

OCCL Batch Services User Guide

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Revision History

Date	Section title	Description of changes
March 2012	2 Select a Batchload Project Type and Output 3 Order a Batchload Project	2 – Added a section at the end emphasizing the need for libraries to do follow-up holdings maintenance after a one-time batchload project. Lists the ways to maintain holdings with links to more information. 3 – Added information specifically about batchloading vendor-supplied records. If your batchload project includes adding unmatched records to WorldCat, you can add only vendor records that have vendor permission for redistribution. Gives instructions for checking OCLC vendor permissions and for batchloading to set holdings only, if you do have records that lack redistribution permissions.
August 2011	3 Order a Batchload Project	Added precise instructions for opening a spreadsheet on the OCLC Web site that lists vendors who have given OCLC and OCLC users permission to load records they supply into WorldCat.
July 2011	2 Select a Batchload Project Type and Output 5 How Batchload Processes Records	Added the following note to sections on Cancel holdings only projects and processing: Caution: When your library's holdings are deleted from OCLC master bibliographic records, any attached local records are also deleted, including local holdings records (LHRs) and local bibliographic data records.
February 2011	3 Order a Batchload Project	Added guideline for new order feature to request extracting local bibliographic data
	5 How Batchload Processes Records	Added results of requesting extraction of local bibliographic data
November 2010	New version	This is Version 2 of the Guide.

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1 What Is Batchload?

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1.1 What is Batchload?

Batchload is an automated offline service that OCLC uses to process large amounts of library records in various data formats to synchronize library holdings with WorldCat by:

- Setting and/or canceling holdings on WorldCat records
- Adding original cataloging records to WorldCat
- Providing OCLC numbers for your local system records
- Providing copies of OCLC-MARC records that match the records you send for loading into your local system

1.2 Why use Batchload?

Batchload integrates your library's holdings in WorldCat to accurately reflect your collection and make it visible to your patrons, other libraries, and users of the Web through such OCLC services as:

- Web-scale Management Services
- WorldCat Local
- WorldCat.org
- Group Catalog
- Navigator
- Collection Analysis
- Resource Sharing
- Cataloging

1.3 Basic workflow

To use Batchload, you order the type(s) of bibliographic batchload project(s) you need. In the order, you also request the output you need from your project and provide OCLC with information about the characteristics of your library's records. See [chapter 2](#) "Select a Batchload Project Type and Output" and [chapter 3](#) "Order a Batchload Project" for details. Batchload uses MARC-formatted records for processing but can also convert other types of data from your library, as described in chapter 2 for the various project types.

This Guide covers details of the following basic steps in a typical Batchload workflow:

1	Library. Selects the type(s) of project(s) and output needed.
2	Library. Completes and submits a batchload order for each project type.
3	OCLC. Sends the library an order confirmation with a unique batchload project ID and a link to instructions for submitting your records/data.
4	Library. Extracts and sends local system records/data to OCLC for processing.
5	OCLC. Matches the library's records against WorldCat to set or cancel holdings* in records that match and to add your unmatched records that meet quality standards to WorldCat as original cataloging, if requested in your order.
6	OCLC. Provides reports and records to help index consistently formatted OCLC control numbers in your local system or to upgrade your library's records. Provides statistical reports on processing results.
7	Library. Keeps holdings current in WorldCat using ongoing batchload project(s) or using OCLC cataloging services.

* **Definition of set or cancel holdings** – Batchload sets (adds) or cancels (deletes) your library's OCLC institution symbol in matching WorldCat records to indicate items that your library holds or no longer holds, respectively. When your library's holdings are up-to-date in WorldCat, users see an accurate reflection of your collection in Web-scale Management Services, WorldCat Local, and other discovery and resource sharing services listed above in [1.2](#).

1.4 Who is eligible for Batchload?

You are eligible for Batchload services if you:

- Are an OCLC member and have an OCLC cataloging subscription
- Have a Group services contract that authorizes you to do batchload

1.5 What is in this Guide?

The purpose of this guide is to provide the information you need to use Batchload to your library's best advantage. The main sections cover the sample typical workflow described above:

- How to choose a project and output
- How to order a project
- How to send your records/data for processing
- How OCLC processes records
- Why some records remain (called "exception data") and what happens to them
- What kind of report and record files may result from batchload projects

Appendixes include detailed technical information about matching or merging records in WorldCat, validating records for batchload, and more.

Notes:

- **Batchloading for local holdings records is not covered in this Guide.** This Guide covers only Batchload for bibliographic records. For information about batchloading local holdings records, see the [Local Holdings Record Updating Service Guide](#).
 - **“Batchload” is not the same as “batch processing” in Connexion client.** “Batchload” is the name of the service that OCLC performs for libraries. “Batch processing” in the Connexion client is a function that libraries can use themselves to process multiple records at a time using the “Batch” menu commands. See more about [Connexion client batch processing](#) in Connexion client documentation.
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1.6 More information

- See a condensed version of this Guide in the [Batchload Solutions for Bibliographic Records Quick Reference](#).
- See all [Batchload documentation](#).

2 Select a Batchload Project Type and Output

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2.1 List of batchload project and output types

Click a link to go directly to a description of a project type: [Reclamation](#) | [Retrospective](#) | [Symbol flip](#) | [Cancel holdings only](#) | [Ongoing batchload](#) | [Other MARC \(non-MARC21\) formatted data](#) | [Non-MARC "patterned" bibliographic data](#) | [List of numeric search keys](#) | [Group batchload](#)

Click a link to go directly to a description of an output type: [Cross Reference Report](#) | [Library's own records returned with OCLC numbers](#) | [OCLC-MARC records returned](#)

See more about: [Ways to keep your holdings in sync](#)

Note: One-time no-charge reclamation or retrospective project. Since July 1, 2005, OCLC has offered a first-time no-charge reclamation or retrospective project to synchronize a library's holdings with WorldCat. The only requirement is that following the completion of the batchload project:

The library **must continue to keep holdings up-to-date in WorldCat**. This constant follow-up is critical to maximizing your library's use of OCLC services.

How? You can continue to use batchload, or you can use other OCLC services. See more in section 2.9 below.

2.2 Project types

Select a project type based on the status of your records in relation to WorldCat and the type of records/data your library can provide. (Batchload uses MARC-formatted records for processing but can also use or convert other types of data; see [chapter 4](#), section 4.9 "More about record and data formats for batchload" for more information.)

See section [2.7](#) below for a checklist of questions to help you select the type(s) of batchload projects you may need. You may need more than one type.

Caution: When your library's holdings are deleted from OCLC master bibliographic records, any attached local records are also deleted, including local holdings records (LHRs) and local bibliographic data records.

Reclamation (including a scan/delete process)

Matches your records in WorldCat to set (add) holdings; time-stamps them; and then cancels (deletes) holdings on records that were set earlier than the time of the batchload transaction. This type of project can bring your holdings up-to-date if you have not consistently maintained them and cannot easily isolate only the records that need to be updated. The following is how a reclamation project works:

- You send all of your library's records. As they are matched in WorldCat and holdings are set for items you hold, the current date is "stamped" on each record.
- After batchload is complete, OCLC runs a Scan/Delete to remove your holdings from records with a date stamp earlier than the date of the batchload transaction (typically the date when you extracted your records for submittal to OCLC).

Note: Before performing the scan/delete, Batch Services always contacts you to confirm the date on which canceling holdings will be based. You must approve the date before OCLC will run the scan/delete.

- Holdings set after the date of the scan/delete are retained in WorldCat. Therefore, you can continue online cataloging while your records are processed. OCLC recommends, however, that you stop deleting holdings until the reclamation project is complete.
- By default, scan/deletes are processed to skip any holding set on a record that has a local holdings record (LHR) attached. The LHR itself will remain, and the holding will remain set on the record, regardless of date stamp. However, you can request to remove the LHR and related holding (use the free-text box in the order form question “Do you have more information for your project?”)..

Note: You can also request a scan/delete only. See instructions in [chapter 3](#), section 3.4 “How to request a scan/delete-only or symbol flip project.”

To select a reclamation project when you order:

1. In the Bibliographic Batchload order form question, “Select a Batchload project type,” select **One time**, and then select **Reclamation**. (See complete ordering instructions in
2. In “How should holdings be set or canceled,” select:
 - **Cancel for all**
 - Or
 - **Set for all**
 - Or
 - **Set or cancel based on value of Rec Stat** ([Rec Stat](#) = record status, Leader/05)

See details for these choices in [chapter 5](#), section 5.1.5 “Setting and canceling holdings.”

Retrospective

Matches your records in WorldCat to set holdings if you are new to OCLC cataloging or have not previously set holdings in WorldCat. Also used to set, cancel, or set and cancel holdings as appropriate to fill a gap in your collection or to catch up after periods of inactivity.

- You send all of your records or a subset of records to set or cancel holdings in WorldCat and obtain OCLC control numbers for records in your local system if you choose.
- A retrospective project does not include scan/deletes.
- It is usually a one-time project (see more about ongoing projects below).

To select a retrospective project when you order:

1. In the Bibliographic Batchload order form question, "Select a Batchload project type," select **One time**, and then select **Retrospective**.
2. In "How should holdings be set or canceled," select:
 - **Cancel for all**
 - Or
 - **Set for all**
 - Or
 - **Set or cancel based on value of Rec Stat** ([Rec Stat](#) = record status, Leader/05)

See details for these choices in [chapter 5](#), section 5.1.5 "Setting and canceling holdings."

Symbol flip

Scans WorldCat for an OCLC institution symbol in bibliographic records and replaces all occurrences with another institution symbol, or scans for multiple institution symbols and replaces them with a single institution symbol (for example, to merge collections from multiple libraries or to form a consortium under one symbol).

- You do **not** need to use the Bibliographic Batchload order form **or** send records to OCLC.

To order a symbol flip project:

- ▶ Send a written request in an e-mail to OCLC Batch Services at batchload@oclc.org.

For complete instructions, see [chapter 3](#), section 3.4 "How to request a scan/delete-only or a symbol flip project."

Cancel holdings only (on records sent)

Matches your records in WorldCat to cancel holdings, for example, for discarded items.

- Send only records for items your library no longer holds.
- Your holdings are removed WorldCat for all of the records you send that match WorldCat records.

To select a cancel holdings project when you order:

Do this

1. In the Bibliographic Batchload order form question, "Select a Batchload project type," select **One time**, and then select **Cancels**.

2. In “How should holdings be set or canceled,” the only selection available is **Cancel for all**.

Or do this

- ▶ Choose **Ongoing**, and then choose **Cancels only**.

Ongoing batchload

Once your holdings are up-to-date in WorldCat, you can order an ongoing (open-ended) project to continue processing records to update holdings as your library acquires and catalogs items or weeds the collection and de-acquisitions items.

You continue to send your records. OCLC continues to process them as set up in your project whenever they come in. OCLC returns your batchload output for each file of records as the records finish processing.

Note: You may need one or more ongoing projects. The way your local system identifies items removed from your collection—that is, whether batch processing can use or force the value **d** in record status ([Rec Stat](#); Leader/05) in your bibliographic records to delete holdings—determines whether you would need one or more ongoing batchload projects. See [chapter 5](#), section 5.1.5 “Setting and deleting holdings” for details.

To select an ongoing project when you order:

1. In the Bibliographic Batchload order form question, “Select a Batchload project type,” select **Ongoing**.
2. In “What type of project will it be,” select:
 - **Cancels only**
 - Or
 - **Sets only**
 - Or
 - **Set or cancel per record status** ([Rec Stat](#), Leader/05)

See details for these choices in [chapter 5](#), section 5.1.5 “Setting and canceling holdings.”

Other non-U.S.-based MARC formatted data

You send records in other non-U.S.-based MARC formats, such as UNIMARC, INTERMARC, and IBERMARK for Batch Services to convert to MARC 21 for processing.

Non-MARC “patterned” bibliographic data

For libraries that cannot provide MARC-formatted data, OCLC has its own tools to converting non-MARC “patterned” bibliographic data for batchload.

- You send non-MARC data that has discernible elements, such as author and title, in a consistent format, such as in a spreadsheet or a tab-key-delimited text file.
- The data is converted to MARC records and matched against WorldCat for setting or canceling your holdings.

- You can get matching full OCLC-MARC records for records that have holdings set to load into your local system if you want to upgrade your records.

To select a non-MARC “patterned” bibliographic data project, first select the data type:

1. In the Bibliographic Batchload order form question “Identify the format of the data you are submitting...,” select **Non-MARC**.
2. Under “Format,” select:
 - **Spreadsheet**
 - Or
 - **Delimited text**
 - Or
 - **Labeled data**
 - Or
 - Other** (enter a description in the adjacent text box)

(Continued on next page)

3. Under “Type of data,” select **Bibliographic**.

Then select the project type:

4. For the order form question “Select a Batchload project type,” select **One time** or **Ongoing**.
5. Select **Cancel**, **Reclamation**, or **Retrospective**, and then select **Set for all** or **Cancel for all**.

Non-MARC—List of numeric search keys

OCLC can use a simple list of numeric data to match against WorldCat records for setting or canceling holdings.

- You send a list of one of the following numbers from the numeric data in your records: LCCNs, ISBNs, ISSNs, or OCLC control numbers. You can send one file per number type; you cannot, for example, mix OCLC numbers and LCCNs in a single file. You can, however, send multiple files, each based on a single number type—for example, a file of OCLC numbers for one set of records and a file of ISBNs for another set of records.

Caution: The match rate for lists of LCCNs, ISBNs, and ISSNs tends to be very low. If possible, please provide OCLC numbers for your numeric search key project.

- Your holdings are set or canceled in WorldCat records that have matching numeric data.
- If you are setting holdings, you can order matching full OCLC-MARC records for loading into your local system if you want to upgrade your records.

To select a non-MARC numeric search key project when you order, first select the data format:

1. In the Bibliographic Batchload order form question “Identify the format of the data you are submitting...,” select **Non-MARC**.
2. Under “Format,” select:
 - **Spreadsheet**
 - Or
 - **Delimited text**
 - Or
 - **Labeled data**
 - Or
 - Other** (enter a description in the adjacent text box)
3. Under “Type of data,” select **List of numeric search keys**.

Then select the project type:

4. In the order form question “Select a Batchload project type,” select **One time** or **Ongoing**.
5. Select one of the following types of processing: **Set for all** or **Cancel for all**.

Group project

- You send the consolidated set of records that are shared by a group of libraries for resource sharing or that are produced from a shared local system or a shared processing center.
- Group projects can be one-time or ongoing, and they can be different project types, including reclamation, retrospective, and others.

See instructions for ordering for a group in [chapter 3](#), section 3.3.1, “Order a group project.” There are unique guidelines, options, and results to consider before ordering a group project. See details in section 3.3.2 “Guidelines and options for ordering group projects.”

2.3 Separate batchload orders for each project type

Your library’s local system may have different types of records—such as vendor, locally created, special collection/archive, or digital resource records—which require different types of batch processing or output. To process different record types, you may need to order separate batch projects.

For example, a library may send a file of records to have holdings set, original records added, and full OCLC-MARC records returned to replace brief records. At the same time the library has another file of records which needs only a Cross Reference Report to index OCLC numbers, not full records, since those records are already full MARC format.

Each of these is a separate project and requires two separate orders and submission of two separate sets of records. Each project will have its own project ID for tracking.

2.4 Output types

Select the type of output that meets your library’s needs for:

- Indexing the OCLC control number to integrate your local system with WorldCat
- Upgrading your local system records as needed

OCLC produces the output that you select for each file in your project as it completes processing.

See [2.8](#) below for a checklist of questions to help you select the type of output you need.

Cross Reference Reports

Batchload automatically generates a two-column text file that lists the OCLC number (without prefix) across from the unique local record ID located in the 001 field. If your local record numbers were not in the 001 field when you sent them to OCLC, batch preprocessing moved them to the 001.

Example of a Cross Reference Report:

OCLC control number	Local record ID from 001 field
48110776	.b21361198
179104583	.b21512760
229024760	.b21512772

- You can use this report to match and merge the OCLC numbers into your local system records for indexing. Indexing the OCLC numbers integrates your local system with WorldCat.
- Batchload always produces XREF reports and makes them available, whether or not you use them, **unless** your batchload project was based on a list of numeric search keys. For numeric search key projects, you receive a Batchload File Processing Summary Report.

Note: You may want to check with your local system provider to verify that your system can use the Cross Reference Report for merging OCLC numbers into your records.

To select a Cross Reference (XREF) Report as output when you order:

- ▶ For the Bibliographic Batchload order form question “What output do you want to receive when your project is completed?” select **Report only**.

Note: “Report only” is the only choice when you order a project based on numeric search keys. Instead of an XREF report, you receive a Batchload File Processing Summary Report.

Your records returned with OCLC numbers

Note: This option is unavailable for batchload projects using non-MARC data (either non-MARC bibliographic data or a list of numeric search keys).

Batchload returns your records with OCLC control numbers merged in for those that matched WorldCat records.

- By default, the OCLC control numbers are merged into your records in field 035 \$a with the (OCoLC) prefix. You can select a different (or additional) location and format for the merged OCLC number when you order your project. For example, you may want the OCLC number merged in field 001 with the *ocm* or *ocn* prefix.
- This output type is not generated unless you request it in your batchload order.

To select your records returned with OCLC numbers as output when you order:

- ▶ For the Bibliographic Batchload order form question “What output do you want to receive when your project is completed?” select **Report and your records**.

Full OCLC-MARC records returned

Note: This option is unavailable for batchload projects that are based on a list of numeric search keys.

Batchload can provide copies of OCLC-MARC records that matched your records in WorldCat.

- If you choose this option, you also have the option of merging certain local data—for example, your local system control number, notes, or call numbers—into the copies of the OCLC-MARC records. See details in the [OCLC-MARC Record Output Details for Bibliographic Batchload](#) quick reference.

Caution: In certain circumstances, receiving OCLC-MARC records may incur billing charges. See more in [2.6](#) below. Please contact OCLC Customer Support at support@oclc.org if you have questions about implications for billing.

- By default, OCLC-MARC records contain the OCLC number in these fields:
 - 001 prefixed by *ocm* or *ocn*
 - 035 \$a prefixed by (OCoLC)
- Custom postprocessing can change the default formatting if needed. For example, if your library prefers to have the local system control number in the 001 field, Batch

Services can postprocess records to replace data in field 001 with the local system number.

- OCLC-MARC record output is not generated unless you request it in your batchload order.

To select OCLC-MARC records as output when you order:

- ▶ For the Bibliographic Batchload order form question “What output do you want to receive when your project is completed?” select **Report and OCLC-MARC records**.

2.5 Output records are produced from batch archive records

Batch output records (your records returned with OCLC numbers or full OCLC-MARC records) are created from OCLC archive records. For every record you send for batchloading that matches a WorldCat record and has holdings set or canceled—called a “batch transaction” or an “offline transaction”—a **batch archive record selection (BARS)** is created in the OCLC batchload archive. BARS are also created for other OCLC products including Cataloging Partners, WorldCat Collection Sets, Language Sets, GovDoc, MARC Subscription, and eSerials Holdings Service.

Local data retention in BARS

Some local data from your records is retained in your batch archive records. When you order OCLC-MARC records as output of your project, you can work with your database specialist to determine whether you want to have local data transferred to the OCLC-MARC records you receive, which data are allowable, and which data to transfer. See details [OCLC-MARC Record Output Details for Batch Processing](#).

Bibliographic Record Snapshot service

When a library is logged into Connexion and performs a transaction on a record in WorldCat, (such as setting or deleting holdings—called an “online transaction”), a **Cataloging Archive Record Selection** (or CARS) is created in the OCLC archive.

BARS and CARS are used to create records for the [Bibliographic Record Snapshot service](#), which is a separate service, not a part of Batchload.

No BARS for scan/delete-only or symbol flip projects

Scan/delete-only and symbol flip projects do **not** create archive records. Therefore, you cannot receive an output file of records for use in your local system, and there are no records that can be included in the OCLC Bibliographic Snapshot service.

See more details about BARS and CARS and information on their impact on batchload reporting in appendix D “Sample Reports.”

2.6 Notes on product codes, tracking, and billing

As noted at the beginning of this chapter, OCLC offers a one-time no-charge reclamation or retrospective project. Most other batchload activity is covered by your library’s Cataloging

subscription or Group services contract. Contact OCLC Customer Support at support@oclc.org for details or for information about getting a Cataloging subscription if you do not have one.

Most batchload projects are assigned product codes that are used internally for tracking and, only if appropriate, for billing.

Notes on batchload output and projects:

- **OCLC-MARC record output.** OCLC-MARC records are free with a Cataloging subscription of Group services contract. If you order OCLC-MARC records as output from a one-time no-charge reclamation or retrospective project, OCLC charges for each MARC record delivered. If your one-time no-charge project is for a group, there is a charge for each MARC record produced for each library in the group for which holdings are set.
- **Scan/delete-only and symbol flip projects.** There are no product codes, tracking, or billing for scan/delete-only projects or for symbol flip projects.

Questions? Please contact OCLC Customer Support at support@oclc.org.

2.7 Checklist of questions for selecting a batchload project type

Use the checklist of questions in this section to help you select project type(s) you need.

Caution: When your library’s holdings are deleted from OCLC master bibliographic records, any attached local records are also deleted, including local holdings records (LHRs) and local bibliographic data records.

Question	Solution
Does your library have holdings set in WorldCat but they have not been consistently maintained? Do you need to bring them up-to-date but cannot easily identify the records that need updating? <input type="checkbox"/> Yes <input type="checkbox"/> No	If you answer Yes, consider ordering a one-time reclamation project, which includes a scan/delete.
Are you a new OCLC member? <input type="checkbox"/> Yes <input type="checkbox"/> No Do you have gaps in your WorldCat holdings? For example, you have acquired or cataloged a new collection and have not set holdings in WorldCat for items in the collection. <input type="checkbox"/> Yes <input type="checkbox"/> No Do you have some local system records that do not include OCLC numbers? <input type="checkbox"/> Yes <input type="checkbox"/> No	If you answered Yes to any of these questions, consider ordering a one-time retrospective project.
Are your library’s holdings represented in WorldCat by more than one OCLC institution symbol, but you want the holdings to be combined under fewer symbols? <input type="checkbox"/> Yes <input type="checkbox"/> No	If you answered Yes, consider requesting a symbol flip project via e-mail.
Do you need to cancel holdings in WorldCat for discarded items? <input type="checkbox"/> Yes <input type="checkbox"/> No	If you answered Yes, consider ordering a cancel-holdings-only project.

Question	Solution
<p>Do you want to keep your holdings up-to-date once they are in sync in WorldCat (beyond or instead of using OCLC cataloging services to maintain holdings)? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Have you been cataloging locally, rather than exporting records from WorldCat (that is, you have non-OCLC records)? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Have you been copy-cataloging using records exported from WorldCat but without setting your holdings (that is, you have OCLC-derived records)? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>If you answered Yes to any of these questions, consider ordering one or more ongoing batchload projects, depending on library needs (for example, multiple projects to set holdings on various vendor records).</p>
<p>Is your data in a MARC format other than MARC 21? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>If you answered Yes, order a project based on having OCLC convert another MARC format to MARC 21</p>
<p>Do you have non-MARC “patterned” bibliographic data? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>If you answered Yes, order a project based on having OCLC convert non-MARC “patterned” data to MARC-21.</p>
<p>Can you provide a list of OCLC numbers for records for which you want to either set or cancel holdings? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>If you answered Yes, order a numeric search key project based on a simple list of search keys that OCLC can use for matching WorldCat records.</p>
<p>Are you a resource-sharing library group or library group that shares a local catalog or a processing center and you need to update holdings in WorldCat for the group? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>If you answered Yes, order a group project using the group’s consolidated record files.</p>

2.8 Checklist of questions for selecting batchload output

Use the checklist of questions in this section to help you select the type of output you need from your project:

Question	Solution
<p>Is the OCLC control number stored in the same location—field/subfield—in your records for indexing in your local system? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>If you answered Yes, consider using a Cross Reference Report.</p>
<p>Are OCLC control numbers missing from a significant number of your local records? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>If you answered Yes, consider ordering your own records returned with OCLC control numbers merged in.</p>
<p>Do you have a significant number of minimal-level MARC records? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Do you have non-MARC data in your local system and want to upgrade to full OCLC-MARC? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>If you answered Yes to either of these questions, consider ordering full OCLC-MARC records returned for matched records.</p>

2.9 Ways to keep your holdings in sync in addition to batchload

Keeping your holdings up-to-date in WorldCat **following** completion of a one-time batchload project is critical to your library's effective use of OCLC services (see more [details](#)).

You can continue to use batchload to update your holdings, or you can use other OCLC services, depending on your library's specific needs. Click a link below to learn more:

- [CatExpress](#)
- [Connexion](#)
- [CONTENTdm](#)
- [Contract Cataloging](#)
- [eSerials Holdings Service](#)
- [GovDoc](#)
- [WorldCat Cataloging Partners](#)
- [WorldCat Collection Sets](#)
- [WorldCat knowledge base](#) ***

*** **WorldCat knowledge base:**

A batchload alternative for long-term management of electronic resources for WorldCat Local and WorldShare Management Services (WMS).

