



# Proposal for CAMARA Edge Cloud contribution

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# EdgeXR Overview



EdgeXR is a group of former MobileEdgeX engineers which built the Open Sourced platform code and offer services based on that knowledge to operators and interested stakeholders

The team includes



Sunay Tripathi

Prior roles including

- ▶ Director of Product/Head of Google Distributed Cloud-Edge (GDC-E) and Telecom at Google
- ▶ CTO & EVP Product & Engineering at MobileEdgeX
- ▶ Founder & CTO at Pluribus Networks



Jesse Bijl

Prior roles including

- ▶ Co-Founder & Managing Partner at TangibleXR
- ▶ Head of EMEA Channel at MobileEdgeX
- ▶ Senior Manager Product Innovation at Deutsche Telekom



Jon Gainsley

Prior roles including

- ▶ Chief Architect at MobileEdgeX
- ▶ Principal Software Engineer at Pluribus Networks
- ▶ R&D Engineer at Sun Microsystems



Thomas Vits

Prior roles including

- ▶ Co-Founder & Managing Partner at TangibleXR
- ▶ Principal Engineering Project Manager MobileEdgeX
- ▶ Head of R&D Germany, LG Electronics Mobile Communications

Additional  
former  
MobileEdgeX  
engineers

Our mission is to build next-gen edge cloud platform solutions on top of the Open Source platform code, including

- Maintenance of the code (bugfixes, QA)
- New feature development / Existing feature buildout
- Managed deployments of platform instances (either fully managed by EdgeXR or providing support to 3rd parties to setup private instances)
- Packaging of bundled solutions



