

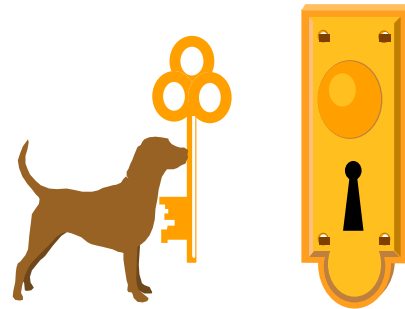
# *PUP security*

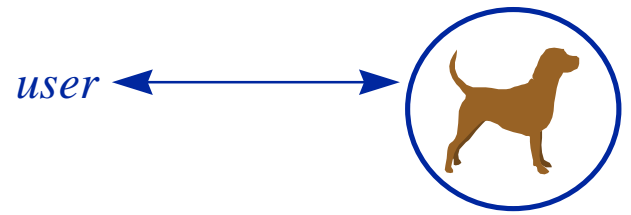
Will Harwood



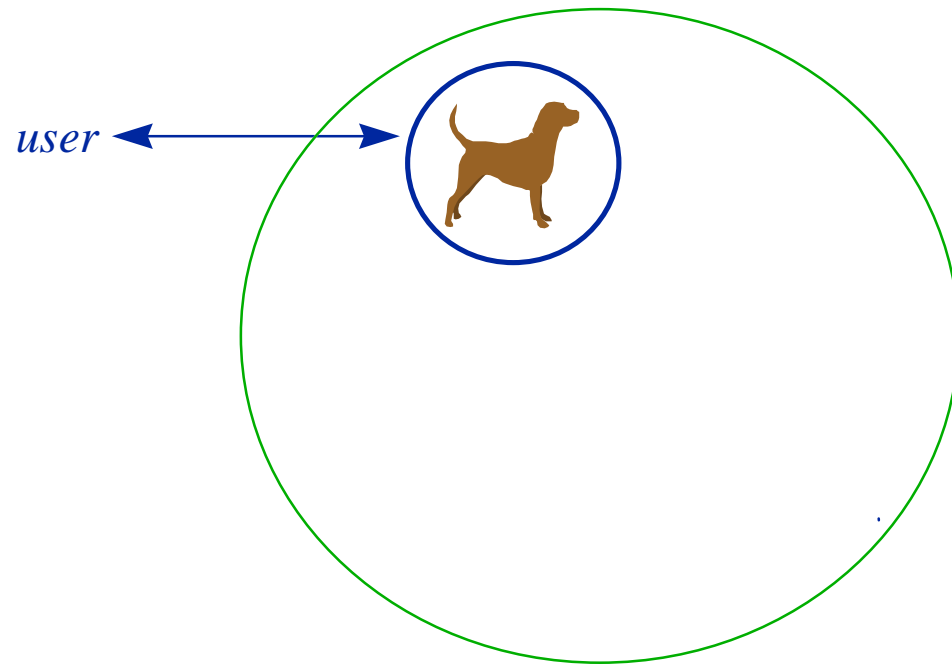
