



Fedora CoreOS

Your Next Multiplayer Homelab Distro

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What would we talk about?

What is **Fedora CoreOS**?



In a world where thousands of GNU/Linux distributions already exist, why should you care about one more?

Your **Minecraft** server



Get started on an adventure in a voxel-like world with your own rules, self-hosting hardware, friends and host operating system

Your **Valheim** server



Survive and prove yourself to be fit for the halls of Valhalla on a server hardware, friends and operating system of your own

Read the documentation



What is **Fedora CoreOS**?



Minimal set of **packages**

Across three release streams, only those packages that are needed for a minimal **networking-enabled** and **container-ready** setup are pre-installed

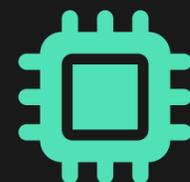
Need more packages?
Just layer them with rpm-ostree!



Secure and **scalable**

With packages automatically updated and releases coming out fortnightly, the host is made secure and accurately configurable for scalable deployments.

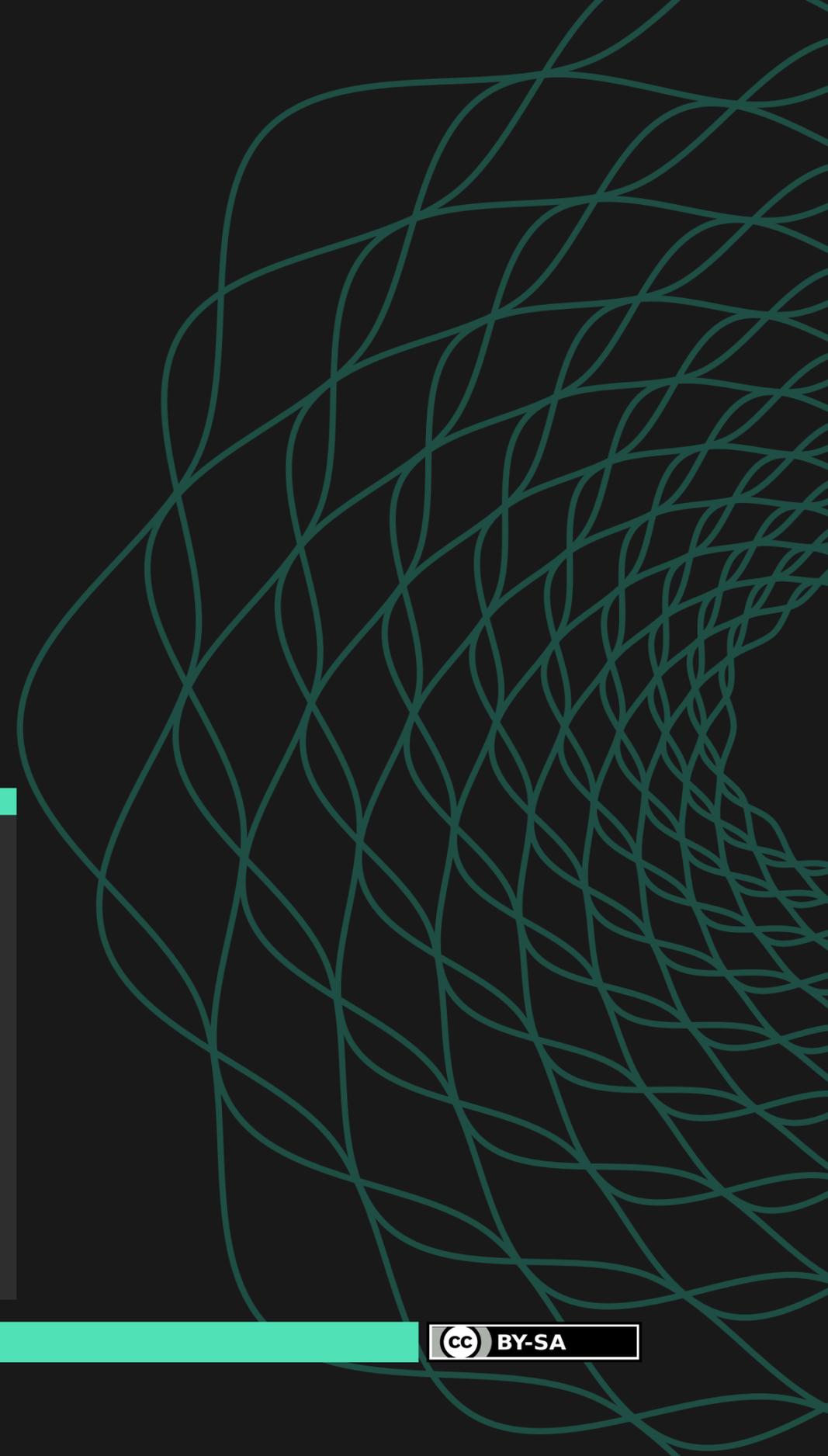
How do you configure?
Use Ignition Config and Butane!



