

Deploying Containers without Kubernetes

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Sometimes k8s is not the solution



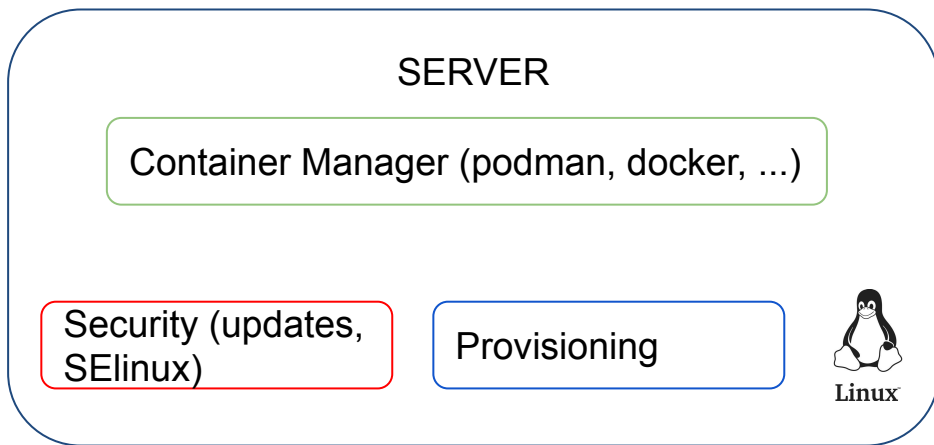
- **Scalability**
- Clever updates
- On-prem or cloud

- Reduce sysadmin cost, infrastructure cost, time of people
- Reduce the time needed to make projects available (MVP)
- Version control (GitOps)

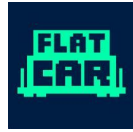


Alternatives ? What about Linux ?

Dedicated Linux solution focused on running containerized applications



Tiny Linux Ecosystem





- **Reduce sysadmin cost, infrastructure cost, time of people**
 - Automatic Updates (deploy it and forget about it)
- **Reduce the time needed to make projects available (MVP)**
 - Easy to deploy and provision (ready in less than a minute)
- **Version control (GitOps)**
 - Configuration as YAML/JSON
- **Clever updates**
 - 3 versions streams (next, testing and stable), update don't break
- **On-prem or cloud**
 - Currently available on 12 platforms (AWS, GCP, Azure, Digital Ocean, OpenStack, libvirt, VMware ..)



- Easy and safe updates with rpm-ostree and zncati

Fedora CoreOS 32.20201104.3.0

Tracker: <https://github.com/coreos/fedora-coreos-tracker>

Discuss: <https://discussion.fedoraproject.org/c/server/coreos/>

Last login: Wed Nov 18 09:37:58 2020 from 192.168.122.1

[core@localhost ~]\$ systemctl status zncati.service

● zncati.service - Zncati Update Agent

Loaded: loaded (/usr/lib/systemd/system/zncati.service; enabled; vendor preset: enabled)

Active: **active (running)** since Wed 2020-11-18 09:37:45 UTC; 10min ago

Docs: <https://github.com/coreos/zncati>

Main PID: 713 (zncati)

Tasks: 2 (limit: 2281)

Memory: 16.1M

CGroup: /system.slice/zncati.service

└─713 /usr/libexec/zncati agent -v

[core@localhost ~]\$ rpm-ostree status

State: idle

Deployments:

● ostree://fedora:x86_64/coreos/stable

Version: **32.20201104.3.0** (2020-11-17T10:56:39Z)

Commit: 318de830c2f30a97333cd43aa1d500a46ccfedcb2de70a04d0c48228944346da

GPSSignature: Valid signature by 97A1AE57C3A2372CCA3A4ABA6C13026D12C944D0

ostree://fedora:fedora/x86_64/coreos/stable

Version: **32.20200907.3.0** (2020-09-23T08:16:31Z)

Commit: b53de8b03134c5e6b683b5ea471888e9e1b193781794f01b9ed5865b57f35d57

GPSSignature: Valid signature by 97A1AE57C3A2372CCA3A4ABA6C13026D12C944D0

[core@localhost ~]\$

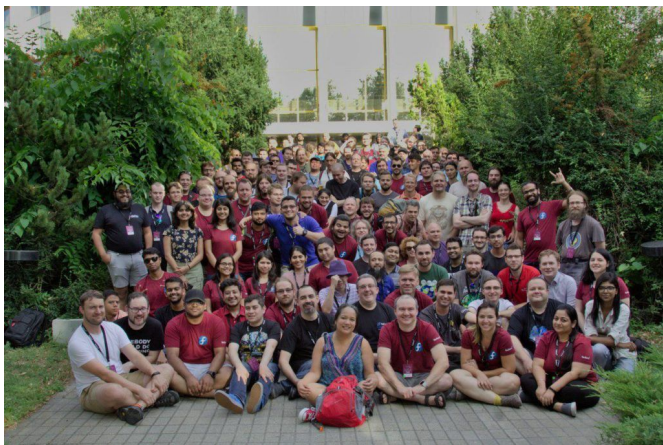


- Provisioning with Ignition

```
---
version: "1.0.0"
variant: fcos
passwd:
  users:
    - name: core
      ssh_authorized_keys:
        - ssh-ed25519 my_ssh_key cverna@fedoraproject.org

systemd:
  units:
    - contents: |
        [Unit]
        Description=Run a hello world web service
        After=network-online.target
        Wants=network-online.target
        [Service]
        ExecStart=/bin/podman run --pull=always --name=hello --net=host -p 8080:8080 quay.io/cverna/hello
        ExecStop=/bin/podman rm -f hello
        [Install]
        WantedBy=multi-user.target
      enabled: true
      name: hello.service
```


- Community





- Getting started
 - <https://docs.fedoraproject.org/en-US/fedora-coreos/>
- How to get in touch
 - Discourse :
<https://discussion.fedoraproject.org/c/server/coreos/5>
 - IRC: #fedora-coreos on freenode
 - GitHub : <https://github.com/coreos>