Event histories are unfolded, but only those that preserve static safety properties, defined offline via model checking. These choices determine the balance between inter-agent consistency, autonomy and trust.

Related Work

- **Collecting Facts**: Agents accept facts from peers, but only if they conform to the static specification, e.g., they are appropriately cryptographically signed.
- **Unfolding Event History**: Event histories are unfolded, but only those that preserve static safety properties, defined offline via model checking. These choices determine the balance between inter-agent consistency, autonomy and trust.
- **Changing Current State**: The system state is modeled by two abstractions interfaced by unfolding graphs of immutable events, much like the unfolding chains of immutable transaction blocks in blockchains.
- **Facts are created via inference based on multi-modal logics such as epistemic logic and fluent calculus.**
- **Events are partially chronologically ordered, much like tasks in computational workflows, encouraging parallelism in computing the current state.**
- **Manual and automated monitoring of the facts, histories, and state incentivize agents to play by the rules.**

Acknowledgements: This work is part of the AMdEX Fieldlab project supported by Kansen Voor West EFRO (KFW00309) and the province of Noord-Holland.