Edge computing APIs

Hannu Flinck, Nokia

Developer community needs open, consistent and stable APIs

- ETSI MEC has published a set of specifications on API Framework and service specific APIs
  - See e.g. https://datatracker.ietf.org/meeting/98/materials/slides-98-nfvrg-sessb-12-multi-access-edge-computing-mec-applications-00
- MEC API characteristics:
  - RESTful HTTP APIs
  - OpenAPI compliant descriptions both in YAML and JSON
  - All APIs electronically available and can be navigated in browser (swagger UI), for example Radio API:
    - https://forge.etsi.org/gitlab/mec/gs012-rnis-api/raw/master/RniAPI.yaml
- Same flavors used in 3GPP 5G service based architecture API definitions!

- See more about MEC APIs in https://github.com/wol190/ETSI-ISG-MEC

Available OpenAPI 2.0 compliant API definitions for following services

- MEC-012 Radio Network Information API
  - Queries for cell associations, bearers and L2 measurements.
  - Notifications for Radio bearer establishments, modifications, handovers, etc.
- MEC-028 WLAN API
  - Queries for Access Point info, WLAN Station Info.
  - Notifications for Stations associated to an Access Point, PHY Data Rates
- MEC-013 Location API
  - Queries for UE Location Lookup, UEs in a particular location, etc.
  - Notifications for UE Information updates for the list of UEs in a particular location
- MEC-014 UE Identity API
  - Allows to define UE specific Identity tags that are associated with traffic rules in the mobile edge system.
- MEC-015 Bandwidth Management API
  - Getting, setting and updating BW allocations for sessions

Target: a developer ecosystem that spans across different deployments

Key functionalities for Edge Computing

MEC Application Development Community

Interaction & Information Exposure