



# SmilartOS

UserGuide v1855.4.0

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# Overview

SmilartOS is a Linux operating system based on CoreOS (<https://www.coreos.com/>). There are differences between SmilartOS and CoreOS:

- OS installation process
- OS upgrade process
- Default settings
- Set of utils
- SAM

You can use official CoreOS documentation to configure anything in operating system. SmilartOS doesn't change any binary files in base CoreOS distribution. So SmilartOS is 100% compatible with CoreOS. This documentation describes differences between SmilartOS and CoreOS. You should use official CoreOS documentation for other questions.

## Hardware requirements

SmilartOS has only one special requirement: at least 8 GB of RAM.

Other hardware requirements are the same as for CoreOS.



Installer always uses disk `/dev/sda` as a target disk for operating system. It can't be changed. If you have several disks and not sure which is `/dev/sda`, disconnect all other disks except for one that will be used in operating system installation process. You can return other disks after installation completed.

## Installation process

### Prepare boot stick

Write iso image to USB stick. Image must be written exactly byte to byte. To do so you can use **Win32 Disk Imager** in Windows, **Image writer** in Linux or **dd** util in any linux/unix distribution.

For example

```
$ sudo dd if=SmilartOS-1855.4.0_48.iso of=/dev/sdb status=progress
```



You cannot install SmilartOS from DVD disk.

# Installation

First of all, you should boot from USB stick.

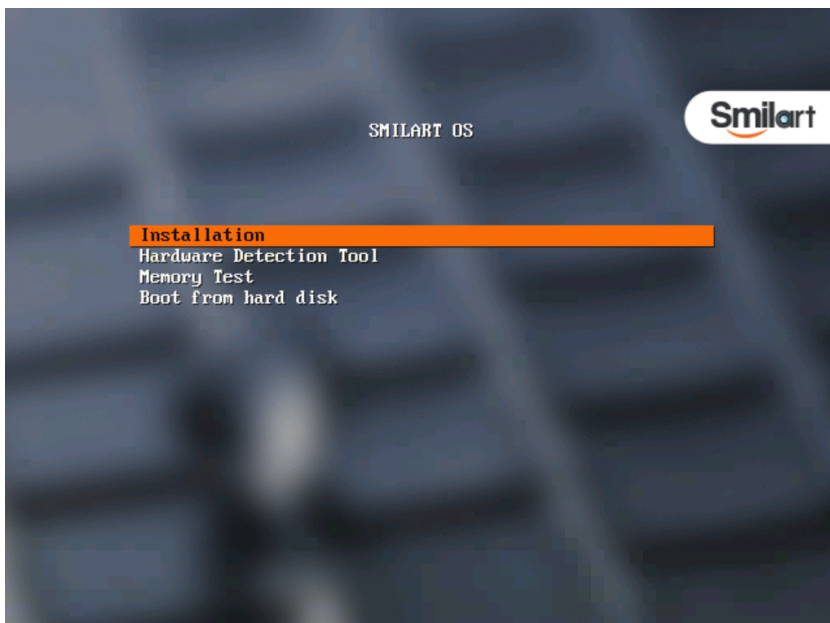
- Insert USB that contains the image in the computer and power it on.
- Select USB stick as a boot device.
- Boot the computer from USB stick.

When your computer is booted from USB stick, you will see a boot menu which consist of four items (Image 3):

- *Installation* – start the installation process.
- *Hardware Detection Tool* – utils to check hardware.
- *Memory Test* – test RAM with *memtest86+*
- *Boot from hard disk* – boot the computer from hard disk.

To start installation choose *Installation* item in the menu.

