

# Using OCLC for Batch Loading Records into I-Share Databases



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## I. Preface

This document outlines the input standards and conventions to be used by I-Share libraries when working on OCLC to create bibliographic, MARC Format for Holdings Data (MFHD), and item records for batch loading into local I-Share databases using the Voyager automated library system, version 7.1.0 (and higher). This document intentionally does not address authority records.

This document is not intended to be a detailed guide to the use of MFHDs. It is assumed that readers of this document have a basic understanding of the MFHD format. All I-Share libraries are encouraged to have available for staff the most current version of the *MARC 21 Format for Holdings Data* document, including any updates. Print versions of this document are available from the Library of Congress Cataloging Distribution Service <<http://www.loc.gov/cds/>>. The concise version of the MFHD manual is available online at <<http://www.loc.gov/marc/holdings/echdhome.html>>.

## Introduction

The majority of this document contains specifications for using Voyager's bulk import functionality to load batches of OCLC records into a local library's Voyager database. Batches of records from other sources or vendors, such as Marcive and retrospective conversion projects, should also correspond to the conventions described in this specification, if item and MFHD records are to be created by the bulk import process. If the non-OCLC vendor cannot supply records that use these conventions, additional bulk import rules can be created by the library for these special loads. Contact the CARLI Office for more information.

Bulk import is used primarily to add new bibliographic records and, if appropriate, corresponding MFHD and item records to a Voyager database. Voyager is not designed to do maintenance work on existing MFHD records via bulk import. Therefore, it is assumed that libraries will do all maintenance work on existing holdings records from within the Voyager database rather than via this batch load program. This includes changes to call numbers, deleting holdings, etc. With Voyager version 2001.2 and higher, it is possible to add a new MFHD to an existing bib record in a local database, but there are limitations, and unless the library is very careful about this process, unintended results are possible. Therefore, it is recommended that libraries use the Voyager cataloging client to add copies to an existing bib record, rather than using bulk import transactions for this task.

CARLI receives a single batch of records from OCLC via EDX (i.e., FTP) every night. Included in this daily EDX file of records are the OCLC produce, update, delete holdings/cancels, and lock and replace transactions performed by all libraries that are included in the I-Share OCLC group subscription.

NOTE: OCLC Export transactions, done using any of the OCLC interfaces, are not included in the daily EDX file received from OCLC. See section XIV of this document for more information on using OCLC export functionality with a Voyager database.

NOTE 2: The daily EDX file also does not contain records for other OCLC batch services, such as Bibliographic Notification or PromptCat files. Usually, the library establishes a separate mechanism for delivery of these files to CARLI, as well as separate bulk import rules to process these bib records.

The OCLC EDX data will be loaded into each library's Voyager database the evening after it is received from OCLC. These loads currently begin at 6 p.m. daily. Therefore, the bibliographic and holding/item records added via OCLC and bulk import will appear in each Voyager database two working days after the OCLC transaction is completed. In other words, the records are actually added to each database the evening after the OCLC transaction is performed, but staff likely will not see the records in the database until the second business day after the OCLC transaction is performed.

The daily EDX file contains the OCLC transactions for all I-Share participating libraries as part of the group subscription. CARLI staff run a program called MARC Split on the daily EDX file to separate the transactions by library, and then by the bulk import “mode” indicated by the coding entered by library staff in each record. See the description of each “mode” below. This means that, if all I-Share participating libraries performed at least one transaction in each mode on a particular day, MARC Split could output more than 500 separate files of records to be loaded for that day.

NOTE: the library can use as few or as many of the modes outlined in this document in any particular day’s OCLC transactions. In other words, the library does not have to use the same mode for all items cataloged in a single day. Libraries should use whichever mode is most appropriate to the specific cataloging situation in hand.

As the first step, MARC Split removes records coded for Do Not Process mode, as well as other OCLC transactions that are not considered an “add” transaction, from the daily EDX file. Then, the different files of records for each remaining mode are loaded into the appropriate Voyager databases. The process begins at 6 p.m. daily, and the loads are done in the following order: Express Mode, Express Replace Mode, Embedded Holdings Mode, Embedded Holdings Replace Mode, Electronic Resources Mode, Electronic Resources Replace Mode, No Holdings Mode, and finally No Holdings Replace Mode transactions. Within each mode, the libraries are processed alphabetically by three-letter code. Under normal circumstances, the entire daily EDX file is completely processed in about an hour.

NOTE: because MARC Split relies on OCLC three-letter codes to put records into the right queue, if a library is assigned a NEW code at the three-character level, the library must share this information with the CARLI Office so that the load scripts can be modified to accommodate the new code. However, this is not necessary for an additional holding code at the four-character level (assuming the new 4<sup>th</sup> character is added to an existing three-character code). Until the CARLI Office is made aware of a new three-character code for an I-Share library, any records received from OCLC with the new three-character code will not be loaded into the library’s database.

CARLI staff are responsible for the actual processing and loading of the daily OCLC EDX file into each library’s Voyager database. The processing and loading is automated via use of several different scripts that run 7 days a week, 52 weeks a year. If there are any problems with a daily load, CARLI makes every effort to notify the I-Share libraries of this situation as soon as possible via email announcements to the TechServ-ig and I-ShareLiaisons lists. The normal fix to a problematic load is to re-load any previously skipped records along with the next day’s routine processing.

## **Bulk Import Rules**

The individual I-Share libraries are responsible for creating and maintaining the bulk import rules that are used by Voyager during the bibliographic load process. Bulk import rules are created in the Cataloging section of the Voyager System Administration (SysAdmin) client.

Libraries should follow the I-Share recommendations for bulk import rules documented in the Cataloging section of SysAdmin available from < <http://www.carli.illinois.edu/sites/files/i-share/documentation/secure/cat.pdf> >. That document contains some proprietary information about Voyager and is therefore stored in the “secure” realm of the CARLI website. Like all pages on the CARLI/I-Share website that are in the secure realm, connections to the site from an I-Share campus IP address should not require the input of a login for access. However, if the IP address from which a connection is being made is not recognized as belonging to an I-Share institution (based on reverse DNS lookup), the user is prompted for their institutional affiliation and personal library barcode number. If the user is found in the library’s patron file, they should be allowed access to the secure webpage(s).

The I-Share-recommended SysAdmin bulk import settings are used in conjunction with the data entry standards detailed in this document.

If a library varies from the I-Share SysAdmin bulk import rule recommendations, the data entry standards detailed in this document may not function as described. In these cases, it is the library's responsibility to document their local practices and distribute this information to staff in the local library. The CARLI Office may be able to assist with troubleshooting any bulk import load problems that might arise due to locally defined bulk import rules, but primary responsibility for this kind of troubleshooting falls upon the library. It is also the local library's responsibility to fix any incorrect records added via bulk import.

## OCLC Charges

As of July 1, 2004, Illinois libraries began using a fixed-price method of billing from OCLC, called "Group Services Pricing." Essentially, this pricing model provides Illinois libraries unlimited usage of a large suite of OCLC services for a fixed price that has been established for each Illinois library, rather than a per-transaction pricing structure. Cataloging services are included in Group Services Pricing.

Details about this pricing model are available from the ILLINET/OCLC Office's website at the URL below:

[http://www.cyberdriveillinois.com/departments/library/who\\_we\\_are/OCLC/home.html](http://www.cyberdriveillinois.com/departments/library/who_we_are/OCLC/home.html)

In the ILLINET/OCLC Office's document above, references are made to various OCLC product codes. The primary OCLC product codes used for the kinds of transactions detailed within this *Using OCLC...* document are as follows:

CAT first time use (FTU) produce or update	ONT2500
Export bibliographic	CRC3715

In addition, the per-record EDX charge (product code MLE 2008) that CARLI formerly passed along to I-Share participating libraries has also been eliminated under the Group Services Pricing. These former charges were included in the calculation of the fixed price for each I-Share library.

Because the Group Services Pricing eliminates OCLC per-transaction charges for cataloging activities, many I-Share libraries have re-examined their cataloging workflows as a result. Each I-Share participating library should use a workflow that best meets the library's local needs. CARLI does not recommend one workflow over another to its participating libraries. It is the local library's decision about what kind of OCLC transactions to perform when adding bibliographic records to the local database.

## The "Modes"

Voyager bulk import functionality will add new bibliographic records to individual I-Share library databases in batch mode. It can also create new holdings records (both MFHDs and item records), and replace existing bibliographic records if coded by the inputting libraries according to the specifications included in this document.

There are several possible bulk import processes ("modes") for I-Share libraries, depending on whether the library prefers to key MFHD and item information into an OCLC record or key them directly in the Voyager database, and whether or not an existing bibliographic record's content should be replaced by that of the incoming record. It should be noted that while some situations can be accommodated with the specifications in this document, not all MFHD and item records would be able to be generated via OCLC

data entry. Library cataloging staff should be familiar with the mechanics of and library policies for entry of bibliographic and/or holdings information from within the Voyager cataloging client. The following chart provides a quick summary of the different “modes” currently available to I-Share libraries via Voyager bulk import functionality. Sections II through X of this document describe each mode in more detail.

MARC Split and bulk import functionality will work its way down the chart and use the topmost row that applies.

<b>Mode of Creating Holdings</b>	<b>How MARC Split will Identify this Mode</b>	<b>What Bulk Import will Do with OCLC 994 Field “Add” Transactions</b>	<b>Can the existing Bib be Replaced with an 049 \$r REP?</b>	<b>What Bulk Import will do with Delete Transactions</b>
“Do Not Process Mode”	049 \$a has a symbol for an I-Share library and 049 \$o contains the text “SKIP” (without the quotes)	Not applicable. The bib will be removed from the daily file of OCLC transactions before any additional processing is done, and therefore is not loaded into Voyager at all.	Not applicable	No action
“No Holdings Mode” (Records that should not create holdings in the Voyager database)	049 \$a has a symbol for an I-Share library and 049 \$m contains the text “NO” (without the quotes)	The bib will be added if it isn’t in the Voyager database already, but no MFHDs or item records will be created.	No	No action
“No Holdings Replace Mode” (Records that should not create holdings in the Voyager database)	049 \$a has a symbol for an I-Share library, 049 \$m contains the text “NO” and 049 \$r contains the text “REP” (both without the quotes)	The incoming bib will replace the contents of the existing bib, if a match is found based on the duplicate detection settings in the SysAdmin bulk import rule. By default, the bib will be added if it isn’t in the Voyager database already.	Yes	No action
“Embedded Holdings Mode”	049 \$a has a symbol for an I-Share library and the bib also contains an 852 \$b	The bib will be added if it isn’t in the Voyager database already. A single MFHD and single item record will be added to Voyager.	No	No action

"Embedded Holdings Replace Mode"	049 \$a has a symbol for an I-Share library, 049 \$r contains the text "REP" (without the quotes), and the bib also contains an 852 \$b	The incoming bib will replace the contents of the existing bib, if a match is found based on the duplicate detection settings in the SysAdmin bulk import rule. By default, the bib will be added if it isn't in the Voyager database already. A single MFHD and single item record will be added to Voyager, if this option is selected in the bulk import rule.	Yes	No action
<b>Mode of Creating Holdings</b>	<b>How MARC Split will Identify this Mode</b>	<b>What Bulk Import will Do with OCLC 994 Field "Add" Transactions</b>	<b>Can the existing Bib be Replaced with an 049 \$r REP?</b>	<b>What Bulk Import will do with Delete Transactions</b>
"Electronic Resources Mode"	049 \$a has a symbol for an I-Share library and 049 \$s contains the text "ER" (without the quotes)	The bib will be added if it isn't in the Voyager database already. A single MFHD (but no item record) will be added to Voyager.	No	No action
"Electronic Resources Replace Mode"	049 \$a has a symbol for an I-Share library and 049 \$s contains the text "ER", and 049 \$r contains the text "REP" (both without the quotes)	The incoming bib will replace the contents of the existing bib, if a match is found based on the duplicate detection settings in the SysAdmin bulk import rule. By default, the bib will be added if it isn't in the Voyager database already. A single MFHD (but no item record) will be added to Voyager, if this option is selected in the bulk import rule.	Yes	No action

"Express Replace Mode"	049 \$a has a symbol for an I-Share library and 049 \$r contains the text "REP" (without the quotes)	The incoming bib will replace the contents of the existing bib, if a match is found based on the duplicate detection settings in the SysAdmin bulk import rule. By default, the bib will be added if it isn't in the Voyager database already. A single MFHD and single item record will be added to Voyager, if this option is selected in the bulk import rule.	Yes	No action
"Express Mode"  This is the default.	049 \$a has a symbol for an I-Share library (but no 049 \$m or \$r or \$s, or 852 \$b subfields)	The bib will be added if it isn't in the Voyager database already. A single MFHD and single item record will be added to Voyager.	No	No action

OCLC includes a 994 field in each transaction, and the 994 \$a includes a code that indicates the type of transaction performed on each bib record. CARLI staff have programmed MARC Split so that only 994 \$a codes that represent "add" transactions are processed via bulk import.

994 \$a codes that indicate an "add transaction":

01	PRODUCE
02	UPDATE
50	ALL PRODUCE
90	OFFLINE RETRIEVE
92	OFFLINE UPDATE

Note that MARC Split will not output DELETE transactions (994 \$a 03 and 12) or "LOCK and REPLACE" transactions (994 \$a 11) into the load queue for each library. This means that these transactions are not loaded into the individual Voyager databases. See section XIII of this document for more information about deleting records from a Voyager database.

After MARC Split outputs the Add transactions, it then sorts the records to be loaded by "mode." Voyager version 2001.2 (and higher) supports nine I-Share modes. Each mode is described in more detail in the rest of this document.

The current "modes" of data entry available to I-Share libraries via Voyager bulk import are:

- Do Not Process Mode (see section II)
- No Holdings Mode (see section III)
- No Holdings Replace Mode (see section IV)
- Express Mode (see section V)
- Express Replace Mode (see section VI)
- Embedded Holdings Mode (see section VII)



Embedded Holdings Replace Mode (see section VIII)

Electronic Resources Mode (see section IX)

Electronic Resources Replace Mode (see section X)

### **Special notes on Voyager System Administration options related to bulk import**

With Voyager version 2001.2 and higher, ExLibris has added new functionality to bulk import. Many of these enhancements are considered optional in the I-Share environment, and libraries are free to enable (or not) each option, depending on local workflow. These options are described below, and unless stated otherwise apply to all of the different I-Share “modes” (except Do Not Process mode). More information about each of these options is included in the I-Share specific documentation on Cataloging SysAdmin, available from

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

### **“Create MFHDs on existing Bibs” option in SysAdmin/bulk import rules**

With Voyager version 2001.2 (and higher) bulk import functionality, it is possible for bulk import to add new MFHDs/item records to an existing bib record in the local database. In other words, when the duplicate detection profile identifies an incoming bib as matching an existing bib, the option exists to have bulk import create a new MFHD or item and link it to the existing bib record. Previous versions of Voyager bulk import would never add new holdings to an existing bib in the database. It is important to note that this option will only create a new MFHD/item record. It will never add new data to an existing MFHD, even if the location and call number in the incoming transaction match existing MFHDs in the local database.

Selecting the check box labeled “Create MFHDs on existing Bibs” in any bulk import rule that is designed to create MFHDs enables this functionality. (Because neither No Holdings Mode nor No Holdings Replace Modes will create MFHDs at all, this option is grayed out in SysAdmin for these modes.) If this option is not selected in any bulk import rule that creates MFHDs, then if the incoming bib matches an existing record in the database, no MFHD or item record is created by bulk import. This applies to any of the Replace modes as well.

The CARLI Office strongly recommends that libraries experiment with this bulk import rule setting on a small number of records prior to making a final decision about whether to enable this functionality in the local database. Note that because this is a bulk import rule setting, the decision is made for the entire batch of records processed by a bulk import rule, rather than on a record-by-record basis.

The CARLI Office also recommends that whenever an individual cataloging situation calls for replacing an existing bib record with an incoming record, but not to create any new holdings, that the library perform the transaction in No Holdings Replace Mode. This will prevent any unintentional MFHDs or item records being created by bulk import.

In this document, when applicable to the mode, the corresponding bulk import rule has selected the option to “Create MFHDs on existing Bibs.” This is not intended to be an endorsement of this option by CARLI, but it is, rather, a means for simplifying and being consistent within this document.

### **“Leave OPAC Suppress Unchanged for Replaced and Merged Records” option in SysAdmin/bulk import rules**

For any bulk import rule that uses a “Replace” bib duplicate detection profile, with Voyager version 5 (and higher), there is a new option to “Leave OPAC Suppress Unchanged for Replaced and Merged Records.” For I-Share libraries, this option would apply to any of the “Replace” modes.

If this option is checked/enabled in a bulk import rule, when the existing bib is replaced by bulk import, the bib’s Suppress from OPAC flag (on the System tab of the bib record) is not reset by bulk import. In other words, if the existing bib has the Suppress from OPAC flag set to Yes and the bulk import rule’s Leave OPAC Suppress Unchanged... option is enabled, the OPAC suppression is not removed when the bib is replaced using this bulk import rule. If the Leave OPAC Suppress option is not enabled, then the OPAC suppression in the existing bib is removed when the bib is replaced.

The decision about use of the Leave OPAC Suppress Unchanged... option is at the discretion of the local library, based on their workflows regarding the use of their “Replace” type bulk import rules.

### **“Discard incoming records that do not match existing records” option in SysAdmin/Bib duplicate detection profiles**

For any bulk import rule that uses a “Replace” bib duplicate detection profile, with Voyager version 5 (and higher), it is possible for bulk import to discard from the load any incoming records that do not match an existing record in the database. For I-Share libraries, this option would apply to any of the “Replace” modes.

If the Discard incoming records... option is enabled, any incoming bibliographic records that do not match an existing record in the database are not added as new records, but instead are discarded. If the Discard incoming records... option is not enabled, any incoming bib records that do not match an existing record in the database are added as new records. The ExLibris default is that this option is not enabled, and this matches bulk import functionality prior to Voyager version 5.

When this option became available, IUAG’s Consortial Cataloging and Authority Control Committee investigated its possible uses. CCAC determined that this new option might be more useful to libraries that use bulk import for loads of records from non-OCLC sources, or for special projects. It was thought that most I-Share libraries would not want to enable this option for routine, daily OCLC transactions.

Therefore, in the details for each “Replace” mode in this document, it will be assumed that this option is not enabled, and so by default, incoming OCLC records that do not match an existing record in the database will be added as new by bulk import.

### **“Expected Character Set” settings in SysAdmin/bulk import rules**

With the Voyager with Unicode version and higher, the values selected in the “Expected Character Set Mapping of Imported Records” field in all SysAdmin bulk import rules must be appropriate for the source of the incoming records. The value found in the bibliographic records’ Leader byte 9 is the key factor for this setting.

Incoming records that contain a value of “a” (representing Unicode-enabled bibs) in Leader byte 9 can only be loaded during bulk import if the Expected Character Set value in the bulk import rule is set to a Unicode value. If there is a mismatch in these settings, and the first record in the incoming file does not have the expected value in Leader byte 9, the load is aborted and no records are processed with that bulk import rule.

Because of this issue with Expected Character Sets, CARLI Office staff have added a new step to the processing of the files received from OCLC. All incoming records will have their Leader byte 9 value checked, and those records that have a Leader byte 9 value of "a" will be split into a separate file from records that have a value of blank in this field. Then, records with Leader byte 9 value "a" will need to be processed with the appropriate bulk import rule whose Expected Character Set value is "MARC21 UTF-8" (i.e., Unicode). Records that contain a Leader byte 9 value of blank are processed with the appropriate bulk import rule whose Expected Character Set value is "OCLC (non-Unicode)".

All of the processing for "Expected Character Set" issues during bulk import happens behind the scenes in CARLI routines and in the settings in each library's SysAdmin bulk import rules. In other words, cataloging staff doing routine data entry on OCLC for batch loading into the local databases do not need to do any special coding to deal with Unicode vs. non-Unicode enabled bib records.

Local staff responsible for maintaining Cataloging SysAdmin for their library should review the I-Share specific documentation available from <<http://www.carli.illinois.edu/sites/files/i-share/documentation/secure/cat.pdf>> for more details on the "Expected Character Set" setting. At this time, it is unknown when or if OCLC will enhance their batch output services so that files of OCLC records can be output in the Unicode format. When this change is made on OCLC's end, I-Share libraries will be required to make corresponding changes to their bulk import rules in order for the files of records to be processed by Voyager.

### **Use of "Input Stamp" Data in 049 \$a in SysAdmin/bulk import rules**

Prior to February 2006, I-Share libraries could not include any data other than the OCLC holding code in 049 \$a (for example, [bracketed info for card production]). If the OCLC transaction included data in 049 \$a other than the holding code, the transaction would "fail." Failure here meant that the MFHD/item location would not be based on the value mapped from the 049 \$a, but rather the location will be assigned using the wildcard default (i.e., the fall-through-the-cracks default) for location as profiled in the specific bulk import rule in SysAdmin.

However, in February 2006, CARLI staff discovered how to add some new routines to the MARC Split program used for pre-processing the daily OCLC files to accommodate the use of manual input stamps in the 049 \$a. This new programming is not a simple change that can be done automatically for all I-Share libraries, however. It is assumed that most of the use of input stamp data is related to OCLC catalog card production, and it is also assumed that few I-Share libraries are still receiving catalog cards from OCLC. However, CARLI staff will implement this new routine for any I-Share library that wishes to use input stamps during bulk import. The library's I-Share Liaison must file a WRO (Work Request Online) as the first step in implementing this new functionality. CARLI staff will work with the library to determine the custom programming changes necessary for the individual library.

After the WRO is filed, but before starting to use this type of data entry, library staff must add the desired [input stamp] data along with the 049 \$a code to the Mapping tab in all bulk import rules that the library expects to use with input stamps. It is assumed that Express Mode is the most likely candidate for this new functionality, but implementation is not limited to this mode. However, this new functionality is not expected to be used for No Holdings or No Holdings Replace mode, since these modes do not create MFHD/item records in Voyager.

The mapping tab data must match exactly the data to be input in the 049 \$a, including spaces and capitalization. For example, if the library wishes to use an input stamp of [MAP] combined with 049 \$a code ABCD, the following entry must be added to the bulk import rule's Mapping table:

Marc item = <desired Voyager item type code abbreviation>

Voyager item = <desired Voyager item type name>

Marc loc = [MAP]ABCD  
Voyager loc = <desired Voyager location name>  
Call number hierarchy = <desired choice>

If the library needs to place a blank space between the [MAP] and ABCD, then the bulk import rule's mapping table entry must also contain a blank space between the input stamp and the OCLC holding code.

NOTE: It is also important to note that the use of input stamps in the 049 \$a will NOT automatically generate call number prefixes in the MFHD/item that is created via bulk import. This functionality is still not supported in Voyager bulk import.

## II. Do Not Process Mode

Effective November 22, 2010, a new mode was added to the I-Share daily OCLC processing scripts. This Do Not Process mode will remove an individual record resulting from an update or produce transaction to be removed from the file(s) of records before they are loaded into Voyager databases. OCLC bib records coded for this mode are not loaded into Voyager, and likewise no holdings or item records are generated in a Voyager database. There is no entry in any log file to indicate that a record was treated as "do not process" mode.

While there are several workflows that could make use of this mode, a common use is when the library performs both an update/produce transaction in WorldCat and also performs an export transaction for the same record. One example is for original cataloging records. It remains true that all original (full) cataloging must be done in OCLC rather than in Voyager. Prior to implementation of this mode, some libraries would create their original cataloging records in OCLC and, rather than waiting for the update or produce transaction to be loaded via bulk import, the library would immediately export the newly created record from OCLC to the local database. When the same record would later be processed along with the other update/produce transactions for that day, it would be discarded/rejected from the load because the incoming record would match an existing record (the one created by the export transaction) in the database. When this scenario occurred, an entry would be made in the log file(s) for that day's OCLC transactions.

Because the library elected to also perform the export transaction on that bib, there is no need for the update transaction that created the OCLC record to be loaded into Voyager. These discarded/rejected records in the log file made it more time-consuming to process the unintentional discards/rejects for that day's transactions, i.e., those requiring attention or follow-up. So, this new mode was implemented to help make the work of inspecting the daily output files from OCLC transactions more efficient for library staff.

