

# Understanding Identity as a Social Construct

## Preliminary Thoughts

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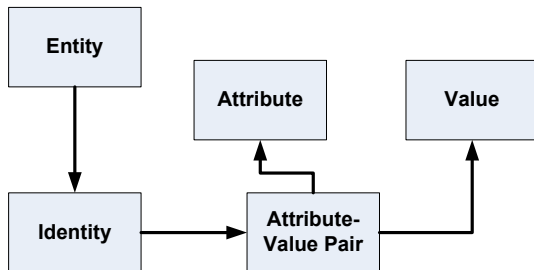
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# What is Identity?

- ▶ Has been studied from various points of view
  - ▶ IT: security (authentication and such)
  - ▶ Sociology: one's placement in a society
  - ▶ Psychology: personal feeling of self (?)

# Understanding Identity



# Identity and Uniqueness

- ▶ In general, identity is
  - ▶ Far from unique
    - ▶ Identity politics is about heritage or social groupings
    - ▶ You identify yourself as a researcher
  - ▶ May not be discrete or “crisply” defined
  - ▶ May not be credentialed
- ▶ Identity in IT: discrete and credentialed
  - ▶ Objects with guaranteed unique identifiers
  - ▶ Personae in online social networks
- ▶ Typical IT representation:
  - ▶ A set of attribute-value pairs
  - ▶ Often including some attributes that guarantee uniqueness
    - ▶ Identifier

# Identity and Norms

- ▶ We need identity as a basis for trust
  - ▶ Reflected in all decision-making, including about commitments, authorizations, powers, . . .
- ▶ If we can establish an identity without authenticating to an individual, we gain
  - ▶ Effective audit and control
  - ▶ While supporting improved privacy

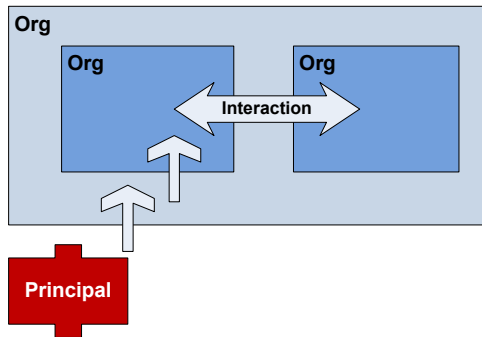
# An Organizational Approach

Read *Org* as *group*, *community*, or *social circle*

- ▶ Nested or partially overlapping Orgs, defined via roles
  - ▶ A principal is an individual or an Org
  - ▶ A principal adopts one or more roles in one or more Orgs
- ▶ On adopting a role, a principal acquires a token (signed by the Org)
  - ▶ One or more of the tokens signifies its identity for interactions as that role within the Org
  - ▶ And jointly with the Org's tokens for outside interactions
- ▶ An identity service verifies tokens
  - ▶ More generally, all such attributes in a message header

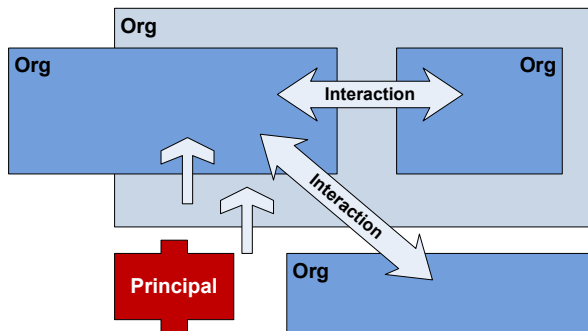
# Nested Organizations

Acquiring and using identities



# Partially Overlapping Organizations

## Benefits and risks





# Thanks!

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