LHRs For Serials: Implementation Guidelines for UC Campuses

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Over the past few months, Local Holdings Records (LHRs) have become increasingly critical to the UC's WorldCat Local Implementation. While they started as a solution for one or two issues, they now represent the best solution for a number of the UC's current problems in WorldCat Local including: improving performance for Large Serials, enabling CDL Request to use WorldCat Local as a back-end instead of current Melvyl, and developing ways to include local UC information into WorldCat Local. This document presents OCLC's requirements and UC best practices for reference, together with answers to questions posed by UC libraries and by OCLC regarding the processes for creating, maintaining, displaying, and using LHRs.

Currently, OCLC has implemented, or is about to implement, the following uses for LHRs for serials:

**FirstSearch:**

Resource Sharing. Data from LHRs displays as shown in the examples in Appendix A. Campuses (UCSD and UCLA) that added LHRs for at least some serials one or more years ago have reported a decrease in ILL requests for serial issues not owned.

**WorldCat Local:**

User experience. Improve the user experience by providing immediate display of location and summary holdings information; eliminates the delay that results from sending a query to and receiving a response from the local system. [Note: not yet “turned on” for UC WCL, as the granularity of the display is not sufficient for campuses with holdings in multiple locations.]

Availability Query functionality. Support AQ (Availability Query, the functionality intended to substitute for Request from Classic Melvyl). [Note: an imminent rather than a current use.]

**WorldCat.org:**

No current use of LHR data.

**OCLC Requirements for LHRs**

OCLC has identified a number of requirements for LHRs. We have outlined the major requirements in the following section. More detail is available on the OCLC website. LHRs must be in the MARC21 Format for Holdings Data. Do not use any tags, indicators, or subfield codes that are not documented in the OCLC Local Holdings Format and Standards on OCLC’s web site, [http://www.oclc.org/holdingsformat/en/](http://www.oclc.org/holdingsformat/en/).

[Note to Campuses: These requirements do not mean that you must have MARC holdings records in your local system, nor that if you have MARC holdings records that they must necessarily meet these requirements while in your local system. The requirements describe an end result that may be achieved through one or more of the following: output tables; post-output manipulation by the campus; post-output manipulation by OCLC.]
The following fields and subfields are required.

**Leader**

The Leader must be correctly formatted and of the right length. Pay special attention to the following character positions:

**Leader/05 (record status):**

- The value for this byte should either be 'c' (corrected), 'd' (deleted), or 'n' (new). If you need to delete an LHR from a WorldCat record, you may also go into Connexion browser and delete the LHR manually. Or if you need to delete just one (or some but not all) LHR(s) from a record, then you can resubmit all the LHRs to be retained without the deleted LHR(s).
- If you are deleting the last LHR in Connexion Browser, you will be asked if you also want to delete your holdings symbol from the WorldCat record.

**Leader/06 (type of record):**

- Be sure to use the correct value depending on whether you have single-part, multipart, or serial holdings.
- For Phase I, all values should be 'y' since we are only sending serial holdings data.

**Leader/17 (encoding level):**

- For serials, our summary holdings should be a minimum of level 3 in the ANSI/NISO Z39.71 standard (or of an equivalent level if using a different holdings standard). Acceptable values are 3, 4, 5, or m (if using a mixture of 3 and 4).

**001**

The 001 contains a local system number. OCLC uses this number on the Detailed Exception Report to help you identify records that were not successfully processed.

**007***

OCLC requires an 007 field in every LHR. Campuses should strive to code at least the first two bytes, indicating both the general and specific material designations. If campuses are unable to specifically code the 007 in every LHR, then they need to code at least the first two bytes in LHRs for online resources. For the LHRs that lack an 007, OCLC will add the default values of ‘zu’ for unknown format.

**008**

The 008 must be correctly formatted and of the right length. Coding of the lending and reproduction policy bytes (20 and 21) can be set to override Policies Directory deflection or defer to Policies Directory profiles: [http://www.oclc.org/support/tips/resourcesharing/tip6.htm](http://www.oclc.org/support/tips/resourcesharing/tip6.htm). If you do not provide an 008 or if it is incorrectly formatted, then OCLC will add one with generic values or correct the formatting.

