### Creating Virtual Learning Environment for Higher Education Institutions

Zvonko Martinović University Computing Centre University of Zagreb

> EUNIS conference 2016 June 8-10 2016





# **University of Zagreb University Computing Centre (SRCE)**

- SRCE was founded in 1971 within the University of Zagreb
- Today, SRCE is the main computing centre and the architect of the e-infrastructure, covering both the University of Zagreb and the whole research and high education system
- SRCE is the competence center for information and communication technologies as well as the center for education and support in the area of ICT application

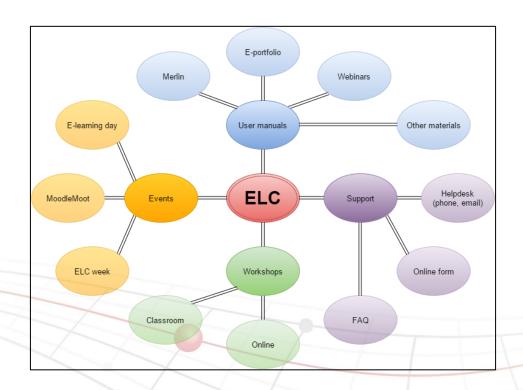


#### **E-learning Centre (ELC)**



- The E-learning Centre was established at the University Computing Centre of the University of Zagreb in 2007
- Today is a focal point for systematic take-up and supporting e-learning across the higher education institutions in Croatia
- Basic objectives of the E-learning Centre are:
  - to provide and maintain a reliable and generally accessible university platform for elearning
  - to provide support to teachers, students, e-learning teams and institutions
  - to support the university network of people involved or interested in e-learning
  - to promote and foster the e-learning implementation

### **E-learning Centre activities**



### **User support**

- Technical support to users who work with elearning technologies maintained by the Elearning Centre
- Advised support to teachers in preparation and maintenance of e-courses (help desk, consultancy, projects on the e-course development)
- Training Courses (on-line & f2f) on the use of e-learning technologies maintained by the Elearning Centre
- Manuals, instructions and animations about the use of e-learning technologies
- Promotional activities with the aim to raise awareness on e-learning and create a network of people



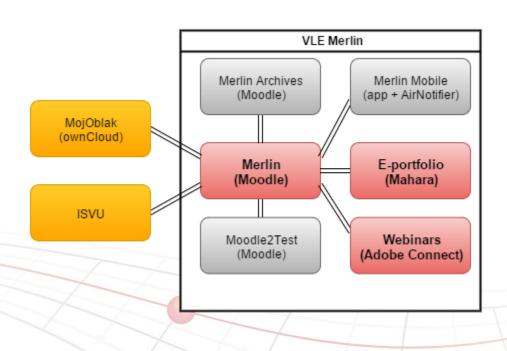


# Distance education systems maintained by ELC

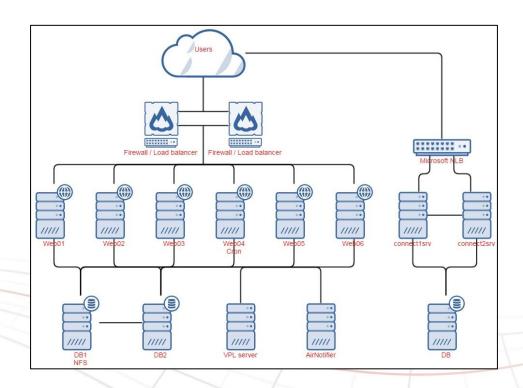


- Merlin VLE for courses in higher education
- MoD e-learning system for elearning projects in community
- MuS e-learning system for schools
- Moodle2Test e-learning system for testing
- Moodle2Demo demo elearning system in Croatian
- E-portfolio system
- System for Webinars
- All systems are accessible using Single Sign-On (SSO) for authentication and authorization through AAI@EduHr infrastructure

## Virtual Learning Environment for Higher Education Institutions



#### **VLE - infrastructure**



#### Merlin

- http://merlin.srce.hr
- e-learning platform based on Moodle
- System for managing and distributing courses over Internet
- Reliable and free of charge elearning platform for higher education institutions, academic staff and students
- Integrated with ISVU and MojOblak



#### Merlin

- First installation was made in 2007
- Course archive for last five academic years
- VLE Merlin hosts 4,970 e-courses, used by over 2,350 teachers and 33,400 students in the current academic year
- Over 12,200 archived e-courses and over 78,700 users in total
- Moodle version 2.9 has been installed for the academic year 2015/2016
- It is continuously upgraded, optimized, maintained and modified to users needs
- Optimal user experience through universal design principles, responsive web design and Mobile App
- In current academic year on Merlin there are over 4,600 assignments, 2,000 quizzes, 6,400 forums and 40,200 files

#### **Webinars**

- https://connect.srce.hr
- Web based seminar system based on Adobe Connect
- Webinar is a presentation, lecture, workshop or a seminar in real time over the Internet. It enables audio, video and text communication between attendees.
- A webinars' main feature is its interactivity, especially the ability to send and receive information which enables interaction between a presenter and participants located on various different locations
- System hosts 405 meeting rooms and has more then 9,400 registered users



