

PODMAN FOR THE WIN ^{In 3D!}



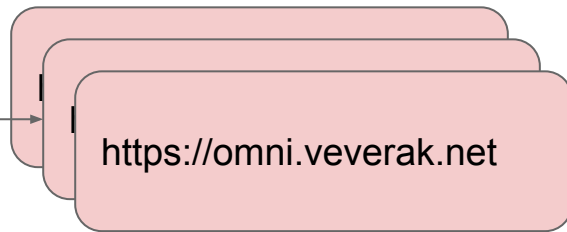
AGENDA

- Podman in Homelab - Jakub Veverka
- Podman in CI - Tomáš Kukrál
- Podman on Desktop - Michal Ježek
- Discussion

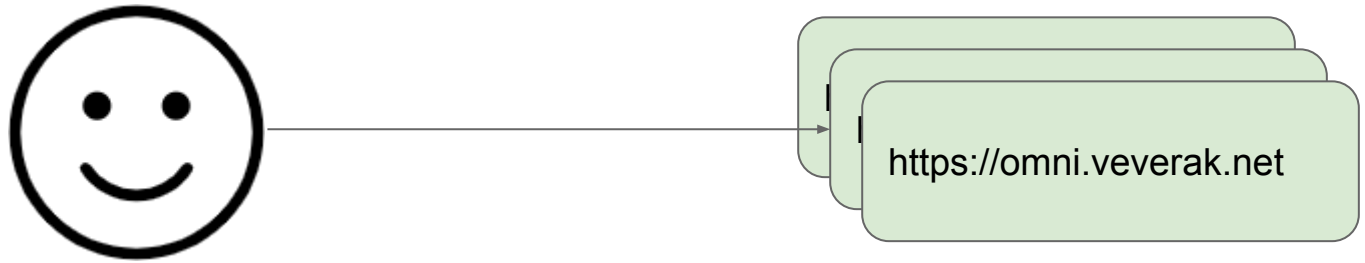


PODMAN IN HOMELAB

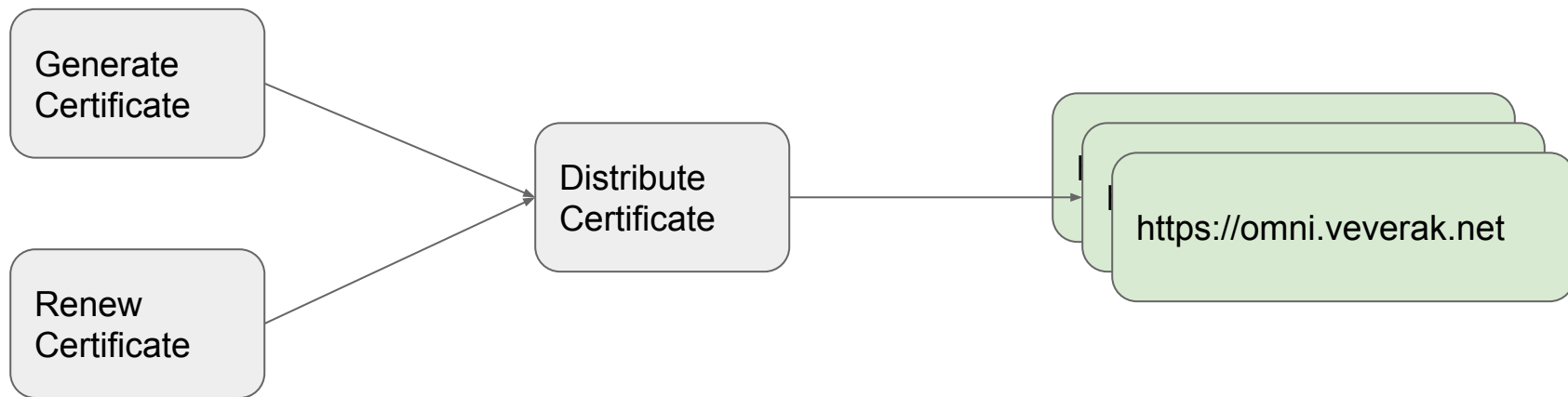
CURRENT STATE



THE GOAL



THE GOAL

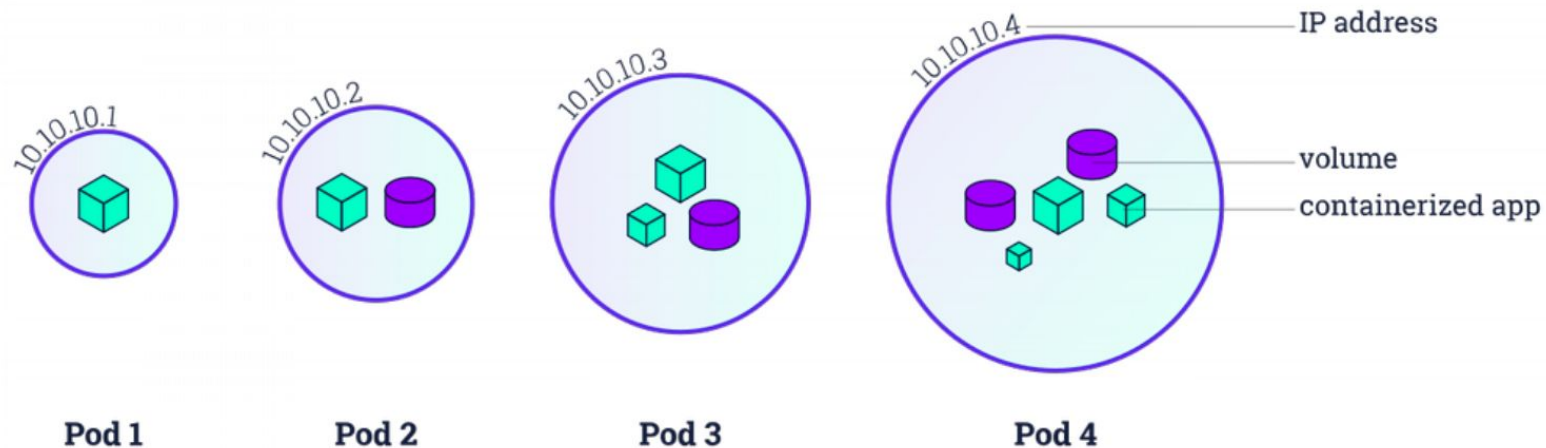




WHY PODMAN?

- It is daemonless, more secure
- It uses the fork/exec model for containers
- It lets you run containers as a non-root user
- Plays well with k8s pods
- Thriving community
- Available in many Linux distros

PODMAN & KUBERNETES



