

- [Astra Linux Special Edition 1.6, 8.1, x.7](#)
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- 
- , [Astra Linux Special Edition 1.5](#)
- [Astra Linux Special Edition .10015.01 1.4 1.5](#)
- [GPG](#)



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Astra Linux Special Edition .10015-01 ( 1.7), .10015-10  
Astra Linux Special Edition .10015-17  
Astra Linux Special Edition .10015-37 ( 7.7)  
Astra Linux Special Edition .10015-03 ( 7.6)  
Astra Linux Special Edition .10152-02 ( 4.7)  
Astra Linux Special Edition .10015-01 ( 1.6)  
Astra Linux Special Edition .10015-16 . 1  
Astra Linux Special Edition .10015-16 . 2  
Astra Linux Special Edition .10265-01 ( 8.1)  
Astra Linux Common Edition 2.12

## Astra Linux Special Edition 1.6, 8.1, x.7

:

- bsign;
- binutils;
- gzip;
- lzma;
- bzip2;
- gnupg.

:

```
sudo apt install bsign binutils gzip lzma bzip2 gnupg
```

1. :

```
sudo gpg --import secret_key.key
```

2. :

```
sudo gpg --list-secret-keys
```

1. sudo.
2. sign-deb.sh. web- [sign-deb16.sh](#).
3. :

```
key_id="<_>"
pass_file="<____>"
```

4. :

- a. , , ;
- b. , , ;

```
sudo ./sign-deb16.sh /root/pkg /root/pkg_sign
```

:

