



/boot

-
-
- . /boot
- /boot
- initrd
-
- tmpfs /boot
- initrd
- initrd
-
-

 :

- Astra Linux Special Edition .10015-01 (1.7)
- Astra Linux Special Edition .10015-01 (1.6)
- Astra Linux Special Edition .10015-16 . 1
- Astra Linux Common Edition 2.12 ()

 . :

- boot LVM.

(/boot) , - . :

- " ",
- /boot;
- /boot , ;
- initrd;
- ;

, : /boot. , , :

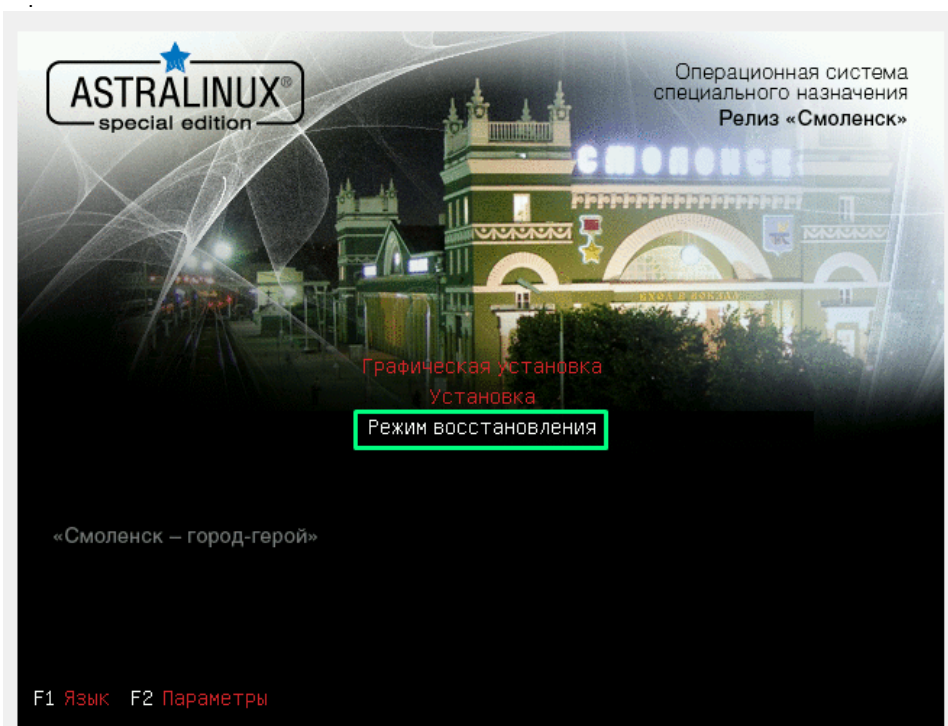
- - - [end Kernel panic - not syncing: VFS: Unable to mount root fs on unknow-block(0,0)

.
 , LVM, , LVM. , .

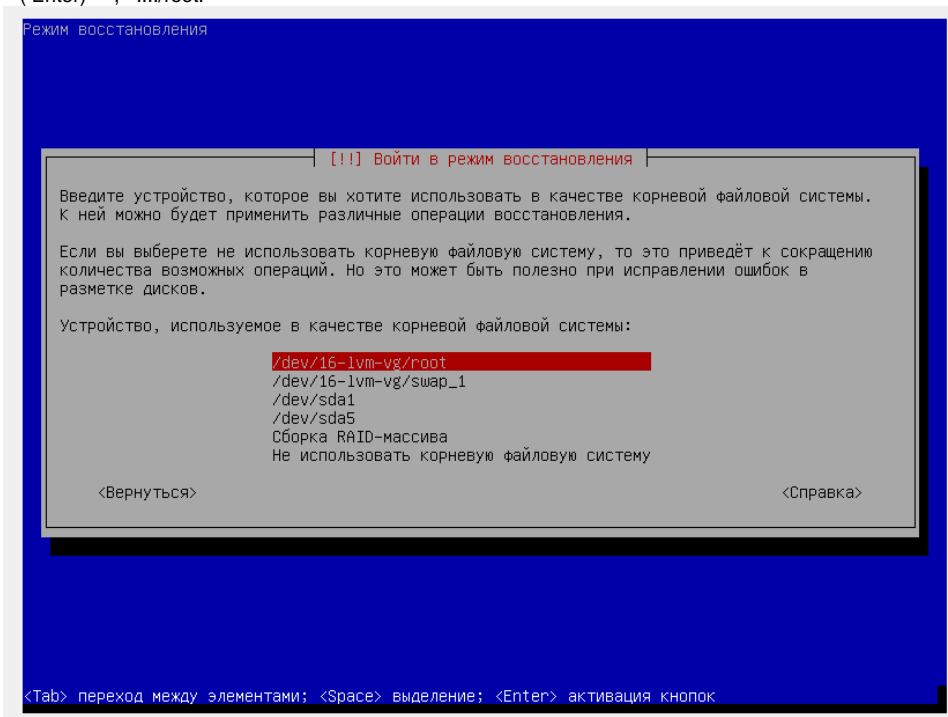
(USB-) Astra Linux Special Edition 1.6.
:

