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Bridging Standards and Ecosystems for Interoperable Quality Data on Micro-Credentials

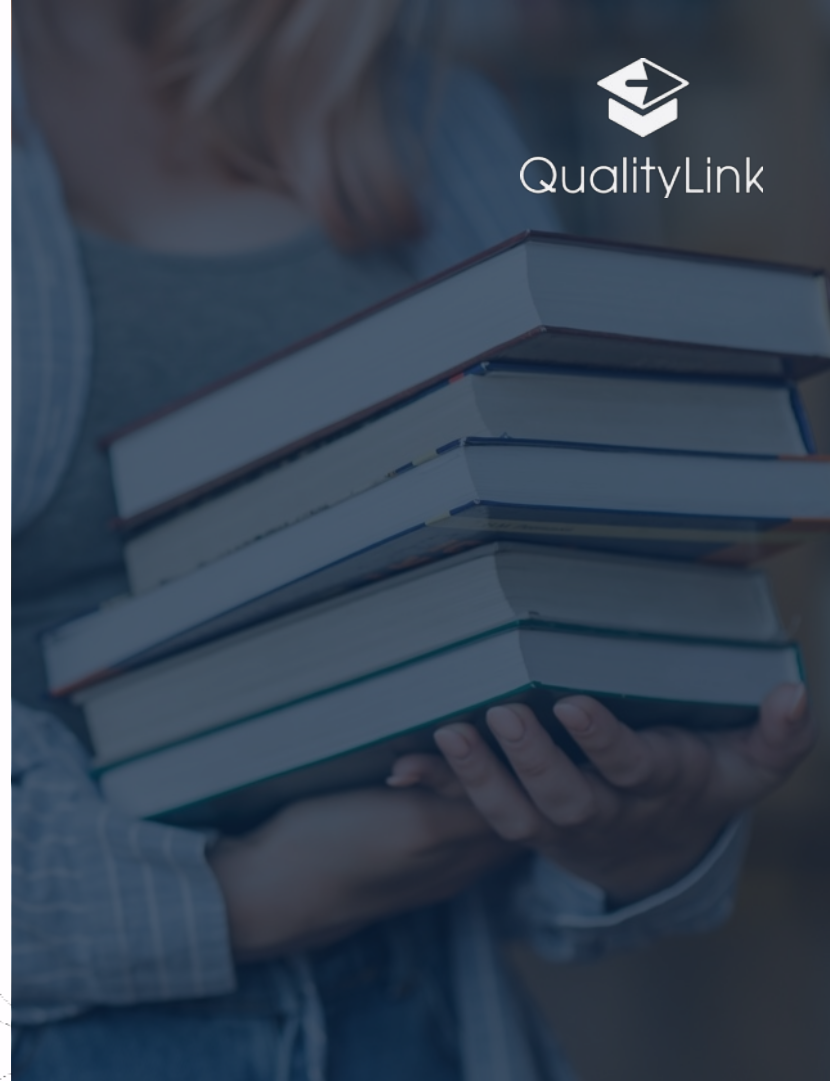
Cedefop workshop
“Microcredentials and the future of learning”

23 October 2025

Colin Tück (KIC)