## sign-deb16.sh

```
#!/bin/bash
#-----
key_id=""
pass_file=""
DIR_BIN=$1
DIR_SIGNED=$2
#-----
TMP_DIR=$DIR_SIGNED/tmp$$

if [ -z $DIR_BIN ] ; then
    echo "Specify original directory as first argument."
    exit 1
fi

if [ -z $DIR_SIGNED ] ; then
    echo "Specify destination directory as second argument."
    exit 1
fi

if [ ! -e $DIR_BIN ] ; then
    echo "Original directory $DIR_BIN doesn't exist."
    exit 1
fi

list_of_packages=`find $DIR_BIN -type f -name "*.deb"`
list_of_udebs=`find $DIR_BIN -type f -name "*.udeb"`

for i in $list_of_packages ; do
    pack_name=`echo $i | awk '{sub(/^.+\/\//, "", $0) ; a=$0; print a}'`
    echo "Unpacking $pack_name"
    mkdir -p $TMP_DIR/{control,data}
    cp $i $TMP_DIR
    pushd $TMP_DIR &>/dev/null
    fakeroot ar x $pack_name
    SIGN_LOG=${DIR_SIGNED}/${pack_name}.log
# Definig archives type
    data_arch_type=`ls data.tar* | cut -d'.' -f3`
    control_arch_type=`ls control.tar* | cut -d'.' -f3`
    popd &>/dev/null
# Unpack data archive
    pushd $TMP_DIR/data &>/dev/null
    case $data_arch_type in
        gz)
            fakeroot tar --same-permissions --same-owner -xzf ../data.tar.gz
            ;;
        bz2)
            fakeroot tar --same-permissions --same-owner -xjf ../data.tar.bz2
            ;;
        lzma)
            fakeroot tar --same-permissions --same-owner --lzma -xf ../data.tar.lzma
            ;;
        xz)
            fakeroot tar --same-permissions --same-owner -xJf ../data.tar.xz
            ;;
    esac
    popd &>/dev/null

# Unpack control archive
    pushd $TMP_DIR/control &>/dev/null
    case $control_arch_type in
        gz)
            fakeroot tar --same-permissions --same-owner -xzf ../control.tar.gz
            ;;
        bz2)
            fakeroot tar --same-permissions --same-owner -xjf ../control.tar.bz2
```

```

;;
lzma)
fakeroot tar --same-permissions --same-owner --lzma -xf ../control.tar.lzma
;;
xz)
fakeroot tar --same-permissions --same-owner -xJf ../control.tar.xz
;;
esac
popd &> /dev/null

# Sign files
pushd $TMP_DIR/data &> /dev/null
list=`find . -type f`
for file in $list ; do
    elf=`file $file | cut -d: -f2 | awk -F' ' '{print $1}'`
    if [ $elf = "ELF" ]; then
        #if [ "$(file $file | grep ELF)" ];then
        oldstat=`stat -c %a $file`
        bsign -N -s --pgoptions="--batch --pinentry-mode=loopback --passphrase-file=$pass_file --default-
key=$key_id" $file
        bsign -w $file
        newstat=`stat -c %a $file`
        [ $newstat != $oldstat ] && echo "BSIGN_CHMOD_ERROR in $file" >> ${SIGN_LOG} 2>&1
        else
            echo "$file not ELF"
        fi
    done
done
popd &> /dev/null

# Counting md5sums
pushd $TMP_DIR/control &> /dev/null
if [ -e ./md5sums ] ; then
    filenames=`cat md5sums | awk -F' ' '{print $2}'`
    popd &> /dev/null
    pushd $TMP_DIR/data &> /dev/null
    for j in $filenames
    do
        echo `md5sum $j` >> $TMP_DIR/control/md5sums.new
    done
    sed -e 's/\ \ /g' $TMP_DIR/control/md5sums.new > $TMP_DIR/control/md5sums.new_mod
    popd &> /dev/null
    mv -f $TMP_DIR/control/md5sums.new_mod $TMP_DIR/control/md5sums &> /dev/null
    rm -f $TMP_DIR/control/md5sums.new &> /dev/null
fi

# Packing back in deb
pushd $TMP_DIR/data &> /dev/null
case $data_arch_type in
    gz)
        fakeroot tar --same-permissions --same-owner -czf ../data.tar.gz .
        ;;
    bz2)
        fakeroot tar --same-permissions --same-owner -cjf ../data.tar.bz2 .
        ;;
    lzma)
        fakeroot tar --same-permissions --same-owner --lzma -cf ../data.tar.lzma .
        ;;
    xz)
        fakeroot tar --same-permissions --same-owner -cJf ../data.tar.xz .
        ;;
esac
popd &> /dev/null

pushd $TMP_DIR/control &> /dev/null
case $control_arch_type in
    gz)
        fakeroot tar --same-permissions --same-owner -czvf ../control.tar.gz .
        ;;
    bz2)
        fakeroot tar --same-permissions --same-owner -cjvf ../control.tar.bz2 .
        ;;

```

```

        lzma)
        fakeroot tar --same-permissions --same-owner --lzma -cvf ../control.tar.lzma .
        ;;
        xz)
        fakeroot tar --same-permissions --same-owner -cJvf ../control.tar.xz .
        ;;
    esac
    popd &> /dev/null
    pushd $TMP_DIR &> /dev/null
    fakeroot ar rcs $TMP_DIR/$pack_name debian-binary control.tar.$control_arch_type data.
tar.$data_arch_type &> /dev/null
    cp ${pack_name} $DIR_SIGNED/${pack_name%.deb}_signed.deb &> /dev/null
    echo "Creating $DIR_SIGNED/${pack_name%.deb}_signed.deb"
    popd &> /dev/null
    rm -rf $TMP_DIR &> /dev/null
done

for j in $list_of_udebs ; do
    cp $j $DIR_SIGNED
done

echo "done"
exit 0

```

## , Astra Linux Special Edition 1.5



, , Astra Linux Special Edition 1.5 , astra-digisig-oldkeys. /etc/digisig/keys/legacy/keys/

## Astra Linux Special Edition .10015.01 1.4 1.5

sudo. :

```
sudo gpg --import key_for_signing.key
```

. root. , , . , .

