EOSC Future Open Days

WP3 Working Groups

25th November 2021

The EOSC Future project is co-funded by the
European Union Horizon Programme call
INFRAEOSC-03-2020, Grant Agreement number 101017536

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Aim of today

- Working Groups in the Architecture and Interoperability WP: why and what?
- Highlights of the current Working Groups
  - Alessia Bardi (CNR)
  - Giuseppe La Rocca (EGI)
  - Keith Jeffery (ENVRI-FAIR)
  - Enol Fernandez (EGI)
- And obviously get feedback and address any queries

Overview of the Architecture and Interoperability Framework WP

Licia Florio (GÉANT)

WP3 Objectives

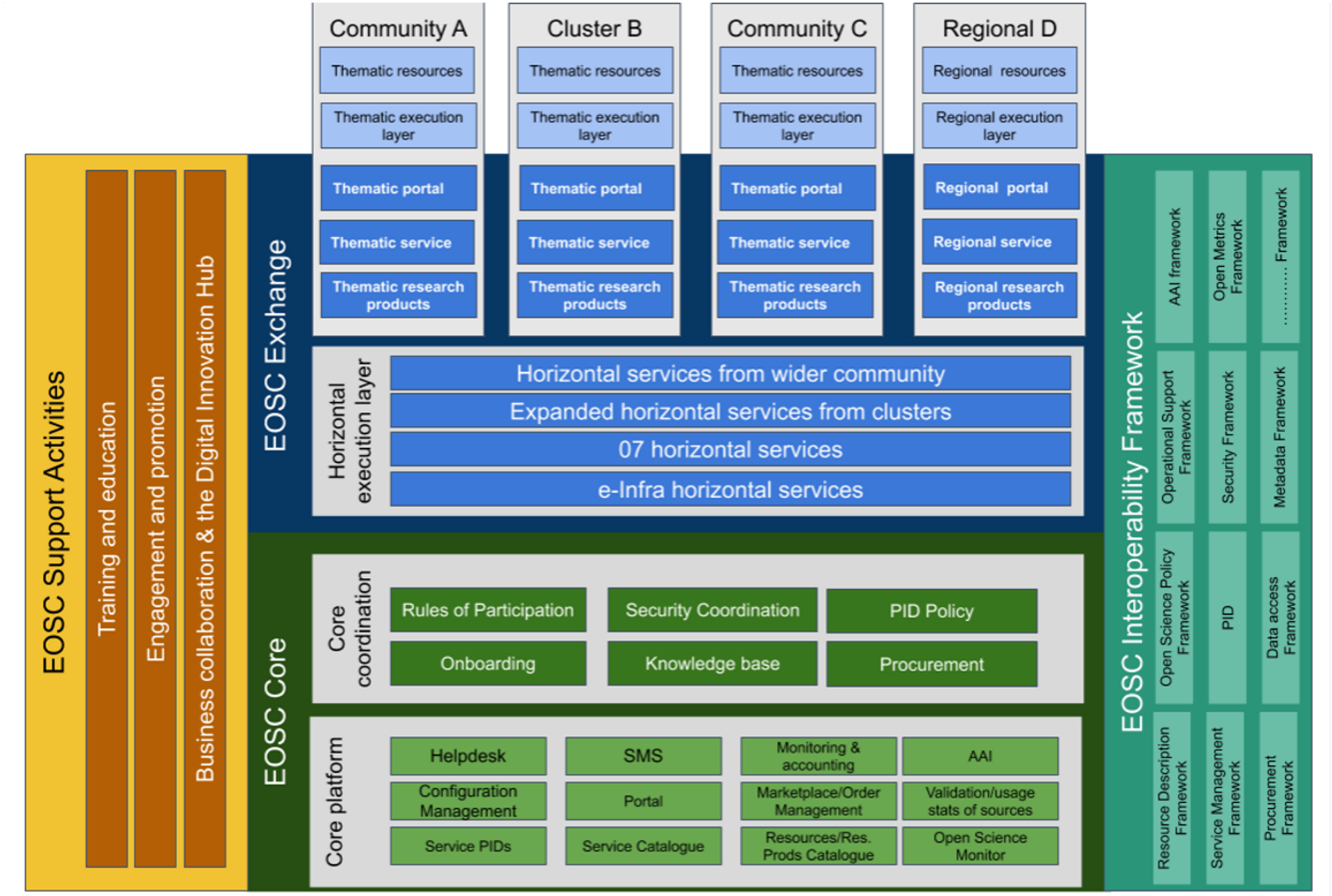
Continuously enhance the overarching federated EOSC architecture needed for the EOSC-Core and EOSC capabilities by collecting functional cross-communities requirements within the project and beyond.

