

Astra Linux (UEFI Legacy BIOS)

- PXE Astra Linux preseed
- partman-auto
- preseed Astra Linux Special Edition .10015-01 1.7 (rescue mode)



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- Astra Linux Special Edition .10015-01 .10015-10 (1.7)
- Astra Linux Special Edition .10015-37 (7.7)
- Astra Linux Special Edition .10015-01 (1.6)
- Astra Linux Special Edition .10015-16 . 1
- Astra Linux Common Edition 2.12



!

1. Astra Linux (. Astra Linux);
2. Astra Linux Special Edition .10015-01 (1.7) Astra Linux Special Edition .10152-02 (4.7) . Astra Linux Special Edition (x.7): .



. :

- VMSVGA Oracle VirtualBox;
- cirrus qxl Virt Manager.

PXE Astra Linux



PXE (.Preboot eXecution Environment) — , - , .
: <https://www.debian.org/releases/buster/amd64/apbs02.en.html>.

. Astra Linux .

. PXE Astra Linux

preseed

preseed . .

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- preseed.cfg Astra Linux Special Edition .10015-01 (1.7) . preseed.cfg Astra Linux Special Edition .10015-01 1.7;
- preseed.cfg Astra Linux Special Edition .10015-01 (1.6): preseed_se16.cfg.
- preseed.cfg Astra Linux Common Edition 2.12: preseed_ce.cfg.

preseed.cfg, :



sudo cp preseed_se16.cfg /srv/tftp/se/preseed.cfg



sudo cp preseed_ce.cfg /srv/tftp/ce/preseed.cfg

preseed:

1. :



. .

- a. HTTP- :

```
#
# ftp, mirror/country string
d-i mirror/protocol string http
d-i mirror/country string manual
d-i mirror/http/hostname string 192.168.56.1
# Astra Linux Special Edition .10015-01 ( 1.6)
d-i mirror/http/directory string /repo/se
# , Astra Linux Common Edition 2.12
#d-i mirror/http/directory string /repo/ce
d-i mirror/http/proxy string
```

b. FTP-:

```
d-i mirror/protocol string ftp
d-i mirror/ftp/hostname string 192.168.56.1
d-i mirror/ftp/directory string /repo/se
# , Astra Linux Common Edition 2.12
#d-i mirror/ftp/directory string /repo/ce
d-i mirror/ftp/proxy string
```

2. :

```
# $TZ;
# /usr/share/zoneinfo/.
d-i time/zone string Europe/Moscow
```

3. (, ([swap](#)):)):

```
# ,
# .
# : () .
#d-i partman-auto/init_automatically_partition \
# select -

# , .
# -devfs .
# , SCSI/SATA:
#d-i partman-auto/disk string /dev/sda
# :
# , .
# .
# , .
# : "regular", "lvm" "crypto"
d-i partman-auto/method string regular

# UEFI
# d-i partman-efi/non_efi_system boolean true
```

```

# ,
# , LVM,
# . ...
d-i partman-auto/purge_lvm_from_device boolean true
# lvm .
d-i partman-lvm/confirm boolean true

# .
#: 0 .
#

# legacy bios:
d-i partman-auto/choose_recipe select atomic

# UEFI:
# d-i partman-auto/choose_recipe select /lib/partman/recipes-amd64-efi/30atomic

# partman
# .
d-i partman/confirm_write_new_label boolean true
d-i partman/choose_partition select finish
d-i partman/confirm boolean true
d-i partman-auto-crypto/erase_disks boolean true
d-i partman-basicfilesystems/no_swap boolean true
d-i partman-target/mount_failed boolean true
d-i partman-partitioning/unknown_label boolean true
d-i partman-auto/purge_lvm_from_device string true
d-i partman-lvm/vgdelete_confirm boolean true
d-i partman/confirm_write_new_label string true
d-i partman-lvm/confirm boolean true
d-i partman/confirm_nooverwrite boolean true
4. (user) :

```



12345678 , . :

```
openssl passwd -1
```

```

# .
d-i passwd/user-fullname string u
d-i passwd/username string u

# ,
#d-i passwd/user-password password 12345678
#d-i passwd/user-password-again password 12345678

# MD5 .
d-i passwd/user-password-crypted password $1$EPkHS/dI$0t123aI/oMBBndBVZP0o.1

