

## 1.4.3 ESR-10 - 1.4.3

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- DHCP
- ESR-10, TFTP-
- ESR-10
- GRE keepalive

ESR10 1.4.3 1.0.9.

1.4.3 DHCP . 43 16, , , . : "0x10:05:31:2e:34:2e:33". TFTP-. 1.4.3 , ESR-10.

1.4. : 1.4.0 SNMP, SNMP . 1.4.1 GRE-, factory-config SNMP . 1.4.1 MTU - GRE ( GRE ). MTU - , GRE, MTU -.  
ESR-10 TFTP-, 121 DHCP- ( TFTP- ).

### DHCP

```
class "esr10.vl2304" {
    log(info, concat("Case esr10.vl2304 class for ", binary-to-ascii(16, 8, ":", packet(28, 6))));
    match if (
        (
            (binary-to-ascii(10, 8, ".", packet(24, 3)) = "172.30.0") or
            (binary-to-ascii(10, 8, ".", packet(12, 3)) = "172.30.0") or
            (binary-to-ascii(10, 8, ".", packet(24, 3)) = "172.30.1") or
            (binary-to-ascii(10, 8, ".", packet(12, 3)) = "172.30.1")
        )
        and
        (
            (substring (option vendor-class-identifier, 0, 6) = "ESR-10")
        )
    );
}
subnet 172.30.0.0 netmask 255.255.254.0 {
    option routers 172.30.0.1;
    option subnet-mask 255.255.254.0;
    option ms-classless-static-routes 29, 192, 168, 20, 0, 172, 30, 0, 1;
    option rfc3442-classless-static-routes 29, 192, 168, 20, 0, 172, 30, 0, 1;
    pool {
        allow members of "esr10.vl2304";
        default-lease-time 86400;
        max-lease-time 87000;
        option tftp-server-name "100.123.0.2";
# , DHCP- 43 , 1.4.3
        if substring (option vendor-encapsulated-options, 2, 5) = "1.4.3" {
            option bootfile-name "ESR10GRE-1.4.3.txt";
        }
# vendor-class-identifier
        elseif option vendor-class-identifier = "ESR-10" {
            option bootfile-name "ESR10GRE.txt";
        }
        range 172.30.0.10 172.30.1.254;
    }
}
```

### ESR-10, TFTP-

:

```
copy -v ESR10GRE.txt ESR10GRE-1.4.3.txt
```

:

```
#!/usr/bin/clish
#12                                     #    "12",
hostname ESR-10GRE

tech-support login enable
root login enable

boot host auto-config                 #    TFTP-,
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
object-group service dhcp_client
    port-range 68
exit
object-group service ntp
    port-range 123
exit

object-group network MNG
    ip address-range 100.123.0.2
    ip prefix 172.30.0.0/23
    ip prefix 192.168.20.0/29
exit

vlan 2,10-11
exit

security zone trusted
exit
security zone GRE
exit

snmp-server
snmp-server community "private1" rw   # community    8 128
snmp-server community "public11" ro   # community    8 128
snmp-server host 100.123.0.2
exit

snmp-server system-shutdown           #    SNMP-

bridge 1
    description "Tunnel-IP"
    vlan 2
    security-zone GRE
    ip address dhcp
    ip dhcp client ignore router
    enable
exit
bridge 2
    description "userData"
    enable
exit
bridge 3
    description "mgmt_ESR10"
    security-zone trusted
```

```

    ip address dhcp
    enable
exit

interface gigabitethernet 1/0/1
    switchport access vlan 2
exit
interface gigabitethernet 1/0/2
    switchport mode trunk
    bridge-group 2
exit
interface gigabitethernet 1/0/3
    switchport access vlan 10
    bridge-group 2 tagged
exit
interface gigabitethernet 1/0/4
    switchport access vlan 10
    bridge-group 2 tagged
exit
interface gigabitethernet 1/0/5
    switchport mode trunk
    bridge-group 2
exit
interface gigabitethernet 1/0/6
    switchport access vlan 2
exit

tunnel gre 1
    mtu 1462                                # MTU      4 , -,
    keepalive dst-address 172.30.2.1        # ,      keepalive.      ,      bridge 3
    keepalive dhcp dependent-interface bridge 1 # ,      keepalive
    keepalive dhcp dependent-interface bridge 3 # ,      keepalive
    keepalive enable # keepalive
    mode ethernet
    local interface bridge 1
    remote address 192.168.20.1
    enable
exit
tunnel gre 1.1
    bridge-group 3
    mtu 1458 # MTU - , . MTU - 1500 tftp -
    snmp init-trap
    enable
exit
tunnel gre 2
    mtu 1462
    mode ethernet
    bridge-group 2
    local interface bridge 1
    remote address 192.168.20.2
    enable
exit

security zone-pair trusted self
    rule 10
        action permit
        match protocol any
        match source-address MNG
        match destination-address any
        enable
    exit
exit
security zone-pair GRE self
    rule 10
        action permit
        match protocol any
        match source-address MNG
        match destination-address any
        enable
    exit
exit

