

Astra Linux Special Edition 1.4 Astra Linux Directory read only

- Astra Linux 1.2
- Astra Linux 1.4

Astra Linux SE (), , microSD, ""().. , read only. . , /., , ALD. , , , (..) , - CIFS.

. , .. ALD. ., c , CUPS, /var/spool/cups /var/cache/cups .

Astra Linux 1.2

1. 8.5 .

2. ALD -. () . . 7.6.7 . root. ALD, ald-client ald-client-parsec. :

dpkg -l | grep ald-client

"ii" , .:

ii ald-client 1.4.12 Astra Linux Directory client

, :

aptitude install ald-client-parsec

ALD . . . /etc/hosts :

127.0.0.1 localhost
192.168.1.1 myhost.mydomain.ru

hostname . - myhost. /etc/hostname. ALD 5. :

date

. man date. NTP, . /etc/cron.d/ntpdate c :

*/10 * * * * root /usr/sbin/ntpdate <ntp->

<ntp-> ip-, NTP.

. /etc/ald/ald.conf:

DOMAIN=< >

< > . - .mydomain.ru

SERVER=< >

<>- ALD-. : myserver.mydomain.ru

CLIENT ON=1

ALD.

:

ald-client commit-config

ALD . man ald, man ald-client, .6 .

3. read only root.
3.1... , . , .

ls -l /etc/rc2.d

:

K50cups
K60dhcp3-server
K80exim4
K80vsftpd
README
S01ald-nscd-cleaner
S05vbesave
S10rsyslog
S12acpid
S20gpm
S20nfs-common
S20nscd
S20nslcd
S20ulogd
S21dbus
S22avahi-daemon
S24hal
S29ald-mount-helper
S89atd
S89cron
S98usplash
S99acpi-support
S99console-setup
S99fly-dm
S99rc.local
S99rmnologin
S99stop-bootlogd

S , K-.. update-rc.d SMTP- exim4 . , :

update-rc.d -f exim4 remove
update-rc.d exim4 80 stop 6 5 4 3 2 1 0 .

cups, dhcp3-server vsftpd. . man update-rc.d

3.2. read only /etc/fstab. , , , .
/etc/fstab :

:

/dev/mksm_sd1 / ext2 ro 0 0

/dev/mksm_sd1 ,
/- ,
ext2 - (ext2 , . . 8.5.),
ro - ,
fsck.
, .. .
, , , :

tmpfs /tmp tmpfs defaults 0 0

```
/tmp, /var/tmp, /var/lock, /var/run, /var/log, /var/lock, /var/private, /var/cache/nscd, /var/cache/samba, /var/spool/samba, /ald_home.  
fstab :
```

```
# /etc/fstab: static file system information.  
#  
# <file system> <mount point> <type> <options> <dump> <pass>  
proc /proc proc defaults 0 0  
/dev/mksm_sd1 / ext2 ro 0 0  
/dev/scd0 /media/cdrom0 udf,iso9660 user,noauto 0 0  
tmpfs /ald_home tmpfs defaults 0 0  
tmpfs /tmp tmpfs defaults 0 0  
tmpfs /var/lock tmpfs defaults 0 0  
tmpfs /var/run tmpfs defaults 0 0  
tmpfs /var/log tmpfs defaults 0 0  
tmpfs /var/tmp tmpfs defaults 0 0  
tmpfs /var/private tmpfs defaults 0 0  
tmpfs /var/cache/nscd tmpfs defaults 0 0  
tmpfs /var/cache/samba tmpfs defaults 0 0  
tmpfs /var/spool/samba tmpfs defaults 0 0
```

```
3.3. /var/private. , ( .3.2. ), ... /var/private , . . /root, :
```

```
mkdir /tmp/tmpdir  
cd /tmp/tmpdir  
mkdir mac tmp varcache vartmp  
tar -cvzf /root/private.tar.gz *  
cd  
rm -r /tmp/tmpdir
```

```
/var/private, /etc/rc.local :
```

```
tar -C /var/private -xzf /root/private.tar.gz
```

```
exit 0
```

```
3.4. /etc , , /var/private ( .3.3 ). /etc, :
```

```
cd /etc  
tar -cvzf /root/etc.tar.gz *
```

```
/etc initramfs. :
```

```
cp /boot/initrd.img-2.6.34-3-generic /boot/initrd.img-2.6.34-3-generic.backup  
mkdir /tmp/ramdisk  
gunzip -S "" /boot/initrd.img-2.6.34-3-generic -c > /tmp/ramdisk/image  
cd /tmp/ramdisk  
cpio -id < image  
rm image
```

```
/tmp/ramdisk initramfs. init, "#Chain to real filesystem":
```

```
mount -t tmpfs -o size=$tmpfs_size,mode=0755 /dev/ram0 ${rootmnt}/etc  
tar -C ${rootmnt}/etc -xzf ${rootmnt}/root/etc.tar.gz
```

```
initramfs /boot, :
```

```
cd /tmp/ramdisk  
find . | cpio -o -H newc | gzip -9 > /boot/initrd.img-2.6.34-3-generic
```

```
sync. . . read only.

4.
4.1 - /etc . . . :

- . . .
- . . . :
- . . . :

mount -o rw,remount /

- . . . :
- . . . :

cd /etc
tar -czvf /root/etc.tar.gz *
```

