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## SNMP

### access

SNMPv3.

(no) .

```
access <TYPE>
no access
```

<TYPE> -- :

- ro -- ;
- rw -- .

CONFIG-SNMP-USER

```
esr(config-snmp-user)# access rw
```

## authentication access

(no) .

```
authentication access <TYPE>
no authentication access
```

<TYPE> - :

- auth - ;
- priv - .

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CONFIG-SNMP-USER

```
esr(config-snmp-user)# authentication algorithm auth
```

## authentication algorithm

SNMPv3-.

(no) .

```
authentication algorithm <ALGORITHM>
no authentication algorithm
```

<ALGORITHM> - :

- md5 - md5;
- sha1 - sha1.

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CONFIG-SNMP-USER

```
esr(config-snmp-user)# authentication algorithm md5
```

## authentication key

SNMPv3-.

(no) .

```
authentication key ascii-text { <CLEAR-TEXT> | encrypted <ENCRYPTED-TEXT> }
no authentication key
```

```
<CLEAR-TEXT>-, 8 16 ;
encrypted - :
<ENCRYPTED-TEXT> - 8 16 (16 32) (0xYYYY...) (YYYY...).
```

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## CONFIG-SNMP-USER

```
esr(config-snmp-user)# authentication key ascii-text 123456789
esr(config-snmp-user)# authentication key ascii-text encrypted CDE65039E5591FA3F1
```

## client-list

IP-, SNMPv3 SNMPv3 .

(no) SNMPv3-.

```
[no] client-list <NAME>
```

```
<NAME> - object-group, 31 .
```

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## CONFIG-SNMP-USER

```
esr(config-snmp-user)# client-list OBG005
```

## community

```
SNMP-community .
```

```
(no) community.
```

```
community <COMMUNITY>
```

```
no community
```

```
<COMMUNITY> – SNMP, [1..128];
```

```
community – .
```

```
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```

```
CONFIG-SNMP-HOST
```

```
esr(config-snmp-host)# community privatekey
```

## ip address

```
IP-, SNMPv3-.
```

```
(no) SNMPv3-.
```

```
[no] ip address <ADDR>
```

```
<ADDR> – IP- , , AAA.BBB.CCC.DDD, [0..255];
```

```
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```

```
CONFIG-SNMP-USER
```

```
esr(config-snmp-user)# ip address 192.168.85.33
```

## ipv6 address

```
IPv6-, SNMPv3-.
```

```
(no) SNMPv3-.
```

```
[no] ipv6 address <IPV6-ADDR>
```

```
<IPV6-ADDR> – IPv6- , X:X:X:X::X, [0..FFFF].
```

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CONFIG-SNMP-USER

```
esr(config-snmp-user)# ipv6 address AC:05:12:44::24
```

## enable

SNMPv3-.

(no) SNMPv3-.

```
[no] enable
```

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CONFIG-SNMP-USER

```
esr(config-snmp-user)# enable
```

## oid-tree

OID (/). OID .

OID .

(no) oid-tree.

```
oid-tree <OID> <ACTION>
```

```
no oid-tree <OID>
```

<OID> – OID, 255 ;

<ACTION> – , OID

- excluded – OID;
- included – OID.

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#### CONFIG-SNMP-VIEW

```
esr(config-snmp-view)# oid-tree 1.3.6.1.2.1.2.2 excluded
```

#### port

SNMP .

(no) .

```
port <PORT>
no port
```

<PORT> – UDP-, [1..65535].

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#### CONFIG-SNMP-HOST

```
esr(config-snmp-host)# port 5555
```

#### privacy algorithm

(no) .

```
privacy algorithm <ALGORITHM>
no privacy algorithm
```

<ALGORITHM> – :

- aes128 – AES-128;
- des – DES.

CONFIG-SNMP-USER

```
esr(config-snmp-user)# privacy algorithm des
```

**privacy key**

(no) .

```
privacy key ascii-text { <CLEAR-TEXT> | encrypted <ENCRYPTED-TEXT> }
no privacy key
```

```
<CLEAR-TEXT> - , 8 16 ;
<ENCRYPTED-TEXT> - 8 16 (16 32) (0xYYYY...) (YYYY...).
```

CONFIG-SNMP-USER

```
esr(config-snmp-user)# privacy key ascii-text 123456789
esr(config-snmp-user)# privacy key ascii-text encrypted CDE65039E5591FA3F1
```

**rmon collection statistics**

RMON- .

(no) RMON- .

```
rmon collection statistics <INDEX> owner <OWNER>
no rmon collection statistics
```

```
<INDEX> - RMON- ;
<OWNER> - [1..127] .
```

CONFIG-GI

CONFIG-TE

```
esr(config-if)# rmon collection statistics 17 owner admin
```

## snmp-server

SNMP- VRF.

(no) SNMP-.

[no] snmp-server

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## CONFIG

```
esr(config)# snmp-server
```

## snmp-server community

SNMP.

(no) .

