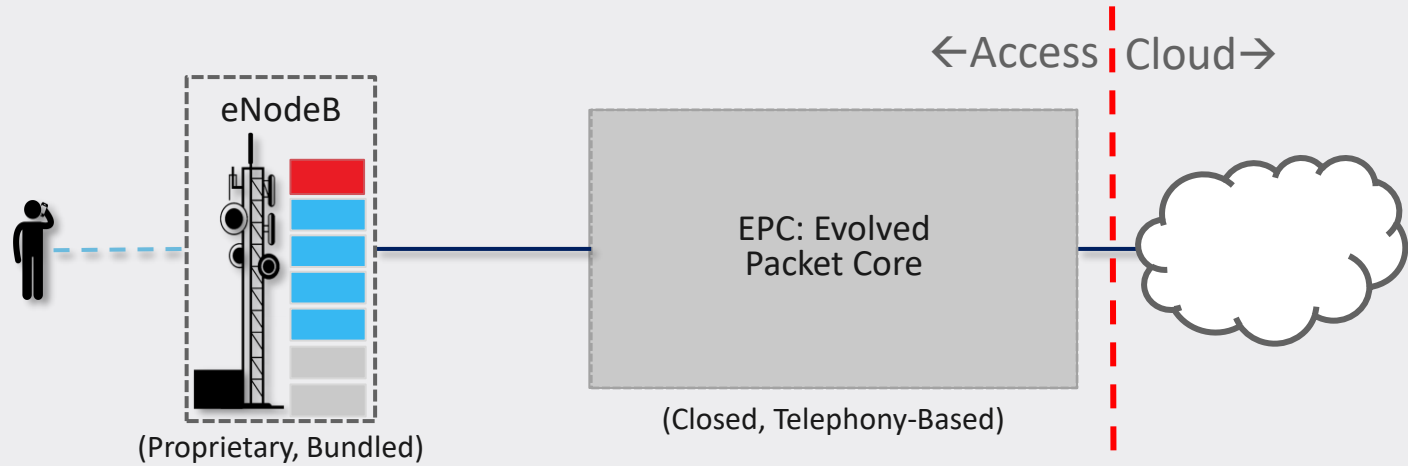


*AETHER: OPEN 5G-CONNECTED  
EDGE CLOUD*

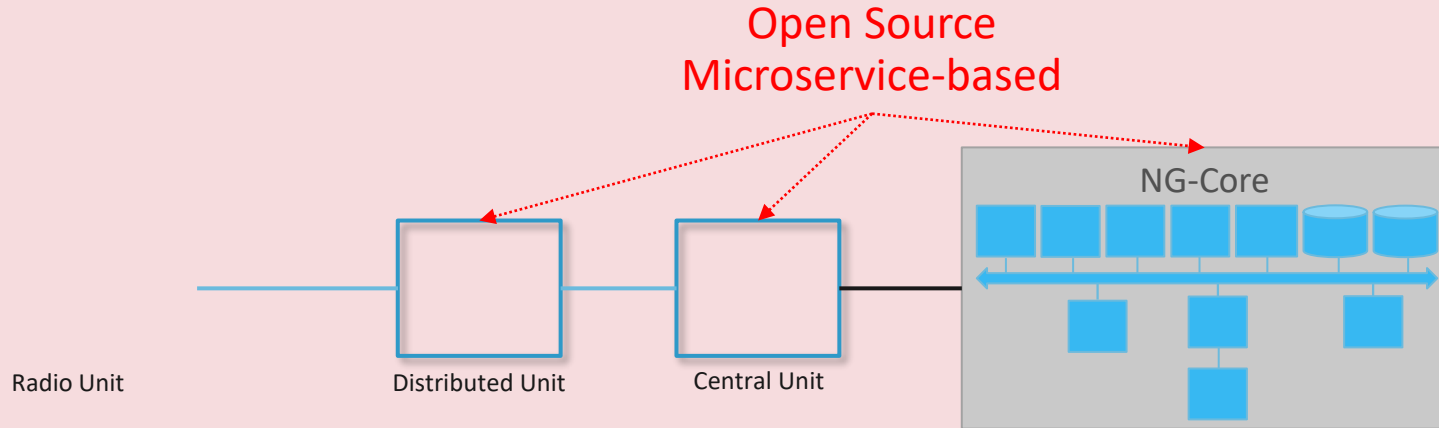
*Larry Peterson  
Open Networking Foundation  
Princeton University*

