

ESR-Series. Release notes. 1.14.5

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1.14.5

- QoS:
 - complex-qos
- :
 - Policy-Based Routing
- :
 - DHCP-
 - SYSLOG
 - syslog- syslog- syslog-
 - , IPS/IDS, syslog .
- - STP/RSTP bridge
 - STP/RSTP switchport ESR-1x/2x
- Remote-access
 - IKE IPsec L2TP- L2TP-

1.14.0

:

- AAA:
 - TLS/SSL LDAP
- DPI:
 - : **bittorrent-networking, ms-netlogon, ms-rpc, ms-sms, rtp audio, secure-http, secure-smtp, vmware-vsphere**
- IDS/IPS:
 - HTTP FTP
- IPsec:
 - mode transport
- QoS:
 - URL
- Tracking
 - VRRP SLA .
 - VRRP, PBR, , , AS-PATH preference route-map.
- :

- CLI:
 - ,
 - **ping** IPv4/IPv6/DNS ip/ipv6
 - 8
 - **verify storage-device**
 - **clear storage-device**
- SSH:
 - host- . ssh host-
 - **rsa1**
 - **crypto key generate configure, update ssh-host-key root**
- :
 - Ingress Egress Netflow

1.13.0

- :
- ESR-1511 ESR-3100
- Content-Filter HTTP-
- Anti-Spam HTTP-
- :
 - BGP:
 - BGP RIB ESR-10/12V/12VF/14VF 1M
 - BGP RIB ESR-20/21/100/200 2,5M
 - BGP RIB ESR-1000/1200/1500/1510 5M

1.12.0

- :
- IDS/IPS:
 - Eltex Distribution Manager — , Kaspersky SafeStream II
- IPsec:
 - debug IPsec
- MPLS:
 - VPLS Kompella Mode
 - L2VPN
- USB-Modem:
 - HILINK
- - IS-IS:
 - 3-way handshake
- :
 - CLI:
 - root
- :
 - AAA OpenVPN-
- :
 - HTTP proxy
 -

1.11.2

- :
- BRAS:
 - BRAS VRF L3
 - Option 82 DHCP
 - BRAS SNMP
- SNMP:
 - softgre
- :
 - CLI:
 - **merge,** c candidate-config
 - Bridge
 - object-groups c
 -
 - route-maps
 -

-
- **clear vrrp-state,** VRRP 3* Advertisement_Interval+1. , backup,
- SLA:
 - IP SLA ICMP-ECHO
- :
- wireless-controller

1.11.1

- :
- IPsec:
 - Mobility and Multihoming Protocol (MOBIKE) IKEv2
 - IPsec
 - CRL Subject-name

1.11.0

- :
- CLI:
 - TCP/UDP- firewall/NAT-
 - mDNS
- IPsec:
 - - XAUTH /
 - Subject XAUTH
- :
- Multiwan pppoe, l2tp, openvpn, pptp vti-
-
- GRE
 - GRE- : USB-modem, pptp, l2tp, pppoe- e1, multilink-
 - GRE- IP- VRF
 - L2 wireless-controller
- PPPoE
 - " , " / " \"
- USB- SD/MMC . FAT

1.10.0

- :
- :
 - IS-IS
 - RIP NG
 - BGP
 - BGP:
 - BGP Graceful restart
 - BGP Weight
 - OSPF:
 - OSPF Graceful restart
- :
-
- CLI-
-
- :
- L2TP PPTP-
- OpenVPN-
- MPLS:
 - LDP
 - L2VPN VPWS
 - L2VPN VPLS Martini mode
 - L3VPN MP-BGP

1.8.7

- :
- USB-Modem:

- :
 - "no compression" TCP/IP
 - SSH (CLI)

1.8.5

- :
- Security:
 - demo- IDS/IPS
- SLA:
 - Wellink SLA ESR-10/12V/12VF
- USB-Modem:
 - '_, '@, ', '- ' user cellular profile
- :
 - Zabbix-proxy

1.8.3

- :
- IPsec:
 - IPsec DMVPN L2TPv3
- Multilink:
 - multilink
 - multilink
- OSPF:
 -

