

April 3, 2019

Virtualized Broadband: ONF SDN Enabled Broadband Access (SEBA)

2019 Reference Design (RD) 2.0 Planning

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Principal Member of Technical Staff

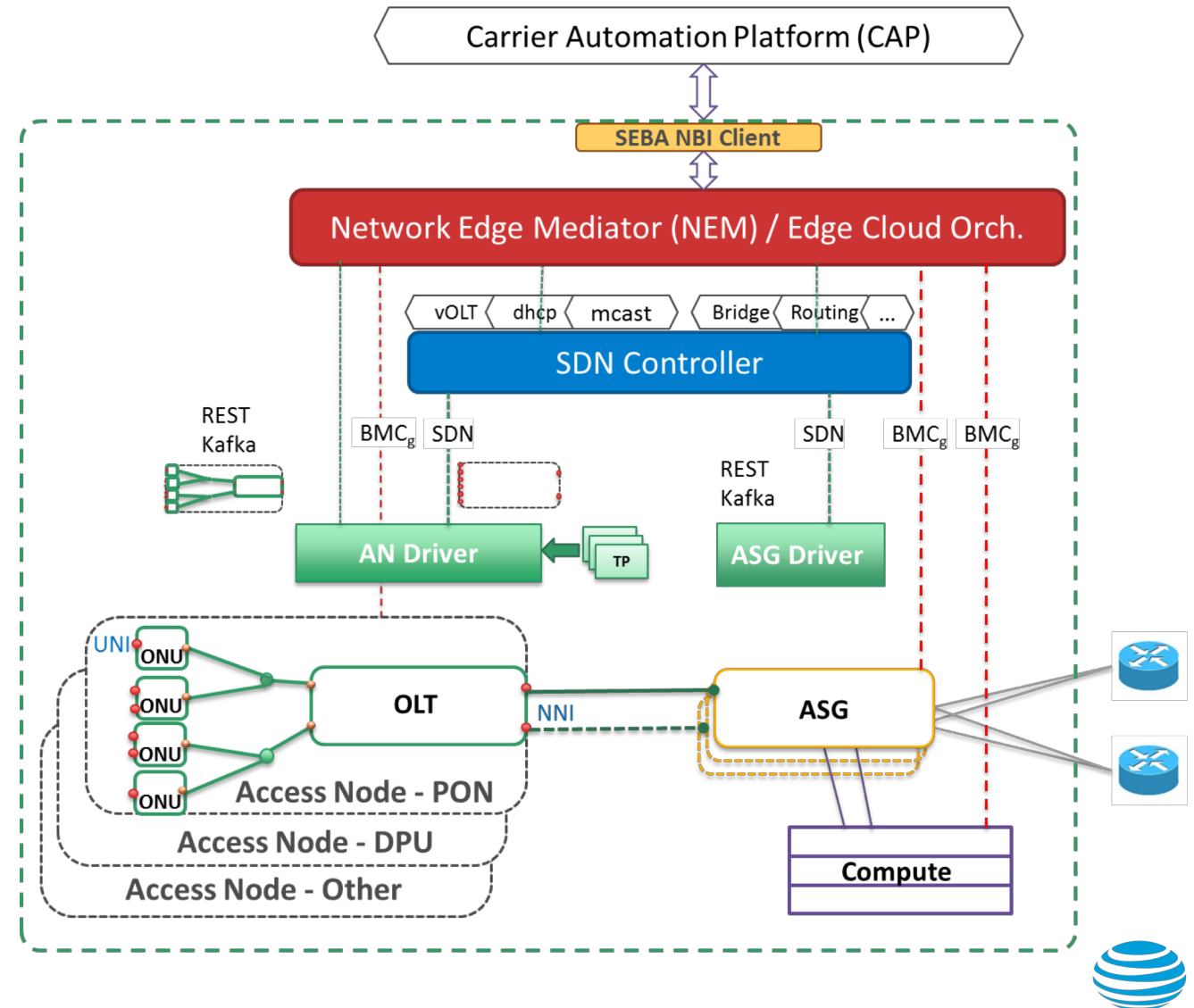
AT&T Converged Access and Device Technology