QualityLink



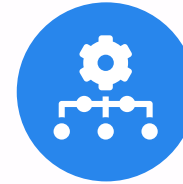
Challenges of today's landscape



Diversity of micro-credentials and other short courses



Basic info and quality indicators rarely published using open standards



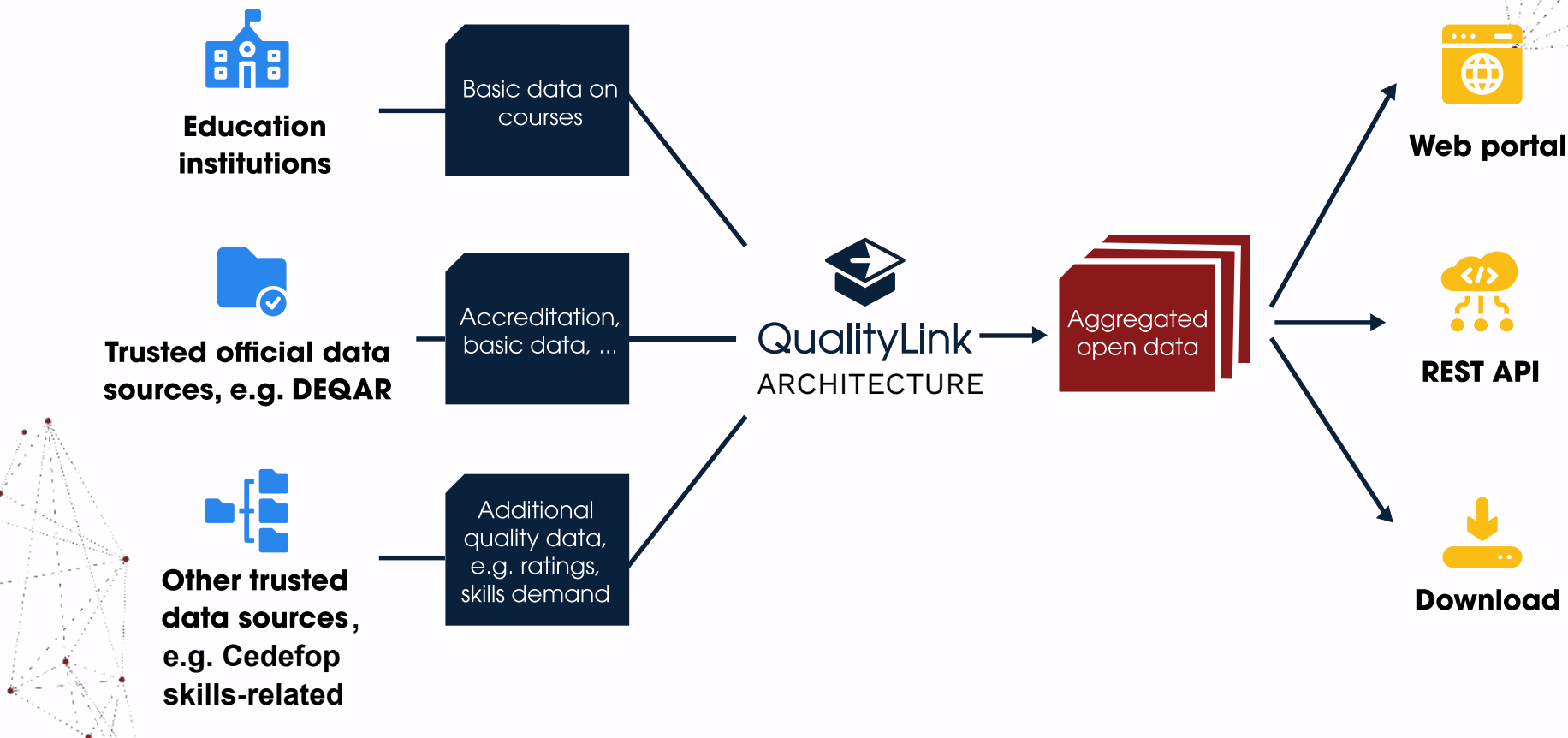
Standardise and reliable data crucial for recognition and understanding

QualityLink is an Erasmus+ project running Dec 2023 – May 2026 | Partners:



Our aim: an open quality data exchange architecture

(in particular, but not only for micro-credentials)



Use cases

of a Europe-wide open dataset on learning opportunities



Europe-wide
visibility



Potential
learners,
guidance



Mapping and
benchmarking



Credential
transparency for
the labour
market



Reliable
information for
recognition

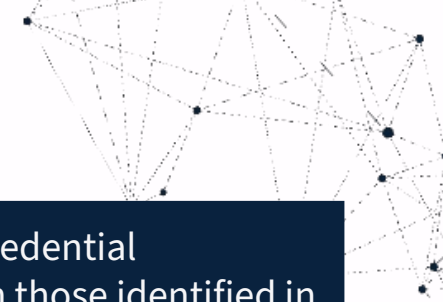


Alliances' joint
catalogues



Quality Domains and Indicators

- 1) Content Relevance, Labour Market Demand and Accuracy
- 2) Teaching Methods and Pedagogy
- 3) Accessibility and Inclusivity
- 4) Learner-Centred Approach, Satisfaction and Success
- 5) Institutional Reputation



