Identity and Reputation

Phillip J. Windley, Ph.D.
Dept. of Computer Science
Brigham Young University

www.windley.com
enterprise vs. user-centric
1. identity provider
2. relying party
1. identity provider
2. relying party
3. user
scenario one
• id provider and relying party have prior arrangement

• user is only involved peripherally and because of policy
scenario two
• id provider and relying party need no prior agreement

• user involved structurally
separate claim acquisition & presentation
scale & privacy advantages
OpenID
• simple to integrate
• no need for replying party and id provider to know about each other
• authentication only
reputation
your story about me
based on identity
\[ r_{id} \approx f(\phi, T_x, \rho) \]
cs601

- reputation theme
- reviewed dozens of papers
- class project
  - agile methodology
  - 3 two-week iterations
  - 9 students
design philosophy

- reputation is a calculated score
- factors
  - verified facts and credentials
  - transactions
  - ratings & endorsements
- transparency
- transactions jointly owned and immutable
architecture

- id system neutral
- data model for users and credentials
- rules engine
- plug-in architecture
  - adds data model
  - adds rule operations
you’ve got to start somewhere
demo time
future work

• ratings and endorsements
• interuser trust
  • claim bloglines OPML, friends
• check other network data
• identity broker