WP2 Federated Infrastructure

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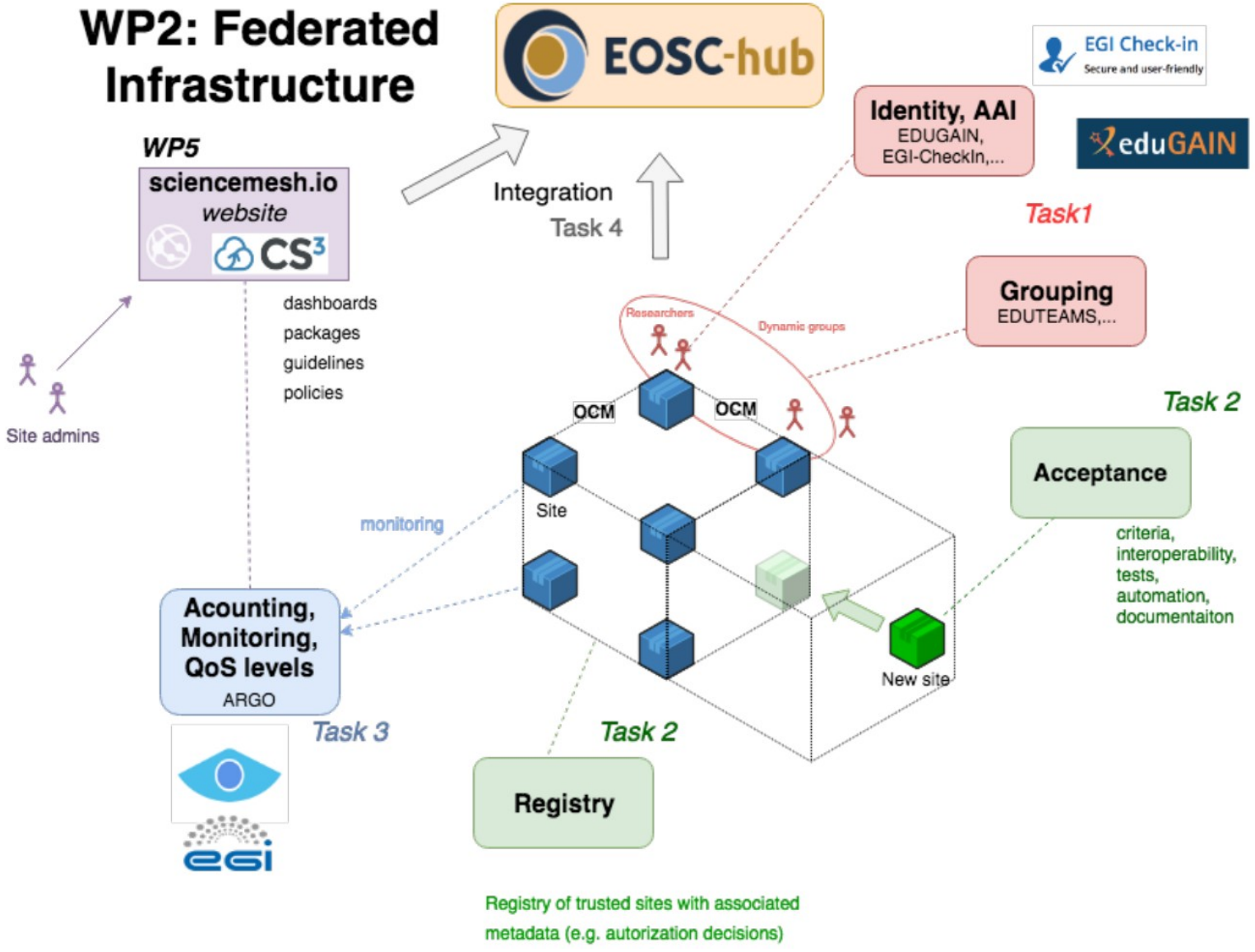
WP2 Federated Infrastructure

- Deals with all aspects related to federating the infrastructure
  - AAI
  - Monitoring, Accounting, QoS, OLA's
  - Security
  - Integration
- Leverage of what is already there

WP2: Federated Infrastructure



WP2 Objectives

- Establish a lightweight, minimal add-on infrastructure based on existing self-sustained CS3 sites and existing sustainable operational infrastructure in the EOSC-hub project.
- Establish operational and deployment processes, procedures, policies and tools for the federated community service at the site level.
- Implementing accounting, monitoring, incident- and change management and security procedures and policies.
- Establish trust relationships, the authentication and authorization infrastructure, and the defining operational procedures and policies and provide documentation.
- Support for sites that want to join this federated infrastructure.

