THE WP3: TECHNOLOGY AND FOUNDATION

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Coordinator WP3

ABOUT ME

- Background in Computer Engineering
- Joined CERN in 2014
- Service Manager of CERNBox (CERN Collaborative Platform)
- Storage operator for CERN storage backbone infrastructure
- Creator and technical leader for Reva and the CS3APIs

WHAT IS THE MAIN OBJECTIVE

- Provide the technical foundation for the site and application interoperability (protocols, APIs, implementation and runtime architecture) and a blueprint for evolution of the shared community service based on common protocols and interfaces.

TASK DISTRIBUTION

	WP 3 TASKS				
	T3.1 (APIS)	T3.2 (IMPLEM)	T3.3 (EFSS)	T3.4 (R&D)	*PM*
CERN	★				*58*
AILL		★			*55*
PSNC			★		*34*
CESNET					*20*
CUBBIT				★	*14*
SURF					*14*
WWU					*5*
DTU					*4*
					204

★ Task Leader

Task Participant

WHAT IS THE WORK PLAN? 3 YEARS PLAN

			DELIVERABLES	MILESTONES	T3.1	T3.2	T.3.3	T3.4
2020	January	M1			All tasks run from 1st to 36th month			
	February	M2						
	March	M3						
	April	M4						
	May	M5						
	June	M6						
	July	M7						
	August	M8						
	September	M9	D3.1					
	October	M10						
	November	M11						
	December	M12		M3.1				
2021	January	M13						
	February	M14						
	March	M15	D3.2					
	April	M16						
	May	M17						
	June	M18						
	July	M19						
	August	M20						
	September	M21	D3.3					
	October	M22						
	November	M23						
	December	M24						
2022	January	M25						
	February	M26						
	March	M27						
	April	M28						
	May	M29						
	June	M30	D3.4					
	July	M31						
	August	M32						
	September	M33	D3.5	M3.2				
	October	M34						
	November	M35						
	December	M36		M3.3				

TASK 3.1
DEFINITION OF THE APIS

TASK 3.2
REFERENCE INTEROPERABILITY PLATFORM

TASK 3.3
EFSS SERVICE INTEGRATION

TASK 3.4
R&D

WHAT ARE THE MAIN DELIVERABLES AND MILESTONES OF THE WORK PACKAGE?

- The binding deliverables to EU are:
  - D3.1 Definition of APIs and Protocols ---------- Month 9
  - D3.2 Initial implementation of the platform ---------- Month 15
  - D3.3 App-specific APIs integrated into the protocol ---------- Month 21
  - D3.4 Report on integration with peer-to-peer storage ---------- Month 30
  - D3.5 Full implementation of the protocols, platform and apps ---- Month 33
- The milestones to achieve are:
  - M3.1 Platform ready to test for site interoperability ---------- Month 12
  - M3.2 Platform ready to test for all users in production ---------- Month 33
  - M3.3 New application and users integrated in the platform ------ Month 36

WHAT ARE THE MAIN INTERACTIONS WITH OTHER WPS?

	WP 3 TASKS DEPENDENCIES			
	T3.1 (APIS)	T3.2 (IMPLEM)	T3.3 (EFSS)	T3.4 (R&D)
WP2 AAI APIS (T2.1)				
WP2 QA, MON & ACC (T2.3)				
WP 4 AAP APIS (T4.1)				

Task Dependency

WHAT ARE THE MAIN CHALLENGES AND RISKS? I

- The main challenge of the WP3 is to ensure the delivery of the required software to create the CS3MESH core component, the inter-operability platform needed to connect isolated and distinct service islands across Europe in the federated mesh (including AAI, storage, sync&share and applications).
- Another challenge is to find/define and implement the necessary APIs to make inter-operability happen.

WHAT ARE THE MAIN CHALLENGES AND RISKS? II

	WP3 RISKS			
	Description	Likely-hood	Impact	Mitigation
R3.1	Cirtical Staff Leaving	Low	High	Knowledge sharing. Creating a community
R3.2	EFFSS stops activity	Medium	Medium	At least 5 different partnershipts with EFSS
R3.3	Delays in delivering platform	Medium	High	Rely on experience of partners running their own services
R3.4	Convergence of APIs/Protocols	Low	Medium	Start from internal APIs that are working and promote them to standards
R3.5	Software Components incompatibilities	Low	High	Rely on QA experience from parterns. API-driven development helps adoptions across incompatible technologies

WHAT ARE THE MAIN CHALLENGES AND RISKS? III

R3.6	Mismatch between reality and expectations	Medium	Medium	The expectations are highly desired from the services that partners run and have identified as key improvements to their services
R3.7	Insuficient QA for the Software	Low	Medium	Rely on extensive testing and systems
R3.8	Failure to substain the service after project	Low	Medium	Rely on the susbtainabiliyt model of the sites run by partners and extrapolate to the global service

WHAT PART OF THE WORK IS ON THE CRITICAL PATH OF THE PROJECT?

