MASTER THESIS – OBJECT MIGRATION IN DISTRIBUTED, HETEROGENEOUS SQL DATABASE NETWORK

Background
Mobile networks are used all over the world and are the corner stone in the networked society, where everything that benefits from a connection shall be connected. To support the vast amount and diversity of data expected in future networks, Ericsson are developing products to drive and support the networked society. The subjects for Master Thesis are defined to investigate and develop algorithms, architecture, tools etc. to support huge increase of speech, data and massive IoT for Radio Access Networks.

Thesis Description
The 5G radio network architecture is a large distributed network and as such needs efficient and reliable data distribution. In such large distributed networks, it is important to be able to efficiently keep large amounts of data in order to share common configuration throughout the radio network. SQL is one possible approach to data storage, but the distributed nature of the radio network puts unusual requirements on the database deployment.

Task:
- Study the feasibility of having consistent configuration data objects in a heterogenous network of SQL databases.
- Study and define metrics to evaluate different alternatives.

The thesis will be concluded with a result presentation for the Ericsson team.

Qualifications
This project aims at students in electrical engineering, computer science, computer engineering or similar. Background in wireless communication is preferred.

Extent
1-2 students, 30hp each

Location
Ericsson AB Mjärdevi, Linköping

Preferred Starting Date
Spring 2018

Keywords
C++, Mobile Telecommunication, Cloud, Distributed real time systems, 5G

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