



1. , , :

```
mail="<__>"
```

:

```
mail="support@organization.ru"
```

2. gen-key.cfg . :

```
Key-Type: 1
%no-protection
Key-Length: 4096
Subkey-Type: 1
Subkey-Length: 4096
Name-Real: <__>
Name-Email: <__>
Expire-Date: 0
```

(support, mail):

```
echo "Key-Type: 1
%no-protection
Key-Length: 4096
Subkey-Type: 1
Subkey-Length: 4096
Name-Real: support
Name-Email: $mail
Expire-Date: 0" > gen-key.cfg
```

3. :

```
gpg --batch --gen-key gen-key.cfg
```

```
:
--batch - ;
--gen-key - ;
gen-key.cfg - .
```

4. <__>.gpg.key (mail):

```
gpg --armor --output "$mail.gpg.key" --export "$mail"
```

```
:
--armor - ASCII;
--output "$mail.gpg.key" - , ( );
--export "$mail" - () ( );
```

5. Astra Linux:

```
sudo gpg --no-default-keyring --keyring /usr/share/apt/astra-archive.
gpg --import "$mail.gpg.key"
```

, Astra Linux, .



, , /boot/grub/grub.cfg debian-installer/allow-unauthenticated=true.

, , . UDEB-:

1. :

```
gpg --output "$mail.gpg" --export "$mail"
```

, ASCII;

2. :

```
sudo chmod 644 "$mail.gpg"
```

3. UDEB- . aptkey:

a. . :

```
package="aptkey"
```

b. :

```
mkdir -p "$package/DEBIAN"
```

c. \$package/DEBIAN/control ():

```
echo "Package: $package
Version: 1.0
Section: debian-installer
Priority: important
Architecture: all
Essential: no
Installed-Size: 1024
Maintainer: $mail
#Package-Type: udeb
#XC-Package-Type: udeb
Description: Add own keyring to apt
Depends: apt" > "$package/DEBIAN/control"
```

d. \$package/DEBIAN/postinst (, 0()) :

```
echo "exit 0" > "$package/DEBIAN/postinst"
chmod 0755 "$package/DEBIAN/postinst"
```

e. :

```
mkdir -p "$package/etc/apt/trusted.gpg.d"
cp "$mail.gpg" "$package/etc/apt/trusted.gpg.d/"
```

```
"$package/etc/apt/trusted.gpg.d" /etc/apt/trusted.gpg.d;
```

f. :

```
dpkg-deb --build "$package"
```

g. :

```
sudo mv "$mail.gpg" /etc/apt/trusted.gpg.d/
```



"-" ().

a. . cache:

```
mkdir -p cache
```

b. DEB- UDEB- :

```
find cd/pool -name \*.deb -print -exec mv {} cache \;  
find cd/pool -name \*.udeb -exec mv {} cache \;
```

c. () :

```
mv "$package.deb" "cache/${package}_1.0.deb"
```

d. :

```
rm -rf $HOME/cd/{db,dists,pool}
```

e. :

- i. ;
- ii. ;

f. ~/cd/conf:

```
mkdir -p ~/cd/conf
```

g. ~/cd/conf/distributions :

```
echo 'Origin: Debian  
Codename: 1.7_x86-64  
Suite: stable  
Version: 1.7.0  
Architectures: amd64  
Components: main contrib non-free  
UDebComponents: main  
SignWith: yes' > ~/cd/conf/distributions
```

Astra Linux Special Edition .10015-01 1.7, amd64, main, contrib, nonfree. ;

1. :

```
reprepro -b cd/ export 1.7_x86-64
```

2. :

```
gpg --yes --armor -o ~/cd/dists/1.7_x86-64/Release.gpg -sb ~/cd/dists/1.7_x86-64/Release
```

3. , cache:

```
reprepro --ask-passphrase -Vb cd includedeb 1.7_x86-64 cache/*.deb  
reprepro --ask-passphrase -Vb cd includeudeb 1.7_x86-64 cache/*.udeb
```

4. :

```
cd ~/cd; find ! -name md5sum.txt ! -name gostsums.txt -follow -type f -  
print0 | xargs -0 md5sum > md5sum.txt ; cd ..
```

 find: ;...

