Insights for Edge Software Developers

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For: everyone

Episode #9 – VIS API in MEC Sandbox
In this episode ...

• We will learn:
  • What is new about MEC Sandbox V2X Information Service (VIS)
  • Predicted QoS functionality
  • Possible use cases
  • Demo comprising of how to interact with the new V2X network scenario

try-mec.etsi.org
V2X Information Service (VIS) in MEC Sandbox

“/provide_predicted_qos” supported endpoint provides the following:

• QoS specified in terms of RSRQ/RSRP values of (the strongest) radio signal being received at a specific geo-location

• Used to query predicted/estimated values of RSRQ/RSRP on potential UE routes

• One set of RSRQ/RSRP values for one set of location coordinates
1 – Predicted QoS functionality

- A new network scenario is added in the MEC Sandbox (4g-5g-macro-v2x) which contains the VIS functionality.
- Multiple geo-coordinates along a route (or multiple routes) can be sent in the request.
- VIS returns predicted QoS values (RSRQ/RSRP) for all the geo-coordinates sent in the request for a particular sandbox instance (user) using pre-defined traffic patterns via a prediction function.
2 – Possible Use cases

- QoS values along a planned vehicular route can be used to trigger, modify or postpone
  - The application of certain V2X functionalities; and/or
  - The download of content delivery software / packages.
- Different MEC applications (e.g., Machine Learning applications) can use the QoS values to send some useful data to (for example) another application for processing (e.g., for training a ML/AI data model).

Developers can perform actions in their applications based on the QoS Information gained from MEC Application/service consumer of V2X information service of MEC Sandbox.
3 – V2X scenario in MEC Sandbox

It provides new network scenario in MEC Sandbox to support MEC030 Service API
Conclusions and further resources

What we have learnt:

- Implementation of V2X service in the MEC Sandbox
- How to play around with the V2X service in the MEC Sandbox
- Applications / Use cases related to this new service

Interested to learn more?

- Visit the MEC Sandbox and play with V2X Information Services: https://try-mec.etsi.org/
- Learn more about V2X Information Service API in MEC030 at https://www.etsi.org/deliver/etsi_gs/MEC/001_099/030/02.02.01_60/gs_mec030v020201p.pdf
- Also look at V2X Information Service API in MEC030 at https://forge.etsi.org/rep/mec/gs030-vis-api
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