Traffic Offloading for Online Video Service in Vehicular Networks A Cooperative Approach

ABSTRACT

- In this paper, we propose a cooperative downloading mechanism in heterogeneous vehicular networks that comprises vehicular ad hoc network and cellular network.
- In this mechanism, RSUs act as traffic managers to fetch proper data from the Internet and then distribute to vehicles in an approximately optimal manner.
- Specifically, based on vehicular mobility prediction and inter-node throughput estimation, a storage time aggregated graph is constructed for planning transmission scheme.

EXISTING SYSTEM

- Online video service becomes prevalent nowadays, as people are accustomed to getting information in form of videos.
- While home users can easily retrieve all kinds of contents onto their laptops, vehicular users are constrained by intermittent connectivity to roadside units.
- Besides, as the load of cellular infrastructure increases dramatically, it is envisioned that the cellular network can be offloaded by utilizing RSUs and vehicular relays.

PROPOSED SYSTEM

- A STAG method is employed to illustrate the optimization problem of minimizing stalling time as well as maximizing received amount.
- Accordingly, we propose a greedy-driven algorithm named SSTF-MRAS to cope with this problem, and its efficiency analysis proves that it can find a suboptimal solution in polynomial time complexity.
- This study provides an illustration of communication re-source management through planning transmission scheme in vehicular networks.

HARDWARE REQUIREMENTS Intel core 13 Processor RAM 2B• 20 GF Hard Disk

SOFTWARE REQUIREMENTS

: LINUX

• Operating System

- Tool
- Front End

- : Network Simulator-2
- : OTCL (Object Oriented Tool Command Language)

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