I. What is a BibPURL?

**Definition:** A PURL (Persistent Uniform Resource Locator) is a substitute for a URL. The PURL points to a look-up table (or resolution service) which redirects the query to the URL.

II. Overview of the CONSER PURL pilot project

In August 2001, a group of 7 CONSER participants tested the concept of cooperative maintenance of URLs for freely-available e-resources through an OCLC-hosted PURL server. The pilot project was conducted with the intention to forward a recommendation to PCC regarding use of a PURL server for records maintained by BIBCO/CONSER institutions. OCLC helped set up and host the CONSER PURL server software version 2.14. In March 2002, the CONSER PURL discussion listserv was established. In the summer of 2002, the CONSER PURL project was officially and successfully implemented, and extended to BIBCO members. At the present time there are 20 participants in the project.
III. Creating BibPURLs

a. When to create BibPURLs

The 3 most important criteria to consider before creating a BibPURL are:

1. Is this an open access resource? If no, stop—do not create BibPURL. If yes, go to 2.
2. Does this open access link already have a BibPURL or other stable URI assignment? (e.g., we would not want to assign a BibPURL for something that has already been assigned a persistent URL). If yes, stop—do not create a BibPURL. If no, go to 3.
3. Do you have the proper authorization level for updating the master OCLC record with the BibPURL? If yes, create a BibPURL!

It is okay to create BibPURLs for the following:

✓ E-resources that require registration for free access (add 856 $z Requires registration for free access)
✓ Versions of online federal documents that do not link to the government agency (these are maintained by GPO)
✓ Mirror sites for open access e-resources
✓ Open access e-resources that can only be accessed indirectly via a list or canned search
✓ Open access e-resources in which the links contain CGI scripts
✓ Open access e-resources in which the links contain tildes ~ and/or #
✓ Online serial analytics

b. When not to create BibPURLs?

Do NOT create BibPURLs for the following:

∅ E-resources that are not freely available to all. NOTE: Items that are “free with print subscription” are not “free to all”
∅ Individual serial issues that not cataloged as online serial analytics
∅ Related websites
∅ U.S. federal documents (These are candidates for GPO PURLs. The domain for these URLs usually ends in .gov but please also check the fixed field GPub code) Example: https://pubs.er.usgs.gov/publication/pp1403F You may also report these directly to GPO for PURL creation
∅ DOIs (these are persistent)
∅ ARKS (these are persistent)
Examples:
http://ark.cdlib.org/ark:/13030/ft0000032w
http://arks.princeton.edu/ark:/88435/02870x24z

∅ Handle System (these are persistent):
Examples:
http://dml.cz/handle/10338.dmlcz/134237
http://hdl.loc.gov/loc.gdc/gcf-0315
http://dc.statelibrary.sc.gov/handle/18072/20535
http://hdl.handle.net/2286/R.I.26694

∅ OpenURLs (these are persistent):
Examples:
http://www.tandfonline.com/openurl?genre=journal&issn=0002-1369

∅ Other persistent links such as OCLC PURLS, GPO PURLS, WAS, Content DM, LOCKSS, HathiTrust, Google, Internet Archive, PubMed Central (e.g., PubMed Central
Example: http://www.ncbi.nlm.nih.gov/pmc/journals/792) and LC resources (e.g., http://www.loc.gov/chroniclingamerica/lccn/sn85042462/issues)
∅ Links that contain multiple consecutive “/” characters (e.g., http://.../.../...).

b. How to create a BibPURL (see: http://purl.oclc.org/OCLC/PURL/FAQ#toc3.13)
Note: Before beginning, open two web browser sessions with http://bibpurl.oclc.org

OCLC Bibliographic
PURL Service

This PURL resolver is used by participants in CONSER (Cooperative Online Serials) and EEDC
the Program for Cooperative Cataloging). In order to create, validate, or modify PURLs you must
authentication and password and become a registered user. Other users can only reach this resol

Account Creation and Maintenance
- Register a new user
- Modify user information
- Log in to this Resolver
- Log out from this Resolver

Search this Resolver for:
- Search Usage Statistics
- Search PURLs
- Search user information

Support:
- Frequently Asked Questions
- Title and Network Support (UNS)
- Online Support (PDF)

PURL Creation and Maintenance
- Create a PURL
- Create a partial redirect PURL
- Modify a PURL
- Chase a PURL
- Chase a PURL
- Batch add PURLs
- Batch modify PURLs

PURL Validation:
- Search Previous Validation Results
- Search PURL URL, or Institution
- Symbol
- Hand Enter PURLs
- View Previous Validation Reports
Check for duplication (i.e., check to see if BibPURL has already been established) by going to the Search section of the BibPURL software to check for duplication. Search for URLs by using a portion of the URL instead of whole URLs (e.g., “conser” in http://www.loc.gov/acq/conser/purl/documentation.html). Note that keywords are case-sensitive. This search strategy yields more inclusive results than checking whole URLs. Different catalogers could enter slightly different URLs; if one entered an exact string match, one could easily miss equivalent URLs. There may be cases where one may wish to do an access method “am” search in Connexion.

