

IPsec VPN

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VPN. IKE

access profile

```
IKE-GATEWAY .  
(no) IKE-GATEWAY.
```

[no] access profile <NAME>

<NAME> - IKE-GATEWAY, 31.

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CONFIG

```
esr(config)# access profile OFFICE
```

address-assignment pool

IPsec-.

(no) .

[no] address-assignment pool <NAME>

<NAME> - , 31.

10

CONFIG

```
esr(config)# address-assignment pool CENTER  
esr(config-pool)#
```

assign-interface

```
loopback IPsec-VPN-.  
(no) loopback IPsec-VPN-.
```

```
assign-interface loopback <LOOPBACK>[-<LOOPBACK>  
no assign-interface
```

```
<LOOPBACK> - loopback-, [1..8].
```

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CONFIG-IKE-GW

```
esr(config-ike-gw)# assign-interface loopback 3
```

authentication algorithm

, IKE-. IKE- (authentication, . [password](#)).
(no) .

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

```
<ALGORITHM> - , : md5, sha1, sha2-256, sha2384, sha2-512.
```

sha1

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CONFIG-IKE-PROPOSAL

```
esr(config-ike-proposal)# authentication algorithm md5
```

authentication mode

XAUTH , IPsec.
(no) .

```
authentication mode { local | radius | client }  
no authentication mode
```

```
local - , ;  
radius - , RADIUS-;  
client - xauth-.
```

CONFIG-IKE-POLICY

```
esr(config-ike-policy)# authentication mode local
```

authentication method

IKE-. IKE-, IKE- (. [pre-shared-key](#)). IKE- .
 (no) .

authentication method <METHOD>
 no authentication method

<METHOD>- . :
 • pre-shared-key - , ;
 • rsa-public-key - , RSA-;
 • xauth-psk-key - , .

pre-shared-key

CONFIG-IKE-POLICY

```
esr(config-ike-proposal)# authentication method pre-shared-key
```

bind-interface vti

, «route-based».
 (no) .

bind-interface vti <VTI>
 no bind-interface vti

<VTI>- VTI.

CONFIG-IKE-GATEWAY

```
esr(config-ike-gw)# bind-interface vti 1
```

certificate

(no) .

```
certificate <CERTIFICATE-TYPE> <NAME>
no certificate <CERTIFICATE-TYPE>
```

<CERTIFICATE-TYPE> - , :

- ca - ;
- crt - ;
- local-crt - ;
- local-crt-key - RSA ;
- local-id - . Subject "any";
- remote-crt - . "any" ;
- remote-id - . Subject "any".

<NAME> - , 31 .

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CONFIG-IKE-POLICY

```
esr(config-ike-policy)# certificate ca KEY
```

data-tunnel address

```
IP- GRE data , , IPsec . GRE data . ( ELTEX_DATA_IP(28684).
(no) IP- GRE data .
```

```
data-tunnel address <ADDR>
no data-tunnel address
```

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

CONFIG-POOL

```
esr(config-pool)# data-tunnel address 192.168.2.66
```

dead-peer-detection action

, , IPsec , Dead Peer Detection.

Dead Peer Detection (DPD) – . R-U-THERE (IKE 1) INFORMATIONAL (IKE 2) IPsec-

(no) .

dead-peer-detection action <MODE>

no dead-peer-detection action

<MODE> – DPD:

- restart – ;
- clear – ;
- hold – ;
- none – , .

none

CONFIG-IKE-GATEWAY

```
esr(config-ike-gw)# dead-peer-detection action clear
```

dead-peer-detection interval

DPD.

DPD [certificate](#).

(no) .

dead-peer-detection interval <SEC>

no dead-peer-detection interval

<SEC> – DPD, [1..180].

