SIX MONTHS MORE - ABOUT ANOTHER AMBITIOUS IDENTITY MANAGEMENT PROJECT

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Abstract:

This papers is based on the authors last year EUNIS paper "Identity Management in 18 months – an example process"[i] In the between the author changed position from Oldenburg to Erlangen and took the project management position in this IDM project.

The author starts with a short summary of the lessons learned from the Oldenburg identity management project. As there are:
- a need for strategic goals
- a need for strict project management
- importance of management support
- manpower
- authoritative decisions
- power / ability of endurance

According to this the environment of higher education is reflected. This is also the environmental perimeter of IT-projects in higher education.

Coming from this meta level down to the project essentials, the setting of the current project is presented. This is in many points refined from Oldenburg and has some new elements like the PRINCE2[ii] project management setting and a stronger dependence on the project partner Novell. PRINCE2 is short summarized and its practical application is described.

As a good practice the management rules and the used project management tools infrastructure is presented. Following the guideline: Modern tools for modern project management; this consists of different open source tools for different purposes. The philosophy behind this portfolio of open source tools is to use paradigms of open source software development in a project for it-driven organizational change. It will answer the questions: How communicate open? How can the discussion process and the knowledge about the way to a decision be documented? How can small powerful tools support these tasks? Why is the customizability of open source software important for the projects success?

Finally the paper describes the current project plans and the current effort of the project. Based on this a component oriented system architecture will be presented. This includes an argumentation why this complex concept was fostered by the preliminarily described principles of project management.

Preliminary Notes or Lessons Learned Part 1

From the Oldenburg Identity Management (IDM) project described in the authors last year EUNIS paper[iii] several experiences had to taken into account before starting a new project:

- Technology is only the flavor of an identity management project.
  That means that the software platform is not relevant for the progress of an identity management project. From an abstracting level all German IDM converge to a likely structure. All operate with a separated meta-directory and one ore more spread directories, for customers and administration purpose. The administration and user self-service is mostly done via a web interface.
  Those who work on a distributed meta-directory are a significant minority and follow a "local federation approach"
- There is a need for strategic goals!
  Starting a project without strategic guidelines will leave a project in disorientation. It is hard for the navigator (aka project manager) to find the proper route if the final destination is unknown. Many operational goals could only be weighted and aligned under the guidance of strategic guidelines.
- There is a need for strict project management!
  It is all about empowerment of the project manager. He or she is in charge of the day-to-day business. The project manager has to have the authority to give instructions to every project member within the matrix organization. Managers in line have to be informed what "their employees" do within the project but there has to be acknowledgement about who gives instruction associated with the project.
- Some decisions have to be made authoritatively.
  Sometimes the sentiments are some kind of contrary; perhaps team members or customers lack the willingness to aggress. In these cases the project manager has to make a decision authoritatively to prevent the project from standing still or one party to be the overall winner. In this but not only in this cases …
- Management support is not to overestimate!
  Defining strategic goals and the role of a project manager within an organization are classical duties for the management. The success of the project is directly connected to the attention it is paid by the upper management.
- Building complex information systems needs manpower.
  Without a minimum of personnel the project duration will extend unpredictable. This will have negative influence on the project outcome.
- One key competence of the project manager is the power / ability of endurance.
  Whether there are disaffected project members or dissatisfied customers, unforeseen obstacles or disabilities in the chosen software – a key competence for the project manager is endurance – or even call it patience.

These seven conclusions from the good practice[iv] in Oldenburg were the starting point for a new IDM project – called IDMone – in Erlangen (Bavaria, Germany).

The environmental conditions of higher education in Germany

In absence of sufficient Know-How to draw a comparison to other European countries the author assumes that the following remarks are special to German universities.

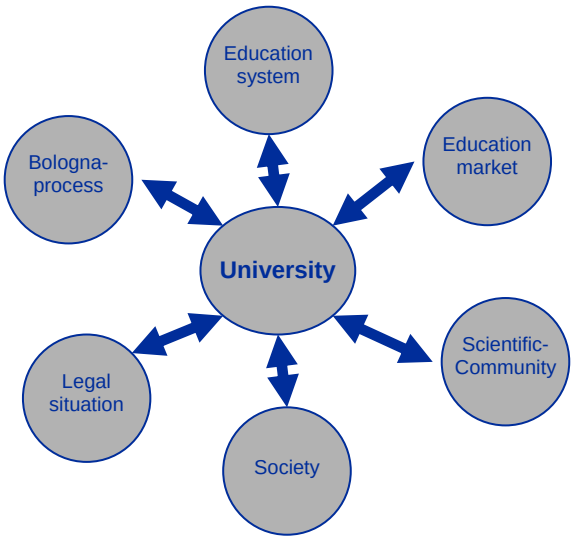

Figure 1: University and their environment, source: own.

