

IP SLA ICMP-ECHO

-
-
-
- cli ESR
- SLA SNMP
- VRRP source ip
- SLA

ESR SLA, , (responder - agent). SLA. 1.11.2 SLA ICMP-ECHO, ip .

ICMP , SLA. :

- "Success"- ICMP .
- "Fail" - ICMP .

, ICMP , SLA .

:

```
ip sla
```

:

```
ip sla test < >
  icmp-echo <IP > source-ip <IP > num-packets <      > interval <   , >
    frequency < , >
    packet-size < , >
    ttl < >
    timeout < , >
    vrf < VRF>
    enable
exit
```

:

```
ip sla test <Set ip sla test number>
```

<Set ip sla test number> - , [1-10000].

```
icmp-echo <IP > source-ip <IP > num-packets [<Number of packets>] interval [<Interval in milliseconds>]
```

<IP >- IP , .

<IP >- IP , .

num-packets - , [1-6000], 100. ICMP-ECHO 3.

interval - , [1-255], 20 .

vrf - VRF, VRF.

frequency - , [1-604800], 10.

packet-size - , [64-10000], 74 .

ttl - TTL , [0-255], 64.

timeout - , [1-4294967295], 3000 .

enable - SLA .

```
exit -
```

:

```
ip sla schedule <> life <{ <LIFE-TIME> | forever }> start-time <{ <MONTH> <DAY> <TIME> | now }>
```

<> - SLA , [1..10000]

<LIFE-TIME> - , [1..2147483647] . forever - .

<TIME> - , HH:MM:SS, :

- HH - , [0..23];
- MM - , [0..59];
- SS - , [0..59].

<MONTH> - , [January / February / March / April / May / June / July / August / September / October / November / December];

<DAY> - , [1..31];

now - .



! , , .

```
ip sla

ip sla test 1
  icmp-echo 192.168.250.1 source-ip 192.168.200.49 num-packets 3
  enable
exit
ip sla test 12
  vrf br12
  icmp-echo 192.168.48.11 source-ip 198.19.0.2 num-packets 3
  enable
exit

ip sla schedule 1 life forever start-time now
ip sla schedule 12 life forever start-time now
```

cli ESR

```
show ip sla test configuration [<>] vrf [< VRF>]
```

```
<> - , , VRF.
```

```
< VRF> - VRF, , VRF, . VRF.
```

```
esr# show ip sla test configuration
Test number: 1
State: Enabled
Control phase: Disabled
Authentication: Disabled
Destination address: 192.168.250.1
Destination port: --
Frequency: 10
Interval: 20
Number of packets: 3
Packet size: 74
Source address: 192.168.200.49
Source interface: --
Source port: --
DSCP: 0
COS: 0
Timeout: 3000
Number of history records: 10

esr# show ip sla test configuration 12 vrf br12
Test number: 12
State: Enabled
Control phase: Disabled
Authentication: Disabled
Destination address: 192.168.48.11
Destination port: --
Frequency: 10
Interval: 20
Number of packets: 3
Packet size: 74
Source address: 198.19.0.2
Source interface: --
Source port: --
DSCP: 0
COS: 0
Timeout: 3000
Number of history records: 10
```

```
show ip sla test statistics [<>] vrf [< VRF>] - :
```

```

esr# show ip sla test statistics
Number LC LCR LCF TC OADF OADVF OADR OADRV TAD
DUP OSF OSR
----- -----
----- -----
1 0 0 0 3 0 0 0 0 0
0 0 0

esr# show ip sla test statistics vrf br12
Number LC LCR LCF TC OADF OADVF OADR OADRV TAD
DUP OSF OSR
----- -----
----- -----
12 0 0 0 3 0 0 0 0 0
0 0

```

:

```

esr# show ip sla test statistics 1
Test number: 1
Test status: Successful
Transmitted packets: 3
Lost packets: 0 (0%)
Lost packets in forward direction: 0 (0%)
Lost packets in reverse direction: 0 (0%)
One-way delay forward min/avg/max: 0/0/0 milliseconds
One-way delay reverse min/avg/max: 0/0/0 milliseconds
One-way jitter forward min/avg/max: 0/0/0 milliseconds
One-way jitter reverse min/avg/max: 0/0/0 milliseconds
Two-way delay min/avg/max: 0/0/0 milliseconds
Duplicate packets: 0
Out of sequence packets in forward direction: 0
Out of sequence packets in reverse direction: 0

esr# show ip sla test statistics 12 vrf br12
Test number: 12
Test status: Fail
Transmitted packets: 3
Lost packets: 0 (0%)
Lost packets in forward direction: 0 (0%)
Lost packets in reverse direction: 0 (0%)
One-way delay forward min/avg/max: 0/0/0 milliseconds
One-way delay reverse min/avg/max: 0/0/0 milliseconds
One-way jitter forward min/avg/max: 0/0/0 milliseconds
One-way jitter reverse min/avg/max: 0/0/0 milliseconds
Two-way delay min/avg/max: 0/0/1 milliseconds
Duplicate packets: 0
Out of sequence packets in forward direction: 0
Out of sequence packets in reverse direction: 0

```

SLA SNMP

SNMP SNMP ESR:

```

snmp-server
snmp-server system-shutdown
snmp-server community "public11" ro
snmp-server community "private1" rw

snmp-server host 100.123.0.2
exit

```

, SLA (Success Fail) :

```

ip sla logging -      SLA
snmp-server enable traps syslog -   syslog      SNMP .
      syslog.

```

[ELTEX-ESR-IPSLA-MIB.mib](#) - MIB ESR SLA

```

snmpwalk -v2c -c public11 198.18.128.2 -m /tftpboot/ELTEX-ESR-IPSLA-MIB.mib ELTEX-ESR-IPSLA-MIB::
eltEsrIpSlaStatTestStatus.1
ELTEX-ESR-IPSLA-MIB::eltEsrIpSlaStatTestStatus.1 = INTEGER: successful(2)

snmpwalk -v2c -c public11 198.18.128.2 -m /tftpboot/ELTEX-ESR-IPSLA-MIB.mib ELTEX-ESR-IPSLA-MIB::
eltEsrIpSlaStatTestStatus.12
ELTEX-ESR-IPSLA-MIB::eltEsrIpSlaStatTestStatus.12 = INTEGER: fail(1)

```

VRPP source ip

VRPP source ip SLA , , VRPP backup fail ,.. VRPP . VRPP master icmp , .

SLA

```

snmp-server
snmp-server system-shutdown
snmp-server community "public11" ro
snmp-server community "private1" rw

snmp-server host 100.123.0.2
exit

snmp-server enable traps syslog

ip sla

ip sla logging

ip sla test 1
  icmp-echo 192.168.250.1 source-ip 192.168.200.49 num-packets 3
  frequency 90
  packet-size 1500
  ttl
  timeout 500
  enable
exit
ip sla test 12
  vrf br12
  icmp-echo 192.168.48.11 source-ip 198.19.0.2 num-packets 3
  frequency 90
  packet-size 1400
  ttl
  timeout 1000
  enable
exit

ip sla schedule 1 life forever start-time now
ip sla schedule 12 life forever start-time now

```