

5G MEC/Slice System to Support Cloud Gaming, HD Video and Live Broadcasting

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Tencent

Agenda

- › Blueprint Release 4 Outcomes
- › Relevant Industry Trials
- › Work Plan

BP R4 Outcomes

› What Released

- No new functional features
- Integrated Bluval for validating the K8s layer and OS layer of the system using 3 test suites (Kube-hunter, Lynis, Vuls)
- Detected and fixed **34** system level vulnerabilities, improved security and validation of the blueprint

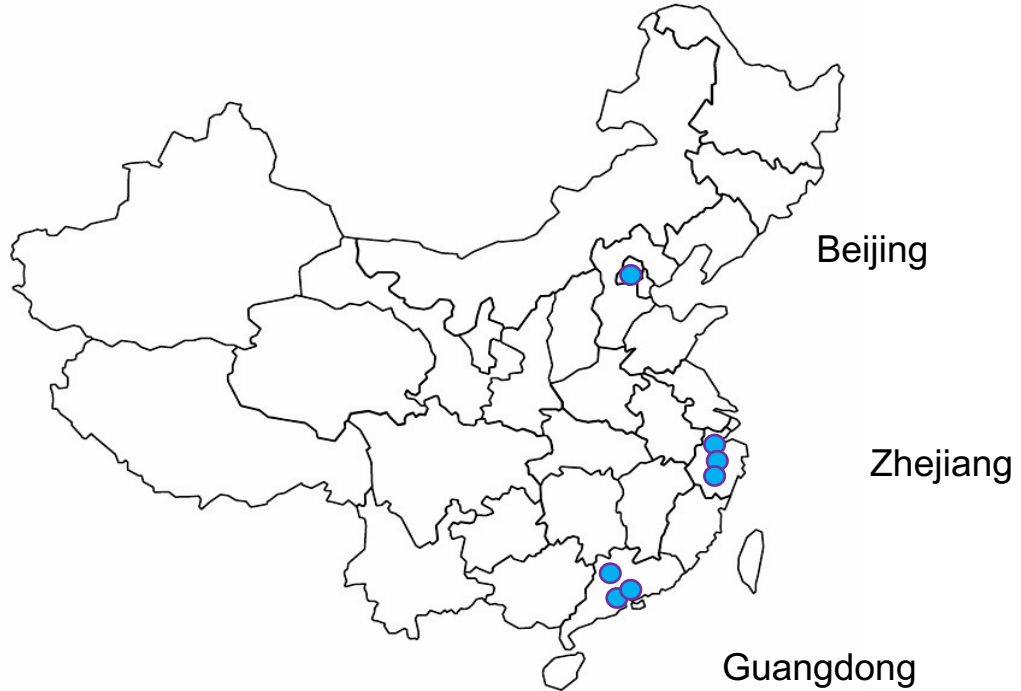
› Documentation List

- **5G MEC/Slice System Release 4 Wiki Page:** <https://wiki.akraino.org/pages/viewpage.action?pageId=28976943>
 - **Release Notes:** <https://wiki.akraino.org/display/AK/R4+-+Release+Notes>
 - **Test Documentation:** <https://wiki.akraino.org/display/AK/R4+-+Test+Documentation>
- **Bluval Vulnerabilities Scanning Results on Nexus (Kube-hunter, Lynis, Vuls):**
https://nexus.akraino.org/content/sites/logs/tencent/bluval/results_upload/
- **Bluval Validation Criteria:** <https://wiki.akraino.org/display/AK/Steps+To+Implement+Security+Scan+Requirements>

