# Batch Loading Patron Data into I-Share Voyager Databases
(revised 5/17/2016)

This document is intended to be used in conjunction with the Voyager "Patron SIF" which is found in the *Voyager 9.1.1 Technical User's Guide*, chapter 19. To create files of patron data, the library's local IT staff will need both of these documents, and also information on how your library wishes to define certain fields in the patron record SIF.

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## I. Introduction

This document describes the process by which batches of patron data may be loaded into an I-Share library's Voyager database. Since the format of the patron data are different in Voyager from the format in other automation systems, libraries will need to work with their local IT/computing staff to prepare data in the Voyager format.

SPECIAL NOTE: I-Share libraries are now prohibited from entering any Social Security Number data into Voyager patron records. This document has been revised in accordance with this policy.

## II. Overview

The details for each of these steps are contained in the remainder of this document.

**1. Preparing the data**
Libraries will need to work with their local computing/IT department staff to prepare the data in the Voyager Patron SIF (Standard Input Format). The Patron SIF is documented in the *Voyager 9.1.1 Technical User's Guide*, chapter 19. The SIF format may change from time to time as I-Share libraries upgrade to new versions of the Voyager software. Section III.1 of this document lists the fields that <u>must</u> have specified values, CARLI Office recommendations for certain fields, and the fields whose values are determined by library policies.

**2. FTPing the data to CARLI**

Each library has a directory/account on the I-Share files server (files.carli.illinois.edu) to which the data must be sent. A secure FTP (File Transfer Protocol) client <u>must</u> be used. CARLI Office staff use programs such as WinSCP and FileZilla, which are freely-available, open source software that support secure and encrypted SFTP file transfers. The CARLI website provides instructions on the <u>installation and use of Secure FTP</u> programs. (Note: CARLI no longer supports or provides for download the Tectia SSH client.)

**3. Filing a work request**

The I-Share Liaison, Library Director, or their designate files a work request using WRO <http://wro.carli.illinois.edu> to notify CARLI staff that the data are ready to be processed, and indicating which of several options the library wishes to invoke to process the patron data.

**4. Reviewing the test results and diagnostic report**

CARLI staff will run a diagnostic report that summarizes the contents of certain fields and that identifies certain kinds of problems in the patron data (if present). A sampling of records based on patron group codes from the input file will also be loaded into the library's production database. Library staff must review the diagnostic report and the sample records, and then inform CARLI staff whether or not it is OK to proceed with the complete load. This review is important because it is nearly impossible to back out from a bad load of patron data.

**5. Reviewing the audit report**

When CARLI staff load the data, the Voyager software produces an audit report that lists any records that could not be loaded. Library staff should review this report and decide whether to make corrections manually or to submit another file of patron data.

## III. The Details

**III. 1. Preparing the data**

Libraries will need to work with their local IT department staff to prepare the data in the Voyager Patron SIF (Standard Input Format). The Patron SIF is documented in the *Voyager 9.1.1 Technical User's Guide*, chapter 19. The SIF format may change from time to time as I-Share libraries upgrade to new versions of the Voyager software. For I-Share's upgrade to Voyager version 9.1.1 in summer 2015, there were no changes to the Patron SIF format.

The CARLI Office requests that the names of patron data files begin with "patrons" followed by the 3-letter code for your library and any other text that helps distinguish one file from another (e.g., patrons.aru.students.fall2011).

The Patron SIF needs some commentary. Some fields require specific values determined either by the functionality of the Voyager system (marked as VOY in the Required column in the chart below) or by I-Share policy (marked as I-Share in the Required column in the chart below). For some other fields, Voyager System Administration settings will determine the values.. The table below supplements (but does not replace) the Patron SIF in the *Voyager 9.1.1 Technical User's Guide*.

IMPORTANT NOTE: Many libraries choose not to include notes (item #72 below) in the patron records that they load into Voyager, which is a perfectly legitimate decision. The Voyager Patron SIF document

contains some information that can be confusing in this case. If you do not want to include notes, omit field #72 altogether and end the record as described below:

For patrons with 1 address segment and no note, EITHER byte 886 should be a line feed (\n) OR bytes 886-887 should be a carriage return (\r) and a line feed (\n).

For patrons with 2 address segments and no note, EITHER byte 1315 should be a line feed (\n) OR bytes 1315-1316 should be a carriage return (\r) and a line feed (\n).

For patrons with 3 address segments and no note, EITHER byte 1744 should be a line feed (\n) OR bytes 1744-1745 should be a carriage return (\r) and a line feed (\n).


**Special notes regarding certain patron record SIF fields and Voyager functionality**

**III. 1.A Barcode number field intentionally blank-filled**

Some I-Share libraries assign patron barcode numbers only at the circulation desk, and therefore their patron SIF files intentionally do not include values in the patron barcode field (item #3 below). If this scenario applies to your library, the patron barcode id 1 field (item #2), patron barcode 1 field (item #3), and barcode modified date1 (item #6) all should be blank filled, but the patron group 1 (item #4) must contain the appropriate patron group code for the individual record, and barcode status 1 (item #5) should contain the digit 1.

With these fields populated in this manner, a patron record added as new during the load will contain a patron group code but the barcode segment will be blank. An existing patron record will have no changes made to the barcode number field and no new blank barcode will be added, but the rest of the incoming data will be used to update the existing patron record (e.g., address, expiration date). The audit report from the load will contain messages about the blank barcode, but because that was the desired outcome, those particular messages can be ignored.


