THE CITY UNIVERSITY OF NEW YORK
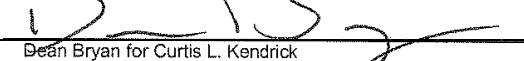
CUNY The City University of New York

C5 CHANGE REQUEST FORM FOR CUNY APPLICATIONS

Change Request Name: Correct patron data import into Aleph Library System

Sponsor: Curtis L. Kendrick

Sponsor's Title: University Dean for Libraries and Information Resources

Division/College: Central Office

Sponsor's Signature: _Dean Bryan for Curtis L. Kendrick_

Date of Submission: September 17, 2012

Contact Person for this request: Kevin J Collins

Telephone: 646.313.8159

Email: kevin.collins@mail.cuny.edu

The Change Request Process

The Change Request process is as follows:

- Any change requests must be sponsored by a Vice Chancellor or College President using the *C4 Change Request Form for CUNY Applications*. **The Change Request form must be filled out completely and accurately.***

- Completed requests should be submitted using the appropriate form to Brian Cohen, the Associate Vice Chancellor and University CIO.

- The Change Request will be technically analyzed for cost, allocation of resources, and schedule impact. This analysis may take up to one month to perform and document.

- The Computer Change Control Committee will review the change request and its technical analysis. The committee may accept the change request (in which case it will be queued for action), reject the request, or defer the request until their next monthly meeting.

- Please address any questions regarding the use of this form to Mr. James Anastasio at the following address: **James.Anastasio@mail.cuny.edu** .

  ***Please note**: Because accurate analysis cannot be performed without the necessary information, change request forms that are not fully completed will be returned to the sponsor.

Please address the following questions with as much detail as possible:
(Use additional paper as necessary)

Section A. – Business Requirements

1. Describe the requested changes:

Please describe the changes you are requesting in detail, including the following:

-The functional changes being requested:

1a. Remove job titles from patron addresses. Currently, confusing and often inaccurate job titles are added to the mailing addresses of faculty and other employees when creating files for import into the Aleph library catalog.

1b. Change expiration dates for CUNY retirees' patron records to Retirement Date plus 20 years. Once the expiration date is supplied, discontinue including the retiree in the patron load. This should be done for anyone who has separated from CUNY as soon as possible.

1c. Include EMPLID numbers in PLIF files extracted from CUNYfirst data and loaded into the Aleph patron database as Type 07.

1d. Provide EMPLID numbers in the A03 field whenever Social Security Numbers are missing.

1e. Create a local campus patron record for each user in addition to the existing global patron record.

1f. Include CUNY Start students in the library PLIF extract, assigning the students correctly to their respective local campuses.

1g. Work Study students should not be listed as "Staff." They should be correctly listed according to their primary student role as either "Undergraduate" or "Graduate" students.

1h. Both a local campus address and a home addresses must be supplied for all patrons. The local campus address is based on which campus is considered primary for each patron.

1i. If a local campus supplies CUNYfirst with the barcodes that appear on campus ID cards, then the patron load file ought to include those barcodes. If there is no campus-assigned barcode present in CUNYfirst, then no barcode should be sent in the patron load file. CUNYfirst should provide patron barcodes to the Aleph library system during the PLIF (patron information) loads. The patron

barcode should be placed into the barcode field but leave the barcode verification field blank.

CUNYfirst should load campus barcodes using the same file formatting that was previously perfected using E-SIMS.

1j. Default user language should not be specified (or changed) by the patron load file. Blank spaces should populate this field in the patron load file.
This language is actually an interface language, which is set by the patrons themselves in the Aleph catalog. It defines whether a patron prefers to use the regular English language desktop interface, or a mobile interface.

1k. 'Home Library' should be specified for all patrons based on which campus is identified as the primary (home) campus in CUNYfirst. This is stored in the CUNY-wide (i.e., global) patron record. This should be determined by the individual's primary campus in CUNYfirst. "Full-time" status should take precedence and dictate each individual's primary campus.

1l. All patrons need a local campus record. This was lost with the move to CUNYfirst. If a patron is part of more than one campus, then they will need a local campus record for all campuses based on their relationship to that campus.

