

# D1.2 Data and Research Outputs Management Plan - b

Version 1.0

07 July 2024

## Abstract

COGNIT is an AI-enabled Adaptive Serverless Framework for the Cognitive Cloud-Edge Continuum that enables the seamless, transparent, and trustworthy integration of data processing resources from providers and on-premises data centers in the cloud-edge continuum, and their automatic and intelligent adaptation to optimise where and how data is processed according to application requirements, changes in application demands and behaviour, and the operation of the infrastructure in terms of the main environmental sustainability metrics. This document provides updated information about how the Project is making its data/research outputs findable, accessible, interoperable, and reusable (FAIR). The most important takeaway in this report is the up-to-date catalogue of project data assets, classified in categories and fully identified following the data management methodology defined by the Data Management Plan (DMP) in Deliverable D1.1 (M6).



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## Deliverable Metadata

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<b>Status:</b>	Submitted

## Document History

Version	Issue Date	Status <sup>1</sup>	Content and changes
0.1	03/07/2024	Draft	Initial Draft
0.2	05/07/2024	Peer-Reviewed	Reviewed Draft
1.0	07/07/2024	Submitted	Final Version

## Peer Review History

Version	Peer Review Date	Reviewed By
0.1	05/07/2024	Monowar Bhuyan (UMU)
0.1	05/07/2024	Nikolaos Matskanis (CETIC)

## Summary of Changes from Previous Versions

First Version of Deliverable D1.2
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<sup>1</sup> A deliverable can be in one of these stages: Draft, Peer-Reviewed, Submitted, and Approved.

## Executive Summary

Deliverable D1.2, the updated Data and Research Outputs Management Plan in WP1 (“Project Management”), describes how data management is being performed by the COGNIT Project according to FAIR principles (Findable, Accessible, Interoperable, Reusable) and in adherence to the GDPR and other relevant regulation.

It is the intention of the Consortium to make all the data and research outputs openly available, following the principle “as open as possible, as closed as necessary”. As a general rule, the Project makes its publicly available data and research outputs findable through **Zenodo**, given that this well-established platform follows the FAIR principles and is OpenAIRE-compliant. At a minimum, all scientific publications will be available via Green Open Access. All metadata may be freely used under Creative Commons license CC0.

The project website will list all its publicly available data and research outputs, including links to the project deliverables and scientific publications on Zenodo, to other materials hosted locally or somewhere else (e.g. blog posts, press releases, commercial publications, screencasts, and webinars), as well as to the Project’s **GitHub** public repository. A Creative Commons license will be used for the project website and its associated online contents.

A central aim of the Project is to provide value to as many European organisations and citizens as possible beyond the original Consortium. By default, all software produced by COGNIT will be released as **open source** under Apache License, Version 2.0. All the source code produced by the Project, as well as eventually all AI/ML models (and the relevant metrics used to train them) and the datasets produced during the validation phases of the COGNIT Framework by its Use Cases, will be made available through the existing GitHub public repository. Apart from the secure use of Zenodo and GitHub repositories, personal and research data collected during the execution of the Project will be stored and managed centrally through OpenNebula’s corporate account on **Google Workspace**.

The execution and regular updating of this Data and Research Outputs Management Plan is being performed by the Project Coordinator (OpenNebula) as Task Leader of T1.5 (“Data, Legal, Gender, and Ethical Framework Definition”). As such, OpenNebula has defined the figure of a **Data Management Officer (DMO)**, who is in charge of overseeing the successful application of this Plan. OpenNebula has also appointed a **Data Protection Officer (DPO)** for the purposes of this project.

This deliverable updates—when changes have taken place during the reporting period—the information provided in D1.1 (M6) and provides an up-to-date **catalogue of Research Data Assets managed by the Project**. The whole Data Management Plan and that catalogue will be continuously revised until the conclusion of the Project in M36.

