

# v1.24\_ SoftWLC

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- 
- 
- GPG
- GPG apt sources
- Nginx
- 
- root mysql
- mysql-server
- OpenJDK 8
- OpenJDK 8 ( , )
- 
- GPG apt sources
- MongoDB
- JAVA\_HOME tomcat8
- 
- Java
- openjdk Tomcat
- tomcat 8080 8081
- MAC-
- SOAP/XML (Apache Axis)
- MySQL 'eltex-ems'
- MySQL RADIUS
- eltex-ems
- eltex-radius
- eltex-radius-nbi SoftWLC OSS/BSS
- eltex-ngw
- eltex-ngw
- eltex-apb
- (Authentication Authorization and Accounting) Wi-Fi , BRAS
- 'Hotspot'
- Hotspot-
- WiFi 'Hotspot'
- 
- 
- B2B,
- 
- API Wi-Fi.
- 
- eltex-doors
- 
- 
- nginx
- Nginx
- nginx
- Nginx tomcat8
- Eltex EMS

SoftWLC :

- 8
- CPU >= 2200MHz
- >= 35Gb
- 
- Ubuntu Server 18.04 LTS / Astra Linux Common Edition 2.12.44 / Debian 9

:

```
root@ubuntu-bionic:~# free -m
total used free shared buffers cached
Mem: 7985 409 7575 0 12 228
-/+ buffers/cache: 168 7816
Swap: 0 0 0
```

CPU:

```
root@ubuntu-bionic:~# lscpu
Architecture: x86_64
CPU op-mode(s): 32-bit, 64-bit
Byte Order: Little Endian
CPU(s): 2
On-line CPU(s) list: 0,1
Thread(s) per core: 1
Core(s) per socket: 2
Socket(s): 1
NUMA node(s): 1
Vendor ID: GenuineIntel
CPU family: 6
Model: 60
Stepping: 3
CPU MHz: 3294.301
BogoMIPS: 6588.60
L1d cache: 32K
L1d cache: 32K
L2d cache: 6144K
NUMA node0 CPU(s): 0,1
```

:

```
root@ubuntu-bionic:~# df -h
Filesystem Size Used Avail Use% Mounted on
udev 3.9G 12K 3.9G 1% /dev
tmpfs 799M 436K 799M 1% /run
/dev/sda1 40G 1.4G 37G 4% /
none 4.0K 0 4.0K 0% /sys/fs/cgroup
none 5.0M 0 5.0M 0% /run/lock
none 3.9G 0 3.9G 0% /run/shm
none 100M 0 100M 0% /run/user
none 901G 113G 789G 13% /vagrant
```

:

```
root@ubuntu-bionic:~# cat /etc/lsb-release
DISTRIB_ID=Ubuntu
DISTRIB_RELEASE=18.04
DISTRIB_CODENAME=bionic
DISTRIB_DESCRIPTION="Ubuntu 18.04.5 LTS"
```

:

```
root@ubuntu-bionic:~# ping eltex.nsk.ru
PING eltex.nsk.ru (62.109.0.175) 56(84) bytes of data.
64 bytes from mail.eltex.nsk.ru (62.109.0.175): icmp_seq=1 ttl=55 time=52.8 ms
64 bytes from mail.eltex.nsk.ru (62.109.0.175): icmp_seq=2 ttl=55 time=47.6 ms
64 bytes from mail.eltex.nsk.ru (62.109.0.175): icmp_seq=3 ttl=55 time=46.4 ms
64 bytes from mail.eltex.nsk.ru (62.109.0.175): icmp_seq=4 ttl=55 time=46.5 ms
64 bytes from mail.eltex.nsk.ru (62.109.0.175): icmp_seq=5 ttl=55 time=46.3 ms
^C
--- eltex.nsk.ru ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4005ms
rtt min/avg/max/mdev = 46.398/47.977/52.889/2.516 ms
```

```
root@ubuntu-bionic:~# echo "deb http://archive.eltex-co.ru/wireless softwlc-1.24-xenial main" >> /etc/apt
/sources.list.d/eltex.list

root@ubuntu-bionic:~# echo "deb http://archive.eltex.org/wireless/ radius-1.24-bionic main" >> /etc/apt/sources.
list.d/eltex.list
```

```

root@ubuntu-bionic:~# sudo wget -O - http://archive.eltex-co.ru/wireless/repo.gpg.key | sudo apt-key add -
--2020-09-17 05:01:57-- http://archive.eltex-co.ru/wireless/repo.gpg.key
archive.eltex-co.ru (archive.eltex-co.ru)... 172.16.5.22
archive.eltex-co.ru (archive.eltex-co.ru)|172.16.5.22|:80...
HTTP-... 200 OK
: 1704 (1,7K) [application/octet-stream]
: ««STDOUT»».

- 100%
[=====
=====>] 1,66K --KB/s in 0s

/2020-09-17 05:01:57 (142 MB/s) - stdout [1704/1704]

OK

