Location Based Routing for Vehicular Ad Hoc Networks (LCT1-14)

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Methodology

Result of Running VANET

Software and Hardware Requirement

Introduction

The traditional structure of the internet is the centralized hierarchy server model, where each device has to communicate with its superior server for getting the destination address based on routing table. However, it does not work in rural area, for example, in the middle of a highway. People are mainly travelling in cars at a high speed, non-stop, as a result, devices will be joining in and out one broadcast range within a couple of seconds. The routing table is required to updates frequently but actually cannot be achieved.

Therefore, the project aims to study “Location Based Routing for Vehicular Ad Hoc Networks” (VANET). Using global positioning system (GPS) as guidance, VANET uses cars as mobile nodes to create a mobile network and does not rely on routers in wired networks or access points so that multiple nodes (cars) allow exchanging data with wide broadcast range.

Objective

Using VANET,
1. users can communicate with another node directly
2. outside its own broadcast range but within the same ad-hoc network
3. under moving
4. without the central network core

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