

Linking to Electronic Library Resources from Learning Management Systems Using an OpenURL Resolver.

David W. Lewis
IUPUI University Library
dlewis@iupui.edu

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Introduction

Learning Management Systems (LMS), such as Blackboard or WebCT, are part of the teaching environments on most college and university campuses.

Also common on most campuses are a growing number of electronic resources, usually made available through the library. In many case libraries electronic journal collections are larger than the print journal collections and electronic books are beginning to become common. Unfortunately, these electronic resources come from a wide variety of vendors and there are no common interfaces to them.

It would be a great operational and educational advantage to be able to easily create links between a campus' LMS and the electronic resources licensed by the library. This could make course readings a click away from the syllabus and could replace library course reserves and coursepacks. The result would be easier for students and could save libraries the work of managing a course reserve system and students the expense of purchasing coursepacks.

Unfortunately, the diversity of library resources providers makes a system of easy links between a campus LMS and the many vendors of electronic library resources difficult. The usual approach would be to find a persistent URL and paste it into the course page. The problem is that it is unlikely that very many faculty will be able to do this easily.

Fortunately the right tool – OpenURL – makes the solution simple.

OpenURL

OpenURL is a standard which provides the means to link citations found in indexes or other reference sources (“sources” in OpenURL speak) to link to a variety of services. The most important service is the linking of the citation to

full-text (the “target” in OpenURL speak). Other services such as catalog lookups or citation searching are also possible.

The OpenURL standard takes the metadata from a citation and puts it in a coded form. This coded data is but into a URL which begins with the location of a campus’ OpenURL resolver server. This server has a database, which contains information on the electronic resources that are available to a given campus. You can think of it as the library catalog, which machines can talk to. The individual library maintains the database usually with assistance from the OpenURL resolver vendor. When the OpenURL resolver is given an OpenURL it is able to create a link to the full-text of the citation (if the full-text is available) as well as other services that a library may choose to provide.

An example of a citation and the OpenURL generated for it is given below:

Citation:

Alan F. Beardon; Ghanshyam B. Mehta, “The Utility Theorems of Wold, Debreu, and Arrow-Hahn,” *Econometrica*, Vol. 62, No. 1. (Jan., 1994), pp. 181-186.

OpenURL (Server information is in line one and metatdata in line two. They would be merged to make the Open URL.):

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http://sfx.ulib.iupui.edu/
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sfx_local?sid=CSA:econlit-set-c&pid=%3cAN%3e03  
25769%3c%2fAN%3e%26%3cAU%3eBeardon%2c+Alan+F+%3b+Mehta%2c+G  
hanshyam+B%3c %2fAU%3e&issn=0012-  
9682&date=1994&volume=62&issue=1&spage=181&epage=86&g  
enre=article&aulast=Beardon&aufirst=Alan&auinitm=F&title=Ec  
onometrica&at  
itle=The+Utility+Theorems+of+Wold%2c+Debreu%2c+and+Arrow%2d  
Hahn
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If the OpenURL is placed behind the citation a linkable citation is created that can be placed in any web document, including the web pages of a campus LMS. This can be seen at: <http://www.ulib.iupui.edu/oncourse/example.html>.

If you click on the citation, you will go to the IUPUI University Library OpenURL resolver (an ExLibris SFX server). If you click the full-text from JSTOR link, you will be taken directly to the full-text of the article in JSTOR (assuming you are on a campus with JSTOR access).