5. :

```
ln -s 1.7_x86-64 ~/cd/dists/stable
```

6. ~/cd/conf :

```
rm -rf ~/cd/conf ~/cd/db cache
```

preseed.cfg

- preseed.cfg. , , .

preseed.cfg:

1. USB- () preseed:
 - a. .
 - b. (, preseed.cfg) ;
 - c. boot/grub/grub.cfg (linux) preseed, :

```
linux /install.amd/vmlinuz quiet modprobe.blacklist=evbug astra_install=1 nomodeset debian-  
installer/locale=ru debian-installer/language=ru keyboard-configuration/xkb-keymap=ru console-  
keymaps-at/keymap=ru preseed/file=/cdrom/preseed.cfg
```

d. .

2. (CD-ROM, DVD-ROM) USB-:
 - a. :
 - i. USB- .
 - ii. USB- vfat :



(, sdh), (sdh1).

```
sudo mkfs.vfat -I /dev/<_>
```

```
iii. .  
iv. preseed .  
v. .
```

b. :

```
i. .  
ii. Enter ( ).  
iii. F2. .  
iv. Esc. , .  
v. preseed, /cdrom, /media, :
```

```
linux /install.amd/vmlinuz quiet modprobe.blacklist=evbug astra_install=1 nomodeset  
debian-installer/locale=ru debian-installer/language=ru keyboard-configuration/xkb-  
keymap=ru console-keymaps-at/keymap=ru preseed/file=/media/preseed.cfg
```

vi. Enter.

, , . preseed.

preseed.cfg

, preseed.cfg . . [Astra Linux](#) (UEFI Legacy BIOS).

preseed.cfg, :

```
1. . , ;  
2. preseed.cfg ;  
3. .
```

:

```
for n in ~/cd/install.amd ~/cd/install.amd/gtk ~/cd/hd-media ~/cd/hd-media  
/gtk; do  
    if [ -d $n ] ; then  
        pushd `mktemp -d`  
        chmod u+w $n $n/initrd.gz  
        cat $n/initrd.gz | gzip -d | sudo cpio -i  
        sudo cp ~/preseed.cfg .  
        sudo find | cpio -o --format=newc | gzip -9c > $n/initrd.gz  
        sudo rm -rf *  
        chmod -R -w $n  
        popd  
    fi  
done
```

, (, , pressed.cfg), , hd-media.

:

```
cd ~/cd; find ! -name md5sum.txt -follow -type f -print0 | xargs -0 md5sum  
> md5sum.txt ; cd ..
```

 find: ; ...

1. :

```
sudo mount -o bind $HOME/cd /mnt
```

Chroot

1. chroot- :

 Astra Linux Special Edition .10015-01 (1.7) Astra Linux, 1.7, debootstrap debian-archive-keyring 1.7 (. [Astra Linux](#)).

```
sudo debootstrap --components=main,contrib,non-free --arch=amd64 1.7  
_x86-64 chroot "file:///mnt"
```

1. /etc/apt/sources.list.d/mounted.list :

```
echo "deb file:/mnt 1.7_x86-64 main contrib non-free" | sudo tee /etc  
/apt/sources.list.d/mounted.list
```

2. :

```
sudo rm -fr /var/lib/apt/lists/*
```

3. :

```
sudo apt update
```

4. , :

```
apt policy <__>
```

5. /etc/apt/sources.list.d/mounted.list:

```
sudo rm /etc/apt/sources.list.d/mounted.list
```

6. :

```
sudo apt update
```

:

```
sudo umount /mnt
```

ISO-

1. MBR ISO-:

```
dd if=<__ISO-> bs=1 count=432 of=isohdpx.bin
```

isohdpx.bin;

2. ISO-:

```
xorriso -as mkisofs -isohybrid-mbr isohdpx.bin -b isolinux/isolinux.  
bin -no-emul-boot -boot-load-size 4 -boot-info-table -c isolinux/boot.  
cat -V "WIKI_ISO" \  
-eltorito-alt-boot -e boot/grub/efi.img -no-emul-boot -isohybrid-  
gpt-basdat -append_partition 2 0xef cd/boot/grub/efi.img \  
-o wiki_iso.iso ~/cd
```

-V (volume id) (WIKI_ISO), -o , (- wiki_iso.iso). . man xorriso.

3. : isohdpx.bin:

```
rm isohdpx.bin
```