

Biennial Punch List¹ of Best Practices for Electronic Resources Engineering Libraries Division American Society for Engineering Education (2004-2005)

The Engineering Libraries Division (ELD) of the American Society for Engineering Education (ASEE) endorses the following best practices for electronic scholarly publishing. The quality, stability, and accessibility of electronic resources have vastly improved since the very early days of electronic publishing. However, there are significant outstanding problems that continue to persist. This biennial Punch List is a summary of best practices in those selected areas considered by a majority of ELD members to be the most important to address at this time.

The purpose of this list is to focus attention on these issues, to inform content providers of the preferred practices in each instance, and to open a dialogue with content providers on these issues in order to effect positive change. We would welcome discussion of the content of this document or of other topics related to electronic scholarly publishing that are not included in the text that follows. Please send comments to members of the [Best Practices for Electronic Resources Task Force](#).

In formulating these best practices many existing guidelines were consulted. The guidelines from the [California Digital Library](#), the [COUNTER Project](#), the [Digital Library Federation](#), the [International Coalition of Library Consortia \(ICOLC\)](#), and the [Zwolle Group](#) were particularly useful. These organizations are to be commended for their insightful and forward thinking approach to these issues. Content providers are strongly encouraged to read the guidelines from these organizations in their entirety for additional and more in-depth coverage of many of the topics we've addressed.

Issues Addressed in the 2004-2005 Punch List:

1. Access Authentication
2. Co-Branding of Products
3. Copyright Issues
4. Cover-to-Cover Digitization
5. Digital Quality
6. Interlibrary Loan/Electronic Reserves
7. Linking to Content
8. Perpetual Access
9. Purchase Models
10. Retractions and Corrections (Errata and Corrigenda)
11. Statistics

¹ Punch List -- An itemized list, typically prepared by the architect or construction manager, documenting incomplete or unsatisfactory items after the contractor has notified the owner that the tenant space is substantially complete. From Crye-Leike, Realtors' [Commercial Glossary of Terms](#), accessed 3/16/04.

1. ACCESS AUTHENTICATION

STATEMENT: Access must be available to all authorized users—both affiliates of the library and walk-ins. Affiliates (e.g. full- and part-time students and employees, including all faculty, staff, and other researchers working on grants administered by the institution) must have access to the licensed content regardless of their physical location. Walk-ins include affiliates as defined above and in addition any persons not affiliated with the library who are physically present at any of the library’s site(s).

The authorization system must allow affiliates access to the resource from anywhere with a minimum of effort on the part of the library and the authorized user. The current preferred method of authentication uses IP addresses. Authorization systems should handle access via campus proxy servers, and special requirements for access via campus proxy servers should be well documented.

Individual passwords are *not* acceptable. Though not yet a replacement for IP/proxy access, password access via inter-institutional, open source middleware solutions is rapidly becoming important to larger institutions. As an example, Shibboleth offers a mechanism for querying the status of a potential user seeking access to a resource. [See Appendix] Strong preference is given to content providers who are willing to simultaneously provide IP-based access and implement access authorization through the use of such mechanisms. Further, authorized users must never be challenged with a login/password prompt when non-personalized access is controlled by IP or other means. A login/password requirement for the purpose of allowing personalization of the interaction with the licensed content (e.g., saving favorite documents, an individual profile, etc.) is acceptable, but must not be a requirement for an authorized user to have access to the licensed content.

RATIONALE: The electronic environment does not fundamentally change rights related to access and use of licensed content. Affiliated users should have the right to easy access to licensed content regardless of their physical location. Where access to print is open to on-site users regardless of their affiliation, access to electronic equivalents must be open as well.

2. CO-BRANDING OF PRODUCTS

STATEMENT: It is vital for libraries to have the ability to co-brand products with the content provider. It is important to have the ability to name individual campuses within consortia separately, and to use wording of the institution's choice. Strong preference is given to including the concept of payment, as in “Access to this product paid for by [campus library name].”

RATIONALE: Co-branding is vital to ensure that users understand the role the library plays in securing access to research material. Without co-branding users may assume the resource is "free." This undermines the library's ability to make a strong case for future funding and the library's continuing support of the product. Libraries also do a considerable amount of marketing for the content provider's products within our respective institutions. In addition to providing access to the product, we initiate new users to the benefits of the product and we provide training and ongoing support of the product to our faculty, students, and other researchers.

