

2022-0819SE17 (1.7.2)

1.7.2 ,

«Astra Linux Special Edition» .10015-01 .10015-10 (1.7), - Astra Linux.

—

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

—

- 2022-0407SE17MD
- 2022-0318SE17MD
- 2022-0201SE17MD
- 2021-1126SE17 (1.7.1)
- 2021-0915SE17MD

⋮

- , 2022-0819SE17 (1.7.2)
- 2022-0819SE17 (1.7.2):

- , 2022-0819SE17 (1.7.2)

- , 2022-0819SE17 (1.7.2)

Astra Linux: 1.7.2.5

∴ Astra Linux



!

Linux 5.15, ksmbd.ko, Linux – ksmbd.ko
Linux.

```

graph TD
    A(( )) --- B(( ))
    A --- C(( ))
    B --- D(( ))
    B --- E(( ))
    D --- F(( ))
    D --- G(( ))
    F --- H(( ))
    F --- I(( ))
    H --- J(( ))
    H --- K(( ))
    J --- L(( ))
    J --- M(( ))
    L --- N(( ))
    L --- O(( ))
    N --- P(( ))
    N --- Q(( ))
    P --- R(( ))
    P --- S(( ))
    R --- T(( ))
    R --- U(( ))
    T --- V(( ))
    T --- W(( ))
    V --- X(( ))
    V --- Y(( ))
    X --- Z(( ))
    X --- AA(( ))
    Z --- AB(( ))
    Z --- AC(( ))
    AB --- AD(( ))
    AB --- AE(( ))
    AD --- AF(( ))
    AD --- AG(( ))
    AF --- AH(( ))
    AF --- AI(( ))
    AH --- AJ(( ))
    AH --- AK(( ))
    AJ --- AL(( ))
    AJ --- AM(( ))
    AL --- AN(( ))
    AL --- AO(( ))
    AN --- AP(( ))
    AN --- AQ(( ))
    AP --- AR(( ))
    AP --- AS(( ))
    AR --- AT(( ))
    AR --- AU(( ))
    AT --- AV(( ))
    AT --- AW(( ))
    AV --- AX(( ))
    AV --- AY(( ))
    AX --- AZ(( ))
    AX --- BA(( ))
    AZ --- BB(( ))
    AZ --- BC(( ))
    BB --- BD(( ))
    BB --- BE(( ))
    BD --- BF(( ))
    BD --- BG(( ))
    BF --- BH(( ))
    BF --- BI(( ))
    BH --- BJ(( ))
    BH --- BK(( ))
    BJ --- BL(( ))
    BJ --- BM(( ))
    BL --- BN(( ))
    BL --- BO(( ))
    BN --- BP(( ))
    BN --- BQ(( ))
    BP --- BR(( ))
    BP --- BS(( ))
    BR --- BT(( ))
    BR --- BU(( ))
    BT --- BV(( ))
    BT --- BW(( ))
    BV --- BX(( ))
    BV --- BY(( ))
    BX --- BZ(( ))
    BX --- BA1(( ))
    BZ --- BB1(( ))
    BZ --- BC1(( ))
    BB1 --- BD1(( ))
    BB1 --- BE1(( ))
    BD1 --- BF1(( ))
    BD1 --- BG1(( ))
    BF1 --- BH1(( ))
    BF1 --- BI1(( ))
    BH1 --- BJ1(( ))
    BH1 --- BK1(( ))
    BJ1 --- BL1(( ))
    BJ1 --- BM1(( ))
    BL1 --- BN1(( ))
    BL1 --- BO1(( ))
    BN1 --- BP1(( ))
    BN1 --- BQ1(( ))
    BP1 --- BR1(( ))
    BP1 --- BS1(( ))
    BR1 --- BT1(( ))
    BR1 --- BU1(( ))
    BT1 --- BV1(( ))
    BT1 --- BW1(( ))
