Motivation

- The Framework
- The Approach

- "Friends" notion in social media is too coarse to enable fine-grained privacy management
- There is no simple way to grant access rights to only a set of trusted parties
- Trust-based privacy policies allow users to specify their privacy preferences based on their trust relationships, and help users to control their social data

Audience

- Action
  - View
  - Edit
  - Comment
  - Delete

Artifact

- Profile attributes
- Posted resources
- Messages
- Comments

Trust Model

- Explicit trust: friends, trust/block list
- Implicit trust: trust network derived from different social relationships

Trust-aware Privacy Control

- Privacy Protocol:
  - Trust Barrier – audience control
  - Action Set – action control
  - Confidentiality Level – artifact control

Protocol Example: People with trust value higher than 0.9 can edit and comment my "medium confidential" posts

Benefits and Challenges

- Benefits:
  - Fine-grained
  - User-defined privacy preferences
  - Applicable to many social platforms

- Challenges:
  - Designing usable implementation
  - Motivating users' participation to enrich implicit trust network

Using Underlying Inter-Entity Trust Information for Privacy Management

Alice’s relationship network