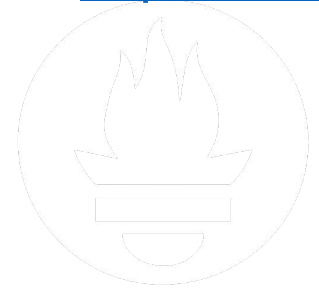


Lima

<https://lima-vm.io/>



Linux virtual machines for running containers (on macOS)

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- Automatic host filesystem sharing
- Automatic port forwarding
- Built-in integration for containerd

(and Docker, Podman, Kubernetes, Apptainer, ...)

```
$ brew install lima  
$ limactl start  
$ lima nerdctl run -p 80:80 nginx
```

How it works

- **Hypervisor**

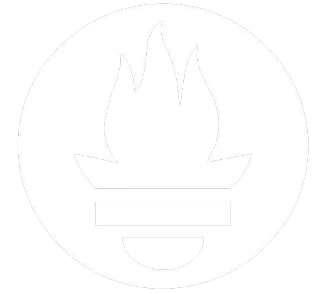
QEMU (default) or Virtualization.framework

- **Intel-on-ARM binary executor**

qemu-user (default) or Rosetta 2 (faster)

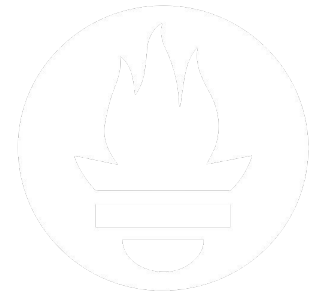
- **Filesystem sharing**

reverse sshfs (default), virtio-9p-pci, or virtiofs (faster)



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How it works



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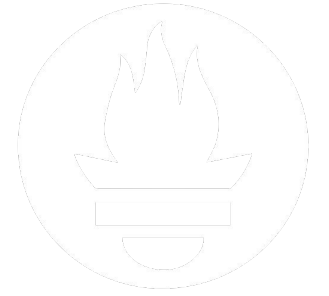
- **Network**

- user mode networking (default)
- `socket_vmnet` (for direct access to the IP, etc. with `sudo`)

- **Port forwarding**

Implemented by watching `/proc/net/tcp`, iptables, and Kubernetes services

Built-in templates



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- **Distros**

almalinux, alpine, archlinux, centos-stream, debian, opensuse, oraclelinux, rocky, ubuntu, ...

- **Container engines**

apptainer, docker, docker-rootful, podman, podman-rootful, ...

- **Container orchestration**

faasd, k3s, k8s, nomad

```
$ limctl start --name=default template://docker
```

Recent updates

- **v0.13:** Lima joined the CNCF Sandbox



- **v0.14:** Added the support for Virtualization.framework, virtiofs, and Rosetta 2 for Linux

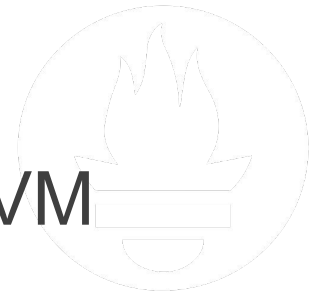
```
$ limctl start --name=default template://experimental/vz
```

- **v0.15:** In-place YAML modification using yq expressions (similar to jq)

```
$ limctl start --set='.cpus = 2 | .memory = "2GiB"'
```

Recent updates

- **v0.16:** Implemented “user-v2” network to support VM-to-VM communication without the root privilege on the host



PromCon

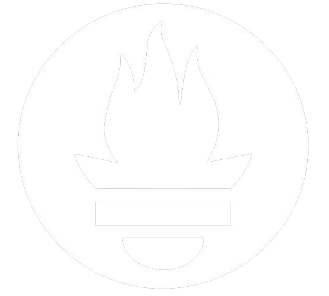
```
$ limctl start --name=default template://experimental/user-v2
```

- **v0.17:** Enhanced the CLI syntax; No longer need to care about YAML

```
$ limctl create --cpus=2 --memory=2 --vm-type=vz
```

- **v0.18:** Added the support for WSL2 driver

Roadmap for v1.0



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- Switch the default hypervisor from QEMU to Virtualization.framework
- inotify

