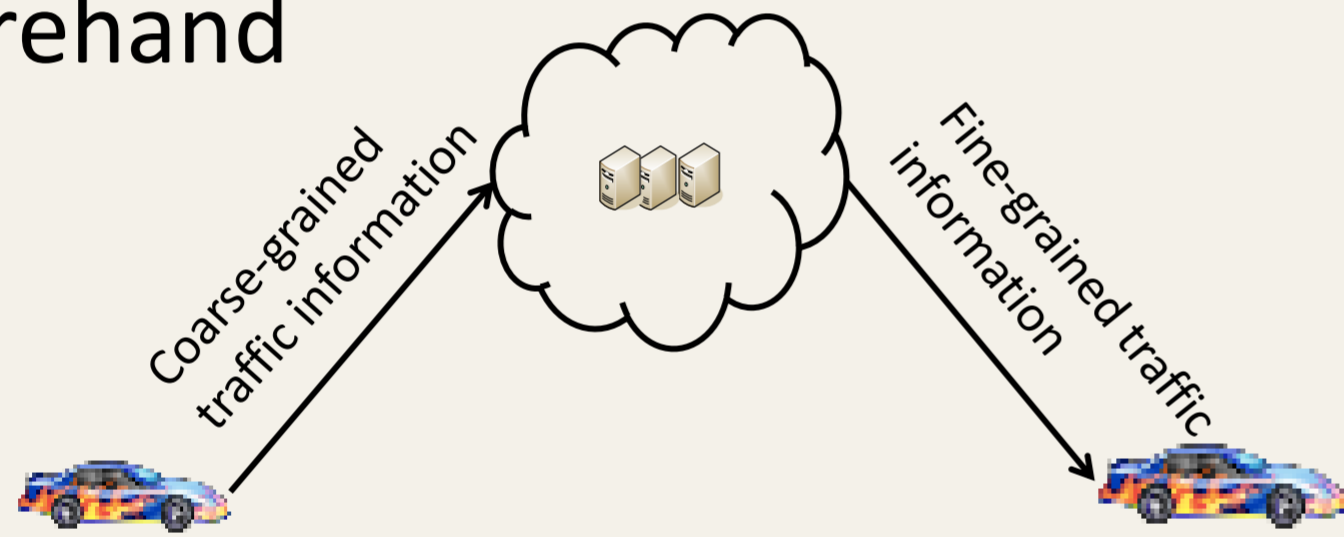


TaaS: Secure Cloud-assisted Traffic Information Dissemination in Vehicular Ad Hoc NETWORKS