"No Platform means No Service" and "No Inter-operability means No Service"

On the critical path is the definition of the APIs, as without them the system will not interplay with existing infrastructures neither we can ask vendors to implement against the platform because the APIs are not available.

MANAGEMENT AND COMMUNICATIONS

- Being WP3 mainly a software development activity the daily management and communications will be done on developer-friendly applications.
- For real-time-messaging a private channel for WP3 has been created on Gitter because is where Reva, OCM, CS3 APIs are.
- For agile project management on WP3 the Github Project management suite will be used. CS3MESH related activities and open community contributions from members outside the project like ownCloud, Google Summer of Code and individual contributors.
- New Github tags will be added to coordinate the efforts for the CS3MESH project.
- Confidential communications for the project (money, HR, conflicts, …) will be done either by direct mail contact or by secure communication channel provided by WP1.

AGILE PROCESS

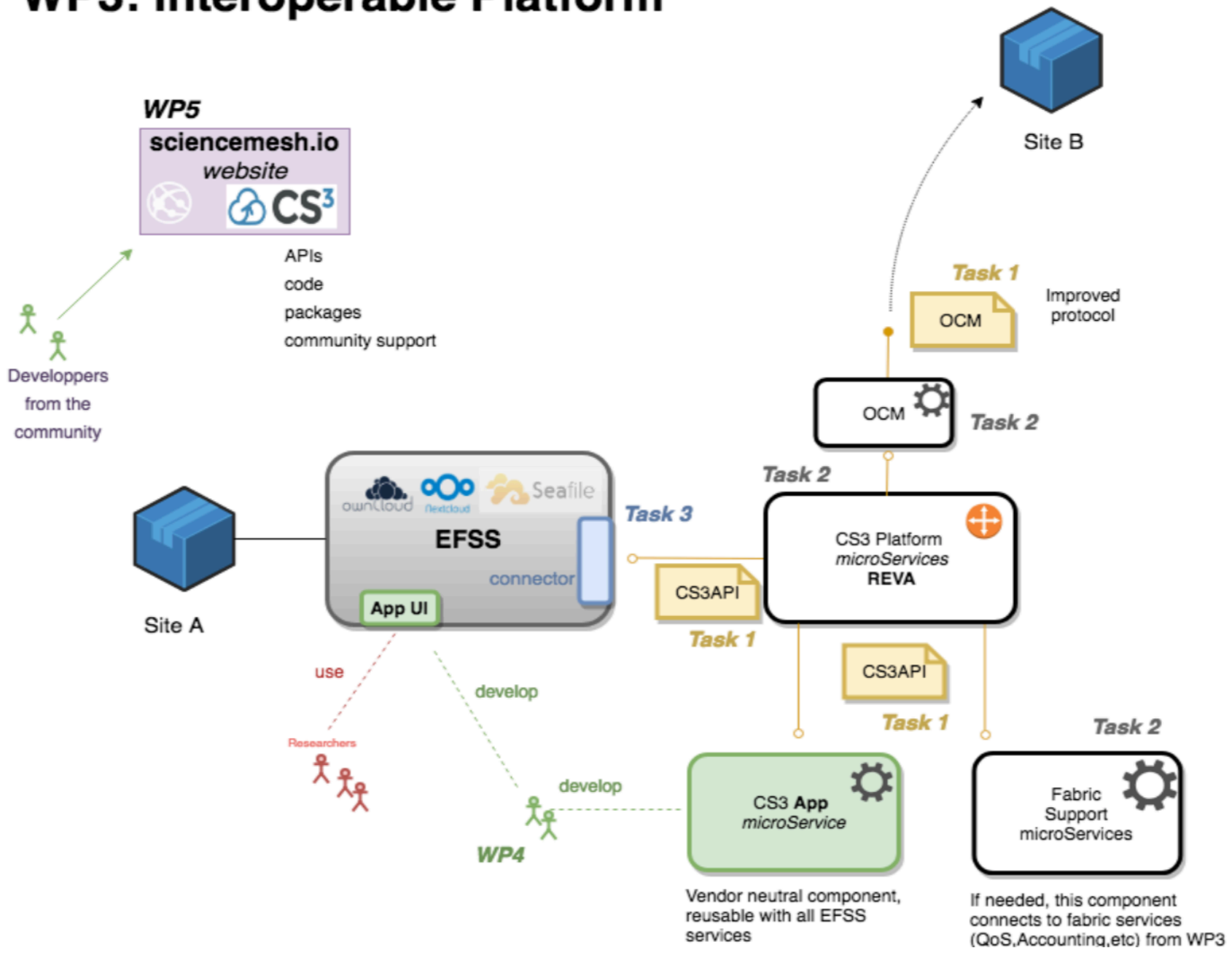
- As stated in the project proposal the methodology to use in WP3 is SCRUM
- No big bang approaches, the process will be iterative inside the WP and also among other dependencies like WP2 and WP4.
- The aim is to have short feedback loops where we can try and explore different paths to create MVPs (Minimum Viable Products) exposed to all partners for their feedback.
- The sprints will be two-weeks and the retrospection period will serve as input for the Steering Committee meeting to report on progress on the Work Package.

