

# **Evergreen Documentation**

**Documentation Interest Group**

# Evergreen Documentation

Documentation Interest Group

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# Part I. Introduction



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# Chapter 1. About This Documentation

This guide was produced by the Evergreen Documentation Interest Group (DIG), consisting of numerous volunteers from many different organizations. The DIG has drawn together, edited, and supplemented pre-existing documentation contributed by libraries and consortia running Evergreen that were kind enough to release their documentation into the creative commons. Please see the [Attributions](#) section for a full list of authors and contributing organizations. Just like the software it describes, this guide is a work in progress, continually revised to meet the needs of its users, so if you find errors or omissions, please let us know, by contacting the DIG facilitators at [docs@evergreen-ils.org](mailto:docs@evergreen-ils.org).

This guide to Evergreen is intended to meet the needs of front-line library staff, catalogers, library administrators, system administrators, and software developers. It is organized into Parts, Chapters, and Sections addressing key aspects of the software, beginning with the topics of broadest interest to the largest groups of users and progressing to some of the more specialized and technical topics of interest to smaller numbers of users.

Copies of this guide can be accessed in PDF and HTML formats from <http://docs.evergreen-ils.org/>.

# Chapter 2. About Evergreen

Evergreen is an open source library automation software designed to meet the needs of the very smallest to the very largest libraries and consortia. Through its staff interface, it facilitates the management, cataloging, and circulation of library materials, and through its online public access interface it helps patrons find those materials.

The Evergreen software is freely licensed under the GNU General Public License, meaning that it is free to download, use, view, modify, and share. It has an active development and user community, as well as several companies offering migration, support, hosting, and development services.

The community's development requirements state that Evergreen must be:

- Stable, even under extreme load.
- Robust, and capable of handling a high volume of transactions and simultaneous users.
- Flexible, to accommodate the varied needs of libraries.
- Secure, to protect our patrons' privacy and data.
- User-friendly, to facilitate patron and staff use of the system.

Evergreen, which first launched in 2006 now powers over 544 libraries of every type – public, academic, special, school, and even tribal and home libraries – in over a dozen countries worldwide.

# Part II. Evergreen 2.6 Release Notes

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# Chapter 3. Upgrade notes

## OPAC

### TPAC library pages

Evergreen 2.5 introduced the `Library information URL` library setting to associate a web page with a library. If set, this value was used as the target of the library link in the copy table on the record details page. However, the new default behavior is to link to the automatically generated TPAC library page, which in turn links to the external web site.

If you wish to maintain the previous behavior, you can set the `Use external library information URL` library setting to `True`.

### Disable Autosuggest by Default

As described in <https://bugs.launchpad.net/evergreen/+bug/1187993>, the community is aware of ongoing accessibility issues caused through use of the autosuggest feature of the Evergreen catalog. The decision has been made to disable autosuggest by default for new installations. Existing sites are cautioned to take note of this change and decide for themselves whether to discontinue use.

It is possible to disable the autosuggest feature via a global flag. Look in `Admin -> Server Administration -> Global Flags`, find the `OPAC: Show auto-completing suggestions dialog...` setting, then edit and uncheck the `Enabled` box.

## Miscellaneous

### Removal of open-ils.ingest service

The `open-ils.ingest` service is no longer required, and has been removed.

You should update your `opensrf.xml` file to remove references to `open-ils.ingest`, and you may also wish to remove the `OpenILS/Application/Ingest.pm` file from your Perl `@INC` path.

In `opensrf.xml`, remove the entire `<open-ils.ingest>` element from the `<apps>` element, and remove `<appname>open-ils.ingest</appname>` from any `<activeapps>` elements where it is present.

If you have the `perldoc` command installed, you can use the following command to locate the path on disk of the `Ingest.pm` file, which is no longer required and can be removed:

```
perldoc -l OpenILS::Application::Ingest
```

### Reporter view *classic\_current\_circ* dropped

As part of the DB upgrade, the reporter view "reporter.classic\_current\_circ" was dropped. If you previously installed this view from `example.reporter-extension.sql`, it will have to be re-installed by executing the "CREATE OR REPLACE VIEW reporter.classic\_current\_circ AS..." SQL once again from `example.reporter-extension.sql`.

# Chapter 4. New Features

## Administration

### Add granular settings for requiring staff initials for notes

There are now three separate library settings for controlling whether staff are required to input their initials when creating different types of notes. See new library settings below.

Any pre-existing library setting for requiring staff initials are preserved during the upgrade process. After upgrading, you may choose to change the set behavior for any of the three new settings.

#### New Library Settings

- Require staff initials for entry/edit of patron standing penalties and messages. (ui.staff.require\_initials.patron\_standing\_penalty)
- Require staff initials for entry/edit of patron notes. (ui.staff.require\_initials.patron\_info\_notes)
- Require staff initials for entry/edit of copy notes. (ui.staff.require\_initials.copy\_notes)

## Cataloging

### Enhancements to Evergreen's MARC Editor Concerning Fixed Fields

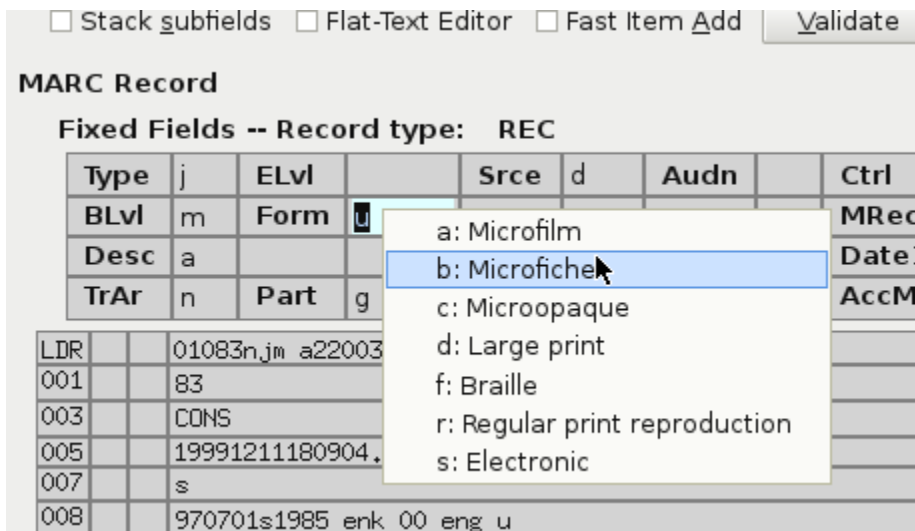
This work is a combination of two features. One provides suggested values in a right-click context menus for fixed field values based on the *type* of the record being edited. The other provides a wizard to help specifically with the Physical Characteristics of the record, i.e. the 007 field.

#### Right-Click Context Menus

Users will be able to right-click on the value control for fixed fields in the MARC Editor, and Evergreen will provide a menu from which the user can select a possible value. This will work for fixed fields where Evergreen already contains information from the Library of Congress's MARC 21 standard.

Example:





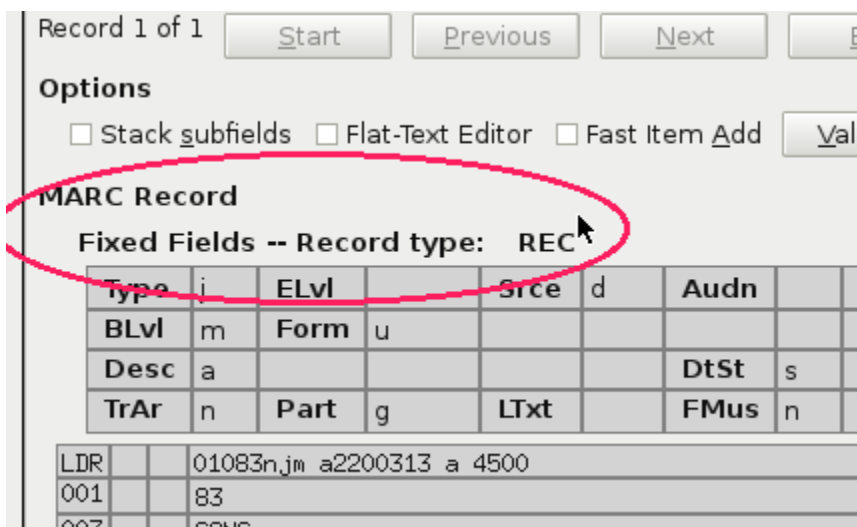
Evergreen already comes loaded with information from the Library of Congress’s MARC 21 standard on possible values for some fixed fields.

The following table shows which fixed fields for which *Record Types* have values already loaded into Evergreen.

| Fixed Field | Record Types                             |
|-------------|--|
| Audn        | {BKS, COM, REC, SCO, SER, VIS}           |
| BLvl        | {BKS, COM, MAP, MIX, REC, SCO, SER, VIS} |
| Form        | {BKS, MAP, MIX, REC, SCO, SER, VIS}      |
| Lang        | {BKS, COM, MAP, MIX, REC, SCO, SER, VIS} |
| LitF        | {BKS}                                    |
| Type        | {BKS, COM, MAP, MIX, REC, SCO, SER, VIS} |

A *Record Type* is itself a combination of the *Type of Record* (fixed field name: Type) and *Bibliographic Level* (fixed field name: BLvl) elements of the MARC leader (positions 06 and 07 respectively). You can see a record’s Record Type in the MARC Editor as shown in this screenshot:

*Record Type:*



A user may add values to these fixed fields as well as to other fixed fields through the MARC Coded Value Maps interface found under the Admin # Server Administration menu in the staff client. These are grouped by Record

Attribute Types (a superset of fixed fields) which have labels such as *Alph*, *Biog*, *Videorecording format*, and *Language*.

From LOC Fixed Fields documentation, *Alph* is *Original alphabet or script of title*, *Biog* is *Biography*, *Videorecording format* is from the 007 field, *Language* is positions 35-37 of the 008, and so on. Other Record Attribute Types such as *Author* are, of course, not fixed fields at all.

When users add new values here, the right-click context menus of the fixed fields in the MARC Editor will include those values.

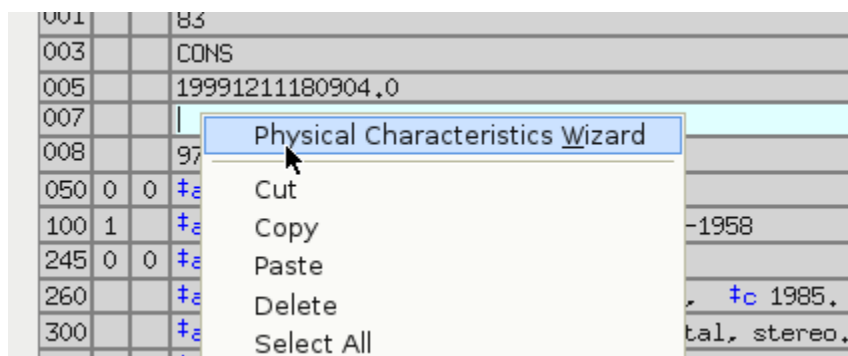
All values added for any fixed field in the Coded Value Map will display for any *Record Type* that uses that fixed field.

Users of the MARC Editor always retain the option of leaving a fixed field blank, entering the special values # or |, or entering a value not provided by the right-click context menu.

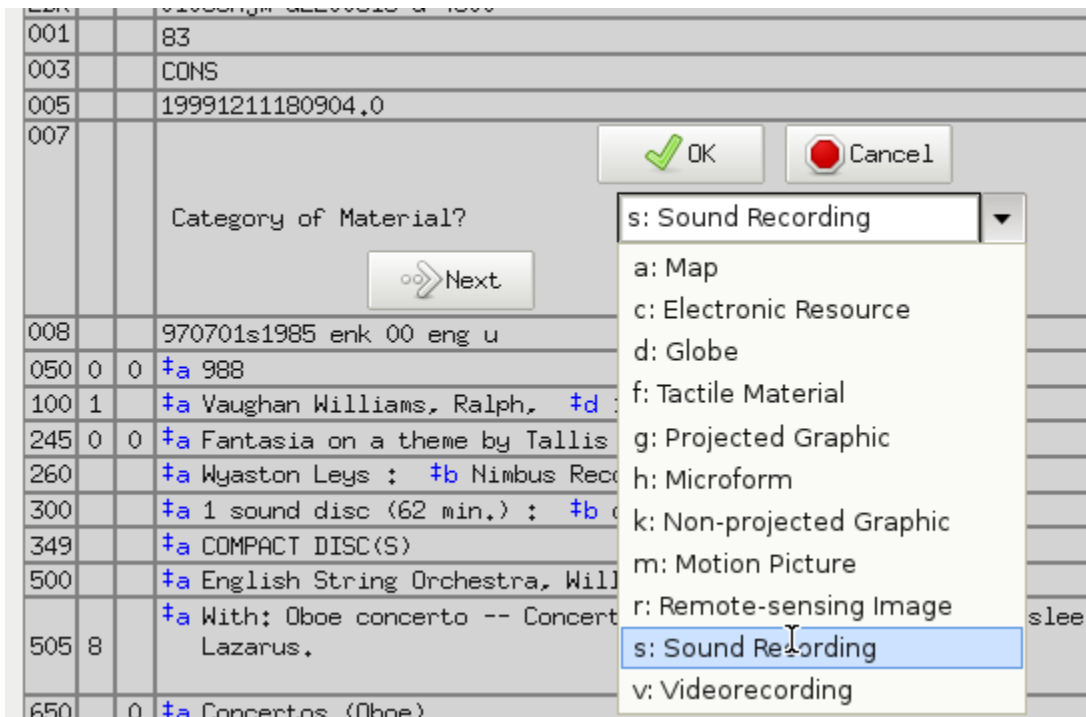
## Physical Characteristics Wizard

By right-clicking on an existing or new 007 field in the MARC Editor, users will be able to enter a wizard that leads them step-by-step through the positions in that 007 field, telling them the significance of the current position and providing a drop-down list of possible values.

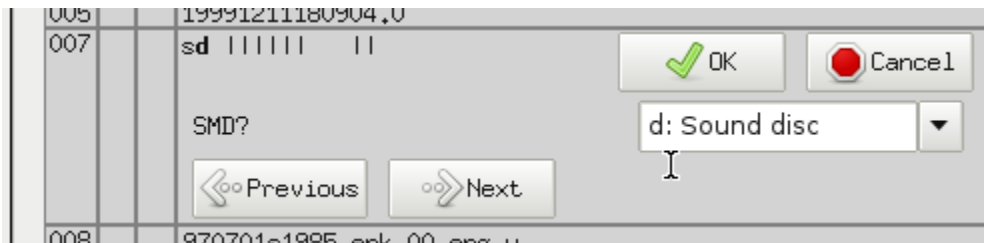
Launching the Physical Characteristics Wizard:



Choosing the Category of Material:



Choosing a value for a later position:



## marc\_export script replacement

The `/openils/bin/marc_export` script is completely rewritten. This new version accepts all of the same command line options as the old version as well as some new options.

The rewritten `marc_export` talks directly to your Evergreen database and is a great deal faster than the previous version. Because the new script talks directly to the database, it needs to know how to connect. To facilitate this, a new option, `--store`, was added that allows the user to specify one of three Evergreen storage backends to use when exporting records. The valid choices are `reporter`, `cstore`, or `storage`. The default of `reporter` should work in most cases, but if you do have a separate reporter database and you know you want to talk directly to your main production database, then you will probably want to choose either `cstore` or `storage`.

In addition to the `--store` option, a `--since` option is also added so that you can specify output of an update file of records changed, added, and/or deleted since the given date. The `--since` option uses a fairly flexible date parser and can accept a wide range of date formats including ISO 8601, many common date formats such as M/D/Y (common in the US) or D/Mon/Y (with the first 3 characters or more of the month spelled out), as well as several less common date formats. Special date strings such as `yesterday`, `today`, `yesterday week`, and `today week` are also supported. For more information see the `VALID DATE FORMATS` section of the `Date::Manip::Date` man page. Available online here:

There is one final difference between the new script and the old `marc_export`. The new script does not output progress as it executes. Many of the statistics that the script reported are not readily available to the new script. It was deemed better to just not output any progress rather than to output something different from the old program. If your scripts parse the output from `marc_export`, they will need to be modified not to expect any.

## Circulation

### Lost Item Billing: New Min/Max Price Settings

When an item is marked lost, the user is typically billed for the item. In Evergreen, they can either be charged the amount recorded in the item object, or if that value is blank (or zero), charged a default price (controlled by settings).

In addition to these existing settings, now we can accommodate a range of prices by saying the patron should be billed at least  $X$  and not more than  $Y$ . This also allows you to effectively set a fixed price for all lost items by setting min and max to the same amount.

#### New Org Unit Settings

- Minimum Item Price: `circ.min_item_price`
- Maximum Item Price: `circ.max_item_price`

#### New Permissions

- `UPDATE_ORG_UNIT_SETTING.circ.min_item_price`
- `UPDATE_ORG_UNIT_SETTING.circ.max_item_price`

### User Editor: "Update Expire Date" button

A new button labeled "Update Expire Date" is added in the user editor next to expire date field. This button can be used to re-calculate the user's expire date based on the current profile's permission interval and today's date.

This is similar to how the expire date is populated when creating a new user, or when changing the profile group.

This button simplifies the process of "renewing" a user, by eliminating the requirement that staff manually enter a new expire date.

A button is used here so that the updating of the expire date remains an intentional process, not one that happens upon any edit.

## OPAC

### Composite Record Attributes

With this feature we create an abstraction on top of the Record Attribute infrastructure to allow the aggregation of multiple, cross-Attribute values under a single search filter value, accessible through new, dynamic filters.

Each QueryParser filter will be created by the addition of a Composite Record Attribute Definition. For instance, one may wish to create a Composite Record Attribute Definition for an abstract "Item Type" interface component that uses information from the `item_type`, `vr_format`, `bib_level` and `item_form` Record Attribute Definitions, with each Composite Record Attribute Value having a different combination of Record Attribute Values from some or all of these Record Attribute Definitions. In this way, a single interface component might be presented as a dropdown with options such as "All Books", "All video recordings", "DVDs", "VHS Tapes", "E-Books", "Audio Books" and "Large Print Books". Of particular note are the "DVDs" and "VHS Tapes" entries, which include information from Record Attribute Definitions completely separate from the others. Additionally, the Composite Record Attribute Values defined by this Composite Record Attribute Definition can be used to drive behavioral logic, such as alternate icon display or link generation, in upgrade-friendly template adjustments.

Included in this development is a replacement for the single-attribute Format filter supplied for basic search. Instead, a Composite Attribute is used to combine the values from Item Type, Item Form and Videorecording Format in various ways that provide a more patron-friendly set of choices.

This new Format filter can be adjusted, or even replaced with a completely local one, through configuration and without template adjustment.

## Located URI visibility options

Before this, Evergreen restricted the visibility of bibliographic records that make use of Located URIs in a way that attempts to model licensing restrictions.

There now exists a global flag to allow sites the option of changing the behaviour of Located URIs so that they act in a way analogous to copies for visibility testing. When the `opac.located_uri.act_as_copy` global flag is enabled, Located URIs will cause their containing bib records to become visible in searches where the URI is in scope to either ancestors of the search library, as before, or descendants of the search library, as copies do. As before, if a preferred library is supplied by the user, it is added to the list of visible org units to check.

Additionally, while the underlying UnAPI and supporting code was capable of providing a reasonable and logical sort order for the Located URIs when embedded as XML holdings elements, the client-facing UnAPI method was not making use of that. It now does, and uses the same sorting algorithm as is used for copies.

## Multi-valued Record Attributes and Controlled Record Attributes

Having identified common use cases and reasonable restrictions that can be placed on the feature set, we have extended the Record Attribute infrastructure to support both the extraction and storage of all instances of a defined Attribute found within a bibliographic record, as well as provide new and more powerful indexing of existing data, in several ways.

Record Attributes can now be defined by configuration as either single-valued or multi-valued. For any Attribute configured as single-valued, only the first value extracted from a record will be stored. This configuration parameter and restriction is in place to support potential query optimizations based on foreknowledge of whether a given Attribute is multi-valued or not.

Record Attributes will be defined by configuration as either controlled or uncontrolled. A controlled Record Attribute is one that has entries in the Coded Value Map infrastructure specifying the valid values the record may carry for this attribute. If defined as a controlled Attribute, any unknown values extracted from a record will be ignored. Uncontrolled Attributes, however, may contain any value. This configuration parameter and restriction also supports potential query optimization.