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1. Introduction

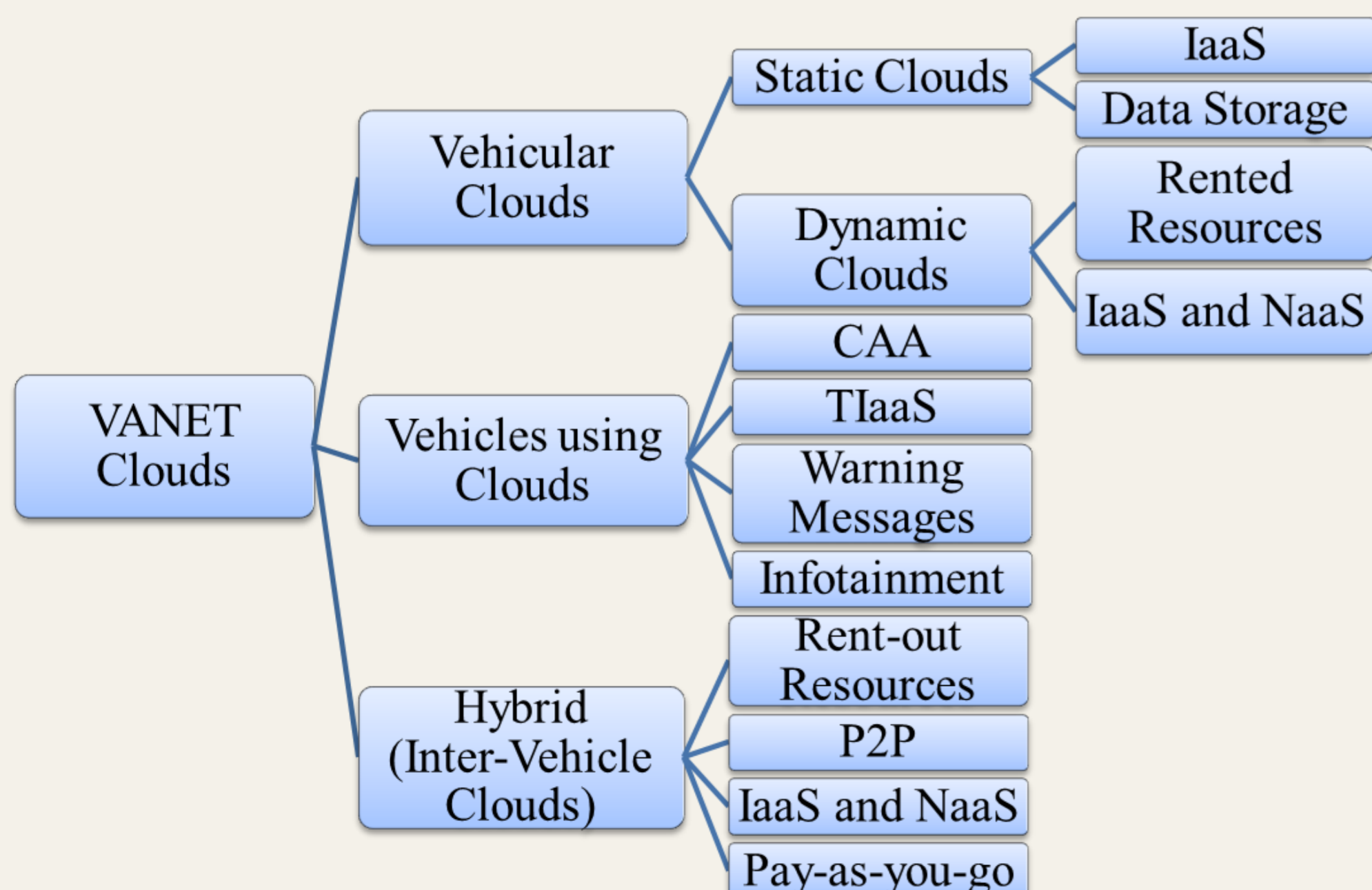
- Traffic Information dissemination is cornerstone in VANET
- Current VANET application relies upon such information
- To extend the radius of the traffic view, we leverage clouds for crowdsourcing
- **Basic Idea**
 - Share Coarse-grained information with clouds
 - Get Fine-grained traffic information from clouds based on current and near-future locations
- Clouds decides smartly (who needs what?)
- Vehicles must subscribe to the service beforehand



