

Privacy

CIS/CSE 583



What is Privacy?

- The ability to communicate without being overheard
- The right to keep confidential information secret
- The right to behave differently when “alone” vs. when in a group
- The right to be left alone
 - Don't underestimate the importance of this one—it's the foundation of the formation of this country



History of Privacy: Colonial America

- Find an open field to talk
- Sneak off into the woods
- No privacy indoors (large families, few walls)
- The church encouraged neighbors to snoop on each other
 - Tithingmen
 - Eavesdropping



The First Amendment to the Constitution of the USA

“Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the government for a redress of grievances.”



The Fourth Amendment to the Constitution of the USA

“The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no warrants shall issue, but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.”



History of Privacy: 1800's USA

- Long-distance communication by telegraph
 - Could be read/intercepted
- Still able to use “open field” privacy
- Privacy higher indoors
- Late 1800's: concern about invasive press
- Snooping discouraged



History of Privacy: 1900-1965 USA

- Telephone communication was over wires, manually placed by operator
 - Operators could listen in (and often did)
 - Tapping a phone was easy: just connect wires on the clips
- Public figures still had some privacy
- McCarthyism, Hoover's FBI
- Development of electronic listening devices (bugs)
- U2 spy plane (1950's)



History of Privacy: USA 1965-1990

- Watergate, Viet Nam—investigative reporting legitimized; government is no longer trusted
- Development of public key cryptography: secure communications possible; Crypto is controlled as a munition
- The Internet is born
- IBM makes the PC (DEC didn't want to)
- Scandal sheets (tabloids) explode in popularity—sensationalist journalism
- Separation of domestic, international intelligence and law enforcement
- SR-71 blackbird, satellites



History of Privacy: USA 1990-2001

- No privacy for public figures
 - Politicians, athletes, movie stars
 - What about Monica? Noelle?
- Wireless communication—convenience is more important than privacy
- Cameras, cameras, cameras
- Satellites, satellites, satellites
- Confusion over who owns content on computer systems



History of Privacy: The Web (1994-2001)

- The Web causes network use to explode
 - Active content
 - Cookies
 - spyware
- Attempts to outlaw or control encryption, or endorse bad encryption
 - Clipper chip, DMCA
- Spam, spam, wonderful spam
- Backlash against companies (doubleclick, amazon) collecting data



History of Privacy: USA 11 Sept. 2001 onward

- Steady erosion of constitutional rights as we understood them
 - US citizens detained without counsel; habeas corpus ignored
 - Military tribunals
- Attempts to ban encryption resurrected
- Polls indicate people think that the 1st amendment might “go too far.”



Discussion

- What is the proper level of privacy to expect in today's world?
 - In your home
 - At your place of work
 - In public places
 - On the net
- How can we achieve it?


