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## archive

.

(no) .

[no] archive

.

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CONFIG

:

```
esr(config)# archive
esr(config-archive)#
```

## auto

/ ( [time-period](#) ).

(no) .

[no] auto

.

15

CONFIG-ARCHIVE

:

```
esr(config-archive)# auto
```

## boot system

, .

boot system <IMAGE>

<IMAGE> – , :

- image-1 – ;
- image-2 – .

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ROOT

:

```
esr# boot system image-2
```

## by-commit

.

(no) .

[no] by-commit

.

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CONFIG-ARCHIVE

:

```
esr(config-archive)# by-commit
```

commit

( ) . RUNNING- CANDIDATE. , «confirm» , ( 600 , system config-confirm timeout).

commit

.

10

ROOT  
CHANGE-EXPIRED-PASSWORD

:

```
esr# commit
```

.

confirm

. ( 600 , system config-confirm timeout) «commit» , . .

confirm

.

10

ROOT  
CHANGE-EXPIRED-PASSWORD

:

```
esr# confirm
```

.

copy

.

copy <SOURCE> <DESTINATION>

<SOURCE> -, :

- `tftp://<ip>[<port>]:/<path>` – TFTP-, :
  - `<ip>` – IP- TFTP-;
  - `<port>` – , TFTP-, IP- «#» «:»;
  - `<path>` – TFTP-.
- `tftp://<ipv6>[%<interface>][<port>]:/<path>` – TFTP-, :
  - `<ipv6>` – IPv6- TFTP-;
  - `<interface>` – link-local ;
  - `<port>` – , TFTP-, IPv6- '#' ':' ( IPv6- «[]»);
  - `<path>` – TFTP-.
- `ftp://<user>[:<password>]@<ip>[<port>]:/<path>`
  - `<ip>` – IP- FTP-;
  - `<user>` – ( *ip ftp client username*, *ip ftp client username*);
  - `<password>` – ( *ip ftp client password*, *ip ftp client password*);
  - `<port>` – , TFTP-, IP- «#» «:»;
  - `<path>` – FTP-.
- `ftp://<user>[:<password>]@<ipv6>[%<interface>][<port>]:/<path>`
  - `<ipv6>` – IPv6- FTP-;
  - `<interface>` – link-local ;
  - `<user>` – ( *ip ftp client username*, *ip ftp client username*);
  - `<password>` – ( *ip ftp client password*, *ip ftp client password*);
  - `<port>` – , TFTP-, IPv6- '#' ':' ( IPv6- «[]»);
  - `<path>` – FTP-.
- `sftp://<user>[:<password>]@<ip>[<port>]:/<path>`
  - `<ip>` – IP- FTP-;
  - `<user>` – ( *ip sftp client username*, *ip sftp client username*);
  - `<password>` – ( *ip sftp client password*, *ip sftp client password*);
  - `<port>` – , TFTP-, IP- «#» «:»;
  - `<path>` – FTP-.
- `sftp://<user>[:<password>]@<ipv6>[%<interface>][<port>]:/<path>`
  - `<ipv6>` – IPv6- FTP-;
  - `<interface>` – link-local ;
  - `<user>` – ( *ip sftp client username*, *ip sftp client username*);
  - `<password>` – ( *ip sftp client password*, *ip sftp client password*);
  - `<port>` – , TFTP-, IPv6- '#' ':' ( IPv6- «[]»);
  - `<path>` – FTP-.
- `scp://<user>[:<password>]@<ip>[<port>]:/<path>`
  - `<ip>` – IP- ;
  - `<user>` – ( *ip ssh client username*, *ip ssh client username*);
  - `<password>` – ( *ip ssh client password*, *ip ssh client password*);
  - `<port>` – , TFTP-, IP- «#» «:»;
  - `<path>` – .
- `scp://<user>[:<password>]@<ipv6>[%<interface>][<port>]:/<path>`
  - `<ipv6>` – IPv6- ;
  - `<interface>` – link-local ;
  - `<user>` – ( *ip ssh client username*, *ip ssh client username*);
  - `<password>` – ( *ip ssh client password*, *ip ssh client password*);
  - `<port>` – , TFTP-, IPv6- '#' ':' ( IPv6- «[]»);
  - `<path>` – .
- `http://<ip>[<port>]:/<path>` – HTTP-, :
  - `<ip>` – IP- HTTP-;
  - `<port>` – , HTTP-, IP- «#» «:»;
  - `<path>` – HTTP-.
- `http://<ipv6>[%<interface>][<port>]:/<path>` – HTTP-, :
  - `<ipv6>` – IPv6- HTTP-;
  - `<interface>` – link-local ;
  - `<port>` – , HTTP-, IPv6- '#' ':' ( IPv6- «[]»);
  - `<path>` – TFTP-.
- `https://[ca/<CA-FILE>][:server-key/<SK-FILE>]@<ip>[<port>]:/<path>` – HTTPS-, :
  - `<CA-FILE>` – ;
  - `<SC-FILE>` – ;
  - `<SK-FILE>` – ;
  - `<ip>` – IP- HTTP-;
  - `<port>` – , HTTPS-, IP- «#» «:»;
  - `<path>` – HTTP-.
- `https://[ca/<CA-FILE>][:server-key/<SK-FILE>]@<ipv6>[%<interface>][<port>]:/<path>` – HTTPS-, :
  - `<CA-FILE>` – ;
  - `<SC-FILE>` – ;
  - `<SK-FILE>` – ;
  - `<ipv6>` – IPv6- HTTPS-;
  - `<interface>` – link-local ;
  - `<port>` – , HTTP-, IPv6- '#' ':' ( IPv6- «[]»);
  - `<path>` – TFTP-.
- `usb://usb_name:/PATH`
  - `usb_name` – USB-. "show storage-devices" ( [show storage-devices](#));
  - `<path>` – USB-.
- `mmc://mmc_name:/PATH` ( ESR-10/12V/12VF/14VF)
  - `mmc_name` – MMC-. "show storage-devices" ( [show storage-devices](#));
  - `<path>` – MMC-.
- `system:factory-config` – ;