Liaise with relevant stakeholders in the project (clusters, e-infras, RIs, etc.) and beyond (INFRAEOSC-07 projects, RDA, FIM4R, CODATA, EOSC Assoc, etc.) to define a widely accepted EOSC Interoperability Framework.

Define and continuously improve the Interoperability Framework and guidelines for all functional areas.

Support WGs to ensures that functional requirements from cross-community use cases are known and compatible and technically interoperable with the EOSC-Core

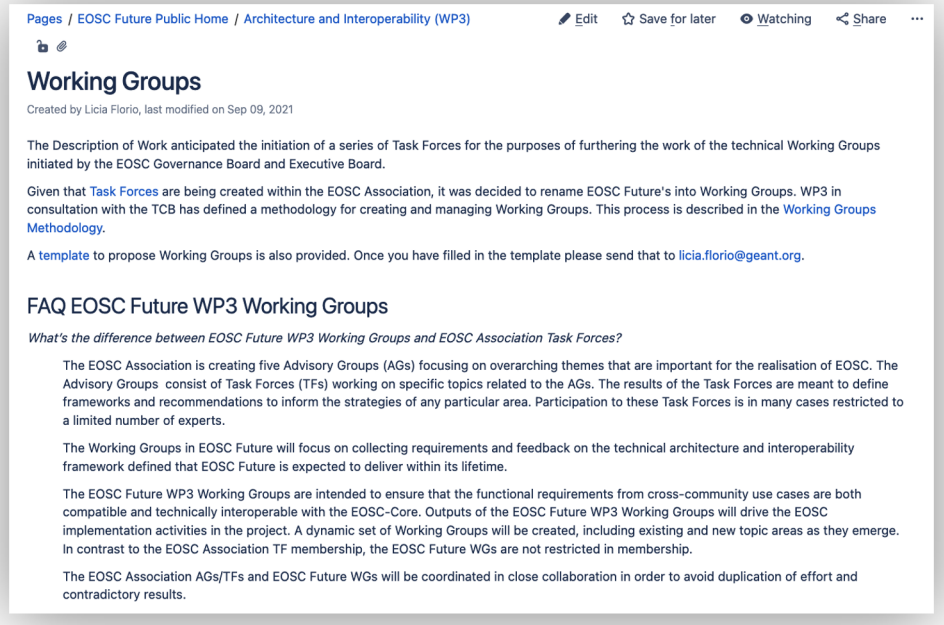
EOSC Architecture



Working Groups in WP3

There are different activities that are part of WP3, one of them being the overall management of the Working Groups:

- Define acceptance criteria and a process for setting up WGs in T3.3
- Create a Steering Group (TCB) responsible for the oversight of the work of the WG and evolution of the EOSC Interoperability Framework beyond *EOSC Future* duration.
- Manage calls for Working Groups - max 5 WGs running at any given time



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Working Groups

Created by Licia Florio, last modified on Sep 09, 2021

The Description of Work anticipated the initiation of a series of Task Forces for the purposes of furthering the work of the technical Working Groups initiated by the EOSC Governance Board and Executive Board.

Given that Task Forces are being created within the EOSC Association, it was decided to rename EOSC Future's into Working Groups. WP3 in consultation with the TCB has defined a methodology for creating and managing Working Groups. This process is described in the Working Groups Methodology.

A template to propose Working Groups is also provided. Once you have filled in the template please send that to licia.florio@geant.org.

FAQ EOSC Future WP3 Working Groups

What's the difference between EOSC Future WP3 Working Groups and EOSC Association Task Forces?

The EOSC Association is creating five Advisory Groups (AGs) focusing on overarching themes that are important for the realisation of EOSC. The Advisory Groups consist of Task Forces (TFs) working on specific topics related to the AGs. The results of the Task Forces are meant to define frameworks and recommendations to inform the strategies of any particular area. Participation to these Task Forces is in many cases restricted to a limited number of experts.

The Working Groups in EOSC Future will focus on collecting requirements and feedback on the technical architecture and interoperability framework defined that EOSC Future is expected to deliver within its lifetime.