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## Abbreviations and Acronyms

<b>AI</b>	Artificial Intelligence
<b>API</b>	Application Programming Interface
<b>CDPA</b>	Cloud Data Processing Addendum
<b>CLA</b>	Contributor License Agreement
<b>DMO</b>	Data Management Officer
<b>DOI</b>	Digital Object Identifier
<b>DPM</b>	Data Management Plan
<b>DPO</b>	Data Protection Officer
<b>GA</b>	Grant Agreement
<b>GDPR</b>	General Data Protection Regulation
<b>HTTP</b>	Hypertext Transfer Protocol
<b>JSON</b>	JavaScript Object Notation
<b>ML</b>	Machine Learning
<b>OAI-PMH</b>	Open Archives Initiative Protocol for Metadata Harvesting
<b>REST</b>	Representational State Transfer
<b>SQL</b>	Structured Query Language
<b>URL</b>	Uniform Resource Locator

## 1. Introduction

The general purpose of Deliverable D1.2 is to provide a revised description of the Data Management Plan used in the COGNIT Project, updating when appropriate the contents in the original version submitted in M6, thus incorporating any significant changes to the Project's Data Management Plan that have taken place during the reporting period.

Deliverable D1.2, which uses D1.1 (M6) as its baseline, is also composed of seven main content chapters, including a Data Summary (Section 2), FAIR Data (Section 3), Other Research Outputs (Section 4), Allocation of Resources (Section 5), Data Security (Section 6), Ethics (Section 7), and Other Issues (Section 8).

It is important to highlight that Section 2 in this document now comes with a fully up-to-date **catalogue of Research Data Assets managed by the Project**, which have been tracked and registered during the reporting period following the overall methodology of the Data Management Plan defined in D1.1. That catalogue is the main takeaway of D1.2. The updated, final version of this catalogue is expected to be the main takeaway of the future Deliverable D1.3, to be produced at the end of the project in M36.

This document includes references to the modular architecture of the COGNIT Framework (originally defined in Deliverable D2.1) and to the planned actions to communicate and disseminate the Project's results among the scientific community (see Deliverable D6.1).

## 2. Data Summary

The COGNIT Project has been generating a variety of Research Data Assets during its execution up until M18, namely:

- **Software** – Produced by the COGNIT Project and released as open source under Apache License through its public GitHub repositories.
- **Project deliverables** – Publicly available (unless identified as “Sensitive” on the GA) through the Project’s website once submitted to the European Commission, and pending their final approval for publication on Zenodo too.
- **Scientific publications** – Produced by the COGNIT Project as Academic Papers or Conference Papers and gradually made available through Open Access.
- **Other publications and materials** – Produced by the COGNIT Project as a way to share research data in a variety of additional formats such as press releases, technical or scientific blog posts, reports describing the Project’s contribution to standards, white papers, video tutorials or demonstrators.

The following sections describe the Research Data Assets that are already public and those that are not public yet, or subject to an embargo:

### 2.1. Catalogue of public Research Data Assets

The following assets have already been made public by the COGNIT Project by M18:

ID	Title	Description
SOFTW-01	COGNIT Framework	<i>Public Github repository</i>
DELIV-01	D1.1 Data and Research Outputs Management Plan - a	<i>Initial version of COGNIT Data Management Plan</i>
DELIV-02	D2.1 COGNIT Framework - Architecture - a	<i>First version of the Architecture Report</i>
DELIV-03	D2.2 COGNIT Framework - Architecture - b	<i>Second version of the Architecture Report</i>
DELIV-04	D2.3 COGNIT Framework - Architecture - c	<i>Third version of the Architecture Report</i>
DELIV-05	D3.1 COGNIT FaaS Model - Scientific Report - a	<i>Results of the 1st research cycle (M4-M9) under WP3</i>
DELIV-06	D3.2 COGNIT FaaS Model - Scientific Report - b	<i>Results of the 2nd research cycle (M10-M15) under WP3</i>
DELIV-07	D3.6 COGNIT FaaS Model - Software Source - a	<i>Software generated as results of the 1st research cycle (M4-M9) under WP3</i>

