Linköping University

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Linköping E-Press Organization

Related information can be obtained from the following web pages:

Linköping University:	http://www.liu.se/
Dept of CIS:	http://www.ida.liu.se/
EMTEK:	http://www.ida.liu.se/NIL
This article:	http://www.ida.liu.se/NILntd97/02/
The author:	http://www.ida.liu.se/~erisa/

The following summary of "how we did it" can hopefully be useful for those intend to organize an Electronic Press for a university or an institute. This includes, but is not restricted to those who set it up in order to serve as an FPA (First Publication Archive) for the purpose of the ETAI (Electronic Transactions on Artificial Intellligence).

1 Background and purpose

The goal and purpose of the E-Press is as follows:

- To publish research articles and other similar works electronically, that is, to make sure that they are available over the Internet over an extended period of time, and without change.

The following are some considerations which are of major importance if the E-Press is to be able to live up to that goal:

- The commitment to long-time retention of articles must be credible. If someone can easily decide two years from now to discontinue the operation, then it's not credible.
- The commitment to the persistence (non-change) of the articles must also be credible. It's not sufficient that *we know* that the author is not able to change his or her article two years from now; furthermore, the world must be convinced that this will be impossible, or that it would be extremely difficult and that it would be detected and corrected rapidly if it happened.
- Articles must be nice-looking and have a reasonably uniform appearance. It's not acceptable to let every author make his or her own choice and design of the layout.
- It must be reasonably convenient for the author to set his/her article up for publication.
- The E-Press operation must not cost much. Since the assumption is that we are not going to charge for net access to E-Press articles, the costs will be covered by departmental and/or university budgets. This will not be possible if the cost is high.
- The E-Press operation must be well integrated with existing university structures, otherwise its long-term survival will be risky.

The following are some of our concrete decisions which immediately follow from one or more of the above considerations:

- The University Board (that is, the highest decision-making authority of the university) has decided to create the E-Press and specified its basic instructions, including in particular the mandate to keep published articles on-line for a period normally of 25 years from the date of publication.

- The E-Press server is organizationally located in UNIT, the entity within the university which is in charge of general computing services and computer networks (complementing departmental computer systems). One of the aspects of guaranteeing non-interference from authors is to keep its daily operation at some distance from the research departments.

- The E-Press is run by a group of a few persons representing different roles and competences, namely the following. I specify their names in order to make it possible for the reader to contact any one of them for information and advice.

  - Erik Sandewall, Computer Science department. Editor-in-chief; coordinates the area editors (see below)
  - Liselotte Thornell, University Library. E-Press manager; deals with all 'library' and 'publisher' aspects of the E-Press, such as:
    * Publication agreements with authors
    * Obtaining ISSN numbers for E-Press series
    * Budget and attestation of expenses
  - Peter Bivesand, UNIT (computing services); runs the server where E-Press publications are held, and maintains the cover and index pages for the publications and services.
  - Mikael Eriksson, Computer Science department. WWW and HTML specialist; has designed the standard E-Press cover page, gives advise about naming conventions etc.
  - Tommy Persson, Computer Science department. Latex specialist; has designed (or more precisely, corrected) the Latex style file for the E-Press, and gives advise about Latex versions etc.

  The first three of these are in charge of different aspects of the operation; the last two are primarily consultant on an on-call basis (although of course they can take initiative if some problem is detected).

  Additional persons have been engaged for specific purposes, such as setting up style files for Word and for Framemaker.

- We decided to restrict the E-Press services as much as possible, in order to minimize costs. The following services are **not** provided by the E-Press:

  - Putting the manuscript on a nice looking format, help with formatting, help with language correction. This has to be done by each author or department, at their expense. The E-Press only receives the finished article as postscript or PDF (full article; text or HTML (the abstract). That's all.

  We foresee the possible creation of service unit(s) within the university which sell the text finishing services to university departments, but that's not the E-Press business.

  - Dealing with documents on the source-text level, for example filename.tex. We don't want to be involved with formatting. We also don't want to be involved with reformatting from source, if and when postscript and PDF become obsolete. At that time, it will be up to each department and author to decide whether they want to do that, and how. The E-Press is only concerned with preserving the original version.

    However, we do foresee the possibility that the E-Press itself may effectuate automatic transformation from postscript or PDF to a successor format, provided that that transformation can be done simply by running a program, and provided that the same transformation can be done by E-Press "customeers" as well (so that the whole process is transparent).

    Transformations to more compact formats, such as gzip, can also be done by the E-Press, for similar reasons.

  - Search operations on the level of the text of the document, or steps and measures to make the article maximally visible on the net. This has to be done by the interested parties, such as each department or author.

    If an author has figured out a way of maximizing an articles exposure, he or she is of course free (and encouraged) to arrange that the resulting links point directly to the E-Press cover page for the article.

  - Dealing with corrections, updates, errata, etc. What has been received on publication day has been published, that's all.

    However, the E-Press does allow, foresee, and encourage authors to later on produce additional information pertaining to the article, such as errata lists, new variants of the article where the errors have been corrected, and so on. This information must be set up and maintained by the authors or author department. The E-Press will however be prepared to modify the article cover page so that it contains links to such author-provided information and updates. (See below about cover pages).

- We decided to set up a **cover page** system. This means that each published article is primarily represented by a WWW page which is not the article itself, but a short HTML page containing

  - The basic bibliographic information: author, title, etc.
  - Links to the abstract and the article. (Sometimes the abstract is within the cover page itself).

  - Verification information allowing the customer to verify that the article being linked to has not been tampered with after the day of publication.
  - Links to E-Press-generated new variants, such as a PDF version if it has been generated automatically from a submitted postscript version.
  - Links to author-provided information as described above.

The URL's of the cover pages are systematically named, such as `http://www.ep.liu.se/ea/cis/1997/025/index.html`, where `ea` means "electronic articles", `cis` is the series name "Computer and Information Science", and `025` is the serial number within the year.

With this arrangement, the URL of the cover page can be published and used persistently as the key to the article. On the other hand, the physical location of the article itself may change; it is just a matter of changing the link in the cover page. If it is decided on the national level to create a national research publication server (as an extension of the traditional national library system), then the cover page can easily be set up to point to there.

The E-Press systems manager (presently Peter Bivesand) is in charge of setting up these cover pages and keeping them updated. The cover page design was made by Mikael Eriksson.

I now have to rush for a meeting, so I'll just write down a few notes, and then come back to this later on

Software: we don't really have a lot of software for the E-Press operation. The major software requirements are:

- Style files for formatting - different formatters - to be given to authors. See the E-Press information pages.
- A program for doing checksums and public-key encryption, for the validation. A publicaly available system is used, of course. Reference to Peter Bivesand.
- The standard publication contract can also be seen as a kind of "software".

We have foreseen writing small programs which generate cover pages automatically, etc, but this has not been put into widespread operation yet.

Transfer and handshaking routines author - area editor - E-Press. Will write a few lines about this.

Formalities, ISSN numbers, paper-based archiving, sending to other universities, etc: will write a few lines about this.

Definition of scientific areas, area editors: will write a few lines.

Copyrights: will write a few lines. Basically, we expect the author to retain the copyright, but he or she must make a clear agreement with us so we don't get into trouble if he or she later transfers copyright to someone else.