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The Erasmus without Paper Project

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Context and problem area

Digitalisation is a must

but

Digital change = culture change

EWP Project goals

♦ Design and work out a pilot for an **integrated communication network** supporting the exchange of student data[1] in an electronic form

♦ Build pilot **connectors** that will allow Student Information Systems (SISs) with built-in mobility modules[2] and/or stand-alone Mobility systems to exchange data over the EWP Network.

[1]data, not documents (eg. scanned copies), which can be processed automatically, stored in databases, used to create documents

[2]part of SIS that takes care of Bilateral Agreements, student applications, Learning Agreements, Transcript of Records and other documents

What processes are we talking about?

♦ **Interinstitutional agreements** between HEIs

♦ The exchange of various data connected with specific points in the exchange process

  • Keydata of HEIs
  • Nominations
  • Agreeing on Learning agreements (includes course catalogues)
  • Host Transcripts of Records
  • Home Transcripts of Records (including grade conversion)
  • Arrival/Departure certificates etc …

  New services can be added at any time

♦ Reporting Erasmus+ student data (Mobility Tool+)

Where are the data?

- Student Information Systems (SIS) of HEIs or other providers (commercial, consortia, …)
- International Student Mobility modules (may or may not be part of SIS, but sometimes still Excel files!)
- National student data repositories

How to solve the problem?

- Create a network that will enable all the data repositories in whatever form to communicate with each other
- Exchange structured data, not primarily documents (e.g. scans)
- Security: authentication of servers and users
- User identification and electronic signatures
- Keep the data where they are, but make them accessible in a simple, reliable and secure way
- Align with global developments (Groningen Declaration)

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Main tasks - 1

- Describe all possible user scenarios in mobility. A desk-research report has been published on the issues involved, including the results of a large questionnaire
- Create common data models and appropriate document formats for the structured data that is exchanged
- Define the necessary transport protocols and standards
- Take care of identity management: create a register to handle users

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Main tasks - 2

♦ Look into security and privacy issues
♦ Build connectors (sets of APIs) that allow all data handling software to send and receive data over the network with minimum effort
♦ Include extra services to increase performance (e.g. grade conversion tool Egracons, integration of other services...)
♦ Look for synergies and collaboration
♦ Open source, interoperability
♦ Look into how to provide electronic signatures

API: application programming interface

API specifications offer detailed decriptions on how a system can be hooked up to the network

Each HEI decides which APIs to implement in its own system (could be limited or step by step)

The list of APIs implemented by each HEI are available in the network registry (manifest files)

API's: what is already available?

♦ Echo/Discovery

♦ Institution

♦ Organisation

♦ Courses

♦ Interinstitutional agreements

♦ Mobilities (including nominations and Learning Agreements)

♦ Transcript of Records: in EWP it is HEI administration-initiated.

♦ Reference connector

API specifications

API specifications for developers are available publicly: http://developers.erasmuswithoutpaper.eu/.

This is in essence a guideline for developers

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Registry

♦The registry is the only 'central' file on the server in the network

♦Authentication of the user servers

♦Manifest file: details which services the HEI is offering (both pulling and pushing) i.e. which APIs have been implemented by each provider

What does it cost?

♦ It's free
♦ If you use commercial or consortium-built software, you will have access to all services.
♦ If you have your own house-built software you will have to implement the APIs yourself and integrate them in your software (EWP can provide examples and help)
♦ If you have no software (smaller HEIs), you can use a 'light' commercial software version (free)
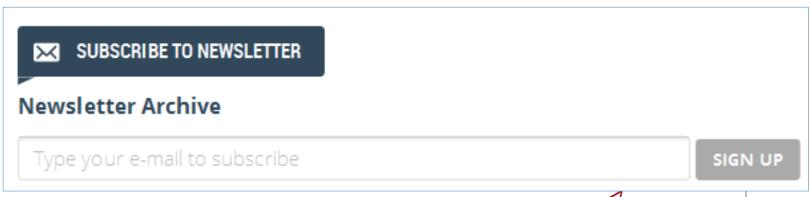
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GitHub repository

♦ All technical documents are hosted in a constantly updated separate GitHub repository.

♦External programmers can easily download their own copies of these documents and propose changes to them.

♦Assign one of your developers to have a look at our specifications if interested

Additional Information

♦EWP website: www.erasmuswithoutpaper.eu

♦GitHub: github.com/erasmus-without-paper

♦EWP for developers: developers.erasmuswithoutpaper.eu

Register for EWP Newsletter to keep in touch!

www.Erasmuswithoutpaper.eu

Present Partners

- **European University Foundation,** Luxemburg
- **Universiteit Gent,** Belgium
- **Asociación Grupo Santander,** Spain (Brussels)
- **Universitetet I Oslo (+FS),** Norway
- **Uniwersytet Warszawski (+ Muci),** Poland
- **Umea Universitet (+ Ladok),** Sweden
- **Universidade do Porto,** Portugal
- **Erasmus Student Network,** ESN, Belgium
- **Kion Spa (+S3),** Italy
- **SOP Hilmbauer & Mauberger GmbH & Co KG,** Austria,
- **SIGMA Gestion Universitaria AIE,** Spain

- New partners in EWP2.0: University of Malaga (ES), QS Unisolution/MoveOn (DE), Cnous (FR)

Other consortium members

- University of Essex, UK
- Framework Computer Consultants Limited (Digitary), Ireland
- University of Aveiro, Portugal
- National Student Clearinghouse, United States
- Grupo Compostela de Universidades, Spain
- European Association of Erasmus Coordinators,Cyprus
- European Association for International Education, Netherlands
- Reseau des universites des capitales de l'Europe (UNICA), Belgium
- QS unisolution GmbH, Germany
- Universidad de Malaga,Spain
- AHOVOS/DHO,   Belgium
- Groningen Declaration, Netherlands

Consortium Partners

UNIVERSITEIT GENT

SGROUP EUROPEAN UNIVERSITIES' NETWORK

EUF EUROPEAN UNIVERSITY FOUNDATION

UNIVERSITAS OSLOENSIS · MDCCCXI

UNIVERSITY OF WARSAW

UMEÅ UNIVERSITET

U. PORTO

ESN INTERNATIONAL EXCHANGE ERASMUS STUDENT NETWORK

KION GROUP

SOP

SIGMA technological innovation for universities

Associate Partners

compostela

European Association EAEC Erasmus Coordinators

EAIE European Association for International Education

GRONINGEN DECLARATION

Uma UNIVERSIDAD DE MÁLAGA

NATIONAL STUDENT CLEARINGHOUSE

QS UNISOLUTION

UNICA

universidade de aveiro

University of Essex

DIGITARY

AHOVOS

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Thank you for your attention!

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