<b>DELIV-08</b>	D3.7 COGNIT FaaS Model - Software Source - b	<i>Software generated as results of the 2nd research cycle (M10-M15) under WP3</i>
<b>DELIV-09</b>	D4.1 COGNIT Serverless Platform - Scientific Report - a	<i>Results of the 1st research cycle (M4-M9) under WP4</i>
<b>DELIV-10</b>	D4.2 COGNIT Serverless Platform - Scientific Report - b	<i>Result of the 2nd research cycle (M10-M15) under WP4</i>
<b>DELIV-11</b>	D4.6 COGNIT Serverless Platform - Software Source - a	<i>Software generated as results of the 1st research cycle (M4-M9) under WP4</i>
<b>DELIV-12</b>	D4.7 COGNIT Serverless Platform - Software Source - b	<i>Software generated as results of the 2nd research cycle (M10-M15) under WP4</i>
<b>DELIV-13</b>	D5.1 Use Cases - Scientific Report - a	<i>First version of the Use Cases Report</i>
<b>DELIV-14</b>	D5.2 Use Cases - Scientific Report - b	<i>Second version of the Use Cases Report</i>
<b>DELIV-15</b>	D5.3 Use Cases - Scientific Report - c	<i>Third version of the Use Cases Report</i>
<b>DELIV-16</b>	D5.7 COGNIT Framework - Software Source - a	<i>Software generated as results of the 2nd research cycle (M10-M15) under WP5</i>
<b>DELIV-17</b>	D5.10 COGNIT Framework - Demo - a	<i>Demonstrator of the first integrated version of the COGNIT Framework</i>
<b>DELIV-18</b>	D6.1 Communication and Dissemination Plan & Report - a	<i>First version of the D&amp;C Plan and Report</i>
<b>PAPER-01</b>	Latency and resource consumption analysis for serverless edge analytics	<i>Academic Paper published on the Journal of Cloud Computing</i>
<b>PAPER-02</b>	Modelling the Green Cloud Continuum: Integrating Energy Considerations into Cloud-Edge Models	<i>Academic Paper published on Cluster Computing</i>
<b>PRESS-01</b>	European project COGNIT releases the Architecture of its AI-enabled Serverless Framework for the Cloud-Edge Continuum	<i>Initial press release announcing the release of the definition of the COGNIT Architecture.</i>
<b>VIDEO-01</b>	Energy Efficiency Optimisation for Cloud-Edge Orchestration (October 2023)	<i>Demonstrator</i>
<b>VIDEO-02</b>	Deploying the COGNIT Platform (June 2024)	<i>Technical tutorial</i>



## Software

DATA ASSET	SOFTW-01
Source	<a href="#">COGNIT Framework</a>
License	Apache License, Version 2.0
Purpose of reuse	Access to the open source serverless technology developed by the COGNIT Project.
COGNIT users	All partners
Other users	Researchers, open source developers, industry, cloud engineers.

## Project Deliverables

DATA ASSET	DELIV-01
Source	<a href="#">D1.1 Data and Research Outputs Management Plan - a</a>
License	CC BY-NC-SA 4.0
Purpose of reuse	Reference Data Management Plan for other HE projects
COGNIT users	All partners
Other users	European Commission.

DATA ASSET	DELIV-02
Source	<a href="#">D2.1 COGNIT Framework - Architecture - a</a>
License	CC BY-NC-SA 4.0
Purpose of reuse	Reference document of the initial steps in the definition of the architecture, valid for both COGNIT partners and for other scientific groups
COGNIT users	All partners
Other users	Scientific groups working on same or similar topics to those developed in COGNIT; European Commission.

DATA ASSET	DELIV-03
Source	<a href="#">D2.2 COGNIT Framework - Architecture - b</a>

<b>License</b>	CC BY-NC-SA 4.0
<b>Purpose of reuse</b>	Reference document of the results obtained in the definition of the architecture during the first research cycle (M4-M9), valid for both COGNIT partners and for other scientific groups
<b>COGNIT users</b>	All partners
<b>Other users</b>	Scientific groups working on same or similar topics to those developed in COGNIT; European Commission.