PODMAN & SYSTEMD

```
[Unit]
Description=Podman container-topservice.service
Documentation=man:podman-generate-systemd(1)
Wants=network.target
After=network-online.target

[Service]
Environment=PODMAN_SYSTEMD_UNIT=%n
Restart=on-failure
ExecStart=/usr/bin/podman start topservice
ExecStop=/usr/bin/podman stop -t 10 topservice
ExecStopPost=/usr/bin/podman stop -t 10 topservice
PIDFile=/run/user/1000/containers/overlay-container
KillMode=none
Type=forking

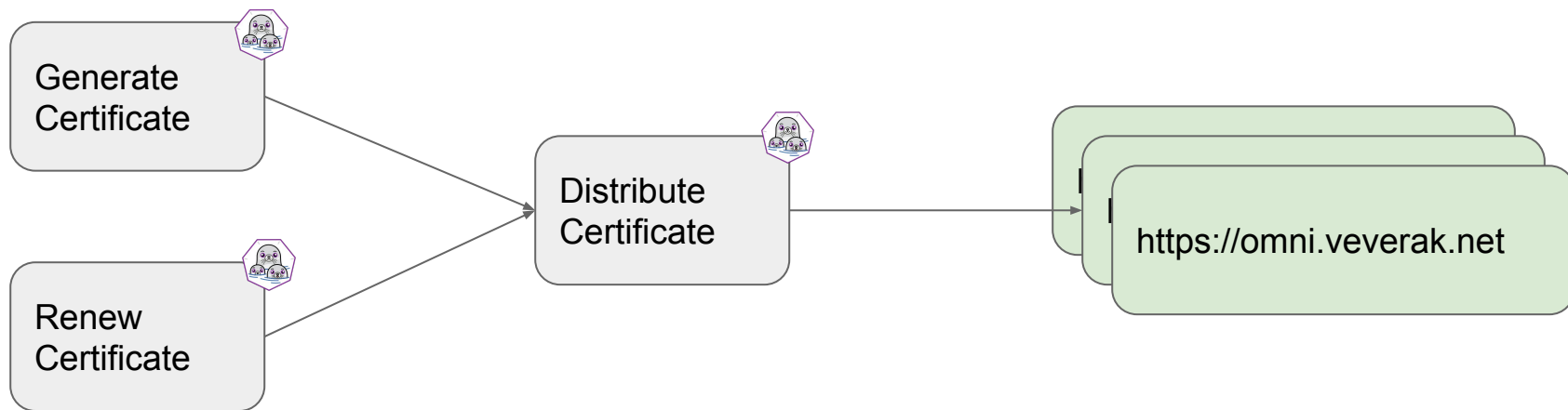
[Install]
WantedBy=multi-user.target default.target
```

```
podman generate systemd \
--name awesome-httpbin
```