```

## GPG

```

root@ubuntu-bionic:~# wget https://nginx.org/keys/nginx_signing.key

```

## GPG apt sources

```

root@ubuntu-bionic:~# apt-key add nginx_signing.key

```

## Nginx

```

root@ubuntu-bionic:~# echo "deb http://nginx.org/packages/ubuntu/ bionic nginx" > /etc/apt/sources.list.d/nginx.
list

```

```

root@ubuntu-bionic:~# apt-get update
...
Fetched 12.1 MB in 19s (624 kB/s)
Reading package lists... Done

```

## root mysql

```

root@ubuntu-bionic:~# debconf-set-selections <<< 'mysql-server mysql-server/root_password password root'
root@ubuntu-bionic:~# debconf-set-selections <<< 'mysql-server mysql-server/root_password_again password root'

```

## mysql-server

```

root@ubuntu-bionic:~# apt-get -y install mysql-server

```

## OpenJDK 8

```

root@ubuntu-bionic:~# apt-get install openjdk-8-jdk

```

## OpenJDK 8 ( , )

```

root@ubuntu-bionic:~# update-java-alternatives -s java-1.8.0-openjdk-amd64

```

```

root@ubuntu-bionic:~# echo "rsyslog-mysql rsyslog-mysql/dbconfig-install boolean true" | debconf-set-selections
root@ubuntu-bionic:~# echo "rsyslog-mysql rsyslog-mysql/mysql/app-pass password root" | debconf-set-selections
root@ubuntu-bionic:~# echo "rsyslog-mysql rsyslog-mysql/app-password-confirm password root" | debconf-set-selections
root@ubuntu-bionic:~# echo "rsyslog-mysql rsyslog-mysql/password-confirm password root" | debconf-set-selections
root@ubuntu-bionic:~# echo "rsyslog-mysql rsyslog-mysql/mysql/admin-pass password root" | debconf-set-selections
root@ubuntu-bionic:~# echo "rsyslog-mysql rsyslog-mysql/remote/port string " | debconf-set-selections
root@ubuntu-bionic:~# apt-get install --yes ntp tftp-hpa tftpd-hpa snmpd snmp rsyslog libpcap0.8-dev ffmpeg
rsyslog-mysql curl tomcat8 software-properties-common python-pexpect unzip zip mongodb-server isc-dhcp-server
pcscd opensc pcsc-tools python-suds libtalloc2 libwbclient0 tomcat8-admin

```

## PGP apt sources

```

root@ubuntu-bionic:~# apt-key adv --keyserver hkp://keyserver.ubuntu.com:80 --recv
9DA31620334BD75D9DCB49F368818C72E52529D4

```

## MongoDB

```

root@ubuntu-bionic:~# echo "deb [ arch=amd64,arm64 ] http://repo.mongodb.org/apt/ubuntu bionic/mongodb-org/4.0
multiverse" | tee /etc/apt/sources.list.d/mongodb-org-4.0.list

```

## JAVA\_HOME tomcat8

```

root@ubuntu-bionic:~# echo "JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64" >> /etc/default/tomcat8

```

```

root@ubuntu-bionic:~# cp /usr/share/zoneinfo/Asia/Novosibirsk /etc/localtime