- If a BibPURL already exists, use that BibPURL
- If no BibPURL exists, create a new BibPURL

i. Create a single BibPURL

a. Choose "Create single PURL"
b. Enter ID/password if you have not already logged into the PURL server [note that ID/password are case sensitive]. Tip: FireFox is a better choice for a browser because you can save your ID/password; with IE you need to re-enter it with every new action.

Logon: For security reasons, CONSER participants must log on with their CONSER authorizations and passwords.

NOTES:

- Anyone attempting to register on the server who is not using a CONSER authorization and password will receive an error message.
- Once a participant has logged into the BibPURL server, s/he will be able to create, modify, etc., several BibPURLs without having to enter an authorization/password separately for each action. (If using IE, you will need to reenter your ID/password)
- All registered CONSER participants are members of the CONSER group on the server and will be able to maintain other participants’ BibPURLs, regardless of whether the library is listed as a maintaining institution.
- Non-participating libraries may view information in the BibPURL server, even though they cannot edit the information.

c. Type/paste the URL in the "URL" box.
   (NOTE: Since the URL used in the BibPURL server is not in the MARC record, there is no need for certain substitutions. Do NOT substitute %5F for underscore, or %7E for tilde)
Note:

- # will result in an error report by the validation software
- // multiple slashes will be collapsed into a single slash
- / is legitimate as a final character; it is required in the case of partial redirects

Click on "Create PURL" under “PURL Creation and Maintenance”
Click on URL here to verify URL accuracy.
Use back button to get back to browser.
Click on "confirm"

ii. Batch Creation of BibPURLs

a. Click on “Batch Add PURLs” under “PURL Creation and Maintenance”
b. Use “Add List,” if you choose to add a list of URLs within the window.
c. At the beginning and end of the list, use <rec> or </rec> respectively
d. For each BibPURL, add a line:
   <rec>
   <purl></purl>
   </rec>
e. Example of complete list:
   <recs>
   <rec>
   <purl></purl>
   </rec>
   <rec>
   <purl></purl>
   </rec>
   </recs>
f. Click “Add Batch” button to send batch request
g. [OCLC BibPURL server will respond with a list of BibPURLs & corresponding URLs]
h. You may wish to copy the list to Notepad or Word, if the BibPURLs are not to be used immediately.

IV. What is a partial redirect or partial redirection?

From the PURL FAQ, section 1.9:

The concept of partial redirection is the use of a domain as a prefix for a localized hierarchy of URLs. This is possible because a PURL resolver will resolve as much of a PURL as it can find in its
database and append the remainder (unresolved portion) to the end of the resolved URL. For example, if the partial redirect http://purl.foo.com/bar exists and is associated with the URL http://your.web.server/your/servers/web/root then an attempt to resolve the partial redirect PURL http://purl.foo.com/bar/some/other/stuff.html will resolve to the URL http://your.web.server/your/servers/web/root/some/other/stuff.html

When the CONSER PURL project was first implemented, we did not use partial redirects and created separate BibPURLs for each title. In June 2003, partial redirects were approved for use by participants on collections such as working papers.

A. When is it appropriate to create partial redirects? -- Some guidelines for determining whether you have a good candidate for a partial redirect

Partial redirects are ideal for groups of resources that share the same domain/hierarchy/URL syntax which are identified by a stable unique identifier.

The ideal candidate for a partial redirect should fulfill the following criteria:

- The domain/hierarchy of the URL is the same for all the URLs
- The unique identifiers are stable (e.g., ISSN, ISBN, series numbers, or other control numbers) and preferably neat (e.g., avoid lengthy title identifiers, or lengthy identifiers that are not intuitive such as: 0efc506f62adceb8018f9135ae18433e)
- The e-resources have been around for a few years and therefore, have a history of stable unique identifiers and consistent hierarchies (i.e., even if the hierarchies have changed over time, they are consistent for all the resources involved and not just a select few. That is, if one changes, they all change)
- Consider link maintenance issues (How much maintenance will be needed in OCLC and your local catalogs should the unique identifiers become unstable? The main advantage to using a partial redirect is maintenance. Only one BibPURL needs to be maintained compared to potentially thousands. The assumption is that even if a URL for the resource in question changes, then the unique identifier will stay the same)

**If in doubt, do not use partial redirects and create individual BibPURLs instead!**

B. Examples of partial redirects:

a. Here is a theoretical example to explain redirection. A group of serials have URLs that all begin http://www.biomedcentral.com/

...and that use an ISSN to distinguish the titles, e.g.:

http://www.biomedcentral.com/1471-2105
http://www.biomedcentral.com/1472-6750

To create a partial redirect for "http://www.biomedcentral.com/" choose "Create a partial
redirect PURL" and type the URL in the window under the displayed PURL (note that partial redirects require an ending "/" character which is what distinguishes it from other BibPURLs): http://bibpurl.oclc.org/web/212/

Then press "Submit" and "Confirm".