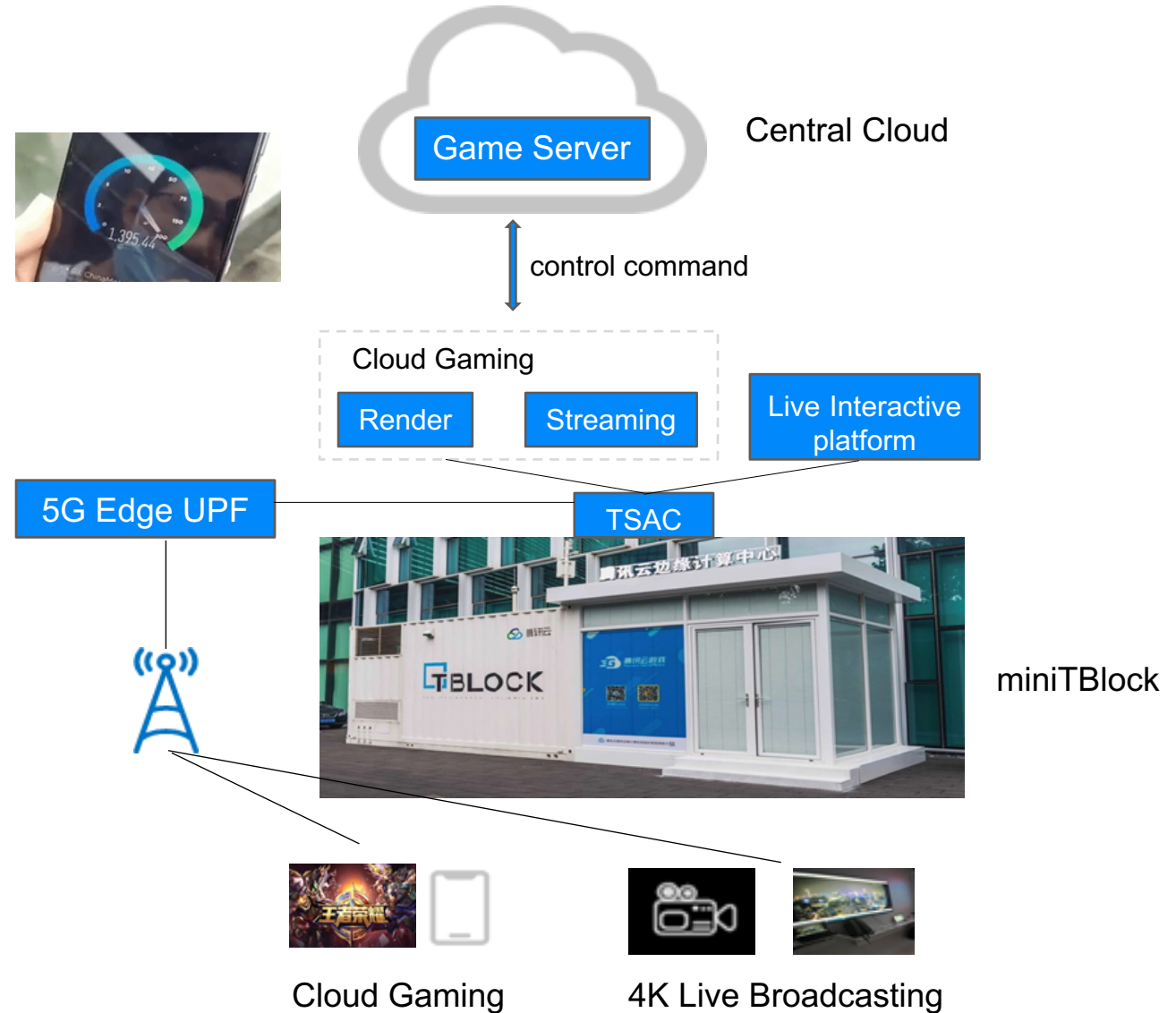
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Practice – TSAC* Trials