We store uncontrolled attribute values in a new table with a monotonically decreasing ID sequence, separating it from controlled values, reducing storage requirements by retaining only unique values, and making lookup faster.

## Restrictions

- A Record Attribute's values must match Coded Value Map entries if it is to be a Controlled Attribute. Coded Value Map control is indicated by a new "controlled" boolean on the config.record\_attr\_definition table.
- Record Attributes must "opt in" to multi-valued-ness. Record Attributes will opt in via a new "multi" boolean on config.record\_attr\_definition; this restriction enforces site config requirements by being explicit about the definition of "multi" fields.
- If controlled but not opt'd in to multi-mode, only the first value will be recorded but the new search mechanism will be used.
- Only single-valued Record Attributes will be available for use by the system as Sort Axes.
- Only controlled Record Attributes will be available for use by the TPAC as dynamically generated filter UI components, such as filter dropdowns or multi-selects.

## New External Dependency

This new feature requires the addition of the intarray extension to Postgres. This is a stock extension available on most linux distributions via the same package as the already-required plperl extension.

## Restore OpenSearch Support

Restore previously held functionality from JSPAC to support OpenSearch in TPAC. This allows users to easily add the Evergreen search engine to their browser's built-in set of search engines.

## Accepting payments with Stripe

Stripe is a payment processing service that lets sites take credit card payments without payment card information ever touching the sites' own servers.



Using Stripe as a payment processor means that clients **must** have Javascript enabled in order to submit fine payments through your OPAC.

## Library Settings

The following settings need to be set at the appropriate org level for sites wanting to use Stripe.

- "Allow Credit Card Payments" (should be *true*)  
`credit.payments.allow`
- "Enable Stripe payments" (should be *true*)  
`credit.processor.stripe.enabled`
- "Stripe publishable key" (value provided by Stripe)

```
credit.processor.stripe.pubkey
```

- "Stripe secret key" (value provided by Stripe)

```
credit.processor.stripe.secretkey
```

- "Name default credit processor" (should be *Stripe*)

```
credit.processor.default
```

## TPAC library pages

This feature adds one web page per library in the system to the TPAC at `http://hostname/eg/opac/library/<SHORTNAME>` and `http://hostname/eg/opac/library/<ID>`. The pages publish the following information from Evergreen (if available):

- Name of the library
- Link to the library web site (from `Library Information URL` library setting)
- Opening hours
- Email address
- Phone number
- Mailing address
- Link to parent library (if applicable)

Library pages are linked from the copy table on the record details page.

## Structured data

The library web pages publish schema.org structured data, which can enable search engines and other systems to better understand your libraries and their resources.

## TPAC Metarecord Search and Holds

This feature adds support for searching and placing holds against metarecords.

### Metarecord Searching

In the top search bar and in the advanced search page, there is a new search modifier labeled "Group Formats and Editions". When selected, searches are performed against metarecords and metarecords are shown in the results list.

For each metarecord, format icons for all constituent records are shown. When a user clicks on a metarecord, if the metarecord has multiple constituent records, the user is taken to the constituent records list. Similarly, when a metarecord only has one constituent record, the user is directed to the record detail page for the constituent record.

### Metarecord Holds

Clicking the place hold link from the metarecord results page shows the available formats and languages for the metarecord, allowing the user to limit the scope of the hold. Non-metarecord holds now get a new "Advanced Holds

Options" link which allows user to promote a title hold to a metarecord hold, thus providing access to the formats / editions selector, before the hold is placed.

In the My Account holds list, icons for all selected formats are displayed in the Format columns for the hold. When editing a metarecord hold, users may modify the desired formats and languages.

## Configuration

Admins may disable this feature by un-commenting the "metarecord.disabled" attribute in config.tt2

## Web Content Accessibility Guidelines (WCAG) Compliance

To make the catalog more accessible to users with a range of disabilities, including blindness and low vision, the catalog has been revised to better comply with the Web Content Accessibility Guidelines (WCAG) 2.0. These revisions target level "AA" of compliance.

For more information on WCAG, see <http://www.w3.org/WAI/intro/wcag>



# Chapter 5. Bug Fixes

## IMPORTANT SECURITY INFORMATION

A serious security flaw that allows unauthorized remote access to organizational unit settings is fixed in the following releases of Evergreen: 2.5.9, 2.6.7, and 2.7.4. All prior releases of Evergreen are vulnerable to exploitation of this flaw to reveal sensitive system information. If you are running a vulnerable release of Evergreen you are **strongly** encouraged to upgrade to a non-vulnerable release as soon as possible.

## Set resource limits for Clark Kent

Several parameters are now available for the reporter daemon process (`clark-kent.pl`) to control resource usage. These can be used to reduce the chances that a malformed report can cause indigestion on a database or reports server. The new parameters, which can be set in `opensrf.xml` or as command-line switches for `clark-kent.pl` are

- `//reporter/setup/statement_timeout/--statement-timeout`

Number of minutes to allow a report's underlying SQL query to run before it gets cancelled. Default value is 60 minutes. If a report's query gets cancelled, the `error_text` value will be set to a valid that indicates that the allowed time was exceeded.

- `//reporter/setup/max_rows_for_charts/--max-rows-for-charts`

Number of rows permitted in the query's output before Clark Kent refuses to attempt to draw a graph. Default value is 1,000 rows.

- `//reporter/setup/resultset_limit/--resultset-limit`

If set, truncates the report's output to the specified number of hits. Note that it will not be apparent to a staff user if the report's output has been truncated. Default value is unlimited.

The report concurrency (i.e., the number of reports that Clark Kent will run in parallel) can now also be controlled via the `opensrf.xml` setting `//reporter/setup/parallel`.

# Chapter 6. Acknowledgments

The Evergreen project would like to acknowledge the following organizations who commissioned developments in this release of Evergreen:

- Butler Public Library, IN, USA
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- Noble County Public Library, IN, USA
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- North of Boston Library Exchange
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- Merrimack Valley Library Consortium
- Pohjois-Karjalan Tietotekniikkakeskus Oy
- Saint Louis Christian College
- Traverse Area District Library

We regret any omissions. If a contributor has been inadvertently missed, please open a bug at <http://bugs.launchpad.net/evergreen/> with a correction.

# Part III. Software Installation



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# Chapter 7. Introduction

This part will guide you through the installation steps installation or upgrading your Evergreen system. It is intended for system administrators.

# Chapter 8. System Requirements

## Server Minimum Requirements

The following are the base requirements setting Evergreen up on a test server:

- An available desktop, server or virtual image
- 1GB RAM, or more if your server also runs a graphical desktop
- Linux Operating System
- Ports 80 and 443 should be opened in your firewall for TCP connections to allow OPAC and staff client connections to the Evergreen server.

## Staff Client Requirements

Staff terminals connect to the central database using the Evergreen staff client, available for download from The Evergreen download page. The staff client must be installed on each staff workstation and requires at minimum:

- Windows (XP, Vista, or 7), Mac OS X, or Linux operating system
- a reliable high speed Internet connection
- 512Mb of RAM
- The staff client uses the TCP protocol on ports 80 and 443 to communicate with the Evergreen server.

### Barcode Scanners

Evergreen will work with virtually any barcode scanner – if it worked with your legacy system it should work on Evergreen.

### Printers

Evergreen can use any printer configured for your terminal to print receipts, check-out slips, holds lists, etc. The single exception is spine label printing, which is still under development. Evergreen currently formats spine labels for output to a label roll printer. If you do not have a roll printer manual formatting may be required.

# Chapter 9. Installing the Evergreen server

## Preamble: referenced user accounts

In subsequent sections, we will refer to a number of different accounts, as follows:

- Linux user accounts:
  - The **user** Linux account is the account that you use to log onto the Linux system as a regular user.
  - The **root** Linux account is an account that has system administrator privileges. On Debian and Fedora you can switch to this account from your **user** account by issuing the `su -` command and entering the password for the **root** account when prompted. On Ubuntu you can switch to this account from your **user** account using the `sudo su -` command and entering the password for your **user** account when prompted.
  - The **opensrf** Linux account is an account that you create when installing OpenSRF. You can switch to this account from the **root** account by issuing the `su - opensrf` command.
  - The **postgres** Linux account is created automatically when you install the PostgreSQL database server. You can switch to this account from the **root** account by issuing the `su - postgres` command.
- PostgreSQL user accounts:
  - The **evergreen** PostgreSQL account is a superuser account that you will create to connect to the PostgreSQL database server.
- Evergreen administrator account:
  - The **egadmin** Evergreen account is an administrator account for Evergreen that you will use to test connectivity and configure your Evergreen instance.

## Preamble: developer instructions



Skip this section if you are using an official release tarball downloaded from <http://evergreen-ils.org/downloads>

Developers working directly with the source code from the Git repository, rather than an official release tarball, must install some extra packages and perform one step before they can proceed with the `./configure` step.

As the **root** Linux account, install the following packages:

- `autoconf`
- `automake`
- `libtool`

As the **user** Linux account, issue the following command in the Evergreen source directory to generate the configure script and Makefiles:



# Installing prerequisites

Evergreen has a number of prerequisite packages that must be installed before you can successfully configure, compile, and install Evergreen.

1. Begin by installing the most recent version of OpenSRF (2.3.0 or later). You can download OpenSRF releases from <http://evergreen-ils.org/opensrf-downloads/>

2. On many distributions, it is necessary to install PostgreSQL 9 from external repositories.

- On Debian Squeeze, open `/etc/apt/sources.list` in a text editor as the **root** Linux account and add the following line:

```
deb http://backports.debian.org/debian-backports squeeze-backports main contrib
```

- On Ubuntu Lucid, you can use a PPA (personal package archive), which are package sources hosted on Launchpad. The one most commonly used by Evergreen Community members is maintained by Martin Pitt, who also maintains the official PostgreSQL packages for Ubuntu. As the **root** Linux account, issue the following commands to add the PPA source:

```
apt-get install python-software-properties
add-apt-repository ppa:pitti/postgresql
```

- Ubuntu Precise comes with PostgreSQL 9, so no additional steps are required.
- Fedora comes with PostgreSQL 9, so no additional steps are required.

3. On Debian and Ubuntu, run `aptitude update` as the **root** Linux account to retrieve the new packages from the backports repository.

4. Issue the following commands as the **root** Linux account to install prerequisites using the `Makefile.install` prerequisite installer, substituting `debian-squeeze`, `debian-wheezy`, `fedora`, `ubuntu-lucid`, or `ubuntu-precise` for `<osname>` below:

```
make -f Open-ILS/src/extras/Makefile.install <osname>
```

5. Add the `libdbi-libdbd` libraries to the system dynamic library path by issuing the following commands as the **root** Linux account:



You should skip this step if installing on Ubuntu Precise. The `ubuntu-precise` target uses `libdbd-pgsql` from packages.

## Debian / Ubuntu Lucid.

```
echo "/usr/local/lib/dbd" > /etc/ld.so.conf.d/eg.conf
ldconfig
```

## Fedora.

```
echo "/usr/lib64/dbd" > /etc/ld.so.conf.d/eg.conf
ldconfig
```

# Configuration and compilation instructions

For the time being, we are still installing everything in the `/openils/` directory. From the Evergreen source directory, issue the following commands as the **user** Linux account to configure and build Evergreen:

```
PATH=/openils/bin:$PATH ./configure --prefix=/openils --sysconfdir=/openils/conf
make
```

These instructions assume that you have also installed OpenSRF under `/openils/`. If not, please adjust `PATH` as needed so that the Evergreen `configure` script can find `osrf_config`.

## Installation instructions

1. Once you have configured and compiled Evergreen, issue the following command as the **root** Linux account to install Evergreen, build the server portion of the staff client, and copy example configuration files to `/openils/conf`. Change the value of the `STAFF_CLIENT_STAMP_ID` variable to match the version of the staff client that you will use to connect to the Evergreen server.

```
make STAFF_CLIENT_STAMP_ID=rel_name install
```

2. The server portion of the staff client expects `http://hostname/xul/server` to resolve. Issue the following commands as the **root** Linux account to create a symbolic link pointing to the `server` subdirectory of the server portion of the staff client that we just built using the staff client ID `rel_name`:

```
cd /openils/var/web/xul
ln -sf rel_name/server server
```

## Change ownership of the Evergreen files

All files in the `/openils/` directory and subdirectories must be owned by the `opensrf` user. Issue the following command as the **root** Linux account to change the ownership on the files:

```
chown -R opensrf:opensrf /openils
```

## Additional Instructions for Developers



Skip this section if you are using an official release tarball downloaded from <http://evergreen-ils.org/downloads>

Developers working directly with the source code from the Git repository, rather than an official release tarball, need to install the Dojo Toolkit set of JavaScript libraries. The appropriate version of Dojo is included in Evergreen release tarballs. Developers should install the Dojo 1.3.3 version of Dojo by issuing the following commands as the **opensrf** Linux account:

```
wget http://download.dojotoolkit.org/release-1.3.3/dojo-release-1.3.3.tar.gz
tar -C /openils/var/web/js -xzf dojo-release-1.3.3.tar.gz
cp -r /openils/var/web/js/dojo-release-1.3.3/* /openils/var/web/js/dojo/.
```

## Configure the Apache Web server

1. Use the example configuration files in `Open-ILS/examples/apache/` (for Apache versions below 2.4) or `Open-ILS/examples/apache_24/` (for Apache versions 2.4 or greater) to configure your Web server for

the Evergreen catalog, staff client, Web services, and administration interfaces. Issue the following commands as the **root** Linux account:

### Debian and Ubuntu.

```
cp Open-ILS/examples/apache/eg.conf /etc/apache2/sites-available/  
cp Open-ILS/examples/apache/eg_vhost.conf /etc/apache2/  
cp Open-ILS/examples/apache/eg_startup /etc/apache2/  
# Now set up SSL  
mkdir /etc/apache2/ssl  
cd /etc/apache2/ssl
```

### Fedora.

```
cp Open-ILS/examples/apache_24/eg_24.conf /etc/httpd/conf.d/  
cp Open-ILS/examples/apache_24/eg_vhost_24.conf /etc/httpd/eg_vhost.conf  
cp Open-ILS/examples/apache/eg_startup /etc/httpd/  
# Now set up SSL  
mkdir /etc/httpd/ssl  
cd /etc/httpd/ssl
```

2. The `openssl` command cuts a new SSL key for your Apache server. For a production server, you should purchase a signed SSL certificate, but you can just use a self-signed certificate and accept the warnings in the staff client and browser during testing and development. Create an SSL key for the Apache server by issuing the following command as the **root** Linux account:

```
openssl req -new -x509 -days 365 -nodes -out server.crt -keyout server.key
```

3. As the **root** Linux account, edit the `eg.conf` file that you copied into place.
  - a. To enable access to the offline upload / execute interface from any workstation on any network, make the following change (and note that you **must** secure this for a production instance):
    - (Apache 2.2): Replace `Allow from 10.0.0.0/8` with `Allow from all`
    - (Apache 2.4): Replace `Require host 10.0.0.0/8` with `Require all granted`
  - b. (Fedora): Change references from the non-existent `/etc/apache2/` directory to `/etc/httpd/`.
4. Change the user for the Apache server.
  - (Debian and Ubuntu): As the **root** Linux account, edit `/etc/apache2/envvars`. Change `export APACHE_RUN_USER=www-data` to `export APACHE_RUN_USER=opensrf`.
  - (Fedora): As the **root** Linux account, edit `/etc/httpd/conf/httpd.conf`. Change `User apache` to `User opensrf`.
5. Configure Apache with performance settings appropriate for Evergreen:
  - (Debian and Ubuntu): As the **root** Linux account, edit `/etc/apache2/apache2.conf`:
  - (Fedora): As the **root** Linux account, edit `/etc/httpd/conf/httpd.conf`:
    - a. Change `KeepAliveTimeout` to 1. Higher values reduce the chance of a request timing out unexpectedly, but increase the risk of using up all available Apache child processes.
    - b. *Optional*: Change `MaxKeepAliveRequests` to 100

- c. Update the prefork configuration section to suit your environment. The following settings apply to a busy system:

```
<IfModule mpm_prefork_module>
    StartServers      20
    MinSpareServers   5
    MaxSpareServers   15
    MaxClients        150
    MaxRequestsPerChild 10000
</IfModule>
```

6. (Fedora): As the **root** Linux account, edit the `/etc/httpd/eg_vhost.conf` file to change references from the non-existent `/etc/apache2/` directory to `/etc/httpd/`.
7. (Debian and Ubuntu): As the **root** Linux account, enable the Evergreen site:

```
a2dissite default # OPTIONAL: disable the default site (the "It Works" page)
a2ensite eg.conf
```

8. (Ubuntu): As the **root** Linux account, enable Apache to write to the lock directory; this is currently necessary because Apache is running as the `opensrf` user:

```
chown opensrf /var/lock/apache2
```

## Configure OpenSRF for the Evergreen application

There are a number of example OpenSRF configuration files in `/openils/conf/` that you can use as a template for your Evergreen installation. Issue the following commands as the **opensrf** Linux account:

```
cp -b /openils/conf/opensrf_core.xml.example /openils/conf/opensrf_core.xml
cp -b /openils/conf/opensrf.xml.example /openils/conf/opensrf.xml
```

When you installed OpenSRF, you created four Jabber users on two separate domains and edited the `opensrf_core.xml` file accordingly. Please refer back to the OpenSRF README and, as the **opensrf** Linux account, edit the Evergreen version of the `opensrf_core.xml` file using the same Jabber users and domains as you used while installing and testing OpenSRF.



The `-b` flag tells the `cp` command to create a backup version of the destination file. The backup version of the destination file has a tilde (`~`) appended to the file name, so if you have forgotten the Jabber users and domains, you can retrieve the settings from the backup version of the files.

`eg_db_config`, described in the following section, sets the database connection information in `opensrf.xml` for you.

## Creating the Evergreen database

### Setting up the PostgreSQL server

For production use, most libraries install the PostgreSQL database server on a dedicated machine. Therefore, by default, the `Makefile.install` prerequisite installer does **not** install the PostgreSQL 9 database server that is required by every Evergreen system. You can install the packages required by Debian or Ubuntu Lucid on the machine of your choice using the following commands as the **root** Linux account:

**(Debian / Ubuntu / Fedora) Installing PostgreSQL server packages.** Each OS build target provides the postgres server installation packages required for each operating system. To install Postgres server packages, use the make target `postgres-server-<OSTYPE>`. Choose the most appropriate command below based on your operating system.

```
make -f Open-ILS/src/extras/Makefile.install postgres-server-debian-wheezy
make -f Open-ILS/src/extras/Makefile.install postgres-server-debian-squeeze
make -f Open-ILS/src/extras/Makefile.install postgres-server-ubuntu-lucid
make -f Open-ILS/src/extras/Makefile.install postgres-server-ubuntu-precise
make -f Open-ILS/src/extras/Makefile.install postgres-server-fedora
```

**(Fedora) Postgres initialization.** Installing Postgres on Fedora also requires you to initialize the PostgreSQL cluster and start the service. Issue the following commands as the **root** user:

```
postgresql-setup initdb
systemctl start postgresql
```

For a standalone PostgreSQL server, install the following Perl modules as the **root** Linux account:

**(Debian / Ubuntu) Installing additional Perl modules on a standalone PostgreSQL 9 server.**

```
aptitude install gcc libxml-libxml-perl libxml-libxslt-perl
cpan Business::ISBN
cpan JSON::XS
cpan Library::CallNumber::LC
cpan MARC::Record
cpan MARC::File::XML
cpan UUID::Tiny
cpan Rose::URI
```

**(Fedora) Installing additional Perl modules on a standalone PostgreSQL 9 server.**

```
yum install gcc perl-XML-LibXML perl-XML-LibXSLT perl-Business-ISBN
yum install perl-Library-CallNumber-LC perl-MARC-Record perl-MARC-Charset
yum install perl-MARC-File-XML perl-UUID-Tiny
```

You need to create a PostgreSQL superuser to create and access the database. Issue the following command as the **postgres** Linux account to create a new PostgreSQL superuser named **evergreen**. When prompted, enter the new user's password:

```
createuser -s -P evergreen
```

**Enabling connections to the PostgreSQL database.** Your PostgreSQL database may be configured by default to prevent connections, for example, it might reject attempts to connect via TCP/IP or from other servers. To enable TCP/IP connections from localhost, check your `pg_hba.conf` file, found in the `/etc/postgresql/` directory on Debian and Ubuntu, and in the `/var/lib/pgsql/data/` directory on Fedora. A simple way to enable TCP/IP connections from localhost to all databases with password authentication, which would be suitable for a test install of Evergreen on a single server, is to ensure the file contains the following entries *before* any "host ... ident" entries:

```
host    all             all             ::1/128         md5
host    all             all             127.0.0.1/32   md5
```

When you change the `pg_hba.conf` file, you will need to reload PostgreSQL to make the changes take effect. For more information on configuring connectivity to PostgreSQL, see <http://www.postgresql.org/docs/devel/static/auth-pg-hba-conf.html>

## Creating the Evergreen database and schema

Once you have created the **evergreen** PostgreSQL account, you also need to create the database and schema, and configure your configuration files to point at the database server. Issue the following command as the **root**

Linux account from inside the Evergreen source directory, replacing `<user>`, `<password>`, `<hostname>`, `<port>`, and `<dbname>` with the appropriate values for your PostgreSQL database (where `<user>` and `<password>` are for the **evergreen** PostgreSQL account you just created), and replace `<admin-user>` and `<admin-pass>` with the values you want for the **egadmin** Evergreen administrator account:

```
perl Open-ILS/src/support-scripts/eg_db_config --update-config \  
  --service all --create-database --create-schema --create-offline \  
  --user <user> --password <password> --hostname <hostname> --port <port> \  
  --database <dbname> --admin-user <admin-user> --admin-pass <admin-pass>
```

This creates the database and schema and configures all of the services in your `/openils/conf/opensrf.xml` configuration file to point to that database. It also creates the configuration files required by the Evergreen `cgi-bin` administration scripts, and sets the user name and password for the **egadmin** Evergreen administrator account to your requested values.

