

LicensES User Guide

Installation:

For the installation download the 'Install Bundle' and run the installation script with the following command:

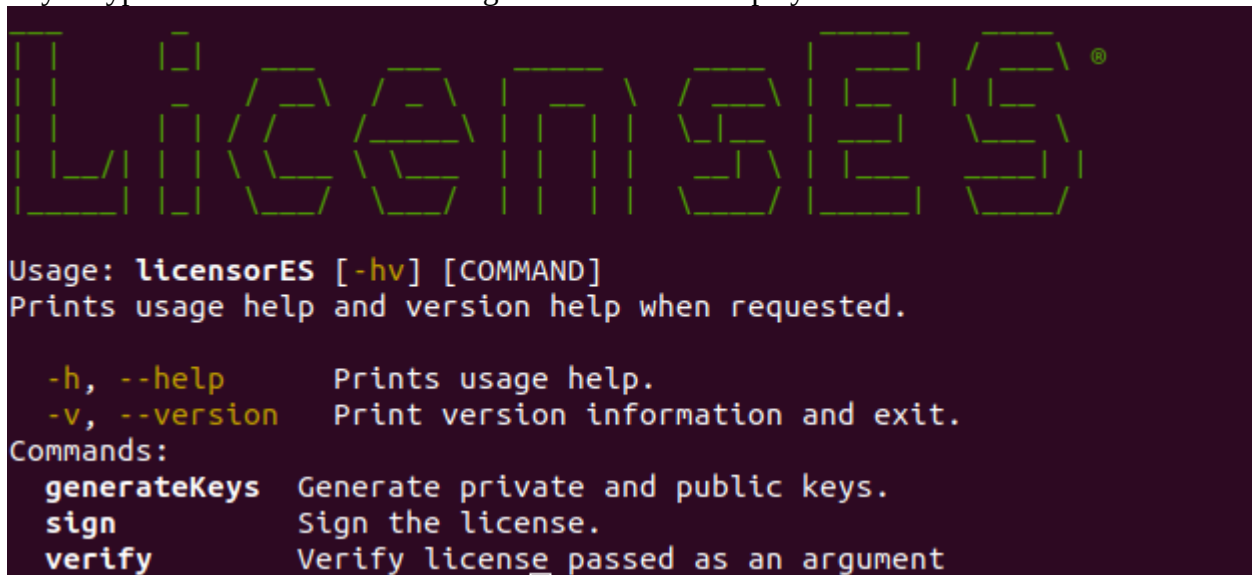
```
sudo ./es-licenser.sh install
```

To remove 'es-licenser' run the removal script with the following command:

```
sudo ./es-licenser.sh uninstall
```

After a successful installation you will be able to use [es-licensor]. Open a new terminal and type **es-licensor**, during typing 'es-licensor' you can notice that by pressing [TAB], auto complete functionality will be involved.

After you typed **es-licensor** the following window will be displayed:

A terminal window with a dark purple background. At the top, the word "LicensES" is displayed in a large, green, outlined font. Below it, the text "Usage: licensorES [-hv] [COMMAND]" is shown in white. Underneath, a line of white text reads "Prints usage help and version help when requested." This is followed by two lines of options: "-h, --help Prints usage help." and "-v, --version Print version information and exit." Below these, the word "Commands:" is written in white. Finally, three commands are listed: "generateKeys Generate private and public keys.", "sign Sign the license.", and "verify Verify license passed as an argument".

```
LicensES®  
Usage: licensorES [-hv] [COMMAND]  
Prints usage help and version help when requested.  
  
-h, --help      Prints usage help.  
-v, --version   Print version information and exit.  
Commands:  
generateKeys   Generate private and public keys.  
sign           Sign the license.  
verify         Verify license passed as an argument
```

es-licensor -h , --help will print you the menu with the commands.

es-licensor -v , --version will show you the version of the app.

