

OPEN

Compute Project



OCP Networking Project Overview

OCP Telco workshop
Big Communications Event, Austin, TX
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Omar Baldonado, ocb@fb.com
Carlos Cardenas, carlos@cumulusnetworks.com
OCP Networking Project Co-Leads



OCP Networking Project

*“...create a set of networking technologies that are
disaggregated and **fully open**,
allowing for rapid innovation in the network space...”*

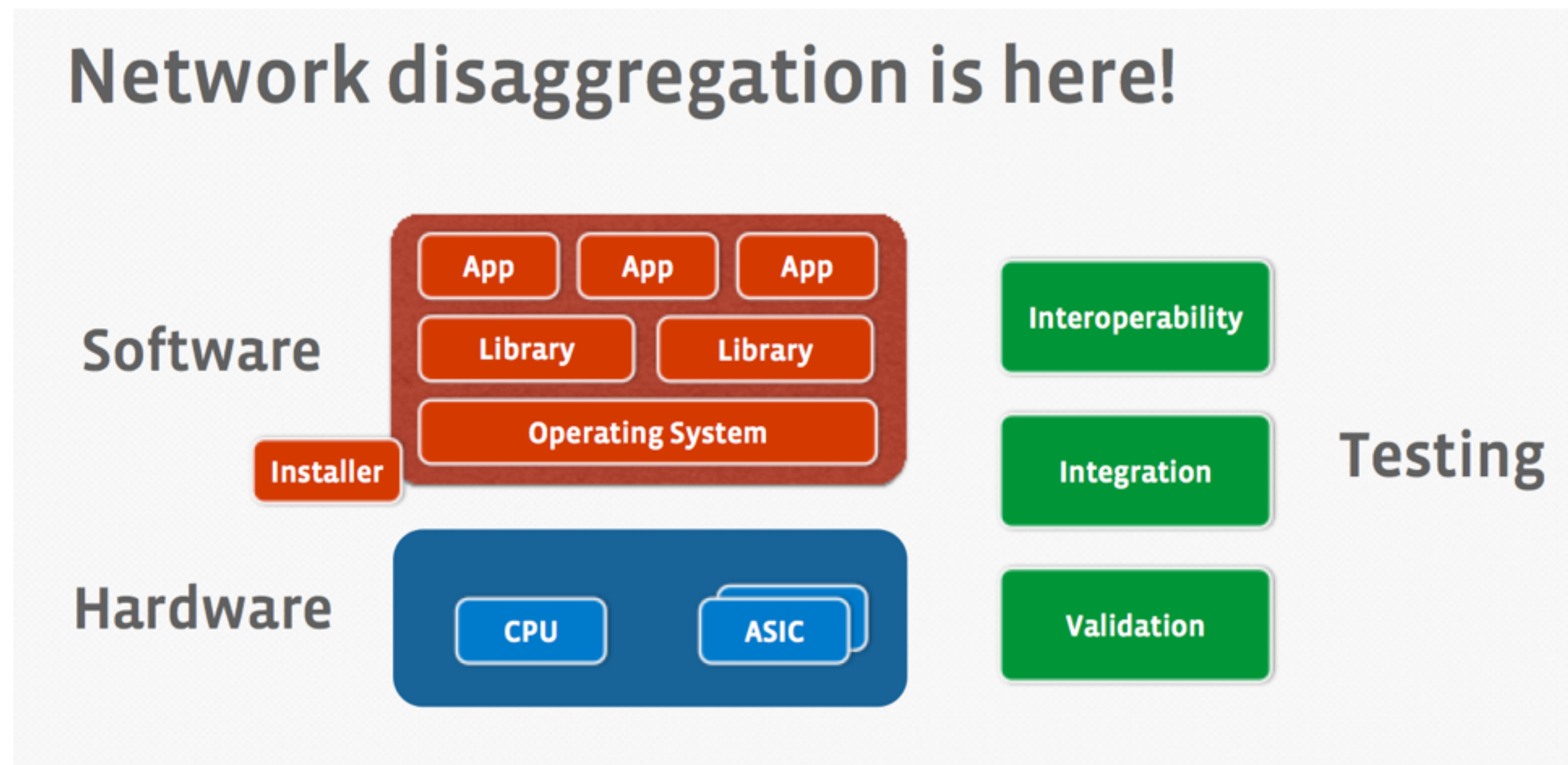
founding charter, May 2013



started in large data centers...