# 5G TRANSFORMATION

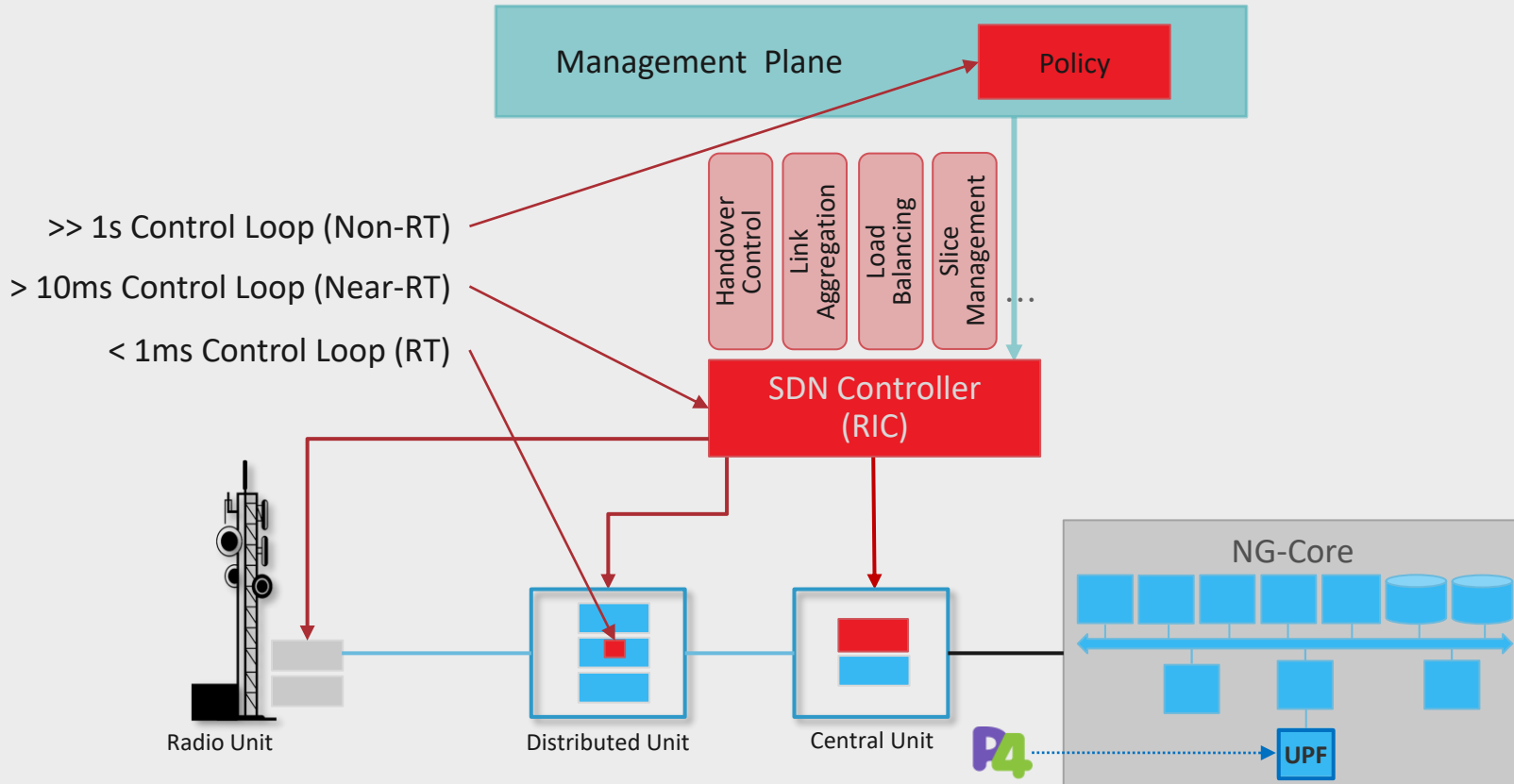
4G



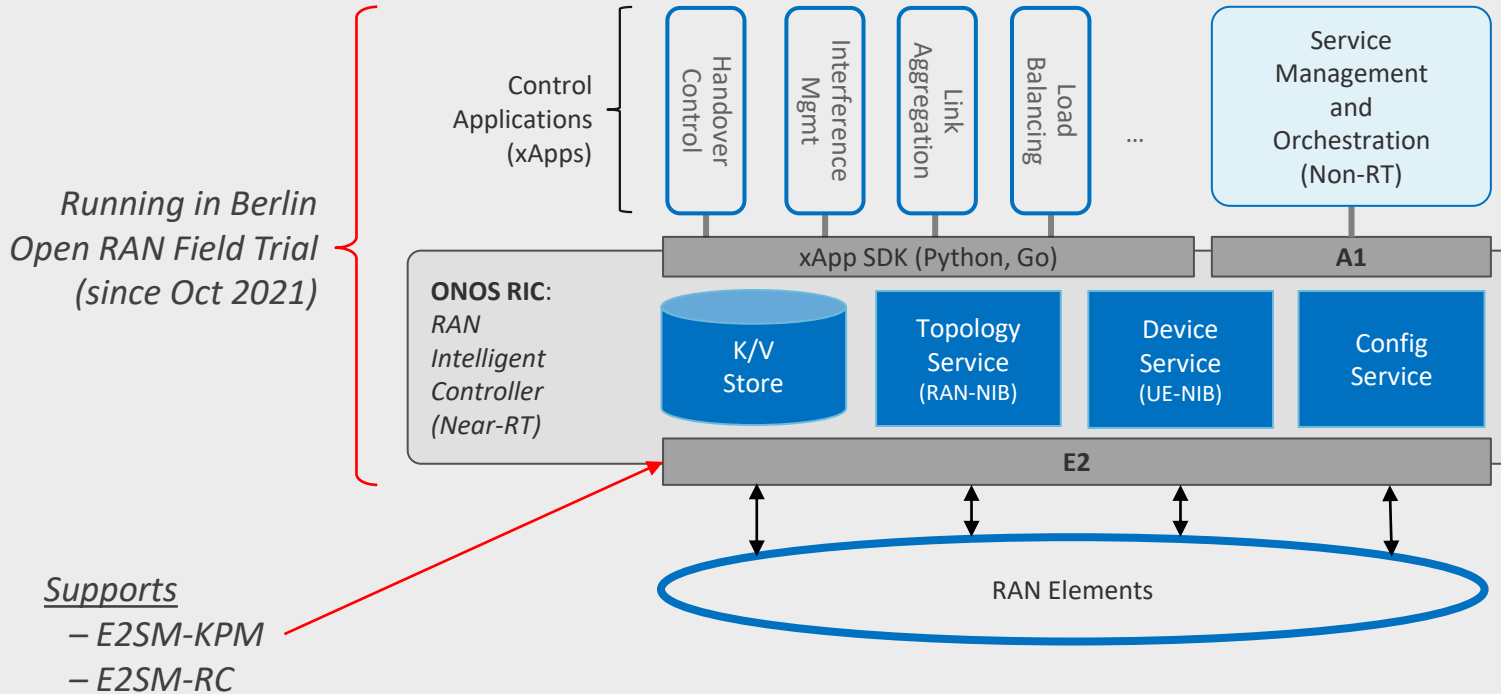
5G



# PROGRAMMABLE END-TO-END & TOP-TO-BOTTOM