```

## Java

```

root@ubuntu-bionic:~# echo "JAVA_OPTS=\"${JAVA_OPTS} -server -Xms512m -Xmx2048m -XX:-UseParallelGC -XX:
+UseConcMarkSweepGC -XX:+AggressiveOpts\"" >> /etc/default/tomcat8

```

## openjdk Tomcat

```

root@ubuntu-bionic:~# echo "JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64" >> /etc/default/tomcat8

```

## tomcat 8080 8081

```

root@ubuntu-bionic:~# sed -i 's/8080/8081/' /etc/tomcat8/server.xml

```

## MAC-

```

root@ubuntu-bionic:~# apt-get install eltex-oui-list

```

## SOAP/XML (Apache Axis)

```

root@ubuntu-bionic:~# apt-get install eltex-axis

```

## MySQL 'eltex-ems'

```
root@ubuntu-bionic:~# apt-get install eltex-ems-db
...
Enter your MySQL administrator password: root
Enable remote access to database? (y/N) y
...
Select default language for EMS:
1. Russian
2. English (default)
Enter number: 1
Using locale ru_RU
mysql: [Warning] Using a password on the command line interface can be insecure.
Select access control type:
1 - Role based
2 - Domain based (default)
Enter number: 2
Using domain based access control
Enter root domain name (default is 'root'): root
Please restart EMS manually with "service eltex-ems restart"
```

## MySQL RADIUS

```
root@ubuntu-bionic:~# apt-get install eltex-radius-db
...
Enter your MySQL administrator login (default is 'root'): root
Enter your MySQL administrator password: root
Creating database ...
mysql: [Warning] Using a password on the command line interface can be insecure.
...

mysql: [Warning] Using a password on the command line interface can be insecure.
Preparing database ...
mysql: [Warning] Using a password on the command line interface can be insecure.
mysql: [Warning] Using a password on the command line interface can be insecure.
Enter root domain name (default is 'root'): root
mysql: [Warning] Using a password on the command line interface can be insecure.
Tariff 'default' has been successfully created
mysql: [Warning] Using a password on the command line interface can be insecure.
Do you want to add ThreeYearsRadacct monitor to cron? [Y/n] Y
CRON server will be restarted with "service cron restart"
Please restart RADIUS server manually with "service eltex-radius restart"
```



"Hotspot Default" :

- : default
- : root
- 
- : 10
- Downstream Upstream 1 /c

Default

eltex-wifi-cab, eltex-radius-nbi, eltex-portal-constructor

```

root@ubuntu-bionic:~# apt-get install eltex-auth-service-db
...
Enter your mysql administrator login (default is 'root'): root
Enter your mysql administrator password: root
Creating database 'eltex_auth_service'
Create remote database user? (y/N) y
Database 'eltex_auth_service' successfully created
Enter root domain [root]:
Create default auth-user:
Set login [admin]:
Set password [password]:
Default auth-user 'admin' created successfully
Set service user password [softwlc]:
Service user 'softwlc_service' created successfully. Please, check it at '/etc/eltex-wifi-cab/system.xml' on
your 'Eltex Wi-Fi customer cabinet' host.
Create default auth-nas (for eltex-wifi-cab):
Set eltex-wifi-cab ip address (leave empty if 127.0.0.1):
Default auth-nas '127.0.0.1' created successfully

```

## eltex-ems

```

root@ubuntu-bionic:~# apt-get install eltex-ems
...
Replace config files:
- /etc/default/tftpd-hpa:
Replace /etc/default/tftpd-hpa? (type 'd' to view diff) [y/N/d] y
File /etc/default/tftpd-hpa is overwritten.
Restarting tftpd-hpa..
- /etc/vsftpd.conf:
Replace /etc/vsftpd.conf? (type 'd' to view diff) [y/N/d] y
File /etc/vsftpd.conf is overwritten.
Restarting vsftpd..
- /etc/snmp/snmpd.conf:
Replace /etc/snmp/snmpd.conf? (type 'd' to view diff) [y/N/d] y
File /etc/snmp/snmpd.conf is overwritten.
Restarting snmpd..
- /etc/rsyslog.conf:
Replace /etc/rsyslog.conf? (type 'd' to view diff) [y/N/d] y
File /etc/rsyslog.conf is overwritten.
- /etc/rsyslog.d/50-default.conf:
Replace /etc/rsyslog.d/50-default.conf? (type 'd' to view diff) [y/N/d] y
File /etc/rsyslog.d/50-default.conf is overwritten.
- /etc/rsyslog.d/mysql.conf:
Replace /etc/rsyslog.d/mysql.conf? (type 'd' to view diff) [y/N/d] y
File /etc/rsyslog.d/mysql.conf is overwritten.
Restarting service rsyslog..