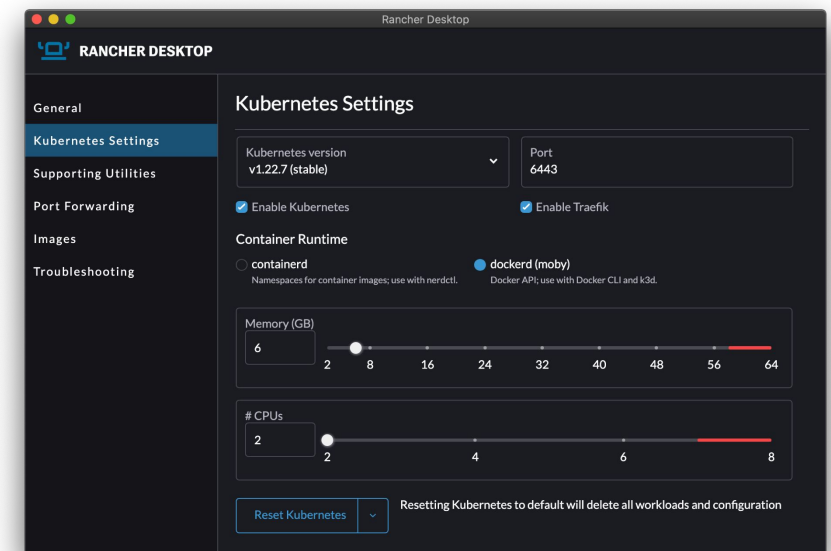
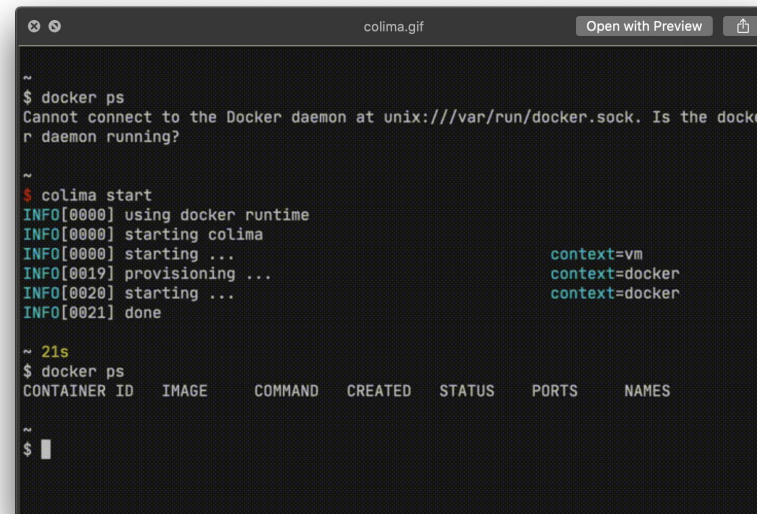
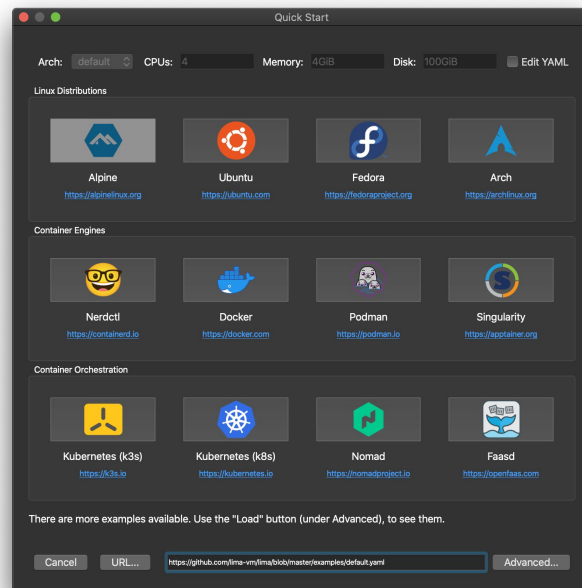
Third party FLOSS projects based on Lima



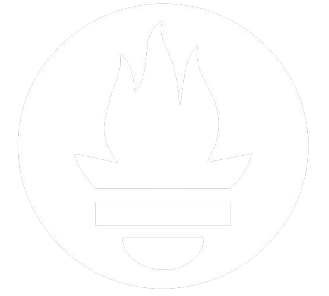
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Lima-GUI	https://github.com/afbjorklund/lima-gui
Colima	https://github.com/abiosoft/colima
Rancher Desktop	https://rancherdesktop.io/
Finch	https://github.com/runfinch/finch

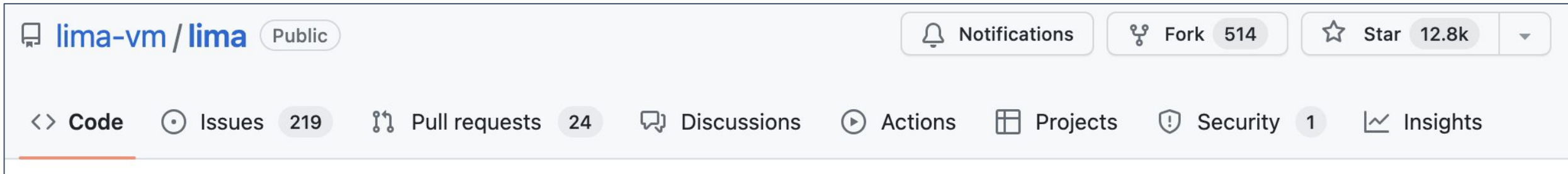


Join the community!



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- **GitHub:** <https://github.com/lima-vm/lima/>



- **Slack:** <https://slack.cncf.io/> (Channel: #lima)