Level of similarity of micro-credential skills/learning outcomes with those identified in forecasts (numeric scale)

The ratio of students per academic staff (numeric)

Ratio of students from a disadvantaged socio-economic background (numeric)


Grade distribution table, following ECTS Users' Guide practices (numeric)

HEIs that have recognised the micro-credential, e.g. towards a larger degree programme (numeric, list + links)

Most Relevant Quality Indicators



Students' top 5

1. Clearly defined learning objectives
 2. Up-to date course content
 3. Aligns with employer's demands
 4. Percentage who complete
 5. Students ratings: learners recommend
- 


Stakeholders' top 5

1. Clearly defined learning objectives
2. Up-to date course content
3. Percentage who upgrade career within 1 year after completing
4. Aligns with employer's demands
5. Recognition of prior learning

What's next

- **Data aggregator:** beta/pilot version available this month (October 2025)
- **Europe-wide catalogue:** later this autumn/winter 2025

More for policy/decision-makers:



Step-by-Step Guide

Guide for Decision-Makers

QualityLink is a European project that is developing standards and practical tools for publishing and aggregating course data from multiple institutions into unified, searchable catalogues.

Using QualityLink, European Universities alliances can create joint course catalogues that enable students to discover learning opportunities across the alliance. The joint catalogue is foundational for virtual inter-university campuses and enhanced student mobility. Joint catalogues directly address Use Case 1 "Discover" from the [European Higher Education Interoperability Framework \(HEIF\)](#).

What is QualityLink developing?

- **Common language:** Standardised format and approaches for publishing data, based on the [European Learning Model \(ELM\)](#)
- **Data aggregator:** Software that automatically collects course data from multiple institutional sources
- **Europe-wide portal:** Pilot platform showcasing learning opportunities from all participating institutions ([mock-up of the platform](#))

What are the benefits?

- Your institution/alliance **already has course data in ELN, OQAP, Edu-API or OCCAP**; you can expose information on your programmes, courses and micro-credentials to a wider European audience with little extra effort. This can enhance your reach of potential learners and facilitate cooperation with others.
- Your institution/alliance maintains **course data in different formats**; by mapping your existing data standard to ELM or one of the interoperable APIs, you can improve your interoperability with other institutions across Europe. ELM is also the basis for [European Digital Credentials for Learning \(EDCC\)](#), so if your data is mapped to ELM you facilitate the issuing of digital degrees and micro-credentials for your courses.
- If you need to **renew your institution's or alliance's public course catalogue**, you can use the hosted QualityLink portal for easy deployment. You can also use and customise the QualityLink software yourself, as it is fully open source.

What are the implementation options?

- **Hosted solution:** Use our maintained aggregator and portal. This is the easiest option for fast deployment and requires minimal own.

<https://quality-link.eu/step-by-step/>

More for IT managers/implementers:

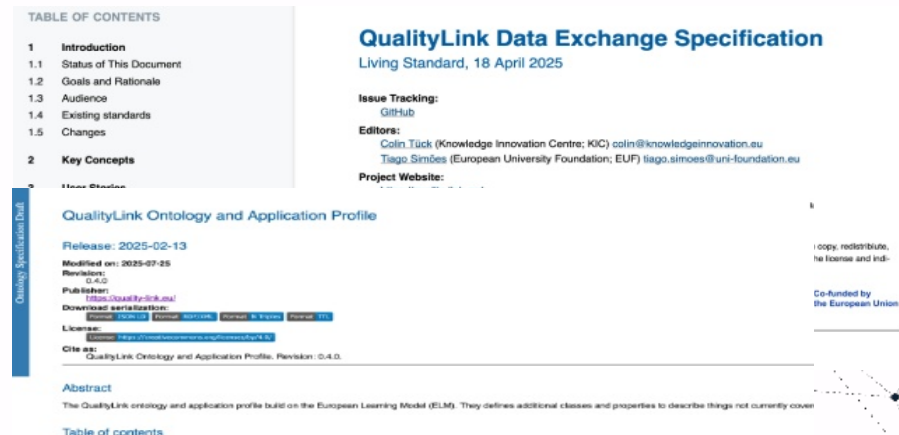


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QualityLink Data Exchange Specification

Living Standard, 18 April 2025

Issue Tracking:
[GitHub](#)

