

v1.20_ SoftWLC

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```
<div class="aui-message error aui-message-error">
<p class="title">
<span class="aui-icon icon-error"></span>
<strong>Comala Metadata License Details</strong>
</p>
<p>Invalid commercial evaluation license with a expired error. Please click <a href="https://marketplace.atlassian.com/plugins/org.andya.confluence.plugins.metadata" target="_blank">here</a> to purchase a commercial license.</p>
</div>
```

SoftWLC :

- 8
- CPU >= 2200MHz
- >= 35Gb
-
- Ubuntu 18.04

```
:  
  
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/sdal 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-1.20-xenial main" >> /etc/apt/sources.list.d/eltex.list
root@ubuntu-bionic:~# echo "deb http://archive_eltex.org/wireless/ radius-1.20-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 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
```

GPG 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 tomcat7

```
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

```
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
Restart the service with command "service eltex-auth-service restart"
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) ...
```

SoftWLC

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

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-constructor
```

```
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_1.19_nginx.conf -O softwlc_1.19_nginx.conf
```

Nginx

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

nginx

```
root@ubuntu-bionic:~# cp softwlc_1.19_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
```