WHAT WILL BE THE FIRST DELIVERABLE?

- The "only" deliverable in the first year is

D3.1: Definition of APIs for September 2020.

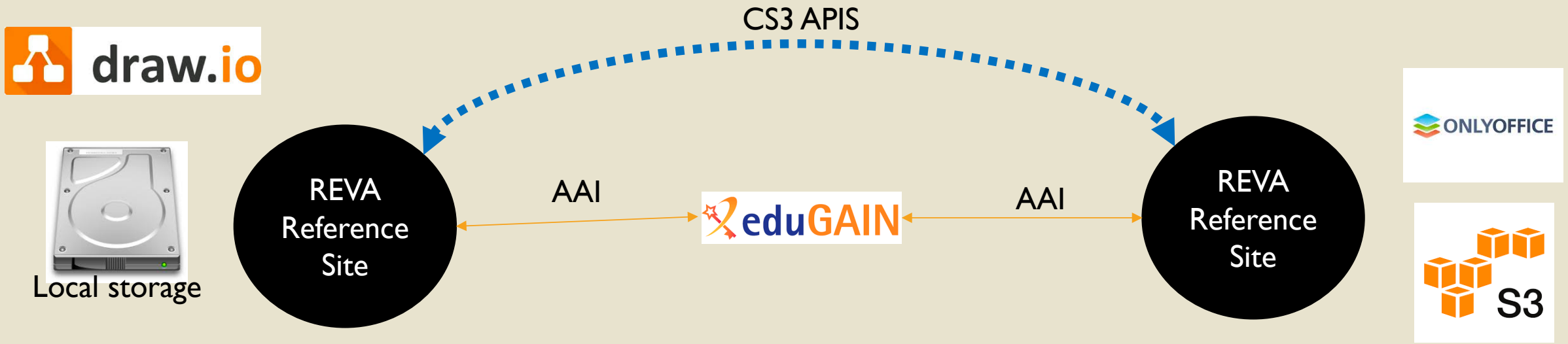
WP3: Interoperable Platform



WHAT WILL YOU START WITH? NEXT MONTH

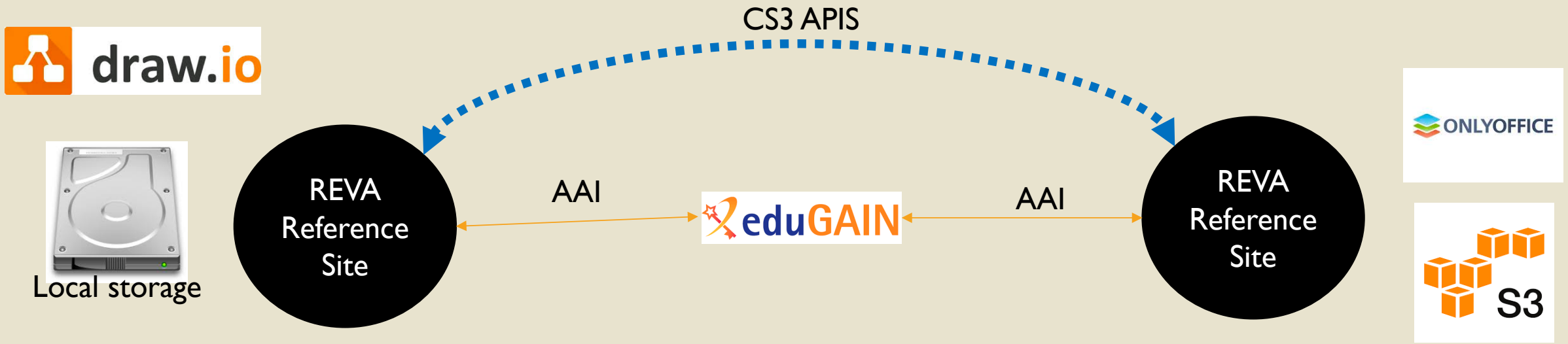
- Finalizing implementation of sharing (public links and collaborative sharing) and access to shares
- Setup Continuous Deployment for the inter-operability platform
- Onboarding new staff members

WHAT WILL YOU HAVE THIS YEAR?