1m. Student registration blocks need to be automatically imported and removed (when resolved) into CUNYfirst based on excessive debts ($10 or greater) to a campus library. Previously some campuses had an automated process which has been completely lost.

-The reason for the requested changes:

1a. This change will improve the delivery of library patron notices, e.g., overdue books. Currently at CUNY, Aleph library patron (customer) records are imported with an HCM-based "title" embedded in the address field. These titles do not add value to the primary purpose of the patron address, which is to contact and inform patrons. Including a staff title is not a common industry practice for the import of patron address data into Aleph.

Library patron notices require the cooperation of patrons to be effective. Under certain conditions these titles confuse patrons and work against gaining cooperation from patrons.

The titles are misleading to patrons who do not understand the complex system of employee classification. These employee descriptions are confusing, and in a worst case situation may lead some patrons to question whether the notice is

being sent to the right person. ("That's not my title, are you sure this notice is for me?")

For example, the patron load process describes Central Office employee Kevin Collins as "Exec VC and Univ Provost." This is incorrect; Kevin's official CUNY position title is "University Systems Librarian."

Patron titles also assist phishing attacks by allowing hackers to more effectively target CUNY faculty, administrators and staff, thus increasing the risk of PII data breaches.

1b. In accordance with the PSC contract, CUNY campus libraries have long provided University retirees with the benefit of continued use of library services. With the implementation of CUNYfirst patron data loads into the Aleph integrated library system, retirees' patron accounts began expiring soon after corresponding retirement dates were supplied from CUNYfirst data loads.

This change would once again allow all University retirees to enjoy access to library services provided by their respective CUNY campus library and reduce the risk of a lawsuit.

Once an employee has left CUNY, the individual should no longer be included in the patron load as soon as reasonably possible. Retirees who have been retired for more than 45 days should be discontinued. This lag in discontinuing retirees from the PLIF will allow time for their expiration date to be reset to 20 years in the future.

Typically, patron account expiration dates are set 90 days into the future. This allows adjunct professors time to be reinstated for a subsequent semester.

1c. This future-oriented change plans ahead to University-wide customer service enhancements such as Single sign-on (SSO) with the CUNYfirst-based LDAP and CUNY-wide Universal Access. This change will facilitate the implementation and use of research discovery tools like Primo, which will help users find research materials more quickly and easily and will provide a much better return on investment on the millions of dollars spent collectively by the CUNY Central Office and all campus libraries on electronic journal articles and databases as well as physical books, DVDs, CDs and more.

With access to each library user's unique CUNYfirst EMPLID number, authorized library staff members at all campuses will be more efficient and effective during typical business operations such as retrieving overdue books, receiving money for lost or damaged items, reporting for the bursar, clearing patron accounts, or tracking requests made by users at other campuses.

1d. In certain cases a social security number is missing from an individual's record in CUNYfirst. (The individual may be a foreign student or simply has not supplied a social security number.)

The current patron extract is supplying 'XXXXXXXXX' (or '999999999') in the 'A03' field. This field is used in the library catalog database as a unique index key for matching patron records. The extract process needs to trap for this condition and replace the value supplied for 'A03' with the unique value EMPLID number. Otherwise, the patron's record fails to load into the library catalog. While the 'A03' field is not displayed on the screen for staff viewing, it must remain a unique value in order for a patron record to be properly imported.

This problem is quickly growing worse. In Spring 2012 there were approximately 2,500 records that could not be imported due to this problem, and by September 2012 this number had climbed above 4,550 records.

Not making this change forces staff at CUNY campus libraries to manually key in thousands of patrons, as well as manually maintain patron expiration dates on an ongoing basis.

1e. It is common for CUNY students and employees to have library activity across multiple campuses. Libraries need to track the history of each library user's activity across all campuses using a single global patron account rather than multiple accounts.

A person may have different roles at different campuses. (This is independent of the patron's status on other campuses.) A patron with multiple campus affiliations typically has different levels of privilege and authorization at different campuses.

1f. CUNY Start students need to be included for their local campuses so that they will automatically have access to the appropriate levels of service and access to library resources.

1g. Currently address fields for work study students (e.g., at Queensborough Community College) are only being provided with the CUNY work location "Financial Services" (campus office) as their home mailing address. The addresses are meaningless because the student rarely if ever visits these locations.

