

# Batch Loading Bibliographic Records for Electronic Resources

revised 5/30/2013

## Overview

I-Share libraries often obtain sets of MARC records for electronic materials to load into their Voyager databases. This document outlines various things a library should consider when loading a set of records for electronic resources and describes the options a library has for customizing the records through CARLI. It was written in response to Recommendation R25 from the “Cataloging Electronic Resources/Electronic Resources Display in the OPAC Task Force (2009) Final Report”:

[http://www.carli.illinois.edu/sites/files/i-share/documentation/secure/cater2009\\_finalreport.pdf](http://www.carli.illinois.edu/sites/files/i-share/documentation/secure/cater2009_finalreport.pdf)

In addition to this document, I-Share libraries should also review the “Batch Loading Mini Report” created by the CatER2009 Task Force, which provides a graphical representation of the information in the Recommendations, followed by a list of Recommendations that specifically apply to the task:

[http://www.carli.illinois.edu/sites/files/i-share/documentation/cater\\_batch\\_mini.pdf](http://www.carli.illinois.edu/sites/files/i-share/documentation/cater_batch_mini.pdf)

Record de-duplication is very important in I-Share’s consortial environment. If you will be obtaining records from a vendor other than OCLC, please see “Best Practices for Bibliographic Records from Non-OCLC Sources” for special considerations:

<http://www.carli.illinois.edu/products-services/i-share/cat/vendorrecs>

## Summary of Steps to Load a Batch of E-Resources Bib Records

1. Review this document, the “Batch Loading Mini Report” document and Final Report (especially section 9 “Cataloging in Batch”) by the CatER2009 Task Force (see above), Voyager System Administration documentation (see below), and other I-Share documentation as needed.
2. Verify that the file of records supplied by the vendor is in MARC format.
3. Decide if record customizations are needed by carefully reviewing the raw set of records, and decide if the vendor, your library, or CARLI will make the changes to the records. If the vendor or your library will edit the records, please do so before performing System Administration work and filing the WRO for the record load.
4. Create a specific e-resources location in Voyager System Administration, if needed, as recommended by the CatER2009 Task Force in Recommendation R8. Libraries who choose not to create a new location may wish to request a distinctive Operator ID be assigned to these records during the load for later identification and deletion.
5. Complete the System Administration Bulk Import Rule setup, if needed, which is required for the loading of the records into Voyager.
6. File a WRO for the record load as described below in this document.
7. Review the test load of 10 records and log files. Contact CARLI with any problems so that load specifications can be adjusted, if needed.
8. Approve the 10 record test load.

9. After the full load has been completed, enjoy the e-resources records in your local database!

## **MARC Format Requirement**

The file(s) of bibliographic records to be loaded into your database must be in the MARC format. Text files are not acceptable. Some common extensions applied to MARC record files are .mrc, .dat, and .bin, but your vendor may have used a different extension. If there is any doubt as to whether the file is in the MARC format, ask your vendor contact person.

A test that you can perform to verify that the records are in MARC format is to try to open the file with the Voyager cataloging client. This option works best if the file contains less than a few thousand records as more records may take a long time to open. In the client, go to Record>Import>From new file. Point the client to the location where you have saved the file on your PC, highlight the filename, and click Open. If the file opens without any error messages from Voyager, this means you have a valid file of MARC records.

If you get an error message stating “The record character encoding does not match the import format ...” that means that the file does contain MARC records, but your client’s Expected Character Set preference is not set to the value that matches the bib record’s Leader byte 9 code (i.e., Unicode vs. non-Unicode). If you don’t need to examine any of the records in the file with the cataloging client, this is a good enough test for verifying that the file contains MARC records.

However, if you prefer to examine some of the records via the cataloging client when the error message above displays, go to Options>Preferences>Mapping tab, and set the Expected Character Set of Imported Records to match the character set of the bib record file. The most common values for this preference setting are “MARC21 UTF-8”, when the file contains Unicode records, or “OCLC (non-Unicode)”, if the records are not in Unicode. If needed, more information about this preference setting is available from the “Voyager Cataloging Client Session Defaults and Preferences Configuration for I-Share Libraries” document: <http://www.carli.illinois.edu/products-services/i-share/cat/secure/catprefs>

## **Record Customization**

In many cases, the bibliographic records received from vendors will not meet local, I-Share, or national cataloging standards, and libraries will want to perform clean up or add local customizations before loading them into Voyager.