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Project Website: [https://quality-link.eu/technical-specs/](#)

QualityLink Ontology and Application Profile

Release: 2025-02-13

Modified on: 2025-07-25

Revision: 0.4.0

Publisher: <https://quality-link.eu/>

Download serialisation: [JSON](#) [XML](#) [RDF](#) [JSON-LD](#) [CSV](#) [Excel](#) [HTML](#) [PDF](#)

License: <https://creativecommons.org/licenses/by/4.0/>

Cite as: QualityLink Ontology and Application Profile, Revision: 0.4.0

Abstract

The QualityLink ontology and application profile built on the European Learning Model (ELM). They define additional classes and properties to describe things not currently cover

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<https://quality-link.eu/technical-specs/>

Some Findings from QualityLink



Reliable data can support trust in digital micro-credentials – complements formal QA



Standards and tech can be solved, but open data also requires policy commitment



A lot of untapped potential in connecting different data sources (e.g. credentials and skills)

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Landscape of data standards used in Europe

Standard	Maintained by	Used by	Tech
ELM	EU	EDC, QDR	RDF ontology & profiles
ELMO	EMREX	EWP, EMREX	XML schema
OOAPI	SURF	Dutch HEIs, European alliances	REST API
OCCAPI	EUF	Some HEIs, EWP (future)	REST API
Edu-API	1EdTech	Various	REST API

