

Toll Guarantee Model

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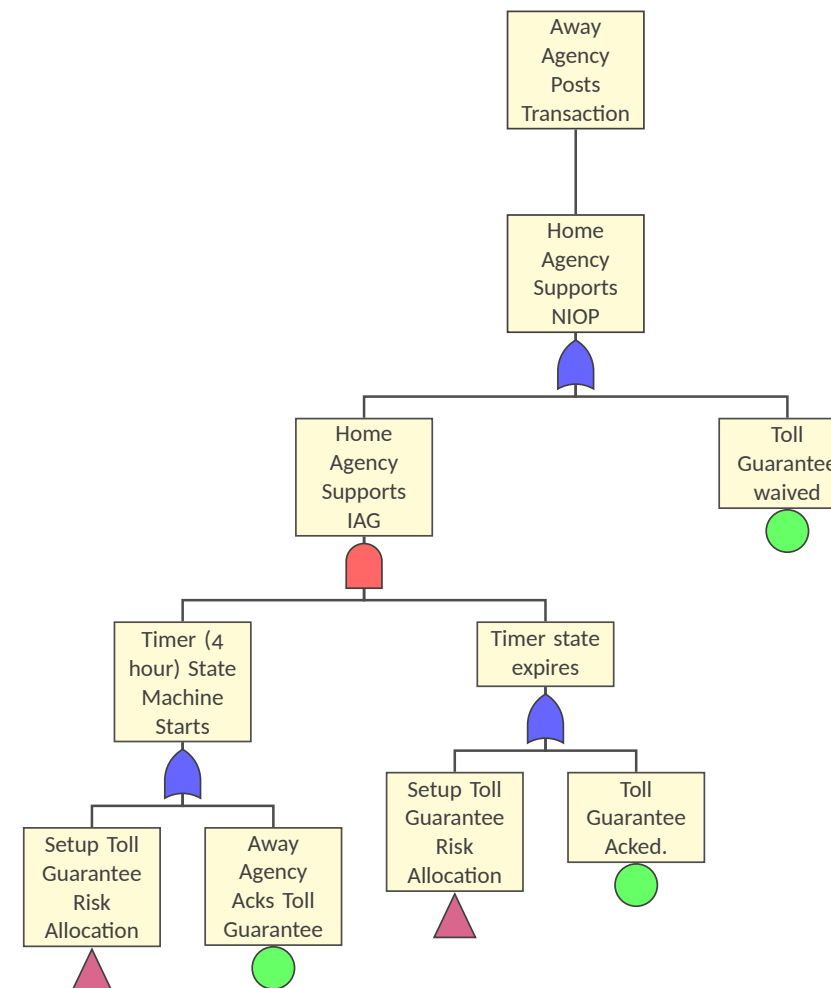
- ▶ The diagram to the right is an informal representation of and/or gates.
- ▶ This question is akin to be a user story, with all the relevant analysis.
- ▶ This diagram adds a concept of a Risk allocation (Rick - can you please expand on this term.).
- ▶ The state machine is implemented as a cronjob/daemonjob, notification service for the appropriate agency and or users from the agency so that the user can act on the toll guarantee request by the away agency.

Example

A key benefit of all contracts is the allocation of risk. This is important between parties dealing at arms length, because each wants to maximize their advantages. It is equally important between cooperating toll agencies. Overall financial effectiveness of each agency is important to stakeholders, and can be especially important with respect to bonds: bondholders have expectations of performance, and failure to meet expectations can have significant negative impacts. By properly allocating risk, a contract or working agreement between agencies ensures that each agency can properly understand and manage their risk. For a traditional contract, ensuring that the risk is properly allocated, and remains so, requires considerable manual effort. For example, each release of operational code must be reviewed to ensure that the functionality maintains the proper allocation of risk, especially around areas like time limits.

Notification service is part of the overall reporting and alerting mechanisms is part of the core implementation. This figure demonstrates an example of a potential implementation of the smart contracts working to allocate risk to the appropriate agency.

One of the considerations is that when a smart contract is being executed all the agencies that are involved in the transaction will be aware of the changes to the ledger.



- ▶ Amount of uncollected toll per year for Maryland - USD 137MM. [Link](#)
- ▶ "States treat violations differently. Each state has access to other state's motor vehicle registration data. The problem is: how do we get people to pay what they owe? what is the carrot and what is the stick? if i get a toll violation from Kansas, what is the likelihood that I will be traveling through Kansas again? if i do it all the time, i would likely pay. if it is a one-time thing, no way i pay. State's should come up with a threshold value and then agree to penalize THEIR residents if they go above the threshold in a different state..." - Conduent
- ▶ Fleet management along with risk allocation could be a starting point for the MVP - Kyra Solutions

Thank you for your time!