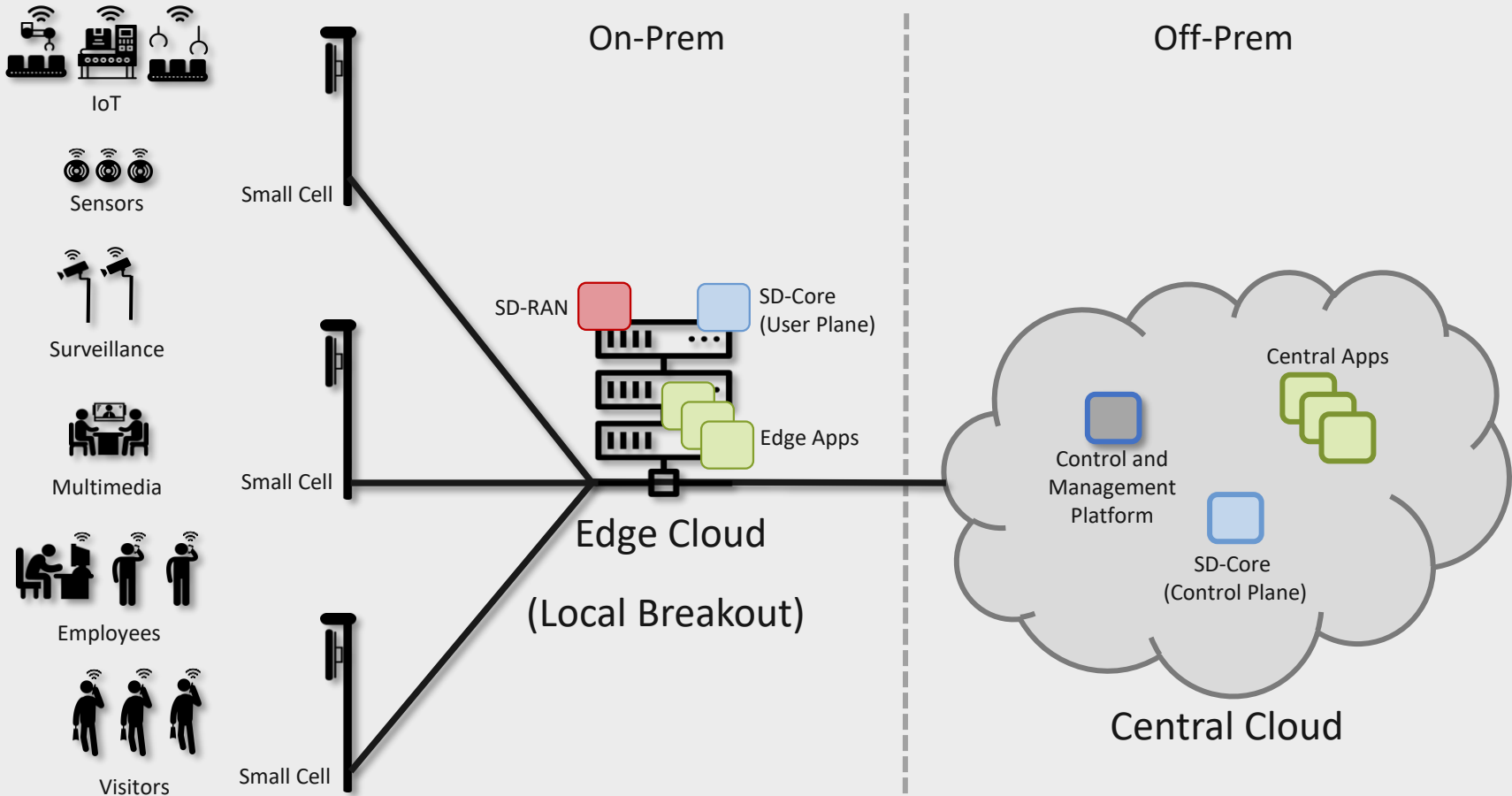
# SD-RAN: ONOS-BASED RIC



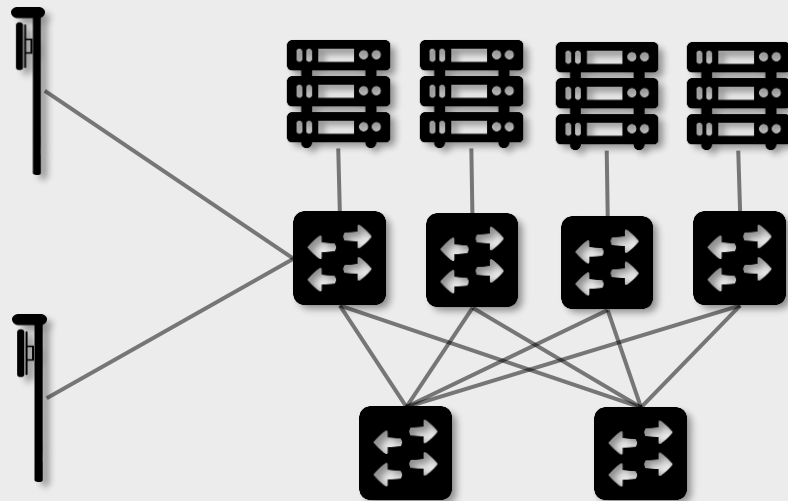


Managed 5G Edge Cloud for Enterprises  
(an ONF Project)