[no] snmp-server community <COMMUNITY> [ <TYPE> ] [ { <ADDR> | <IPV6-ADDR> } ] [client-list <OBJ-GROUP-NETWORK-NAME> ] [ <VERSION> ] [ view <VIEW-NAME> ] [ vrf <VRF> ]

<COMMUNITY> – SNMP, [1..128];

<TYPE> – :

- ro – ;
- rw – .

<ADDR> – IP-, , AAA.BBB.CCC.DDD, [0..255].

<IPV6-ADDR> – IPv6-, X:X:X::X, [0..FFFF].

<OBJ-GROUP-NETWORK-NAME> – IP-, snmp-, 31 .

<VERSION> – snmp, community, v1 v2c.

<VIEW-NAME> – SNMP view , OID.

<VRF> – VRF, , 31 .

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CONFIG

```
esr(config)# snmp-server community public rw
```

### **snmp-server contact**

SNMP, ( ). , , .

(no) SNMP, .

[no] snmp-server contact <CONTACT>

<CONTACT>- , 255 .

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CONFIG

```
esr(config)# snmp-server contact ivanov_ivan
```

### **snmp-server dscp**

DSCP IP- SNMP-.

(no) DSCP .

snmp-server dscp <DSCP>

no snmp-server dscp

<DSCP>- DSCP, [0..63].

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CONFIG

```
esr(config)# snmp-server dscp 40
```

### **snmp-server enable traps**

SNMP-.

(no) SNMP-.

```
[no] snmp-server enable traps
```

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CONFIG

```
esr(config)# snmp-server enable traps
```

### **snmp-server enable traps config**

SNMP- .

(no) .

```
[no] snmp-server enable traps config [ <ACT> ]
```

<ACT>- : .

- commit - ;
- confirm - .

<ACT>- .

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CONFIG

```
esr(config)# snmp-server enable traps config commit
```

### **snmp-server enable traps entity**

SNMP- running-config.

(no) .

```
[no] snmp-server enable traps entity [ <ENT> ]
```

<ENT>- : .

- config-change – running-config.

<ENT> – .

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CONFIG

```
esr(config)# snmp-server enable traps entity
```

### **snmp-server enable traps entity-sensor**

SNMP- .

(no) .

```
[no] snmp-server enable traps entity-sensor [ <ENT> ]
```

<ENT> – : .

- threshold – .

<ENT> – .

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CONFIG

```
esr(config)# snmp-server enable traps entity-sensor
```

### **snmp-server enable traps environment**

SNMP- .

(no) .

```
[no] snmp-server enable traps environment [ <ENV> ]
```

<ENV> – : .

- pwrin – ;
- pwrin-insert – ;
- fan – ;
- fan-speed-changed – ;
- fan-speed-high – ;
- memory-flash-low – NAND ;
- memory-flash-critical-low – NAND ;
- memory-ram-low – RAM ;
- memory-ram-critical-low – RAM ;
- cpu-load – ;
- cpu-overheat-temp – CPU ;

- cpu-critical-temp – CPU ;
- cpu-supercooling-temp – CPU ;
- switch-overheat-temp – ;
- switch-supercooling-temp – ;
- board-overheat-temp – ;
- board-supercooling-temp – ;
- sfp-overheat-temp – sfp-;
- sfp-supercooling-temp – sfp-.

<ENV> – .

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## CONFIG

```
esr(config)# snmp-server enable traps enviroment pwrin
```

### **snmp-server enable traps envmon**

SNMP- .

(no) .

```
[no] snmp-server enable traps envmon [ <ENV> ]
```

<ENV> – : .

- fan – ;
- shutdown – ;
- supply – ;
- temperature .

<ENV> – .

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## CONFIG

```
esr(config)# snmp-server enable traps envmon fun
```

### **snmp-server enable traps files-operations**

SNMP- .

(no) .

```
[no] snmp-server enable traps files-operations [ <ACT> ]
```

<ACT> – : .

- successful – ;

- failed – ;
- canceled – ;

canceled – .

<ACT> – .

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CONFIG

```
esr(config)# snmp-server enable traps files-operations canceled
```

### **snmp-server enable traps flash**

SNMP- flash-.

(no) .

```
[no] snmp-server enable traps flash [ <ACT> ]
```

<ACT> – : .

- insertion – flash-;
- removal – flash-.

<ACT> – .

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CONFIG

```
esr(config)# snmp-server enable traps flash removal
```

### **snmp-server enable traps interfaces**

SNMP- .

(no) .

```
[no] snmp-server enable traps interfaces [ <ACT> ]
```

<ACT> – : .

- rx-utilization-high – ;
- tx-utilization-high – ;
- number-high – IP-;

<ACT> – .

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CONFIG

```
esr(config)# snmp-server enable traps interfaces rx-utilization-high
```

### **snmp-server enable traps ports**

SNMP-

(no) .

```
[no] snmp-server enable traps ports [ <TYPE> ]
```

<TYPE>- : .

- port-counters-errors - .

<TYPE>- .

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CONFIG

```
esr(config)# snmp-server enable traps ports
```

### **snmp-server enable traps screens**

SNMP- c DoS .

