

What is Metadata?

Data that provides information about other data.
Information that is generated as you use technology and that lets you know the who, what, where, when and how of a variety of activities.

Where does it come from? ←



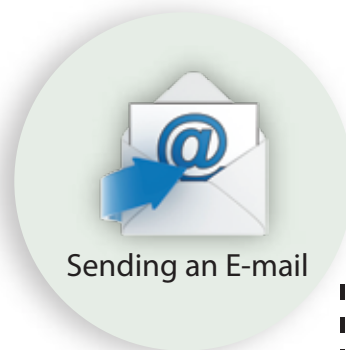
Making a phone call

- Phone number of caller
- Phone number(s) called
- Unique serial numbers of phones involved
- Time of call
- Duration of call
- Location of each participant
- Telephone calling card numbers



Internet Browsing

- Pages visited and when
- User data and possibly user login details with auto-fill features
- URLs
- Your IP address, internet service provider, device hardware details, operating system and browser version
- Cookies and cached data from websites
- Your search queries
- Results that appeared in searches
- Pages you visit from search
- Your name and profile biographical information including birthday, hometown, work history and interests



Sending an E-mail

- Sender's name, email and IP address
- Recipient's name and email address
- Server transfer information
- Date, time and timezone
- Unique identifier of email and related emails (Message-ID)
- Content type and encoding
- Mail client login records with IP address
- Mail client header formats
- Priority and categories
- Subject of email
- Status of the email
- Read receipt request



Social Networking

- Your username and unique identifier
- Your subscriptions
- Your location
- Your device
- Activity date, time and time zone
- Your activities, "likes", check-ins and events
- Language
- When you created your account
- Tweet's location, date, time and time zone
- Tweet's unique ID and ID of tweet replied to
- Contributor IDs
- Your followers, following and favorite count
- Your verification status
- Application sending the tweet

→ What can it reveal?

Metadata is...

"Arguably more revealing [than content] because it's actually much easier to analyze the patterns in a large universe of metadata and correlate them with real-world events than it is to go through a semantic analysis of all of someone's email and all of someone's telephone calls."



- Daniel Weitzner
Computer scientist

→ And so...



In many cases, courts have recognized that metadata can reveal much about an individual and deserves privacy protection, while recognizing that context matters.