**035**

The number of the WorldCat record to which to attach the LHR must be contained in the 035 $a. Precede the number with OCLC's MARC organization code in parentheses. Both indicators are blank.

Example:
The 852 must contain at a minimum your institution's OCLC code in $a and the OCLC 4 character code for the particular location in which the item is housed in $b. It may also contain call number data and public notes.

The OCLC 4 character code ("Holding Library Code" in OCLC terminology) must be 4 characters in length, and only alpha-numeric characters in the ranges A-Z and 2-9 are used in new codes.

When submitting LHRs to OCLC, you may either use the OCLC 4 character Holding Library Code or your system's location code in the $b. In either case, you must have a location mapping table established with OCLC and CDL (see UC Libraries Best Practices for LHRs section of this document for an example).

The indicators may be specifically coded according to the MARC guidelines or they may both (or one or the other) be blank.

**Example using local system code in $b:**

```
852 $a CUS $b ck
```

**Example using 4 character Holding Library Code in $b:**

```
852 21 $a CLU $b CLUM
```

See the questions at the end for guidelines on location information.

**Summary Holdings Data***

LHRs for serials in a tangible format must contain summary holdings information in at least one of the following fields or field pairs:

<table>
<thead>
<tr>
<th>MARC Field(s)</th>
<th>Indicators</th>
<th>Subfields</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>853</strong>*</td>
<td>853 1st indicator must be either:</td>
<td>853 Required subfields:</td>
</tr>
<tr>
<td>Captions and pattern---Basic bibliographic unit</td>
<td>0</td>
<td>$8 Field link and sequence number</td>
</tr>
<tr>
<td>Paired with:</td>
<td>1</td>
<td>$a First level of enumeration number</td>
</tr>
<tr>
<td><strong>863</strong>*</td>
<td>853 2nd indicator must be either:</td>
<td>863 Required subfields:</td>
</tr>
<tr>
<td>Enumeration and chronology---Basic bibliographic unit</td>
<td>0</td>
<td>$8 Field link and sequence number</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>$a First level of enumeration (caption)</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>863 1st indicator must be either:</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>blank</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>$a First level of enumeration (actual enumeration)</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>$a First level of enumeration number</td>
</tr>
</tbody>
</table>
| 863 | 2nd indicator must be either:  
   blank  
   0  
   1  
   2  
   3  
   4 |
|-----|---------------------------------------------------------------------|
| 854 | 1st indicator must be either:  
   0  
   1  
   2  
   3  
   4  
   5 |
| 864 | 2nd indicator must be either:  
   blank  
   0  
   1  
   2  
   3 |

**854***
Captions and pattern---Supplementary material
Paired with:
**864***
Enumeration and chronology---Supplementary material
NOTE: These are currently not used by OCLC when producing summary holdings records in FirstSearch

| 854 | Required subfields:  
   $8 Field link and sequence number  
   $a First level of enumeration (caption)  
   864 Required subfields:  
   $8 Field link and sequence number  
   $a First level of enumeration (actual enumeration) |
|-----|---------------------------------------------------------------------|
| 855 | 1st indicator must be:  
   blank  
   855 2nd indicator must be:  
   blank  
   865 1st indicator must be either:  
   blank  
   4  
   5  
   865 2nd indicator must be either:  
   blank  
   1  
   3 |
| 865 | Required subfields:  
   $8 Field link and sequence number  
   $a First level of enumeration (caption)  
   865 Required subfields:  
   $8 Field link and sequence number  
   $a First level of enumeration (actual enumeration) |

| 866 | Required subfields:  
   $8 Field link and sequence number  
   $a Textual holdings |
|-----|---------------------------------------------------------------------|
| 1st indicator must be either:  
   blank  
   3  
   4  
   5  
   2nd indicator must be either:  
   blank  
   0  
   1  
   2  
   3  
   4 |
UC Libraries' Best Practices for LHRs

1. Sending 856 fields in campus library LHRs UC Best-Practice

Do not send any 856 fields that come from SCP. If you have a resource with both CDL and locally licensed access, you must only send the 856 fields for the locally licensed access.