OCP Networking as of March 2015



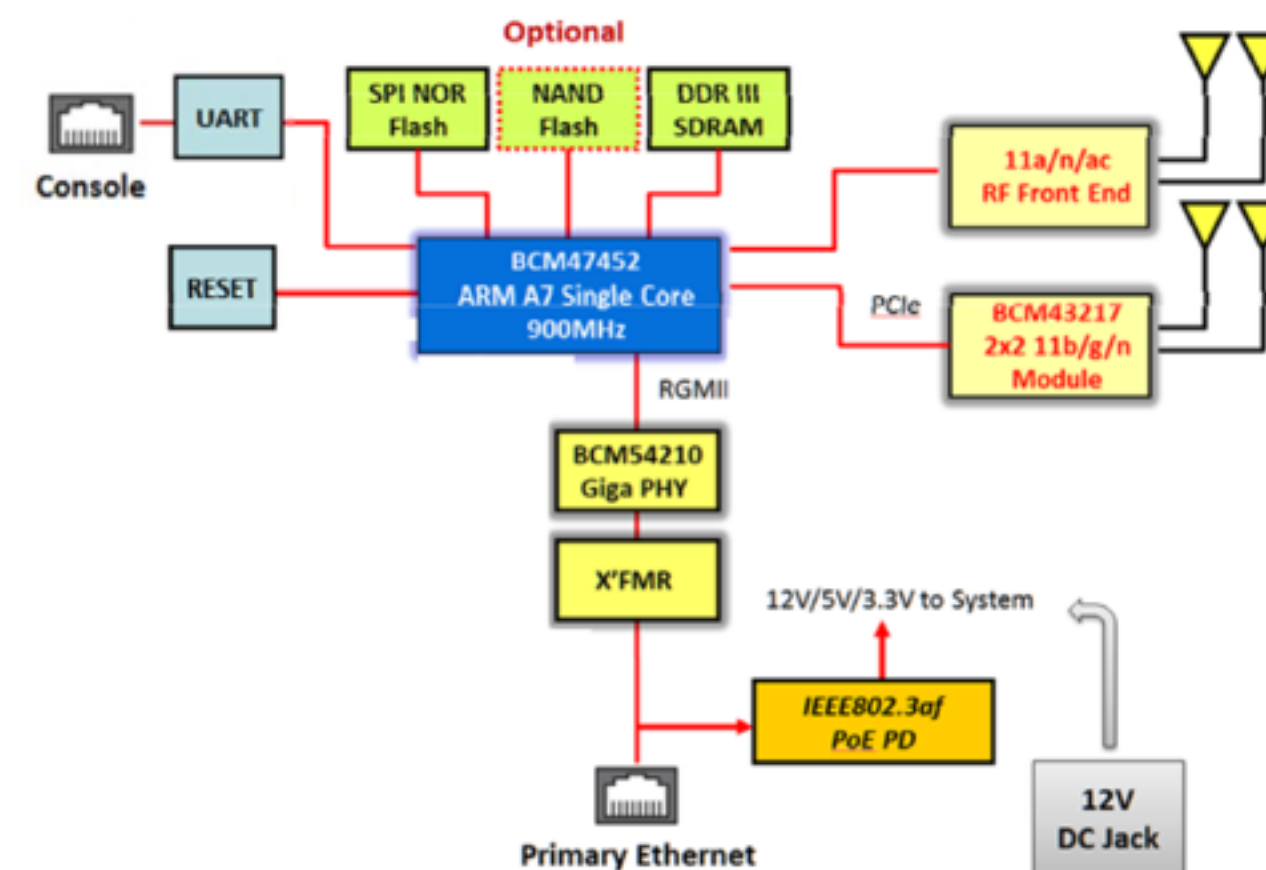
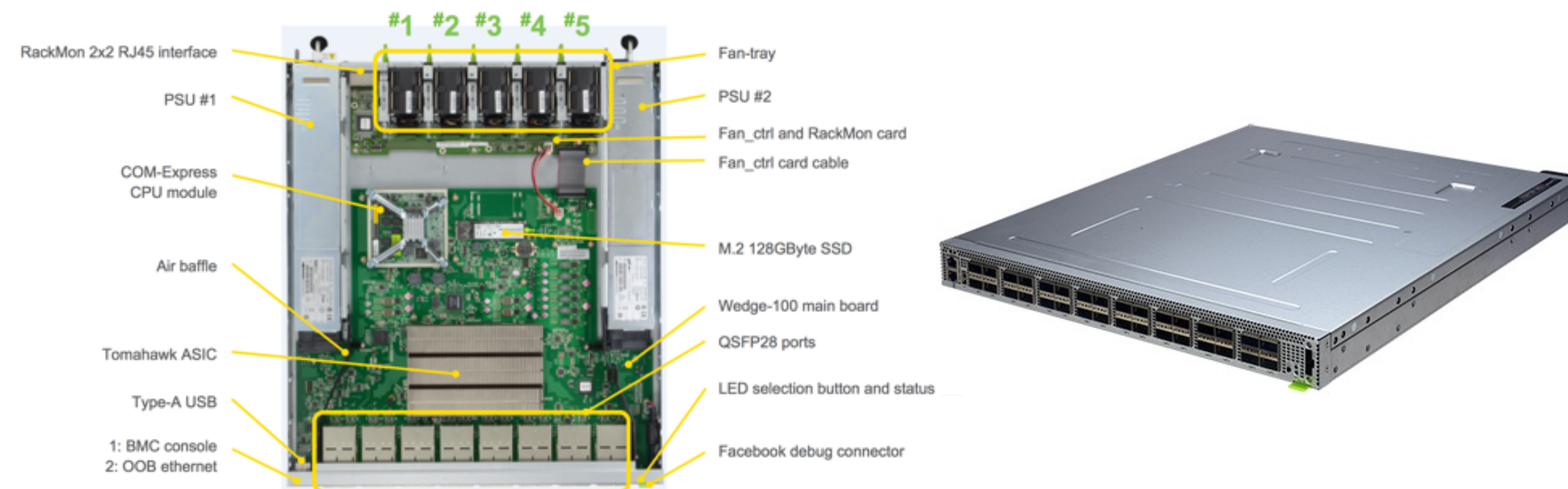
- One accepted switch
- Software building blocks
- Testing efforts starting