The [WorldCat knowledge base](#) (included at no extra charge in your OCLC Cataloging subscription) is a non-batchload alternative for managing your electronic resources efficiently for the long term.

The knowledge base:

- Combines data about your library's electronic content with linking features that enable access to the content of your e-books, full-text articles and more.
- Sets your holdings in WorldCat automatically.
- Provides a license management feature for managing vendor-supplied data for electronic resources.

For short-term immediate exposure, continue to use batchload.

Just as WorldCat grows from the records created and added by libraries, the knowledge base grows as libraries enter their electronic collections. If your library is not yet using the WorldCat knowledge base and you have resources that you need to make accessible to users immediately via WorldCat Local or WMS, for the short term, do use batchload:

- If you have holdings records (based on MARC21 Format for Holdings Data) with OCLC control numbers, you can use batchload specifically for updating your OCLC local holdings records (LHRs). This type of batchload is called the Local Holdings Record Updating service. Use it for your electronic resources to update or add URLs in field 856.

See the [Local Holdings Record Updating Service User Guide](#) for more information about managing local holdings records.

- If you do not have holdings records, you can use an enhanced bibliographic batchload project to create level-2 LHRs from bibliographic data.

See more information in [Local Holdings Record Batchload for Branch Level Scoping](#) before discussing the details with your WorldCat Local or WML implementation manager.

3 Order a Batchload Project

Last updated March 2012

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3.1 Ordering

Before you order:

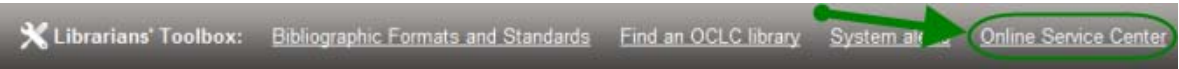
You are limited to 60 min. to complete the order (see [Session timeout](#) below). Please prepare your information ahead of time by filling out the [Order Checklist for Bibliographic Batchload](#) to be sure you have the information you need. The checklist simulates the order form questions.

Notes:

- See [3.3](#) below for guidelines specifically for group (non-single institution) orders.
- See [3.4](#) below for more about ordering scan/delete-only or symbol flip projects, which do **not** require submitting an order or sending records.

3.1.1 How to order

Use the Online Service Center (OSC) on the OCLC Web site to place all batchload orders:

	Action
1	<p>Go to the OSC logon page. (https://www.oclc.org/webapp/wcs/stores/servlet/OSCPortal?storeId=10051)</p> <p>Tip: If you are on the OCLC home page at http://www.oclc.org, scroll to the bottom of the screen. In the Librarian’s Toolbox bar, click Online Service Center.</p> 
2	In the navigation list on the left of the Welcome page, click Log on .
3	<p>On the Log on page:</p> <p>a) In the ACCOUNT INFO box, enter your OSC account User ID and Password. Or If you have no OSC account but you do have a WorldCat.org, FirstSearch, or WebJunction account, enter the user name and password for your account. Or If you have none of the accounts listed above, click Create a new account, follow instructions to set up an OSC account, and then log on.</p> <p>b) In the PROFILE box, be sure that My institution is selected.</p> <p>c) Click Log On.</p>
4	On the OSC Welcome page, click Order OCLC products and services .
5	On the Order page, click OCLC services .
6	On the OCLC services page, click Batchload for Bibliographic Records , or click the associated Order button.
7	<p>A “gateway” page opens with information to help ensure that you are prepared for ordering. When you are ready, click the link I am ready to order a bibliographic batchload project. Continue to next step.</p>

	Action
8	<p>If asked for a contact, select one from the list for your institution, if available, or follow directions to add a contact. Then click Continue. (This contact is for OSC tracking only and is not used for any Batchload purposes.)</p>
9	<p>Complete the Bibliographic Batchload Order form. See Guidelines for ordering below for more details about:</p> <ul style="list-style-type: none"> • Ordering for a group • Fixing order errors • Vendor records, restricted use, and adding your unmatched records to WorldCat • Storing local bibliographic data at OCLC to display in WorldCat Local or WMS • Session timeout for ordering • Warning: Do not use the browser Back or Refresh buttons • Dynamic drop-down questions • Required order data • Dynamic inline help • Links to follow-up information for some selections <p>Notes on completing and submitting the order successfully:</p> <ul style="list-style-type: none"> • Important! Be sure to review the order checklist and prepare for completing the order form questions before you log on to order. • If the order form does not capture any special considerations you need or questions you have about your project, use the final question, “Do you have more information to add about your project,” to clarify or provide more instructions to Batch Services.
10	<p>When finished, click Continue to start the process of submitting your order.</p> <p>If you have errors in the order, the order form re-displays with an error list at the top. See instructions for correcting the errors in Order data errors below. When errors are corrected, click Continue again.</p>
11	<p>Your order re-displays for checking. To edit data you entered, click the Edit button next to a question.</p> <p>When finished checking and editing your order, click Continue (or press <Alt><X>).</p> <p>Or</p> <p>Click Cancel (or press <Alt><S>) or log off the OSC at any time to cancel your order (see 3.1.1 below).</p> <p>Note: Each time you edit the data you entered and click Continue, the order form re-displays the data you entered until you make no more changes and there are no more errors.</p>
12	<p>On the OSC Review page, scroll down to the Batchload Order Form Terms and Conditions. Click the button next to I Accept, and then click Submit Order.</p> <p>You must accept the terms and conditions to place your order.</p> <p>An OSC Receipt screen displays. You can log off the OSC.</p>

3.1.2 Problems with your order?

If you cancel your order, a form opens to give you the option of commenting on any problems you had. If you complete and submit this form, an OCLC support staff person will contact you within two business days to help you resolve the problem and place your order successfully.

3.1.3 Immediate results of submitting your order

- You receive an e-mail message from the OSC with a *WEB-xxxxx* number confirming that your order was transmitted from the OSC to Batch Services. **Do not use this “WEB” number** for any communications about your batchload project. Instead use the project ID described in the next bullet point.

- You receive a separate email confirmation from Batch Services that provides:

- Your unique batchload project ID in the format *Pxxxxxx* (example: **P012345**).

Do use this project ID (“P” number) to identify your project when you submit your records and each time you communicate with OCLC about your project.

In turn, OCLC always uses your project ID in any communications or reports you receive for your project.

- Your order data for a final check

Note: You can reply to this order confirmation e-mail if you have corrections to your order. The e-mail goes directly to database specialists in Batch Services.

- A link to file submittal instructions for the method you chose in your order.

- Your project is set up automatically based on your order data, and for many project types, your project begins processing immediately when OCLC receives your records. See details in [chapter 4](#), Send Records/Data for Batchload.

3.2 Guidelines for using the order form

The following guidelines do not cover every feature of this order form. See a list of all order form questions and information references in the [Order Checklist for Bibliographic Batchload](#). The requirements and guidelines below are supplementary.

See these topics:

- [Ordering for a group](#)
- [Fixing order errors](#)
- [Batchload for vendor-supplied records \(can you add them to WorldCat if unmatched?\)](#)
- [Select local bibliographic data to display in WorldCat Local or WMS](#)
- [Order session timer](#)
- [Navigation](#)
- [Dynamic drop-down questions](#)
- [Required order data](#)
- [Dynamic inline help](#)
- [Links in the order form to follow-up information for some selections](#)

Ordering for a group (multiple institutions)

See instructions, requirements, guidelines, and options for ordering for a group in [3.3](#) below.

After you order for a group and receive your batchload project ID (a “P” number), you need to provide Batch Services with a “translation” table that correlates the library identifier for each library in the group with the library’s OCLC institution symbol for setting holdings in WorldCat. See detailed instructions in [Library Identifiers for Group Batchload Orders](#).

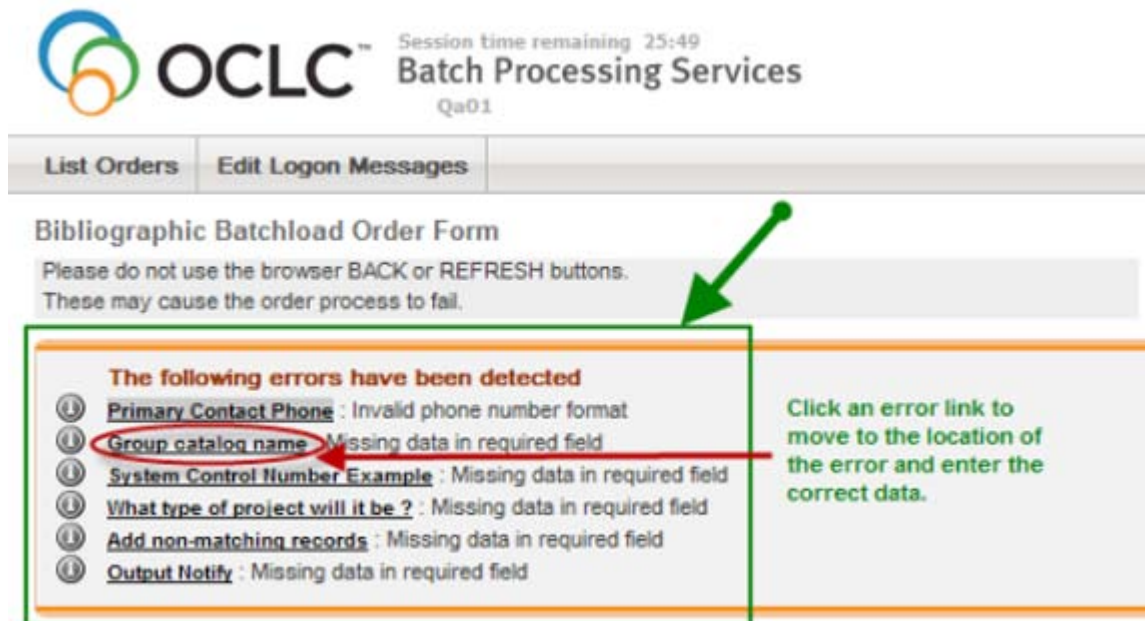
Fixing order errors

[Step 9](#) in the ordering instructions above describes what happens when there are errors in your completed order form. To fix an error:

Either

(1) Click a link in the error list to automatically move to the location of the error and fix it.

Example:



OCLC™ Session time remaining 25:49
Batch Processing Services
Qa01

List Orders Edit Logon Messages

Bibliographic Batchload Order Form

Please do not use the browser BACK or REFRESH buttons. These may cause the order process to fail.

The following errors have been detected

- ① Primary Contact Phone : Invalid phone number format
- ① Group catalog name : Missing data in required field
- ① System Control Number Example : Missing data in required field
- ① What type of project will it be ? : Missing data in required field
- ① Add non-matching records : Missing data in required field
- ① Output Notify : Missing data in required field

Click an error link to move to the location of the error and enter the correct data.

Or

(2) Scroll through the order form to locate and fix errors shown with a dark red background. In the sample error on the next page, the phone number and group catalog name (green boxes and arrows) are required but were left blank.

Example:

Contact Information

Institution **OC LC INC (OC LC #1)**
 Service partner **NONMEMBERS (OC LC)**
 Primary contact

Name (Required)
 Title
 Address1
 Address2
 City State
 Postal code
 Country (Required)
 Email (Required)
 Phone (Required) Fax

Is this project for a single institution or a group (multiple institutions) ?
 To look up OC LC institution symbols, open the [Find an OC LC library](#) service.
 Single institution or group (Required)

Which OC LC product(s) will be supported by this project ? [More information](#)

Note : If you are implementing [WorldCat Navigator](#), select WorldCat Local or Group Catalog, depending on your contract.

Product(s) (Required)

If this order applies to more than one product, click and hold the control key (Ctrl) to make multiple selections. Selections remain highlighted. Undo a selection the same way, by holding Ctrl.

Group catalog name

Batchload for vendor-supplied records (can you add them to WorldCat if unmatched?)

Caution: You can include records that you receive from vendors in a batchload project to set your library’s holdings. However, to add them to WorldCat if unmatched, your library or OC LC must have permission from the vendor to redistribute the records.

Please check permissions in your contract with the vendor who provides records that you want to batchload.

You can also check a list of vendors who have contracted with OC LC to allow their records to be added to WorldCat:

1. Open the “Vendor record licensing” Web page at: <http://www.oclc.org/worldcatlocal/support/vendor.htm>
2. Click the first link—**Vendor record sets accessible through WorldCat Local.**
3. Click **Download the Databases and Collections list.**
4. In the File Download window, click **Open.**
5. In the Excel spreadsheet, click the second tab, labeled **[Current date] Content List**, at the lower left to see the alphabetized list of OC LC vendor permissions.

If neither you nor OC LC has permission to redistribute records, you can request permission directly from the vendor. Some vendors will grant permission.

Restricted use records. For any records from vendors who have not given you or OCLC permission to redistribute, the records you receive from them are considered to be “restricted-use” records; that is, they cannot be added to WorldCat.

How to order batchload for restricted-use records:

You can order a separate batchload project for your restricted-use records to set holdings only. When you order, in the order form:

1. For the question, “Select a batchload project type,” select the type you want and then choose **Set for all**.
2. For the question, “Should we add your records when they do not match existing WorldCat records?” select **No**.

Select local bibliographic data to display in WorldCat Local or WMS

If you are ordering a project to support WorldCat Local or Web-scale [now called WorldShare] Management Services (WMS), you can select local bibliographic data to be stored at OCLC for display to your WorldCat Local or WMS users.

- Local bibliographic data you select is stored as an attachment to the associated WorldCat bibliographic record.
- The data is **not** added to WorldCat bibliographic or local holdings records and **cannot be viewed or edited in Connexion**. You can change or maintain the data through batchloading.
- The data you select is unrelated and separate from local fields transferred to your OCLC batch archive record.

To select local bibliographic data to keep for display to users when you order:

1. In the order form question “What OCLC product(s) will be supported by your project,” select **WorldCat Local** and/or **Web-scale** [now called WorldShare] **Management Services**.
2. In the question “Do you want to display local bibliographic data to your users via WorldCat Local or Web-scale [now called WorldShare] Management Services,” select **Yes**.
3. Select one or more check boxes for the local bibliographic data you want to keep:

<input type="checkbox"/> ..Uniform title (240)	<input type="checkbox"/> Local subject added entry – Corporate name (697)
<input type="checkbox"/> Non-specialized notes (500, 59X)	<input type="checkbox"/> Local subject added entry – Meeting name (698)
<input type="checkbox"/> “With” notes (501)	<input type="checkbox"/> Local subject added entry – Uniform title (699)
<input type="checkbox"/> Index term – Genre form (655)	<input type="checkbox"/> Added entry – Personal name (700, 790, 796)
<input type="checkbox"/> Local subject added entry – Topical term (690)	<input type="checkbox"/> Added entry – Corporate name (710, 791, 797)
<input type="checkbox"/> Local subject added entry – Geographic name (691)	<input type="checkbox"/> Added entry – Meeting name (711, 792, 798)
<input type="checkbox"/> Added class number (695)	<input type="checkbox"/> Added entry – Uniform title (730, 793, 799)
<input type="checkbox"/> Local subject added entry – Personal name (696)	
4. Select **Yes** or **No** to the question “Does your system store the data you want to display in the fields listed above?”

Important! If you select **No**, you will need to send a mapping table to Batch Services at batchload@oclc.org **after** receiving your order confirmation e-mail with your project ID (“P” number), and **after** you send your records for processing, so that the data can be re-mapped for display.

See more information and, if needed, instructions for creating and sending a mapping table in [Storing Local Bibliographic Data via Batchload for WorldCat Local or WMS](#).

Note: You will see this question in the order form:

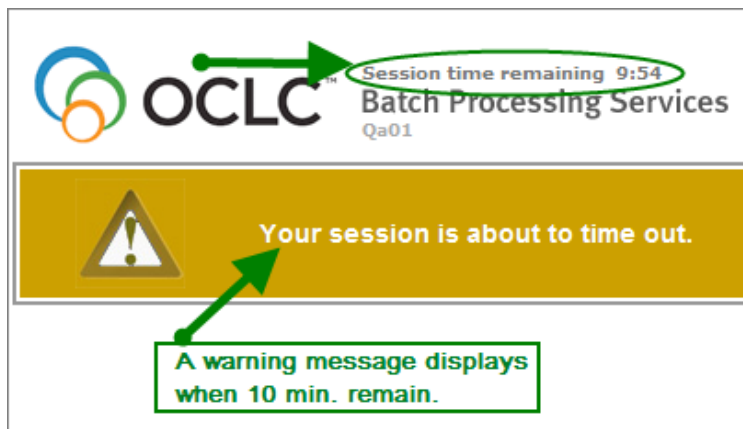
- **Only if** you select WorldCat Local or WMS as the OCLC product(s) supported by your project.
- **But not if** your project is for canceling holdings only.
- **And not if** your project is based on a list of numeric search keys.

Order session timeout

A session timer displays at the top of the order form showing a running account of time remaining (in *min:sec*) to complete your order. The timer automatically ends your session after 60 minutes. It displays a warning when 10 minutes remain (see an example on the next page). You cannot save data you entered; if your session times out, you must start the order over.

OCLC highly recommends using the [order checklist](#) to review the questions and prepare your information beforehand.

Example:



Warning: Do not use the browser Back or Refresh buttons

Note the warning that appears at the top of the order form:

Please do not use the browser BACK or REFRESH buttons. These may cause the order process to fail.

Dynamic drop-down questions

For some questions, the order form may change as you fill it out. Depending on the information you enter, additional questions may open dynamically.

Example:

For the question about where the OCLC number is located in your records, if you select **Other** as shown in the illustration on the next page, drop-down boxes open for entering the field and subfield location (green arrows).

What is the location of the OCLC control number in your records ? [More Information](#)

- If you store properly formatted OCLC control numbers in 035 \$a with (OCoLC), batchload uses that number as a default for matching.
- If you store your OCLC control numbers in another location, indicate the location of the OCLC number in your records so they can also be used for matching.

Location(s)

Field and subfield entry boxes display only if you select "Other."

Select as many locations as apply (Required)

- None (records do not contain OCLC numbers)
- 001, OCLC number with ocm/ocn prefix
- 001, OCLC number only, no prefix
- 035 \$a (OCoLC)
- Other

If your library stores the number in multiple locations, click and hold the control key (Ctrl) to make multiple selections. Selections remain highlighted. Undo a selection the same way, by holding Ctrl.

Other

Field (Required) Subfield (Required if field >= 010)

Required order data

Data that you must enter is marked **(Required)**, as shown in the illustration directly above (orange arrows).

Dynamic inline help

Some questions in the order form have a [More information](#) link as shown below (green arrow).

Example:

What is the location and format of your unique system control number ? [More Information](#)

Click the link to expand inline help for information relevant to the question. To collapse expanded inline help, click the **Hide** button as shown below (green arrow).

Illustration:

What is the location of the OCLC control number in your records ? [Hide](#)

Examples of OCLC control number formats

001, OCLC number with ocm/ocn prefix	ocm00045678, ocn212555869
001, OCLC number only, no prefix	45678, 212555869
035 \$a (OCoLC)	\$a(OCoLC)12345678
Other	(OCoLC)12345678, (OCoLC)123456789 ocm02345678, ocn023456789 12345678, 123456789

See more about the [OCLC control number](#)

Note: Links in inline help for various order form questions as shown in the illustration above (purple arrows), open supplementary information on the OCLC Web site. For example, the link [035](#) shown above opens the [description of field 035](#) in *Bibliographic Formats and Standards*.

Tip: You can click the same links in the pre-order [checklist](#) to view information **before you order**.

Show all inline help

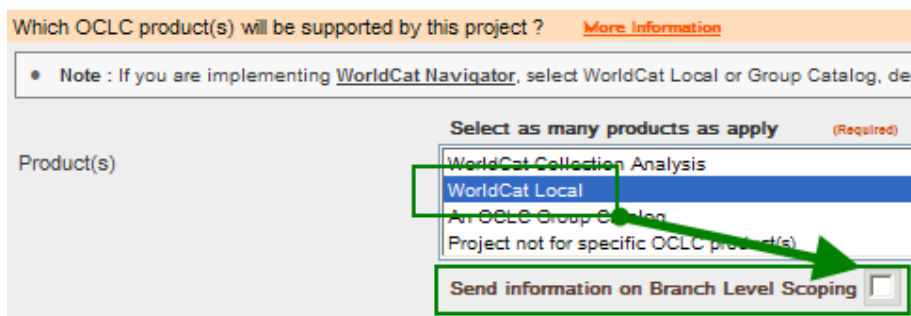
To expand or collapse inline help for all questions, click a link in the top right corner of the order form:

[Show inline help](#) or [Hide inline help](#)

Links in the order form to follow-up information for some selections

If you select **WorldCat Local** as the OCLC product, or one of the products, supported by your batchload project, you can select a check box to receive follow-up information about Branch Level Scoping to support WorldCat Local (see the illustration on the next page). If you select the check box, a link to the following quick reference will be included in your order confirmation e-mail from Batch Services: [Local Holdings Record Batchload for Branch Level Scoping](#).

Illustration:



If you select **Report and OCLC-MARC Records** as the output of your project, as shown in the illustration below, a database specialist will contact you after you receive your order confirmation to determine whether you want to have local data transferred to the OCLC-MARC records and, if so, which data to transfer. The order form links to follow-up information about transferring local data in [OCLC-MARC Record Output Details for Batch Processing](#).

Illustration:

What output do you want to receive when your project is completed ?

Your choices are

- **Report Only**
 - For a project based on MARC records or non-MARC bibliographic data, you receive a Cross Reference (XREF) Report showing the OCLC numbers across from your system control number. XREF reports are available on the OCLC Product Services Web.
 - For a project based on a simple list of numeric search keys, you receive a Batchload File Processing Summary Report.
- **Report and your records (this option is unavailable for projects based on non-MARC data)**
 - For a project based on MARC records, you receive an XREF report. You also receive your records with OCLC numbers added in the location and format you select below.

Please note : If you choose to merge the OCLC control number into the 001 field (see below), any existing 001 in your records will be replaced. If you choose another field, the new field will be added without replacing existing data. However, the new field will not be added if it is an exact duplicate of an existing field.
- **Report and OCLC-MARC records**
 - For a project based on MARC data or non-MARC bibliographic data, you receive an XREF report and OCLC-MARC records.
 - For a project based on a list of numeric search keys, you receive a Batchload File Processing Summary Report and OCLC-MARC records.

Please note : If you make this selection, you can request that local data fields be transferred to your OCLC-MARC output records. [See more details.](#) If you want this option, OCLC will need more information about fields to transfer. **After** you complete this order and receive an order confirmation email with a batch project ID, an OCLC database specialist will work with you to discuss and confirm details for your OCLC-MARC record output. See more about the [OCLC control number](#).

Output Report and OCLC-MARC records (Required)

Notify user@library.org (Required)

3.3 How to order group projects, including guidelines and options

3.3.1 Order a group project

To order a reclamation, retrospective, or ongoing project for a group (multiple institutions) to set or cancel holdings using consolidated files of the group’s records:

	Action
1	<p>Log on and navigate to the Bibliographic Batchload Order form in the Online Service Center. You must use a batchload group project symbol to log on (see guideline below).</p> <p>In the question “Is this project for a single institution or a group (multiple institutions)?” select Group.</p>
2	<p>In the Field and Subfield boxes, enter the field and subfield in the group records where internal identifiers are specified for the shared local system.</p>
3	<p>In the OCLC Batchload group project symbol box, check to be sure that the batchload group project symbol that is automatically supplied from your session logon is correct.</p>
4	<p>In the OCLC institution symbol to be used for billing this project box, enter the OCLC symbol for billing. You can enter the group symbol or a symbol for a library in the group.</p> <p>Optional. Click Check symbol to check that the symbol is valid. If invalid, a message is displayed to the right of the box: Please enter a valid symbol</p>

	Action
5	<p>In the OCLC institution symbols of libraries in the group box, enter a list of symbols separated by commas, spaces, or semicolons. (Limit: 500 symbols)</p> <p>Use the following buttons as described in the order form to help ensure that your list is accurate and complete:</p> <ul style="list-style-type: none"> • Sort symbols (sorts alphabetically) • Check symbols (checks that symbols are valid) (see step 6) • Display names (opens a list of institution names for the symbols you enter)
6	<p>If you click Check symbols, any invalid symbols are listed to the right of the box as red underlined links.</p> <div data-bbox="378 688 586 768" style="border: 1px solid gray; padding: 2px; margin: 10px 0;"> <p style="margin: 0;">Invalid symbol(s)</p> <p style="margin: 0;">XXX 1M2</p> </div> <p>Example:</p> <p>Click an invalid symbol link to automatically select the symbol in the box for editing.</p>
7	<p>Complete the order form and submit the order.</p>

3.3.2 Requirements and guidelines for group projects

Required guidelines in the following list are marked [R].