In the OCLC bib record, append the ISSN to the BibPURL, e.g.:
http://bibpurl.oclc.org/web/212/1471-2105
http://bibpurl.oclc.org/web/212/1472-6750
etc.

b. IMF working paper example:

Partial redirect BibPURL: http://bibpurl.oclc.org/web/24285/

The IMF the working papers are organized by year and working paper number prefixed by “wp.”

This is what the BibPURL for working paper no. 99/1 looks like:

V. How to enter the BibPURLs into the OCLC record?

Each 856 should have two $u subfields. Add the BibPURL to the first 856 $u, and add the original URL to the second 856 $u. The information in the second $u is intended solely for OCLC use in duplicate record detection and need not be maintained as the URL changes. Tip: Cut and paste the BibPURL from the completed form in the server and just change the => to $u.

856 41 $u http://bibpurl.oclc.org/web/123456 $u  http://www.sos.state.il.us/library/isl/isl.html

BibPURLs should also be entered onto closely related bibliographic records. If there are multiple OCLC records representing variant versions* (e.g., paper and online), add the BibPURL to the 856 field for each version.

Example:
OCLC# 25866594: Society & animals
OCLC# 46775398: Society & animals (Online)

Reasons: Might as well! Also, if the paper version ceases, that’s one less thing to think about when doing the title change.

*Do not add BibPURLs for corresponding open access links on non-English parallel language records.
a. When is it appropriate to remove BibPURLs from an OCLC record?

As a general rule, once a BibPURL has been entered onto an OCLC record, it should not be removed. If the BibPURL is incorrect or invalid, add an 856 explanatory $z note.

See section VI.A. below on *How to withdraw and deactivate BibPURLs* for examples of 856 $z notes.

VI. What to do when a URL changes?

When you discover that a URL has changed, either through the PURL validation process or some other notification, you should try to find a valid link (Internet Archive is okay but should be a last resort) for the resource and modify the URL behind the PURL in the PURL server to maintain persistence. Go to: http://bibpurl.oclc.org/, select Modify PURLs and enter ID/Password. Enter /[PURL] in the PURL box. Replace the old URL with the new valid one. Type in reason for change (e.g., URL changed). Click on Modify PURL and then “Confirm.”

Catalogers are not required to maintain the 2nd 856 $u in the OCLC record although some participants are doing this as a courtesy to catalogers who use the “Use extracted data from URL” option in Connexion to create new records. The latter constitutes a workload issue and the decision to maintain the 2nd 856 $u is a local one. (NOTE: Most institutions do not maintain the 2nd 856 $u)

A. How to withdraw and deactivate BibPURLs

From time to time, someone may create a BibPURL and later regret it. For example, if a cataloger establishes a BibPURL for an e-resource and later realizes that the resource is a federal document or a commercial site, then the BibPURL would need to be withdrawn. Or, if an e-resource is no longer available online, the BibPURL should also be withdrawn.

If you accidentally created a BibPURL, it has not yet been input onto an OCLC record, and you wish to withdraw it (e.g., created by accident), simply deactivate it in the BibPURL server.

To withdraw/deactivate a BibPURL, go to http://bibpurl.oclc.org/. Select Modify PURLs. Enter ID/Password. Enter /[PURL] in the PURL box. Delete URL. Type in reason for change, e.g., created in error, no longer available online, etc. Click on Modify PURL. Click Confirm.
This process will associate the BibPURL with a "null URL." BibPURLs may be withdrawn in this way, but they are never deleted. (http://purl.oclc.org/OCLC/PURL/FAQ#toc3.14)

Example of a page returned by a withdrawn BibPURL:

**B. How to update the OCLC record when you withdraw/deactivate a BibPURL**

If you withdraw/deactivate a BibPURL that exists on an OCLC record, you will also need to update the OCLC bibliographic record(s).
Firstly, search for all OCLC records that contain the BibPURL in question. Use the search index for "access method" (am:) to search for the BibPURLs. Or try this search method: In Connexion, go through the motions of creating a new record. Click on Create. Then check "Use extracted data from URL." Make sure "Show records that include that URL" is checked. Type the BibPURL in the URL box. Click on the "Create" button. You will get a list of any catalog records that contain that BibPURL in the Search Results box. Don't click on Continue with record creation. You can open the record by clicking on the "Display" button. Otherwise, you can log off.