Multi-architecture ready

Support for **native** and/or **virtualized** deployment on architectures like **x86_64**, **aarch64** and **s390x** is available, and that for more is coming soon.

Want to make it happen sooner?
Start contributing today!



Minimal set of packages

STABLE

The most reliable stream offered with changes reaching the stream after spending a period of time in the **testing** stream.

v37.20221211.3.0

Released on **Dec 26, 2022**
414 packages, 1 removed, 27 upgraded

TESTING

Represents what comes to the next **stable** stream, with the content regularly updated and opportunities to catch breaking changes

v37.20221225.2.2

Released on **Jan 03, 2022**
415 packages, 1 downgraded

NEXT

Represents the changes coming in the **future**, helps with experimenting new features and testing platform rebases for the next major version

v37.20221225.1.2

Released on **Jan 03, 2022**
415 packages, 1 downgraded

Secure and scalable

Variable wariness to getting updates

Want to install every update that hits the repositories? You can do it. Want to be the last one to install the updates? You can do that as well.



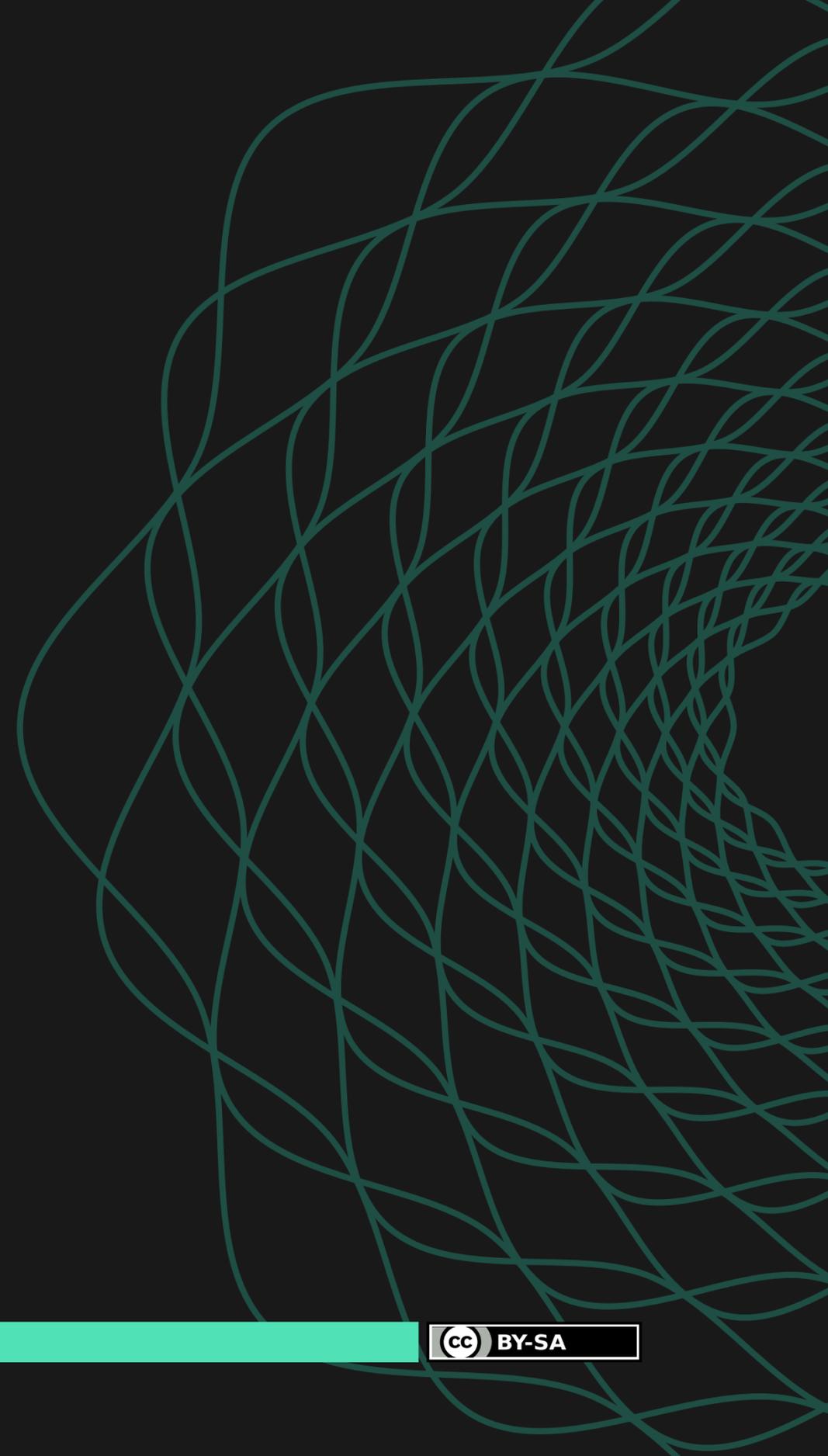
Finalizing updates as and when fit

Finalize updates right after downloads, automate an external lock manager or configure a specific time for applying updates.