Guideline	Description
Group symbol [R]	<p>If you order for a group, you must log on the Online Service Center to place your order using an OCLC batchload group project symbol rather than an OCLC institution symbol for a single library in the group. Ordering under a group symbol ensures that the group project can be distinguished from any projects that a single institution in the group may order. The group symbol is used for tracking project files.</p>
	<p>If your group does not have an OCLC batchload group project symbol, contact OCLC Customer Support at support@oclc.org for help.</p>
OCLC institution symbols for libraries in the group [R]	<p>Each library in the group must be profiled under an OCLC institution symbol (the symbols are required for setting and canceling holdings accurately).</p>
Project coordinator	<p>OCLC needs a primary contact (usually the person who places the order) for communications about the project.</p>
Library identifiers in records submitted [R]	<p>The group's bibliographic records sent for processing must contain library identifiers representing libraries in the group in a consistent location (field/subfield). Library identifiers in a record indicate which libraries in the group hold the item. Identifiers can be unique local codes (meaningful only internally to the libraries), holding library codes, or the OCLC institution symbols of libraries in the group. See 3.3.5 below for more details. See also Library Identifiers for Group Batchload Orders.</p>

Translation table	Processing for a group is based on a translation table that “translates” the local library identifiers in the records into corresponding OCLC institution symbols in order to set or cancel holdings accurately for each member of the group. See more about setting up the translation table in 3.3.5 below.
Adding the group’s unmatched records to WorldCat	<p>If your group project includes adding the group’s unmatched records to WorldCat as original cataloging, you can choose which symbol to use in the 040 \$c of the added record to indicate the contributing library. Select:</p> <ul style="list-style-type: none"> • The OCLC group project symbol <p>Or</p> <ul style="list-style-type: none"> • The first OCLC institution symbol found in each record

3.3.3 Options for group projects

Option	Description
Retain local system control number	You can opt to retain a local system control number in the 035 or 951 field. No other local data can be retained.
OCLC-MARC record output	<p>Caution: If you order full OCLC-MARC record output from your group project, a copy of the matching WorldCat record is created for each library for which a holding is set. For example, one record containing three library identifiers sets three holdings on the WorldCat record, and three copies of the WorldCat record will appear in the MARC record output file. For one-time no-charge retrospective or reclamation projects, billing will include a charge for each of the three copies of the one WorldCat record. There is no charge for OCLC-MARC records if you have a Cataloging subscription or Group services contract.</p> <p>Billing implications for MARC record output. If you have questions about possible billing implications for ordering OCLC-MARC record output, contact OCLC Customer Support at support@oclc.org to clarify before you order.</p>
Single institution batchload projects	Any single library in the group can also place a separate batchload project independently of the group project.

3.3.4 Results of group projects

Result	Description
Batchload reports for a group project	Reports contain a list of holdings set or canceled for each OCLC institution symbol of libraries in the group.
Archive records	Archive records are created for transactions on WorldCat records—including setting holdings, canceling holdings, and adding records to WorldCat—for each library in the group (archive records contain the library’s history of local changes to WorldCat master records).

3.3.5 Translation table for group projects

In your batchload order, you provide both (1) the location (field/subfield) of library identifiers in the records you send and (2) a list of the OCLC institution symbols for all libraries in the group. After you order and receive your batchload project ID, construct a translation table to correlate the library identifiers with the OCLC institution symbols. See examples of translation tables below. See detailed instructions in [Library Identifiers for Group Batchload Orders](#).

Translation table example 1

Institution name	Library identifier	OCLC institution symbol
Australian Catholic Univ Canberra	AACU	ATUCC
Australian Taxation Office	AATO	TX4
Australian Bureau of Statistics	ABS	ATABS
Canberra Inst of Tech	ACIT	CANIT
Department of admin services	ADAC	XG\$

Translation table example 2

Institution name	Library identifier	OCLC institution symbol
Hanson Professional Services	spishan	AP5
Illinois Dept of Public Health	spisiph	D91
Phoenix Academy	deceph3	DPSPA
Blue Mound Memorial Library District	blmpblm	GD9
Lovington Public Library District	lovplov	GD7

3.4 How to request a scan/delete-only or symbol flip project

You do not need to use the order form or send any records to OCLC for a scan/delete-only project or for a symbol flip project.

Caution: Symbol flips and scan/deletes are permanent processes that cannot be reversed and do not create archive records (see [chapter 2](#), section 2.5 “Output records are produced from archive records” for more information). There is no charge or related product code for a symbol flip or scan/delete-only.

To request a scan/delete-only or symbol flip project:

Action	
1	<p>Create an e-mail message to request your project. List your:</p> <ul style="list-style-type: none"> • OCLC institution symbol • Institution name • Type of project (“scan/delete only” or “symbol flip”) • Reason for the request (e.g., institution closed, merging with another institution, etc.) • Instructions

	Action
2	<p>For a symbol flip project:</p> <p>Supply the OCLC institution symbol(s) to be flipped and the OCLC symbol that should replace the flipped symbol(s).</p> <p>Note: You can replace a single OCLC symbol or multiple symbols, but you can flip the symbol(s) to only one symbol per request.</p>
3	<p>For a scan/delete-only project—LHRs:</p> <p>If your library has local holdings records (LHRs) attached to WorldCat records, add a description of how you want to process matched records that have your LHRs attached.</p> <p>[Add this text:]</p> <p>For matched records that have my library’s LHRs attached</p> <p>[Conclude with one of the following:]</p> <ul style="list-style-type: none"> ○ delete all occurrences of my library’s holdings (remove holding from bibliographic record and remove any attached LHRs). ○ delete all LHRs (but do not delete holdings). ○ delete all LHRs and delete the holding set on the associated bibliographic record. ○ delete all bibliographic holdings except bibliographic holdings with LHRs attached (keep LHRs attached) <p>For more information on LHRs, see the Local Holdings Record Updating Service User Guide.</p>
4	<p>For a scan/delete-only project—IRs:</p> <p>If your library has bibliographic institution records (IRs) attached to WorldCat records, add a description of how you want to process matched records that have your IRs attached.</p> <p>[Add this text:]</p> <p>For matched records that have my library’s IRs attached</p> <p>[Conclude with one of the following:]</p> <ul style="list-style-type: none"> ○ Delete all occurrences of my library’s holdings (remove holding from bibliographic record and remove any attached IRs). ○ Delete all IRs (but do not delete holdings). ○ Delete all IRs and delete the holding set on the associated bibliographic record. ○ Delete all bibliographic holdings except bibliographic holdings with IRs attached (keep IR attached)
5	<p>Send the e-mail to OCLC Batch Services at batchload@oclc.org.</p>

4 Send Records/Data for Batchload

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4.1 Methods of sending records/data

4.1.1 Methods by data type

How you send your library's records for batchloading depends on the type of data you send for processing and, therefore, also on the type of project you order. The following table shows which methods are available for sending records/data by project and data type:

Methods	What is this?	Use to send this data type or to request this project type...
FTP	File transfer protocol using an OCLC Electronic Data Exchange (EDX) account	MARC data
PSWeb	File upload using the OCLC Product Services Web interface	MARC data
E-mail with files attached	Message to Batch Services with data files attached for batchloading	<ul style="list-style-type: none"> • Non-MARC “patterned” bibliographic data • List of numeric search keys
Files on physical media via mail service	Files on CD or DVD mailed to OCLC for batchloading	
E-mail with no data required	Simple e-mail request	<ul style="list-style-type: none"> • Scan/delete-only • Symbol flip

4.1.2 What you need to use FTP or PSWeb

Choosing between FTP or PSWeb is a matter of library experience or preference. If you have already used one or the other, you will likely continue using the method you know. If you are deciding which to use, the following table shows what you need for each:

What you need for FTP	<ul style="list-style-type: none"> • An FTP client such as WS_FTP_Professional or Blue Zone. Do not use Internet Explorer or FireFox. • OCLC EDX account. If you do not already have one, an EDX account is automatically created for you when you order.
What you need for PSWeb	<ul style="list-style-type: none"> • Web browser • OCLC authorization and password for logging on: <ul style="list-style-type: none"> ○ Use your existing cataloging, FirstSearch (with an administrative or statistics password), or resource sharing authorization and password. Or <ul style="list-style-type: none"> ○ When you place your order, you can request a PSWeb-only authorization and supply your preferred password.
What you need for either FTP and PSWeb	<ul style="list-style-type: none"> • You will use the same guidelines and procedures for creating DATA and LABEL file(s). • Plain text editor such as NotePad to create LABEL file(s). Do not use Word.

4.1.3 FTP and PSWeb recommended limits for file size and number of files to submit per day

- OCLC Batch Services recommends a file size limit of 100 megabytes (MB) and a limit of submitting no more than 19 sets of DATA and LABEL files per day. This file size accommodates:
 - Up to 90,000 MARC bibliographic records
 - Up to 300,000 MARC holdings records ([MFHD](#)) for LHRUS projects only (see the [Local Holdings Record Updating Service User Guide](#) for more information)
- **Smaller and fewer bibliographic record files for uploading to PSWeb.** For uploading bibliographic record files to PSWeb, OCLC recommends smaller files of 50 MB, or about 40,000 to 45,000 records, to avoid possible timeout issues with uploading larger files using Web-based file transfer interfaces such as PSWeb. (These problems are rarely an issue for files of holdings records.) We recommend limiting uploads to 10 sets of files per day.
 - If you want to upload larger bibliographic record files (100 MB) to PSWeb, we recommend that you transfer one DATA and one LABEL file at a time and wait for the transfer to complete successfully before uploading more files.
 - If these guidelines for PSWeb upload do not work for you, please use FTP transfer instead.
- If you are submitting a large number of files for your project via either PSWeb or FTP, OCLC highly recommends sending only one or two sets of DATA/LABEL files the first day; any problems in your LABEL file data or in file naming conventions can be corrected before you send other files.

4.2 Quick references

See printable quick references that give instructions separately for each method of preparing and sending files/data:

- [Send Records for Batch Processing Using PSWeb](#)
- [Send Records for Batchload Using FTP](#)
- [Send Records for Batchload Using Your Innovative \(III\) Local System](#)
- [Send Non-MARC Data for Batchload via E-mail or Physical Media](#)

This chapter of the Guide consolidates all of the information and instructions contained in the quick references.

4.3 Create DATA and LABEL files for FTP or PSWeb submittal

Whether you use FTP or PSWeb, you need to create DATA and LABEL files. DATA files contain your records. LABEL files contain required information about the DATA files in a required format.

4.3.1 General guidelines

- Create a LABEL file for each DATA file. Please strictly follow guidelines and instructions to prevent problems with sending your data.
- Always send the DATA file first, followed by its associated LABEL file.

4.3.2 Create DATA file(s)

	Action
1	Copy your MARC records to one or more files. See limits in 4.1.3 above.
2	<p>Name the DATA file using these conventions:</p> <ul style="list-style-type: none"> • Use alphanumeric characters only (no hyphens, dashes, pound signs, or other non-alphanumeric characters). • Use up to eight characters between periods (.). • Use the following required naming convention to match the corresponding LABEL file name: <ul style="list-style-type: none"> ○ Type DATA.D followed by the current date in the format <i>yymmdd</i>. Example: DATA.D090328 ○ If you submit multiple DATA files, use the same name but add the extension .FILE followed by a unique number for each file. Example: DATA.D090328.FILE1 DATA.D090328.FILE2, DATA.D090328.FILE3, and so on • If you ordered a one time batch project and send multiple files: <p>For the last file you send for your project, replace the .FILE extension with the extension .LAST.</p> <p>The .LAST extension signals Batch Services that you have sent all of your records and then OCLC can complete your project and generate summary reporting.</p> Example: DATA.D090328.LAST <p>Note: If your project consists of only one file, add only the extension .LAST to the file name.</p> <p>Examples of complete DATA file names: DATA.D090328.FILE1, DATA.D090328.FILE2 (project with multiple files) Or DATA.D090328.LAST (last or only file in a one time project)</p>
3	Repeat the steps above to create as many DATA files as needed for your records and remain within the recommended limits (see 4.1.3 above).

4.3.3 Create a LABEL file for each DATA file

Action	
--------	--

- 1 Open a new document in a text editor such as NotePad (do not use Word).
- 2 Type each of the five field labels listed in the following table on separate lines, with each label followed by two blank spaces and then the specified data.

Caution: Follow the [guidelines](#) below strictly to prevent problems with submitting your data.

Type this label...	Enter two blank spaces and then this data...
DAT	Date the DATA file was compiled, in format <i>yyyymmdd</i> , followed by 000000.0 , no spaces
RBF	Number of records in the DATA file, no comma
DSN	DATA file name
ORS	OCLC institution symbol
FDI	Batch Services-assigned project ID; that is, the “P” number that you receive in your Batch Services order confirmation email. Example: P012345 Caution: Do not use the WEB-xxxxxx number sent by the Online Services Center (OSC). That number confirms only that your order was transmitted from the OSC to Batch Services and is not used for Batchload.

Example of LABEL file content

Replace each ■ with a blank space. Note that the font in this example is **Courier New** (see guidelines immediately below).

```

DAT■■20090328000000.0
RBF■■75000
DSN■■DATA.D090328
ORS■■OCL
FDI■■P011871
    
```

Guidelines

- Type all content in capital letters.
- Do not add any other data or notes or extra spacing.
- Entering the two spaces between each label and the data is critical. Preferably, use a fixed length font, so that you can clearly see and fix any spacing errors.
Example: To change the font in Notepad, click **Format > Font**. In the **Font** list, click **Courier New**.
- Press <Enter> before typing the next field (moves the cursor to the next line).

Action	
3	<p>Click File > Save to name and save the file:</p> <p>a. In the File name box of the Save As window, type LABEL.D followed by the current date in the format <i>yyymmdd</i>.</p> <p style="padding-left: 40px;">Example: LABEL.D090328</p> <p>b. Add the .FILE extension if you create multiple LABEL files, followed by the same number as the DATA file it describes.</p> <p style="padding-left: 40px;">Examples: LABEL.D090328.FILE LABEL.D090328.FILE2, and so on</p> <p>c. If you ordered a one time batch project and you are sending multiple files: For the LABEL file that corresponds to the last DATA file you send for your project, replace the .FILE extension with the extension .LAST.</p> <p style="padding-left: 40px;">Note: If your project consists of only one file, add only the extension .LAST to the name.</p> <p>d. In the Encoding list, select ANSI if not already selected. Other encoding types may cause file errors.</p>

4.4 Send DATA and LABEL file(s) via FTP

Caution: If you use FTP **and** your local system is Innovative Interfaces, please use [special instructions](#) not given in this Guide. Innovative systems have a built-in FTP function. The instructions are a composite provided by Innovative users who have transferred records to OCLC. OCLC cannot provide definitive instructions. Please consult technical support for your Innovative system, if you need help.

To use FTP to send your DATA and LABEL files:

Action	
1	<p>Using an FTP client such as WSFTP_Pro or Blue Zone, enter:</p> <p style="padding-left: 40px;">ftp edx.oclc.org</p>
2	<p>Enter your EDX account user name in the format:</p> <p style="padding-left: 40px;">t[xxx]1 (Replace [xxx] with your OCLC institution symbol and enter a 1, the number one, not the letter "ell")</p> <p style="padding-left: 40px;">Example: tOCL1</p>

	Action
3	<p>Enter your password.</p> <p>The first time you use your account, you must change the initial default password, which is the same as your user name</p> <p style="text-align: center;">Example: tOCL1</p> <p>a. In the password box, type a single string with your initial default password followed by your new password twice, separating each password with a slash:</p> <p style="text-align: center;"><i>[initial default password]/[new password]/[new password].</i></p> <p style="text-align: center;">Example: tOCL1/blue1234/blue1234</p> <p>Note: The new password must be eight characters (use A-Z, #, \$, or @) and must include at least one number (0-9).</p> <p style="text-align: center;">Example: blue1234</p> <p>b. Click OK.</p> <p>Note: The next time you log on, you may get a password error if you happened to save the initial “change password” command string. Simply enter your new password only once (example: blue1234) and save your connection session.</p>
4	<p>Change the default directory to:</p> <p style="text-align: center;">‘edx.ebsb.[xxx].ftp’ (replace [xxx] with your OCLC institution symbol)</p> <p>Caution: Always include the single quotation marks.</p>
5	<p>Verify that the transfer type is set to binary mode (bin).</p>
6	<p>Send the DATA file first. Type put [file name].</p> <p style="text-align: center;">Example: put DATA.D090328.FILE1 (first of multiple files) Or put DATA.D090328.LAST (last or only file for a one time project)</p>
7	<p>Send the corresponding LABEL file next. Type put [file name].</p> <p style="text-align: center;">Example: put LABEL.D090328.FILE1 Or put LABEL.D090328.LAST</p>
8	<p>Repeat steps 6 and 7 to transfer more files as needed, following the recommended limits described in 4.1.3 above.</p>
9	<p>Click Quit.</p>

4.5 Send DATA and LABEL file(s) via PSWeb

To use the Product Services Web (PSWeb) to send DATA and LABEL files:

	Action
1	In your Web browser, go to http://psw.oclc.org .
2	In the list of links on the left, click File uploads .
3	On the File Uploads page, click OCLC Batch Services (Batchload orders with project number Pnnnnnn) .
4	Enter your OCLC logon authorization and password and click Enter . See the " What you need " table above for details about authorizations for PSWeb.
5	Send the DATA file first: Under Data File(s) , type the full path and file name of your DATA file, or click Browse and locate the file.
6	Send the LABEL file next: Under Label File(s) , type the path or locate the corresponding LABEL file.
7	Enter more pairs of DATA and LABEL files as needed, following the recommended limits described in 4.1.3 above.
8	Click Upload Files . Your files should appear in the Current Files list below the Upload Files button.
9	Click Log Out below the list of links on the left.

4.6 OCLC file pickup

- Files successfully sent to OCLC via FTP or PSWeb are picked up by an internal process at approximately 2:00 a.m. U.S. Eastern Time each day.
- Shortly after OCLC pickup, you will get an e-mail notification that OCLC received your file. If you do not receive the e-mail, contact OCLC Batch Services at batchload@oclc.org to investigate.

4.7 What happens to your files?

If you are a U.S. library ordering for your institution only, **and** you can provide MARC 21 records, **and** you do not need to receive OCLC-MARC record output, when OCLC receives your files:

- Your records start processing automatically with no prior review by OCLC staff.
- Within minutes after OCLC pickup, you receive an e-mail to let you know that processing has begun on your project, with information about how records will be processed, based on your order selections.

OR

If your project does **not** have the characteristics listed above and instead, has one of the characteristics listed in the table below:

- You receive an e-mail notification that your files were received.
- The files go into an evaluation queue for customized setup.
- An OCLC Batch Services database specialist reviews your project setup and records and may contact you for more information. The following table gives examples.

If your project is ...	A database specialist ...
Non-U.S. order	Reviews for varying cataloging practices
Order for a group (multiple libraries)	Requests data from you to correlate local library identifiers in records with OCLC institution symbols of libraries in your group See more on providing library identifiers .
Order for OCLC-MARC record output	Contacts you about whether to retain local data from your records in the MARC records you receive. See more details .
Order based on non-MARC “patterned” data	Evaluates the data for converting to MARC records and matching against WorldCat.
Order based on a list of numeric search keys	Provides special processing—the numeric keys are matched against WorldCat.

4.8 Send non-MARC data via e-mail or physical media

After you order a non-MARC data project for either “patterned” bibliographic data or numeric search keys, **and** you receive an order confirmation e-mail from Batch Services that contains your project ID (a “P” number; example, “P012345”), you can prepare and send your data.

4.8.1 Create file(s) of patterned bibliographic data

Export data from your local system using a desktop application such as FILEMAKER; Microsoft Access, Excel, or Word; ClarisWorks; or Lotus into the type of file you selected when you ordered (that is, a spreadsheet, a delimited or labeled text file, or another file type that you specified).

Examples

The following two examples, one exported from an Excel spreadsheet and the other from FILEMAKER, show only a small part of the data exported.

Excel spreadsheet

BIB-LEVEL#	ISBN#	DDC#	TITLE#	AUTHORS#	PUBLISHER NAME#
M#	031210281X#	#	The World turned upside down: Indian voices from early America#	Calloway, Colin G.#	Bedford Book of St Martin's Press#
M#	750704322#	371.122#	Passionate enquiry and school development: a story about teacher action research#	Dadds, Marion#	The Falmer Press#
M#	#	792.0954#	A future plan for the development of the modern theater in Qatar#	Burshaid, Saad#	#

You can create a file like the one illustrated above by using comma-delimited settings in the export tools of the spreadsheet software.

FILEMAKER

```

Type:-Article #
Author:-Key, Joseph Patrick #
Title:-INDIANS AND ECOLOGICAL CONFLICT IN TERRITORIAL ARKANSAS. Citation:-Arkansas Historical Quarterly 2000-59(2):127-146 #
Abstract:-The removal of Delaware's and Shawnee from the White River in Arkansas during the early 19th-century was part of a larger ecological conflict over land and natural resources that pitted Native Americans against whites and also against each other. The emergence of a fur trade with white merchants intensified competition and resource depletion among several tribes. Ironically, peace treaties tended to intensify commercial hunting. Cherokee settlers and the white settlers that followed added competition over land use to this volatile situation. Ultimately, white farmers tied to the emerging cotton market won this contest by harnessing political power and removing their Native American competition. #
Documentation:-Based mainly on manuscript collections at the National Archives and University of Arkansas-Fayetteville and secondary sources; 46 notes. #
Abstracter:-R. E. McFarland #
Language:-English #
Period:-1780-1821 #
Subject:-Fur Trade #
Arkansas, Indian-White Relations, Farming, Land, #
ISSN:-0004-1823 #

Entry:-38:7667 #
    
```

You can create a file like the one illustrated above using FileMaker's export utilities.

4.8.2 Create list(s) of numeric search keys

Create list(s) of numeric search keys using the type of file you specified when you ordered (that is, a spreadsheet, a delimited or labeled text file, or another file type that you specified).

Guidelines

- Enter only one type of numeric search key in a single file. If you want to send more than one type of number, create a separate file for each.

You can send a list of LCCNs, ISBNs, ISSNs, or OCLC control numbers using the formats shown in the table:

Numeric data	Formatting	Example
LCCN—Library of Congress	Include hyphens	84-23765
ISBN—International Standard Book Number	Omit hyphens	0818903457
ISSN—International Standard Serial Number	Include hyphens	1060-0396
OCLC control number	Include one of these prefixes: • # (pound sign) • * (asterisk) • ocm/ocn	• #1299 • *13713166 • ocm32551273/ • ocn141381273

Caution: The match rate for lists of LCCNs, ISBNs, and ISSNs tends to be very low. If possible, please provide OCLC numbers for your numeric search key project.

- Enter numeric search keys in a single column, one search key per line.
- Combine smaller files for the same index into one.
 - Limit:** 80,000 search keys per file.
- Be sure to remove any duplicate entries, blank lines, invalid numbers, and/or spurious data from the files.

4.8.3 E-mail non-MARC data files

	Action
1	Create an e-mail message. In the Subject line of the e-mail include your: <ul style="list-style-type: none"> • OCLC institution symbol • Batchload project ID (“P” number) <p>Example: Subject: OCL, Batchload Project ID P099999</p>
3	Attach your non-MARC patterned bibliographic data file(s) or your numeric search key file(s) to the e-mail. <ul style="list-style-type: none"> • Do not include data or search keys in the body of the e-mail. • Do not send multiple e-mail messages; attach all files to one message.)
4	Send the e-mail with attachments to OCLC Batch Services at batchload@oclc.org .

4.8.4 Mail non-MARC data files on CD or DVD

	Action
1	Copy your non-MARC bibliographic data file(s) or your numeric search key file(s) to a CD or DVD.
2	<p>Label both the CD or DVD and its case with:</p> <ul style="list-style-type: none"> ○ Name of your library ○ OCLC institution symbol ○ Batchload project ID ("P" number) <p>Example: Project ID P012345</p> <ul style="list-style-type: none"> ○ Record count or number of search keys ○ Contact person's name, phone number, and e-mail address
3	<p>Mail the CD or DVD to OCLC Batch Services:</p> <p>OCLC 6565 Kilgour Place Dublin, OH 43017-3395 USA Attention: Batch Services MC 139</p>

4.9 More about record and data formats for batchload

Although Batchload at OCLC requires MARC 21-formatted bibliographic records that have either MARC-8 or UTF-8 Unicode character encoding, OCLC can convert or use other types of data. This section has more information about MARC and non-MARC data types that OCLC uses for batchloading.

4.9.1 MARC-formatted records

Formatted records are formal, pre-defined, structured sets of codes and content designators that allow computers to read files and exchange records and data across platforms. MARC (**M**achine **R**eadable **C**ataloging) formats are examples.