# *Security*

- Authenticity
- Privacy
- Anonymity
- Delegation
- Non Repudiation

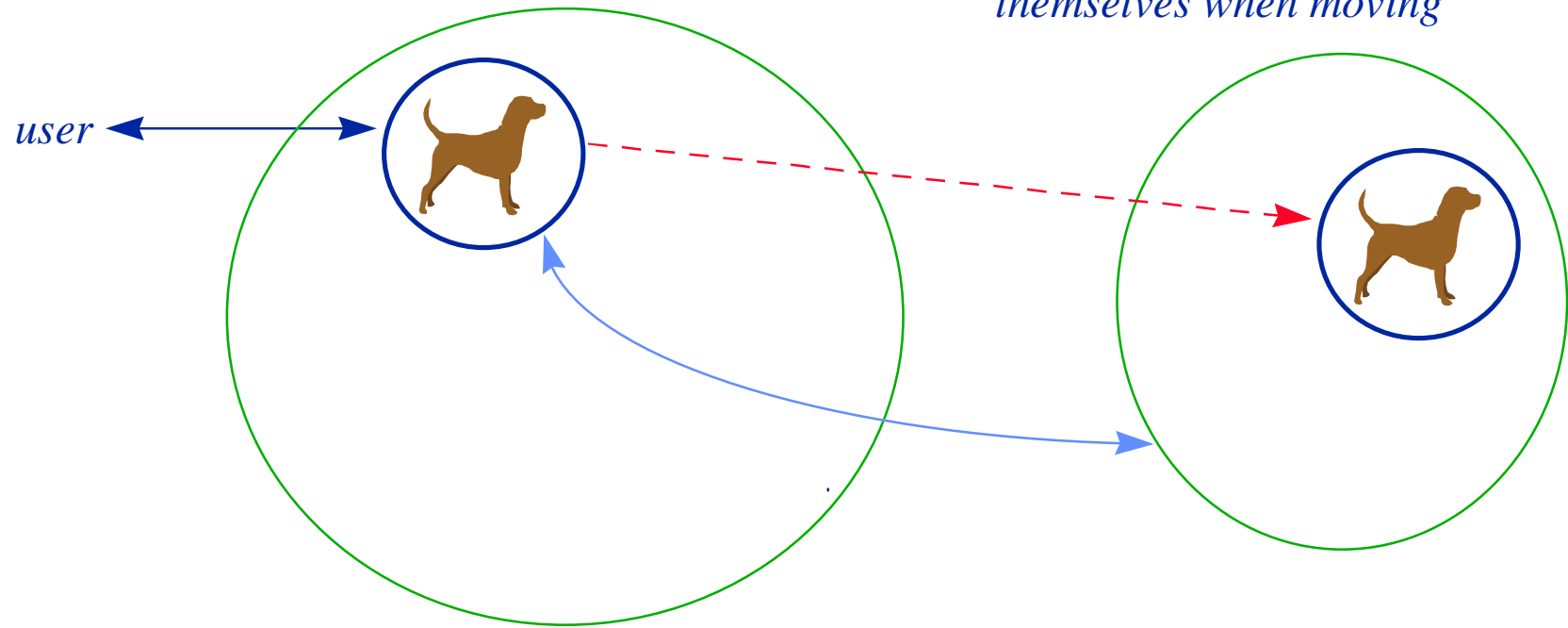


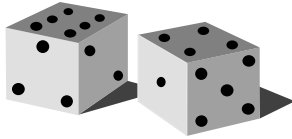