OTHER PODMAN GOODIES

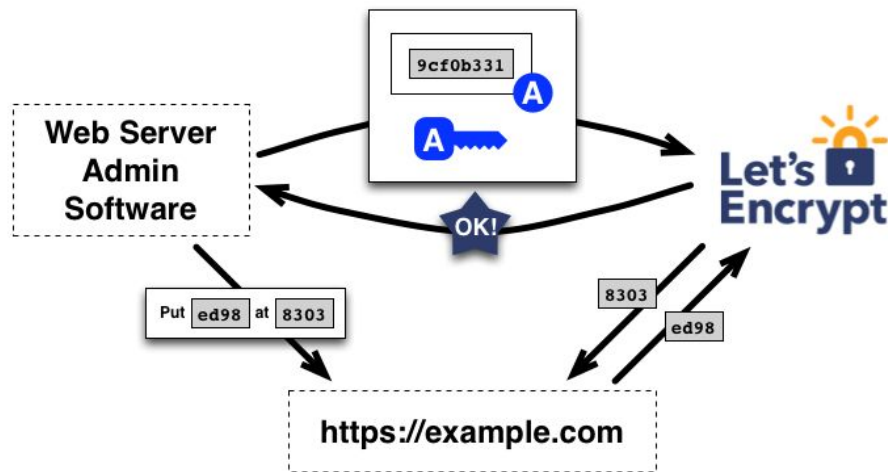
- Auto-updates
- `--latest`
- `--replace`
- `--all`

THE GOAL





CREATE CERTIFICATE USING LET'S ENCRYPT



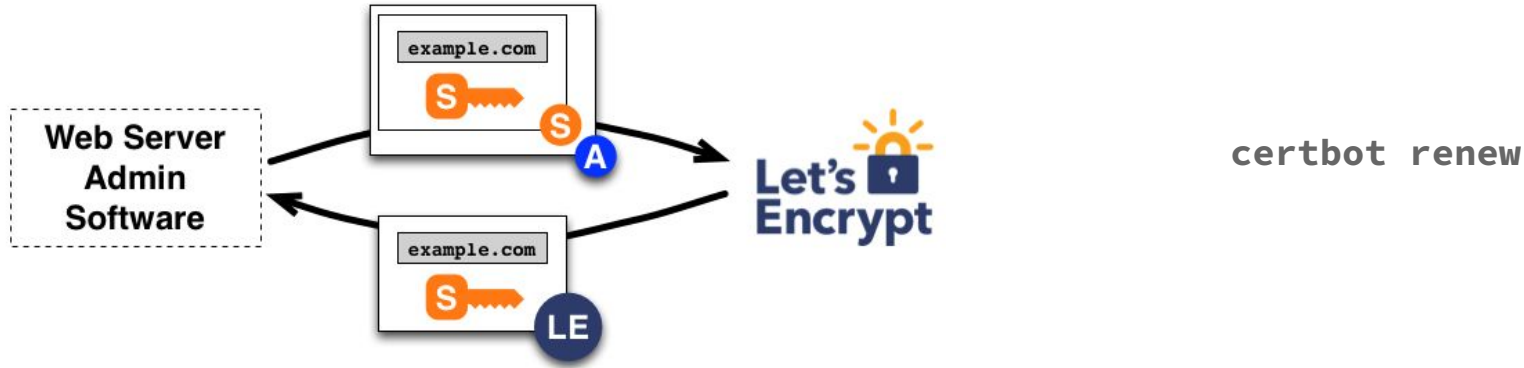
```
certbot certonly \
```

```
--dns-google \
```