```

5. :

```

tasksel tasksel/first multiselect Base, Fly
# /usr/share/tasksel/debian-tasks.desc

```

:

```

#
d-i pkgsel/include string openssh-server

```

6. , , MBR. Astra Linux Common Edition 2.12 , :

```
# ALCE
grub-installer grub-installer/choose_bootdev select /dev/sda
d-i grub-pc/install_devices multiselect /dev/sda

# grub
# , mbr,
# :
#d-i grub-installer/only_debian boolean false
#d-i grub-installer/with_other_os boolean false
#d-i grub-installer/bootdev string (hd0,0)
#d-i grub-pc/install_devices multiselect /dev/sda
# grub :
#d-i grub-installer/bootdev string (hd0,0) (hd1,0) (hd2,0)
```

7. :



12345678 . :

```
openssl passwd -1
```

```
# grub,
#d-i grub-installer/password password 12345678
#d-i grub-installer/password-again password 12345678
#grub-installer grub-installer/password-mismatch error
# MD5, grub-md5-crypt(8).
d-i grub-installer/password-crypted password $1$EPkHS/dI$0t123aI/oMBBNdBVZP0o.1
```

8. , ssh :

```
# ,
# /target. chroot /target
# ,
# apt-install in-target
# .
d-i preseed/late_command string in-target systemctl enable ssh.service
```

, BIOS/UEFI , Astra Linux . , , :

```
sudo debconf-get-selections --installer > preseed.new
sudo debconf-get-selections >> preseed.new
```

preseed.new , .

Astra Linux Common Edition 2.12 late-command:

```
d-i preseed/late_command string in-target apt update; in-target apt dist-upgrade;
```

Astra Linux Special Edition update.service ftp http :

```
[Unit]
Description=Update system
After=rc-local.service network-online.target
Before=getty.target
Before=systemd-user-sessions.service

[Service]
StandardOutput=tty
Type=oneshot
ExecStart=/usr/local/bin/update.sh

[Install]
WantedBy=multi-user.target
```

update.sh . , :

```
#!/bin/bash

clear
# /etc/apt/sources.list ( - server, ftp):
echo "deb ftp://server/repo/se/mounted-iso-main smolensk main contrib non-free" > /etc/apt/sources.list
echo "deb ftp://server/repo/se/mounted-iso-devel smolensk main contrib non-free" >> /etc/apt/sources.list
echo "deb ftp://server/repo/se/repository-update smolensk main contrib non-free" >> /etc/apt/sources.list
echo "deb ftp://server/repo/se/repository-update-dev smolensk main contrib non-free" >> /etc/apt/sources.list

echo "Updating system, please wait..."
echo "Do not turn off your computer!"
apt-get update &> /dev/null
apt-get -y dist-upgrade &> /dev/null
apt-get -y install chromium &> /dev/null
rm -f /etc/systemd/system/multi-user.target.wants/update.service
systemctl daemon-reload
rm -f /usr/local/bin/update.sh
reboot
```

preseed :

```
d-i preseed/late_command string in-target systemctl enable ssh ; \
                                in-target wget -O /usr/local/bin/update.sh ftp://10.0.2.20/se/update.sh; \
                                in-target chmod +x /usr/local/bin/update.sh; \
                                in-target wget -O /lib/systemd/system/update.service ftp://10.0.2.20/se
/update.service; \
                                in-target systemctl enable update.service;
```

- , , .

partman-auto

. [partman-auto](#)

E , , , , , - USB- , interface, **interface=eth1**.

(,) :

1. ftp- :

```
#!/bin/sh
kill-all-dhcp; netcfg
```

2. : DHCP netcfg (.).

```
sudo chmod +x <____>
```

3. :

```
d-i preseed/run string ftp://<____>
```

debconf:

