GN4-1 SA8 "Real Time Applications and Multimedia Management"
eduOER is an Open Education Resource (OER) metadata aggregation hub and portal service for the European research and education community.
eduOER collects multimedia content (mainly lecture recordings, webinars, video clips, audio-visual objects and animations) at the European level and then delivers it both to the end-user and to other higher level OER aggregators or services (such as OpenEducationEuropa or OpenAIRE) and platforms (Drupal, PuMukit, Moodle, Kaltura, Canvas).

eduOER is not a repository (does not store content) but a referatory (only stores and handles metadata).

eduOER is a service also to content providers, helping them to manage, improve and better expose their metadata.

eduOER is governed by GÉANT and the NREN community.
eduOER addresses the main challenges of searching and finding good quality, properly licensed, openly accessible educational content and learning objects – especially multimedia type – across repositories, countries, disciplines and languages.

The key issues addressed by eduOER are:

- Many institutional video repositories are small and not mature enough for open sharing, although they own precious content.
- Web search engines (Google search and the likes) do not penetrate into deep metadata structure of repositories so many educational content remains hidden under the web.
- Simple web searches lead to multiple and not necessarily trustable sources.
- There is no other aggregator so much specialized in multimedia (mainly video) educational content.
NRENs are in a good position to develop and aggregate institutional multimedia repositories because they:

- provide the primary network connectivity to most of the higher education institutes, campuses, colleges and research labs (in some countries even primary and secondary schools) and so they have a privileged communication and linkage both to user communities and to content creators.

- NRENs have the required expertise and are in a privileged position to provide infrastructure and develop/support the necessary technologies, (e.g. search technologies, metadata harmonization, federated access, portal creation, multimedia editing, lecture recording, video production).

- The NREN community is able to govern and run the eduOER service at a marginal operations cost (OPEX) using their advanced cloud-based infrastructure services and delivery model.
A collective work: The eduOER team

- **GEANT**: overall coordination
- **GRNET (the Greek NREN)**: development of services to content providers, metadata aggregation infrastructure, hosting infrastructure, future operation of the portal
- **University of Vigo**: Development of the PUMUKIT portal
- **FCCN (the Portuguese NREN)**: Communication and outreach strategy and implementation
- **IUCC (the Israeli NREN)**: setup the open education principles, design of OER strategy and end-user use case analysis.
- **SURFNET (the Dutch NREN)**: content providers’ user need requirements and use case analysis + national community manager
- **NIIF (the Hungarian NREN)**: national coordinator & CM
- **PSNC (the Polish NREN)**: national coordinator & CM
- **GARR (the Italian NREN)**: national coordinator & CM
- **RENA TER (the French NREN)**: national coordinator & CM
Metadata Aggregation Workflow

metadata aggregation results
eduOER services to content providers

- eduOER metadata analytics service
- eduOER monitoring service
- eduOER mapping and transformation service
- eduOER metadata validation service
- eduOER OAI-PMH target service
- eduOER search API Drupal Module

http://services.oer.geant.org/monitoring/#/dashboard/elasticsearch/GEANT%20OER%20Metadata%20Analysis
http://services.oer.geant.org/monitoring/#/dashboard/elasticsearch/GEANT%20OER%20Aggregation
eduOER services to content providers – How to join

Join eduOER in 3 simple steps
Join eduOER in 3 simple steps

1) The very first step for you as the administrator of a repository or a relevant content provider – wishes to become part of the eduOER service – is to fill out and submit the short technical questionnaire about your repository below.

Filling out the questionnaire shouldn't take more than 10 minutes for the technical administrator. The next steps can be determined based on the results and the GÉANT eduOER team will send an estimation on the time and efforts needed to make a successful connection.

Questionnaire

2) Next, the eduOER metadata engineering team will contact you and ensure the smooth integration into the eduOER hub. Should you have any question about the questionnaire or the procedure, feel free to contact the metadata engineering team. Optionally, you can join the eduOER metadata aggregation community, Mailing list and Wiki page.

E-mail us  ♦  Subscribe  ♦  Wiki

3) After having clarified and completed all the initial steps with our technical team, you can relax and let the eduOER metadata aggregation engine do its magic.
https://portal.oer.geant.org/
eduOER Portal services

- Responsive multimedia oriented portal
- Simple and faceted search
- Embedded video player (Watch external videos in the OER portal)
- Channels by knowledge area (Science, Technology, Humanities, etc.)
- By Repository (contributing Institution) catalogue
- By Subject catalogue
- Most viewed videos
- Recently added videos
- Social sharing (easy Facebook, Tweeter, etc. sharing)
- Related videos, videos from the same series
eduOER – future roadmap

- Back-end services:
  - Harvesting and re-sharing paradata (user comments, ratings, etc.)
  - Adding automated metadata translation between languages, google translate

- Portal:
  - Paradata-ready UI: ratings, comments, social features
  - Integrated peer review process
  - Improved Faceted search UI:
    - figures of the object under each option. e.g., [ ] English (344), [ ] French (45)
    - Multi selection: e.g., [x] English, [ ] French, [x] Spanish
  - LMS integration: Moodle, Blackboard
  - Video management platform integration: Canvas, Kaltura
  - PuMuKIT Search widget. (Easy search from any PuMuKIT based Repository)
  - Accessibility
  - Mobile applications
Use Cases – content providers

• **TNC Networking Conference** is the largest and most prestigious European research networking conference, with more than 650 participants attending this annual event. TNC proceedings were only present through YouTube, with limited searchability and no possibility for cross-searching.

• **PRACE (e-infrastructure)** is the Partnership for Advanced Computing in Europe. The PRACE Advanced Training Centres (PATCs) produce high-quality training material dealing with high performance computing that their meta-data are now integrated into eduOER, ready to be shared and reused by the user community of eduOER and also linked to related content.

• Training materials produced by other e-Infrastructures will soon be available in eduOER (e.g. CERN, RDA, Nordunet).
Chicken and egg? Not anymore...

I’m not going to share my resources until you provide me a system that ensures licencing and IPR...

I’m not developing anything until you commit to using it...
Hey Repositories, would you pay $X$ to save $n$ times $Y$?
Business development (Revenue stream II.)

• Hey Institutes, would you pay Z for a hosted media portal backed by eduOER?
  • Would you pay W to enrich your existing Kaltura, Moodle, Drupal, Canvas, etc... portal with eduOER?