In a discussion with @degregat @nikete @cwgoes @apriori discussed this report. In this thread, we'll outline who will contribute what to the ART. Will discuss with @AHart later today.

For context: Original Proposal

Proposal

What is a solver?

The term in the cryptocurrency research/builder discourse arises when used to discuss intent-centric protocols. Typically, the term solver is meant to encompass an entity that does:

- computation search,
- liquidity provision,
- and transaction submission.

In our thinking , these roles can be unbundled. Different actors can fill each of these functions. In addition, our notion of a solver requires proving of transactions (producing zero-knowledge proofs). With the emergence of proving marketplaces and shared aggregation / verification techniques, it makes sense to discuss our opinion(s) here.

In particular, the goal of this ART is to outline our current understanding of the entity we refer to as "solver" by defining the roles and responsibilities clearly, and perhaps briefly speculating on how a "solver" could be composed of different actors.

The report should also touch on the different ways that intents can be "solved":

- coincidence of wants (cycles / ring trades).
- market maker.
- users matching their own intents.

Other topics of interest:

- economic pre-confirmations

.

- trade-off b/w latency and information disclosure.
- solver interface.
- collaborative solving economics.
- solving for different application types.

Proposed authors: @apriori @AHart

My part:

- introduce the concept of a solver and review (literature) how the term is used in the context of existing Ethereum-based protocols
- outline what the report aims to achieve.