DEQAR

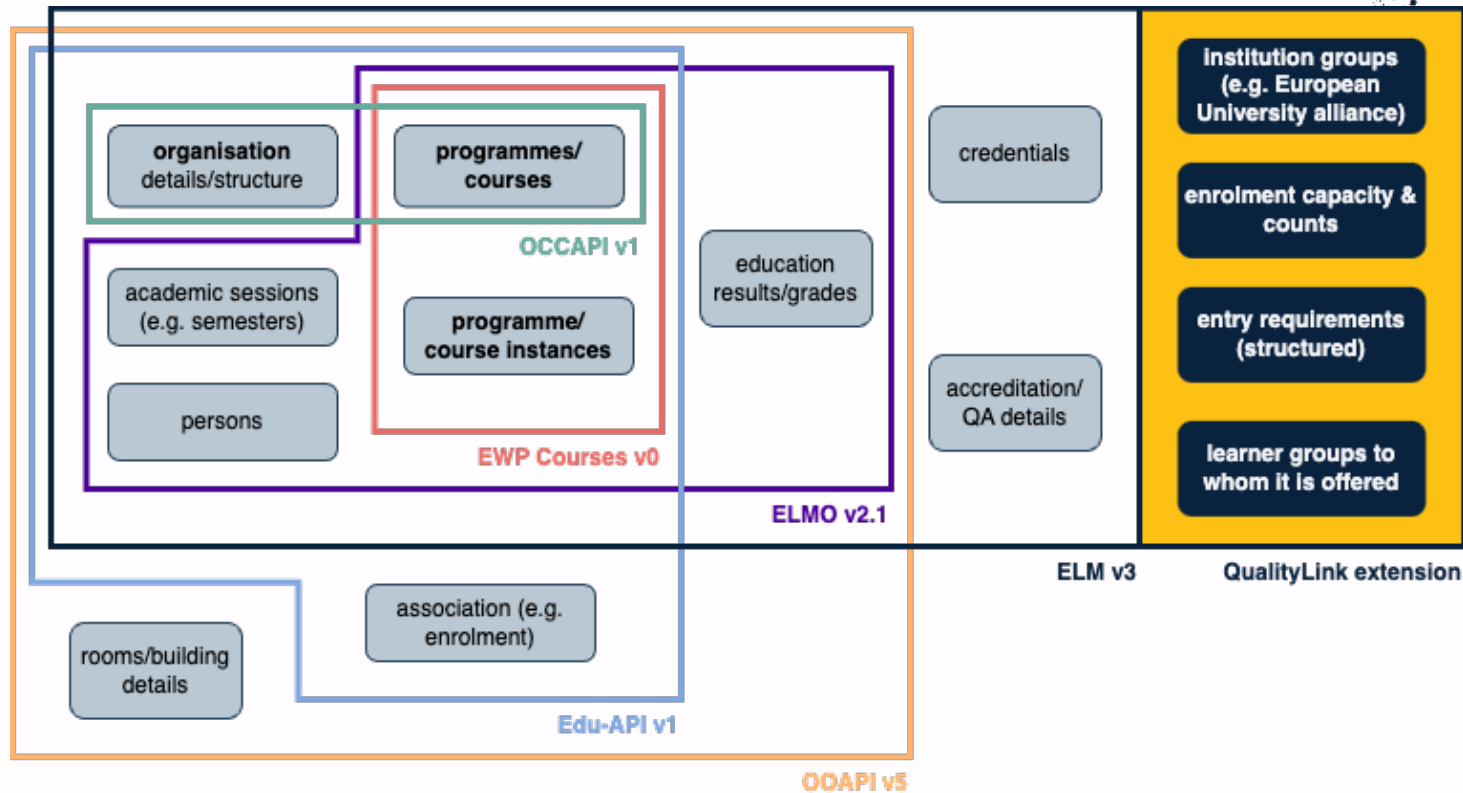
EQAR

EQAR & QA agencies

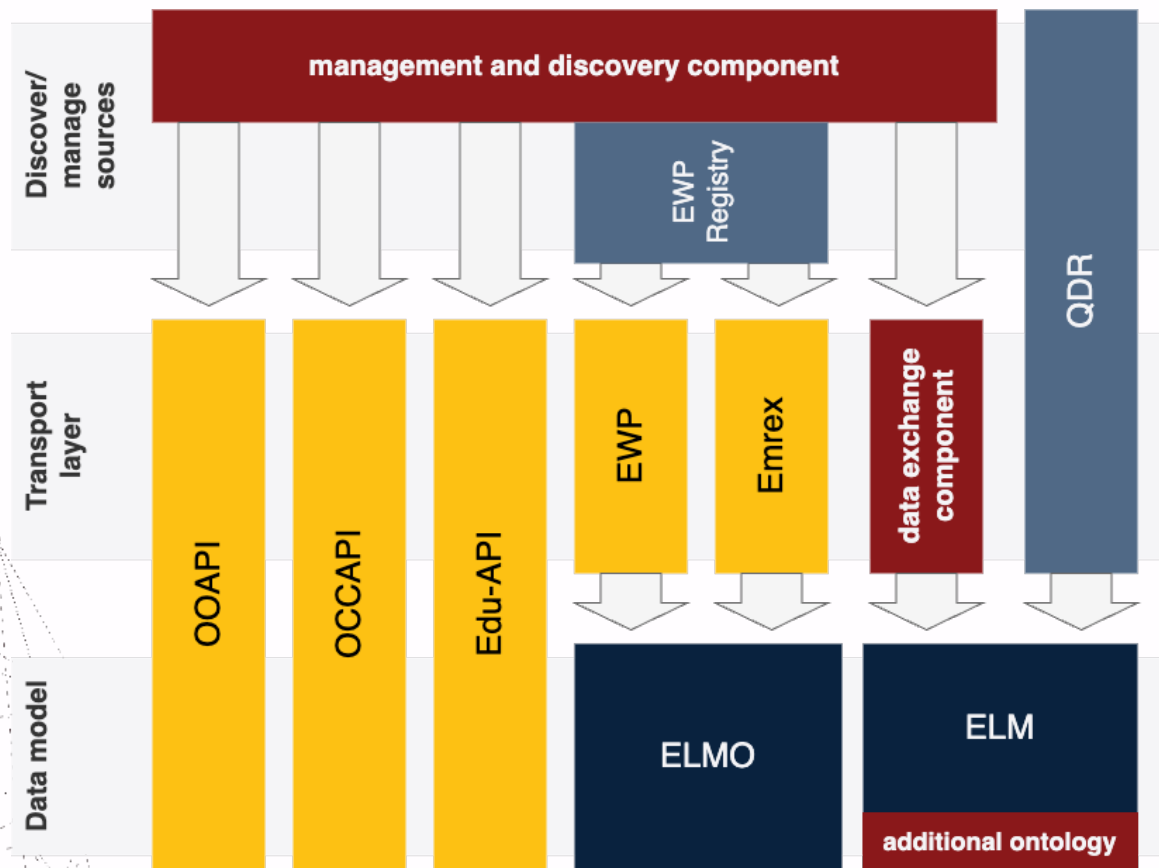
REST API



Coverage of basic information and quality indicators



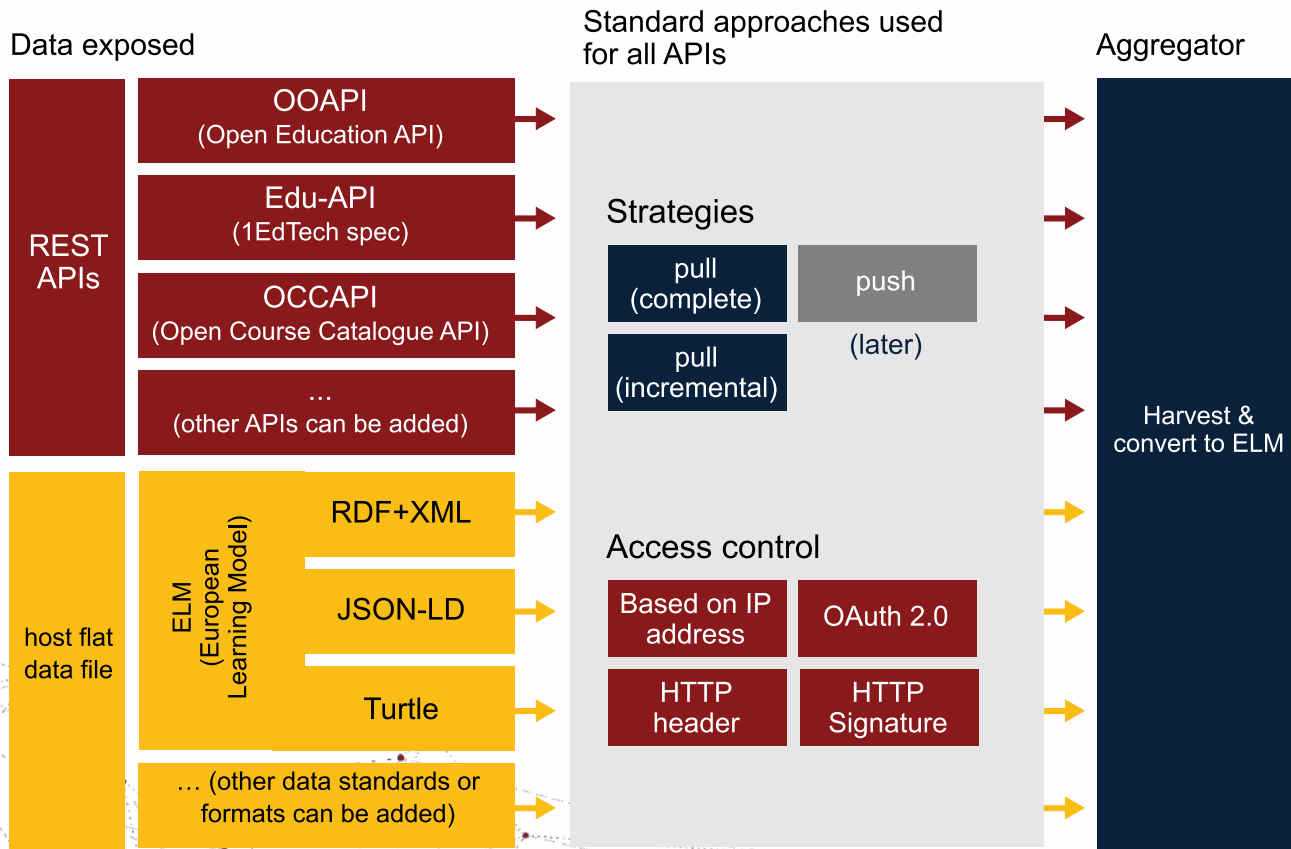
Existing standards and gaps



Principles:

- Build on existing standards
- Low bar to adoption
- Flexibility where helpful
- Open to extensions
- New components open source

Data Exchange Architecture





Web portal

- Publicly accessible
- Basic search, filtering, ...
- Preset views for alliances, etc.



REST API

- Integration into other applications
- Custom course catalogue frontend
- Free, but with rate limits



Download

- Research or analysis
- Freely accessible without restriction

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