MARC Split recognizes Do Not Process Mode by the presence of 049 \$o SKIP in a bibliographic record. Data entry in the 049 \$o is not case sensitive. However, data entry in the 049 \$a is case sensitive.

For example:

```
049    $a ABCD $o skip  
049    $a ABCD $o SKIP
```

Either transaction above will result in a bib record being removed from the input file for that day's OCLC loads prior to bulk import processing.

NOTE: Because this "mode" is invoked by CARLI scripts prior to any Voyager bulk import loads, there is no corresponding bulk import rule required in a library's System Administration client to support its use. The only requirement to enable the use of Do Not Process Mode is to code the appropriate OCLC transaction with the 049 \$o SKIP text string.

### III. No Holdings Mode

Some I-Share libraries may prefer to create MFHDs and item records directly in the Voyager cataloging client. They may make the decision of where to create these holdings on a record-by-record basis. For example, they may use Express Mode (described in section V) for single copy monographs, but use this No Holdings Mode for more complex cases.

For records entered in No Holdings Mode, new bib records are loaded into the Voyager database, but bulk import creates no MFHDs or item records. The holdings must be added by library staff online using the Voyager cataloging client.

MARC Split recognizes No Holdings Mode by the presence of 049 \$m NO in a bibliographic record. Data entry in the 049 \$m is not case sensitive. However, data entry in the 049 \$a is case sensitive.

For example:

```
049    $a ABCD $m no
049    $a ABCD $m NO
```

Either transaction above will result in a bib record being added if it is not already present in the Voyager database. The duplicate detection profile associated with the No Holdings Mode (NOHOLD) bulk import rule determines if the incoming record is new to the database. Bulk import will not create any MFHD or item records for No Holdings Mode transactions.

NOTE: It is the library's responsibility to have a corresponding NOHOLD bulk import rule and appropriate bib record duplicate detection profile established in their Voyager SysAdmin client prior to creating any No Holdings Mode transactions on OCLC. If an OCLC record is processed in No Holdings Mode, but the corresponding SysAdmin setup is not in place, bulk import of all No Holdings Mode transactions from that day's EDX file will cease immediately. There will be one line in the log file: "Failed to retrieve parameters from import\_rule [NOHOLD]." See section XII for more information about bulk import log file messages.

See the Cataloging section of the I-Share System Administration documentation, available from <<http://www.carli.illinois.edu/sites/files/i-share/documentation/secure/cat.pdf>>, for the recommended settings for the NOHOLD bulk import rule and its corresponding duplicate detection profile.

### IV. No Holdings Replace Mode

Some I-Share libraries may prefer to create MFHDs and item records directly in the Voyager cataloging client. They may make the decision of where to create these holdings on a record-by-record basis. For example, they may use Express Mode (described in section V) for single copy monographs, but use this No Holdings Replace Mode for more complex cases. A common use for No Holdings Replace Mode is to update a serial bib record when the library notices a title change, and needs to add a "Continued by" note (etc.) to the former title's bib record that already exists in the local database.

For records entered in No Holdings Replace Mode, if an existing bib record is determined to match the incoming record based on the duplicate detection profile in the bulk import rule, the content of the existing bib record is replaced with the content of the incoming bib record. In this mode, bulk import does not create MFHDs or item records. The holdings must be added by library staff online using the Voyager cataloging client, if appropriate to the cataloging situation.

The incoming bib record is added into the Voyager database if bulk import does not identify an existing record that matches based on the duplicate detection profile associated with the No Holdings Mode Replace

(NOHLDREP) bulk import rule, and that dup detection profile does not have the “Discard incoming records that do not match existing records” option enabled.

MARC Split recognizes No Holdings Replace Mode by the presence of 049 \$m NO \$r REP in a bibliographic record. Data entry in the 049 \$m and \$r is not case sensitive. However, data entry in the 049 \$a is case sensitive.

For example:

```
049    $a ABCD $m no $r rep
049    $a ABCD $m NO $r REP
```

Either transaction above will result in an existing bib record being replaced or the incoming record being added (by default) if it is not already present in the Voyager database. Bulk import creates no MFHD or item records for No Holdings Replace Mode transactions.

NOTE: It is the library’s responsibility to have a corresponding NOHLDREP bulk import rule and appropriate bib record duplicate detection profile established in their Voyager SysAdmin client prior to performing any No Holdings Replace Mode transactions on OCLC. If an OCLC record is processed in No Holdings Replace Mode, but the corresponding SysAdmin setup is not in place, bulk import of all No Holdings Replace Mode transactions from that day’s EDX file will cease immediately. There will be one line in the log file: “Failed to retrieve parameters from import\_rule [NOHLDREP].” See section XII for more information about bulk import log file messages.

See the Cataloging section of the I-Share System Administration documentation, available from <http://www.carli.illinois.edu/sites/files/i-share/documentation/secure/cat.pdf>, for the recommended settings for the NOHLDREP bulk import rule and its corresponding duplicate detection profile.

## V. Express Mode

This mode is designed to make it easy for libraries to create the most straightforward holdings in Voyager with a minimum amount of coding in an OCLC record.

MARC Split will identify a record as using Express Mode by default. In other words, if the record doesn’t have 049 \$o SKIP to indicate Do Not Process mode, and it does not contain 049 \$m NO to indicate one of the No Holdings Mode options, and it does not contain an 852 \$b field to indicate one of Embedded Holdings Mode options, and it does not contain an 049 \$s to indicate one of the Electronic Resources Mode options, and it does not contain 049 \$r REP to indicate an Express Replace Mode transaction, then the MARC Split program will process the transaction using Express Mode.

The duplicate detection profile associated with the Express Mode (EXPRESS) bulk import rule determines if the incoming record is new to the database. In Express Mode, incoming bibs that are identified as duplicates are rejected/discarded from the load, with a message written to the log file. If the incoming bib is rejected/discarded and the library has not selected the “Create MFHDs on existing Bibs” option in SysAdmin for the EXPRESS bulk import rule, bulk import will not create a MFHD/item for the existing bib.

If the bib is new to the database, or is a duplicate but the library has selected the “Create MFHDs on existing Bibs” option in the EXPRESS bulk import rule in SysAdmin, bulk import will create a MFHD and item record by deriving data from the following 049 subfields:

```
$a      The OCLC holding symbol, which is mapped to a Voyager location code
$l      The Voyager item type code abbreviation
$p      The barcode number
```

Only one 049 \$a is valid per OCLC transaction. Because the MFHD standard calls for a new MFHD in the cases of different locations or different call numbers, bulk import will not attempt to create more than one MFHD per OCLC transaction. If the cataloging situation calls for more than one location or call number to be created, the library has a few options:

- (1) The library can elect to create all appropriate holdings via the cataloging client (adding the bib via No Holdings Mode).
- (2) The library can elect to create the first bib/MFHD/item record via Express Mode, and then create subsequent MFHDs/items via the cataloging client.
- (3) If the library has checked the "Create MFHD for existing Bibs" option in the EXPRESS bulk import rule in SysAdmin, the library can perform multiple Express Mode transactions using the same bib record. A new MFHD and item record will be added to the local database for each subsequent Express mode transaction. However, the existing bib record will not be replaced with each subsequent transaction; in Express Mode, the incoming bib is rejected/discarded by bulk import if it matches an existing bib in the local database.

The Voyager item type code abbreviation must be entered in 049 \$l (that's the letter L, not the number 1). The list of valid Voyager item type code abbreviations is included in Appendix A of this document. Note that the data entry in this subfield is case sensitive. If bulk import finds an invalid item type code abbreviation in 049 \$l, the item record's item type will be assigned based on the "wildcard" item type entered in the Express Mode bulk import rule's Mapping table value. If no 049 \$l data are entered in an individual bib record, the program will also use this "wildcard" value as the default Voyager item type.

The item's barcode number should be entered in 049 \$p. Bulk import will copy the data found in 049 \$p exactly as entered into the item record's barcode field. No brackets or punctuation should be entered in 049 \$p. The entire barcode number must be entered; bulk import will not expand an abbreviated barcode number entered in 049 \$p. No more than one barcode number may be entered in this subfield.

If a barcode number is not entered in 049 \$p, bulk import will still create the MFHD and item record, but the item record will not contain a barcode number. A message is written to the log file warning that a barcode was not found in the transaction. A barcode number can be added to the item record via the Voyager cataloging client after the item record has been added to the database via bulk import.

Items can circulate in the local Voyager database without a barcode number in the item record, but materials sent to another I-Share library to fill a request must have a physical barcode attached to the piece, and the item record in Voyager must contain the corresponding barcode number.

**IMPORTANT NOTE:** there are some limitations in the current Voyager bulk import functionality that apply to Express Mode transactions:

- Current Voyager bulk import functionality does not support the creation of an automatic call number prefix based on the input of a selected OCLC holding code.

If libraries require call number prefixes via OCLC produce or update transactions, there are three alternatives:

- (1) The library can do a No Holdings Mode transaction and manually add all of the holdings information via the cataloging client, after the bib record has been loaded into the Voyager database.

(2) The library can do an Express Mode transaction to get a bib and MFHD/item record created in Voyager via the OCLC transaction. Library staff would then manually add the call number prefix to the MFHD via the cataloging client after the bib, MFHD, and item records have been loaded into the Voyager database.

(3) The library can do an Embedded Holdings Mode transaction, and include the call number prefix in 852 \$k. See section VII for more information on Embedded Holdings Mode transactions.

- Current Express Mode bulk import functionality does not support adding a MFHD 852 \$t field at all. There is no way to change this default in the current version of bulk import. However, it should be noted that WebVoyage has been configured to display “Copy: 1” whenever the MFHD does not contain an explicit 852 \$t value.
- The Voyager location code will be derived from the OCLC holding symbol in 049 \$a. Since some libraries have more Voyager locations than OCLC holding symbols, Express Mode can be used only for items in locations that can be derived from 049 \$a. If the library needs to create a MFHD/item for a Voyager location that cannot be derived from 049 \$a, the library can perform an Embedded Holdings Mode transaction. See section VII for more information on Embedded Holdings Mode. If the library needs to add new OCLC holdings symbols, they must contact the ILLINET/OCLC Office for information on accomplishing this change to the library’s OCLC profile, and then the new holdings symbols must be added to the Express Mode bulk import rule’s mapping table.
- Express Mode will always assume that the holding is for a single-piece title with a single MFHD and item record. It does not create holdings for multiple copies, volumes, or serial items. If the library has a cataloging situation that calls for multiple copies, volumes, or serial items, the library can use No Holdings Mode (see section III) and enter the MFHD(s) and item records directly in Voyager or the library can perform an Embedded Holdings Mode transaction(s) (see section VII).
- If the library selects the “Create MFHD for existing Bibs” option in the EXPRESS bulk import rule in Voyager SysAdmin, an additional MFHD/item record is created for each OCLC transaction on the same bib done in Express Mode. Bulk import will not add new holding lines or item records to an existing MFHD in the local database, but will create a new MFHD/item record, even when the existing MFHD’s location and call number are identical to the new MFHD’s location and call number.

The call number will be mapped into the MFHD/item from the first appropriate field that is present in the bib record, as defined by the call number hierarchy selected in the Express Mode bulk import rule’s Mapping table. If there are multiple call numbers with the same field tag in the bib record, bulk import will use the last one found in the bib record.

With Voyager version 2001.2 (and higher)’s enhanced bulk import functionality, it is possible to copy MFHD fields found in a bib record into a MFHD when it is created. This includes the 856 field, which by the MARC standards can be a bib record field and/or a MFHD field. In order for bulk import to copy the 856 field into a MFHD in an Express Mode transaction, the EXPRESS bulk import rule must have enabled both the options for “Copy 852-855, 863-878 Fields from Bib to MFHD” and “Copy 856 Field from Bib to MFHD.” While this seems odd in an Express Mode rule, it is needed because the “Copy 856 Field from Bib to MFHD” option remains grayed out (i.e., not available) unless the “Copy 852 ...” option is also checked.

NOTE: Libraries should not enter 852 \$b data in Express mode transactions, because MARC Split will treat the transaction as Embedded Holdings Mode. However, with the options above selected and when the 856 is the only 85x field included in the bib, the 856 field(s) will be copied into the MFHD when it is created by bulk import, and the transaction will be processed as Express Mode.



With Voyager version 7.1.0 (and higher), bulk import will create the item record with a default copy number of 1. Prior to this version of Voyager, the copy number added via bulk import was always zero.

NOTE: It is the library's responsibility to have a corresponding EXPRESS bulk import rule and appropriate bib record duplicate detection profile established in the Voyager SysAdmin client prior to performing any Express Mode transactions on OCLC. If an OCLC record is processed in Express Mode, but the corresponding SysAdmin setup is not in place, bulk import of all Express Mode transactions from that day's EDX file will cease immediately. There will be one line in the log file: "Failed to retrieve parameters from import\_rule [EXPRESS]." See section XII for more information about bulk import log file messages.

See the Cataloging section of the I-Share System Administration documentation, available from <http://www.carli.illinois.edu/sites/files/i-share/documentation/secure/cat.pdf>, for the recommended settings for the EXPRESS bulk import rule and its corresponding duplicate detection profile.

### Express Mode Data Entry Examples:

The following examples are to be considered illustrative only. In particular, the data entered in the 049 \$a and \$l represent this library's local policies for assigning locations and item types. You should follow your own library's policies when entering any library-specific data in your OCLC transactions.

#### Express Mode Example #1:

OCLC Bib record contains:

```
090    $a PS3505.A87 $b D4
049    $a ABCD $l bk1 $p 31234006921506
```

This transaction will result in the bib record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's EXPRESS bulk import rule, will also generate a MFHD in Voyager that contains the following 852 field:

```
852 0  $b main $h PS3505.A87 $i D4
```

This MFHD will contain the following default MFHD 008 field (fixed fields):

```
Receipt status = 0
Method of acquisition = u
Cancellation date = | | |
General retention policy = 8
Specific retention policy - policy type = <blank>
Specific retention policy - number of units = <blank>
Specific retention policy - unit type = <blank>
Completeness = 4
Number of copies = 001
Lending policy = u
Reproduction policy = u
Language = | | |
Copy report = 0
Date of report = 000000
```

The item record linked to this MFHD will contain the following fields:

Barcode: 31234006921506  
Permanent location: <Location display name for location code "main">  
Item type: <Item type display name for item type "Book1">  
Copy: 1  
Pieces: 1  
Price: \$0.00

All other fields in the item record are blank.

### Express Mode Example #2:

OCLC Bib record contains:

092 \$a 297 \$b .M999  
092 \$a 297 \$b .M987o  
049 \$a XYZR \$l bkn

This transaction will result in the bib record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's EXPRESS bulk import rule, will generate a MFHD in Voyager that contains the following 852 field:

852 1 \$b ref \$h 297 \$i .M987o

This MFHD will also contain the same MFHD 008 field (fixed fields) as described in Express Mode Example #1.

This library's cataloging policy is to assign the call number prefix of "REF." to all materials cataloged in Voyager location code "ref". To accomplish this, staff manually adds the text REF. to the MFHD 852 \$k after the MFHD is created by the Express Mode transaction.

The item record linked to this MFHD will contain the following fields:

Barcode: <blank>  
Permanent location: <Location display name for location code "ref">  
Item type: <Item type display name for item type "BookN">  
Copy: 1  
Pieces: 1  
Price: \$0.00

All other fields in the item record are blank.

### Express Mode Example #3 (bib represents a print title that also contains an 856 field for the electronic version; this library uses the single record cataloging approach for its electronic resources):

OCLC Bib record contains:

086 \$a ED 1.322/2:SCH 6/6  
049 \$a ABCG \$l bkn  
856 4 \$u <http://purl.access.gpo.gov/GPO/LPS36012>

This transaction will result in the bib record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's EXPRESS bulk import rule (which includes

selecting both of the options for copying 8xx fields into the MFHD), will generate a MFHD in Voyager that contains the following 8xx fields:

```
852 3 $b doc $h ED 1.322/2:SCH 6/6
856 4 $u http://purl.access.gpo.gov/GPO/LPS36012
```

This MFHD will also contain the same MFHD 008 field (fixed fields) as described in Express Mode Example #1.

The item record (for the print version) linked to this MFHD will contain the following fields:

```
Barcode: <blank>
Permanent location: <Location display name for location code "doc">
Item type: <Item type display name for item type "BookN">
Copy: 1
Pieces: 1
Price: $0.00
```

All other fields in the item record are blank.

## VI. Express Replace Mode

This mode is designed to make it easy for libraries to create the most straightforward holdings in Voyager with a minimum amount of coding in an OCLC record, while simultaneously replacing the content of the existing bib record with the content of the incoming bib record. If the library wishes to replace the content of an existing bib record but not generate additional holdings, the library should use No Holdings Replace Mode instead of this mode.

MARC Split recognizes Express Replace Mode by the presence of 049 \$a <OCLC holding code> and 049 \$r REP in a bibliographic record. Data entry in the 049 \$r is not case sensitive. However, data entry in the 049 \$a is case sensitive.

For example:

```
049 $a ABCD $r rep
049 $a ABCD $r REP
```

The duplicate detection profile associated with the Express Replace Mode (EXPRREP) bulk import rule determines if the incoming record is new to the database. By default, if the incoming bib is not identified as a duplicate, it will be added to the database. If the incoming bib is identified as a duplicate, the incoming bib replaces/overlays the content of the existing bib.

If the EXPRREP bulk import rule has the option for "Create MFHD for existing Bibs" selected, then bulk import will create a MFHD and item record by deriving data from the following bib record 049 subfields:

```
$a The OCLC holding symbol, which is mapped to a Voyager location code
$l The Voyager item type code abbreviation
$p The barcode number
```

Only one 049 \$a is valid per OCLC transaction. Because the MFHD standard calls for a new MFHD in the cases of different locations or different call numbers, bulk import will not attempt to create more than one MFHD per OCLC transaction. If the cataloging situation calls for replacing an existing bib record and also for creating MFHDs for more than one location or call number, the library has two options:

(1) The library can elect to replace the existing bib record via the OCLC transaction by using No Holdings Replace Mode, and create all appropriate holdings via the cataloging client.

(2) The library can perform multiple Express Replace Mode transactions using the same bib record. The content of the existing bib will be replaced with each subsequent transaction, and a new MFHD and item record will be added to the local database for each subsequent Express Replace Mode transaction, as long as the library has checked the "Create MFHD for existing Bibs" option in the EXPRREP bulk import rule in Voyager SysAdmin.

The Voyager item type code abbreviation must be entered in 049 \$l (that's the letter L, not the number 1). The list of valid Voyager item type code abbreviations is included in Appendix A of this document. Note that the data entry in this subfield is case sensitive. If bulk import finds an invalid item type code abbreviation in 049 \$l, the item record's item type will be assigned based on the "wildcard" item type entered in the Express Replace Mode bulk import rule's Mapping table value. If no 049 \$l data are entered in an individual bib record, the program will also use this "wildcard" value as the default Voyager item type.

The item's barcode number should be entered in 049 \$p. Bulk import will load the data found in 049 \$p exactly as entered into the item record's barcode field. No brackets or punctuation should be entered in 049 \$p. The entire barcode number must be entered; bulk import will not expand an abbreviated barcode number entered in 049 \$p. No more than one barcode number may be entered in this subfield.

If a barcode number is not entered in 049 \$p, bulk import will still create the MFHD and item record, but the item record will not contain a barcode number. A message is written to the log file warning that a barcode was not found in the transaction. A barcode number can be added to the item record via the Voyager cataloging client after the item has been added to the database via bulk import.

Items can circulate in the local Voyager database without a barcode number in the item record, but materials sent to another I-Share library to fill a request must have a physical barcode attached to the piece, and the item record in Voyager must contain the corresponding barcode number.

IMPORTANT NOTE: there are some limitations in the current Voyager bulk import functionality that apply to Express Replace Mode transactions:

- Current Voyager bulk import functionality does not support the creation of an automatic call number prefix based on the input of a selected OCLC holding code.

If libraries require call number prefixes via OCLC produce or update transactions along with replacing the content of an existing bib record, there are two alternatives:

(1) The library can do a No Holdings Replace Mode transaction and manually add all of the holdings information via the cataloging client, after the bib record has been loaded/replaced in the Voyager database.

(2) The library can do an Embedded Holdings Replace Mode transaction to replace the bib and create a MFHD/item record in Voyager via the OCLC transaction. The library would include the call number prefix in 852 \$k. See section VIII for more information on Embedded Holdings Replace Mode transactions.

- Current Express Replace Mode bulk import functionality does not support adding a MFHD 852 \$t field at all. There is no way to change this default in the current version of bulk import.
- The Voyager location code will be derived from the OCLC holding symbol in 049 \$a. Since some libraries have more Voyager locations than OCLC holding symbols, Express Replace Mode can be used only for

items in locations that can be derived from 049 \$a. If the library needs to replace a bib and also create a MFHD/item for a Voyager location that cannot be derived from 049 \$a, the library can perform an Embedded Holdings Replace Mode transaction (see section VIII for more information).

- This mode will always assume that each individual MFHD created represents a single-piece title with a single MFHD and item record. It does not create holdings for multiple copies, volumes, or serial items. If the library has a cataloging situation that calls for replacing an existing bib and creating multiple copies, volumes, or serial items, the library can use No Holdings Replace Mode (see section IV) and enter the MFHD(s) and item records directly in Voyager or the library can perform an Embedded Holdings Replace Mode transaction (see section VIII).
- If the library selects the “Create MFHD for existing Bibs” option in the EXPRREP bulk import rule in Voyager SysAdmin, an additional MFHD/item record is created for each OCLC transaction on the same bib done in Express Replace Mode. Bulk import will not add new holding lines or item records to an existing MFHD in the local database, but will create a new MFHD/item record, even when the existing MFHD’s location and call number are identical to the new MFHD’s location and call number.

The call number will be taken from the first appropriate field that is present in the bib record, as defined by the call number hierarchy used in the EXPRREP bulk import rule. If there are multiple call numbers with the same field tag in the bib record, bulk import will use the last one found in the bib record.

With Voyager version 2001.2 (and higher)’s enhanced bulk import functionality, it is possible to copy MFHD fields found in a bib record into a MFHD when it is created. This includes the 856 field, which by the MARC standards can be a bib record field and/or a MFHD field. In order for bulk import to copy the 856 field into a MFHD in an Express Replace Mode transaction, the EXPRREP bulk import rule must have enabled both the options for “Copy 852-855, 863-878 Fields from Bib to MFHD” and “Copy 856 Field from Bib to MFHD.” While this seems odd in an “express” rule, it is needed because the “Copy 856 Field from Bib to MFHD” option remains grayed out (i.e., not available) unless the “Copy 852 ...” option is also checked.

NOTE: Libraries should not enter 852 \$b in Express Replace Mode transactions, because MARC Split will treat the transaction as Embedded Holdings Replace Mode. However, with the options above selected and when the 856 is the only 85x field included in the bib, the 856 field(s) will be copied into the MFHD when it is created by bulk import, and the transaction will be processed as Express Replace Mode.

With Voyager version 7.1.0 (and higher), bulk import will create the item record with a default copy number of 1. Prior to this version of Voyager, the copy number added via bulk import was always zero.

NOTE: It is the library’s responsibility to have a corresponding EXPRREP bulk import rule and appropriate bib record duplicate detection profile established in the Voyager SysAdmin client prior to performing any Express Replace Mode transactions on OCLC. If an OCLC record is processed in Express Replace Mode, but the corresponding SysAdmin setup is not in place, bulk import of all Express Replace Mode transactions from that day’s EDX file will cease immediately. There will be one line in the log file: “Failed to retrieve parameters from import\_rule [EXPRREP].” See section XII for more information about bulk import log file messages.

See the Cataloging section of the I-Share System Administration documentation, available from <http://www.carli.illinois.edu/sites/files/i-share/documentation/secure/cat.pdf>, for the recommended settings for the EXPRREP bulk import rule and its corresponding duplicate detection profile.

## Express Replace Mode Data Entry Examples:

The following examples are to be considered illustrative only. In particular, the data entered in the 049 \$a and \$l represents this library's local policies about assigning locations and item types. You should follow your own library's policies when entering any library-specific data in your OCLC transactions.

Also, additional MFHDs and items are created for existing bibs because this library selected the "Create MFHD for existing Bibs" option in the EXPRREP bulk import rule in Voyager SysAdmin. If the library does not have this option checked in the EXPRREP bulk import rule and there is an existing bib in the local database that matches the incoming transaction, the content of the existing bib is replaced with the incoming bib, but no additional MFHDs or items are created by bulk import.