1.8.2

- :
- ESR-20/21/1500/1510
- OpenVPN:
 - 64
- ACL:
 - ESR-1X: 255

1.8.1

- :
- OpenVPN :
 - IP- OpenVPN-
 - OpenVPN-

1.8.0

- :
- :
 - DMVPN
- BGP:
 - BGP RIB ESR-20/21/100/200 2M
 - BGP RIB ESR-1000/1200/1500/1510 3M
- SNMP:
 - LLDP-MIB

1.7.0

- :
- :
 - IDS/IPS
 - HTTP proxy: redirect
- CLI:
 - ESR-1700: object-group network 1024
 - Prefix List, route-map 0.0.0.0/0
 - object-group url

- MAC-
- **ip http proxy redirect-port, ip http proxy redirect-port** BRAS HTTP(S) Proxy
- NAT:
 - ESR-1700: NAT pool 1024

1.6.6

:

- :
 - keepalive softgre .
 - ping-probe .
 - keepalive mode reactive wireless-controller

1.6.5

:

- CLI:
 -
 - CLI
 -
 - // CLI
- :
 - sub- softgre Bridge, VRF

1.6.4

:

- BRAS:
 - **show subscriber-control sessions count** BRAS
 - **show subscriber-control services count** BRAS
- mDNS
 - mDNS-reflector
 - mDNS
 - **show ip mdns-reflector** mDNS
 - **clear ip mdns-reflector**
- :
 - CLI
 - dynamic/static tunnel softgre **show/clear mac address-table**
 - :
 - **clear tunnels softgre remote-address <ip>** softgre
 - **clear tunnels softgre** softgre

1.6.2

:

- BRAS:
 - ESR-1X/2X
 - c IP nas-ip
- DHCP:
 - DHCP
 - DHCP 128
- QoS:
 - , ingress
 - ACL
 - DSCP
- VoIP:
 - PBX
- :
 - routerport/switchport/hybrid
 - E1 HDLC
 - Serial (RS-232):
 - Dial up, leased line
 -
- - BGP:
 - Flow Specification Rules
 - weight
 - route-map default route, le/ge/eq

- remove-private-as all, nearest, replace
- IP:
 - IP Unnumbered
 - ICMP unreachable/redirect
 - IPv6 Router Advertisement
- MultiWAN:
 - NAT
- :
 - AAA:
 - IP TACACS/LDAP
 - RADIUS
 - TACACS 60
 - CLI:
 -
 -
 - CPU
 -
 -
 -
 -
 -
 -
 - show ip firewall counters**
 - HTTP (S)
 - (running, candidate, factory)
 -
 - commit update
 - SNMP:
 - community trap
 - IP trap
 - linkDown/linkUp cisco-like
 - SSH:
 - IP SSH
 - Cisco SLA responder
 - Eltex SLA
 - SFTP
- Firewall:
 - ICMP
 - HTTP (S) Proxy:
 - : ActiveX, JS, Cookies
 - / /
 - URL RADIUS CoA
 - NAT:
 - PPTP/PPPoE
- :
 - IPsec:
 - IP, DHCP,
 -
 - XAuth
 - PFS (perfect forward secrecy) DH

1.4.4

- :
 - PPPoE:
 - PAP, MS-CHAP, MS-CHAPv2, EAP

1.4.2

- :
 - show ip firewall screens counters,**
 - XMAS TCP all flags
 - SNMP:
 - snmp-server contact snmp-server location.** OID
 - SNMP View: community user OID
 - NTP:
 - show ntp peers:**
 - Firewall:
 - ip firewall sessions tracking sip port,** TCP/UDP SIP session tracking
 - Firewall:
 - ip firewall sessions tracking sip port,** TCP/UDP SIP session tracking

- :
- L2TP IPsec
- IP SLA (Wellink):
 -
 -
 - : , CLI, SYSLOG SNMP

1.4.1

:

- :
 - GRE:
 - keepalive Ethernet over GRE
 - SoftGRE 8 (ESR-1200/ESR-1700)
 - MTU SUB-GRE
 - IPsec:
 - **encryption algorithm null config-ipsec-proposal**, ESP-
 - policy-based IPsec VRF
- BRAS:
 -
 - **session ip-authentication config-subscriber-control.** IP-
 - **show subscriber-control radius-servers** RADIUS-
- SNMP:
 - **commitConfirmAndReload** SetRequest
 - RMON,
 - VoIP- SNMP
 - DoS-
 - SNMP traps :
 -
 - GRE/SUB-GRE
 - bridge-group
 - BRAS-
- AAA:
 - **source-address config-tacacs-server config-ldap-server**
- MultiWAN:
 - **wan load-balance config-cellular-modem**, Multiwan USB-
- L3-:
 - BFD
 - BGP:
 - **default-information originate config-bgp-af, default-originate config-bgp-neighbor,**
- CLI:
 - Ctrl-P Ctrl-N
 - **show tracking objects**
- LLDP:
 - MED DSCP, VLAN, PRIORITY . Voice VLAN
- Firewall:
 -
 - **ip firewall logging screen config,** DoS-
- QoS:
 - GRED (Generic RED) IP DSCP IP Precedence
- VRRP:
 - VRF
 - VRRP track-ip
- Zabbix:
 - Zabbix-
- :
-