<b>DATA ASSET</b>	<b>DELIV-04</b>
<b>Source</b>	<a href="#">D2.3 COGNIT Framework - Architecture - c</a>
<b>License</b>	CC BY-NC-SA 4.0
<b>Purpose of reuse</b>	Reference document of the results obtained in the definition of the architecture during the second research cycle (M10-M15), valid for both COGNIT partners and for other scientific groups
<b>COGNIT users</b>	All partners
<b>Other users</b>	Scientific groups working on same or similar topics to those developed in COGNIT; European Commission.

<b>DATA ASSET</b>	<b>DELIV-05</b>
<b>Source</b>	<a href="#">D3.1 COGNIT FaaS Model - Scientific Report - a</a>
<b>License</b>	CC BY-NC-SA 4.0
<b>Purpose of reuse</b>	Reference document of the results obtained in the definition of the FaaS Model during the 1st Research Cycle (M4-M9)
<b>COGNIT users</b>	All partners
<b>Other users</b>	Scientific groups working on same or similar topics to those developed in COGNIT; European Commission.

<b>DATA ASSET</b>	<b>DELIV-06</b>
<b>Source</b>	<a href="#">D3.2 COGNIT FaaS Model - Scientific Report - b</a>
<b>License</b>	CC BY-NC-SA 4.0
<b>Purpose of reuse</b>	Reference document of the results obtained in the definition of the FaaS Model during the 2nd Research Cycle (M10-M15)

<b>COGNIT users</b>	All partners
<b>Other users</b>	Scientific groups working on same or similar topics to those developed in COGNIT; European Commission.

<b>DATA ASSET</b>	<b>DELIV-07</b>
<b>Source</b>	<a href="#">D3.6 COGNIT FaaS Model - Software Source - a</a>
<b>License</b>	CC BY-NC-SA 4.0
<b>Purpose of reuse</b>	Reference document regarding the implementation of the FaaS Model during the 1st Research Cycle (M4-M9)
<b>COGNIT users</b>	All partners
<b>Other users</b>	Scientific groups working on same or similar topics to those developed in COGNIT; European Commission.

<b>DATA ASSET</b>	<b>DELIV-08</b>
<b>Source</b>	<a href="#">D3.7 COGNIT FaaS Model - Software Source - b</a>
<b>License</b>	CC BY-NC-SA 4.0
<b>Purpose of reuse</b>	Reference document regarding the implementation of the FaaS Model during the 2nd Research Cycle (M10-M15)
<b>COGNIT users</b>	All partners
<b>Other users</b>	Scientific groups working on same or similar topics to those developed in COGNIT; European Commission.

<b>DATA ASSET</b>	<b>DELIV-09</b>
<b>Source</b>	<a href="#">D4.1 COGNIT Serverless Platform - Scientific Report - a</a>
<b>License</b>	CC BY-NC-SA 4.0
<b>Purpose of reuse</b>	Reference document of the results obtained in the definition of the Serverless Platform during the 1st Research Cycle (M4-M9)
<b>COGNIT users</b>	All partners
<b>Other users</b>	Scientific groups working on same or similar topics to those developed in COGNIT; European Commission.

<b>DATA ASSET</b>	<b>DELIV-10</b>
<b>Source</b>	<a href="#">D4.2 COGNIT Serverless Platform - Scientific Report - b</a>
<b>License</b>	CC BY-NC-SA 4.0
<b>Purpose of reuse</b>	Reference document of the results obtained in the definition of the Serverless Platform during the 2nd Research Cycle (M10-M15)
<b>COGNIT users</b>	All partners
<b>Other users</b>	Scientific groups working on same or similar topics to those developed in COGNIT; European Commission.

<b>DATA ASSET</b>	<b>DELIV-11</b>
<b>Source</b>	<a href="#">D4.6 COGNIT Serverless Platform - Software Source - a</a>
<b>License</b>	CC BY-NC-SA 4.0
<b>Purpose of reuse</b>	Reference document regarding the implementation of the Serverless Platform during the 1st Research Cycle (M4-M9)
<b>COGNIT users</b>	All partners
<b>Other users</b>	Scientific groups working on same or similar topics to those developed in COGNIT; European Commission.

