

20211008SE16 (9)

 .

 fly-astra-update astra-update - .

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- -
 - xrdp
 - , ()
- - -
 - - fly-astra-update/astra-update
 - fly-astra-update/astra-update
 - /boot
 - - -
 - ISO-
 - astra-update
 - fly-astra-update astra-update.
 - - linux-5.10
 - - VirtualBox
 -
 - skanlite

 Astra Linux: **1.6.9.8**
.: Astra Linux



- , 20211008SE16 (9)
- , 20211008SE16 (9)

 , , Astra Linux Special Edition .

 Astra Linux Special Edition

, «Astra Linux Special Edition» .10015-01 (1.6), - Astra Linux.



:

- 0 :
<https://dl.astralinux.ru/astra/stable/smolensk/security-updates/1.6/20211008SE16/20211008SE16.iso>;
- :
<https://dl.astralinux.ru/astra/stable/smolensk/security-updates/1.6/devel/20211008SE16>.

:

- [20210730SE16](#) - 8
- [20210723SE16MD](#)
- [20210611SE16](#) - 7
- [20210317SE16MD](#)
- [20210128SE16MD](#)
- [20201207SE16MD](#)
- [20200921SE16MD](#)
- [20200807SE16MD](#)
- [20200722SE16](#) - 6
- [20200526SE16MD](#)
- [20200327SE16](#) - 5
- [20191029SE16](#) - 4
- [20190912SE16](#) - 3
- [20190712SE16MD](#)
- [20190621SE16MD](#)
- [20190529SE16MD](#)
- [20190222SE16](#) - 2
- [20181229SE16](#) - 1



().

xrdp

xrdp, xorgxrdp : [xorgxrdp_0.2.17-0astra1+b1](#).

, ()

apt-cdrom (, [Astra Linux Special Edition](#) -), - . . :

1. /etc/apt/sources.list , ;
2. :

```
sudo apt update
```

3. ;
 4. [Astra Linux Special Edition](#) -;
- :

```
sudo apt install libvulkan1 libev4 qdbus-qt5 libunwind8 reprepro  
libcurl3 qt5-image-formats-plugins \  
libxml++2.6-2v5 libxml-xpath-perl libxmlrpc-core-c3 libxmlrpc-epi0  
libxml2 libxml-parser-perl
```

Astra Linux (.) ISO- Astra Linux [fly-astra-update](#) [astra-update](#) ().



- ;
- : fly-astra-update astra-update - .



- ;
- . fly-astra-update/astra-update :

```
sudo astra-nochmodx-lock disable
```

- () Astra Linux.

- — astra-update;
- — fly-astra-update.

() , (. fly-astra-update/astra-update fly-astra-update/astra-update).



apt-cdrom add .

;
<https://dl.astralinux.ru/astra/stable/smolensk/security-updates/1.6/20211008SE16/20211008SE16.iso>;

ISO- /mnt .
;

```
gostsum -d /mnt/20211008SE16.iso
```

;

```
e12773aaad307f1feb8c9b0c7010d5182d1d762caa61070c90cfe7f4607066d9
```



«-»:

<https://dl.astralinux.ru/astra/stable/smolensk/security-updates/1.6/20211008SE16/20211008SE16.iso.sig>

;
;
<https://dl.astralinux.ru/astra/stable/smolensk/security-updates/1.6/devel/20211008SE16>



```
a5ddfee7bc81830b1293e98031d208e9440814ae5984cca41da6926a3040c7d7
```

fly-astra-update/astra-update

, , :

- fly-astra-update (astra-update):

```
sudo apt update
sudo apt install fly-astra-update
```

- astra-update:

```
sudo apt update
sudo apt install astra-update
```

fly-astra-update/astra-update

1. , , /media/cdrom:

```
sudo mount /mnt/20211008SE16.iso /media/cdrom
```

2. :

astra-update:

```
sudo apt install /media/cdrom/pool/non-free/a/astra-update/astra-
update_*.deb
```

astra-update fly-astra-update:

```
sudo apt install /media/cdrom/pool/non-free/a/astra-update/astra-
update_*.deb
sudo apt install /media/cdrom/pool/non-free/libf/libflyadmin
/libflyadminpackage_*.deb
sudo apt install /media/cdrom/pool/non-free/f/fly-astra-update/fly-
astra-update_*.deb
```

3. :

```
sudo umount /media/cdrom
```



().