1.4.0

:

- :
 - PPTP-
 - PPPoE-
 - Ethernet over GRE
 - Ethernet over GRE
 - MTU 10000
 - IPsec:
 - XAuth IPsec-
 - OpenVPN
 -
- BRAS:
 - USER IP - PROXY IP NetFlow
- L2 :
 - **force-up config-vlan.** VLAN «Up»

- L3 :
 - IPv6
 - BGP:
 - local preference
 - **show ip bgp neighbors**
 - VRRP tracking: MED AS-path VRRP
- CLI:
 - **terminal resize**
 - APN **config-cellular-profile** "@" , " , "-"
 - :
 - MAC- /
 - expect- Firewall
 - show ip interfaces
- DHCP:
- IP- DHCP-
- IP-, , HEX-
- NAT:
- Static NAT
- NTP:
 - **ntp enable vrf <NAME>** . **ntp enable**
 - **ntp logging**, NTP-
 - **ntp source address <IP>**, IP- NTP peers
- SNMP:
 - **snmp-server vrf <NAME>** . **snmp-server** SNMPv3
 - :
 - , ,
 - (commit, confirm, restore, rollback ..)
 -
 -
 - (esr **snmp-server system-shutdown**)
 - VRRP
 - :
 -
 - ARP-
- SYSLOG:
- /
- VRRP:
 - **vrrp force-up**. VRRP IP- «Up»

1.3.0

:

- :
 - DoS :
 - ICMP flood
 - Land
 - Limit-session-destination
 - Limit-session-source
 - Syn flood
 - UDP flood
 - Winnuke
 - :
 - Fin-no-ack
 - ICMP type
 - IP sweep
 - Port scan
 - Spoofing
 - Syn-fin
 - TCP-no-flag
 - - ICMP fragment
 - IP fragment
 - Large ICMP
 - Syn fragment
 - UDP fragment
 - Unknown protocols
- DNS- DNS-
- LLDP
- 3G/4G USB-
- AAA:
 -
 -
 -
 - ,
 -
 -
 - , / root RS-232 (console)
 -

-
- BGP:
- BRAS:
 - Framed-IP-Address, IP- Access-Request RADIUS
 - Proxy
- CLI:
 - SFTP / ,
 - USB-, SD/MMC ,
 -
 -
- DHCP:
 - DHCP client. IP-
 - DHCP- VRF
 - 150 (tftp-server ip) 61 (client-identifier HH:<MAC>) DHCP-
- Firewall:
 - ALG-
 - , (,)
- IPSEC:
 - any local address IKE gateway
 -
- L2 :
 - BPDU ESR-100/200
 - ESR-100/200
- MultiWAN:
 - (LOSS, jitter, RTT)
 - VRF
 - LT-
- NTP:
 -
 -
- SNMP:
 - SNMPv1
 -
 - snmp-server community
- SSH
 - SSH
 - SSH
 - SSH
 - SSH
 - , ,
 - RSA-
- VLAN
 - VLAN (ESR-1000/ESR-1200)
 - MAC based VLAN
 - VLAN
- VRRP
 - VRRP IP IP- GRE, IP4IP4, L2TPv3 RADIUS-
 - VRRP IP- L2TP/PPTP
 - VRRPv3
 - IP-

1.2.0

:

- :
- GRE Keepalive
- L3 :
 - BGP:
 -
 - /
 - BGP 1000
 -
 - Multiwan:
 -
 - VRRP:
 - VRRP IP
 - Port-Channel (ESR-100/200)
- IPsec:
 - Policy-based IPsec
 - (margin seconds/packets/bytes, randomization)
 - IPsec /
 - , , SA
- SNMP:
 - ifSpeed IF-MIB
 - SNMP Trap:

- CLI:
 - , IP- MAC- ARP/ND
 - log
 - log c **copy**
 - critlog **show syslog**
 - log . **show syslog from-end**
 - . **system config-confirm timeout**
 - :
 - Cisco-like :

v1.2.0: system:..

esr# copy system:running-config

v1.1.0: fs://.../

esr# copy fs://running-config

- AAA:
 - ,
- NTP:
 -
- Firewall:
 - 512
 - , - . **ip firewall sessions allow-unknown**
- QoS:
 - Basic QoS
- BRAS:
 - SSID
 - MAC-
 - / VRRP

1.1.0

:

- BRAS:
 -
 - RADIUS CoA, AAA
 - / URL
 - ,
 - HTTP Proxy
 - HTTP Redirect
 - HTTPS Proxy
 - HTTPS Redirect
 - URL PCRF
 - Netflow
 - MAC-
- Netflow:
 - Netflow v10. URL
 - VRF
 - Domain Observation ID
 - NAT-
 - HTTPS Host
 - L2/L3 location
 - active-timeout
 - IP- Netflow-
 - Firewall
- VRRP:
 - VRRP-
- CLI:
 -
 - Firewall NAT
 - /
 -
- SYSLOG:
 - IP- SYSLOG
- L2 :
 - Q-in-Q
- L3 :
 - VRF:
 - Virtual Ethernet Tunnel (VRF)
 - BGP:
 - IP- (update-source)
 - BFD
- DHCP Relay:
 - Option 82
 - VRF

- point-to-point (GRE, IP-IP ..)
- :
- SNMP:
 - MAU-MIB
- QoS:
 - QoS policy-map 1024 class-map 1024
- Wi-Fi Controller:
 - (SSID) DATA- RADIUS-

1.0.8

- :
- AAA:
 - source IP RADIUS-
 - SSH-
 - SSH
- L3 :
 - MultiWAN: per-flow
 - BGP blackhole/unreachable/prohibit Nexthop
 - VRF-lite:
 - NTP
 - GRE-
- CLI:
 - **show interfaces status**
 - ***
 - **no nat { source | destination } NAT**
- VRRP:
 - 3
 - GARP Master
 - 8 Virtual IP
- Firewall Wi-Fi Controller'
- Multiwan:
 -
- ESR-100/ESR-200:
 - 100BASE-X -
- ESR-1000:
 - : unknown-unicast
- :
 - SNMP:
 - SNMP Trap:
 - Trap CPU
 - SNMP MIB:
 - IP-MIB
 - TUNNEL-MIB
 - ELTEX-TUNNEL-MIB
 - RL-PHYS-DESCRIPTION-MIB
 - CISCO-MEMORY-POOL-MIB
 - CISCO-PROCESS-MIB

1.0.7

- :
- L3 :
 - VLAN (Internal Usage VLAN)
 - MultiWAN:
 - DirectConnect-
 - TCP MSS
 - (FIB)
 - (RIB)
 - Prefix List
 - BGP
 - BGP ECMP
 - keepalive
 - Policy-based routing (IPv4 only)
 - OSPF BGP
 - route-map OSPF, RIP
 - VRF-lite:
 - BGP
 - OSPF
 - QoS
 - (AAA, Telnet, SSH, SNMP, Syslog, **copy**)

- IPv6:
 - BGP
 - Nexthop route-map
 - RADIUS/TACACS/LDAP
 - MultiWAN
- :
 - RADIUS PPTP/L2TP
 - OpenVPN
 - Ethernet-over-GRE (Wi-Fi)
 - IPsec:
 - DES
- ARP/ND:
 -
- DHCP Server:
 - netbios-name-server DHCP
- CLI:
 -
 - ACL
 - untagged/tagged VLAN **switchport general allowed vlan remove**
 -
- VRRP:
 - preempt delay
 - Virtual IP
- Multiwan:
 - target list
- ESR-100/ESR-200:
 - -based QoS
 - ACL
- ESR-1000:
 - SFP- 10G
 - : -
- :
 - IP SLA (Wellink)
- SYSLOG: timezone
- :
 - SNMP:
 - SNMP Trap
 - SNMP MIB:
 - ENTITY-MIB
 - IANA-ENTITY-MIB

