# Research Report ਙ



# JOINT CROSS-BORDER INTERNET COMMUNICATION SYSTEM OF THE UNIVERSITY OF DEBRECEN AND POLITEHNICA UNIVERSITY OF TIMISOARA

# Goal of the project

The overall goal of the project is to enable enhanced capacity for cross-country cooperation and interaction between and within the participating universities by providing high quality WiFi system and IP streaming system for the students, professors and researchers at the University of Debrecen and Politehnica University of Timisoara, aiming at supporting the synchronization of educational, research and development, and other scientific activities of the cooperating universities

# Short description of the project

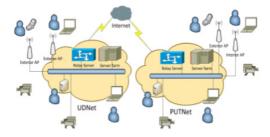
- Interior and exterior WiFi service will be installed at both sites to be able to access from mobile notebooks and smart phones the partners data and services infrastructure and Internet services.
- The project implements the EDUROAM service in PUT. This common authentication service with other universities within Europe allows accessing WiFi Internet, increases the Internet accessibility for both academic partners and incoming students travelling to PUT and UD.
- IP streaming subsystem will be installed at both universities to be able to interchange the local multimedia content between the partners.
- The activity during the year 2015 consisted in: improvement of the WiFi infrastructure for Quality of Service enhancement and extension of the WiFi network.

### Project implemented by

- University of Debrecen, UD Lead partner
- Politehnica University of Timişoara, UPT Project partner

### Implementation period

01.01.2013 - 31.05.2014 and 01.01.2015 - 31.08.2015.



# Main activities

- Communication and publicity activities;
- Acquisition of the specific equipments;
- Development and implementation of the specific WiFi network;
- Development and implementation of the specific IP streaming system.
- Extension of the WiFi network.

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#### Results

- Several technical meetings took place both in Timişoara and Debrecen. As a consequence the inherently implementation problems were discussed and solved.
- The placement of the 200 Access Points covering the interior and exterior of the buildings of the faculties and student hostels from the campus was achieved and the connection to the specific infrastructure was done.
- The extension and improvement of the WiFi network was focused on one of the main buildings of UPT, belonging to the Faculty of Mechanics.
- The specific infrastructures for implementing the EDUROAM service and the IP streaming video service were developed and implemented.
- Tests were done and also the dissemination of the results was done.
- A closing event was organized.

#### Applicability and transferability of the results:

- Achievement of a secure WiFi network covering a large area, offering also the EDUROAM service and IP streaming service.
- Possibility to develop research oriented on IP streaming, network traffic and main features.

#### Fields of interest:

• WiFi networks, IP streaming

#### **Research centre**

Research Center in Computers and Information Technology

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#### Research team

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