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CONFIG-IKE-GATEWAY

```
esr(config-ike-gw)# dead-peer-detection interval 15
```

dead-peer-detection timeout

, DPD.
DPD certificate.
(no) .

```
dead-peer-detection timeout <SEC>  
no dead-peer-detection timeout
```

```
<SEC> - DPD, [1..180].
```

30

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CONFIG-IKE-GATEWAY

```
esr(config-ike-gw)# dead-peer-detection timeout 60
```

description

, IKE.
(no) .

```
description <DESCRIPTION>  
no description
```

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

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CONFIG-IKE-PROPOSAL

CONFIG-IKE-POLICY

CONFIG-IKE-GATEWAY

```
esr(config-ike-proposal)# description "my proposal"
```

dh-group

```
- IKE- - , .  
(no) .
```

```
dh-group <DH-GROUP>  
no dh-group
```

<DH-GROUP> - -, [1, 2, 5, 14, 15, 16, 17, 18].

1

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CONFIG-IKE-PROPOSAL

```
esr(config-ike-proposal)# dh-group 5
```

encryption algorithm

```
, IKE-.  
(no) .
```

```
encryption algorithm <ALGORITHM>  
no encryption algorithm
```

<ALGORITHM> - , : des, 3des, blowfis28, blowfis92, blowfish256, aes128, aes192, aes256, aes128ctr, aes192ctr, aes256ctr, camellia128, camellia192, camellia256.

3des

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CONFIG-IKE-PROPOSAL

```
esr(config-ike-proposal)# encryption algorithm aes128
```

ike-policy

IKE .

(no) .

```
[no] ike-policy <NAME>
```

<NAME> – IKE, 31 .

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CONFIG-IKE-GATEWAY

```
esr(config-ike-gw)# ike-policy ike_poll
```

ip prefix

, IPsec-.

(no) , IPsec-.

```
ip prefix <ADDR/LEN>
```

```
no ip prefix
```

<ADDR/LEN> – IP-, AAA.BBB.CCC.DDD/EE, AAA – DDD [0..255] EE [1..32].

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CONFIG-POOL

```
esr(config-pool)# ip prefix 192.168.0.0/16
```

lifetime seconds

IKE.

(no) .

```
lifetime seconds <SEC>
no lifetime seconds
```

<SEC> – , [4 ..86400].

10800

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CONFIG-IKE-POLICY

```
esr(config-ike-proposal)# lifetime 21600
```

local address

```
IP- IPsec-.
(no) IP- .
```

```
local address <ADDR>
no local address
```

<ADDR> – IP- .

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CONFIG-IKE-GATEWAY

```
esr(config-ike-gw)# local address 192.168.1.1
```

local interface

```
IP-, IPsec-.
(no) IP-, .
```

```
local interface <IF>
no local interface
```

<IF> – , .

CONFIG-IKE-GW

```
esr(config-ike-gw)# local interface gigabitethernet 1/0/1
```

local network

IP- , IP- . IPsec-.

(no) IP- .

[no] local network <ADDR/LEN> [protocol { <TYPE> | <ID> } [port <PORT>]]

<ADDR/LEN> – IP- . AAA.BBB.CCC.DDD/EE, AAA – DDD [0..255] EE [1..32];

<TYPE> – , : esp, icmp, ah, eigrp, ospf, igmp, ipip, tcp, pim, udp, vrrp, rdp, l2tp, gre;

<ID> – IP-, [0x00-0xFF];

<PORT> – TCP/UDP-, [1..65535].

CONFIG-IKE-GATEWAY

```
esr(config-ike-gw)# local network 192.168.1.0/24 protocol tcp port 22
```

management-tunnel address

IP- GRE management , , IPsec . GRE management .(ELTEX_MANAGEMENT_IP(28683).

(no) IP- GRE management .

management-tunnel address <ADDR>
no management-tunnel address

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

CONFIG-POOL

```
esr(config-pool)# management-tunnel address 192.168.2.87
```

mobike disable

(IP- local address).

(no) local address .

```
[ no ] mobike disable
```

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CONFIG-IKE-GATEWAY

```
esr(config-ike-gateway)# mobike disable
```

mode

IKE.