*PUPs must be protected*

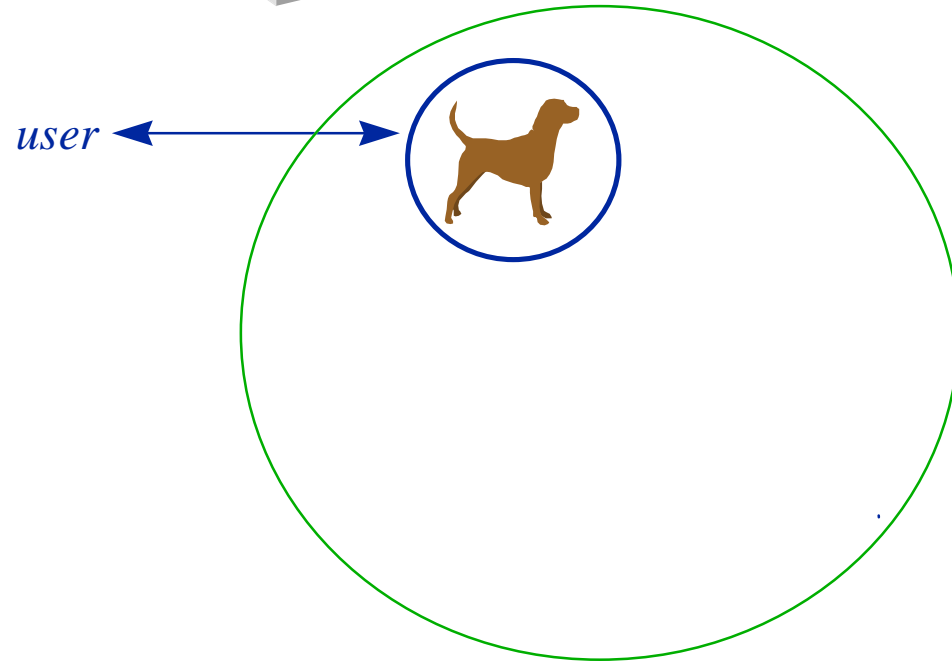


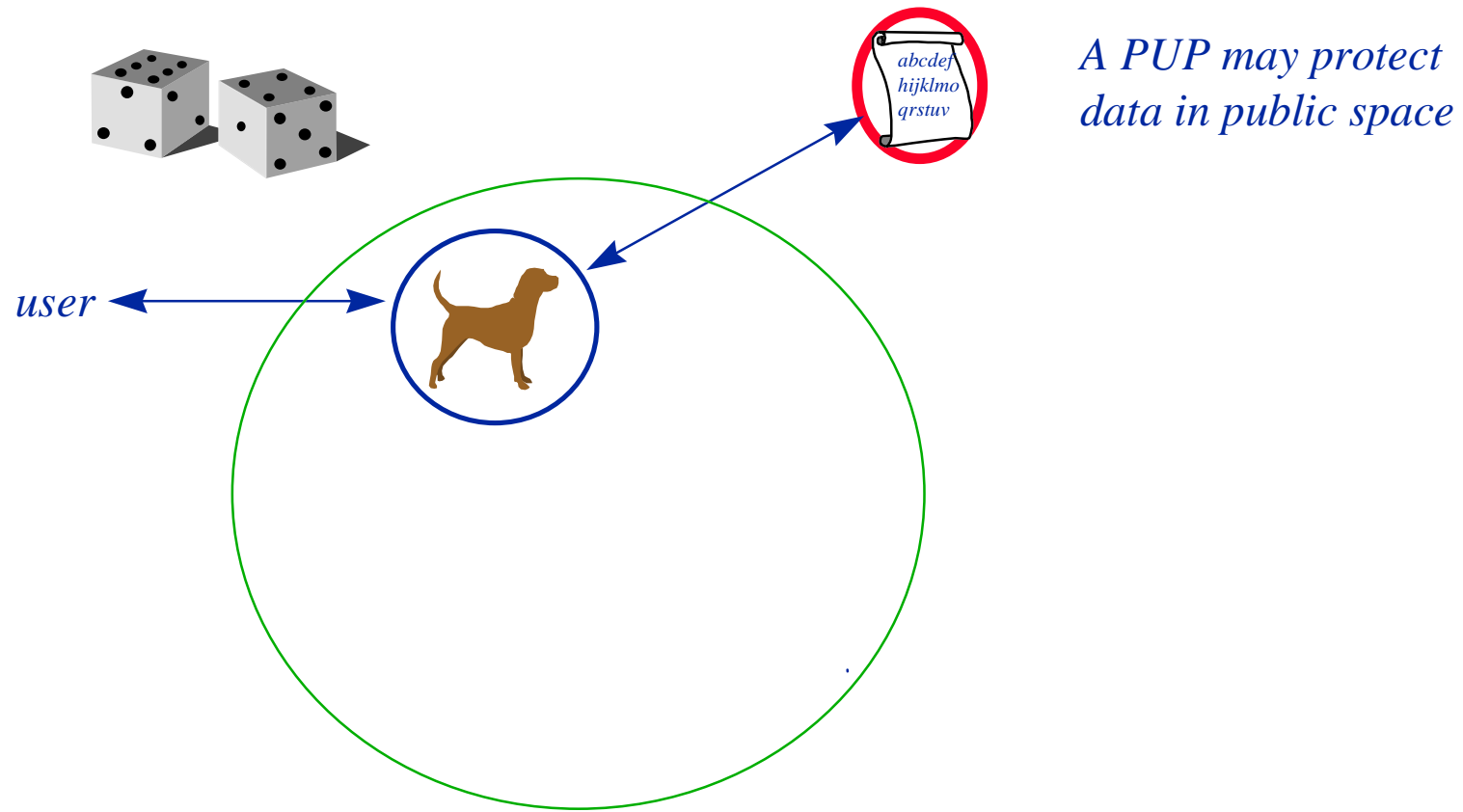
*PUPs must be protect themselves when moving*

