

DLL

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- [DLL](#)
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- [ELF](#) .



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- Astra Linux Special Edition .10015-01 .10015-10 (1.7)
- Astra Linux Special Edition .10152-02 (4.7)
- Astra Linux Special Edition .10015-01 (1.6)
- Astra Linux Special Edition .10015-16 . 1 . 2
- Astra Linux Special Edition .10265-01 (8.1)
- Astra Linux Common Edition 2.12



, , Windows, Astra Linux Special Edition (). , (), . (DLL) . , Astra Linux. . [Wine](#): .
elf (Astra Linux). -R .

bsign-aliens

[2023-0426SE17 \(1.7.4\)](#) [2023-0727SE47 \(4.7.4\)](#) bsign-aliens.

bsign-dll bsign-dot-net, .dll .net .

bsign-dll

dll :

```
bsign-dll [-h] [-p <>] [-R] [-w] <__dll>.dll
```

:

- -h, --help — ;
- -p <>, --pgoptions <> — bsign;
- -R, --replace — DLL ;
- -w, --show-info — ;
- -h -

bsign-dot-net



(, :

1. /etc/digsig/keys.
2. :

```
sudo update-initramfs -u -k all
```

3. .

dot-net :

```
bsign-dot-net [-h] [-p <>] <_>
```

bsign-dot-net:

- -h, --help — ;
- -p, --pgoptions — bsign;

DLL



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- . ().
- `signdll`.
- , Python `cffi` `xattr` .
- Python `cffi` `xattr` .

Astra Linux, `bsigh-aliens` (, 1.7.4/4.7.4). :

1. Astra Linux Special Edition x.7 . Astra Linux Special Edition .
2. . :

```
sudo apt install python3 python3-pip python3-dev python-dev build-essential libssl-dev libxml2-dev libffi-dev libxslt1-dev zlib1g-dev
```

3. Astra Linux Special Edition x.7 `cffi`:

```
pip3 install cffi
```

4. `xattr`:

```
pip3 install xattr
```

5. `pyelftools`:

```
pip3 install pyelftools
```

6. (,):

```
gpg --import --pinentry-mode=loopback --passphrase-file=org_password.txt org_secret.gpg
```

: `signdll`.

```
#!/usr/bin/python3
import sys
import shutil
import subprocess
import argparse
import xattr
import tempfile

DIGSIG_ELF_SIG_SIZE = 512

parser = argparse.ArgumentParser()
parser.add_argument('dll', metavar='filename.dll', help='path to dll to sign')
parser.add_argument('-p', '--pgoptions', help='pass options to the privacy guard program')
parser.add_argument('-R', '--replace', help='replace original file', action='store_true')
parser.add_argument('-w', '--show-info', help='describe signature information', action='store_true')
args = parser.parse_args()

name = args.dll

def show_info():
```

```

f = tempfile.NamedTemporaryFile()
shutil.copyfile(args.dll, f.name)
f.seek(-DIGSIG_ELF_SIG_SIZE, 2)
sig = f.read(DIGSIG_ELF_SIG_SIZE)
f.seek(-DIGSIG_ELF_SIG_SIZE, 2)
f.write(b'\x00' * DIGSIG_ELF_SIG_SIZE)
f.flush()
xattr.setxattr(f.name, 'user.sig', sig)
bsign_args = ['bsign', '-w', f.name]
bsign = subprocess.run(bsign_args, stdout=subprocess.PIPE)
print(bsign.stdout.decode()
      .replace("xattr ", "dll ")
      .replace(f.name, args.dll))
return bsign.returncode

try:
    if args.show_info:
        sys.exit(show_info())

    if args.replace:
        new_name = name
    else:
        if not name.endswith(('.dll', '.exe')):
            print("[Error] Must have filename.dll as an argument")
            sys.exit(1)
        new_name = name[:-4] + '_signed' + name[-4:]
        shutil.copyfile(name, new_name)

    with open(new_name, mode='ab') as f:
        f.write(b'\x00' * DIGSIG_ELF_SIG_SIZE)

    bsign_args = ['bsign', '--sign', '--xattr', new_name]
    if args.pgoptions is not None:
        if '--batch' in args.pgoptions:
            bsign_args.append('--nopass')
        bsign_args.extend(['-p', args.pgoptions])

    if subprocess.call(bsign_args):
        print("[Error] Calling bsign failure")
        sys.exit(1)

    sig = xattr.getxattr(new_name, 'user.sig')
    xattr.removexattr(new_name, 'user.sig')

    with open(new_name, mode='r+b') as f:
        f.seek(-DIGSIG_ELF_SIG_SIZE, 2)
        f.write(sig)

except Exception as e:
    print(str(e))
    sys.exit(1)

```

```
signdll [-h] [-p PGOPTIONS] [-R] <_>
```

:

- -p, — pgoptions bsign;
- -R — replace - DLL . elf;
- -w — ;
- -h — .

test.dll (,)::

```
./signdll test.dll
```

org_password.txt.

test_signed.dll.

:

```
gpg -k
```

:

```
find . -name "*.dll" -exec ./signdll -R --pgoptions="--batch --pinentry-mode=loopback --passphrase-file=org_password.txt --default-key=1234...CDEF" {} \;
```

default-key - . -R, .

test.dll:

```
./signdll -w test.dll
```