    BV1 --- BX1(( ))
    BV1 --- BY1(( ))
    BX1 --- BZ1(( ))
    BX1 --- BA2(( ))
    BZ1 --- BB2(( ))
    BZ1 --- BC2(( ))
    BB2 --- BD2(( ))
    BB2 --- BE2(( ))
    BD2 --- BF2(( ))
    BD2 --- BG2(( ))
    BF2 --- BH2(( ))
    BF2 --- BI2(( ))
    BH2 --- BJ2(( ))
    BH2 --- BK2(( ))
    BJ2 --- BL2(( ))
    BJ2 --- BM2(( ))
    BL2 --- BN2(( ))
    BL2 --- BO2(( ))
    BN2 --- BP2(( ))
    BN2 --- BQ2(( ))
    BP2 --- BR2(( ))
    BP2 --- BS2(( ))
    BR2 --- BT2(( ))
    BR2 --- BU2(( ))
    BT2 --- BV2(( ))
    BT2 --- BW2(( ))
    BV2 --- BX2(( ))
    BV2 --- BY2(( ))
    BX2 --- BZ2(( ))
    BX2 --- BA3(( ))
    BZ2 --- BB3(( ))
    BZ2 --- BC3(( ))
    BB3 --- BD3(( ))
    BB3 --- BE3(( ))
    BD3 --- BF3(( ))
    BD3 --- BG3(( ))
    BF3 --- BH3(( ))
    BF3 --- BI3(( ))
    BH3 --- BJ3(( ))
    BH3 --- BK3(( ))
    BJ3 --- BL3(( ))
    BJ3 --- BM3(( ))
    BL3 --- BN3(( ))
    BL3 --- BO3(( ))
    BN3 --- BP3(( ))
    BN3 --- BQ3(( ))
    BP3 --- BR3(( ))
    BP3 --- BS3(( ))
    BR3 --- BT3(( ))
    BR3 --- BU3(( ))
    BT3 --- BV3(( ))
    BT3 --- BW3(( ))
    BV3 --- BX3(( ))
    BV3 --- BY3(( ))
    BX3 --- BZ3(( ))
    BX3 --- BA4(( ))
    BZ3 --- BB4(( ))
    BZ3 --- BC4(( ))
    BB4 --- BD4(( ))
    BB4 --- BE4(( ))
    BD4 --- BF4(( ))
    BD4 --- BG4(( ))
    BF4 --- BH4(( ))
    BF4 --- BI4(( ))
    BH4 --- BJ4(( ))
    BH4 --- BK4(( ))
    BJ4 --- BL4(( ))
    BJ4 --- BM4(( ))
    BL4 --- BN4(( ))
    BL4 --- BO4(( ))
    BN4 --- BP4(( ))
    BN4 --- BQ4(( ))
    BP4 --- BR4(( ))
    BP4 --- BS4(( ))
    BR4 --- BT4(( ))
    BR4 --- BU4(( ))
    BT4 --- BV4(( ))
    BT4 --- BW4(( ))
    BV4 --- BX4(( ))
    BV4 --- BY4(( ))
    BX4 --- BZ4(( ))
    BX4 --- BA5(( ))
    BZ4 --- BB5(( ))
    BZ4 --- BC5(( ))
    BB5 --- BD5(( ))
    BB5 --- BE5(( ))
    BD5 --- BF5(( ))
    BD5 --- BG5(( ))
    BF5 --- BH5(( ))
    BF5 --- BI5(( ))
    BH5 --- BJ5(( ))
    BH5 --- BK5(( ))
    BJ5 --- BL5(( ))
    BJ5 --- BM5(( ))
    BL5 --- BN5(( ))
    BL5 --- BO5(( ))
    BN5 --- BP5(( ))
    BN5 --- BQ5(( ))
    BP5 --- BR5(( ))
    BP5 --- BS5(( ))
    BR5 --- BT5(( ))
    BR5 --- BU5(( ))
    BT5 --- BV5(( ))
    BT5 --- BW5(( ))
    BV5 --- BX5(( ))
    BV5 --- BY5(( ))
    BX5 --- BZ5(( ))
    BX5 --- BA6(( ))
    BZ5 --- BB6(( ))
    BZ5 --- BC6(( ))
    BB6 --- BD6(( ))
    BB6 --- BE6(( ))
    BD6 --- BF6(( ))