#### **E-portfolio**

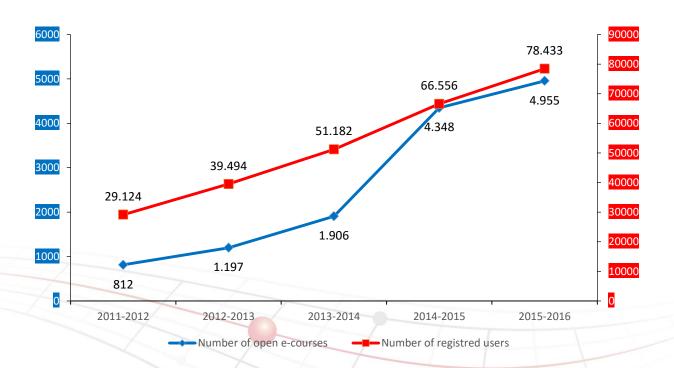
- http://merlin.srce.hr/eportfolio/
- Electronic portfolio system based on Mahara
- Collection of digital resources produced by someone
- In education: a collection of documents describing student/teacher work, efforts, progress and achievement in one or more areas over time
- Different types of data (text files, pictures, video and audio clips, blogs and bookmarks)
- Flexible and transportable
- There are over 44,000 pages created by over 18,200 registered users



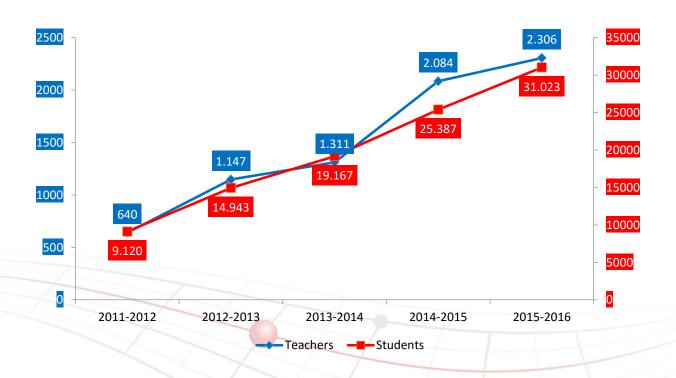
#### Merlin users

- In total 82 institutions (6 universities, 10 Polytechnic and school of professional higher education)
- 29 institutional users
- 19 institutions using Merlin ISVU connection
- University of Zagreb 32 institutions using Merlin, 17 as institutional users
- For University of Zadar and University of Dubrovnik Merlin is the official elearning system

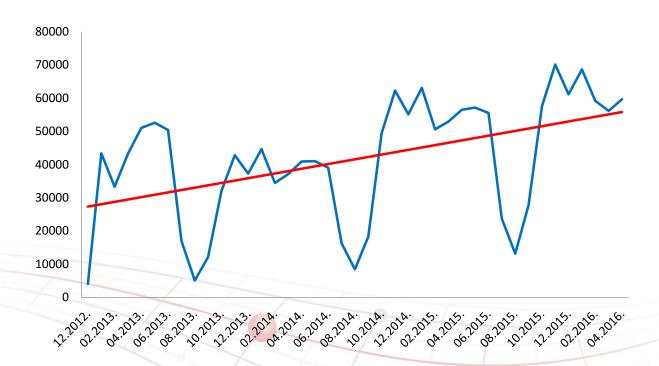
# Merlin - Number of e-courses and registered users per academic year



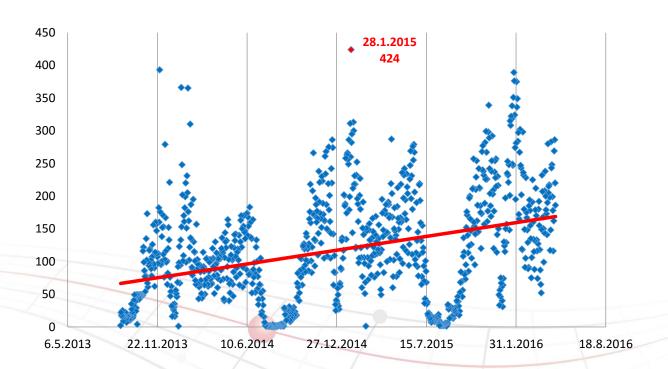
# Merlin - Number of enrolled teachers and students per academic year



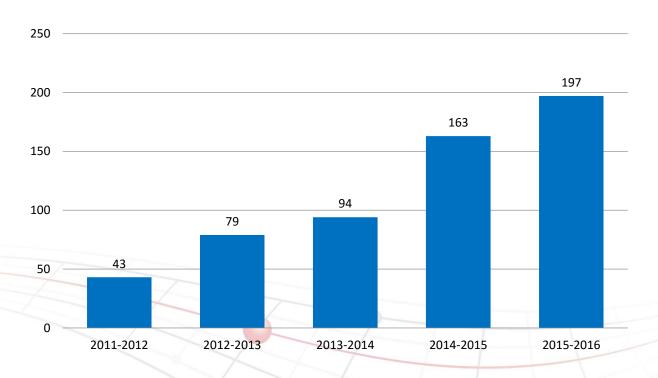
# Merlin - Users on monthly basis (Google Analytics)



### Merlin - Concurrent users (daily peek)



### Merlin - amount of learning materials in GB



#### Next steps...

- To provide disaster recovery on SRCE second data center location
- To prepare the VLE for the next academic year (with all additional materials and support)
- Further integration of Merlin with ISVU
- To integrate Merlin with Digital Academic Archivers and Repositories
- To optimize the existing system to maximize usability of the existing resources

#### **Questions?**

#### http://www.srce.unizg.hr/en/elc

ceu@srce.hr



This material is available under the International Creative Commons License 4.0 *Attribution-NonCommercial-NoDerivs*.

University of Zagreb
University Computing Centre - SRCE

www.srce.unizg.hr/en

creativecommons.org/licenses/by-nc-nd/4.0/deed.en

According to the Open Access Policy, Srce ensures that all research data made by Srce is accessible and free to use by the general public, especially educational and professional information and content derived from the actions and work of Srce.

www.srce.unizg.hr/oa-and-oer