(no) .

```
[no] snmp-server enable traps screens [ <SCREEN> ]
```

<SCREEN>- DoS :

- dest-limit - ;
- source-limit - ;
- icmp-threshold - ICMP flood ;
- udp-threshold - UDP flood ;
- syn-flood - SYN flood ;
- land - land ;
- winnuke - winnuke ;
- icmp-frag - ICMP-;
- syn-flag - TCP-, SYN;
- unknown-proto - , ID IP 137 ;
- ip-frag - ;
- port-scan - port scan ;
- ip-sweep - IP-sweep ;
- syn-fin - TCP-, SYN FIN;
- fin-no-ack - TCP- FIN ACK;

- no-flag – TCP-, flags;
- spoofing – IP spoofing ;
- reserved – ICMP- 2 7 (reserved);
- quench – ICMP- 4 (source quench);
- echo-request – ICMP 8 (echo-request);
- time-exceeded – ICMP- 11 (time exceeded);
- unreachable – ICMP- 3 (destination-unreachable);
- icmp-large – ICMP- ;
- tcp-all-flags – tcp- ;
- udp-frag – udp- .

<LINK> – .

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CONFIG

```
esr(config)# snmp-server enable traps screens reserved
```

### **snmp-server enable traps snmp**

SNMP- .

(no) .

[no] snmp-server enable traps snmp [ <ACT> ]

<ACT> – : .

- authentication – snmp- community snmpv3-;
- coldstart – snmp- ;
- linkdown – link down;
- linkup – link up.

<ACT> – .

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CONFIG

```
esr(config)# snmp-server enable traps snmp linkup
```

### **snmp-server enable traps syslog**

SNMP- syslog-.

(no) .

[no] snmp-server enable traps syslog

## CONFIG

```
esr(config)# snmp-server enable traps syslog
```

**snmp-server enable traps wifi**

SNMP- wifi-.

(no) .

[no] snmp-server enable traps wifi [ <NAME> ]

<NAME> – softgre:

- wifi-tunnels-number-in-bridge-high – sub-gre- bridge
- wifi-tunnels-operation– snmp softgre.

<NAME> – .

## CONFIG

```
esr(config)# snmp-server enable traps syslog
```

**snmp-server host**

SNMP- IP- SNMP-.

(no) SNMP-.

[no] snmp-server host { <ADDR> | <IPV6-ADDR> } [vrf <VRF>]

<ADDR> – IP-, AAA.BBB.CCC.DDD, [0..255];

<IPV6-ADDR> – IPv6-, X:X:X:X::X, [0..FFFF];

<VRF> – VRF, SNMP-, 31 .

## CONFIG

```
esr(config)# snmp host 192.168.2.2
```

## snmp-server location

SNMP, ( ). ,,, ..  
(no) .

```
[no] snmp-server location <LOCATION>
```

```
<LOCATION>- , 255 .
```

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CONFIG

```
esr(config)# snmp-server location duglasa_adamsa_42
```

## snmp-server system-shutdown

snmp-.  
(no) SNMP-.

```
[no] snmp-server system-shutdown
```

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CONFIG

```
esr(config)# snmp-server system-shutdown
```

## snmp-server trap link

SNMP-trap.  
(no) .

```
snmp-server trap link <MODE>
no snmp-server host
```

<MODE> – SNMP-trap. :

- ietf;
- cisco.

ietf

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CONFIG

```
esr(config)# snmp-server trap link cisco
```

### **snmp-server user**

SNMPv3-.
(no) SNMPv3-.

```
[no] snmp-server user <NAME>
```

<NAME> – , 1 128 .

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CONFIG

```
esr(config)# snmp-server user admin
esr(config-snmp-user)#
```

### **snmp-server view**

snmp view, OID community (SNMPv2) user (SNMPv3).
(no) snmp view.

```
[no] snmp-server view <VIEW-NAME>
```

<VIEW-NAME> – SNMP view, 31 .

## CONFIG

```
esr(config)# snmp-server view user_access
esr(config-snmp-view)#
```

**source-address**

IP- .

(no) .

```
source-address { <ADDR> | <IPV6-ADDR> }
no source-address
```

<ADDR> – IP-, AAA.BBB.CCC.DDD, [0..255];  
<IPV6-ADDR> – IPv6-, X:X:X:X::X, [0..FFFF].

IPv4/IPv6 – SNMP-.

## CONFIG-SNMP-HOST

```
esr(config-snmp-host)# source-address 192.168.22.17
```

**source-interface**

, IPv4/IPv6- .

(no) .

```
source-interface { <IF> | <TUN> }
no source-interface
```

<IF> – , ;  
<TUN> – , .

CONFIG-SNMP-HOST

```
esr(config-snmp-host)# source-interface gigabitethernet 1/0/1
```

## view

snmp view,      OID SNMPv3 user.

(no) snmp view.

```
[no] view <VIEW-NAME>
```

<VIEW-NAME> – SNMP view ,      OID,    31 .

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CONFIG-SNMP-USER

```
esr(config-snmp-user)# view user_view
```

## SYSLOG

### logging aaa configuration

syslog-    aaa.

(no)      aaa.

```
[no] logging aaa configuration
```

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CONFIG

```
esr(config)# logging aaa configuration
```

## **logging acl configuration**

syslog- ACL.

