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## Data Management Plan

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### Abstract

The deliverable describes the data management plan of the ESCUDO-CLOUD project. It identifies the different kinds of data managed and produced by the project, describing their representation, management, sharing, archiving and preservation.

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# ESCUDO-CLOUD Consortium

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# Versions

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Version	Date	Description
0.1	2015.06.05	Initial Release
0.2	2015.06.26	Second Release
1.0	2015.06.30	Final Version

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# List of Contributors

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This document contains contributions from different ESCUDO-CLOUD partners. Contributors for the chapters of this deliverable are presented in the following table.

Chapter	Author(s)
Executive summary	UNIMI
Chapter 1: Data Management Plan	UNIMI

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# Executive Summary

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This deliverable describes the data management plan establishing the policy regulating collection, management, sharing, archiving, and preservation of data in the ESCUDO-CLOUD project. Data regulated by the plan are all data that are either managed or are produced by ESCUDO-CLOUD (i.e., documents and software tools).

Introducing the ESCUDO-CLOUD data management plan, we want to explicitly note that the project does not use or manage any sensitive data, like Personally Identifiable Information (PII), confidential commercial information, or real-life data. In fact, ESCUDO-CLOUD strictly builds the technical framework enabling users (companies as well as individual users) to maintain control of their data in the cloud, but neither collects nor uses any personal data either directly or indirectly. No real-life data (and therefore no PII or sensitive information more specifically) are collected or processed, or exposed to secondary use. Development, testing, validation, as well as demonstration of all the solutions developed in ESCUDO-CLOUD are carried out only on purely synthetic data. Such data are generated randomly, based only on structural information (such as table structure and data types) with no consideration of – or connection to – real-life data instances. The project management continuously monitors all the project activities and ensures that all activities are carried out using purely synthetic data and no real-life data is ever acquired or used. The project management assumed responsibility to also continuously keep the EC/reviewers informed if any potential for PII usage ever appears.

Therefore, data produced by ESCUDO-CLOUD are technical solutions (in the form of documents or software tools). In its working the project does not acquire any data from other sources. The ESCUDO-CLOUD Consortium is committed to timely and rapid distribution of the project's results, making them widely available and openly accessible. ESCUDO-CLOUD pursues an open-access policy, making results and publications publicly available. Data needed for the working of the project (such as work communications and progresses of the technical work) are restricted to the project participants.

In this deliverable, we describe the data management plan with reference to the different kinds of data handled or produced by ESCUDO-CLOUD.





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# 1. Data Management Plan

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Data produced by the project are technical solutions (in the form of documents or software tools). The project does not acquire or produce any specific data sets. Therefore, in the following we refer the data management plan to the different kinds of data managed or produced by the project distinguishing the following kinds of data: *i*) data/information about the project, *ii*) data for the working of the project itself, *iii*) documents (scientific papers, and deliverables/work documents) produced by the project, and *iv*) software tools produced by the project.

There are three main servers where data on the project is hosted. These are dedicated to manage the following:

- Web site of the project (<http://www.escudocloud.eu>) (with a public and a restricted area),
- Project document repository SVN (<https://www.escudocloud.eu/svn/repos/escudocloud>) for the project's internal working and communication,
- Mailing lists ([escudocloud-...@filibusta.crema.unimi.it](mailto:escudocloud-...@filibusta.crema.unimi.it)) for project working and communication.

All servers reside within the premises of the project coordinator (UNIMI) and are managed by administrative personnel of UNIMI. They are backed up weekly.

## 1.1 Data set: Data about the project

### Data set description

This kind of data refers to all the data describing the project that are to be made publicly available (for dissemination purposes) such as: fact sheet, consortium, objectives, vision, planned work and its organization in work packages. In addition to these static data about the project, this kind of data includes information that is continuously updated as the project progresses, such as news reporting related events, dissemination and exploitation relevant information.

### Standards and metadata

Data are organized with a hierarchical structure allowing easy retrieval and navigation. Content management is handled with the Joomla content management structure.

### Data sharing

Data in this data set are publicly accessible via the project web site <http://www.escudocloud.eu>.

### **Archiving and preservation**

Data are stored on a server residing within the premises of the project coordinator (UNIMI) and are managed by administrative personnel of UNIMI. The server is backed up weekly. They will be maintained at least five years after the life of the project.

## **1.2 Data set: Data for the working of the project**

### **Data set description**

This kind of data refers to the information needed for the working of the project itself, such as name and contact information of people working in the project, meetings, communication among them, and intermediary progresses. As established by the Consortium Agreement (art 10.9), for people working on the project, only contact information is acquired, and ESCUDO-CLOUD will not make available any personal data to other parties or process any personal data on behalf of other parties.

### **Standards and metadata**

Contact information is organized in different mailing lists to allow easy retrieval and references. Work in progress is organized in a hierarchical structure with nested directories and files with self-explanatory names. Mailing lists and SVN information is also accessible via the restricted area of the project web site using project login credentials.