Students and staff have very different levels of library privileges campus to campus. Depending on local campus library policy, student privileges may permit students to check out more books or have different loan periods. Student success and resource usage studies focus on student activity and work study students should be included in any such reporting analysis.

1h. Home addresses must be supplied in order for patrons to receive overdue and other library notices via mail. Students commonly have a current local address that is often different from their home address. Staff also needs to supply a secondary home address in case of a job or location change for identification and communication purposes.

1i. Some CUNY campuses (e.g., Hunter) currently assign barcodes to campus members and print it on their ID card. Until recently we imported these campus assigned barcodes in the existing patron load process for Hunter College from SIMs. This functionality was lost.

The ability to continue to use card readers (for self-check, or at a service desk) is obvious to anyone who has used a credit card to pay at a grocery self checkout counter. CUNYfirst should provide patron barcodes to the Aleph library system during PLIF (patron information) loads, yet *only* when the campus has provided a barcode to CUNYfirst. The patron barcode should be placed into the barcode field but leaving the barcode verification field blank.

1j. The patron load file should *not* specify a default interface language as it does now; currently, this overwrites the preferences entered by students and faculty. For example, patrons using the Aleph catalog Web OPAC (online library catalog interface) already select whether they wish to use the standard desktop interface, or the mobile device language interface. This preference is stored in the patron database.

1k. Patron access to specific resources, usage statistics and reporting, and other critical Aleph functionality relies on accurate identification of the "home" campus with which each user is primarily associated. CUNYfirst should provide this type of home campus identification/affiliation via PLIF loads to the Aleph patron database.

1l. CUNYfirst should provide identification for each type of patron "status." Patron status refers to the role (e.g., whether a student, faculty or staff member) and/or relationship (e.g., full-time, primary relationship or part-time, secondary relationship) with a specific campus or among several campuses. A user may have different roles at different campuses, and the local campus status should reflect the primary role on a given campus. (This is independent of the patron's status on other campuses.) A patron with multiple campus affiliations typically has different levels of privilege and authorization (in the case of library staff) at different campuses.

1m. CUNYfirst should restore automated batch registration blocks and removal of blocks. Registration blocks are an important part of doing business on many college campuses. For those CUNY campuses that opt in for this automation, it will save libraries thousands of dollars by recouping fees for lost materials as well

as countless staff hours spent dealing with angry customers and in manual data entry.

-The underlying business issue/requirement:

-The affected business unit(s):

This affects all CUNY campus libraries because it affects all Aleph library system users (e.g., students, faculty, staff, and retirees – all types of end users). According to CIS, ranks among the top three most used CUNY application services.

-The components of the change (including system, organizational, and procedural):

1. Procedural — All requested changes are procedural but are intended to simplify and improve both workflow and output quality. For example, properly identifying individuals during the import of patron data for each CUNY campus would improve service. This should make smaller the amount scope of manual work done by local campus.

-When the change is needed:

Many of these changes are needed as soon as possible because of a loss of critical functionalities desperately needed by users and staff at campus libraries; others have increased in urgency and priority due to recent enterprise priority initiatives such as Universal Access and the interoperability of Primo, Aleph and the CUNYfirst-based LDAP.

2. What University function will the requested change serve?

State the business functions and/or unit(s) that will benefit from the change, how they will benefit, and whether benefits are short- or long-term.   Include monetary and other measures of the benefits, if applicable.

2a. This modified functional change has been specifically designed to improve how personal information is listed, searched and verified in the CUNY library catalog while eradicating the risk of a personally identifiable information (PII) data breach. CUNY's Aleph library catalog is already set up to accept the CUNYfirst EMPLID as a Type 07 ID code. In the future, the CUNYfirst EMPLID will be a reliable and visible match point visible for authorized library staff members across all CUNY campuses.

2b CUNY campus libraries have long provided University retirees with the benefit of continued use of library services. This change will automate the continuation of library services for retirees.

2c. The use of the EMPLID may sometimes result in the same data duplicated in separate fields. However, the library catalog is set up to handle this condition. Each of these separate locations use this information for separate purposes.