### Express Replace Mode Example #1:

OCLC Bib record contains:

```
090    $a PN2287.A48 $b T39 1989
049    $a ABCD $l bk1 $p 31234006921599 $r rep
```

This transaction will result in an existing bib record being replaced or the incoming record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's EXPRREP bulk import rule, will also generate a MFHD in Voyager that contains the following 852 field:

```
852 0  $b main $h PN2287.A48 $i T39 1989
```

This MFHD will contain the following default MFHD 008 field (fixed fields):

```
Receipt status = 0
Method of acquisition = u
Cancellation date = | | | |
General retention policy = 8
Specific retention policy - policy type = <blank>
Specific retention policy - number of units = <blank>
Specific retention policy - unit type = <blank>
Completeness = 4
Number of copies = 001
Lending policy = u
Reproduction policy = u
Language = | | |
Copy report = 0
Date of report = 000000
```

The item record linked to this MFHD will contain the following fields:

```
Barcode: 31234006921599
Permanent location: <Location display name for location code "main">
Item type: <Item type display name for item type "Book1">
Copy: 1
Pieces: 1
Price: $0.00
```

All other fields in the item record are blank.

## Express Replace Mode Example #2:

OCLC Bib record contains:

```
092    $a 792.7 $b .H999
092    $a 792.7 $b .H987x
049    $a XYZB $l bkn $r rep
```

This transaction will result in an existing bib record being replaced or the incoming record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's EXPRREP bulk import rule, will generate a MFHD in Voyager that contains the following 852 field:

```
852 1  $b ref $h 792.7 $i .H987x
```

This MFHD will also contain the same MFHD 008 field (fixed fields) as described in Express Replace Mode Example #1.

This library's cataloging policy is to assign the call number prefix of "REF." to all materials cataloged in Voyager location code "ref". To accomplish this, staff manually adds the text REF. to the MFHD 852 \$k after the MFHD is created by the Express Replace Mode transaction.

The item record linked to this MFHD will contain the following fields:

```
Barcode: <blank>
Permanent location: <Location display name for location code "ref">
Item type: <Item type display name for item type "BookN">
Copy: 1
Pieces: 1
Price: $0.00
```

All other fields in the item record are blank.

## Express Replace Mode Example #3 (bib represents a print title that also contains an 856 field for the electronic version; this library uses the single record cataloging approach for its electronic resources):

OCLC Bib record contains:

```
086    $a ED 1.322/2:SCH 6/6
049    $a ABCG $l bkn $r REP
856 4  $u http://purl.access.gpo.gov/GPO/LPS36012
```

This transaction will result in the bib record being replaced or, by default, the incoming bib is added if it is not already present in the Voyager database. The coding above, in conjunction with this library's EXPRREP bulk import rule (which includes selecting both of the options for copying 8xx fields into the MFHD), will generate a MFHD in Voyager that contains the following 8xx fields:

```
852 3  $b doc $h ED 1.322/2:SCH 6/6
856 4  $u http://purl.access.gpo.gov/GPO/LPS36012
```

This MFHD will also contain the same MFHD 008 field (fixed fields) as described in Express Mode Example #1.

The item record (for the print version) linked to this MFHD will contain the following fields:

Barcode: <blank>

Permanent location: <Location display name for location code "doc">

Item type: <Item type display name for item type "BookN">

Copy: 1

Pieces: 1

Price: \$0.00

All other fields in the item record are blank.

## VII. Embedded Holdings Mode

The *MARC21 Format for Holdings Data* standard says that the holding fields can be "embedded" in MARC bib records. In other words, the various MFHD fields (852, 853, 866 etc.) can be added to a bib record in OCLC, pass any OCLC validation routines, and be used by the local system to create MFHD records when the bib records are added to the local database.

Some of the Embedded Holdings Mode functionality that ILC SO had under its DRA system has been included in Voyager version 2001.2 (and higher).

In the I-Share Voyager environment, this mode is designed to add a bib record and allow for the creation of a more complex MFHD record via OCLC update or produce transactions than is available with Express Mode. However, please note the limitations with this mode detailed below.

MARC Split recognizes Embedded Holdings Mode by the presence of an 049 \$a <OCLC holding code> and an 852 \$b containing a valid Voyager location code. Data entry in both the 049 \$a and 852 \$b is case sensitive.

The duplicate detection profile associated with the Embedded Holdings Mode (EMBED) bulk import rule determines if the incoming record is new to the database. In Embedded Holdings Mode, incoming bibs that are identified as duplicates are rejected/discarded from the load, with a message written to the log file. If the bib is rejected/discarded and library has not selected the "Create MFHDs on existing Bibs" option in SysAdmin for the EMBED bulk import rule, bulk import will not create a MFHD/item for the bib.

If the bib is new to the database, or is a duplicate but the library has selected the "Create MFHDs on existing Bibs" option in the EMBED bulk import rule in SysAdmin, bulk import will create a MFHD and item record by deriving data from the following fields/subfields:

049 \$a <must contain a valid I-Share library OCLC holding code for processing>

049 \$l The Voyager item type code abbreviation

049 \$p The barcode number

852 \$b The Voyager location code (not the Voyager location name)

<additional MFHD fields can be added as required. See the detailed examples below.>

NOTE: the library must include the call number (if one is to be created) in the appropriate MFHD 852 subfields. In Embedded Holdings Mode, call numbers are not copied from the 05x, 08x, or 09x fields into the MFHD. Therefore, the call number must be explicitly entered in the 852 field to be copied into the MFHD created by bulk import.

Also, the 852 field's first indicator must be present and correct for the classification scheme represented in the call number (e.g., Dewey, LC, etc.). Bulk import will copy the entire 852 field (including all subfields) into the MFHD exactly as it is entered in the bib, even if the data entry is incorrect. This includes indicator values as well as subfield coding.



For example, if a library enters a Dewey call number in 852 \$h and \$i, but the 852 field's indicator is set at 0 instead of 1, bulk import will copy the incorrect indicator into the MFHD. When the MFHD is saved to Voyager, however, the indexing on the call number entered in this example will revert to Other, because the call number did not pass Voyager's internal validation for an LC call number (based on the indicator value entered in the 852). No error messages are written to the log file for this scenario. Bulk import does not reset the 852 indicator to 8 in this scenario, so staff need to be sure to enter the correct 852 indicator value for the classification scheme being used in the 852 \$h and \$i.

In addition, if the call number entered by staff is copied from an 0xx field into the 852, staff should be sure to edit the 852 subfield codes properly (e.g., from 0xx \$a and \$b to 852 \$h and \$i). Bulk import will copy the 852 as entered into the MFHD, even if the cutter information is incorrectly coded as \$b instead of \$i. No error messages are written to the log file for this scenario. However, the indexing on the call number will include only the \$h data, and not the cutter information because it was not saved to the database in 852 \$i.

Library staff are strongly encouraged to consult the MFHD standard documentation for information about all valid MFHD tags, indicators, fields, and subfields.

If the cataloging situation calls for including additional 85x-87x fields in the MFHD besides the 852 (e.g., for multi-volume titles), the appropriate MFHD fields should be added to the bib record, and they will be copied as entered into the MFHD.

Only one 852 \$b is valid per OCLC transaction. Because the MFHD standard calls for a new MFHD in the cases of different locations or different call numbers, bulk import will not attempt to create more than one MFHD per OCLC transaction. If the cataloging situation calls for more than one location or call number to be created, the library has a few options:

- (1) The library can elect to create all appropriate holdings via the cataloging client (adding the bib via No Holdings Mode).
- (2) The library can elect to create the first bib/MFHD/item record via Embedded Holdings Mode, and then create subsequent MFHDs/items via the cataloging client.
- (3) The library can perform multiple Embedded Holdings Mode transactions using the same bib record. A new MFHD and item record will be added to the local database for each subsequent Embedded Holdings Mode transaction, as long as the library has checked the "Create MFHD for existing Bibs" option in the EMBED bulk import rule in Voyager SysAdmin. However, the existing bib record will not be replaced with each subsequent transaction; in Embedded Holdings Mode, the incoming bib is rejected by bulk import if it matches an existing bib in the local database.

The Voyager item type code abbreviation must be entered in 049 \$l (that's the letter L, not the number 1). The list of valid Voyager item type code abbreviations is included in Appendix A of this document. Note that the data entry in this subfield is case sensitive. If bulk import finds an invalid item type code abbreviation in 049 \$l, the item record's item type will be assigned based on the "wildcard" item type entered in the Embedded Holdings Mode bulk import rule's Mapping table value. If no 049 \$l data are entered in an individual bib record, the program will also use this "wildcard" value as the default Voyager item type.

A single item's barcode number can be entered in 049 \$p. Bulk import will load the data found in 049 \$p exactly as entered into the item record's barcode field. No brackets or punctuation should be entered in 049 \$p. The entire barcode number must be entered; bulk import will not expand an abbreviated barcode number entered in 049 \$p. No more than one barcode number may be entered in this subfield.

If a barcode number is not entered in 049 \$p, bulk import will still create the MFHD and item record, but the item record will not contain a barcode number. A message is written to the log file warning that a

barcode was not found in the transaction. A barcode number can be added to the item record via the Voyager cataloging client after the item has been added to the database via bulk import.

Items can circulate in the local Voyager database without a barcode number in the item record, but materials sent to another I-Share library to fill a request must have a physical barcode attached to the piece, and the item record in Voyager must contain the corresponding barcode number.

IMPORTANT NOTE: there are some limitations in the current Voyager bulk import functionality that apply to Embedded Holdings Mode transactions:

- Even though the MFHD may be created so that multiple volumes are represented in the MFHD, the Voyager 2001.2 (and higher) version of bulk import will create only one item record that is linked to the MFHD. This item record will not have its enumeration and/or chronology fields populated by data from the MFHD. Libraries will need to manually enter enumeration/chronology data to the item record as well as manually enter any additional item records in the Voyager cataloging client, as required by the cataloging situation.
- Even though using Embedded Holdings Mode will allow the data entry of an explicit copy number in the MFHD 852 \$t, bulk import will set the copy number in the item record to copy 1.

OTHER CAVEATS FOR EMBEDDED HOLDINGS MODE:

- Data entry in the 852 \$b must represent a valid Voyager location code that is found in the local database's SysAdmin/Cataloging/Bulk Import Rules/<rule code> EMBED /Mapping/MARC Loc field. To be valid, the code entered in the bib record's 852 \$b must match the entries in SysAdmin exactly, including punctuation and case-sensitivity. If a typographical error is made when entering the 852 \$b in the OCLC transaction, bulk import will create a MFHD but the MFHD and item record's location will be assigned based on the "wildcard" location value entered in the Embedded Holdings Mode bulk import rule's Mapping table.
- The bib record must contain an 852 \$b for the transaction to be processed as Embedded Holdings Mode. If no 852 \$b location is included in an individual OCLC transaction, the transaction will be processed by bulk import as an Express Mode transaction, even if there are other MFHD fields embedded in the bib record (e.g., 85x/86x pairs, 856, or 866 fields).

NOTE: It is the library's responsibility to have a corresponding EMBED bulk import rule and appropriate bib record duplicate detection profile established in the Voyager SysAdmin client prior to performing any Embedded Holdings Mode transactions on OCLC. If an OCLC record is processed in Embedded Holdings Mode, but the corresponding SysAdmin setup is not in place, bulk import of all Embedded Holdings Mode transactions from that day's EDX file will cease immediately. There will be one line in the log file: "Failed to retrieve parameters from import\_rule [EMBED]." See section XII for more information about bulk import log file messages.

See the Cataloging section of the I-Share System Administration documentation, available from <<http://www.carli.illinois.edu/sites/files/i-share/documentation/secure/cat.pdf>>, for the recommended settings for the EMBED bulk import rule and its corresponding duplicate detection profile.

## Embedded Holdings Mode Data Entry Examples:

The following examples are to be considered illustrative only. Libraries should refer to the *MARC21 Format for Holdings Data* for descriptions of the MFHD fields, subfields, and indicators. In particular, the data entered in the 049 \$l and 852 \$b represents this library's local policies about assigning item types and locations. You should follow your own library's policies when entering any library-specific data in your OCLC transactions.

### Embedded Holdings Mode Example #1 (simple single copy MFHD and item):

OCLC Bib record contains:

```
049   $a ABCD $l bk1 $p 31234112225678
050 00 $a GV1785.A83 $b C76 1997
852 0  $b main $h GV1785.A83 $i C77 1997x $t 1
```

This transaction will result in the bib record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's EMBED bulk import rule, will also generate a MFHD in Voyager that contains the following 852 field:

```
852 0  $b main $h GV1785.A83 $i C77 1997x $t 1
```

This MFHD will contain the following default MFHD 008 field (fixed fields):

```
Receipt status = 0
Method of acquisition = u
Cancellation date = | | | |
General retention policy = 8
Specific retention policy - policy type = <blank>
Specific retention policy - number of units = <blank>
Specific retention policy - unit type = <blank>
Completeness = 4
Number of copies = 001
Lending policy = u
Reproduction policy = u
Language = | | |
Copy report = 0
Date of report = 000000
```

The item record linked to this MFHD will contain the following fields:

```
Barcode: 31234112225678
Permanent location: <Location display name for location code "main">
Item type: <Item type display name for item type "Book1">
Copy: 1
Pieces: 1
Price: $0.00
```

All other fields in the item record are blank.

**Embedded Holdings Mode Example #2 (Voyager location code not mapped from 049 \$a; also, a call number prefix is needed):**

OCLC Bib record contains:

049 \$a ABCD \$l bk1 \$p 31234112226789  
852 1 \$b veryspec \$k VERYSPEC. \$h 759.13 \$i B43 2000 \$t 1

This transaction will result in the bib record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's EMBED bulk import rule, will generate a MFHD in Voyager that contains the following 852 field:

852 1 \$b veryspec \$k VERYSPEC. \$h 759.13 \$i B43 2000 \$t 1

This MFHD will also contain the same default MFHD 008 field (fixed fields) as the record detailed in Embedded Holdings Example 1 above.

The item record linked to this MFHD will contain the following fields:

Barcode: 31234112226789  
Permanent location: <Location display name for location code "veryspec">  
Item type: <Item type display name for item type "Book1">  
Copy: 1  
Pieces: 1  
Price: \$0.00

All other fields in the item record are blank.

**Embedded Holdings Mode Example #3 (Create a MFHD for a 3 volume set for Reference):**

049 \$a ABCF \$l bkn  
852 0 \$b ref \$k REF. \$h Z998 \$i .H42 1997 \$t 1  
853 23 \$8 1 \$a v.  
863 40 \$8 1.1 \$a 1  
863 40 \$8 1.2 \$a 2  
863 40 \$8 1.3 \$a 3

NOTE: in this example, the library is not entering a barcode number in 049 \$p because only a single item record will be created by bulk import. Library staff will add the barcode numbers and item level Enumeration data to the item records as they are manually edited/created in the cataloging client.

This transaction will result in the bib record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's EMBED bulk import rule, will generate a MFHD in Voyager that contains the following MFHD fields:

852 0 \$b ref \$k REF. \$h Z998 \$i .H42 1997 \$t 1  
853 23 \$8 1 \$a v.  
863 40 \$8 1.1 \$a 1  
863 40 \$8 1.2 \$a 2  
863 40 \$8 1.3 \$a 3

This MFHD will also contain the same default MFHD 008 field (fixed fields) as the record detailed in Embedded Holdings Example 1 above.

The single item record linked to this MFHD will contain the following fields:

Barcode: <blank>  
Permanent location: <Location display name for location code "ref">  
Item type: <Item type display name for item type "BookN">  
Copy: 1  
Pieces: 1  
Price: \$0.00

All other fields in the item record are blank.

Note that library staff will need to manually add information via the cataloging client to the Enumeration/Chronology fields in the single item record added by bulk import. In addition, library staff will want to add additional item records via the cataloging client for the items not created via bulk import, and manually input the Enumeration/Chronology data into these new item records as well.

**Embedded Holdings Mode Example #4 (Create a MFHD for an annual serial title; this is the first issue cataloged by the library):**

049 \$a ABCG \$l serlr \$p 31234112221515  
852 0 \$b per \$k PER. \$h AP2 \$i .N6777 \$t 1  
853 23 \$8 1 \$a (yr.)  
863 40 \$8 1.100 \$a 2003

Note: The sequence number assigned in 863 \$8 ("100") is intentionally high, so that next year's issue can be added as sequence number 99, the following year's issue added as 98, etc. so that the most recent issues display first. It should be noted, however, that WebVoyage displays 86x information from the MFHD in the order that the fields are stored in the MFHD, rather than by explicitly using the sequence number. Libraries are encouraged to use a sequence number in their MFHDs, though, because it is hoped that future enhancements to Voyager will include relying on the sequence number for display purposes.

This transaction will result in the bib record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's EMBED bulk import rule, will generate a MFHD in Voyager that contains the following MFHD fields:

852 0 \$b per \$k PER. \$h AP2 \$i .N6777 \$t 1  
853 23 \$8 1 \$a (yr.)  
863 40 \$8 1.100 \$a 2003

This MFHD will also contain the same default MFHD 008 field (fixed fields) as the record detailed in Embedded Holdings Mode Example 1 above.

The item record linked to this MFHD will contain the following fields:

Barcode: 31234112221515  
Permanent location: <Location display name for location code "per">  
Item type: <Item type display name for item type "SerialLR">  
Copy: 1  
Pieces: 1  
Price: \$0.00

All other fields in the item record are blank.

Note that library staff will need to manually add information to the Enumeration/Chronology fields in the item record via the cataloging client, after the item is added to the database by bulk import.

**Embedded Holdings Mode Example #5 (Create a MFHD for a quarterly serial title; all issues for two years added at the same time, and including a summary holdings statement):**

049 \$a ABCG \$l sern  
852 0 \$b per \$k PER. \$h AP2 \$i .T87 \$t 1  
866 1 \$8 1 \$a v.1(2002)-  
853 23 \$8 2 \$a v. \$b pt. \$i (yr.)  
863 40 \$8 2.993 \$a 2 \$b 4 \$i 2003  
863 40 \$8 2.994 \$a 2 \$b 3 \$i 2003  
863 40 \$8 2.995 \$a 2 \$b 2 \$i 2003  
863 40 \$8 2.996 \$a 2 \$b 1 \$i 2003  
863 40 \$8 2.997 \$a 1 \$b 4 \$i 2002  
863 40 \$8 2.998 \$a 1 \$b 3 \$i 2002  
863 40 \$8 2.999 \$a 1 \$b 2 \$i 2002  
863 40 \$8 2.1000 \$a 1 \$b1 \$i 2002

Note: The sequence numbers assigned in 863 \$8 are intentionally high, so that the following year's issues can be added so that the most recent issues display first. It should be noted, however, that WebVoyage displays 86x information from the MFHD in the order that the fields are stored in the MFHD, rather than by explicitly using the sequence number. Libraries are encouraged to use a sequence number in their MFHDs, though, because it is hoped that future enhancements to Voyager will include relying on the sequence number for display purposes.

NOTE: in this example, the library is not entering a barcode number in 049 \$p because only a single item record will be created by bulk import. Library staff will add the barcode numbers and item level Enumeration data to the item records as they are manually edited/created in the cataloging client.

This transaction will result in the bib record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's EMBED bulk import rule, will generate a MFHD in Voyager that contains the following MFHD fields:

852 0 \$b per \$k PER. \$h AP2 \$i .T87 \$t 1  
853 23 \$8 2 \$a v. \$b pt. \$i (yr.)  
863 40 \$8 2.993 \$a 2 \$b 1 \$i 2003  
853 23 \$8 2 \$a v. \$b pt. \$i (yr.)  
863 40 \$8 2.993 \$a 2 \$b 4 \$i 2003  
863 40 \$8 2.994 \$a 2 \$b 3 \$i 2003  
863 40 \$8 2.995 \$a 2 \$b 2 \$i 2003  
863 40 \$8 2.996 \$a 2 \$b 1 \$i 2003  
863 40 \$8 2.997 \$a 1 \$b 4 \$i 2002  
863 40 \$8 2.998 \$a 1 \$b 3 \$i 2002  
863 40 \$8 2.999 \$a 1 \$b 2 \$i 2002  
863 40 \$8 2.1000 \$a 1 \$b1 \$i 2002  
866 1 \$8 1 \$a v.1(2002)-

NOTE: when this MFHD is created in Voyager, the order of the individual 863 fields is retained from the original data entry in the bib, but the 866 field is added after the 853/863 fields.

This MFHD will also contain the same default MFHD 008 field (fixed fields) as the record detailed in Embedded Holdings Example 1 above.

The single item record linked to this MFHD will contain the following fields:

Barcode: <blank>  
Permanent location: <Location display name for location code "per">  
Item type: <Item type display name for item type "SerialN">  
Copy: 1  
Pieces: 1  
Price: \$0.00

All other fields in the item record are blank.

Note that library staff will need to manually add information via the cataloging client to the Enumeration/Chronology fields in the single item record added by bulk import. In addition, library staff will want to add additional item records via the cataloging client for the items not created via bulk import, and manually input the Enumeration/Chronology data into these new item records as well.

**Embedded Holdings Mode Example #6 (Create a MFHD for copy 1 of a monograph, with a public note):**

049 \$a ABCD \$l bk1 \$p 31234006921512  
852 1 \$b main \$h 813 \$i C286YRE \$t 1 \$z Gift of Friends of the Library

This transaction will result in the bib record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's EMBED bulk import rule, will also generate a MFHD in Voyager that contains the following 852 field:

852 1 \$b main \$h 813 \$i C286YRE \$t 1 \$z Gift of Friends of the Library

This MFHD will also contain the same default MFHD 008 field (fixed fields) as the record detailed in Example 1 above.

The item record linked to this MFHD will contain the following fields:

Barcode: 31234006921512  
Permanent location: <Location display name for location code "main">  
Item type: <Item type display name for item type "Book1">  
Copy: 1  
Pieces: 1  
Price: \$0.00

All other fields in the item record are blank.

**Embedded Holdings Example #7 (Create a MFHD for copy 1 of a monograph, with a staff/non-public note):**

049 \$a ABCD \$l bk1 \$p 31234006921513  
852 1 \$b main \$h 813 \$i C286YR \$t 1 \$x Gift of Friends of the Library

This transaction will result in the bib record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's EMBED bulk import rule, will also generate a MFHD in Voyager that contains the following 852 field:

852 1 \$b main \$h 813 \$i C286YR \$t 1 \$x Gift of Friends of the Library

This MFHD will also contain the same default MFHD 008 field (fixed fields) as the record detailed in Embedded Holdings Example 1 above.

The item record linked to this MFHD will contain the following fields:

Barcode: 31234006921513

Permanent location: <Location display name for location code "main">

Item type: <Item type display name for item type "Book1">

Copy: 1

Pieces: 1

Price: \$0.00

All other fields in the item record are blank.

**Embedded Holdings Example #8 (Create a MFHD for copies 1 and 2, both receiving the same call number and going to the same location in the library):**

NOTE: this example requires two separate OCLC transactions.

Transaction 1 Example:

049 \$a ABCD \$l bk1 \$p 31234006921514

852 1 \$b fic \$h 813.5 \$i T187 \$t 1

Transaction 2 Example:

049 \$a ABCD \$l bk1r \$p 31234006921515

852 1 \$b fic \$h 813.5 \$i T187 \$t 2

Transaction 1 will result in the bib record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's EMBED bulk import rule, will also generate a MFHD in Voyager that contains the following 852 field:

852 1 \$b fic \$h 813.5 \$i T187 \$t 1

This MFHD will also contain the same default MFHD 008 field (fixed fields) as the record detailed in Embedded Holdings Example 1 above.

The item record linked to this MFHD will contain the following fields:

Barcode: 31129006921514

Permanent location: <Location display name for location code "fic">

Item type: <Item type display name for item type "Book1">

Copy: 1

Pieces: 1

Price: \$0.00

All other fields in the item record are blank.



Transaction 2 will result in the bib record being rejected by bulk import. The coding above, in conjunction with this library's EMBED bulk import rule (which includes enabling the option for "Create MFHDs for existing Bibs"), will also generate a MFHD in Voyager that contains the following 852 field:

```
852 1 $b fic $h 813.5 $i T187 $t 2
```

This MFHD will also contain the same default MFHD 008 field (fixed fields) as the record detailed in Embedded Holdings Example 1 above.