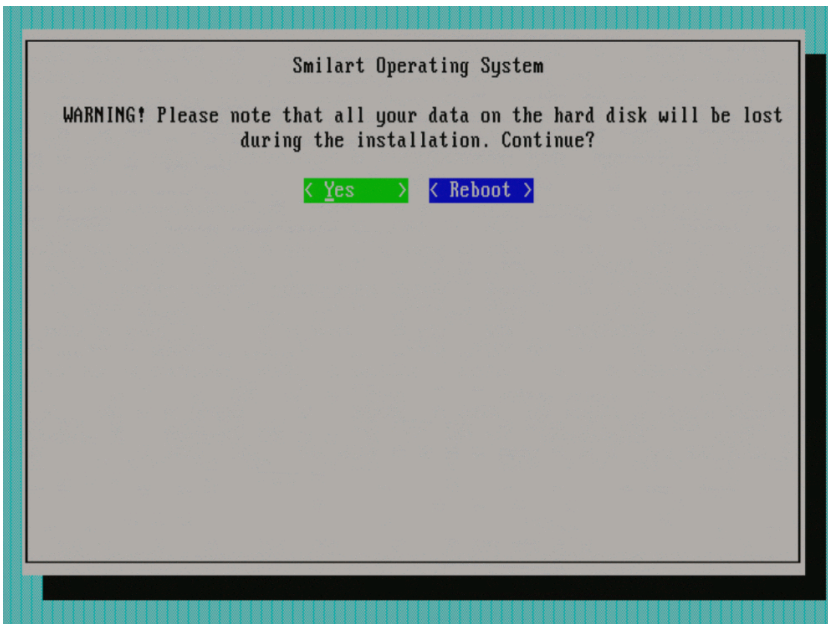
## Installation. First stage.



Picture 1.Boot menu

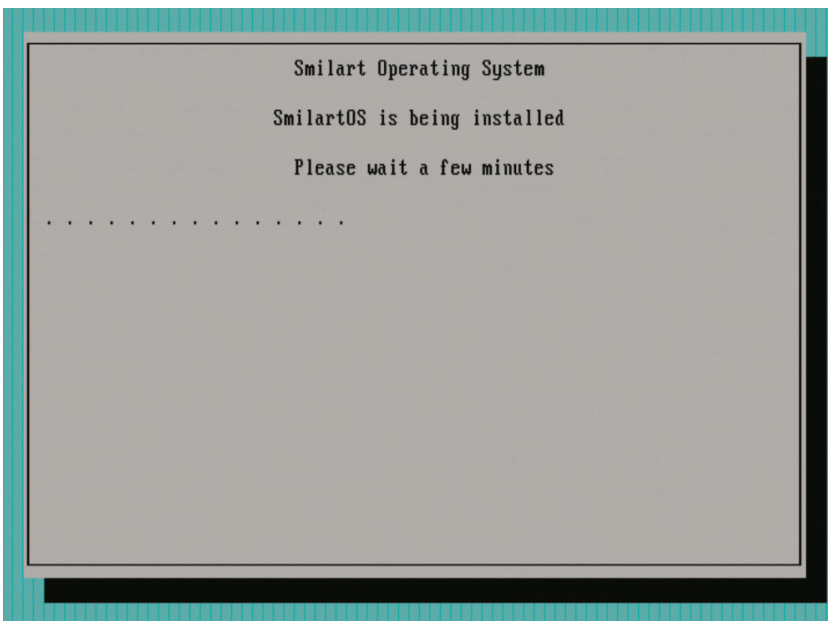
Installer verifies check sums of the installing components and warns you that all data on your local drive will be lost. (Picture 2).

To continue installation process choose **Yes** or choose **Reboot** to cancel installation.



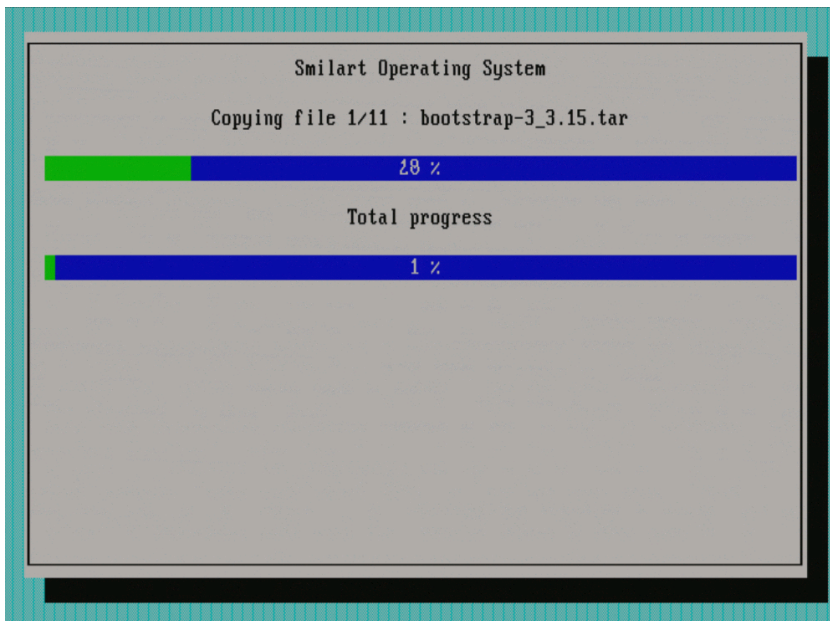
*\_Picture 2. \_Warning that all your data will be lost.*