DEFINITION OF APIS

OVERVIEW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CS3 APIS
Local storage
REVA
Reference
Site
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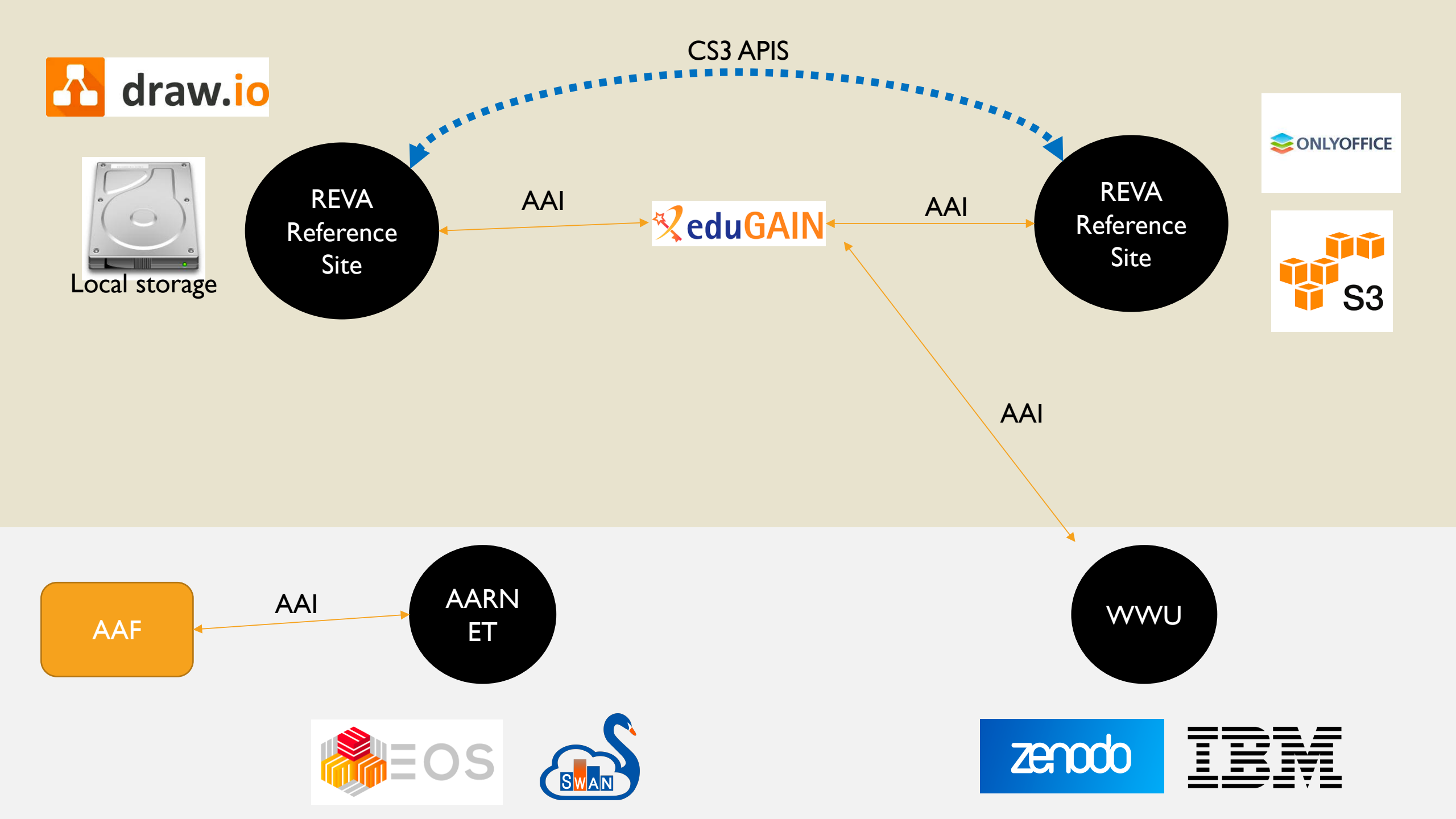
ONLYOFFICE
S3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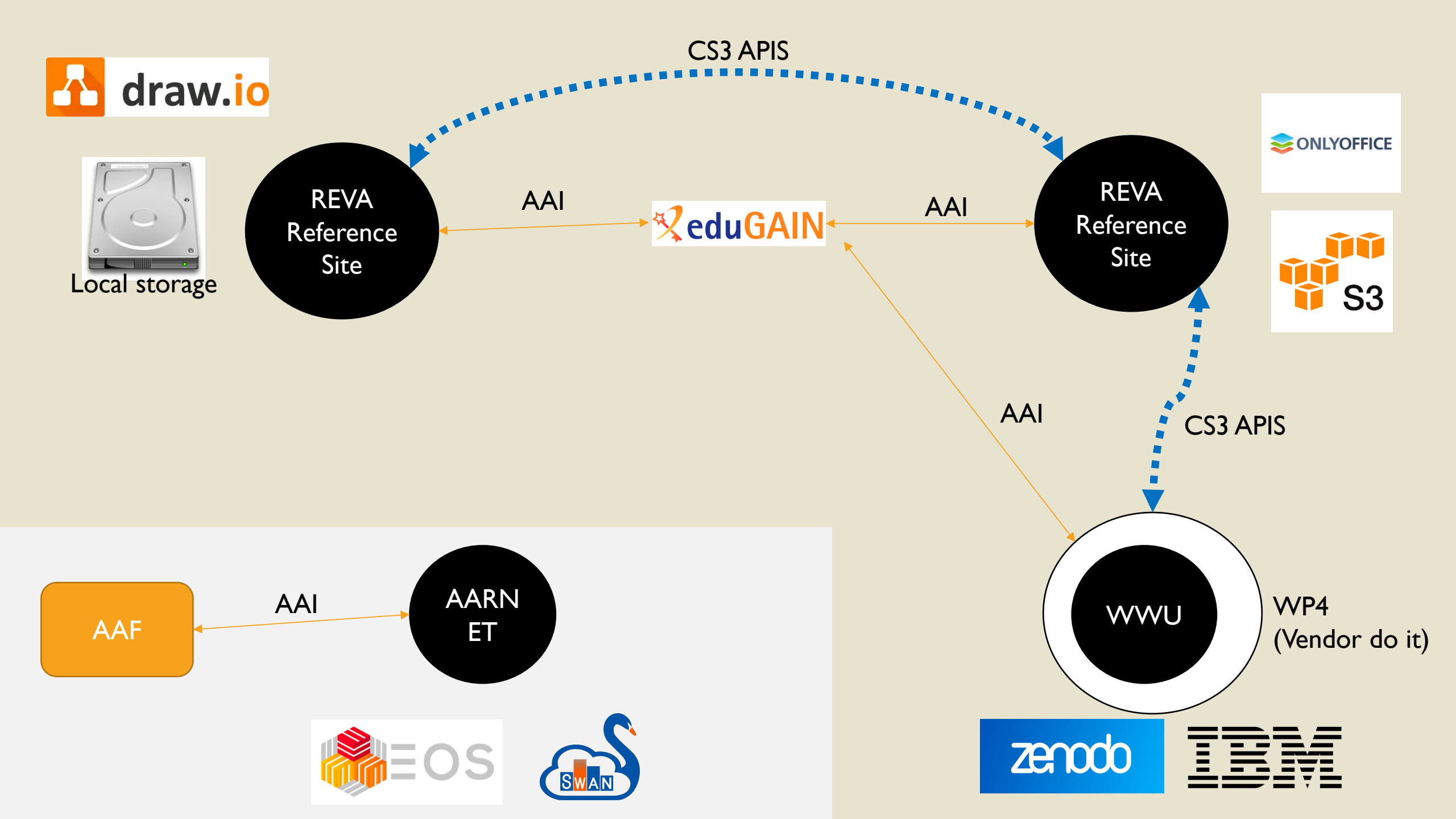
