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..:

- /;
- Astra Linux ;
- Astra Linux Special Edition x.7 .

Astra Linux , IP- 192.168.56.1 (. Astra Linux).

, :

- /srv/repo/alse/main - Astra Linux x.7 ;
- /srv/repo/alse/base - Astra Linux x.7 ;
- /srv/repo/alse/update-main - ();
- /srv/repo/alse/update-base - ();

## Astra Linux Special Edition: ISO-

:

```
sudo mkdir -p /srv/repo/alse/main
```

( /media/cdrom - /media/cdrom):

```
[ -d /media/cdrom ] || sudo mkdir /media/cdrom
sudo mount /__ISO- /media/cdrom
```

:

```
sudo cp -a /media/cdrom/* /srv/repo/alse/main
```

ISO-:

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

, ( ):

```
sudo mkdir -p /srv/repo/alse/base
[ -d /media/cdrom ] || sudo mkdir /media/cdrom
sudo mount /__ISO- /media/cdrom
sudo cp -a /media/cdrom/* /srv/repo/alse/base
sudo umount /media/cdrom
```

( ):

```
sudo mkdir -p /srv/repo/alce/update-main  
[ -d /media/cdrom ] || sudo mkdir /media/cdrom  
sudo mount /__ISO- /media/cdrom  
sudo cp -a /media/cdrom/* /srv/repo/alce/update-main  
sudo umount /media/cdrom
```

( ):

```
sudo mkdir -p /srv/repo/alce/update-base  
[ -d /media/cdrom ] || sudo mkdir /media/cdrom  
sudo mount /__ISO- /media/cdrom  
sudo cp -a /media/cdrom/* /srv/repo/alce/update-base  
sudo umount /media/cdrom
```

## Astra Linux Common Edition:

Astra Linux Common Edition :

1. ISO :

```
sudo mkdir -p /srv/repo/alce  
[ -d /media/cdrom ] || sudo mkdir /media/cdrom  
sudo mount /__ISO- /media/cdrom  
sudo cp -a /media/cdrom/* /srv/repo/alce  
sudo umount /media/cdrom
```

2. :

```
sudo mkdir -p /srv/repo/alce  
sudo rsync --delete -aqLz dl.astralinux.ru::astra/astra/stable/2.12_x86-64/repository/ /srv/repo/alce
```

""::astra" - rsync, /astra/stable/2.12\_x86-64/repository - . rsync :

```
sudo rsync --delete -aqLz rsync://dl.astralinux.ru/astra/astra/stable/2.12_x86-64/repository /srv/repo/alce
```

--progress --stats:

```
sudo rsync --progress --stats --delete -avLz rsync://dl.astralinux.ru/astra/astra/stable/2.12_x86-64/repository /srv/repo/alce
```

rsync . man rsync.

 web- : [https://dl.astralinux.ru/astra/stable/2.12\\_x86-64/repository/](https://dl.astralinux.ru/astra/stable/2.12_x86-64/repository/)

ftp, http.

, , , :

- FTP:
  - 21/TCP ;
  - 20/TCP ;
  - 49152-65534/TCP ;

- HTTP:
  - 80/TCP;
- HTTPS:
  - 443/TCP;
- rsync:
  - 873/TCP;

## FTP

FTP ( . [FTP](#)):

```
sudo apt install vsftpd
```

/etc/vsftpd.conf :

 listen=yes  
listen\_ipv6=no

#  
anonymous\_enable=YES  
local\_enable=no  
anon\_root=/srv/repo  
no\_anon\_password=yes  
hide\_ids=yes

ftp:

 sudo systemctl restart vsftpd

## HTTP

 "" Apache2. .  
Astra Linux Special Edition /etc/apache2/apache2.conf AstraMode off Apache2. .

web-:

```
sudo apt install apache2
```

:

```
sudo ln -s /srv/repo /var/www/html/
```

/etc/apache2/sites-enabled/000-default.conf DocumentRoot /var/www/html :

1. apache2 2.4:

 <Directory /var/www/html/repo>  
Options Indexes MultiViews FollowSymLinks  
AllowOverride None  
Order Deny,Allow  
Require all granted  
</Directory>

2. apache2 2.2:

```
i <Directory /var/www/html/repo>
    Options Indexes MultiViews FollowSymLinks
    AllowOverride None
    Order Deny,Allow
    Allow from all
</Directory>
```

web-:

```
sudo systemctl restart apache2
```

( /etc/apt/sources.list /etc/apt/sources.list.d)

/etc/apt/sources.list , /etc/apt/sources.list.d , /etc/apt/sources.list.d , "" .list.

Astra Linux Special Edition x.7:

```
i #
deb file:/srv/repo/alse/main stable main contrib non-free
#
deb file:/srv/repo/alse/base stable main contrib non-free
#
deb file:/srv/repo/alse/update-main stable main contrib non-free
#
deb file:/srv/repo/alse/update-base stable main contrib non-free
```

Astra Linux Special Edition 1.6:

```
i #
deb file:/srv/repo/alse/main smolensk main contrib non-free
#
deb file:/srv/repo/alse/base smolensk main contrib non-free
#
deb file:/srv/repo/alse/update-main smolensk main contrib non-free
#
deb file:/srv/repo/alse/update-base smolensk main contrib non-free
```

## FTP

Astra Linux Common Edition:

```
i deb ftp://192.168.56.1/alse/ stable main contrib non-free
```

Astra Linux Special Edition .10015-01 x.7:

```
i #
deb ftp://192.168.56.1/alse/main stable main contrib non-free
#
deb ftp://192.168.56.1/alse/base stable main contrib non-free
#
deb ftp://192.168.56.1/alse/update-main stable main contrib non-free
#
deb ftp://192.168.56.1/alse/update-base stable main contrib non-free
```