Takeaway:

Disaggregation was here, but still ramping up!

What a difference a year makes

OCP networking hardware



- Full design packages
- Community review
- Testing program
- Disaggregation
 - Hardware and software
- Multiple layers

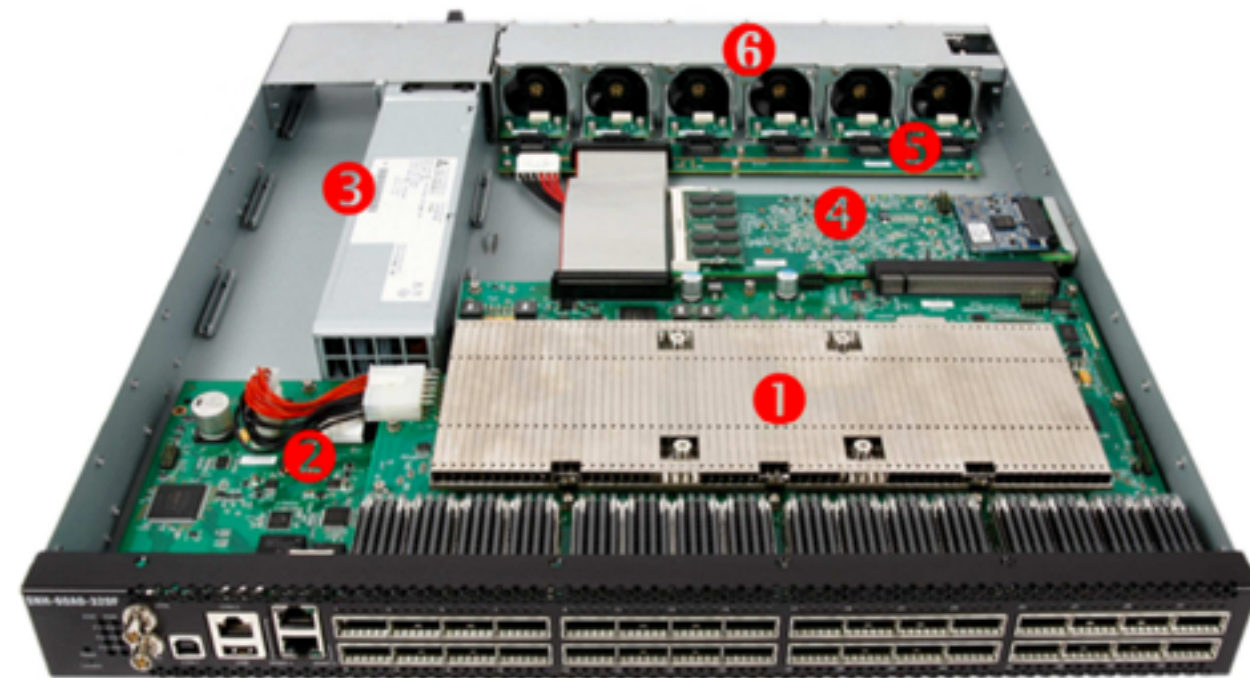