(no) ACL.

[no] logging acl configuration

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CONFIG

```
esr(config)# logging acl configuration
```

## **logging firewall configuration**

syslog-

(no)

[no] logging firewall configuration

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CONFIG

```
esr(config)# logging firewall configuration
```

## **logging login on-failure**

syslog- CLI.

(no)

[no] logging login on-failure

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CONFIG

```
esr(config)# logging login on-failure
```

## logging nat

syslog- NAT.

(no) NAT.

[no] logging nat [<NAT-TYPE>]

<NAT-TYPE> – NAT :

- destination;
- proxy;
- source;

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CONFIG

```
esr(config)# logging nat source
```

## logging service start-stop

syslog-

(no)

[no] logging service start-stop

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CONFIG

```
esr(config)# logging service start-stop
```

## logging syslog configuration

```
syslog- syslog-  
(no) syslog-
```

```
[no] logging syslog configuration
```

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CONFIG

```
esr(config)# logging syslog configuration
```

## logging userinfo

```
syslog- user-profile.  
(no) user-profile.
```

```
[no] logging userinfo
```

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CONFIG

```
esr(config)# logging userinfo
```

## ntp logging

```
syslog- NTP-  
(no) NTP-
```

```
[no] ntp logging
```

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CONFIG

```
esr(config)# ntp logging
```

## show syslog

```
syslog-, log-, log- .
```

```
show syslog <FILE> [ from-date <YEAR> <MONTH> <DAY> ] [ from-time <TIME> ] [ to-date <YEAR> <MONTH> <DAY> ] [ to-time <TIME> ] [ from-end ]
```

```
<FILE>- , 31 ;
```

```
from-date - ;
```

```
from-time - ;
```

```
to-date - ;
```

```
to-time - ;
```

```
<YEAR>- , [2001..2037].
```

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

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

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

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

```
from-end - , ;
```

ROOT

```

esr# show syslog
  Log files
  ~~~~~
##  Name          Size in bytes  Date of last modification
---  -----
1   debug         371681        Thu Jan  1 16:17:04 1970
2   debug.1       524222        Thu Jan  1 01:48:13 1970
3   esr          97259         Thu Jan  1 16:17:01 1970
---  -----
Total files: 4
esr# show syslog configuration
SYSLOG
File size: 512 (kiB)
Number of logs: 3
Console: info
  Files:
  ~~~~~
ID   Name          Severity
--  -----
0    esr           info

```

## show syslog configuration

syslog-.

show syslog configuration

ROOT

```

esr# show syslog configuration
SYSLOG
File size: 500 (kiB)
Number of logs: 1
Console: info
Monitor: info

```

## syslog cli-commands

syslog-.

(no) .

```
[no] syslog cli-commands
```

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CONFIG

```
esr(config)# syslog cli-commands
```

## syslog console

```
syslog- . , .  
(no) .
```

```
syslog console <SEVERITY>  
no syslog console
```

```
<SEVERITY>- , ( ):
```

- emerg - , ;
- alert - , ;
- crit - , ;
- error - ;
- warning - , ;
- notice - ;
- info - ;
- debug - , ;
- none - syslog- .

info

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CONFIG

```
esr(config)# syslog console info
```

## syslog file

```
syslog . , , .  
(no) syslog .
```

```
syslog file { flash:syslog/<NAME> | tmppsys:syslog/<NAME> } <SEVERITY>
no syslog file { flash:syslog/<NAME> | tmppsys:syslog/<NAME> | all}

flash - ;
tmppsys - ;
<NAME> - , , 31 . «all» syslog-;
<SEVERITY> - , syslog console.
```

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CONFIG

```
esr(config)# syslog file esr info
```

## syslog file-size

(no)

```
syslog file-size <SIZE>
no syslog file-size

<SIZE> - , [10..10000000] .
```

500

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CONFIG

```
esr(config)# syslog file-size 10000
```

## syslog host

syslog syslog- . , .
(no) syslog syslog-.

```
syslog host <HOSTNAME> { <ADDR> | <IPV6-ADDR> } [ <SEVERITY> ] [ <TRANSPORT> ] [ <PORT> ] [ vrf <VRF> ] [ source-
address { <SRC-ADDR> | <IPV6-SRC-ADDR> } ]
no syslog host { <HOSTNAME> | all }
```

```

<HOSTNAME> – syslog-, 31 . . «all» no syslog host all syslog-;
<ADDR> – IP-, AAA.BBB.CCC.DDD, [0..255];
<IPV6-ADDR> – IPv6-, X:X:X:X::X, [0..FFFF];
<SEVERITY> – , , syslog console;
<TRANSPORT> – , , :
    • TCP – TCP;
    • UDP – UDP;
<PORT> – TCP/UDP-, , [1..65535], 514;
<VRF> – VRF, syslog-, 31 ;
<SRC-ADDR> – IP-, IP- syslog ;
<IPV6-SRC-ADDR> – IPv6-, IPv6- syslog ;
all – sysloh-host.