- system:default-config – ();
- system:running-config – ;
- system:candidate-config – , «commit»;
- system:firmware – . ;
- system:boot-1 – (SBI, bl1, x-loader).
- system:boot-2 – (u-boot, boot).
- flash:critlog/FILE – ;
- flash:syslog/FILE – , ;
- tmpsys:syslog/FILE – , ;
- flash:backup/FILE – ;
- flash:data/FILE – .

<DESTINATION> – , :

- tftp://<ip>[<port>]:/<path> – TFTP-, :
  - <ip> – IP- TFTP-;
  - <port> – , TFTP-, IP- «#» «:»;
  - <path> – TFTP-.
- tftp://<ipv6>[%<interface>][<port>]:/<path> – TFTP-, :
  - <ipv6> – IPv6- TFTP-;
  - <interface> – link-local ;
  - <port> – , TFTP-, IPv6- '#' ':' ( IPv6- «[]»);
  - <path> – TFTP-.
- ftp://[<user>[:<password>]@]<ip>[<port>]:/<path>
  - <ip> – IP- FTP-;
  - <user> – ( ip ftp client username, ip ftp client username);
  - <password> – ( ip ftp client password, ip ftp client password);
  - <port> – , TFTP-, IP- «#» «:»;
  - <path> – FTP-.
- ftp://[<user>[:<password>]@]<ipv6>[%<interface>][<port>]:/<path>
  - <ipv6> – IPv6- FTP-;
  - <interface> – link-local ;
  - <user> – ( ip ftp client username, ip ftp client username);
  - <password> – ( ip ftp client password, ip ftp client password);
  - <port> – , TFTP-, IPv6- '#' ':' ( IPv6- «[]»);
  - <path> – FTP-.
- sftp://[<user>[:<password>]@]<ip>[<port>]:/<path>
  - <ip> – IP- FTP-;
  - <user> – ( ip sftp client username, ip sftp client username);
  - <password> – ( ip sftp client password, ip sftp client password);
  - <port> – , TFTP-, IP- «#» «:»;
  - <path> – FTP-.
- sftp://[<user>[:<password>]@]<ipv6>[%<interface>][<port>]:/<path>
  - <ipv6> – IPv6- FTP-;
  - <interface> – link-local ;
  - <user> – ( ip sftp client username, ip sftp client username);
  - <password> – ( ip sftp client password, ip sftp client password);
  - <port> – , TFTP-, IPv6- '#' ':' ( IPv6- «[]»);
  - <path> – FTP-.
- scp://[<user>[:<password>]@]<ip>[<port>]:/<path>
  - <ip> – IP- ;
  - <user> – ( ip ssh client username, ip ssh client username);
  - <password> – ( ip ssh client password, ip ssh client password);
  - <port> – , TFTP-, IP- «#» «:»;
  - <path> – .
- scp://[<user>[:<password>]@]<ipv6>[%<interface>][<port>]:/<path>
  - <ipv6> – IPv6- ;
  - <interface> – link-local ;
  - <user> – ( ip ssh client username, ip ssh client username);
  - <password> – ( ip ssh client password, ip ssh client password);
  - <port> – , TFTP-, IPv6- '#' ':' ( IPv6- «[]»);
  - <path> – .
- usb://usb\_name:/PATH
  - usb\_name – USB-. "show storage-devices" (. [show storage-devices](#));
  - <path> – USB-.
- mmc://mmc\_name:/PATH ( ESR-10/12V/12VF/14VF)
  - mmc\_name – MMC-. "show storage-devices" (. [show storage-devices](#));
  - <path> – MMC-.
- system:candidate-config – , «commit»;
- system:licence – ;
- system:boot-licence – ;
- system:firmware – . ;
- system:boot2 – (u-boot, x-loader);
- system:certificate/ca/ – ;
- system:certificate/dh/ – -;
- system:certificate/server\_key/ – OPENVPN-;
- system:certificate/server\_crt/ – OPENVPN-;
- certificate:client-key/FILE – OPENVPN-;
- certificate:client-crt/FILE – OPENVPN-;
- system:certificate/ta/ – -;

