

DLL

- bsign-aliens
 - bsign-dll
 - bsign-dot-net
- DLL
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- ..
- Astra Linux:
 - 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



- . (.
- 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 ffi:

```
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
```