```

```
ip telnet server
ip ssh server

ntp enable
ntp server 100.123.0.2
exit
```

## ESR-10

### 1. TFTP- :

```
esr-10# copy tftp://100.123.0.2:/esr10-1.4.3-build3.firmware fs://firmware
Download firmware from tftp://100.123.0.2:/esr10-1.4.3-build3.firmware...
esr10-1.4.3-build3.firmware          100% |*****| 67160k  0:00:00 ETA
Write firmware...
Erasing 128 Kibyte @ f4e0000 -- 100 % complete
Writing data to NAND...
#####
#####
Firmware updated successfully.
```

### 2., :

```
ESR-10GRE# sh bootvar
```

| Image | Version                  | Date                          | Status     | After reboot |
|-------|--------------------------|-------------------------------|------------|--------------|
| 1     | 1.0.9 build 81[4401667]  | date 08/11/2017 time 16:32:11 | Active     | *            |
| 2     | 1.4.3 build 3[52739dfd8] | date 09/11/2018 time 13:04:32 | Not Active |              |

```
esr-10# boot system image-2

Do you really want to set boot system image? (y/N): y
esr-10# sh bootvar
```

| Image | Version                  | Date                          | Status     | After reboot |
|-------|--------------------------|-------------------------------|------------|--------------|
| 1     | 1.0.9 build 81[4401667]  | date 08/11/2017 time 16:32:11 | Active     |              |
| 2     | 1.4.3 build 3[52739dfd8] | date 09/11/2018 time 13:04:32 | Not Active | *            |

### 3. ESR-10:

```
ESR-10GRE# reload system
Do you really want to reload system ? (y/N): y
```

#### 4. , :

```
ESR-10GRE# show running-config tunnels
tunnel gre 1
  mtu 1462
  keepalive dst-address 172.30.2.1
  keepalive dhcp dependent-interface bridge 1
  keepalive dhcp dependent-interface bridge 3
  mode ethernet
  local interface bridge 1
  remote address 192.168.20.1
  enable

ESR-10GRE# show running-config snmp
snmp-server
snmp-server system-shutdown
snmp-server community "private1" rw
snmp-server community "public11" ro

snmp-server host 100.123.0.2
exit
snmp-server system-shutdown
```

5. SNMP-community - EMS "" ESR-10.

## GRE keepalive

GRE ( tunnel gre 1).

GRE keepalive:



keepalive dst-address - IPv4, keepalive, ; keepalive dhcp dependent-interface - , IP- keepalive. . bridge 1 bridge 3; keepalive enable - keepalive; keepalive retries - , keepalive. 6; keepalive timeout - , , keepalive dst-address. 10; keepalive dhcp link-timeout -, keepalive, IP- , keepalive dhcp dependent-interface. 10.

GRE keepalive: default lease-time, DHCP- , ESR-10 ( GRE) :

**default-lease-time > (retries \* timeout + dhcp link-timeout) \* 2 + 10.**

GRE keepalive, default-lease-time ESR-10 150- .