11 OCP data center switches accepted



- 16x40G
- 48x10G
- 32x40G
- 36x40G
- 32x100G

Newly shared OCP specs - new DC switches

ALPHA



facebook

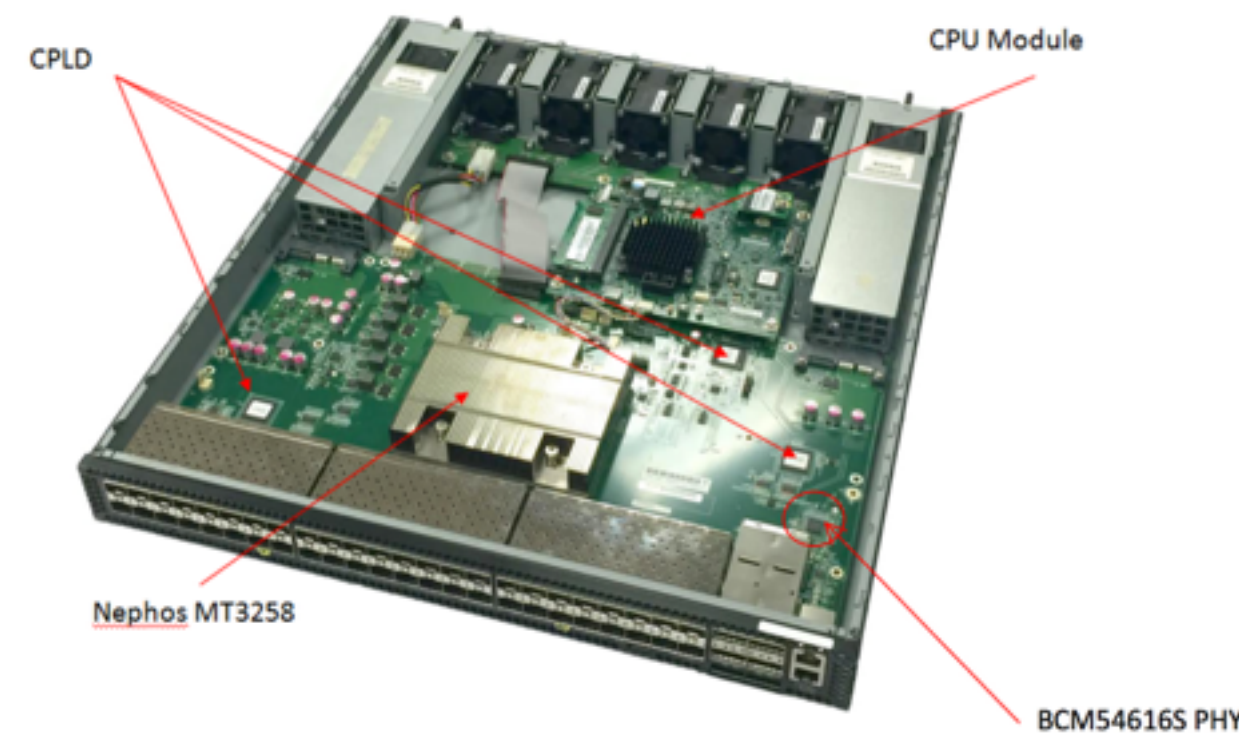


- Facebook Wedge 100
- Alpha 48x10G and 32x100G

Newly shared OCP specs - new silicon

Edge-core[®]