**III. 1.B Email address field intentionally blank-filled**

Some I-Share libraries add email addresses to patron records only at the circulation desk, and therefore their patron SIF files intentionally do not include an address segment for the email address (items #53 through 58 below, for address type 3). Currently, when the patron SIF file does not contain an email address segment for a patron, but the existing patron record in Voyager does contain an email address, the patron loader will delete the existing email address, unless the email address has had the "Protect" option checked from within the circulation client.

Libraries for which this scenario applies are encouraged to consider the cost/benefits of protecting email addresses in the circulation client. Patron addresses (including the email address) that are "Protected" from within the client will not have any updates made to them via batch loads, including the address itself, or its beginning and ending dates. Also, there is not an option in the patron load process to set the Protect flag in batch mode, but rather the address protection must be done manually in the circ client.

An alternative is to work with the local IT department to populate the email address segment in the patron SIF for as many patron records as possible that are included in the batch load.

**Fields in the Patron SIF file**

| Item # | Offset | Item Name | Required? | Comments |
|---|---|---|---|---|
| 01 | 1 | patron id | VOY | This field must be filled with ten zeroes. |
| 02 | 11 | patron barcode id 1 | I-Share | This field must be filled with ten blanks. |
| 03 | 21 | patron barcode 1 | | This field is the patron's barcode number. Do <u>not</u> include hyphens in this field. CARLI recommends that all patrons be assigned a barcode. It is possible to have a patron record in Voyager that does not have a barcode, and for such a patron to borrow local library materials. However, such a patron will not be able to request materials or to use the "My Account" feature in the online catalog until a barcode has been added to the Voyager patron record. |
| 04 | 46 | patron group 1 | VOY | This field must contain one of the patron group codes (not a patron group name) that the library entered into the System Administration module. It must NOT be left blank. See Appendix 1 near the end of this document for the list of valid patron group codes for I-Share libraries. |
| 05 | 56 | barcode status 1 | VOY | This field must be set to a digit between "1" and "5". If a patron's barcode status in Voyager is any value other than 1 (Active), the barcode is blocked from circulation privileges. Care should be used when assigning a barcode status of 2 through 5 in a batch load. |
| 06 | 57 | barcode modified date 1 | | CARLI recommends that this field be left blank. |
| | | | | |
| | | | | NOTE: A patron record in Voyager may have more than one barcode assigned by the same library. For example, Voyager would allow a single patron record to have a student barcode and also a faculty barcode in the same database. If your library does this, items 7-16 should be filled in according to the same specifications as items 2-6. If your library assigns only one barcode per patron, items 7-16 should be filled in as follows: |
| | | | | |
| 07 | 67 | patron barcode id 2 | I-Share | This field must be filled with ten blanks. |
| 08 | 77 | patron barcode 2 | | This field should be left blank unless the library wishes to use multiple barcodes. |
| 09 | 102 | patron group 2 | | This field should be left blank unless the library wishes to use multiple barcodes. |
| 10 | 112 | barcode status 2 | | This field should be left blank unless the library wishes to use multiple barcodes. |
| 11 | 113 | barcode modified date 2 | | CARLI recommends that this field be left blank. |
| 12 | 123 | patron barcode id 3 | I-Share | This field must be filled with ten blanks. |
| 13 | 133 | patron barcode 3 | | This field should be left blank unless the library wishes to use multiple barcodes. |
| 14 | 158 | patron group 3 | | This field should be left blank unless the library wishes to use multiple barcodes. |
| 15 | 168 | barcode status 3 | | This field should be left blank unless the library wishes to use multiple barcodes. |

| Item # | Offset | Item Name | Required? | Comments |
|---|---|---|---|---|
| 16 | 169 | barcode modified date 3 | | CARLI recommends that this field be left blank. |
| | | | | |
| 17 | 179 | registration date | | This field may be set to a date that is meaningful to the library (in yyyy.mm.dd format) or it may be left blank. |
| 18 | 189 | patron expiration date | VOY | CARLI recommends that you use a date at least 4 weeks after the date that you anticipate doing your next patron load. This field must NOT be left blank; enter an expiration date in yyyy.mm.dd format. |
| 19 | 199 | patron purge date | VOY | This field should be set to a date that is meaningful to the library. CARLI recommends that the library choose a date on or following the patron expiration date. This purge date can be used as an alternative to the patron expiration date in Voyager's patron record purge functionality (new with version 5 and higher) This field must NOT be left blank. Use the yyyy.mm.dd format for the purge date. |
| 20 | 209 | voyager date | | This field must be left blank. |
| 21 | 219 | voyager updated | | This field must be left blank. |
| 22 | 229 | circulation happening location code | | CARLI recommends that this field be left blank.<br><br>NOTE: There is no real Voyager functionality that uses this field, but it does display as "Entered at:" in the circ client. If anything is entered in this field, it must be a valid location code as found in the library's SysAdmin module. |
| | | | | |
| 23 | 239 | institution id | VOY (see<br><br>footnote 3, p. 19-9) and I-Share | Technically, in Voyager, either the Institution ID or the SSN can be used to detect duplicate patron records. By policy, I-Share libraries are no longer permitted to store SSN data in Voyager patron records, so the Institution ID field must not be blank. It can contain any alphanumeric value that will be unique for each patron of your institution. |
| 24 | 269 | ssn | I-Share | Because I-Share libraries are no longer permitted to store SSN data in Voyager patron records, this field must be filled with eleven blanks. |

