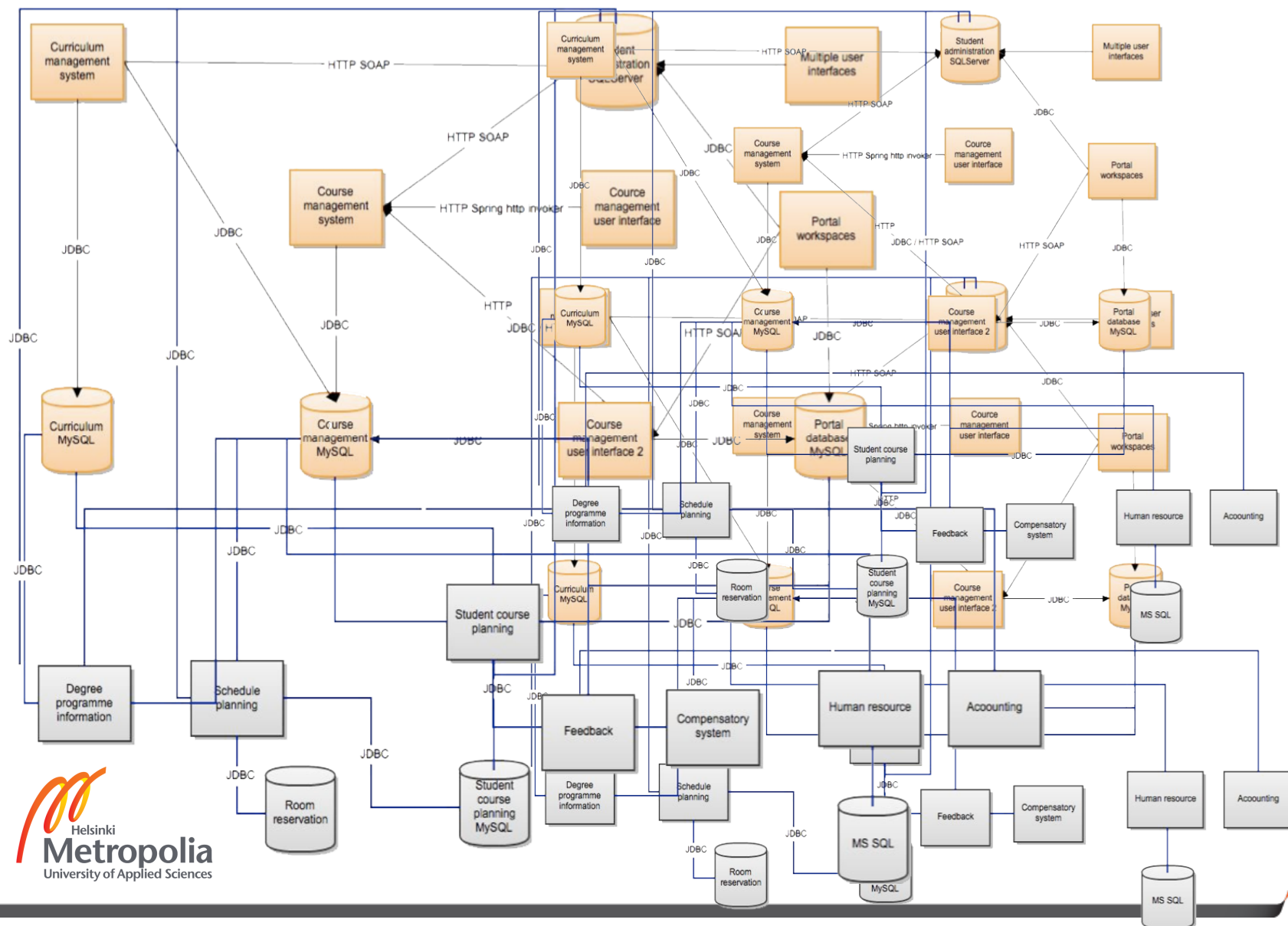




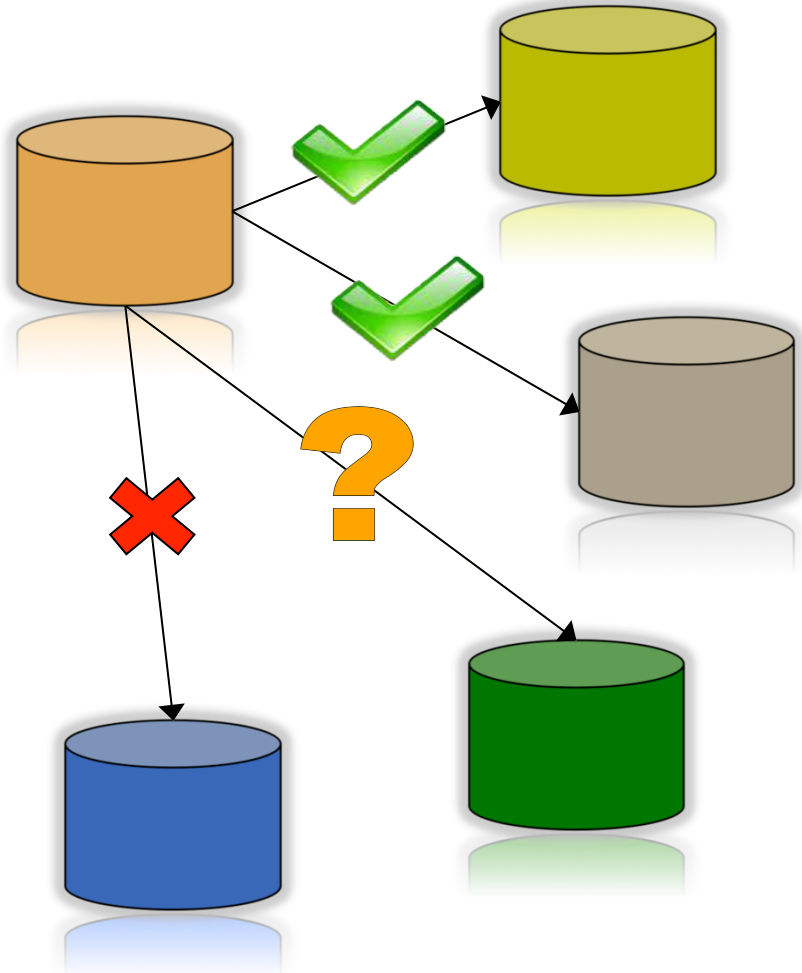
Peppi - Next-generation ecosystem for Higher Education Institutions education management