You can get a complete set of options for `eg_db_config` by passing the `--help` parameter.

## Loading sample data

If you add the `--load-all-sample` parameter to the `eg_db_config` command, a set of authority and bibliographic records, call numbers, copies, staff and regular users, and transactions will be loaded into your target database. This sample dataset is commonly referred to as the *concerto* sample data, and can be useful for testing out Evergreen functionality and for creating problem reports that developers can easily recreate with their own copy of the *concerto* sample data.

## Creating the database on a remote server

In a production instance of Evergreen, your PostgreSQL server should be installed on a dedicated server.

### PostgreSQL 9.1 and later

To create the database instance on a remote database server running PostgreSQL 9.1 or later, simply use the `--create-database` flag on `eg_db_config`.

## Starting Evergreen

1. As the **root** Linux account, start the `memcached` and `ejabberd` services (if they aren't already running):

```
/etc/init.d/ejabberd start  
/etc/init.d/memcached start
```

2. As the **opensrf** Linux account, start Evergreen. The `-l` flag in the following command is only necessary if you want to force Evergreen to treat the hostname as `localhost`; if you configured `opensrf.xml` using the real hostname of your machine as returned by `perl -ENet::Domain 'print Net::Domain::hostfqdn() . "\n";'`, you should not use the `-l` flag.

```
osrf_control -l --start-all
```

- If you receive the error message `bash: osrf_control: command not found`, then your environment variable `PATH` does not include the `/openils/bin` directory; this should have been set in the **opensrf** Linux account's `.bashrc` configuration file. To manually set the `PATH` variable, edit the configuration file `~/ .bashrc` as the **opensrf** Linux account and add the following line:

```
export PATH=$PATH:/openils/bin
```

3. As the **opensrf** Linux account, generate the Web files needed by the staff client and catalogue and update the organization unit proximity (you need to do this the first time you start Evergreen, and after that each time you change the library org unit configuration. ):

```
autogen.sh
```

4. As the **root** Linux account, restart the Apache Web server:

```
/etc/init.d/apache2 restart
```

If the Apache Web server was running when you started the OpenSRF services, you might not be able to successfully log in to the OPAC or staff client until the Apache Web server is restarted.

## Testing connections to Evergreen

Once you have installed and started Evergreen, test your connection to Evergreen via `srfsh`. As the **opensrf** Linux account, issue the following commands to start `srfsh` and try to log onto the Evergreen server using the **egadmin** Evergreen administrator user name and password that you set using the `eg_db_config` command:

```
/openils/bin/srfsh
srfsh% login <admin-user> <admin-pass>
```

You should see a result like:

```
Received Data: "250bf1518c7527a03249858687714376"
-----
Request Completed Successfully
Request Time in seconds: 0.045286
-----

Received Data: {
  "ilsevent":0,
  "textcode":"SUCCESS",
  "desc":" ",
  "pid":21616,
  "stacktrace":"oils_auth.c:304",
  "payload":{
    "authtoken":"e5f9827cc0f93b503a1cc66bee6bdd1a",
    "authtime":420
  }
}

-----
Request Completed Successfully
Request Time in seconds: 1.336568
-----
```

If this does not work, it's time to do some troubleshooting.

- As the **opensrf** Linux account, run the `settings-tester.pl` script to see if it finds any system configuration problems. The script is found at `Open-ILS/src/support-scripts/settings-tester.pl` in the Evergreen source tree.
- Follow the steps in the [troubleshooting guide](#).
- If you have faithfully followed the entire set of installation steps listed here, you are probably extremely close to a working system. Gather your configuration files and log files and contact the [Evergreen development mailing list](#) for assistance before making any drastic changes to your system configuration.

# Getting help

Need help installing or using Evergreen? Join the mailing lists at <http://evergreen-ils.org/communicate/mailling-lists/> or contact us on the Freenode IRC network on the #evergreen channel.

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# Chapter 10. Installing the Staff Client

## Installing on Windows

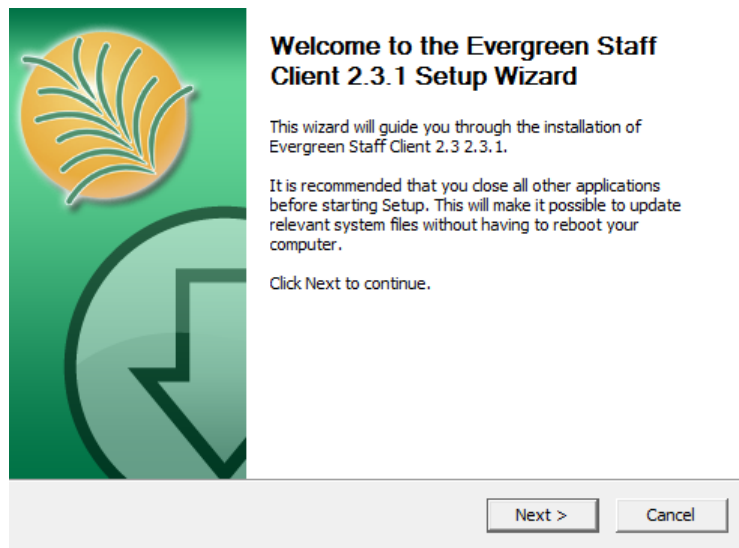
Official Evergreen releases have corresponding Windows based staff clients ready to use.

1. Download the staff client from <http://www.open-ils.org/downloads.php>.

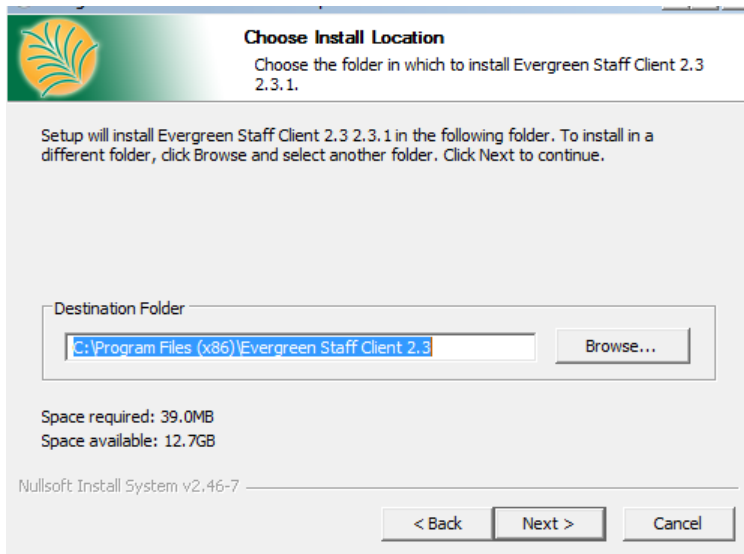


The version of your staff client will need to match the version of your Evergreen server. If you are unsure about the version of your Evergreen server, contact your system administrator.

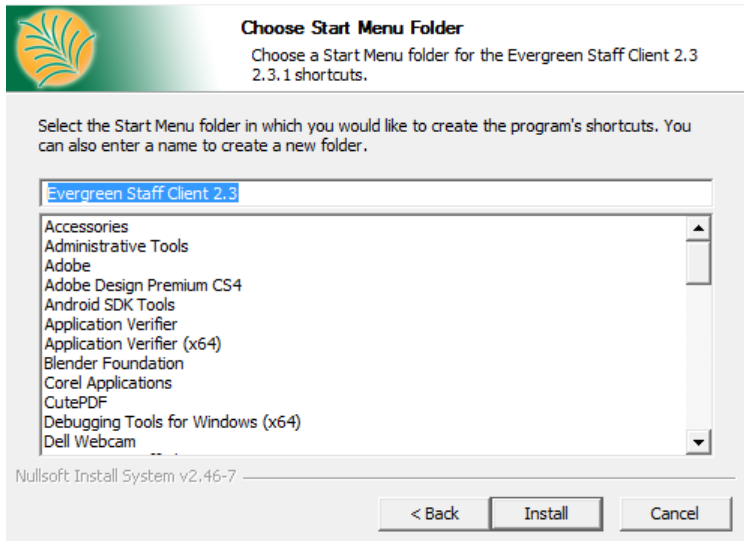
2. Click on the downloaded Evergreen setup file.
3. Click *Next* to begin installation:



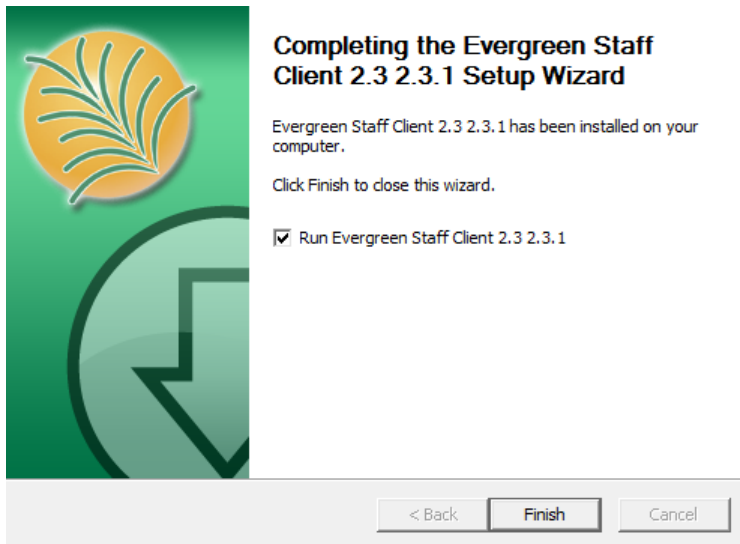
4. Click *Next* to accept destination folder.



5. Click *Install*.



6. A pop-up should appear indicating that Evergreen has been installed. Click *Finish* to complete the installation.



When you login to Evergreen from the workstation for the first time, you will also need to [register your workstation](#).

## Installing on Linux

1. On the Evergreen **server**, navigate to the `staff_client` directory inside the Evergreen source:

```
cd /path/to/Evergreen/Open-ILS/xul/staff_client
```

2. As the **root** user, build release versions of staff clients for both 32-bit and 64-bit Linux systems:

```
make rigrelease rebuild linux32-updates-client linux64-updates-client
```

This builds and copies two staff client tarballs for Linux to the `updates` directory on the Web server.

3. As the **root** user, reset the ownership of the Evergreen install directory to the **opensrf** user. For example, if your install directory is `/openils`:

```
chown -R opensrf:opensrf /openils
```

4. On your staff client workstation, download the 32-bit or 64-bit version of the staff client from your Web server at <http://hostname/updates/manualupdate.html> (where *hostname* represents the hostname of your Web server).
5. On your staff client workstation, create a directory with the name of your staff client and version.
6. Extract the tar files into that directory.
7. Within the directory, click on the `evergreen` file to start the program.

Or, you can run the program from a terminal (command line). For example, if the staff client files were extracted to a directory called `evergreen_client` in your home directory, you can run it with:

```
~/evergreen_client/evergreen
```

## Registering a Workstation

Before you can connect to Evergreen from your staff client, you will need to register your workstation when you try to login.



You will need the permissions to add workstations to your network. If you do not have these permissions, ask your system administrator for assistance.

1. When you login for the first time, a red box will appear around your workstation information on the right side of the screen.

A screenshot of a web form titled "Workstation". The form has a red border. It contains three input fields: "WS Name" with the text "workstation\_name", "Organization" with a dropdown menu showing "FENNELL", and two buttons: "Register" and "Help".

**Workstation**

WS Name

Organization

2. Create a unique workstation name or use the default computer name provided.
3. Click *Register*
4. You will now be able to log into the system.

## Removing Staff Client Preferences

### Windows

When you uninstall the Evergreen staff client code from your system, the staff client preferences and cached data are not removed from your system. This can be a problem if, for example, you have registered your workstation with the wrong library; or if you have chosen a display language (locale) that is broken and will not let you start up the client again

On Windows, you can uninstall the Evergreen staff client code using the Add/Remove Programs menu.

To remove the staff client preferences and cached data entirely on Windows, there are two directories that you must delete completely (where *<profile>* represents your user profile name):

- **C:\Documents and Settings\*<profile>*\Application Data\OpenILS**
- **C:\Documents and Settings\*<profile>*\Local Settings\Application Data\OpenILS**

You might need to change the preferences in Windows Explorer to display hidden files (Tools # Folder Options... # View).

## Linux

To remove the staff client preferences and cached data from your user account on Linux, there is one directory that you must delete completely:

```
rm -fr ~/.openils
```

# Chapter 11. Upgrading the Evergreen Server

Before upgrading, it is important to carefully plan an upgrade strategy to minimize system downtime and service interruptions. All of the steps in this chapter are to be completed from the command line.

## Software Prerequisites

- **PostgreSQL:** Version 9.1 is recommended. The minimum supported version is 9.1.
- **Linux:** Evergreen 2.6 has been tested on Debian Wheezy (7.0), Debian Squeeze (6.0), Ubuntu Precise Pangolin (12.04) and Ubuntu Lucid Lynx (10.04). If you are running an older version of these distributions, you may want to upgrade before upgrading Evergreen. For instructions on upgrading these distributions, visit the Debian or Ubuntu websites.
- **OpenSRF:** The minimum supported version of OpenSRF is 2.3.0.

In the following instructions, you are asked to perform certain steps as either the root or opensrf user.

- **Debian:** To become the root user, issue the `su` command and enter the password of the root user.
- **Ubuntu:** To become the root user, issue the `sudo su` command and enter the password of your current user.

To switch from the root user to a different user, issue the `su - [user]` command; for example, `su - opensrf`. Once you have become a non-root user, to become the root user again simply issue the `exit` command.

## Upgrade the Evergreen code

The following steps guide you through a simplistic upgrade of a production server. You must adjust these steps to accommodate your customizations such as catalogue skins.

1. Stop Evergreen and back up your data:
  - a. As root, stop the Apache web server.
  - b. As the opensrf user, stop all Evergreen and OpenSRF services:

```
osrf_control --localhost --stop-all
```
  - c. Back up the `/openils` directory.
2. Upgrade OpenSRF. Download and install the latest version of OpenSRF from the [OpenSRF download page](#).
3. As the opensrf user, download and extract Evergreen 2.6:

```
wget http://evergreen-ils.org/downloads/Evergreen-ILS-2.6.1.tar.gz
tar xzf Evergreen-ILS-2.6.1.tar.gz
```



For the latest edition of Evergreen, check the [Evergreen download page](#) and adjust upgrading instructions accordingly.

4. As the root user, install the prerequisites:

```
cd /home/opensrf/Evergreen-ILS-2.6.1
```

On the next command, replace [distribution] with one of these values for your distribution of Debian or Ubuntu:

- `debian-wheezy` for Debian Wheezy (7.0)
- `debian-squeeze` for Debian Squeeze (6.0)
- `ubuntu-precise` for Ubuntu Precise Pangolin (12.04)
- `ubuntu-lucid` for Ubuntu Lucid Lynx (10.04)

```
make -f Open-ILS/src/extras/Makefile.install [distribution]
```

5. As the opensrf user, configure and compile Evergreen:

```
cd /home/opensrf/Evergreen-ILS-2.6.1
PATH=/openils/bin:$PATH ./configure --prefix=/openils --sysconfdir=/openils/conf
make
```

These instructions assume that you have also installed OpenSRF under `/openils/`. If not, please adjust `PATH` as needed so that the Evergreen configure script can find `osrf_config`.

6. As the root user, install Evergreen:

```
cd /home/opensrf/Evergreen-ILS-2.6.1
make STAFF_CLIENT_STAMP_ID=rel_2_6_1 install
```

7. As the root user, change all files to be owned by the opensrf user and group:

```
chown -R opensrf:opensrf /openils
```

8. As the opensrf user, update the server symlink in `/openils/var/web/xul/`:

```
cd /openils/var/web/xul/
rm server
ln -sf rel_2_6_1/server server
```

9. As the opensrf user, update `opensrf_core.xml` and `opensrf.xml` by copying the new example files (`/openils/conf/opensrf_core.xml.example` and `/openils/conf/opensrf.xml`). The `-b` option creates a backup copy of the old file.

```
cp -b /openils/conf/opensrf_core.xml.example /openils/conf/opensrf_core.xml
cp -b /openils/conf/opensrf.xml.example /openils/conf/opensrf.xml
```



Copying these configuration files will remove any customizations you have made to them. Remember to redo your customizations after copying them.

10. As the opensrf user, update the configuration files:

```
cd /home/opensrf/Evergreen-ILS-2.6.1
perl Open-ILS/src/support-scripts/eg_db_config --update-config --service all \
--create-offline --database evergreen --host localhost --user evergreen --password evergreen
```

11. As the *root* user, update the Apache files:



Copying these Apache configuration files will remove any customizations you have made to them. Remember to redo your customizations after copying them. For example, if you purchased an SSL certificate, you will need to edit `eg.conf` to point to the appropriate SSL certificate files.

- a. Update `/etc/apache2/eg_startup` by copying the example from `Open-ILS/examples/apache/eg_startup`.

```
cp /home/opensrf/Evergreen-ILS-2.6.1/Open-ILS/examples/apache/eg_startup /etc/apache2/eg_startup
```

- b. Update `/etc/apache2/eg_vhost.conf` by copying the example from `Open-ILS/examples/apache/eg_vhost.conf`.

```
cp /home/opensrf/Evergreen-ILS-2.6.1/Open-ILS/examples/apache/eg_vhost.conf /etc/apache2/eg_vhost.conf
```

- c. Update `/etc/apache2/sites-available/eg.conf` by copying the example from `Open-ILS/examples/apache/eg.conf`.

```
cp /home/opensrf/Evergreen-ILS-2.6.1/Open-ILS/examples/apache/eg.conf /etc/apache2/sites-available/eg.conf
```

## Upgrade the Evergreen database schema

The upgrade of the Evergreen database schema is the lengthiest part of the upgrade process for sites with a significant amount of production data.

Before running the upgrade script against your production Evergreen database, back up your database, restore it to a test server, and run the upgrade script against the test server. This enables you to determine how long the upgrade will take and whether any local customizations present problems for the stock upgrade script that require further tailoring of the upgrade script. The backup also enables you to cleanly restore your production data if anything goes wrong during the upgrade.



Evergreen provides incremental upgrade scripts that allow you to upgrade from one minor version to the next until you have the current version of the schema. For example, if you want to upgrade from 2.5.1 to 2.6.1, you would run the following upgrade scripts:

- `2.5.1-2.5.2-upgrade-db.sql`
- `2.5.2-2.5.3-upgrade-db.sql`
- `2.5.3-2.6.0-upgrade-db.sql` (this is a major version upgrade)
- `2.6.0-2.6.1-upgrade-db.sql`

Note that you do **not** want to run additional 2.5 scripts to upgrade to the newest version of 2.5, since currently there is no automated way to upgrade from 2.5.4+ to 2.6. Only upgrade as far as necessary to reach the major version upgrade script (in this example, as far as 2.5.3).

