# Overview of an ELN application

**System:**

*System:* Confluence

*Where is system used:*

Faculty of Science and Technology (ST), Aarhus University (AU). In relation to project the focus has been on users at research groups at Interdisciplinary Nanoscience Center (iNANO) and Bioinformatics Research Centre (BiRC).

*What is the intended purpose of the system:*

The system is offered as a general platform *research documentation* in order to make it easier for the individual researcher to follow the rules for responsible conduct of research at AU. The system as offered via http://labbook.au.dk is very flexible and makes it possible for individual researchers, research groups, and departments to adapt different workflows that

* facilitates easy collaboration and mentoring of research projects,
* facilitates easy sharing of information about e.g. equipment, protocols and resources,
* supports research integrity by logging of editing events and daily backups on AU servers,
* keeps data confidential within your research group to be compatible with patenting law.

The system is not designed as a storage for large amounts of data, but documents stored in the system can refer to data stored elsewhere on AU IT maintained file systems.

*How was the system chosen:*

Earlier versions of Confluence systems have been in use at research groups at iNANO and Department of Molecular Biology and Genetics (MBG) since 2007. Based on the experiences from these application, it was decide to offer a Confluence based system to a broader range of users at ST.

**Users:**

*Number of users that the system is offered to and their backgrounds (e.g. all employees at a faculty or department, or a more selected group):*

The system is offered to all employees and students at ST. We currently do not have data on how many of these are active users of the system.

**Organization:**

*What are the technical requirements of the system:*

To use the system via http://labbook.au.dk, the user needs access to an internet browser.

*How is the technical installation and maintenance of the system organized:*

The confluence system is installed and maintained by AU IT and runs on systems that are fully under backup.

*How is the administration of the system organized (e.g. maintenance of users, permissions, common content):*

Each department at ST has a local 'user administrator' who can perform basic user administration tasks. A 'super user administrator' has been appointed among the local user administrators. This person is responsible for the running maintenance of the system and acts as the contact person to AU IT.

**Costs:**

*What are the license fees (if any):*

It costs approximately 80.000 DKK/Year for a site license (up to 10.000 users) that makes it possible to offer http://labbook.au.dk to all employees and students at ST (and AU).

*How are the running costs for system maintenance and administration financed (besides this activity):*

Currently the costs are covered at the Faculty level.

**Overall experiences and future actions:**

Confluence (as offered via http://labbook.au.dk) is very flexible and can be adapted to many purposes. However, this also means that it has a rather steep learning curve for users who are not familiar with its wiki-based workflow and its way of organizing documents into spaces. Also its wiki-based workflow, where users can edit documents (with logging) is difficult to appreciate by some users.

The system is extensively used in some research groups but wider adoption, in particular at groups that do not perform traditional 'wet-lab' work and have used a traditional labbook, has turned out to be difficult as these researchers and groups typically has adopted workflows that involves versioning systems (e.g. Git) for documenting and sharing code and other outcomes of their research.

The network of user administrator is hard to build and maintain, and requires support in the organization beyond the current activity.