| Item # | Offset | Item Name | Required? | Comments |
|--------|--------|-----------|-----------|----------|
| 25 | 280 | statistical category 1 | | Note: If the patron SIF file contains any statistical |
| 26 | 283 | statistical category 2 | | categories for an individual patron record, the existing |
| 27 | 286 | statistical category 3 | | categories for that patron record will be deleted and the |
| 28 | 289 | statistical category 4 | | new categories from the file will be added.  If you leave |
| 29 | 292 | statistical category 5 | | any of the statistical categories blank in the patron SIF |
| 30 | 295 | statistical category 6 | | file, any existing statistical categories in the patron |
| 31 | 298 | statistical category 7 | | record will remain untouched after the load. |
| 32 | 301 | statistical category 8 | | |
| 33 | 304 | statistical category 9 | | |
| 34 | 307 | statistical category 10 | | |
| | | | | |
| 35 | 310 | name type | VOY | This field must be set to "1" (personal name) or "2" (institution name). If in doubt, use "1" for batch loads. |
| 36 | 311 | surname | VOY | This field must not be left blank.  If name type is "1", this should be a surname.  If name type is "2", this should be an institution name. |
| 37 | 341 | first name | VOY (see comment) | This field must not be left blank for personal names (name type 1). |
| 38 | 361 | middle name | | This field may be left blank. |
| 39 | 381 | title | | e.g., "Dr." This field may be left blank. |
| | | | | |
| 40 | 391 | historical charges | I-Share | This field must be set to ten zeroes. |
| 41 | 401 | claims returned count | I-Share | This field must be set to five zeroes. |
| 42 | 406 | self-shelved count | I-Share | This field must be set to five zeroes. |
| 43 | 411 | lost items count | I-Share | This field must be set to five zeroes. |
| 44 | 416 | late media returns | I-Share | This field must be set to five zeroes. |
| 45 | 421 | historical bookings | I-Share | This field must be set to five zeroes. |
| 46 | 426 | cancelled bookings | I-Share | This field must be set to five zeroes. |
| 47 | 431 | unclaimed bookings | I-Share | This field must be set to five zeroes. |
| 48 | 436 | historical callslips | I-Share | This field must be set to five zeroes. |
| 49 | 441 | historical distributions | I-Share | This field must be set to five zeroes. |
| 50 | 446 | historical short loans | I-Share | This field must be set to five zeroes. |
| 51 | 451 | unclaimed short loans | I-Share | This field must be set to five zeroes. |

| Item # | Offsets | Item Name | Required? | Comments |
|---|---|---|---|---|
| 52 | 456 | address count | VOY | This field must be set to a value between "1" and "9." There must be at least one address segment in each patron record. Note that an email address is to be placed in an address segment. If you provide more than one address segment, items 53-71 are repeated for each address segment. There are a total of 9 address segments possible in the Voyager patron record.<br><br>The concept of "address segments" is new to many of us with the implementation of Voyager. You should have one address segment for each address that you have for each patron.<br><br>Suppose you have one address for some patrons (your staff, perhaps) and two addresses for others (for students). In this case, you will have some patron records with one address segment and others with 2 address segments and the patron records must be different lengths. The begin and end dates for each address segment (fields 56 and 57) are important. A patron can have no more than one current permanent address, no more than one current temporary address, and no more than one current email address. Consequently, if you have more than one address segment of a particular type, the date ranges must not overlap.<br><br>You may, for example, have more than one email address for some patrons. In this case, go ahead and create two address segments with address type 3, but you must give them date ranges that do not overlap. This might be a way to have both email addresses in your patron record, available to your circulation staff, even though notices will be sent to only the current addresses (per the begin and end dates for each address type). |

| Item # | Offsets | Item Name | Required? | Comments |
|--------|---------|-----------|-----------|----------|
| | | | | Items 53-71 represent the address segment, which is repeatable for as many addresses as are indicated in Item 52, the Address Count. Each address segment requires a length of 429 characters. |
| | | | | The Offsets column indicates the starting position for the first three address segments. If adding more than two segments, successive segments must begin following the end of the previous address (i.e., 429 positions after the previous address id). |
| | | | | See IMPORTANT NOTE above. |
| | | | | |
| 53 | 457, 886, 1315 | address id | I-Share | This field must be set to ten zeroes. |
| 54 | 467, 896, 1325 | address type | VOY | This field must be set to a value between "1" and "3". The value 1 is used with a permanent address; value 2 is used with a temporary address; value 3 is used with an e-mail address. |
| 55 | 468, 897, 1326 | address status code | VOY | This field must be set to "N" (Normal) or "H" (Hold). A value of H means that notices are not sent to this address. A value of H associated with the permanent address (address type 1) means the patron is blocked from Voyager borrowing privileges. |
| 56 | 469, 898, 1327 | address begin date | VOY | CARLI recommends that you choose a date no later than today's date. Otherwise, a patron may temporarily lose Voyager borrowing privileges. See the note above (item 52) about multiple address segments and corresponding begin and end dates. |
| 57 | 479, 908, 1337 | address end date | VOY | CARLI recommends that you pick a date at least four weeks after the date that you anticipate doing your next patron load. If the address end date associated with the permanent address (address type 1) is reached before the patron record expires, the patron may lose Voyager borrowing privileges due to this date having passed. See the note above (item 52) about multiple address segments and corresponding begin and end dates. |
| | | | | |
| 58 | 489, 918, 1347 | address line 1 | VOY | This field must not be left blank. |
| 59 | 539, 968, 1397 | address line 2 | | For email addresses (address type = "3"), fields 59-71 are left blank. |