Looking at the universities environmental surroundings[v] the Bologna-process is the most important challenge that German universities have to face nowadays. The consequent renunciation of the German diploma and the area-wide introduction of bachelor and master is a major impact on German universities. The revolution starts with the reformation of the study system which inevitable brings a change of the administration process and the recreation of IT-process support.

This change marks a fundamental change in the German higher education system. Coming from a traditional academic point of view, where teaching is the more or less beloved part of research, the Bologna process drives German universities to a role of market participants in a more and more globalized education market. Customer satisfaction, evaluation and study fees are buzz words only heard partly before. This externally driven change of self-conception has influence on the universities value system.

The Scientific Community is some kind of pillar in these times of changes. Some researchers are more bound to their community then to their university. As rent seekers they always look for the organization that offers the best conditions for their research. Their willingness to stay can only be influence by the quality of support they receive from their current organization and the positive influence of the organizational reputation on their own standing. Both – quality of service and reputation – are major topics for modern service organizations.

The Society claims universities for different things. Well educated personnel[vi], support of life long learning and knowledge transfer only to name three major topics in the public opinion. Mostly IT is the facilitating technology to fulfill all these claims.

The Legal Situation has the broadest influence on organizational action. The new interception law established after September 11th puts new requirements to universities IT especially in Germany where some of the assassins were educated in technical universities. A need to be prevented for surveillance task has never been significant potential before.

It hopefully comes clear that the environmental perimeter is vast and the stakeholders IT-projects have to pay attention to vary in their opinions and demands extremely.

In these times of changes it becomes more and more important to build a reliable grounding for a service oriented education organization. Part of this infrastructure which enables modern services is Identity Management – an effort to build an administrative basis for digital and non-digital resources.[vii]

Practical project management with PRINCE2 – Rules and Tools

After resuming the past experiences and drawing the big picture of the environmental setting of German universities it now time to get hands on. How can an IT project in higher education – an IDM project for example – be managed?

Project Management is a broad field with many different models for different industries. In Germany the V-Modell-XT[viii] is a quasi standard for the public sector. But the complexity of this project management standard is to big for projects with less than 25 team members. Also it is more focused on developing new software systems than customizing standard software to organizational needs. By Coincidence the project partner Novell Consulting[ix] has developed an internal projeject management standard based on PRINCE2[x]. After reviewing this project management standard PRINCE2 was chosen as applicable. So it was customized to the needs and surroundings at the University Erlangen-Nuremberg. The major adjustments and supporting tools will be described along the eight standard processes of PRINCE2.

The “Starting up a project (SU)” process was implemented as described. The university made use of an external consultant to support and moderate this process. This external support turned out to be helpful to adapt a new project management standard in short time and to focus on the essential decisions.
To collect issues and ideas, structure them and keep them on track the mindmapping tool freemind[xi] turned out to be helpful. Btw. This was the origin of one major team rule – stated below – “Everything starts with a mindmap!”

The “Planning (PL)” process takes place in an evolutionary manner. This means that the current phase is planed in detail while the following phases are only roughly planed. For the planning task GanttProject[xii] is used. This open source tool cooperates with the mindmapping tool mentioned above.[xiii] It incorporates all basic project planning features needed without the complexity of Microsoft Project in comparison. Presently missing features concerning controlling issues are under development and will hopefully integrated in the stable branch soon.

The “Initiating a project (IP)” process culminated in an official Kick-Off. Under the guidance of the provost all relevant players where invited and by different presentations a common sense of the importance of the project and the role within of every player was transported.
Had it been easy to select the members of the project board – representatives from the computer center as responsible organizational unit and the project partner Novell Consulting – so it was not for this process. The stakeholder analysis developed in the Oldenburg project was a helping tool.[xiv]
The second important element was the team-norming. Within this one day workshop every team member described its role and its understanding of the roles of the other team members in the project. These perceptions were discussed so that at the end of the day everybody knew his or her role within the project team. Although the rules – mentioned in the next paragraph – were agreed and defined.