WP2 Tasks

- 2.1 Roadmap for trust
- 2.2 Operational excellence and new sites
- 2.3 Quality assurance, monitoring and accounting
- 2.4 Integration with EOSC-hub
- 2.5 Security in federation

Task Distribution

WP2 Task Distribution						
Partner	**2.1**	**2.2**	**2.3**	**2.4**	**2.5**	**PM**
SURF						50
CERN						32
WWU						23
CESNET						19
SWITCH						12
DTU						6
PSNC						3

Task leader

Participant

WP2 Deliverables and Milestones

		PM	Deliverable	Milestone	Task
2020	Jan	M1			
	Feb	M2			
	Mar	M3			
	Apr	M4			
	May	M5			
	Jun	M6			
	Jul	M7			
	Aug	M8			
	Sep	M9			
	Oct	M10			
	Nov	M11			
	Dec	M12	D2.1 (D)	M2.1 (R)	2.1

D2.1: “Implementation of Federated Identity and Group Management”

M2.1: “All sites working together with OCM
and federated login”

R: REPORT
D: DEMO

WP2 Deliverables and Milestones

		PM	Deliverable	Milestone	Task
2021	Jan	M13			
	Feb	M14			
	Mar	M15			
	Apr	M16			
	May	M17			
	Jun	M18	D2.2 (R)		2.2
	Jul	M19			
	Aug	M20			
	Sep	M21			
	Oct	M22			
	Nov	M23			
	Dec	M24	D2.3 (D)		2.3
			D2.4 (R)		2.5

D2.2: “Operational procedures defined”

D2.3: “Full implementation of quality assurance and monitoring”

D2.4: “Full implementation of security policies and procedures”

R: REPORT
D: DEMO

WP2 Deliverables and Milestones

		PM	Deliverable	Milestone	Task
2022	Jan	M25			
	Feb	M26			
	Mar	M27			
	Apr	M28			
	May	M29			
	Jun	M30		M2.2 (R)	2.2
	Jul	M31			
	Aug	M32			
	Sep	M33	D2.5(R)		2.4
	Oct	M34			
	Nov	M35			
	Dec	M36			

D2.5: “Service included in EOSC-hub”

M2.2: “All sites working together with OCM
and federated login”

R: REPORT

WP2 Deliverables for the first year

Task	Description	Deliverable	Type	Due	Task lead
2.1	Roadmap for trust	D2.1 ”Implementation of federated identity and group management”	DEMO	M12	CESNET
		M2.1 ”All sites working together with OCM and federated login”	WORKSHOP REPORT	M12	

WP2 Deliverables

Task	Description	Deliverable	Type	Due	Task lead
2.2	Operational excellence and new sites	D2.2 ”Operational procedure defined”	REPORT	M18	WWU
		M2.2 ”New sites joining federation”	PROGRESS REPORT	M30	

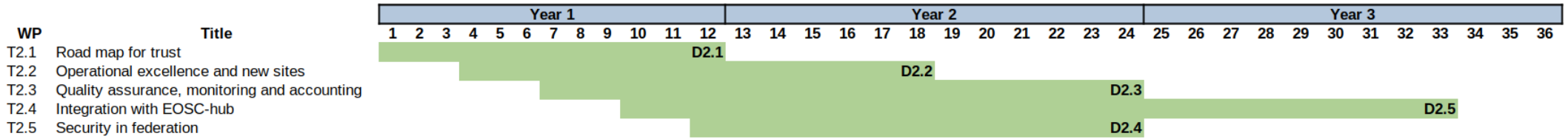
WP2 Deliverables

Task	Description	Deliverable	Type	Due	Task lead
2.3	Quality assurance, monitoring and accounting	D2.2 ”Operational procedure defined”	DEMO	M24	SURF
2.4	Integration with EOSChub	D2.5 ”Full implementation of security policies and procedures”	REPORT	M33	SURF