1.0.6

- :
 - :
 -
 - :
 - Netflow v5/v9/v10(IPFIX)
 - sFlow
- MAC-:
 - MAC-
 - MAC-
- Syslog:
 -
 -
- CLI:
 - | include/exclude/begin/count
 -
 - syslog
 - , TFTP/SSH/FTP **copy**
 - ARP/IPv6 Self- **show arp show ipv6 neighbors**
 - :
 - **ip path-mtu-discovery**
 - DHCP: **ip address dhcp enable ip address dhcp**

v.1.0.6:(config)# interface gigabitethernet 1/0/1

(config-if-gi)# ip address dhcp

v.1.0.5:(config)# interface gi 1/0/15

(config-if)# ip address dhcp enable

- DHCP: **ip address dhcp server <IP> ip dhcp server address <IP>**

v.1.0.6: (config)# interface gigabitethernet 1/0/1
 (config-if)# ip dhcp server address 10.10.0.1
 v.1.0.5: (config)# interface gigabitethernet 1/0/1
 (config-if)# ip address dhcp server 10.10.0.1

- DHCP: **ip address dhcp** {<ignore, lease-time, reboot, set reboot time, retry, select-timeout, timeout, vendor-class-id>
ip dhcp client {<ignore, lease-time, reboot, set reboot time, retry, select-timeout, timeout, vendor-class-id>}

v.1.0.6: (config)# interface gigabitethernet 1/0/1
 (config-if)# ip dhcp client timeout 60
 v.1.0.5: (config)# interface gigabitethernet 1/0/1
 (config-if)# ip address dhcp timeout 60

- Firewall: **show security zone-pair counters** **show ip firewall counters**

v.1.0.6: # show ip firewall counters
 v.1.0.5: # show security zone-pair counters

- Firewall: **clear security zone-pair** **clear ip firewall counters**

v.1.0.6: # clear ip firewall counters
 v.1.0.5: # clear security zone-pair

- sNAT: **service nat source** **nat source**

v.1.0.6: (config)# nat source
 v.1.0.5: (config)# service nat source

- dNAT: **service nat destination** **nat destination**

v.1.0.6: (config)# nat destination
 v.1.0.5: (config)# service nat destination

- NTP: **service ntp** {< broadcast-client, dscp, enable, peer, server>} **ntp** {< broadcast-client, dscp, enable, peer, server>}

v.1.0.6: (config)# ntp peer 10.10.10.10
 v.1.0.5: (config)# service ntp peer 10.10.10.10

- MULTIWAN: **target <IP>** **ip address <IP>**

v.1.0.6: (config)# wan load-balance target-list eltex
 (config-wan-target-list)# target 3
 (config-wan-target)# ip address 10.10.0.1
 v.1.0.5: (config)# wan load-balance target-list eltex
 (config-wan-target-list)# target 3
 (config-wan-target)# target 10.10.0.1

- IPsec: **ipsec authentication method psk** **ipsec authentication method pre-shared-key**

v.1.0.6: (config)# remote-access l2tp elt
 (config)# ipsec authentication method pre-shared-key
 v.1.0.5: (config)# remote-access l2tp elt
 (config)# ipsec authentication method psk

- QoS:
-
- Firewall:
-
- SSH:
- RSA, DSA, ECDSA, Ed25519
- NAT:
- NAT Firewall
- bridge
- MultiWAN:
- SUB-
- SNMP:
- ifXTable
- SNMP IPv6
- /
- MAC-
- L3 :
- BGP:
-
- ExtCommunity
- AS
- default-

:

- CLI:
- 'all'
- :
- Jumbo Frame (MTU 10000)
- /32 Loopback-
- Firewall:
- /
- Firewall
- QoS:
- /
- DSCP
- QoS (HQoS)
- (shaping), 1/
- (shaping per queue)
- RED, GRED
- SFQ
- -based QoS
- :
- (ACL)
- IP- DHCP- MAC-
- MAC- Firewall
- DHCP- Relay-
- Telnet, SSH-
- E1:
- CHAP
- PPP
- MLPPP (Multilink PPP)
- AAA:
- , RADIUS, TACACS+, LDAP
- TACACS+
- : SYSLOG, RADIUS, TACACS+
- :
- L3 :
- BGP:
 - (local preference, AS-path, community, nexthop, origin, metric, subnet)
 - Route-Reflector
 - :
 - 32-
 - :
 - :
 - RIP:
 - :
 - :
 - OSPF:
 - eligible NBMA-
 - (- eq, le, ge)
 - blackhole/prohibit/unreachable
- VRF Lite:
 - VRF:
 - IPv4/IPv6-
 - :
 - NAT
 - Firewall
- :
- :
 - / (flow)
 - :
- Syslog
- :
- :
 - Firewall
 - DHCP-
 - SoftGRE Wi-Fi
- IPv6 :
 - :
 - :
 - Firewall
 - OSPFv3
 - Prefix-List
 - NTP
 - Syslog
 - ping, traceroute
 - Telnet client/server
 - SSH client/server
 - DHCP Server/Relay/Client
- SNMP:
 - SNMP v3
 - SNMP MIB () QoS