```

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CONFIG

```
esr(config)# syslog host eltex 192.168.2.2
```

## **syslog max-files**

```

        .
        .
        (no) .
        .

syslog max-files <NUM>
no syslog max-files

<NUM> – , [1 .. 1000].
```

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CONFIG

```
esr(config)# syslog max-files 100
```

## **syslog monitor**

```
syslog-, (Telnet, SSH). , .
(no) .
```

```
syslog monitor <SEVERITY>
no syslog monitor
```

```
<SEVERITY>- , syslog console.
```

info

15

CONFIG

```
esr(config)# syslog monitor info
```

## syslog reload debugging

```
debugging syslog-.
(no) .
```

```
[no] syslog reload debugging
```

15

CONFIG

```
esr(config)# syslog reload debugging
```

## syslog sequence-numbers

```
syslog-.
(no) .
```

```
[no] syslog sequence-numbers
```

15

CONFIG

```
esr(config)# syslog sequence-numbers
```

### syslog snmp

```
syslog-,  snmp-  snmp-trap. , , .  
(no) .
```

```
syslog snmp <SEVERITY>  
no syslog snmp
```

```
<SEVERITY> - ,  syslog console.
```

info

10

CONFIG

```
esr(config)# syslog snmp info
```

### syslog timestamp msec



ESR-100/200/1000/1200/1500/1700

```
syslog-.  
(no) .
```

```
[no] syslog timestamp msec
```

15

CONFIG

```
esr(config)# syslog timestamp msec
```

## syslog sip-level

sip-.

(no) .

```
[no] syslog sip-level <LEVEL>
```

```
<LEVEL> – sip-, syslog. [0..9].
```

0

15

CONFIG

```
esr(config)# syslog sip-level 8
```

## SSH, Telnet

### crypto key generate

SSH.

```
crypto key generate [ dsa | ecdsa <ESCDAs> | ed25519 <ED25519> | rsa <RSA> | rsal <RSA1> ]
```

dsa – DSA;

ecdsa – ECDSA;

- <ECDSA> – , 256, 384 521;
- , 521.

```
ed25519 – ED25519;
• <ED25519> – , [256..2048];
• , 2048.

rsa – RSA ;
• <RSA> – , [1024..2048];
• , 2048.

rsa1 – RSA1;
• <RSA> – , [1024..2048];
• , 2048.
```

15

## CONFIG

```
esr(config)# crypto key generate ecdsa
```

## ip ftp client password

FTP.

(no) .

```
ip ftp client password { <CLEAR-TEXT> | encrypted <ENCRYPTED-TEXT> }
[no] ftp client password
```

```
<CLEAR-TEXT> – , [1 .. 16], [0-9a-fA-F];
<ENCRYPTED-TEXT> – , [2..32].
```

15

## CONFIG

```
esr(config)# ip ftp client password test
```

## ip ftp client username

FTP.

(no) .

```
ip ftp client username <NAME>
no ftp client username
```

```
<NAME> - , 31 .
```

15

CONFIG

```
esr(config)# ip ftp client username test
```

## ip sftp client password

SFTP.

(no) SFTP.

```
ip sftp client password { <TEXT> | encrypted < ENCRYPTED-TEXT > }
no ip sftp client password
```

<TEXT> - [1..16] ASCII-;

<ENCRYPTED-TEXT> - , [8..16] , [16..32]

15

CONFIG

```
esr(config)# ip sftp client password 123456789
```

## ip sftp client username

SFTP.

(no) SFTP.

```
ip sftp client username <USERNAME>
no ip sftp client username
```

<USERNAME> - , 31 .

15

CONFIG

```
esr(config)# ip sftp client username esruser
```

### **ip ssh authentication algorithm disable**

SSH-.

(no)    SSH-.

```
[no] ip ssh authentication algorithm <ALGORITHM> disable
```

<ALGORITHM> – , [md5, md5-96, sha1, sha1-96, sha2-256, sha2-512, ripemd160].

15

CONFIG

```
esr(config)# no ip ssh authentication algorithm md5 disable
```

### **ip ssh authentication retries**

SSH-.

(no)    SSH- .

```
ip ssh authentication retries <NUM>
```

```
no ip ssh authentication retries
```

<NUM> – SSH- [1..10].

10

6

CONFIG

```
esr(config)# ip ssh authentication retries 5
```

## ip ssh authentication timeout

SSH.

(no) SSH- .

```
ip ssh authentication timeout <SEC>
```

```
no ip ssh authentication timeout
```

<SEC>- , [30..360].

10

120

CONFIG

```
esr(config)# ip ssh authentication timeout 60
```

## ip ssh client password

SCP.

(no) .

```
ip ssh client password { <CLEAR-TEXT> | encrypted <ENCRYPTED-TEXT> }
```

```
no ssh client password
```

<CLEAR-TEXT>- , [1 .. 16], [0-9a-fA-F];

<ENCRYPTED-TEXT>- , [2..32].

15

CONFIG

```
esr(config)# ip ssh client password test132
```

### **ip ssh client source-ip**

ip-, ssh- .  
(no) .

ip ssh client source-ip <ADDR>  
no ssh client source-ip

<ADDR> – IP-, AAA.BBB.CCC.DDD, [0..255]. IP- - / .

