

2022-0926SE47 (4.7.2)

4.7.2 , "Astra Linux Special Edition" .10152-02 (4.7), - Astra Linux.

 :

- `() ( - main);`
- `(base);`
- `(extended);`
-

- 2022-0407SE47MD
- 2022-0318SE47MD
- 2022-0201SE47MD
- 2022-0114SE47 (4.7.1)
- 2021-0915SE47MD

 :

- , 2022-0926SE47 (4.7.2)
- 2022-0926SE47 (4.7.2):
- , 2022-0926SE47 (4.7.2)
- , 2022-0926SE47 (4.7.2)

Linux, 4.7.2, TF307-MB-S-C rev3.0 sdk-5.4.

Astra Linux

: 4.7.2.5

∴ Astra Linux

9 9 *

(base).



```
(base) (main), .
```

The diagram illustrates the relationship between various Linux distributions and their upstream projects. It features a central column of circles and squares, with branches to the right labeled with distribution names like Astra Linux, and branches to the left labeled with upstream projects like Firefox and Chromium. The diagram illustrates how different Linux distributions are derived from common upstream sources.



().



!

```
( , ) ( - main) fly-admin-int-check gostsums.txt, repository-update.iso.
```


!

() Astra Linux (, « ») , Astra Linux.



- ;
- 2022-0926SE47 (4.7.2): ;
- : fly-astra-update astra-update - .



```
df -h /boot
```

```
75. /boot , /boot ( 512).
```

```
. boot LVM. .
```

(main)

1. - :
https://dl.astralinux.ru/astra/frozen/4.7_arm/4.7.2/iso/repository-update.iso
 :

```
wget https://dl.astralinux.ru/astra/frozen/4.7_arm/4.7.2/iso/repository-update.iso
```

2. ISO- /mnt . :
 - , 34.11-2012 . :

```
gostsum -d /mnt/repository-update.iso
```

```
:
```

```
a18b3693d4f7e450b899b94c386903d8f44042d981c7ce8fa5558919576defce
```

- ISO- CSP. , . CSP CSP fly-csp.
 :
 a. "-" - :
https://dl.astralinux.ru/astra/frozen/4.7_arm/4.7.2/iso/repository-update.iso.sig
 :

```
wget https://dl.astralinux.ru/astra/frozen/4.7_arm/4.7.2/iso/repository-update.iso.sig
```

- b. /mnt ,
- c. /mnt , (-f <__>):

```
/opt/cproccsp/bin/amd64/cryptcp -verify -detached repository-
update.iso repository-update.iso.sig -f repository-update.iso.
sig
```

, "y" <Enter>.

:

```
.
[ErrorCode: 0x00000000]
```

, .

(.) /etc/apt/sources.list, :

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

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

, . , . :

```
sudo astra-update -a /mnt/<___> /mnt/repository-update.iso
```

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

(main) - Astra Linux

 Astra Linux Special Edition .10152-02 (4.7) -. :

- baikal1;
- huawei1;
- mtrust1.

1. - Astra Linux, :

a. , HTTPS, apt-transport-https ca-certificates:

```
sudo apt install apt-transport-https ca-certificates
```

 , - Astra Linux HTTP.

b. /etc/apt/sources.list :

- HTTPS

```
#
deb https://dl.astralinux.ru/astra/frozen/4.7_arm/4.7.2/repository-main/ 4.7_arm
main contrib non-free
# - -
deb https://dl.astralinux.ru/astra/frozen/4.7_arm/4.7.2/repository-main/ 4.7_arm
<___>
```

```
#
deb https://dl.astralinux.ru/astra/frozen/4.7_arm/4.7.2/repository-update/ 4.7_arm
main contrib non-free
# - -
deb https://dl.astralinux.ru/astra/frozen/4.7_arm/4.7.2/repository-update/ 4.7_arm
<__>
```

- HTTP

```
deb http://dl.astralinux.ru/astra/frozen/4.7_arm/4.7.2/repository-main/ 4.7_arm main
contrib non-free
deb http://dl.astralinux.ru/astra/frozen/4.7_arm/4.7.2/repository-main/ 4.7_arm <__>

deb http://dl.astralinux.ru/astra/frozen/4.7_arm/4.7.2/repository-update/ 4.7_arm main
contrib non-free
deb http://dl.astralinux.ru/astra/frozen/4.7_arm/4.7.2/repository-update/ 4.7_arm <__>
```

2. :

```
sudo apt update
```

3. , :

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

(base)

- Astra Linux

-  Astra Linux Special Edition .10152-02 (4.7) - . :
 - baikal1;
 - huawei1;
 - mtrust1.

