Tagging People for Access Control: Users' Perspective

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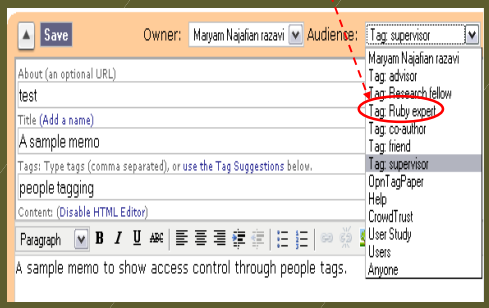
Introduction:

- Access control in social systems is often defined as a **network of friends** relationship
  - all "friends" are created equal
  - all relationships are reciprocal
- We propose instead **tagging people** to complement group-based access control
  - Each new tag applied to a person has a distinctly specifiable visibility
  - People tagged with the same keyword form a relationship-based access control group
  - **Egocentric**, **dynamic**, and **non-reciprocal**
- We report on users' feedback regarding **intuitiveness**, **usefulness**, and **usability** of people-tagging for access control

Implementation:

- **Incoming tags** show how others have classified this user
- **outgoing tags** show how this user has organized his/her connections
- Tags may signal **relationship** (advisor) or **assessment** (ruby expert)
- Different color-codes represent various visibility levels
- Possible to pivot on the tagger, the taggee, incoming, or outgoing tag



Methodology:

- We performed a lab study with three phases:

1. An initial survey
2. Performing 5 pre-defined tasks; each involved creating memos of various sensitivity and exposing them to different audiences
   - –whether to use classic group or people-tagging functionality
   - –what is the proper owner and audience for the memo
3. Semi-structured interviews

- 10 participants took part in the study

Results:

1. Private or semi-private tags were more popular for use on the Open Web, whereas public tags were considered more suitable for enterprise environment (i.e., the "goto" person for a certain task)
2. People tags were perceived differently form classic groups for access control; considered suitable for "**on-the-fly**, **temporary**, **dynamic**, **limited**" communications, as opposed to classic groups, considered suitable for "**long-term**, **focused**, **ongoing**" communications
3. Some control on the incoming tag was considered necessary
4. **Confirmation** of incoming tags was the control method of choice (compared to **deleting unwanted tags** and **changing the visibility of incoming tags**), because of having the least social implication
5. Usability of the people-tagging interface needs improvements, such as **easy navigation** to taggee's profile, ability to **tag more than one user at the same time**, and the ability to **tag in place**
6. Tagging people for access control seems **compatible with users' mental model;** our users made sophisticated observations and creative suggestions about the privacy model after only half an hour of controlled interaction with the system