10

CONFIG

```
esr(config)# ip ssh client source-ipt 192.168.22.78
```

### **ip ssh client username**

SCP.  
(no) .

ip ssh client username <NAME>  
no ssh client username

<NAME> – , 31 .

15

CONFIG

```
esr(config)# ip ssh client username tester
```

### **ip ssh dscp**

DSCP IP- SSH- .  
(no) DSCP .

```
ip ssh dscp <DSCP>
```

```
no ip ssh dscp
```

<DSCP> – DSCP, [0..63].

32

10

CONFIG

```
esr(config)# ip ssh dscp 40
```

### **ip ssh encryption algorithm disable**

SSH-.

(no) SSH-.

[no] ip ssh encryption algorithm <ALGORITHM> disable

<ALGORITHM> – , [aes128, aes192, aes256, aes128ctr, aes192ctr, aes256ctr, arcfour, arcfour128, arcfour256, blowfish, cast128, 3des].

15

CONFIG

```
esr(config)# ip ssh encryption algorithm aes128 disable
```

### **ip ssh key-exchange algorithm disable**

SSH- .

(no) SSH-.

[no] ip ssh key-exchange algorithm <ALGORITHM> disable

<ALGORITHM> – , [dh-group1-sha1, dh-group14-sha1, dh-group-exchange-sha1, dh-group-exchange-sha256, ecdh-sha2-nistp256, ecdh-sha2-nistp384, ecdh-sha2-nistp521].

## CONFIG

```
esr(config)# ip ssh key-exchange algorithm dh-group-exchange-shal disable
```

**ip ssh key-exchange time**

SSH-.

(no)     SSH- .

ip ssh key-exchange time <SEC>

no ip ssh key-exchange time

<SEC> – , [1..72].

## CONFIG

```
esr(config)# ip ssh key-exchange time 24
```

**ip ssh key-exchange volume**

,     SSH-.

(no) ,     SSH- .

ip ssh key-exchange volume <DATA>

no ip ssh key-exchange volume

<DATA> – , [1..4096].

1000

CONFIG

```
esr(config)# ip ssh key-exchange volume 512
```

## ip ssh port

SSH- .

(no) .

```
ip ssh port <PORT>
no ip ssh port
```

<PORT> – , [1..65535].

22

15

CONFIG

```
esr(config)# ip ssh port 3001
```

## ip ssh server

SSH- .

(no) SSH-.

```
[no] ip ssh server [ vrf <VRF>]
```

<VRF> – VRF, 31, SSH-.

SSH- .

10

CONFIG

```
esr(config)# no ip ssh server
```

### ip telnet dscp

DSCP IP- Telnet-.

(no) DSCP .

```
ip telnet dscp <DSCP>
```

```
no ip telnet dscp
```

<DSCP> – DSCP, [0..63].

32

15

CONFIG

```
esr(config)# ip telnet dscp 40
```

### ip telnet port

Telnet- .

(no) .

```
ip telnet port <PORT>
```

```
no ip telnet port
```

<PORT> – , [1..65535].

23

15

CONFIG

```
esr(config)# ip telnet port 2001
```

## ip telnet server

Telnet- .

(no) Telnet-.

```
[no] ip telnet server [vrf <VRF>]
```

<VRF>- VRF, 31, Telnet-.

Telnet- .

15

## CONFIG

```
esr(config)# no ip telnet server
```

## show crypto key mypubkey

, SSH.

```
show crypto key mypubkey <OPTIONS>
```

<OPTIONS>- :

- dsa – DSA;
- ecdsa – ECDSA;
- ed25519 – ED25519;
- rsa – RSA;
- rsa1 – RSA1.

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## ROOT

```
esr# show crypto key mypubkey rsa
Key data
-----
ssh-rsa
AAAAB3NzaC1yc2EAAAQABAAQDz750sWCQrnNufg1yhuksTFYCYdEfg
JZ9tWUvcssAZhCJWMewprXBuZMABzFmfBgl57pgapxn2qJXJ8ESMV7X7gPfy
xQQah61376z3SFcpKvwudNgwHiS5HCYPRQWx2Xdaz/nJtYr5NpYgLPba68NC
iXcqEp7EPR5GojDVxpuDuk0hPFcihzmt5Yx8ZptJRzRtsuDQYlowv0Qa24kd
O1Q90/1qKfbAhB6XI601+dK5VEj7giBESarcRn69/e/YVbdGBdTE93QWFPKI
bm63imfbxRwWtcwsFdIH18B1v9ZqDqqF/IO3TkIKa31hV9Gnsaw1AXi/IdyY
bYPboHRdcTlH/ root@esr-1000
```

## **port monitor**

(no) .

[no] port monitor

10

CONFIG-GI

CONFIG-TE

```
esr(config-if-gi)# port monitor interface gigabitethernet 1/0/5
```

## **port monitor interface**

(no) .

port monitor interface <IF> <DIRECTION>

no port monitor

<IF> - , , ;

<DIRECTION> - :

- tx - ;
- rx - .