| Item # | Offsets | Item Name | Required? | Comments |
|---|---|---|---|---|
| 60 | 579, 1008, 1437 | address line 3 | | |
| 61 | 619, 1048, 1477 | address line 4 | | |
| 62 | 659, 1088, 1517 | address line 5 | | |
| 63 | 699, 1128, 1557 | city | | |
| 64 | 739, 1168, 1597 | state (province) code | | For U.S. states, use the two-character code assigned by the U.S. Postal Service. |
| 65 | 746, 1175, 1604 | zipcode/postal code | | |
| 66 | 756, 1185, 1614 | country | | CARLI recommends that this field be left blank for addresses in the United States. |
| | | | | |
| 67 | 776, 1205, 1634 | phone (primary) | | |
| 68 | 801, 1230, 1659 | phone (mobile) | | |
| 69 | 826, 1255, 1684 | phone (fax) | | |
| 70 | 851, 1280, 1709 | phone (other) | | |
| 71 | 876, 1305, 1734 | date added/updated | I-Share | This field must be left blank. |
| | | | | |
| 72 | 886, 1315, 1744 | notes | | This field is optional.  If you do not want to use it, omit it completely; do not provide blanks. If included, it follows the last address.See the "Filing a Work Request" section below for more information on the notes field. |
| 73 | 886, 1315, 1744 | end of record marker | | See IMPORTANT NOTE above. |

### III. 2. FTPing the data to CARLI

You must use a secure FTP client to submit the patron data to CARLI. If your institution provides a site license to a secure FTP package that supports "secure shell version 2," you should be able to use it. The CARLI Office does not recommend any particular software, though CARLI staff use programs such as WinSCP and FileZilla. For installation and use instructions, see <http://www.carli.illinois.edu/products-services/i-share/sysreq/secure/SSHSecureShell>.

To ensure compliance with FERPA requirements, libraries should exchange patron data via the secure, I-Share files server at files.carli.illinois.edu. CARLI has assigned each I-Share library its own account and directory on this server. The account name is xxxftp, where "xxx" is the 3-letter abbreviation for the name of your institution, in lower case. Your library's I-Share Liaison is responsible for this account. Liaisons may contact the CARLI Office to receive the password for this account. The liaison may share this password with other staff as needed by your library's operations. CARLI staff will place in this account the reports related to the patron load process, as well as other reports. Because law protects patron data, liaisons should be careful to share this password only as necessary.

The CARLI Office requests that the names of FTPed files begin with "patrons" followed by the 3-letter code for your library and any other text that helps distinguish one file from another (e.g., patrons.aru.students.fall2011).

### III. 3. Filing a work request

Next, the I-Share Liaison, Library Director, or their designate at your library should file a work request using WRO, and use the work request type Voyager Patron Load. The person who files the WRO may designate another staff member as the primary contact person for the patron data load work request. If you submit patron data in several files (e.g., a file for faculty and a separate file for students), submit a WRO for each set of data to be processed. Documentation for using WRO is available from <http://www.carli.illinois.edu/using-work-requests-online>. WRO itself is available from: <http://wro.carli.illinois.edu>.

In addition to the name of the patron data file, you will have to provide the following information in the WRO:

(A) What type of notes are present in the record? (The options are: General notes, Pop-up notes, or No notes.)

If note data are included in the patron load, does the library want the note to be treated as a general note or as a pop-up note? If no notes are in the patron data, select the No notes option.

(B) How should existing notes be overlaid by the incoming record? (The options are: Add new notes to the old ones, Replace old notes with the new ones, or Ignore new notes.)

If note data are NOT included in the patron load, select the Ignore new notes option.

(C) Should extended notes processing be done? (The options are: yes or no.)

Extended notes processing allows you to place multiple notes in the notes field of the patron SIF. A TAB character must precede each note, including the first.

**III. 4. Reviewing the test results and diagnostic report**

CARLI staff will run a Patron Load Diagnostic Report on each file of patron records submitted. If the report shows no obvious problems, CARLI staff will also load a sampling of at least 9 records from the file into your production database. The total number of patron records selected for loading is based on the number of patron groups found in the file:

> 1 patron group in the input file: 10 patron records are selected for the test load
> 2 patron groups in the input file: 5 records loaded from each patron group (10 total)
> 3 patron groups in the input file: 3 records loaded from each patron group (9 total)
> 4 or more patron groups in the input file: 2 records loaded from each patron group (2 times the number of patron groups total)

The CARLI staff member who is processing the patron data will contact you when the Patron Load Diagnostic Report has been placed in your FTP account. The Patron Load Diagnostic Report includes the barcode numbers and patron group code of the sample records that were loaded. Library staff must review the diagnostic report and the sample records and inform CARLI in writing that the results are correct before the remaining records will be loaded.

The diagnostic reports use the following naming convention:

pload_diag_xxx_WRO#.txt
(where the xxx represents the library's three letter Voyager database code and WRO# represents the WRO number assigned to the patron load request)

See Appendix 2 for a sample Patron Load Diagnostic Report. NOTE: the diagnostic reports are designed to be displayed/printed in landscape view and will be most readable if opened with a word processor, using a non-proportional font such as Courier. Depending on your word processing software, you may also wish to adjust the margins of the report as well.

The Patron Load Diagnostic Report contains three types of information: situations that are definitely errors that can result in the incoming record being rejected by the loader (marked as ERROR in the report), situations that could be a potential problem (marked as WARNING in the report), and counts/descriptions of the data included in the input file that give a library staff person a way to evaluate the content of the file (marked as FYI in the report).