Installation of CoreOS image takes a few minutes (Picture 3).



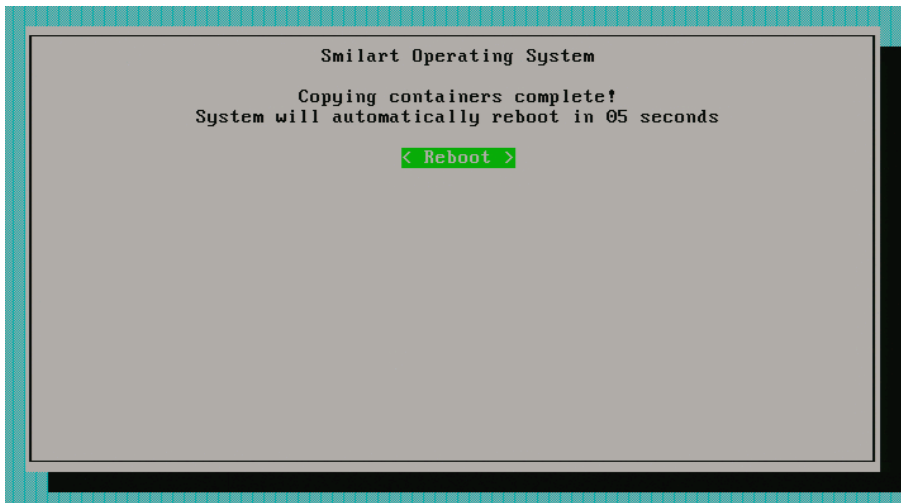
*\_Picture 3. Installation in progress \_*

Necessary files will be copied without any questions.



Picture 4. Copying files

When all necessary files have been copied, press **Reboot** to reboot the server. Otherwise reboot will be done in automatic mode (*Picture 5*).



*Picture 5. First stage reboot*

## Installation. Second stage.

Remove USB stick from the server and boot it from you hard drive.

To log into system use the following credentials:

**Username:** root

**Passowrd:** smilart

```
This is localhost (Linux x86_64 3.18.6) 07:34:24
SSH host key: 69:40:0d:05:78:ed:6f:32:9a:af:bf:d6:b6:59:53:68 (DSA)
SSH host key: f0:1c:65:a2:98:91:65:73:a0:8d:72:20:10:13:9e:f1 (ED25519)
SSH host key: 95:eb:53:b9:4a:dc:a1:96:0f:e8:57:26:5a:c2:a3:53 (RSA)
enp5s0:

localhost login: [ 10.9579581 r8169 0000:05:00:00 enp5s0: link up
[ 10.9581311 IPv6: ADDRCONF(NETDEV_CHANGE): enp5s0: link becomes ready

This is localhost (Linux x86_64 3.18.6) 07:34:27
SSH host key: 69:40:0d:05:78:ed:6f:32:9a:af:bf:d6:b6:59:53:68 (DSA)
SSH host key: f0:1c:65:a2:98:91:65:73:a0:8d:72:20:10:13:9e:f1 (ED25519)
SSH host key: 95:eb:53:b9:4a:dc:a1:96:0f:e8:57:26:5a:c2:a3:53 (RSA)
enp5s0: fe80::1e6f:65ff:fe3e:e2a5

localhost login: smilart
Password: _
```

Picture 6. Log on



Next step is network configuration. Choose network interface card to configure (*Picture 7*). Use arrow up/down keys to move between items. Press **Space** to select. Press **Next** to configure chosen interface.