The item record linked to this MFHD will contain the following fields:

Barcode: 31234006921515

Permanent location: <Location display name for location code "fic">

Item type: <Item type display name for item type "BookLR">

Copy: 1

Pieces: 1

Price: \$0.00

All other fields in the item record are blank.

Because this library's policy is to keep item level copy numbers in synch with the 852 \$t value in the MFHD, staff will need to edit the copy number in the item record after the item is added by bulk import, from the default copy 1 to copy 2.

#### **Embedded Holdings Mode Example #9 (Create a MFHD for separately shelved score and parts):**

```
049 $a ABCM $l sco1
```

```
852 0 $b musrm $k MUSIC. $h M457.4.H48 $i T83 2003 $t 1
```

```
853 23 $8 1 $a (unit)
```

```
863 40 $8 1.1 $a score
```

```
863 40 $8 1.2 $a parts
```

Note: in this example, the library is not entering barcode numbers because only a single item record will be created by bulk import. Library staff will add the barcode numbers to the item record(s) as they are manually edited/created in the cataloging client.

This transaction will result in the bib record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's EMBED bulk import rule, will generate a MFHD in Voyager that contains the following MFHD fields:

```
852 0 $b musrm $k MUSIC. $h M457.4.H48 $i T83 2003 $t 1
```

```
853 23 $8 1 $a (unit)
```

```
863 40 $8 1.1 $a score
```

```
863 40 $8 1.2 $a parts
```

This MFHD will also contain the same default MFHD 008 field (fixed fields) as the record detailed in Embedded Holdings Example 1 above.

The single item record linked to this MFHD will contain the following fields:

Barcode: <blank>

Permanent location: <Location display name for location code "musrm">

Item type: <Item type display name for item type "Score1">

Copy: 1

Pieces: 1

Price: \$0.00

All other fields in the item record are blank.

Note that library staff will need to manually add information via the cataloging client to the Enumeration field ("score") in the single item record added by bulk import. In addition, library staff will want to add an additional item record via the cataloging client for the "parts", and manually input the Enumeration data into this new item record as well.

## VIII. Embedded Holdings Replace Mode

The *MARC21 Format for Holdings Data* standard says that the holding fields can be "embedded" in MARC bib records. In other words, the various MFHD fields (852, 853, 866 etc.) can be added to a bib record in OCLC, pass any OCLC validation routines, and be used by the local system to create MFHD records when the bib records are added to the local database.

Some, but not all, of the Embedded Holdings Mode functionality that ILCSO had under its DRA system has been included in Voyager version 2001.2 (and higher). Please note the limitations with this mode detailed below.

In the I-Share Voyager environment, this mode is designed to allow for the overlay/replace of a bib record, while simultaneously creating a more complex MFHD record via OCLC update or produce transactions than is available with Express Replace Mode. If the library wishes to replace the content of an existing bib record but not to generate additional holdings, the library should use No Holdings Replace mode instead of this mode.

MARC Split recognizes Embedded Holdings Replace Mode by the presence of an 049 \$a <OCLC holding code>, the 049 \$r containing the code REP, and an 852 \$b field. Data entry in both the 049 \$a and 852 \$b is case sensitive, while data entry in 049 \$r is not case sensitive.

For example:

049 \$a ABCV \$r rep

049 \$a ABCV \$r REP

852 8 \$b av \$h VID12345 \$t 2

The duplicate detection profile associated with the Embedded Holdings Replace Mode (EMBEDREP) bulk import rule determines if the incoming record is new to the database. By default, if the incoming bib is not identified as a duplicate, it will be added to the database. If the incoming bib is identified as a duplicate, the incoming bib replaces/overlays the content of the existing bib.

If the bib is new to the database, or is a duplicate but the library has selected the “Create MFHDs on existing Bibs” option in SysAdmin’s EMBEDREP bulk import rule, bulk import will create a MFHD and item record by deriving data from the following fields/subfields:

049 \$a <must contain a valid I-Share library holding code for processing>  
049 \$l The Voyager item type code abbreviation  
049 \$p The barcode number  
852 \$b The Voyager location code (not the Voyager location name)  
<additional MFHD fields can be added as required. See the detailed examples below>

NOTE: the library must include the call number (if one is to be created) in the appropriate MFHD 852 subfields. In Embedded Holdings Replace Mode, call numbers are not copied from the 05x, 08x, or 09x fields into the MFHD. Therefore, the call number must be explicitly entered in the 852 field to be copied into the MFHD created by bulk import.

Also, the 852 field’s first indicator must be present and correct for the classification scheme represented in the call number (e.g., Dewey, LC, etc.). Bulk import will copy the entire 852 field (including all subfields) into the MFHD exactly as it is entered in the bib, even if the data entry is incorrect. This includes indicator values as well as subfield coding.

For example, if a library enters a Dewey call number in 852 \$h and \$i, but the 852 field’s indicator is set at 0 instead of 1, bulk import will copy the incorrect indicator into the MFHD. When the MFHD is saved to Voyager, however, the indexing on the call number entered in this example will revert to Other, because the call number did not pass Voyager’s internal validation for an LC call number (based on the indicator value entered in the 852). No error messages are written to the log file for this scenario. Bulk import does not reset the 852 indicator to 8 in this scenario, so staff need to be sure to enter the correct 852 indicator value for the classification scheme being used in the 852 \$h and \$i.

In addition, if the call number entered by staff is copied from an 0xx field into the 852, staff should be sure to edit the 852 subfield codes properly (e.g., from 0xx \$a and \$b to 852 \$h and \$i). Bulk import will copy the 852 as entered into the MFHD, even if the cutter information is incorrectly coded as \$b instead of \$h. No error messages are written to the log file for this scenario. However, the indexing on the call number will include only the \$h data, and not the cutter information because it was not saved to the database in 852 \$i.

Library staff are strongly encouraged to consult the MFHD standard documentation for information about all valid MFHD tags, indicators, fields, and subfields.

If the cataloging situation calls for including additional 85x-87x fields in the MFHD (e.g., for multi-volume titles), the appropriate MFHD fields should be added to the bib record, and they will be copied as entered into the MFHD.

Only one 852 \$b is valid per OCLC transaction. Because the MFHD standard calls for a new MFHD in the cases of different locations or different call numbers, bulk import will not attempt to create more than one MFHD per OCLC transaction. If the cataloging situation calls for more than one location or call number to be created, the library has a few options:

- (1) The library can elect to create all appropriate holdings via the cataloging client (replacing the existing bib via No Holdings Replace Mode).
- (2) The library can elect to create/replace the first bib/MFHD/item record via Embedded Holdings Replace Mode, and then create subsequent MFHDs/items via the cataloging client.

(3) The library can perform multiple Embedded Holdings Replace Mode transactions using the same bib record. A new MFHD and item record will be added to the local database for each subsequent Embedded Holdings Replace Mode transaction, as long as the library has checked the “Create MFHD for existing Bibs” option in the EMBEDREP bulk import rule in Voyager SysAdmin. In addition, the existing bib record will be replaced with each subsequent transaction.

The Voyager item type code abbreviation must be entered in 049 \$l (that’s the letter L, not the number 1). The list of valid Voyager item type code abbreviations is included in Appendix A of this document. Note that the data entry in this subfield is case sensitive. If bulk import finds an invalid item type code abbreviation in 049 \$l, the item record’s item type will be assigned based on the “wildcard” item type entered in the Embedded Holdings Replace Mode bulk import rule’s Mapping table value. If no 049 \$l data are entered in an individual bib record, the program will also use this “wildcard” value as the default Voyager item type.

A single item’s barcode number can be entered in 049 \$p. Bulk import will load the data found in 049 \$p exactly as entered into the item record’s barcode field. No brackets or punctuation should be entered in 049 \$p. The entire barcode number must be entered; bulk import will not expand an abbreviated barcode number entered in 049 \$p. No more than one barcode number may be entered in this subfield.

If a barcode number is not entered in 049 \$p, bulk import will still create the MFHD and item record, but the item record will not contain a barcode number. A message is written to the log file warning that a barcode was not found in the transaction. A barcode number can be added to the item record via the Voyager cataloging client after the item has been added to the database via bulk import.

Items can circulate in the local Voyager database without a barcode number in the item record, but materials sent to another I-Share library to fill a request must have a physical barcode attached to the piece, and the item record in Voyager must contain the corresponding barcode number.

IMPORTANT NOTE: there are some limitations in the current Voyager bulk import functionality that apply to Embedded Holdings Replace Mode transactions:

- Even though the MFHD may be created so that multiple volumes are represented in the MFHD, the 2001.2 (and higher) version of bulk import will create only one item record that is linked to the MFHD. This item record will not have its enumeration and/or chronology fields populated by data from the MFHD. Libraries will need to manually enter enumeration/chronology data to the item record as well as manually enter any additional item records in the Voyager cataloging client, as required by the cataloging situation.
- Even though using Embedded Holdings Replace Mode will allow the data entry of an explicit copy number in the MFHD 852 \$t, bulk import will set the copy number in the item record to copy 1.

OTHER CAVEATS FOR EMBEDDED HOLDINGS REPLACE MODE:

- Data entry in the bib record’s 852 \$b must represent a valid Voyager location code that is found in the local database’s SysAdmin/Cataloging/Bulk Import Rules/<rule code> EMBEDREP /Mapping/MARC Loc field. To be valid, the code entered in the bib record’s 852 \$b must match the entries in SysAdmin exactly, including punctuation and case-sensitivity. If a typographical error is made when entering the 852 \$b in the OCLC transaction, bulk import will create a MFHD but the MFHD and item record’s location will be assigned based on the “wildcard” Voyager location value entered in the Embedded Holdings Replace Mode bulk import rule’s Mapping table.
- A bib record must contain both an 852 \$b and an 049 \$r REP for the transaction to be processed as Embedded Holdings Replace Mode. If no 852 \$b location is included in an individual OCLC transaction, the transaction will be processed by bulk import as an Express Mode transaction (or

Express Replace Mode, if 049 \$r REP is present), even if there are other MFHD fields embedded in the bib record (e.g., 85x/86x pairs, 856, or 866 fields).

- If the library selects the “Create MFHD for existing Bibs” option in the EMBEDREP bulk import rule in Voyager SysAdmin, an additional MFHD/item record is created for each OCLC transaction on the same bib done in Embedded Holdings Replace Mode. Bulk import will not add new holding lines or item records to an existing MFHD in the local database, but will create a new MFHD/item record, even when the existing MFHD’s location and call number are identical to the new MFHD’s location and call number.

NOTE: It is the library’s responsibility to have a corresponding EMBEDREP bulk import rule and appropriate bib record duplicate detection profile established in the Voyager SysAdmin client prior to performing any Embedded Holdings Replace Mode transactions on OCLC. If an OCLC record is processed in Embedded Holdings Replace Mode, but the corresponding SysAdmin setup is not in place, bulk import of all Embedded Holdings Replace Mode transactions from that day’s EDX file will cease immediately. There will be one line in the log file: “Failed to retrieve parameters from import\_rule [EMBEDREP].” See section XII for more information about bulk import log file messages.

See the Cataloging section of the I-Share System Administration documentation, available from <http://www.carli.illinois.edu/sites/files/i-share/documentation/secure/cat.pdf>, for the recommended settings for the EMBEDREP bulk import rule and its corresponding duplicate detection profile.

### **Embedded Holdings Replace Mode Data Entry Examples:**

The following examples are to be considered illustrative only. Libraries should refer to the *MARC21 Format for Holdings Data* for descriptions of the MFHD fields, subfields, and indicators. In particular, the data entered in the 049 \$l and 852 \$b represents this library’s local policies about assigning item types and locations. You should follow your own library’s policies when entering any library-specific data in your OCLC transactions.

Also, additional MFHDs and items are created for existing bibs because this library selected the “Create MFHD for existing Bibs” option in the EMBEDREP bulk import rule in Voyager SysAdmin. If the library does not have this option checked in the EMBEDREP bulk import rule and there is an existing bib in the local database that matches the incoming transaction, the content of the existing bib is replaced with the incoming bib, but no additional MFHDs or items are created by bulk import.

### **Embedded Holdings Replace Mode Example #1 (simple single copy MFHD and item):**

OCLC Bib record contains:

```
049 $a ABCD $l bk1 $p 31234112225678 $r REP
050 00 $a GV1785.A83 $b C76 2004
852 0 $b main $h GV1785.A83 $i C77 2004x $t 1
```

This transaction will result in an existing bib record being replaced or, by default, the incoming record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library’s EMBEDREP bulk import rule, will also generate a MFHD in Voyager that contains the following 852 field:

```
852 0 $b main $h GV1785.A83 $i C77 2004x $t 1
```

This MFHD will contain the following default MFHD 008 field (fixed fields):

Receipt status = 0

Method of acquisition = u  
Cancellation date = ||||  
General retention policy = 8  
Specific retention policy - policy type = <blank>  
Specific retention policy - number of units = <blank>  
Specific retention policy - unit type = <blank>  
Completeness = 4  
Number of copies = 001  
Lending policy = u  
Reproduction policy = u  
Language = |||  
Copy report = 0  
Date of report = 000000

The item record linked to this MFHD will contain the following fields:

Barcode: 31234112225678  
Permanent location: <Location display name for location code "main">  
Item type: <Item type display name for item type "Book1">  
Copy: 1  
Pieces: 1  
Price: \$0.00

All other fields in the item record are blank.

**Embedded Holdings Replace Mode Example #2 (Voyager location code not mapped from 049 \$a; also, a call number prefix is needed):**

OCLC Bib record contains:

049 \$a ABCD \$l bk1 \$r rep \$p 31234112226789  
852 1 \$b veryspec \$k VERYSPEC. \$h 759.13 \$i B43 2000 \$t 1

This transaction will result in an existing bib record being replaced or, by default, the incoming record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's EMBEDREP bulk import rule, will also generate a MFHD in Voyager that contains the following 852 field:

852 1 \$b veryspec \$k VERYSPEC. \$h 759.13 \$i B43 2000 \$t 1

This MFHD will also contain the same default MFHD 008 field (fixed fields) as the record detailed in Embedded Holdings Replace Example 1 above.

The item record linked to this MFHD will contain the following fields:

Barcode: 31234112226789  
Permanent location: <Location display name for location code "veryspec">  
Item type: <Item type display name for item type "Book1">  
Copy: 1  
Pieces: 1  
Price: \$0.00

All other fields in the item record are blank.

**Embedded Holdings Mode Replace Example #3 (Create a MFHD for a 3 volume set for Reference):**

```
049    $a ABCF $l bkn $r rep
852 0  $b ref $k REF. $h Z998 $i .H42 1997 $t 1
853 23 $8 1 $a v.
863 40 $8 1.1 $a 1
863 40 $8 1.2 $a 2
863 40 $8 1.3 $a 3
```

Note: in this example, the library is not entering barcode numbers because only a single item record will be created by bulk import. Library staff will add the barcode numbers to the item record(s) as they are manually edited/created in the cataloging client.

This transaction will result in an existing bib record being replaced or, by default, the incoming record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's EMBEDREP bulk import rule, will also generate a MFHD in Voyager that contains the following fields:

```
852 0  $b ref $k REF. $h Z998 $i .H42 1997 $t 1
853 23 $8 1 $a v.
863 40 $8 1.1 $a 1
863 40 $8 1.2 $a 2
863 40 $8 1.3 $a 3
```

This MFHD will also contain the same default MFHD 008 field (fixed fields) as the record detailed in Embedded Holdings Replace Example 1 above.

The single item record linked to this MFHD will contain the following fields:

```
Barcode: <blank>
Permanent location: <Location display name for location code "ref">
Item type: <Item type display name for item type "BookN">
Copy: 1
Pieces: 1
Price: $0.00
```

All other fields in the item record are blank.

Note that library staff will need to manually add information via the cataloging client to the Enumeration/Chronology fields in the single item record added by bulk import. In addition, library staff will want to add additional item records via the cataloging client for the items not created via bulk import, and manually input the Enumeration/Chronology data into these new item records as well.

**Embedded Holdings Replace Mode Example #4 (Create a MFHD for an annual serial title; this is the first issue cataloged by the library):**

```
049    $a ABCG $l serlr $r rep $p 31234112221515
852 0  $b per $k PER. $h AP2 $i .N6777 $t 1
853 23 $8 1 $a (yr.)
863 40 $8 1.100 $a 2003
```

Note: The sequence number assigned in 863 \$8 ("100") is intentionally high, so that next year's issue can be added as sequence number 99, the following year's issue added as 98, etc. so that the most recent issues display first. It should be noted, however, that WebVoyage displays 86x information from the MFHD in the order that the fields are stored in the MFHD, rather than by explicitly using the sequence number. Libraries are encouraged to use a sequence number in their MFHDs, though, because it is hoped that future enhancements to Voyager will include relying on the sequence number for display purposes.

This transaction will result in an existing bib record being replaced or, by default, the incoming record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's EMBEDREP bulk import rule, will also generate a MFHD in Voyager that contains the following fields:

852 0 \$b per \$k PER. \$h AP2 \$i .N6777 \$t 1  
853 23 \$8 1 \$a (yr.)  
863 40 \$8 1.100 \$a 2003

This MFHD will also contain the same default MFHD 008 field (fixed fields) as the record detailed in Embedded Holdings Replace Mode Example 1 above.

The item record linked to this MFHD will contain the following fields:

Barcode: 31234112221515  
Permanent location: <Location display name for location code "per">  
Item type: <Item type display name for item type "SerialLR">  
Copy: 1  
Pieces: 1  
Price: \$0.00

All other fields in the item record are blank.

Note that library staff will need to manually add information to the Enumeration/Chronology fields in the item record via the cataloging client, after the item is added to the database by bulk import.

**Embedded Holdings Replace Mode Example #5 (Create a MFHD for a quarterly serial title; all issues for two years added at the same time, and including a summary holdings statement):**

049 \$a ABCG \$l sern  
852 0 \$b per \$k PER. \$h AP2 \$i .T87 \$t 1  
866 1 \$8 1 \$a v.1(2002)-  
853 23 \$8 2 \$a v. \$b pt. \$i (yr.)  
863 40 \$8 2.993 \$a 2 \$b 4 \$i 2003  
863 40 \$8 2.994 \$a 2 \$b 3 \$i 2003  
863 40 \$8 2.995 \$a 2 \$b 2 \$i 2003  
863 40 \$8 2.996 \$a 2 \$b 1 \$i 2003  
863 40 \$8 2.997 \$a 1 \$b 4 \$i 2002  
863 40 \$8 2.998 \$a 1 \$b 3 \$i 2002  
863 40 \$8 2.999 \$a 1 \$b 2 \$i 2002  
863 40 \$8 2.1000 \$a 1 \$b1 \$i 2002

Note: The sequence numbers assigned in 863 \$8 are intentionally high, so that the following year's issues can be added so that the most recent issues display first. It should be noted, however, that WebVoyage displays 86x information from the MFHD in the order that the fields are stored in the MFHD, rather than by explicitly



using the sequence number. Libraries are encouraged to use a sequence number in their MFHDs, though, because it is hoped that future enhancements to Voyager will include relying on the sequence number for display purposes.

NOTE: in this example, the library is not entering a barcode number in 049 \$p because only a single item record will be created by bulk import. Library staff will add the barcode numbers and item level Enumeration data to the item records as they are manually edited/created in the cataloging client.

This transaction will result in an existing bib record being replaced or, by default, the incoming record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's EMBEDREP bulk import rule, will also generate a MFHD in Voyager that contains the following fields:

```
852 0 $b per $k PER. $h AP2 $i .T87 $t 1
853 23 $8 2 $a v. $b pt. $i (yr.)
863 40 $8 2.993 $a 2 $b 1 $i 2003
853 23 $8 2 $a v. $b pt. $i (yr.)
863 40 $8 2.993 $a 2 $b 4 $i 2003
863 40 $8 2.994 $a 2 $b 3 $i 2003
863 40 $8 2.995 $a 2 $b 2 $i 2003
863 40 $8 2.996 $a 2 $b 1 $i 2003
863 40 $8 2.997 $a 1 $b 4 $i 2002
863 40 $8 2.998 $a 1 $b 3 $i 2002
863 40 $8 2.999 $a 1 $b 2 $i 2002
863 40 $8 2.1000 $a 1 $b1 $i 2002
866 1 $8 1 $a v.1(2002)-
```

NOTE: when this MFHD is created in Voyager, the order of the individual 863 fields is retained from the original data entry in the bib, but the 866 field is added after the 853/863 fields.

This MFHD will also contain the same default MFHD 008 field (fixed fields) as the record detailed in Embedded Holdings Example 1 above.

The single item record linked to this MFHD will contain the following fields:

```
Barcode: <blank>
Permanent location: <Location display name for location code "per">
Item type: <Item type display name for item type "SerialN">
Copy: 1
Pieces: 1
Price: $0.00
```

All other fields in the item record are blank.

Note that library staff will need to manually add information via the cataloging client to the Enumeration/Chronology fields in the single item record added by bulk import. In addition, library staff will want to add additional item records via the cataloging client for the items not created via bulk import, and manually input the Enumeration/Chronology data into these new item records as well.

**Embedded Holdings Replace Mode Example #6 (Create a MFHD for copy 1 of a monograph, with public note):**

049 \$a ABCD \$l bk1 \$r rep \$p 31234006921512  
852 1 \$b main \$h 813 \$i C286YRE \$t 1 \$z Gift of Friends of the Library

This transaction will result in an existing bib record being replaced or, by default, the incoming record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's EMBEDREP bulk import rule, will also generate a MFHD in Voyager that contains the following 852 field:

852 1 \$b main \$h 813 \$i C286YRE \$t 1 \$z Gift of Friends of the Library

This MFHD will also contain the same default MFHD 008 field (fixed fields) as the record detailed in Embedded Holdings Replace Example 1 above.

The item record linked to this MFHD will contain the following fields:

Barcode: 31234006921512  
Permanent location: <Location display name for location code "main">  
Item type: <Item type display name for item type "Book1">  
Copy: 1  
Pieces: 1  
Price: \$0.00

All other fields in the item record are blank.

**Embedded Holdings Replace Mode Example #7 (Create a MFHD for copy 1 of a monograph, with a staff/non-public note):**

049 \$a ABCD \$l bk1 \$r rep \$p 31234006921513  
852 1 \$b main \$h 813 \$i C286YR \$t 1 \$x Gift of Friends of the Library

This transaction will result in an existing bib record being replaced or, by default, the incoming record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's EMBEDREP bulk import rule, will also generate a MFHD in Voyager that contains the following 852 field:

852 1 \$b main \$h 813 \$i C286YR \$t 1 \$x Gift of Friends of the Library

This MFHD will also contain the same default MFHD 008 field (fixed fields) as the record detailed in Embedded Holdings Replace Example 1 above.

The item record linked to this MFHD will contain the following fields:

Barcode: 31234006921513  
Permanent location: <Location display name for location code "main">  
Item type: <Item type display name for item type "Book1">  
Copy: 1  
Pieces: 1  
Price: \$0.00

All other fields in the item record are blank.

**Embedded Holdings Mode Replace Example #8 (Create a MFHD for copies 1 and 2, both receiving the same call number and going to the same location in the library):**

NOTE: this example requires two separate OCLC transactions.

Transaction 1 Example:

049 \$a ABCD \$l bk1 \$r rep \$p 31234006921514  
852 1 \$b fic \$h 813.5 \$i T187 \$t 1

Transaction 2 Example:

049 \$a ABCD \$l bk1r \$r rep \$p 31234006921515  
852 1 \$b fic \$h 813.5 \$i T187 \$t 2

Transaction 1 will result in an existing bib record being replaced or, by default, the incoming record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's EMBEDREP bulk import rule, will also generate a MFHD in Voyager that contains the following 852 field:

852 1 \$b fic \$h 813.5 \$i T187 \$t 1

This MFHD will also contain the same default MFHD 008 field (fixed fields) as the record detailed in Embedded Holdings Replace Example 1 above.

The item record linked to this MFHD will contain the following fields:

Barcode: 31129006921514  
Permanent location: <Location display name for location code "fic">  
Item type: <Item type display name for item type "Book1">  
Copy: 1  
Pieces: 1  
Price: \$0.00

All other fields in the item record are blank.