10

CONFIG-GI

CONFIG-TE

```
esr(config-if-gi)# port monitor interface gigabitethernet 1/0/5
```

## **port monitor mode**

(no) .

```
port monitor mode <MODE>
no port monitor mode
```

<MODE> - :

- network - ;
- monitor-only - .

network

10

CONFIG

```
esr(config)# port monitor mode monitor-only
```

## port monitor remote



ESR-1000/1200/1500/1700

(RSPAN).

(no) (RSPAN).

```
[no] port monitor remote
```

10

CONFIG-GI

CONFIG-TE

```
esr(config-if-gi)# port monitor remote
```

## port monitor remote vlan



ESR-1000/1200/1500/1700

VLAN,  
(no) VLAN.

```
port monitor remote vlan <VID> <DIRECTION>
no port monitor remote vlan <DIRECTION>
```

<VID> – VLAN, [2...4094];

<DIRECTION> – :

- tx – VLAN ;
- rx – VLAN .

10

CONFIG

```
esr(config)# port monitor remote vlan 10
```

### show interfaces switch-port monitor

```
show interfaces switch-port monitor
```

1

ROOT

```
esr# show interfaces switch-port monitor
Port monitor mode:          network
RSPAN configuration RX:    VLAN 222
RSPAN configuration TX:    VLAN 222
Source Port     Destination Port     Type      RSPAN
-----  -----  -----  -----
gil1/0/7        gil1/0/6           RX,TX    Enabled
```

LLDP

## **lldp enable**

LLDP.

(no) LLDP.

[no] lldp enable

15

CONFIG

```
esr(config)# lldp enable
```

## **lldp hold-multiplier**

lldp-timer, , LLDP.

(no)

lldp hold-multiplier <SEC>

no lldp hold-multiplier

<SEC> – , [1..10].

4

10

CONFIG

```
esr(config)# lldp hold-multiplier 5
```

## **lldp management-address**

IP-, LLDP TLV management-address.

(no) LLDP TLV management-address.

```
lldp management-address <ADDR>
no lldp management-address

<ADDR> – IP-, AAA.BBB.CCC.DDD, [0..255]. IP- - / .
```

15

CONFIG

```
esr(config)# lldp management-address 192.168.54.42
```

### **lldp med fast-start enable**

LLDP-MED (.[lldp network-policy](#)).  
(no) LLDP-MED .

```
[no] lldp med fast-start enable
```

LLDP-MED .

15

CONFIG

```
esr(config)# lldp med fast-start enable
```

### **lldp med fast-start tx-interval**

LLDP-MED (.[lldp network-policy](#)).  
(no) LLDP-MED .

```
lldp med fast-start tx-interval <SEC>
[no] lldp med fast-start tx-interval
```

```
<SEC> - , [1.. 32768] .
```

1

10

CONFIG

```
esr(config)# lldp med fast-start tx-interval 20
```

## lldp receive

```
LLDPDU .
(no) LLDPDU .
```

```
[no] lldp receive
```

.

```
LLDP- .
```

15

CONFIG-IF-GI

CONFIG-IF-TE

```
esr(config-if-gi)# lldp receive
```

## lldp system-description

```
, LLDP TLV system-description.
(no) LLDP TLV system-description.
```

```
lldp system-description <DESCRIPTION>
no lldp system-description
```

```
<DESCRIPTION> - , 255 .
```

## CONFIG

```
esr(config)# lldp system-description esr-1000-1.3.0
```

**lldp system-name**

, LLDP TLV system-name.

(no).

```
lldp system-name <NAME>
no lldp system-name
```

<NAME>- , 255 .

hostname.

## CONFIG

```
esr(config)# lldp system-name esr-100-branch-12
```

**lldp timer**

LLDPDU.

(no) LLDPDU .

```
lldp timer <SEC>
no lldp timer
```

<SEC>- , [1..32768].

CONFIG

```
esr(config)# lldp timer 3
```

## lldp transmit

LLDPDU .  
(no), LLDPDU .

[no] lldp transmit

LLDP- .

15

CONFI-IF-GI

CONFI -IF-TE

```
esr(config-if-gi)# lldp transmit
```

## show lldp neighbors

, LLDP.

show lldp neighbors <IF>

<IF>-, , .  
(gigabitethernet tengigabitethernet). LLDP .

10

ROOT

```

esr# show lldp neighbors
LLDP Neighbor Information:

Local Information:
  Index:          0
  Local Interface:  g1/0/4

Neighbour Information:
  Chassis type:      mac
  Chassis ID:        a8:f9:4b:aa:8c:90
  Management ip:    192.168.1.5
  Management ip:    fe80::2052:e5ff:fe36:226f
  Port type:        local
  Port ID:          g1/0/8
  Port description: esr200-lldp-test
  Time to live:     120
  System name:      esr-200-test
  System Description: Eltex Router ESR-200 1.3.0 build 79 (date 14/08/2017 time 10:19:13)

System capabilities:
  Bridge:           false
  Router:           true
  Station:          true
  Wlan:             false

```

## show lldp statistics

LLDP , LLDP.

show lldp statistics <IF>

<IF>- , , . (gigabitethernet tengigabitethernet). LLDP .