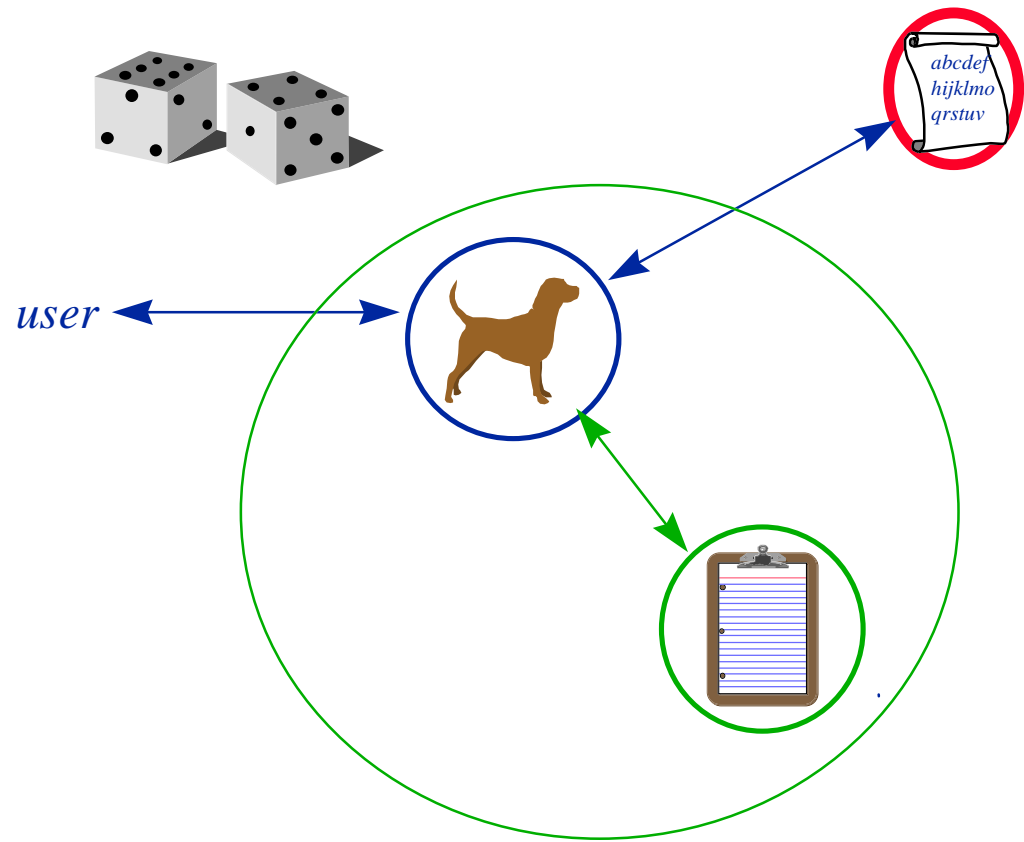




*Users must be authenticated*



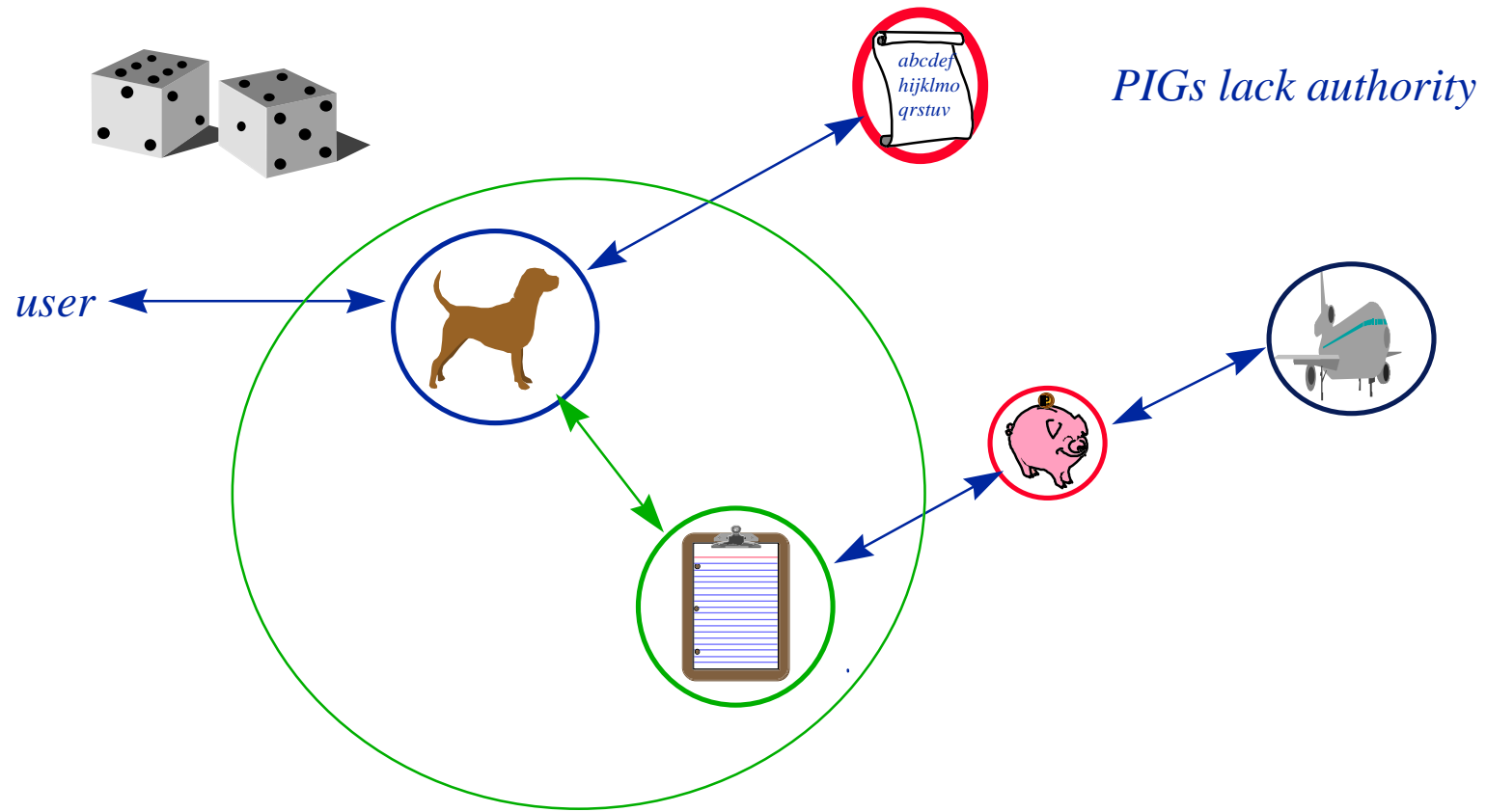




*A PUP may delegate authority*

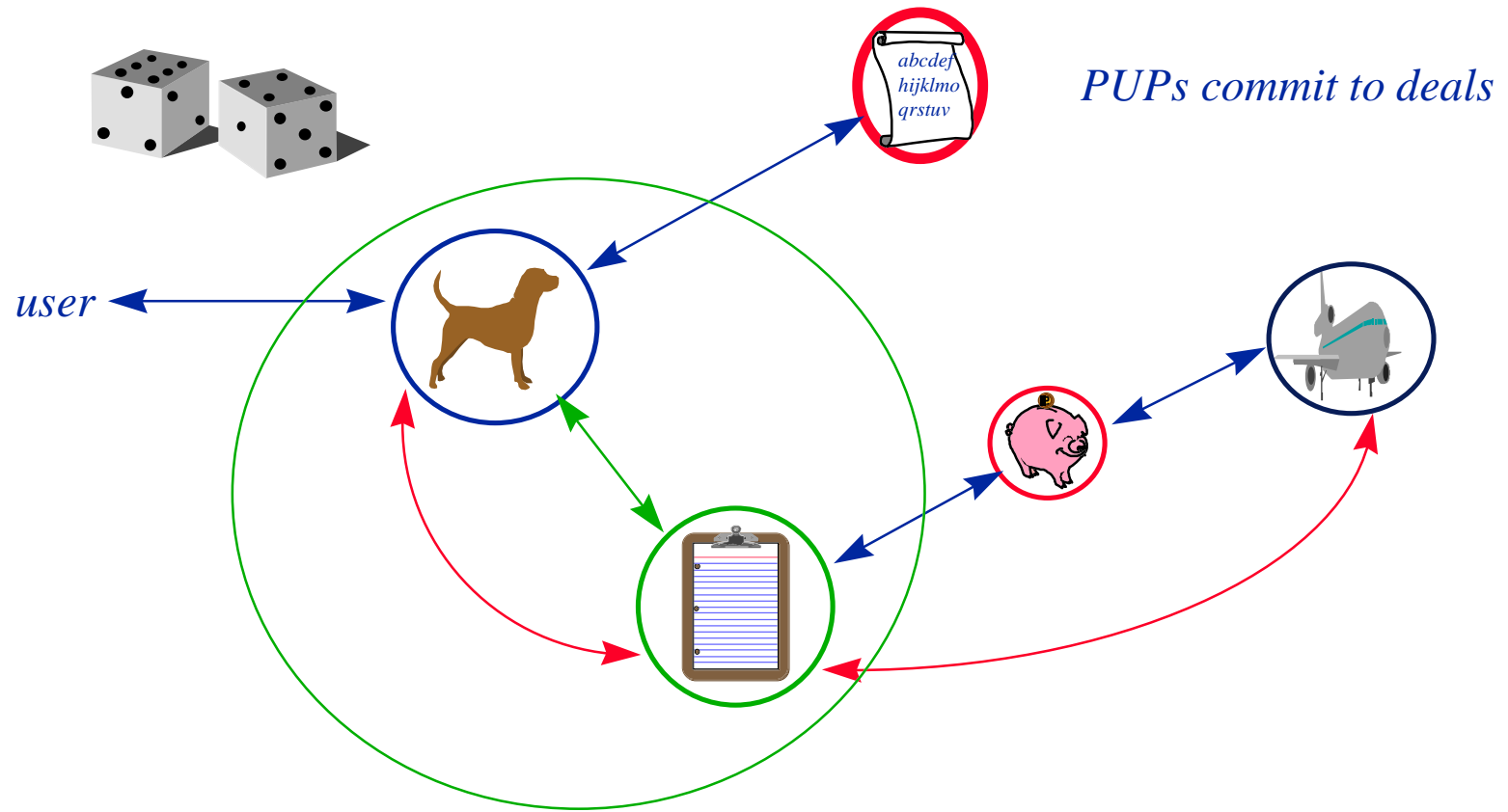


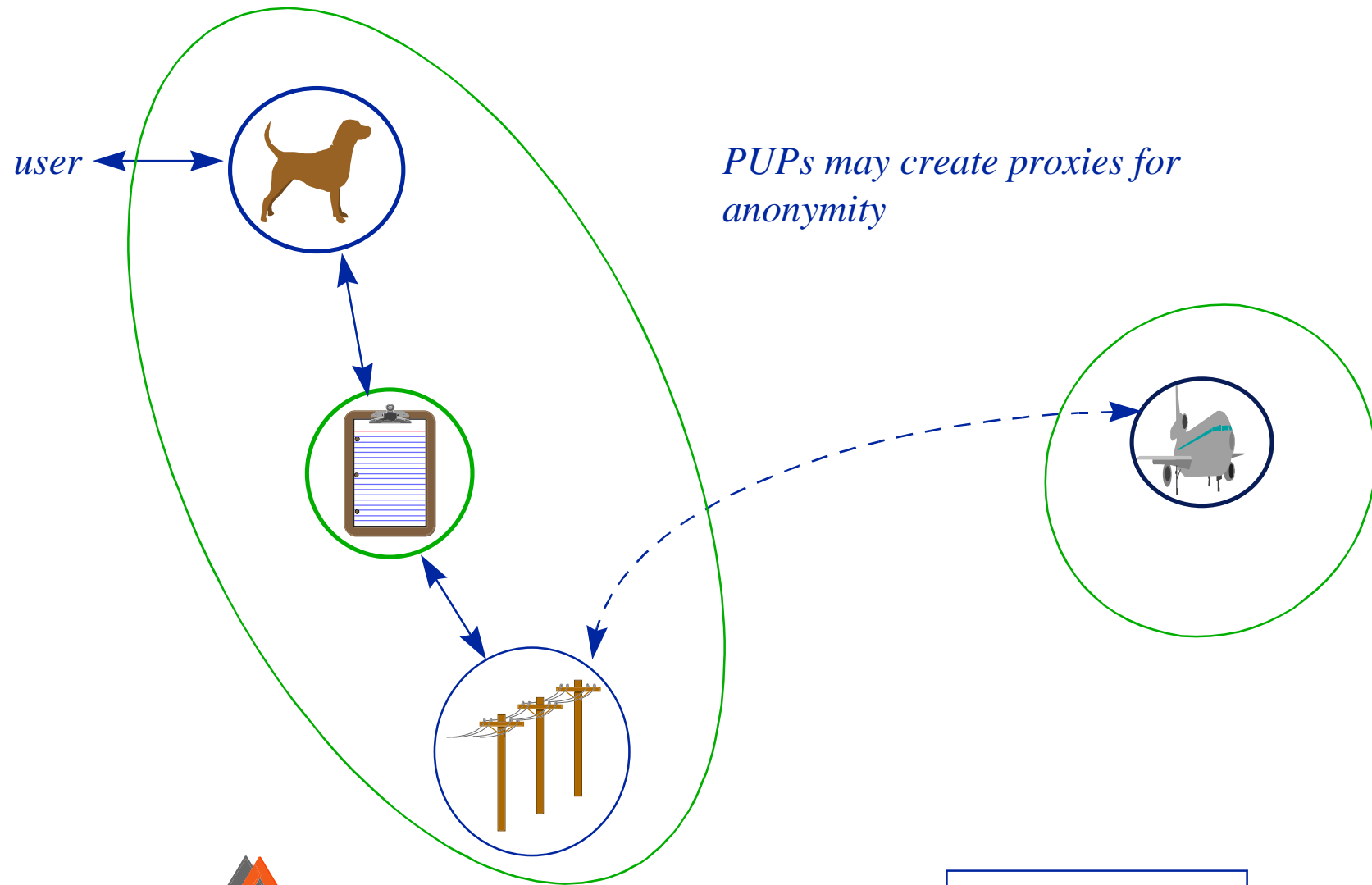