- system:certificate/crl/ – ;
- flash:data/FILE – .

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ROOT

1

```
esr# copy tftp://10.100.100.1/esr.cfg system:candidate-config
```

2

```
esr# copy tftp://10.100.100.1/crl.pem system:certificate/crl/crl.pem
```

## count-backup

.

(no) .

count-backup <NUM>

no count-backup

<NUM> – . [1..100].

1

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CONFIG-ARCHIVE

:

```
esr(config-archive)# count-backup 20
```

## delete

...

delete { <FILE> | licence | boot-licence }

<FILE> – , ( ):

- flash:backup/FILE – ;
- flash:critlog/FILE – ;
- flash:data/FILE – ;
- flash:syslog/FILE – , ;
- tmpsys:syslog/FILE – , ;

- system:certificate/ca/ - ;
- system:certificate/dh/ - -;
- system:certificate/server\_key/ - IPsec/OpenVPN;
- system:certificate/server\_cert/ - IPsec/OpenVPN;
- certificate:client-key/FILE - OPENVPN-;
- certificate:client-cert/FILE - OPENVPN-;
- system:certificate/ta/ - ;
- system:certificate/crl/ - .

licence - .

boot-licence - .

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ROOT

:

```
esr# delete system:certificate/dh/dh.key
```

dir

(USB/MM ).

```
dir { usb://<USB-device-name>/<PATH> | mmc://<MMC-device-name>/<PATH> | flash:backup/FILE | flash:data/FILE }
```

<USB-device-name> - USB-. show storage-devices usb, [show storage-devices](#).

<MMC-device-name> - MMC-. show storage-devices mmc, [show storage-devices](#).

- flash:backup/FILE - ;
- flash:data/FILE - ;

<PATH> - USB/MMC-.

flash:backup/FILE - ;

flash:data/FILE - ;

1

ROOT

:

```
esr# dir mmc://EF28-D074
Name                                     Type      Size      --
-----
esr1000-1.4.0-build21.uboot             File       0.00      B
.Trash-1000                             Directory  0.00      B
```

path

```
, , . -
```

(no) .

path <PATH>

no path

<PATH> – tftp/ftp/sftp/scp :

