Identity, Trust & Data

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Does blockchain technology solve...
The Identity Problem

• The “quality” or “security” of a digital identity
• The relative “freedom” or independence of an identity from any given authority
• The source of trust for a digital identity

- Privacy
- Binding to real-world
- Attributes, reputations
- Provenance, trustworthiness
- Availability, persistence
- Auditability, non-repudiability, etc
The Data Problem

Anthem: Hacked Database
Included 78.8 Million People
Health insurer says data breach affected up to 70 million
Anthem members

- Organizations are holding growing amounts of data
- Making them attractive to attacks
- Increasing their liabilities
- Impacting privacy of subjects & owners
- Ownership & sharing
- Metadata
The Trust Problem

- Technical trust vs Social trust
- Social trust today encoded as legal
- Legal Trust Framework defines “rules of the game” and resolves “exceptions”
- Standardization of LTF for identity & for data sharing

- “Trustless” not equivalent to ”Trustworthy”
- Decentralization does not translate to trust
- Is “trust” a consensus problem
- Smart Contracts, human errors & contrivances
- Smart malware
The Privacy Problem

- Data about human behavior has always been essential for both government and industry
- But how do we enable institutions to collect and analyze data without abusing that information

New Principles (OPAL):

1. Never allow raw data to leave repo
2. Data encrypted at all times, at rest & in computation
3. Aggregate answers only
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