d-i netcfg/enable boolean false	. , , .
d-i netcfg/choose_interface select auto	, . , .
d-i netcfg/choose_interface select eth1	(- eth1).
d-i netcfg/link_wait_timeout string 10	(link) (3).
d-i netcfg/dhcp_timeout string 60 d-i netcfg/dhcpv6_timeout string 60	DHCP
d-i netcfg/disable_autoconfig boolean true	, .
d-i netcfg/dhcp_failed note d-i netcfg/dhcp_options select Configure network manually	DHCP-
d-i netcfg/get_nameservers string 192.168.1.1 d-i netcfg/get_ipaddress string 192.168.1.42 d-i netcfg/get_netmask string 255.255.255.0 d-i netcfg/get_gateway string 192.168.1.1 d-i netcfg/confirm_static boolean true	(IPv4).
d-i netcfg/get_ipaddress string fc00::2 d-i netcfg/get_netmask string ffff:ffff:ffff:ffff:: d-i netcfg/get_gateway string fc00::1 d-i netcfg/get_nameservers string fc00::1 d-i netcfg/confirm_static boolean true	(IPv6).
d-i netcfg/hostname string somehost	(, DHCP DNS).
d-i netcfg/wireless_wep string	WEP
d-i netcfg/dhcp_hostname string radish	DHCP-, .
d-i hw-detect/load_firmware boolean true	(false).
netcfg/get_netmask string 255.255.255.0	. , , .
netcfg/get_gateway string 192.168.1.1	. , , . none , .

preseed Astra Linux Special Edition .10015-01 1.7

preseed Astra Linux Special Edition 1.7 . [preseed Astra Linux Special Edition .10015-01 1.7.](#)

:

1. - Astra Linux Special Edition .10015-01 1.7 (- [Astra Linux Special Edition x.7](#));
2. /boot /tmp (. [Astra Linux](#)):

```
d-i partman-auto/expert_recipe string myroot :: \
    512 16384 512 ext2 \
        $primary{ } $bootable{ } \
        method{ format } format{ } use_filesystem{ } filesystem{ ext2 } mountpoint{ /boot } .\
    8192 16384 16384 ext4 \
        method{ format } format{ } use_filesystem{ } filesystem{ ext4 } mountpoint{ / } .\
    2048 16384 2048 ext4 \
        method{ format } format{ } use_filesystem{ } filesystem{ ext4 } mountpoint{ /tmp } options
/noexec{ noexec } options/nodev{ nodev } options/nosuid{ nosuid } .\
    500 8192 -1 ext4 \
        method{ format } format{ } use_filesystem{ } filesystem{ ext4 } mountpoint{ /home } .
d-i partman-auto/choose_recipe select myroot
```

3. (Base packages Fly desktop), SSH Server :

```
tasksel tasksel/first multiselect Base packages, Fly desktop, SSH server
```

[Astra Linux Directory \(ALD\)](#) ;

4. - astra 12345678;

5. c , :
a. :

```
d-i astra-additional-setup/os-check select Maximum security level Smolensk
```

- b. :

```
d-i astra-additional-setup/os-check select Advanced security level Voronezh
```

- c. :

```
d-i astra-additional-setup/os-check select Base security level Orel
```

6. , . :
a. :

```
d-i astra-additional-setup/additional-settings-smolensk multiselect Enable Mandatory Integrity
Control, Enable Mandatory Access Control, Disable ptrace capability
```

- b. :

```
d-i astra-additional-setup/additional-settings-voronezh multiselect Enable Mandatory Integrity
Control, Disable ptrace capability
```

- c. :

```
d-i astra-additional-setup/additional-settings-orel multiselect Disable ptrace capability
```

7. :

```
d-i clock-setup/ntp boolean true
d-i clock-setup/ntp-server string ntp2.vniiftri.ru
```

8. :

- i. ntp, systemd-timesyncd.service ([Astra Linux](#)):

```
d-i preseed/late_command string in-target apt purge -y ntp ; \
                           in-target systemctl enable systemd-timesyncd.service ; \
```

a. :

```
in-target rm -f /etc/NetworkManager/system-connections/*;
```

().

(rescue mode)



() , .

, pxelinux.cfg/default , preseed. , preseed.cfg:

```
LABEL netinstall
  MENU LABEL Start Astra Linux 1.07.02 rescue
  kernel 1.07.00/linux
  append initrd=ce/initrd.gz modprobe.blacklist=evbug auto=true priority=critical debian-installer
/ locale=en_US console-keymaps-at/keymap=ru hostname=ce212 domain=my.dom astra-license/license=true
url=tftp://192.168.56.1/ce/preseed.cfg interface=auto netcfg/dhcp_timeout=60 vga=788 debian-installer
/allow_unauthenticated=true rescue/enable=true
```

:

```
rescue/enable=true
```