### **What kinds of customizations may be needed?**

The “Batch Loading Mini Report” created by the CatER2009 Task Force and referenced above in the Overview summarizes a number of potential bib record modifications to enhance access and to follow consortial and national standards, including:

- 856 subfield coding and usage
- how to create Provider-Neutral (monograph) or Aggregator Neutral (serial) records
- using the 245 \$h
- control number integrity (ISBN, LCCN, OCLC #)

Other customizations can facilitate the bulk loading of the records or provide local data:

- adding Voyager Location information
- adding a call number, or copying a call number from another bib field
- adding a proxy prefix to 856 fields
- adding local notes or informational fields

### **How are records customized?**

There are three options for editing these records:

1. Libraries can work with their vendor to edit the records before receipt.
2. Libraries can edit the records locally using a tool such as MarcEdit before sending them to CARLI for loading.
3. CARLI can perform customizations requested by the library prior to loading the records into the Voyager database. The WRO form is used to communicate the customizations to CARLI staff.

The three options above are not mutually exclusive. It may be that the vendor can provide some customizations in the records before a library receives them, and that the library requests additional edits on the WRO form for CARLI to make before the load.

## **Voyager System Administration requirements**

There are two elements of Voyager System Administration that are invoked during a batch load of bib records: Locations, which are established in the System>Locations area and Bulk Import Rules, which are established in Cataloging>Bulk Import Rules.

### **Locations**

The CatER2009 Task Force Recommendation R8 encourages library to create locations for electronic resources:

**The Task Force recommends that each holdings record (MFHD) representing an electronic resource be assigned a location specifically designated for electronic resources rather than for any other physical format. The Task Force recommends that each library make its own decision about how many such locations to create and what names to give them.**

Many I-Share libraries have one location for all of their electronic resources; some libraries have multiple e-resource locations (e.g., separate location codes for major packages such as netLibrary and Springer). One reason for separate locations is that they permit the library to define narrower (collection-specific) location limit groups in Voyager, which can then be exposed in VuFind as location facets. Another reason that might become relevant for a library at some point in the future is that the standard Voyager record extract scripts (used, for instance, to extract data to be indexed for searching in Primo Central) allow the library to exclude certain records from the extract on the basis of the MFHD location code. Ultimately, this is a local decision.

If the library needs to create a new location for a batch load of electronic resource records, this SysAdmin work must be completed before the WRO is filed. More information about the

SysAdmin steps needed create a new location is available from ExLibris' Voyager 7.2 System Administration User's Guide, beginning on page 10-46. In addition, a useful checklist of the steps needed to fully enable a new location within a Voyager database can be found in the same document, beginning on page 10-59. This User's Guide is available at:

[http://www.carli.illinois.edu/sites/files/i-share/documentation/secure/V\\_SystemAdmin\\_7\\_2\\_3\\_20101001.pdf](http://www.carli.illinois.edu/sites/files/i-share/documentation/secure/V_SystemAdmin_7_2_3_20101001.pdf)

### **Distinctive Operator ID option**

If libraries do not wish to create a separate location, a unique operator ID may be assigned to aid in easily identifying these records in the future. Operator IDs, requested in the WRO form, should be no more than 10 characters, include no spaces, and may include dashes or underscores. Operator IDs appear in the Voyager Cataloging Client under the History tab.

### **Bulk Import Rules**

Bulk Import Rules contain the library-specific parameters for the batch loading of bibliographic records into Voyager databases. Options available include, but are not limited to, the format of the bib records (e.g., Unicode or non-Unicode); whether bib, holdings, and item records are to be created during the load; whether the incoming bib should replace the content of an existing bib; the location code to be added to the new holding record; and which call number type (if any) is to be copied from the bib into the new holding record. In addition, the 856 field is copied from the bib into the holdings record during bulk import, so the content of the bib 856 field should be carefully considered when planning a batch load of electronic resource records.

Electronic resources typically require a different kind of Bulk Import Rule than print resources. CARLI has created default "modes" for Electronic Resources that can be used as is or as models for a new custom rule. See Section V, parts M through P of the "Voyager System Administration in I-Share Libraries, Part 6: Cataloging" document for guidance:

<http://www.carli.illinois.edu/sites/files/i-share/documentation/secure/cat.pdf>

This I-Share-specific Cataloging SysAdmin document is referenced several times in the remainder of this section.