    BD6 --- BG6(( ))
    BF6 --- BH6(( ))
    BF6 --- BI6(( ))
    BH6 --- BJ6(( ))
    BH6 --- BK6(( ))
    BJ6 --- BL6(( ))
    BJ6 --- BM6(( ))
    BL6 --- BN6(( ))
    BL6 --- BO6(( ))
    BN6 --- BP6(( ))
    BN6 --- BQ6(( ))
    BP6 --- BR6(( ))
    BP6 --- BS6(( ))
    BR6 --- BT6(( ))
    BR6 --- BU6(( ))
    BT6 --- BV6(( ))
    BT6 --- BW6(( ))
    BV6 --- BX6(( ))
    BV6 --- BY6(( ))
    BX6 --- BZ6(( ))
    BX6 --- BA7(( ))
    BZ6 --- BB7(( ))
    BZ6 --- BC7(( ))
    BB7 --- BD7(( ))
    BB7 --- BE7(( ))
    BD7 --- BF7(( ))
    BD7 --- BG7(( ))
    BF7 --- BH7(( ))
    BF7 --- BI7(( ))
    BH7 --- BJ7(( ))
    BH7 --- BK7(( ))
    BJ7 --- BL7(( ))
    BJ7 --- BM7(( ))
    BL7 --- BN7(( ))
    BL7 --- BO7(( ))
    BN7 --- BP7(( ))
    BN7 --- BQ7(( ))
    BP7 --- BR7(( ))
    BP7 --- BS7(( ))
    BR7 --- BT7(( ))
    BR7 --- BU7(( ))
    BT7 --- BV7(( ))
    BT7 --- BW7(( ))
    BV7 --- BX7(( ))
    BV7 --- BY7(( ))
    BX7 --- BZ7(( ))
    BX7 --- BA8(( ))
    BZ7 --- BB8(( ))
    BZ7 --- BC8(( ))
    BB8 --- BD8(( ))
    BB8 --- BE8(( ))
    BD8 --- BF8(( ))
    BD8 --- BG8(( ))
    BF8 --- BH8(( ))
    BF8 --- BI8(( ))
    BH8 --- BJ8(( ))
    BH8 --- BK8(( ))
    BJ8 --- BL8(( ))
    BJ8 --- BM8(( ))
    BL8 --- BN8(( ))
    BL8 --- BO8(( ))
    BN8 --- BP8(( ))
    BN8 --- BQ8(( ))
    BP8 --- BR8(( ))
    BP8 --- BS8(( ))
    BR8 --- BT8(( ))
    BR8 --- BU8(( ))
    BT8 --- BV8(( ))
    BT8 --- BW8(( ))
    BV8 --- BX8(( ))
    BV8 --- BY8(( ))
    BX8 --- BZ8(( ))
    BX8 --- BA9(( ))
    BZ8 --- BB9(( ))
    BZ8 --- BC9(( ))
    BB9 --- BD9(( ))
    BB9 --- BE9(( ))
    BD9 --- BF9(( ))
    BD9 --- BG9(( ))
    BF9 --- BH9(( ))
    BF9 --- BI9(( ))
    BH9 --- BJ9(( ))
    BH9 --- BK9(( ))
    BJ9 --- BL9(( ))
    BJ9 --- BM9(( ))
    BL9 --- BN9(( ))
    BL9 --- BO9(( ))
    BN9 --- BP9(( ))
    BN9 --- BQ9(( ))
    BP9 --- BR9(( ))
    BP9 --- BS9(( ))
    BR9 --- BT9(( ))
    BR9 --- BU9(( ))
    BT9 --- BV9(( ))
    BT9 --- BW9(( ))
    BV9 --- BX9(( ))
    BV9 --- BY9(( ))
    BX9 --- BZ9(( ))
    BX9 --- BA10(( ))
    BZ9 --- BB10(( ))
    BZ9 --- BC10(( ))
    BB10 --- BD10(( ))
    BB10 --- BE10(( ))
    BD10 --- BF10(( ))
    BD10 --- BG10(( ))
    BF10 --- BH10(( ))
    BF10 --- BI10(( ))
    BH10 --- BJ10(( ))
    BH10 --- BK10(( ))
    BJ10 --- BL10(( ))
    BJ10 --- BM10(( ))
    BL10 --- BN10(( ))