For the situations marked as ERRORs, the number of records with the error is included, as well identifying information copied from a maximum of 10 records that contain the error.

Some examples of ERRORs:
- A field must be filled with zeroes but the records contain other (invalid) data
- A patron record without a surname
- A patron record without an expiration date

If the diagnostic report indicates any ERRORs, the library staff member responsible for approving the full patron load should carefully consider the consequences of proceeding with the load. The safest way to proceed with any sets of patron data that contain errors is to work with the producer of the patron data to correct the errors and submit to CARLI a new set of patron records, in place of the file containing the errors.

For the situations marked as WARNINGs, the number of records with the potentially problematic data is included, and in some cases, identifying information is copied from a maximum of 10 records that contain the problem.

Some examples of WARNINGs:
- Barcode status fields with a value other than 1 (for Active)
- Patron expiration dates less than 3 months in the future
- Patron note data formatted incorrectly that can result in blank note fields

If the diagnostic report indicates any WARNINGs, the library staff member responsible for approving the full patron load should carefully consider the consequences of proceeding with the load. Perhaps the library intended to load records with a barcode status other than Active, or perhaps the expiration date was intentionally shortened for this particular load. This is the local library's decision to make. If the WARNINGs indicate real problems, then the library contact should work with the producer of the patron data to correct the problems and submit to CARLI a new set of patron records for loading. If the data are acceptable to the library, the contact should approve the full load.

For the situations marked as FYI (i.e., that need some analysis to determine if they are correct), the report lists the values in each field and the number of patron records that contain each value. For example, for the expiration date field, the report might show:

```
1182 patrons have PATRON_EXPIRATION_DATE 2012.08.31
 245 patrons have PATRON_EXPIRATION_DATE 2013.12.31
```

A library staff member needs to decide if these dates are appropriate. Much of this is a matter of common sense. Normally, a library would not want to load patron records whose expiration dates have already past. Normally, new and/or updated records would need to have an expiration date that allows for circulation privileges until the end of the current term/academic year (per library policy).

Another example: If you thought that this batch of patron records was for faculty and staff only and the counts for the patron group field look like the example below, you know you have a problem that would require consultation with your data producer and probably a new set of records:

```
FYI: Count of values in PATRON_GROUP_1
            354 barcodes have patron group AE
            245 barcodes have patron group FC
             31 barcodes have patron group GR
           1151 barcodes have patron group UG
```

SPECIAL NOTE ABOUT PATRON RECORD DATE FIELDS: Voyager is quite sensitive to the dates contained within individual patron records. Library staff/patron data producers should pay close attention to the date information contained in a batch load of patron records, particularly the Patron Expiration Date (item #18 in the SIF), Address Begin Date (item #56) and Address End Date (item #57).

For example, even if the patron's Expiration date has not passed, once the Address End Date associated with the patron's Permanent Address has past, the patron is blocked from Voyager circulation privileges due to the Address End Date. Unfortunately, the Voyager circulation client doesn't display the Permanent Address End Date, so this date cannot be manually changed to a future date from within the client. There are workarounds from within the circulation client, but it is in the best interest of the patrons not to have the Address End Dates be out of synch with the record's overall expiration date.

There are some errors that the Patron Load Diagnostic Report cannot catch. The only way to catch such errors is to look at the sample records that were loaded into your database.

For example, a common error would be for the data to be in the wrong columns of the field. When you look at the records using the circulation client, you might see something like this, which indicates that the data in the input file were not parsed correctly into the First name field:
Last name:      Smith                   J
First name:     ohn

When you have finished checking the Patron Load Diagnostic Report and the sample records, contact the CARLI staff member who is processing your load and either give your approval for loading the rest of the data or notify the staff member that a different patron file will be submitted to correct errors.


**III. 5. Reviewing the audit report**

The Voyager software creates an audit report as an output file from each patron load. It lists records that could not be loaded for any reason, and should give you enough information that you can decide whether to correct them manually or to submit another set of patron data. These audit reports are placed in your library's FTP account on the files.carli.illinois.edu server.

The audit report for the sample record test load uses the following naming convention:

pload_test_auditYYYYMMDD_xxx_WRO#.log
(where the YYYYMMDD represents the Year, Month and Day of the load, the xxx represents the library's three-letter Voyager database code, and WRO# represents the WRO number assigned to the patron load request)

If the test load results in any rejected records, an error log is created that uses the following naming convention:

> pload_test_errorYYYYMMDD_xxx_WRO#.log
> (where the YYYYMMDD represents the Year, Month and Day of the load, the xxx represents the library's three-letter Voyager database code, and WRO# represents the WRO number assigned to the patron load request)

After the complete file of patron data has been loaded, the audit report (and perhaps also the error report) will be placed in your FTP account and the WRO will be closed. The audit report for the full load uses the following naming convention:

> pload_full_auditYYYYMMDD_xxx_WRO#.log
> (where the YYYYMMDD represents the Year, Month and Day of the load, the xxx represents the library's three-letter Voyager database code, and WRO# represents the WRO number assigned to the patron load request)

If the full load results in any rejected records, an error file is generated and uses the following naming convention:

> pload_full_errorYYYYMMDD_xxx_WRO#.log
> (where the YYYYMMDD represents the Year, Month and Day of the load, xxx represents the library's three letter Voyager database code, and WRO# represents the WRO number assigned to the patron load request)

See Appendix 3 for a sample post-load audit report. This sample does not include all possible messages from a patron load audit report.