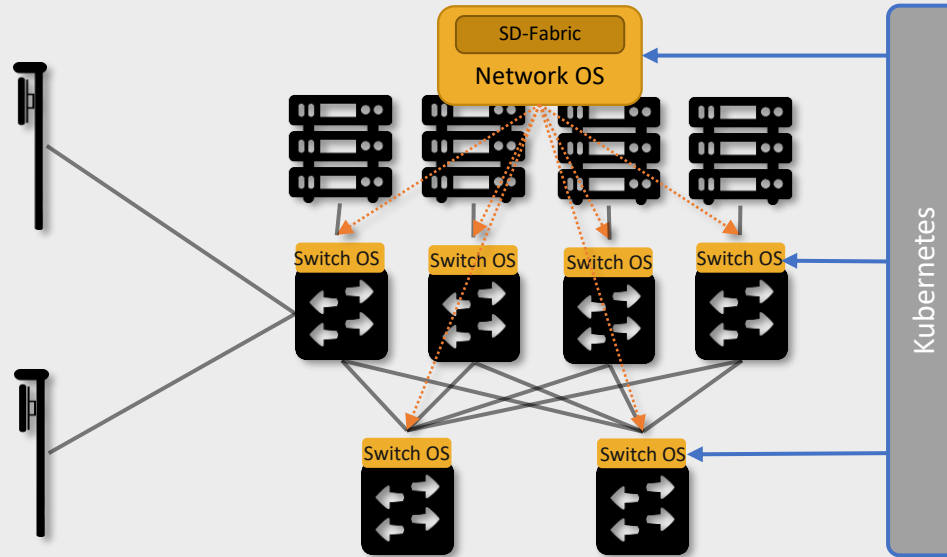
# AETHER OVERVIEW



# AETHER HARDWARE

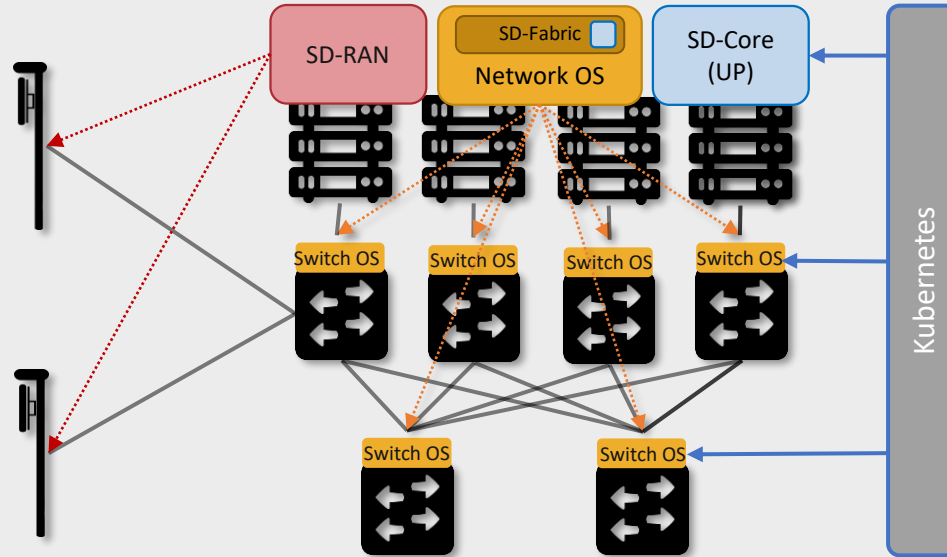


