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TOPIC #4

Over-the-Air Update Strategies via 5G

Matthias Weiß
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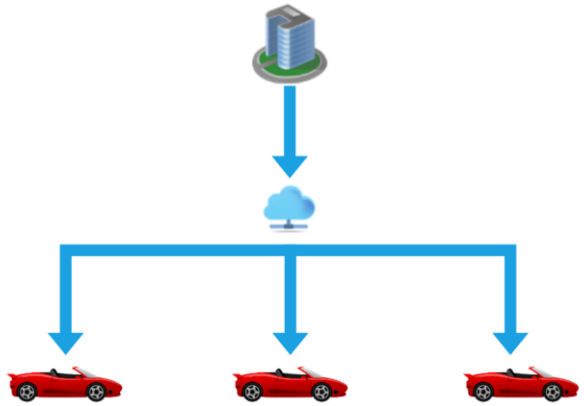
Over-the-Air Update Strategies via 5G

HACKATHON TOPIC #4



Challenge

- Default scenario: Distributed deployment between 5G clients and servers inside Arena2036
- Advanced: Introduction of edge cache, move servers to actual cloud

Level

Problem description

- Implement the default scenario and conduct 5G measurements for different OTA strategies
- Expand the prototype by implementing the edge cache and moving the server to cloud backend

Approach

- Standalone 5G network by Nokia
- Java Service Backend on Linux
- Cloud/Edge technologies
- Clients such as Raspberry Pis

Please keep in mind …

- Good to very good programming skills in Java
- Motivation to gain hands-on experience with OTA updates, 5G technologies etc.
- Knowledge in Git, SSH, Shell/Bash, microcontrollers like Raspberry Pis, cloud/edge computing concepts, and web development

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MENTOR AVAILABILITY FOR SPARRING & COACHING

FRIDAY | 10.11.2023

- 13:00 am – open end

SATURDAY | 11.11.2023

- 08:00 am – open end

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