Problem 1 = spider web



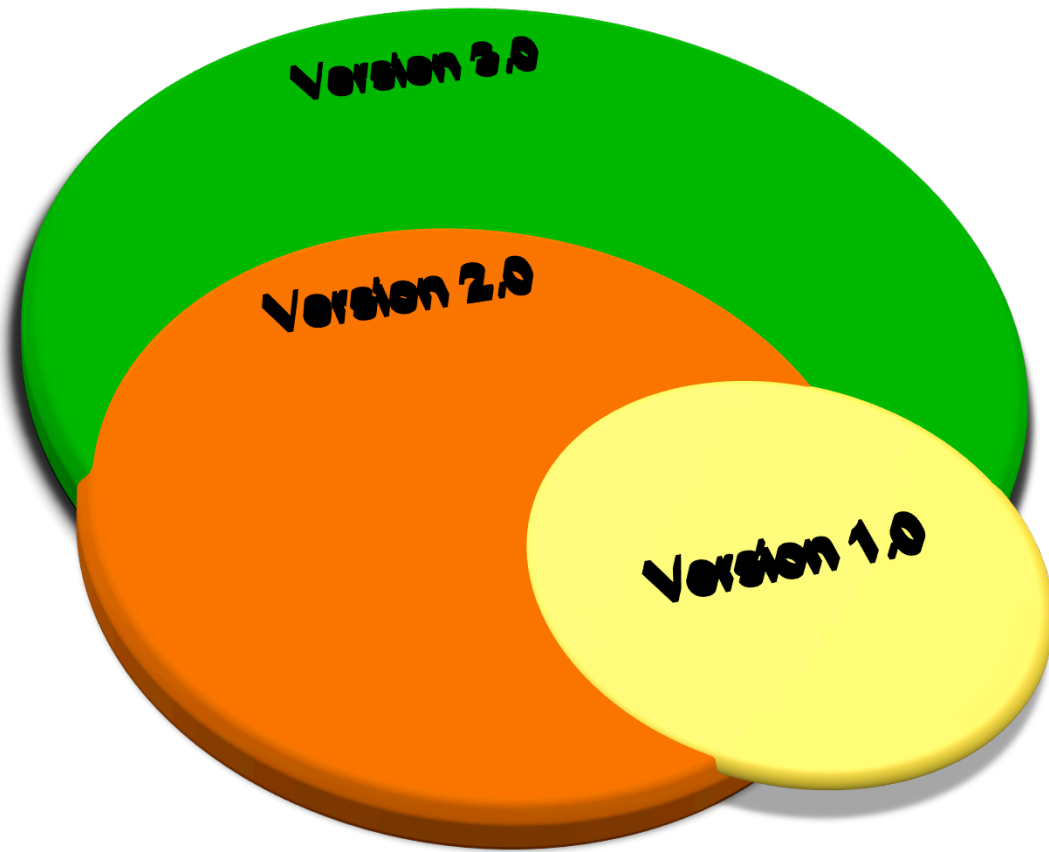
Problem 2 = Master data handling

- Duplicated data
- Synchronizing
- Corruption



Problem 3 = Monolithic systems

- Generation growth
- Maintaining
- New features
- Development is not cost-efficient



Problem 4 = user experience

- Usability
- Creating new interfaces to legacy systems

The collage displays several screenshots from the Metropolia STTS system:

- ENROLMENTS**: A table showing course details with columns for Study name and code, Ecr., Asc., Max., Credit value, and Period. Courses listed include '3D ympäristösuunnittelu', 'Arvostelutekniikka', 'Automaattitekniikan perusteet', 'Bocconi Award', and 'Dieläkäseutus'.
- Curriculum search**: A sidebar with filters for Name, Code, Version, Type, Training programme, Qualification, and Qualification title. It also includes fields for the first and last names of the person in charge and a code of person in charge.
- IMPLEMENTATIONS**: A section for filling in fields and pressing search, with dropdowns for Department, Study code, Study type, Study name, Period, and Group. It also has radio buttons for 'order by name' and 'order by date'.
- Calendar**: A weekly view for June 11, 2012, showing a grid of time slots (08:00-18:00) and course reservations. The calendar is titled 'Week 11' and shows dates from Monday 12.03. to Sunday 18.03.
- Metropolia STTS**: A large banner with the text 'Metropolia STTS' and 'Toimintasuunnitelma- ja esityshaku | Päättävöitteet ja taloudellinen raami'.
- Metropolia TUUBI2**: A sidebar menu with options like 'FRONT PAGE', 'FOR STUDENT', 'FOR STAFF', 'Important dates', 'Benefits and subsidies', 'Work Placement', 'Welfare', 'International Metropolia and Student Exchange', and 'Sustainable development'.