1. - Astra Linux, :

- a. , HTTPS, apt-transport-https ca-certificates:

```
sudo apt install apt-transport-https ca-certificates
```

-  , - Astra Linux HTTP.

- b. /etc/apt/sources.list :

- HTTPS

```
#
deb https://dl.astralinux.ru/astra/frozen/4.7_arm/4.7.2/repository-base/ 4.7_arm
main contrib non-free
# - -
deb https://dl.astralinux.ru/astra/frozen/4.7_arm/4.7.2/repository-base/ 4.7_arm
<__>
```

- HTTP

```
deb http://dl.astralinux.ru/astra/frozen/4.7_arm/4.7.2/repository-base/ 4.7_arm main
contrib non-free
deb http://dl.astralinux.ru/astra/frozen/4.7_arm/4.7.2/repository-base/ 4.7_arm
<__>
```

2. :

```
sudo apt update
```

3. , :

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

tar- (base)



tar- .

1. tar- , .
2. tar- /mnt . :

- , 34.11-2012 . :

```
gostsum /mnt/base-4.7.2-08.09.2022_15.07.tgz
```

:

```
92b0292e3eea832f7f5b2c3e51b1ead4a3a4740103aae4b4a343dceb60518482
```

- tar- CSP. , . CSP [CSP](#) [fly-csp](#).

:

- a. "-" , ,
- b. /mnt ,
- c. /mnt , (-f<__>):

```
/opt/cprocsp/bin/amd64/cryptcp -verify -detached base-4.7.2-08.09.2022_15.07.tgz base-4.7.2-08.09.2022_15.07.tgz.sig -f base-4.7.2-08.09.2022_15.07.tgz.sig
```

, "y" <Enter>.

:

```
[ErrorCode: 0x00000000]
```

3. tar- .
4. tar-, /srv/base-repository:

```
sudo mkdir /srv/base-repository
```

```
sudo tar zxvf base-4.7.2-08.09.2022_15.07.tgz -C /srv/base-repository/
```



5. `/srv/base-repository/` ([Astra Linux](#)), , :

```
#  
deb file:/srv/base-repository/ 4.7_arm main contrib non-free  
# - -  
deb file:/srv/base-repository/ 4.7_arm <__>
```

6. :

```
sudo apt update
```

7. , :

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



Astra Linux, TF307-MB-S-C rev3.0, sdk-5.4, , .



.



.



ca-certificates-local .

Firefox

1. , , : — — **Firefox**.
2. "about:preferences" <Enter>.
3. [].
4. [...].
5. /etc/ssl/certs/rootca_MinDDC_rsa2022.pem [].
6. - [].
7. [].

, [] :

The Ministry of Digital Development and Communications
Russian Trusted Root CA

Chromium

1. , , : — — **Chromium**.
2. "chrome://settings/certificates" <Enter>.
3. [].
4. /etc/ssl/certs/rootca_MinDDC_rsa2022.pem [].
5. [].

:

org-The Ministry of Digital Development and Communications
Russian Trusted Root CA

« »



4.7.1 Astra Linux « » (fly-notifications), .

« » :

```
sudo apt install fly-notifications
```

qtnotifydaemon .

Linux, 4.7.2, TF307-MB-S-C rev3.0 sdk-5.4. , :

1. bm1000-mbm10.dtb /boot, :

```
sudo cp -f /usr/lib/firmware/5.4.0-110-generic/device-tree/baikal  
/bm1000-mbm10.dtb /boot
```

2. /boot/grub/grub.cfg — menuentry, , :

```
devicetree /boot/bm1000-mbm10.dtb
```