### sign\_deb.sh

```

#!/bin/bash

key_id="00000000"
pass_file="/root/key_password.txt"

DIR_BIN=$1
DIR_SIGNED=$2

TMP_DIR=$DIR_SIGNED/tmp$$
SIGN_LOG=sign.log

if [ -z $DIR_BIN ] ; then
    echo "Specify original directory as first argument."
    exit 1
fi

if [ -z $DIR_SIGNED ] ; then
    echo "Specify destination directory as second argument."
    exit 1
fi

if [ ! -e $DIR_BIN ] ; then
    echo "Original directory $DIR_BIN doesn't exist."
    exit 1

```

```

fi

list_of_packages=`find $DIR_BIN -type f -name "*.deb"`
list_of_udebs=`find $DIR_BIN -type f -name "*.udeb"`

for i in $list_of_packages ; do
    pack_name=`echo $i | awk '{sub(/^.+\/\//,"",$0) ; a=$0; print a}'`
    echo "Unpacking $pack_name"
    mkdir -p $TMP_DIR/{control,data}
    cp $i $TMP_DIR
    pushd $TMP_DIR &>/dev/null
    ar x $pack_name
    SIGN_LOG=${DIR_SIGNED}/${pack_name}.log
# Definig archives type
    data_arch_type=`ls data.tar* | cut -d'.' -f3`
    control_arch_type=`ls control.tar* | cut -d'.' -f3`
    popd &>/dev/null
# Unpack data archive
    pushd $TMP_DIR/data &>/dev/null
    case $data_arch_type in
        gz)
            tar --same-permissions --same-owner -xzf ../data.tar.gz
            ;;
        bz2)
            tar --same-permissions --same-owner -xjf ../data.tar.bz2
            ;;
        lzma)
            tar --same-permissions --same-owner --lzma -xf ../data.tar.lzma
            ;;
        xz)
            tar --same-permissions --same-owner -xJf ../data.tar.xz
            ;;
    esac
    popd &>/dev/null

# Unpack control archive
    pushd $TMP_DIR/control &>/dev/null
    case $control_arch_type in
        gz)
            tar --same-permissions --same-owner -xzf ../control.tar.gz
            ;;
        bz2)
            tar --same-permissions --same-owner -xjf ../control.tar.bz2
            ;;
        lzma)
            tar --same-permissions --same-owner --lzma -xf ../control.tar.lzma
            ;;
        xz)
            tar --same-permissions --same-owner -xJf ../control.tar.xz
            ;;
    esac
    popd &>/dev/null

# Sign files
    pushd $TMP_DIR/data &> /dev/null
    list=`find . -type f`
    for file in $list ; do
        elf=`file $file | cut -d: -f2 | awk -F' ' '{print $1}'`
        if [ $elf = "ELF" ]; then
            #if [ "$(file $file | grep ELF)" ];then
                oldstat=`stat -c %a $file`
                bsign -N -s --pgoptions="--default-key=$key_id --passphrase-file=$pass_file" $file
                bsign -w $file
                newstat=`stat -c %a $file`
                [ $newstat != $oldstat ] && echo "BSIGN_CHMOD_ERROR in $file" >> ${SIGN_LOG} 2>&1
            else
                echo "$file not ELF"
            fi
        done
    popd &> /dev/null