1. ;
2. ;

3. " ":

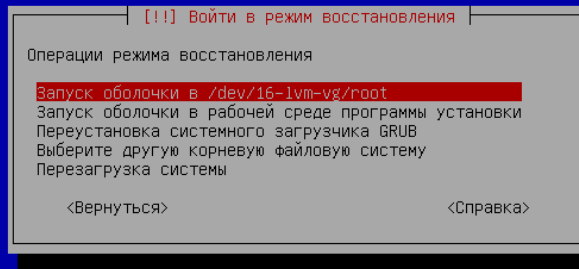


4. (Enter) ,root:



5. /dev/16-lvm-vg/root:

Режим восстановления



<Tab> переход между элементами; <Space> выделение; <Enter> активация кнопок

:

root@astra:/#
root@astra:/#

6. **CTRL+ALT+F2** Enter, :

```
Please press Enter to activate this console.

BusyBox v1.22.1 (Debian 1:1.22.0-19) built-in shell (ash)
Enter 'help' for a list of built-in commands.

~ # chroot /target/_
```

7. :

```
chroot /target
```

. . .

. /boot

/boot .

/home, boot-backup, .

:

```
cp -r /boot/ /home/boot-backup
```

```
Please press Enter to activate this console.

BusyBox v1.22.1 (Debian 1:1.22.0-19) built-in shell (ash)
Enter 'help' for a list of built-in commands.

~ # chroot /target/_
sh-4.4# cp -r /boot/ /home/boot-backup
sh-4.4#
```

/boot

/boot:

```
ls -la /boot
```

```
226516
drwxr-xr-x 3 root root 4096 10 21:40 .
drwxr-xr-x 25 root root 4096 13 17:27 ..
-rw-r--r-- 1 root root 1492731 20 2018 abi-4.15.3-1-generic
-rw-r--r-- 1 root root 1467894 20 2018 abi-4.15.3-1-hardened
-rw-r--r-- 1 root root 215263 20 2018 config-4.15.3-1-generic
-rw-r--r-- 1 root root 215941 4 16:10 config-4.15.3-2-generic
drwxr-xr-x 5 root root 4096 10 21:40 grub
-rw-r--r-- 1 root root 46731042 10 21:40 initrd.img-4.15.3-1-generic
-rw-r--r-- 1 root root 45810528 10 21:39 initrd.img-4.15.3-1-hardened
-rw-r--r-- 1 root root 46182771 10 21:40 initrd.img-4.15.3-2-generic
-rw-r--r-- 1 root root 44873873 10 21:40 initrd.img-4.15.3-2-hardened
-rw----- 1 root root 8038256 20 2018 old-vmlinuz-4.15.3-1-generic
-rw----- 1 root root 7214960 20 2018 old-vmlinuz-4.15.3-1-hardened
-rw-r--r-- 1 root root 0 20 2018 retpoline-4.15.3-1-generic
-rw-r--r-- 1 root root 0 20 2018 retpoline-4.15.3-1-hardened
-rw----- 1 root root 3969624 20 2018 System.map-4.15.3-1-generic
-rw----- 1 root root 3186040 20 2018 System.map-4.15.3-1-hardened
-rw----- 1 root root 3995440 4 16:10 System.map-4.15.3-2-generic
-rw----- 1 root root 3174738 4 16:10 System.map-4.15.3-2-hardened
-rw----- 1 root root 8144672 4 16:10 vmlinuz-4.15.3-2-generic
-rw----- 1 root root 7190304 4 16:10 vmlinuz-4.15.3-2-hardened
```

```
, /boot - 4.15.3-1 4.15.3-2, - generic hardened. rm., hardened, , :
```

```
rm /boot/*-4.15.3-1-hardened
```

initrd

initrd :

```
update-initramfs -t -u -k 4.15.3-2-generic
```

4.15.3-2 , .

tmpfs /boot

, /boot , , :

```
mount -t tmpfs none /boot
```

/boot , .

initrd

initrd :

```
update-initramfs -t -u -k 4.15.3-2-generic
```

4.15.3-2 , .
, initrd,, /home :

```
cp -r /boot/initrd.img-4.15.3-2-generic /home
```

initrd

tmpfs /boot :

```
umount /boot
```

tmpfs /boot .

initrd.img-4.15.3-2-generic :

```
cp -r /home/initrd.img-4.15.3-2-generic /boot/
```

" , .

initrd :

```
update-grub
```

:

```
exit
```

:

```
reboot
```

.

, .

, , :

```
sudo apt -f install
```