Transaction 2 will result in an existing bib record being replaced in the Voyager database. The coding above, in conjunction with this library's EMBED bulk import rule (which includes enabling the option for "Create MFHDs for existing Bibs"), will also generate a MFHD in Voyager that contains the following 852 field:

852 1 \$b fic \$h 813.5 \$i T187 \$t 2

This MFHD will also contain the same default MFHD 008 field (fixed fields) as the record detailed in Embedded Holdings Replace Example 1 above.

The item record linked to this MFHD will contain the following fields:

Barcode: 31234006921515  
Permanent location: <Location display name for location code "fic">  
Item type: <Item type display name for item type "BookLR">

Copy: 1  
Pieces: 1  
Price: \$0.00

All other fields in the item record are blank.

Because this library's policy is to keep item level copy numbers in synch with the 852 \$t value in the MFHD, staff will need to edit the copy number in the item record after the item is added by bulk import, from the default copy 1 to copy 2.

**Embedded Holdings Replace Mode Example #9 (Create a MFHD for separately shelved score and parts):**

```
049    $a ABCM $l sco1 $r REP
852 0  $b musrm $k MUSIC. $h M457.4.H48 $i T83 $t 1
853 23 $8 1 $a (unit)
863 40 $8 1.1 $a score
863 40 $8 1.2 $a parts
```

Note: in this example, the library is not entering barcode numbers because only a single item record will be created by bulk import. Library staff will add the barcode numbers to the item record(s) as they are manually edited/created in the cataloging client.

This transaction will result in an existing bib record being replaced or, by default, the incoming record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's EMBEDREP bulk import rule, will also generate a MFHD in Voyager that contains the following fields:

```
852 0  $b musrm $k MUSIC. $h M457.4.H48 $i T83 $t 1
853 23 $8 1 $a (unit)
863 40 $8 1.1 $a score
863 40 $8 1.2 $a parts
```

This MFHD will also contain the same default MFHD 008 field (fixed fields) as the record detailed in Embedded Holdings Replace Example 1 above.

The single item record linked to this MFHD will contain the following fields:

Barcode: <blank>  
Permanent location: <Location display name for location code "musrm">  
Item type: <Item type display name for item type "Score1">  
Copy: 1  
Pieces: 1  
Price: \$0.00

All other fields in the item record are blank.

Note that library staff will need to manually add information via the cataloging client to the Enumeration field ("score") in the single item record added by bulk import. In addition, library staff will want to add an additional item record via the cataloging client for the "parts", and manually input the Enumeration data into this new item record as well.

## IX. Electronic Resources Mode

The IUG's Cataloging Electronic Resources/Electronic Resources Display in the OPAC Task Force 2009 (CatER2009) report includes recommendations that I-Share libraries catalog their electronic resources so that a bib and MFHD are added to the local database, that the MFHD contains the URL, and that no item record is created.

Recommendation R10 states:

The Task Force recommends that libraries always place the URL or URLs appropriate to their end-users in the 856 field, subfield u of the holdings record (MFHD).

Recommendation R18 states:

The Task Force recommends that libraries not create item records for electronic resources. (The single exception to this recommendation is the e-item record used in Voyager reserves).

See the URL below for a copy of the complete CatER2009 Task Force 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)

Therefore, to support these recommendations, additional bulk import rules are needed to process these materials when they are cataloged via OCLC update or produce transactions.

In the I-Share Voyager environment, the Electronic Resources Mode is designed to add a bib record, and create a single MFHD record (but no item record) via OCLC update or produce transactions. The URL is copied into the MFHD as well.

MARC Split recognizes Electronic Resources Mode by the presence of 049 \$s ER in a bibliographic record. Data entry in the 049 \$s is not case sensitive. However, data entry in the 049 \$a is case sensitive.

For example:

```
049    $a ABCE $s er
049    $a ABCE $s ER
```

NOTE: because the Electronic Resources Mode is designed to create MFHDs only (no item records), staff should not enter 049 \$l or \$p data in these transactions.

The duplicate detection profile associated with the Electronic Resources Mode (ERES) bulk import rule determines if the incoming record is new to the database. In Electronic Resources Mode, incoming bibs that are identified as duplicates are rejected/discarded from the load, with a message written to the log file. If the bib is rejected/discarded and library has not selected the "Create MFHDs on existing Bibs" option in SysAdmin for the ERES bulk import rule, bulk import will not create a MFHD for the bib.

The Electronic Resource Mode is designed to be a variation of Embedded Holdings Mode, so that the library can create call number prefixes (if desired) or use location codes in the MFHD that might not be profiled for Express Mode transactions. However, the library can set up their ERES bulk import rule to be a variation on Express Mode, if their OCLC 049 profile and call number needs can be accommodated in this manner. The description of the ERES bulk import rule in the I-Share CAT SysAdmin document reflects both of these options.

The detailed examples below show embedded holdings-style data entry for this mode. In addition, for these examples, the ERES bulk import rule has the option for "Create MFHD for existing Bibs" selected, to enable the creation of a new MFHD on an existing, replaced bib record.

With Voyager version 2001.2 (and higher) enhanced bulk import functionality, it is possible to copy MFHD fields found in a bib record into a MFHD when it is created. This includes the 856 field, which by the MARC standards can be a bib record field and/or a MFHD field. In order for bulk import to copy the 856 field into a MFHD in an Electronic Resources Mode transaction, the ERES bulk import rule must have enabled the options for “Copy 852-855, 863-878 Fields from Bib to MFHD” and “Copy 856 Field from Bib to MFHD.”

NOTE: It is the library’s responsibility to have a corresponding ERES bulk import rule and appropriate bib record duplicate detection profile established in their Voyager SysAdmin client prior to creating any Electronic Resources Mode transactions on OCLC. If an OCLC record is processed in Electronic Resources Mode, but the corresponding SysAdmin setup is not in place, bulk import of all Electronic Resources Mode transactions from that day’s EDX file will cease immediately. There will be one line in the log file: “Failed to retrieve parameters from import\_rule [ERES].” See section XII for more information about bulk import log file messages.

See the Cataloging section of the I-Share System Administration documentation, available from <http://www.carli.illinois.edu/sites/files/i-share/documentation/secure/cat.pdf>, for the recommended settings for the ERES bulk import rule and its corresponding duplicate detection profile.

### **Electronic Resources Mode Data Entry Examples:**

The following examples are to be considered illustrative only. You should follow your own library’s policies when entering any library-specific data in your OCLC transactions.

#### **Electronic Resources Mode Example #1 (MFHD with 852 and 856 fields, no call number):**

NOTE: this library does not use any call number information for electronic resource materials.

OCLC Bib record contains:

```
049    $a ABCD $s ER
852    $b online $t 1
856 40 $u http://www.netLibrary.com/summary.asp?id=25014
```

This transaction will result in the bib record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library’s ERES bulk import rule, will also generate a MFHD in Voyager that contains the following fields:

```
852    $b online $t 1
856 40 $u http://www.netLibrary.com/summary.asp?id=25014
```

This MFHD will contain the following default MFHD 008 field (fixed fields):

```
Receipt status = 0
Method of acquisition = u
Cancellation date = | | | |
General retention policy = 8
Specific retention policy - policy type = <blank>
Specific retention policy - number of units = <blank>
Specific retention policy - unit type = <blank>
Completeness = 4
Number of copies = 001
```

Lending policy = u  
Reproduction policy = u  
Language = | | |  
Copy report = 0  
Date of report = 000000

No item record is created in Electronic Resources Mode.

**Electronic Resources Mode Example #2 (MFHD with 852 and 856 fields, and a regular call number with prefix):**

OCLC Bib record contains:

```
049    $a ABCD $s ER
852 0  $b online $k NETLIB. $h QA76.9.D3 $i A24 2000 $t 1
856 40 $u http://www.netLibrary.com/summary.asp?id=18867
```

This transaction will result in the bib record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's ERES bulk import rule, will also generate a MFHD in Voyager that contains the following 852 and 856 fields:

```
852 0  $b online $k NETLIB. $h QA76.9.D3 $i A24 2000 $t 1
856 40 $u http://www.netLibrary.com/summary.asp?id=18867
```

This MFHD will contain the same default MFHD 008 field (fixed fields) as the record detailed in Electronic Resources Example 1 above.

No item record is created in Electronic Resources Mode.

**Electronic Resources Mode Example #3 (MFHD with 852 and 856 fields, and a generic call number):**

NOTE: this library's policy is to use the same generic call number on all electronic resource MFHDs.

OCLC Bib record contains:

```
049    $a ABCD $s ER
852 8  $b govdoc $h Electronic $t 1
856 40 $u http://purl.access.gpo.gov/GPO/LPS3827
```

This transaction will result in the bib record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's ERES bulk import rule, will also generate a MFHD in Voyager that contains the following 852 and 856 fields:

```
852 8  $b govdoc $h Electronic $t 1
856 40 $u http://purl.access.gpo.gov/GPO/LPS3827
```

This MFHD will contain the same default MFHD 008 field (fixed fields) as the record detailed in Electronic Resources Example 1 above.

No item record is created in Electronic Resources Mode.

**Electronic Resources Mode Example #4 (MFHD with 852, 856, and 866 fields, and a local call number with prefix):**

OCLC Bib record contains:

```
049    $a ABCD $s ER
852 8   $b per $k PER. $h JIH $t 1
856 40  $u http://www.jstor.org/journals/00221953.html $z Access is available only to authorized users.
866 1   $8 0 $a v.1(1970) - v.29(1998)
```

This transaction will result in the bib record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's ERES bulk import rule, will also generate a MFHD in Voyager that contains the following fields:

```
852 8   $b per $k PER. $h JIH $t 1
856 40  $u http://www.jstor.org/journals/00221953.html $z Access is available only to authorized users.
866 1   $8 0 $a v.1(1970) - v.29(1998)
```

This MFHD will contain the same default MFHD 008 field (fixed fields) as the record detailed in Electronic Resources Mode Example 1 above.

No item record is created in Electronic Resources Mode.

**Electronic Resources Mode Example #5A (single MFHD with 852 and multiple 856 fields):**

The CatER2009 task force report's recommendation R15 states:

The Task Force recommends that catalogers structure data in the 856 field of the holdings record (MFHD), and, if present, the 856 field of the bibliographic record, in the following way:

- Subfield 3: Provider or package name, if appropriate, and/or coverage/part information, if appropriate
- Subfield z: Note of restriction and institutional identification, if appropriate
- Subfield u: URL appropriate to the institution
- Subfield y: Link text

The CatER 2009 task force report's recommendation R16 states:

If there are multiple active URLs for an e-resource title, the Task Force recommends that catalogers record one URL per 856 field and provide notes in the appropriate subfields as specified by [recommendation] R15. This applies to 856 fields in the holdings record (MFHD) and, if present, in bibliographic record.

Each URL should be placed in its own 856 field within a holdings record (MFHD), but libraries may choose to place each 856 field in its own holdings record (MFHD) or have multiple 856 fields in a single holdings record (MFHD).

Libraries batch loading records will need to work within the parameters of the batch loading process, which can result in a single holdings record (MFHD) with multiple URLs, or multiple holdings records (MFHDs), one for each URL, depending on how the records are loaded. If multiple URLs are copied from the bibliographic record and placed into a holdings record (MFHD) at the time of loading, there will be one holdings record with multiple URLs. If an existing bibliographic record is overlaid with a new URL during an update, and the Bulk Import Rule is set to "Create MFHDs for Existing Bibs", a new holdings



record (MFHD) will be created with the new URL at the time of the update and any previous holdings records (MFHD) will also remain.

To enable these recommendations in a situation where the library's online holdings are spread across two different URLs, for perhaps two different vendors, but the library wishes to create a single MFHD, the OCLC Bib record contains:

```
049    $a ABCD $s ER
852 0  $b per $h ML1 $i .N5 $t 1
856 40 $3 IngentaSelect v.24: no.3(2001:spring)- $u
http://www.ingentaselect.com/rpsv/cv/ucp/04182076/contpl-1.htm
856 40 $3 JSTOR v.1(1977)-v.23(1999) $u http://www.jstor.org/journals/04182076.html
```

This transaction will result in the bib record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's ERES bulk import rule, will also generate a MFHD in Voyager that contains the following fields:

```
852 0  $b per $h ML1 $i .N5 $t 1
856 40 $3 IngentaSelect v.24: no.3(2001:spring)- $u
http://www.ingentaselect.com/rpsv/cv/ucp/04182076/contpl-1.htm
856 40 $3 JSTOR v.1(1977)-v.23(1999) $u http://www.jstor.org/journals/04182076.html
```

This MFHD will contain the same default MFHD 008 field (fixed fields) as the record detailed in Electronic Resources Example 1 above.

No item record is created in Electronic Resources Mode.

#### **Electronic Resources Mode Example #5B (multiple MFHDs with 852 and different 856 fields):**

NOTE: this example requires two separate OCLC transactions.

To enable the recommendations above in a situation where the library's online holdings are spread across two different MFHDs, with different URLs, for perhaps two different vendors, the cataloger would have to perform two ERES transactions for the single bib record. In addition, the ERES bulk import rule must also have the option for "Create MFHD for existing Bibs" enabled.

Transaction 1's OCLC Bib record contains:

```
049    $a ABCD $s ER
852 0  $b per $h ML1 $i .N5 $t 1
856 40 $3 IngentaSelect v.24: no.3(2001:spring)- $u
http://www.ingentaselect.com/rpsv/cv/ucp/04182076/contpl-1.htm
```

Transaction 2's OCLC Bib record contains:

```
049    $a ABCD $s ER
852 0  $b per $h ML1 $i .N5 $t 2
856 40 $3 JSTOR v.1(1977)-v.23(1999) $u http://www.jstor.org/journals/04182076.html
```

Transaction 1 will result in the bib record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's ERES bulk import rule, will also generate a MFHD in Voyager that contains the following fields:

852 0 \$b per \$h ML1 \$i .N5 \$t 1  
856 40 \$3 IngentaSelect v.24: no.3(2001:spring)- \$u  
<http://www.ingentaselect.com/rpsv/cv/ucp/04182076/contpl-1.htm>

This MFHD will contain the same default MFHD 008 field (fixed fields) as the record detailed in Electronic Resources Example 1 above.

No item record is created in Electronic Resources Mode.

Transaction 2 will result in the bib record being rejected by bulk import. The coding above, in conjunction with this library's ERES bulk import rule, will also generate a MFHD in Voyager that contains the following fields:

852 0 \$b per \$h ML1 \$i .N5 \$t 2  
856 40 \$3 JSTOR v.1(1977)-v.23(1999) \$u <http://www.jstor.org/journals/04182076.html>

This MFHD will contain the same default MFHD 008 field (fixed fields) as the record detailed in Electronic Resources Example 1 above.

No item record is created in Electronic Resources Mode.

## **X. Electronic Resources Replace Mode**

The IUG's Cataloging Electronic Resources/Electronic Resources Display in the OPAC Task Force 2009 (CatER) report includes recommendations that I-Share libraries catalog their electronic resources so that a bib and MFHD are added to the local database, that the MFHD contains the URL, and that no item record is created.

Recommendation R10 states:

The Task Force recommends that libraries always place the URL or URLs appropriate to their end-users in the 856 field, subfield u of the holdings record (MFHD).

Recommendation R18 states:

The Task Force recommends that libraries not create item records for electronic resources. (The single exception to this recommendation is the e-item record used in Voyager reserves).

See the URL below for a copy of the complete CatER2009 Task Force 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)

Therefore, to support these recommendations, additional bulk import rules are needed to process these materials when they are cataloged via OCLC update or produce transactions.

In the I-Share Voyager environment, this mode is designed to allow for the overlay/replace of a bib record, while simultaneously creating a single MFHD record (but no item record) via OCLC update or produce transactions. If the library wishes to replace the content of an existing bib record but not to generate additional holdings, the library should use No Holdings Replace mode instead of this mode.

MARC Split recognizes Electronic Resources Replace Mode by the presence of 049 \$r REP \$s ER in a bibliographic record. Data entry in the 049 \$r and \$s is not case sensitive. However, data entry in the 049 \$a is case sensitive.

For example:

```
049    $a ABCD $s er $r rep
049    $a ABCD $s ER $r REP
```

NOTE: because the Electronic Resources Replace Mode is designed to create MFHDs only (no item records), staff should not enter 049 \$l or \$p data in these transactions.

The duplicate detection profile associated with the Electronic Resources Replace Mode (ERESREP) bulk import rule determines if the incoming record is new to the database. If the incoming bib is not identified as a duplicate, by default it will be added to the database. If the incoming bib is identified as a duplicate, the incoming bib replaces/overlays the content of the existing bib.

The Electronic Resources Replace Mode is designed to be a variation of Embedded Holdings Replace Mode, so that the library can create call number prefixes (if desired) or use location codes in the MFHD that might not be profiled for Express Replace Mode transactions. However, the library can set up their ERESREP bulk import rule to be a variation on Express Replace Mode, if their OCLC 049 profile and call number needs can be accommodated in this manner. The description of the ERESREP bulk import rule in the I-Share CAT SysAdmin document reflects both of these options.

The detailed examples below show embedded holdings-style data entry for this mode. In addition, for these examples, the ERESREP bulk import rule has the option for "Create MFHD for existing Bibs" selected, to enable the creation of a new MFHD on an existing, replaced bib record.

NOTE: It is the library's responsibility to have a corresponding ERESREP bulk import rule and appropriate bib record duplicate detection profile established in their Voyager SysAdmin client prior to creating any Electronic Resources Replace Mode transactions on OCLC. If an OCLC record is processed in Electronic Resources Replace Mode, but the corresponding SysAdmin setup is not in place, bulk import of all Electronic Resources Replace Mode transactions from that day's EDX file will cease immediately. There will be one line in the log file: "Failed to retrieve parameters from import rule [ERESREP]." See section XII for more information about bulk import log file messages.

See the Cataloging section of the I-Share System Administration documentation, available from <http://www.carli.illinois.edu/sites/files/i-share/documentation/secure/cat.pdf>, for the recommended settings for the ERESREP bulk import rule and its corresponding duplicate detection profile.

## Electronic Resources Replace Mode Data Entry Examples:

The following examples are to be considered illustrative only. You should follow your own library's policies when entering any library-specific data in your OCLC transactions.

### Electronic Resources Replace Mode Example #1 (MFHD with 852 and 856 fields, no call number):

NOTE: this library does not use any call number information for electronic resource materials.

OCLC Bib record contains:

```
049    $a ABCD $s ER $r REP
852    $b online $t 1
856 40 $u http://www.netLibrary.com/summary.asp?id=25014
```

This transaction will result in an existing bib record being replaced or, by default, the incoming record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's ERESREP bulk import rule, will also generate a MFHD in Voyager that contains the following 852 and 856 fields:

```
852    $b online $t 1
856 40 $u http://www.netLibrary.com/summary.asp?id=25014
```

This MFHD will contain the following default MFHD 008 field (fixed fields):

```
Receipt status = 0
Method of acquisition = u
Cancellation date = | | | |
General retention policy = 8
Specific retention policy - policy type = <blank>
Specific retention policy - number of units = <blank>
Specific retention policy - unit type = <blank>
Completeness = 4
Number of copies = 001
Lending policy = u
Reproduction policy = u
Language = | | |
Copy report = 0
Date of report = 000000
```

No item record is created in Electronic Resources Mode.

### Electronic Resources Replace Mode Example #2 (MFHD with 852 and 856 fields, and a regular call number with prefix):

OCLC Bib record contains:

```
049    $a ABCD $s ER $r REP
852 0  $b online $k NETLIB. $h QA76.9.D3 $i A24 2000 $t 1
856 40 $u http://www.netLibrary.com/summary.asp?id=18867
```

This transaction will result in an existing bib record being replaced or, by default, the incoming record being added if it is not already present in the Voyager database. The coding above, in conjunction with

this library's ERESREP bulk import rule, will also generate a MFHD in Voyager that contains the following 852 and 856 fields:

```
852 0   $b online $k NETLIB. $h QA76.9.D3 $i A24 2000 $t 1
856 40  $u http://www.netLibrary.com/summary.asp?id=18867
```

This MFHD will contain the same default MFHD 008 field (fixed fields) as the record detailed in Electronic Resources Replace Example 1 above.

No item record is created in Electronic Resources Replace Mode.

**Electronic Resources Replace Mode Example #3 (MFHD with 852 and 856 fields, and a generic call number):**

NOTE: this library's policy is to use the same generic call number on all electronic resource MFHDs.

OCLC Bib record contains:

```
049     $a ABCD $s ER $r REP
852 8   $b govdoc $h Electronic $t 1
856 40  $u http://purl.access.gpo.gov/GPO/LPS3827
```

This transaction will result in an existing bib record being replaced or, by default, the incoming record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's ERESREP bulk import rule, will also generate a MFHD in Voyager that contains the following 852 and 856 fields:

```
852 8   $b govdoc $h Electronic $t 1
856 40  $u http://purl.access.gpo.gov/GPO/LPS3827
```

This MFHD will contain the same default MFHD 008 field (fixed fields) as the record detailed in Electronic Resources Replace Example 1 above.

No item record is created in Electronic Resources Replace Mode.

**Electronic Resources Replace Mode Example #4 (MFHD with 852, 856, and 866 fields, and a local call number with prefix):**

OCLC Bib record contains:

```
049     $a ABCD $s ER $r REP
852 8   $b per $k PER. $h JIH $t 1
856 40  $u http://www.jstor.org/journals/00221953.html $z Access is available only to authorized users.
866 1   $8 0 $a v. 1(1970) - v. 29(1998)
```

This transaction will result in an existing bib record being replaced or, by default, the incoming record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's ERESREP bulk import rule, will also generate a MFHD in Voyager that contains the following fields:

```
852 8   $b per $k PER. $h JIH $t 1
856 40  $u http://www.jstor.org/journals/00221953.html $z Access is available only to authorized users.
```

866 1 \$8 0 \$a v. 1(1970) - v. 29(1998)

This MFHD will contain the same default MFHD 008 field (fixed fields) as the record detailed in Electronic Resources Replace Example 1 above.

No item record is created in Electronic Resources Replace Mode.

**Electronic Resources Replace Mode Example #5A (single MFHD with 852 and multiple 856 fields):**

The CatER2009 task force report's recommendation R15 states:

The Task Force recommends that catalogers structure data in the 856 field of the holdings record (MFHD), and, if present, the 856 field of the bibliographic record, in the following way:

- Subfield 3: Provider or package name, if appropriate, and/or coverage/part information, if appropriate
- Subfield z: Note of restriction and institutional identification, if appropriate
- Subfield u: URL appropriate to the institution
- Subfield y: Link text

The CatER2009 task force report's recommendation R16 states:

If there are multiple active URLs for an e-resource title, the Task Force recommends that catalogers record one URL per 856 field and provide notes in the appropriate subfields as specified by [recommendation] R15. This applies to 856 fields in the holdings record (MFHD) and, if present, in bibliographic record.

Each URL should be placed in its own 856 field within a holdings record (MFHD), but libraries may choose to place each 856 field in its own holdings record (MFHD) or have multiple 856 fields in a single holdings record (MFHD).

Libraries batch loading records will need to work within the parameters of the batch loading process, which can result in a single holdings record (MFHD) with multiple URLs, or multiple holdings records (MFHDs), one for each URL, depending on how the records are loaded. If multiple URLs are copied from the bibliographic record and placed into a holdings record (MFHD) at the time of loading, there will be one holdings record with multiple URLs. If an existing bibliographic record is overlaid with a new URL during an update, and the Bulk Import Rule is set to "Create MFHDs for Existing Bibs", a new holdings record (MFHD) will be created with the new URL at the time of the update and any previous holdings records (MFHD) will also remain.

To enable these recommendations in a situation where the library's online holdings are spread across two different URLs, for perhaps two different vendors, but the library wishes to create a single MFHD, the OCLC Bib record contains:

```
049 $a ABCD $s ER $r REP
852 0 $b per $h ML1 $i .N5 $t 1
856 40 $3 IngentaSelect v.24: no.3(2001:spring)- $u
http://www.ingentaselect.com/rpsv/cv/ucp/04182076/contpl-1.htm
856 40 $3 JSTOR v.1(1977)-v.23(1999) $u http://www.jstor.org/journals/04182076.html
```

This transaction will result in an existing bib record being replaced or, by default, the incoming record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's ERESREP bulk import rule, will also generate a MFHD in Voyager that contains the following fields:

852 0 \$b per \$h ML1 \$i .N5 \$t 1  
856 40 \$3 IngentaSelect v.24: no.3(2001:spring)- \$u  
<http://www.ingentaselect.com/rpsv/cv/ucp/04182076/contpl-1.htm>  
856 40 \$3 JSTOR v.1(1977)-v.23(1999) \$u <http://www.jstor.org/journals/04182076.html>

This MFHD will contain the same default MFHD 008 field (fixed fields) as the record detailed in Electronic Resources Example 1 above.

