Research use of network data vs. privacy

Scott Jordan
Department of Computer Science
University of California, Irvine
Overview of Section 222

- If an ISP receives customer propriety information by virtue of its provision of the Broadband Internet Access Service:
  - Is the information individually identifiable?
    - NO:
      - An ISP may use the information without customer approval.
    - YES:
      - An ISP may use the information, without customer approval, to provide the Broadband Internet Access Service.
      - An ISP needs customer approval for other uses.
Overview of Section 222

- An ISP may use the information, without customer approval, to provide the Broadband Internet Access Service.
  - Includes:
    - Protecting the rights or property of the carrier
    - Protecting users of broadband service from fraudulent, abusive, or unlawful use of broadband services.
Researcher use of network data

- Which researchers?
  - within ISP?
  - academic?
  - for profit?

- For what purpose?
  - network security?
  - networking?
  - other?

- Under what safeguards?
  - anonymization?
  - aggregation?
  - publication?
  - consumer contact?
  - consumer consent?
  - IRB?
October 2016 FCC Order

- Is the information individually identifiable?
  - If linked or reasonably linkable to an individual or device.
  - i.e., if it can reasonably be used on its own, in context, or in combination
    - (1) to identify an individual or device, or
    - (2) to logically associate with other information about a specific individual or device

- Email address, MAC address, IP address, persistent online or unique advertising identifiers

- Customer proprietary network information (e.g. geo-location, domains, traffic statistics, ports, application headers, application usage, application payload) when associated with individual identifiers.
Research to improve and protect networks or telecommunications

- No customer approval needed if the information is used to provide the Broadband Internet Access Service:
  - Which researchers?
    - Any.
  - For what purpose?
    - Improve and protect networks or telecommunications.
    - Research and develop network and cybersecurity defenses.
  - Under what safeguards?
    - Minimize privacy risks, e.g. data minimization, minimally identifiable information.
    - Customer consent required for publication or other disclosure.