The EOSC Future WP3 Working Groups are intended to ensure that the functional requirements from cross-community use cases are both compatible and technically interoperable with the EOSC-Core. Outputs of the EOSC Future WP3 Working Groups will drive the EOSC implementation activities in the project. A dynamic set of Working Groups will be created, including existing and new topic areas as they emerge. In contrast to the EOSC Association TF membership, the EOSC Future WGs are not restricted in membership.

The EOSC Association AGs/TFs and EOSC Future WGs will be coordinated in close collaboration in order to avoid duplication of effort and contradictory results.

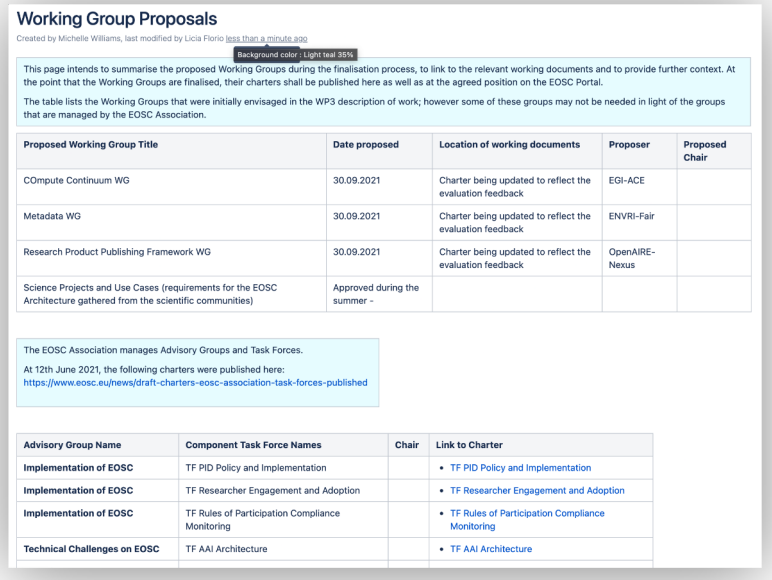
[Working Groups Process]

WP3 WGs conceived as an important tool to advance the EOSC Architecture.

Alignment with the EOSC Assoc to avoid duplication of work.

How do we support Working Groups ?

- WP3 maintain Working Groups (WP3) - Task Force (EOSC Assoc) Registry
- WP3 Support day-to-day running of the Working Groups
- Ensure that charters and meeting notes are available on the EOSC WP3 wiki
- But ultimately the WGs are responsible for their own work



Working Group Proposals

Created by Michelle Williams, last modified by Licia Florio less than a minute ago

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This page intends to summarise the proposed Working Groups during the finalisation process, to link to the relevant working documents and to provide further context. At the point that the Working Groups are finalised, their charters shall be published here as well as at the agreed position on the EOSC Portal.

The table lists the Working Groups that were initially envisaged in the WP3 description of work; however some of these groups may not be needed in light of the groups that are managed by the EOSC Association.

Proposed Working Group Title	Date proposed	Location of working documents	Proposer	Proposed Chair
COmpute Continuum WG	30.09.2021	Charter being updated to reflect the evaluation feedback	EGI-ACE	
Metadata WG	30.09.2021	Charter being updated to reflect the evaluation feedback	ENVRI-Fair	
Research Product Publishing Framework WG	30.09.2021	Charter being updated to reflect the evaluation feedback	OpenAIRE-Nexus	
Science Projects and Use Cases (requirements for the EOSC Architecture gathered from the scientific communities)	Approved during the summer -			

The EOSC Association manages Advisory Groups and Task Forces.

At 12th June 2021, the following charters were published here: https://www.eosc.eu/news/draft-charters-eosc-association-task-forces-published

Advisory Group Name	Component Task Force Names	Chair	Link to Charter
Implementation of EOSC	TF PID Policy and Implementation		• TF PID Policy and Implementation
Implementation of EOSC	TF Researcher Engagement and Adoption		• TF Researcher Engagement and Adoption
Implementation of EOSC	TF Rules of Participation Compliance Monitoring		• TF Rules of Participation Compliance Monitoring
Technical Challenges on EOSC	TF AAI Architecture		• TF AAI Architecture

Initial list of WGs envisaged at the time of the project preparation was revisited by T3.1 in line with the groups created by the EOSC Association

https://wiki.eoscfuture.eu/x/ngWK

Initial Working Groups in WP3

Call for WG launched in September - 3 Working Groups were approved.

