WebBridge: MCO

What is WebBridge? [Slide 1]

1. WebBridge is an OpenURL Resolution Server.
2. WebBridge provides functionality to link to or query additional resources from the WebPAC.

Because WebBridge integrates with the WebPac, Innovative makes a distinction between Resolution Server versus the displays generated by or within the WebPac. The WebPac functions are referred to as Bibliographic Record Linking and Browse Linking. The Resolution Server and the WebPAC functions use the OpenURL standard for linking.

What is OpenURL? [Slide 2]

One of the uses of OpenURL Resolution is to solve what's commonly referred to as the "Appropriate Copy" problem. "How do my users connect from one resource to other resources in my collection? How do my users move from a citation to the full-text of the article in my collection?" **[Slide 3]**

OpenURL also provides a simple solution for creating persistent URLs and preventing broken links.

Resolution Server Linking

A resolution server resolves or parses metadata passed to it in order to provide content or appropriate resource links. With the Resolver acting as sort of a dynamic translator between services, libraries can control which resources are available to users depending on a user's context. It also gives libraries greater control over the persistence of links.

Resolution Server linking includes the "typical" OpenURL scenario: **[Slide 4]**

"I found a citation for an article I want, how do I find the full-text?"

1. A user begins by searching a database, locates an article citation, and clicks an OpenURL hyperlink within the citation. This database – where the user links from – is referred to as the Origin.
2. The Resolution Server (a.k.a. resolver) interprets the data sent to it by the Origin, in this case the OpenURL query string,
3. The user selects an option, e.g. results from the server's database of holdings (a.k.a. A-Z list), or is connected directly to the Resource, depending on the settings defined in the server.
4. The server passes on appropriate information to the selected Resource, also referred to as the Target.

In order for the Resolution process to work, the Resolver **must** "know" about two things: **[Slide 5]**

1. the **metadata** passed to it. Origins must send the metadata to the Resolver using the OpenURL standard syntax. An standard open syntax allows service providers such as libraries to more easily build resolvers and services. Because of the syntax's simplicity and flexibility, vendors and libraries are willing to adopt and use it.
2. the **link syntax** of the Resources that it targets. Target resources are not required to be OpenURL-compliant, but they must have a predictable linking syntax so that the Resolver can create a valid link dynamically. This also means that there will usually be many more Target Resources than Origins.

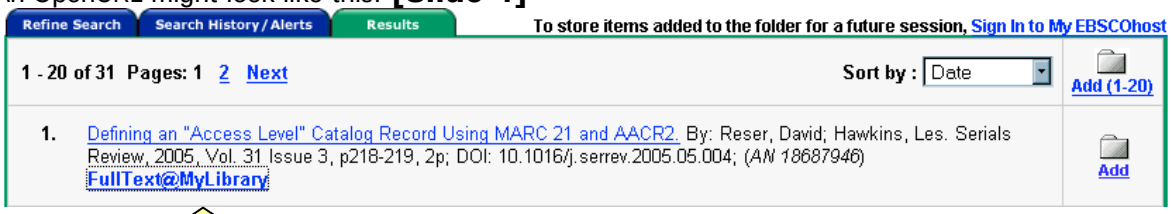
Coverage Data

Ideally, the Resolver will also have access to a "knowledge base" of the library's collections, e.g. A-Z list of available e-journals, so that it can point the user directly to the most appropriate copy. For WebBridge, the knowledge base is loaded through the Serials module using the Coverage Data modes. The knowledge base typically consists of ejournal holdings, but in theory it could contain metadata about any collection.

More about OpenURL

OpenURL metadata is most often passed in the URL query string (an HTTP(S) GET request) in its **KEV format**, but it doesn't have to be.

An OpenURL might look like this: **[Slide 4]**



http://arthur.missouri.edu:4550/resserv?sid=EBSCO&genre=article&issn=00987913&title=Serials%20Review&atitle=Defining%20an%20%22Access%20Level%22%20Catalog%20Record%20Using%20MARC%2021%20and%20AACR2%2E&author=Reser%2C%20David&authors=Reser%2C%20David%3BHawkins%2C%20Les&date=20050901&volume=31&issue=3&spage=218&title=Serials%20Review&atitle=Defining%20an%20%22Access%20Level%22%20Catalog%20Record%20Using%20MARC%2021%20and%20AACR2%2E&author=Reser%2C%20David&authors=Reser%2C%20David%3BHawkins%2C%20Les&date=20050901&volume=31&issue=3&spage=218

The concept of a Resolution Server is not confined to OpenURL. Likewise, uses of OpenURL beyond the citation-fulltext scenario. It could be metadata about anything, a place, a car, a person, etc.
For more about uses of OpenURL and to download the standard, see http://library.caltech.edu/openurl/

Bibliographic Record Linking and Browse Linking scenarios are similar except that they happen in the WebPac and links can pass information from the current search or record to the target.