### **Data sharing**

Data sharing is restricted to project participants. Access to the SVN service is available to all project participants and is regulated with control of login and (randomly generated) password distributed to each individual participant by the administrator of the server. Access to the different mailing lists of the project is regulated with control of login and (randomly generated) password distributed to each individual participant by the administrator of the server.

### **Archiving and preservation**

Data are stored on a server sitting within the premises of the project coordinator (UNIMI) and are managed by administrative personnel of UNIMI. The server is backed up weekly. They will be maintained at least five years after the life of the project.

## **1.3 Data set: Project results - Documents**

### **Data set description**

This kind of data refers to all documents produced by the project. Among them we distinguish: deliverables/work documents and scientific papers.

### **Standards and metadata**

All documents (in .tex or .doc format when in production) are made available in PDF format once completed.

Deliverables and work documents are identified following an easy-to-use notation with three parts: a letter that determines the kind of document (D for Deliverable, W for Work document); the number of the work package that coordinates its production; and a serial number that uniquely identifies the document within that work package.

All documents have .bibtex metadata, easing the search and can be exported for easy reference. These metadata include the ones prescribed in the Grant Agreement (art 29.2).

### **Data sharing**

IPR and dissemination of project results is regulated by the Consortium Agreement (art 8). IPR of results remain with the project's party that generated them. Sharing and dissemination follow an open access policy. For sharing and dissemination, we distinguish deliverables/work documents and scientific papers.

All deliverables and work documents in the project are classified as public (PU). Consequently, they are made accessible to the general public following their final acceptance by the EC. This dissemination and sharing is made via the web site of the project (<http://www.escudocloud.eu>, link "Results/Deliverables").

ESCUDO-CLOUD embraces an open access policy, and also all scientific papers are made publicly available via the project website. Before undergoing public release, paper publication undergoes an internal process within the ESCUDO-CLOUD Consortium, regulated by the Grant Agreement (art. 29) and Consortium Agreement (art. 8.3) of the project. In particular, "prior notice of any planned publication shall be given to concerned Parties at least 21 calendar days before the publication. Any objection to the planned publication shall be made in accordance with the Grant Agreement in writing to the Coordinator and to the Party or Parties proposing the dissemination within 15 calendar days after receipt of the notice. If no objection is made within the time limit stated above, the publication is permitted." At this point, the paper is made publicly available via the project public web site (<http://www.escudocloud.eu>, link "Results/Publications").

Before papers are accepted as publication at scientific venue, this sharing and dissemination is made possible via the partners' institutional archives and other open archives (e.g., arxiv). For papers accepted for formal publication by publishers, this public sharing and dissemination access is made possible via "green" open-access publication (i.e., "self-archiving"), which is in line with the copyright policy of major institutions and associations of the most selective and recognised conferences and journals. Within this policy, the publishers allow authors to post the final versions of accepted papers in their personal web site, the web site of their employers, or selected pre-authorised institutional web sites. Project publications are then hosted (and publicly accessible) from the partners' website or open archives and linked from the web site of the project, thus ensuring broad visibility and easy access.

### **Archiving and preservation**

Deliverables are stored on a server sitting within the premises of the project coordinator (UNIMI) and are managed by administrative personnel of UNIMI. The server is backed up weekly. They will be maintained at least five years after the life of the project.

Scientific papers are linked from the project web site and are stored on partners institutional archives (also periodically backed up) and other open archives (like arxiv), which provides guarantees of continuity of service preservation of access.

## **1.4 Data set: Project results - Software tools**

### **Data set description**

This kind of data refers to all software tools produced by the project. Software tools to be developed within the project have all corresponding deliverables or work documents.

### **Standards and metadata**

Code of software tools produced by the project are written using commonly-used programming languages (e.g., Java, C++, Python) or shell scripts. Every tool will have structured metadata associated, specifying information such as: unique identifier, creator/s, versions; allowing for easy reference and retrieval.

### **Data sharing**

IPR and dissemination of project results is regulated by the Consortium Agreement (Art 8). IPR of results remain with the project's party that generated them.

As for sharing, software tools developed in the project, corresponding to work documents and deliverables, subject to the applicable IPR clauses, are classified as public (PU). Object code of tools developed by academic partners, subject to the applicable IPR clauses, will be made accessible to the general public following formal acceptance by the EC. Public dissemination and sharing is made via the web site of the project (<http://www.escudocloud.eu>).

Source code of software tools built by academic partners will be provided as building blocks under an open source license and as applicable under the relevant IPR agreement.

### **Archiving and preservation**

Object code of tools produced within ESCUDO-CLOUD will be stored on a server sitting within the premises of the project coordinator (UNIMI) and managed by administrative personnel of UNIMI. They will be backed up weekly. They will be maintained at least five years after the life of the project.