

Privacy

Controlling Personal Information

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About

- SINTEF - The largest research organization in Scandinavia
 - Approx. 2000 employees
 - Turnover: NOK 2 billion
- Located in Oslo and Trondheim
- SINTEF Software Engineering, Safety and Security
 - Software security
 - Security in healthcare systems
 - Incident response management
 - Security architecture
 - Privacy

What is privacy?

- Pop: *The right to be let alone*
- (a) *The quality or state of being apart from company or observation and (b) freedom from unauthorized intrusion* (Merriam-Webster dictionary)
- *“The right of individuals and organizations to control the collection, storage, and dissemination of information about themselves.”* (U.S. government)
- *“The quality of being secluded from the presence or view of others.”* (Wordnet/Princeton university)
- *“The ability of an individual or group to keep their lives and personal affairs out of public view, or to control the flow of information about themselves.”* (Wikipedia)

Legislation

- EC Human Rights declaration
 - Article 8: the right to privacy is fundamental
- EC data protection directives (95/46/EC, 2002/58/EC)
 - Just cause
 - User control (informed consent)
 - Transparency
- National legislation
 - Additional restrictions
- Outside EU

The current web

- Enormous amount of information
 - Text, pictures, videos
 - Not just *personal* information
- Online social network services
 - Facebook, LinkedIn, MySpace, etc
- Web 2.0 services with increased user interaction
- More personal information required (e.g. user accounts)
- Emerging adaptable services (e.g. amazon.com)
- No privacy tool to help users
 - Trust is established manually and informally
 - Privacy policies must be manually inspected
 - No adherence to policy guaranteed

The future web

- Ubiquitous computing
 - Mobile services
 - “Always on”
- The semantic web
 - Machine *understandable* information
 - Automated search and retrieval
 - Increased search precision
 - Information and services
 - Automated trust negotiation
 - Requires formal trust definition
 - Adaptation and learning
 - Extensive information recording
 - Context awareness

Threats

- Information aggregation
- Tracking
- Profiling
- Phising
- Extortion
- Espionage
- Targeted commercial
- Social engineering
- ...

... Knowledge is power

Thank you for your attention!

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