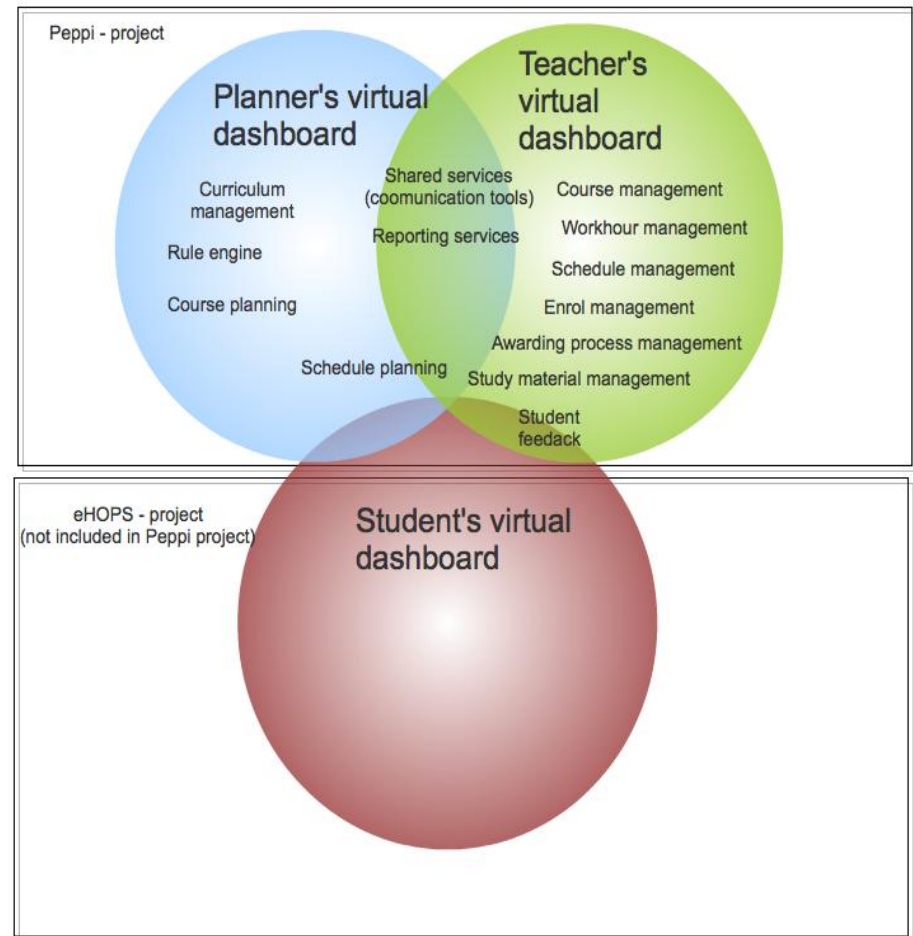


Creating new university education management ecosystem using service oriented architecture -
Peppi

About

- Peppi is a comprehensive service-oriented system for curriculum planning and related e-services for HEI management
- Complete renovation of application architecture, user interfaces and design methods.
- Two largest Universities of Applied Sciences in Finland will implement Peppi in 2013.
- Project in numbers:
 - Project members: 87
 - Budget: 2,7 million euros
 - Documentation: over 600 pages
 - Work days used: 5500

Virtual dashboards



Services for education management

- curriculum/syllabus planning
- rule engine
- course planning
- course instance planning
- organization planning
- expense planning and budgeting
- teacher work hour planning and
- schedule planning



Services for teachers

- Awarding process handling
- Communication tools
- Own schedule handling
- Own workload handling
- Course planning
- Material and document handling
- Support for virtual learning environments