<b>DATA ASSET</b>	<b>DELIV-12</b>
<b>Source</b>	<a href="#">D4.7 COGNIT Serverless Platform - Software Source - b</a>
<b>License</b>	CC BY-NC-SA 4.0
<b>Purpose of reuse</b>	Reference document regarding the implementation of the Serverless Platform during the 1st Research Cycle (M10-M15)
<b>COGNIT users</b>	All partners
<b>Other users</b>	Scientific groups working on same or similar topics to those developed in COGNIT; European Commission.

<b>DATA ASSET</b>	<b>DELIV-13</b>
<b>Source</b>	<a href="#">D5.1 Use Cases - Scientific Report - a</a>
<b>License</b>	CC BY-NC-SA 4.0

<b>Purpose of reuse</b>	Reference document for the description of the use cases and their goals and expectations with respect to COGNIT
<b>COGNIT users</b>	All partners
<b>Other users</b>	Scientific groups working on same or similar topics to those developed in COGNIT; European Commission.

<b>DATA ASSET</b>	<b>DELIV-14</b>
<b>Source</b>	<a href="#">D5.2 Use Cases - Scientific Report - b</a>
<b>License</b>	CC BY-NC-SA 4.0
<b>Purpose of reuse</b>	Reference document for the description of the work done on the use cases during the 1st Research Cycle (M4-M9)
<b>COGNIT users</b>	All partners
<b>Other users</b>	Scientific groups working on same or similar topics to those developed in COGNIT; European Commission.

<b>DATA ASSET</b>	<b>DELIV-15</b>
<b>Source</b>	<a href="#">D5.3 Use Cases - Scientific Report - c</a>
<b>License</b>	CC BY-NC-SA 4.0
<b>Purpose of reuse</b>	Reference document for the description of the work done on the use cases during the 2nd Research Cycle (M10-M15)
<b>COGNIT users</b>	All partners
<b>Other users</b>	Scientific groups working on same or similar topics to those developed in COGNIT; European Commission.

<b>DATA ASSET</b>	<b>DELIV-16</b>
<b>Source</b>	<a href="#">D5.7 COGNIT Framework - Software Source - a</a>
<b>License</b>	CC BY-NC-SA 4.0
<b>Purpose of reuse</b>	Reference document regarding the implementation of the integrated COGNIT Framework at the closure of the 2nd Research Cycle (M10-M15)
<b>COGNIT users</b>	All partners

<b>Other users</b>	Scientific groups working on same or similar topics to those developed in COGNIT; European Commission.
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<b>DATA ASSET</b>	<b>DELIV-17</b>
<b>Source</b>	<a href="#">D5.10 COGNIT Framework - Demo - a</a>
<b>License</b>	CC BY-NC-SA 4.0
<b>Purpose of reuse</b>	Reference document regarding the demonstrations of the integrated COGNIT Framework associated to the closure of the 2nd Research Cycle (M10-M15)
<b>COGNIT users</b>	All partners
<b>Other users</b>	Scientific groups working on same or similar topics to those developed in COGNIT; European Commission.

<b>DATA ASSET</b>	<b>DELIV-18</b>
<b>Source</b>	<a href="#">D6.1 Communication and Dissemination Plan &amp; Report - a</a>
<b>License</b>	CC BY-NC-SA 4.0
<b>Purpose of reuse</b>	Reference communication and dissemination plan for HE projects.
<b>COGNIT users</b>	All partners
<b>Other users</b>	European Commission.

## Scientific Publications

<b>DATA ASSET</b>	<b>PAPER-01</b>
<b>Source</b>	<a href="#">Latency and resource consumption analysis for serverless edge analytics</a>
<b>License</b>	CC BY 4.0 International
<b>Purpose of reuse</b>	This work can be used as reference for ongoing activities of different research groups worldwide.
<b>COGNIT users</b>	OpenNebula
<b>Other users</b>	Scientific groups working on the same topic/s or others close to the one/s addressed in the paper.

DATA ASSET	PAPER-02
Source	<a href="#">Modelling the Green Cloud Continuum: Integrating Energy Considerations into Cloud-Edge Models</a>
License	CC BY 4.0 International
Purpose of reuse	This work can be used as reference for ongoing activities of different research groups worldwide.
COGNIT users	UMU
Other users	Scientific groups working on the same topic/s or others close to the one/s addressed in the paper.