To upgrade across multiple major versions (e.g. from 2.3.0 to 2.6.1), use the same logic to utilize the provided major version upgrade scripts. For example:

- `2.3-2.4.0-upgrade-db.sql`
- `2.3-2.4-supplemental.sh`



- (run all incremental scripts from 2.4.0 to 2.4.3)
- 2.4.3-2.5.0-upgrade-db.sql
- (run all incremental scripts from 2.5.0 to 2.5.3)
- 2.5.3-2.6.0-upgrade-db.sql
- 2.6.0-2.6.1-upgrade-db.sql



Pay attention to error output as you run the upgrade scripts. If you encounter errors that you cannot resolve yourself through additional troubleshooting, please report the errors to the [Evergreen Technical Discussion List](#).

Run the following steps (including other upgrade scripts, as noted above) as a user with the ability to connect to the database server.

```
cd /home/opensrf/Evergreen-ILS-2.6.1/Open-ILS/src/sql/Pg
psql -U evergreen -h localhost -f version-upgrade/2.5.3-2.6.0-upgrade-db.sql evergreen
```



After the `2.5.3-2.6.0-upgrade-db.sql` script finishes, you will see a note on how to reingest your bib records. You may run this after you have completed the entire upgrade and tested your system. Reingesting records may take a long time depending on the number of bib records in your system.

## Restart Evergreen and Test

1. As the `opensrf` user, start all Evergreen and OpenSRF services:

```
osrf_control --localhost --start-all
```

2. As the `opensrf` user, run `autogen` to refresh the static organizational data files:

```
cd /openils/bin
./autogen.sh
```

3. Start `srfsh` and try logging in using your Evergreen username and password:

```
/openils/bin/srfsh
srfsh% login username password
```

You should see a result like:

```
Received Data: "250bf1518c7527a03249858687714376"
-----
Request Completed Successfully
Request Time in seconds: 0.045286
-----

Received Data: {
  "ilsevent":0,
  "textcode":"SUCCESS",
  "desc":" ",
  "pid":21616,
  "stacktrace":"oils_auth.c:304",
  "payload":{
    "authtoken":"e5f9827cc0f93b503a1cc66bee6bdd1a",
    "authtime":420
  }
}

-----
Request Completed Successfully
Request Time in seconds: 1.336568
-----
```

If this does not work, it's time to do some troubleshooting.

4. As the root user, start the Apache web server.

If you encounter errors, refer to the troubleshooting section of this documentation for tips on finding solutions and seeking further assistance from the Evergreen community.

# Chapter 12. Setting Up EDI Acquisitions

## Introduction

Electronic Data Interchange (EDI) is used to exchange information between participating vendors and Evergreen. This chapter contains technical information for installation and configuration of the components necessary to run EDI Acquisitions for Evergreen.

## Installation

### Install EDI Translator

The EDI Translator is used to convert data into EDI format. It runs on localhost and listens on port 9191 by default. This is controlled via the `edi_webrick.cnf` file located in the `edi_translator` directory. It should not be necessary to edit this configuration if you install EDI Translator on the same server used for running Action/Triggers events.



If you are running Evergreen with a multi-server configuration, make sure to install EDI Translator on the same server used for Action/Trigger event generation.

### Steps for Installing

1. As the **opensrf** user, copy the EDI Translator code found in `Open-ILS/src/edi_translator` to somewhere accessible (for example, `/openils/var/edi`):

```
cp -r Open-ILS/src/edi_translator /openils/var/edi
```

2. Navigate to where you have saved the code to begin next step:

```
cd /openils/var/edi
```

3. Next, as the **root** user (or a user with sudo rights), install the dependencies, via "install.sh". This will perform some apt-get routines to install the code needed for the EDI translator to function. (Note: subversion must be installed first)

```
./install.sh
```

4. Now, we're ready to start "edi\_webrick.bash" which is the script that calls the "Ruby" code to translate EDI. This script needs to be started in order for EDI to function so please take appropriate measures to ensure this starts following reboots/upgrades/etc. As the **opensrf** user:

```
./edi_webrick.bash
```

5. You can check to see if EDI translator is running.

- Using the command "ps aux | grep edi" should show you something similar if the script is running properly:

```
root    30349  0.8  0.1  52620 10824 pts/0    S      13:04   0:00 ruby ./edi_webrick.rb
```

- To shutdown EDI Translator you can use something like pkill (assuming no other ruby processes are running on that server):

```
kill -INT $(pgrep ruby)
```

# Install EDI Scripts

The EDI scripts are "edi\_pusher.pl" and "edi\_fetcher.pl" and are used to "push" and "fetch" EDI messages for configured EDI accounts.

1. As the **opensrf** user, copy edi\_pusher.pl and edi\_fetcher.pl from Open-ILS/src/support-scripts into /openils/bin:

```
cp Open-ILS/src/support-scripts/edi_pusher.pl /openils/bin
cp Open-ILS/src/support-scripts/edi_fetcher.pl /openils/bin
```

2. Setup the edi\_pusher.pl and edi\_fetcher.pl scripts to run as cron jobs in order to regularly push and receive EDI messages.

- Add to the opensrf user's crontab the following entries:

```
10 * * * * cd /openils/bin && /usr/bin/perl ./edi_pusher.pl > /dev/null
0 1 * * * cd /openils/bin && /usr/bin/perl ./edi_fetcher.pl > /dev/null
```

- The example for edi\_pusher.pl sets the script to run at 10 minutes past the hour, every hour.
- The example for edi\_fetcher.pl sets the script to run at 1 AM every night.



You may choose to run the EDI scripts more or less frequently based on the necessary response times from your vendors.

## Configuration

### Configuring Providers

Look in Admin > Server Administration > Acquisitions > Providers

| Column               | Description/Notes   |
|----------------------|---|
| Provider Name        | A unique name to identify the provider                            |
| Code                 | A unique code to identify the provider                            |
| Owner                | The org unit who will "own" the provider.                         |
| Currency             | The currency format the provider accepts                          |
| Active               | Whether or not the Provider is "active" for use                   |
| Default Claim Policy | ??  |
| EDI Default          | The default "EDI Account" to use (see EDI Accounts Configuration) |
| Email                | The email address for the provider                                |
| Fax Phone            | A fax number for the provider                                     |
| Holdings Tag         | The holdings tag to be utilized (usually 852, for Evergreen)      |
| Phone                | A phone number for the provider                                   |
| Prepayment Required  | Whether or not prepayment is required                             |
| SAN                  | The vendor provided, org unit specific SAN code                   |
| URL                  | The vendor website  |

# Configuring EDI Accounts

Look in Admin > Server Administration > Acquisitions > EDI Accounts

| Column                | Description/Notes   |
|-----------------------|---|
| Label                 | A unique name to identify the provider  |
| Host                  | FTP/SFTP/SSH hostname - vendor assigned   |
| Username              | FTP/SFTP/SSH username - vendor assigned   |
| Password              | FTP/SFTP/SSH password - vendor assigned   |
| Account               | Vendor assigned account number associated with your organization                          |
| Owner                 | The organizational unit who owns the EDI account  |
| Last Activity         | The date of last activity for the account   |
| Provider              | This is a link to one of the "codes" in the "Providers" interface                         |
| Path                  | The path on the vendor's server where Evergreen will send it's outgoing .epo files        |
| Incoming Directory    | The path on the vendor's server where "incoming" .epo files are stored                    |
| Vendor Account Number | Vendor assigned account number.   |
| Vendor Assigned Code  | Usually a sub-account designation. Can be used with or without the Vendor Account Number. |

## Configuring Organizational Unit SAN code

Look in Admin > Server Settings > Organizational Units

This interface allows a library to configure their SAN, alongside their address, phone, etc.

## Troubleshooting

### PO JEDI Template Issues

Some libraries may run into issues with the action/trigger (PO JEDI). The template has to be modified to handle different vendor codes that may be used. For instance, if you use "ingra" instead of INGRAM this may cause a problem because they are hardcoded in the template. The following is an example of one modification that seems to work.

**Original template has:**

```
"buyer": [
  [% IF target.provider.edi_default.vendcode && (target.provider.code == 'BT' || target.provider.name.match('(
    {"id-qualifier": 91, "id": "[% target.ordering_agency.mailing_address.san _ ' ' _ target.provider.edi_default
  [%- ELSEIF target.provider.edi_default.vendcode && target.provider.code == 'INGRAM' -%]
    {"id": "[% target.ordering_agency.mailing_address.san %]"},
    {"id-qualifier": 91, "id": "[% target.provider.edi_default.vendcode %]"}
  [%- ELSE -%]
    {"id": "[% target.ordering_agency.mailing_address.san %]"}
  [%- END -%]
],
```

**Modified template has the following where it matches on provider SAN instead of code:**

```
"buyer":[
  [% IF target.provider.edi_default.vendcode && (target.provider.san == '1556150') -%]
  {"id-qualifier": 91, "id":["% target.ordering_agency.mailing_address.san _ ' ' _ target.provider.edi_default
  {"id-qualifier": 91, "id":["% target.ordering_agency.mailing_address.san _ ' ' _ target.provider.edi_default
  [%- ELSIF target.provider.edi_default.vendcode && (target.provider.san == '1697978') -%]
  {"id":["% target.ordering_agency.mailing_address.san %]},
  {"id-qualifier": 91, "id":["% target.provider.edi_default.vendcode %]}
  [%- ELSE -%]
  {"id":["% target.ordering_agency.mailing_address.san %]}
  [%- END -%]
],
```

# **Part IV. System Configuration and Customization**

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# Chapter 13. Introduction

The Evergreen system allows a free range of customizations to every aspect of the system. Use this part of the documentation to become familiar with the tools for configuring the system as well as customizing the catalog and staff client.

# Chapter 14. Describing your organization

Your Evergreen system is almost ready to go. You'll need to add each of the libraries that will be using your Evergreen system. If you're doing this for a consortium, you'll have to add your consortium as a whole, and all the libraries and branches that are members of the consortium. In this chapter, we'll talk about how to get the Evergreen system to see all your libraries, how to set each one up, and how to edit all the details of each one.

## Organization Unit Types

The term *Organization Unit Types* refers to levels in the hierarchy of your library system(s). Examples could include: All-Encompassing Consortium, Library System, Branch, Bookmobile, Sub-Branch, etc.

You can add or remove organizational unit types, and rename them as needed to match the organizational hierarchy that matches the libraries using your installation of Evergreen. Organizational unit types should never have proper names since they are only generic types.

When working with configuration, settings, and permissions, it is very important to be careful of the Organization Unit **Context Location** - this is the organizational unit to which the configuration settings are being applied. If, for example, a setting is applied at the Consortium context location, all child units will inherit that setting. If a specific branch location is selected, only that branch and its child units will have the setting applied. The levels of the hierarchy to which settings can be applied are often referred to in terms of "depth" in various configuration interfaces. In a typical hierarchy, the consortium has a depth of 0, the system is 1, the branch is 2, and any bookmobiles or sub-branches is 3.

## Create and edit Organization Unit Types

1. Open **Admin > Server Administration > Organization Types**.
2. In the left panel, expand the **Organization Unit Types** hierarchy.
3. Click on a organization type to edit the existing type or to add a new organization unit.
4. A form opens in the right panel, displaying the data for the selected organization unit.
5. Edit the fields as required and click **Save**.

To create a new dependent organization unit, click **New Child**. The new child organization unit will appear in the left panel list below the parent. Highlight the new unit and edit the data as needed, click **Save**

## Organizational Units

*Organizational Units* are the specific instances of the organization unit types that make up your library's hierarchy. These will have distinctive proper names such as Main Street Branch or Townsville Campus.

## Remove or edit default Organizational Units

After installing the Evergreen software, the default CONS, SYS1, BR1, etc., organizational units remain. These must be removed or edited to reflect actual library entities.

# Create and edit Organizational Units

1. Open **Admin > Server Administration > Organizational Units**.
2. In the left panel, expand the the Organizational Units hierarchy, select a unit.
3. A form opens in the right panel, displaying the data for the selected organizational unit.
4. To edit the existing, default organizational unit, enter system or library specific data in the form; complete all three tabs: Main Settings, Hours of Operation, Addresses.
5. Click **Save**.

To create a new dependent organizational unit, click **New Child**. The new child will appear in the hierarchy list below the parent unit. Click on the new unit and edit the data, click **Save**

## Organizational Unit data

The **Addresses** tab allows you to enter library contact information. Library Phone number, email address, and addresses are used in patron email notifications, hold slips, and transit slips. The Library address tab is broken out into four address types: Physical Address, Holds Address, Mailing Address, ILL Address.

The **Hours of Operation** tab is where you enter regular, weekly hours. Holiday and other closures are set in the **Closed Dates Editor**. Hours of operation and closed dates impact due dates and fine accrual.

## After Changing Organization Unit Data

After you change Org Unit data, you must run the autogen.sh script. This script updates the Evergreen organization tree and fieldmapper IDL. You will get unpredictable results if you don't run this after making changes.

Run this script as the **opensrf** Linux account.

```
autogen.sh
```

## Set closed dates using the Closed Dates Editor

1. Open **Admin > Local Administration > Closed Dates Editor**.
2. Select type of closure: typically Single Day or Multiple Day.
3. Click the Calendar gadget to select the All Day date or starting and ending dates.
4. Enter a Reason for closure (optional).
5. Click **Apply** to all of my libraries if your organizational unit has children units that will also be closed.
6. Click **Save**.

Now that your organizational structure is established, you can begin configuring permissions for the staff users of your Evergreen system.

# Chapter 15. Describing your people

Many different members of your staff will use your Evergreen system to perform the wide variety of tasks required of the library.

When the Evergreen installation was completed, a number of permission groups should have been automatically created. These permission groups are:

- Users
- Patrons
- Staff
- Catalogers
- Circulators
- Acquisitions
- Acquisitions Administrator
- Cataloging Administrator
- Circulation Administrator
- Local Administrator
- Serials
- System Administrator
- Global Administrator
- Data Review
- Volunteers

Each of these permission groups has a different set of permissions connected to them that allow them to do different things with the Evergreen system. Some of the permissions are the same between groups; some are different. These permissions are typically tied to one or more working location (sometimes referred to as a working organizational unit or work OU) which affects where a particular user can exercise the permissions they have been granted.

## Setting the staff user's working location

To grant a working location to a staff user in the staff client:

1. Search for the patron. Select **Search > Search for Patrons** from the top menu.
2. When you retrieve the correct patron record, select **Other > User Permission Editor** from the upper right corner. The permissions associated with this account appear in the right side of the client, with the **Working Location** list at the top of the screen.

3. The **Working Location** list displays the Organizational Units in your consortium. Select the check box for each Organization Unit where this user needs working permissions. Clear any other check boxes for Organization Units where the user no longer requires working permissions.
4. Scroll all the way to the bottom of the page and click **Save**. This user account is now ready to be used at your library.

As you scroll down the page you will come to the **Permissions** list. These are the permissions that are given through the **Permission Group** that you assigned to this user. Depending on your own permissions, you may also have the ability to grant individual permissions directly to this user.

## Comparing approaches for managing permissions

The Evergreen community uses two different approaches to deal with managing permissions for users:

- **Staff Client**

Evergreen libraries that are most comfortable using the staff client tend to manage permissions by creating different profiles for each type of user. When you create a new user, the profile you assign to the user determines their basic set of permissions. This approach requires many permission groups that contain overlapping sets of permissions: for example, you might need to create a *Student Circulator* group and a *Student Cataloger* group. Then if a new employee needs to perform both of these roles, you need to create a third *Student Cataloger / Circulator* group representing the set of all of the permissions of the first two groups.

The advantage to this approach is that you can maintain the permissions entirely within the staff client; a drawback to this approach is that it can be challenging to remember to add a new permission to all of the groups. Another drawback of this approach is that the user profile is also used to determine circulation and hold rules, so the complexity of your circulation and hold rules might increase significantly.

- **Database Access**

Evergreen libraries that are comfortable manipulating the database directly tend to manage permissions by creating permission groups that reflect discrete roles within a library. At the database level, you can make a user belong to many different permission groups, and that can simplify your permission management efforts. For example, if you create a *Student Circulator* group and a *Student Cataloger* group, and a new employee needs to perform both of these roles, you can simply assign them to both of the groups; you do not need to create an entirely new permission group in this case. An advantage of this approach is that the user profile can represent only the user's borrowing category and requires only the basic *Patrons* permissions, which can simplify your circulation and hold rules.

Permissions and profiles are not carved in stone. As the system administrator, you can change them as needed. You may set and alter the permissions for each permission group in line with what your library, or possibly your consortium, defines as the appropriate needs for each function in the library.

## Managing permissions in the staff client

In this section, we'll show you in the staff client:

- where to find the available permissions

- where to find the existing permission groups
- how to see the permissions associated with each group
- how to add or remove permissions from a group

We also provide an appendix with a listing of suggested minimum permissions for some essential groups. You can compare the existing permissions with these suggested permissions and, if any are missing, you will know how to add them.

## Where to find existing permissions and what they mean

In the staff client, in the upper right corner of the screen, click on **Admin > Server Administration > Permissions**.

The list of available permissions will appear on screen and you can scroll down through them to see permissions that are already available in your default installation of Evergreen.

There are over 500 permissions in the permission list. They appear in two columns: **Code** and **Description**. Code is the name of the permission as it appear in the Evergreen database. Description is a brief note on what the permission allows. All of the most common permissions have easily understandable descriptions.

## Where to find existing Permission Groups

In the staff client, in the upper right corner of the screen, navigate to **Admin > Server Administration > Permission Groups**.

Two panes will open on your screen. The left pane provides a tree view of existing Permission Groups. The right pane contains two tabs: Group Configuration and Group Permissions.

In the left pane, you will find a listing of the existing Permission Groups which were installed by default. Click on the + sign next to any folder to expand the tree and see the groups underneath it. You should see the Permission Groups that were listed at the beginning of this chapter. If you do not and you need them, you will have to create them.

## Adding or removing permissions from a Permission Group

First, we will remove a permission from the Staff group.

1. From the list of Permission Groups, click on **Staff**.
2. In the right pane, click on the **Group Permissions** tab. You will now see a list of permissions that this group has.
3. From the list, choose **CREATE\_CONTAINER**. This will now be highlighted.
4. Click the **Delete Selected** button. **CREATE\_CONTAINER** will be deleted from the list. The system will not ask for a confirmation. If you delete something by accident, you will have to add it back.
5. Click the **Save Changes** button.

You can select a group of individual items by holding down the *Ctrl* key and clicking on them. You can select a list of items by clicking on the first item, holding down the *Shift* key, and clicking on the last item in the list that you want to select.



Now, we will add the permission we just removed back to the Staff group.

1. From the list of Permission Groups, click on **Staff**.
2. In the right pane, click on the **Group Permissions** tab.
3. Click on the **New Mapping** button. The permission mapping dialog box will appear.
4. From the Permission drop down list, choose **CREATE\_CONTAINER**.
5. From the Depth drop down list, choose **Consortium**.
6. Click the checkbox for **Grantable**.
7. Click the **Add Mapping** button. The new permission will now appear in the Group Permissions window.
8. Click the **Save Changes** button.

If you have saved your changes and you don't see them, you may have to click the Reload button in the upper left side of the staff client screen.

## Managing role-based permission groups in the database

While the ability to assign a user to multiple permission groups has existed in Evergreen for years, a staff client interface is not currently available to facilitate the work of the Evergreen administrator. However, if you or members of your team are comfortable working directly with the Evergreen database, you can use this approach to separate the borrowing profile of your users from the permissions that you grant to staff, while minimizing the amount of overlapping permissions that you need to manage for a set of permission groups that would otherwise multiply exponentially to represent all possible combinations of staff roles.

In the following example, we create three new groups:

- a *Student* group used to determine borrowing privileges
- a *Student Cataloger* group representing a limited set of cataloging permissions appropriate for students
- a *Student Circulator* group representing a limited set of circulation permissions appropriate for students

Then we add three new users to our system: one who needs to perform some cataloging duties as a student; one who needs perform some circulation duties as a student; and one who needs to perform both cataloging and circulation duties. This section demonstrates how to add these permissions to the users at the database level.

