

Dystrubucja Linux'a - CentOS 8

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Plan prezentacji

- 1 Wprowadzenie
- 2 Instalacja
- 3 Konfiguracja pakietów
- 4 Zarządzanie i konfiguracja

Wprowadzenie



Community ENTerprise Operating System
Pierwsze Wydanie: 14 maja 2004
Aktualna wersja: 8.0.1905
Licencja: GNU GPL

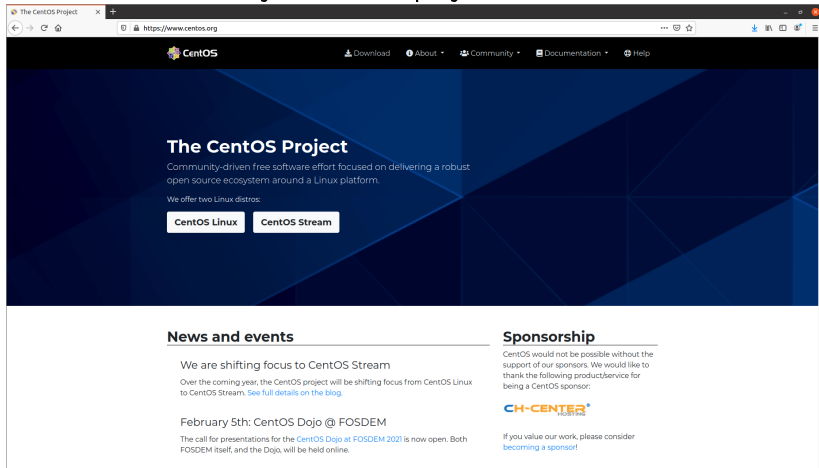
Wprowadzenie



Red Hat

W CentOS wykorzystany jest kod źródłowy oprogramowania Red Hat Enterprise Linux do stworzenia odrębnej dystrybucji, która jest bardzo podobna do Red Hat Enterprise Linux.

Oficjalna strona projektu CentOS



The screenshot shows the official CentOS Project website in a browser window. The browser's address bar displays "https://www.centos.org". The website features a dark blue header with the CentOS logo and navigation links for Download, About, Community, Documentation, and Help. The main content area has a dark blue background with the text "The CentOS Project" and a description: "Community-driven free software effort focused on delivering a robust open source ecosystem around a Linux platform." Below this, it states "We offer two Linux distros:" and provides two buttons: "CentOS Linux" and "CentOS Stream". The lower section of the page is white and contains two columns: "News and events" and "Sponsorship".

The CentOS Project
Community-driven free software effort focused on delivering a robust open source ecosystem around a Linux platform.

We offer two Linux distros:


[CentOS Linux](#) [CentOS Stream](#)

News and events

We are shifting focus to CentOS Stream
Over the coming year, the CentOS project will be shifting focus from CentOS Linux to CentOS Stream. [See full details on the blog.](#)

February 5th: CentOS Dojo @ FOSDEM
The call for presentations for the [CentOS Dojo at FOSDEM 2021](#) is now open. Both FOSDEM itself, and the Dojo, will be held online.

Sponsorship
CentOS would not be possible without the support of our sponsors. We would like to thank the following product/service for being a CentOS sponsor:

 **CH-CENTER**
HOSTING

If you value our work, please consider [becoming a sponsor!](#)

Instalacja

Menu główne instalacji

CentOS

INSTALLATION SUMMARY

CENTOS LINUX 8.0.1905 INSTALLATION

us Help

LOCALIZATION

- Keyboard
English (US)
- Language Support
English (United States)
- Time & Date
Americas/New York timezone

SOFTWARE

- Installation Source
Local media
- Software Selection
Server with GUI

SYSTEM

- Installation Destir
Automatic partitioning sele
- KDUMP
Kdump is enabled
- Network & Host
Not connected
- SECURITY POLICY
No content found

Quit Begin Installation

We won't touch your disks until you click 'Begin Installation'.

Please complete items marked with this icon before continuing to the next step.

Instalacja

Okno wyboru środowiska i dodatkowych funkcji

SOFTWARE SELECTION **CENTOS LINUX 8.0.1905 INSTALLATION**

Done Help

Base Environment

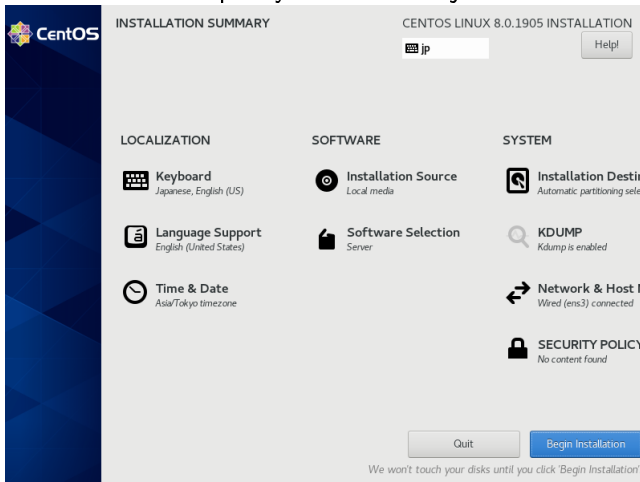
- Server with GUI**
An integrated, easy-to-manage server with a graphical interface.
- Server**
An integrated, easy-to-manage server.
- Minimal Install**
Basic functionality.
- Workstation**
Workstation is a user-friendly desktop system for laptops and PCs.
- Custom Operating System**
Basic building block for a custom CentOS system.
- Virtualization Host**
Minimal virtualization host.