Started

Research Product Publishing Framework WG - OpenAIRE Nexus

Science Projects and Use Cases (started)

Metadata WG - ENVRI-FAIR

Compute Continuum WG - EGI-ACE

AAI (EOSC Association TF)

FAQ

Recurrent question: What's the difference between the TFs in the Association and the WGs in EOSC Future?

A: PLEASE check the FAQ on the EOSC Wiki:
https://wiki.eoscfuture.eu/display/PUBLIC/Working+Groups

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Thank you!

Research Product Publishing Framework Working Group

Alessia Bardi, ISTI-CNR, OpenAIRE Nexus WP7 leader

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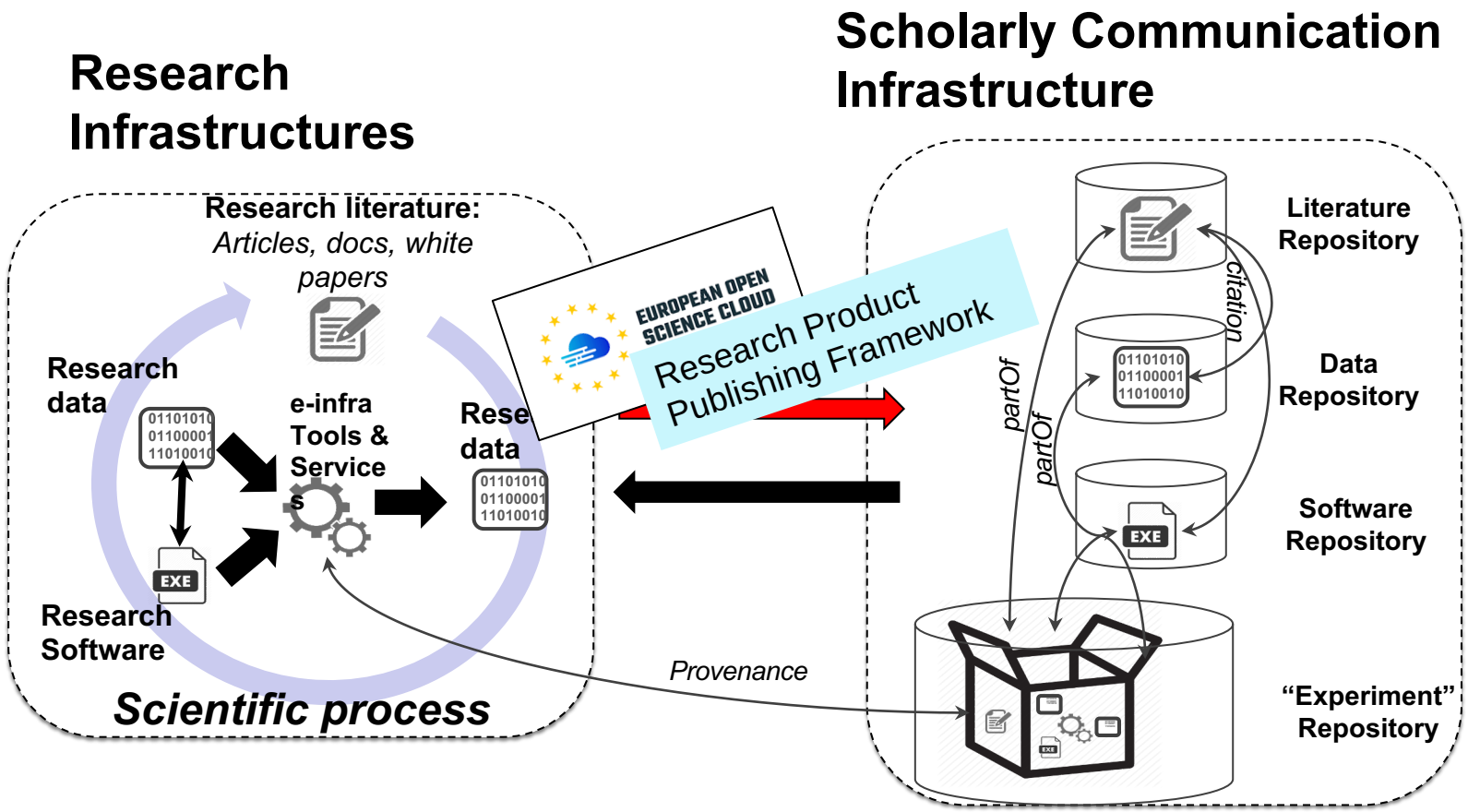
Participants