/boot

:

```
lsblk
```

/boot 512, :

1. /boot 512.
2. , /boot 512 :

a. :

```
dpkg -l linux-image-*
```

b. (), 4.15.3-1-hardened :

```
sudo apt remove linux-image-4.15.3-1-hardened
```

c. .

d. , .

e. - , 4.15.3-154-hardened:

```
sudo apt install linux-astra-modules-4.15.3-154-hardened
```

. [boot](#) [LVM](#).

(.) ISO-, :

1. :
 - a. ;
 - b. ;
2. :
 - a. ;
 - b. ;

/etc/apt/sources.list, :

```
sudo astra-update -a -r
```

/etc/apt/sources.list , astra-update/fly-astra-update (. [fly-astra-update](#) [astra-update](#) -).

ISO-

, ISO- :

1. ISO-:
 - a. ;
 - b. ;
2. ISO-:
 - a. ;
 - b. ;

ISO- , . astra-update/fly-astra-update, :

```
sudo astra-update -a /mnt/smolensk1.6.iso /mnt/20211008SE16.iso /mnt
/smolensk1.6-devel.iso /mnt/20211008SE16-devel.iso
```

, /mnt , /mnt.
· fly-astra-update astra-update.

astra-update

, :

```
sudo astra-update -a <__ > /mnt/20211008SE16.iso
```

() , :

```
sudo astra-update -a /mnt/20211008SE16.iso
```

~.

, , astra-update fly-astra-update : fly-astra-update astra-update - .

fly-astra-update astra-update.



astra-update fly-astra-update.



fly-astra-update/astra-update upgrade(sudo apt upgrade), dist-upgrade(sudo apt dist-upgrade).



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Astra Linux.

1. Astra Linux, , , -() :

```
sudo apt-cdrom add
```

2. ISO- -, -.

3. ISO-, , , :

```
sudo mount /mnt/20211008SE16.iso /media/cdrom
sudo apt-cdrom -m add
sudo umount /media/cdrom
```

«20211008SE16».

-m, apt-cdrom , , - .
apt-cdrom .



- - , .



/, .
, <Enter>.

- 1.6 - .

- -, /media/cdrom , :

```
sudo mount /mnt/20211008SE16.iso /media/cdrom
```

4. (sudo -s) , sudo:



sudo -s
... ..
exit

5. - «» (, -s apt), , :

```
sudo -s
apt update
apt -s dist-upgrade
exit
```

- .

6. :

```
sudo -s
apt update
apt dist-upgrade
apt -f install
exit
```

- .

linux-5.10

linux-5.10. (,):

```
sudo apt install linux-5.10
```

Grub.

.

VirtualBox

Oracle VirtualBox VirtualBox, VirtualBox (. [VirtualBox](#)).

```
uname -r
```

```
:
```

```
5.4.0-81-generic
```

```
, Linux , :
```

```
dpkg -l | awk '/linux-image/ {print $1,$2}'
```

```
:
```

```
ii linux-image-4.15-generic
ii linux-image-4.15-hardened
ii linux-image-4.15.3-1-generic
ii linux-image-4.15.3-1-hardened
ii linux-image-4.15.3-141-generic
ii linux-image-4.15.3-141-hardened
ii linux-image-4.15.3-154-generic
ii linux-image-4.15.3-154-hardened
ii linux-image-5.4-generic
ii linux-image-5.4-hardened
ii linux-image-5.4.0-71-generic
ii linux-image-5.4.0-71-hardened
ii linux-image-5.4.0-81-generic
ii linux-image-5.4.0-81-hardened
ii linux-image-hardened
```

```
, :
```

- «RC» — , ;
- «ii» — .

```
, ( ):
```

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

```
set -e
```

```
# , .
pkgs="linux-image-4.15.3-1-generic \
linux-image-4.15.3-1-hardened \
linux-image-4.15.3-141-generic \
linux-image-4.15.3-141-hardened \
linux-image-4.15.3-154-generic \
linux-image-4.15.3-154-hardened \
linux-image-5.4.0-71-generic \
linux-image-5.4.0-71-hardened "
```

```
# .
#
# apt purge.
[ -n "$pkgs" ] && apt remove $pkgs
```

```
# Grub.
update-grub2
```

skanlite

skanlite, fly-scan, :

```
sudo apt install fly-scan
```

skanlite .



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fly-admin-int-check gostsums.txt, .



, ccnri _ . ccnri , , ().