

Integrated Campus-Portal

Martin Plümicke

Baden-Wuerttemberg Cooperative State University (DHBW)

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Agenda

- 1 Introduction
- 2 Central software systems
- 3 The portal strategy
- 4 Identity management
- 5 Possibilities of SharePoint integration
- 6 Integration of different systems into the campus-portal
- 7 Workflows using functions of different systems
- 8 Demo
- 9 Summary and Outlook

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- 30.000 students at 12 locations all over Baden-Wuerttemberg
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-
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 - Many different structures, especially IT-structures
⇒ it is a challenge to harmonize them

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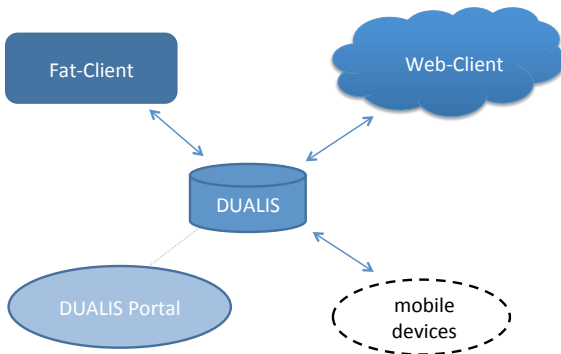
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Campus-Management: DUALIS¹

- Basic claims data of the students, the lecturers and the companies
- Ressource planning of lecturers
- Ressource planning of premises
- Timetable planning
- All exams and the credentials

DUALIS

Architecture



Student-evaluation of lectures

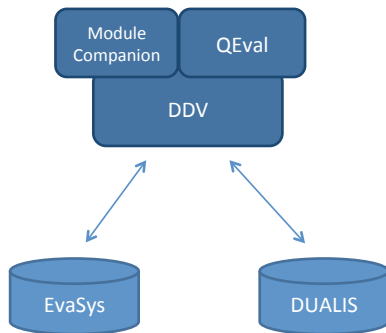
Reporting-Tool: Dualis Data Visualizer (DDV)

- Java rich-client
- Bases on jreport²
- In-house development

²Jinfontet Software

DDV

Architecture



Central systems prepared for soon introduction

- **CRM** (MS-Dynamics)

Three groups of customers:

- potential companies for the student's internships
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- **Alumni-tool** (product of Datenlotsen)
 - uses MS-Dynamics
 - integrated into Sharepoint

Planned central systems

- e-learning: Moodle
- email-tool: MS-Exchange/Outlook

MS-SharePoint

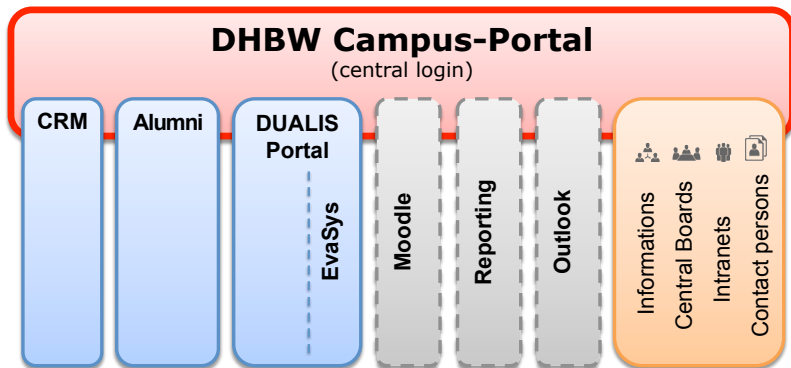
At the moment only the communication functions are used:

- central intranet and intranets for all campus
- interchange platform for all central boards
- contact persons
- information about laws

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The portal strategy



Goal: All users can reach all central IT-systems from one account on one platform.

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Identity management

- Authentication and authorization to the systems
- **Goal:** one-to-one relation user to identity
- **Challenge:** 12 campus are responsible for their identity management
This is typical for universities: all faculties have their own identity management.

Active Directory Federation Service (ADFS)

- **MS-Description:** *ADFS provides an identity federation solution for organizations looking to share identity information with their partners in a secure manner.*
- In our Situation: **partners = locations/faculties**
- **Single sign-on**
Users need not to authenticate them multiple times for using different web-applications.

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Link: Changing the web-application by a link.