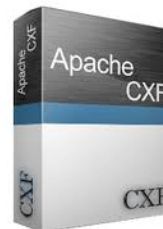
Peppi - Architecture

Used technologies

Interface layer



Service layer

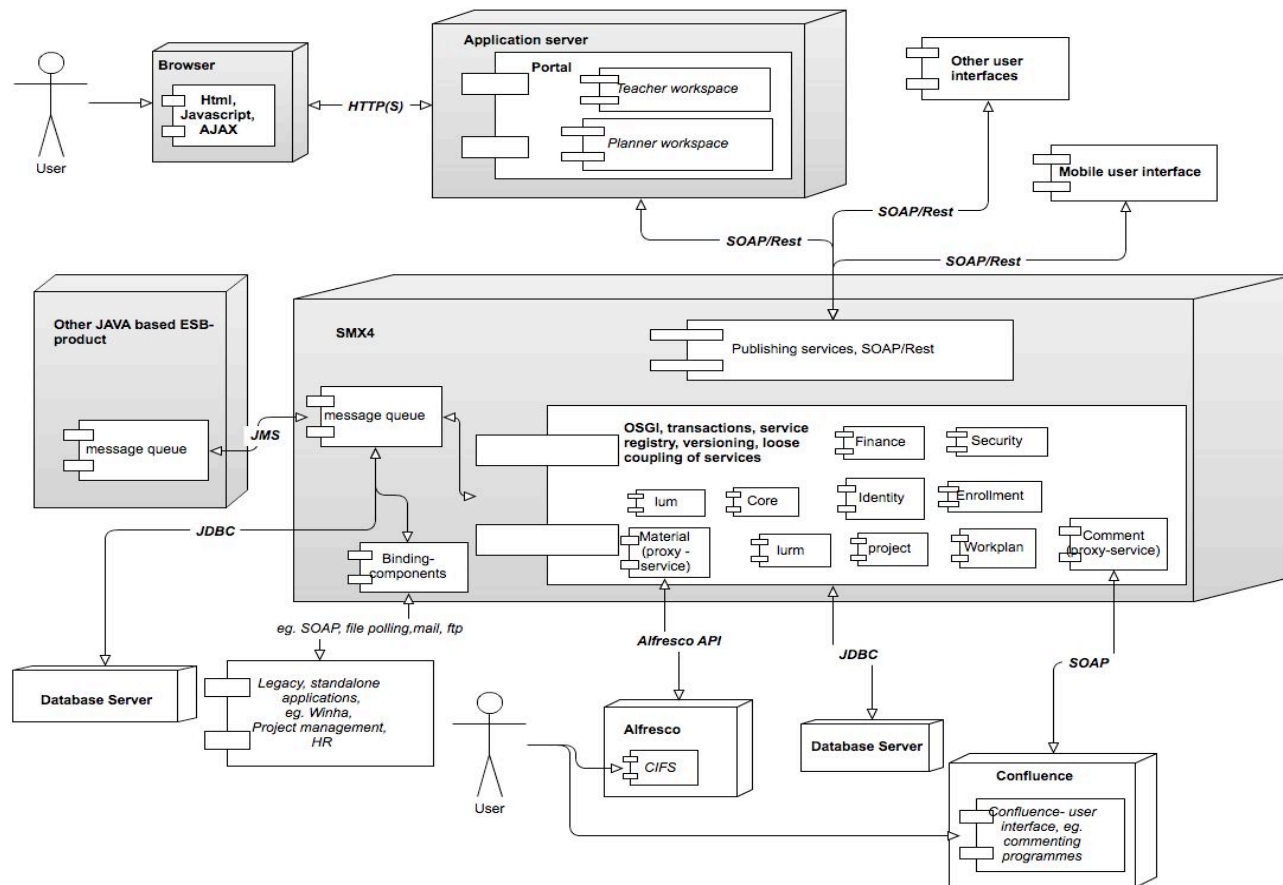


Database layer

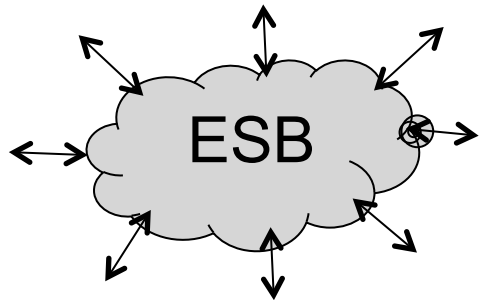


Deployment diagram

Deployment Diagram

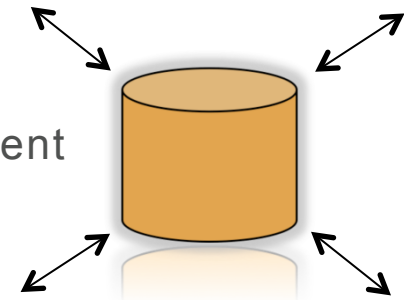


Benefits



From point to point integrations to integration logic in one place

From master data problems to master data management



From monolithic system to modular ecosystem

From difference in user interfaces to one UI layout in dashboards: better user experience

Code	Name	ECTS Credits	1.5	1.5	1.5	1.5	1.5	1.5	1.5
SR1051-000	Information, Communication and Automation Technology	3	3						
XXXX02	Information Technology and Computing Skills	3	1.5	1.5					
XXXX03	Calculus with Applications	3		3					
XXXX04	Professional English	3			3				
XXXX05	Mathematical Functions	3		1.5	1.5				
XXXX06	Mathematics	2				2			
SR1051-001	Health Care	3	3						
XXXX07	Clinical Skills I	3							
XXXX08	Verbal, Written and Web-based Communication Skills	3							
XXXX09	Basics of Health Care Sciences	3							
XXXX10	Clinical Radiography and Health Care Environment	6	3	3					
XXXX11	Clinical Skills II	3							
XXXX12	Practical Training in Clinical Skills	4		4					
SR1051-002	Contributing Studies to Radiography and Radiotherapy	3	3						
XXXX13	Anatomy and Physiology	3							
XXXX14	Mathematics and Physics	3	1.5	1.5					

Benefits for IT-Services

- Technology and data model are well suited for single-installation for many organizations scenarios
- Can be leveraged as a cloud service for a multitude of customers
- All the components are scalable and open
- Enterprise service bus makes it easy to deploy new service interfaces and new schemas to the environment on-the-fly, without service interruptions
- Effortless integrations with third party systems (e.g. Identity management, Collaboration systems)
- Cost savings and vendor neutrality through open source software

Benefits for Executives and Management

- Opportunity to deal with any information exchange with other HEI's in Europe.
- Decreases resources used in HEI's management.
- Improves information quality, based on master data principles.
- Using standards in every solution achieves solutions that have long lifespan.

Benefits for Users

- Engaging and easy to learn interfaces
- Support for multiple languages
- Unparalleled performance and reliability
- Decreased time spent on management
- Whole education management process in one ecosystem



Demo

<https://peppi.eduix.fi/>



Thank You!

Further information:

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