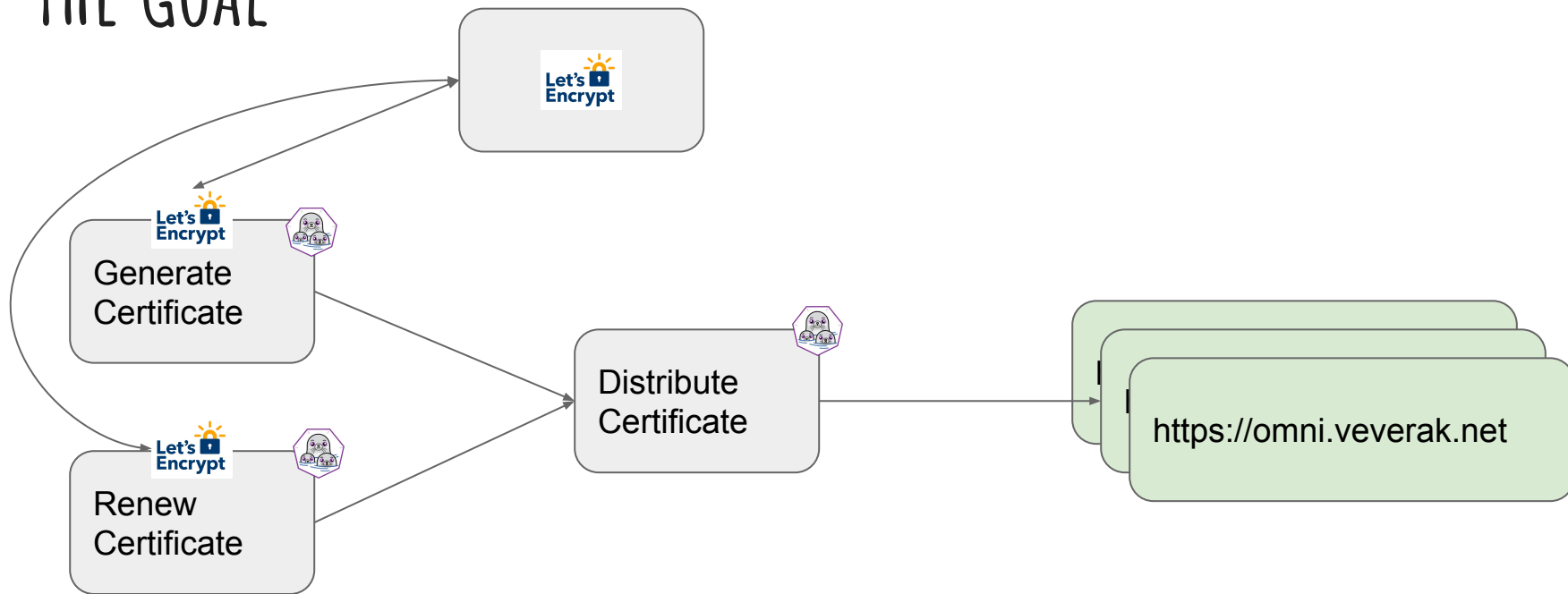
```
--dns-google-credentials  
/run/secrets/google.json \
```

```
-d example.com
```