3. COPYRIGHT ISSUES

STATEMENT: Copyrights are sets of agreements between authors and content providers that govern the use of works of scholarship. Management of copyrights is an extremely complex proposition as the agreements vary by country and by content provider, and can be altered by means of amendment or grant by the parties. This document seeks to highlight for content providers some attributes of copyright agreements that support libraries' ability to promote access to scholarship.

In general, libraries look for agreements that support educational uses of scholarly works, and the principle of Fair Use, including but not limited to:

- Right to post published article on websites (personal or institutional)
- Right to post pre-publications of article on websites (personal or institutional)
- Right to make copies for interlibrary loan (from print or electronic format original)
- Right to use copies for reserves and/or e-reserves

Efforts are ongoing to identify and articulate basic principles to guide the development of copyright agreements that address the interests and concerns of authors, content providers, libraries, and other individuals and institutions. In particular the Zwolle Group, an international collaboration of stakeholders in scholarly publishing, is [drafting guidelines](#) that promise to be useful additions to this collection of suggested best practices for electronic scholarly publishing. The guidelines, to be called the Copyright Toolkit, are expected to be released in 2004.

RATIONALE: It is important for authors, content providers, and users to have a clear understanding of each other's rights and responsibilities regarding electronic scholarly publishing. Myriad and nuanced copyright agreements that require individualized attention impede dissemination of scholarship. Outdated agreements that were not created for the digital environment make common, modern practices for dissemination technically illegal. Due to the increasingly global arena for electronic scholarly communication, international agreement on basic copyrights and responsibilities for all stakeholders is imperative.

4. COVER-TO-COVER DIGITIZATION²

STATEMENT: Electronic content should be cover-to-cover and include all content found in the print equivalent. This includes all content issued as supplements or special issues in print or in other formats such as CD-ROM. Supplements should be made available online at the same time as the main issue. Cover-to-cover content includes, but is not limited to:

Abstracts; Addendums; Advertisements; Announcements; Author Biographies; Award Announcements; Book Reviews; Books Received; Brief Communications; Calendars; Case Reports; Classic Papers; Clinical Practice Reports; Conference Contents Lists; Correspondence; Cover Art; Debates; Directories; Discussions; Editorial Board Members; Editorials; Education Notes; Errata/Erratum; Forewords; Forthcoming articles; Forum Articles; Full-Length Articles; In Memoriam/Memorials; Instructions To Authors; Introductions; Legal Notes; Letters To The Editor And Replies; Literature Alerts; Masthead Information; Miscellaneous; News/News Items; Obituaries; Other Contents; Papers accepted for publication; Patent Abstracts; Patent Reports; Personal Reports; Previews; Product News/Review; Publisher's Notes; Requests For Assistance; Research Notes; Research Papers; Review Articles; Schedule of Issues; Sequencing Reports; Short Communication; Short Surveys; Software Reviews; Supplementary Materials; Table Of Contents; Test Reviews.

RATIONALE: Libraries require a complete, cover-to-cover, accurate digital replica of the original journal. Accurate collection development decisions on the retention of paper or electronic can only be made when the electronic is equivalent to the paper.

5. DIGITAL QUALITY

STATEMENT: Producers of electronic content should adhere, at a minimum, to the specifications for page image and machine-readable text masters outlined in the Digital Library Federation (DLF) document [Benchmark for Faithful Digital Reproductions of Monographs and Serials](#). If those benchmarks are updated in the future, content producers should adjust their processes to meet those revised benchmarks.

RATIONALE: Libraries and their users have a right to expect a certain minimum level of quality in all products they buy, whether print or electronic. For an electronic product, this means text and graphics must be sharp and legible in electronic form, and if a paper copy is produced from the electronic, that copy should be comparable to the quality of a print original.

² Selected portions of this text adapted from [California Digital Library Technical Requirements for E-Journal Vendors](#), dated May 16, 2003.

6. INTERLIBRARY LOAN/ELECTRONIC RESERVES

STATEMENT:

Interlibrary Loan: Licenses should permit fair use of all information for non-commercial, educational, instructional, and scientific purposes by authorized users.

Content providers must allow electronic information to be used for non-commercial interlibrary loan between two libraries in support of their teaching, learning, or research missions. The library agrees to fulfill all interlibrary loan requests in compliance with section 108 of the U.S. Copyright Law and the Guidelines for Proviso of Subsection 108(2g)(2) prepared by the National Commission on New Technological Uses of Copyrighted Works. There should be no additional record keeping beyond that required for copyright compliance by borrowing/lending libraries. Upon adequate consideration from the content provider, the library agrees to maintain records representing the library's use of materials in such interlibrary loan and to provide records to the content provider upon request.

