

# v1.28\_ Eltex-Radius

- Radius-  
• eltex-radius

eltex-radius docker-.env, eltex-radius.env docker-compose.yml.

- 1) eltex-radius, service eltex-radius stop. , , systemctl disable eltex-radius.service
- 2) EMS-- Radius ( eltex-radius).
- 3) docker, docker-compose .
- 4) , - ( - eltex-radius):

```
eltex@eltex:~$ mkdir -p eltex-radius/certs/  
eltex@eltex:~$ cd eltex-radius
```

- 5) docker-compose.yml, .env eltex-radius.env :

## docker-compose.yml

```
version: '3'  
  
services:  
  eltex-radius:  
    container_name: eltex-radius  
    network_mode: host  
    image: hub.eltex-co.ru/softwlc/eltex-radius:<SoftWLC version>-<tag>  
    env_file: eltex-radius.env  
    volumes:  
      # Eltex OUI list  
      - /usr/share/oui-base/oui-freeradius.txt:/usr/share/oui-base/oui-freeradius.txt:ro  
      # Eltex-Radius-NBI certificates  
      - ./eltex-radius/certs/ca/wireless-ca.crt:/etc/eltex-radius/certs/ca/default.pem:ro  
      - ./eltex-radius/certs/server.crt:/etc/eltex-radius/certs/server.crt:ro  
      - ./eltex-radius/certs/server.key:/etc/eltex-radius/certs/server.key:ro
```

✔ <SoftWLC version>-<tag> SoftWLC , .

## eltex-radius.env

```
# ! ! #
# Ports on which server will listen
RADIUS_AUTH_PORT=1812
RADIUS_ACCT_PORT=1813
RADIUS_INNER_TUNNEL_PORT=18121

# MySQL database
RADIUS_DB_HOST=localhost
RADIUS_DB_PORT=3306
RADIUS_DB_LOGIN=radius
RADIUS_DB_PASSWORD=radpass
RADIUS_DB_NAME=radius

# PCRF
# If you setting RADIUS_PCRF_ENABLED=0, then you also should enable accounting port listening in "default"
server
RADIUS_PCRF_HOST=127.0.0.1
RADIUS_PCRF_PORT=7080
RADIUS_PCRF_ENABLED=1

# EAP
RADIUS_CA_CERT_NAME=default.pem
RADIUS_TLS_KEY_PASSWORD=eltex

# Proxying
RADIUS_PROXY_AUTH=0
RADIUS_PROXY_DOMAIN_REGEX=^(.+\\.)?enterprise\\.root$
RADIUS_PROXY_HOST=127.0.0.1
RADIUS_PROXY_PORT=18121
RADIUS_PROXY_SECRET=eltex

# Ubiquiti vendor detection
RADIUS_UBI_VENDOR_REGEX=Apple|Ubiquiti
RADIUS_VENDOR_GROUP_ENABLED=1

# Settings of runtime NAS discovery
RADIUS_DYNAMIC_CLIENTS=false
RADIUS_DYNAMIC_CLIENT_SUBNET=192.168.0.0/16
RADIUS_DYNAMIC_CLIENT_LIFETIME=3600
RADIUS_DYNAMIC_CLIENT_RATE_LIMIT=false

# Proxy SSID
RADIUS_PROXY_SSID_ENABLED=0
RADIUS_PROXY_SSID_VALUE=EAP_TLS
RADIUS_PROXY_SSID_HOST=127.0.0.1
RADIUS_PROXY_SSID_PORT=18122
RADIUS_PROXY_SSID_SECRET=eltex

# Status-Server settings
RADIUS_STATUS_HOST=127.0.0.1
RADIUS_STATUS_PORT=18123
RADIUS_STATUS_CLIENT_HOST=127.0.0.1
RADIUS_STATUS_CLIENT_SECRET=eltex

#TIMEZONE
TZ=Asia/Novosibirsk
```

eltex-radius.env :

- RADIUS\_DB\_HOST - mysql
- RADIUS\_DB\_PORT - mysql
- RADIUS\_DB\_LOGIN - mysql
- RADIUS\_DB\_PASSWORD - mysql
- RADIUS\_DB\_NAME - mysql
- RADIUS\_PCRF\_HOST - eltex-pcrf



.. Eltex-EMS eltex-radius - , , nas .