The “Directing a project (DP)” is implemented as described in PRINCE2. Additionally some rules were defined to support and ease the daily team work. The rules express the common sense of the project team, how to cooperate and work together efficiently. They provide answers to the following questions:

- What is the internal e-mail-address of the project team? This should be an e-mail-list.
- When is the regular appointment for the team meeting?
- What is the agenda for a team meeting? This should contain status reports of all team members, review of sitemap, reporting, risk-management, project plan and individual task list.
- Where is the place to collect all relevant information?
- What tool to use for which task?
- Is there a common programming language and environment in the project and which?
- In which cases reports have to be written?
    - What has been the goal fort he task?
    - What are the results and where can they be found?
- What is the standard approval path for external communication?
- If part-time employees are amongst the team members when do they work are not work?

The answers to all of these questions have to be clear, easy understandable and free of contradictions.

The “Controlling a stage (CS)” process combines the predictions and dependencies in the project plan with the risk management. The risk management faces chances, risks and issues. For this task a simple installation of bugzilla[xv] is used. This allows the structured collection of all relevant information. As the IDMone project mostly communicates via e-mails there is a media gap to the web based bugzilla. All relevant information has to be copied to the web. So efforts go in the direction of testing OTRS[xvi], which is becoming the central helpdesk system software of the Computer Center.
Additionally the project board members receive a weekly report by e-mails. This forces the project manager to reflect on the project weekly and keeps the project board up to date with the project progress.

The “Managing product delivery (MP)” process is embossed by the delivery of customized software modules and a proper documentation. The quality of the documentation is enforced by the supply of document templates. The project itself is documented by a reporting system based on a weblog. This weblog facilitates the project with an open, easy and partly documentation of the project progress along the time line. This pieces and part read afterwards and together document the developing discussion process and the knowledge about the way to a decision.
As central information repository a wiki is used. This is easy to learn (markup), to use (only browser needed) and can be accessed from everywhere. Still documents for reports, presentations or articles are needed. All these and much more files are stored in a subversion repository.[xvii] As all other tools this one is accessible under all operating systems. In urgent cases all you need is a web browser to access the project files. With a WebDAV client build in the most operating systems, basic users do not need any special application for using and especially writing to the repository. The auto-versioning feature via WebDAV makes it possible.

Especially in this process the demand for an empowered and enduring project manager is strongest. Nobody likes to document his work or commit facts for years. All the more a project manager who enforces decisions and insists on documentation even up to an annoying manner is needed.

The point when project board and daily work come together is the “Managing stage boundaries (SB)” process.

The “Closing a project (CP)” process is scheduled for end of 2008. At least then the project management practice will prove its capability.

The Bottom-line after all is: Modern tools for modern project management. The philosophy behind this portfolio of open source tools is to use their advantages like platform independence, interoperability and customizability without the disadvantages of proprietary software like license costs or proprietary and non-fully-interoperable file formats. The project management makes also use of good practice from open source software development when it adopts their project management tools with classical project management standards.

Finally a conclusion inspired by Pascal Aubry[xviii]: Depict what can be pictured! – Pictures are a good way – even the best – to achieve common sense about complex issues.

The IDMone project so far

Started officially on November 7th 2006 the Identity Management project at the Friedrich-Alexander University Erlangen- Nuremberg named “IDMone” has an ambitious project plan (see Figure 2).

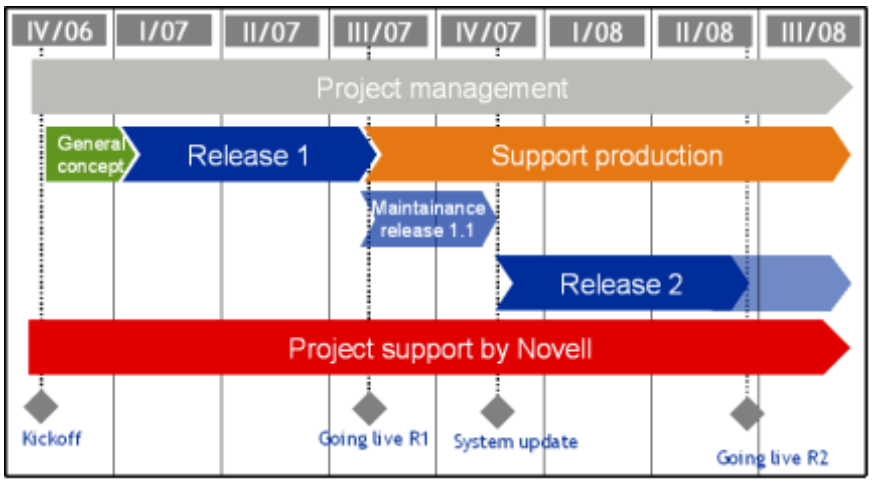

Figure 2: IDMone project plan, source: own.