Types of MARC data you can send include:

- **MARC 21.** The version of Machine Readable Cataloging that superseded USMARC in 1999 with the harmonization of U.S. and Canadian MARC formats. It is the current official MARC standard in the United States, Canada, Australia, and other countries. It is the format OCLC supports in WorldCat.
- **Other non-U.S.-based MARC formats.** OCLC can reformat the following types of MARC records to MARC 21:
 - **UNIMARC:** A version of Machine Readable Cataloging that is supported by IFLA (International Federation of Library Associations) and used by China, Japan, Europe, and other countries.

- **INTERMARC:** A MARC format based on Library of Congress MARC (LCMARC) developed by the Bibliotheque Nationale in the 1970's. INTERMARC is superseded by UNIMARC; however, many catalogs, especially in Europe, have INTERMARC records.
- **IBERMARC:** A MARC format based on USMARC developed in Spain. Although IBERMARC may be unified with UNIMARC, catalogs may contain IBERMARC records.
- **Other non-MARC21:** INDOMARC and CATMARC are examples of other non-MARC21 formats. Most are being unified with UNIMARC, but catalogs may contain such records.

4.9.2 Character encoding in MARC-formatted records

Character encoding schemes are numeric computer codes (binary or hexadecimal) that represent multiscript characters across languages to facilitate consistent electronic data transmission and display.

All MARC records that you send to OCLC for batchloading must consistently use:

- **Only MARC-8** encoding in all records
- Or
- **Only UTF-8 Unicode** encoding in all records

Leader position 9 (008/09, Character coding scheme) in records must correctly indicate whether the character encoding is MARC-8 or UTF-8 Unicode:

- Blank = MARC-8
- Value **a** = UTF-8 Unicode)

A mix of MARC-8 and UTF-8 Unicode or inclusion of other encoding schemes causes processing errors for your entire file and/or for individual records.

See more about [MARC-8](#) or [UTF-8 Unicode](#) encoding.

4.9.3 Non-MARC data

You can send other data types for batchload, including:

- **Consistently patterned bibliographic data.** OCLC can reformat non-MARC data that is that is in a consistent pattern in a spreadsheet or a word-processing document. The data can be converted to MARC 21 if it has one or more of the following characteristics:
 - Labeled columns of data in a spreadsheet
 - Consistently labeled fields followed by data in a word processing file (for example, AUTHOR: Smith, John TITLE: My Life Story)
 - Data fields and records delimited by one or more unique identifiable keyboard keys in a word processing file (for example, data fields separated by commas; records separated by <Tab>).
 - Positional data field descriptions and their content related by record position (for example, fixed length formatted records).
- **Simple list of numeric search keys.** OCLC can use simple lists of numbers from the numeric data in your records. You can use one of the following types of numeric data per

file: LCCNs, ISBNs, ISSNs, or OCLC control numbers, with OCLC numbers the preferred choice (see [details](#) above).

When you order a project based on numeric search keys, you request that holdings be either set or canceled in WorldCat records that have matching numeric data. If you have some records that need to have holdings set and some that need to be canceled, you need to order two separate numeric search key projects and send separate lists for each.

5. How Batchload Processes Records

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5.1. Processing

Please note: The descriptions of processing in this section are **default settings** for batchload projects. Some projects, specifically those that database specialists review manually before processing, may have other settings, depending on the results of evaluation by the OCLC database specialist assigned to the project and on the specialist's discussions with the library.

See a more detailed account of how records are matched in WorldCat for processing in appendix A, "Matching Records for Batchload."

5.1.1 Unique key matching

OCLC number. Properly formatted OCLC control numbers are mapped to field 035 \$a and prefixed with (*OCoLC*) for use by batchload software.

When you order a batchload project that uses MARC records, you are asked to select which, if any, of the following qualifiers to apply to OCLC number matching:

- Derived title (fields 245, 246, 247) (**default**)
- Date (008/07-10)
- Material type (Leader/06)
- Language of cataloging (field 040 \$b)

Qualifiers cross-check other data in matched records. See more about whether/how to [select OCLC number qualifiers](#).

Other unique keys. The following is a list of unique keys used for matching. The OCLC number qualifiers listed above are applied.

- 010 \$a (LCCN)
- 016 \$a (National bibliographic control number)
- 020 \$a (ISBN)
- 022 \$a (ISSN)
- 024 \$a (Other standard number)
- 027 \$a; \$z and 088 \$a; \$z (Report number)
- 028 \$a and 262 \$c (Publisher number)
- 029 \$a (Other system control number)
- 030 (CODEN)
- 856 \$u (Uniform resource identifier)

5.1.2 Extended matching

When an OCLC control number is not available, or when the qualifiers rule out the OCLC number as a match, or when a single match is not retrieved by the other unique keys, the system uses extended matching based on additional data in the body of the record (author, title, publisher, and more).

5.1.3 Enriching WorldCat automatically

Batch processing automatically merges some data in records if the data enhances the records (e.g., fields 029, 040, 938, etc). LC call numbers and subject headings, Dewey call numbers, content notes, summaries, or non-English subject headings in your records may be merged into matching WorldCat records that lack them. Other data may be merged at the discretion of the database specialist assigned to your project.

Note: For matched records, an algorithm can be used to determine whether the library's record or the existing WorldCat record is retained as the master record. An algorithm and processing specifications determine which fields of the records are merged to create the final master record. See appendix B, "Merging Specifications" for more information.

5.1.4 Adding unmatched records

When you order a batchload project and your records are MARC, you can select the option to add your unmatched records to WorldCat as original cataloging.

If you request that your unmatched records be added, the records must meet these standards and criteria to be added:

- National standards for cataloging, including those for descriptive cataloging and forms of headings.
- OCLC K-level standards for completeness, as described in *Bibliographic Formats and Standards*:
<http://www.oclc.org/bibformats/en/onlinecataloging/default.shtm#BCGGBAFC>
- Titles that can be used for matching. If field 245 is missing or lacks both \$a and \$k, the record cannot be added to WorldCat. Such records go into the unresolved file. (See chapter 6 "Exception Data (Records Remaining)" for more information.)

See more details about [sparse records](#) below.

- Batchload validation errors that are at an "acceptable" severity level (determined by the system) or that can be fixed for processing using preprocessing routines.

See more about [invalid records](#) below.

- Records from vendors who have either given your library or OCLC permission to redistribute the records.

If the vendor has not given redistribution permission, these records are considered to be "restricted use" records and cannot be added to WorldCat. See 3.2 "Guidelines for using the order form" for instructions about how to treat these records for batchloading.

More about records that are too “sparse” to be added to WorldCat

Definition. Sparse records are bibliographic records that lack sufficient data to identify a **manifestation** of an item. For example, a record for the book *Dombey and Son* by Charles Dickens that has only the title and author’s name does not identify the precise manifestation of the book by publisher, date of publication, language, format (for example, Braille or large print), editor, and other data that would distinguish the particular manifestation of *Dombey and Son*.

Used for processing? Sparse records that OCLC receives for a project are not added to WorldCat or used to replace WorldCat records. They are used if they match in WorldCat to set or cancel holdings. Unmatched sparse records are placed in the unresolved records file.

Conditions that define a record as too sparse

- a. Field 245 lacks both subfields \$a and \$k
- b. Contains field 245 with subfields \$a or \$k but does not have any of the following fields:
 - o 250 – 490
 - o 773
 - o 020
 - o 022
 - o 024
 - o 028

Exception: Even if a record has the 024 and a field 245 with subfield \$a or \$k, if the first indicator value in field 024 is **8** and the record has no other fields, it is considered to be sparse.)

With the exception noted above and with the two exceptions below, if any of the fields in this list are present along with field 245 \$a or \$k in a record, it is a candidate (other criteria must be met) for adding to WorldCat.

- c. Field 245 \$a or \$k contains the following text (case-insensitive):
 - o *dummy title*
 - o *no title found*
 - o *no title*
- d. Data in field 245 \$a or \$k does not contain alphanumeric characters. Examples of invalid titles:
 - o 245 00 ... / \$c Henry Thomas.
 - o 245 10 .
 - o 245 00 *** / \$c par M. ***
 - o 245 10 ##
 - o 245 00 ???
 - o 245 00 \$c Sotheby’s.

Exception: A record that contains field 245 with only angle brackets in subfields \$a and \$6 is not considered to be sparse. It is a candidate (other criteria must be met) for adding to WorldCat.

Example of acceptable title with angle brackets:
245 00 \$6 880-01 \$a <>

Note on sparse records for users of SCIPIO

A SCIPIO record is too sparse to add under the following condition **in addition to** conditions **a**, **c**, and **d** listed above:

- e. Lacks fields 024, 033, and 110.

More about invalid records

Batchload Error Validation software checks MARC 21 content designation and record format (structure) in records at several points during processing, using a less rigorous subset of the online validation used in Connexion.

Invalid records can contain invalid codes, fields, indicators, and/or subfields, lack required fields, or repeat non-repeatable fields.

Validation includes categorizing errors according to severity and may identify errors that can be fixed. System rules for identifying the severity level of validation errors determine whether records with errors can be used for matching in WorldCat or can become candidates (other criteria must be met) for adding to WorldCat if unmatched.

See details in appendix C “Batchload Validation for Bibliographic Records.”

5.1.5 Setting and canceling holdings

Caution: When your library’s holdings are deleted from OCLC master bibliographic records, any attached local records are also deleted, including local holdings records (LHRs) and local bibliographic data records.

Batch processing uses record status to determine whether to cancel or set your holdings in WorldCat. (**Record status** is labeled “[Rec stat](#)” in the fixed field display in bibliographic records; it is also referred to as Leader byte 05 or 008/05.)

When record status contains the value **d**, your institution’s holding symbol is canceled (deleted) on matching WorldCat records.

For any value other than **d**, your holding symbol is set (added) on matching and newly added records.

Depending on which one of the following types of holdings actions you select when you order a batchload project, this is how holdings are processed:

- **Cancel for all.** Batch preprocessing forces the record status value **d** for all records submitted, regardless of the value in your records, so that your holdings are canceled on all matched WorldCat records.
- **Set for all.** Batch preprocessing changes any occurrence of **d** in record status to **c**, so that your holdings are set for all matching or added records.
- **Set or cancel holdings based on the record status value.** Batch preprocessing accepts the record status value in your records, so that your holdings are canceled for matched records with value **d**, and holdings are set for matched records with any other value.

Note: For this third type of holding action only, preprocessing checks record by record. For the other two holding actions—cancel for all or set for all—values are forced for all records.

When record status value cannot be used. If your library's local system does not have Leader Byte 05 for record status implemented, you cannot use the value **d** to indicate cancel holdings. Instead, you can order two separate projects and send two separate sets of records, one project to cancel holdings on all records sent and another project to set holdings on all records sent.

5.1.6 Replacing records in WorldCat (one-to-one)

Under special circumstances, OCLC can replace a WorldCat record that your library contributed with a new record from your library, if the record has not been enhanced by other libraries. This type of processing may be used for bibliographic records that represent unique items held only by a single institution, such as archives and special collections.

You can request one-to-one replace in the batchload order in the free-text box for the question "Do you have more information to add about your project?" After you place the order and you receive your project ID ("P" number, for example "P012345"), a database specialist will contact you to work out the details.

Note: Regardless of the value in 040 \$c, when you send a record, any record that gets added has 040 \$c set to the OCLC institution symbol of the contributing library. (Originally, the value might have been the MARC institution code of the contributing library, or the OCLC symbol/MARC code of the institution that originally transcribed the record into machine-readable form.)

Detailed rules for replacing records

When your records are processed, for those that match, the WorldCat records are replaced according to the following rules:

- **Cataloging source rule:** The symbols in field 040 (Cataloging Source) \$c (Transcribing Agency) of the library's record and the matching WorldCat record must match. If they match **and** the following modification rules are met, the record is replaced. If they do not match, the WorldCat record is not replaced. (040 \$c is the OCLC symbol of the organization that created the record in WorldCat.)
- **Modification rules:** If the WorldCat record was modified, it contains 040 (Cataloging Source) \$d (Modifying Agency). To be replaced, records need to have the symbol types listed below. If 040 \$d has any symbols other than those described below, the WorldCat record is **not replaced**. This rule protects modifications made to the record by all other OCLC members.

Only records with the following kinds of symbols in 040 \$d **are replaced**:

- The symbol in 040 \$d matches the symbol in 040 \$c. This rule assumes that the modifying agency is the library that first created the record and therefore is allowed to replace it.
- The symbol in 040 \$d is an OCLC quality control processing symbol (OCL, OCLCA, OCLCG, OCLNG and OCLCQ). This rule assumes that the record creator's information takes precedence over quality assurance corrections.
- The symbols in 040 \$d are those of vendors (listed below) for whom 938 fields are being added. This rule assumes that the record creator's information takes precedence over vendor-added information.

ACTRA	BTCTA	DKAGE	I5B	RECBX
ALBRS	BWK	DON	LEILA	SBACH
AUXAM	BWX	DVDSN	LNDMK	TRCLS
BAKER	C3L	ERASA	NEIDC	TZT
BBCAA	CASSC	ERASP	OHX	WEINB
BDX	CDX	EVIEW	PL#	YDXCP
BOLIN	CNPIT	GGVRL	PLAYA	
BLICP	DG1	H7K	QUICK	

Note: Records that are considered to be too sparse are not used to replace records. See more about sparse records above.

5.1.7 Storing local bibliographic data

When you order a bibliographic batchload project to support full-subscription WorldCat Local or to support migration to Web-scale Management Services (WMS), you can request that OCLC extract local bibliographic data from your records for display to users via your OCLC discovery interface.

If you select this option, batchload creates local bibliographic data records attached to the associated WorldCat bibliographic records. The local bibliographic data is visible only through WorldCat Local or WMS and can be maintained through batchload. You cannot view or edit it using Connexion or any other interface.

Results of extracting local bibliographic data are reported with the other results of your batchload project in File Processing Summary Reports for each file processed and in your final Project Processing Summary Report when your project is complete.

Note: If you later delete holdings on WorldCat records that have your library's local bibliographic data records attached, the local bibliographic data is also deleted.

See more information in [Storing Local Bibliographic Data via Batchload for WorldCat Local or WMS](#).

5.2. Preprocessing

Batchload preprocessing helps to prepare records and resolve potential problems with your library’s data that may prevent successful processing. If a batchload specialist needs to review your project, s/he may analyze a sample of the data, run tests on your records, and then write and run preprocessing routines on the records. The routines transform data in ways that are needed for matching records, setting and canceling holdings, resolving records, merging data, and updating WorldCat records. Data in the records may be moved, normalized (that is, made consistent), or reformatted.

Caution: Preprocessing is a "best efforts" attempt to prepare your data for processing. Batch Services cannot guarantee that these preprocessing routines (1) will lead to successful processing or (2) will not adversely affect the quality of coding in your records.

This preprocessing section gives examples of errors and how records may be preprocessed in the attempt to fix them. You can use information in this section to evaluate your library’s records for potential problems **before** you order a batchload project. The best case, of course, is for OCLC to receive records that are free of these problems, whenever possible.

See part 6 “Exception Data (Records Remaining)” in this Guide for more about records remaining that have been processed, usually multiple times using various routines, but are returned to you because they could not be matched or added in WorldCat.

5.2.1 Critical errors and preprocessing routines

The following table describes “bad,” missing, invalid, or un-matched elements in records that cause critical errors. These errors result in records that are returned to you as “exception data” (defined above). The table also lists preprocessing routines that are used to try to fix or mitigate the errors.

Critical Error	Description of error	Preprocessing routine does this...
“Bad” record leader and record directory	The leader or directory may have incorrect data in it, may be too long or short, or may contain illegal characters.	Re-blocks and reformats the records.
001 field missing (See 5.2.2 below for more details.)	Batchload software uses the unique local system control number in field 001 for de-duplication and post-processing reports.	Supplies the 001 field and the local system control number from another field.
Multiple 001 fields (See 5.2.2 below for more details.)	Batchload software uses the unique local system control number in field 001 to de-duplicate your files.	Removes all but one 001.
008 field missing	The 008 field is the fixed field of the MARC record.	Codes the 008 based on the content of variable fields in the record. The quality of the coding varies.

Critical Error	Description of error	Preprocessing routine does this...
008 incorrect length	Often, if the format of the record is incorrect, the fixed field is too long or too short.	Codes the 008 based on the content of variable fields in the record. The quality of the coding varies.
Date1 missing from 008 field or invalid	Date 1 is required and must be valid. Invalid data in Date1 includes, for example, dashes, question marks, spacing underscores, alpha characters, blanks for unknown dates.	Uses dates in the record (for example, 260 Ꞥc) or supplies a dummy date. The outcome varies.
245 field missing	No title	May provide a dummy title, but most often does not attempt to correct missing titles.
Invalid Rec Stat (See 5.2.3 below for more details.)	Batch processing uses Record Status to identify records for canceling holdings.	Forces Rec Stat to value d for cancel holdings projects.
Invalid Type (Rec Type)	Type and Bib Level combined determine the format of the record, which must be valid.	May try to correct the coding based on the content in variable fields. The quality of the coding varies.
Invalid Bib Level	Same as for invalid Type.	Same as for invalid Type.
Invalid escape sequences	These errors are usually caused by character encoding problems. For example, individual fields may contain Microsoft encoding instead of UTF-8 Unicode or MARC-8.	Can only rarely correct these errors.
Contains 066 field but no 880 field(s)	Field 066 identifies non-Latin scripts. 880 fields contain the non-Latin script data. Special processing is required for non-Latin scripts.	Can remove the 066 field but cannot supply missing text in 880 fields.
Contains 880 field(s) but no 066 field	Same as for the error directly above.	Same as for the error directly above.

5.2.2 More about the 001 field

When you order a batchload project, you enter the field in your records that contains the library’s local system control number. If needed, as part of your project setup, OCLC moves the number to field 001, so that the number can be used to:

- Accurately de-duplicate your files.
- Produce Cross Reference (XREF) reports that list each OCLC control number across from the correct corresponding local system control number to help you index the OCLC numbers in your local system. Indexing the OCLC control number links your library’s records to WorldCat.

In the MARC 21 standard, field 001 (Control number) contains the control number assigned by the organization that creates, uses, or distributes the record. However, sometimes libraries do not use field 001 for their own control number. For example:

- A library may retain whatever data is in the 001 from source records (for example, LCCNs, OCLC control numbers, or vendor numbers).

Or

- Field 001 may be missing from a library's records—the library may delete the field, or the field is not used in the local system, or it is excluded from records exported from the local system.

Before your records are processed by the batchload matching software, preprocessing routines can create an 001 field, if missing, and can supply the unique local system control number (sometimes called the bibliographic record ID) from the field you identified in your order form (for example, from a 9xx local field).

Example 1

Batch Services received a file in which 19,877 records were missing field 001. Batch preprocessing supplied the 001 field and inserted the local system control number from field 904.

Other records in this file contained 001 fields, but the database specialist assigned to the project tested the file and found the same number in the 001 for different titles: the numbers were not unique.

For example, four records had the same number in field 001, but the titles showed that they are not duplicate records:

001 field	Title (245 field)
bwi07988692	TaeBo live!=bAdvanced Workout_h[videorecording]
bwi07988692	TaeBo live!=bBasic Workout_h[videorecording]
bwi07988692	TaeBo live!=bInstructional_h[videorecording]
bwi07988692	TaeBo live!=b8-Minute Workout_h[videorecording]

To correct the misleading duplicate numbers, the database specialist ran a preprocessing routine that replaced the data in the 001 of each record with the unique local system control number from another field. When batch processing started, the software treated these records correctly as non-duplicates and processed them.

5.2.3 More about invalid record status

The value **d** in record status (Rec Stat) in a record—Leader Byte 05 (008/05)— indicates that institution-level holdings should be canceled on that record.

If your local system can output a file with record status **d** for those records on which you want to cancel holdings, you can send a single MARC file, and batch processing can use the record status value to set holdings for matching records with any value except **d** and cancel holdings on matching records with value **d**.

If your local system cannot output records with a Record Status **d**, you can order separate projects for two separate sets of records:

- One project for canceling holdings on all records sent that match and one for setting holdings on all records sent that match. See more about how preprocessing prepares these records in section 5.1.5 above.

Or

- Two separate numeric search key projects, one listing search keys for canceling holdings on matched records and a separate list of search keys for setting holdings on matched records. See more about numeric search key projects in 2.2 “Project types.”

5.2.4 Other common errors

The following table describes other errors, how they can be prevented, and whether they can be addressed by preprocessing routines.

Type of common error	Description of error	Prevention	Preprocessing routine available?
Tag order	Fields 001, 003, 005, and 035 are located at the end of records.	These fields should be in tag order.	No
UTF-8 Unicode character encoding	Records are in UTF-8 Unicode character encoding but do not contain the proper designation in Leader byte 09 (008/09).	UTF-8 Unicode character encoding must be designated by a in Leader 09. If Leader 09 is blank, encoding indicates MARC-8.	No
Country codes (008/15-17)	Three-character country codes are used in Leader bytes 15 to 17 (008/15-17) instead of the two-character code. And/or country codes include uppercase alphabetical characters.	Leader bytes 15 to 17 should use two-character codes. Codes should all be in lowercase.	Yes
Language codes (008/35-37)	Language codes in Leader bytes 35 to 37 (008/35-37) have uppercase alphabetical characters.	All alphabetical characters should be lowercase.	Yes
Duplicate records (does not apply to group projects)	Preprocessing found duplicate records in files, identified by the local system control number in the 001 field. No other checks are made to verify that the records are true duplicates.	Database specialists must manually examine the duplicates. If found to be true duplicate records, the latest version of the record will be processed.	No

Type of common error	Description of error	Prevention	Preprocessing routine available?
040 ‡b	OCLC encourages its membership to include the language of cataloging (040 ‡b) in records. If not included, the language of cataloging is English by default. Therefore, the lack of a code in a record with cataloging data in a non-English language misrepresents the cataloging.	Include a language code in 040 ‡b if any cataloging data is in a language other than English.	Most often, no (Preprocessing cannot supply a language code in 040 ‡b unless it applies to all records.)
040 ‡e	Cataloging description MARC code was noted in the 040 ‡e. ppiak = Verona, Eva. Pravilnik i prirucnik za izradbu abecednih kataloga (Zagreb: Hrvatsko bibliotekarsko drustvo)	The rules for descriptive cataloging used to create the records were other than AACR2, AACR1, ALA 1908, ALA 1941, or ALA 1949. Use only for rare or archival materials.	
035 (See 5.2.5 for more details.)	The form of OCLC numbers has changed over many years. Records sent from local systems may contain various forms of OCLC control numbers, which may cause errors in matching, de-duplicating, and linking between OCLC systems and local systems. Or Records may contain no OCLC control numbers.	When you ordered your project, you entered the location and format of the OCLC control numbers in your records. If the format is inconsistent, you can work with the database specialist to normalize the OCLC numbers (that is, make them consistent).	Yes

Type of common error	Description of error	Prevention	Preprocessing routine available?
6xx	Subject headings are coded as local with 2nd indicator of 4 or with 2nd indicator of 7, and the source code is noted in ‡2.	<p>6xx 2nd indicator 4 Source not specified. The formulation of the subject added entry conforms to a controlled list, but the source cannot be specified by one of the thesaurus or subject heading systems covered by the other 2nd indicator values or by a code for a specific subject heading list in ‡2.</p> <p>6xx 2nd indicator 7 plus ‡2 Source is specified in ‡2. Subject headings or terms are based on other subject authorities (i.e., on authorities other than those listed here). Identify the source in ‡2.</p>	

5.2.5 More about the 035 field and OCLC control numbers

Batchload uses OCLC control numbers in your records in the following ways:

- To match WorldCat records.
- In local systems to link local records to WorldCat records.
- In batchload preprocessing to de-duplicate the records you submit for processing.

Because the format of OCLC control numbers has changed over many years and many local systems remove it or put it in a field other than the 035, OCLC batch services uses preprocessing routines to map existing OCLC control numbers to field 035 ‡a, prefixed with (OCoLC).

The following table describes the changes in OCLC control numbers formatting and location over time. Records can contain any of these formats and locations for the OCLC number.

Description	Format	Examples
In records created 12 November 2006 and before, field 001 contains the OCLC control number	OCLC numbers 1 through 99999999: Has an ocm prefix Composed of 8 digits, right justified, with leading zeros	ocm00012345
In records created after 12 November 2006, field 035 contains the OCLC control number	OCLC numbers 100,000,000 and higher: Has an ocn prefix. Composed of 9 digits.	ocn123456789

Description	Format	Examples
Sometime after November 2006, the OCLC control number in field 035 Ꞥa is prefixed by (OCoLC) .	OCLC number is a variable-length numeric string with no leading zeros.	(OCoLC)198765401

Notes:

- Field 019 contains the OCLC control number of a deleted or merged record replaced by the current one.
- If located in field 001, the OCLC control number is prefixed by **ocm** or **ocn**.