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Web-Services: W3C consortium: *A web-service is a software system designed to support interoperable machine-to-machine interaction over a network.*

In the framework of SharePoint web-services could be used to call functions of different applications.

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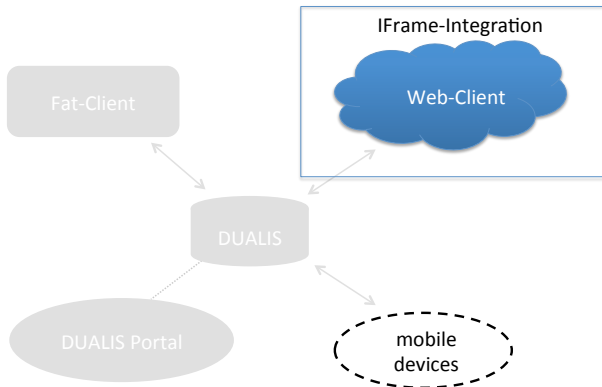
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Workflow-Integration: In SharePoint workflows can be modelled with functions of different applications by using web-services.

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DUALIS/EvaSys-Integration I



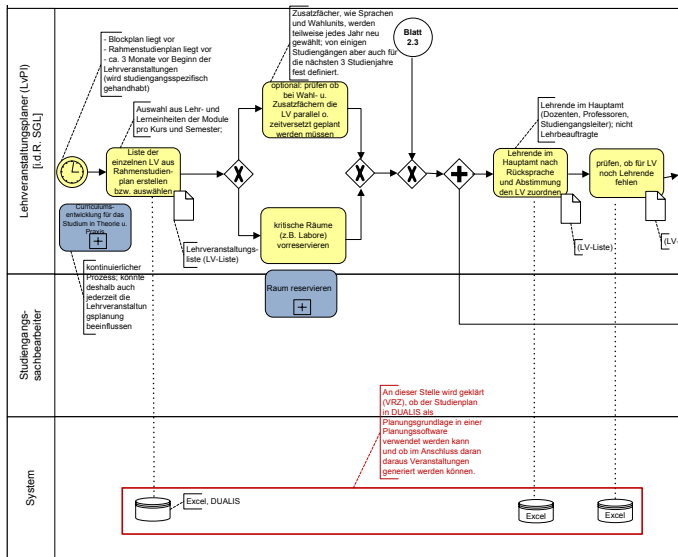
DUALIS/EvaSys-Integration II (Workflow-Integr.)

No.	Process	User
1	Planning courses	head of department, secretary
2	Course evaluation (with EvaSys)	head of department
3	Students enrollment, exmatriculate and grant students leave absence	secretary
4	Relations adminstrating (students \leftrightarrow companies)	secretary
5	Fees adminstrating	adminstration
6	Remission fees	adminstration
7	Recoveries of amounts verifying	adminstration
8	Salaries und contracts accounting	adminstration
9	Grates typing and unblocking	lecturers, secretary, head of department
10	Transcript of records, creditials providing	secretary

Process modelling

- 52 processes of studies und teaching are identified
- Modelled in workshops
- Summarized in a process companion

Example: Planning of lessons



CRM-Integration

Iframe-Integration: Standard functions of MS-Dynamics web-client

CRM-Integration

IFrame-Integration: Standard functions of MS-Dynamics web-client

Workflow-Integration: DHBW-processes:

No.	Process	User
11	Adminstration and acquisition of partner companies	head of department
12	Adminstration of lecturers	head of department secretary
13	Students recruitment (exchange platform)	head of department partner companies

Integration of the other systems

Alumni: SharePoint-application

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Reporting (DDV): Workflow-Integration

In DVV all functions are callable as a web-services.

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Outlook: IFrame-Integration, as Outlook has a web-client

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Workflows using functions of different systems

- In SharePoint-workflows web-services of different systems can be called.
- It is possible to implement processes using different systems.
- The user works process-oriented and not system-oriented!

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Example: Process: **Planning of lessons**

At the moment the workflows ends with *make course public*

Additional functions:

- Generate student evaluation (EvaSys)
- Generate an e-learning course (Moodle)

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- Portal bases on MS-SharePoint
- Integrated systems: student administration, evaluation, customer relationship, alumni-management, eLearning and reporting

Great benefit: All central applications are used by one application.

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Outlook

- Optimizing the processes independent from the systems
- Corresponding workflow-implementation