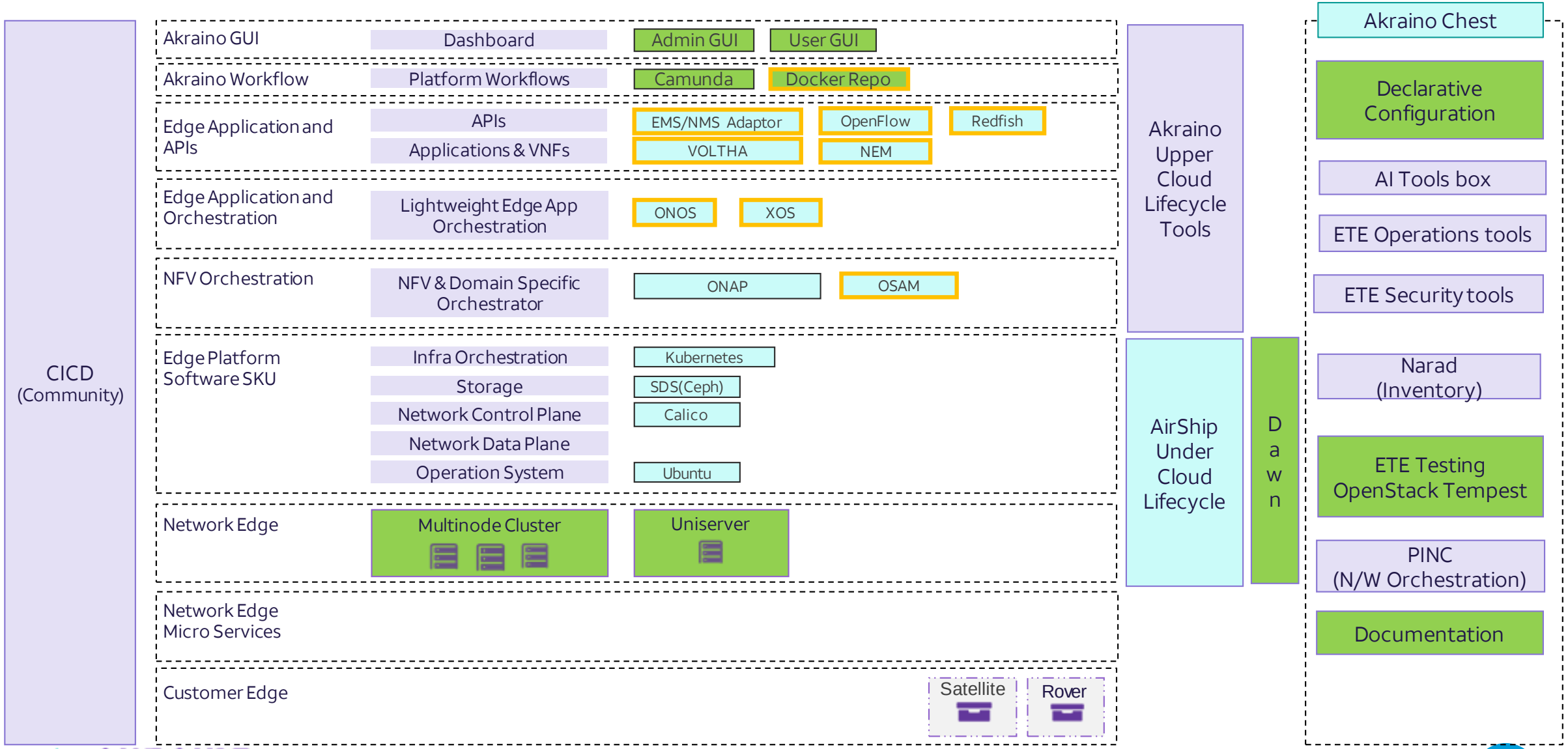
Blueprint Proposal: SEBA

Case Attributes	Description	Informational
Type	New blueprint for fixed wireline access within Network Cloud Blueprint family	
Blueprint Family - Proposed Name	Network Cloud	
Use Case	Virtual broadband access (XGS-PON - Higher bandwidth, symmetric version of GPON)	
Blueprint proposed Name	SDN Enabled Broadband Access (SEBA)	
Scale & Type	3 servers per POD x86 and ARM (with 8-16 cores each)	
Applications	Virtual broadband access – vOLT access & aggregation (5000 edge locations)	
Power Restrictions	Less than 1 kW. NEBS and 48V DC	
Infrastructure orchestration	OS - Ubuntu 16.x Docker 1.13.1 or above / K8 1.10.2 or above- Container Orchestration Under Cloud Orchestration - Airship v1.0 Open Network Operating System (ONOS) and XOS VOLTHA (Virtual Optical Line Terminal Hardware Abstraction – CORD project) Network Edge Mediator (NEM) ONAP and OSAM EMS/NMS Adaptor	
SDN	ONOS OF & Redfish	
Workload Type	Containers	
Additional Details	Akraino based community blueprint, Full Automation (Airship based + Tenant Container support) Cloud layer hardened for production Current SEBA POD contains network elements, compute nodes, and software components. Aggregation and management switches Three compute nodes required for K8 redundancy About twenty containers running ONOS, XOS, VOLTHA, NEM, etc Supports up to 16 OLTs.	See attachment for additional details

AKRAINO EDGE STACK

Akraino SEBA Blueprint SW Stack



AKRAINO EDGE STACK

Akraino | Upstream | New SEBA Components | Next phase

Source: AT&T