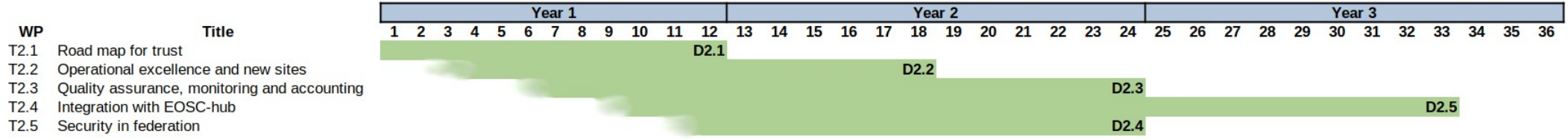
WP2 Deliverables

Task	Description	Deliverable	Type	Due	Task lead
2.5	Security in federation	D2.4 ”Full implementation of security policies and procedures”	REPORT	M24	SWITCH

Workplan


Year 1
Year 2
Year 3
WP
Title
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36
T2.1 Road map for trust
T2.2 Operational excellence and new sites
T2.3 Quality assurance, monitoring and accounting
T2.4 Integration with EOSC-hub
T2.5 Security in federation
D2.1
D2.2
D2.3
D2.5
D2.4

Workplan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D2.1
D2.2
D2.3
D2.5
D2.4

Workplan T2.1 (M1-M12) CESNET

- Roadmap for trust
  - Define requirements
  - Survey to collect info on identity/group sources
  - Define AAI design
  - Implementation
  - Testing
  - Demo(D2.1) and write report(M2.1)
- Smooth user experience is paramount, otherwise it won’t be used.

Workplan T2.2 (M4-M18) WWU

- Operational excellence and new sites
  - Investigate procedures etc. of other federated infrastructures
  - Provide registry of trusted sites (ask for an overview of setup etc.)
  - Define inclusion criteria of new sites
  - Define and document functionality and interoperability tests
  - Provide consultancy support for sites (helpdesk), establish central ticket system like Jira or OTRS
  - Define and implement a way how to deal with rogue sites
  - Write report (D2.2)
  - Write report on new sites joining the federation (M2.2)

Workplan T2.3 (M7-M24) SURF

- Quality assurance, monitoring and accounting
  - Investigate QA/monitoring/accounting infrastructures of EGI
  - Write technical plan for integration
  - Development of tooling
  - Testing
  - Deployment
  - Give DEMO (D2.3)

Workplan T2.4 (M10-M33) SURF

- Integration with EOSC-hub
  - Collect all requirements
  - Determine integration level
  - Define, document and implement the required processes
  - Apply for catalogue entries
  - Write report on inclusion in EOSC-hub infrastructure (D2.5)

Workplan T2.5 (M12-M24) SWITCH

- Security in federation
  - Collect information about security policies and procedures from participant sites
  - Collect information from other federated infrastructures on security policies and procedures
  - Define the system borders/security responsibility
  - Define security policies and procedures for Science Mesh
  - Describe these policies and procedures in a report (D2.4)

Challenges and risks for WP2

Risk	Likely-hood	Impact	Mitigation
Critical staff leaving	Low	High	Facilitate knowledge sharing
EFSS technology provider stops its activity	Medium	Medium	5 partners with whom we have partnerships
Underestimated effort to run the services	Medium	High	Partners being very experienced
Non-conformity with EOSC requirements	Low	High	Experienced partners and close communication with EOSC-hub people
Mismatch between user expectations and delivered functionality	Medium	Medium	Experience and close contact to users and user communities
Insufficient QA for software and service	Low	Medium	Use established methodologies and existing services in monitoring and troubleshooting
Failure to sustain service after the end of the project	Low	Medium	Sites are already sustainable

Interactions with other WPs

	WP2 Task Dependencies				
	2.1	2.2	2.3	2.4	2.5
3.1					
3.2					

Task Dependency

What work is on the critical path

- Task 2.1
  - Without federated AAI there is no Science MESH
  - Other workpackages depend on it