The project is sponsored by the Free State of Bavaria, who defined establishing an Identity Management system until end of 2008 as one topic in the agreement on objectives between the Free State and the university.
Unfortunately all public project documents are as usual for German public administration project published in German language in the project webpage[xix]. But short abstracts will be provided on request.
As most projects in IDM already mentioned above IDMone works on a two pillar architecture with a meta-directory handling the provisioning tasks and an IDM-service-portal which is the

central interface for administration, delegated administration and user self service. While writing this article the project team works on a detailed concept how to implement this with the Novell Identity Manager[xx]. At least 22 target systems should be provided with identity coming from the classical source applications: student administration system, human resource system and IDM-service-portal – as source system for all other accounts. All systems with the blue background will be included in the first release (see Figure 3).

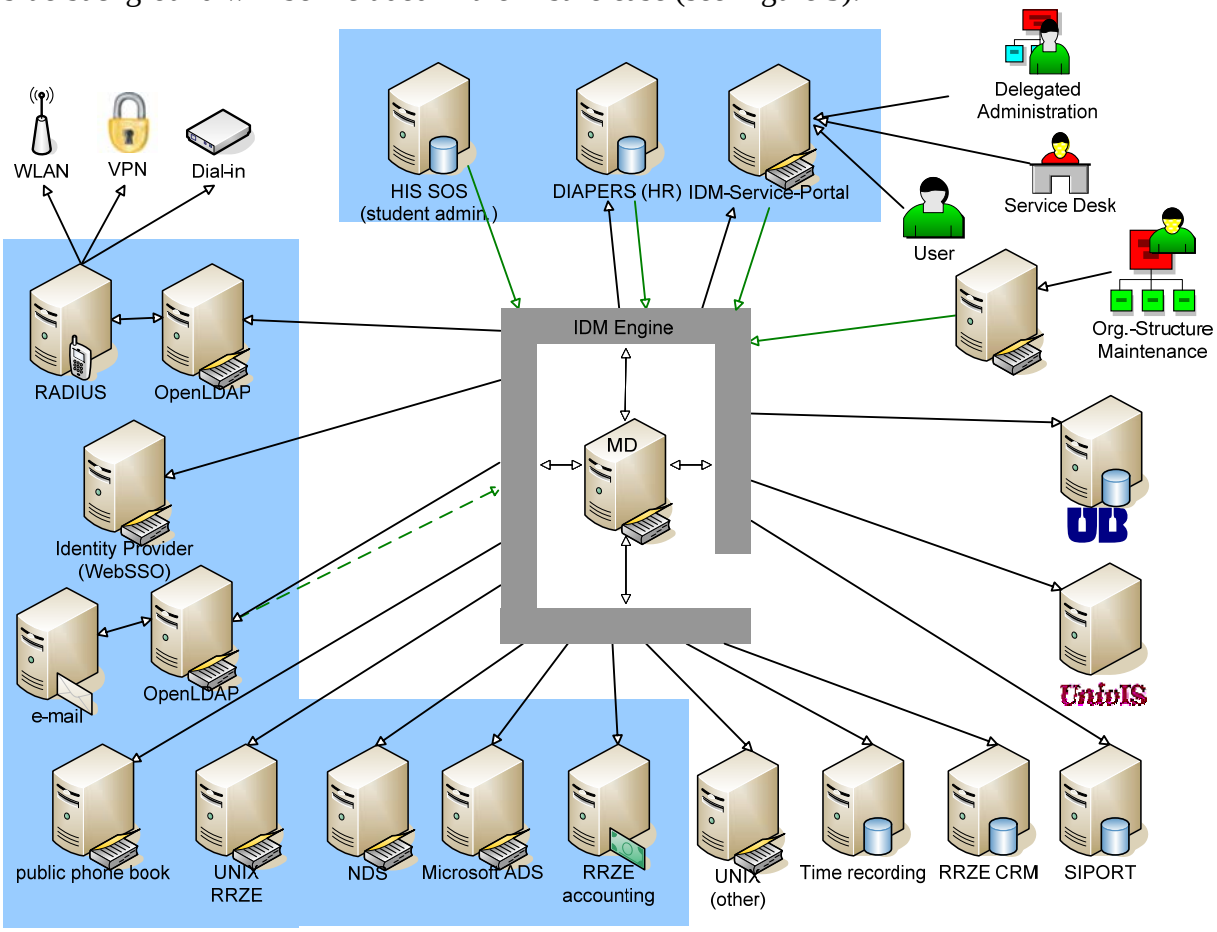

Figure 3: Architecture overview, source: own.

Because of the diversity of target systems the project will implement the connections modular. Every connector will be independent from the others. The team pays attention to the requirement, that no connector should affect one of the others. This should be supported by an object-relational Directory Information Tree structure of the meta directory shown in Figure 4.