- tftp://<ip>[<port>]/<path> – TFTP-, :
  - <ip> – IP- TFTP-;
  - <port> – , TFTP-, IP- «#» «:»;
  - <path> – TFTP-.
- tftp://<ipv6>[%<interface>][<port>]/<path> – TFTP-, :
  - <ipv6> – IPv6- TFTP-;
  - <interface> – link-local ;
  - <port> – , TFTP-, IPv6- '#' ':' ( IPv6- «[]»);
  - <path> – TFTP-.
- ftp://[<user>[:<password>]@]<ip>[<port>]/<path>
  - <ip> – IP- FTP-;
  - <user> – ( ip ftp client username, ip ftp client username);
  - <password> – ( ip ftp client password, ip ftp client password);
  - <port> – , TFTP-, IP- «#» «:»;
  - <path> – FTP-.
- ftp://[<user>[:<password>]@]<ipv6>[%<interface>][<port>]/<path>
  - <ipv6> – IPv6- FTP-;
  - <interface> – link-local ;
  - <user> – ( ip ftp client username, ip ftp client username);
  - <password> – ( ip ftp client password, ip ftp client username);
  - <port> – , TFTP-, IPv6- '#' ':' ( IPv6- «[]»);
  - <path> – FTP-.
- sftp://[<user>[:<password>]@]<ip>[<port>]/<path>
  - <ip> – IP- FTP-;
  - <user> – ( ip sftp client username, ip sftp client username);
  - <password> – ( ip sftp client password, ip sftp client password);
  - <port> – , TFTP-, IP- «#» «:»;
  - <path> – FTP-.
- sftp://[<user>[:<password>]@]<ipv6>[%<interface>][<port>]/<path>
  - <ipv6> – IPv6- FTP-;
  - <interface> – link-local ;
  - <user> – ( ip sftp client username, ip sftp client username);
  - <password> – ( ip sftp client password, ip sftp client password);
  - <port> – , TFTP-, IPv6- '#' ':' ( IPv6- «[]»);
  - <path> – FTP-.
- scp://[<user>[:<password>]@]<ip>[<port>]/<path>
  - <ip> – IP- ;
  - <user> – ( ip ssh client username, ip ssh client username);
  - <password> – ( ip ssh client password, ip ssh client password);
  - <port> – , TFTP-, IP- «#» «:»;
  - <path> – .
- scp://[<user>[:<password>]@]<ipv6>[%<interface>][<port>]/<path>
  - <ipv6> – IPv6- ;
  - <interface> – link-local ;
  - <user> – ( ip ssh client username, ip ssh client username);
  - <password> – ( ip ssh client password, ip ssh client password);
  - <port> – , TFTP-, IPv6- '#' ':' ( IPv6- «[]»);
  - <path> – .

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CONFIG-ARCHIVE

:

```
esr(config-archive)# path tftp://10.10.10.1:/esr-1000/config
```

restore

, . . «confirm». «restore» .



restore

.

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ROOT

:

```
esr# restore
```

.

rollback

. CANDIDATE . «commit».

.

rollback

.

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ROOT

:

```
esr# rollback
```

.

save

CANDIDATE .

save

.

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ROOT

:

```
esr# save
```

Flash- .

show bootvar

, .

show bootvar

.

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ROOT

:

```
esr# show bootvar
Image      Version                               Date                               Status                               After reboot
-----
1          1.0.7 build 119[5cd22b8]             date 22/12/2015 time             Not Active
18:00:47
2          1.0.7 build 119[5cd22b8]             date 22/12/2015 time             Active                             *
18:00:47
```

show boot-licence

.

show boot-licence

.

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ROOT

:

```

esr# show boot-licence
Licence information
-----
Name:      Eltex
Version:   1.0
Type:      ESR-1000
S/N:       NP01000530
MAC:       A8:F9:4B:AA:44:BB
Features:
  KSS - Kaspersky Security System

```

## show candidate-config

, ( «commit» ).

```
show candidate-config [ <SECTION> ]
```

<SECTION> - :

- aaa - , ;
- access-list - ;
- bridges - ;
- channel-group - ;
- clock - NTP-;
- dhcp - DHCP-, Relay-;
- dual-homing - Dual Homing <sup>1</sup>;
- extended - ;
- hostname - ;
- interfaces [<IF>] - :
  - <IF> - , , .
- ip-address - IP-;
- ipv6 [<SUBSECTION>] - IPv6:
  - address - IPv6-;
  - dhcp [<SUBSECTION>] - IPv6 DHCP-:
  - client - IPv6 DHCP-;
    - relay - IPv6 DHCP Relay-;
    - server - IPv6 DHCP-.
  - routing [<SUBSECTION>] - IPv6-:
    - bfd - IPv6 BFD;
    - bgp - IPv6 BGP;
    - ospf - OSPFv3;
    - prefix-lists - IPv6 -;
    - static - .
  - vrrp - IPv6 VRRP-.
- dialplan - ;
- lldp - LLDP;
- mac-address-table - MAC- <sup>1</sup>;
- mdns - mDNS;
- mirroring - <sup>1</sup>;
- mpls - MPLS;
- mdns - mDNS;
- multiwan - WAN-;
- nat [<SUBSECTION>] - NAT:
  - source - Source NAT;
  - destination - Destination NAT;
  - alg - NAT.
- netflow - Netflow ;
- object-groups - IP- TCP/UDP-;
- port-security - Port Security <sup>1</sup>;
- qos - QoS;
- remote-access [<SUBSECTION>] - L2TP over IPsec PPTP-;
  - l2tp - L2TP over IPsec-;
  - pptp - PPTP-;
  - openvpn - OpenVPN-;
- remote-client - (SSH, Telnet, etc.);
- rmon - RMON;
- routing [<SUBSECTION>] - :
  - bfd - BFD;