Sometimes the same Bulk Import Rule can be used for multiple/different e-resources record loads and a new rule need not be created. This is highly dependent on the data in the record set and what a library's needs are for that load. For example, all of the default I-Share "modes" were created for bib record loads that originate as OCLC update or produce transactions. This means that the bibs are expected to contain an 049 field and perhaps an 852 field with specific data entry elements input by the cataloger, which are then mapped into the Voyager MFHD and item records when the bibs are loaded into the local database. Those types of mapping decisions are made within the Bulk Import Rule used for the load.

When a library is planning to load a batch of records for electronic resources supplied by a non-OCLC vendor, it is the library's responsibility to know what data elements are contained in the file of bib records, and to either use an existing Bulk Import Rule (if appropriate) or to create a new Bulk Import Rule that will match the data found in the bibs and will produce the desired results for the load.

Below are some questions the staff member planning a batch load should ask about the data in the bib records; the answers will affect the configuration of the Bulk Import Rule for the load. As mentioned in the Record Customization section, if the records don't have the data elements described in questions 4 through 6 below by default, you need to decide who will make the changes to the records: the vendor, your library, or CARLI staff.

1. In which character set are the bib records encoded?

If the bibs are in Unicode format (e.g., bib leader byte 9 is value "a"), then the Bulk Import Rule>Rules tab must have its value for "**Expected Character Set Mapping of Imported Records**" set to **MARC21 UTF-8** (a.k.a., Unicode). (An example can be seen in Section V, part N of the I-Share Cat SysAdmin document cited above, on page 63.) Otherwise, the probable value for this setting for bibs from a non-OCLC source is MARC21 MARC8 (non-Unicode).

2. Which types of records are to be created in Voyager during the batch load?

The CatER2009 Task Force Final Report Recommendation R18 encourages that libraries do not create item records for electronic resources. If the library follows this recommendation, then the Bulk Import Rule>Rules tab must have the **radio button for "Bibs, MFHDs" selected**. An example is found in Section V, part M of the I-Share Cat SysAdmin document on page 55. In particular, the option for "Bibs, MFHDs, Items" should not be selected.

3. Are any of the incoming bib records expected to match any existing records in the database? If so, should the content of the incoming bib record replace the existing record?

If the vendor is expected to supply updated files of records after the initial load, and if the content of the updated bibs should replace the existing bibs, then the Bulk Import Rule>Rules tab should have **Bib Dup Profile set to "OCLCReplace."** This is an I-Share standard duplicate detection profile that will match on the 035a field. (An example can be seen in Section V, part O of the I-Share Cat SysAdmin document on page 65.)

If the load is expected to be a one-time only job and the records in the file are not expected to match existing records in the database, then the Bulk Import Rule>Rules tab may have its **Bib Dup Profile set to "OCLCCondBulk."** This is an I-Share standard duplicate detection profile that will match on the 035a field, but will warn about (i.e., reject) any incoming records that match an existing record on the combination of LCCN and ISBN, or, LCCN and ISSN. (An example can be seen in Section V, part M of the I-Share Cat SysAdmin document on page 56.)

More details about both of these Bibliographic Duplicate Detection Profiles are available in Section III, part D of the I-Share SysAdmin document cited above.

However, if the bib records don't have an internal control number that can be used for de-duplication during the load, the library may need to create a customized Duplicate Detection Profile based on the data that is available in the bib records, and then link to that custom de-duping profile from within the Bulk Import Rule. If the bib records lack an internal control

number, the library should consult with CARLI staff ([support@carli.illinois.edu](mailto:support@carli.illinois.edu)) about the need to create a new Bibliographic Duplicate Detection Profile and other considerations, such as the effect of the load on the I-Share union catalog.

4. From which bib record field/subfield will the Voyager location code be mapped into the MFHD record?

If the bibs contain an 049 \$a with a valid OCLC holding code, the library may be able to use the Express Mode model of the standard Electronic Resources Mode Bulk Import Rule described in Section V, part M of the I-Share SysAdmin, starting on page 54. In this model, the Bulk Import Rule>Rules tab must have **Loc field set to “049”** and the **Loc Subfield set to “a”**. The Bulk Import Rule>Mapping tab must contain an entry for each OCLC holding code represented in the file of bib records.