No item record is created in Electronic Resources Mode.

### **Electronic Resources Replace Mode Example #5B (multiple MFHDs with 852 and different 856 fields):**

NOTE: this example requires two separate OCLC transactions.

To enable the recommendations above in a situation where the library's online holdings are spread across two different MFHDs, with different URLs, for perhaps two different vendors, the cataloger would have to perform two ERESREP transactions for the single bib record. In addition, the ERESREP bulk import rule must also have the option for "Create MFHD for existing Bibs" enabled.

Transaction 1's OCLC Bib record contains:

049 \$a ABCD \$s ER \$r REP  
852 0 \$b per \$h ML1 \$i .N5 \$t 1  
856 40 \$3 IngentaSelect v.24: no.3(2001:spring)- \$u  
<http://www.ingentaselect.com/rpsv/cv/ucp/04182076/contpl-1.htm>

Transaction 2's OCLC Bib record contains:

049 \$a ABCD \$s ER \$r REP  
852 0 \$b per \$h ML1 \$i .N5 \$t 2  
856 40 \$3 JSTOR v.1(1977)-v.23(1999) \$u <http://www.jstor.org/journals/04182076.html>

Transaction 1 will result in an existing bib record being replaced or, by default, the incoming record being added if it is not already present in the Voyager database. The coding above, in conjunction with this library's ERESREP bulk import rule, will also generate a MFHD in Voyager that contains the following fields:

852 0 \$b per \$h ML1 \$i .N5 \$t 1  
856 40 \$3 IngentaSelect v.24: no.3(2001:spring)- \$u  
<http://www.ingentaselect.com/rpsv/cv/ucp/04182076/contpl-1.htm>

This MFHD will contain the same default MFHD 008 field (fixed fields) as the record detailed in Electronic Resources Example 1 above.

No item record is created in Electronic Resources Mode.

Transaction 2 will result in an existing bib record being replaced by bulk import. The coding above, in conjunction with this library's ERESREP bulk import rule, will also generate a MFHD in Voyager that contains the following fields:

852 0 \$b per \$h ML1 \$i .N5 \$t 2

856 40 \$3 JSTOR v.1(1977)-v.23(1999) \$u <http://www.jstor.org/journals/04182076.html>

This MFHD will contain the same default MFHD 008 field (fixed fields) as the record detailed in Electronic Resources Replace Example 1 above.

No item record is created in Electronic Resources Replace Mode.

## XI. Processing Bibliographic Records

After MARC Split is used to divide the incoming OCLC EDX file into different queues for processing (by library and by “mode”), each individual batch of records is loaded into the appropriate library’s database using standard Voyager bulk import functionality. When a library has performed transactions in multiple modes on the same day, the order of processing the modes is as follows:

- Express
- Express Replace
- Embedded Holdings
- Embedded Holdings Replace
- Electronic Resources
- Electronic Resources Replace
- No Holdings
- No Holdings Replace

Each library is responsible for creating and maintaining their bulk import rules in the Voyager System Administration client.

Each bulk import rule is linked to a bibliographic duplicate detection profile that contains bib record fields that are used for duplicate detection matching. Each field used for matching is also given a “field weight” so that selected fields can be considered more (or less) important than other fields for duplicate detection. For example, in I-Share libraries, the OCLC number stored in bib record 035 \$a is considered the most important duplicate detection field, and it is given a field weight of 100.

For more information on I-Share’s recommended SysAdmin settings for bulk import rules and duplicate detection, see the Cataloging section of the I-Share System Administration documentation, available from <http://www.carli.illinois.edu/sites/files/i-share/documentation/secure/cat.pdf>.

Specifically, CARLI recommends that libraries create a duplicate detection profile called “OCLC Conditional Bulk” to be used for Express, Embedded Holdings, Electronic Resources and No Holdings Mode bulk import rules. This duplicate detection profile contains the following values in SysAdmin:

Profile Name:	<b>OCLCCondBulk</b>
Profile Code:	OCLCCONB
Duplicate handling:	Add-Conditional
Cancellation:	OCLC
Duplicate replace:	100
Duplicate warn:	30



### Field Definitions

0350, weight 100  
010A, weight 20  
022A, weight 15  
024I, weight 10  
028A, weight 10  
035A, weight 100, field override = 019, subfield override = a  
BBID, weight 100  
ISB3, weight 25

CARLI also recommends that libraries create a duplicate detection profile called "OCLC Replace" to be used for the No Holdings Replace, Express Replace, Embedded Holdings Replace, and Electronic Resources Replace Mode bulk import rules. This duplicate detection profile contains the following values in SysAdmin:

Profile Name:	<b>OCLCReplace</b>
Profile code:	OCLCREP
Duplicate handling:	Replace
Cancellations:	None
Duplicate replace:	100
Duplicate warn:	75

### Field Definitions

0350, weight 100  
010A, weight 10  
022A, weight 10  
024I, weight 10  
028A, weight 10  
035A, weight 100, field override = 019, subfield override = a  
BBID, weight 100  
ISB3, weight 10

The "duplicate replace" value of 100 in both duplicate detection profiles above means that any field or combination of fields that add up to 100 or higher are considered to be a match. In other words, using CARLI's recommended field weights above, the OCLC number (stored in bibs in 035 \$a, but using a special index called 0350 for bulk import functionality) is sufficient for the incoming and existing bib records to be considered a match. However, an existing bib that only contains the same ISBN (bib record field 020 \$a, which is included in the new ISB3 index) as the incoming record, but no other matching standard numbers, is not sufficient for duplicate detection to consider the two records to be a match.

The "duplicate warn" value of 30 (for profile OCLCCONB) or 75 (for profile OCLCREP) above means that any field or combination of fields that add up to 30 or 75 respectively are treated as a "warning" by bulk import, or "not a perfect match." These records are not added to the database by bulk import, but are instead discarded with a warning in the log file. In other words, using CARLI's recommended field weights for OCLCCONB above, an incoming bib that contains the same LCCN (bib field 010 \$a) and ISBN (bib field 020 \$a, included in the ISB3 index), but that does not contain the same OCLC number (field 035 \$a) as the existing bib record, is treated as a match at the warning level and is discarded from the load.

For more information on log file messages regarding duplicate replaces and warnings, and field weights, see the section XII of this document.

For more detailed information on Voyager bulk import and duplicate detection processes in general, see the “Bibliographic Duplicate Detection” section of the Cataloging Configuration chapter in the *Voyager 7.1 System Administration User’s Guide*.

The standard Voyager bulk import functionality does not offer a way to delete selected fields or subfields from bib records after the bib has been processed, but before it is loaded into the local database. Therefore, unlike the custom OCLC load program that ILC SO used under its DRA environment, the 049 \$a, \$l, \$p, \$m, \$r, and \$s data as well as the 85x/86x MFHD fields are retained in the bib records added to a Voyager database. The presence of these data is not to be considered an error situation in Voyager bib records. It should be noted that the I-Share-standard version of WebVoyage does not display the 049 or 852 fields in the full record display. The 856 field in bib records may or may not display in WebVoyage for the local databases, depending on decisions made by the local library.

### **Special Note on the “Suppress from Universal Catalog” Option**

Many I-Share librarians have wished for a way that individual bibliographic records could display in the local database (and therefore not be marked as “OPAC suppressed”), but that these records be excluded from display in the Universal Catalog (UC). A common scenario for this desired functionality is for brief Acquisitions order records, which the library wants their public to see, but which may not be appropriate for loading into the I-Share Universal Catalog.

This functionality is still not present from within Voyager itself, but CARLI staff have created a clever workaround in the behind-the-scenes UC processing that enables this functionality.

As of April 1, 2004, bibliographic records can be suppressed from the I-Share Universal Catalog while remaining visible in a library’s local OPAC. This functionality, called “Suppress from UC,” is accomplished by particular coding of the 049 field in the bibliographic record. In contrast, the “Suppress from OPAC” setting, available in a bibliographic record’s System tab in the Voyager Cataloging Client, causes record bib record suppression from both a library’s local OPAC *and* the UC.

To cause a bibliographic record (and its associated holdings) to be suppressed from the UC, include a \$u nouc in the 049 field of the desired bibliographic record. This \$u nouc can be added to the bibliographic record at any time: when the bib record is already present in the local Voyager database; prior to performing the update/produce command on the bib in OCLC; during manual import of a record into Voyager (before the record is saved to the database); or, added by a vendor into a set of vendor records being purchased and loaded into your local database.

However, not all bib records are candidates for the use of this option. The CARLI position statement for which types of records this option should (and should not) be used with can be found at <http://www.carli.illinois.edu/products-services/i-share/acq/uc-suppr-policy>.

More detailed information about implementing this option can be found at <http://www.carli.illinois.edu/products-services/i-share/cat/uc-suppr-049u>. The following information contains the 049 \$u coding examples for OCLC transactions.

## 049 \$u coding examples for OCLC update/produce transactions

In OCLC update/produce transactions, add the \$u nouc to the 049 field of the bibliographic record just as you would any of the other coding for bulk import modes. Then, update/produce the OCLC record normally. A \$u nouc can be used in conjunction with all eight bulk import modes.

Example: 049 \_\_ \$a ABCD \$l bk1 \$p 12345678901234 \$u nouc

Example: 049 \_\_ \$a ABCD \$m no \$u nouc

Example: 049 \_\_ \$a ABCD \$m no \$r rep \$u nouc

### Special Note on the Bibliographic Record Replace/Overlay Option:

Even though in the Voyager environment each I-Share library has its own separate database, each of these local databases are set up to automatically feed their bibliographic records into the I-Share Universal Catalog (UC). The UC is a physically separate database that in theory represents a de-duplicated union catalog of the bibs and holdings for all of the I-Share participating libraries.

For more information on I-Share's settings used for de-duplicating the Universal Catalog, see the document available at <<http://www.carli.illinois.edu/products-services/i-share/cat/secure/UC-dupdetect>>.

Since I-Share's Universal Catalog database is a union catalog, some basic guidelines must be followed when editing or replacing bibliographic records in the local Voyager database:

- Changes made to full bibliographic records (either via any of the Replace Mode transactions or online editing in the Voyager cataloging client) must be based on national standards such as AACR2 and the LC Rule Interpretations. In addition, changes made to full bibliographic records must follow the I-Share "Cooperative Cataloging Guidelines for I-Share Databases." See <<http://www.carli.illinois.edu/products-services/i-share/cat/coop-cat-guidelines>> for the full text of these guidelines.
- Staff members who change bibliographic records (either via any of the Replace Mode transactions or online editing in the Voyager cataloging client) must not make changes to records that will (1) cause the record to represent a work different from that originally described by the record, or (2) will remove points of access.

Despite libraries' adherence to these guidelines, I-Share's experience with the Universal Catalog has included times when a bib record replacement in the local database does not always have the correct or desired result in the Universal Catalog. These undesirable results are seen most often under two circumstances:

- (1) when an unsuppressed "short" bibliographic record (such as one used for Acquisitions purposes, often a bib record without an OCLC number) is replaced with a "full" OCLC cataloging record;
- (2) when an unsuppressed existing "full" bib has an OCLC number, but the record is changed/replaced with a record containing a different OCLC number (i.e., the bib used in ACQ had an OCLC number, but when the material arrives, the cataloger determines the bib used for the order does not describe the title in hand).

The problem is that while the short/incorrect bib is replaced properly in the local database, the short/incorrect bib in the UC is not deleted, and the library's holdings are not set on the full/correct bib.

NOTE: Bib records that are marked as either OPAC suppressed or UC suppressed at the time they are added to the local Voyager database do not exhibit these replacement problems in the UC.

More details about “safe” bibliographic replacement routines in the I-Share environment are available from the URL below, including information about the change effective November 2007 whereby the UC extracts from the local databases are performed on an hourly basis:

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

To summarize, the easiest way to avoid these UC replace problems is to mark the existing unsuppressed bib record as OPAC suppressed or UC suppressed at least one hour (or day) prior to the transaction that replaces the bib. It is also imperative that the suppressed bib contains the original OCLC number (or that it contain no OCLC number in the case of short bibs) at the time the bib is suppressed. In other words, don't add or change the OCLC number on the existing bib in the local database in the same transaction as the bib suppression. You have to wait to add/change the OCLC number until at least one hour/day after the bib is suppressed. This adding/changing of the OCLC number can be done on the same day that the bib is replaced.

If done as described in the safe bibliographic replacement routine document cited above, the act of suppressing the short/incorrect bib should delete your library's holdings from the Universal Catalog and also delete the existing UC bib, if there are no other libraries' holdings linked to the UC bib.

Then after waiting at least one hour/day, the existing bib in the local database can be unsuppressed and replaced with the correct full bib containing the desired OCLC number. The subsequent bib replacement should add an updated copy of the bib record to the UC and/or set your holdings on the correct bib in the UC. The replacement can be done via No Holdings Replace Mode bulk import transactions, or online via OCLC Export transactions and the Voyager cataloging client's import functionality, or online via copying a bib record from the UC using the cataloging client.

## **XII. Log Files and Error Messages**

Bulk import will generate a log file for each “mode” used by the library for that day's OCLC transactions. The exception is for Do Not Process mode records, which do not generate any log files or log file entries at all. The log files (if any) are copied into the library's xxxftp directory (where “xxx” represents your library's I-Share three letter code) on the I-Share Files server. For more information on accessing files on the Files server, see the document available at <<http://www.carli.illinois.edu/products-services/i-share/sysreq/secure/SSHSecureShell>>.

Depending on whether your library had any produce or update transactions at all, what mode(s) were used, and whether there were any duplicates or records treated as errors, there could be as many as 32 log files created each day for your library. If your library had no OCLC update or produce transactions on a particular day, no log files would be created for that day.

Libraries will want to download these files regularly as part of the ongoing cataloging workflow routines. These log files will remain in your xxxftp account for 60 days. These files will be systematically deleted from the xxxftp accounts, so libraries are not required to manually delete them after downloading. If the library manually deletes the files, CARLI staff may not be able to help the library troubleshoot bulk import load problems.

Below are the log file names and descriptions of the contents of each file. The MMMDD represents the month and date of the OCLC transactions, not the date of the load into Voyager. See the “Interpreting the Log File Messages” section below for more information on the content of the different log files.

OCLC\_MMMDD\_NOHOLD\_LOG.TXT

Created when there are any No Holdings Mode transactions (049 \$m NO). This is the main No Holdings Mode log file, and it contains the bib record IDs for records added, information about records rejected or discarded, and the statistics from the load.

#### OCLC\_MMMDD\_NOHOLD\_REJECTS.TXT

Created when any No Holdings Mode transactions were rejected because the incoming record matched an existing record based on OCLC control number. This file contains text copies of the incoming bib records that were rejected.

#### OCLC\_MMMDD\_NOHOLD\_DISCARDS.TXT

Created when any No Holdings Mode transactions were discarded because the incoming record either matched more than one existing record, or the incoming record matched an existing record based on a combination of ISBN or ISSN, and LCCN (or multiple ISBNs) but not on OCLC number. This file contains text copies of the incoming bib records that were discarded.

#### OCLC\_MMMDD\_NOHOLD\_ERRORS.MRC

Created when any No Holdings Mode transactions contained characters that Voyager could not convert to Unicode during the bulk import. These files contain actual MARC records, not just textual copies of the errored records. Library staff may download these files to a PC and then import the bibs manually into the local database using the Voyager cataloging client. The character(s) that caused the problem during bulk import should be fixed manually before the record is saved to the database.

#### OCLC\_MMMDD\_NOHOLD\_ERRORS.TXT

As of October 4, 2010, this file is created when any No Holdings Mode transactions contained characters that Voyager could not convert to Unicode during the bulk import. This file contains eye-readable (textual) copies of the MARC records with conversion errors described above.

#### OCLC\_MMMDD\_NOHOLDREP\_LOG.TXT

Created when there are any No Holdings Replace Mode transactions (049 \$m NO \$r REP). This is the main No Holdings Replace Mode log file, and it contains the bib record IDs for records added or replaced, information about records discarded, and the statistics from the load.

#### OCLC\_MMMDD\_NOHOLDREP\_DISCARDS.TXT

Created when any No Holdings Replace Mode transactions were discarded because the incoming record either matched more than one existing record, or the incoming record matched an existing record based on a combination of ISBN or ISSN and LCCN (or multiple ISBNs) but not on OCLC number, or the library has enabled the "Discard incoming records that do not match existing records" option in the replace duplicate detection profile used by the No Holdings Replace bulk import rule. This file contains text copies of the incoming bib records that were discarded.

#### OCLC\_MMMDD\_NOHOLDREP\_REPLACES.TXT

Created when any No Holdings Replace transactions replaced an existing bib. This file contains text copies of the existing bib(s) as they looked before they were replaced by the contents of the incoming bib(s).

#### OCLC\_MMMDD\_NOHOLDREP\_ERRORS.MRC

Created when any No Holdings Replace Mode transactions contained characters that Voyager could not convert to Unicode during the bulk import. These files contain actual MARC records, not just textual copies of the errored records. Library staff may download these files to a PC and then import the bibs manually into

the local database using the Voyager cataloging client. The character(s) that caused the problem during bulk import should be fixed manually before the record is saved to the database.

#### OCLC\_MMMDD\_NOHOLDREP\_ERRORS.TXT

As of October 4, 2010, this file is created when any No Holdings Replace Mode transactions contained characters that Voyager could not convert to Unicode during the bulk import. This file contains eye-readable (textual) copies of the MARC records with conversion errors described above.

#### OCLC\_MMMDD\_EXPR\_LOG.TXT

Created when there are Express Mode transactions. This is the main Express Mode log file, and it contains the bib record IDs for records added, information about records rejected or discarded, and the statistics from the load.

#### OCLC\_MMMDD\_EXPR\_REJECTS.TXT

Created when any Express Mode transactions were rejected because the incoming record matched an existing record based on OCLC control number. This file contains text copies of the incoming bib records that were rejected.

#### OCLC\_MMMDD\_EXPR\_DISCARDS.TXT

Created when any Express Mode transactions were discarded because the incoming record either matched more than one existing record, or the incoming record matched an existing record based on a combination of ISBN or ISSN and LCCN (or multiple ISBNs) but not on OCLC number. This file contains text copies of the incoming bib records that were discarded.

#### OCLC\_MMMDD\_EXPR\_ERRORS.MRC

Created when any Express Mode transactions contained characters that Voyager could not convert to Unicode during the bulk import. These files contain actual MARC records, not just textual copies of the errored records. Library staff may download these files to a PC and then import the bibs manually into the local database using the Voyager cataloging client. The character(s) that caused the problem during bulk import should be fixed manually before the record is saved to the database. Library staff will also need to manually create MFHDs and item records for the imported bib via the Voyager cataloging client.

#### OCLC\_MMMDD\_EXPR\_ERRORS.TXT

As of October 4, 2010, this file is created when any Express Mode transactions contained characters that Voyager could not convert to Unicode during the bulk import. This file contains eye-readable (textual) copies of the MARC records with conversion errors described above.

#### OCLC\_MMMDD\_EXPRREP\_LOG.TXT

Created when there are any Express Replace Mode transactions (049 \$r REP). This is the main Express Replace Mode log file, and it contains the bib record IDs for records added or replaced, information about records discarded, and the statistics from the load.

#### OCLC\_MMMDD\_EXPRREP\_DISCARDS.TXT

Created when any Express Replace Mode transactions were discarded because the incoming record either matched more than one existing record, or the incoming record matched an existing record based on a combination of ISBN or ISSN and LCCN (or multiple ISBNs) but not on OCLC number, or the library has

enabled the “Discard incoming records that do not match existing records” option in the replace duplicate detection profile used by the Express Replace bulk import rule. This file contains copies of the incoming bib records that were discarded.

#### OCLC\_MMMDD\_EXPRREP\_REPLACES.TXT

Created when any Express Replace Mode transactions replaced an existing bib. This file contains text copies of the existing bib(s) as they looked before they were replaced by the contents of the incoming bib(s).

#### OCLC\_MMMDD\_EXPRREP\_ERRORS.MRC

Created when any Express Replace Mode transactions contained characters that Voyager could not convert to Unicode during the bulk import. These files contain actual MARC records, not just textual copies of the errored records. Library staff may download these files to a PC and then import the bibs manually into the local database using the Voyager cataloging client. The character(s) that caused the problem during bulk import should be fixed manually before the record is saved to the database. Library staff may also need to manually create MFHDs and item records for the imported bib via the Voyager cataloging client, if appropriate to the cataloging situation.

#### OCLC\_MMMDD\_EXPRREP\_ERRORS.TXT

As of October 4, 2010, this file is created when any Express Replace Mode transactions contained characters that Voyager could not convert to Unicode during the bulk import. This file contains eye-readable (textual) copies of the MARC records with conversion errors described above.

#### OCLC\_MMMDD\_EMBED\_LOG.TXT

Created when there are Embedded Holdings Mode transactions (852 \$b). This is the main Embedded Holdings Mode log file, and it contains the bib record IDs for records added, information about records rejected or discarded, and the statistics from the load.

#### OCLC\_MMMDD\_EMBED\_REJECTS.TXT

Created when any Embedded Holdings Mode transactions were rejected because the incoming record matched an existing record based on OCLC control number. This file contains text copies of the incoming bib records that were rejected.

#### OCLC\_MMMDD\_EMBED\_DISCARDS.TXT

Created when any Embedded Holdings Mode transactions were discarded because the incoming record either matched more than one existing record, or the incoming record matched an existing record based on a combination of ISBN or ISSN and LCCN (or multiple ISBNs) but not on OCLC number. This file contains text copies of the incoming bib records that were discarded.

#### OCLC\_MMMDD\_EMBED\_ERRORS.MRC

Created when any Embedded Holdings Mode transactions contained characters that Voyager could not convert to Unicode during the bulk import. These files contain actual MARC records, not just textual copies of the errored records. Library staff may download these files to a PC and then import the bibs manually into the local database using the Voyager cataloging client. The character(s) that caused the problem during bulk import should be fixed manually before the record is saved to the database. Library staff will also need to manually create MFHDs and item records for the imported bib via the Voyager cataloging client.

#### OCLC\_MMMDD\_EMBED\_ERRORS.TXT

As of October 4, 2010, this file is created when any Embedded Holdings Mode transactions contained characters that Voyager could not convert to Unicode during the bulk import. This file contains eye-readable (textual) copies of the MARC records with conversion errors described above.

#### OCLC\_MMMDD\_EMBEDREP\_LOG.TXT

Created when there are any Embedded Holdings Replace Mode transactions (049 \$r REP and 852 \$b). This is the main Embedded Holdings Replace Mode log file, and it contains the bib record IDs for records added or replaced, information about records discarded, and the statistics from the load.

#### OCLC\_MMMDD\_EMBEDREP\_DISCARDS.TXT

Created when any Embedded Holdings Replace Mode transactions were discarded because the incoming record either matched more than one existing record, or the incoming record matched an existing record based on a combination of ISBN or ISSN and LCCN (or multiple ISBNs) but not on OCLC number, or the library has enabled the "Discard incoming records that do not match existing records" option in the replace duplicate detection profile used by the Embedded Holdings Replace bulk import rule. This file contains text copies of the incoming bib records that were discarded.

#### OCLC\_MMMDD\_EMBEDREP\_REPLACES.TXT

Created when any Embedded Holdings Replace transactions replaced an existing bib. This file contains text copies of the existing bib(s) as they looked before they were replaced by the contents of the incoming bib(s).

#### OCLC\_MMMDD\_EMBEDREP\_ERRORS.MRC

Created when any Embedded Holdings Replace Mode transactions contained characters that Voyager could not convert to Unicode during the bulk import. These files contain actual MARC records, not just textual copies of the errored records. Library staff may download these files to a PC and then import the bibs manually into the local database using the Voyager cataloging client. The character(s) that caused the problem during bulk import should be fixed manually before the record is saved to the database. Library staff may also need to manually create MFHDs and item records for the imported bib via the Voyager cataloging client, if appropriate to the cataloging situation.

