Aura
A peer-to-peer reputation system
Cat Okita, 2003

Reputation Systems

- What is a Reputation System?
  - Livejournal/Friendster, eBay, Advogato, Slashcode
- Why do you care?
- What could you use this for?
  - Establishing trust, performance metrics, meme propagation, spam filtering

Challenges

- Authentication
- Trust
- Non-repudiation

Design Considerations

- Fast, resource efficient
- Secure - Difficult to corrupt information or impersonate others
- Portable - Easy to use from any location
- Simple to use and extend (plugins)
- Independent - not dependant on a centralized server

Attacks

- Information poisoning
  - Flooding
  - Trojans
  - Identity theft
  - Impersonation
  - DoS

Implementation

- Peer-to-peer
  - Local datastore
  - Can also run as an aggregator
- Reputation
  - overall personal and general, or by specific area
- Gossip
  - information about indirect entities

A quick check of Reputation

- Picking a mailer
  - Stable, fast, secure?
- Finding out about a poster to a mailing list
  - Credibility: Crazy, expert, unknown?
- Filtering
  - Personal or server level

Configuration

- Text-based configuration
  - Use Templates to describe data format to exchange details
- Requires use of public/private key cryptography

Future Plans

- Pretty GUI
- Better cross-platform portability
- Improved statistical reporting
- Implementation of group keys
- Trigger automation

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- Available at:
  - http://www.geekness.net/tools/aura
- Email to:
  - aura@geekness.net

- Questions???