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

  - 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
**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

- **5GC Emulator**: NW Slicing emulator
  - NW slicing emulator, enforcement of network slicing policy

- **Edge GW**: LDNS container
  - LDNS, parsing of DNS resp. and injection of offloading rule

- **Edge connector**: NW slicing mgmt
  - 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!