SOCIAM

Understanding Personal Data as a Space

Learning from dataspaces to create Linked Personal Data

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Personal data

Personal Information Management

Semantic Desktop
Personal Data Stores

Personal data

Integration

Semantic Desktop
Personal Data Stores

Personal data

Integration

is hard

Semantic Desktop
Personal Data Stores

Dataspace

= abstraction for data management across heterogeneous collections

Franklin, M., Halevy, A., Maier, D.
From databases to dataspaces:
A new abstraction for information management.
SIGMOD Rec. 34(4), 27–33 (Dec 2005)

Dataspace

$\neq$ a data integration approach,
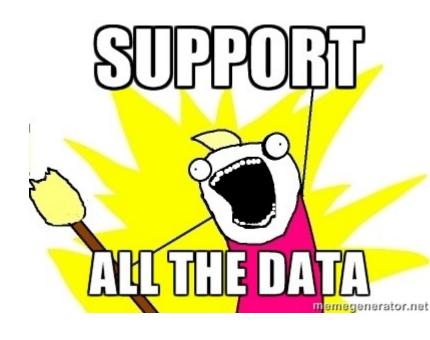but a data co-existence approach

Franklin, M., Halevy, A., Maier, D.
From databases to dataspaces:
A new abstraction for information management.
SIGMOD Rec. 34(4), 27–33 (Dec 2005)

Dataspace characteristics

1. support **all** the data

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4. **pay-as-you-go** integration

Dataspace characteristics

1. support **all** the data ✓

2. **not** in full control of the data ✓

3. **best effort** answers ✓

4. **pay-as-you-go** integration ✓

Personal dataspace

Personal data **is** a dataspace.

Personal dataspace

Personal data is a dataspace.

centred on the person

Dataspace components

Participants (a.k.a. data sources)

Dataspace components

Participants

Dataspace components

Participants

Relationships

Dataspace components

Participants

Relationships

DataSpace Support Platform

DSSP = suite of interrelated
services and guarantees

(to solve "recurring challenges involved in dealing
consistently and efficiently with large amounts of
interrelated but disparately managed data")

Personal Dataspace Support Platform

PDSP = suite of services and guarantees
to handle personal data

Services – data source

Data access

Cataloging

Monitoring

Services - search

Indexing

Search, query & browsing

Services - integration

(Incremental) Mapping

Integration

Services - access

Identity management

Access control

Services – write

Annotation

Update

Higher level services

Archiving

Caching

Sharing

Guarantees

Stable endpoints

Relative to the user

Conclusion

Personal data is a dataspace.

PDSP

Conclusion (?)

Personal data is a dataspace.

Implement the PDSP !

🐦 @aprilush

Google + INTERNET ARCHIVE

for personal data