### Other publications and materials

DATA ASSET	PRESS-01
Source	<a href="#">European project COGNIT releases the Architecture of its AI-enabled Serverless Framework for the Cloud-Edge Continuum</a>
License	CC BY-NC-SA 4.0
Purpose of reuse	Show the progress of the EU-funded projects under the HE topic on Cognitive Cloud.
COGNIT users	All partners
Other users	European Commission.

DATA ASSET	VIDEO-01
Source	<a href="#">Energy Efficiency Optimisation for Cloud-Edge Orchestration (October 2023)</a>
License	CC BY-NC-SA 4.0
Purpose of reuse	Show the behaviour of a cloud-edge orchestrator based on energy efficiency optimisation criteria.
COGNIT users	RISE, UMU
Other users	Scientific groups working on same or similar topics to those developed in COGNIT. European Commission.

DATA ASSET	VIDEO-02
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<b>Source</b>	<a href="#">Deploying the COGNIT Platform (June 2024)</a>
<b>License</b>	CC BY-NC-SA 4.0
<b>Purpose of reuse</b>	Show a step-by-step tutorial about how to deploy the first integrated version of the COGNIT Platform
<b>COGNIT users</b>	OpenNebula
<b>Other users</b>	Scientific groups working on same or similar topics to those developed in COGNIT. European Commission.

## 2.2. Catalogue of non-public Research Data Assets

At the time of writing this report, the following assets still have to be made public by the Project under its Open Access commitment (i.e. expected to happen before M36):

ID	Title	Description
PAPER-03	COGNIT: Challenges and Vision for a Serverless and Multi-Provider Cognitive Cloud-Edge Continuum	<i>Conference Paper at IEEE EDGE 2023</i>
PAPER-04	Anomaly Detection and Resolution on the Edge: Solutions and Future Directions	<i>Conference Paper at IEEE SOSE 2023</i>
PAPER-05	Formal Models for the Energy-Aware Cloud-Edge Computing Continuum: Analysis and Challenges	<i>Conference Paper at IEEE SOSE 2023</i>
PAPER-06	Towards a Workload Mapping Model for Tuning Backing Services in Cloud Systems	<i>Conference Paper at DEXA 2023</i>
PAPER-07	Cliffhanger: an experimental evaluation of stateful serverless at the edge	<i>Conference Paper at WONS 2024</i>
PAPER-08	Securing P4-SDN Data Plane against Flow Table	<i>Conference Paper at NOMS 2024</i>

### Scientific publications

<b>DATA ASSET</b>	<b>PAPER-03</b>
<b>Source</b>	<a href="https://doi.ieeecomputersociety.org/10.1109/EDGE60047.2023.00015">doi.ieeecomputersociety.org/10.1109/EDGE60047.2023.00015</a>
<b>COGNIT users</b>	All partners



<b>DATA ASSET</b>	<b>PAPER-04</b>
Source	<a href="https://doi.org/10.1109/SOSE58276.2023.00034">doi.org/10.1109/SOSE58276.2023.00034</a>
COGNIT users	UMU

<b>DATA ASSET</b>	<b>PAPER-05</b>
Source	<a href="https://doi.org/10.1109/SOSE58276.2023.00012">doi.org/10.1109/SOSE58276.2023.00012</a>
COGNIT users	UMU

<b>DATA ASSET</b>	<b>PAPER-06</b>
Source	<a href="https://doi.org/10.1007/978-3-031-39847-6_19">doi.org/10.1007/978-3-031-39847-6_19</a>
COGNIT users	UMU

<b>DATA ASSET</b>	<b>PAPER-07</b>
Source	<a href="https://doi.org/10.23919/WONS60642.2024.10449637">doi.org/10.23919/WONS60642.2024.10449637</a>
COGNIT users	RISE