To create the Student group, add a new row to the *permission.grp\_tree* table as a child of the *Patrons* group:

```
INSERT INTO permission.grp_tree (name, parent, usergroup, description, application_perm)
SELECT 'Students', pgt.id, TRUE, 'Student borrowers', 'group_application.user.patron.student'
FROM permission.grp_tree pgt
WHERE name = 'Patrons';
```

To create the Student Cataloger group, add a new row to the *permission.grp\_tree* table as a child of the *Staff* group:

```

INSERT INTO permission.grp_tree (name, parent, usergroup, description, application_perm)
SELECT 'Student Catalogers', pgt.id, TRUE, 'Student catalogers', 'group_application.user.staff.student_cataloger'
FROM permission.grp_tree pgt
WHERE name = 'Staff';

```

To create the Student Circulator group, add a new row to the *permission.grp\_tree* table as a child of the *Staff* group:

```

INSERT INTO permission.grp_tree (name, parent, usergroup, description, application_perm)
SELECT 'Student Circulators', pgt.id, TRUE, 'Student circulators', 'group_application.user.staff.student_circulator'
FROM permission.grp_tree pgt
WHERE name = 'Staff';

```

We want to give the Student Catalogers group the ability to work with MARC records at the consortial level, so we assign the UPDATE\_MARC, CREATE\_MARC, and IMPORT\_MARC permissions at depth 0:

```

WITH pgt AS (
  SELECT id
  FROM permission.grp_tree
  WHERE name = 'Student Catalogers'
)
INSERT INTO permission.grp_perm_map (grp, perm, depth)
SELECT pgt.id, ppl.id, 0
FROM permission.perm_list ppl, pgt
WHERE ppl.code IN ('UPDATE_MARC', 'CREATE_MARC', 'IMPORT_MARC');

```

Similarly, we want to give the Student Circulators group the ability to check out copies and record in-house uses at the system level, so we assign the COPY\_CHECKOUT and CREATE\_IN\_HOUSE\_USE permissions at depth 1 (overriding the same *Staff* permissions that were granted only at depth 2):

```

WITH pgt AS (
  SELECT id
  FROM permission.grp_tree
  WHERE name = 'Student Circulators'
) INSERT INTO permission.grp_perm_map (grp, perm, depth)
SELECT pgt.id, ppl.id, 1
FROM permission.perm_list ppl, pgt
WHERE ppl.code IN ('COPY_CHECKOUT', 'CREATE_IN_HOUSE_USE');

```

Finally, we want to add our students to the groups. The request may arrive in your inbox from the library along the lines of "Please add Mint Julep as a Student Cataloger, Bloody Caesar as a Student Circulator, and Grass Hopper as a Student Cataloger / Circulator; I've already created their accounts and given them a work organizational unit." You can translate that into the following SQL to add the users to the pertinent permission groups, adjusting for the inevitable typos in the names of the users.

First, add our Student Cataloger:

```

WITH pgt AS (
  SELECT id FROM permission.grp_tree
  WHERE name = 'Student Catalogers'
)
INSERT INTO permission.usr_grp_map (usr, grp)
SELECT au.id, pgt.id
FROM actor.usr au, pgt
WHERE first_given_name = 'Mint' AND family_name = 'Julep';

```

Next, add the Student Circulator:

```

WITH pgt AS (
  SELECT id FROM permission.grp_tree
  WHERE name = 'Student Circulators'
)
INSERT INTO permission.usr_grp_map (usr, grp)
SELECT au.id, pgt.id
FROM actor.usr au, pgt
WHERE first_given_name = 'Bloody' AND family_name = 'Caesar';

```

Finally, add the all-powerful Student Cataloger / Student Circulator:

```
WITH pgt AS (  
  SELECT id FROM permission.grp_tree  
  WHERE name IN ('Student Catalogers', 'Student Circulators')  
)  
INSERT INTO permission.usr_grp_map (usr, grp)  
SELECT au.id, pgt.id  
FROM actor.usr au, pgt  
WHERE first_given_name = 'Grass' AND family_name = 'Hopper';
```

While adopting this role-based approach might seem labour-intensive when applied to a handful of students in this example, over time it can help keep the permission profiles of your system relatively simple in comparison to the alternative approach of rapidly reproducing permission groups, overlapping permissions, and permissions granted on a one-by-one basis to individual users.

# Chapter 16. Migrating Patron Data

This section will explain the task of migrating your patron data from comma delimited files into Evergreen. It does not deal with the process of exporting from the non-Evergreen system since this process may vary depending on where you are extracting your patron records. Patron could come from an ILS or it could come from a student database in the case of academic records.

When importing records into Evergreen you will need to populate 3 tables in your Evergreen database:

- actor.usr - The main table for user data
- actor.card - Stores the barcode for users; Users can have more than 1 card but only 1 can be active at a given time;
- actor.usr\_address - Used for storing address information; A user can have more than one address.

Before following the procedures below to import patron data into Evergreen, it is a good idea to examine the fields in these tables in order to decide on a strategy for data to include in your import. It is important to understand the data types and constraints on each field.

1. Export the patron data from your existing ILS or from another source into a comma delimited file. The comma delimited file used for importing the records should use Unicode (UTF8) character encoding.
2. Create a staging table. A staging table will allow you to tweak the data before importing. Here is an example sql statement:

```
CREATE TABLE students (  
    student_id int, barcode text, last_name text, first_name text, email text,  
    address_type text, street1 text, street2 text,  
    city text, province text, country text, postal_code text, phone text, profile  
    int DEFAULT 2, ident_type int, home_ou int, claims_returned_count int DEFAULT  
    0, username text, net_access_level int DEFAULT 2, password text  
);
```



The *default* variables allow you to set default for your library or to populate required fields in Evergreen if your data includes NULL values.

The data field profile in the above SQL script refers to the user group and should be an integer referencing the id field in permission.grp\_tree. Setting this value will effect the permissions for the user. See the values in permission.grp\_tree for possibilities.

ident\_type is the identification type used for identifying users. This is a integer value referencing config.identification\_type and should match the id values of that table. The default values are 1 for Drivers License, 2 for SSN or 3 for other.

home\_ou is the home organizational unit for the user. This value needs to match the corresponding id in the actor.org\_unit table.

3. Copy records into staging table from a comma delimited file.

```
COPY students (student_id, last_name, first_name, email, address_type, street1, street2,  
    city, province, country, postal_code, phone)  
FROM '/home/opensrf/patrons.csv'  
WITH CSV HEADER;
```

The script will vary depending on the format of your patron load file (patrons.csv).

4. Formatting of some fields to fit Evergreen field formatting may be required. Here is an example of sql to adjust phone numbers in the staging table to fit the evergreen field:

```
UPDATE students phone = replace(replace(replace(rpad(substring(phone from 1 for 9), 10, '-') ||
substring(phone from 10), '(', ''), ')', ''), ' ', '-');
```

Data “massaging” will be required to fit formats used in Evergreen.

5. Insert records from the staging table into the actor.usr Evergreen table:

```
INSERT INTO actor.usr (
  profile, username, email, passwd, ident_type, ident_value, first_given_name,
  family_name, day_phone, home_ou, claims_returned_count, net_access_level)
SELECT profile, students.username, email, password, ident_type, student_id,
first_name, last_name, phone, home_ou, claims_returned_count, net_access_level
FROM students;
```

6. Insert records into actor.card from actor.usr .

```
INSERT INTO actor.card (usr, barcode)
SELECT actor.usr.id, students.barcode
FROM students
INNER JOIN actor.usr
ON students.username = actor.usr.username;
```

This assumes a one to one card patron relationship. If your patron data import has multiple cards assigned to one patron more complex import scripts may be required which look for inactive or active flags.

7. Update actor.usr.card field with actor.card.id to associate active card with the user:

```
UPDATE actor.usr
SET card = actor.card.id
FROM actor.card
WHERE actor.card.usr = actor.usr.id;
```

8. Insert records into actor.usr\_address to add address information for users:

```
INSERT INTO actor.usr_address (usr, street1, street2, city, state, country, post_code)
SELECT actor.usr.id, students.street1, students.street2, students.city, students.province,
students.country, students.postal_code
FROM students
INNER JOIN actor.usr ON students.username = actor.usr.username;
```

9. Update actor.usr.address with address id from address table.

```
UPDATE actor.usr
SET mailing_address = actor.usr_address.id, billing_address = actor.usr_address.id
FROM actor.usr_address
WHERE actor.usr.id = actor.usr_address.usr;
```

This assumes 1 address per patron. More complex scenarios may require more sophisticated SQL.

## Creating an sql Script for Importing Patrons

The procedure for importing patron can be automated with the help of an sql script. Follow these steps to create an import script:

1. Create an new file and name it import.sql

## 2. Edit the file to look similar to this:

```
BEGIN;

-- Create staging table.
CREATE TABLE students (
    student_id int, barcode text, last_name text, first_name text, email text, address_type text,
    street1 text, street2 text, city text, province text, country text, postal_code text, phone
    text, profile int, ident_type int, home_ou int, claims_returned_count int DEFAULT 0, username text,
    net_access_level int DEFAULT 2, password text
);

--Copy records from your import text file
COPY students (student_id, last_name, first_name, email, address_type, street1, street2, city, province,
country, postal_code, phone, password)
FROM '/home/opensrf/patrons.csv' WITH CSV HEADER;

--Insert records from the staging table into the actor.usr table.
INSERT INTO actor.usr (
    profile, username, email, passwd, ident_type, ident_value, first_given_name, family_name,
    day_phone, home_ou, claims_returned_count, net_access_level)
SELECT profile, students.username, email, password, ident_type, student_id, first_name,
last_name, phone, home_ou, claims_returned_count, net_access_level FROM students;

--Insert records from the staging table into the actor.usr table.
INSERT INTO actor.card (usr, barcode)
SELECT actor.usr.id, students.barcode
FROM students
    INNER JOIN actor.usr
        ON students.username = actor.usr.username;

--Update actor.usr.card field with actor.card.id to associate active card with the user:
UPDATE actor.usr
    SET card = actor.card.id
FROM actor.card
WHERE actor.card.usr = actor.usr.id;

--INSERT records INTO actor.usr_address from staging table.
INSERT INTO actor.usr_address (usr, street1, street2, city, state, country, post_code)
SELECT actor.usr.id, students.street1, students.street2, students.city, students.province,
students.country, students.postal_code
FROM students
    INNER JOIN actor.usr ON students.username = actor.usr.username;

--Update actor.usr mailing address with id from actor.usr_address table.:
UPDATE actor.usr
    SET mailing_address = actor.usr_address.id, billing_address = actor.usr_address.id
FROM actor.usr_address
WHERE actor.usr.id = actor.usr_address.usr;

COMMIT;
```

Placing the sql statements between BEGIN; and COMMIT; creates a transaction block so that if any sql statements fail, the entire process is canceled and the database is rolled back to its original state. Lines beginning with — are comments to let you you what each sql statement is doing and are not processed.

# Batch Updating Patron Data

For academic libraries, doing batch updates to add new patrons to the Evergreen database is a critical task. The above procedures and import script can be easily adapted to create an update script for importing new patrons from external databases. If the data import file contains only new patrons, then, the above procedures will work well to insert those patrons. However, if the data load contains all patrons, a second staging table and a procedure to

remove existing patrons from that second staging table may be required before importing the new patrons. Moreover, additional steps to update address information and perhaps delete inactive patrons may also be desired depending on the requirements of the institution.

After developing the scripts to import and update patrons have been created, another important task for library staff is to develop an import strategy and schedule which suits the needs of the library. This could be determined by registration dates of your institution in the case of academic libraries. It is important to balance the convenience of patron loads and the cost of processing these loads vs staff adding patrons manually.

# Chapter 17. Migrating from a legacy system

When you migrate to Evergreen, you generally want to migrate the bibliographic records and copy information that existed in your previous library system. For anything more than a few thousand records, you should import the data directly into the database rather than use the tools in the staff client. While the data that you can extract from your legacy system varies widely, this section assumes that you or members of your team have the ability to write scripts and are comfortable working with SQL to manipulate data within PostgreSQL. If so, then the following section will guide you towards a method of generating common data formats so that you can then load the data into the database in bulk.

## Making electronic resources visible in the catalog

Electronic resources generally do not have any call number or copy information associated with them, and Evergreen enables you to easily make bibliographic records visible in the public catalog within sections of the organizational unit hierarchy. For example, you can make a set of bibliographic records visible only to specific branches that have purchased licenses for the corresponding resources, or you can make records representing publicly available electronic resources visible to the entire consortium.

Therefore, to make a record visible in the public catalog, modify the records using your preferred MARC editing approach to ensure the 856 field contains the following information before loading records for electronic resources into Evergreen:

**Table 17.1. 856 field for electronic resources: indicators and subfields**

| Attribute   | Value                           | Note  |
|-------------|---------------------------------|---|
| Indicator 1 | 4                               |   |
| Indicator 2 | 0 or 1                          |   |
| Subfield u  | URL for the electronic resource |   |
| Subfield y  | Text content of the link        |   |
| Subfield z  | Public note                     | Normally displayed after the link   |
| Subfield 9  | Organizational unit short name  | The record will be visible when a search is performed specifying this organizational unit or one of its children. You can repeat this subfield as many times as you need. |

Once your electronic resource bibliographic records have the required indicators and subfields for each 856 field in the record, you can proceed to load the records using either the command-line bulk import method or the MARC Batch Importer in the staff client.



# Migrating your bibliographic records

Convert your MARC21 binary records into the MARCXML format, with one record per line. You can use the following Python script to achieve this goal; just install the *pymarc* library first, and adjust the values of the *input* and *output* variables as needed.

```
#!/usr/bin/env python
# -*- coding: utf-8 -*-
import codecs
import pymarc

input = 'records_in.mrc'
output = 'records_out.xml'

reader = pymarc.MARCReader(open(input, 'rb'), to_unicode=True)
writer = codecs.open(output, 'w', 'utf-8')
for record in reader:
    record.leader = record.leader[:9] + 'a' + record.leader[10:]
    writer.write(pymarc.record_to_xml(record) + "\n")
```

Once you have a MARCXML file with one record per line, you can load the records into your Evergreen system via a staging table in your database.

1. Connect to the PostgreSQL database using the *psql* command. For example:

```
psql -U <user-name> -h <hostname> -d <database>
```

2. Create a staging table in the database. The staging table is a temporary location for the raw data that you will load into the production table or tables. Issue the following SQL statement from the *psql* command line, adjusting the name of the table from *staging\_records\_import*, if desired:

```
CREATE TABLE staging_records_import (id BIGSERIAL, dest BIGINT, marc TEXT);
```

3. Create a function that will insert the new records into the production table and update the *dest* column of the staging table. Adjust "staging\_records\_import" to match the name of the staging table that you plan to create when you issue the following SQL statement:

```
CREATE OR REPLACE FUNCTION staging_importer() RETURNS VOID AS $$
DECLARE stage RECORD;
BEGIN
FOR stage IN SELECT * FROM staging_records_import ORDER BY id LOOP
    INSERT INTO biblio.record_entry (marc, last_xact_id) VALUES (stage.marc, 'IMPORT');
    UPDATE staging_records_import SET dest = currval('biblio.record_entry_id_seq')
    WHERE id = stage.id;
END LOOP;
END;
$$ LANGUAGE plpgsql;
```

4. Load the data from your MARCXML file into the staging table using the COPY statement, adjusting for the name of the staging table and the location of your MARCXML file:

```
COPY staging_records_import (marc) FROM '/tmp/records_out.xml';
```

5. Load the data from your staging table into the production table by invoking your staging function:

```
SELECT staging_importer();
```

When you leave out the *id* value for a *BIGSERIAL* column, the value in the column automatically increments for each new record that you add to the table.

Once you have loaded the records into your Evergreen system, you can search for some known records using the staff client to confirm that the import was successful.

# Migrating your call numbers, copies, and parts

*Holdings*, comprised of call numbers, copies, and parts, are the set of objects that enable users to locate and potentially acquire materials from your library system.

*Call numbers* connect libraries to bibliographic records. Each call number has a *label* associated with a classification scheme such as the Library of Congress or Dewey Decimal systems, and can optionally have either or both a label prefix and a label suffix. Label prefixes and suffixes do not affect the sort order of the label.

*Copies* connect call numbers to particular instances of that resource at a particular library. Each copy has a barcode and must exist in a particular copy location. Other optional attributes of copies include circulation modifier, which may affect whether that copy can circulate or for how long it can circulate, and OPAC visibility, which controls whether that particular copy should be visible in the public catalog.

*Parts* provide more granularity for copies, primarily to enable patrons to place holds on individual parts of a set of items. For example, an encyclopedia might be represented by a single bibliographic record, with a single call number representing the label for that encyclopedia at a given library, with 26 copies representing each letter of the alphabet, with each copy mapped to a different part such as *A, B, C, ... Z*.

To migrate this data into your Evergreen system, you will create another staging table in the database to hold the raw data for your materials from which the actual call numbers, copies, and parts will be generated.

Begin by connecting to the PostgreSQL database using the *psql* command. For example:

```
psql -U <user-name> -h <hostname> -d <database>
```

Create the staging materials table by issuing the following SQL statement:

```
CREATE TABLE staging_materials (  
  bibkey BIGINT, -- biblio.record_entry_id  
  callnum TEXT, -- call number label  
  callnum_prefix TEXT, -- call number prefix  
  callnum_suffix TEXT, -- call number suffix  
  callnum_class TEXT, -- classification scheme  
  create_date DATE,  
  location TEXT, -- shelving location code  
  item_type TEXT, -- circulation modifier code  
  owning_lib TEXT, -- org unit code  
  barcode TEXT, -- copy barcode  
  part TEXT  
);
```

For the purposes of this example migration of call numbers, copies, and parts, we assume that you are able to create a tab-delimited file containing values that map to the staging table properties, with one copy per line. For example, the following 5 lines demonstrate how the file could look for 5 different copies, with non-applicable attribute values represented by `\N`, and 3 of the copies connected to a single call number and bibliographic record via parts:

```
1  QA 76.76 A3 \N \N LC 2012-12-05 STACKS BOOK BR1 30007001122620 \N  
2  GV 161 V8 Ref. Juv. LC 2010-11-11 KIDS DVD BR2 30007005197073 \N  
3  AE 5 E363 1984 \N \N LC 1984-01-10 REFERENCE BOOK BR1 30007006853385 A  
3  AE 5 E363 1984 \N \N LC 1984-01-10 REFERENCE BOOK BR1 30007006853393 B  
3  AE 5 E363 1984 \N \N LC 1984-01-10 REFERENCE BOOK BR1 30007006853344 C
```

Once your holdings are in a tab-delimited format—which, for the purposes of this example, we will name *holdings.tsv*--you can import the holdings file into your staging table. Copy the contents of the holdings file into the staging table using the *COPY SQL* statement:

```
COPY staging_items (bibkey, callnum, callnum_prefix,
  callnum_suffix, callnum_class, create_date, location,
  item_type, owning_lib, barcode, part) FROM 'holdings.tsv';
```

Generate the copy locations you need to represent your holdings:

```
INSERT INTO asset.copy_location (name, owning_lib)
  SELECT DISTINCT location, 1 FROM staging_materials
  WHERE NOT EXISTS (
    SELECT 1 FROM asset.copy_location
    WHERE name = location
  );
```

Generate the circulation modifiers you need to represent your holdings:

```
INSERT INTO config.circ_modifier (code, name, description, sip2_media_type)
  SELECT DISTINCT circmod, circmod, circmod, '001'
  FROM staging_materials
  WHERE NOT EXISTS (
    SELECT 1 FROM config.circ_modifier
    WHERE circmod = code
  );
```

Generate the call number prefixes and suffixes you need to represent your holdings:

```
INSERT INTO asset.call_number_prefix (owning_lib, label)
  SELECT DISTINCT aou.id, callnum_prefix
  FROM staging_materials sm
  INNER JOIN actor.org_unit aou
    ON aou.shortname = sm.owning_lib
  WHERE NOT EXISTS (
    SELECT 1 FROM asset.call_number_prefix acnp
    WHERE callnum_prefix = acnp.label
    AND aou.id = acnp.owning_lib
  ) AND callnum_prefix IS NOT NULL;
```

```
INSERT INTO asset.call_number_suffix (owning_lib, label)
  SELECT DISTINCT aou.id, callnum_suffix
  FROM staging_materials sm
  INNER JOIN actor.org_unit aou
    ON aou.shortname = sm.owning_lib
  WHERE NOT EXISTS (
    SELECT 1 FROM asset.call_number_suffix acns
    WHERE callnum_suffix = acns.label
    AND aou.id = acns.owning_lib
  ) AND callnum_suffix IS NOT NULL;
```

Generate the call numbers for your holdings:

```
INSERT INTO asset.call_number (
  creator, editor, record, owning_lib, label, prefix, suffix, label_class
)
  SELECT DISTINCT 1, 1, bibkey, aou.id, callnum, acnp.id, acns.id,
  CASE WHEN callnum_class = 'LC' THEN 1
        WHEN callnum_class = 'DEWEY' THEN 2
  END
  FROM staging_materials sm
  INNER JOIN actor.org_unit aou
    ON aou.shortname = owning_lib
  INNER JOIN asset.call_number_prefix acnp
    ON COALESCE(acnp.label, '') = COALESCE(callnum_prefix, '')
  INNER JOIN asset.call_number_suffix acns
    ON COALESCE(acns.label, '') = COALESCE(callnum_suffix, '')
  ;
```

Generate the copies for your holdings:

```

INSERT INTO asset.copy (
  circ_lib, creator, editor, call_number, location,
  loan_duration, fine_level, barcode
)
SELECT DISTINCT aou.id, 1, 1, acn.id, acl.id, 2, 2, barcode
FROM staging_materials sm
  INNER JOIN actor.org_unit aou
    ON aou.shortname = sm.owning_lib
  INNER JOIN asset.copy_location acl
    ON acl.name = sm.location
  INNER JOIN asset.call_number acn
    ON acn.label = sm.callnum
WHERE acn.deleted IS FALSE
;

```

Generate the parts for your holdings. First, create the set of parts that are required for each record based on your staging materials table:

```

INSERT INTO biblio.monograph_part (record, label)
SELECT DISTINCT bibkey, part
FROM staging_materials sm
WHERE part IS NOT NULL AND NOT EXISTS (
  SELECT 1 FROM biblio.monograph_part bmp
  WHERE sm.part = bmp.label
    AND sm.bibkey = bmp.record
);

```

Now map the parts for each record to the specific copies that you added:

```

INSERT INTO asset.copy_part_map (target_copy, part)
SELECT DISTINCT acp.id, bmp.id
FROM staging_materials sm
  INNER JOIN asset.copy acp
    ON acp.barcode = sm.barcode
  INNER JOIN biblio.monograph_part bmp
    ON bmp.record = sm.bibkey
WHERE part IS NOT NULL
  AND part = bmp.label
  AND acp.deleted IS FALSE
  AND NOT EXISTS (
    SELECT 1 FROM asset.copy_part_map
    WHERE target_copy = acp.id
      AND part = bmp.id
  );

```

At this point, you have loaded your bibliographic records, call numbers, call number prefixes and suffixes, copies, and parts, and your records should be visible to searches in the public catalog within the appropriate organization unit scope.