SEBA Rationale, Assumptions & Architecture

As presented at ONF Connect 2018

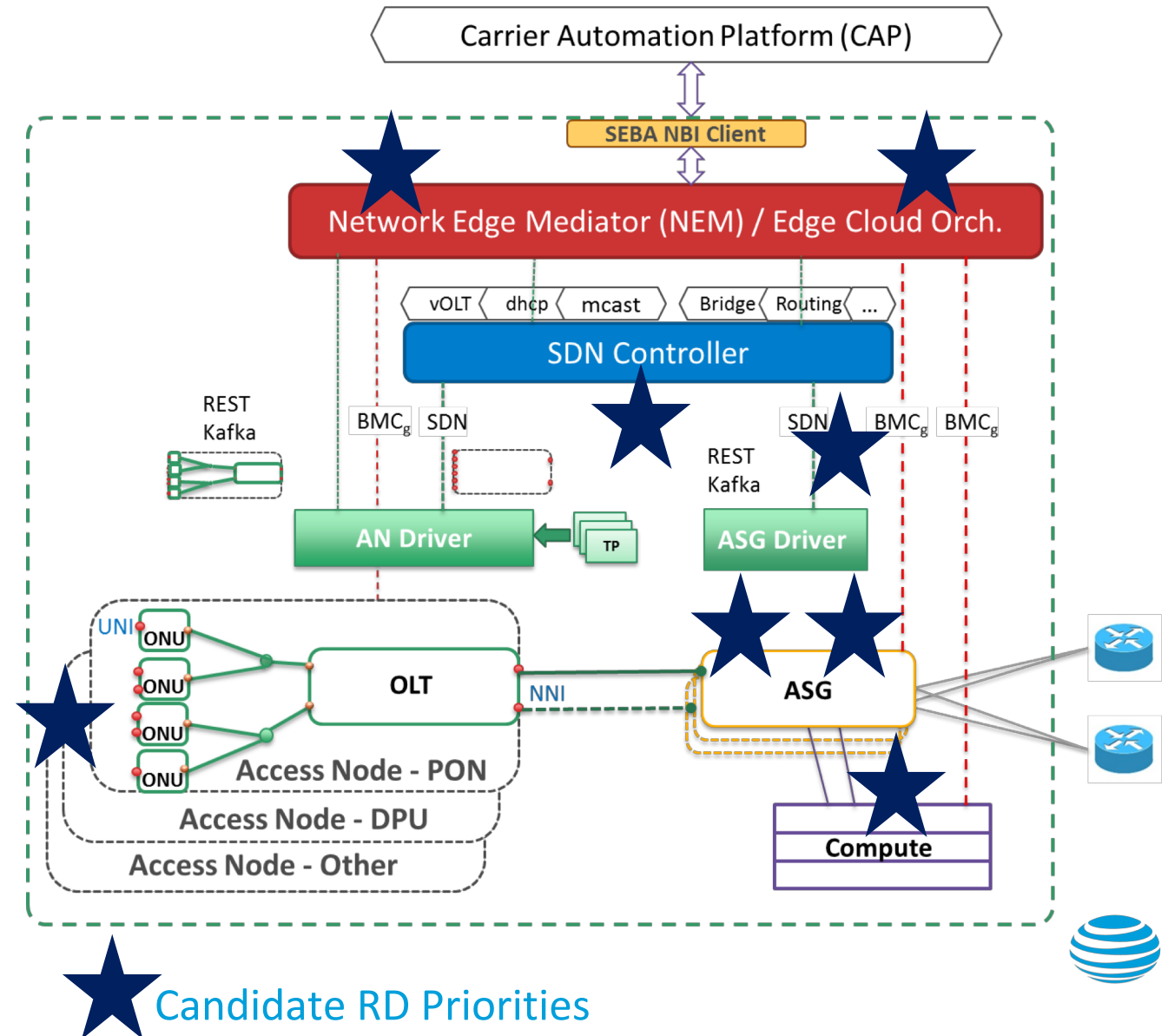
- Operator-Driven
- Deploy in 2018
- Common infrastructure
- Containers run in Kubernetes as cloud underlayer
- Edge cloud orchestration option for convergence to Akraino EdgeStack (Linux Foundation)
- Enable any Northbound CAP - Legacy OSS and new systems like ONAP
- Integrate to existing networks as well as greenfield
- Aggregation and Service Gateway (ASG) enables Wireline Broadband Network Gateway (BNG) or Wireless PDN Gateway (PGW)