Having the data in a visible location will allow staff to use existing library catalog functions to search for and accurately identify user accounts of specific individuals. Having it in a hidden location allows us to maintain a single unique matchpoint.

This change to EMPLID will also eventually allow campus libraries to discontinue the use of social security and/or tax ID numbers for retrieving overdue materials and collecting fines and fees.

2e. Often patrons will transfer from one campus to another without returning books or paying all of their fines. Without linking the records of an individual from one campus to another, it becomes much more difficult and sometimes impossible to say for certain that an individual who owes books or money at one campus is or is not the same person simply transferred to another campus. While the name may appear to be the same, libraries need a foolproof method to determine whether it actually *is* the same person.

The EMPLID will replace all of the uses that campus libraries currently have for social security and/or tax ID numbers.

2i. The CUNYfirst patron load file will need to include campus ID card barcodes, if a given campus is supplying CUNYfirst with appropriate barcodes.

2j. This modified patron load file ought to be blank at positions 822 - 829.
[USER-REC-CON-LNG = blank]

2k. Patron load files need to identify the Home campus, which is designated in CUNYfirst as the person's primary campus. This is used for a variety of service functions and reports to define which campus each patron is primarily associated.

2l. The patron status in the patron's local patron record should include their primary status on a given campus. Some individuals will be both a student and an employee on a campus. However, only one of those roles is considered primary, for example full-time. This is independent of any status at another campus.

There is a difference between being a full-time staff person who attends classes part-time, vs. a full-time student who works part-time. Regardless, a person's full-time status should determine their local campus patron account status.

For example, a person is a full-time employee on one campus, and a student on another campus. The local patron records should list the patron as an employee at one campus, and a student at the other.

2m. Patron blocks ought to be imported into CUNYfirst in such a way that CUNYfirst will be able to block registration for classes and graduation. If registration does not matter for an individual on one campus, it may be meaningful on another. Of course, the registration blocks would only apply to those campuses that have opted in for blocking. Some campuses do not currently have the manpower for the manually intensive work related to the use registration blocking.

Scripts for exporting data for patron blocks already exist. These scripts already identify the Home Library (campus) for an individual, or for the approximately 10% of people without a Home Library, the campus library to whom the debt is owed. (Libraries are owed money for lost books. According to the CUNY Tuition and Fee Manual, fees for lost books are the only funds campus libraries may recoup.)

For several campuses this is a continuation of existing functionality. (i.e., import of blocks into E-SIMs). For other campuses it will be new functionality. It would be more efficient in the long run to develop a solution that can easily be ported to other campuses beyond those that currently have it.

Together these changes will improve staff efforts to retrieve thousands of overdue library books and other materials, and increase the rate of collection for overdue fines and lost book fees all of which are annually worth hundreds of thousands of dollars to the University while reducing staffing costs through improved automation.

3. What critical University function or activity will be impacted if this change is not implemented?

Describe the risks associated with not implementing the change, including the ways in relevant business units, functions, and/or activities will be adversely affected. What would you estimate to be the severity level of this impact if the change were not approved?

3a. Sending business communications that include job titles that are inaccurate and often undecipherable promotes a public impression that CUNY record

keeping is error prone at best. It also lowers staff confidence in regards to the manner and effort in which CUNY tracks staff information.

Patrons often complain that library notices appear "less than professional." CUNY needs its community members to instead feel positive about communications from CUNY campus libraries, which encourage patrons to renew loans when possible and to return books on time. Without cooperation from patrons, it becomes more difficult to retrieve loaned items and collect fines and fees where appropriate.

Students typically need access to library books and online resources at the start of each academic semester. Forcing the manual creation of thousands of patron records is inefficient and results in even longer queues at library service desks. Many students are unwilling to wait in long lines, and this affects their ability to successfully complete academic assignments in a timely manner. This situation also diverts library staff time away from activities that could be instead directed toward other useful and customer centered work within the library.

Patrons owe thousands of dollars to campus libraries for lost books and overdue fines. Students that need access to library services and materials that support their academic coursework must satisfy these debts when patron records data is accurate and timely, ensuring that scofflaws will be held accountable and act responsibly or pay a different sort of price – lack of access.