However, it is much more common for batch loads of electronic resource records to use the Embedded Holdings Mode model of the standard Electronic Resources Mode Bulk Import Rule. (This is also described in Section V, part M of the I-Share SysAdmin, starting on page 54.) In this model, the Bulk Import Rule>Rules tab must have **Loc field set to “852”** and the **Loc Subfield set to “b”**. In order to copy the 852 field from the bib into the MFHD, the Bulk Import Rule>Rules tab must also have **this box checked/enabled: “Copy 852 ... Fields from Bib to MFHD”**. This model requires an explicit and complete 852 field to be in each bib record, including the proper indicator values, the valid Voyager location code in \$b, and the appropriate call number in \$h (and optionally \$i and \$k). The value entered in the 852 \$b must exactly match (case- and punctuation-sensitive) a **valid Voyager location code that must also be in the Bulk Import Rule>Mapping tab table** that will be used for the load. The 852 field may optionally also contain a copy number in \$t, a public note in \$z, and/or a non-public note in \$x. All 852 field indicators and subfields from the bib are then copied to the MFHD record that is created during bulk import.

5. From which bib record field/subfield will the call number be copied into the MFHD record?

The CatER2009 Task Force Final Report Recommendation R17 encourages libraries to assign an appropriate topical call number or class number to electronic resource holding records. If the bib records contain the applicable call number field (e.g., Library of Congress), the call number can be mapped from the bib into the MFHD record during the load.

If CARLI staff are creating the 852 field, it will be populated by the answers to questions 10a-10b in the WRO that must be filed to initiate a batch load of records; this includes call number information. See the next section of this document for more details about the various customization options available via the WRO form for batch loads of electronic resource records.

Libraries that choose to have their vendor create the 852 field, or that choose to create their own 852 field, must consider the following regarding call numbers:

- If the bibs contain the appropriate call number field for the library’s cataloging policies (e.g., an 050 or an 090 field for LC call numbers) AND if the library is using the Express Mode model of the standard Electronic Resources Mode Bulk Import Rule, the **Mapping table of the Rule should be configured to use the appropriate Call Number Hierarchy** for copying the call number from the bib into the MFHD record. (An example can be seen in Section V, part M of the I-Share Cat SysAdmin, starting on page 59.)
- If the library is using the Embedded Holdings Mode model of the standard Electronic Resources Mode Bulk Import Rule, the 852 field added to the bib must contain the desired call number in \$h (and optionally \$i and \$k), and the proper 852 first indicator value for the call number type. This also applies when a generic call number is to be used for all electronic resource records (e.g., ONLINE). In order to copy the 852 field from the bib into the MFHD, the Bulk Import Rule>Rules tab must also have **this box checked/enabled: “Copy 852 ... Fields from Bib to MFHD”**.
- If the library requires that a call number prefix be added to each MFHD record, then the Embedded Holdings Mode model must be used, as the 852 \$k cannot be populated using an Express Mode model of a Bulk Import Rule.

#### 6. How does the bib record’s 856 field get copied into the MFHD record?

The CatER2009 Task Force Report Recommendation R10 encourages libraries to always copy the 856 field(s) from the bib into the MFHD record. To implement this recommendation, the Bulk Import Rule>Rules tab must have **both of these boxes checked/enabled:**

- “Copy 852 ... Fields from Bib to MFHD”
- “Copy 856 Field from Bib to MFHD”

(An example can be seen in Section V, part M of the I-Share Cat SysAdmin document on page 55.)

With the settings above in the Bulk Import Rule, any 856 fields stored in the bib record will be copied as is into the MFHD record. Therefore, library staff should consider the use of the 856 as both a descriptive field as well as the access point to the online resource when planning a batch load.

## WRO requirements

Once you have obtained the set of records and completed any Voyager System Administration setup, you are ready to submit a WRO instructing CARLI staff on how to load the records. A library’s I-Share Liaison, Director, or their designate should file a WRO of type “Voyager Bulk Import for Electronic Resources ONLY” and enter the information as appropriate for your library. Someone other than the person who files the WRO can be indicated as the contact for the request.

### *1. Name of the bulk import data file:*

This is the name of the file of records that you will provide to CARLI, most likely by uploading it to your library’s xxxftp directory on the CARLI Files server.

2. *Bulk import rule code (case-sensitive):*

This is the code of the Bulk Import Rule in Voyager System Administration that will be used to load the records into your database. It is the library's responsibility to make sure that the required SysAdmin data entry is in place and accurate before the WRO is filed.