# AETHER PLATFORM

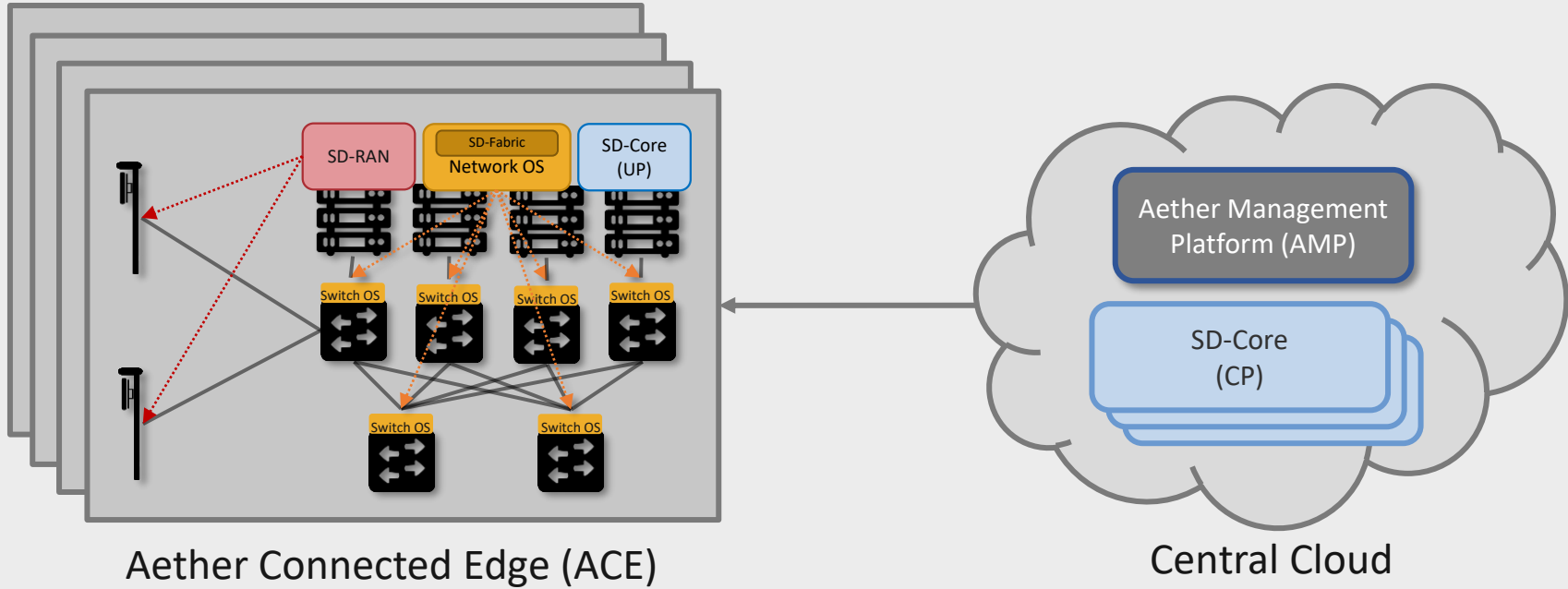




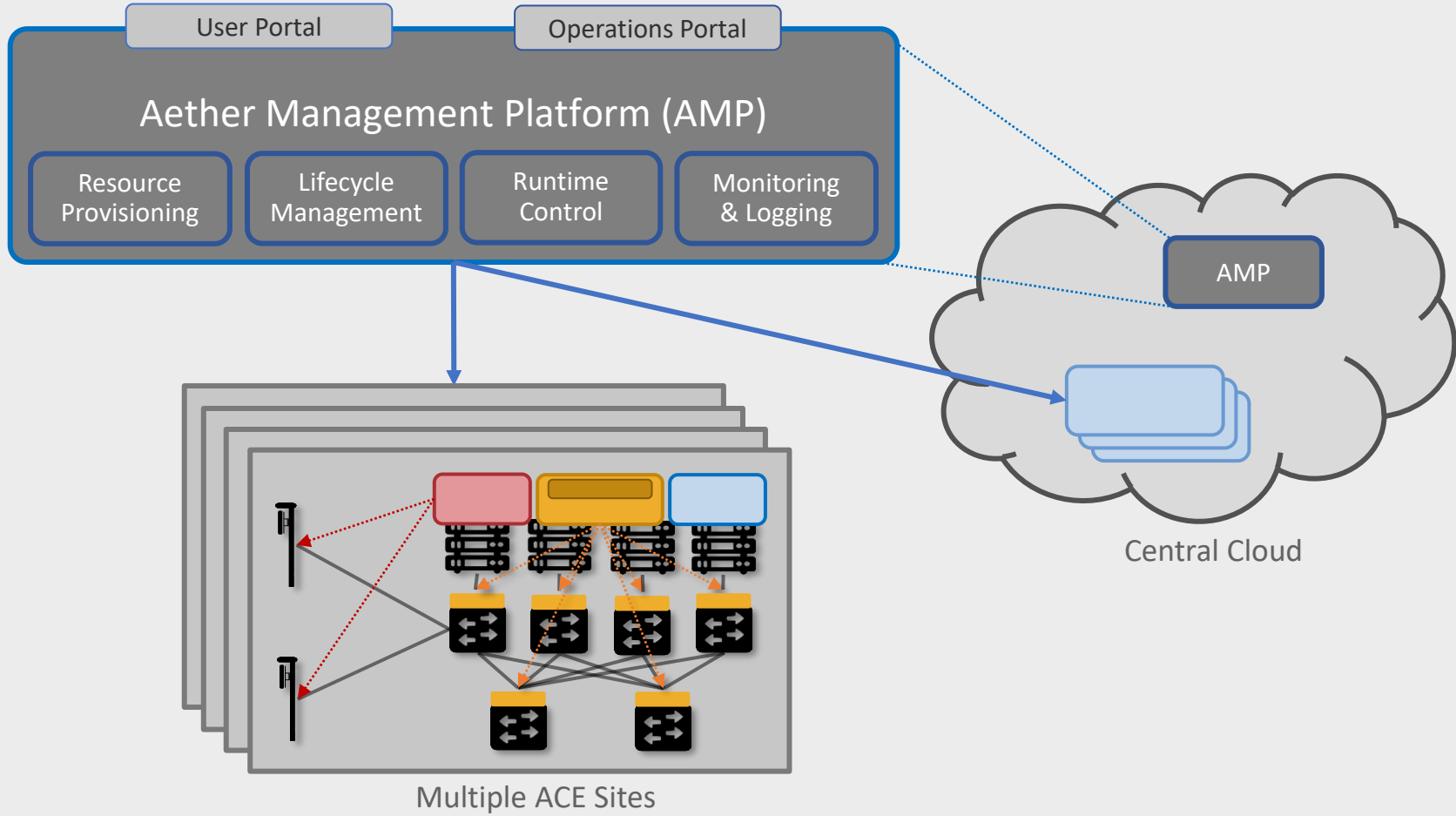
# AETHER CONNECTIVITY SERVICE