## IV. Patron Barcode Issues During Batch Loads

For various reasons, including the transition away from the use of SSN data in Voyager patron records, a library may need to change how their patron's barcode number is formatted. This section is designed to help libraries understand what Voyager's patron batch load utility will do when the barcode number in the incoming record is different than the existing barcode in the database.

Of course, any barcode number transition has timing implications regarding when the new barcode numbers can be added to the Voyager database and when the new barcode numbers will begin to appear on the patrons' physical ID card. For the sake of the patrons' ability to use Voyager to request and charge materials, libraries are encouraged to have as short a time as possible during which the barcode number on the physical ID card does not match the number stored in the barcode field in the Voyager patron records.

See the section below on patron barcode prefixes if the library has not already decided on the format of the new barcode numbers for their patron records.

During a batch load of patron data into Voyager, if the incoming record matches an existing record (based on the Institution ID as the de-duplication field), AND if the patron's barcode number is the same in both records, AND if the patron's group code is the same in both records, the existing record is updated as

expected (i.e., no changes are made to the barcode). This is the normal sequence of events when the barcode number does not change for an individual patron record.

During a batch load of patron data into Voyager, if the incoming record matches an existing record (based on the Institution ID as the de-duplication field), BUT the patron's barcode number is different in the incoming record from the existing barcode, AND if the patron's group code is the same in both records (i.e., no changes are made to patron group code), then the Voyager patron update program will change the existing barcode's status to Other (i.e., inactive) and the new incoming barcode will be added with the barcode status included in the input file, presumably Active.  This is the normal sequence of events when the barcode number changes but the patron group code does not change in an individual patron record.

During a batch load of patron data into Voyager, if the incoming record matches an existing record (based on the Institution ID as the de-duplication field), BUT the patron's barcode number AND the patron's group code are both DIFFERENT in the incoming record from the existing record, then the Voyager patron update program will ADD the new incoming barcode number with its status as set in the input file (presumably Active), and nothing happens to the existing barcode number.  When this happens, the patron record will have multiple barcode numbers and the status on each barcode will be Active.  When this scenario occurs (multiple Active barcodes for the same patron record), problems can be encountered at the circulation desk or for UB transactions.

The way to avoid this scenario is to be careful when assigning patron group codes in a batch load that also changes barcode numbers, because an existing barcode's status is NOT changed by the loader if the incoming barcode is different from the existing barcode AND the incoming patron group code is different from the existing patron group code in the record.

There is a query on the I-Share Shared SQL page that can help libraries identify any patron records that have more than one barcode in the local database.  Please see the query called "Identify patrons with multiple barcodes in the local database" available from < http://www.carli.illinois.edu/products-services/i-share/reports/secure/sql-local-man>.

**About Patron Barcode Prefixes**

If the library is planning to change patron barcode numbers (for example, from SSN to some other number), the library should strongly consider adopting the "I-Share-standard" 14-digit barcode.  This number begins with a 5-digit prefix that is unique among I-Share libraries.  The remaining 9 digits can be whatever meets the needs of the library. While it is not a requirement that an I-Share library use the 14-digit patron barcode with a prefix, the current version of Voyager includes a function called "barcode lookup" that allows the system to recognize the patron's library affiliation based on the barcode prefix. With "barcode lookup," staff are not required to select the home library manually when performing circulation transactions.  Patron barcodes without a unique-to-the-library prefix are not able to take advantage of this functionality.  Materials can circulate to patron records without a barcode prefix, but staff have to select the patron's home library manually during the transaction.

A listing of current and alternative patron barcode practices for I-Share participating libraries, including prefixes, is available from <http://www.carli.illinois.edu/products-services/i-share/circ/barcode-formats>.


## V. Getting Help

For assistance with the patron batch load procedures, contact the CARLI Office (email: support@carli.illinois.edu or phone: 217-244-7593 or toll-free in Illinois: 866-904-5843).

# APPENDIX 1:  I-Share Patron Group Codes and Names

The table below lists the I-Share-approved Voyager patron group codes and the name/translation of the codes.  Libraries may use any of these patron groups that are appropriate for their circulation policies. However, **libraries may not create new patron groups outside of the list below without approval** from the CARLI Office, due to Universal Borrowing patron mapping requirements.

The patron groups that your library decides to use must be entered in the Voyager System Administration module.  Library staff will need to work with their local computing staff to determine how these codes will be assigned in a file of patron data for batch loading.

| I-Share Patron Group Codes | Default Patron Code Translation |
| --- | --- |
| AA | Afflorgac |
| AE | Acad Emply |
| AL | Alum |
| AO | Afflorgoth |
| AS | Afflorgstf |
| EF | Emeritusfc |
| EG | Extramuralgr |
| EU | Extramuralug |
| FC | Faculty |
| GA | Grad Asst |
| GR | Grad Stdnt |
| GS | StateGvStf |
| GV | State Govt |
| HS | HighSchool |
| II | Intl ILL |
| IL | Interlib |
| IN | IllinetLib |
| LB | Local BUO |
| LH | Local HiPrv |
| LL | Local LoPrv |
| LS | Libstaff |
| LU | Library Use |
| PH | Permit Hi |
| PL | Permit Lo |
| PP | ProblemPat |
| RE | Retired |
| SS | Supt Staff |
| SY | LibSystems |
| UG | Undergrad |