    BL10 --- BO10(( ))
    BN10 --- BP10(( ))
    BN10 --- BQ10(( ))
    BP10 --- BR10(( ))
    BP10 --- BS10(( ))
    BR10 --- BT10(( ))
    BR10 --- BU10(( ))
    BT10 --- BV10(( ))
    BT10 --- BW10(( ))
    BV10 --- BX10(( ))
    BV10 --- BY10(( ))
    BX10 --- BZ10(( ))
    BX10 --- BA11(( ))
    BZ10 --- BB11(( ))
    BZ10 --- BC11(( ))
    BB11 --- BD11(( ))
    BB11 --- BE11(( ))
    BD11 --- BF11(( ))
    BD11 --- BG11(( ))
    BF11 --- BH11(( ))
    BF11 --- BI11(( ))
    BH11 --- BJ11(( ))
    BH11 --- BK11(( ))
    BJ11 --- BL11(( ))
    BJ11 --- BM11(( ))
    BL11 --- BN11(( ))
    BL11 --- BO11(( ))
    BN11 --- BP11(( ))
    BN11 --- BQ11(( ))
    BP11 --- BR11(( ))
    BP11 --- BS11(( ))
    BR11 --- BT11(( ))
    BR11 --- BU11(( ))
    BT11 --- BV11(( ))
    BT11 --- BW11(( ))
    BV11 --- BX11(( ))
    BV11 --- BY11(( ))
    BX11 --- BZ11(( ))
    BX11 --- BA12(( ))
    BZ11 --- BB12(( ))
    BZ11 --- BC12(( ))
    BB12 --- BD12(( ))
    BB12 --- BE12(( ))
    BD12 --- BF12(( ))
    BD12 --- BG12(( ))
    BF12 --- BH12(( ))
    BF12 --- BI12(( ))
    BH12 --- BJ12(( ))
    BH12 --- BK12(( ))
    BJ12 --- BL12(( ))
    BJ12 --- BM12(( ))
    BL12 --- BN12(( ))
    BL12 --- BO12(( ))
    BN12 --- BP12(( ))
    BN12 --- BQ12(( ))
    BP12 --- BR12(( ))
    BP12 --- BS12(( ))
    BR12 --- BT12(( ))
    BR12 --- BU12(( ))
    BT12 --- BV12(( ))
    BT12 --- BW12(( ))
    BV12 --- BX12(( ))
    BV12 --- BY12(( ))
    BX12 --- BZ12(( ))
    BX12 --- BA13(( ))
    BZ12 --- BB13(( ))
    BZ12 --- BC13(( ))
    BB13 --- BD13(( ))
    BB13 --- BE13(( ))
    BD13 --- BF13(( ))
    BD13 --- BG13(( ))
    BF13 --- BH13(( ))
    BF13 --- BI13(( ))
    BH13 --- BJ13(( ))
    BH13 --- BK13(( ))
    BJ13 --- BL13(( ))
    BJ13 --- BM13(( ))
    BL13 --- BN13(( ))
    BL13 --- BO13(( ))
    BN13 --- BP13(( ))
    BN13 --- BQ13(( ))
    BP13 --- BR13(( ))
    BP13 --- BS13(( ))
    BR13 --- BT13(( ))
    BR13 --- BU13(( ))
    BT13 --- BV13(( ))
    BT13 --- BW13(( ))
    BV13 --- BX13(( ))
    BV13 --- BY13(( ))
    BX13 --- BZ13(( ))
    BX13 --- BA14(( ))
    BZ13 --- BB14(( ))
    BZ13 --- BC14(( ))
    BB14 --- BD14(( ))
    BB14 --- BE14(( ))
    BD14 --- BF14(( ))
    BD14 --- BG14(( ))
    BF14 --- BH14(( ))
    BF14 --- BI14(( ))
    BH14 --- BJ14(( ))
    BH14 --- BK14(( ))
    BJ14 --- BL14(( ))
    BJ14 --- BM
```

