla 2



Track 77 list Boolean or
Object 10
Object 50

Track 78 list Boolean and
Object 10 not
Object 50

Track 79 list Boolean or
Object 10 not
Object 50 not
```

```
Event manager applet EIGRP-BUILDER
Event track 78 state up
Action 1.0 cli command "enable"
Action 2.0 cli command "config t"
Action 3.0 cli command "router eigrp TESTING"
Action 4.0 cli command "address-fam ipv4 uni auton 1"
Action 5.0 cli command "network 10.0.0.0 0.0.0.3"
Action 6.0 cli command "network 1.1.1.0 0.0.0.255"
Action 7.0 cli command "topology base"
Action 8.0 cli command "distribute-list 10 in g0/1"
Action 9.0 syslog msg EIGRP-IS-IN-EFFECT

Event manager applet EIGRP-REMOVAL
Event track 78 state down
Action 1.0 cli command "enable"
Action 2.0 cli command "config t"
Action 3.0 cli command "no router eigrp TESTING"
```




```
Track 10 ip sla 1

Track 50 ip sla 2



Track 77 list Boolean or
Object 10
Object 50

Track 78 list Boolean and
Object 10 not
Object 50

Track 79 list Boolean or
Object 10 not
Object 50 not
```

```
Event manager applet EIGRP-BUILDER
Event track 78 state up
Action 1.0 cli command "enable"
Action 2.0 cli command "config t"
Action 3.0 cli command "router eigrp TESTING"
Action 4.0 cli command "address-fam ipv4 uni auton 1"
Action 5.0 cli command "network 10.0.0.0 0.0.0.3"
Action 6.0 cli command "network 1.1.1.0 0.0.0.255"
Action 7.0 cli command "topology base"
Action 8.0 cli command "distribute-list 10 in g0/1"
Action 9.0 syslog msg EIGRP-IS-IN-EFFECT



Event manager applet EIGRP-BUILDER
Action 6.5 cli command "network 2.2.2.0 0.0.0.255"
```

```
R1#

Config t

Alias exec x1 show ip int brief
Alias exec x2 show ip route
Alias exec x3 show ip ospf neighbor

Alias exec b1 show bgp vpnv6 vrf BGP-NEIGHBORS unicast summary | incl 22.228.0.1

Alias configure e9 router eigrp 9
Alias configure t9 interface tunnel 97009
Alias configure a1 ip access-list extended INBOUND-TRAFFIC

Alias exec RESET tclsh reset.base-config.tbc
```

R1#

Config t

Alias exec x3 show ip ospf neighbor

```
DATACENTER-ROUTER(config)#
DATACENTER-ROUTER(config)#alias exec x3 show ip ospf neighbor
DATACENTER-ROUTER(config)#
DATACENTER-ROUTER(config)#exit
DATACENTER-ROUTER#
DATACENTER-ROUTER#x3

Neighbor ID     Pri   State           Dead Time   Address         Interface
22.17.1.7         1   FULL/BDR        00:00:31    22.18.107.1     GigabitEthernet0/0/1.107
1.1.1.1           0   FULL/  -        00:00:35    22.255.200.0    GigabitEthernet0/0/1.98
DATACENTER-ROUTER#
DATACENTER-ROUTER#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
DATACENTER-ROUTER(config)#
DATACENTER-ROUTER(config)#do x3

Neighbor ID     Pri   State           Dead Time   Address         Interface
22.17.1.7         1   FULL/BDR        00:00:32    22.18.107.1     GigabitEthernet0/0/1.107
1.1.1.1           0   FULL/  -        00:00:37    22.255.200.0    GigabitEthernet0/0/1.98
DATACENTER-ROUTER(config)#
```

```
R1#

Config t

Alias configure a1 ip access-list extended INBOUND-TRAFFIC
```

```
DATACENTER-ROUTER(config)#
DATACENTER-ROUTER(config)#
DATACENTER-ROUTER(config)#
DATACENTER-ROUTER(config)#alias configure a1 ip access-list extended INBOUND-TRAFFIC
DATACENTER-ROUTER(config)#
DATACENTER-ROUTER(config)#a1
DATACENTER-ROUTER(config-ext-nacl)#
DATACENTER-ROUTER(config-ext-nacl)#
```