<b>DATA ASSET</b>	<b>PAPER-08</b>
Source	<a href="https://doi.org/10.1109/NOMS59830.2024.10575461">doi.org/10.1109/NOMS59830.2024.10575461</a>
COGNIT users	UMU

### 2.3. Catalogue of Research Data Assets under embargo

No assets have been placed under embargo during the reporting period:

ID	Title	Description

## 3. FAIR data

### 3.1. Making data findable, including provisions for metadata

Both the Project's website ([COGNIT.SovereignEdge.eu](https://cognit.sovereignedge.eu)) and its Zenodo repository remain the main channels for the COGNIT Project to make its publicly available data and research outputs traceable and locatable (e.g. allocating unique DOI to digital objects). Should there be any changes in this regard, they will be reported in Deliverable D1.3 (M36).

### 3.2. Making data accessible

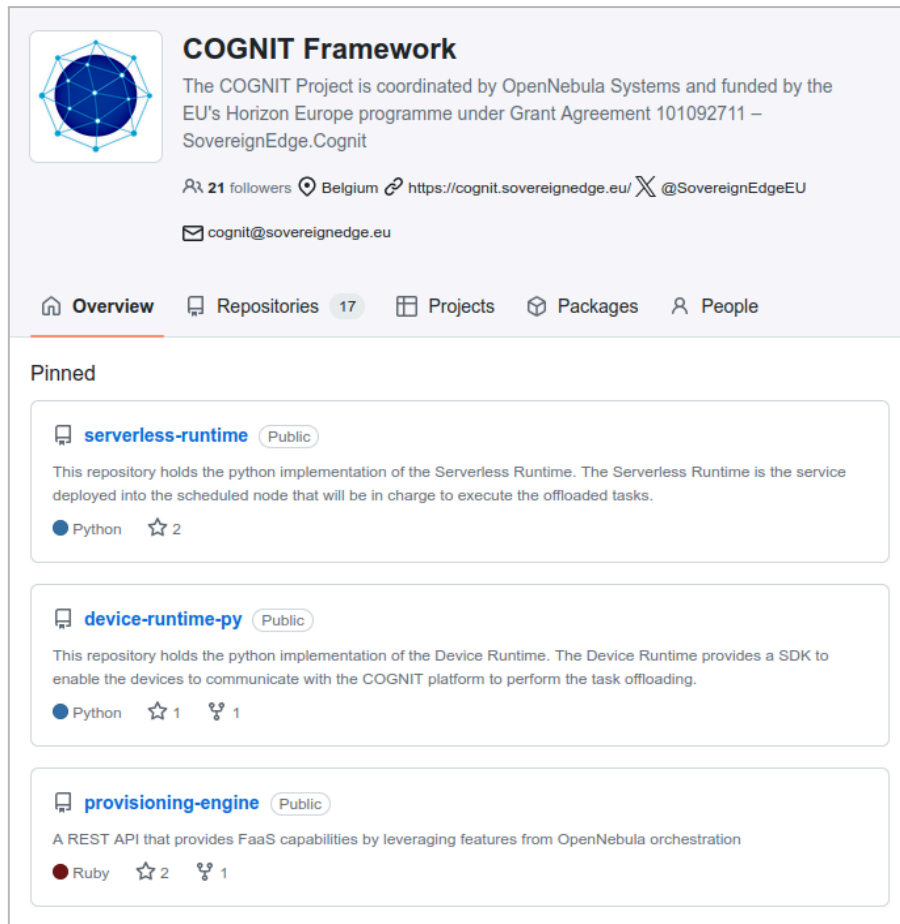
It is still the intention of the Consortium to make all the data and research outputs openly available, following the principle "as open as possible, as closed as necessary".



**Figure 3.1.** Zenodo repository managed by the COGNIT Project.

### Repository:

The COGNIT Project will keep gradually expanding the public contents available through open online repositories such as [Zenodo](https://zenodo.org) for project deliverables and academic papers, and [GitHub](https://github.com) for source code and, eventually, the AI/ML models (and the relevant metrics used to train them) and datasets produced by the Validation Use Cases.