```

```

# Counting md5sums
pushd $TMP_DIR/control &> /dev/null
if [ -e ./md5sums ] ; then
    filenames=`cat md5sums | awk -F' ' '{print $2}'`
    popd &> /dev/null
    pushd $TMP_DIR/data &> /dev/null
    for j in $filenames
    do
        echo `md5sum $j` >> $TMP_DIR/control/md5sums.new
    done
    sed -e 's/\ \> \ /g' $TMP_DIR/control/md5sums.new > $TMP_DIR/control/md5sums.new_mod
    popd &> /dev/null
    mv -f $TMP_DIR/control/md5sums.new_mod $TMP_DIR/control/md5sums &> /dev/null
    rm -f $TMP_DIR/control/md5sums.new &> /dev/null
fi

# Packing back in deb
pushd $TMP_DIR/data &> /dev/null
case $data_arch_type in
    gz)
        tar --same-permissions --same-owner -czf ../data.tar.gz .
        ;;
    bz2)
        tar --same-permissions --same-owner -cjf ../data.tar.bz2 .
        ;;
    lzma)
        tar --same-permissions --same-owner --lzma -cf ../data.tar.lzma .
        ;;
    xz)
        tar --same-permissions --same-owner -cJf ../data.tar.xz .
        ;;
esac
popd &> /dev/null

pushd $TMP_DIR/control &> /dev/null
case $control_arch_type in
    gz)
        tar --same-permissions --same-owner -czvf ../control.tar.gz .
        ;;
    bz2)
        tar --same-permissions --same-owner -cjvf ../control.tar.bz2 .
        ;;
    lzma)
        tar --same-permissions --same-owner --lzma -cvf ../control.tar.lzma .
        ;;
    xz)
        tar --same-permissions --same-owner -cJvf ../control.tar.xz .
        ;;
esac
popd &> /dev/null
pushd $TMP_DIR &> /dev/null
ar rcs $TMP_DIR/$pack_name debian-binary control.tar.$control_arch_type data.tar.$data_arch_type &> /dev
/null
cp ${pack_name} $DIR_SIGNED/${pack_name%.deb}_signed.deb &> /dev/null
echo "Creating $DIR_SIGNED/${pack_name%.deb}_signed.deb"
popd &> /dev/null
rm -rf $TMP_DIR &> /dev/null
done

for j in $list_of_udebs ; do
    cp $j $DIR_SIGNED
done

echo "Sign done"

```

:

```
key_id="000000"
pass_file="/root/key_password.txt"
```

```
00000 , , /root/key_password.txt . , :
```

```
gpg --list-keys
```

[sign-deb\\_package.sh](#)

Astra Linux Special Edition .10015-01 1.5 ,

```
sudo. :
```

```
sudo gpg --import key_for_signing.key
```

```
key_for_signing.key — .
```

```
. root. , , . , .
```

