Experimental Analysis

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1 Experiment

This experiment roughly simulates the vehicles and the resource pool by setting the random parameters of vehicles (coordinate, amount of resource). There are two set experiments: stack-only resource pool and evaluation function resource pool. Both sets experience 40 times and each experiment has 30 vehicles in the resource pool with random parameters.

2 Analysis and conclusion

According to the recorded data of experiments, I summarize in two parts. The first is the average distance between the client vehicle and all the service vehicles in each request. The second part is the number of service vehicles in a request. The smaller average distance effect the Qos of V2V which can reduce the latency by reducing the transport distance. The smaller number of service vehicles can enhance Qos by reducing the network nodes. In conclusion, (Figure2)(Figure1)using the evaluation function is better than using stack only in VFC resource pool.

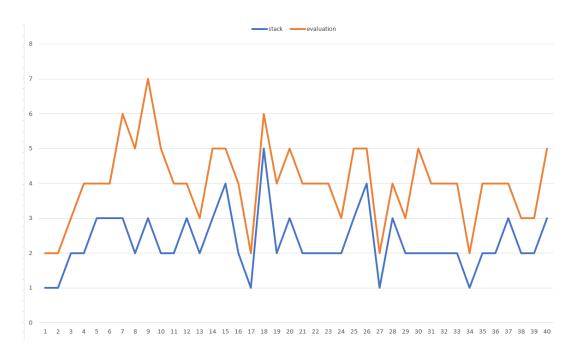


Figure 1: number of service vehicles

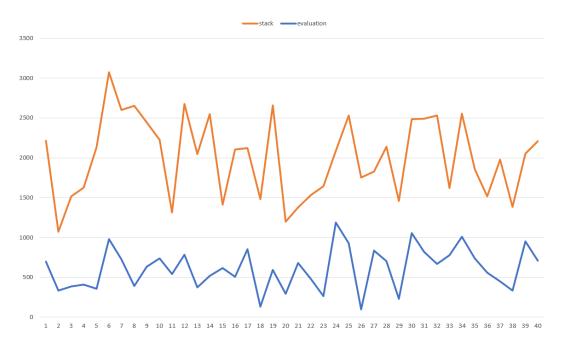


Figure 2: average distance