Privacy and Access Control: How are These Two Concepts Related?

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Cyber-Elephant Problem
Privacy-Inspired Extensions

Pre-Access

Post-Access
Access Control

Privacy-Inspired Extensions

Pre-Access

Impose agreements
Impose limits
Declare purpose
Trust negotiation
Attribute-Based Encryption

Post-Access
Access Control

Privacy-Inspired Extensions

- Pre-Access
- Post-Access

  - Enforce
  - Audit
  - Trust

World-Leading Research with Real-World Impact!
Clipper Chip 1993

Clipper Chip: Key Escrow

- Decrypted conversation
- Intercept
- Encrypted conversation
- Clipper chip in phones
- Escrow keys
  - Judicial or government office
Total Information Awareness 2003

TIA Overview (vision)

Detect, Classify, ID, Track, Understand, Preempt

DoD and Foreign Intel Community

- Intelligence
  - Government Collectors
    - Public
  - Counter Intelligence

- Operations
  - Collaborative, Multi-agency Policy & OPs Environment

Law Enforcement Community

- Law Enforcement
  - Private
  - Commercial Collectors
    - Public

- Repositories
  - Discovery Tools
  - Models

- Counter-Intel Law Enforcement

- Policy
  - Plausible Futures
  - Options

AccessRestricted
- By Law
- By Policy & Regulation

5/20/2003
Patriot Act Reauthorization 2015

Patriot Act Surveillance Powers

Section 215 used by FBI, NSA to collect metadata
When, where, to whom the calls were made
Stored for 5 years

U.S. lawmakers fail to vote for Patriot Act; it expires midnight