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

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Agenda

› Release 3 summary
› Release 4 & beyond plan
• 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.
List of key feature of R3

- Provides traffic influence APIs to the edge connector
- Performs signaling and data exchange with the Edge GW during traffic offloading

- LDNS, acting as a DNS server
- cAdvisor, provisioning pod-level rx/tx statistics
- EAA, edge application registration

- DNS CLI, configuring DNS rules enforced by the LDNS hosted on each Edge GW
- Prometheus, collecting and visualizing rx/tx statistics
- Grafana, visualizing rx/tx statistics
Local DNS design and implementation

- UPF able to perform dynamic offloading, with the addition/remove of items to the IP list
- Forwarding of DNS req/resp included in Release 3
Traffic management

- Pod-level traffic statistics collection
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Next step

- **5GC Emulator**: NW Slicing emulator
- **Edge GW**: LDNS Container
- **Edge Connector**: Prometheus Container
  - NW Slicing Mgmt

**R4**
- Beyond R4

- NW slicing emulator, enforcement of network slicing policy
- LDNS, parsing of DNS resp. and injection of offloading rule
- Prometheus, application level (sum of replicas) traffic statistics
Thank you!