:

- RADIUS\_DYNAMIC\_CLIENTS=true
- RADIUS\_DYNAMIC\_CLIENT\_SUBNET - (), (, ESR), eltex-radius

eltex-oui-list, .



eltex-radius-nbi ,

**openssl x509 -text -noout -in /var/lib/eltex-radius-nbi/certificates/server.crt**

Signature Algorithm, , md5WithRSAEncryption, :

```
$ sudo dpkg-reconfigure eltex-radius-nbi
$ openssl x509 -text -noout -in /var/lib/eltex-radius-nbi/certificates/server.crt
Signature Algorithm: sha256WithRSAEncryption
$ sudo /var/lib/eltex-radius-nbi/setup_er_eap.sh
$ sudo service eltex-radius restart
```

CA certificate, server certificate, server private key , eltex-radius-nbi docker- ( - eltex-radius/certs/ca ca-certificate (wireless-ca.crt), eltex-radius/certs server.crt server.key) update\_certificates.sh

: SOFTWLC\_HOST=< nbi>@<ip nbi> bash ./update-certificates.sh

: ./update-certificates.sh

## update-certificates.sh

```
#!/bin/bash

set -e

if [ -z "$CERTS_DIR" ]; then
    CERTS_DIR=./eltex-radius/certs
fi

if [ -z "$ENV_FILE" ]; then
    ENV_FILE=./eltex-radius.env
fi

if [ -z "$SOFTWLC_HOST" ]; then
    SOFTWLC_HOST=$USER@$HOSTNAME
fi

mkdir -p $CERTS_DIR/ca
scp $SOFTWLC_HOST:/var/lib/eltex-radius-nbi/setup_er_eap.sh ./

sed -n '3,/SERVER_KEY_PASSWORD/p' setup_er_eap.sh > setup_er_eap.env
source ./setup_er_eap.env

echo "$CA_CERT" > $CERTS_DIR/ca/wireless-ca.crt
chmod 644 $CERTS_DIR/ca/wireless-ca.crt

echo "$SERVER_CERT" > $CERTS_DIR/server.crt
echo "$SERVER_KEY" > $CERTS_DIR/server.key
chmod 644 $CERTS_DIR/server.*

if [ -f $ENV_FILE ]; then
    sed -i -e "s/^\(RADIUS_TLS_KEY_PASSWORD\)=.*/\1=$SERVER_KEY_PASSWORD/" $ENV_FILE
fi

echo "CA certificate, server certificate and server private key were updated successfully."
echo "To override tls_key_password in your eltex-radius docker container use this environment variable:
RADIUS_TLS_KEY_PASSWORD=$SERVER_KEY_PASSWORD"
```

mysql , bind-address mysql

```
sudo sed -i -e "s/^(bind-address.*=.*\)/#\1/" /etc/mysql/mysql.conf.d/mysqld.cnf
sudo systemctl restart mysql.service
```

**docker-compose up -d**

, eltex-radius, nas- EMS. IP , EMS.

Radius EMS, IP , docker-compose.

docker-compose **docker-compose restart**

## Radius-

1) :

```
mkdir -p ./eltex-radius/config
docker cp eltex_eltex-radius_1:/etc/eltex-radius/proxy.conf ./eltex-radius/config/proxy.conf
mkdir -p ./eltex-radius/config/servers
docker cp eltex_eltex-radius_1:/etc/eltex-radius/servers/default ./eltex-radius/config/servers/default
mkdir -p ./eltex-radius/config/policy.d
docker cp eltex_eltex-radius_1:/etc/eltex-radius/policy.d/proxy ./eltex-radius/config/policy.d/proxy
```

2) docker-compose.yml , . + 1813:

#### docker-compose.yml

```
version: '3'

services:
  eltex-radius:
    container_name: eltex-radius
    network_mode: host
    image: hub.eltex-co.ru/softwlc/eltex-radius:<SoftWLC version>-<tag>
    env_file: eltex-radius.env
    volumes:
      # Eltex OUI list
      - /usr/share/oui-base/oui-freeradius.txt:/usr/share/oui-base/oui-freeradius.txt:ro
      # Eltex-Radius-NBI certificates
      - ./eltex-radius/certs/ca/wireless-ca.crt:/etc/eltex-radius/certs/ca/default.pem:ro
      - ./eltex-radius/certs/server.crt:/etc/eltex-radius/certs/server.crt:ro
      - ./eltex-radius/certs/server.key:/etc/eltex-radius/certs/server.key:ro
      # Eltex-radius configs
      - ./eltex-radius/config/proxy.conf:/etc/eltex-radius/proxy.conf:ro
      - ./eltex-radius/config/servers/default:/etc/eltex-radius/servers/default:ro
      - ./eltex-radius/config/policy.d/proxy:/etc/eltex-radius/policy.d/proxy:ro
```

3) deb-.

3) docker-compose **docker-compose restart**

## eltex-radius

eltex-radius docker-compose docker-compose.yml command:

#### docker-compose.yml debug

```
version: '3'

services:
  eltex-radius:
    container_name: eltex-radius
    network_mode: host
    image: hub.eltex-co.ru/softwlc/eltex-radius:<SoftWLC version>-<tag>
    env_file: eltex-radius.env
    # ViewRADIUSD startup options here:
    # https://freeradius.org/radiusd/man/radiusd.html
    command: ["-X"] # DEBUG
    volumes:
      # Eltex OUI list
      - /usr/share/oui-base/oui-freeradius.txt:/usr/share/oui-base/oui-freeradius.txt:ro
      # Eltex-Radius-NBI certificates
      - ./eltex-radius/certs/ca/wireless-ca.crt:/etc/eltex-radius/certs/ca/default.pem:ro
      - ./eltex-radius/certs/server.crt:/etc/eltex-radius/certs/server.crt:ro
      - ./eltex-radius/certs/server.key:/etc/eltex-radius/certs/server.key:ro
      # Eltex-radius configs
      - ./eltex-radius/config/proxy.conf:/etc/eltex-radius/proxy.conf:ro
      - ./eltex-radius/config/servers/default:/etc/eltex-radius/servers/default:ro
      - ./eltex-radius/config/policy.d/proxy:/etc/eltex-radius/policy.d/proxy:ro
```

eltex-radius **docker-compose up -d.**

eraddebug :

**docker-compose exec eltex-radius eraddebug**

[v1.28\\_radius debug](#)

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RADIUS_ACCT_PORT	1813
RADIUS_INNER_TUNNEL_PORT	18121
RADIUS_DB_HOST	localhost
RADIUS_DB_PORT	3306
RADIUS_DB_LOGIN	radius
RADIUS_DB_PASSWORD	radpass
RADIUS_DB_NAME	radius
RADIUS_PCRF_HOST	127.0.0.1
RADIUS_PCRF_PORT	7080
RADIUS_PCRF_ENABLED	1
RADIUS_CA_CERT_NAME	default.pem
RADIUS_TLS_KEY_PASSWORD	eltex
RADIUS_PROXY_AUTH	0
RADIUS_PROXY_DOMAIN_REGEX	^(.+\.)?enterprise\.root\$
RADIUS_PROXY_HOST	127.0.0.1
RADIUS_PROXY_PORT	18121
RADIUS_PROXY_SECRET	eltex
RADIUS_UBI_VENDOR_REGEX	Apple Ubiquiti
RADIUS_VENDOR_GROUP_ENABLED	1
RADIUS_DYNAMIC_CLIENTS	false
RADIUS_DYNAMIC_CLIENT_SUBNET	192.168.0.0/16
RADIUS_DYNAMIC_CLIENT_LIFETIME	3600
RADIUS_DYNAMIC_CLIENT_RATE_LIMIT	false
RADIUS_PROXY_SSID_ENABLED	0
RADIUS_PROXY_SSID_VALUE	EAP_TLS
RADIUS_PROXY_SSID_HOST	127.0.0.1
RADIUS_PROXY_SSID_PORT	18122
RADIUS_PROXY_SSID_SECRET	eltex
RADIUS_STATUS_HOST	127.0.0.1
RADIUS_STATUS_PORT	18123
RADIUS_STATUS_CLIENT_HOST	127.0.0.1
RADIUS_STATUS_CLIENT_SECRET	eltex
TZ	Asia/Novosibirsk