Deploying Containers without Kubernetes

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Sometimes k8s is not the solution

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

- **Scalability**
- Clever updates
- On-prem or cloud
Alternatives? What about Linux?

Dedicated Linux solution focused on running containerized applications

SERVER

Container Manager (podman, docker, ...)

Security (updates, SElinux)  Provisioning

Linux
Tiny Linux Ecosystem
Fedora CoreOS

- **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 ..)
Fedora CoreOS

- Easy and safe updates with rpm-ostree and zincati
Fedora CoreOS

- Provisioning with Ignition

```yaml
---
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
```
Fedora CoreOS

- Community
Fedora CoreOS

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