Electronic Reserves and Course Packs: The library and authorized users must be able to use a reasonable portion of the licensed materials for use in connection with specific courses provided by the respective institution in compliance with the fair use policies.

RATIONALE: The electronic environment does not fundamentally change the concept of fair use. Prohibiting the use of electronic material for non-commercial interlibrary loan and electronic reserves is unacceptable.

7. LINKING TO CONTENT³

STATEMENT: All documents contained in licensed electronic resources should be easily discovered and located by a library's users, regardless of whether those documents are available in a different electronic product licensed by the library, freely available elsewhere in electronic form, available only in print (via a link to/from the library's online catalog record), or available in some other way (e.g. via interlibrary loan or document delivery). All links should resolve at the appropriate level of specificity (e.g. a request for an article should not result in a link at the journal title level). The preferred method of linking to/from electronic content is to use the metadata commonly found in an OpenURL. For information on OpenURL, see the pending National Information Standards Organization standard Z39.88-200X and the associated key/encoded-value (KEV) [format implementation guidelines](#). While other methods are possible (e.g. using Digital Object Identifiers (DOIs), as CrossRef does), OpenURL is preferred.

³ Selected portions of this text adapted from [California Digital Library Technical Requirements for E-Journal Vendors](#), dated May 16, 2003.

RATIONALE: A uniform linking solution should be used by all content providers and libraries and should be based upon an industry standard. The emerging NISO OpenURL standard meets these requirements and offers significant advantages to content providers, libraries and users.

Advantages for content providers:

- A URL for any link can be generated dynamically via a single formatting criterion, with no need to vary the format depending on the source of the material.
- A content provider need not offer highly customized linking options for individual licensors, since the licensor's local service can now perform that function.

Advantages for libraries:

- The library does not need to upload its local data to a variety of different systems, since it can develop and maintain its own link server to handle all customized linking.

Advantages for users:

- Users gain direct access to electronic resources licensed for a particular community by the library, to local print holdings, and to other services provided by the library, such as interlibrary loan or document delivery.

8. PERPETUAL ACCESS

STATEMENT: The content provider must guarantee the library royalty-free, perpetual access to all purchased content and use of that content in accordance with the terms of the existing or, in the case of cancellation of the agreement, the most recently signed license agreement.

In the case of a current license agreement, the content provider must agree to provide electronic access to all material the library currently or previously subscribed to in electronic form, in a format mutually agreed to in the terms of the license.

In the case where a current license agreement no longer exists, the content provider must agree to continue to provide access to all electronic content purchased under all previous licenses between the content provider and the library, or to provide the source files for that content to the library so that the library may provide its own access to the purchased content.

If the content provider's choice is to offer access on their site to the previously purchased content, it remains the content provider's responsibility to make the content available in the same manner and format that it offers to current subscribers. If the source files are provided to the library, it becomes the library's responsibility to address access and format migration issues.

RATIONALE: In the print environment, a library subscribes to a journal or journal package knowing that one of the values it receives is virtually perpetual access to the content being purchased. Subscribing to a journal or journal package in electronic form should provide those same perpetual access guarantees, all as part of the subscription price.

9. PURCHASE MODELS

STATEMENT: Subscriptions to electronic versions of print resources should always be available in three format options: print only, electronic only, and a combination of print and electronic.

The option to purchase access to multiple titles from a single content provider for a single cost should be available as an option, but is unacceptable when individual titles cannot also be purchased separately.

RATIONALE: The needs and financial means of individual libraries vary greatly. Content providers should offer libraries multiple purchase options for electronic resources. Libraries should not be unduly penalized for maintaining access to resources in multiple formats or for not wishing to purchase access to bundled collections of resources from content providers.

STATEMENT: Subject specific electronic resources that are priced according to FTE users should be based on the number of potential FTE's in the primary user group, not on the number of potential FTE users campus wide.

RATIONALE: Subject specific electronic resources are most often used by a limited number of users at a given institution. Libraries and content providers should be able to negotiate an approximate number of FTE users likely to use a specific resource and arrive at a cost based on that number rather than the total number of FTE users at the institution.