(no) .

```
mode <MODE>
```

```
no mode
```

```
<MODE> - IKE, :
```

- main - :
 - , IKE- IKE ;
 - -, . ;
 - . IKE.
- aggressive - , , :
 - () , IKE-: SA, -, . ;
 - SA, , IKE-;
 - .

main

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CONFIG-IKE-POLICY

```
esr(config-ike-policy)# mode aggressive
```

mode

(no) .

```
mode <MODE>
```

```
no mode
```

<MODE> - , :

- policy-based - ;
- route-based - , .

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CONFIG-IKE-GATEWAY

```
esr(config-ike-gw)# mode route-based
```

password

IKE-GETWAY. , sha512.

(no) IKE-GETWAY .

```
password ascii-text { <CLEAR-TEXT> | encrypted <HASH_SHA512> }
```

```
no password
```

<CLEAR-TEXT> - , [8..32] , [0-9a-fA-F].

<HASH_SHA512> -- sha512, 110 .

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CONFIG-PROFILE

```
esr(config-profile) password tteesstt
```

password local-crt-key

(certificate)
(no) .

```
password local-crt-key ascii-text { <CLEAR-TEXT> | encrypted <HASH_SHA512> }  
no password local-crt-key
```

<CLEAR-TEXT> - , [8..32] , [0-9a-fA-F].

<HASH_SHA512>-- sha512, 110 .

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CONFIG-IKE-POLICY

```
esr(config-ike-policy) password tteesstt
```

pfs dh-group

- IPsec- - , .
(no) .

```
pfs dh-group <DH-GROUP>  
no pfs dh-group
```

<DH-GROUP> - -, [1, 2, 5, 14, 15, 16, 17, 18].

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CONFIG-IPSEC-PROPOSAL

```
esr(config-iseç-proposal)# pfs dh-group 5
```

pre-shared-key

, , .
(no) .

```
pre-shared-key { ascii-text { <TEXT> | encrypted <ENCRYPTED-TEXT> } | hexadecimal { <HEX> | encrypted <ENCRYPTED-HEX> } }
no pre-shared-key
```

<TEXT> – [1..64] ASCII ;
<HEX> – [1..32] [2..128] (0xYYYY...) (YYYY...).
<ENCRYPTED-TEXT> – [1..32], [2..128];
<ENCRYPTED-HEX> – [2..64], [2..256].

none

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CONFIG-IKE-POLICY

```
esr(config-ike-policy)# pre-shared-key hexadecimal abc123
```

proposal

IKE .
(no) IKE.

[no] proposal <NAME>

<NAME> – IKE, 31 .

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CONFIG-IKE-POLICY

```
esr(config-ike-policy)# proposal ike_prop1
```

remote address

IP- IPsec-.
(no) IP- .

```
remote address { <ADDR> | any }
no remote address
```

```
<ADDR> – IP- .
```

```
any – IKE- IP-.
```

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CONFIG-IKE-GATEWAY

```
esr(config-ike-gw)# remote address 192.168.1.2
```

remote network

```
IP- , IP- , XAUTH. , , IPsec-.
```

```
(no) IP- .
```

```
remote network { dynamic pool <POOL> | <ADDR/LEN> [ protocol { <TYPE> | <ID> } [ port <PORT> ] ] | any }
no remote network { dynamic pool |<ADDR/LEN> [ protocol { <TYPE> | <ID> } [ port <PORT> ] ] | any }
```

```
<POOL> – XAUTH;
```

```
<ADDR/LEN> – IP- . AAA.BBB.CCC.DDD/EE, AAA – DDD [0..255] EE [1..32];
```

```
<TYPE> – , : esp, icmp, ah, eigrp, ospf, igmp, ipip, tcp, pim, udp, vrrp, rdp, l2tp, gre;
```

```
<ID> – IP-, [0x00-0xFF];
```

```
<PORT> – TCP/UDP-, [1..65535];
```

```
any – , .
```

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CONFIG-IKE-GATEWAY

```
esr(config-ike-gw)# remote network 192.168.0.0/24 protocol tcp port 22
```

remote network dynamic client

```
IPsec-VPN-.
```

```
(no) IPsec-VPN-.
```

```
[no] remote network dynamic client
```

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CONFIG-IKE-GW

```
esr(config-ike-gw)# remote network dynamic client
```

security ike gateway

IKE SECURITY IKE GATEWAY. IKE , . VTI-, , IKE,
(no) IKE.