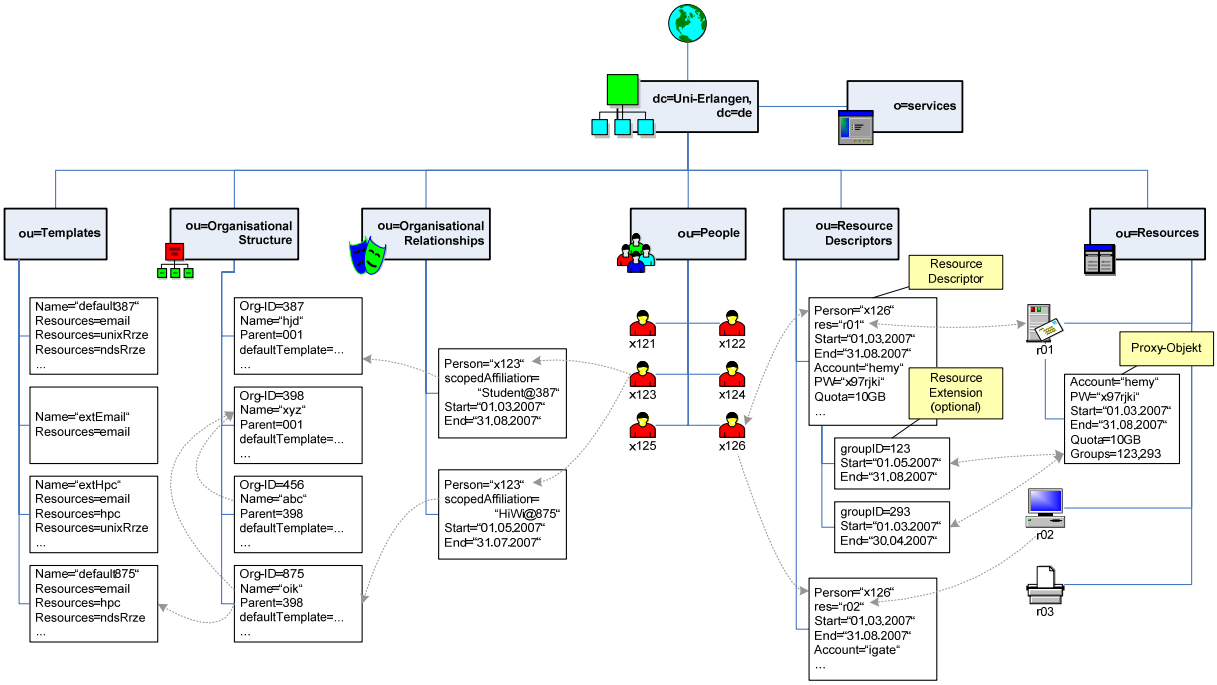

Figure 4: IDMone DIT-structure, source: own.

The processes behind this complex DIT-structure are “work in progress” while writing this article and will be presented at the conference.

As described in the authors last years EUNIS presentation[xxi] an important role played the participation of employees and customers. This was used during the as-is-analysis, which were mostly surveyed in group interview or brainstorming. Now, within the phase of prototyping most issues are discussed one-on-one with the responsible system administrators. To give all (technical) players a current insight in the projects progress a working group was formed. This working group meets regularly every four weeks or even more often with a time limit of 60 minutes per meeting. It is always comprised of a status report, the discussion of one major topic and the possibility for every participant to address the project team with special issue he wants to be mentioned or remind of. The participants of this working group are identified supported by the stakeholder analysis mentioned above.
This different forms of participation keep the project on track and helps the team to remind issues that otherwise might be neglected.

Future aspect or what’s next?

The team is currently working on the detailed concept. This will be hopefully presented at EUNIS 2007.

Currently the weblog is only accessible for project members because it documents not only the projects progress but also the blocking issues. With the effects of the project becoming broader importance the balance between openness and project internals has to be re-adjusted.

One Milestone is the project report in September 2007. At this time the project management and controlling will have its first proof of concept. Are the chosen tools the right ones to keep the project on track and make the progress transparent to external non-technical minded stakeholders like the Government of the Free State of Bavaria?
Currently the project team is confident of mastering the upcoming challenges.

[i] Eggers, Hendrik: Identity Management in 18 months – an example process, EUNIS 2006 Tartu, Estonia.
[ii] http://www.ogc.gov.uk/methods_prince_2.asp.
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[iv] The author would doubt that there can be best practice in project management. Everything could work somewhat better but this discussion is far off this article.
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