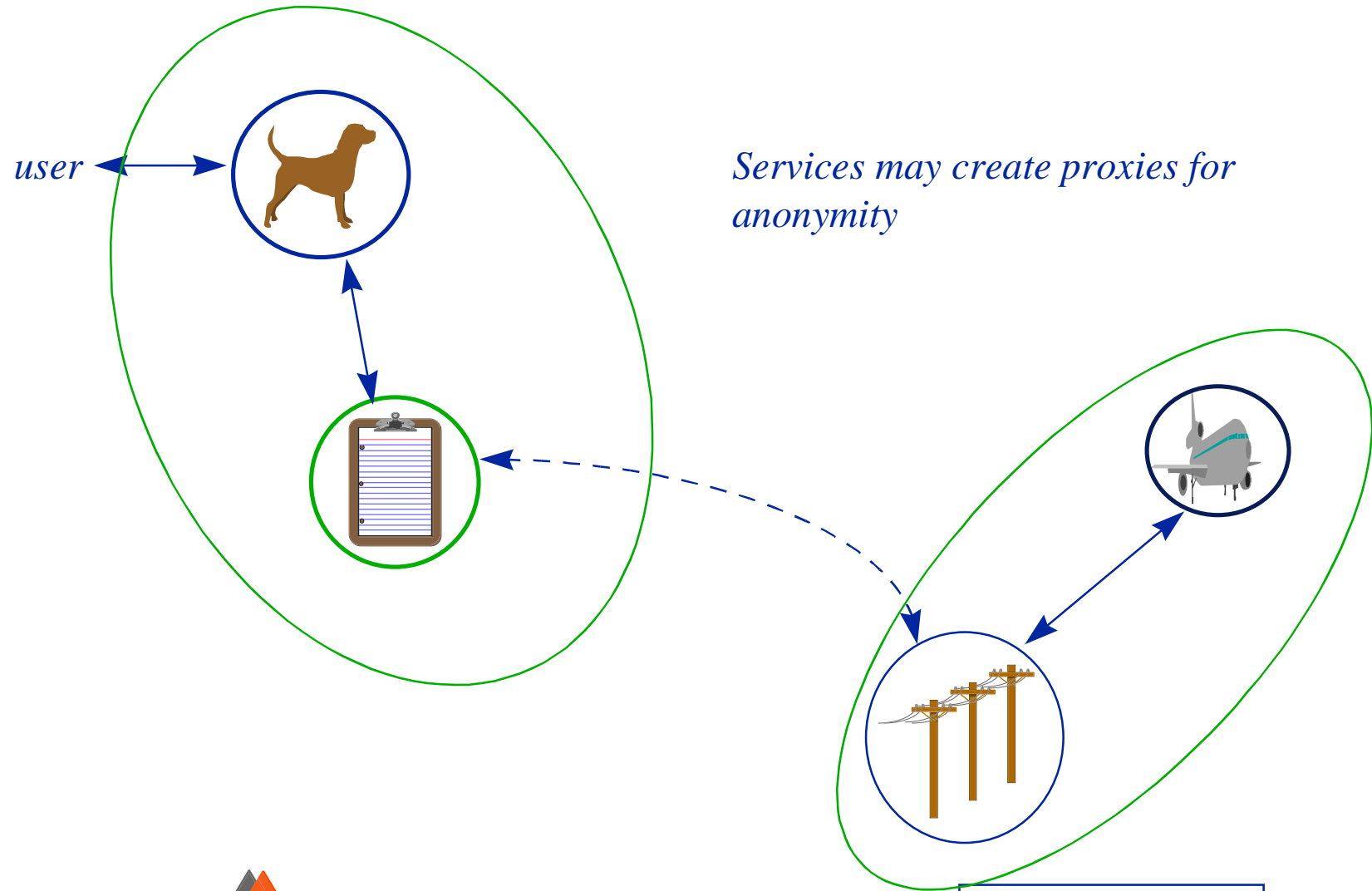


*PIGs lack authority*



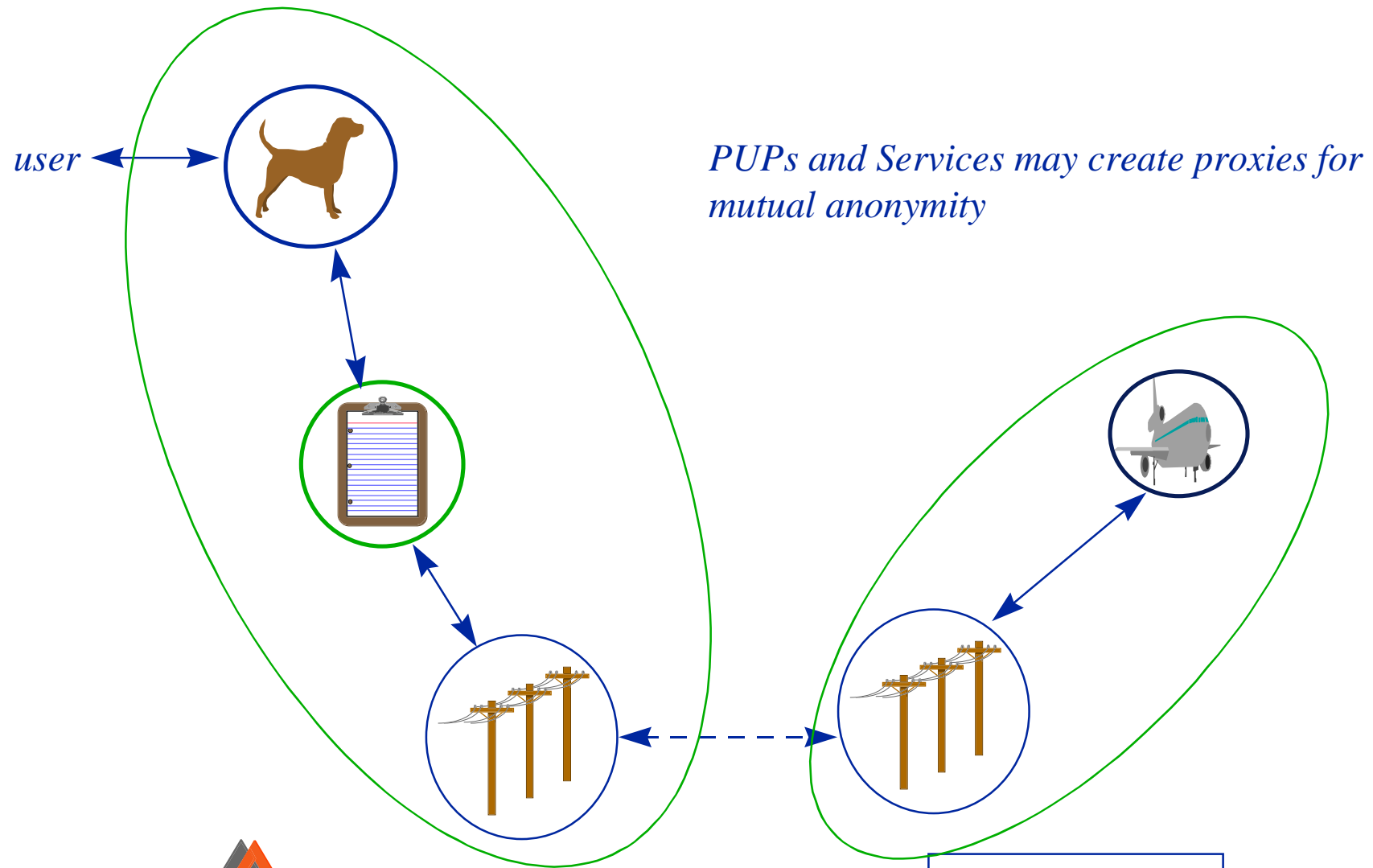






*Services may create proxies for anonymity*





# *Authentication*

- Users
  - Multiple Modalities
  - Scalable Risk
- PUPS
  - need to authenticate their location
- Services



# *Privacy*

- PUPs internal data
  - need to protect PUPs from dissection
- User data space
  - not all user data is in a PUP
- Communication
  - User to PUP
  - PUP to TA, PIG & Service ...



# *Delegation & Non Repudiation*

- PUPs may delegate authority to TA's
- Users cannot repudiate deals done by PUPs
- PUPs cannot repudiate deals done by TA's
- Service cannot repudiate deal offered





# *Questions*

- Audit?
  - users, services, network providers
- Other notions of security?
- Do users want agents to have authority?
- Are agents actions legally binding?
- What happens at international boundaries?
- Are there valid, legal uses for double blind dealing?

