

SecTOR Identity Component

Stakeholders

- ⬠ Users (authors, readers, reviewers, comment writers)
- ⬠ University libraries
- ⬠ Anyone missing?

User Identity

- ◇ „Normal“ user identity to interact with the SecTOR systems
- ◇ User-generated would be nice
- ◇ Uniquely identifies any given user who interacts with the SecTOR client
- ◇ One identity per user? If so → How do we limit the number of created identities per user?
 - ◇ ORCID?
- ◇ How to protect privacy and avoid storing unnecessary data in our system?

User Pseudonyms

- ◇ Each identified user receives a limited number of pseudonym IDs, which cannot be linked to the digital user ID
- ◇ Each pseudonym user ID receives a limited number of tokens, which cannot be linked to the pseudonym user ID nor to the digital user ID

⇒ Implement via Blockchain?

⇒ Implement identities manually or rely on existing standards? (e.g., Decentralized Identifiers?)

⇒ Blind signatures (from university client) on pseudonym IDs provided by users to “activate” them

APIs – User Client

- ◇ `GenerateUserID(a, b, c)` - returns a normal user ID XOR error message
- ◇ `GenerateLocalPseudonym(a, b, c)` - returns a new unsigned pseudonym key pair XOR error message
- ◇ `VerifyIdentity(ID)` - returns true/false XOR error message
- ◇ `VerifyPseudonym(a,b,c)` - returns true/false XOR error message
- ◇ ...

APIs – University Library Client

- ◇ SignPseudonym(publicKey) - returns signed (blind signature) public key (pseudonym) AND allocate the corresponding amount of tokens XOR error message
- ◇ AuthenticateUser(ID) - returns true/false XOR error message
- ◇ ...