This appears in three displays:

1. Browse Table – only passes information about the user's search
2. Bibliographic Record – can pass title, subject, author, ISBN, ISSN
3. Resource Panel

WebBridge increases the number of **resource links** (a.k.a. reslink) that are available within the WebPac. The "Search MOBIUS" button is a resource link. Links to Syndetics content or Amazon are other typical examples of how resource links are used. You'll notice in the testPac that the activation of WebBridge moved the Search MOBIUS button to the right column. This is also where, by default, the WebBridge or "Other Resources" button displays. With WebBridge, external services like MOBIUS or Syndetics can now be defined as "Resources" within WebBridge and managed using WebBridge Management. Whether they appear in the browse or record displays depends on the properties set for that resource. WebBridge also allows each scope to have unique Resource Links.

WebBridge Management

WebBridge Management controls everything WebBridge "knows" about Origins, Resources, and linking.

Edit Categories – for grouping like resources in the display (e.g. Full Text, E-Books, Search Engines, etc.). Origins can have more than one category assigned; categories displayed to the user depend on the user's Origin. Each Resource definition can only have one Category.

Edit Origin Definitions – for creating and editing Origins. Properties include Active, Type (Innovative or External), and Category(ies) (required for an Origin to be functional). External Origins (anything not Innovative) must each be assigned a unique SID (source ID) provided by the vendor or service provider.

Edit Filters – for selecting when to block a Resource from displaying (e.g. Scope, External Origin to prevent circular linking, Network access level)

Edit Field Selectors – for selecting and modifying field values from coverage data or incoming OpenURL metadata. Used in Data Tests to select a field for testing. Used in Resource Definition Links to insert field values (similar to a token).

Edit Data Tests – for selecting when a Resource should display (e.g. hasISSN, matchISSN). Can be specified to match against Coverage Data.

Edit Resource Definitions – for creating and editing Resource Definitions. Properties include Active, Review Source, Category, display texts, links, Filters, and Data Tests. Each Resource Definition can belong to only one Category. Data Tests and link displays are assigned individually for Resolution Server Linking, Bib Record Linking, and Browse Table Linking.

Article Finder – generates URLs for articles by using the OpenURL standard. Allows users to locate holdings by entering citation information.

Arthur Implementation

WebBridge in the Arthur WebPac test environment: http://arthur.missouri.edu:2082/

Implementation plan available from MCO web site (Arthur Coordinators > Documents).

The Public Services Committee will need to make decisions primarily regarding the appearance and usability of the unscoped catalog. PSC should be concerned not only with the appearance, but also with the content (links) presented in the unscoped catalog. Of course, your input will also be valuable to the look and feel of WebBridge functionality throughout the catalog as well as the resolution server displays.

Public Services should be concerned with the 4 displays for the unscoped catalog:

1. Browse Table Linking
2. Bibliographic Record Linking
3. Web Pac Resource Display Panel
4. Article Finder form

Currently, I've set most of the subscription or institution-specific resources to not display in the unscoped WebPac. This means they won't display in the table links, record links, or the display panel.

A couple of alternative ideas for determining what resources to include in the unscoped displays:

1. Allow each institution to choose one resource total or one resource per category to display in the unscoped display panel.
2. Include institution-specific links only to more general resources
   e.g. an ISSN or title search of each institution's e-journal finder similar to
   Missouri State Employees: find in E-Journal Finder
3. Include institution-specific links only for in-common resources, e.g. a single link directly to MasterFile Premier that relies on Ebsco's IP authentication. This won't work if institutions rely solely on their proxy authentication.

Innovative Manual: Page # 105530, Page # 105384

Setting Up a Custom HTML Form for Resolution Server Display

A resolution server is a server that resolves metadata passed to it in order to provide appropriate resource links. Innovative uses the OpenURL standard to pass metadata to the resolution server. The resolution server displays resource links to the user through the resserv_panel.html and resserv_staff_panel.html custom HTML forms. These forms are edited in the same manner as Customizable Web OPAC Forms.

resserv_panel.html
resserv_staff_panel.html

These forms control the display of resources accessed through external origins. The resserv_panel.html form displays for the general public while the resserv_staff_panel.html form is used for a staff display from Millennium clients. These forms use the following tokens:

<!--{openurl:<X>}-->

<!--{resourcelist}-->

<!--{ifnoresources}-->

<!--{xif}-->

Token	Description
<!--{openurl:<X>}-->	The system replaces the token with an OpenURL value based on the setting of the <X>.
<!--{resourcelist}-->	The system replaces the <!--{resourcelist}--> token with a list of relevant resources determined by the settings in the WebBridge Management interface.
<!--{ifnoresources}-->	If the list of relevant resources is empty, the system can display a message.
<!--{xif}-->	Closes the <!--{ifnoresources}--> block.