Chairs

- Alessia Bardi, OpenAIRE Nexus WP7 leader (ISTI-CNR)
- Jose Benito Gonzalez Lopez, Zenodo.org technical manager (CERN)
- Paolo Manghi, OpenAIRE Nexus coordinator, EOSC Future TCB member (OpenAIRE AMKE)

13 Participants from

Motivations



- Manual (re)-deposition costs
- Loss of context out of the RI
- Metadata quality
- Article-centered view
- Integration costs of different deposition APIs

WG outputs

#	Planned Activities	Outputs	Due Month (indicative)
1	Landscape study on (semi-)automatic publishing workflows/integration between RI and repository services	Report (Input for activities 2 and 3)	M3
2	Identification of real-case scenarios and integration patterns among the services involved in the WG	Report (Input for activity 4)	M3
3	Analysis of existing repository deposition frameworks from the functional and non-functional perspectives (identification of common patterns, common problems, etc)	Report (Input for activity 4)	M5
4	Protocol recommendation v1.0 open for consultation and refinement	Recommendation	M6

Final output: Research Product Publishing framework
Protocol (API, formats) recommendation for the EOSC interoperability framework

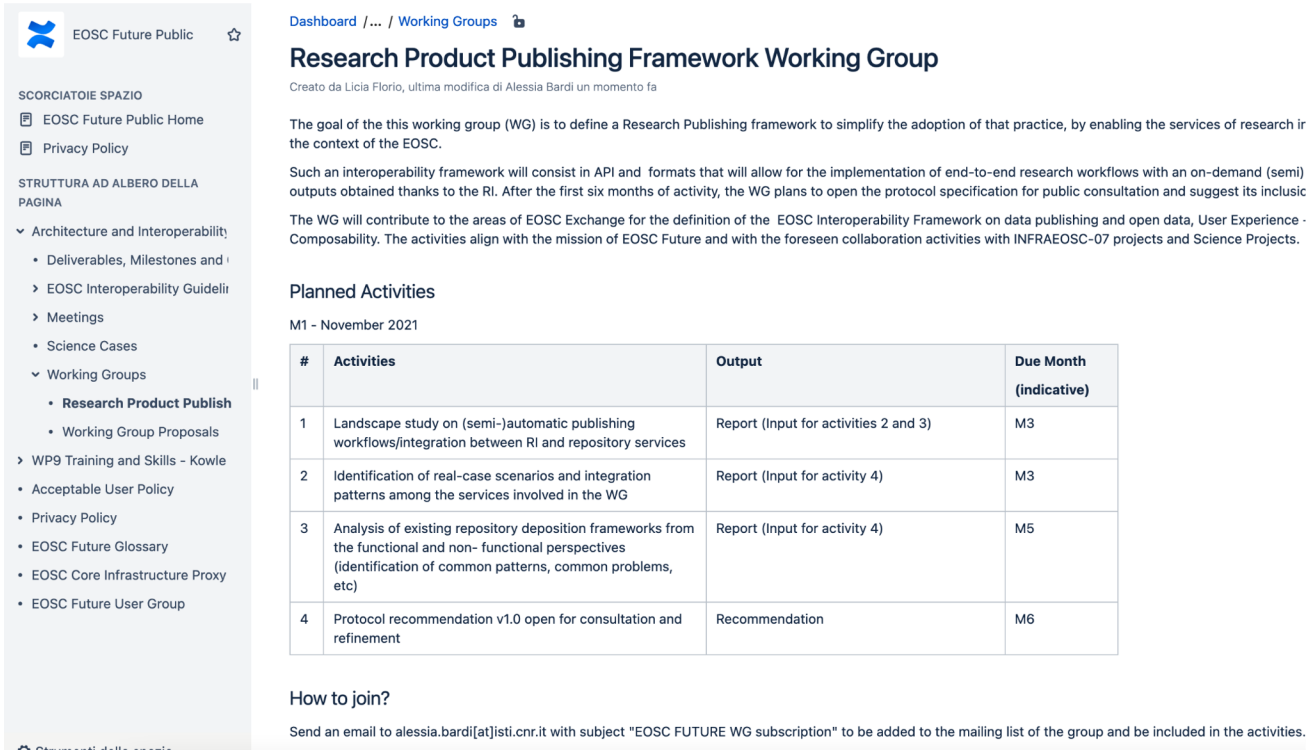
Based on previous experiences, prototypes and existing frameworks

How to join

We welcome new members to contribute with their experience, ongoing projects and wishlist

Developers and managers of repository services, data processing services, computational engine, virtual research environments, etc.