STATEMENT: Campus wide site licenses for electronic resources should include at no extra charge users at institutionally owned remote locations that are not identified as separate campuses of the institution.

RATIONALE: Libraries at many institutions must provide access to electronic resources for users at numerous remote locations operated by the home institution. In many cases the number of users at a remote location is small and should not be considered a separate campus by the content provider.

10. RETRACTIONS AND CORRECTIONS (ERRATA AND CORRIGENDA)

STATEMENT:

1. Items under dispute and retracted items must not be removed from the system. They must remain online and be clearly identified as disputed or retracted.
2. The statement of the dispute or retraction must provide an explanation of why the item is being disputed or retracted and must include the complete citation of the original item.
3. Retraction statements and corrections must be clearly linked to the original item, and vice versa. Particular attention should be paid to the placement of the link so that it is readily apparent and not bypassed when the article or the correction/retraction statement is accessed directly through another product such as an indexing, abstracting, or alerting service.
4. Retraction statements and corrections should appear on a numbered page in a prominent section of the journal.
5. Retraction statements and corrections should be listed in the contents page, and include in their headings the title of the article.

RATIONALE: Reader awareness of article corrections (and retractions) can be of critical importance in engineering and the physical sciences just as in the biological sciences and medicine where the issue has received more attention. Reproducibility of experiments is just as essential in engineering, laboratory safety requires detailed attention to methods, and scientific misconduct does occur in these disciplines as it does in medicine. It is also crucial that retracted items not be removed. Removal of retracted items destroys the integrity of the scientific record, prevents widespread peer review (if the article is gone researchers cannot evaluate the disputed article for themselves) and causes reader confusion in locating items.

11. STATISTICS

STATEMENT: Content providers should provide free monthly use statistics, provided in a timely manner, that meet the [COUNTER Code of Practice](#) requirements. Additionally, use statistics need to distinguish the publication year of the material being accessed during the reporting period broken down by site (each separate campus in a consortium or each institutionally-defined set of IP addresses) and journal title. Abstract downloads should not be counted as full text article downloads.

RATIONALE: These guidelines promote the credible and consistent measurement of usage data in formats that will allow meaningful comparisons of usage between titles from different content providers. Comparable usage statistics at the level of granularity specified above are crucial to libraries' ability to justify expenditures.

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This Punch List was created by the ELD Best Practices for Electronic Resources Task Force:

Christy Hightower, Chair
University of California Santa Cruz
christyh@ucsc.edu

Karen Andrews
University of California Davis
klandrews@ucdavis.edu

Mel DeSart
University of Washington
desart@u.washington.edu

Elizabeth Mengel
Johns Hopkins University
emengel@jhu.edu

Jim Ottaviani
University of Michigan
Jim.ottaviani@umich.edu

Kate Thomes
University of Pittsburgh
kthomes@pitt.edu

Thomas Volkening
Michigan State University
volkenin@egr.msu.edu

APPENDIX

SHIBBOLETH⁴

<http://shibboleth.internet2.edu/>

The Shibboleth attribute authority server offers content providers a simple mechanism for querying the status of a user via XML-based, encrypted messaging. We seek agreements with content providers willing to work both with us to implement access authorization through the use of the Shibboleth mechanism, and simultaneously to provide IP-based

⁴ Selected portions of this text adapted from [California Digital Library Technical Requirements for E-Journal Vendors](#), dated May 16, 2003.

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access to their resources. In such development, the content provider would be required to install a Shibboleth target server. The Shibboleth software is open source, so there is no license fee, and it is not difficult to install and maintain. For more details, consult the Shibboleth site.

Recommended Guidelines:

BENCHMARK FOR FAITHFUL DIGITAL REPRODUCTIONS OF MONOGRAPHS AND SERIALS

Digital Library Federation (DLF)

<http://www.diglib.org/standards/bmarkfin.htm>

CALIFORNIA DIGITAL LIBRARY

Technical Requirements for Vendors

<http://www.cdlib.org/vendors/>

COUNTER (COUNTING ONLINE USAGE OF NETWORKED ELECTRONIC RESOURCES)

Code of Practice

<http://www.projectcounter.org/index.html>

INTERNATIONAL COALITION OF LIBRARY CONSORTIA GUIDELINES

<http://www.library.yale.edu/consortia/>

ZWOLLE GROUP

Copyright management information:

<http://www.surf.nl/copyright/keyissues/scholarlycommunication/agreements.php>