[no] security ike gateway <NAME>

<NAME> – IKE, 31 . «all» IKE-.

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CONFIG

```
esr(config)# security ike gateway ike_gwl  
esr(config-ike-gw)#
```

security ike policy

IKE, IKE, IKE.
(no) . SECURITY IKE POLICY.

[no] security ike policy <NAME>

<NAME> – IKE, 31 . «all» IKE .

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CONFIG

```
esr(config)# security ike policy ike_policy
esr(config-ike-policy)#
```

security ike proposal

IKE (Internet Key Exchange), , -, IKE VPN Security Association (SA). , SA. (no) .

```
[no] security ike proposal <NAME>
```

```
<NAME> - IKE, 31. «all» IKE-.
```

10

CONFIG

```
esr(config)# security ike proposal ike_proposal
esr(config-ike-proposal)#
```

security ike session uniqueids

- XAUTH /.

(no) .

```
security ike session uniqueids <MODE>
no security ike session uniqueids
```

```
<MODE> - -, :
```

- no - XAUTH , XAUTH "INITIAL_CONTACT", IP- , XAUTH . XAUTH IP-.
- never - XAUTH . XAUTH IP- "INITIAL_CONTACT" .
- replace - XAUTH . XAUTH IP-.
- keep - XAUTH . XAUTH .

never

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CONFIG

```
esr(config)# security ike session uniqueids replace
```

show security ike

```
show security ike { gateway | policy | proposal } [<NAME>]
```

```
gateway - «gateway» ;
policy - «policy» ;
proposal - «proposal» ;
<NAME>- . , .
```

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ROOT

```
esr# show security ike proposal
  Proposal
  ~~~~~
Name      Auth      Encryption      DH      Hash      Lifetime
-----  -----  -----  --  -----  -----
aaa      pre-sha    3des        1  sha1      3600
          red-key

esr# show security ike policy
  Policy
  ~~~~~
Name      Mode      Proposal
-----  -----  -----
ike_pol1  main      ike_prop1

esr# show security ike gateway ik_gw
Description:      --
IKE Policy:      ike_pol1
IKE Version:     v1-only
Mode:            route-based
Binding interface: vtil
IKE Dead Peer Detection:
  Action:        none
  Interval:      2
  Timeout:       30
```

user

IKE-GETWAY.

(no) .

(config-profile).

```
[no] user <NAME>
```

<NAME>- , 31 .

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CONFIG-ACCESS-PROFILE

```
esr(config-access-profile)# user connecter963
```

version

IKE.

(no) .

```
version <VERSION>
```

```
no version
```

<version> – IKE-: v1-only v2-only.

v1-only

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CONFIG-IKE-GATEWAY

```
esr(config-ike-gw)# version v2-only
```

xauth access-profile

XAUTH.

(no) .

```
[no] xauth access-profile <NAME> [client <USER-NAME>
```

<NAME> – XAUTH, 31 ;

<USER-NAME> – xauth-, 31 .

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CONFIG-IKE-GATEWAY

```
esr(config-ike-gateway)# xauth access-profile OFFICE
```

VPN. IPsec

authentication algorithm

(no) .

```
authentication algorithm <ALGORITHM>
```

```
no authentication algorithm
```

```
<ALGORITHM> - , : md5, sha1, sha2-256, sha2384, sha2-512.
```

```
sha1
```

```
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```

```
CONFIG-IPSEC-PROPOSAL
```

```
esr(config-ipsec-proposal)# authentication algorithm md5
```

description

(no) .