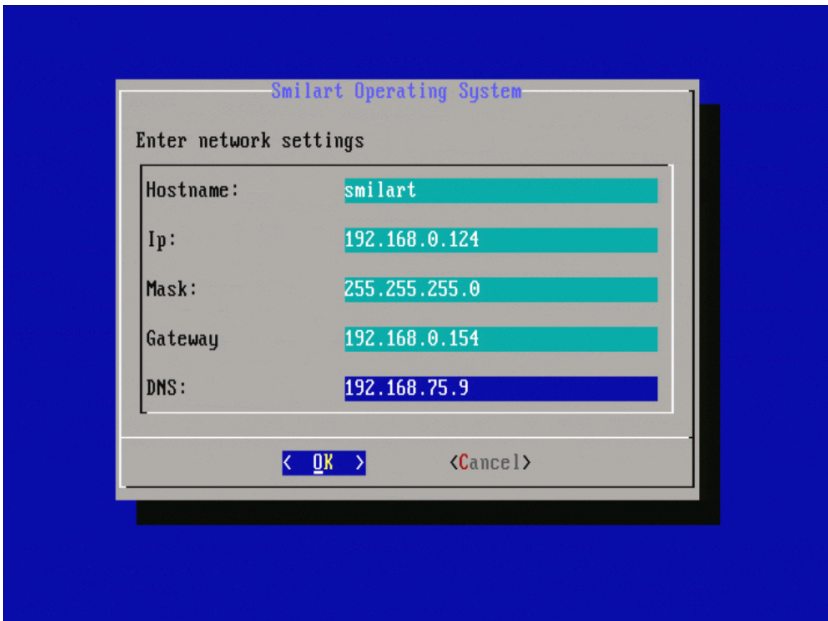
*Picture 7. Select network interface card*

Type following data in the opened windows (*Picture 8*):

1. Hostname.
2. Static IP-address.
3. Mask subnet.
4. Default gateway.
5. DNS server address.



Allowed symbols for hostname are latin alphabet, digits and dash.



Picture 8. Network settings

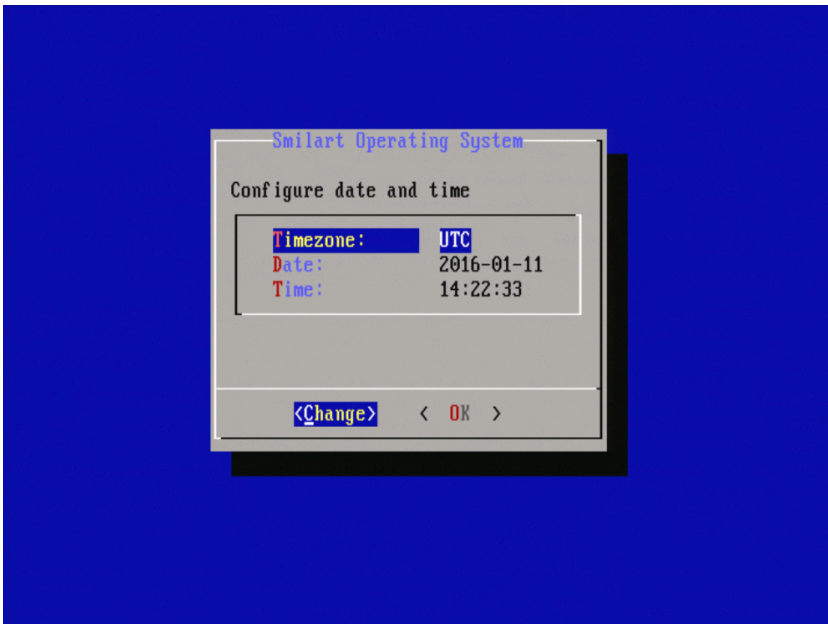


You can use **network-config** if you want to change network settings after installation.