Published - SEBA RD 1.0

Targeted 2019 Steps & Dates

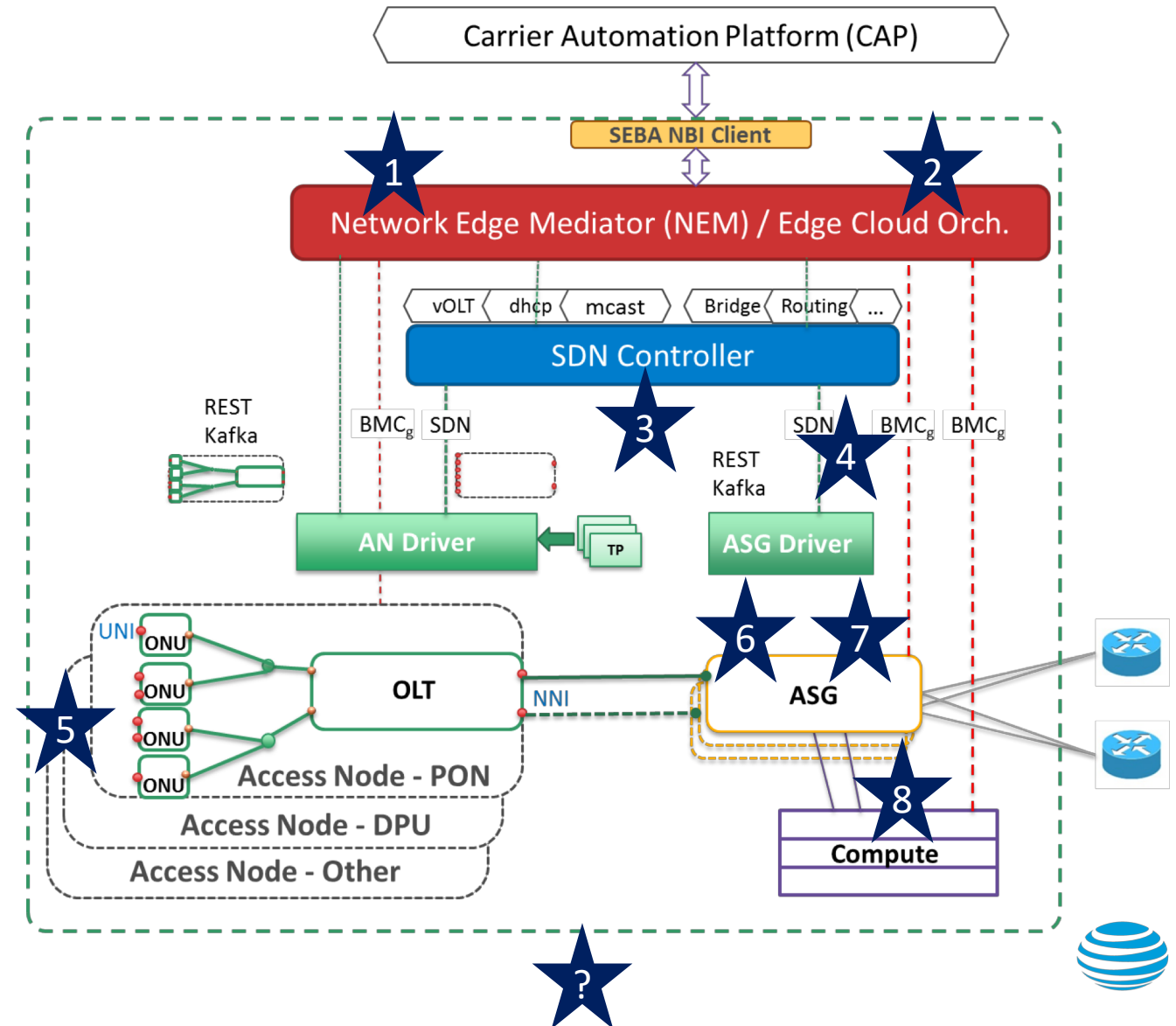
- April 2019
 - Solicitation of Priorities for RD 2.0
 - Prioritization Completed for RD 2.0
- July 2019
 - Draft RD 2.0 for ONF Membership review
- September 10-13, 2019
 - Review opportunity at ONF Connect 2019
- October 2019
 - Public Release of SEBA RD 2.0



SEBA RD 2.0 Priorities Proposals & Solicitation

Candidate Priorities Identified by RD Team (no order)

- 1 Analytics Function in NEM
- 2 Akraino SEBA Blueprint for Network Cloud
- 3 SDN Controller (ONOS) Evolution
- 4 P4 Runtime (in addition to OpenFlow)
- 5 Additional Access Technologies – including but not limited to Gfast, xDSL, NGPON2, EPON, 25GPON, DOCSIS, Fixed Wireless, Ethernet
- 6 BNG in SEBA – Lessons learned and expanded definitions
- 7 Merging workloads for SEBA (fixed access), COMAC (wireless) and/or OMECE (wireless core)
- 8 Third-party apps via Multi Access Edge Cloud (MAEC); Virtual CPE (vCPE)
- 9 SEBA RD Team Solicits Additional Priorities



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