1.0.4

:

- CLI:
 - FTP, SCP
 - u-boot
 - :
 - NAT: **proxy-arp interface ip nat proxy-arp**

```
v.1.0.4: (config)# service nat source
(config-snat)# proxy-arp interface gigabitethernet 1/0/15 SPOOL
v.1.0.3: (config)# interface gigabitethernet 1/0/15
(config-if)# ip nat proxy-arp SPOOL
```

- IKE: **policy ike-policy**

```
v.1.0.4: (config)# security ike gateway gw1
(config-ike-gw)# policy ik_pol1
v.1.0.3: (config)# security ike gateway gw1
(config-ike-gw)# ike-policy ik_pol1
```

- IPSec: **vpn-enable enable**

```
v.1.0.4: (config)# security ipsec vpn vpn1
(config-ipsec-vpn)# vpn-enable
v.1.0.3: (config)# security ipsec vpn vpn1
(config-ipsec-vpn)# enable
```

- VTI: **interface vti tunnel vti**

```
v.1.0.4: (config)# tunnel vti 1
v.1.0.3: (config)# interface vti 1
```

- DHCP: **service dhcp-server ip dhcp-server**

```
v.1.0.4: (config)# ip dhcp-server
v.1.0.3: (config)# service dhcp-server
```

- SNMP:
 - SNMP
 - SNMP MIB ()
- :
 - Authentication key-chain
 - OSPF:
 - NSSA
 - Stub Area
 - MD5
 - MTU Ignore
 - RIP:
 - MD5
 - BGP:
 - EBGp Multihop
 - next-hop-self
 - :
 - preference
- :
 - VRRP
 - DualHoming
 - WAN (Wide Area Network)
 - WAN-
- DHCP:
 - DHCP relay
- QOS:
 - L3- (DSCP)
 - 8-
 - SP, WRR
- :
 - loopback-
- NAT/Firewall:
 - (H.323, GRE, FTP, SIP, SNMP)

- :
- :
- :

1.0.3

:

- :
 - VLAN
 - LAG (static LACP)
 - STP/RSTP/MSTP
 - Bridge-
- :
 - OSPF
 - BGP
 - RIP
- NAT:
 - Proxy ARP Source NAT
- :
 - L2TPv3
 - IPv4-over-IPv4
 - GRE
- Syslog:
 - (SSH Telnet)
 - RFC5424
- CLI:
 - CLI
 - ARP-
 - hardware
 - ARP-
- :
 - "Flash"
- :
 - SHA-2 IKE IPsec

1.0.2

:

- :
 - () TFTP-()
 - Hostname
 - ()
 - DNAT
 - DHCP-
 - IPSec,
 - object-group service/network
- :
 - C
- :
 - PPTP
 - L2TP/IPSec
- NTP:
 - , ,
- 10G
- :
 - Ping

1.0.1

- :
 - Source NAT
 - Destination NAT
 - Static NAT
- , VPN:
 - IKE
 - (IPsec)
 - (3DES, AES)
 - MD5, SHA1, SHA256, SHA384, SHA512
- :
 - DHCP Server
 - DHCP Client
 - DNS
- L3 :
 - C
- :
 - Firewall
- :
 - :
 - CLI
 - Telnet, SSH
 - ()
 -
 -
 - (u-boot)
- :
 - Syslog

<u>Firewall ()</u>	<u>5.9 /</u>
<u>NAT ()</u>	<u>5.9 /</u>
<u>IPsec VPN ()</u>	<u>3.7 / (AES128bit / SHA1)</u>
<u>VPN-</u>	<u>100</u>
<u>-</u>	<u>100</u>
<u>-</u>	<u>512 000</u>

- (500M/ IPsec)
- CPU
- policy-based VPN
- u-boot
- switch
- bridging
- VLAN (bridging)
- SNMP, Webs
- timezone
- NTP