1

ROOT

esr# show lldp statistics							
Interface	Transmitted	Received	Discarded	Unrecognized	Ageout	Inserted	Deleted
g1/0/1	1	0	0	0	0	0	0

## zabbix-agent zabbix-proxy

### active-server

Zabbix- .

(no) .

active-server <ADDR> [ port <PORT> ]  
no active-server

```
<ADDR> - IP- , AAA.BBB.CCC.DDD, [0..255];  
<PORT> - , [1..65535].
```

10

#### CONFIG-ZABBIX-AGENT

```
esr(config-zabbix-agent)# active-server 192.168.16.54
```

#### config-retrieve

(no) .

```
config-retrieve <SEC>  
no config-retrieve
```

```
<SEC> - , [1..604800].
```

3600

10

#### CONFIG-ZABBIX-PROXY

```
esr(config-zabbix-proxy)# config-retrieve 200
```

#### database

zabbix-proxy.

(no) .

```
database <PATH>  
no database
```

```
<PATH> - zabbix-proxy.
```

zabbix .

10

CONFIG-ZABBIX-PROXY

```
esr(config-zabbix-agent)# database flash:data/zabbix.dat
```

## enable

Zabbix-.

(no) Zabbix-.

[no] enable

10

CONFIG-ZABBIX-AGENT

CONFIG-ZABBIX-PROXY

```
esr(config-zabbix-agent)# enable
```

## hostname

. Hostname Zabbix.

(no) .

hostname <NAME>

no hostname

<NAME> - , 255 .

hostname .

10

CONFIG-ZABBIX-AGENT  
CONFIG-ZABBIX-PROXY

```
esr(config-zabbix-agent)# hostname branch_12
```

## port

TCP-, Zabbix- .

(no) TCP-.

```
port <PORT>  
[no] port
```

<PORT> – , [1024..32767].

10

CONFIG-ZABBIX-AGENT  
CONFIG-ZABBIX-PROXY

```
esr(config-zabbix-agent)# port 20050
```

## remote-commands

Zabbix-.

(no) Zabbix-.

```
[no] remote-commands
```

15

CONFIG-ZABBIX-AGENT

CONFIG-ZABBIX-PROXY

```
esr(config-zabbix-agent)# remote-commands
```

### **server**

IP- Zabbix- zabbix-agent, .  
(no) IP- Zabbix-.

```
server <ADDR>  
no server
```

<ADDR> – IP- , AAA.BBB.CCC.DDD, [0..255].

10

CONFIG-ZABBIX-AGENT

```
esr(config-zabbix-agent)# server 192.168.18.54
```

### **server**

IP- Zabbix- zabbix-proxy, .  
(no) Zabbix- zabbix-proxy.

```
server <ADDR> [port <PORT>]  
no server
```

<ADDR> – IP- , AAA.BBB.CCC.DDD, [0..255];

<PORT> – UDP-, [1024..32767].

<ADDR> – o;

<PORT> – 10051.

10

## CONFIG-ZABBIX-PROXY

```
esr(config-zabbix-agent)# server 192.168.18.54 port 1285
```

### show zabbix-agent configuration

Zabbix-.

```
show zabbix-agent configuration
```

.

1

ROOT

```
esr# show zabbix-agent configuration
VRF:          --
State:        Enabled
Active server:  --
Active server port:  --
Hostname:    esr
Port:         --
Remote commands: Disabled
Server:       192.168.18.54
Source address:  --
Timeout:     3
```

### show zabbix-proxy configuration

Zabbix-proxy.

```
show zabbix-proxy configuration
```

.

1

ROOT

```
esr# show zabbix-proxy configuration
VRF:          --
State:        Enabled
Hostname:     ESR-10SLA
Port:          --
Remote commands: Enabled
Server:        192.168.32.228
Server port:   --
Source address:  --
Timeout:      3
Configuration retrieve: 30
```

## source-address

Zabbix-.

(no) .

```
source-address <ADDR>
no source-address
```

<ADDR> – IP-, AAA.BBB.CCC.DDD, [0..255];

IP- , Zabbix-.

10

CONFIG-ZABBIX-AGENT

CONFIG-ZABBIX-PROXY

```
esr(config-zabbix-agent)# source-address 192.168.1.57
```

## timeout

Zabbix-.

(no) .

```
timeout
no timeout
```

<SEC> – , [1..30].

3

10

CONFIG-ZABBIX-AGENT

CONFIG-ZABBIX-PROXY

```
esr(config-zabbix-agent)# timeout 20
```

### **zabbix-agent**

Zabbix- VRF.

(no) Zabbix- VRF.

[no] zabbix-agent [ vrf <VRF> ]

<VRF>- VRF, 31 .

.

10

CONFIG

```
esr(config)# zabbix-agent
```

### **zabbix-proxy**

Zabbix-proxy VRF.

(no) Zabbix-proxy VRF.

[no] zabbix-proxy [ vrf <VRF> ]

<VRF>- VRF, 31 ;

.

10

CONFIG

```
esr(config)# zabbix-proxy
```