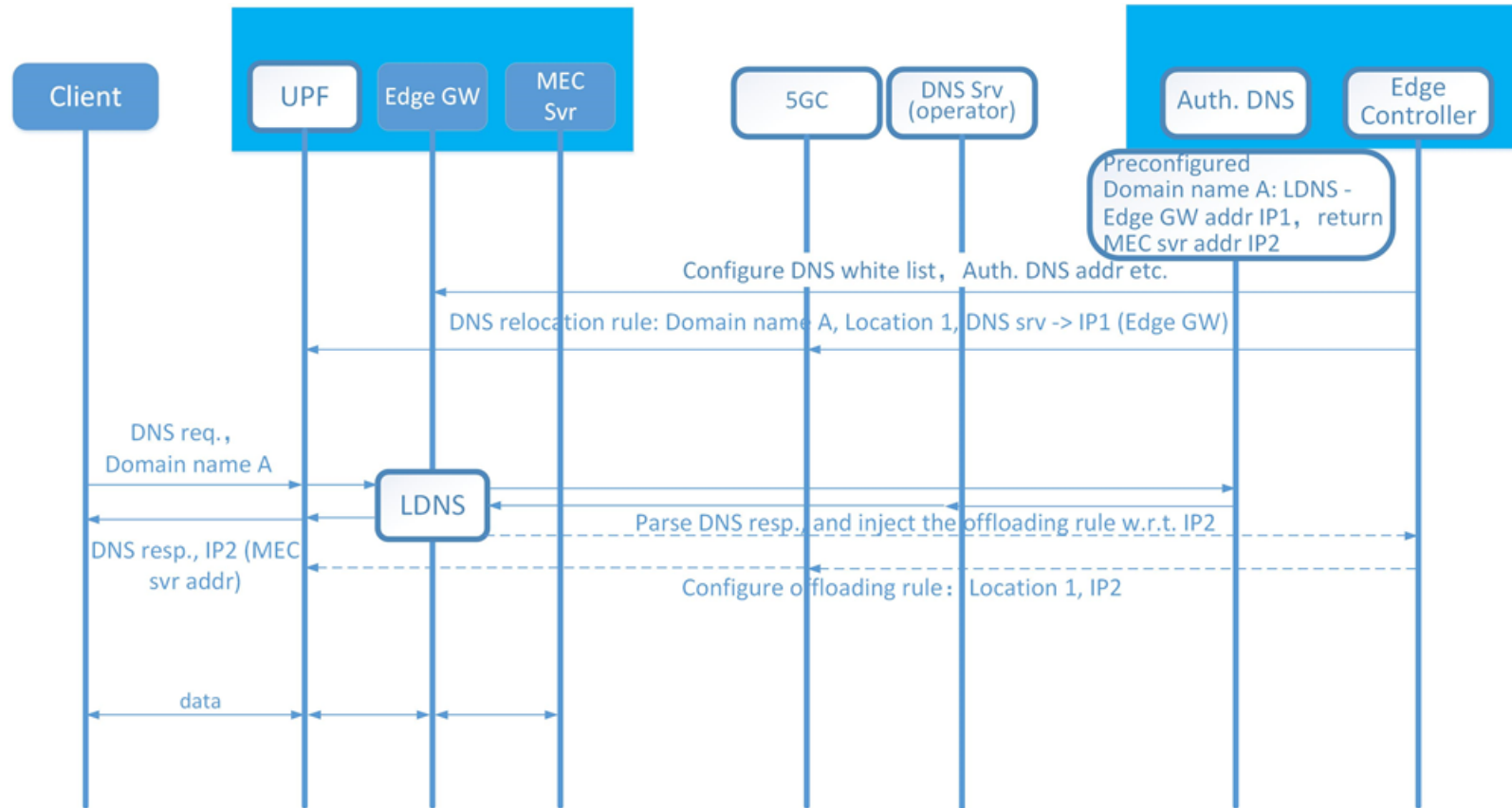


9 trials for CDN, live broadcasting & cloud gaming



TSAC: Tencent Smart Access Connector

Key Technology - Local DNS (LDNS)



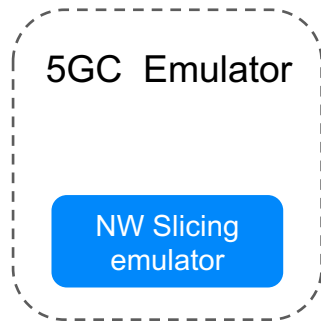
Differences between DNS handling of ETSI MEC

- Interaction with the authoritative DNS server, where request is parsed
- Interaction with UPF, to enable DNS request relocation and traffic offloading

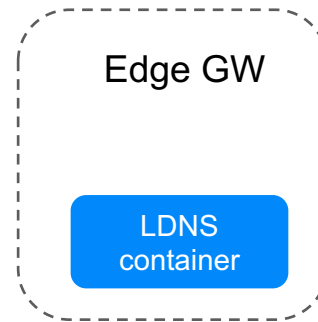
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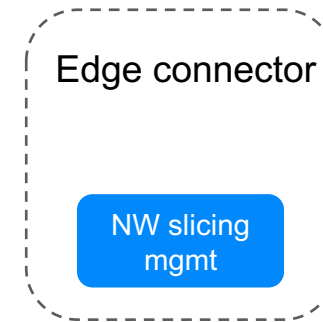
Work Plan