# Chapter 18. Importing materials in the staff client

Evergreen exists to connect users to the materials represented by bibliographic records, call numbers, and copies — so getting these materials into your Evergreen system is vital to a successful system. There are two primary means of getting materials into Evergreen:

- The Evergreen staff client offers the **MARC Batch Importer**, which is a flexible interface primarily used for small batches of records;
- Alternately, import scripts can load data directly into the database, which is a highly flexible but much more complex method of loading materials suitable for large batches of records such as the initial migration from your legacy library system.

## Staff client batch record imports

The staff client has a utility for importing batches of bibliographic and copy records available through **Cataloging > MARC Batch Import/Export**. In addition to importing new records, this interface can be used to match incoming records to existing records in the database, add or overlay MARC fields in the existing record, and add copies to those records.

The MARC Batch Import interface may also be colloquially referred to as "Vandelay" in the Evergreen community, referring to this interface's internals in the system. You will also see this name used in several places in the editor. For instance, when you click on the **Record Match Sets**, the title on the screen will be **Vandelay Match Sets**.

## When to use the MARC Batch Importer

- When importing in batches of up to 500 to 1,000 records.
- When you need the system to match those incoming records to existing records and overlay or add fields to the existing record.
- When you need to add copies to existing records in the system.



If you are importing copies that do not have barcodes or call numbers, you must enable the *Vandelay Generate Default Barcodes* and *Vandelay Default Barcode Prefix* (*vandelay.item.barcode.prefix*) settings.

## Record Match Sets

Click the **Record Match Sets** button to identify how Evergreen should match incoming records to existing records in the system.

These record match sets can be used when importing records through the MARC Batch Importer or when importing order records through the Acquisitions Load MARC Order Records interface.

Common match points used when creating a match set include:

- MARC tag 020a (ISBN)
- MARC tag 022a (ISSN)
- MARC tag 024a (UPC)
- MARC tag 028a (Publisher number)

## Create Match Sets

1. On the **Record Match Sets** screen, click **New Match Set** to create a set of record match points. Give the set a **Name**. Assign the **Owning Library** from the dropdown list. The **Match Set Type** should remain as **biblio**. Click **Save**.
2. If you don't see your new set in the list, in the upper left corner of the staff client window, click the **Reload** button.
3. If you had to reload, click the **Record Match Sets** button to get back to that screen. Find your new set in the list and click its name. (The name will appear to be a hyperlink.) This will bring you to the **Vandelay Match Set Editor**.
4. Create an expression that will define the match points for the incoming record. You can choose from two areas to create a match: Record Attribute (MARC fixed fields) or MARC Tag and Subfield. You can use the Boolean operators AND and OR to combine these elements to create a match set.
5. When adding a Record Attribute or MARC tag/subfield, you also can enter a Match Score. The Match Score indicates the relative importance of that match point as Evergreen evaluates an incoming record against an existing record. You can enter any integer into this field. The number that you enter is only important as it relates to other match points.

Recommended practice is that you create a match score of one (1) for the least important match point and assign increasing match points to the power of 2 to working points in increasing importance. . After creating a match point, drag the completed match point under the folder with the appropriately-named Boolean folder under the Expression tree.

Your Expression: `((020 $a OR 022 $a OR 024 $a OR 028 $a))`

Add new

Working Match Point  
Choose from among the three buttons above to add a new match point.

Your Expression

- [-] AND
  - [-] OR
    - 020 \$a | Match score 2
    - 022 \$a | Match score 2
    - 024 \$a | Match score 1
    - 028 \$a | Match score 1

6. Click **Save Changes to Expression**.

## Quality Metrics

- Quality metrics provide a mechanism for Evergreen to measure the quality of records and to make importing decisions based on quality.

- Metrics are configured in the match set editor.
- Quality metrics are not required when creating a match set.
- You can use a value in a record attribute (MARC fixed fields) or a MARC tag as your quality metric.
- The encoding level record attribute can be one indicator of record quality.

| Quality | Record Attribute | Tag | Subfield | Value |
|---------|------------------|-----|----------|-------|
| 1       | enc_level        |     |          | E     |
| 2       | enc_level        |     |          | J     |
| 3       | enc_level        |     |          | 3     |
| 4       | enc_level        |     |          | 7     |
| 5       | enc_level        |     |          | 5     |
| 6       | enc_level        |     |          | M     |
| 7       | enc_level        |     |          | 2     |
| 8       | enc_level        |     |          | K     |
| 9       | enc_level        |     |          | 8     |
| 10      | enc_level        |     |          | L     |
| 11      | enc_level        |     |          | I     |
| 12      | enc_level        |     |          | 4     |
| 13      | enc_level        |     |          | 1     |
| 14      | enc_level        |     |          |       |

## Import Item Attributes

If you are importing copies with your records, you will need to map the data in your holdings tag to fields in the copy record. Click the **Import Item Attributes** button to map this information.

1. Click the **New Definition** button to create a new mapping for the holdings tag.
2. Use the **Tag** field to identify the MARC tag that contains your holdings information.
3. Add the subfields that contain specific copy information to the appropriate copy field.
4. Select the **Keep** box if Evergreen should keep this holdings tag in the record after it is imported. Otherwise, Evergreen will remove this holdings tag.
5. At a minimum, you should add a name for the definition, identify the MARC holdings tag, and add the subfields that identify the circulating library, the owning library, the call number and the barcode.

## Import Item Attribute Definitions

Context Org Unit

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|                        |   |
|------------------------|---|
| Alert Message          | <input type="text"/>  |
| Barcode                | <input type="text" value="p"/>  |
| Call Number            | <input type="text" value="j"/>  |
| Circulate              | <input and="" text()='\"circul\""/' type="text" value="[@code = \" x\"=""/> |
| Circulate As MARC Type | <input type="text"/>  |
| Circulating Library    | <input b\"][2]"="" type="text" value="[@code = \"/>                         |
| Circulation Modifier   | <input type="text" value="g"/>  |
| Copy Number            | <input type="text" value="t"/>  |
| Definition ID          | <input type="text" value="1"/>  |
| Deposit                | <input type="text"/>  |
|                        | <input type="text"/>  |

## Overlay/Merge Profiles

If Evergreen finds a match for an incoming record in the database, you need to identify which fields should be replaced, which should be preserved, and which should be added to the record. Click the **Merge/Overlay Profiles** button to create a profile that contains this information.

These overlay/merge profiles can be used when importing records through the MARC Batch Importer or when importing order records through the Acquisitions Load MARC Order Records interface.

Evergreen comes pre-installed with two default profiles:

- **Default merge** - No fields from incoming record are added to match. This profile is useful for item loads or for order record uploads.
- **Default overlay** - Incoming record will replace existing record.

You can customize the overlay/merge behavior with a new profile by clicking the **New Merge Profile** button. Available options for handling the fields include:

- **Preserve specification** - fields in the existing record that should be preserved.
- **Replace specification** - fields in existing record that should be replaced by those in the incoming record.
- **Add specification** - fields from incoming record that should be added to existing record (in addition to any already there.)
- **Remove specification** - fields that should be removed from incoming record.

You can add multiple tags to these specifications, separating each tag with a comma.

## Importing the records

After making the above configurations, you are now ready to import your records.



1. Click the **Import Records** button
2. Provide a unique name for the queue where the records will be loaded
3. Identify the match set that should be used for matching
4. If you are importing copies, identify the **Import Item Attributes** definition in the Holdings Import Profile
5. Select a record source
6. Select the overlay/merge profile that defines which fields should be replaced, added or preserved
7. Identify which records should be imported, the options are:
  - **Import Non-Matching Records** will automatically import records that have no match in the system
  - **Merge on Exact Match** will automatically import records that match on the 901c (record ID)
  - **Merge on Single Match** will automatically import records when there is only one match in the system
  - **Merge on Best Match** will automatically import records for the best match in the system; the best match will be determined by the combined total of the records match point scores

You do not need to select any of these import options at this step. You may also opt to review the records first in the import queue and then import them.

- **Best Single Match Minimum Quality Ratio** should only be changed if quality metrics were used in the match set
  - Set to 0.0 to import a record regardless of record quality
  - Set to 1.0 if the incoming record must be of equal or higher quality than the existing record to be imported
  - Set to 1.1 if the incoming record must be of higher quality than the existing record to be imported
- **Insufficient Quality Fall-Through Profile** can also be used with quality metrics. If an incoming record does not meet the standards of the minimum quality ratio, you can identify a back-up merge profile to be used for those records. For example, you may want to use the default overlay profile for high-quality records but use the default merge profile for lower quality records.

# Chapter 19. Ordering materials

Acquisitions allows you to order materials, track the expenditure of your collections funds, track invoices and set up policies for manual claiming. In this chapter, we're going to be describing how to use the most essential functions of acquisitions in the Evergreen system.

## When should libraries use acquisitions?

- When you want to track spending of your collections budget.
- When you want to use Evergreen to place orders electronically with your vendors.
- When you want to import large batches of records to quickly get your on-order titles into the system.

If your library simply wants to add on-order copies to the catalog so that patrons can view and place holds on titles that have not yet arrived, acquisitions may be more than you need. Adding those on-order records via cataloging is a simpler option that works well for this use case.

Below are the basic administrative settings to be configured to get started with acquisitions. At a minimum, a library must configure **Funding Sources**, **Funds**, and **Providers** to use acquisitions.

## Managing Funds

### Funding Sources (Required)

Funding sources allow you to specify the sources that contribute monies to your fund(s). You can create as few or as many funding sources as you need. These can be used to track exact amounts for accounts in your general ledger.

Example funding sources might be:

- A municipal allocation for your materials budget;
- A trust fund used for collections;
- A revolving account that is used to replace lost materials;
- Grant funds to be used for collections.

Funding sources are not tied to fiscal or calendar years, so you can continue to add money to the same funding source over multiple years, e.g. County Funding. Alternatively, you can name funding sources by year, e.g. County Funding 2010 and County Funding 2011, and apply credits each year to the matching source.

1. To create a funding source, select **Admin > Server Administration > Acquisitions > Funding Source**. Click the **New Funding Source** button. Give the funding source a name, an owning library, and code. You should also identify the type of currency that is used for the fund.
2. You must add money to the funding source before you can use it. Click the hyperlinked name of the funding source and then click the **Apply Credit** button. Add the amount of funds you need to add. The **Note** field is optional.

## Funds (Required)

Funds allow you to allocate credits toward specific purchases. They typically are used to track spending and purchases for specific collections. Some libraries may choose to define very broad funds for their collections (e.g. children's materials, adult materials) while others may choose to define more specific funds (e.g. adult non-fiction DVDs for BR1).

If your library does not wish to track fund accounting, you can create one large generic fund and use that fund for all of your purchases.

1. To create a fund, select **Admin > Server Administration > Acquisitions > Funds**. Click the **New Fund** button. Give the fund a name and code.
2. The **Year** can either be the fiscal or calendar year for the fund.
3. If you are a multi-branch library that will be ordering titles for multiple branches, you should select the system as the owning **Org Unit**, even if this fund will only be used for collections at a specific branch. If you are a one-branch library or if your branches do their own ordering, you can select the branch as the owning **Org Unit**.
4. Select the **Currency Type** that will be used for this fund.
5. You must select the **Active** checkbox to use the fund.
6. Enter a **Balance Stop Percent**. The balance stop percent prevents you from making purchases when only a specified amount of the fund remains. For example, if you want to spend 95 percent of your funds, leaving a five percent balance in the fund, then you would enter 95 in the field. When the fund reaches its balance stop percent, it will appear in red when you apply funds to copies.
7. Enter a **Balance Warning Percent**. The balance warning percent gives you a warning that the fund is low. You can specify any percent. For example, if you want to spend 90 percent of your funds and be warned when the fund has only 10 percent of its balance remaining, then enter 90 in the field. When the fund reaches its balance warning percent, it will appear in yellow when you apply funds to copies.
8. Check the **Propagate** box to propagate funds. When you propagate a fund, the system will create a new fund for the following fiscal year with the same parameters as your current fund. All of the settings transfer except for the year and the amount of money in the fund. Propagation occurs during the fiscal year close-out operation.
9. Check the **Rollover** box if you want to roll over remaining encumbrances and funds into the same fund next year. If you need the ability to roll over encumbrances without rolling over funds, go to the **Library Settings Editor (Admin > Local Administration > Library Settings Editor)** and set **Allow funds to be rolled over without bringing the money along** to **True**.
10. You must add money to the fund before you can begin using it. Click the hyperlinked name of the fund. Click the **Create Allocation** button. Select a **Funding Source** from which the allocation will be drawn and then enter an amount for the allocation. The **Note** field is optional.

## Fund Tags (Optional)

You can apply tags to funds so that you can group funds for easy reporting. For example, you have three funds for children's materials: Children's Board Books, Children's DVDs, and Children's CDs. Assign a fund tag of children's to each fund. When you need to report on the amount that has been spent on all children's materials, you can run a report on the fund tag to find total expenditures on children's materials rather than reporting on each individual fund.

1. To create a fund tag, select **Admin > Server Administration > Acquisitions > Fund Tags**. Click the the **New Fund Tag** button. Select a owning library and add the name for the fund tag.
2. To apply a fund tag to a fund, select **Admin > Server Administration > Acquisitions > Funds**. Click on the hyperlinked name for the fund. Click the **Tags** tab and then click the **Add Tag** button. Select the tag from the dropdown menu.

## Ordering

### Providers (Required)

Providers are the vendors from whom you order titles.

1. To add a provider record, select **Admin > Server Administration > Acquisitions > Providers**.
2. Enter information about the provider. At a minimum, you need to add a **Provider Name**, **Code**, **Owner**, and **Currency**. You also need to select the **Active** checkbox to use the provider.

### Distribution Formulas (Optional)

If you are ordering for a multi-branch library system, distribution formulas are a useful way to specify the number of copies that should be distributed to specific branches and copy locations.

1. To create a distribution formula, select **Admin > Server Administration > Acquisitions > Distribution Formulas**. Click the **New Formula** button. Enter the formula name and select the owning library. Ignore the **Skip Count** field.
2. Click **New Entry**. Select an Owing Library from the drop down menu. This indicates the branch that will receive the items.
3. Select a Shelving Location from the drop down menu.
4. In the Item Count field, enter the number of items that should be distributed to that branch and copy location. You can enter the number or use the arrows on the right side of the field.
5. Keep adding entries until the distribution formula is complete.

### Helpful acquisitions Library Settings

There are several acquisitions Library Settings available that will help with acquisitions workflow. These settings can be found at **Admin > Local Administration > Library Settings Editor**.

- Default circulation modifier - Automatically applies a default circulation modifier to all of your acquisitions copies. Useful if you use a specific circulation modifier for on-order copies.
- Default copy location - Automatically applies a default copy location (e.g. On Order) to acquisitions copies.
- Temporary barcode prefix - Applies a unique prefix to the barcode that is automatically generated during the acquisitions process.
- Temporary call number prefix - Applies a unique prefix to the start of the call number that is automatically generated during the acquisitions process.

# Preparing for order record loading

If your library is planning to upload order records in a batch, you need to add some information to your provider records so that Evergreen knows how to map the copy data contained in the order record.

1. Retrieve the record for the provider that has supplied the order records by selecting **Admin > Server Administration > Acquisitions > Providers**. Click on the hyperlinked Provider name.
2. In the top frame, add the MARC tag that contains your holdings data in the **Holdings Tag** field (this tag can also be entered at the time you create the provider record.)
3. To map the tag's subfields to the appropriate copy data, click the **Holding Subfield** tab. Click the **New Holding Subfield** button and select the copy data that you are mapping. Add the subfield that contains that data and click **Save**.

## Holding Subfield

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| ✓                        | # | Provider | Name            | Subfield |  |
|--------------------------|---|----------|-----------------|----------|--|
| <input type="checkbox"/> | 1 | bt       | quantity        | q        |  |
| <input type="checkbox"/> | 2 | bt       | estimated_price | p        |  |
| <input type="checkbox"/> | 3 | bt       | owning_lib      | b        |  |
| <input type="checkbox"/> | 4 | bt       | fund_code       | u        |  |
| <input type="checkbox"/> | 5 | bt       | copy_location   | t        |  |
| <input type="checkbox"/> | 6 | bt       | circ_modifier   | g        |  |

4. If your vendor is sending other data in a MARC tag that needs to be mapped to a field in acquisitions, you can do so by clicking the Attribute Definitions tab. As an example, if you need to import the PO Name, you could set up an attribute definition by adding an XPath similar to:

```
code => purchase_order
xpath => //*[@tag="962"]/*[@code="p"]
Is Identifier => false
```

where 962 is the holdings tag and p is the subfield that contains the PO Name.

# Preparing to send electronic orders from Evergreen

If your library wants to transmit electronic order information to a vendor, you will need to configure your server to use EDI. You need to install the EDI translator and EDI scripts on your server by following the instructions in the Evergreen 2.3 documentation. (<http://docs.evergreen-ils.org/2.3/installation.html>)

Configure your provider's EDI information by selecting **Admin > Server Administration > Acquisitions > EDI Accounts**. Give the account a name in the **Label** box.

1. **Host** is the vendor-assigned FTP/SFTP/SSH hostname.
2. **Username** is the vendor-assigned FTP/SFTP/SSH username.
3. **Password** is the vendor-assigned FTP/SFTP/SSH password.
4. **Account** This field enables you to add a supplemental password for entry to a remote system after log in has been completed. This field is optional for the ILS but may be required by your provider.

5. **Owner** is the organizational unit who owns the EDI account
6. **Last Activity** is the date of last activity for the account
7. **Provider** is a link to the codes for the Provider record.
8. **Path** is the path on the vendor's server where Evergreen will deposit its outgoing order files.
9. **Incoming Directory** is the path on the vendor's server where Evergreen will retrieve incoming order responses and invoices.
10. **Vendor Account Number** is the Vendor assigned account number.
11. **Vendor Assigned Code** is usually a sub-account designation. It can be used with or without the Vendor Account Number.

You now need to add this **EDI Account** and the **SAN** code to the provider's record.

1. Select **Admin > Server Administration > Acquisitions > Providers**.
2. Click the hyperlinked Provider name.
3. Select the account you just created in the **EDI Default** field.
4. Add the vendor-provided SAN code to the **SAN** field.