```
description <DESCRIPTION>
```

```
no description
```

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

```
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```

```
CONFIG-IPSEC-VPN
```

```
CONFIG-IPSEC-PROPOSAL
```

```
CONFIG-IPSEC-POLICY
```

```
esr(config-ipsec-vpn)# description "VPN to Moscow Office"
```

enable

IPsec VPN.

(no) IPsec VPN.

```
[no] enable
```

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CONFIG-IPSEC-VPN

```
esr(config-ipsec-vpn)# enable
```

encryption algorithm

(no)

```
encryption algorithm <ALGORITHM>
no encryption algorithm
```

```
<ALGORITHM> - , : null, des, 3des, blowfish28, blowfish192, blowfish256, aes128, aes192, aes256, aes128ctr, aes192ctr, aes256ctr, camellia128, camellia192, camellia256.
```

3des

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CONFIG-IPSEC-PROPOSAL

```
esr(config-ipsec-proposal)# encryption algorithm blowfish128
```

ike dscp

DSCP IP- IKE-.

(no) DSCP .

```
ike dscp <DSCP>
```

```
no ike dscp
```

```
<DSCP> – DSCP, [0..63].
```

63

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CONFIG-IPSEC-VPN

```
esr(config-ipsec-vpn)# ike dscp 40
```

ike establish-tunnel

VPN. , VPN «ike». mode.
(no) .

```
ike establish-tunnel <MODE>  
no Ike establish-tunnel
```

<MODE> – VPN:

- by-request – ;
- route – , ;
- immediate – . VPN immediate, VPN CLI .

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CONFIG-IPSEC-VPN

```
esr(config-ipsec-vpn)# ike establish-tunnel route
```

ike gateway

IKE- VPN. , VPN «ike». mode.

```
ike gateway <NAME>  
no ike gateway
```

<NAME> – IKE-, 31 .

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CONFIG-IPSEC-VPN

```
esr(config-ipsec-vpn)# ike gateway ike_gwl
```

ike idle-time

, , SA.
(no) .

```
ike idle-time <TIME>
```

```
no ike idle-time
```

```
<TIME> - , [4..86400]
```

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CONFIG-IPSEC-VPN

```
esr(config-ipsec-vpn)# ike idle-time 3600
```

ike rekey disable

IKE- ,
(no) .

```
[no] ike rekey disable
```

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CONFIG-IPSEC-VPN

```
esr(config-ipsec-vpn)# ike rekey disable
```

ike rekey margin

IKE- .

(no) .

```
ike rekey margin { seconds <SEC> | packets <PACKETS> | kilobytes <KB> }
no ike rekey margin { seconds | packets | kilobytes }
```

<SEC>- , (lifetime seconds, . **lifetime**). [4..86400].

<PACKETS>- , (lifetime packets, . **lifetime**). [4..86400].

<KB>- , (lifetime kilobytes, . **lifetime**). [4..86400].

- 540 .

- .

15

CONFIG-IPSEC-VPN

```
esr(config-ipsec-vpn)# ike rekey margin seconds 1800
```

ike rekey randomization

margin seconds, margin packets, margin kilobytes.

(no) .

```
ike rekey randomization <VALUE>
```

```
no ike rekey randomization
```

<VALUE>- , [1..100]

100%

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CONFIG-IPSEC-VPN

```
esr(config-ipsec-vpn)# ike rekey randomization 10
```

ike ipsec-policy

IPsec- VPN. , VPN «ike». mode.

```
ike ipsec-policy <NAME>
no ike ipsec-policy
```

<NAME> – IPsec-, 31 .

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CONFIG-IPSEC-VPN

```
esr(config-ipsec-vpn)# ike ipsec-policy ipsec_pol1
```

lifetime

IPsec-.

(no) .

```
lifetime { seconds <SEC> | packets <PACKETS> | kilobytes <KB> }
no lifetime { seconds | packets | kilobytes }
```

<SEC> – IPsec-, . [1140..86400].

<PACKETS> – , IPsec-. [4..86400].

<KB> – , IPsec-. [4..86400].