- NW slicing emulator, enforcement of network slicing policy



- LDNS, parsing of DNS resp. and injection of offloading rule

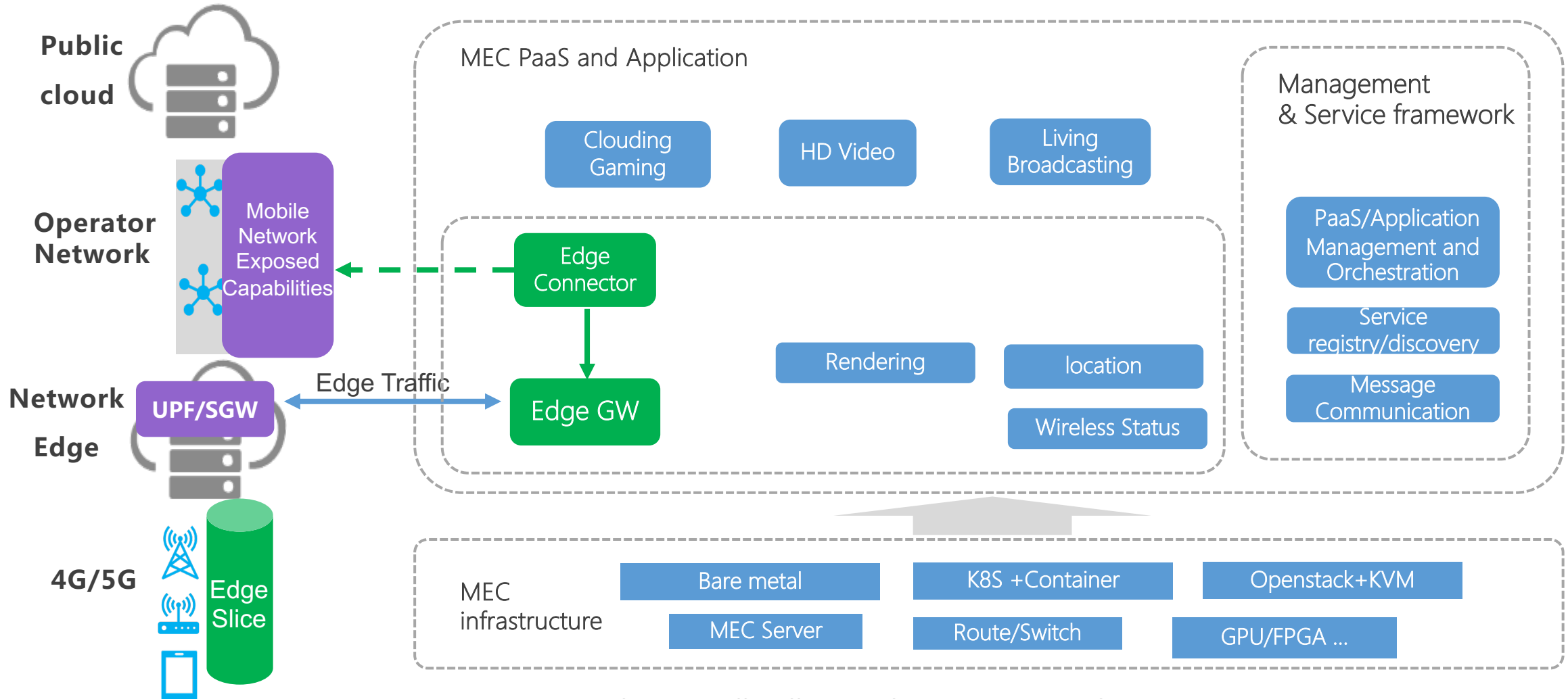


- NW slicing mgmt, APIs to manipulate NW slices

Backup



BP Architecture Recap



- Edge connector: enable flexible traffic offloading from the aspects of control interaction with mobile network exposed capabilities, and subscribe the edge slice between UE and edge application
- Edge GW: enable the traffic offloading from the aspects of data plane with local traffic routing, traffic management and so on.

Thank you!