Add-Ons for Selected Environment

- Hardware Monitoring Utilities**
A set of tools to monitor server hardware.
- Windows File Server**
This package group allows you to share files between Linux and MS Windows(tm) systems.
- Debugging Tools**
Tools for debugging misbehaving applications and diagnosing performance problems.
- File and Storage Server**
CIFS, SMB, NFS, iSCSI, iSER, and iSNS network storage server.
- FTP Server**
These tools allow you to run an FTP server on the system.
- GNOME**
GNOME is a highly intuitive and user-friendly desktop environment.
- Guest Agents**
Agents used when running under a hypervisor.
- InfiniBand Support**
Software designed for supporting clustering, grid connectivity, and low-latency, high bandwidth storage using RDMA-based InfiniBand, iWARP, RoCE, and OPA.

Instalacja










Ropoczywanie instalacji



The image shows the 'INSTALLATION SUMMARY' screen for CentOS Linux 8.0.1905. The screen is divided into three columns: LOCALIZATION, SOFTWARE, and SYSTEM. At the top right, there is a 'Help!' button and a language selection field set to 'jp'. At the bottom, there are 'Quit' and 'Begin Installation' buttons. A warning message at the bottom states: 'We won't touch your disks until you click 'Begin Installation''. The CentOS logo is visible in the top left corner of the window.

INSTALLATION SUMMARY **CENTOS LINUX 8.0.1905 INSTALLATION**

jp Help!

LOCALIZATION	SOFTWARE	SYSTEM
 Keyboard <i>Japanese, English (US)</i>	 Installation Source <i>Local media</i>	 Installation Destir <i>Automatic partitioning sele</i>
 Language Support <i>English (United States)</i>	 Software Selection <i>Server</i>	 KDUMP <i>Kdump is enabled</i>
 Time & Date <i>Asia/Tokyo timezone</i>		 Network & Host n <i>Wired (ens3) connected</i>
		 SECURITY POLICY <i>No content found</i>

Quit **Begin Installation**

We won't touch your disks until you click 'Begin Installation'.

Instalacja

Konfigurowanie hasła root i tworzenie użytkownika

CentOS

CONFIGURATION

CENTOS LINUX 8.0.1905 INSTALLATION

jp Help!

USER SETTINGS

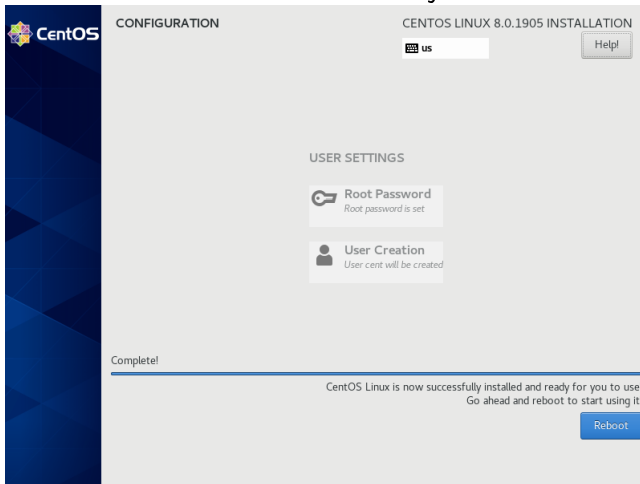
Root Password
Root password is not set

User Creation
No user will be created

Creating lmpv on /dev/vda2

Please complete items marked with this icon before continuing to the next step.

Kończenie instalacji



Konfiguracja pakietów



YUM (yellowdog updater, modified) to frontend komendy rpm i preferowane narzędzie do zarządzania pakietami. Najważniejszą zaletą narzędzia yum jest, że dba ono o zależności pakietów instalując automatycznie dodatkowo wymagane pakiety

Konfiguracja pakietów

W pliku konfiguracyjnym `/etc/yum.conf` można zdefiniować osobne sekcje dla każdego nowego repozytorium, z którego ma korzystać system.

```
# cat /etc/yum.conf

[main]
cachedir=var/cache/yum/$basearch/$releasever
keepcache=0
debuglevel=2
logfile=var/log/yum.log
exactarch=1
obsoletes=1
gpgcheck=1
plugins=1
installonly_limit=3
```