Visit the wiki page of the WG and get in touch to join the WG!



EOSC Future Public

SCORCIATOIE SPAZIO
- EOSC Future Public Home
- Privacy Policy

STRUTTURA AD ALBERO DELLA PAGINA
- Architecture and Interoperability
  - Deliverables, Milestones and
  - EOSC Interoperability Guideli
  - Meetings
  - Science Cases
  - Working Groups
    - **Research Product Publish**
    - Working Group Proposals
- WP9 Training and Skills - Kowle
- Acceptable User Policy
- Privacy Policy
- EOSC Future Glossary
- EOSC Core Infrastructure Proxy
- EOSC Future User Group

Dashboard / ... / Working Groups

Research Product Publishing Framework Working Group

Creato da Licia Florio, ultima modifica di Alessia Bardi un momento fa

The goal of the this working group (WG) is to define a Research Publishing framework to simplify the adoption of that practice, by enabling the services of research ir the context of the EOSC.

Such an interoperability framework will consist in API and formats that will allow for the implementation of end-to-end research workflows with an on-demand (semi) outputs obtained thanks to the RI. After the first six months of activity, the WG plans to open the protocol specification for public consultation and suggest its inclusic

The WG will contribute to the areas of EOSC Exchange for the definition of the EOSC Interoperability Framework on data publishing and open data, User Experience - Composability. The activities align with the mission of EOSC Future and with the foreseen collaboration activities with INFRAEOSC-07 projects and Science Projects.

Planned Activities

M1 - November 2021

#	Activities	Output	Due Month (indicative)
1	Landscape study on (semi-)automatic publishing workflows/integration between RI and repository services	Report (Input for activities 2 and 3)	M3
2	Identification of real-case scenarios and integration patterns among the services involved in the WG	Report (Input for activity 4)	M3
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4	Protocol recommendation v1.0 open for consultation and refinement	Recommendation	M6

How to join?

Send an email to alessia.bardi[at]isti.cnr.it with subject "EOSC FUTURE WG subscription" to be added to the mailing list of the group and be included in the activities.

https://wiki.eoscfuture.eu/display/PUBLIC/Research+Product+Publishing+Framework+Working+Group

The Science Projects and Use Cases Working Group

Giuseppe La Rocca, EGI, Co-chair
Jonathan Tedds, ELIXIR/EMBL-EBI, Co-chair

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Participants

Giuseppe La Rocca (Co-chair),
EGI, giuseppe.larocca@egi.eu

Jonathan Tedds (Co-chair),
ELIXIR/EMBL-EBI, tedds@ebi.ac.uk

- Representatives from all the EOSC Future Science Clusters:
  - ENVRI-FAIR, ESCAPE, Life Science, PANOSC, and SSHOC.
- Technical members from EOSC Future T6.2 and T6.3
- EOSC Future WP3, WP4, WP5, WP7 and TCB members
- INFRA-EOSC-07 projects representatives

Objectives

- **Gather requirements** from science projects to steer the overall project technical roadmap, shape the EOSC architecture and drive the activities of the technical WPs.
- **Keep science projects informed** about the technical achievement of the project.
- **Pilot integrations** with EOSC Core and horizontal services.
- **Oversee** how the science projects adopt the project technical outputs.