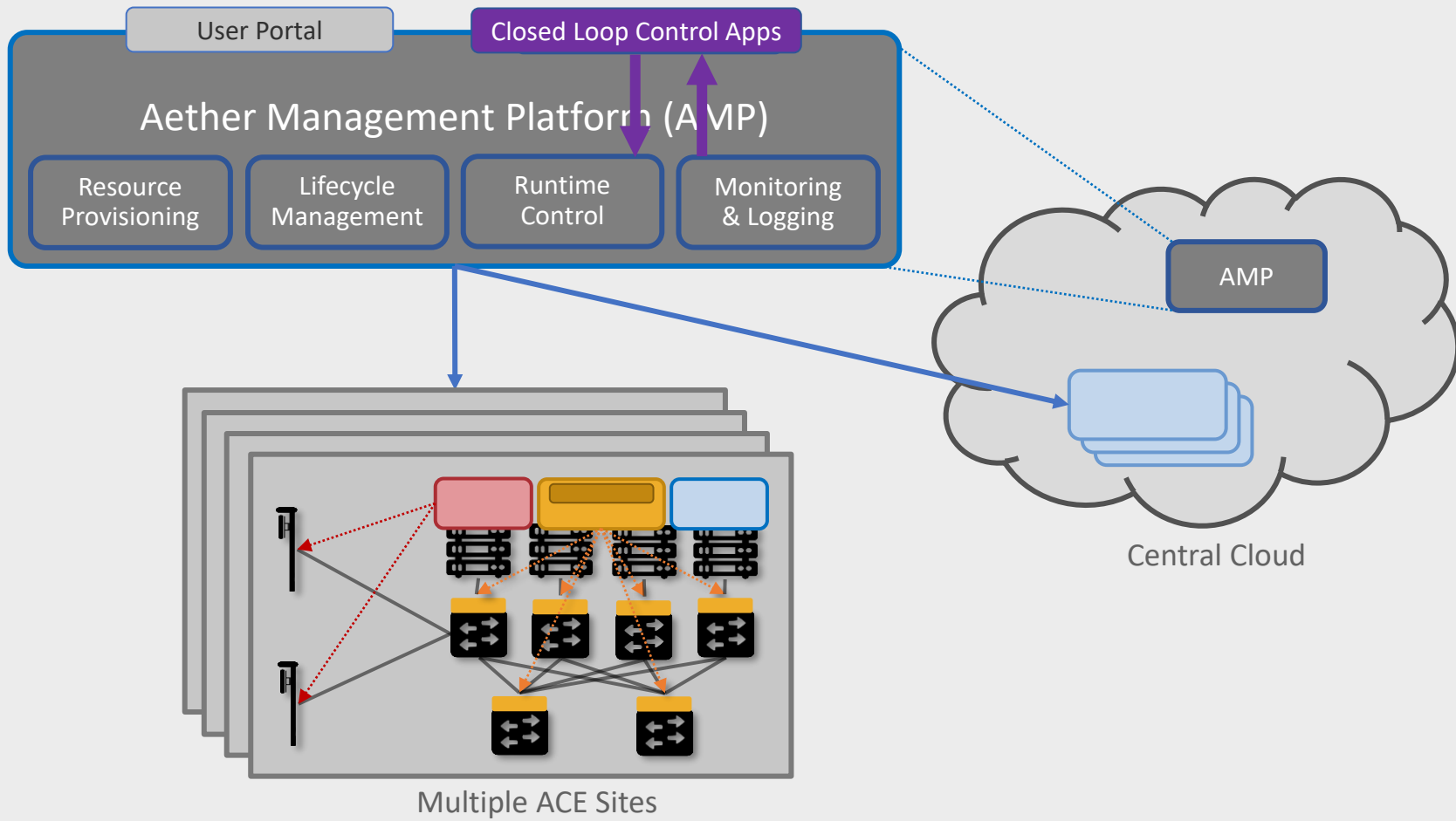
# AETHER AS A MANAGED SERVICE



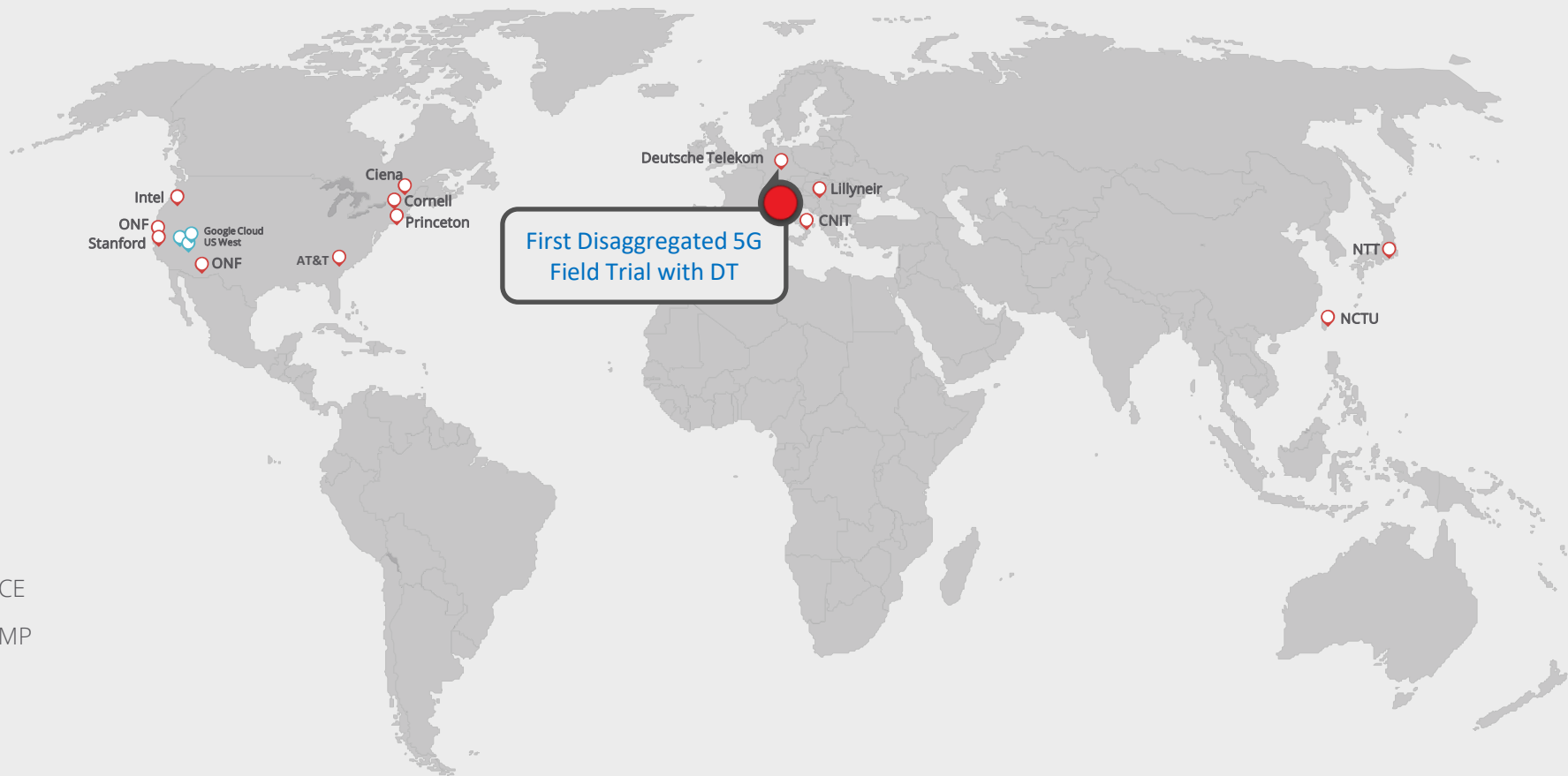