NETWORKS



- 48x10G Mediatek/Nephos
- 32x100G Edge-core with Cavium

Newly shared OCP specs - chassis/modular



- Facebook "6-pack" - 128X40G
- Edge-core 256x100G, 512x100G

Newly shared OCP devices - edge & access

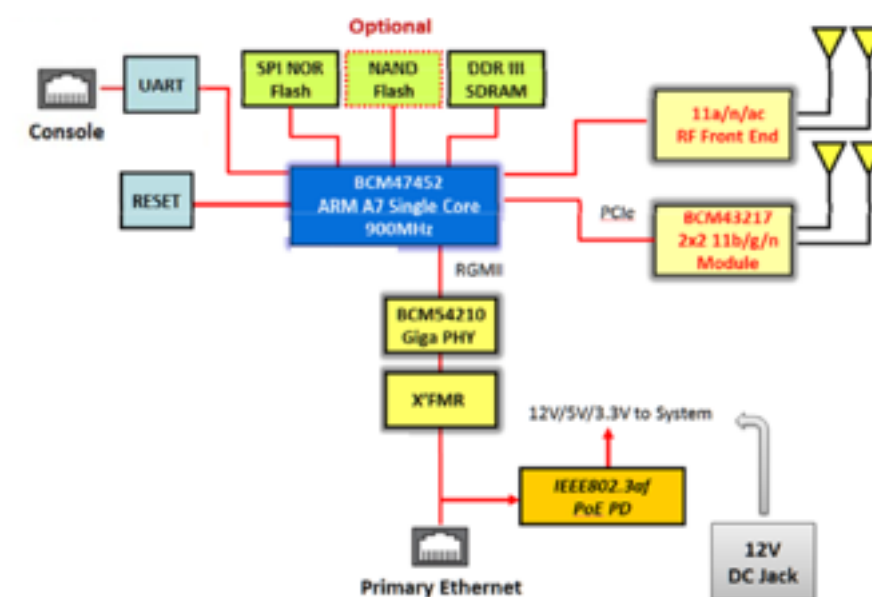
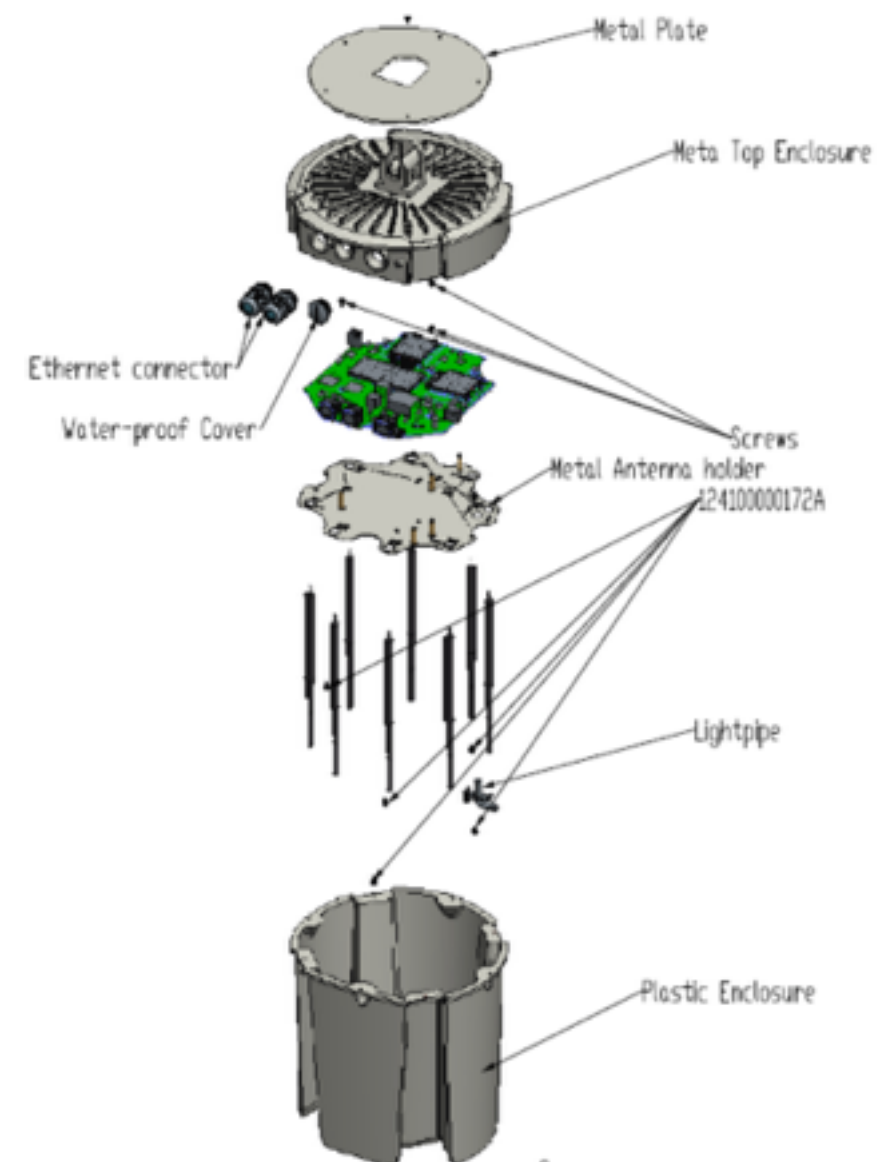
Edge-**c**ore**E**®
NETWORKS



- Edge - based on Broadcom "Qumran" - deep buffers, expandable TCAM
- Access - 48x1G w/ stacking & POE options