OCLC control numbers in records you send for batchload

If your records have the OCLC control number in field 035 Ꞥa with the **(OCoLC)** prefix, it will be used for matching.

If your records contain no OCLC numbers at all, Batch Services uses extended matching and/or other unique search keys to match the records with WorldCat records.

If your records contain different location/format of OCLC control numbers, Batch Services moves them to 035 Ꞥa for matching.

Note: If you ordered your own records returned with OCLC control numbers merged into the records (in the question, “What output do you want to receive when your project is completed?”), the question also lets you choose the field/subfield where you want to locate the merged number and its format.

After you select “Cross Reference Report and your records,” a new section labeled “OCLC control number and location” drops down, and you can select one of these locations for the OCLC number:

001, **035 Ꞥa**, or **Other** (you specify a field)

You can also specify one of these formats:

(OCoLC)1234, **(OCoLC)ocm00001234**, **ocm00001234**, **00001234**, or **1234**

See more [information about OCLC control numbers](#) on the OCLC Web site.

6. Exception Data (Records Remaining)

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6.1. Exception data

Not all records submitted for batchload can be successfully matched or added in WorldCat during batchload, even after OCLC database specialists analyze the records and run additional multiple routines to help fix problems. These records remaining are called “exception data.” Depending on the types of problems or the phase of processing that identifies them, exception data records are put into separate files and made available for return to your library.

Note: See instructions for retrieving any exception data files for your project in *7 Batchload Reports and Records* in this Guide.

6.2. Deselected, unresolved, and duplicate records

The following table describes exception data files of deselected, unresolved, and duplicate records that may be produced and returned to libraries on Product Services Web (PSWeb) or via the library’s Electronic Data Exchange (EDX) account.

D in file names = date the file or project completed processing (*yyymmdd*)

R in file names = internal OCLC tracking number called the order ID

Note that different file extensions identify the various kinds of report and record files

Files	Description	File name format
Deselected records (.DESL)	<p>Contains records identified by preprocessing routines or by a database specialist that do not meet criteria specified by the library or by OCLC to a deselected record file</p> <p>Examples</p> <ul style="list-style-type: none"> • No field 245 • Character encoding errors • No ID from translation table (group project only) • Record fragment • Order record (non-bibliographic) <p>These records may be removed from processing or regrouped for special processing.</p>	<p>D[YYMMDD].[order ID#].DESL</p> <p>Example: D090722.R266863.DESL</p>
Unresolved records (.UNRES)	<p>Contains records that do not match a WorldCat record and cannot be added to WorldCat during processing because of errors or failure to meet other quality standards.</p> <p>Examples</p> <ul style="list-style-type: none"> • Lack of field 001, 008, 245 • Other problem identified by the database specialist) <p>See more about unresolved records below.</p>	<p>D[YYMMDD].[order ID#].UNRES</p> <p>Example: D090722.R266863.UNRES</p>
Duplicate records	<p>Records in the library’s files that have the same number in field 001 in multiple records in a given file are identified as duplicates.</p> <p>The record with the most recent date is processed. All others are put in a duplicate records file (.DUP).</p>	<p>D[YYMMDD].[order ID#].DUP</p> <p>D090722.R266863.DUP</p>

	<p>Caution: True duplicates? The software does not check other data in the record, such as the title, to ensure the records are true duplicates. However, some local systems allow the same record number to be in records for items with different titles. If this is true for your local system, notify Batch Services at batchload@oclc.org before you send the records so that adjustments can be made to your project setup.</p>
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6.3. More about unresolved records

The reasons for unresolved records—that is, those that do not match a record in WorldCat and cannot be added to WorldCat during processing—include:

- Record did not match because legitimate differences in cataloging practice or data errors prevented the batchload software matching algorithms from identifying the record as a match to a WorldCat record. For more information on matching, see appendix B, Matching Records.
- Record could not be added to WorldCat for the following reasons:
 - MARC validation errors. For example, non-repeatable fields are repeated, indicator values are missing or erroneous, or other validation errors occur.
 - Character encoding errors. A record has a character encoding scheme other than UTF-8 Unicode or MARC 8 or is encoded correctly but contains a non-UTF-8 or MARC-8 character.
 - Sparse data. Records that do not have enough data to be considered even a brief bibliographic record. Often, these are order records that were not deselected during the evaluation process.

What Batch Services does with unresolved records

The way unresolved records are managed varies depending on the type of data and project, including the following:

- **Records are not processed further.** If a batchload results in fewer than 100 unresolved records and analysis shows that the records will not be added, they go into an .UNRES file for return to your library.
- **Records are reprocessed.** If a batchload results in more than 100 unresolved records, the assigned database specialist evaluates and reprocesses the records if possible. If they are not reprocessed, Batch Services sends you an e-mail explaining the decision.
- **Records are returned to you** If you choose, you can edit them further using the local system or an OCLC cataloging service. You can download the files using OCLC Product Services Web (<http://psw.oclc.org/>) edit them, and resubmit them for batchloading or process them locally.
- In some circumstances, a text version of the unmatched records may be sent to you as an e-mail attachment (this may occur for a one-time or annual batch project only).

6.4. Other files of exception data

The following table describes other possible file types that contain exception data:

Files	Description	File name format
Data rejected (the .PASS. file)	Data errors identified in the library's original files sent, at the point when the files are picked up by OCLC software and converted to MARCIN (an internal OCLC designation for ASCII MARC format which is used for processing). Errors include record structure problems, incorrect record directory data, records that are too large, and records with missing or misplaced record terminators.	[OCLC symbol][NNNNNN].PASS. [NNNNNN] Example: NUI0417.PASS.GV05N01
Data rejected, character set problems (.UTFER)	The system converts UTF-8 Unicode-encoded records to OCLC MARC-8 encoding and checks for other character encoding problems before processing. Some characters cannot be converted to MARC-8. Records with these characters are put in .UTFER files.	D[FILE DATE].R[ORDER NUMBER].UTFER Example: D091016.R276863.UTFER
Data rejected, integrity problems (.REJ)	Data integrity errors include inaccurate record directories, illegal leader data, illegal or illogical characters in the leader or directory, or illegal data in other fields	D[FILE DATE].R[ORDER NUMBER].REJ Example: D091016.R276863.REJ

7 Get Batchload Reports and Records

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7.1 Get reports and records

Batch Services notifies you when records and reports are ready. The files are posted to the OCLC Product Services Web (PSWeb) and to your OCLC Electronic Data Exchange (EDX) account if you have one.

Besides generating the Cross Reference Report and any output records you order (your own records with OCLC numbers or OCLC-MARC records), your batchload project generates statistical reports and can generate exception data files.

7.1.1 Get reports and records using PSWeb

To use PSWeb to get reports and records:

	Action
1	In your Web browser, go to http://psw.oclc.org .
2	On the Welcome page, click Records and Reports .
3	Under Records and their Associated Reports , click OCLC Batch Services records and reports .
4	<p>Enter your OCLC authorization and password, if you are not already logged on, and click OK. See the Notes on valide PSWeb logon authorizations following this procedure.</p> <p>The Records and Reports page shows a list of records and reports generated for your displayed OCLC institution symbol.</p>
5	<p>Identify your files.</p> <ul style="list-style-type: none"> • Cross Reference Report files are named with a “D” number (date processed), followed by an “R” number (internal OCLC file tracking number called the Order ID), followed by the file extension .XREF. Example: D100424.R27663.XREF • Files of your records returned with OCLC control numbers or files of full OCLC-MARC records, depending on whether you ordered one of these, are named with the same “D” number followed by the “R” number, but they have no file extension. Example: D100424.R27663 • Any other report and record files created by processing your project will also include the “R” number. See more about reports and records in section 7.2.
6	Click Download next to a record or report file (or click View to view the file).
7	In the Save As screen, enter a path name or navigate to the folder where you want to save the file, and click Save .

Notes on valid authorizations for PSWeb logon

- Use your OCLC cataloging, FirstSearch (with an administrative or statistics password), or resource sharing authorization and password if you have one.
- If you do not have one of these authorizations, you can request a PSWeb-only authorization when you order your batchload project, or send a request to orders@oclc.org.
- Provide your own preferred password. Use uppercase letters A-Z, digits 0-9, and/or characters # @ \$. Use a letter or digit as the first character.

7.1.2 Get reports and records using EDX

To use EDX to get reports and records:

	Action
1	Using an FTP client such as WSFTP_Pro or Blue Zone, enter: ftp edx.oclc.org
2	Enter your EDX account user name in the format: t[xxx]1 (replace [xxx] with your OCLC institution symbol and enter a 1, the number one, not the letter "ell") Example: tOCL1
3	Enter your password. The first time you use your account, you must change the initial default password, which is the same as your user name Example: tOCL1 a. In the password box, type a single string with your initial default password followed by your new password twice, separating each password with a slash: <i>[initial default password]/[new password]/[new password].</i> Example: tOCL1/blue1234/blue1234 The new password must be eight characters (use A-Z, #, \$, or @) and must include at least one number (0-9). Example: blue1234 b. Click OK . Note: The next time you log on, you may get a password error if you happened to save the initial "change password" command string. Simply enter your new password only once (example: blue1234) and save your connection session.

	Action
4	<p>Change the default directory to:</p> <pre>cd 'EDX.EBSB.[xxx].FTP'</pre> <p>(replace [xxx] with your OCLC institution symbol)</p> <p>Caution: Always include the single quotation marks.</p>
5	<p>Identify the file you are retrieving. (If using UNIX commands, type ls to list the files.)</p> <p>Names of files posted by Batch Services use the format shown below, where:</p> <p>xxx = OCLC institution symbol "D" number = Date in the format YYMMDD "R" number = Unique Order ID in the format Rnnnnnn (nnnnnn = system-assigned number)</p> <ul style="list-style-type: none"> • Record files: EDX.EBSB.[xxx].records.D[YYMMDD].R[nnnnnn] • Statistics files: EDX.EBSB.[xxx].stats EDX.EBSB.[xxx].stats(R[nnnnnn])
6	<p>Verify that your transfer type is set to binary (bin).</p>
7	<p>Enter get [filename].</p>
8	<p>Click Quit.</p>

See [Retrieving Files from OCLC \(GET\)](#) in the EDX User Guide for more information.

7.1.3 Availability of reports and records

Report and record files are available via PSWeb and EDX for at least 90 days from the day they are posted. After 90 days, contact OCLC at support@oclc.org.

You may pick up files any time, except for maintenance time on Sundays, from 2:00 a.m. to 6:00 a.m. U.S. Eastern Time.

7.2 Summary of batchload report and record files

The following table describes report and record files that may result from your project.

D in file names represents the date the file or project completed processing (*yymmdd*)

R in file names represents an internal OCLC tracking number called the order ID

Title	Format of file name	Example
Report files		
File Processing Summary Report <ul style="list-style-type: none"> Provides statistics on results of processing a file in a batchload project. Produced for each file completed in a project. 	<i>D[date processed].R[order number].FILESUM.HTML</i>	D100422.R27663.FILESUM.HTML
Project Processing Summary Report <ul style="list-style-type: none"> Provides statistics on final results of processing the complete project. Produced when a project is completed. 	<i>D[date processed].R[order number].PROJSUM.HTML</i>	D100424.R27676.PROJSUM.HTML
Validation Errors Report* <ul style="list-style-type: none"> Shows all validation errors for all records, whether minor or major. Produced when a project is completed, if unadded records remain. 	<i>D[date processed].R[order number].UDEV*</i>	D100424.R27663.UDEV*
Exception Report <ul style="list-style-type: none"> Shows the library's local system control numbers (from field 001) of records not added. Produced when a project is completed, if unadded records remain. 	<i>D[date processed].R[order number].EXCPRPT</i>	D100424.R27663.EXCPRPT
Cross Reference Report <ul style="list-style-type: none"> Shows matching OCLC control numbers across from your library's local system control number (from field 001). Produced for each completed file in a project. 	<i>D[date processed].R[order number].XREF</i>	D100424.R27663.XREF

Title	Format of file name	Example
<p>Custom Cross Reference Report</p> <ul style="list-style-type: none"> Shows the same as the Cross Reference Report except that a third column containing numeric data from a single subfield in one of the following fields: 001, 019, 020, 022, or 082 This report is available only by special request before you send your data to be processed. Produced for each completed file in a project. 	<p>D[<i>date processed</i>].R[<i>order number</i>].CXREF</p>	<p>D100424.R27663.CXREF</p>
<p>Exception data record files</p> <ul style="list-style-type: none"> Exception data files may be produced when a project is completed if exception data remains. Exception data = records that could not be matched or added and so remain unprocessed for various reasons. See details in 6, “Exception Data (Records Remaining).” 		
<p>Character set problem file</p>	<p>D[<i>date processed</i>].R[<i>order number</i>].UTF8.UTFER</p>	<p>R27663.UTF8.UTFER</p>
<p>Data integrity error file</p>	<p>D[<i>date processed</i>].R[<i>order number</i>].REJ</p>	<p>D100424.R27663.REJ</p>
<p>Duplicate record file</p>	<p>D[<i>date processed</i>].R[<i>order number</i>].DUP</p>	<p>D100424.R27663.DUP</p>
<p>Deselected record file</p>	<p>D[<i>date processed</i>].R[<i>order number</i>].DESL</p>	<p>D100424.R27663.DESL</p>
<p>Unresolved record file</p>	<p>D[<i>date processed</i>].R[<i>order number</i>].UNRES</p>	<p>D100424.R27663.UNRES</p>
<p>Output record files (produced only if requested in user’s order)</p>		
<p>OCLC-MARC record output file</p>	<p>D[<i>date processed</i>].R[<i>order number</i>]</p>	<p>D100424.R27663</p>
<p>Own records returned file</p>	<p>D[<i>date processed</i>].R[<i>order number</i>]</p>	<p>D100424.R27663</p>

***Note on the Detailed Error Validation Report:** The system creates a report on all validation errors found in unresolved records (those in the .UNRES file). The Detailed Error Validation Report (.UDEV) is a text file showing minor and major validation errors, record-by-record. For a detailed explanation of processing validation errors, see Appendix D, “Validation.”

7.3 Examples of reports

In Progress. Batchload reports are being re-designed. Examples of newly designed reports will be added here as they are implemented. See examples of existing reports in appendix D.

[File Processing Summary Report](#) | [more to be added]

OCCL Bibliographic Batchload File Processing Summary Report

Report Date: 06/17/2010 **Institution Name:** OCLC Test 5
Run Date: 2010-06-17 **Institution Symbol:** ZOY
Project ID: 013296 **Batch Specialist:** BRADLEY WATSON

[Key to Report](#) **Email:** babichh@oclc.org

Toggle Labels

Order ID	Original File Name	New File Name
R502020		DBS.TEST.@ZOY.MARCIN.D100222.U062

Order ID:	R502020
File Submittal	
Label Count	500
Data Rejected	0
Total Records to New File:	500
File Conversion	
Records Received	500
Rejected, Character Set Problems	0
Total Records Sent to Preprocessing:	500
Preprocessing	
Records from File Conversion (or Unres)	500
Rejected, Data Integrity Errors	0
Rejected, Duplicate of Other Record in File	0
Rejected, Deselected by Preprocessing	0
Total Records Sent to Batch Processing:	500

Batch Processing	
Total Records Received from Preprocessing	500
Records Matched	1
Records Added	497
Records Unresolved	2
Total Records Processed:	500
Action Taken on WorldCat Records	
Holdings Set	498
Holdings Canceled	0
Records Used to Replace WorldCat Records	0
Records Used to Merge Data to WorldCat Recs	0

For a description of the data in Batchload Summary Reports, see the [Key to Bibliographic Batchload Processing Summary Reports](#).

Appendix A: Matching Records for Batchload

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Caution: This appendix is an overview; it does not include all of the processing details, anomalies, and exceptions that may occur during record matching. Any machine-matching algorithm, regardless of how sophisticated it is, may not always match records in the same way library staff do. Insignificant differences in records may cause machine algorithms to incorrectly match or not match records.

A.1 Introduction

When bibliographic records you send OCLC for processing (also called “incoming” records) are matched against WorldCat for the purpose of adding or deleting holdings symbols or for adding, replacing or deleting institution records or for enriching WorldCat, records are processed through a variety of matching algorithms. The options for matching vary from one project to another depending on the fullness and accuracy of the bibliographic records and the purpose for which the records are being processed. Database specialists may review files you send for processing to determine the most effective matching strategy.

General rules as they apply to matching include:

- If a single match is found, no other searches are done to find others.
- If multiple matches are found, various additional criteria are used to discriminate between the records and to select the ‘best’ records.
- If data is present in one record but not the other, there is usually no effect on the matching; records are counted neither as matched nor unmatched. There are some exceptions, however, in which the absence or presence of data causes records not to match.

A.2 Steps in matching

There are two basic steps for matching bibliographic records:

- Looking for candidate record matches with WorldCat records
- Determining whether or not the records match, that is, represent the same manifestation of an item, by comparing data in the records

Several iterations of searching and matching may be attempted to find matching records.

A.3 Finding matching candidates

OCLC uses several kinds of searches to look for matching candidates. Each batchload project may be defined differently to use the most appropriate searches. OCLC database specialists may analyze the contents of the file to determine the most efficient search strategy. Generally, once a single match is found, no additional searches are performed; if multiple matches are found, the matching software continues through other comparison elements to find the best match. If multiple matches remain after all matching is completed, additional software selects the best record from the set of matching records.

Optional qualifiers (see section A.4) may be used to evaluate candidate records retrieved by a search. The options are designed to discriminate between records and eliminate unsuitable candidates. Database specialists can select useful and effective options for each project.

- **OCLC number matching.** If the record contains a validly constructed OCLC number, it is used to find a match if the Database Specialist has selected it in the project definition.
- **Unique key matching.** Numbers that identify a manifestation or a record may be used to find matching candidate records. If more than one key is in the record and the Database Specialist has specified it be used, it is OR'd with other keys to retrieve the most

comprehensive set of candidate records. Unique keys are described further in section B.5.

- Extended matching.** If a single match has not been found during the unique key matching phase, the database specialist can request extended matching to compare other bibliographic data beyond unique keys. In extended matching, up to five searches are executed using various combinations of terms. Queries combine terms from the following MARC tags in various ways. Records found are added to those found in the unique key matching phase as candidates for matching to the incoming record.

The following table lists data elements and MARC fields/subfields that may be used in searches for extended matching.

Data element	MARC fields/subfields
Author	100 \$a 110 \$a and \$b 111 \$a 130 \$a 700 \$a 710 \$a and \$b 711 \$a 730 \$a 720 \$a
Title	245 \$a \$k \$b \$f \$n and \$p
Publisher	533 \$c 260 \$b and \$f 261 \$a, \$b, and \$e 262 \$b
Date	008/07-10
Material type	Subset of terms from the format/document type index (search label dt=) used for WorldCat searching See Searching WorldCat Indexes for details.

A.4 Qualifiers

Qualifiers are optional specialized comparison elements. Depending on how you order your batchload project, you may initially choose qualifiers, or a database specialist may determine qualifiers to use during a review of your project. Use of qualifiers depends on the kind of data and accuracy of the data in the incoming records and on the purpose for processing the file. Qualifiers may be selected or deselected independently and separately for any matching phase of processing, including OCLC control number matching, unique key matching, or extended matching.

If any of the selected qualifiers do not match, the candidate record is considered unmatched.

Qualifiers are:

- **Language of cataloging.** Matches are determined by matching codes in 040 \$b. If no code is present, the record defaults to **eng** (English).
- **Date of publication.** Attempts many comparisons using dates from the fixed field (008/07-10 and 008/11-14) and from fields 260 \$c, 533 \$d, and 362 \$a.
- **Derived title key.** The matching software derives title keys from fields 245, 246, and 247 and compares them to each other. If any of them match, the derived title key is considered a match. If they mismatch, more extensive title comparisons are performed. See [Searching WorldCat Indexes](#) for more about derived title searching.
- **Material Type.** Terms are generated as for the material type (mt=) index. Only terms used to describe the physical manifestation of an item (for example, VHS videotape, microfiche, Braille) are used for comparing the records. General terms (such as juvenile, government publication) are not used. If any of the designated terms match, material type is a match. See [Searching WorldCat Indexes](#) for more about the material type index.

A.5 Comparison elements for unique key matching

The following is a list of “unique” keys used for matching. If any of them match a WorldCat record, the incoming record is considered a match.

Unique key	MARC field/subfield
OCLC	035 \$a
LCCN	010 \$a
ISBN	020 \$a 020 \$z (if no 020 \$a)
ISSN	022 \$a
CODEN	030 \$a
URL	856 \$u (if indicator 1 = 4)
Publisher number (scores and sound recordings only)	028 \$a 262 \$c
Other system number	024 \$a
Report number	027 \$a 027 \$z 088 \$a 088 \$z
National bibliographic agency control number	016 \$a

Note: In a few instances, the Other system control number (field 029, \$a) is also used as a unique key.

If selected, qualifiers are used to deselect records from the set of records retrieved via unique key matching. When a single record matches based on one of these unique keys **and** the qualifiers match, matching is complete. If no matches are found or if there are multiple matches, the candidate records may undergo extended matching. If there are too many candidates, no attempt is made to match the record.

A.6 Comparison elements for extended matching

When a record is not matched in the unique key phase, it is sent to extended matching if the database specialist has selected the extended matching option. In extended matching, several parts of the bibliographic records are compared in an attempt to find the best matches and to eliminate records for similar manifestations of an item. These comparison elements resemble those that library staff use to distinguish records from each other. For example, if a cataloger sees that two records have different publishers, the cataloger determines they are not a match because they do not represent the same manifestation of the item. In the same way, the matching software also rejects candidate records that have different publishers.

Comparing candidate records

Once candidates are identified, the records are compared in WorldCat. While there are some specialized rules for various kinds of materials (such as maps and sound recordings), most of the comparison elements are treated the same for all types of material. In addition, database specialists can also apply qualifiers (see section A.4).

Normalizations and comparisons

Each comparison element is normalized and compared in a variety of ways, tailored to the specific comparison element. Normalization (that is, treating two similar elements as the same) usually includes changing the text to all uppercase or lowercase, eliminating most punctuation, and eliminating some common words. such as **a**, **an**, and **the**). Each comparison element has its own rules for normalization and comparison. Because the comparison rules for some elements can be complex, several different comparisons are attempted.

The following general descriptions of comparison points include only the most general high-level rules:

Comparison element	MARC fields/subfields	Notes
LCCN	010 \$a for serials 010 \$z	If both the incoming record and WorldCat record are Library of Congress (LC) records, the numbers must match exactly, including both the prefix and the numeric portion.
Title	245 \$a, \$b, \$n, \$p, \$f, \$k 222 \$a 246 \$a	<ul style="list-style-type: none"> • All of the titles are compared against each other. • Single character typographical differences are considered a match. • Some words and phrases, such as “a novel,” may be ignored for matching. • When both records have generic titles such as “Journal,” the author data is also compared.

Comparison element	MARC fields/subfields	Notes
Publisher	533 \$c 260 \$b 261 \$a or \$b or \$e 262 \$b	<ul style="list-style-type: none"> • Only the first field/subfield found is used for matching. • Abbreviations are ignored in the comparison. • Equivalency tables have been built for comparing some publishers (for example, “Charles Scribner” will match “Scribner”). • Single character typographical differences are considered a match. • Many words, such as “company,” “press,” “editorial,” are ignored in the comparison. • Publisher statements such as “S.n.” or “n.p.” are ignored.
Place of publication	533 \$b 260 \$a 261 \$f 262 \$a	<ul style="list-style-type: none"> • Only the first field/subfield found is used for matching. • Single character typographical differences are considered a match. • If the software does not find a match on the textual data, the country of publication code in the fixed field (008/15-17) is compared. Two records published in the same country are considered a match.
Edition	250 \$a	
Author	100 \$a 110 \$a and \$b 111 \$a 130 \$a and \$p 700 \$a 710 \$a and \$b 711 \$a 720 \$a 730 \$a and \$p	<ul style="list-style-type: none"> • Authors are compared under only a few specific conditions, such as when two records have a generic title such as “Journal,” in order to distinguish one record from another. • The author is also compared when the record has very little other data for matching.
Extent of item	300 \$a	<ul style="list-style-type: none"> • Not compared for serials. • Single-part items and multipart items do not match each other. • The largest number of, for example, pages or volumes, is compared.
Size	300 \$c 305 \$c	<ul style="list-style-type: none"> • Not compared for serials. • Only the numeric portion is compared.
Type of score designation	300 \$a 250 \$a 254 \$a 130 \$s 240 \$s 6XX \$x and \$v	<ul style="list-style-type: none"> • Determines the kind of score (for example, vocal score, miniature score). • If one record has a specialized kind of designation, the other record must also have the same designation. • If only “score” is found in both records, they are considered a match.
Cartographic scale	255 \$a 507 \$a.	<ul style="list-style-type: none"> • Compared only for maps. • Only the numeric data is compared.

