Multi-Owner data Sharing for Analytics and Integration respecting Confidentiality and Owner control

Results

Project Information

MOSAICrOWN
Grant agreement ID: 825333

Funded under
H2020-EU.2.1.1.

Project website

Overall budget
€ 3 203 750

EU contribution
€ 3 203 750

Status
Ongoing project

Coordination

UNIVERSITA DEGLI STUDI DI MILANO
Italy

Start date
1 January 2019

End date
31 December 2021

Deliverables

Other (3)

Preliminary version of tools for the governance framework
It provides a preliminary version of the tools developed for the definition of the data governance framework for the management of data in collaborative platforms. (T3.1, T3.2, T3.3)

First version of data sanitisation tools
It provides a first version of the tools developing data sanitisation techniques. (T5.2)
First version of encryption-based protection tools
It provides a first version of the tools enforcing encryption-based data protection techniques. (T4.2)

Documents, reports (6)

First version of policy specification language and model
It provides a preliminary version of the model and language for policy specification. (T3.2)

Report on requirements, research alignment and deployment plan
It reports on the status of about the alignment between the research and technological development in WPs3–5 and the requirements of the Use Cases. (T2.2)

Requirements from the Use Cases
It provides the final version of the data protection requirements coming from the Use Cases. (T2.1)

Report on encryption-based techniques and policy enforcement
It provides a first version of the techniques for policy enforcement, based on the basic protection techniques developed in W4.1. (T4.2)

First report on privacy metrics and data sanitisation
It illustrates the metrics designed for measuring privacy and the techniques developed for data sanitisation. (T5.1, T5.2)

First version of the reference metadata model
It provides a preliminary version of the reference metadata model. (T3.1)

Open Research Data Pilot (1)

Data Management Plan
It provides a detailed description of the data management plan. (T7.1)

Publications

Peer reviewed articles (4)
A Fuzzy-Based Brokering Service for Cloud Plan Selection
Author(s): Sabrina De Capitani di Vimercati, Sara Foresti, Giovanni Livraga, Vincenzo Piuri, Pierangela Samarati
Published in: IEEE Systems Journal, Issue 13/4, 2019, Page(s) 4101-4109, ISSN 1932-8184
DOI: 10.1109/JSYST.2019.2893212

Securing Resources in Decentralized Cloud Storage
Author(s): Enrico Bacis, Sabrina De Capitani di Vimercati, Sara Foresti, Stefano Paraboschi, Marco Rosa, Pierangela Samarati
Published in: IEEE Transactions on Information Forensics and Security, Issue 15, 2020, Page(s) 286-298, ISSN 1556-6013
DOI: 10.1109/TIFS.2019.2916673

Monte Carlo and Reconstruction Membership Inference Attacks against Generative Models
Author(s): Benjamin Hilprecht, Martin Härterich, Daniel Bernau
Published in: Proceedings on Privacy Enhancing Technologies, Issue 2019/4, 2019, Page(s) 232-249, ISSN 2299-0984
DOI: 10.2478/popets-2019-0067

Toward Owners' Control in Digital Data Markets
Author(s): Sabrina De Capitani di Vimercati, Sara Foresti, Giovanni Livraga, Pierangela Samarati
Published in: IEEE Systems Journal, 2020, Page(s) 1-8, ISSN 1932-8184
DOI: 10.1109/JSYST.2020.2970456

Conference proceedings (10)

Multi-Provider Secure Processing of Sensors Data
Author(s): Enrico Bacis, Sabrina De Capitani di Vimercati, Dario Facchinetti, Sara Foresti, Giovanni Livraga, Stefano Paraboschi, Marco Rosa, Pierangela Samarati
Published in: 2019 IEEE International Conference on Pervasive Computing and Communications Workshops (PerCom Workshops), 2019, Page(s) 349-351
DOI: 10.1109/PERCOMW.2019.8730707

Empowering Owners with Control in Digital Data Markets
Author(s): Sabrina De Capitani di Vimercati, Sara Foresti, Giovanni Livraga, Pierangela Samarati
Published in: 2019 IEEE 12th International Conference on Cloud Computing (CLOUD), 2019, Page(s) 321-328
DOI: 10.1109/CLOUD.2019.00060
Data security and privacy in the cloud

**Author(s):** Sabrina De Capitani di Vimercati, Sara Foresti, Giovanni Livraga, Pierangela Samarati

**Published in:** Mobile Multimedia/Image Processing, Security, and Applications 2019, 2019, Page(s) 15

**DOI:** 10.1117/12.2523603

Data Confidentiality and Information Credibility in On-line Ecosystems

**Author(s):** Giovanni Livraga, Marco Viviani

**Published in:** Proceedings of the 11th International Conference on Management of Digital EcoSystems, 2019, Page(s) 191-198

**DOI:** 10.1145/3297662.3365829

Dynamic Allocation for Resource Protection in Decentralized Cloud Storage

**Author(s):** Enrico Bacis, Sabrina De Capitani di Vimercati, Sara Foresti, Stefano Paraboschi, Marco Rosa, Pierangela Samarati

**Published in:** 2019 IEEE Global Communications Conference (GLOBECOM), 2019, Page(s) 1-6

**DOI:** 10.1109/globecom38437.2019.9013354

Controlled Query Evaluation in Description Logics Through Instance Indistinguishability

**Author(s):** Gianluca Cima, Domenico Lembo, Riccardo Rosati, Domenico Fabio Savo

**Published in:** Proceedings of the Twenty-Ninth International Joint Conference on Artificial Intelligence, 2020, Page(s) 1791-1797

**DOI:** 10.24963/ijcai.2020/248

Declarative Access Control for Aggregations of Multiple Ownership Data

**Author(s):** Marco Rosa, Francesco Di Cerbo, Rocio Cabrera Lozoya

**Published in:** Proceedings of the 25th ACM Symposium on Access Control Models and Technologies, 2020, Page(s) 59-70

**DOI:** 10.1145/3381991.3395609

Secure Sublinear Time Differentially Private Median Computation

**Author(s):** Jonas Bohler, Florian Kerschbaum

**Published in:** Proceedings 2020 Network and Distributed System Security Symposium, 2020

**DOI:** 10.14722/ndss.2020.24150

Revisiting Controlled Query Evaluation in Description Logics

**Author(s):** Domenico Lembo, Riccardo Rosati, Domenico Fabio Savo

**Published in:** Proceedings of the Twenty-Eighth International Joint Conference on Artificial Intelligence, 2019, Page(s) 1786-1792

**DOI:** 10.24963/ijcai.2019/247