Methodology

- Create a “mini support teams” to oversee the technical integration of the Science Projects
  - Assign one technical coordinator (alias a shepherd) per Science Project/Clusters

- Mini support teams and Science Projects agree and perform the integrations

- Organize monthly reporting meetings with shepherds and TCB members

Expected outputs

The WG will support the achievement of the following items of the high-level technical roadmap (limited to M6):

- A2-M6. Researchers can see services from the thematic clusters through EOSC.
- C1-M6. Researchers can see example cases of complex workflows using multiple resource providers.
- C2-M6. Researchers can access and use EOSC computing and storage resources.
- C3-M6. Researchers can see a rich range of horizontal resources and request access to them.
- D4-M6. Initial cluster services have been onboarded and are listed in the Resource registry in the EOSC portal and accessible through the EOSC Marketplace.
- D5-M6. Horizontal services (publishing workflows, data transfer, data packaging, container deployment) are demonstrated through 07 service instances.
- F1-M6. SP Deployment
- F2-M6. Clusters' Input to EOSC Horizontal Services

The WG will support the delivery of the following project deliverables:

- D3.1 - Science Cases for Development of EOSC Architecture and Frameworks (ELIXIR/EMBL, M3, R, PU):
- D4.2a/b - Back-Office Requirement Analysis (EGI, M9/20, R/O, PU)
- D5.2a/b - Front-Office Requirement Analysis (ICOS, M9/18, R/O, PU)
- D6.1a/b – Registry of Connection, Integration, Validation and Auditing Processes (EGI, M10/30, DEM, PU)
- D7.1 - EOSC Service Planning (EGI, M4, R, PU)

Compute Continuum Working Group

Enol Fernández, EGI, chair

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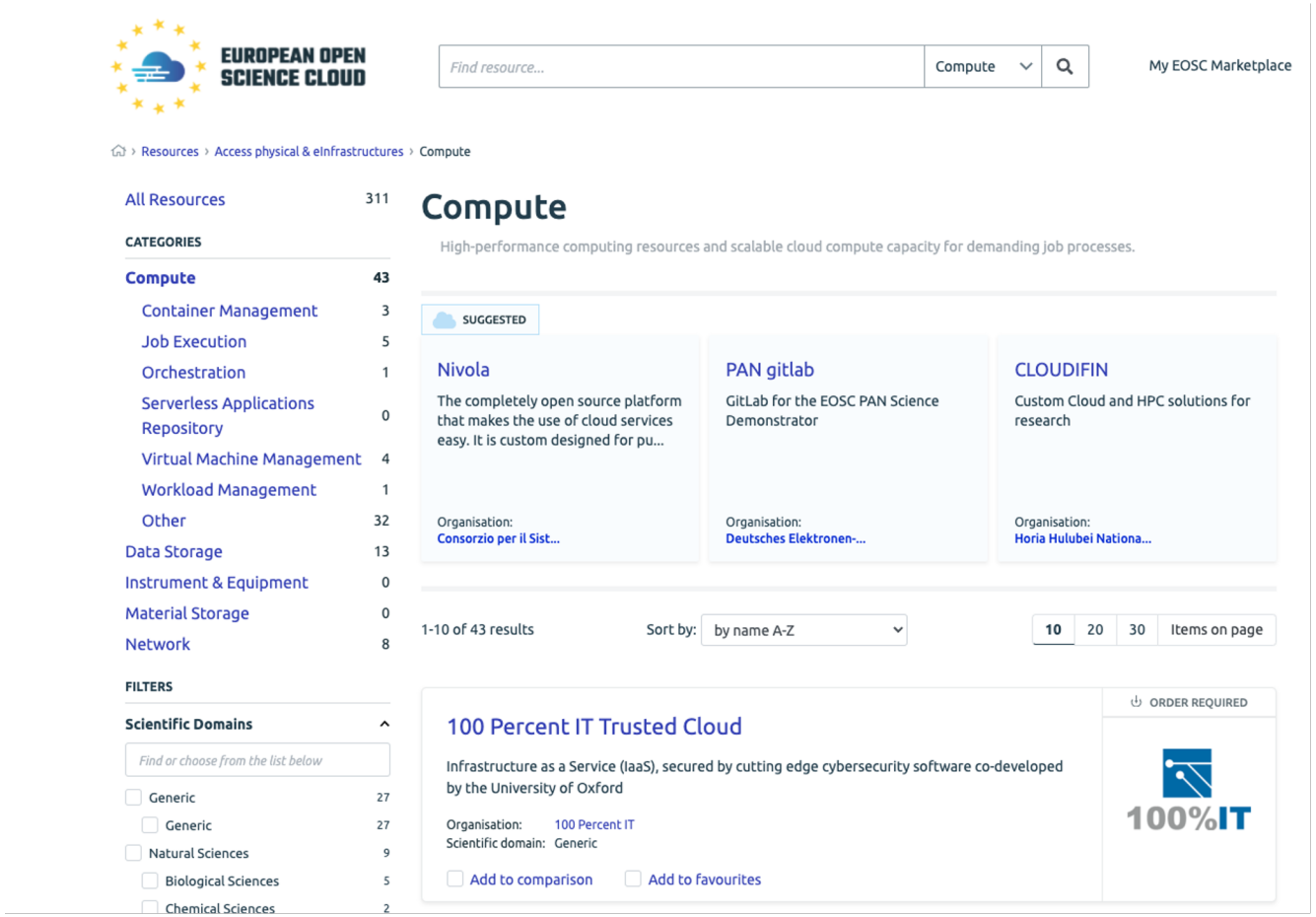
Motivation