One LHR may contain multiple 856 fields; it is also possible to have multiple LHRs associated with a single bibliographic record, each LHR containing just one 856 field. At this time, given that OCLC and UC have not determined precisely how the data from 856 fields will display in WCL, it is impossible to make a best-practice recommendation with respect to which approach to use. Until a best-practice recommendation can be made, select the technically easier of the two approaches.
2. LHRs for materials at the RLFs UC Best-Practice

Currently, UCs should send LHRs for materials that they have deposited at an RLF. The LHRs for these materials should have a location code that includes "NRLF" or "SRLF" prominently in the display location name. Other specifications regarding the coding of LHRs for materials at the RLFs are being developed.

3. Frequency of updating LHRs UC Best-Practice

Updated LHRs should be sent at least weekly though you can send them on a more frequent schedule if desired. Updates should include all new and corrected LHRs. If you have multiple LHRs attached to a WorldCat record and you make a correction to only one (or some) of them, then you need to resend all LHRs for that WorldCat record.

4. Granularity of location information in LHRs UC Best-Practice

Locations in LHRs should be as granular as those in your ILS. The OCLC location codes are used by a number of services including WorldCat Local and CDL Request. WorldCat Local will display the mapped location name to the patron when they view the record in WorldCat Local. Request, uses the code to look-up whether a location circulates or not, or whether it is a special library location (that only lends to other special libraries). Campuses will need to supply this information to both CDL and OCLC. CDL will work with OCLC to synchronize this as this information is maintained in the future for NGM, Request, and VDX.

<table>
<thead>
<tr>
<th>Local Location Name (as it should display)</th>
<th>Local Location Code</th>
<th>Library Type (Special*/Normal)</th>
<th>OCLC Holdings Symbol (3 or 5 character CLU / CLUER)</th>
<th>*OCLC **Holdable for ILL (yes/no/na)</th>
<th>Lends only to Special Libraries within UC (yes/no/na)</th>
<th>Pickup Location**</th>
</tr>
</thead>
</table>

*Special*: refers to "special collection" locations. These often have unique loan rules like "Only loans to another special collections location." CDL's Request tool uses this information to inform the user that the item may be harder to acquire for them.

**Pickup Location**: refers to whether there is a different pickup location than the stated Location. A good example of this might be materials set to the RLFs where the request needs to go to the campus instead of the actual location the item is held.

Questions, Clarifications for UC Libraries

What LHRs need to be sent?

To start, you should send LHRs for all print and electronic serials. In the future, we hope to expand this to all electronic materials and ultimately all items.

Do we need to do anything different if we're sending LHRs with Multiple Holdings Symbols?

A "Group" batchload should be set up with the OCLC Batch team if a campus wishes to submit LHRs for multiple OCLC Institution symbols in the same file. If a campus uses more than one OCLC Institution symbol (e.g., CLU, ZAS) but submits separate files of LHRs for each symbol, there is no need to set up a "Group" batchload.
What are the consequences of not sending LHRs as frequently as suggested?

There are consequences for Request and user satisfaction since people might request or go to the shelves for items that been withdrawn/added/transferred at a particular campus in the time period between updates. It is good to be consistent across campuses so users have the same expectation of currency of the database. Making this a weekly routine will industrialize the process, making it less prone to error and save staff from having to relearn it.

How do you delete an LHR?

If you are deleting an LHR or adding a new one using batchloading processes, you must resubmit all remaining LHRs for that record. That is to say, if you have 5 LHRs attached to one OCLC record and you want to delete one, you must re-submit the 4 existing LHRs. Alternately, you can manually delete the LHR via the Connexion Browser.

Will our procedures need to change for other material types (monographic LHRs, etc)? Will we need a different Export Table from III?

If you use summary holdings records for all your resources, serial or not, then your procedures should not need to change. Since most, if not all campuses, do not do this, then separate procedures will be required when we start sending non-serial resources. For III specifically, the III export table works only on checkin records. If you don't have checkin records attached to all of your bibliographic records, then a different means of export will be required. What this will be is unknown right now.

