ESR-Series. Release notes. 1.14.5

- 1.14.5
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- 1.12.0
- 1.11.2
- 1.11.1
- 1.11.0
- 1.10.0
- 1.8.7
- 1.8.5
- 1.8.3
- 1.8.2
- 1.8.1
- 1.8.0
- 1.7.0
- 1.6.6
- 1.6.5
- 1.6.4
- 1.6.2
- 1.4.4
- 1.4.2
- 1.4.1
- 1.4.0
- 1.3.0
- 1.2.0
- 1.1.0
- 1.0.8
- 1.0.7
- 1.0.6
- 1.0.5
- 1.0.4
- 1.0.3
- 1.0.2
- 1.0.1

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:

        - Trap o CPU, , RAM FLASH
- 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-
- :
  - OSFP
  - 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

:

Firewall ( )	*5.9 /*
NAT ( )	*5.9 /*
IPsec VPN ( )	*3.7 / (AES128bit / SHA1)*
VPN-	*100*
_	*100*
_	*512 000*

:

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