4.2. ALD, root., root ,.. /root .

Astra Linux 1.4

Astra Linux SE (1.4) ALD read only.

1.2. :--//--

1. --//--

2. ALD -. () .
.. 7.6.7 .
astra-admins.

:

sudo apt-get install ald-client-common

ALD . . . /etc/hosts :

127.0.0.1 localhost
192.168.1.1 myhost.mydomain.ru myhost

hostname . - myhost. /etc/hostname.
C ALD 5. () :

date

. man date.
NTP, . /etc/cron.d/ntpdate c:

* /10 * * * * root /usr/sbin/ntpdate <ntp->

```
<ntp-> ip- , NTP.  
.:  
sudo ald-client join < >
```

```
< >- ALD. ALD . man ald, man ald-client, .6 .  
3. read only astra-admins sudo  
3.1. --//--  
3.2. read only /etc/fstab. , , , .  
/etc/fstab :
```

```
-----
```

```
:  
/dev/mksm_sd1 / ext2 ro 0 0
```

```
/dev/mksm_sd1 ,  
/- ,  
ext2 - (ext2 , . . 8.5. ),  
ro - ,  
fsck.  
. . .  
, , , :
```

```
tmpfs /tmp tmpfs defaults 0 0
```

```
:  
  
/tmp  
/run  
/var/tmp  

```

```
/etc /var/private.
```

```
fstab:
```

```
...  
/dev/mksm_sd1 / ext2 ro 0 0  
tmpfs /ald_home tmpfs defaults 0 0  
tmpfs /tmp tmpfs defaults 0 0  
tmpfs /run tmpfs defaults 0 0  
tmpfs /var/lock tmpfs defaults 0 0  
tmpfs /var/log tmpfs defaults 0 0  
tmpfs /var/tmp tmpfs defaults 0 0  
tmpfs /var/cache/nsqd tmpfs defaults 0 0  
tmpfs /var/cache/samba tmpfs defaults 0 0  
tmpfs /var/spool/samba tmpfs defaults 0 0  
tmpfs /root tmpfs defaults 0 0  
tmpfs /var/lib/ald tmpfs defaults 0 0  
...  
.
```

```
, . . . , tmpfs /var/spool/cups /var/cache/cups.
```

```
3.3. /var/private. , (. .3.2. ), .  
.. /var/private , . /opt, :
```

```
mkdir /tmp/tmpdir
cd /tmp/tmpdir
mkdir mac tmp varcache vartmp
sudo tar -cvzf /opt/private.tar.gz *
cd
rm -r /tmp/tmpdir
```

3.4. /etc , . . /etc /opt, :

```
cd /etc
sudo tar -cvzf /opt/etc.tar.gz *
```

3.5. etc.tar.gz private.tar.gz /etc /var/private initramfs. /usr/share/initramfs-tools/init, "#Chain to real filesystem" :

```
mount -t tmpfs -o size=$tmpfs_size,mode=0755 /dev/ram0 ${rootmnt}/etc
mount -t tmpfs -o size=$tmpfs_size,mode=0755 /dev/ram1 ${rootmnt}/var/private
tar -C ${rootmnt}/etc -xzf ${rootmnt}/opt/etc.tar.gz
tar -C ${rootmnt}/var/private -xzf ${rootmnt}/opt/private.tar.gz
```

:

```
sudo update-initramfs -k all -ut
```