3600

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CONFIG-IPSEC-POLICY

```
esr(config-ipsec-proposal)# lifetime seconds 3600
```

manual authentication algorithm

. , VPN «manual». mode.

(no) .

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

<ALGORITHM> - , [md5, md5-128, sha1, sha1-160, aesxcbc, sha2-256, sha2-384, sha2-512].
```

none

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CONFIG-IPSEC-VPN

```
esr(config-ipsec-vpn)# manual authentication algorithm sha1
```

manual authentication key

. , VPN «manual». mode.

```
manual authentication key { ascii-text {<TEXT> | encrypted <ENCRYPTED-TEXT>} | hexadecimal {<HEX> | encrypted
<ENCRYPTED-HEX>} }
```

no manual authentication key

```
<TEXT> - [1..64] ASCII ;
<HEX> - [1..32] [2..128] (0xYYYY...) (YYYY...);
<ENCRYPTED_TEXT> - [1..32], [2..128];
<ENCRYPTED_HEX> - [2..64], [2..256].
```

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CONFIG-IPSEC-VPN

```
esr(config-ipsec-vpn)# manual authentication key hexadecimal abcdef
```

manual bind-interface vti

, route-based. , VPN «manual». mode.
(no) .

```
manual bind-interface vti <VTI>
no manual bind-interface vti
```

```
<VTI> – VTI, :  
ESR-10/12V/12VF/14VF – [1..10];  
ESR-20/21/100/200 – [1..250];  
ESR-1000/1200/1500/1511/1700/3100 – [1..500].
```

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CONFIG-IPSEC-VPN

```
esr(config-ipsec-vpn)# manual bind-interface vti 0
```

manual encryption algorithm

```
. , VPN «manual». mode.  
(no) .
```

```
manual encryption algorithm <ALGORITHM>  
no manual encryption algorithm
```

```
<ALGORITHM> – , : des, 3des, blowfis28, blowfis92, blowfish256, aes128, aes192, aes256, aes128ctr, aes192ctr, aes256ctr, camellia128, camellia192, camellia256.
```

3des

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CONFIG-IPSEC-VPN

```
esr(config-ipsec-vpn)# manual encryption algorithm blowfis28
```

manual encryption key

```
. , VPN «manual». mode.  
(no) .
```

```
manual encryption key { ascii-text { < TEXT> | encrypted <ENCRYPTED-TEXT> } | hexadecimal { <HEX> | encrypted <ENCRYPTED-HEX> } }  
no manual encryption key
```

```
<TEXT> – [1..36] ASCII ;
```

```
<HEX> - [1..24] [2..72] (0xYYYY...) (YYYY...);  
<ENCRYPTED-TEXT> - [1..24], [2..72];  
<ENCRYPTED-HEX> - [2..36], [2..144].
```

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CONFIG-IPSEC-VPN

```
esr(config-ipsec-vpn)# manual encryption key hexadecimal 0x123456
```

manual mode

```
. , VPN «manual». mode.  
(no) .
```

```
manual mode <MODE>  
no manual mode
```

<MODE> - :

- policy-based - , ;
- route-based - , .

10

CONFIG-IPSEC-VPN

```
esr(config-ipsec-vpn)# manual mode route-based
```

manual protocol

```
. , VPN «manual». mode.  
(no) .
```

```
manual protocol <TYPE>  
no manual protocol
```

<TYPE> - , :

- ah - , ;
- esp - .

esp

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CONFIG-IPSEC-VPN

```
esr(config-ipsec-vpn)# manual protocol ah
```

manual spi

. , VPN «manual». mode.
(no) .

manual spi <HEX>

no manual spi

<HEX> – , 32 (8) (0xYYYY...) (YYYY...).

15

CONFIG-IPSEC-VPN

```
esr(config-ipsec-vpn)# manual spi FF
```

mode

, VPN.

mode <MODE>

no mode

<MODE> – VPN:

- ike – , , IKE;
- manual – VPN. IKE- . .

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CONFIG-IPSEC-VPN

