

# A Social Networking-Based Access Control Scheme for Personal Content

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# Sharing Personal Content Online is a Mess!

- Huge growth of personal content
  - Photos, videos, blog pages, song collections
- Two common ways of sharing it with your friends and family

# 1. Use e-mail service (e.g., GMail)

- Restrictions due to GMail's bandwidth costs
- Email is based on Push model
  - Inefficient way to share content
- E-mail was never designed to act as a content delivery system!

## 2. Use Social Networking Sites

- Many content-specific sites with little support for access control
- Users must maintain many copies of social network
  - Copies of social network become inconsistent and out-of-date
  - Users must be registered to upload/access restricted content
  - Redundant information in many cases
- **People have one social network, yet they now must manage several copies of their social network**

# Sharing Personal Content Online is a Mess!

- There is a mismatch between people's needs and what today's sites offer!

# Separate Social Information from Content Serving

- Observation: today's sites store **both** social information **and** personal content
- Insight: separate them
  - Let people manage social networks
  - Let sites serve content

# Our Proposal for Cleaning Up the Mess

# Let People Manage Social Networks

- Capture social relations digitally with social attestations
  - Issue signed attestation to your friends, family, buddies, etc...
  - People use attestations to prove their relationships to others
- Maintain **one** social network – personal address book
  - Managed by user
  - No infrastructure component



# Let Sites Serve Content

- Sites can offer access control suitable to the needs of personal content
  - Personal content needs social networks
- Social ACLs:
  - Restrict access to private photos to people with “family” attestations
  - Restrict access to private song collections to people with “friend” attestations

# New Internet Applications

- Social firewalls
  - Restrict home machine access to friends only
- Social Google Calendar
  - Publish different views of online calendar
    - One view to family, another view to colleagues

# Thank you for your attention!

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