

Privacy and Security Program IETF 91



Landscape of work

- 3 challenges:
 - Internet protocols are developed as building blocks and thus security and privacy protections are piecemeal
 - security approaches presume that attackers have resources on par with those available to those secure the system.
 - many systems breach confidentialitr to simplify the delivery of services or meet other requirements.



3 streams of work

- 1. Internet scale resilience
 - → Showrunner: Brian Trammel)
- 2. Confidentiality Area
 - → Showrunner: Joe Hall
- 3. Trust Area
 - → Showrunner: Karen O'Donoghue



Internet Scale Resilience

Areas of work: route hijacking, distributed denial of service, and related attacks; it will describe the available mitigations and work with related IETF programs to limit the development of protocols which offer amplification opportunities to the attackers.

Documents:

Threat model document

Mitigations document

IAB statement on prevention of UDP amplification attacks

Program slides and white paper for broad audience



Confidentiality

Areas of work: threat models related to surveillance, describe building blocks which may be used to mitigate that threat, and provide a systems engineering level of description of how to build a confidential application which flows across the open Internet.

Documents:

Threat model document

Mitigations document

IAB statement on applicability of cleartext protocols

Systems engineering document



Trust

Areas of work: PKI infrastructures, with a specific focus on how to manage protocol systems in which there are multiple sources of truth which may provide assurances related to identity, authorization, or repudiation.

Documents:

Threats related to multiple sources of truth

Mitigations document

IAB statement on designing protocols with multiple sources of truth

IRTF charter for work exploring block-chain models as sources of truth for community managed resources