```
esr(config-ipsec-vpn)# mode ike
```

proposal

IPsec.

(no) .

[no] proposal <NAME>

<NAME> – IPsec, 31 .

15

CONFIG-IPSEC-POLICY

```
esr(config-ipsec-policy)# proposal ipsec_prop1
```

protocol

(no) .

protocol <PROTOCOL>

no protocol

<PROTOCOL> – , :

- ah – , ;
- esp – .

esp

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CONFIG-IPSEC-PROPOSAL

```
esr(config-ipsec-proposal)# protocol ah
```

security ipsec policy

IPsec, IPsec IKE.

(no) .

SECURITY IPSEC POLICY.

```
[no] security ipsec policy <NAME>
```

<NAME> – IPsec, 31. «all» IPsec-.

10

CONFIG

```
esr(config)# security ipsec policy ipsec_pol1  
esr(config-ipsec-policy)#
```

security ipsec proposal

IPsec. IPsec , IPsec- .

(no) .

SECURITY IPSEC PROPOSAL.

```
[no] security ipsec proposal <NAME>
```

<NAME> – IPsec, 31. «all» IPsec-.

10

CONFIG

```
esr(config)# security ipsec proposal ipsec_prop1  
esr(config-ipsec-proposal)#
```

security ipsec vpn

VPN IPsec SECURITY IPSEC VPN.

(no) VPN.

```
[no] security ipsec vpn <NAME>
```

<NAME> – VPN, 31. «all» VPN.

CONFIG

```
esr(config)# security ipsec vpn ipsec_vpn1
esr(config-ipsec-vpn)#

```

show security ipsec

VPN, IPsec.

```
show security ipsec { vpn configuration | policy | proposal } [<NAME>]
```

vpn configuration – VPN;

policy – IPsec;

proposal – IPsec;

<NAME> – . VPN, .

ROOT

```
esr# show security ipsec proposal
Proposal
~~~~~
Name          Prot   Enc. alg.        Auth. alg.        Lifetime
-----  -----  -----  -----
ipsec_prop1    esp    aes128        sha1           28800 sec
esr# show security ipsec policy
Name          Description      Proposal
-----  -----  -----
ipsec_policy1            ipsec_prop1
Master# show security ipsec vpn configuration IPSECVPN
Description:      --
State:           Enabled
IKE:
  Establish tunnel:      immediate
  IPsec policy:         IPSECPOLICY
  IKE gateway:          IKEGW
  IKE DSCP:             63
  IKE idle-time:        0s
  IKE rekeying:         Enabled
    Margin time:        540s
    Margin kilobytes:   0
    Margin packets:     0
    Randomization:     100%
```

show security ipsec vpn authentication

IPsec-VPN-.

```
show security ipsec vpn authentication <NAME> [ vrf <VRF> ]
```

<NAME> - IPsec VPN, 31 .

<VRF> - VRF, 31 , DNS-.

10

ROOT

```
esr# show security ipsec vpn authentication
Local host      Remote host      Local subnet      Remote subnet
Authentication          State
-----  -----
-----  -----
2.2.2.1          2.2.2.2          192.168.2.0/24      192.168.1.1/32      Xauth PSK, login:
ipsec           Established
```

show security ipsec vpn status

VPN, IKE- VPN .

```
show security ipsec vpn status [ vrf <VRF> ] [ <NAME> ]
```

<NAME> - VPN, 31 ;

<VRF> - VRF, 31 .

10

ROOT

```
esr# show security ipsec vpn status
Name      Local host     Remote host    Initiator spi      Responder spi      State
-----  -----  -----  -----
ipsec_vpnl 10.100.14.1 10.100.14.2 0x05d8e0ac3543f0cb 0xcfalc4179d001154  Established
```

type

IPsec.

(no) .

```
type <TYPE>
no type
```

```
<TYPE> - IPsec, :
```

- tunnel;
- transport.

tunnel

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CONFIG-IPSEC-VPN

```
esr(config-access-vpn)# type transport
```