Comparison element	MARC fields/subfields	Notes
Music parts	300 \$a and \$e	<ul style="list-style-type: none"> • Compared only for scores. • Compares only the number of parts. • If one record has parts and the other does not, the records are considered to be unmatched.
Music publisher number	028 \$a	Compared only for scores and sound recordings.

A.7 Multiple matches

The goal of record matching is to find a single match or no match at all to WorldCat records. Sometimes the matching software finds more than one matching record in WorldCat. The software removes all records from the set of matching records except the five 5 most likely matches. For example, records with more data to compare are preferred over those with less data. The software attempts to find the “best” record among the reduced number of records. The “best” record is defined by a combination of the source of record, the encoding level, and the presence or absence of authentication codes in field 042. Records are ranked at fifteen levels, from full Library of Congress records at the highest level to minimal-level vendor records at the lowest level. The WorldCat record with the highest rank is chosen as the matching record.

A.8 Matching institution records

Institution records are matched in two phases. The first phase is to find the WorldCat master record as described in sections above. The second phase is to match the institution record to existing institution records. Control numbers in the incoming institution record are compared to control numbers in institution records already in WorldCat using the following keys:

- OCLC control number assigned to the institution record in WorldCat
- Local system number in the incoming record
- Research Library Group (RLG) control number for institution records (if present)

Appendix B: Merging Specifications

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B.1 Merging as part of batchload

Merging is one of a suite of software applications used to coordinate holdings and maintain records in the WorldCat database. This appendix explains merging of incoming files of records from local library systems for batchload.

Merging is used in conjunction with other applications and systems, all of which affect record output, master records, and archive records. The diagram below shows merging as part of the batchload process:

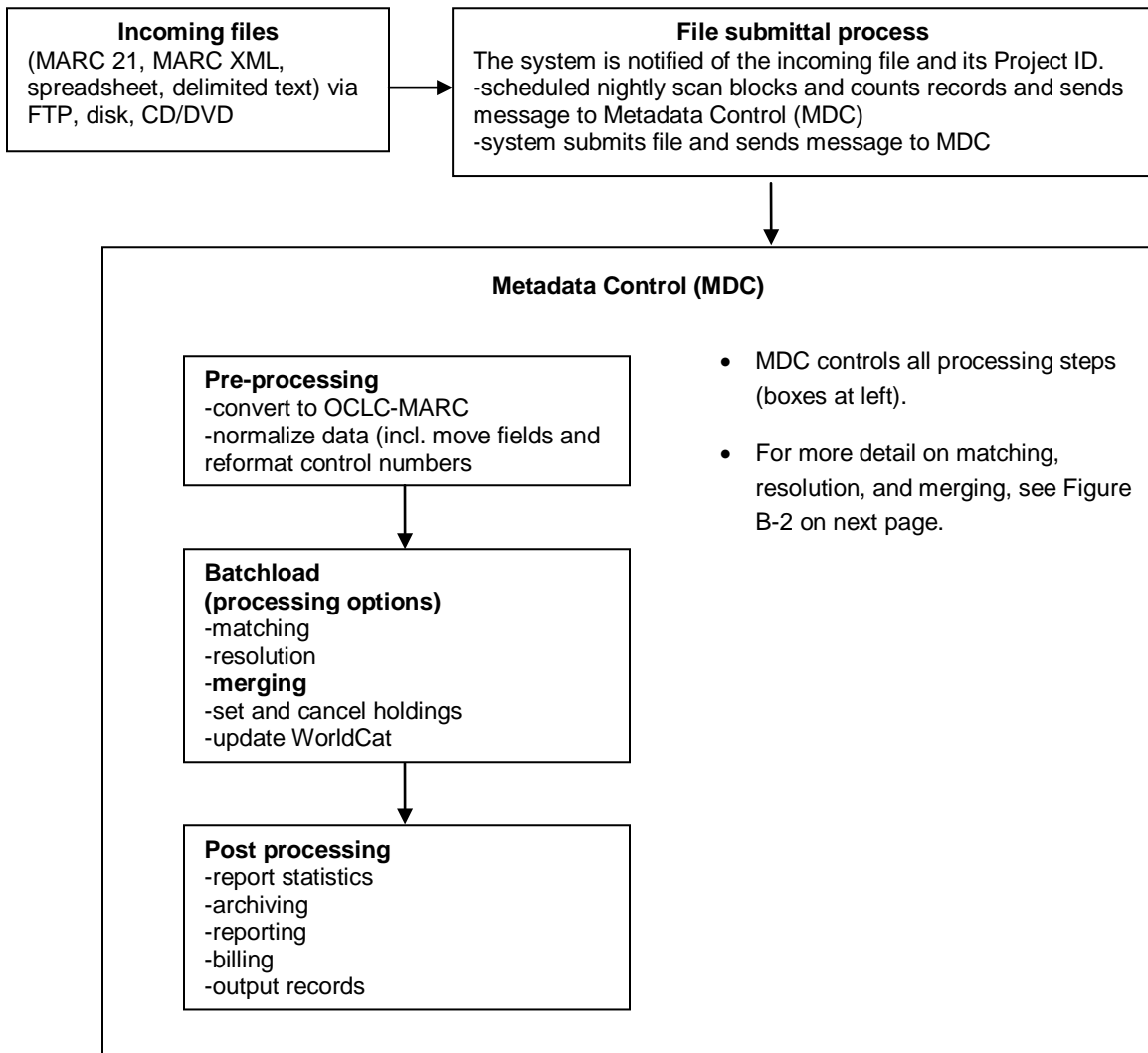


Figure B-1: Overview of merging in batchload

B.2 Merging process

Merging takes place after matching has identified one or more WorldCat records that match the incoming record. Resolution software determines which of the records (the incoming record or one of the matching WorldCat records) is the most complete and designates it the *Retain* record. In batchload, the library's record is usually designated the *Replace* record and the best WorldCat record is designated the Retain record. Other matching WorldCat records are ignored. Next, the selected mergeable fields in the Replace record are copied into the Retain record. Then, Merge software performs a field-by-field merge, with the fields chosen according to the rules outlined in this appendix. After merging, the Retain record is put back into WorldCat as the Master record.

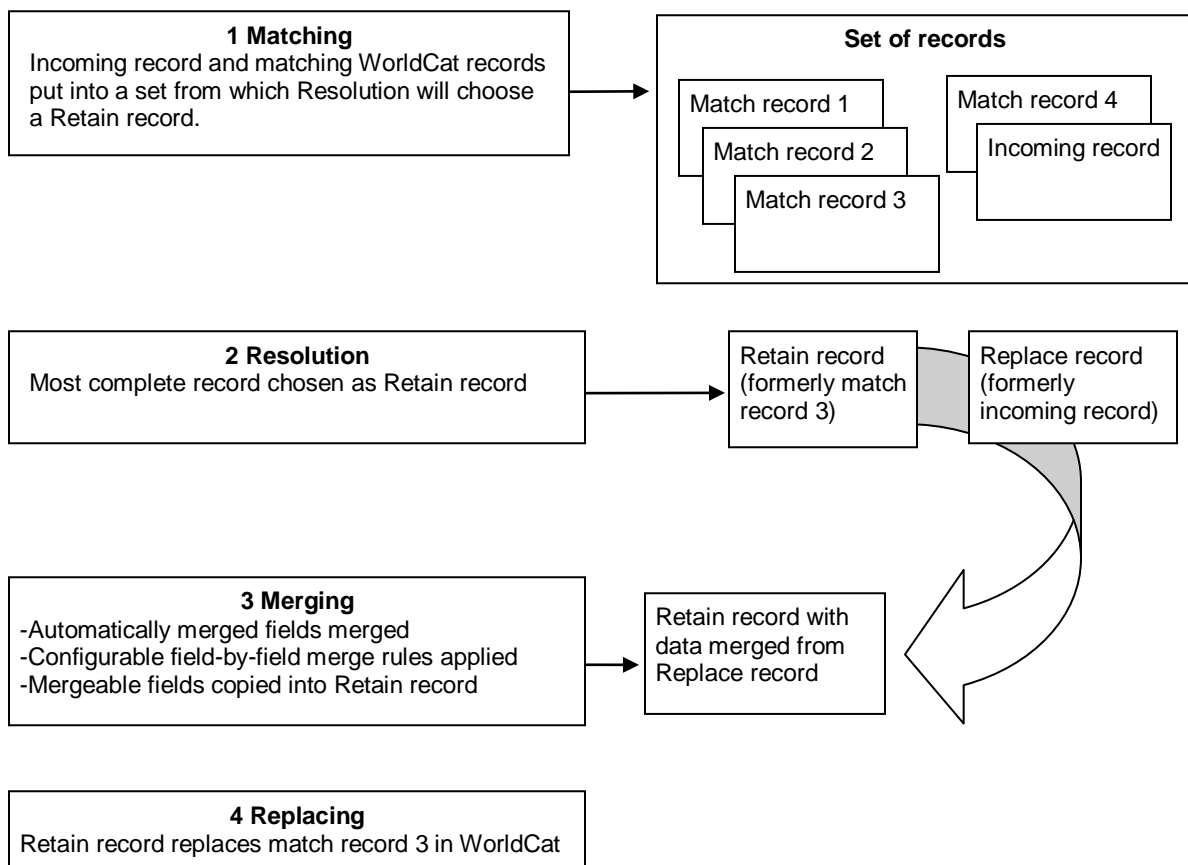


Figure B-2: Overview of matching, resolution, and merging

B.3 Mergeable fields

Merging is performed by a system called metadata capture (MDC), which controls data processing for individual projects and files. Merging can be turned on or off. If merging is off, no merging takes place. If merging is on, there are two kinds of mergeable fields:

- Automatically-merged fields:

029
040
938

In addition to the above fields, the information from controlled heading fields (1xx, 4xx, 6xx, 7xx) that indicates a given field is authority controlled is also automatically merged.

- Configurable fields are selected from the table below by the database specialist in consultation with the library:

006	033	070	306	583	776
007	037	072	504	586	800-830
010	040	074	505	600-651	856
015	041	080	506	653	880
016	043	082/092	508	654	887
020	045	083	511	655	891
022	047	084	520	656	936
024	048	085	526	657	989
027/088	050/090	086	530	658	
028	052	088	538	662	
030	055	258	542	751	
031	060/096	300/305	546	753	

Note: Batch Services policy is to merge some configurable fields if the records would be enhanced. For example, 050, 082, or 6xx fields with second indicator 0 are merged to retain any enhancement.

Note: Since the library's record is usually not chosen as the Retain record, fields are usually merged from it into the master record in WorldCat.

B.4 Table of mergeable fields and rules

This table lists each mergeable field (automatic and configurable) and the rules that apply to it. A description of each Merge type, rule, and notes follow the table.

Merge Table									
Field	Rules								Note
	Merge Type	CONSER	NLM	Format	Lang. of Cat	Bib lvl	Uniqueness	Non-Latin	
006	See Note.	X					X		Note 006
007	3	X		X					
010	2	X		X					
015	8			X			X		Note 015
016	8		X			X	X		Note 016
020	6	X		X		X	X	X	Note 020
022	2	X		X		X			
024	8			X		X	X	X	Note 024
027/088	See Note.			X		X			Note 027/088
028	7			X		X		X	
029	8						X		Note 029
030	6			X		X			
031	7	X		X				X	
033	3	X		X					
037	7	X		X		X		X	
040	See Note.						X		Note 040
041	3	X		X			X		
043	2	X		X				X	
045	2	X		X					
047	2	X		X					
048	3	X		X					
050/090	5	X		X					Note 050/090
052	3	X		X			X	X	Note 052
055	7	X		X				X	
060/096	0/1	X	X	X					
070	7	X		X					
072	7	X		X			X		Note 072
074	7	X		X					
080	8	X		X			X		Note 080
082/092	5	X		X			X		Note 082/092
083	7	X					X	X	Note 083
084	8	X		X			X	X	Note 084
085	7	X					X	X	Note 085
086	8	X		X			X	X	Note 086
088				X		X		X	Note 027/088

Merge Table									
Field	Rules								Note
	Merge Type	CONSER	NLM	Format	Lang. of Cat	Bib lvl	Uniqueness	Non-Latin	
258	7	X		X				X	
300/305	2	X		X	X	X		X	Note 300/305
306	2	X		X		X			
504	7	X		X	X	X		X	
505	7	X		X		X		X	
506	8	X		X		X	X	X	Note 506
508	7	X		X	X	X		X	
511	7	X		X	X	X		X	
520	7	X		X	X	X		X	
526	8	X		X	X	X	X		Note 526
530	7	X			X	X		X	
538	7	X		X	X	X		X	
542	8	X						X	
546	7	X		X	X	X		X	
583	8	X		X	X	X		X	
586	7	X		X	X	X	X	X	
600-651	4		Note NLM Rule	X			X	X	Note 600-651
653	7			X				X	
654	7			X			X	X	Note 654
655	7			X			X	X	Note 655
656	7			X			X	X	Note 656
657	7			X			X	X	Note 657
658	7			X			X	X	Note 658
662	7			X			X	X	Note 662
751	7	X					X	X	Note 751
753	7	X		X	X			X	
776	7	X		X		X	X	X	
800-830	See Note	X			X	X		X	Note 800-830
856	8	Note 856					X	X	Note 856
880	See Note	X							See Non-Latin Rules (page 13)
887	8	X		X			X		Note 887
891	7			X		X			
936	See Note							X	Note 936
938	8	X					X		Note 938
989	2	X		X					

B.5 Merge type rules

Merge Type 0 and Merge Type 1: Merge Type rules 0 and 1 apply to 060 and 096 fields and work in conjunction with the NLM Rule. For the NLM rule, see page 9.

Merge Type 0

- Merge Type 0 is applied for call numbers from NLM.
- Field 060 is retained over field 096. Field 096 is retained only if there are no 060 fields.
- If the incoming record is in an NLM project, its 060 is always the retained, even when one of the replace records is also from NLM.
- For non-NLM projects, if one of the records in a set of matching records is NLM (determined by presence of 029 with value *NLM*), the NLM 060 is always retained, regardless of which record is selected as the retain record.

Merge Type 1

- Merge Type 1 is applied for call numbers not from NLM.
- If none of the call numbers are from an NLM record, all occurrences of either the 060 or 096 from the first replacement record in the set are retained.
- If any record in the set includes field 060 with second indicator other than 4, the 096s are not retained

Merge Type 2

If the field is not present in the retain record, select the first occurrence of this field from the replace record.

Merge Type 3

The combination of the field and the indicator values determine if the fields merge.

- If the indicators are different, the field merges.
- If the field is not present in the retain record, the field merges.
- If the field is present in both records and the indicators are the same, the field does not merge.

Merge Type 4

See Note 600-651 below.

Merge Type 5

See Notes 050/090 and 082/092 below.

Merge Type 6

Merge Type 6 applies to field 020 and 030.

Field 020: See Note 020 below.

Field 030: Each field 030, subfield \$a in the replace record is compared with each 030 subfields \$a and \$z in the retain record. If subfields \$a and \$z are unique, they are added to the retain record.

Merge Type 7

If the field is not in the retain record, merge all occurrences of it from the first record in the replace record set that contains the field. If the field is already present in the retain record, apply the uniqueness test as described in the notes for each of the fields (See Table of mergeable fields and rules above).

Merge Type 8

If the field is not in the retain record, merge all occurrences of it from the replace record set. If the field is already present in the retain record, apply the uniqueness test as described in the notes for each of the fields (See Table of mergeable fields and rules above).

B.6 Standard Merge Rules

CONSER rule: The field will not merge into a CONSER record. A CONSER record has Bib lvl s and field 042 containing one of these codes:

<i>isds/c</i>	<i>lcac</i>	<i>lcd</i>	<i>nlc</i>	<i>nst</i>	<i>premarc</i>
<i>lc</i>	<i>lccopycat</i>	<i>msc</i>	<i>nsdp</i>	<i>pcc</i>	

NLM rule: OCLC has an agreement with NLM to always retain the NLM version of medical data. The NLM rule applies to medical information in fields 016, 060, 096, and MeSH subject headings (600-651 with second indicator 2). If an incoming NLM record matches a record that contains these fields, the NLM fields override the corresponding fields in the existing record. For example, if an LC record is the retain record and NLM the replace record, NLM's 016, 060/096 and MeSH subject headings will override the 016, 060/096 and MeSH subject headings in the LC record.

Type/BLvl Rule. The field will not merge if the Type/BLvl combinations are not compatible. For the valid combinations, see the Type section of *Bibliographic Formats and Standards*: <http://www.oclc.org/bibformats/en/field/type.shtml#combinationtypeblvl>.

Language of Cataloging Rule. The field will not merge if the Language of Cataloging (040 subfield \$b) in either the retain or replace record is different from the language of cataloging in the other record(s). If 040 subfield \$b is missing from any record, it is treated as if it were *eng* (English).

Bibliographic Level Rule (BLvl). The field will not merge if the bibliographic level in the retain record is different from the bibliographic level in the replace record.

Uniqueness Test. A uniqueness test determines if the data in a subfield is unique or the same. Unique data is merged into the retain record. If the data is the same, the field is not merged. If a field in the Merge Table has a uniqueness test, it is described in B.7, Field specific merge notes below.

Non-Latin Rules

In consultation with the Batchload Specialist, libraries can choose from four options for merging non-Latin data:

1) None. Field 880 will not merge.

2) Merge Latin only. The usual merge rules apply; if a field is selected to merge, it will merge. However, if there is non-Latin text in a linked 880 field, the 880 will not merge. The subfield \$6 in the Latin-only field will be deleted. This option is selected only if the non-Latin text and field are invalid.

3) Merge Latin and Linked Non-Latin. If a Latin-only field is going to be merged and it is linked to field 880, both fields will be merged. Field 066 in the retain record will be set accordingly. The occurrence number in subfield \$6 is recalculated. Unlinked non-Latin fields are not merged, even if they include data that would otherwise be a candidate for merging.

4) Merge Latin, Linked Non-Latin and Unlinked Non-Latin. Includes all of the features of *3 Merge Latin and Linked Non-Latin* options with the following additions:

- If the retain record contains a Latin-only field for which there is a non-Latin field in the replace record, the Latin-only text is compared to the Latin-only text in the same field in the replace record. If it matches, the non-Latin text is merged and the fields are linked.
- If it does not match, the non-Latin text is merged to the retain record as an unlinked 880 field. Field 066 is created or modified if appropriate.

Special rules for Series (fields 490, 800-830). For option 4 above, the Latin-only text in the replace record is compared to all of the series fields in an attempt to link to one of them. If any series field matches, the non-Latin text is merged to the retain record. The Non-Latin field is added to retain record as a new field with the same field number as the field it matched.

Special rules for Name heading fields (100-130, 700-730). For option 4 above, the Latin-only text in the replace record is compared to equivalent name heading fields in an attempt to link to one of them. If any name heading field matches, the non-Latin text is merged to the retain record. The Non-Latin field is added to retain record as a new field with the same field number as the field it matched.

Equivalent name heading fields:

100 is equivalent to 700

110 is equivalent to 710

111 is equivalent to 711

130 is equivalent to 730

B.7 Field Specific Merge Notes

Note 006—The 006 field merges under any of these conditions:

- The code in the first position of field 006 does not match the code in any other 006
- The code in the first position of field 006 does not match the Leader/6 value
- If the 006/00 is s and Leader/07 is s, field 006 will not merge

Note 015—The uniqueness test is applied to subfield \$2; if it is unique, field 015 merges. If they are the same, the contents of subfield \$a are compared; if the subfields contain unique data, they are retained.

Note 016—If one of the 016's is in an NLM record (040 subfield \$c *NLM*), it is always retained. The uniqueness test is applied to the first indicator and subfield \$2; if they are unique, they are retained. If they are the same, subfields \$a and \$z are compared; if subfields \$a and \$z contain unique data, field 016 is retained.

Note 020—Uniqueness test is applied to subfields \$a and \$z. If they are different, they are retained, along with subfield \$b.

Note 024—The uniqueness test is applied to the first indicator and subfield \$2; if they are unique, they can be merged. If they are the same, the contents of subfields \$a and \$z are compared; if the subfields contain unique data, field 024 is retained.

Note 027/088—If either field 027 or field 088 (or both) already exists in the retain record, do not merge any 027 or 088 fields.

Note 029—The uniqueness test is applied to the concatenation of subfields \$a, \$b, \$c and \$t. If the concatenated text is different, field 029 will merge.

Note 040—Subfields \$c and \$d from the replace record are merged into the retain record in 040 subfield \$d unless the symbol is already present in field 040. **Exceptions:** These symbols are not merged: OCL, OCLCQ, OCLCA, OCLCG.

Note 050/090—There is a hierarchy of decisions considered prior to selecting the data to retain.

- If present, a call number with class letters is retained and call number without class letters is not.
- The LC-assigned class number is always retained when present in the set of records; it is identified by the 040 subfield \$c *DLC* or by the second indicator value 0. If there is more than one LC-assigned class number in a record, all are retained.
- If there is no LC-assigned class number, retain any single 050 field if present. If no 050 field is present, retain field 090.

When field 090 is retained, it is converted to field 050 with a second indicator value 4.

Note 052—The uniqueness test is applied to subfield \$2. If the subfields \$2 are unique, field 052 will merge.

Note 072—The uniqueness test is applied to the second indicator. If the second indicators are unique, field 072 will merge. The only instance of second indicators being the same that might result in a merge is if the second indicators are 7, in which case subfield \$2 is uniqueness tested. If the subfields \$2 are unique, then field 072 will merge.

Note 080—The uniqueness test is applied to subfield \$2. If the subfields \$2 are unique, they are merged. If the subfields \$2 are the same, the subfields \$a are uniqueness tested. If the subfields \$a are unique, they are retained.

Note 082/092—There is a hierarchy of decisions considered prior to selecting the data to retain.

- If the retain record has an 082 or 092 beginning with alphabetic characters or lacking numeric characters, it is deleted; exceptions are *Fic*, *E*, and *B* which are considered valid DDC numbers and are retained.
- The numbers in subfield \$a are compared. If the numbers are the same, preference is given to the 082 field with second indicator 0 (meaning, "assigned by LC").
- If the numbers in subfield \$a are the same and none is from LC, retain the one with subfield \$2.

- If the numbers in subfield \$a and subfield \$2 are the same, retain the one in the retained record.
- If the numbers in subfield \$a and subfield \$2 are the same and are not in the retained record, retain the longest 082 or 092 field.

When field 092 is retained, it is converted to field 082 with a second indicator value 4 and subfields \$e and \$f are deleted.

Note 083—The uniqueness test is applied to the contents of subfield \$2. If the subfields \$2 are unique, field 083 will merge.

Note 084—The uniqueness test is applied to the contents of subfield \$2. If the subfields \$2 are the same, the uniqueness test is applied to subfields \$a and \$z. If subfields \$a and \$z are unique, they are retained.

Note 085—The uniqueness test is applied to the contents of subfield \$2. If the subfields \$2 are unique, field 085 will merge.

Note 086—The uniqueness test is applied to the first indicator and the contents of subfield \$2. If the first indicator and subfield \$2 code are unique, the field is merged. If the first indicator and subfield \$2 code are the same, the uniqueness test is applied to subfields \$a and \$z. If subfields \$a and \$z are unique, field 086 is retained.

Note 300/305—If either record has multiple fields 300 or 305, no merge occurs. Fields 300/305 are candidates for replacing only under the following conditions:

- Subfield \$a contains 'p. cm.'
- Encoding Level is 8 and the field contains only subfield \$a
- Record has 040 subfield \$c *UKM* and 300/305 subfield \$a begins with [

If the retain record has no 300 or it meets one of the criteria above, it can be replaced by a 300 from the first record merged to it.

Note 506—The uniqueness test is applied to subfield \$5. If subfields \$5 are unique or absent, field 506 will merge.

Note 526—The uniqueness test is applied to a combination of subfields \$a and \$5. If the combination is unique or subfield \$5 is absent, field 526 will merge.

Note 600-651—The uniqueness test is applied to the second indicator. If the second indicators are unique, fields 600-651 will merge. The only instance of second indicators being the same that might result in a merge is if the second indicators are 7, in which case subfield \$2 is uniqueness tested. If the subfields \$2 are unique, then fields 600-651 will merge. All 600-651 fields with the same indicator value (or subfield \$2 as appropriate) are merged or not as a group (for example, if one is retained all are retained). **NLM Exception:** If one of the records is an NLM record (040 subfield \$c *NLM*), NLM subject headings (indicator value 2) always override other subject headings with indicator value 2.

Note 654—The uniqueness test is applied to subfield \$2. If the subfields \$2 are unique, field 654 will merge.

Note 655—The uniqueness test is applied to the second indicator. If the second indicators are unique, field 655 will merge. The only instance of second indicators being the same that might result in a merge is if the second indicators are 7, in which case subfield \$2 is uniqueness tested. If the subfields \$2 are unique, field 655 will merge.