SWAN
zenodo
IBM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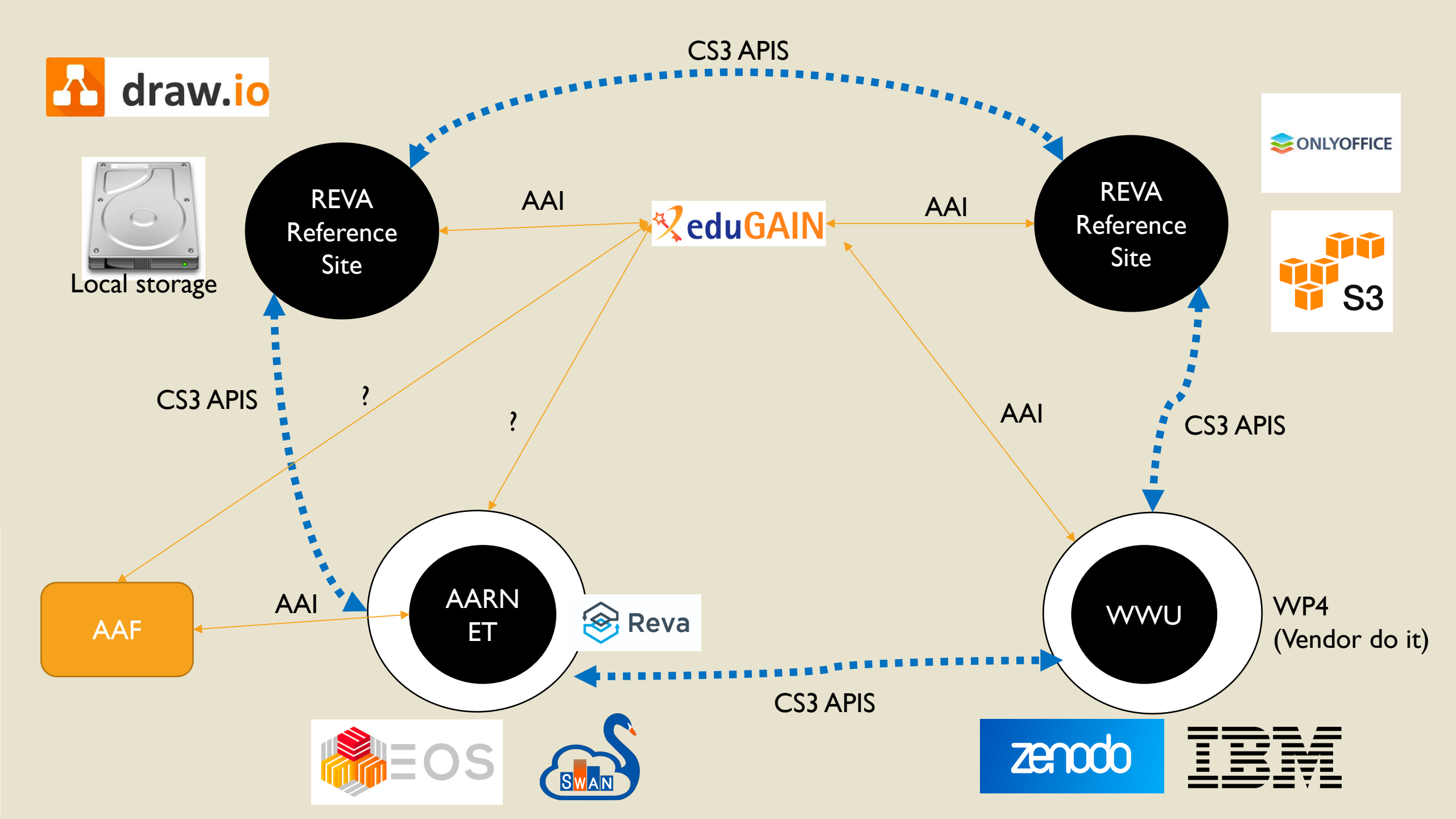
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