

openHPI – Internet Security
Privacy - Private Sphere and Data Privacy
in the Digital Environment

Prof. Dr. Christoph Meinel

Hasso Plattner Institute, Potsdam, Germany

Digital Traces

Our every interaction with the Internet leaves a **digital footprint**

- Some traces on the web are quite obvious, e.g.,
 - sending emails:
 - tracks on email servers of sender and receiver, routers
 - „dialing“ into the Internet:
 - giving the IP address to the Internet provider
- Other interactions leave less obvious traces, e.g.,
 - cashless payment transactions,
 - use of discount cards,
 - hidden "web beacons" on web pages, ...
- In most cases, no-one knows who is involved in data processing operations and where our data is stored

Private sphere

- Private (non-public) sphere, in which a person has the right to free development of one's own personality, unaffected by external influences
- The right to privacy is a fundamental human right

Data privacy brings together different aspects

- Protection against unauthorized data processing or storage
- Right to informational self-determination
- Special protection of personal data (to protect the right to privacy in data processing)

The term **privacy** is today very common in the **digital context**, encompassing both the digital **private sphere** and **data privacy** in the digital space

Digital footprints contribute to the violation of **private sphere**:

- We often have no choice as to whether we want to leave traces while using certain services, e.g., Google
- We often give data voluntarily (often without considering possible consequences), e.g., on social networks
- Even the correlation of seemingly unproblematic data can lead to violations of the private sphere ...

Where and by whom data is processed or stored can be crucial for **data privacy**

- Data privacy law is national law and varies greatly from country to country
- Germany: Financial transactions are particularly critical, since transactions are usually executed via servers outside of Germany

Our Program for Course Week 6: Privacy in the Digital Environment

During this week we will look at **digital technology**, which can endanger or compromise privacy and data protection within the digital world

- ❑ card payment and bonus cards
- ❑ smartphones and other personal devices (wearables)
- ❑ motion profiles in the real world and on the net
- ❑ monitoring on the Internet, e.g., the PRISM program
- ❑ cloud computing for personal use
- ❑ smart home and smart metering

We will discuss further,

- ❑ where and which data accumulates and by whom it is processed and stored
- ❑ and to what extent you can protect yourself

Once again, we wish you lots of insight and fun...