Note 656—The uniqueness test is applied to the second indicator. If the second indicators are unique, field 656 will merge. The only instance of second indicators being the same that might

result in a merge is if the second indicators are 7, in which case subfield \$2 is uniqueness tested. If the subfields \$2 are unique, field 656 will merge.

Note 657—The uniqueness test is applied to the second indicator. If the second indicators are unique, field 657 will merge. The only instance of second indicators being the same that might result in a merge is if the second indicators are 7, in which case subfield \$2 is uniqueness tested. If the subfield \$2's are unique, field 657 will merge.

Note 658—The uniqueness test is applied to subfield \$2. If the subfields \$2 are unique, field 658 will merge.

Note 662—The uniqueness test is applied to subfield \$2. If the subfields \$2 are unique, field 662 will merge.

Note 751—The uniqueness test is applied to the contents of subfield \$2. If the subfields \$2 are unique, field 751 will merge.

Note 800-830—All series fields (490, 800, 810, 811, and 830) are treated as a group. Series information is retained based on these rules:

- Traced series (800-830) are always retained over untraced series (490 with first indicator 1).
- If there are multiple replace records with traced series, choose the first one merged.
- Non-Latin rules: See *Non-Latin Rules* section on page 9.

Note 856—The uniqueness is applied to subfield \$u. If the subfields \$u are unique, field 856 merges. For CONSER records, 856 does not merge unless it meets one of these criteria:

- If field 856 subfield \$u contains the text "books.google.com", field 856 merges if it is not already present.
- If field 856 subfield \$u contains the text "firstsearch.oclc.org", field 856 merges if it is not already present.
- If field 029 subfield \$a contains the text "CNTNT", field 856 merges if it is not already present.

Note 887—The uniqueness test is applied to subfield \$2. If the subfields \$2 are unique or absent, field 887 is transferred.

Note 936—If field 936 does not start with *PR*, it is not retained. If field 936 begins with *PR*, it is a merge type 2. OCLC numbers from all of the 936 fields that begin with *PR* are concatenated into a single string. Duplicate OCLC control numbers are deleted. The OCLC control numbers are compared to the 001 and 019 subfield \$a of the retain record. If the number in field 936 is in fields 001 or 019, it is deleted from the replace record. If all OCLC control numbers are deleted, field 936 is also deleted from the replace record.

Note 938—The uniqueness test is applied to subfield \$b. If the subfields \$b are identical in both records, the 938 will be retained from the incoming record.

Appendix C: Batchload Validation for Bibliographic Records

Last revised September 2010

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C.1 Introduction

Batchload Error Validation is a software application used to automatically check the MARC 21 content designation and record format (structure) in bibliographic records that libraries send OCLC for batch processing. Validation can identify obvious errors for possible correction to improve matching and retrieval. “Quality” of the bibliographic records is not determined by validation.

C.1.1 The scope of error validation

Error Validation does not check all MARC 21 content designators. Some MARC 21 rule violations are ignored because the error does not affect record retrieval (indexing), or represents local cataloging practices, or is too difficult to validate automatically.

For example, the following errors are not checked or reported because they do not affect record retrieval:

- Codes in subfield 2 in various fields and extraneous punctuation in ‡4 and ‡5
- Repeatability of subfields, except for ‡a and ‡b of field 245

C.1.2 Validation via Connexion client or browser

The rules outlined in this chapter do **not** apply to record validation in OCLC Connexion. Record validation in Connexion is different from that used for batchload. For information on Connexion validation:

- See “Validate records online or offline” in Connexion client documentation at: http://www.oclc.org/support/documentation/connexion/client/cataloging/editbib/#cat_edit_validate_records
- See “Validate bibliographic or authority record” in Connexion browser documentation at: http://www.oclc.org/support/documentation/connexion/browser/cataloging/edit_bib_records/default.htm#wc-bib-af-validate

C.2 Timing of validation in batchload for bibliographic records

Batchload validation is used at two points during batchload: first, when a batchload specialist initially analyzes data sent by a library for processing, and second, during preprocessing, when records are evaluated for adding to WorldCat as original records.

C.2.1 Validation for initial analysis of data

Batchload specialists use validation during initial analysis of record files to identify any critical errors. The batchload specialist runs the file through Error Validation software to identify the errors and then attempts to fix or mitigate the errors with processing routines that correct or normalize the data (that is, make data consistent). Validation is just one aspect of initial analysis.

C.2.2 Validation for evaluating records before adding to WorldCat

During processing, every record processed in a file undergoes validation, and each error in a record is detected, recorded, and identified by severity level (severity levels are defined in the next section of this appendix). Once all errors are detected and assigned severity levels, the highest becomes the severity level of the record. If no errors are detected, the record error severity level is zero.

Records not matched with WorldCat records during batch processing are candidates for adding to WorldCat as original records, if requested by the library. The severity level of each record is checked, and records are either added to WorldCat or placed in an “unresolved record” file, based on the rules documented in this appendix. For information on unresolved record files, see chapter 5 “Exception Data (Records Remaining).”

Error severity levels have no effect on matched records used to set or delete holdings.

C.3 Definitions of validation severity levels

In current practice, errors are classified by severity levels:

Correctable errors are incorrect indicator or coded values in situations where a correct or acceptable value can be supplied by default. Examples are:

- Non-blank indicator values where the indicator is undefined
- Some cases of blanks in fixed-field positions where blanks are not defined as valid coded values.

Invalid codes are replaced with default values and the record is counted as corrected unless it also has a more severe error.

Severity level 1 errors are invalid characters or content designators that are regarded as acceptable. The invalid character is passed through unchanged or replaced with an acceptable substitute. These errors are included in validation error reports (see appendix E for more about reports). The record is counted as containing minor errors unless the record also contains a more severe error.

Severity level 2 errors include most cases of invalid characters or content designators. For errors at this level, an attempt is made to correct them or they are simply identified as major. In most cases, the invalid element is replaced with a fill character or other acceptable substitute.

Records are counted as having major errors but are passed along for matching in WorldCat if they have no higher level errors. If they are unmatched, whether the records are added to WorldCat or not depends on the rules outlined in this appendix.

Severity level 3 errors are those which preclude successful processing. Examples include:

- Missing 245 field
- Invalid Record Status code
- 008 field that is too short.

Records with these errors are passed along for matching in WorldCat but are never added. These errors are reported, the record is counted as “rejected,” and it is not passed on to the next processing step.

Severity Level 4 errors are errors in the MARC record structure itself. Such errors prevent any further processing, including a formatted record display. These errors are included in the validation error report and counted as rejected.

All errors in each record are reported in a validation error report.

C.3.1 Adding records to WorldCat: Strict versus relaxed validation with “conditional adds” option

Historically, batchload did not have the concept of major and minor errors. All errors were treated as Severity Level 2, which is the equivalent of today's "strict" validation. If any of the recognized errors appeared in a record, the record was not added to WorldCat.

Currently, batchload validation has been “relaxed.” Relaxed validation categorizes the severity of errors and then corrects some errors and allows records with minor errors to be added to WorldCat.

A batchload specialist may still choose to use strict validation, but by default, most batchload projects are now processed using relaxed validation in combination with a processing option called “conditional adds.” Strict validation is always used for National Library processing.

Combining conditional adds and relaxed validation for most projects is a way of trying to strike a balance between getting records into WorldCat and maintaining WorldCat record quality. The rules in this appendix describe this default combination.

Rare exception: Batchload specialists can set a processing option to “unconditional adds,” which allows adding all but the most problematic records to WorldCat. The rules for unconditional adds are rarely used and are considered only for unusual projects. This exception is beyond the scope of this document.

C.4 Detailed error conditions for relaxed validation

The following list explains how specific error conditions are handled under relaxed validation.

- **Invalid indicator values:** If only one value is defined for the indicator, it is set to that value and no error is reported. Otherwise the invalid value is replaced by an error fill character. The severity level is 1. Applies to all variable data fields.
- **Invalid subfield codes:** If the existing subfield code is in the ranges *a-z*, *0-5*, or *7-9*, it is left unchanged and the severity level is 1. If the existing value is *6*, the severity level is 2. Other subfield code values are replaced with a fill character, and the severity level is 2. Applies to all variable data fields.
- **Multiple occurrences of non-repeatable fields:** The severity level is 1. Applies to all variable data fields except 010, 029, and 245.
- **Invalid code in ModRec:** The invalid code is changed to a blank. No error is reported.
- **Redundant escape sequence:** No error is reported.
- **Mutually exclusive fields:** No action is taken. The severity level is 1.
- **Fixed field too short:** The field is treated as if it were padded with fill characters to the minimum acceptable length. The severity level is 1. Applies to fields 006 and 007.
- **Fixed field too long:** The field is truncated to an acceptable length. No error is reported. Applies to fields 006-008.
- **Fixed field format-specific elements (008/18-34 and 006/01-17):** The MARC fill character is considered valid for non-critical elements. Critical elements are those involved in record type determination and matching, such as Type of Material. Errors in critical elements remain severity level 2. For non-critical elements, if the existing erroneous value is a valid ASCII graphic, the value is left unchanged. Otherwise, the value is replaced with an error fill character. The severity level is 1.
- **Invalid tag:** If the tag is non-numeric or of the form 00X, or if it is marked “not legal for input,” the severity level remains 2. Otherwise, the tag is not altered, and the contents of the field are validated according to the generic field rules—indicator values of blank and *0-9* are valid; subfield codes *a-z* and *0-9* are valid). The severity level is 1 unless the field contains a more severe error.
- **Field 007:** The MARC fill character is considered valid for use in positions 03 and beyond. Position 02 is always forced to blank. For positions 03 and beyond, if the existing erroneous value is alphabetic, numeric, a blank, or a hyphen, the value is retained. Otherwise, the value is replaced with an error fill character. The severity level is 1.

C.5 Severity level 1 error messages

Note: See section C.9 for definitions of placeholder values—such as *ttt*, *nn* or *nnn*, *xx*—in error messages.

ttt FIELD INCORRECT LENGTH

Field 006 or 007 has other than the defined length, or field 008 is too long. Characters missing from field 006 are treated as if fill characters were present. Missing characters in field 007 are ignored. Excess characters in all fields are ignored.

FIELD ttt MAY NOT BE REPEATED

A field designated as non-repeatable but not marked absolutely non-repeatable occurs more than once in the record. Example: **240**.

FIELD ttt MAY NOT OCCUR WITH FIELD ttt

Two fields designated as mutually exclusive appear in the same record. Example: **100** with **130**.

INCORRECT VALUE 'c' (ASCII X'xx') IN POSITION nnn (007 FIELD POSITION nn)

A single-character coded value in field 007 is not valid.

INVALID DATA IN POSITION nn OF ttt FIELD (element)

A single-character coded value in field 006 or 008 is not valid. The element is not critical for matching and indexing.

INVALID DATA IN POSITIONS nn-nn OF ttt FIELD (element)

A multi-character coded value in field 006 or 008 is not valid. The element is not critical for matching and indexing.

INVALID DATA IN POSITIONS nnn-nnn (007 FIELD POSITIONS nn-nn)

A multi-character coded value in field 007 is not valid. The erroneous value is replaced with error fill characters.

INVALID DESCRIPTIVE CATALOGING FORM CODE 'c' (ASCII X'xx')

The Descriptive Cataloging Form code (leader position 18) is not valid. The erroneous value is replaced with an error fill character.

INVALID FIRST INDICATOR 'c' (ASCII X'xx') IN POSITION nnn (ttt FIELD)

The value of the first indicator is not valid in context. It is replaced with an error fill character.

INVALID SECOND INDICATOR 'c' (ASCII X'xx') IN POSITION nnn (ttt FIELD)

The value of the second indicator is not valid in context. It is replaced with an error fill character.

INVALID SUBFIELD CODE 'c' (ASCII X'xx') IN POSITION nnn (ttt FIELD)

The subfield code is not valid in context.

INVALID TAG 'ttt' (FIELD BEGINNING IN POSITION nnn)

The tag is numeric, not defined, and not a control field.

REDUNDANT ESCAPE SEQUENCE IN POSITION nnn (ttt FIELD)

An escape sequence appears when the character set it designates is already in effect.

C.6 Severity level 2 error messages

Note: See section C.9 for definitions of placeholder values—such as *ttt*, *nn* or *nnn*, *xx*—in error messages.

BIB RECORD EXCEEDS MAXIMUM LENGTH - RECORD TRUNCATED

The total length of the record when converted to internal processing format exceeds the system limit. Occurrence of this error is extremely rare since the system limit was raised to 32,000 bytes.

FIELD TERMINATOR MISSING IN POSITION *nnn* (*ttt* FIELD)

The final position of a field as indicated by the length in its directory entry does not contain a field terminator. A terminator is stored into the final position.

FIELD *ttt* MAY NOT BE REPEATED

A field designated as absolutely non-repeatable occurs more than once in the record.
Example: **245**.

ILLEGAL CHARACTER X'*xx*' (ASCII X'*xx*') IN POSITION *nnn* (*ttt* FIELD)

The reported position contains a character which is not a valid MARC character or which OCLC does not yet support. The invalid character is replaced with an error fill character.

ILLEGAL ESCAPE SEQUENCE IN POSITION *nnn* (*ttt* FIELD)

The characters following an escape do not constitute a recognized character set identifier and the standard character set is currently in effect. The escape character is replaced with an error fill character.

INCORRECT DATA IN 042 FIELD

The content of field 042 subfield a does not precisely match one of the known valid codes. For Standard and Group processing, most 042 fields are deleted prior to validation.

INVALID DATA IN POSITION *nn* OF *ttt* FIELD (element)

A single-character coded value in field 006 or 008 is not valid. The element is critical for matching and indexing.

INVALID DATA IN POSITIONS *nn-nn* OF *ttt* FIELD (element)

A multi-character coded value in field 006 or 008 is not valid. The element is critical for matching and indexing.

INVALID EACC CHARACTER *eeeeee* IN POSITION *nnn* (*ttt* FIELD)

The reported three-byte sequence occurs within an EACC string but is not a valid EACC character. The data is not changed.

INVALID ENCODING LEVEL '*c*' (ASCII X'*xx*')

The Encoding Level value (leader position 17) is not valid. The erroneous value is replaced with an error fill character. This error does not occur except when there is an error in the setup.

INVALID SUBFIELD CODE '*c*' (ASCII X'*xx*') IN POSITION *nnn* (*ttt* FIELD)

The subfield code is not a letter or number. The erroneous code is replaced with an error fill character.

INVALID TAG 'ttt' (FIELD BEGINNING IN POSITION nnn)

The tag is non-numeric, not valid for input, or is restricted from use in the category of records being processed.

NO ROOM IN RECORD FOR 040 FIELD

There is not enough room in the internal processing record for the 040 field, which is constructed after conversion. Occurrences of this error are extremely rare since the system limit was raised to 32,000 bytes.

NON-STANDARD CODED CHARACTER IN POSITION nnn (ttt FIELD)

A variant numeric character reference, as produced by the UTF-8 converter, is present at the indicated position. These strings have the form {uXXXX}, where "XXXX" is the Unicode value of the character in hexadecimal.

SUBFIELD \$6 PRESENT WITHOUT FIELD 880

Subfield 6 was found in one or more fields, but no field 880 is present in the record.

SUBFIELD \$% MAY NOT BE REPEATED IN FIELD ttt

"%" is "a" or "b". "ttt" is 245.

SUBFIELD DELIMITER IS NOT FIRST IN POSITION nnn (ttt FIELD)

The first position following the indicators in a variable data field is not a subfield delimiter. The initial characters of this field will be treated as an implicit subfield a.

C.7 Severity levels 3 and 4 error messages

Notes:

- Level 4 errors in the messages listed below are marked with [4] at the end of the message description.
- See section C.9 for definitions of placeholder values—such as *ttt*, *nn* or *nnn*, *xx*—in messages.

001 FIELD MISSING OR EMPTY

Batchload requires a non-blank record identifier in field 001.

008 FIELD INCORRECT LENGTH

The 008 field is shorter than 41 bytes. If the field is too long, the error is severity level 2.

FIELD TERMINATOR MISSING IN POSITION *nnn*

A field terminator was not found in the last byte of the record directory as indicated by the Base Address of Data. [4]

FIELD *ttt* REQUIRED BUT NOT PRESENT

The tag is 008 or 245. Both are mandatory.

ILLEGAL ESCAPE SEQUENCE IN POSITION *nnn* (*ttt* FIELD)

The characters following an escape do not constitute a recognized character set identifier and the standard character set is not in effect. This error is severity level 2 if the standard character set is currently in effect.

INVALID BASE ADDRESS

The Base Address of Data (leader positions 12-16) does not contain a valid value. The value must be one greater than a multiple of 12. [4]

INVALID RECORD STATUS CODE

The record status code is not a recognized valid value; therefore, the transaction is undefined.

INVALID RECORD TYPE/BIB LEVEL

The Record Type or Bibliographic Level code, or combination of the two, is invalid. Thus the record format is undefined and validation cannot be performed.

NO VALID HOLDINGS SYMBOL FOUND

The record lacks a valid library identifier (field 949 subfield I) during group processing. Thus no holdings can be set.

NON-NUMERIC X'xx' (ASCII X'xx') IN POSITION *nnn*

The Base Address of Data (leader positions 12-16) or any of the first seven positions of a directory entry contains a non-numeric character. [4]

SUBFIELD \$6 NOT FIRST IN FIELD - POSITION *nnn* (*ttt* FIELD)

Subfield 6 must be the first subfield in any field other than 886 or 887.

SUBFIELD \$6 STRUCTURE INVALID - POSITION *nnn* (*ttt* FIELD)

The subfield does not have the required structure.

C.8 List of all batchload validation error messages for bibliographic record processing

Note: See section C.9 for definitions of placeholder values—such as *t*, *nn* or *nnn*, *xx*—in error messages.

Error Number	Error Message Text	Severity Level
01	INVALID ENCODING LEVEL 'c' (ASCII X'xx')	2
02	INVALID DESCRIPTIVE CATALOGING FORM CODE 'c' (ASCII X'xx')	1
03	INVALID RECORD TYPE/BIB LEVEL	3
04	INVALID RECORD STATUS CODE	3
05	SUBFIELD DELIMITER IS NOT FIRST IN POSITION nnn (ttt FIELD)	2
06	INVALID TAG 'ttt' (FIELD BEGINNING IN POSITION nnn)	1 or 2
07	INVALID FIRST INDICATOR 'c' (ASCII X'xx') IN POSITION nnn (ttt FIELD)	1
08	INVALID SECOND INDICATOR 'c' (ASCII X'xx') IN POSITION nnn (ttt FIELD)	1
09	ILLEGAL CHARACTER X'xx' (ASCII X'xx') IN POSITION nnn (ttt FIELD)	2
10	INVALID SUBFIELD CODE 'c' (ASCII X'xx') IN POSITION nnn (ttt FIELD)	1 or 2
11	FIELD TERMINATOR MISSING IN POSITION nnn (ttt FIELD)	2
12	NON-NUMERIC X'xx' (ASCII X'xx') IN POSITION nnn	4
13	INVALID BASE ADDRESS	4
14	FIELD TERMINATOR MISSING IN POSITION nnn	4
15	FIELD ttt MAY NOT BE REPEATED	1 or 2
16	FIELD ttt MAY NOT OCCUR WITH FIELD ttt	1
17	FIELD ttt REQUIRED BUT NOT PRESENT	3
18	INCORRECT VALUE 'c' (ASCII X'xx') IN POSITION nnn (007 FIELD POSITION nn)	1
20	ttt FIELD INCORRECT LENGTH	1 or 3
21	INVALID DATA IN POSITIONS nn-nn OF ttt FIELD (element)	1 or 2
22	INVALID DATA IN POSITION nn OF ttt FIELD (element)	1 or 2
23	ILLEGAL ESCAPE SEQUENCE IN POSITION nnn (ttt FIELD)	2 or 3
24	REDUNDANT ESCAPE SEQUENCE IN POSITION nnn (ttt FIELD)	0 or 1
27	INVALID DATA IN POSITIONS nnn-nnn (007 FIELD POSITIONS 9-10)	1
28	SUBFIELD \$6 PRESENT WITHOUT FIELD 880	2
29	SUBFIELD \$6 NOT FIRST IN FIELD - POSITION nnn (ttt FIELD)	3
30	SUBFIELD \$6 STRUCTURE INVALID - POSITION nnn (ttt FIELD)	3
31	INVALID DATA IN POSITIONS nnn-nnn (007 FIELD POSITIONS 6-8)	1
32	INVALID EACC CHARACTER eeeee IN POSITION nnn (ttt FIELD)	2
33	INCORRECT DATA IN 042 FIELD	2
34	NON-STANDARD CODED CHARACTER IN POSITION nnn (ttt FIELD)	2
35	SUBFIELD \$? MAY NOT BE REPEATED IN FIELD ttt	2
52	BIB RECORD EXCEEDS MAXIMUM LENGTH - RECORD TRUNCATED	2
53	001 FIELD MISSING OR EMPTY	3
56	NO ROOM IN RECORD FOR 040 FIELD	2
57	NO VALID HOLDINGS SYMBOL FOUND	3

C.9 Key to placeholder values in error messages

Parts of the text of the error messages in this appendix consist of placeholders for actual values, which are inserted when records are validated. The placeholders are:

Placeholder	Definition
c	A character, presented in single quotes: for example, 'E'. If the character is not printable, the hex value is displayed instead.
eeeeee	An EACC character, presented as a string of six hexadecimal digits: for example, 21344B .
element	One of the mnemonic labels given to elements of the 006 and 008 fields in online displays.
nn or nnn	A decimal offset from the beginning of a record or field. Also used to identify elements of the fixed fields by position.
rrrr	An RLIN library identifier: for example, NYPG .
ttt	A three-digit tag: for example, 245 .
xx	The hexadecimal value of an ASCII or EBDIC character, usually displayed in the form X'xx'.
?	A single lowercase letter or digit.

Appendix D: Sample Reports

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D.1 Batchload Processing Summary

When you submit records for a batchload project, this report is generated for each file in the project as it completes processing. These reports are available for pickup on the [OCLC Product Services Web](#) (PSWeb) or, by request, via e-mail.

Sample report

BATCHLOAD PROCESSING SUMMARY
 Current Project Contact: kozselym@oclc.org

Report Date: 16-Feb-2008
 Run Date: 16-Feb-2008

Institution Name: Kungl. biblioteket - National Library of Sweden
 Symbol: S30
 Order IDs: 208234
 File: DBS.@S30.MARCIN.D080215

Project ID: P009035

PRODUCT CODE SUMMARY

Product Code: TAP3819	48
Product Code: TAP3919	1,279

HOLDINGS SUMMARY

Holdings set:	1,253
Holdings canceled:	0

PROCESSING

Records received:	1,327
Records processed:	1,327
Records added:	687
Unresolved records:	74
Duplicates dropped:	0
Invalid or not selected:	0

PROCESSING:

Records received: Total number of records received for preprocessing. This **may not** be the same as the total number of records received from the library. If the total number of records received in preprocessing is less than the total number received from the library, it means that severe structural errors or incorrect coding was found and the records were removed before the file was "preprocessed."

Records processed: Number of records that were successfully preprocessed. If this number is less than the number of records received, then preprocessing software deselected the records. Records can be deselected during preprocessing when:

- The record is a duplicate based on comparing numbers in the 001 fields
- The record is invalid (usually because of invalid values in the Record Leader)
- The record lacks an 001, 008, or 245 field
- A special deselect routine is included in a customized setup
- The record lacks a valid library identifier (for Group Batchload projects only)

Records added: Number of records added as original records to WorldCat

Unresolved records: Number of records that OCLC matching software could not match or add to WorldCat.

Duplicates dropped: Number of duplicate records in a file dropped during preprocessing based on comparing numbers in the 001 fields only. No other checks are made.

Invalid or not selected: Records that contain invalid values in the Record Leader, or lack an 001, 008, or 245 field, or are deselected by special deselect routines designated for that project.

See chapter 5 for more about deselected, unresolved, and duplicate records.

Batch Specialist email address

The OCLC institution symbol

A unique number assigned to each project. One project may have many associated Order IDs.

A unique number assigned to each unique file in a project.

The file name assigned by OCLC when the file is received.

Product codes track record processing and are used for invoicing and billing. See appendix F for details about product codes.

D.2 Batchload Processing Summary Including Bibliographic Institution Records (IRs)

The description of this report is the same as for the Batchload Processing Summary report in D-1. This illustration shows the same report but for a project that included processing IRs. The IR results appear as a separate section.

IR records are attachments to bibliographic records. The number of IR records added, replaced, or unresolved may be much higher than the number of bibliographic records added or unresolved, since any number of IR records can be attached to a single bibliographic record.