```

## eltex-radius

```

root@ubuntu-bionic:~# apt-get install eltex-radius

```

## eltex-radius-nbi SoftWLC OSS/BSS

```

root@ubuntu-bionic:~# apt-get install eltex-radius-nbi
...

Do you want to generate server certificate? [y/N]: N
Skip generating server certificate

- Reconfigure file '/etc/eltex-radius-nbi/radius_nbi_config.txt'

SoftWLC Northbound is installed. Tomcat service will be restarted...
To check the service works, open the URL:
http://localhost:8080/axis2/services/RadiusNbiService?wsdl
To read documentation, visit the following URL:
http://localhost:8080/eltex-radius-nbi/asciidoc/
libc-bin (2.23-0ubuntu11) ...

```

## eltex-ngw

```
root@ubuntu-bionic:~# apt-get install eltex-ngw
```

## eltex-ngw

```
root@ubuntu-bionic:~# eltex-ngw create-db-user
```

...

```
Creating database user "javauser"  
Enter your mysql administrator login (default is 'root'): root  
Enter your mysql administrator password (root):  
Database user created
```

## eltex-apb

```
root@ubuntu-bionic:~# apt-get install eltex-apb
```

## (Authentication Authorization and Accounting) Wi-Fi , BRAS

```
root@ubuntu-bionic:~# apt-get install eltex-pcrf
```

## 'Hotspot'

```
root@ubuntu-bionic:~# apt-get install eltex-logging-service
```

## Hotspot-

```
root@ubuntu-bionic:~# apt-get install eltex-mercury
```

## WiFi 'Hotspot'

```
root@ubuntu-bionic:~# apt-get install eltex-portal
```

```
root@ubuntu-bionic:~# apt-get install eltex-portal-creator
```

```
root@ubuntu-bionic:~# bash /usr/lib/eltex-portal/db_utils.sh create_db_user
```

## B2B,

```
root@ubuntu-bionic:~# apt-get install eltex-wifi-cab
```

```
root@ubuntu-bionic:~# apt-get install eltex-disconnect-service
```

## API Wi-Fi.

```
root@ubuntu-bionic:~# apt-get install eltex-johnny
```

```
root@ubuntu-bionic:~# apt-get install eltex-doors
```

### eltex-doors

```
root@ubuntu-bionic:~# bash /usr/lib/eltex-doors/db_utils.sh create_db_user
```

```
root@ubuntu-bionic:~# apt-get install eltex-bruce
```

```
root@ubuntu-bionic:~# apt-get install eltex-jobs
```

### nginx

```
root@ubuntu-bionic:~# wget http://archive.eltex-co.ru/wireless/nginx/conf/softwlc_1.24_nginx.conf -O softwlc_1.24_nginx.conf
```

## Nginx

```
root@ubuntu-bionic:~# apt-get install nginx
```

### nginx

```
root@ubuntu-bionic:~# cp softwlc_1.24_nginx.conf /etc/nginx/conf.d/softwlc.conf
```

### Nginx tomcat8

```
root@ubuntu-bionic:~# service nginx restart
```

```
root@ubuntu-bionic:~# service tomcat8 restart
```

## Eltex EMS



Eltex EMS license.xml , EMS. .

```
root@ubuntu-bionic:~# cp licence.xml /usr/lib/eltex-ems/conf/licence/  
root@ubuntu-bionic:~# service eltex-ems restart
```