# APPENDIX 2:  Sample Patron Load Diagnostic Report

```
PATRON LOAD DIAGNOSTICS REPORT

Wed August 12 17:59:36 CDT 2011

File name:  /export/home/xxxftp/upload/patrons.xxx.fall2011
=======================================================================

=======================================================================

The first patron record in the file (in SIF format:
<actual record is not shown in this document for patron privacy
purposes>
=======================================================================




=======================================================================

The following are the records that will be loaded in the test load, and
should be reviewed using the Voyager circulation client.

=======================================================================


                                                                    PAT
PATRON_BAR_CODE1   SURNAME                     SSAN       INSTITUTION_ID GP1
----------------   --------------------------  -----------  -----------
0019019            KAPPES                      [Blank]      0523703       FC
0019415            CHILIGIRIS                  [Blank]      0387501       FC
0020017            CLEM                        [Blank]      0490098       FC
0021163            EMERLE                      [Blank]      0213147        UG
0023417            ADAMS                       [Blank]      0406070       UG
0024035            ROBERTS                     [Blank]      0395768       UG
0033515            ALLEN                       [Blank]      0340352       UG
0057019            BUGEL                       [Blank]      0441572       UG
0083817            WU                          [Blank]      0521306       UG
0087230            CHAMBERS                    [Blank]      0338405       UG

=======================================================================




=======================================================================

Total number of records in the patron file:       1637

=======================================================================
```

```
============================================================================
Please review all of the messages that follow.

  FYI messages will let you verify that the file contains the patrons and the

  dates that you expect.

  WARNING messages indicate potential problems.

  ERROR messages indicate definite problems.

You might decide to go ahead and load a file that has errors and warnings if

there are only a few of them, but be sure to consider the consequences.

============================================================================
FYI: Count of values in PATRON_BAR_CODE1 by length

        1637 barcodes have a length of          7


FYI: Count of values in PATRON_GROUP_1

         264 barcodes have patron group FC

        1373 barcodes have patron group UG


FYI: Count of values in BARCODE_STATUS_1

      1637 barcodes have a status of 1        (Active)


FYI: Count of values in BARCODE_MODIFIED_DATE_1

       1637 barcodes have a modified date of [Blank]


FYI: Count of values in PATRON_BAR_CODE_2 by length

        1637 barcodes have a length of          0


FYI: Count of values in PATRON_GROUP_2

        1637 barcodes have patron group [Blank]


FYI: Count of values in BARCODE_STATUS_2

       1637 barcodes have a status of [Blank]


FYI: Count of values in BARCODE_MODIFIED_DATE_2
```

1637 barcodes have a modified date of [Blank]


FYI: Count of values in PATRON_BAR_CODE_3 by length

        1637 barcodes have a length of         0


FYI: Count of values in PATRON_GROUP_3

        1637 barcodes have patron group [Blank]


FYI: Count of values in BARCODE_STATUS_3

       1637 barcodes have a status of [Blank]


FYI: Count of values in BARCODE_MODIFIED_DATE_3

       1637 barcodes have a modified date of [Blank]


==========================================================================

Date Fields and Library Location

==========================================================================


FYI: Count of values in REGISTRATION_DATE (must be formatted as yyyy.mm.dd or
blank).

WARNING: If the date is not formatted correctly, the patron record will not be
loaded into Voyager.

        1637 patrons have REGISTRATION_DATE [Blank]


FYI: Count of values in PATRON_EXPIRATION_DATE (must be formatted as
yyyy.mm.dd).

WARNING: If the date is not formatted correctly, the patron record will not be
loaded into Voyager.

     1373 patrons have PATRON_EXPIRATION_DATE 2013.01.31

      264 patrons have PATRON_EXPIRATION_DATE 2014.01.31

FYI: Count of values in PATRON_PURGE_DATE (must be formatted as yyyy.mm.dd)

WARNING: If the date is not formatted correctly, the patron record will not be loaded into Voyager.

      264 patrons have PATRON_PURGE_DATE 2015.01.31

    1373 patrons have PATRON_PURGE_DATE 2014.01.31

FYI: Count of values in LIBRARY_LOCATION_CODE (may be blank)

   1637 patrons have LIBRARY_LOCATION_CODE [Blank]


==========================================================================

SSN and Institution ID

verify that the Institution ID is suitable for duplicate detection.  There

should be no blank Institution IDs, no duplicates, and no Social Security

Numbers in this field.  Check that the format of the Institution ID is the

same as was used in your previous patron loads.

Verify that there are no Social Security Numbers in the SSAN field.  Ideally,

the field should be blank.  A number other than an SSN is acceptable in this

field, but it should uniquely identify the patron.

==========================================================================

FYI: Value of INSTITUTION_ID in the first 10 records:

    0523703

    0387501

    0490098

    0213147

    0406070

    0395768

    0340352

    0441572

    0521306

    0338405

FYI: Count of patron records with blank INSTITUTION_ID:        0

FYI: Count of patron records with blank SSAN:                1637


========================================================================

Statistical Categories

========================================================================


FYI: Count of values in STATISTICAL_CATEGORY_1

      1637 patrons have a STATISTICAL_CATEGORY_1 of [Blank]


FYI: Count of values in STATISTICAL_CATEGORY_2

      1637 patrons have a STATISTICAL_CATEGORY_2 of [Blank]


FYI: Count of values in STATISTICAL_CATEGORY_3

      1637 patrons have a STATISTICAL_CATEGORY_3 of [Blank]


FYI: Count of values in STATISTICAL_CATEGORY_4

      1637 patrons have a STATISTICAL_CATEGORY_4 of [Blank]


FYI: Count of values in STATISTICAL_CATEGORY_5

      1637 patrons have a STATISTICAL_CATEGORY_5 of [Blank]