### sign-deb.sh

```
#!/bin/bash
```

```
key_id="00000000"
pass_file="/root/key_password.txt"
```

```
DIR_BIN=$1
DIR_SIGNED=$2
```

```
TMP_DIR=$DIR_SIGNED/tmp$$
SIGN_LOG=sign.log
```

```
if [ -z $DIR_BIN ] ; then
    echo "Specify original directory as first argument."
    exit 1
fi
```

```
if [ -z $DIR_SIGNED ] ; then
    echo "Specify destination directory as second argument."
    exit 1
fi
```

```
if [ ! -e $DIR_BIN ] ; then
    echo "Original directory $DIR_BIN doesn't exist."
    exit 1
fi
```

```
list_of_packages=`find $DIR_BIN -type f -name "*.deb"`
list_of_udebs=`find $DIR_BIN -type f -name "*.udeb"`
```

```
for i in $list_of_packages ; do
    pack_name=`echo $i | awk '{sub(/^.+\/\//, "", $0) ; a=$0; print a}'`
    echo "Unpacking $pack_name"
    mkdir -p $TMP_DIR/{control,data}
    cp $i $TMP_DIR
    pushd $TMP_DIR &>/dev/null
    ar x $pack_name
    SIGN_LOG=${DIR_SIGNED}/${pack_name}.log
# Definig archives type
    data_arch_type=`ls data.tar* | cut -d'.' -f3`
    control_arch_type=`ls control.tar* | cut -d'.' -f3`
    popd &>/dev/null
# Unpack data archive
    pushd $TMP_DIR/data &>/dev/null
    case $data_arch_type in
        gz)
            tar --same-permissions --same-owner -xzf ../data.tar.gz
```

```

;;
bz2)
tar --same-permissions --same-owner -xjf ../data.tar.bz2
;;
lzma)
tar --same-permissions --same-owner --lzma -xf ../data.tar.lzma
;;
xz)
tar --same-permissions --same-owner -xJf ../data.tar.xz
;;
esac
popd &>/dev/null

# Unpack control archive
pushd $TMP_DIR/control &>/dev/null
case $control_arch_type in
gz)
tar --same-permissions --same-owner -xzf ../control.tar.gz
;;
bz2)
tar --same-permissions --same-owner -xjf ../control.tar.bz2
;;
lzma)
tar --same-permissions --same-owner --lzma -xf ../control.tar.lzma
;;
xz)
tar --same-permissions --same-owner -xJf ../control.tar.xz
;;
esac
popd &>/dev/null

# Sign files
pushd $TMP_DIR/data &> /dev/null
list=`find . -type f`
for file in $list ; do
elf=`file $file | cut -d: -f2 | awk -F' ' '{print $1}'`
if [ $elf = "ELF" ]; then
#if [ "$(file $file | grep ELF)" ];then
oldstat=`stat -c %a $file`
bsign -9 -N -s --pgoptions="--default-key=$key_id --passphrase-file=$pass_file" $file
bsign -w $file
newstat=`stat -c %a $file`
[ $newstat != $oldstat ] && echo "BSIGN_CHMOD_ERROR in $file" >> ${SIGN_LOG} 2>&1
else
echo "$file not ELF"
fi
done
popd &> /dev/null

# Counting md5sums
pushd $TMP_DIR/control &>/dev/null
if [ -e ./md5sums ] ; then
filenames=`cat md5sums | awk -F' ' '{print $2}'`
popd &>/dev/null
pushd $TMP_DIR/data &> /dev/null
for j in $filenames
do
echo `md5sum $j` >> $TMP_DIR/control/md5sums.new
done
sed -e 's/\ / \ /g' $TMP_DIR/control/md5sums.new > $TMP_DIR/control/md5sums.new_mod
popd &> /dev/null
mv -f $TMP_DIR/control/md5sums.new_mod $TMP_DIR/control/md5sums &> /dev/null
rm -f $TMP_DIR/control/md5sums.new &> /dev/null
fi

# Packing back in deb
pushd $TMP_DIR/data &> /dev/null
case $data_arch_type in
gz)
tar --same-permissions --same-owner -czf ../data.tar.gz .
;;

```



```

        bz2)
        tar --same-permissions --same-owner -cjf ../data.tar.bz2 .
        ;;
        lzma)
        tar --same-permissions --same-owner --lzma -cf ../data.tar.lzma .
        ;;
        xz)
        tar --same-permissions --same-owner -cJf ../data.tar.xz .
        ;;
    esac
    popd &> /dev/null

    pushd $TMP_DIR/control &> /dev/null
    case $control_arch_type in
        gz)
        tar --same-permissions --same-owner -czvf ../control.tar.gz .
        ;;
        bz2)
        tar --same-permissions --same-owner -cjvf ../control.tar.bz2 .
        ;;
        lzma)
        tar --same-permissions --same-owner --lzma -cvf ../control.tar.lzma .
        ;;
        xz)
        tar --same-permissions --same-owner -cJvf ../control.tar.xz .
        ;;
    esac
    popd &> /dev/null
    pushd $TMP_DIR &> /dev/null
    ar rcs $TMP_DIR/$pack_name debian-binary control.tar.$control_arch_type data.tar.$data_arch_type &> /dev
/null
    cp ${pack_name} $DIR_SIGNED/${pack_name%.deb}_signed.deb &> /dev/null
    echo "Creating $DIR_SIGNED/${pack_name%.deb}_signed.deb"
    popd &> /dev/null
    rm -rf $TMP_DIR &> /dev/null
done

for j in $list_of_udebs ; do
    cp $j $DIR_SIGNED
done

echo "Sign done"

```

:

```
key_id="000000"
pass_file="/root/key_password.txt"
```

00000 , , /root/key\_password.txt - . , :

```
gpg --list-keys
```

.

## GPG

[GnuPG](#)  
[The internals of an OpenPGP key](#)