For example:

```
<HTML>
 <HEAD>
 <TITLE>Resolution Server</TITLE>
  <LINK REL="stylesheet" TYPE="text/css" HREF="/stylesheet.css">
 </HEAD>
 <BODY>
    <IMG SRC="/map.gif" BORDER="0">
    <P>
    <STRONG>The following resources may provide additional information:</STRONG>
    </P>
<!--{openurl:title}-->
<!--{openurl:issn}-->
    <BR>
<!--{openurl:atitle}-->
<!--{openurl:aufirst}-->
<!--{resourcelist}-->
<!--{ifnoresources}-->
    <P>
    <SPAN STYLE="color: red">No resources available</SPAN>
    </P>
<!--{xif}-->
 </BODY>
</HTML>
```

Setting Up a Custom HTML Form for Web OPAC Resource Display

The wp_panel.html file controls the appearance of the pop-up panel displaying resources accessed via Web OPAC. This page is edited in the same manner as Customizable Web OPAC Forms.

wp_panel.html

This form uses the following tokens:

<!--{header}-->

<!--{ret2cat}-->

<!--{closewindow}-->

<!--{resourcelist}-->

<!--{ifnoresources}-->

<!--{xif}-->

Token	Description
<!--{header}-->	The system replaces the <!--{header}--> token with the setting for the WBHEADERTEXT Web OPAC option, if defined.
<!--{ret2cat}-->	The system replaces the <!--{ret2cat}--> token with the setting for the BUT_RET2CAT Web OPAC option, if defined.
<!--{closewindow}-->	The system replaces the <!--{closewindow}--> token with the setting for the BUT_CLOSEWINDOW Web OPAC option, if defined.
<!--{resourcelist}-->	The system replaces the <!--{resourcelist}--> token with a list of relevant resources determined by the settings in the WebBridge Management interface.
<!--{ifnoresources}-->	If the list of relevant resources is empty, the system can display a message.
<!--{xif}-->	Closes the <!--{ifnoresources}--> block.

For example:

```
<HTML>
<HEAD>
   <TITLE>WebBridge Resolution Server</TITLE>
   <link rel="stylesheet" type="text/css" href="styles.css">
 </HEAD>
<BODY>
<!--{header}-->
<!--{ret2cat}-->
<!--{closewindow}-->
   <P>
     <STRONG>The following resources may provide additional information:</STRONG>
   </P>
<!--{resourcelist}-->
<!--{ifnoresources}-->
   <P>
     <SPAN STYLE="color: red">No resources available</SPAN>
   </P>
<!--{xif}-->
 </BODY>
</HTML>
```

Setting up Web OPAC Options in WebBridge

WebBridge linking in Web OPAC can be customized through various Web OPAC options. To add the relevant options, select the following menu options through the character-based system:

Add the following Web OPAC options:

BODYPARAM

BUT_CLOSEFRAME

BUT_CLOSEWINDOW

BUT_RESOURCELINK

BUT_RET2CAT

RESLINK

RESSERV_PORT

STYLESHEET

WBHEADERTEXT

NOTE

Note that the Web OPAC options do *not* affect the resolution server.

Defined Target Resources for Arthur as of 11/2/05

WebBridge Management - Resources

Book Jacket = B Review = R Favorite = F

Active?	Sort		Name	Category	Description
	0		Addall	Book Information	
Y	0		AltaVista	Search Engines	
Y	0		Amazon	Book Information	
Y	0		Article Finder	Full Text	Article Finder
	0		Ask Jeeves	Search Engines	
Y	0		Baker & Taylor Inventory	Inventory Sources	Customize URL before use
Y	0		BioMed Central	Full Text	BioMed Central Keyword/Subject Search (SC)
Y	1		BioMed Central	Full Text	BioMed Central Article Search (SC)
	0		BioOne	Full Text	
	0		Blackwell Synergy	Full Text	Customize URL before use
	0		BMJ	Full Text	
	0		Books in Print	Book Information	
Y	0		Books in Print (CC)	Book Information	
	0		CatchWord	Full Text	
	0		COPAC	Library Catalogs	Journal Search
	0		COPAC	Library Catalogs	Book Search
	0		Dogpile	Search Engines	
Y	5		E-Journal Finder	Full Text	E-Journal Finder - Serials Solutions (MO)
Y	0		EBSCOhost	Full Text	EBSCOhost Subject Search (No Scope)
	1		EBSCOhost	Full Text	EBSCOhost Subject Search(MO)
Y	1		EBSCOhost (CC) - Article Search	Full Text	EBSCOhost (Columbia College)
	1		EBSCOhost (CC) - Subject Search	Full Text	EBSCOhost (Columbia College)
Y	1		EBSCOhost Academic Search Elite	Full Text	EBSCOhost Academic Search Elite Article Search
	0		EBSCOhost EJS	Full Text	
Y	0		Emerald Journals	Full Text	EmeraldInsight Article Search (MO)
	0		Encyclopedia Britannica	General Reference	
	0		Excite	Search Engines	
	0		Gale - InfoTrac OneFile	Full Text	Customize URL before use
	0		Gale - InfoTrac OneFile(CC)	Full Text	Customize URL before use
Y	1		Gale InfoTrac OneFile	Full Text	Gale InfoTrac OneFile Article Search (MO)
Y	1		Gale InfoTrac OneFile	Full Text	Gale InfoTrac OneFile Journal Search (MO)
Y	1		Gale Virtual Reference Library	General Reference	Gale Virtual Reference Library SUBJECT (MO)
Y	0		Google	Search Engines	Google
Y	0		Google	Search Engines	Google (Unscoped)