CDL is working with the LHR sub-group to investigate methods to automatically extract or generate LHRs from MARC records that include BIB & Item information as well as automating some of the manual tasks around producing LHRs. Once the requirements are set, CDL will investigate potential options and advise on potential solutions and their cost/personnel impact. Ideally, some of these options will preclude the necessity of III campuses from purchasing additional export tables or other features.

Are there suggested procedures for tracking and sending LHRs for III campuses?

UCSD has created procedures for tracking, outputting, modifying, and sending LHRs. They were sent to CAMCIG and HOTS on Nov. 20, 2009.

What fields are required for Request vs. the User Interface of WorldCat Local & what are the consequences of not sending this information?

Both the User Interface and Request require similar information drawn from the same fields listed above. The one exception is that Request needs the 007 to be able to differentiate between print and electronic materials. This is mainly due to the common inaccuracy of the indicators on the 856 for Tables of Contents and Summaries, which may be inaccurate. Alternately, there are entirely valid reasons to include an 856 on a print LHR, but there would be no way to tell whether the holdings statement pertained to the print or electronic component. The consequences of not sending at least an electronic 007 for electronic items is that Request will send ILL requests which cannot be filled by the campuses - thus both increasing the time to fill the request and significantly increasing the amount of work for the ILL staff.

How does CDL's Request use data in LHRs?

The CDL Request application is designed to communicate with OCLC and the campus OPACs to determine local holdings. For most materials, Request uses the data returned by the OPAC, the location and status, to determine whether the item can be borrowed or not. To overcome some performance issues, Request will use LHR data for serials, only, to determine whether an item is held and lend-able.

How does LHR data display in WCL?

The current display of LHR data in WCL, which consists of data taken from OCLC's "Summary record", is inadequate for UC needs. OCLC intends to form a group that will include representatives from OCLC and
UC, and possibly from other interested institutions, to work on specifications for the display of LHR data in WCL.

Questions, Clarifications for OCLC

What fields in the LHR does Request need access to from OCLC?

Request needs direct access to any field in a section with an *** above. This would include:

- 007 - to determine if the LHR is for a print or electronic item. Note that a print LHR could be attached to an OCLC # for an electronic item, or vice versa.
- 852 - to determine the shelving location, call #, etc.
- summary holdings:
  - 853/863
  - 854/864
  - 855/865
  - 856
  - 866
  - 867
  - 868

How should the LHR be displayed in the User Interface?

Each local holdings record should display the following items:

<table>
<thead>
<tr>
<th>Display Name</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>Resolved value of the Location Code (852$b) concatenated with the shelving location</td>
<td>852$b + &quot; &quot; + 852$c</td>
</tr>
<tr>
<td>Call #</td>
<td>Concatenated values of the call # subfields within the 852</td>
<td>852$k + 852$h + 852$i + 852$j + 852$m + 852$t?</td>
</tr>
</tbody>
</table>

Holdings Statement:

**Case 1**: 853/863 Pairs
Follow the rules specified [here](#). Concatenate 853/863, 854/864, 855/865 see OCLC documentation.

**Case 2**: 866
Concatenate successive 866, 867, 868 values within any LHR with a semicolon and a space. When changing field types, e.g. from 866 to 867 or 868, a period and space should be used. 867's should be prefixed with "Supplements:" and 868's with "Indexes:". Fields should be ordered based on the sequence # in the $8. 866$a + "; " + 866$a + ".
Supplements:" + 867$a + ".
Indexes:" + 868$a ordered by the $8 of each field.

**Case 3**: 852$z only
Concatenate multiple 852$z's with a period and a space. 852$z + ". " + ...

**Case 4**: 856$3 only
856$3 + ". " + ...
Would a single Summary Holdings Statement per OCLC # work for Request or patrons?

No. A summary holdings statement for the entire record is too general to be useful to either. If one Holdings statement is displayed, it would combine print and electronic holdings. This (a) would not be useful for ILL, as it only handles print materials and (b) would not work for patrons because the summary holdings statement neither explains the print access, electronic access, or where to find the item. If holdings are summarized, they should be summarized by LHR which ensures a common (1) location (2) status (3) Call 3 (4) material type for the item(s).