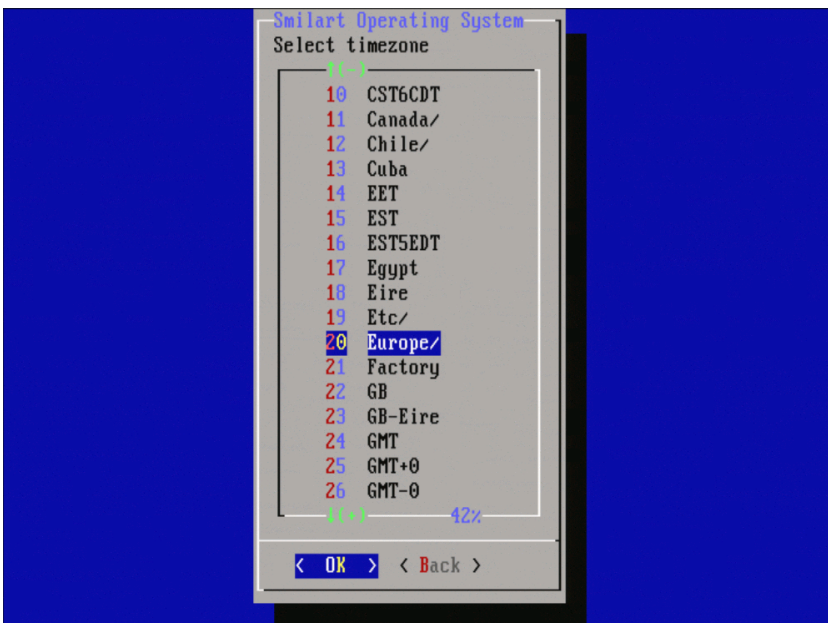
You cannot change **hostname** through this util after installation

Next step is date-time settings (*Pictures 9 - 12*).

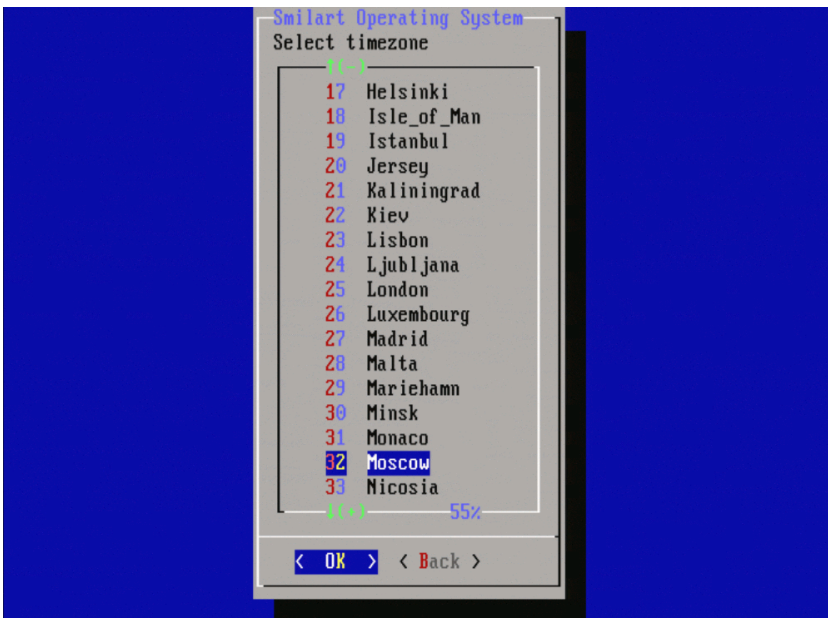


Picture 9. Date-time settings

To choose timezone, highlight *timezone* string and press **Change** button (*Picture 9*). .



Picture 10. Select timezone



Picture 11. Select timezone 2

Last step is installation of applications, which is on your USB stick. It's non-interactive process.





Picture 14. Message about file request

## License acquisition

To get a license key you need to send email with generated **request** file from the flash drive at [support@smilart.com](mailto:support@smilart.com) . In reply you'll have a license key.