, , (base).

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

().

!

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



() Astra Linux (« »), Astra Linux.



:

- ;
- 2022-0819SE17 (1.7.2): ;
- : fly-astra-update astra-update - .



.

, . :

```
df -h /boot
```

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

. boot LVM. .

(main)

1. - :
https://dl.astralinux.ru/astra/frozen/1.7_x86-64/1.7.2/iso/repository-update.iso
 :

```
wget https://dl.astralinux.ru/astra/frozen/1.7_x86-64/1.7.2/iso/
repository-update.iso
```

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

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

:

```
270fd0c3895687e97fa5e7bebe2d866cffdc19e8befb911c3956dc6b58979716
```

- ISO- CSP, . CSP CSP fly-csp.
 :
 a. "-" - :
https://dl.astralinux.ru/astra/frozen/1.7_x86-64/1.7.2/iso/repository-update.iso.sig
 :

```
wget https://dl.astralinux.ru/astra/frozen/1.7_x86-64/1.7.2/
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
```

`/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

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://download.astralinux.ru/astra/frozen/1.7_x86-64/1.7.2/repository-main/ 1.7
_x86-64 main contrib non-free
deb https://download.astralinux.ru/astra/frozen/1.7_x86-64/1.7.2/repository-update/ 1.7
_x86-64 main contrib non-free
```

- HTTP

```
deb http://download.astralinux.ru/astra/frozen/1.7_x86-64/1.7.2/repository-main/ 1.7_x86-
64 main contrib non-free
deb http://download.astralinux.ru/astra/frozen/1.7_x86-64/1.7.2/repository-update/ 1.7
_x86-64 main contrib non-free
```

2. :

```
sudo apt update
```

3. , :

```
sudo astra-update -A -r
```

(base)

- Astra Linux

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://download.astralinux.ru/astra/frozen/1.7_x86-64/1.7.2/repository-base/ 1.7_x86-64 main contrib non-free
```

- HTTP

```
deb http://download.astralinux.ru/astra/frozen/1.7_x86-64/1.7.2/repository-base/ 1.7_x86-64 main contrib non-free
```

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-1.7.2-11.08.2022_15.28.tgz
```

:

```
3e2695de55b85d5d75c31f4df2fa479068bc6e09264990fcec4e6ec7944225a1
```

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

```
/opt/cproccsp/bin/amd64/cryptcp -verify -detached base-1.7.2-11.08.2022_15.28.tgz base-1.7.2-11.08.2022_15.28.tgz.sig -f base-1.7.2-11.08.2022_15.28.tgz.sig
```

, "y" <Enter>.

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

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

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

```
sudo tar zxvf base-1.7.2-11.08.2022_15.28.tgz -C /srv/base-repository/
```



13.

5. /srv/base-repository/ (. Astra Linux). , , :

```
deb file:/srv/base-repository/ 1.7_x86-64 main contrib non-free
```



```
deb cdrom:[<__>]/ 1.7_x86-64 contrib main non-free
```

("#").

6. :

```
sudo apt update
```

7. , :

```
sudo astra-update -A -r -T
```



ksmbd.ko Linux

Linux 5.15, ksmbd.ko, Linux.

1. /etc/modprobe.d/blacklist.local.conf (-).
2. , install, shell-:

```
install ksmbd /bin/true
```

3. :

```
sudo update-initramfs -uk all
```



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

« »



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

« » :

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

```
qtnotifydaemon .
```