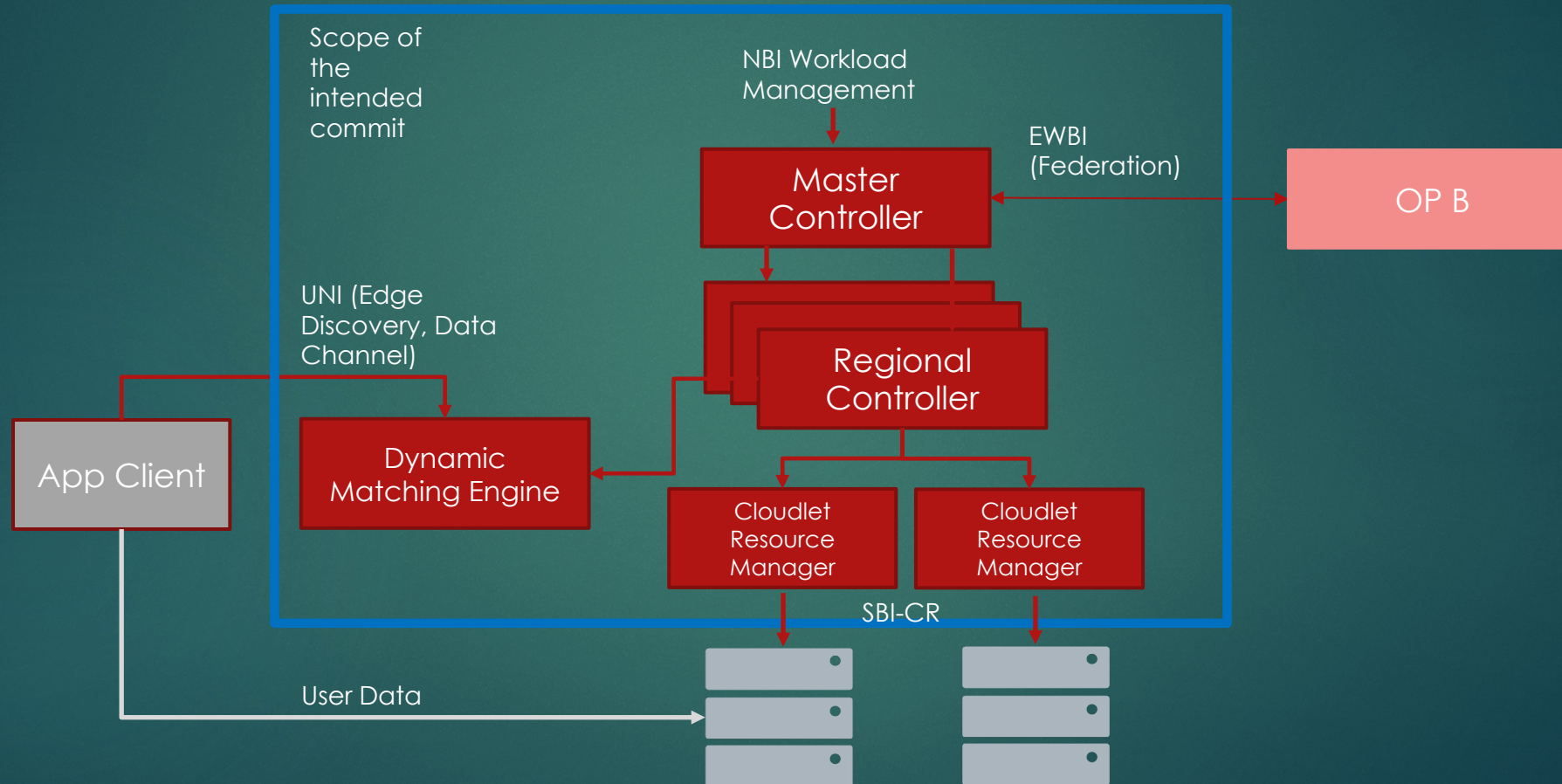
# EdgeXR proposal to CAMARA



- ▶ We believe the MobileEdgeX OpenSource code has a lot of value as it has been commercially matured with many operator deployments and ISV usage
- ▶ We further believe that the CAMARA project is the proper home for that code, as the platform implements the GSMA OP NBI, EWBI, UNI and SBI-CR interfaces
- ▶ Going forward the platform code can serve as a reference implementation in CAMARA for the superset/converged APIs that will be developed in CAMARA, e.g. the superset of 5GFF and GSMA OP EdgeCloud Discovery and workload management APIs
- ▶ Therefore our proposal is to bring the MobileEdgeX OpenSource code (which is under Apache 2.0 license) into CAMARA and actively work towards developing and integrating the CAMARA APIs (incl. EdgeCloud APIs but also other APIs like QoD, Location etc. following the GSMA OP NaaS concept)



# Scope of the proposed contribution





# APIs



- ▶ We started to break out the APIs according to the CAMARA structures (this is not complete yet, i.e. does not include yet the NBI and EWBI)
  - ▶ Discovery/EdgeApp: <https://github.com/edgexr/edge-proto/blob/master/dme/app-client.yaml> (Note: That's the UNI interface for EdgeDiscovery and streaming of events)
  - ▶ Session (auth): <https://github.com/edgexr/edge-proto/blob/master/dme/session.yaml> (Note: this will probably need to be merged with Commonalities WG)
  - ▶ Location: <https://github.com/edgexr/edge-proto/blob/master/dme/locverify.yaml> (Note: this is the VerifyLocation API of the platform which can serve as an initial contribution for the new Location WG)



# Proposed steps



## Step 1 – Initial Commit

- Step 1a: Commit API YAMLS into agreed repo structure
- Step 1b: Commit the underlying implementation code

## Step 2 – API Convergence

- Work out a (superset) of APIs where there are overlapping contributions
- Create the corresponding implementation for those supersets

## Step 3 – Additional APIs/Features

- Co-Develop and integrate additional APIs (e.g. Location, DeviceStatus) and integrate into the platform implementation
- Integrate with other CAMARA systems, e.g. NEF reference implementations

- Integrate code with other WGs including Commonalities, QoD, Location, DeviceStatus
- Develop a testbed for devs and interested parties to use the reference implementation
- Establish QA pipeline for incoming code contributions



# What we seek for in this group...



- ▶ General consensus for hosting the Open Source platform code in CAMARA
- ▶ As initially there will be overlapping contributions, getting a consensus on
  - ▶ How to structure the github repo in a proper way to host those overlapping contributions
    - ▶ Initially we propose to have different repos under EdgeCloud
  - ▶ Define a way of working to converge towards a single (superset) API set
    - ▶ Define a path towards a single, converged repo
- ▶ Getting an understanding what additional contributions are planned in terms of APIs and in terms of underlying code



# Thank you!



- ▶ We believe CAMARA is a great place to build an open ecosystem around the edge platform APIs and reference implementation
- ▶ We would especially appreciate the task of converging different approaches towards the best possible solution for users of the APIs
- ▶ We look forward to work together with all of you to accelerate the adoption of the edge cloud!
- ▶ Please feel free to contact us anytime!
  - ▶ [thomas.vits@edgexr.net](mailto:thomas.vits@edgexr.net)