#### OCLC\_MMMDD\_EMBEDREP\_ERRORS.TXT

As of October 4, 2010, this file is created when any Embedded Holdings Replace Mode transactions contained characters that Voyager could not convert to Unicode during the bulk import. This file contains eye-readable (textual) copies of the MARC records with conversion errors described above.

#### OCLC\_MMMDD\_ERES\_LOG.TXT

Created when there are Electronic Resources Mode transactions (049 \$s ER). This is the main Electronic Resources Mode log file, and it contains the bib record IDs for records added, information about records rejected or discarded, and the statistics from the load.

#### OCLC\_MMMDD\_ERES\_REJECTS.TXT

Created when any Electronic Resources Mode transactions were rejected because the incoming record matched an existing record based on OCLC control number. This file contains text copies of the incoming bib records that were rejected.

#### OCLC\_MMMDD\_ERES\_DISCARDS.TXT



Created when any Electronic Resources Mode transactions were discarded because the incoming record either matched more than one existing record, or the incoming record matched an existing record based on a combination of ISBN or ISSN and LCCN (or multiple ISBNs) but not on OCLC number. This file contains text copies of the incoming bib records that were discarded.

OCLC\_MMMDD\_ERES\_ERRORS.MRC

Created when any Electronic Resources Mode transactions contained characters that Voyager could not convert to Unicode during the bulk import. These files contain actual MARC records, not just textual copies of the errored records. Library staff may download these files to a PC and then import the bibs manually into the local database using the Voyager cataloging client. The character(s) that caused the problem during bulk import should be fixed manually before the record is saved to the database. Library staff will also need to manually create MFHDs for the imported bib via the Voyager cataloging client.

OCLC\_MMMDD\_ERES\_ERRORS.TXT

As of October 4, 2010, this file is created when any Electronic Resources Mode transactions contained characters that Voyager could not convert to Unicode during the bulk import. This file contains eye-readable (textual) copies of the MARC records with conversion errors described above.

OCLC\_MMMDD\_ERESREP\_LOG.TXT

Created when there are any Electronic Resources Replace Mode transactions (049 \$s ER \$r REP). This is the main Electronic Resources Replace Mode log file, and it contains the bib record IDs for records added or replaced, information about records discarded, and the statistics from the load.

OCLC\_MMMDD\_ERESREP\_DISCARDS.TXT

Created when any Electronic Resources Replace Mode transactions were discarded because the incoming record either matched more than one existing record, or the incoming record matched an existing record based on a combination of ISBN or ISSN and LCCN (or multiple ISBNs) but not on OCLC number, or the library has enabled the "Discard incoming records that do not match existing records" option in the replace duplicate detection profile used by the Electronic Resources Replace bulk import rule. This file contains text copies of the incoming bib records that were discarded.

OCLC\_MMMDD\_ERESREP\_REPLACES.TXT

Created when any Electronic Resources Replace Mode transactions replaced an existing bib. This file contains text copies of the existing bib(s) as they looked before they were replaced by the contents of the incoming bib(s).

OCLC\_MMMDD\_ERESREP\_ERRORS.MRC

Created when any Electronic Resources Replace Mode transactions contained characters that Voyager could not convert to Unicode during the bulk import. These files contain actual MARC records, not just textual copies of the errored records. Library staff may download these files to a PC and then import the bibs manually into the local database using the Voyager cataloging client. The character(s) that caused the problem during bulk import should be fixed manually before the record is saved to the database. Library staff may also need to manually create MFHDs for the imported bib via the Voyager cataloging client, if appropriate to the cataloging situation.

OCLC\_MMMDD\_ERESREP\_ERRORS.TXT

As of October 4, 2010, this file is created when any Electronic Resources Replace Mode transactions contained characters that Voyager could not convert to Unicode during the bulk import. This file contains eye-readable (textual) copies of the MARC records with conversion errors described above.

## Interpreting the Log File Messages

Each of the different OCLC...LOG.TXT files contain similar content. The examples and descriptions below apply to all eight types of OCLC...LOG.TXT files, except as specifically noted.

NOTE: The "LINE #:" information inserted in the examples below was added by CARLI staff to help explain each part of the log file. These "LINE" numbers do not appear in an actual bulk import log file.

### EXAMPLE #1: EXPRESS MODE (all records added to the database, no exceptional situations):

#### EXAMPLE #1 OCLC\_FEB04\_EXPR\_LOG.TXT FILE:

```
LINE 1: I am 13920. I will be doing all of
LINE 2: '/export/home/ilcso/bibs/xxx/expr_nor.bibs' for you.
LINE 3: The import code is "EXPRESS" for this run.
LINE 4: The bib dup profile is "OCLCCondBulk" for this run.
LINE 5: The auth dup profile is "AuthReplace" for this run.
LINE 6: This import is using a rule that allows for creating Bibs, MFHDs and
      Items.
LINE 7: This import is using a rule for copying MARC21 holdings fields from bibs
      to MFHDs.
LINE 8: This import is using a rule for creating MFHDs and Items even when the
      incoming Bib is not imported.
LINE 9: Wed Feb 5 17:01:31 2003
LINE 10: Expecting 'O' as character set
LINE 11:1(1): Duplicate Bibs above threshold: replace 0, warning 0.
      Adding Bib record 228920.
      2(2): Duplicate Bibs above threshold: replace 0, warning 0.
      Adding Bib record 228921.
      3(3): Duplicate Bibs above threshold: replace 0, warning 0.
      Adding Bib record 228922.
      4(4): Duplicate Bibs above threshold: replace 0, warning 0.
      Adding Bib record 228923.
      5(5): Duplicate Bibs above threshold: replace 0, warning 0.
      Adding Bib record 228924.

LINE 12:BIBLIOGRAPHIC or AUTHORITY Records
      Processed: 5
      Added: 5
      Discarded: 0
      Rejected: 0
      Errored: 0
      Replaced: 0
      Merged: 0
      Deleted: 0
      Mfhds created: 5
      Items created: 5
LINE 13:Wed Feb 5 17:01:44 2003
```

## INTERPRETATION OF EXAMPLE #1 LOG.TXT FILE:

LINE 1: The number contained in this line (e.g., "I am 13920") is an internal Unix process ID that applies to the bulk import job. It is not relevant to interpreting the log file information or for troubleshooting any problems with the load.

LINE 2: This line shows the path name to the Express Mode bib records that was created when MARC Split divided the daily EDX file of source bibs. The part of this reference that is useful to I-Share library staff is "xxx." The "xxx" represents your library's three-letter code and should verify that the bibs that were loaded into your database were your library's transactions (as opposed to those of another I-Share library).

NOTE: for the other OCLC\_... LOG.TXT files, the "xxx/expr\_nor.bibs" reference is replaced with "xxx/<filename>" that represents a different source file of bibs created by MARC Split. For example, in the OCLC\_MMMDD\_NOHOLDREP\_LOG.TXT files, the "xxx/expr\_nor.bibs" reference is replaced with "xxx/noho\_rep.bibs"

LINE 3: The import code (e.g., EXPRESS) is the actual bulk import rule code used for this load. EXPRESS indicates that this batch of records was processed as Express Mode transactions. This line can be helpful to I-Share library staff to identify which of the bulk import rules should be examined if the load produces any unexpected results.

NOTE: for the other OCLC\_... LOG.TXT files, the "EXPRESS" reference is replaced by one of the following values:

NOHOLD	(for No Holdings Mode transactions)
NOHLDREP	(for No Holdings Replace Mode transactions)
EXPRREP	(for Express Replace Mode transactions)
EMBED	(for Embedded Holdings Mode transactions)
EMBEDREP	(for Embedded Holdings Replace Mode transactions)
ERES	(for Electronic Resources Mode transactions)
ERESREP	(for Electronic Resources Replace Mode transactions)

LINE 4: This indicates the bibliographic duplicate detection profile associated with the bulk import rule used for this load. This line can be helpful to I-Share library staff to identify which of the duplicate detection profiles should be examined if the load produces any unexpected results.

LINE 5: This indicates the authority duplicate detection profile associated with the bulk import rule used for this load. Since the daily OCLC EDX files do not contain authority records, this reference is not relevant to the processing of the bib records in this log.

LINE 6: This indicates that the bulk import rule used for this load had the "Bibs/MFHDs/Items" option selected on the Rules tab in SysAdmin.

NOTE: for the OCLC\_MMMDD\_ERES\_LOG.TXT and OCLC\_MMMDD\_ERESREP\_LOG.TXT files, this line should read "This import is using a rule that allows for creating Bibs and MFHDs."

For the OCLC\_MMMDD\_NOHOLD\_LOG.TXT and OCLC\_MMMDD\_NOHLDREP\_LOG.TXT files, this line should read "This import is using a rule that does not allow creation of MFHDs or Items."

LINE 7: This indicates that the bulk import rule used for this load had the “Copy 8xx ... Fields from Bibs to MFHD” option(s) selected on the Rules tab in SysAdmin.

NOTE: for the OCLC\_MMMDD\_NOHOLD\_LOG.TXT and OCLC\_MMMDD\_NOHOLDREP\_LOG.TXT files, this line should not appear. For the other OCLC\_... LOG.TXT files, this line will appear if the library has selected these options in the bulk import rule.

LINE 8: This indicates that the bulk import rule used for this load had the “Create MFHD for existing Bibs” option selected on the Rules tab in SysAdmin.

NOTE: for the OCLC\_MMMDD\_NOHOLD\_LOG.TXT and OCLC\_MMMDD\_NOHOLDREP\_LOG.TXT files, this line should not appear. For the other OCLC\_... LOG.TXT files, this line will appear if the library has selected this option in the bulk import rule.

LINE 9: This is the start date and time of this bulk import load.

LINE 10: This indicates the “Expected Character Set Mapping of Imported Records” value set in the bulk import rule used for this load. The value of “O” means the bulk import rule is set to “OCLC (non-Unicode).”

LINE 11: Each numbered set of lines details the processing of a single bib record. The duplicated line numbers within parentheses (e.g., “1 (1)” and “2 (2)” ) has no special relevance to the processing of this file of bib records.

The “Duplicate Bibs above threshold: replace 0, warning 0” reference means that the incoming bib did not match any existing bib record in the local Voyager database during the load.

The “Adding Bib record” reference means the incoming bib record was added to the database. The number listed in each Adding Bib record line is the internal Voyager bib record ID assigned to the newly added bib record (e.g., 228920 in message 1(1) in the example above). This bib record ID number can be searched directly in the Voyager cataloging client.

LINE 12: This information represents the summary statistics for this individual load. Each of the types of OCLC\_...\_LOG.TXT files will have its own summary count of records processed for that mode, and the results of the processing.

In Example 1 above, there were 5 records in the input file. All 5 bib records were added to the database, and 5 MFHDs and 5 item records were created and added to the database as well. This summary represents a completely successful Express Mode load.

LINE 13: This is the end date and time of this bulk import load.

If you subtract the start time found in Line 9 from the end time found in Line 12, you see that it took bulk import 13 seconds to load the 5 bib, MFHD and item records for this library, on this date.

Because this particular log file contained no error/exception situations, the OCLC\_FEB04\_EXPR\_LOG.TXT file is the only log file for Express Mode transactions created for this library on this date.

## EXAMPLE #2: EXPRESS MODE (with a “reject” situation):

### EXAMPLE #2 OCLC\_APR01\_EXPR\_LOG.TXT

```
LINE 1: I am 19175. I will be doing all of
LINE 2: '/export/home/ilcso/bibs/xxx/expr.bibs' for you.
LINE 3: The import code is "EXPRESS" for this run.
LINE 4: The bib dup profile is "OCLCCondBulk" for this run.
LINE 5: The auth dup profile is "AuthReplace" for this run.
LINE 6: This import is using a rule that allows for creating Bibs, MFHDs and
      Items.
LINE 7: This import is using a rule for copying MARC21 holdings fields from bibs
      to MFHDs.
LINE 8: This import is using a rule for creating MFHDs and Items even when the
      incoming Bib is not imported.
LINE 9: Wed Apr 2 17:01:15 2003
LINE 10: Expecting '0' as character set
LINE 11:1(1): Duplicate Bibs above threshold: replace 1, warning 0.
           BibID & rank
           233313 - 110
           QUALITY Incoming record rejected because of quality.
           2(2): Duplicate Bibs above threshold: replace 0, warning 0.
           Adding Bib record 233458.

LINE 12: BIBLIOGRAPHIC or AUTHORITY Records
      Processed:      2
      Added:          1
      Discarded:      0
      Rejected:       1
      Errored:        0
      Replaced:       0
      Merged:         0
      Deleted:        0
      Mfhd created:  1
      Items created:  1
LINE 13: Wed Apr 2 17:01:17 2003
```

### INTERPRETATION OF EXAMPLE #2 LOG.TXT FILE:

LINES 1-10, and 12-13 in this log file have the same interpretation as in Example #1 above.

LINE 11: The first record processed in this batch represents an exception situation.

The “replace 1” reference means that the incoming bib record matched one existing record in the local database. If the incoming record had matched two existing records in the database, the message would have been “replace 2” (and so forth, for the number of records matched).

The “BibID” reference, along with the specific information below it, indicates the existing Voyager bib record ID number in the local database that bulk import identified as a match with the incoming record. In this example, the incoming bib record matched existing Bib ID number 233313 in the local database.

The “rank” reference, along with the specific information below it, indicates the sum of the “field weight” values of the fields in the incoming record that matched fields in the existing bib record. In this example, the incoming and existing bib records matched on fields that had a combined field weight of 110. By comparing this log file entry with the field weight values in the OCLCCondBulk duplicate detection profile, we can tell that the two bib records matched on OCLC number (035 \$a, field weight = 100) and either publisher’s control number (028 \$a, field weight = 10) or 024I index (024 \$a, field weight = 10).

Since Express Mode transactions are not designed to perform a replace of an existing bib record, the incoming record is "rejected" as a duplicate by bulk import.

The "QUALITY" reference is included in each message when the incoming record is rejected. Even if the library has followed the CARLI recommendation and has not created a Quality Hierarchy in its bulk import rule, this message appears. Therefore, this reference is not particularly relevant to the processing of the bib records in this log, so staff should ignore this "quality" reference.

Whenever an incoming bib record is rejected by bulk import, a text copy of the incoming record is placed in the OCLC\_MMMDD\_<rule code>\_REJECTS.TXT file.

A routine part of troubleshooting bulk import problems should include a comparison of the incoming record with the existing bib record identified in the log file. Using the records in Example 2 above, the following is discovered when comparing the log files with the existing record in the database.

#### EXAMPLE #2: OCLC\_APR01\_EXPR\_REJECTS.TXT:

This represents a copy of the incoming record that was rejected by bulk import.

```
Record #: 1
Leader : 01685njm 2200325Ka 4500
Fields :
Tag Ind Contents
--- ---
001 ocm49916917
003 OCoLC
005 20030401160424.0
007 ss lsnjlc----e
008 020604s2001 xxumpn eng d
040 || $aJDP$cJDP$dLCS
024 1| $a738572602529
028 02 $aSILKD 6025$bSilva Screen Records
092 || $a781.542$bA643c, CD3855
049 || $a ABCD $lrec1 $p31234112223456
245 00 $aApocalypse :$bCinema choral classics$h[sound recording]
246 3| $aChoral classics
260 || $aUnited States :$bSilva Screen Records,$cp2001.
300 || $a1 sound disc (ca. 75 min.) :$bdigital ;$c4 3//4 in.
500 || $aCompact disc.
511 1| $aCrouch End Festival Chorus, conducted by David Temple ; Th
e City of Prague Philharmonic Orchestra, conducted by Nic Ra
ine and Paul Bateman.
505 0| $aCharging Fort Wagner / Glory -- Hymn to the fallen / Savin
g Private Ryan -- The longest day / The longest day -- Vide
cor meum / Hannibal -- Overture, Agincourt Song / Henry V --
Vocalise / The Ninth Gate -- Bram Stoker's Dracula -- Allon
s, gai, gai, gai / The Lion in winter -- Eya, eya, nova gaud
ia / The Lion in winter -- Dry your tears Afrika / Amistad -
- Dune -- March of men of Harlech (trad.) / Zulu -- Ride of
the Valkyries / Apocalypse now -- The last valley -- Waxing
Elizabeth / Young Sherlock Holmes -- Starman -- Duel of the
fates / Star wars, the phantom menace.
650 |0 $aMotion picture music$xExcerpts.
650 |0 $aChoral music.
710 2| $aCrouch End Festival Chorus.
700 1| $aTemple, David.
710 2| $aCity of Prague Philharmonic.
700 1| $aBateman, Paul,$cconductor.
700 1| $aRaine, Nic.
994 || $a01$bLCS
```

## EXAMPLE #2: EXISTING BIB RECORD IN LOCAL VOYAGER DATABASE:

This is the existing bib record that corresponds to the rejected incoming bib record.

The screenshot shows the Voyager Cataloging interface. The title bar reads "Voyager Cataloging - [Bib 233313 : Apocalypse : Cinema choral classics [sound recording]]". The menu bar includes File, Edit, Record, Display, Options, Window, and Help. The toolbar contains icons for New, Open, Save, Search, Headings, Titles, Save to DB, New Hlds, Get Hlds, New Items, Get Items, Hierarchy, and Help. The MARC record is displayed in a table format:

Tag	I1	I2	Subfield Data
035			⌘a (OCoLC)ocm49916917
040			⌘a JDP ⌘c JDP ⌘d LCS
024	1		⌘a 738572602529
028	0	2	⌘a SILKD 6025 ⌘b Silva Screen Records
092			⌘a 781.542 ⌘b A643c, CD3855
049			⌘a ABCD
245	0	0	⌘a Apocalypse : ⌘b Cinema choral classics ⌘h [sound recording]
246	3		⌘a Choral classics
260			⌘a United States : ⌘b Silva Screen Records, ⌘c p2001.
300			⌘a 1 sound disc (ca. 75 min.) : ⌘b digital ; ⌘c 4 3/4 in.
500			⌘a Compact disc.
511	1		⌘a Crouch End Festival Chorus, conducted by David Temple ; The City of Prague Philharmonic Orchestra, conducted by Nic Raine and Paul Bateman.
505	0		⌘a Charging Fort Wagner / Glory -- Hymn to the fallen / Saving Private Ryan -- The longest day / The longest day -- Vide cor meum / Hannibal -- Overture, Agincourt Song / Henry V -- Vocalise / The Ninth Gate -- Bram Stoker's Dracula -- Allons, gai, gai, gai / The Lion in winter -- Eya, eya, nova gaudia / The Lion in winter -- Dry your tears Afrika / Amistad -- Dune -- March of men of Harlech (trad.) / Zulu -- Ride of the Valkyries / Apocalypse now -- The last valley -- Waxing Elizabeth / Young Sherlock Holmes -- Starman -- Duel of the fates / Star wars, the phantom menace -- The Sonnenscheins / Sunshine.
650	0		⌘a Motion picture music ⌘x Excerpts.
650	0		⌘a Choral music.
710	2		⌘a Crouch End Festival Chorus.
700	1		⌘a Temple, David.
710	2		⌘a City of Prague Philharmonic.
700	1		⌘a Bateman, Paul, ⌘c conductor.

At the bottom of the window, the status bar shows "Publisher Number For Music" and the system clock displays "10:05 AM". The taskbar at the very bottom shows the Start button and open applications including "Voyager.ini - Notep..." and "Voyager Catalogi...".

## EXAMPLE #2: TROUBLESHOOTING ANALYSIS

In this example, the incoming bib record is a duplicate of an existing bib record in the local database. An examination of the existing bib record's History tab (showing the date the bib record was added to the database) as well as the existing MFHD and item record indicates that the bib record that was rejected represents a second copy of this title received by the library.

The solution in this case is to add a new MFHD and item record (both representing copy 2) to this existing bib in the local database.

**EXAMPLE #3: NO HOLDINGS REPLACE (with a “discard” situation due to matching on 2 existing bibs):**

**EXAMPLE #3 OCLC\_FEB07\_NOHOLDREP\_LOG.TXT**

```
LINE 1: I am 26834. I will be doing all of
LINE 2: '/export/home/ilcso/bibs/xxx/noho_rep.bibs' for you.
LINE 3: The import code is "NOHOLDREP" for this run.
LINE 4: The bib dup profile is "OCLCReplace" for this run.
LINE 5: The auth dup profile is "AuthReplace" for this run.
LINE 6: This import is using a rule that does not allow creation of MFHDs or
Items.
LINE 7: Sat Feb 8 17:28:11 2003
LINE 8: Expecting 'O' as character set
LINE 9: 1(1): Duplicate Bibs above threshold: replace 1, warning 0.
      BibID & rank
      229073 - 110
      REPLACE Existing DB Bib record replaced.
      2(2): Duplicate Bibs above threshold: replace 1, warning 0.
      BibID & rank
      29084 - 110
      REPLACE Existing DB Bib record replaced.
      3(3): Duplicate Bibs above threshold: replace 1, warning 0.
      BibID & rank
      229085 - 120
      REPLACE Existing DB Bib record replaced.
      4(4): Duplicate Bibs above threshold: replace 2, warning 0.
      BibID & rank
      229092 - 120
      213734 - 120
      DISCARD Cannot resolve. Record discarded.

LINE 10: BIBLIOGRAPHIC or AUTHORITY Records
      Processed: 4
      Added: 0
      Discarded: 1
      Rejected: 0
      Errored: 0
      Replaced: 3
      Merged: 0
      Deleted: 0
      Mfhds created: 0
      Items created: 0
LINE 11: Sat Feb 8 17:28:50 2003
```

**INTERPRETATION OF EXAMPLE #3 LOG.TXT FILE:**

LINES 1-8 and 10-11 in this log file have the same interpretation as in Examples 1-2 above, except that this log file is for a batch of No Holdings Replace Mode transactions.

LINE 9: The first three records in this log file represent the scenario where an incoming record matched a single existing bib record in the local database (i.e., the “replace” value = 1). The “rank” values in records 1 and 2 reveal that the incoming bib matched the existing bib on the OCLC number (035 \$a) and at least one other standard number field. The “rank” value in record 3 reveals that the incoming bib matched the existing bib on OCLC number (035 \$a) and on at least two other standard number fields.

Since these were No Holdings Replace Mode transactions, the message “REPLACE Existing DB Bib record replaced” represents the expected outcome for the first three records.



However, record 4 represents an exception situation. In this case, the incoming record matched two existing bib records in the local database (i.e., the “replace” value = 2). The record IDs of both existing records are listed under BibID. The rank value reveals that the incoming bib matched the existing bib on OCLC number (035 \$a) and on at least two other standard number fields.

Since bulk import cannot determine which of the multiple existing bibs is the correct one for replacing, the incoming record is discarded from the load.

Whenever an incoming record introduced by any of the Replace modes is discarded by bulk import, a text copy of the incoming record is placed in the OCLC\_MMMDD\_<CODE>REP\_DISCARDS.TXT file.

Similarly, whenever an incoming record introduced by any of the non-Replace modes is discarded by bulk import, a copy of the incoming record is placed in the file OCLC\_MMMDD\_<CODE>\_DISCARDS.TXT.