- bgp – BGP;
- isis – IS-IS;
- key-chains – ;
- ospf – OSPF;
- prefix-list – -;
- rip – RIP;
- route-maps – ;
- static – ;
- tracking – Tracking;
- security [<SUBSECTION>] – IPsec VPN Firewall;
  - ike – IKE;
  - ipsec – IPsec
  - zone – Firewall;
  - zone-pair – Firewall;
- sip – SIP;
  - profile – SIP-;
  - service – SIP-;
- sflow – sFlow ;
- snmp – SNMP-;
- spanning-tree – Spanning Tree <sup>1</sup> ;
- sla – IP SLA
- system – ;
- syslog – Syslog;
- tunnels [<SUBSECTION>] – :
  - gre – GRE-;
  - ip4ip4 – IPv4 over IPv4-;
  - l2tp – L2TP-;
  - l2tpv3 – L2TPv3-;
  - lt – ;
  - softgre – SoftGRE- <sup>1</sup> ;
  - vti – VTI-;
  - pptp – PPTP-;
  - pppoe – PPPoE-;
  - l2tp – L2TP- ;
  - openvpn – OPENVPN-;
- vlans – VLAN;
- voice – ;
- vrf – VRF;
- vrrp – VRRP-;
- wisla – wiSLA;
- wireless-controller – Wi-Fi ;
- zabbix – Zabbix .

---

<sup>1</sup> ESR-1000

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ROOT

;

```

esr# show candidate-config
ntp enable
ntp broadcast-client enable
syslog max-files 3
syslog file-size 512
syslog file default info
vlan 2
exit
security zone trusted
exit
security zone untrusted
exit
object-group service telnet
  port-range 23
exit
object-group service ssh
  port-range 22
exit
object-group service dhcp_server
  port-range 67
exit
More? Enter - next line; Space - next page; Q - quit; R - show the rest.

```

## show configuration changes

```
show configuration changes [<CONFIG> < CONFIG>]
```

<CONFIG> - . :

- candidate-config;
- running-config;
- factory-config;
- default-config.

<CONFIG> running-config candidate-config.

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ROOT

:

```

esr(config-)# show configuration changes
+ interface gigabitethernet 1/0/1.100
+   ip firewall disable
+   ip address 10.54.22.1/24
+ exit

```

## show crypto certificates

```
show crypto certificates [ <CERTIFICATE-TYPE> ]
```

<CERTIFICATE-TYPE> - , :

- ca - ;
- crl - ;
- dh - ;
- server-crt - ;
- server-key - ;
- client-crt - ;
- client-key - ;
- ta - HMAC-

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ROOT

:

```
esr# show crypto certificates
Type          Total
-----
ca             3
dh             1
server key     2
server crt     1
ta             1
crl            1
```

show licence

.

show licence

.

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ROOT

:

```
esr# show licence
Licence information
-----
Name: X-Telecom
Version: 1.0
Type: ESR-1000
S/N: NP01000046
MAC: A8:F9:4B:AA:03:20
Features:
  DHCP - Dynamic Host Configuration Protocol
  IDS - Empty description
  SWUTIL - View interface's utilization
```

# show running-config

.

show running-config [<SECTION>]

<SECTION> – , [show candidate-config](#).

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ROOT

:

```
esr# show running-config syslog
syslog max-files 3
syslog file-size 512
syslog file default info
syslog console info
```

# show storage-devices

(USB/MMC ).

show storage-devices { usb | mmc }

usb – USB- .

mmc – SD/MMC .

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ROOT

:

esr# show storage-devices mmc			
Name	Total, MB	Used, MB	Free, MB
-----	-----	-----	-----
EF28-D074	99.79	72.64	27.15

# show version

.

show version

1

ROOT

:

```
esr# show version
Boot version:
  1.0.7.16 (date 18/11/2015 time 13:40:59)
SW version:
  1.0.7 build 17[d9bdbda] (date 21/11/2015 time 18:06:41)
HW version:
  lv7
```

## time-period

, .

(no) .

time-period <TIME>

no time-period

<TIME>- , [1..35791394].

720

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CONFIG-ARCHIVE

:

```
esr(config-archive)# time-period 1440
```

## type

, .

(no) .

type <TYPE>

no type

<TYPE>- . :



- local – flash:backup/ "config\_YYYYMMDD\_HHMMSS;" :
  - YYYY – , ;
  - MM – , ;
  - DD – , ;
  - HH – , ;
  - MM – , ;
  - SS – , .
- remote – ;
- both – flash:backup .

remote

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CONFIG-ARCHIVE

:

```
esr(config-archive)# type both
```