RENEW CERTIFICATE USING LET'S ENCRYPT



THE GOAL





ANSIBLE PLAYBOOK

```
---
- name: install and start apache
  hosts: web
  become: yes

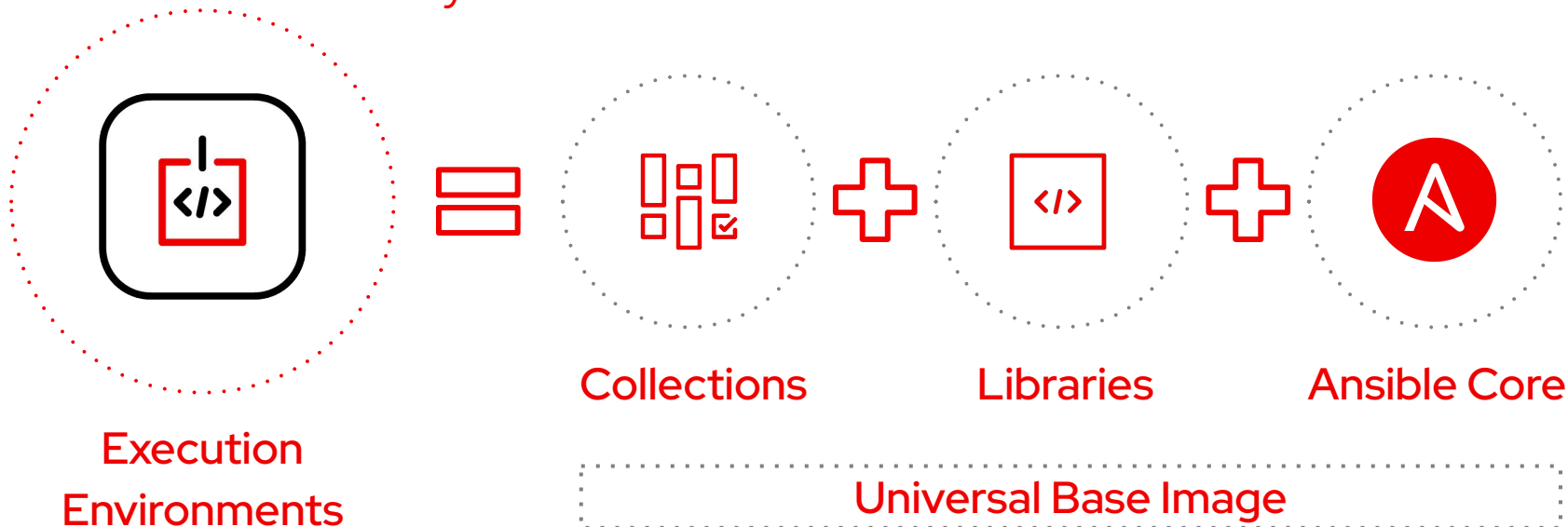
  tasks:
    - name: Latest Apache is installed
      yum:
        name: httpd
        state: latest

    - name: latest index.html file is present
      template:
        src: files/index.html
        dest: /var/www/html/

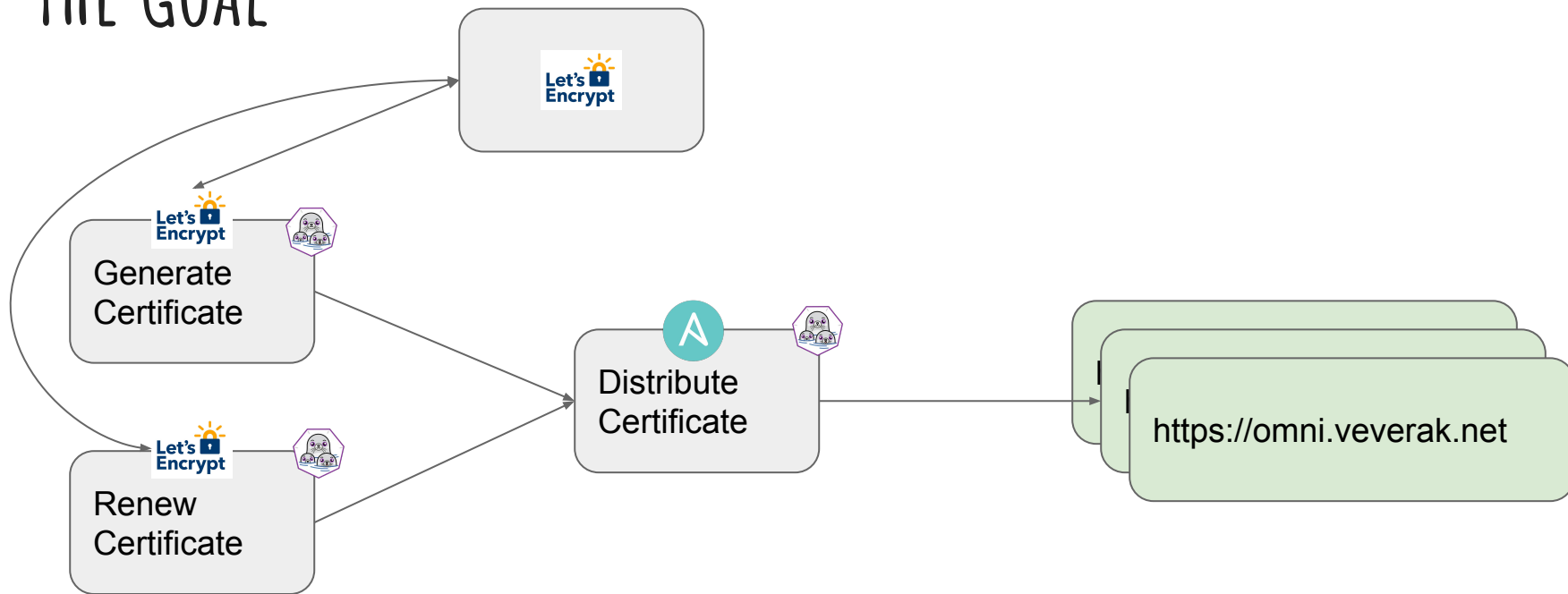
    - name: Apache is started
      service:
        name: httpd
        state: started
```

AUTOMATION EXECUTION ENVIRONMENTS

Components needed for automation, packaged in a cloud-native way



THE GOAL



[● ◀] systemd

WHY SYSTEMD?

- Easy to use and is everywhere
- Easy timer
- Dependency between services
- Podman integration

THE GOAL

