### Motivation

# Top Broker Accused of \$50 Billion Fraud



Client Shock Waves
Country-club investors targeted. Please see Als.

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source: Wall Street Journal

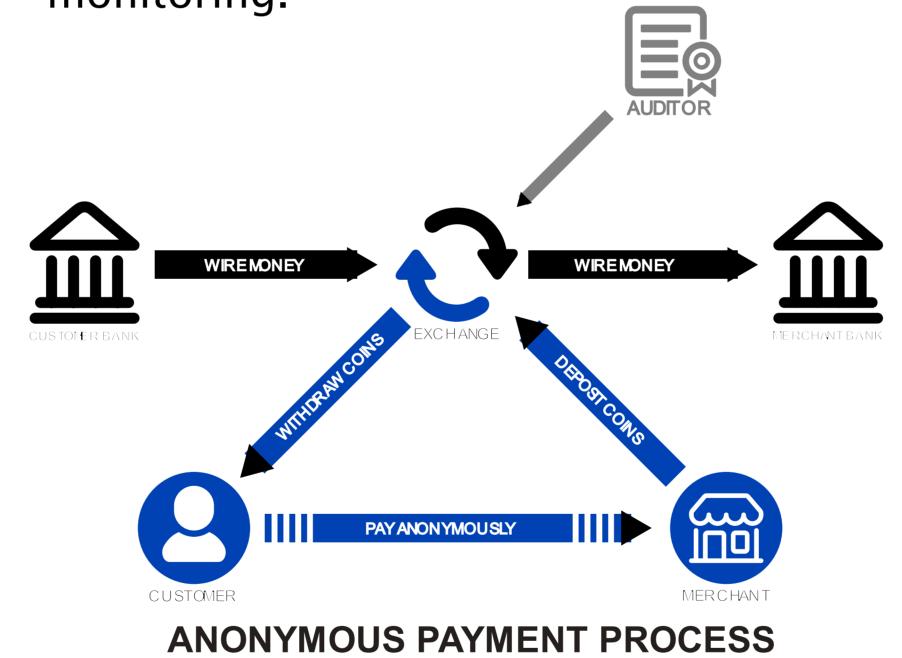
source: Financial Times

Roughly once every decade, a major banking fraud rocks the financial world. Scandals, that could have been prevented with proper oversight; and this is exactly what the GNU Taler auditor is for. In fact, it can detect a variety of misbehaviours (of both exchanges and merchants), including but not limited to:

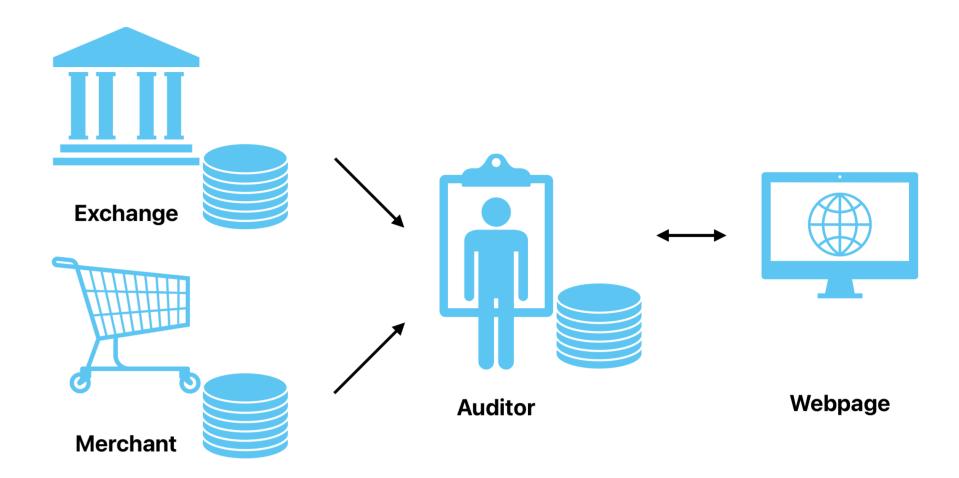
- double spending attempts
- money printing
- invalid wire transfers
- internal system failures

## Architecture

The GNU Taler auditor's responsibility is monitoring and auditing the operation of a GNU Taler exchange by verifying signatures, computing balances and properties. Its logic is split into six programs, referred to as helpers, that run on a job scheduler. The auditor works in real-time, and its results are made available though a single page application for easy monitoring.



source: GNU Taler



The flow of data between different actors

#### Results

With the single page application and real-time auditing, operators or regulators of a GNU Taler exchange can react swiftly in case of a serious inconsistency and thus minimize potential for financial loss.

The auditor's database can be accessed via a RESTful API; this makes it easy to integrate into existing monitoring infrastructure.





# Real-Time Auditing of GNU Taler