Konfiguracja pakietów

```
root@localhost:~# yum update
Last metadata expiration check: 8:01:40 ago on Thu 17 Dec 2020 06:04:44 AM EST.
Dependencies resolved.
-----
Package                Arch      Version                               Repository    Size
-----
Installing:
kernel                 x86_64    4.18.0-240.1.1.el8_3                 baseos      4.3 M
kernel-core            x86_64    4.18.0-240.1.1.el8_3                 baseos      38 M
kernel-modules         x86_64    4.18.0-240.1.1.el8_3                 baseos      26 M
Upgrading:
NetworkManager        x86_64    1:1.26.0-9.el8_3                     baseos      2.4 M
NetworkManager-conf-igmpserver x86_64    1:1.26.0-9.el8_3                     baseos      124 k
NetworkManager-libnm  x86_64    1:1.26.0-9.el8_3                     baseos      1.7 M
NetworkManager-team   x86_64    1:1.26.0-9.el8_3                     baseos      141 k
NetworkManager-tui    x86_64    1:1.26.0-9.el8_3                     baseos      328 k
lspci                  x86_64    4.10.0-240.1.1.el8_3                 baseos      5.8 M
FreeType               x86_64    2.9.1-4.el8_3.1                       baseos      394 k
kernel-tools           x86_64    4.18.0-240.1.1.el8_3                 baseos      4.5 M
kernel-tools-libs     x86_64    4.18.0-240.1.1.el8_3                 baseos      4.3 M
libselinux             x86_64    2.9-4.el8_3                           baseos      165 k
libselinux-utils      x86_64    2.9-4.el8_3                           baseos      242 k
microcode_ctl         x86_64    4.20200609-2.20201027.1.el8_3        baseos      4.5 M
python3-libselinux    x86_64    2.9-4.el8_3                           baseos      293 k
python3-perf          x86_64    4.18.0-240.1.1.el8_3                 baseos      4.4 M
systemd                x86_64    239-41.el8_3                          baseos      3.5 M
systemd-libs          x86_64    239-41.el8_3                          baseos      1.4 M
systemd-pam           x86_64    239-41.el8_3                          baseos      456 k
systemd-udev          x86_64    239-41.el8_3                          baseos      1.3 M
-----
Transaction Summary
-----
Install  3 Packages
Upgrade  10 Packages

Total download size: 95 M
Is this ok [y/N]: _
```

- install - Instaluje lub aktualizuje pakiet
- info - Wyświetla informacje o pakiecie.
- history - Wyświetla historię wykonywanych przez yum czynności.
- search - Szuka pakietu, który zawiera w nazwie określony tekst.

Zarządzanie i konfiguracja

Dodawanie i usuwanie użytkownika

```
root@localhost ~# useradd centos
root@localhost ~# passwd centos
Changing password for user centos:
New password:
BAD PASSWORD: The password fails the dictionary check - it is based on a dictionary word
Retype new password:
passwd: all authentication tokens updated successfully.
root@localhost ~#
```

Rysunek: Komenda: useradd

```
root@localhost ~# userdel centos
root@localhost ~#
```

Rysunek: Komenda: userdel

Zarządzanie i konfiguracja

Zarządzanie zaporą

```
root@localhost ~# systemctl status firewalld
* firewalld.service - firewalld - Dynamic Firewall Daemon
Loaded: loaded (/usr/lib/systemd/system/firewalld.service; enabled; vendor preset: enabled)
Active: active (running) since Thu 2020-12-17 07:06:43 EST; 7min ago
Docs: man:firewalld(1)
Main PID: 258 (firewalld)
Tasks: 2 (limit: 1024)
Memory: 31.0K
CGroup: /systemd/systemd/firewalld.service
└─┬─/usr/libexec/iptables/iptables → /usr/sbin/firewalld --nofork --nopid

```

```
Dec 17 07:06:39 localhost.localdomain systemd[1]: Starting firewalld - Dynamic Firewall Daemon...
Dec 17 07:06:43 localhost.localdomain systemd[1]: Started firewalld - Dynamic Firewall Daemon.
Dec 17 07:06:45 localhost.localdomain firewalld[258]: WARNING: AllowDeviceBinding is enabled. This may
prevent SELinux from
```

Rysunek: firewall-cmd
-status

```
root@localhost ~# systemctl stop firewalld
root@localhost ~# systemctl disable firewalld
Removed /etc/systemd/system/wall-unit.target.wants/firewalld.service.
Removed /etc/systemd/system/bus-urg.target.wants/firewalld.service.
root@localhost ~#
```

Rysunek: stop firewalld
disable firewalld

Zarządzanie i konfiguracja

Zarządzanie zaporą

```
root@localhost ~# firewall-cmd --add-service=http --permanent  
success  
root@localhost ~# firewall-cmd --reload  
success  
root@localhost ~# _
```

Rysunek: firewall—cmd
—add—service=http
—permanent

```
root@localhost ~# firewall-cmd --add-port=34001/tcp  
success  
root@localhost ~# _
```

Rysunek: firewall—cmd
—add—port=34001/tcp

Bibliografia

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<https://www.server-world.info/en/>

<https://docs.centos.org/en-US/docs/>

DZIĘKUJEMY ZA UWAGĘ!