Y	0		Google Scholar	Search Engines	Google Scholar Search (MO)
Y	0		Google Scholar	Search Engines	Google Scholar Search (Stephens)
Y	0		Google Scholar (CC)	Search Engines	Google Scholar
Y	0		Google(CC)	Search Engines	Testing
	0		HotBot	Search Engines	
	0		ILLiad	InterLibrary Loan	Book Loan Customize URL before use
	0		ILLiad	InterLibrary Loan	Article Copy Customize URL before use
Y	0	R	In A Library (Open WorldCat)	Book Information	In A Library (Open WorldCat)
	0		Index to Theses	Recommended Web	
Y	0		INFOMINE	General Reference	
	0		InfoPlease	Search Engines	
	0		Ingenta	Full Text	
	0		Ingram iPage	Inventory Sources	Ingram iPage
	0		Innovative Interlibrary Loan	InterLibrary Loan	Book Loan Customize URL before use
	0		Innovative Interlibrary Loan	InterLibrary Loan	Article Copy Customize URL before use
Y	0		Innovative Interlibrary Loan(CC)	InterLibrary Loan	Article Copy Customize URL before use
	0		Institute of Physics	Full Text	
Y	0		Interlibrary Loan	InterLibrary Loan	Innovative Article (MO)
	0		IxQuick	Search Engines	
Y	0		JSTOR	Full Text	
Y	0		JSTOR (CC)	Full Text	JSTOR (CC)
	0		Kluwer Publishing	Full Text	
Y	0		Librarian's Index to the Internet	Search Engines	
	0		LookSmart	Search Engines	
	0		Lycos	Search Engines	
	0		Meta Crawler	Search Engines	
	0		MSN Search	Search Engines	
Y	0		netLibrary	E-Books	
	0		Netscape Search	Search Engines	
	0		Northern Light	Search Engines	
	0		OCLC ArticleFirst	Full Text	
	0		OCLC ILL	InterLibrary Loan	
	0		OCLC WorldCat	Book Information	
Y	0		Oxford Reference	General Reference	Oxford Reference Subject Search (MO)
Y	0		Oxford Reference (CC)	General Reference	Oxford Reference (Columbia College)
	0		Oxford Reference Online	General Reference	
	0		Project MUSE (CC)	Full Text	

	0		ProQuest	Full Text	Customize URL before use
	0		ProQuest (CC)	Full Text	Customize URL before use
	0		PubMed	Indexes and Abstracts	
Y	0		Resource Discovery Network	General Reference	
	0		ScholarsPortal	Full Text	
	0		SilverPlatter	Indexes and Abstracts	Subject (Webspirs 5) Customize URL before use
	0		SilverPlatter	Indexes and Abstracts	Subject (Webspirs 4.3) Customize URL before
	0		SilverPlatter	Indexes and Abstracts	Journal (Webspirs 5) Customize URL before use
	0		SilverPlatter	Indexes and Abstracts	Journal (Webspirs 4.3) Customize URL before
	0		Springer-Verlag	Full Text	
	0		SwetsNetNavigator	Full Text	
	0		Syndetics	Book Information	Customize URL before use
	0		Taylor & Francis	Full Text	
	0		Teoma	Search Engines	
Y	0		The Internet Public Library	General Reference	The Internet Public Library
	0		Ulrich's Periodical	Inventory Sources	
	0		Web of Science	Indexes and Abstracts	
Y	0		Wilson Art Full Text	Full Text	Wilson Art Full Text Article Search (MO)
Y	0		Wilson Education Full Text	Full Text	Wilson Education Full Text Article Search (MO)
Y	0		Wilson Library Lit. and Information	Full Text	Wilson Library Lit. and Information Sci. Full
	0		Wilson Web	Full Text	
	0		xreferplus	General Reference	
	0		Yahoo!	Search Engines	
	0		YBP GobiDirect	Inventory Sources	
	0		zetoc	Indexes and Abstracts	