3. *Is this a one-time or recurring load option?*

4. *Should there be an "OK to export" flag on the bibliographic record?*

"Yes" marks the bibs as eligible to be backloaded to OCLC so that your library's holdings will be reflected on the record; "No" means they will not be backloaded to OCLC. For more information on backloading see:

<http://www.carli.illinois.edu/products-services/i-share/cat/oclcbackload>

5. *Is it expected that all or most of the records in the input file will: be added as new? replace existing records?*

Select the appropriate option based on the content of the bib record file and knowledge of existing bib records in the library's database.

**Adding a New Work Request:**

**Voyager Bulk Import for Electronic Resources ONLY**

1. Name of the bulk import data file

2. Bulk import rule CODE (case sensitive)

3. Is this a one-time load or a recurring load?  
 One-time load  Recurring load  
If this is a recurring load, the first load will take longer as CARLI will need to work with your institution and your supplier on the details.

4. Should there be an "ok to export" flag on the bibliographic record so the bibs will be backloaded to OCLC?  
(Verify this option with your vendor, as some contracts prohibit bib records from being submitted to OCLC.)  
 Yes  No

5. Is it expected that all or most of the records in the input file will:  
 be added as new?  replace existing records?

6a. *856 field options:*

Use this section to indicate which 856 fields should be retained and deleted (if appropriate). You may choose more than one option. In the boxes provided for the last four options, indicate how the subset of records will be identified.



**6. Details for 856 field(s) in bibs and MFHDs:**

**6a. 856 field options:**

- Retain all existing 856 fields
- Retain ONLY the existing 856 fields that contain these first and second indicator values (enter as many indicator combinations as appropriate):
- Retain ONLY the existing 856 fields that begin with the following text (enter here, punctuation- and case-sensitive):
- Delete any existing 856 fields that contain the following text in 856 subfield 3:
- Delete any existing 856 fields that contain the following text in 856 subfield y:

*6b. Should your institution's proxy string be added to the beginning of 856 subfield u, to support authentication for off-campus access?*

In the example below, the library requested that a proxy string be pre-pended to the existing 856 \$u as found in the records.

**6b. Should your institution's proxy string be added to the beginning of 856 subfield u, to support authentication for off-campus access?**

- Yes (enter here, punctuation- and case-sensitive):
- No

*6c. 856 subfield z (public note) options:*

The CatER2009 Task Force Final Report provides recommendations for the use of 856 \$z, as well as examples of how they display in WebVoyage and VuFind.

**6c. 856 subfield z (public note) options:**

- Retain all existing 856 \$z text as is
- Delete any existing 856 \$z text
- Add a new 856 \$z with the following text to all records (enter here, punctuation- and case-sensitive):
- Change any existing 856 \$z text in all records to (enter here, punctuation- and case-sensitive):

*6d. 856 subfield 3 (materials specified) options:*

The CatER2009 Task Force Final Report provides recommendations for the use of 856 \$3, as well as examples of how they display in WebVoyage and VuFind.

**6d. 856 subfield 3 (materials specified) options:**

- Retain all existing 856 \$3 text as is
- Delete any existing 856 \$3 text
- Add a new 856 \$3 with the following text to all records (enter here, punctuation- and case-sensitive):
- Change any existing 856 \$3 text in all records to (enter here, punctuation- and case-sensitive):

*6e. 856 subfield y (link text) options:*

The CatER2009 Task Force Final Report provides recommendations for the use of 856 \$y, as well as examples of how they display in WebVoyage and VuFind.

**6e. 856 subfield y (link text) options:**

Retain all existing 856 \$y text as is

Delete any existing 856 \$y text

Add a new 856 \$y with the following text to all records (enter here, punctuation- and case-sensitive):

Change any existing 856 \$y text in all records to (enter here, punctuation- and case-sensitive):

*7. Bib 655 field (genre heading) options:*

**7. Bib 655 field (genre heading) options:**

Retain all existing 655 field(s) as is

Delete any existing 655 field(s)

Add a new 655 with the following subfield(s) and subfield text to all records (enter here, punctuation- and case-sensitive):

Change any existing 655 field(s) in all records to (enter here, punctuation- and case-sensitive):

*8. Add a bib field(s) option:*

This option can be used to add custom local fields, or to create an embedded 852 field in the bib (if not already present) to facilitate custom MFHD record creation.