3c. Even with this change some duplicate patron accounts will be created in error. A patron record that is not initially imported may have an account manually created at their local library service desk. The creation of duplicate accounts (e.g., because a social security number was not supplied until after the start of a semester) is not a big problem. Such patron accounts will automatically expire if they are not manually maintained. For those patrons that do not owe money for overdue fines, lost books or other fees, Aleph library catalog software has a scheduled automated process to delete expired patron records.

3e. Patrons may have a different level of library privileges on different campuses because they have a different role on each campus. For example, a patron may enjoy faculty status at La Guardia Community College while attending the Graduate Center with student status and working part-time at Queens College.

A patron with incorrect level(s) of library privileges means a person is subject to greater (or lesser) restrictions than they should have based on their roles at each campus. Under certain circumstances, library privileges accorded by a patron's status or role can even affect the privileges of another patron. For example, a book loaned to a student with an initial checkout period of six weeks can be recalled weeks sooner if urgently requested by a faculty member.

Patrons do not always pay fines or return books. University-wide these debts total thousands of dollars. Having an actual home mailing address facilitates communication with library customers, i.e., it helps to prevent the accrual of fines due to timely notification that a book is about to become overdue, or compounding of fines when the book has already been designated as overdue.

3i. Patrons will need to have their barcodes manually entered individually by library staff. Some CUNY libraries prefer this method, for a variety of business reasons. Hunter, one of CUNY's largest schools, would lose current functionality and have to start entering their barcodes manually. They would need to start issuing barcode tags to attach to their CUNYfirst ID, or some other type of ID card.

Some campuses (e.g., Bronx CC) are looking to automate the distribution of authentication IDs, and not having this option would limit our ability to provide a solution in this case.

Online authentication requires the use of bar codes at this time. We could migrate to some new method of authentication (e.g., CUNYfirst ID). However this will require undertaking another major project to implement this approach in a secure way. It will also require the assignment of CUNYfirst IDs for all CUNY library users.

3j. The majority of CUNY students have a mobile device and this trend is increasing. The ability to search the catalog and conduct normal business (requesting materials, renewing books) will prompt some patrons to opt for this easier / simpler interface as their preferred interface. Patrons are able to select their preferred interface between patron loads, yet are forced to reselect this option after each full patron load.

3k. Home Library is currently assigned by the patron load process. It is not always consistent and for some faculty does not reflect their primary campus.

3l. Currently patrons are not always assigned a local patron record status that appropriately reflects their actual relationship to a given campus. This makes it difficult or impossible to provide appropriate service levels or to generate some of the reporting that is being requested by various campuses.

3m. Registration blocks and removal were automated using E-SIMS for several campuses. This functionality is lost after migrating to CUNYfirst. Some CUNY libraries do not have the manpower to manually key in and delete patron registration blocks, so it is not available to them. While blocks remain in E-SIMS (which is unavailable post-migration to CUNYfirst), staff at campus libraries cannot view, edit or delete the data, i.e., registration blocks.

Whether fines or fees are paid or not, the registration blocks remain frozen in E-SIMS and continues to block registration in CUNYfirst. The registration blocks are sometimes the best or only motivation for students to return books and pay overdue fines. (Fines and lost books currently add up to well over a million dollars across CUNY.)

4. When was the last time this function has been modified?

Include a full description of the last request for modification to this function (if known).

5. How is this function currently working?

How is the goal that the request addresses currently achieved? Describe any 'workarounds' that are now in place.

Do we need #s here, e.g., 1a, 1b, etc.?
Several faculty members have complained to the Office of Library Services about the way they are described by these confusing titles. Current functionality does not facilitate the delivery of mail, which is how the patron address information is used.

Currently thousands of students and some faculty members are not automatically receiving library accounts and therefore cannot access library materials or services.

A number of students have changed campuses without paying the debts owed to their previous campus.

For the inbound patron file positions 995 through position 1000 define how many records follow of three different types. Positions 995 and 996 tell the library catalog how many patron records are being supplied. Positions 999 and 1000 define how many patron records are included in the file. Our inbound file currently is defined to say that we are importing one of each record type. These will need to be modified as well as supplying the needed information.

