

2022-0926SE47 (4.7.2)

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



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

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

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- , 2022-0926SE47 (4.7.2)
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- , 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 different versions of Astra Linux and their dependencies. It features several nodes and arrows:

- Nodes:**
 - (main)**: Represented by a blue circle.
 - (base)**: Represented by a blue circle.
 - tar- (base)**: Represented by a blue circle.
 - Firefox**: Represented by a blue square.
 - Chromium**: Represented by a blue square.
- Arrows:**
 - A vertical arrow points from **(base)** to **(main)**.
 - A vertical arrow points from **(base)** to **tar- (base)**.
 - A horizontal arrow points from **(base)** to **tar- (base)**.
 - A horizontal arrow points from **tar- (base)** to **(main)**.
 - A horizontal arrow points from **tar- (base)** to **Firefox**.
 - A horizontal arrow points from **tar- (base)** to **Chromium**.



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!

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



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() 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, , .



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ca-certificates-local .

Firefox

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

, [] :

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Chromium

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

:

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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
```