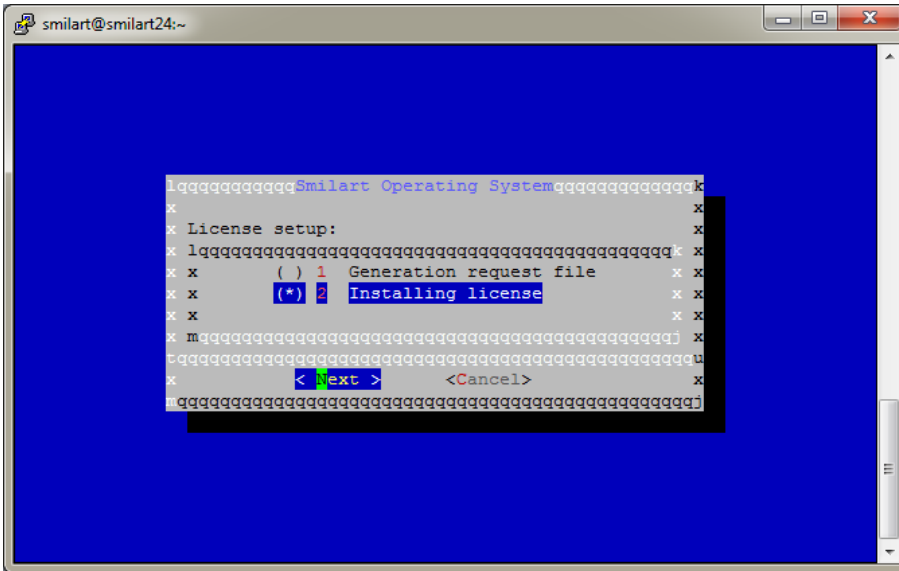
After receiving the license key you must copy it to the flash drive at the same path where **request** file is located and then plug it into to the server.

# License installation

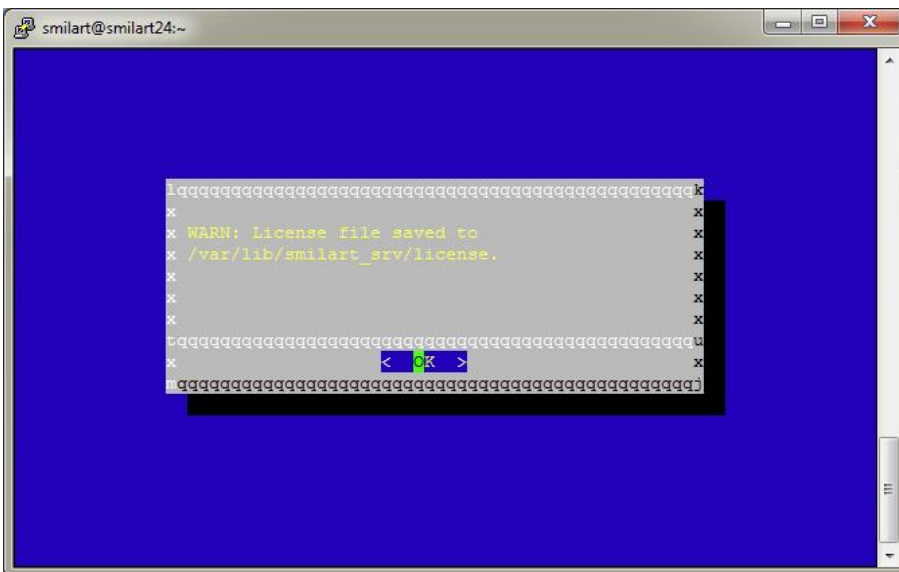
After inserting flash drive to the server run **license-config** (Picture 12).

Then choose **Installing license** and then press **Next** (Picture 15).

If everything is ok you'll get a message about succesfull license installation to `/var/lib/smilar_t_srv/license` (picture 16). Press **OK**.



Picture 15. License installation



picture 16. License key saved successfully



# Product installation

To get instructions on how to install a product, see documentation for the chosen product.

# Diagnostic tools

SmilartOS includes some useful tools for system diagnostic. For install it run command:

```
sam in diag_tools:1.0.0_2
```

Next tools are included:

[ctop](#)

[pidstat](#)

[traceroute](#)

[htop](#)

[iftop](#)

[smartctl](#)

[telnet](#)

[iotop](#)

**connect** tool by Smilart is useful for connecting to a docker container. Instead using command like `docker exec -it mongodb bash` you can use `connect mongodb`.