Sample report showing IR processing

BATCHLOAD PROCESSING SUMMARY		Report Date: 16-Jul-2009
Current Project Contact: wolkanl@oclc.org		Run Date: 16-Jul-2009
Institution Name: American Antiquarian Society		Institution Symbol: AQM
Order IDs: 266148,266167		Project ID: 010974
File: DBS.@AQM.MARCIN.D090715, 3,257 records		
PRODUCT CODE SUMMARY		
Product Code: TAP3812	2,702	See details about product codes in appendix F.
Product Code: TAP3911	555	
Product Code: TAP3971	327	
Product Code: TAP1199	3,257	
Product Code: TAP1729	788	
Product Code: TAP1739	2	
Product Code: TAP1749	2,467	
HOLDINGS SUMMARY		
Holdings set:	3,255	
Holdings canceled:	2	
BIB PROCESSING		
Records processed:	3,257	
Records added:	327	
Unresolved records:	1	
IR PROCESSING		
Records added:	788	IR processing summary
Records replaced:	2,467	
Unresolved records:	1	

D.3 Batchload Processing Summary for a Numeric Search Key Project

This report is generated when a numeric search key project is completed and is sent to you via e-mail.

A batch project based on search keys for a numeric index has two steps:

1. WorldCat records are matched to the numeric key of the records your library sent.
2. The set or cancel holdings action is taken on single matches, and the results are listed in this report.

However, if a local record matches multiple WorldCat records, the set or cancel holdings action is not taken, since batch processing cannot determine a correct matching record. Also, some records may have no match in WorldCat. Multiple or no matches are reported at the end of this report in the Exception Report section (shown on the next page).

What to do about multiple matches? The library can use the Exception Report section (see the next page) to select the correct matching record and send the OCLC numbers to complete setting or canceling holdings.

Sample report

BATCHLOAD PROCESSING SUMMARY		Report Date: 20-Jul-2009
Current Project Contact: smithp@oclc.org		Run Date: 20-Jul-2009
Institution Name: Lompoc Public Library		Institution Symbol: LOM
Order IDs: 266566		Project ID: 011532
File: DBS.@LOM.MRC.B0985.RECORDS,	109 records	
PRODUCT CODE SUMMARY		
Product Code: TAP3919	109	
HOLDINGS SUMMARY		
Holdings set:	109	
Holdings canceled:	0	
BIB PROCESSING		
Records processed:	109	
20090720 STATISTICS REPORT FOR LOM		
	CURRENT	PROJECT
	BATCH	TO DATE
SINGLE HITS	109	4,938
HOLDINGS DELETED	0	0
2 TO 10 HITS	8	852
OVER 10 HITS	0	10
NO HITS	0	37
REJECTS	0	0
TOTALS	117	5,837

The following Exception Report area of the Batchload Processing Summary above for a numeric search key project shows local record numbers that had multiple or no matches.

<p>20090720 EXCEPTION REPORT FOR LOM</p> <p>2 HITS FOR: 0439761263 LOMA</p> <p>OCLC: 061734729 Harris, Christine,\$d1955- Fugitive /\$cChristine Harris. 1st American ed. New York :\$bScholastic,\$c2005, c2004. 155 p. ;\$c20 cm. IMF\$cIMF</p> <p>OCLC: 426074349 Harris, Christine,\$d1955- Undercover girl.\$n#2,\$p--Fugitive /\$cby Christine Harris. New York :\$bScholastic,\$c2004. 155 p. ;\$c20 cm. CNSPL\$cCNSPL</p>	<p>Local record number 0439761263 had two “hits” (that is, two matching WorldCat records). Data from the two matched records is displayed.</p>
<p>4 HITS FOR: 0439761255 LOMA</p> <p>OCLC: 061284978 Harris, Christine,\$d1955- Secrets /\$cChristine Harris. New York :\$bScholastic,\$c2005. 152 p. ;\$c20 cm. BKLS\$cBKL</p>	<p>Local record number 0439761255 matched four WorldCat records. Data from the four matched records is displayed.</p>
<p>OCLC: 062338061 Harris, Christine,\$d1955- Undercover girl /\$cChristine Harris. New York :\$bScholastic,\$c2005- v. ;\$c20 cm. BNY\$cBNY</p>	
<p>OCLC: 063167860 Harris, Christine,\$d1955- Secrets /\$cChristine Harris. New York :\$bScholastic,\$c2005. 152 p. ;\$c20 cm. IHIS\$cIHI</p>	
<p>OCLC: 319903492 Harris, Christine,\$d1955- Secrets /\$cby Christine Harris. 1st American ed. New York :\$bScholastic,\$c2004. 152 p. ;\$c20 cm. OTPS\$cOTP</p>	<p>Record number 9786303301 had no matches.</p>
<p>NO HITS FOR: 9786303301 LOMA</p>	<p>Record number 0792107667 had over ten matches. If a record matches ten or more WorldCat records, details of each matched WorldCat record are not given.</p>
<p>OVER 10 HITS FOR: 0792107667 LOMA</p>	

D.5 Batchload Processing Summary—Exception Log

The Exception Log is generated when a batchload project is completed and is sent to you as an e-mail attachment. The Log lists the local system control numbers (from the 001 fields) of records in your project that OCLC software could not match or add to WorldCat.

Sample log

100:05	11 DEC 2008	BATCHLOAD PROCESSING SUMMARY FOR STANDARD/GROUP LOAD		PAGE 1
BATCH SBK41028 RUN ON 20081210				
PROCESSING EXCEPTION LOG				
SPR	4247726	ERR	4248142	SPR 4250727
SPR	4250732	SPR	4250983	SPR 4251408
SPR	4251519	SPR	4251557	SPR 4251834
ERR	4251856	SPR	4251890	SPR 4252116
SPR	4274757	SPR	4274899	SPR 4275062
ERR	4275393	SPR	4275805	SPR 4276416
SPR	4276590	ERR	4277213	SPR 4277646
ERR	4277833	SPR	4278283	SPR 4278739
ERR	4295032	ERR	4295224	ERR 4399064
ERR	4399517	ERR	4399529	SPR 4400153
SPR	4400162			

Key to abbreviations in the Exception Log

- CAN** Cancel holdings transaction; no matching record found
- ERR** Record contains an error and could not be added
- MUL** Multiple match; could not be resolved (if you see question marks instead of an abbreviation, the question marks mean the same as MUL)
- N/M** No matching record found; records not added because they did not meet quality standards (does not include unmatched sparse records)
- SPR** Unmatched sparse record not added

D.6 Cross Reference (XREF) Report

Batchload generates this report for every file completed in a project. It is a two-column text file that lists the matching OCLC number (without prefix) across from your unique local system control number found in the 001 field. This report is posted to [PSWeb](#) for pickup or, on request, as a text file (*.txt) attachment in an e-mail.

If your local system control number was not in field 001 in the records you submitted for processing, batch preprocessing moves it to field 001 (see 5.2 “Preprocessing” for details).

Note:

You use the Cross Reference Report to match and merge the OCLC numbers into the bibliographic records in your local system. To perform this task, you can work with your local system provider, if needed, or choose another option for obtaining the OCLC numbers.

Sample report

OCLC XREF REPORT	
OCLC	Submitted
Control #	001 Field
22255842	085405019
221275514	085412538
220554074	085412570
154270854	085412597
32648395	085412627
173194008	085412643
221107946	085412651
154241241	08541266X
221009433	085412678
32119009	085412686
32648432	085412716
152432804	085412724

D.7 Custom Cross Reference (CXREF) Report

Custom Cross Reference reports are generated only by request. In the sample report below, data from the 082 field has been included in the third column if present in the record. Custom reports can include only numerical data in fields with one subfield. Only the following tags are available for CXREFs: Bibliographic institution record number or local system control number (field 001), 019, 020, 022, or 082.

Sample report

GBVCP Custom X-Ref Report		
ocn256083510	023325127	
ocm25269821	023503580	838/.609 B
ocm17131982	023618051	
ocn256285123	023708972	
ocn214278364	023719109	
ocm70285272	023736844	
ocm07422320	023804785	838/.91209
ocn256331405	023829869	
ocn256241104	023843535	
ocm09365921	023934891	363.320943
ocm74503083	023936142	
ocm09758351	023952334	331.88/0943
ocm04113170	023973137	709/.47
ocm46110324	024012866	
ocm09443926	02403889X	831/.2
ocm12422529	024071919	809/.93351
ocn187406539	024111848	
ocm26400449	024117064	
ocm17451873	024129402	941.3/4082/0924
ocm18092015	024171611	
ocm09084215	02429635X	822/.91/099415
ocn214328271	024344885	
ocm16801948	024347426	349.494/023 344.940023
ocm06378513	024532525	343.43/082
ocm14902336	02456575X	
ocn256200425	024591017	
ocn256201031	024591297	
ocn256201868	024592900	
ocm46116964	024603945	

D.8 Bibliographic Institution Record (IR) Cross Reference Report

The Cross Reference report for an IR project lists the local record control number in column 1 across from the corresponding OCLC control number in column 2 across from the corresponding IR number in column 3. Custom cross reference reports are unavailable for IRs.

Sample Report

tag:recid	tag:master	tag:ir
100075	ocm05538035	ocn191124094
100093	ocn191093671	ocn191124110
100094	ocm01855327	ocn191124111
100097	ocm03521382	ocn191124114
100098	ocm02054573	ocn191124115
100099	ocm01709195	ocn191124116
10042	ocm13155858	ocn191124396
100836	ocm05935397	ocn191124802
101047	ocm03553745	ocn191125016
101570	ocm01330538	ocn191125561
10168	ocm08776345	ocn191125670
102206	ocn191059343	ocn191066280
103261	ocm01942389	ocn191127309
104077	ocm03550436	ocn191128132
104282	ocm05744388	ocn191128335
104631	ocm04372569	ocn191128668
105298	ocm05734601	ocn191129317
105397	ocm01541343	ocn191129406
10558	ocm09295739	ocn191129591
106095	ocm00437575	ocn191130103
106762	ocm00445587	ocn191130789
10688	ocm10835049	ocn191130910
10844	ocn191100402	ocn191132492
11009	ocm10882472	ocn194928941
111945	ocm77068559	ocn191136063
1120	ocm15924461	ocn191136122

D.9 Detail Error Validation Report

This report is generated when a batch project is completed for unresolved records that were rejected because of validation errors. (See chapter 6 “Exception Data (Records Remaining)” for more about unresolved records and appendix C for more about validation.) Other unresolved records, along with a code for the reason, are reported in the Exception Log (D-5).

The Detail Error Validation Report is available on the PSWeb. The file name is in the form *D[YYMMDD]R[PROJECT ID].UDEV* (example: **D090810.R268798.UDEV**). The report lists errors in each record and includes a processing summary at the end (the processing summary for the sample report below is shown on the next page). The sample report shows only one record and part of a second record of 43 total unresolved records that failed validation. It gives details for the count of invalid/deselected records that displays in the Batchload Summary Report (D-1).

Sample report

```

15:48 22 SEP 2009          BATCHLOAD INPUT RECORD PREPARATION

CATALOGING INSTITUTION: MMX

ERROR: INVALID FIRST INDICATOR ' ' (ASCII X'20') IN POSITION 380 (024 FIELD)

LDR 24 0 |00844cam 2200265 a 450 |
001 10 265 |.b5665814+|
005 17 275 |20080902175609.0+|
008 41 292 |070511s2008 enk b 00100deng +|
020 25 333 |=a9781861893567 (hbk.)+|
020 22 358 |=a1861893566 (hbk.)+|
024 16 380 |=a40015209645+|
035 11 396 |=a313860+|
040 41 407 |=aUKM=cUKM=dBAKER=dBTCTA=dYDXCP=dBWKUK+|
050 25 448 4|=aN237.R316=bC67 2008+|
082 15 473 04|=a759.13=222+|
100 21 488 1 |=aCorris, Michael.+|
245 36 509 10|=aAd Reinhardt /=cMichael Corris.+|
260 31 545 |=aLondon :=bReaktion,=c2008.+|
300 21 576 |=a240 p. ;=c26 cm.+|
504 64 597 |=aIncludes bibliographical references (p. 172-22|
647 |7) and index.+|
600 61 661 10|=aReinhardt, Ad,=d1913-1967=xCriticism and inter|
711 |pretation.+|
700 31 722 1 |=aReinhardt, Ad,=d1913-1967.+|
852 27 753 0 |=aNNoMA=xM020080626 pp.+|
996 34 780 |=a.b5665814=b08-18-09=c11-19-08+|
993 29 814 |=aOCLTRACK=cE2ZQOT00y=r60+|

ERROR SEVERITY LEVEL 1 ←
ERROR: SUBFIELD $b MAY NOT BE REPEATED IN POSITION 562 (245 FIELD)

LDR 24 0 |01276cam 2200325Ia 450 |
001 10 325 |.b5720886+|
005 17 335 |20080902180052.0+|
008 41 352 |080404s2008 enka bc 00000 eng d+|
020 15 393 |=a1905462182+|
020 18 408 |=a9781905462186+|
035 11 426 |=a314489+|
040 24 437 |=aYDXCP=cYDXCP=dBTCTA+|
041 18 461 0 |=aeng=adut=ager+|
050 22 479 4|=aN6490=b.A346 2008+|
245 101 501 00|=aAgainst nature :=bthe hybrid forms of modern s|
551 |ulpture /=bcured by Stephen Feeke and Jon Woo|
599 |d.+|
260 43 602 |=aLeeds :=bHenry Moore Institute,=c2008.+|
300 40 645 |=a26 p. ;=c35 cm.+|
    
```

See appendix D, Batchload Record Validation, for more information on error severity levels and on rejected records.

“Processing Summary Statistics” section of the Detail Error Validation Report

This example is taken from the end of the report shown on the previous page.

<pre> PROCESSING SUMMARY STATISTICS 3,422 RECORDS READ 38 RECORDS CORRECTED 16 RECORDS HAD MINOR ERRORS 19 RECORDS HAD SEVERE ERRORS 8 RECORDS REJECTED 3,415 RECORDS WRITTEN (INCLUDING CONTROL RECORD) 5,058 IS LARGEST BLI RECORD LENGTH 832 IS AVERAGE BIB RECORD LENGTH DBSCONVX NORMAL END </pre>	<div style="border: 1px solid black; padding: 5px;"> <p>These are the records shown in the body of the Detail Error Validation Report (total of 43 unresolved records; that is, those with minor or severe errors plus rejected records).</p> <p>See appendix D for more information on record validation.</p> </div>
--	---

Key to the “Processing Summary Statistics” list above

- **Records Read**
 A count of the records in the report, not the total number of records processed. For example, if 1500 records were in the file sent by **SYS** institution and 529 had holdings set, 971 would be in the Error Validation report. These are unresolved records.
- **Records Corrected**
 A count of records which had minor errors that were corrected automatically by the validation/conversion program during processing.

Example: A record has a non-blank value in one of the indicators of field 020. Since no values other than blank are defined for field 020, the program changes the indicator to blank and counts the record as corrected.

Note: Although a record with this error has been corrected, it still may fail to match a WorldCat record or may not be added to WorldCat (if adds are enabled for the project) if, for instance, the data in the record is too sparse.
- **Minor Errors**
 Errors that are severity level 1 and 2. See appendix D for more information on record validation.
- **Severe Errors**
 Errors that are severity level 3. See appendix D for more information.
- **Records Rejected**
 The total count of records rejected.
- **Records Written**
 The number of records written by validation to the unresolved record file. This number is the sum of records read and records rejected.

Example: 3,422 (records read) + 8 (records rejected) = 972 - 1 (control record) = 971 unresolved records

Note: This report does not include other records that may be in the unresolved record file; that is, sparse records (not added) and deferred records (too many matches). Therefore, the number of records in the unresolved file for the project may not match this report.

D.10 Error Validation Summary

This report is generated for unresolved records that were rejected because of validation errors, along with the previous report (D-9). (See chapter 6 “Exception Data (Records Remaining)” for more about unresolved records and appendix C for more about validation.) The report is sent as an e-mail attachment.

The first column shows the total number of occurrences in the records of each error type, listed by tag number.

The following sample report is for the same project/institution shown in the Detail Error Validation Report above (D-9).

Sample report

ERROR VALIDATION SUMMARY		
CATALOGING INSTITUTION: MMX		
RESULTS		
1	000	FIELD 100 MAY NOT BE REPEATED
1	006	INVALID DATA IN POSITION 0 OF 006 FIELD (T006)
1	006	006 FIELD INCORRECT LENGTH
11	008	INVALID DATA IN POSITIONS 35-37 OF 008 FIELD (LANG)
1	008	INVALID DATA IN POSITIONS 7-10 OF 008 FIELD (DATE 1)
2	024	INVALID FIRST INDICATOR ' ' (ASCII X'20') (024 FIELD)
6	036	INVALID SUBFIELD CODE 'z' (ASCII X'7A') (036 FIELD)
1	100	INVALID SUBFIELD CODE 'v' (ASCII X'76') (100 FIELD)
1	245	ILLEGAL ESCAPE SEQUENCE IN POSITION 521 (245 FIELD)
1	245	ILLEGAL ESCAPE SEQUENCE IN POSITION 525 (245 FIELD)
1	245	ILLEGAL ESCAPE SEQUENCE IN POSITION 606 (245 FIELD)
1	245	ILLEGAL ESCAPE SEQUENCE IN POSITION 610 (245 FIELD)
1	245	SUBFIELD \$b MAY NOT BE REPEATED IN POSITION 562 (245 FIELD)
1	245	SUBFIELD \$b MAY NOT BE REPEATED IN POSITION 738 (245 FIELD)
1	362	INVALID FIRST INDICATOR ' ' (ASCII X'20') (362 FIELD)
1	490	INVALID SUBFIELD CODE 'c' (ASCII X'63') (490 FIELD)
1	505	ILLEGAL ESCAPE SEQUENCE IN POSITION 1074 (505 FIELD)
1	505	ILLEGAL ESCAPE SEQUENCE IN POSITION 1078 (505 FIELD)
1	505	ILLEGAL ESCAPE SEQUENCE IN POSITION 1257 (505 FIELD)
1	505	ILLEGAL ESCAPE SEQUENCE IN POSITION 1261 (505 FIELD)

One of the two records that have this error is shown in the sample Detail Error Validation Report above (E-9).

The record that has this error is shown in the sample Detail Error Validation Report above (E-9).

D.11 Scan/Delete Report

You can request to run this report **before** and/or **after** your scan/delete project is processed to show a list of records, identified by OCLC number and title, for which holdings will be canceled or were canceled. No counts are included in this report. Scan/Delete projects are requested by e-mail. You can request the report and when you want to receive it in the same e-mail. The report is sent as an e-mail attachment.

15266 Constitution Of The Republic Of Paraguay 1967
19859 Law Making Process In Ethiopia
26992 Consulting The Romans An Analogy Between Ancient Rome And Present-Day America
29461 Practice And Theory Of Probation And Parole
31771 Dictionary Of Commercial Financial And Legal Terms Pertaining To Trade And Industry Including Terms Used In Importing Manufacturing Distributing And Marketing As Well As Those Used In Banking Stock
48244 Private Law Sources And Analogies Of International Law
50496 Food For Us All
53503 United States Policy In The Near East Crisis
57181 Russian-English Law Dictionary
62454 Federal Securities Act Of 1933
73979 State And Local Employee Pension Systems A Summary
88412 Study Of Agency Comments On The Proposed Code Of Federal Administrative Procedure Of The American Bar Association (S 1070 86th Cong (1959))
88792 Compensation And Restitution To Victims Of Crime
93368 Proceedings And Addresses At The Freethinkers Convention Held At Watkins N Y 1878
116509 Unsafe At Any Height
118954 Supreme Court And The Idea Of Progress
132253 Business Organizations Professional Corporations And Associations
134835 Selected Readings On The Administration Of Justice And Its Improvement
134945 United States Code
149382 New Approaches In The Law Of Civil Procedure
172828 Little Women
173317 Beyond The Welfare State Economic Planning And Its International Implications
180630 Childrens Social Values An Action Research Study
188585 Ranjit Singh Maharajah Of The Punjab
195120 Notes On Matrimonial Causes Proceeding In District Registries
210049 American International Law Cases
219364 Shepards Puerto Rico Citations Cases And Statutes A Compilation Of Citations To Puerto Rico Cases Reported In The Various Series Of Puerto Rico Reports And To The United States Constitution And
219845 Index Of British Treaties

D.12 How batchload statistics are reported: Implications for reports

This section explains how the system tracks transactions it receives (that is, actions taken on records) and the implications for batchload reports.

Transactions. When a matching record is found by batchload software, the system sends a transaction code to the matching WorldCat record. When a batchload project is profiled to "set an institution's holding for every match found," an **Update** transaction is sent to the database, and the software turns on the *Institution Holding Byte* (or **IHB**) for the profiled institution, for example, the institution with OCLC symbol CN8ML. This transaction is reported in the Batchload Processing Summary as "Holdings set."

When a batchload project is profiled to "cancel an institution's holding for every match found," the opposite happens. A **Cancel Holdings** transaction is sent to the matching WorldCat record and the IHB is turned off. This transaction is reported in the Batchload Processing Summary as "Holdings canceled."

The Batchload Processing Summary does not report anything if an IHB is already turned on (holdings set) or turned off (holdings not set; IHB not present) for those records matched because no transaction was necessary. This fact skews the statistics in the Batchload Processing Summary when compared to BARS (**B**atch **A**rchive **R**ecord) and CARS (**C**ataloging **A**rchive **R**ecords).

BARS and CARS. For every batch transaction performed against WorldCat a batch archive record (BARS) is created in the OCLC archive for that institution. These are often referred to as "offline transactions." The archive records are created by OCLC services such as Batchload, PromptCat, WorldCat Collection Sets, and more. When an institution is logged on to Connexion and performs a transaction in WorldCat (referred to as "online transactions"), such as setting or deleting holdings, a Cataloging Archive Record (CARS) is created.

OCLC updates a report weekly of all online and offline transactions, along with a current count of the actual number of IHBs (holdings) turned on in WorldCat for every Institution profiled with an OCLC institution symbol. This is called the CARS, BARS and IHB Summary Report.

Because the number of holdings in WorldCat is affected by both BARS and CARS transactions, but other processes (for example scan/deletes) are not counted in BARS and CARS, the change (increase or decrease) in the number of holdings for your library in WorldCat from before batch processing to after batch processing may not match exactly the number of record holdings set or holdings cancelled on your Batch Processing Summary. The following example explains how this might happen:

Example

This is a snapshot of the CARS, BARS AND IHB Summary before an April 2006 reclamation project for the institution with the symbol CN8ML. It shows 199,632 holdings in WorldCat. All were created by BARS (offline batch transactions). Note that there are more BARS than holdings, which indicates that some of the same OCLC records were found via an offline transaction several times.

CARS, BARS and IHB Summary Data - as of 20060318							
Inst	Inst#	Holdings	BARS	CARS	Institution Name	State	Network
CN8ML	34312	199,632	201,052	.	MALASPINA UNIV, COL LIBR	BC	CAN

This is the summary report, after the initial reclamation project processing. Note that both holdings and BARS increase:

CARS, BARS and IHB Summary Data - as of 20060415							
Inst	Inst#	Holdings	BARS	CARS	Institution Name	State	Network
CN8ML	34312	233,568	419,243	.	MALASPINA UNIV, COL LIBR	BC	CAN

As part of the reclamation project, a scan/delete of CN8ML holdings set prior to 12-31-2005 is performed. A Scan/Delete is one offline process that does **not** create an archive record; therefore, the BARS did not increase but holdings decreased (by the 17,227 holdings removed).

CARS, BARS and IHB Summary Data - as of 20060513							
Inst	Inst#	Holdings	BARS	CARS	Institution Name	State	Network
CN8ML	34312	216,341	419,243	.	MALASPINA UNIV, COL LIBR	BC	CAN

After the scan/delete, the batch project specifications were changed so that the system could match some of the unresolved (non-matching) records from the initial pass of processing the reclamation project files. Both BARS and holdings increased.

CARS, BARS and IHB Summary Data - as of 20070407							
Inst	Inst#	Holdings	BARS	CARS	Institution Name	State	Network
CN8ML	34312	235,549	438,864	.	MALASPINA UNIV, COL LIBR	BC	CAN

After the reclamation project was completed, a new project to cancel holdings became active, and after processing was completed, BARS increased while holdings decreased.

CARS, BARS and IHB Summary Data - as of 20070908							
Inst	Inst#	Holdings	BARS	CARS	Institution Name	State	Network
CN8ML	34312	234,089	440,379	.	MALASPINA UNIV, COL LIBR	BC	CAN

CARS, BARS and IHB Summary Data - as of 20080628							
Inst	Inst#	Holdings	BARS	CARS	Institution Name	State	Network
CN8ML	34312	234,064	440,505	.	MALASPINA UNIV, COL LIBR	BC	CAN

If the library chooses to have an ongoing batch project to set holdings, both BARS and holdings will increase, **but not by the exact number reported** as “Holdings set” in the Batchload Processing Summary. BARS will keep increasing, but if records in WorldCat already have the IHB turned on for matches, holdings will not increase. An IHB for a given institution can only be on or off on any given WorldCat record. A transaction can be sent multiple times, but it is only counted as a transaction if the IHB actually changes (turned on or off).