**EXAMPLE #3: OCLC\_FEB07\_NOHOLDREP\_DISCARDS.TXT:**

```
Record #: 1
Leader : 01723cjm 2200361Ia 4500
Fields :
Tag Ind Contents
--- ---
001 ocm50231068
003 OCoLC
005 20030207111752.0
007 sd fsngnn---ed
008 020715s2002 enkzzn f hin d
040 || $aEQO$cEQO$dIXA$dLCS
020 || $a1843530252
024 1| $a605633109122
028 02 $aRGNET 1091 CD$bWorld Music Network
092 || $a782.4216391411$bI39, CD3125
049 || $aABCD$mno$rrep
245 00 $aIndia$h[sound recording]
246 18 $aRough guide to the music of India
246 1| $iSubtitle on cover:$aSitar to Bollywood :$bsounds of the subcontinent.
260 || $aLondon :$bWorld Music Network,$cp2002.
300 || $a1 sound disc :$bdigital, stereo. ;$c4 3/4 in.
306 || $a010922
440 10 $aMusic rough guide
546 || $aVocal selections sung in Hindustani.
500 || $aCompilation by Ken Hunt from previously released albums.
500 || $aProgram notes by Ken Hunt ([12] p. ; ill.) inserted in container.
505 0| $aAaj Ki Raat / Asha Bhosle (6:13) -- Vhaba Pare / Bapi Das Baul & Baul
Bishwa (7:24) -- Sarasamukhi / Ravikiran (3:54) -- Desh / Vishwa Mohan
Bhatt & Swapan Chaudhuri (7:06) -- Bruhi Mukundhehi / M.S.
Subbulakshmi (2:36) -- Rajasthani Folk Song / Sultan Khan & Zakir
Hussain (7:57) -- Dehati / Kamalesh Maitra (5:11) -- Thee Thee /
Carolene (4:53) -- Chamil / New Bharat Brass Band (1:56) -- Napali
Srirama / Kadri Gopalnath (2:17) -- Bhairavi / Rais Khan & Sultan Khan
(11:44) -- Hanji Mara Lalou Sa / Musafir (2:49) -- Sun Ja Dil Ki
Dastaan / Hemant Kumar (4:48).
650 10 $aFolk music$zIndia.
650 10 $aMusic, Hindustani.
650 10 $aPopular music$zIndia.
700 1| $aHunt, Ken.
994 || $a01$bLCS
```

### EXAMPLE #3: TROUBLESHOOTING ANALYSIS

NOTE: Screen shots from the cataloging client are not available for this example, because the library has already cleaned up the existing bib records in the local database.

To troubleshoot this situation, the library would need to compare the bib record included in the OCLC\_MMMDD\_NOHOLDREP\_DISCARDS.TXT file with the 2 existing bib records identified in the OCLC\_MMMDD\_NOHOLDREP\_LOG.TXT file. If either of the existing bibs represents a duplicate bib situation, the existing record(s) should be modified or deleted, if appropriate. If the incoming bib represents a duplicate, the library can manually add MFHD and item records to the appropriate existing bib.

### EXAMPLE #3: OCLC\_FEB07\_NOHOLDREP\_REPLACES.TXT:

These records represent what the existing bib records in Example #3 looked like in the local database before the incoming bib records replaced their content. The first two records appear to be short bib records added to the local database for Acquisitions purposes. The third bib record appears to be a full record that perhaps contained inaccurate or incomplete information, thus necessitating that it be replaced with a full record from OCLC.

```
Record #: 1
Leader : 01663cjm 2200397Ka 45x0
Fields :
Tag Ind Contents
--- ---
001 229073
005 20030107091051.0
008 890911p19881987enkmun fi d
035 || $a(OCOLC)ocm20325557
028 02 $aVC7 90727-2$bVirgin Classics
100 1| $aElgar, Edward
245 10 $aEnigma variations
260 || $aLondon :$bVirgin Classics,$cp1988.
300 || $a1 sound disc
```

```
Record #: 2
Leader : 01435cjm 2200373Ka 45x0
Fields :
Tag Ind Contents
--- ---
001 229084
005 20030107093243.0
008 990722p19991998nyujzn z d
035 || $a(OCOLC)ocm41941251
028 02 $aCK 69860$bColumbia/Sony Classical
100 1| $aMarsalis, Wynton,$d1961-
245 10 $aBig train$h[sound recording
260 || $aColumbia/Sony Classical,$cp1999.
300 || $a1 sound disc :$bdigital ;$c4 3/4 in.
500 || $aCompact disc.
```

```

Record #: 3
Leader : 01970cjm 22003491a 45x0
Fields :
Tag Ind Contents
--- ---
001 229085
005 20030207093646.0
007 sd zsnngnmmned
008 010418s2001 cau jzn f d
010 || $a 2001563922
035 || $a(OCoLC)ocm45895887
040 || $aGZG$cGZG$dDLC$dLCS
028 02 $a314 520 191-2$bVerve
028 02 $a314 520 191-2$bVerve/UTV Records
042 || $alcderive
050 00 $aSDA 27452
092 || $a782.42165$bP985p, CD3082
245 00 $aPure jazz$h[sound recording]
246 1| $iSubtitle on container:$a18 of the greatest jazz recordings ever
246 3| $aEighteen of the greatest jazz recordings ever
260 || $aSanta Monica, CA :$bVerve/UTV Records,$cp2001.
300 || $a1 sound disc :$bdigital ;$c4 3/4 in.
538 || $aCompact disc.
511 0| $aVarious artists.
508 || $aCompilation produced by Ken Druker in association with Jef
f Moskow.
500 || $aBiographical notes laid in container.
650 |0 $aJazz.
650 |0 $aJazz vocals.
994 || $aX0$LCS

```

**EXAMPLE #4: EXPRESS MODE (with a "discard" situation due to matching at the warning level, but not the replace level):**

**EXAMPLE #4: OCLC\_MAR24\_EXPR\_LOG.TXT**

```

LINE 1: I am 24996. I will be doing all of
LINE 2: '/export/home/ilcso/bibs/xxx/expr.bibs' for you.
LINE 3: The import code is "EXPRESS" for this run.
LINE 4: The bib dup profile is "OCLCConditional" for this run.
LINE 5: The auth dup profile is "AuthReplace" for this run.
LINE 6: This import is using a rule that allows for creating Bibs, MFHDs and
Items.
LINE 7: This import is using a rule for copying MARC21 holdings fields from bibs
to MFHDs.
LINE 8: This import is using a rule for creating MFHDs and Items even when the
incoming Bib is not imported.
LINE 9: Tue Mar 25 17:11:44 2003
LINE 10: Expecting 'O' as character set
LINE 11:1(1): Duplicate Bibs above threshold: replace 0, warning 1.
BibID & rank
4465998 - 10
DISCARD Cannot resolve. Record discarded.

```

```
LINE 12: BIBLIOGRAPHIC or AUTHORITY Records
        Processed:      1
        Added:          0
        Discarded:      1
        Rejected:       0
        Errored:        0
        Replaced:       0
        Merged:         0
        Deleted:        0
        Mfhds created:  0
        Items created:  0
LINE 13: Tue Mar 25 17:12:07 2003
```

#### **INTERPRETATION OF EXAMPLE #4 LOG.TXT FILE:**

LINES 1-10, and 12-13 in this log file have the same interpretation as the Examples 1-2 above. However, this library is using the "OCLCConditional" duplicate detection profile with their Express Mode transactions, rather than OCLCCondBulk. CARLI recommends that libraries use the OCLCCondBulk duplicate detection profile with all of the non-Replace bulk import rules, primarily to avoid the discard situation described in this example.

LINE 11: The first record processed in this batch represents an exception situation.

The "warning 1" reference means that the incoming bib record matched one existing record in the local database, but it matched at the duplicate detection "warning" level rather than the "replace" level. Because "warnings" represent "not perfect matches," the incoming bib record was discarded by bulk import.

The "BibID" reference, along with the specific information below it, indicates the existing Voyager bib record ID number in the local database that bulk import identified as a match with the incoming record.

The "rank" reference, along with the specific information below it, indicates the sum total of the "field weight" values of the fields in the incoming record that matched fields in the existing bib record. In this example, the incoming and existing bib records matched on only one field (rank = 10), and that field was not an OCLC number.

Because records that match at the warning level, but not the replace level are discarded by bulk import, a OCLC\_MMMDD\_EXPR\_DISCARDS.TXT was created for this transaction.

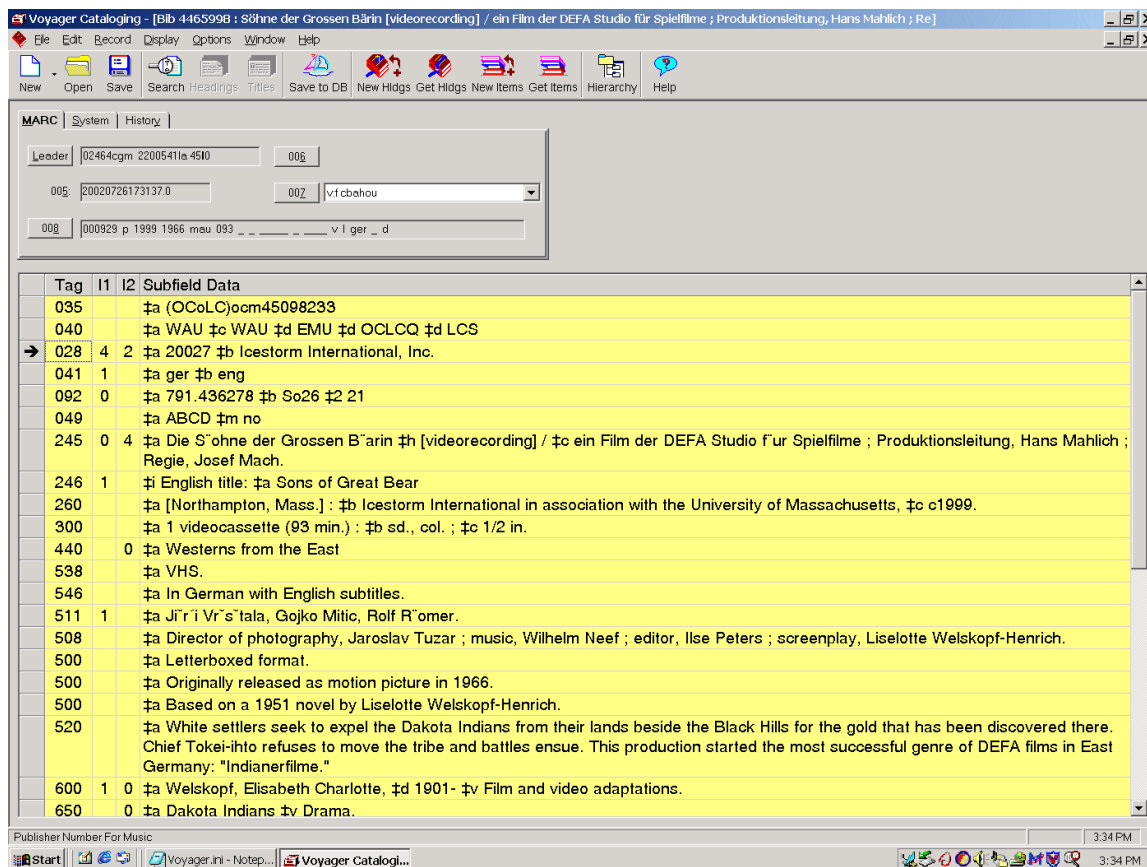
**EXAMPLE #4: OCLC\_MAR24\_EXPR\_DISCARDS.TXT**

This represents a copy of the incoming record that was discarded by bulk import.

```
Record #: 1
Leader : 01525cgm 2200349Ia 4500
Fields :
Tag  Ind  Contents
---  ---  -
001      ocm37663029
003      OCoLC
005      20030324100135.0
007      vd cgaizq
008      970922p19971983cau193 g          v leng d
040  ||   $aJG$cJG$dTMI$dLCS
020  ||   $a0790731541
028  40   $a20027$bDVD Video
090  ||   $aTL789.8.U5$bR555 1997
092  01   $a791.4372$bR449w$221
049  ||   $aABCD$l044
245  04   $aThe right stuff$h[videorecording] /$cLadd Company ; direct
ed by Philip Kaufman ; written for the screen by Philip Kauf
man ; produced by Irwin Winkler and Robert Chartoff.
260  ||   $aBurbank, CA :$bWarner Home Video,$c1997, c1983.
300  ||   $a1 videodisc (193 min.) :$bsd., col. ;$c4 3/4 in.
538  ||   $aDVD format
511  1|   $aScott Glenn, Ed Harris, Barbara Hershey, Dennis Quaid, Pam
ela Reed, Sam Shepard, Kim Stanley, Fred Ward, Veronica Cart
wright, David Clennon, Scott Wilson.
508  ||   $aDirector of photography, Caleb Deschanel ; editors, Glenn
Farr ... [et al.] ; music, Bill Conti.
500  ||   $aBased on the book: The right stuff / Tom Wolfe.
500  ||   $aOriginally produced as motion picture in 1983.
520  ||   $aThe story of how seven cocky pilots became the astronauts
of Project Mercury and pioneered America's launch into the s
pace race.
650  |0   $aAstronauts$zUnited States$xDrama.
650  |0   $aFeature films.
700  1|   $aKaufman, Philip,$d1936-
700  1|   $aWolfe, Tom.$tRight stuff.
710  2|   $aLadd Company.
710  2|   $aWarner Home Video (Firm)
994  ||   $a02$bLCS
```

#### EXAMPLE 4: EXISTING BIB RECORD IN LOCAL VOYAGER DATABASE:

This is the existing bib record that corresponds to the discarded incoming bib record.



#### EXAMPLE #4: TROUBLESHOOTING ANALYSIS

In this example, the incoming bib record matched an existing bib in the local database on the 028 \$a. However, closer examination of these two bib records reveals that they do not represent the same bibliographic work.

As long as this library is using the OCLCConditional (rather than OCLCCondBulk) duplicate detection profile in their Express Mode bulk import rule, this record will not be able to be added to the database via bulk import, without editing the existing bib record to either temporarily delete or change the content of 028 \$a.

The library has a few options to solve this problem.

(1) The library should consider changing their Express Mode bulk import rule to use the OCLCCondBulk duplicate detection profile. This will prevent future incoming records from being discarded based on matching a single non-OCLC standard number in the existing bib record.

After the duplicate detection profile for the Express Mode bulk import rule is changed, the library could update this bib on OCLC again, so that it is included in a future batch of OCLC EDX transactions to be bulk loaded into their Voyager database.

(2) To get this particular bib record into the local database without changing the duplicate detection profile for the Express Mode bulk import rule, the library could do an OCLC Export transaction to import the bib during an online session. See section XIV of this document for more information on the OCLC Export process.

When the incoming bib above is imported into Voyager (via the OCLC Export transaction), staff may have to manually override the online duplicate detection that identifies the incoming and existing bibs as duplicates.

(3) If another I-Share library owns the title represented by the incoming bib record, this library could copy the incoming bib from the Universal Catalog into their local database, and create a MFHD and item record manually in the cataloging client.

When the incoming bib above is copied from the UC, staff may have to manually override the online duplicate detection that identifies the incoming and existing bibs as duplicates.

### **OTHER OCLC... LOG.TXT FILE MESSAGES:**

There are some other situations that can generate specific messages in any of the OCLC...LOG.TXT files. The messages and their interpretation are described below.

- Failed to retrieve parameters from import\_rule [NOHOLD]

This message means the library performed a No Holdings Mode transaction, but there was no NOHOLD bulk import rule found in the library's SysAdmin client.

Similar error messages are created for any other missing bulk import rules (i.e., [NOHOLDREP], [EXPRESS], etc.

- Warning: Failed to find item barcode match: item\_id 8321264

This message means that the library performed a transaction that created an item record, but there was no barcode number entered in 049 \$p in the bib. The item\_ID included in this message is the internal Voyager item record ID number, which is searchable in the cataloging client.

- Warning: No cat\_control\_barcode profile found for [<rule code>].

This message means that the bulk import rule code identified in the message does not have any value entered on the Barcode mapping tab in SysAdmin. For the NOHOLD, NOHOLDREP, ERES and ERESREP rules, this is not an error situation, as none of those rules are designed to create item records, and so no barcodes should be entered in the transactions.

- ERROR: Unparseable record written to error file: [20]-255 : c->8 undefined char in page 9 at 29 'c03431a7.41.'

This message means that the bib record was rejected from the load because it contained a character in field 255 that Voyager could not convert to Unicode during bulk import. The field number will vary in these messages depending on where the error occurs in individual records. The field number with the problematic character should be found in the second set of numbers, following the first number in [brackets].

The actual MARC record that was rejected is placed in a file called "oclc\_<MMMDD>\_<mode>\_errors.mrc" (where <MMMDD> represents the month and day of the OCLC transaction, and <mode> represents the I-Share bulk import mode used in the transaction (e.g., "expr"). Library staff can download this MRC file to the PC, then use the Voyager cataloging client's RecordImport function to manually import the records that were treated as errors by bulk import. If the cat client has its preference set to use a Unicode font (Arial Unicode MS is recommended), when the record is pulled up from the file, there should be a marker in the field in question that shows the problematic character. Staff should be able to manually fix this character before saving the record to the Voyager database.

As of October 4, 2010, a human-readable textual copy of the MARC record that was rejected due to Unicode conversion errors is placed in a file called "oclc\_<MMMDD>\_<mode>\_errors.txt" (where <MMMDD> represents the month and day of the OCLC transaction, and <mode> represents the I-Share bulk import mode used in the transaction (e.g., "expr"). This text file may be useful to staff who review the output files from the daily OCLC loads, but it should be noted that only the "errors.mrc" files are in a format that can be imported into the cataloging client.

- No MFHD created.  
FAILED: 852 \$b "xx" failed to match an existing location code

This message means that a MFHD was not created for the associated bib record in the local database for this particular transaction. The problem is that the library entered the value "xx" in the MARC Loc field in the mapping table of a bulk import rule using the Embedded Holdings model (using the 852 \$b as the source of the Voyager location information), but the value "xx" is not a valid Voyager location, as defined in SysAdmin. To fix this problem so that future bulk import loads don't result in this message, the location code "xx" must be defined in SysAdmin/System/Locations.

### **XIII. Deleting Records**

OCLC delete holdings transactions (e.g., cancels) will have no effect on bibliographic, MFHD, or item records in a Voyager database. This follows a recommendation by ExLibris staff, and is the same processing routine ILC SO used in its DRA environment.

When materials are permanently removed from the collection, if the library's policy is to remove the records entirely from the database, the library should delete the item record and MFHD from the Voyager database using the cataloging client, in addition to deleting the holdings in OCLC's WorldCat.

NOTE: item records cannot be deleted if there are any circulation transactions, fine records, or other types of circulation records associated with that item record. MFHDs cannot be deleted if there are any item records still associated with the MFHD. Also, MFHDs that were created as part of the Acquisitions process and are linked to a purchase order cannot be deleted in Voyager.

If the library is deleting the last MFHD on the bib record (i.e., the library does not have other copies of this title represented by a different MFHD), the library can delete the bib record as well. Deleted bib records from the local database are also deleted from the I-Share Universal Catalog, as long as no other I-Share library has holdings attached to the UC bib. If the bib deleted from the local database can't be deleted from the UC because of other attached holdings, the local library's holding is deleted from the UC bib.

NOTE: Voyager will prevent a bib record from being deleted if there are any MFHDs or item records still associated with it.

If a bibliographic and/or MFHD can't be deleted from Voyager because of linkages to other types of records (e.g., ACQ Purchase Orders), the library has the option to Suppress the bib and/or MFHD from the OPAC. This is done by selecting the Suppress from OPAC option found in the System tab of the bib



and/or MFHD record. See the *Voyager 7.1 Cataloging User's Guide* for more information about suppression of bib and MFHD records.

Bibliographic records marked as Suppress from OPAC or Suppress from UC are also deleted from the I-Share Universal Catalog, as long as no other I-Share library has holdings attached to the UC bib. If the bib suppressed in the local database can't be deleted from the UC because of other attached holdings, the local library's holding is deleted from the UC bib based on the action of suppressing the bib in the local database.

When all of your library's MFHDs have been deleted (or suppressed) from the bib record, a delete holdings transaction should also be done manually in OCLC, to remove your library's holdings symbol from the OCLC master record in WorldCat.

## **IX. OCLC Export Option**

I-Share libraries may choose to use OCLC's Export functionality to download bibliographic and authority records from WorldCat to the local Voyager database in real time.

An OCLC Export is a separate transaction from an OCLC produce or update. Exported bib records are not processed by Voyager bulk import, so the library must manually add MFHD and item records to newly imported bib records using the Voyager cataloging client.

An OCLC Export transaction does not automatically set the library's holding symbol on the bib record in WorldCat.

Libraries may choose not to do an update or produce at the time of the export; the new holding information can be backloaded to OCLC at a later time. If the library exports a record, and does not perform a subsequent update or produce transaction on OCLC, using the cataloging client the library should set the OK to export flag in the System tab on the newly added bib record. This will identify the record for subsequent backloading to OCLC.

If the library chooses to do an update or produce after the Export transaction to set their holdings symbol on OCLC more quickly than backloading will accomplish, the most logical mode to use on the produce or update is Do Not Process Mode. This will prevent the update/produce transaction from being loaded into Voyager at all. It is assumed that the library will add holdings directly in Voyager to the newly imported (via the Export transaction) bib record. In this scenario, because the update/produce transaction will set the library's holdings in OCLC, the library should not set the OK to export flag in the newly added bib record, in order to prevent a subsequent duplicative backload transaction.

For a detailed, graphical guide to the setup instructions for the different OCLC interfaces, see the document at the URL below.

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

### **Importing the exported bibs into Voyager**

Once you have some records exported to your PC, then in the Voyager cataloging client, go to Record/Import/From the New file. In the Select import file dialog box, drill down to wherever you set up your Export destination file or folder (perhaps C:/EXPORT.DAT). Once the file is selected, click OK and the records in your import file will appear, one per line. Select the record you want and click OK. The full bib record will display in the cataloging client, from which you can edit as needed and Save to Database when ready to add it to your Voyager database.

If the bibs were exported from OCLC using the Unicode format (recommended), then the Voyager cataloging client's Options/Preferences/Mapping/Expected Character Set of Imported Records/Local Import value must also be set to "MARC21 UTF-8" (a.k.a., Unicode). If the cataloging client's preference does not match the format of the incoming records, the operator will receive the message "The record character encoding does not match the import format: record skipped."

If this message is received, go to the cat client's Preference/ Mapping tab and reset the Expected Character Set value to be compatible with the format of the incoming record. If the records are exported from OCLC in the Unicode format, set this value in the cataloging client to MARC21 UTF-8. If the records are exported from OCLC in MARC-8 format, then in the cat client's Preference/Mapping tab, set the value to "OCLC (non-Unicode)".

Once the Expected Character Set value in the cat client matches the format of the exported records, the message above should not be seen while importing records from this file.

## Appendix A: Voyager Item Type Code Abbreviations to Use in 049 \$1

This chart lists the valid Voyager item type code abbreviations for use in any of the modes that create item records. The abbreviated codes below are to be used for data entry in the 049 \$1 <the letter EL, not the number 1>. These codes are case sensitive, so staff should be careful to enter them as listed below in their OCLC data entry.

The Item type names listed below are the generic I-Share names; some I-Share libraries have changed the item type names within their Voyager database, so the Item type names below may not apply to all libraries.

049 \$1 code	Voyager Item Type Name	049 \$1 code	Voyager Item Type Name	049 \$1 code	Voyager Item Type Name
bk1	Book1	mic1	Micro1	res7	Reserve7
bk2	Book2	mic2	Micro2	res8	Reserve8
bk3	Book3	mic3	Micro3	resn	ReserveN
bkn	BookN	micn	MicroN	rea1	Realia1
bkre	BookRE	micre	MicroRE	rea2	Realia2
bklr	BookLR	miclr	MicroLR	rea3	Realia3
ser1	Serial1	sco1	Score1	rean	RealiaN
ser2	Serial2	sco2	Score2	reare	RealiaRE
ser3	Serial3	sco3	Score3	realr	RealiaLR
sern	SerialN	scon	ScoreN	arc1	Archive1
serre	SerialRE	score	ScoreRE	arc2	Archive2
serlr	SerialLR	scolr	ScoreLR	arc3	Archive3
av1	AV1	map1	Map1	arcn	ArchiveN
av2	AV2	map2	Map2	arcre	ArchiveRE
av3	AV3	map3	Map3	arclr	ArchiveLR
avn	AVN	mapn	MapN	ele1	Electronic1
avre	AVRE	mapre	MapRE	ele2	Electronic2
avlr	AVLR	maplr	MapLR	oth1	Other1
rec1	Recording1	sof1	Software1	oth2	Other2
rec2	Recording2	sof2	Software2	oth3	Other3
rec3	Recording3	sof3	Software3	othn	OtherN
recn	RecordingN	sofn	SoftwareN	othre	OtherRE
recre	RecordingRE	sofre	SoftwareRE	othlr	OtherLR
reclr	RecordingLR	soflr	SoftwareLR	err	Error
vid1	Video1	res1	Reserve1		
vid2	Video2	res2	Reserve2		
vid3	Video3	res3	Reserve3		
vidn	VideoN	res4	Reserve4		
vidre	VideoRE	res5	Reserve5		
vidlr	VideoLR	res6	Reserve6		