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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..64];

community – .

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CONFIG-SNMP-HOST

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

ip address

IPv6-, 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 .

(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.

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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...).
```

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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] .
```

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CONFIG-GI

CONFIG-TE

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

snmp-server

SNMP-.

(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..64];

<TYPE> – :

- ro – ;
- rw – .

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

<IPv6-ADDR> – IPv6-, X: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 bras

SNMP- .

(no) .

```
[no] snmp-server enable traps bras [ sessions-number-high ]
```

- sessions-number-high – BRAS.

– .

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CONFIG

```
esr(config)# snmp-server enable traps bras sessions-number-high
```

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 envmn

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
```

.

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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> – .

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CONFIG

```
esr(config)# snmp-server enable traps wifi wifi-tunnels-number-in-bridge-high
```

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.

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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 64 .

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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 .

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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-.

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CONFIG-SNMP-HOST

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

source-interface

source-interface

(no) source-interface

```
source-interface { <IF> | <TUN> }
```

```
no source-interface
```

<IF> – , , ;

<TUN> – , , .

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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) syslog- 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 - , ;

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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

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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> | tmpsys:syslog/<NAME> } <SEVERITY>
```

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

flash – ;

tmpsys – ;

<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 - syslo-h-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

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CONFIG

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

syslog reload debugging

debugging syslog-.
(no) .

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

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CONFIG

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

syslog sequence-numbers

syslog-.

(no) .

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

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CONFIG

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

syslog snmp

syslog-, snmp- snmp-trap. , , .

(no) .

```
syslog snmp <SEVERITY>
```

```
no syslog snmp
```

<SEVERITY>- , [syslog console](#).

info

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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 | escda <ESCDA> | ed25519 <ED25519> | rsa <RSA> | rsa1 <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-ip 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].

15

.

CONFIG

```
esr(config)# ip ssh key-exchange algorithm dh-group-exchange-sha1 disable
```

ip ssh key-exchange time

SSH-.

(no) SSH- .

```
ip ssh key-exchange time <SEC>
```

```
no ip ssh key-exchange time
```

<SEC> – , [1..72].

15

1

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].

15

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.

15

ROOT

```
esr# show crypto key mypubkey rsa
Key data
-----
ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAQDz750sWCQrnNufglyhuksTFYCYdEfg
JZ9tWUvcssAZhCJWMewprXBuZMABzFmfBg157pgapxn2qJXJ8ESMV7X7gPfy
xQQah6l376z3SFcpKvwudNgwHiS5HCYPRQWx2Xdaz/nJtYr5NpYgLpba68NC
iXcqEp7EPR5GojDVxpuDuk0hPFcihzmt5Yx8ZptJRzRtsuDQYlowv0Qa24kd
OlQ90/1qKfbAhB6XI60l+dK5VEj7giBESarcRn69/e/YVbdGBdTE93QWFPKI
bm63imfbxRwWtcwsFdIH8Blv9ZqDqqF/IO3TkIKa3lhV9GnsawlAXi/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
-----
gil/0/7          gil/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 .

15

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.

15

CONFIG

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

lldp timer

LLDPDU.

(no) LLDPDU .

lldp timer <SEC>

no lldp timer

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

30

10

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:  gil/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:         gil/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
-----
gil/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
```

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-, .
(no) IP- Zabbix-.

server <ADDR>
no server

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

.

10

CONFIG-ZABBIX-AGENT

CONFIG-ZABBIX-PROXY

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

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
```