**Figure 3.2.** Current view of the Project’s GitHub repository.

## Data:

As established in the original Grant Agreement, only Deliverables D6.4 (M18) and D6.5 (M36)—which describe the Project’s Exploitation Plan—are deemed as “Sensitive” and will not be released publicly. Any other report is being made available once submitted to the EC through the Project’s website.

As defined in Deliverable D1.1 (M6), academic papers produced during the execution of the Project are gradually being made available through Open Access.

As stated in Deliverable D1.1 (M6), all software artefacts produced by COGNIT are being released as open source under [Apache License](#). Upstream contributions to relevant open source technologies are being done in accordance with the existing open source license and the Contributor License Agreement (CLA) of those projects.

A Creative Commons license (i.e. [CC BY-NC-SA 4.0](#)) is being used for publishing the Project’s reports, website, and other online contents.

Personal data collected during the execution of the Project as part of its Communication and Dissemination actions (e.g. event registrations) keeps following the “data minimisation principle” and relevant regulations (e.g. GDPR), and is only available internally to relevant members of the Consortium.

As anticipated in Deliverable D1.1 (M6), it has not been possible yet by M18 to confirm whether or not some data produced during the execution of the Project (e.g. AI/ML models, the metrics used to train them, or specific Use Case datasets) might not be made publicly available due to IPR restrictions or potential exploitation usage by its owners (i.e. members of the Consortium, individually or jointly).

A full report about any eventual restriction or change in this section applying after M18 will be provided at the end of the Project as part of Deliverable D1.3 in line with the final Exploitation Plan defined in D6.5.

### **3.3. Making data interoperable**

This section of the DMP has suffered no modifications since the publication of Deliverable D1.1 in M6. Recommended best practices and formats for data interoperability (e.g. JSON as the standard format for data exchange between the different components of the COGNIT Framework) remain the same. Should there be any changes in this regard, they will be reported in Deliverable D1.3 (M36).

### **3.4. Increase data re-use**

This section of the DMP has suffered no modifications since the publication of Deliverable D1.1 in M6. No data embargoes are in place at the time of writing this report. Should there be any changes in this regard, they will be reported in Deliverable D1.3 (M36).

## 4. Other research outputs

As anticipated in Deliverable D1.1 (M6), it has not been possible yet by M18 to confirm if/how the FAIR principles will end up being applied to the AI/ML models, the relevant metrics used to train them, and the eventual Use Case datasets that might be produced during the execution of the rest of the Project, and whether or not they might finally be made publicly available due to IPR restrictions or potential exploitation usage by its owners. A full report about those research outputs will be provided at the end of the Project as part of Deliverable D1.3 in line with the final Exploitation Plan defined in D6.5.

## 5. Allocation of resources

The allocation of resources and roles defined by Deliverable D1.1. in M6 has suffered no modifications, apart from the update of the contact details of the **Data Management Officer** (DMO) that OpenNebula Systems, as Coordinator of the Project, has allocated:

<b>Name</b>	Dr. Alberto P. Martí
<b>Company</b>	OpenNebula Systems
<b>Address</b>	La Finca Business Park, Building <b>#13</b> 28223 Pozuelo de Alarcón (Spain)
<b>Telephone</b>	+34918298445
<b>E-mail</b>	innovation@opennebula.io

**Table 5.1.** Updated contact details of the DMO of the Project.

Should there be any further updates or changes in this section, they will be reported in Deliverable D1.3 (M36).

## 6. Data security

The Project's Data Security policy defined in Deliverable D1.1 has suffered no modifications so far. Should there be any changes in this regard, they will be reported in Deliverable D1.3 (M36).

## 7. Ethics

As stated in Deliverable D1.1, it is our understanding that the use of AI in this Horizon Europe project does not raise additional ethical issues nor has any impact on the data sharing policy of the Project as defined in M6 by its Data and Research Outputs Management Plan. For the time being, such an understanding remains the same. Should there be any changes in this regard, they will be reported in Deliverable D1.3 (M36).



## 8. Other issues

No other national/funder/sectorial/departmental procedures for data management are being used so far during the execution of the Project. Should there be any changes in this regard, they will be reported in Deliverable D1.3 (M36).