The last step is to add your library's SAN code to Evergreen.

1. Select **Admin > Server Administration > Organizational Units**.
2. Select your library from the organizational hierarchy in the left pane.
3. Click the **Addresses** tab and add your library's SAN code to the **SAN** field.

# Chapter 20. Designing your catalog

When people want to find things in your Evergreen system, they will check the catalog. In Evergreen, the catalog is made available through a web interface, called the *OPAC* (Online Public Access Catalog). In the latest versions of the Evergreen system, the OPAC is built on a set of programming modules called the Template Toolkit. You will see the OPAC sometimes referred to as the *TPAC*.

In this chapter, we'll show you how to customize the OPAC, change it from its default configuration, and make it your own.

## Configuring and customizing the public interface

The public interface is referred to as the TPAC or Template Toolkit (TT) within the Evergreen community. The template toolkit system allows you to customize the look and feel of your OPAC by editing the template pages (.tt2) files as well as the associated style sheets.

### Locating the default template files

The default URL for the TPAC on a default Evergreen system is *http://localhost/eg/opac/home* (adjust *localhost* to match your hostname or IP address).

The default template file is installed in */openils/var/templates/opac*.

You should generally avoid touching the installed default template files, unless you are contributing changes for Evergreen to adopt as a new default. Even then, while you are developing your changes, consider using template overrides rather than touching the installed templates until you are ready to commit the changes to a branch. See below for information on template overrides.

### Mapping templates to URLs

The mapping for templates to URLs is straightforward. Following are a few examples, where *<templates>* is a placeholder for one or more directories that will be searched for a match:

- *http://localhost/eg/opac/home # /openils/var/<templates>/opac/home.tt2*
- *http://localhost/eg/opac/advanced # /openils/var/<templates>/opac/advanced.tt2*
- *http://localhost/eg/opac/results # /openils/var/<templates>/opac/results.tt2*

The template files themselves can process, be wrapped by, or include other template files. For example, the *home.tt2* template currently involves a number of other template files to generate a single HTML file.

Example Template Toolkit file: *opac/home.tt2*.

```
[% PROCESS "opac/parts/header.tt2";
WRAPPER "opac/parts/base.tt2";
INCLUDE "opac/parts/topnav.tt2";
ctx.page_title = l("Home") %]
<div id="search-wrapper">
  [% INCLUDE "opac/parts/searchbar.tt2" %]
</div>
<div id="content-wrapper">
  <div id="main-content-home">
    <div class="common-full-pad"></div>
    [% INCLUDE "opac/parts/homesearch.tt2" %]
    <div class="common-full-pad"></div>
  </div>
</div>
[% END %]
```

Note that file references are relative to the top of the template directory.

## How to override template files

Overrides for template files or TPAC pages go in a directory that parallels the structure of the default templates directory. The overrides then get pulled in via the Apache configuration.

The following example demonstrates how to create a file that overrides the default "Advanced search page" (*advanced.tt2*) by adding a new *templates\_custom* directory and editing the new file in that directory.

```
bash$ mkdir -p /openils/var/templates_custom/opac
bash$ cp /openils/var/templates/opac/advanced.tt2 \
  /openils/var/templates_custom/opac/.
bash$ vim /openils/var/templates_custom/opac/advanced.tt2
```

## Configuring the custom templates directory in Apache's eg.conf

You now need to teach Apache about the new custom template directory. Edit */etc/apache2/sites-available/eg.conf* and add the following `<Location /eg>` element to each of the `<VirtualHost>` elements in which you want to include the overrides. The default Evergreen configuration includes a `VirtualHost` directive for port 80 (HTTP) and another one for port 443 (HTTPS); you probably want to edit both, unless you want the HTTP user experience to be different from the HTTPS user experience.

```
<VirtualHost *:80>
  # <snip>

  # - absorb the shared virtual host settings
  Include eg_vhost.conf
  <Location /eg>
    PerlAddVar OILSWebTemplatePath "/openils/var/templates_custom"
  </Location>

  # <snip>
</VirtualHost>
```

Finally, reload the Apache configuration to pick up the changes. You should now be able to see your change at *http://localhost/eg/opac/advanced* where *localhost* is the hostname of your Evergreen server.

## Adjusting colors for your public interface

You may adjust the colors of your public interface by editing the *colors.tt2* file. The location of this file is in */openils/var/templates/opac/parts/css/colors.tt2*. When you customize the colors of your public interface, remember to create a custom file in your custom template folder and edit the custom file and not the file located in you default template.



# Adjusting fonts in your public interface

Font sizes can be changed in the *colors.tt2* file located in */openils/var/templates/opac/parts/css/*. Again, create and edit a custom template version and not the file in the default template.

Other aspects of fonts such as the default font family can be adjusted in */openils/var/templates/opac/css/style.css.tt2*.

## Media file locations in the public interface

The media files (mostly PNG images) used by the default TPAC templates are stored in the repository in *Open-ILS/web/images/* and installed in */openils/var/web/images/*.

## Changing some text in the public interface

Out of the box, TPAC includes a number of placeholder text and links. For example, there is a set of links cleverly named Link 1, Link 2, and so on in the header and footer of every page in TPAC. Here is how to customize that for a *custom templates* skin.

To begin with, find the page(s) that contain the text in question. The simplest way to do that is with the `grep -r` command. In the following example, search for files that contain the text "Link 1":

```
bash$ grep -r "Link 1" /openils/var/templates/opac
/openils/var/templates/opac/parts/topnav_links.tt2
4:         <a href="http://example.com">[% l('Link 1') %]</a>
```

Next, copy the file into our overrides directory and edit it with vim.

Copying the links file into the overrides directory.

```
bash$ cp /openils/var/templates/opac/parts/topnav_links.tt2 \
/openils/var/templates_custom/opac/parts/topnav_links.tt2
bash$ vim /openils/var/templates_custom/opac/parts/topnav_links.tt2
```

Finally, edit the link text in *opac/parts/header.tt2*. Content of the *opac/parts/header.tt2* file.

```
<div id="gold-links-holder">
  <div id="gold-links">
    <div id="header-links">
      <a href="http://example.com">[% l('Link 1') %]</a>
      <a href="http://example.com">[% l('Link 2') %]</a>
      <a href="http://example.com">[% l('Link 3') %]</a>
      <a href="http://example.com">[% l('Link 4') %]</a>
      <a href="http://example.com">[% l('Link 5') %]</a>
    </div>
  </div>
</div>
```

For the most part, the page looks like regular HTML, but note the `[%(" ")%]` that surrounds the text of each link. The `[% ... %]` signifies a TT block, which can contain one or more TT processing instructions. `l(" ... ")`; is a function that marks text for localization (translation); a separate process can subsequently extract localized text as GNU gettext-formatted PO (Portable Object) files.

As Evergreen supports multiple languages, any customization to Evergreen's default text must use the localization function. Also, note that the localization function supports placeholders such as `[_1]`, `[_2]` in the text; these are replaced by the contents of variables passed as extra arguments to the `l()` function.

Once the link and link text has been edited to your satisfaction, load the page in a Web browser and see the live changes immediately.

## Adding and removing MARC fields from the record details display page

It is possible to add and remove the MARC fields and subfields displayed in the record details page. In order to add MARC fields to be displayed on the details page of a record, you will need to map the MARC code to variables in the `/openils/var/templates/opac/parts/misc_util.tt2` file.

For example, to map the template variable `args.pubdates` to the date of publication MARC field 260, subfield c, add these lines to `misc_util.tt2`:

```
args.pubdates = [];  
FOR sub IN xml.findnodes('//*[@tag="260"]/*[@code="c"]');  
  args.pubdates.push(sub.textContent);  
END;  
args.pubdate = (args.pubdates.size) ? args.pubdates.0 : ''
```

You will then need to edit the `/openils/var/templates/opac/parts/record/summary.tt2` file in order to get the template variable for the MARC field to display.

For example, to display the date of publication code you created in the `misc_util.tt2` file, add these lines:

```
[% IF attrs.pubdate; %]  
  <span itemprop="datePublished">[% attrs.pubdate | html; %]</span>  
[% END; %]
```

You can add any MARC field to your record details page. Moreover, this approach can also be used to display MARC fields in other pages, such as your results page.

## Setting the default physical location for your library environment

`physical_loc` is an Apache environment variable that sets the default physical location, used for setting search scopes and determining the order in which copies should be sorted. This variable is set in `/etc/apache2/sites-available/eg.conf`. The following example demonstrates the default physical location being set to library ID 104:

```
SetEnv physical_loc 104
```

## Setting a default language and adding optional languages

`OILSWebLocale` adds support for a specific language. Add this variable to the Virtual Host section in `/etc/apache2/sites-available/eg.conf`.

`OILSWebDefaultLocale` specifies which locale to display when a user lands on a page in TPAC and has not chosen a different locale from the TPAC locale picker. The following example shows the `fr_ca` locale being added to the locale picker and being set as the default locale:

```
PerlAddVar OILSWebLocale "fr_ca"  
PerlAddVar OILSWebLocale "/openils/var/data/locale/fr-CA.po"  
PerlAddVar OILSWebDefaultLocale "fr-CA"
```

Below is a table of the currently supported languages packaged with Evergreen:

| Language                 | Code  | PO file                           |
|--------------------------|-------|-----------------------------------|
| Czech                    | cs_cz | /openils/var/data/locale/cs-CZ.po |
| English - Canada         | en_ca | /openils/var/data/locale/en-CA.po |
| English - Great Britain  | en_gb | /openils/var/data/locale/en-GB.po |
| *English - United States | en_us | not applicable                    |
| French - Canada          | fr_ca | /openils/var/data/locale/fr-CA.po |
| Portuguese - Brazil      | pt_br | /openils/var/data/locale/pt_BR.po |
| Russian                  | ru_ru | /openils/var/data/locale/ru_RU.po |

\*American English is built into Evergreen so you do not need to set up this language and there are no PO files.

## Editing the formats select box options in the search interface.

You may wish to remove, rename or organize the options in the formats select box. This can be accomplished from the staff client.

1. From the staff client, navigate to **Admin > Server Administration > Marc Coded Value Maps**
2. Select *Type* from the **Record Attribute Type** select box.
3. Double click on the format type you wish to edit.

To change the label for the type, enter a value in the **Search Label** field.

To move the option to a top list separated by a dashed line from the others, check the **Is Simple Selector** check box.

To hide the type so that it does not appear in the search interface, uncheck the **OPAC Visible** checkbox.

Changes will be immediate.

## Adding and removing search fields in advanced search

It is possible to add and remove search fields on the advanced search page by editing the *opac/parts/config.tt2* file in your template directory. Look for this section of the file:

```
search.adv_config = [
  {adv_label => l("Item Type"), adv_attr => ["matttype", "item_type"]},
  {adv_label => l("Item Form"), adv_attr => "item_form"},
  {adv_label => l("Language"), adv_attr => "item_lang"},
  {adv_label => l("Audience"), adv_attr => ["audience_group", "audience"], adv_break => 1},
  {adv_label => l("Video Format"), adv_attr => "vr_format"},
  {adv_label => l("Bib Level"), adv_attr => "bib_level"},
  {adv_label => l("Literary Form"), adv_attr => "lit_form", adv_break => 1},
  {adv_label => l("Search Library"), adv_special => "lib_selector"},
  {adv_label => l("Publication Year"), adv_special => "pub_year"},
  {adv_label => l("Sort Results"), adv_special => "sort_selector"},
];
```

For example, if you delete the line:

```
{adv_label => l("Language"), adv_attr => "item_lang"},
```

the language field will no longer appear on your advanced search page. Changes will appear immediately after you save your changes.

## Changing the display of facets and facet groups

Facets can be reordered on the search results page by editing the *opac/parts/config.tt2* file in your template directory.

Edit the following section of *config.tt2*, changing the order of the facet categories according to your needs:

```
facet.display = [  
  {facet_class => 'author', facet_order => ['personal', 'corporate']},  
  {facet_class => 'subject', facet_order => ['topic']},  
  {facet_class => 'series', facet_order => ['seriestitle']},  
  {facet_class => 'subject', facet_order => ['name', 'geographic']}  
];
```

You may also change the default number of facets appearing under each category by editing the *facet.default\_display\_count* value in *config.tt2*. The default value is 5.

## Including External Content in Your Public Interface

The public interface allows you to include external services and content in your public interface. These can include book cover images, user reviews, table of contents, summaries, author notes, annotations, user suggestions, series information among other services. Some of these services are free while others require a subscription.

The following are some of the external content services which you can configure in Evergreen.

### OpenLibrary

The default install of Evergreen includes OpenLibrary book covers. The settings for this are controlled by the `<added_content>` section of */openils/conf/opensrf.xml*. Here are the key elements of this configuration:

```
<module>OpenILS::WWW::AddedContent::OpenLibrary</module>
```

This section calls the OpenLibrary perl module. If you wish to link to a different book cover service other than OpenLibrary, you must refer to the location of the corresponding Perl module. You will also need to change other settings accordingly.

```
<timeout>1</timeout>
```

Max number of seconds to wait for an added content request to return data. Data not returned within the timeout is considered a failure.

```
<retry_timeout>600</retry_timeout>
```

This setting is the amount of time to wait before we try again.

```
<max_errors>15</max_errors>
```

Maximum number of consecutive lookup errors a given process can have before added content lookups are disabled for everyone. To adjust the size of the cover image on the record details page edit the `config.tt2` file and change the value of the `record.summary.jacket_size`. The default value is "medium" and the available options are "small", "medium" and "large."

## ChiliFresh

ChiliFresh is a subscription-based service which allows book covers, reviews and social interaction of patrons to appear in your catalog. To activate ChiliFresh, you will need to open the Apache configuration file `/etc/apache2/eg_vhost.conf` and edit several lines:

1. Uncomment (remove the "#" at the beginning of the line) and add your ChiliFresh account number:

```
#SetEnv OILS_CHILIFRESH_ACCOUNT
```

1. Uncomment this line and add your ChiliFresh Profile:

```
#SetEnv OILS_CHILIFRESH_PROFILE
```

Uncomment the line indicating the location of the Evergreen JavaScript for ChiliFresh:

```
#SetEnv OILS_CHILIFRESH_URL http://chilifresh.com/on-site /js/evergreen.js
```

1. Uncomment the line indicating the secure URL for the Evergreen JavaScript :

```
#SetEnv OILS_CHILIFRESH_HTTPS_URL https://secure.chilifresh.com/on-site/js/evergreen.js
```

## Content Café

Content Café is a subscription-based service that can add jacket images, reviews, summaries, tables of contents and book details to your records.

In order to activate Content Café, edit the `/openils/conf/opensrf.xml` file and change the `<module>` element to point to the ContentCafe Perl Module:

```
<module>OpenILS::WWW::AddedContent::ContentCafe</module>
```

To adjust settings for Content Café, edit a couple of fields with the `<ContentCafe>` Section of `/openils/conf/opensrf.xml`.

Edit the `userid` and `password` elements to match the user id and password for your Content Café account.

Change the `return_behavior_on_no_jacket_image` to set the behavior of your service when an image is not available for an item. By default this value is set to T which will result in a small image with the text "No Image Available" in place of a book cover. If you set this value to 1 a 1X1 blank image will be in place of a book cover.

## Google Analytics

Google Analytics is a free service to collect statistics for your Evergreen site. In order to use Google Analytics you will first need to set up the service from the Google Analytics website at <http://www.google.com/analytics/>. To activate Google Analytics you will need to edit `config.tt2` in your template. To enable the service set the value of `google_analytics.enabled` to true and change the value of `google_analytics.code` to be the code in your Google Analytics account.

## Novelist

Novelist is a subscription-based service providing reviews and recommendation for books in your catalog. To activate your Novelist service in Evergreen, open the Apache configuration file `/etc/apache2/eg_vhost.conf` and edit the line:

```
#SetEnv OILS_NOVELIST_URL
```

You should use the URL provided by NoveList.

## RefWorks

RefWorks is a subscription-based online bibliographic management tool. If you have a RefWorks subscription, you can activate RefWorks in Evergreen by editing the `config.tt2` file located in your template directory. You will need to set the `ctx.refworks.enabled` value to `true`. You may also set the RefWorks URL by changing the `ctx.refworks.url` setting on the same file.

## SFX OpenURL Resolver

An OpenURL resolver allows you to find electronic resources and pull them into your catalog based on the ISBN or ISSN of the item. In order to use the SFX OpenURL resolver, you will need to subscribe to the Ex Libris SFX service. To activate the service in Evergreen edit the `config.tt2` file in your template. Enable the resolver by changing the value of `openurl.enabled` to `true` and change the `openurl.baseurl` setting to point to the URL of your OpenURL resolver.

## Syndetic Solutions

Syndetic Solutions is a subscription service providing book covers and other data for items in your catalog. In order to activate Syndetic, edit the `/openils/conf/opensrf.xml` file and change the `<module>` element to point to the Syndetic Perl Module:

```
<module>OpenILS::WWW::AddedContent::Syndetic</module>
```

You will also need to edit the `<userid>` element to be the user id provided to you by Syndetic.

Then, you will need to uncomment and edit the `<base_url>` element so that it points to the Syndetic service:

```
<base_url>http://syndetics.com/index.aspx</base_url>
```

For changes to be activated for your public interface you will need to restart Evergreen and Apache.

## Including Locally Hosted Content in Your Public Interface

It is also possible to show added content that has been generated locally by placing the content in a specific spot on the web server. It is possible to have local book jackets, reviews, TOC, excerpts or annotations.

## File Location and Format

By default the files will need to be placed in directories under `/openils/var/web/opac/extras/ac/` on the server(s) that run Apache.

The files need to be in specific folders depending on the format of the added content. Local Content can only be looked up based on the record ID at this time.

**URL Format:** `http://catalog/opac/extras/ac/{type}/{format}/r/{recordid}`

- **type** is one of **jacket**, **reviews**, **toc**, **excerpt** or **anotes**.
- **format** is type dependent:
  - for jacket, one of small, medium or large
  - others, one of html, xml or json ... html is the default for non-image added content
- **recordid** is the bibliographic record id (bre.id).

## Example

If you have some equipment that you are circulating such as a laptop or eBook reader and you want to add an image of the equipment that will show up in the catalog.



If you are adding jacket art for a traditional type of media (book, CD, DVD) consider adding the jacket art to the <http://openlibrary.org> project instead of hosting it locally. This would allow other libraries to benefit from your work.

Make note of the Record ID of the bib record. You can find this by looking at the URL of the bib in the catalog. <http://catalog/eg/opac/record/123>, 123 is the record ID. These images will only show up for one specific record.

Create 3 different sized versions of the image in png or jpg format.

- **Small** - 80px x 80px - named *123-s.jpg* or *123-s.png* - This is displayed in the browse display.
- **Medium** - 240px x 240px - named *123-m.jpg* or *123-m.png* - This is displayed on the summary page.
- **Large** - 400px x 399px - named *123-l.jpg* or *123-l.png* - This is displayed if the summary page image is clicked on.



The image dimensions are up to you, use what looks good in your catalog.

Next, upload the images to the evergreen server(s) that run apache, and move/rename the files to the following locations/name. You will need to create directories that are missing.

- Small - Move the file **123-s.jpg** to **/openils/var/web/opac/extras/ac/jacket/small/r/123**
- Medium - Move the file **123-m.jpg** to **/openils/var/web/opac/extras/ac/jacket/medum/r/123**.
- Large - Move the file **123-l.jpg** to **/openils/var/web/opac/extras/ac/jacket/large/r/123**.



The system doesn't need the file extension to know what kind of file it is.

Reload the bib record summary in the web catalog and your new image will display.

## Troubleshooting TPAC errors

If there is a problem such as a TT syntax error, it generally shows up as an ugly server failure page. If you check the Apache error logs, you will probably find some solid clues about the reason for the failure. For example, in the following example, the error message identifies the file in which the problem occurred as well as the relevant line numbers.

Example error message in Apache error logs:

```
bash# grep "template error" /var/log/apache2/error_log
[Tue Dec 06 02:12:09 2011] [warn] [client 127.0.0.1] egweb: template error:
file error - parse error - opac/parts/record/summary.tt2 line 112-121:
unexpected token (!=)\n [% last_cn = 0;\n          FOR copy_info IN
ctx.copies;\n          callnum = copy_info.call_number_label;\n
```



# Chapter 21. Borrowing items: who, what, for how long

Circulation policies pull together user, library, and item data to determine how library materials circulate, such as: which patrons, from what libraries can borrow what types of materials, for how long, and with what overdue fines.