Leave the BibPURLs and URIs in the 856 field and add an appropriate $z note. Change the 856 second indicator to blank.

** URL is no longer valid:
856 4_ $z Electronic addresses (http://bibpurl.oclc.org/web/#### and http:// ...) not available when searched on: MM/DD/YYYY

** URL is still valid but points to a different resource:
856 4_ $z Electronic addresses (http://bibpurl.oclc.org/web/#### and http:// ...) no longer valid for this resource when searched on: MM/DD/YYYY

** The resource is no longer open access:
856 4_ $z Electronic addresses (http://bibpurl.oclc.org/web/#### and http:// ...) no longer freely available when searched on: MM/DD/YYYY

** URL is still valid but no full text is available:
856 4_ $z Electronic addresses (http://bibpurl.oclc.org/web/#### and http:// ...) have no full text available when searched on: MM/DD/YYYY

Replace the master OCLC record. Deactivate the BibPURL.

** OCLC recommends 2nd indicator blank because utilizing any other display constant (0, 1, or 2) would be misleading. Using the blank 2nd indicator allows the explanatory $z to describe the situation exactly. Users are always free, at the very least, to edit records locally for their own use or to follow LC practice as outlined in LCRI 9.7B. Of course, users who are participating in such cooperative programs as CONSER should follow the guidelines of those programs when they are in conflict with more general OCLC advice.

** VII. Duplicate BibPURLs

We want to avoid creating duplicate BibPURLs as much as possible since duplicate BibPURLs defeat the purpose of unique identifiers and persistence, in addition to creating more maintenance.
There are many reasons why duplicate BibPURLs may exist. It is not uncommon for catalogers to forget searching the BibPURL server before creating a BibPURL, or to create a BibPURL but then forget to enter it in the master OCLC record. Furthermore, a cataloger may accidentally create a BibPURL for a resource that already has a BibPURL assignment because s/he did not find it when searching the BibPURL server (e.g., search was too specific. Tip: search a portion of the URL rather than the entire URL. You might have to wade through a few more results, but your search will be more accurate).

A. What to do when you encounter a duplicate BibPURL?

If you encounter what appears to be a duplicate BibPURL, search for the BibPURL, its associated URL, and/or title (if link is valid and actually takes you to a resource) in OCLC and your local catalog. If there is no evidence of the BibPURL in the OCLC database or in your own local catalog, assume that it was a duplicate BibPURL created in error. You may also send a query to the CONSER PURL discussion list to confirm this.

Solution: Do not deactivate the duplicate BibPURL, just in case another institution is using it. Instead, modify it with the BibPURL that is being used in the master OCLC record. This not only ensures continued persistence for institutions using the orphaned BibPURL, but also releases us from having to maintain two BibPURLs.

**PURL Information Display**

<table>
<thead>
<tr>
<th>PURL</th>
<th><a href="http://bibpurl.oclc.org/web/3848">http://bibpurl.oclc.org/web/3848</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>URL</td>
<td><a href="http://bibpurl.oclc.org/web/1945">http://bibpurl.oclc.org/web/1945</a></td>
</tr>
<tr>
<td>Maintainers</td>
<td>CONSER</td>
</tr>
<tr>
<td>Creation Date</td>
<td>Mon Sep 30 11:37:04 2002</td>
</tr>
<tr>
<td>Last Modified</td>
<td>Sat Oct 19 16:46:51 2002</td>
</tr>
<tr>
<td>Change Category</td>
<td>User Edited</td>
</tr>
</tbody>
</table>

**History**

<table>
<thead>
<tr>
<th>Modified by</th>
<th>CONSER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modified</td>
<td>Mon Sep 30 11:37:04 2002</td>
</tr>
<tr>
<td>Change Category</td>
<td>User Entered</td>
</tr>
<tr>
<td>Reason For Change</td>
<td>Discovered PURL had already been created</td>
</tr>
<tr>
<td>URL</td>
<td><a href="http://www.kb.nl/kb/blonline/blonline.html">http://www.kb.nl/kb/blonline/blonline.html</a></td>
</tr>
</tbody>
</table>

B. In what situations are duplicate BibPURLs acceptable?

If two resources initially had different URLs (and different BibPURLs) but were relocated to the same page due to a website reorganization (e.g., agency publication pages), separate BibPURLs with the same URL are appropriate. We should maintain the separate BibPURLs since there is the possibility that a future reorganization may put the resources at different URLs once again.