# OCP Networking Project Monthly Meeting Minutes

Date: 2018-03-12

## Attendees

- Full Name (Org)
- Scott Emery (Cumulus)
- Omar Baldonado (Facebook)
- Jeff Catlin (Edgecore)
- Don Bollinger (Finisar)
- Steve Noble (BSN/ONL)
- Jack Kohn (Juniper)
- Omar Sultan (Cisco)
- Lisa Garvey (Mojo Networks)
- Xin Liu (MSFT)
- Matt Bergeron (Ixia)
- Vitaly Vovnoboy (MRVL)
- Michael Sporer (TE Connectivity)
- Brian Costello (TE Connectivity)
- Jeremy Huylebroeck (Orange)
- Peter Vinsel (Netscout)
- Ronald van der Pol (SURFnet)
- Diego Warszawski (Netscout)
- Arkadiy Shapiro (Barefoot Networks)

# Agenda

- 00 Welcome
- Final details of OCP Summit Network Engineering workshop schedule
  - BOF Discussion topics
- SAI Engineering Workshop
- Status of wifi for OCP summit
- Potential new group charter
- Project Status

### **Action items**

- Feedback on BoF discussions
- Feedback on proposed charter text

## **Notes/Project Status**

• Final details of OCP Summit Network Engineering workshop schedule

- o Registration: <a href="https://registration.opencompute.org">https://registration.opencompute.org</a>
- Schedule: <a href="http://opencompute.org/ocp-u.s.-summit-2018/schedule/">http://opencompute.org/ocp-u.s.-summit-2018/schedule/</a>
- Looking for BOF questions/topics to seed discussions (see below)
  - Allow 1 or 2 questions following each lightning talk
  - After lighting talk OK, in middle is hard if it's only 10 min (Arkadiy)
- SAI/SONiC Engineering Workshop
  - March 22nd, Thursday, LinkedIn campus
  - Registration/Agenda:

https://www.eventbrite.com/e/ocp-sonicsai-engineering-workshop-hosted-by-linkedin-tickets-43720775015

- Five main topics:
  - Programmability
  - Telemetry
  - WAN scenarios
  - SA
  - SONiC Roadmap
- Status of wifi for OCP summit
  - All set! Ready for up to 3,000 users.
  - Setup starts at 4:00pm on Saturday (~40 Edgecore Access Points)
  - o sPress release went out last week
- Potential new group charter (see below)
  - Existing charter:

http://www.opencompute.org/assets/Uploads/OCP-Network-Project-Charter-V1-12-1-1.pdf

- Very out of date. Does not include areas which the group has expanded into.
- Proposed new charter, see below
  - Please provide feedback to Omar and Scott
- Project status (not including companies with submissions above)
  - OOM (Don Bollinger / Steve Joiner)
    - Optoe driver is in SONic and ONL
    - One fix was made recently to improve EOF handling (in SONiC, available on the OOM github site for others)
    - OOM Demo is on github, ask for help if you want to demo at OCP Summit
  - ONL (Steven Noble)
    - Focus on OCP Summit: Demos, Website, etc
      - Keynote:

https://2018ocpussummit.sched.com/event/DJru/google-facebook-and-big-switch-demo-next-gen-nos-based-on-ocps-open-network-linux?iframe=yes&w=100%&sidebar=yes&bq=no

- Delta platforms on-site
  - 2 racks of equipment now for regression testing
- SAI (Xin):
  - Focus on OCP Summit

- o SONIC (Xin):
  - Focus on OCP Summit
  - On track to release 201803 release
  - Demo: MSFT booth, all many other booth as well 42 RU!
- CBW (Sudhan from Mojo):
  - See above
- Interop (David Woolf)

- ONIE (Curt Brune)
  - Preparing OCP summit slides
  - Working to improve user experience around <u>"installer mode"</u>

# **BoF Discussion Topics/Questions**

Telemetry BoF

SONIC BoF

Optics BoF

Programmability BoF

Open Source Community Roundtable

## Potential New Group Charter

Our previous charter from nearly 5 years ago had an initial purpose of gathering a variety of ideas together and attempted to really focus the initial discussion and activities. We are proposing generalizing and broadening that charter to better encompass our set of current activities.

Draft New OCP Networking Group Charter:

#### Overview

The overall mission of the OCP Networking Project is to create a set of networking technologies that are disaggregated and fully open, allowing for rapid innovation in the network space.

The Networking Project aims to facilitate and enable new and innovative open networking hardware and software that enable hyperscale, large enterprise, and large telco network solutions through collaboration with the wider Open Compute Project ecosystem. These disaggregated and open technologies will need to interoperate with solutions in the existing networking ecosystems, both open and proprietary.

This will cover a wide range from technologies and solutions, including:

- Network domains such as data center, IP and optical backbone, and Internet connectivity and access
- Hardware and the firmware and software used on top of that hardware
- Optical and electrical technologies
- Wired and wireless technologies
- The whole lifecycle of network operations, including design, testing, provisioning, deployment, monitoring, and troubleshooting
- Interoperability with open-source and commercial software (although only open-source projects will be actively supported as official OCP projects)

#### Sub-Projects

Because of the breadth of activities that the OCP Networking Project covers, there will be formal sub-projects for the OCP Networking Project. These will most typically anchor around a particular contribution, focus area, or common firmware/software packages. These sub-projects will have formal sub-project leads, periodic meetings and notes, and report back to the overall project periodically for status.

#### In-Scope Activities

The OCP principles of Efficiency, Scale, Openness, and Impact provide guidance for which projects will be in scope for the Networking Project. If there are large, at-scale network deployments that would benefit from being efficient and being open, and there is clear impact that our projects can have on such deployments, then they will be considered in-scope for the Networking Project.

Example areas to consider in-scope include, but are not limited to:

- Data center switching, including top-of-rack switches as well as aggregation switches at higher/more central parts of data center topologies
- Backbone IP and optical switches/routers
- Low-level firmware and drivers for managing the various switch hardware platforms
- Core software packages that comprise different modules or layers in a device's "network operating system (NOS)" for platform, chip management and programming, operating system interfaces, reusable abstraction layers up the networking stack.
- Server-side distributed systems that provide direct management of networks that include OCP networking hardware

Specifically for software, every software activity should have a tie to some OCP networking hardware.

#### **Out-of-Scope Activities**

By definition, any activity that doesn't meet the principles of efficiency, scale, openness, and impact will be considered out-of-scope.

Further, there are also areas that overlap with other projects within OCP, and we will collaborate with those projects as needed, trying to reduce overlap.

- Network interface cards that reside in servers [covered by the Server Project]
- Power and rack design [covered by the Rack and Power Project]