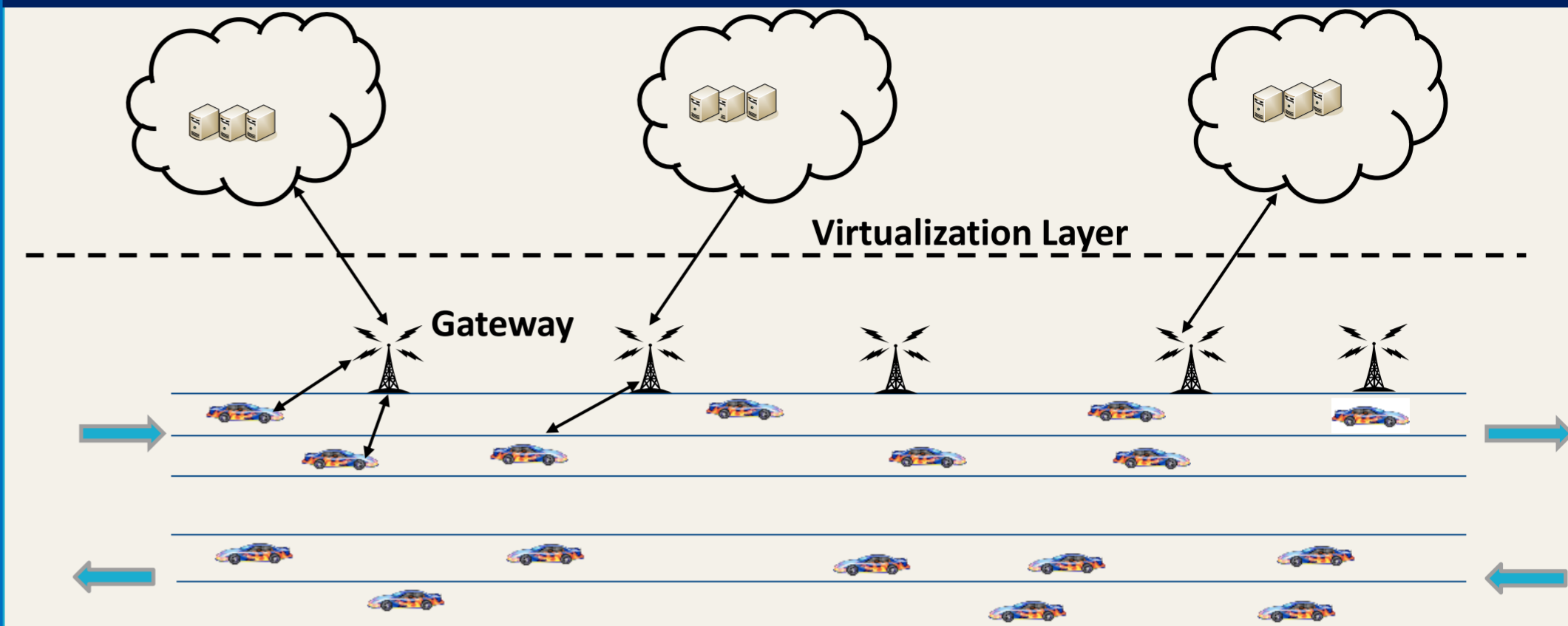
2. VANET

- V2x (V2V and V2I) communication
- Heart-beat messages (beacons) with high frequency
- Construction of traffic views based on beacons

3. VANET Clouds



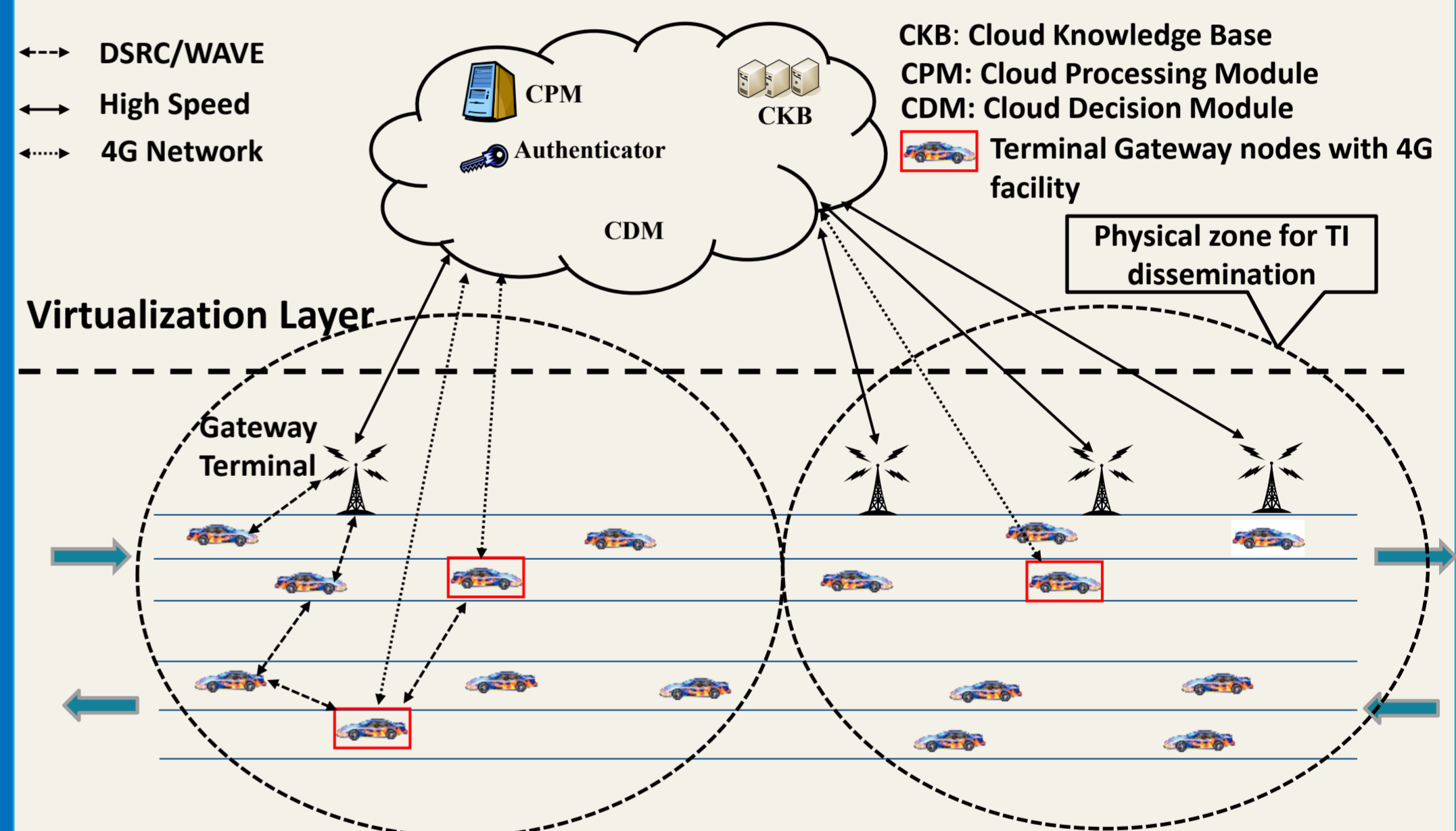
4. VANET using Clouds (VuC)