Astra Linux Special Edition .10015-01 1.6:



```
i #
deb ftp://192.168.56.1/alse/main smolensk main contrib non-free
#
deb ftp://192.168.56.1/alse/base smolensk main contrib non-free
#
deb ftp://192.168.56.1/alse/update-main smolensk main contrib non-free
#
deb ftp://192.168.56.1/alse/update-base smolensk main contrib non-free
```

Astra Linux Special Edition x.7 . - [Astra Linux Special Edition x.7](#)

## HTTP

Astra Linux CE:

```
i deb http://192.168.56.1/repo/alce/stable main contrib non-free
```

Astra Linux Special Edition x.7:

```
i #
deb http://192.168.56.1/repo/alse/main stable main contrib non-free
#
deb http://192.168.56.1/repo/alse/base stable main contrib non-free
#
deb http://192.168.56.1/repo/alse/update-main stable main contrib non-free
#
deb http://192.168.56.1/repo/alse/update-base stable main contrib non-free
```

Astra Linux Special Edition 1.6:

```
i #
deb http://192.168.56.1/repo/alse/main smolensk main contrib non-free
#
deb http://192.168.56.1/repo/alse/base smolensk main contrib non-free
#
deb http://192.168.56.1/repo/alse/update-main smolensk main contrib non-free
#
deb http://192.168.56.1/repo/alse/update-base smolensk main contrib non-free
```

## apt-mirror

apt-mirror . , apt /etc/apt/sources.list, , , .

### apt-mirror

apt-mirror :

```
sudo apt install apt-mirror
```

### apt-mirror

/etc/apt/mirror.list. , , . :

```
##### config #####
#
# set base_path    /var/spool/apt-mirror
#
# set mirror_path  $base_path/mirror
# set skel_path    $base_path/skel
# set var_path     $base_path/var
# set cleanscript  $var_path/clean.sh
# set defaultarch  <running host architecture>
# set postmirror_script $var_path/postmirror.sh
# set run_postmirror 0
set nthreads      20
set _tilde 0
#
##### end config #####
```

, /var/spool/apt-mirror. , , set base\_path .  
/etc/apt/mirror.list , /etc/apt/sources.list . , Astra Linux Special Edition 1.7:

```
##### config #####
#
# set base_path    /var/spool/apt-mirror
#
# set mirror_path  $base_path/mirror
# set skel_path    $base_path/skel
# set var_path     $base_path/var
# set cleanscript  $var_path/clean.sh
# set defaultarch  <running host architecture>
# set postmirror_script $var_path/postmirror.sh
# set run_postmirror 0
set nthreads      20
set _tilde 0
#
##### end config #####

# - Astra Linux Special Edition 1.7
deb https://dl.astralinux.ru/astra/stable/1.7_x86-64/repository-main/ 1.7_x86-64 main contrib non-free

# (admin:password) (8080)
deb https://admin:password@company.ru:8080/astra/stable/1.7_x86-64/repository-main/ 1.7_x86-64 main contrib non-free

# (, , )
clean https://dl.astralinux.ru/astra/stable/1.7_x86-64/repository-main/

#
skip-clean https://dl.astralinux.ru/astra/stable/1.7_x86-64/repository-main/installer-amd64/
```

, x86-64, ., Astra Linux Special Edition .10152-02 ( 4.7):

```
deb [arch=arm64] https://dl.astralinux.ru/astra/stable/4.7_arm/repository-main/ 4.7_arm main contrib non-free
deb [arch=arm64] https://dl.astralinux.ru/astra/stable/4.7_arm/repository-update/ 4.7_arm main contrib non-free
deb [arch=arm64] https://dl.astralinux.ru/astra/stable/4.7_arm/repository-base/ 4.7_arm main contrib non-free
```

apt-mirror cron (/etc/cron.d/apt-mirror). :

```
#
# Regular cron jobs for the apt-mirror package
#
#0 4 * * * apt-mirror /usr/bin/apt-mirror > /var/spool/apt-mirror/var/cron.log
```

apt-mirror. , . :

```
sudo mkdir /var/spool/apt-mirror
```

/var/spool/apt-mirror.  
apt-mirror ( ):

```
sudo chown apt-mirror:apt-mirror /var/spool/apt-mirror
```

:

```
sudo -u apt-mirror apt-mirror
```

, mirror.list, mirror , . - Astra Linux Special Edition 1.7, , mirror/dl.astralinux.ru. /var/spool/apt-mirror/mirror/dl.astralinux.ru,  
.

## apt-cacher-ng



Astra Linux Special Edition x.7 2021-1126SE17 ( 1.7.1).

apt-cacher-ng apt-cacher-ng. 2021-1126SE17 ( 1.7.1) synaptic :

```
sudo apt install apt-cacher-ng
```

. /etc/apt-cacher-ng. /var/cache/apt-cacher-ng.

3142/tcp. , , firewalld:

```
firewall-cmd --permanent --zone public --add-port 3142/tcp
```

, , QEMU/KVM:

```
firewall-cmd --permanent --zone libvirt --add-port 3142/tcp
```



/etc/apt/, /etc/apt/7proxy :

```
Acquire::http::Proxy "http://<IP-__>:3142";
```

.

, :

```
deb http://<IP-__>/dl.astralinux.ru/astra/stable/1.7_x86-64/repository-extended/ 1.7_x86-64 main contrib  
non-free
```

HTTPS:

```
deb http://<IP-__>/HTTPS///dl.astralinux.ru/astra/stable/1.7_x86-64/repository-extended/ 1.7_x86-64 main  
contrib non-free
```