FYI: Count of values in STATISTICAL_CATEGORY_6

      1637 patrons have a STATISTICAL_CATEGORY_6 of [Blank]


FYI: Count of values in STATISTICAL_CATEGORY_7

      1637 patrons have a STATISTICAL_CATEGORY_7 of [Blank]


FYI: Count of values in STATISTICAL_CATEGORY_8

      1637 patrons have a STATISTICAL_CATEGORY_8 of [Blank]

FYI: Count of values in STATISTICAL_CATEGORY_9

        1637 patrons have a STATISTICAL_CATEGORY_9 of [Blank]


FYI: Count of values in STATISTICAL_CATEGORY_10

        1637 patrons have a STATISTICAL_CATEGORY_10 of [Blank]


=============================================================================

Patron Name

=============================================================================

FYI: Count of values in NAME_TYPE

        1637 patrons have a NAME_TYPE of 1        (Personal)


=============================================================================

Addresses and Notes

=============================================================================

FYI: Count of values in ADDRESS_COUNT

           4 patrons have an ADDRESS_COUNT of 1

        1472 patrons have an ADDRESS_COUNT of 3

         161 patrons have an ADDRESS_COUNT of 2


FYI: Count of values in ADDRESS_TYPE alone.

        1472 addresses have an ADDRESS_TYPE of 2        (Temporary)

        1633 addresses have an ADDRESS_TYPE of 3        (Email)

        1637 addresses have an ADDRESS_TYPE of 1        (Permanent)


FYI: Count of values in ADDRESS_TYPE by PATRON_GROUP.

Patron Group FC          has          264 addresses of type 1        (Permanent)

Patron Group FC          has          188 addresses of type 2        (Temporary)

Patron Group FC          has          260 addresses of type 3        (Email)

```
Patron Group UG         has       1373 addresses of type 1        (Permanent)

Patron Group UG         has       1284 addresses of type 2        (Temporary)

Patron Group UG         has       1373 addresses of type 3        (Email)


FYI: Count of values in ADDRESS_STATUS_CODE alone.

     3105 addresses have an ADDRESS_STATUS_CODE of n        (Normal)

     1637 addresses have an ADDRESS_STATUS_CODE of N        (Normal)


FYI: Count of values in ADDRESS_TYPE and ADDRESS_STATUS_CODE combined.

     1472 addresses have ADDRESS_TYPE 2       and ADDRESS_STATUS_CODE n

     1633 addresses have ADDRESS_TYPE 3       and ADDRESS_STATUS_CODE n

     1637 addresses have ADDRESS_TYPE 1       and ADDRESS_STATUS_CODE N


FYI: Count of values in ADDRESS_BEGIN_DATE (must be formatted as yyyy.mm.dd)

WARNING: If the date is not formatted correctly, the address record will not
be loaded into Voyager.

     4742 addresses have a begin date of 2011.08.13


FYI: Count of values in ADDRESS_END_DATE (must be formatted as yyyy.mm.dd)

WARNING: If the date is not formatted correctly, the address record will not
be loaded into Voyager.

     4030 addresses have an end date of 2013.01.31

      712 addresses have an end date of 2014.01.31


FYI: Count of values in PHONE_PRIMARY by length

      405 PHONE_PRIMARY fields have a length of        0

     2877 PHONE_PRIMARY fields have a length of       12

        2 PHONE_PRIMARY fields have a length of        1

     1458 PHONE_PRIMARY fields have a length of        4
```

FYI: Count of values in PHONE_MOBILE by length

     3681 PHONE_MOBILE fields have a length of       12

     1049 PHONE_MOBILE fields have a length of        0

        3 PHONE_MOBILE fields have a length of       18

        3 PHONE_MOBILE fields have a length of        9

        6 PHONE_MOBILE fields have a length of       11


FYI: Count of values in PHONE_FAX by length

     4742 PHONE_FAX fields have a length of       0



FYI: Count of values in PHONE_OTHER by length

     4742 PHONE_OTHER fields have a length of       0
[END OF PATRON LOAD DIAGNOSTICS REPORT]

## APPENDIX 3: Sample Voyager Patron Load Audit Report

```
INVALID RECORD DATA!
  Patron Group could not be found for                      Barcode:
21234617982815
   This barcode has NOT been added for                         SSAN:
Record written to exception file.                     Patron ID:  197


INVALID RECORD DATA!
  There is NO VALID Patron Group in the input file for this patron.
   This patron has not been added to the database.          SSAN:
Record written to exception file.                     Patron ID:  197

INVALID RECORD DATA!
 Sorting on InstitutionID has been selected but the INSTID is missing!
                                    Input file record Number:  1110
Record written to exception file.                     Patron ID:  0

INVALID RECORD DATA!
 The INSTID is identical to one already on file!
 INSTID's must be unique for a LOAD run!                   INSTID:
000000000
Record written to exception file.                     Patron ID:  0


Attempt to update  a stub patron with patronID: 3656


                    GRAND  TOTALS


Input Patron Records Received:        4671
New Patrons Added:                    2740
Existing Patrons Updated:             1927

Records Written To Exception File:    4


                    DETAIL TOTALS


New Patron Barcodes Added:            2745
Existing Patron Barcodes Updated:     0

New Patron Statuses Added:            0
Existing Patron Statuses Updated:     0

New Patron Addresses Added:           2740
Existing Patron Addresses Updated:    1927

New Patron Phone records Added:       4611
Existing Patron Phone Records Updated: 0

New Patron Notes records Added:       0
Existing Patron Notes Records Updated: 0


                    END OF REPORT
```