GENITor

Nikita Borisov

University of Illinois at Urbana-Champaign

- A network for anonymous communication
- Many current users (~200M), most legitimate, some not
- Two objectives:
  - Anonymity
  - Usability -> *Performance*
- Research requires test-bed evaluation
  - Best experiments will involve real, "Opt-in" users

Tor as an Opt-In application in GENI

- Is it even legal?
- How do we protect the rest of the world?

but also...

- How do we protect the users from GENI
  - Tor experimenters (i.e., me)
  - Other experimenters (may not even be malicious)
  - GENI infrastructure

Privacy Guarantees

- Federation
  - Distribute Tor across multiple sub-units
  - Interconnect GeniTor with real Tor
- Privacy vs. measurement
  - Put some restrictions on what measurements I can collect
    - And offer credible guarantees!
  - Provide restrictions on measurements of co-hosted experiments