Rollback the updates you do not need

Every new update creates a new deployment and you can manually fallback to the previous ones if they end up causing issues.



Multi-architecture ready

Baremetal installations

Architectures like x86_64, aarch64 and s390x are supported and the host can be installed using the live ISO, PXE booting and from container



Virtualized environments

No matter which hypervisor you make use of, they are (most likely) supported eg. Libvirt, QEMU/KVM, VMware, VirtualBox etc.

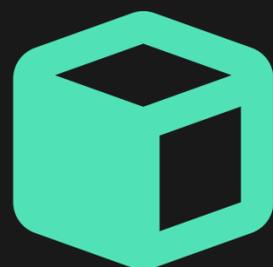


Cloud deployments

Cloud providers (and their documentation) are supported, for eg. AWS, Alibaba Cloud, Azure, Digital Ocean, Exoscale, GCP, IBM Cloud etc.



Your **Minecraft** server



STEP #1

Setup the environment

Ensure the local environment meets the recommended requirements or the remote environment is reachable in the network, to begin with.

In this case,
We would setup host on a local VM.

STEP #2

Configure the host

Jot down the configuration variables like users, groups, keypairs, config files, systemd units in a convenient YML file to use and reuse it.

In this case,
We would start service containers.

STEP #3

Become creative

That's really it! One config file and the entire host environment gets started with the purpose. Something looks off? Rinse and repeat.

In this case,
We would connect to the server.

Scan this QR code

Read the documentation



Setup the environment

Hypervisor used

VMware Workstation v17
Running on Fedora Workstation 37

Specifications provided

32GiB virtualized disk space, 8GiB RAM, 4 virtualized CPUs having 1 virtualized threads each, UEFI boot, Bridged network

Installation method

Fedora CoreOS 37.20221225.3.0
Using the live media of STABLE stream

Configure the host

Tasks specified

Creating users, groups and keypairs, pulling container images, copying over config files, exposing ports on the firewalld service etc.

Sourcing method

A local HTTP server running on port 8080 from the host operating system running the virtual machine hypervisor

Become creative

Setup Minecraft installation

Ensure that the version of Minecraft Java Edition client installed matches that of the one running in the server.

Ensure that the server is reachable

In this case, the device running the Minecraft client happens to be the same one running the virtualized Fedora CoreOS host.

Connect and play

Connect to the server using the IP address of the virtualized host and the port on which the server is running and enjoy.

Your Valheim server



STEP #1

Setup the environment

Ensure the local environment meets the recommended requirements or the remote environment is reachable in the network, to begin with.

In this case,
We would setup host on a local VM.

STEP #2

Configure the host

Jot down the configuration variables like users, groups, keypairs, config files, systemd units in a convenient YML file to use and reuse it.

In this case,
We would start service containers.

STEP #3

Make it to the Valhalla

That's really it! One config file and the entire host environment gets started with the purpose. Something looks off? Rinse and repeat.

In this case,
We would connect to the server.

Scan this QR code

Read the documentation



Setup the environment

Hypervisor used

VMware Workstation v17
Running on Fedora Workstation 37

Specifications provided

32GiB virtualized disk space, 8GiB RAM, 4 virtualized CPUs having 2 virtualized threads each, UEFI boot, Bridged network

Installation method

Fedora CoreOS 37.20221225.3.0
Using the live media of STABLE stream

Configure the host

Tasks specified

Creating users, groups and keypairs, pulling container images, copying over config files, exposing ports on the firewalld service etc.

Sourcing method

A local HTTP server running on port 8080 from the host operating system running the virtual machine hypervisor

Make it to the Valhalla

Setup Valheim installation

Ensure that the version of Valheim client installed from Steam matches that of the one running in the server.

Ensure that the server is reachable

In this case, the device running the Valheim client happens to be the same one running the virtualized Fedora CoreOS host.

Connect and play

Connect to the server using the IP address of the virtualized host and the port on which the server is running and enjoy.

Thank you!

We would love to answer your questions

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DOWNLOAD FEDORA COREOS



SPECIAL THANKS TO

David Kirwan (davidkirwan)



Michal Konecny (zlopez)



Clement Verna (cverna)



Adam Piasecki (c4rt0)



Get started with using **Fedora CoreOS** today - <https://getfedora.org/en/coreos>