Newly shared OCP devices - access points

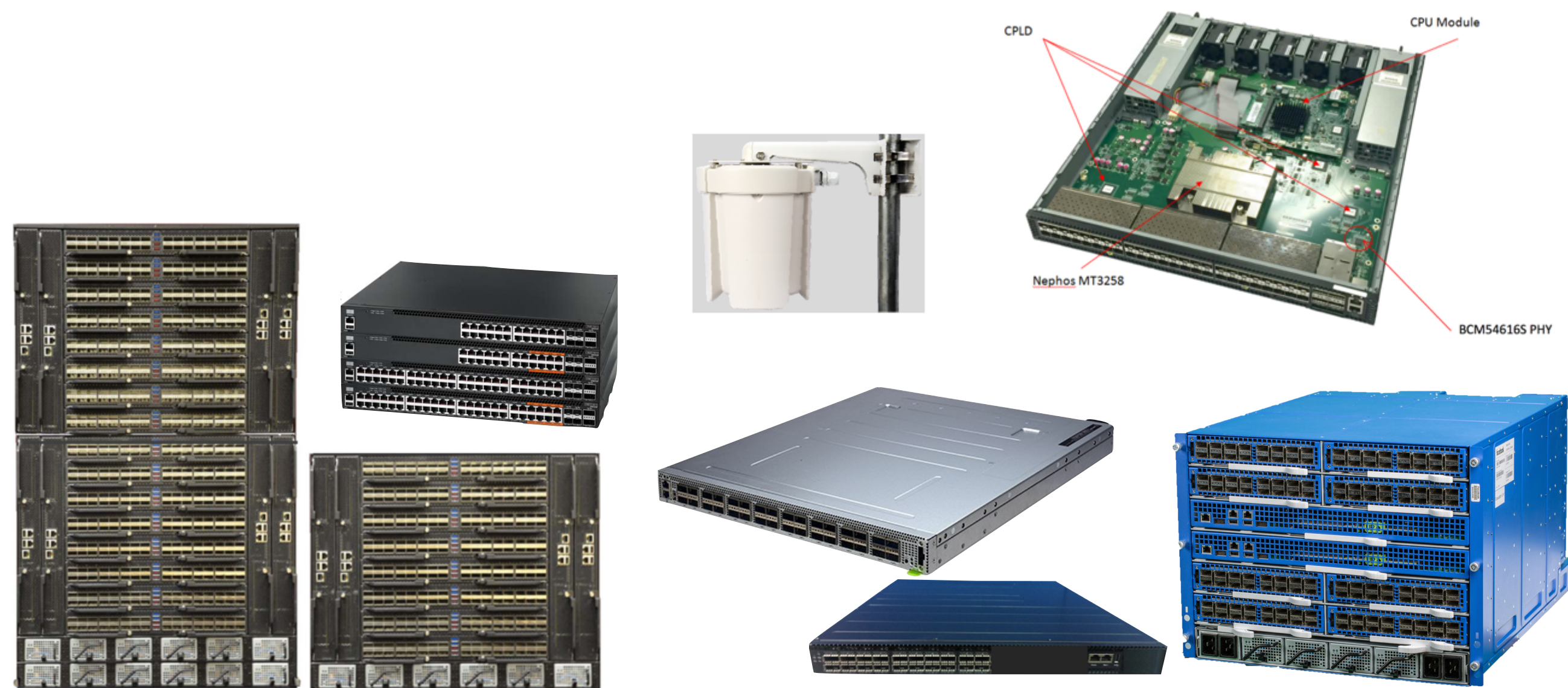
Edge-core[®]
NETWORKS



- 2 indoor, 1 outdoor
- 802.11ac

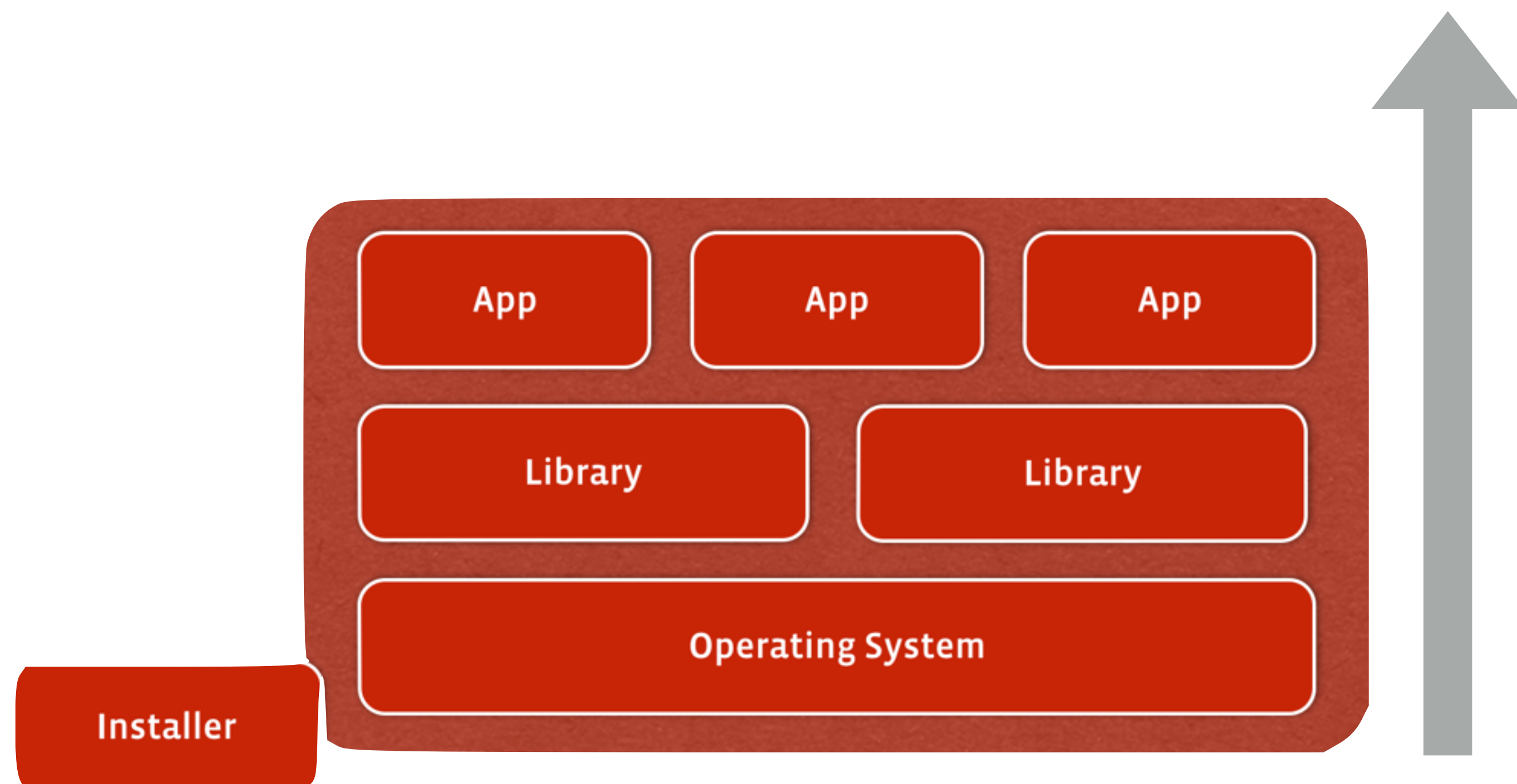
OCP hardware needs... software

Software



- Every OCP networking device supports choice in software

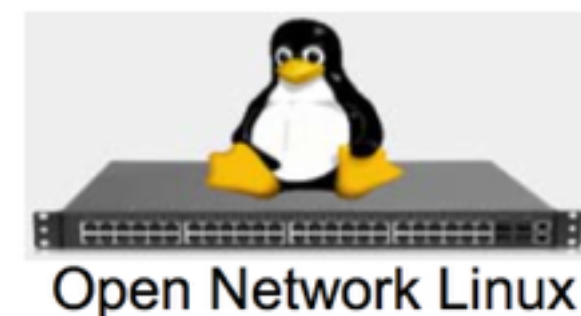
OCP software - moving up the stack



- Initial work was in “building blocks”
- ONIE, ONL, SAI
- Still continuing
- Moving up to actual forwarding functionality

A growing ecosystem of software

Software for Open
Networking in the Cloud
SONiC



SAI

- Multiple projects and providers emerging
- Open source and commercial
- Distributed and centralized

moving to telcos



What does this mean for telcos?

- OCP Network will work closely with OCP Telco/OCP server
- Applicable to Telco data centers (either edge or core)
- Telco exchanges
- Disaggregated access points - HW and SW
- Opening up and going up the software stack
- Simplifying the overall deployments
- ... even more ...