# AETHER MANAGEMENT PLATFORM



# AETHER API



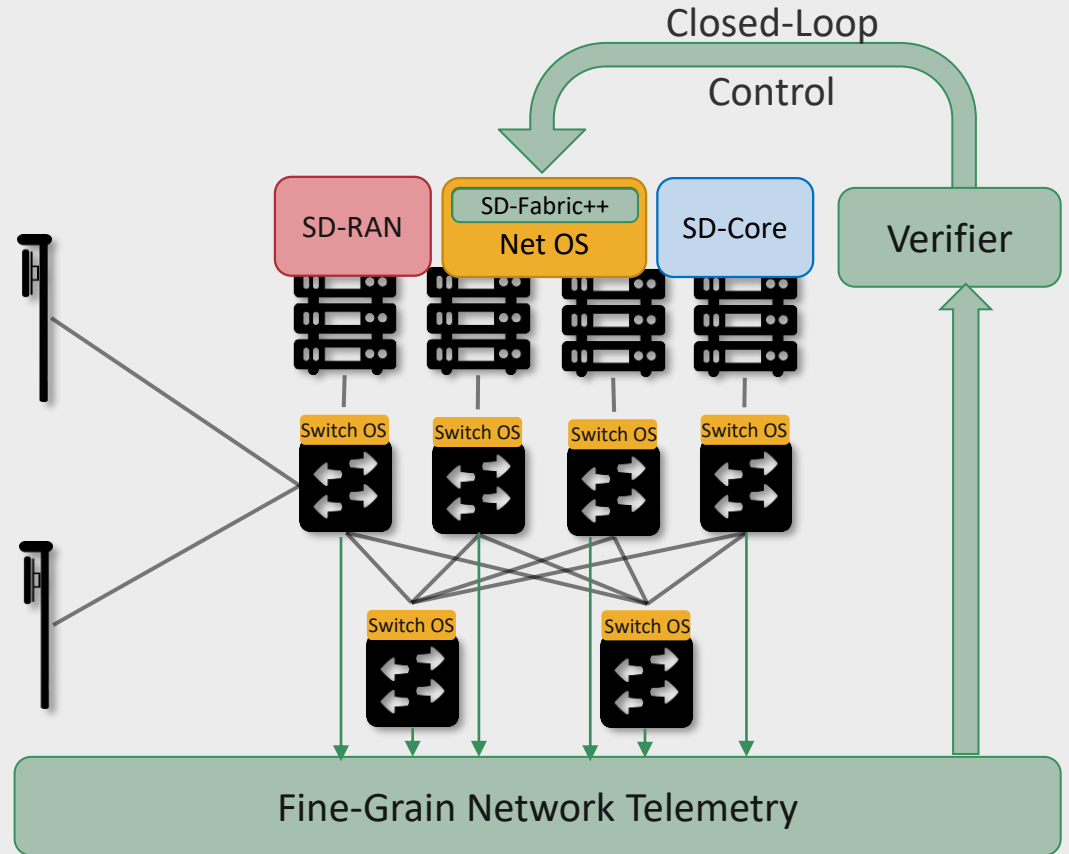
# AETHER HAS BEEN OPERATIONAL SINCE DECEMBER '19



