



# War Stories from Tech Policy: The Cloud

*Joseph Lorenzo Hall, Chief Technologist, CDT*

# Outline

1. Background
2. Cell Phones and the Supreme Court
3. Data Localization
4. Threats to Cloud Privacy

Please feel free to ask about *anything* we work on during Q&A!

# Background

- Background in hard science
  - Planetary astrophysics (atmospheres)
- "Hacked" voting machines for my Ph.D.
- Work regularly in
  - Consumer privacy, health tech, national security, cybersecurity, technical standards, some e-voting, space policy
- Half lawyer, half computer scientist

# What is CDT?

- Non-profit research and advocacy organization
- Support: foundations, companies, cy pres
- Principles:
  - The internet empowers people
  - Forward-looking, collaborative solutions
  - Tangible, pragmatic policy outcomes
- Some of what we do is never public

# What is Technology Policy?

- The rules we set about technology.
- Policy is not just laws.
  - *One cuts the cake, other chooses*
- Align incentives for best outcomes: Social, technical, and economic
- This can prohibit certain things!
  - satellite imagery, 3D-print Sarin, eavesdrop on pagers

# **Cell Phones & the Supreme Court**

# Riley and Wurie cases

- Two cases involving cell phones before the Supreme Court.
  - *Riley v. California* – Search of smart phone incident to arrest
  - *U.S. v. Wurie* – Search of feature phone incident to arrest
- Fourth Amendment requires a warrant before a search
- Limited exceptions: danger to arresting officer, evidence destruction

# Arguments, implications

- CDT, EFF wrote an amicus brief
- What lies in the balance?
  - How much of one's life is on the devices around them?
  - To what extent are things local to the device?
- USG is very worried about encryption and remote wiping



## In a nutshell...

“ Our cell phones can contain more personal information than we carry in our briefcases, store in file cabinets or even have on personal computers. These are our personal papers and effects and should be fully protected under the Fourth Amendment. It's critical that private conversations, photos, and documents are protected from warrantless search whether they're stored inside your house or carried in your pocket

**Jake Laperruque, CDT Fellow on Privacy, Surveillance and Security**

# Data Localization

# Location, routing & processing mandates

- Localization: data cannot leave country
- Routing: data must not/must traverse specific paths
- Processing: data must be processed certain places
- Examples: Brazil (localization), Vietnam (data center mandate),  
Australia (routing)

# Expert report

- CDT regularly convenes experts to author expert reports
  - Key Escrow (1997), SOPA/PIPA (2011), CALEA II (2014)
- Arguments:
  - Security: data and physical
  - Reliability: recovery and latency
  - Innovation: flexibility and pricing
- Please get in touch if you'd like to help!

# Cloud Privacy

## At the mercy of an ooold law...

- ECPA passed in 1986
- Central problem: requires a mere *subpoena* for access to data.
- Treats *metadata* as not as sensitive as content.
- Strange feature: opened email and/email on a server >180 days.
- But, but, but... OMG everything is in the cloud!

# Status

- Yoder-Polis Email Privacy Act (HR 1852)
  - Closes subpoena loophole
  - Provides notice to target within 10 days
- 216 cosponsors! (218 is a majority in the House)
- Poling:
  - 80% think law should change
  - 65-60% very important for limits on how government can intrude
- But the SEC opposes due to administrative subpoena...

# Thank you!

- email: [joe@cdt.org](mailto:joe@cdt.org)
- phone: 202-407-8825
- PGP: 3CA2 8D7B 9F6D DBD3 4B10 1607 5F86 6987 **40A9 A871**
- web: <https://josephhall.org>