**8. Add a bib field(s) option:**

If a new bib record field(s) should be added to all records, specify the field tag, indicator 1, indicator 2, and subfield code(s) and subfield text (enter here, punctuation- and case-sensitive):

*9. Delete a bib field(s) option:*

This option can be useful for removing specific fields as recommended by the provider-neutral and aggregator-neutral guidelines.

**9. Delete a bib field(s) option:**

If a bib record field(s) should be deleted from all records, specify the field tag, indicator 1 and indicator 2 (if applicable), and subfield text (if applicable) to be removed (enter here, punctuation- and case-sensitive):

*10a. MFHD details:*

In this example, the library requested that a call number of “ONLINE” be added to 852 \$h. The specified text is case- and punctuation-sensitive, and will be applied to all records in the input file

**10. MFHD details:**

**10a. Call number options:**

- Do not add any call number to any MFHDs
- Copy the call number from the bib to MFHD using the following call number hierarchy from Voyager SysAdmin/Cataloging:
- Add the same call number text to all MFHDs (punctuation- and case-sensitive, for example: \$h INTERNET):

**If a call number is specified above, should a call number prefix be added to 852 \$k?**

- No
- Yes (enter here, punctuation- and case-sensitive):

*10b. 852 \$t (copy number) options:*

**10b. 852 \$t (copy number) options:**

- Add an 852 \$t with the value 1 to all MFHDs
- Add an 852 \$t with the following value to all MFHDs:
- Do not add any 852 \$t to any MFHD

*11. Item records (if created) will be loaded with copy number set to 1. If you want a different copy number, enter it here:*

In this example, because the library does not want item records for these records (it is strongly recommended that item records NOT be created for e-resources), this section of the WRO form is left blank.

11. **Copy number on item records (if any created):**

*12. If a distinctive operator ID will be created for these loads, enter it here:*

In this example, the library decided to request a distinctive operator ID “Springer2013” to be added during their record loads.

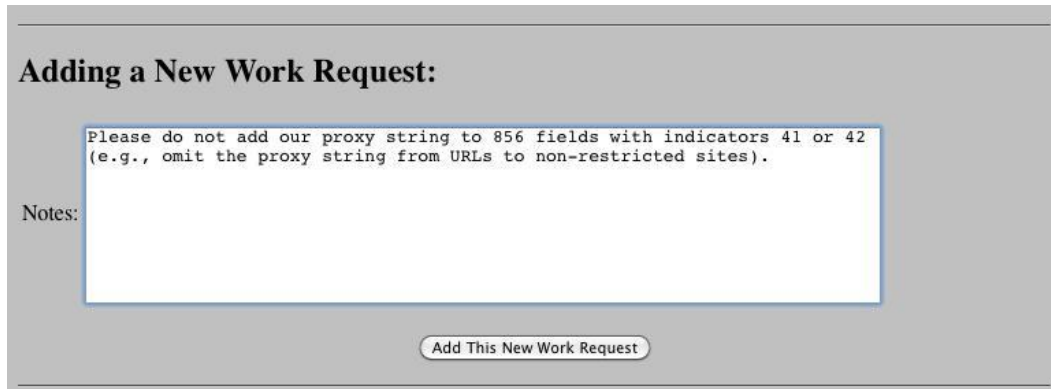
12. **Operator ID option:**

To identify these records easily in the future (in order, for instance, to delete them in batch), specify a distinctive Operator ID:

Once you click the Next button, you’ll be taken to a page with a Notes field. If the library requires any special massaging of the records that is NOT covered by the options described above, the person filing the WRO should add these requirements to the Notes section of the WRO.

*Notes* field example:

In this example, the library wants their proxy string to be added to only 856 fields that represent the full-text resource (as opposed to 856s for Table of Contents, for example).



**Adding a New Work Request:**

Notes:

Please do not add our proxy string to 856 fields with indicators 41 or 42 (e.g., omit the proxy string from URLs to non-restricted sites).

Add This New Work Request

### **Additional Customizations and Getting Help**

As seen from the above descriptions, there are several standard customization options available. A library's needs and workflow considerations should be the factors that determine which options are used. Customizations outside of those listed in the WRO form may be possible; please contact the CARLI Office before filing the WRO to discuss additional needs.

Contact the CARLI Office at [support@carli.illinois.edu](mailto:support@carli.illinois.edu) if you have any questions.