DECEMBER 19, 2016

NETWORKING WORKING GROUP

DC/OS

WORKING GROUP LEADS

Somik Behera, Mesosphere

Avinash Sridharan, Mesosphere

Sargun Dhillon, Mesosphere

Jie Yu, Mesosphere

Aaron Williams, Mesosphere

RESOURCES

Mailing List: networking-wg@dcos.io
(Google Group)

Slack: #networking-wg
chat.dcos.io

Github Repo: dcos/community/wg-networking

Working Group Meetings Calendar:
Google Calendar

AGENDA

- Charter for this working group and where we currently stand with the existing work

- DC/OS 1.9 preview: features that are coming and how to help test and validate

- DC/OS 1.10 roadmap exploration

- Proposed meeting schedule for Jan and Feb

- Q&A

Networking support in DC/OS

Three main areas of focus:

- **Layer 3: IP Connectivity**

- **Layer 4: Load Balancing**

- **Service Discovery**

Layer 3: IP Connectivity

○ **Named virtual networks**: CNI and CNM support in DC/OS
  ■ Introduced in Mesos 1.0: https://goo.gl/HcmWGT

○ **DC/OS Overlay**: A prototype for a virtual network.
  ■ https://github.com/dcos/dcos-mesos-modules/overlay
  ■ https://github.com/dcos/navstar

Layer 4: Load balancing

- ○ **Minuteman:** A distributed east-west load balancer.
    - ■ https://github.com/dcos/minuteman

- ○ **Name-based VIPs:**
    - ■ https://docs.mesosphere.com/1.8/usage/service-discovery/load-balancing-vips/virtual-ip-addresses/

Service Discovery

- ○ **Mesos-dns:** A DNS resolver for containers on DC/OS.
  - ■ https://github.com/dcos/minuteman

- ○ **Spartan:** A distributed DNS proxy on DC/OS.
  - ■ https://github.com/dcos/spartan

Networking in DC/OS 1.9 Preview

- **CNI support for pods**

- **Stability and scalability improvements for overlay and minuteman.**
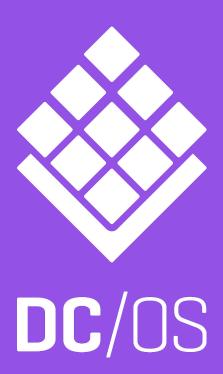
Networking Roadmap

- **"BRIDGE" mode support for UCR.**

- **CNI configuration service.**

- **Per-container network statistics.**

- **IPv6 support for CNI and CNM**

- **Service chaining in CNI**

PROPOSED MEETING SCHEDULE

Proposal:

- Bi-weekly calls to start
- Mondays at 11:00 PT, starting Jan 9

We can record all of the meetings and make them available, with the slides, in the repo.

Thank you!

Q&A