When generating the license, we have to execute several commands with the **following order**:

Generate public in private keys. For this you have to do the following:

1) **es-licensor** [you can press TAB and type 'g' and press again TAB] or you can type by yourself

```
es-licensor generateKeys
```

This command uses default parameters like [**algorithm=RSA, size=1024, format=BASE64, public=public.key, private=private.key**] in order to set for ex. a different size, you will have to type the following command.

es-licensor generateKeys – [TAB to see all commands] and type 's':

```
es-licensor generateKeys -s=2048
```

To get information about the parameters of the [generateKeys command] type the following:

```
es-licensor generateKeys -h
```

And the output:

```
Usage: licensorES generateKeys [-h] [-a=<algorithm>] [-f=<format>]
                                [-pr=<privateKey>] [-pu=<publicKey>] [-s=<size>]
Generate private and public keys.
-a, --algorithm=<algorithm>    Define one secure hash algorithm.
-f, --format=<format>          Choose which format encoding save to file: BASE64, BINARY
-h, --help                    Prints usage help.
-pr, --private=<privateKey>    Name private key.
-pu, --public=<publicKey>      Name public key.
-s, --size=<size>              Define size of encoding.
```

To set multiple parameters for this command, you can type like this:

```
es-licensor generateKeys -s=2048 -f=BINARY
```

Pay attention to the **[INFO]**, here it is mentioned where the keys are saved :

The path is by default: **/home/{your_user}/.eslicense/private.key**
/home/{your_user}/.eslicense/public.key

2) The next step is to sign the license. For this you must have a file containing the information about the license ex.:

```
edition=Demo
email=support@esempla.com
company=Esempla Systems S.R.L.
application=ScanES
releaseVersion=0.1
expiryDate:DATE=2019-08-30
```

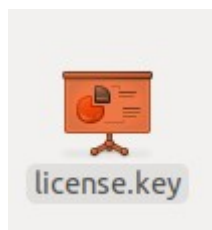
releaseDate:DATE=2019-02-20
clients:INT=10
status=ACTIVE
signatureDigest=SHA-256

Save the file (name must be without special characters and spaces) and after it proceed to the signing.
To sign a license, you must indicate the path to the file above and also you can indicate optional parameters like digest, format etc.:

```
es-licensor sign -l=/home/username/Desktop/licenseES
```

Pay attention to the [INFO], it indicates where the license .key file was saved.

[INFO] License was saved into the file /home/{your_user}/ and the name is license.key



One more time to see information about the parameters of the **sign** command, type:

```
es-licensor sign -h
```

And the output:

```
Usage: licensoreS sign [-h] [-d=<digest>] [-f=<format>] [-kf=<keyFormat>]
                        [-l=<license>] [-pr=<privateKey>] [-pu=<publicKey>]
Sign the license.
  -d, --digest=<digest>      Sign with that algorithm was generated keys: Digest.
  -f, --format=<format>      Define in which type format will be signing license.
  -h, --help                  Prints usage help.
  -kf, --keyFormat=<keyFormat>
                              Define in which type format will be privateKeyFormat.
  -l, --license=<license>    Define name of license file. This field is mandatory.
  -pr, --private=<privateKey>
                              Define to load privateKey: file name.
  -pu, --public=<publicKey>
                              Define to load publicKey: file name.
```

3) Last step is to verify your license. Here you will use command : ‘verify’ and like the previous step, you must indicate the path with the ‘**license.key**’ :

```
es-licensor verify -l=/home/username/Desktop/license.key
```

A successful answer looks like this:

```
License loaded.  
Private key loaded  
Public key loaded  
[INFO] License is properly signed.  
root@es-licensor:~#
```

And again if you look for help with the parameters for 'verify' command:

```
es-licensor verify -h
```

And the output:

```
Usage: licensorES verify [-h] [-f=<format>] [-kf=<keyFormat>] [-l=<license>]  
                        [-pr=<privateKey>] [-pu=<publicKey>]  
Verify license passed as an argument  
-f, --format=<format>  Define in which type format was signing license.  
-h, --help             Prints usage help.  
-kf, --keyFormat=<keyFormat>  
                        Define in which type format will be privateKeyFormat  
-l, --license=<license> Define name of license file. This field is mandatory  
-pr, --private=<privateKey>  
                        Define to load privateKey: file name.  
-pu, --public=<publicKey>  
                        Define to load publicKey: file name.
```

And also this command works with several parameters like keyFormat or privateKey name.

Now that you have done all 3 steps, you can copy the key from 'license.key' and paste in the form on web page that is asking for license to activate the account.