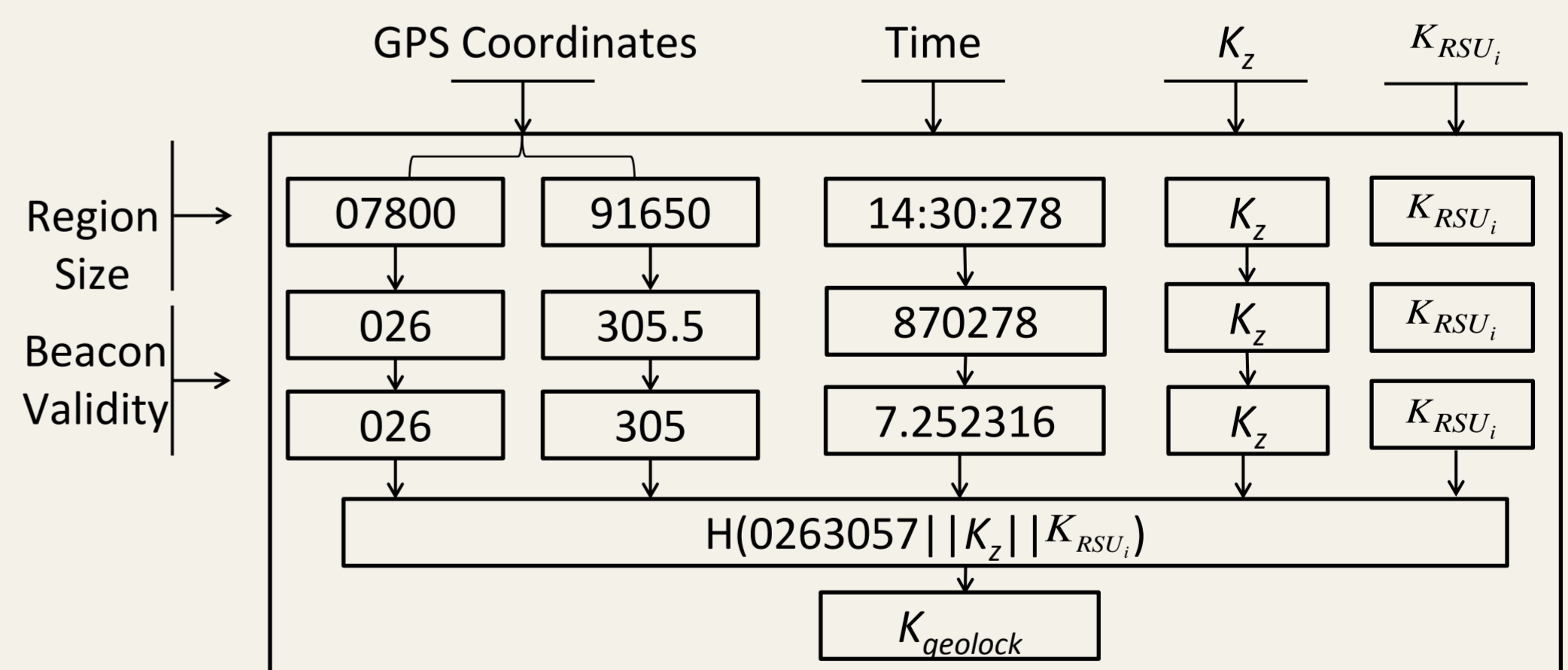
5. Motivation

- Non-line-of-sight (NLOS)
- Cross-road Corners
- Load distribution and thin client concept
- Ideal for early stages of VANET

6. Proposed TaaS



7. Geolock Based Encryption



8. Protocol