- Lack of standards for accessing compute services, multiple technical implementations for delivering similar features
- Current compute services not clearly classified
  - Vague descriptions of services
  - HPC not clearly represented
  - No criteria available for identifying which providers meet the need of a given community
- Impossible to automatically plug compute services to higher level orchestrators
- Unable to perform further integration with EOSC or between services, e.g:
  - Automated monitoring
  - Creation of bundles in EOSC marketplace

Objectives

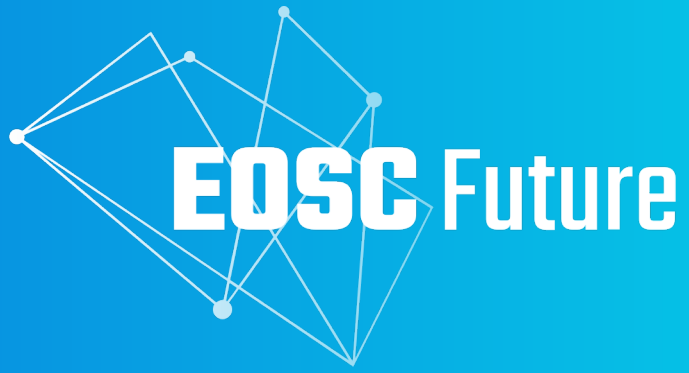
- Review and identify use cases and requirements for accessing computing services
- Review and classify existing technical implementations for accessing computing services (cloud IaaS, HTC, HPC, edge)
- **Define metadata schema(s)** for services that deliver access to computing resources:
  - Extension of the EOSC Resource Profile to describe computing services in EOSC
  - A schema describing interfaces and protocols to access the computing services, thus enabling programmatic access to those services
  - A schema describing technical characteristics of the computing services and common information needed to report their usage
- **Publish compute services in the EOSC Resource catalogue** following the metadata schema developed by the WG
- Develop initial ideas for pairing the description of compute resources with storage descriptions.

Plan

#	Planned Activities	Outputs	Due Month
1	Review of existing Compute-as-a-Service offering in EOSC	Catalogue of services and their characteristics.	M2
2	Review requirements from user communities for Compute-as-a-Service	Technical requirements for the compute services in EOSC from community platforms and services.	M2
3	Analysis of most relevant computing services and identification of attributes to describe them	**Draft metadata schema for Compute-as-a-Service service type(s).**	M3
4	Presentation of initial results to stakeholders	Initial feedback on specifications.	M3
5	Consultation on the produced metadata schema	Feedback from service providers and user communities.	M4
6	Improving the metadata schema based on feedback	**Final specification of the metadata schema and related guidelines .**	M6
7	Integration of the metadata schema with the EOSC Resource Profiles	**Optional extension of the EOSC Resource Profile for compute resources.**	M6
8	Onboarding of the compute resources in EOSC exploiting the extension of the EOSC resource profile for compute resources	**EOSC resource catalogue enriched with compute resources from participating providers described following the metadata schema.**	M6
9	Final report	A short document summarising the main finding of the WG against the objectives.	M6

Status

- Proposal approved by WP3
- Initial list of 15 participants (from EGI-ACE, LifeWatch, ELIXIR, EOSC-Synergy, C-SCALE, RELIANCE, OpenAIRE, EMSO, CMCC, T-Systems, CloudFerro)
  - In contact with stakeholders for better representation - ping me if interested!
- In the coming weeks:
  - Set up wiki space
  - Finalise participant list
  - Set up initial meeting and kick-off activities



Thank you for your attention

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