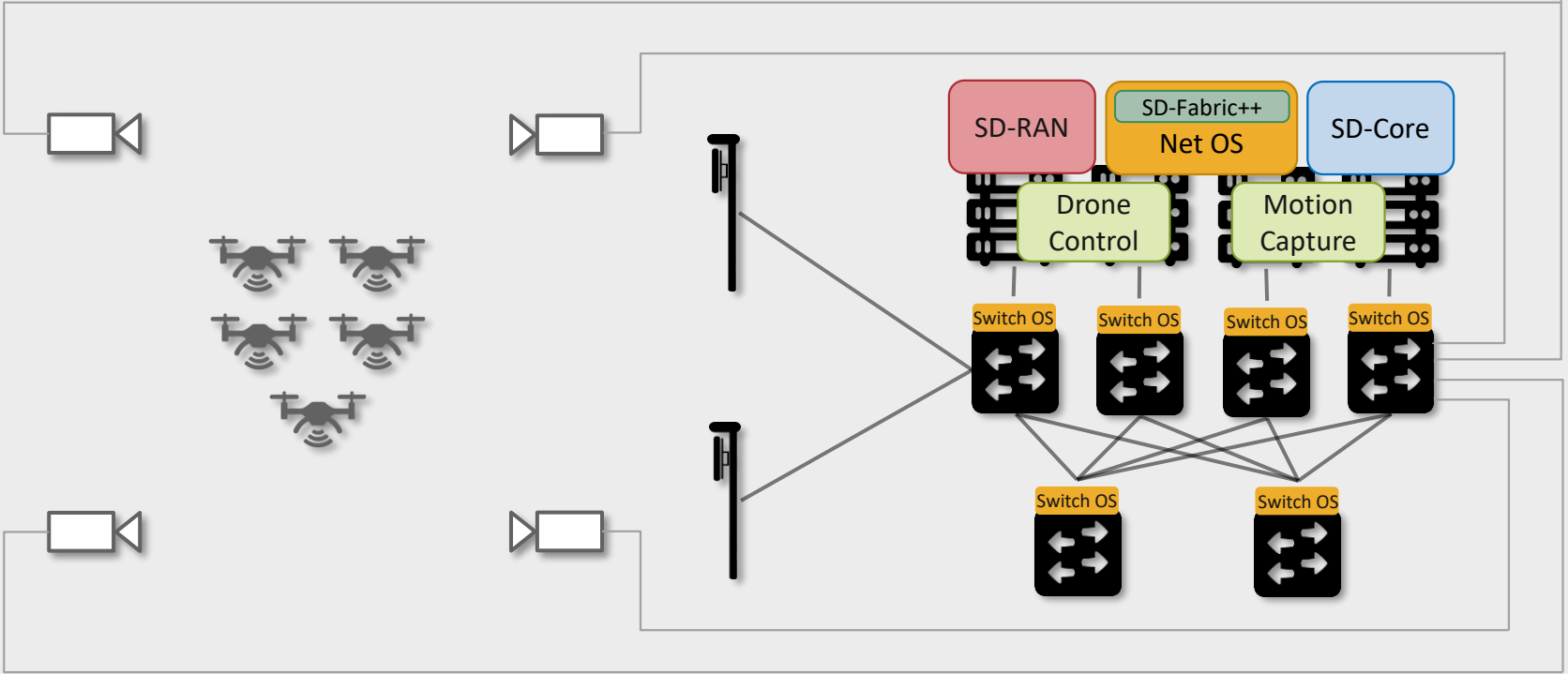
ACE

AMP

# VERIFIABLE CLOSED-LOOP CONTROL



# DEMONSTRATION



# MORE INFORMATION

## Research Position Papers

- *Deep Programmability: SIGCOMM CCR, Oct 2020.*
- *Formal Foundations for P4 Data Planes, ACM POPL, Jan 2021.*

## Project Web Sites

- PRONTO: <https://prontoproject.org>
  - Includes links to [demo videos](#)
- AETHER: <https://opennetworking.org/aether>
  - Includes links to *SD-Fabric, SD-RAN, and SD-Core* projects

## Background Reading

- <https://5g.systemsapproach.org>
- <https://sdn.systemsapproach.org>
- <https://ops.systemsapproach.org>