The "local patron Section" (listed below) supplies "ACUN50" which is correct for gets translated in the Aleph library catalog as 'global patron record'. (It is global based on the sub-library field value.) We would need to add a second 'local patron section' record which would describe the 'local campus' record for a patron. This would begin 'AXX001XX##' where 'XX' is the two letter campus code and '##' is the patron status code. These values would be the same ones currently being supplied in the existing global patron record.

1f. CUNY Start students would have patron type equal to their two letter campus code, and a patron status of '47 CUNY Start'.

1g. At some campuses (e.g., Queensborough) students are being listed as having a patron type of 'staff'. Even when the local campus staff attempts to correct this information, it is changed back by the next patron load. Patron's work statuses (particularly for college students) change often and so home addresses should be used for this purpose.

1h. Staff members have both a work and home address. Students that normally reside with their parents may have a different current campus residential address. Students commonly change work study assignments, and keeping track of these work address changes seems unneeded.

Take for example a patron that normally resides outside of the NYC area and is living in temporary college housing. In this case it would be best to have two addresses, even if there was one address listed in CUNYfirst (the same address could be repeated if necessary). Currently some work study students are having their addresses showing up as listed as the 'Financial Services' office address. It would be better to list in the library catalog official University information for the patron's contact information. (We would rather not have students be required to update address and e-mail changes in multiple locations, i.e., both with the University and the library.)

USER-REC-NO-ID	NUM	2	Number of ID records that follow
USER-REC-NO-ADDRESS	NUM	2	Number of Address records that follow
USER-REC-NO-BOR	NUM	2	Number of patron records that follow

LOCAL PATRON SECTION:

Field name	Char/Num	Length	Notes
BOR-REC-ACTION	CHAR	1	U, I, A, D or X (see actions below)
BOR-REC-SUB-LIBRARY	CHAR	5	
BOR-REC-TYPE	CHAR	2	
BOR-REC-STATUS	CHAR	2	
BOR-REC-EXPIRY-DATE	NUM	8	If blank, will take tab31 value.
BOR-REC-REGISTRATION-DATE	NUM	8	
FILLER	CHAR	174	For future use

6. Alternatives to the Requested Change:

List at least one alternative to the change being requested. For each alternative, describe the ways in which the requested change would be the preferable option.

One alternative would be to invest time and work in improving the way these titles are described in the CUNYfirst system. However, it seems time could be better spent on projects other than modifying employee title text strings.

Registration blocks could be stored in a separate database. (e.g., name, CUNYfirst EMPLID, dollar amount owed and primary home campus) This could be referenced the CUNYfirst student registration process to check whether or not the individual had a block preventing registration. The advantage would be that the process could be automated to (weekly or possibly daily) export date from the library catalog database, and then brought into a separate database or database table. This would then be referenced by the CUNYfirst software.

Following the patron load file into Aleph, campus barcodes could be loaded separately 25 times (one load for each campus). This is inefficient, unfeasible, and works against an enterprise solution CUNY-wide.

Section B. – Assumptions

1. Please list the resources that have been allocated to support this functional change.

Include the projected allocation amount for both Other than Personnel Services (OTPS) and Personnel Services (PS) charges.

We already have a process for the export of patron data, which is later imported into the Aleph library catalog. The change would be minor.

Section C. - Integration Considerations:

1. How will this request impact CUNYfirst?

Is the functionality of this request designed with CUNYfirst in mind? In other words, does the vision behind this request extend past legacy functionality to include how the modified function will work in the CUNYfirst environment?

This change would not directly affect CUNYfirst; it would only affect data exported from CUNYfirst. This modified function has been specifically designed to improve personal information as listed in the Aleph library catalog.

D. Section– Functional Specifications and Design Details:

Please attach and identify any supporting documentation that would help to clarify the requested change.

- Business and data flow diagrams of processes relating to this request;

- A representation of screens (mainframe; WEB; CUNYfirst) to illustrate how the affected function works now and how this function will work after the requested change is implemented;

- New or changed report designs. Include current reports if applicable and new report recommendations. Keep in made that changes in application functionality may affect current reports;

- File layouts for any new/changed input and/or output file requests;

- Any other materials that may be helpful.

November 2009 version 2