Individual elements of the circulation policies are configured using specific interfaces, and should be configured prior to setting up the circulation policies.

## Data elements that affect your circulation policies

There are a few data elements which must be considered when setting up your circulation policies.

### Copy data

Several fields set via the copy editor are commonly used to affect the circulation of an item.

- **Circulation modifier** - Circulation modifiers are fields used to control circulation policies on specific groups of items. They can be added to copies during the cataloging process. New circulation modifiers can be created in the staff client by navigating to **Admin > Server Administration > Circulation Modifiers**.
- **Circulate?** flag - The circulate? flag in the copy editor can be set to False to disallow an item from circulating.
- **Reference?** flag - The reference? flag in the copy editor can also be used as a data element in circulation policies.

### Copy Locations

- To get to the Copy Locations Editor, navigate to **Admin > Local Administration > Copy Locations Editor**.
- When setting up copy locations for your library you can set an entire copy location to allow or disallow circulation.

#### Copy Locations Editor

| Create a new copy location |   |
|----------------------------|---|
| Holdable:                  | Yes <input type="radio"/> No <input checked="" type="radio"/> |
| Circulate:                 | Yes <input type="radio"/> No <input checked="" type="radio"/> |

- Copy locations can also be used as a data element in circulation policies.

### User Permission Group

- The user permission group is also commonly used as a data element in circulation policies.
- Other user data that can be used for circulation policies include the **juvenile** flag in the user record.

# Circulation Rules

**Loan duration** describes the length of time for a checkout. You can also identify the maximum renewals that can be placed on an item.

You can find Circulation Duration Rules by navigating to **Admin > Server Administration > Circulation Duration Rules**.

## Circ Duration Rules

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| ✓                        | #  | name   | max_renewals | shrt    | normal  | extended |
|--------------------------|----|--------|--------------|---------|---------|----------|
| <input type="checkbox"/> | 1  | 21d_1r | 1            | 21 days | 21 days | 21 days  |
| <input type="checkbox"/> | 2  | 21d_0r | 0            | 21 days | 21 days | 21 days  |
| <input type="checkbox"/> | 3  | 14d_1r | 1            | 14 days | 14 days | 14 days  |
| <input type="checkbox"/> | 4  | 3d_0r  | 0            | 3 days  | 3 days  | 3 days   |
| <input type="checkbox"/> | 5  | 7d_0r  | 0            | 7 days  | 7 days  | 7 days   |
| <input type="checkbox"/> | 6  | 1d_0r  | 0            | 1 day   | 1 day   | 1 day    |
| <input type="checkbox"/> | 7  | 2d_0r  | 0            | 2 days  | 2 days  | 2 days   |
| <input type="checkbox"/> | 8  | 35d_1r | 1            | 35 days | 35 days | 35 days  |
| <input type="checkbox"/> | 9  | 21d_3r | 3            | 21 days | 21 days | 21 days  |
| <input type="checkbox"/> | 10 | 7d_1r  | 1            | 7 days  | 7 days  | 7 days   |
| <input type="checkbox"/> | 11 | 2d_1r  | 1            | 2 days  | 2 days  | 2 days   |
| <input type="checkbox"/> | 12 | 14d_2r | 2            | 14 days | 14 days | 14 days  |

**Recurring fine** describes the amount assessed for daily and hourly fines as well as fines set for other regular intervals. You can also identify any grace periods that should be applied before the fine starts accruing.

You can find Recurring Fine Rules by navigating to **Admin > Server Administration > Circulation Recurring Fine Rules**.

## Recurring Fine Rules

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| ✓                        | #  | name   | recurrence_int | low   | normal | high  | grace_period |
|--------------------------|----|--------|----------------|-------|--------|-------|--------------|
| <input type="checkbox"/> | 1  | 10c_pd | 1 day          | 0.10  | 0.10   | 0.10  | 00:00:00     |
| <input type="checkbox"/> | 2  | 2d_pd  | 1 day          | 2.00  | 2.00   | 2.00  | 00:00:00     |
| <input type="checkbox"/> | 3  | 1d_pd  | 1 day          | 1.00  | 1.00   | 1.00  | 00:00:00     |
| <input type="checkbox"/> | 4  | 10d_pd | 1 day          | 10.00 | 10.00  | 10.00 | 00:00:00     |
| <input type="checkbox"/> | 5  | 50c_pd | 1 day          | 0.50  | 0.50   | 0.50  | 00:00:00     |
| <input type="checkbox"/> | 6  | 0c_pd  | 1 day          | 0.00  | 0.00   | 0.00  | 00:00:00     |
| <input type="checkbox"/> | 7  | 5c_pd  | 1 day          | 0.05  | 0.05   | 0.05  | 00:00:00     |
| <input type="checkbox"/> | 8  | 5d_pd  | 1 day          | 5.00  | 5.00   | 5.00  | 00:00:00     |
| <input type="checkbox"/> | 9  | 25c_pd | 1 day          | 0.25  | 0.25   | 0.25  | 00:00:00     |
| <input type="checkbox"/> | 10 | 25d_pd | 1 day          | 25.00 | 25.00  | 25.00 | 00:00:00     |
| <input type="checkbox"/> | 11 | 15c_pd | 1 day          | 0.15  | 0.15   | 0.15  | 00:00:00     |
| <input type="checkbox"/> | 12 | 20c_pd | 1 day          | 0.20  | 0.20   | 0.20  | 00:00:00     |
| <input type="checkbox"/> | 13 | 3d pd  | 1 day          | 3.00  | 3.00   | 3.00  | 00:00:00     |

**Max fine** describes the maximum amount of fines that will be assessed for a specific circulation. Set the **Use Percent** field to True if the maximum fine should be a percentage of the item's price.

You can find Circ Max Fine Rules by navigating to **Admin > Server Administration > Circulation Max Fine Rules**.

### Circ Max Fine Rules

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| ✓                        | #  | Rule Name     | Max Fine Amount | Is Percent |
|--------------------------|----|---------------|-----------------|------------|
| <input type="checkbox"/> | 1  | 10d_max_fine  | 10.00           | False      |
| <input type="checkbox"/> | 2  | 40d_max_fine  | 40.00           | False      |
| <input type="checkbox"/> | 3  | 5d_max_fine   | 5.00            | False      |
| <input type="checkbox"/> | 4  | 999d_max_fine | 999.00          | False      |
| <input type="checkbox"/> | 5  | 0d_max_fine   | 0.00            | False      |
| <input type="checkbox"/> | 6  | 2d_max_fine   | 2.00            | False      |
| <input type="checkbox"/> | 7  | 25d_max_fine  | 25.00           | False      |
| <input type="checkbox"/> | 8  | 100d_max_fine | 100.00          | False      |
| <input type="checkbox"/> | 9  | 30d_max_fine  | 30.00           | False      |
| <input type="checkbox"/> | 10 | 6d_max_fine   | 6.00            | False      |
| <input type="checkbox"/> | 11 | 22d_max_fine  | 22.00           | False      |
| <input type="checkbox"/> | 12 | 150d_max_fine | 150.00          | False      |
| <input type="checkbox"/> | 13 | 20d_max_fine  | 20.00           | False      |
| <input type="checkbox"/> | 14 | 15d_max_fine  | 15.00           | False      |
| <input type="checkbox"/> | 15 | 50d_max_fine  | 50.00           | False      |

These rules generally cause the most variation between organizational units.

Loan duration and recurring fine rate are designed with 3 levels: short, normal, and extended loan duration, and low, normal, and high recurring fine rate. These values are applied to specific items, when copy records are created.

When naming these rules, give them a name that clearly identifies what the rule does. This will make it easier to select the correct rule when creating your circ policies.

## Circulation Limit Sets

Circulation Limit Sets allow you to limit the maximum number of copies for different types of materials that a patron can check out at one time. Evergreen supports creating these limits based on circulation modifiers, copy locations, or circ limit groups, which allow you to create limits based on MARC data. The below instructions will allow you to create limits based on circulation modifiers.

- Configure the circulation limit sets by selecting **Admin > Local Administration > Circulation Limit Sets**.
- **Items Out** - the maximum number of items circulated to a patron at the same time.
- **Depth** - Enter the Min Depth, or the minimum depth, in the org tree that Evergreen will consider as valid circulation libraries for counting items out. The min depth is based on org unit type depths. For example, if you want the items in all of the circulating libraries in your consortium to be eligible for restriction by this limit set when it is applied to a circulation policy, then enter a zero (0) in this field.

- **Global** - Check the box adjacent to Global Flag if you want all of the org units in your consortium to be restricted by this limit set when it is applied to a circulation policy. Otherwise, Evergreen will only apply the limit to the direct ancestors and descendants of the owning library.
- **Linked Limit Groups** - add any circulation modifiers, copy locations, or circ limit groups that should be part of this limit set.

**Example** Your library (BR1) allows patrons to check out up to 5 videos at one time. This checkout limit should apply when your library's videos are checked out at any library in the consortium. Items with DVD, BLURAY, and VHS circ modifiers should be included in this maximum checkout count.

To create this limit set, you would add 5 to the **Items Out** field, 0 to the **Depth** field and select the **Global Flag**. Add the DVD, BLURAY and VHS circ modifiers to the limit set.

## Creating Circulation Policies

Once you have identified your data elements that will drive circulation policies and have created your circulation rules, you are ready to begin creating your circulation policies.

If you are managing a small number of rules, you can create and manage circulation policies in the staff client via **Admin > Local Administration > Circulation Policies**. However, if you are managing a large number of policies, it is easier to create and locate rules directly in the database by updating **config.circ\_matrix\_matchpoint**.

The **config.circ\_matrix\_matchpoint** table is central to the configuration of circulation parameters. It collects the main set of data used to determine what rules apply to any given circulation. It is useful for us to think of their columns in terms of *match* columns, those that are used to match the particulars of a given circulation transaction, and *result* columns, those that return the various parameters that are applied to the matching transaction.

- Circulation policies by checkout library or owning library?
  - If your policies should follow the rules of the library that checks out the item, select the checkout library as the **Org Unit(org\_unit)**.
  - If your policies should follow the rules of the library that owns the item, select the consortium as the **Org Unit (org\_unit)** and select the owning library as the **Copy Circ Lib (copy\_circ\_lib)**.
- Renewal policies can be created by setting **Renewals? (is\_renewal)** to True.
- You can apply the duration rules, recurring fine rules, maximum fine rules, and circulation sets created in the above sets when creating the circulation policy.

## Best practices for creating policies

- Start by replacing the default consortium-level circ policy with one that contains a majority of your libraries' duration, recurring fine, and max fine rules. This first rule will serve as a default for all materials and permission groups.
- If many libraries in your consortium have rules that differ from the default for particular materials or people, set a consortium-wide policy for that circ modifier or that permission group.
- After setting these consortium defaults, if a library has a circulation rule that differs from the default, you can then create a rule for that library. You only need to change the parameters that are different from the default parameters. The rule will inherit the values for the other parameters from that default consortium rule.

- Try to avoid unnecessary repetition.
- Try to get as much agreement as possible among the libraries in your consortium.

### Example 1

| org_unit | duration_rule  | recurring_fine_rule | max_fine_rule |
|----------|----------------|---------------------|---------------|
| CONS     | 21_day_2_renew | NONE                | NONE          |
| SYS1     | NULL           | 25_cents            | 3_dollars     |

In this example, the consortium has decided on a 21\_day\_2\_renew loan rule for general materials, i.e. books, etc. Most members do not charge overdue fines. System 1 charges 25 cents per day to a maximum of \$3.00, but otherwise uses the default circulation duration.

### Example 2

| org_unit | grp   | circ_modifier | circulate | duration_rule  | recurring_fine_rule | max_fine_rule |
|----------|-------|---------------|-----------|----------------|---------------------|---------------|
| CONS     | Users | book          | TRUE      | 21_day_2_renew | 5_cents             | 2_dollars     |
| CONS     | Users | dvd           | FALSE     | 14_day_1_renew | 25_cents            | 5_dollars     |
| CONS     | Users | music         | TRUE      | 14_day_2_renew | 10_cents            | 3_dollars     |

This example includes a basic set of fields and creates a situation where items with a circ modifier of "book" or "music" can be checked out, but "dvd" items will not circulate. The associated rules would apply during checkouts.

### Example 3

| org_unit | grp   | circ_modifier | circulate | duration_rule  | recurring_fine_rule | max_fine_rule |
|----------|-------|---------------|-----------|----------------|---------------------|---------------|
| CONS     | Users | book          | TRUE      | 21_day_2_renew | 5_cents             | 2_dollars     |
| CONS     | Users | dvd           | FALSE     | 14_day_1_renew | 25_cents            | 5_dollars     |
| SYS1     | Adult | dvd           | TRUE      | 14_day_1_renew | 25_cents            | 5_dollars     |
| CONS     | Users | music         | TRUE      | 14_day_2_renew | 10_cents            | 3_dollars     |
| SYS2     | Users | music         | FALSE     | 14_day_2_renew | 10_cents            | 3_dollars     |
| BR3      | Users | music         | TRUE      | 14_day_2_renew | 10_cents            | 3_dollars     |

This example builds on the earlier example and adds some more complicated options.

It is still true that "book" and "music" items can be checked out, while "dvd" is not circulated. However, now we have added new rules that state that "Adult" patrons of "SYS1" can circulate "dvd" items.

## Settings Relevant to Circulation

The following circulation settings, available via **Admin > Local Administration > Library Settings Editor**, can also affect your circulation duration, renewals and fine policy.

- **Auto-Extend Grace Periods** - When enabled, grace periods will auto-extend. By default this will be only when they are a full day or more and end on a closed date, though other options can alter this.
- **Auto-Extending Grace Periods extend for all closed dates** - If enabled and Grace Periods auto-extending is turned on, grace periods will extend past all closed dates they intersect, within hard-coded limits.
- **Auto-Extending Grace Periods include trailing closed dates** - If enabled and Grace Periods auto-extending is turned on, grace periods will include closed dates that directly follow the last day of the grace period.
- **Checkout auto renew age** - When an item has been checked out for at least this amount of time, an attempt to check out the item to the patron that it is already checked out to will simply renew the circulation.
- **Cap Max Fine at Item Price** - This prevents the system from charging more than the item price in overdue fines.
- **Lost Item Billing: New Min/Max Price Settings** - Patrons will be billed at least the Min Price and at most the Max price, even if the item's price is outside that range. To set a fixed price for all lost items, set min and max to the same amount.
- **Charge fines on overdue circulations when closed** - Normally, fines are not charged when a library is closed. When set to True, fines will be charged during scheduled closings and normal weekly closed days.

# Chapter 22. Hard due dates

This feature allows you to specify a specific due date within your circulation policies. This is particularly useful for academic and school libraries, who may wish to make certain items due at the end of a semester or term.



To work with hard due dates, you will need the `CREATE_CIRC_DURATION`, `UPDATE_CIRC_DURATION`, and `DELETE_CIRC_DURATION` permissions at the *consortium* level.

## Creating a hard due date

Setting up hard due dates is a two-step process. You must first create a hard due date, and then populate it with specific values.

To create a hard due date:

1. Click **Admin # Server Administration # Hard Due Date Changes**.
2. Click **New Hard Due Date**.
3. In the **Name** field, enter a name for your hard due date. Note that each hard due date can have multiple values, so it's best to use a generic name here, such as "End of semester."
4. In the **Owner** field, select the appropriate org unit for your new hard due date.
5. In the **Current Ceiling Date** field, select any value. This field is required, but its value will be overwritten in subsequent steps, so you may enter an arbitrary date here.
6. Check the **Always Use?** checkbox if you want items to only receive the due dates you specify, regardless of when they would ordinarily be due. If you leave this box unchecked, your specified due dates will serve as "ceiling" values that limit, rather than override, other circulation rules. In other words, with this box checked, items may be due only on the specified dates. With the box unchecked, items may be due *on or before* the specified dates, simply not after.
7. Click **Save**.

To add date values to your hard due date:

1. Click the hyperlinked name of the due date you just created.
2. Click on **New Hard Due Date Value**
3. In the **Ceiling Date** field, enter the specific date you would like items to be due.
4. In the **Active Date** field, enter the date you want this specific due date value to take effect.
5. Click **Save**.
6. Each Hard Due Date can include multiple values. For example, you can repeat these steps to enter specific due dates for several semesters using this same screen.

After creating a hard due date and assigning it values, you can apply it by adding it to a circulation policy.



# Chapter 23. TPac Configuration and Customization

## Template toolkit documentation

For more general information about template toolkit see: [official documentation](#).

The purpose of this chapter is to focus on the Evergreen-specific uses of Template Toolkit (*TT*) in the OPAC.

## TPAC URL

The URL for the TPAC on a default Evergreen system is <http://localhost/eg/opac/home> (adjust localhost to match your hostname or IP address, naturally!)

## Perl modules used directly by TPAC

- `Open-ILS/src/perlmods/lib/OpenILS/WWW/EGCatLoader.pm`
- `Open-ILS/src/perlmods/lib/OpenILS/WWW/EGCatLoader/Account.pm`
- `Open-ILS/src/perlmods/lib/OpenILS/WWW/EGCatLoader/Container.pm`
- `Open-ILS/src/perlmods/lib/OpenILS/WWW/EGCatLoader/Record.pm`
- `Open-ILS/src/perlmods/lib/OpenILS/WWW/EGCatLoader/Search.pm`
- `Open-ILS/src/perlmods/lib/OpenILS/WWW/EGCatLoader/Util.pm`

## Default templates

The source template files are found in `Open-ILS/src/templates/opac`.

These template files are installed in `/openils/var/templates/opac`.

**NOTE.** You should generally avoid touching the installed default template files, unless you are contributing changes that you want Evergreen to adopt as a new default. Even then, while you are developing your changes, consider using template overrides rather than touching the installed templates until you are ready to commit the changes to a branch. See below for information on template overrides.

## Apache configuration files

The base Evergreen configuration file on Debian-based systems can be found in `/etc/apache2/sites-enabled/eg.conf`. This file defines the basic virtual host configuration for Evergreen (hostnames and



ports), then single-sources the bulk of the configuration for each virtual host by including `/etc/apache2/eg_vhost.conf`.

## TPAC CSS and media files

The CSS files used by the default TPAC templates are stored in the repo in `Open-ILS/web/css/skin/default/opac/` and installed in `/openils/var/web/css/skin/default/opac/`.

The media files—mostly PNG images—used by the default TPAC templates are stored in the repo in `Open-ILS/web/images/` and installed in `/openils/var/web/images/`.

## Mapping templates to URLs

The mapping for templates to URLs is straightforward. Following are a few examples, where `<templates>` is a placeholder for one or more directories that will be searched for a match:

- `http://localhost/eg/opac/home # /openils/var/<templates>/opac/home.tt2`
- `http://localhost/eg/opac/advanced # /openils/var/<templates>/opac/advanced.tt2`
- `http://localhost/eg/opac/results # /openils/var/<templates>/opac/results.tt2`

The template files themselves can process, be wrapped by, or include other template files. For example, the `home.tt2` template currently involves a number of other template files to generate a single HTML file:

### Example Template Toolkit file: `opac/home.tt2`.

```
[% PROCESS "opac/parts/header.tt2";
WRAPPER "opac/parts/base.tt2";
INCLUDE "opac/parts/topnav.tt2";
ctx.page_title = l("Home") %]
<div id="search-wrapper">
  [% INCLUDE "opac/parts/searchbar.tt2" %]
</div>
<div id="content-wrapper">
  <div id="main-content-home">
    <div class="common-full-pad"></div>
    [% INCLUDE "opac/parts/homesearch.tt2" %]
    <div class="common-full-pad"></div>
  </div>
</div>
[% END %]
```

We will dissect this example in some more detail later, but the important thing to note is that the file references are relative to the top of the template directory.

## How to override templates

Overrides for templates go in a directory that parallels the structure of the default templates directory. The overrides then get pulled in via the Apache configuration.

In the following example, we demonstrate how to create a file that overrides the default "Advanced search page" (`advanced.tt2`) by adding a new templates directory and editing the new file in that directory.

## Adding an override for the Advanced search page (example).

```
bash$ mkdir -p /openils/var/templates_custom/opac
bash$ cp /openils/var/templates/opac/advanced.tt2 \
    /openils/var/templates_custom/opac/.
bash$ vim /openils/var/templates_custom/opac/advanced.tt2
```

We now need to teach Apache about the new templates directory. Open `eg.conf` and add the following `<Location /eg>` element to each of the `<VirtualHost>` elements in which you want to include the overrides. The default Evergreen configuration includes a `VirtualHost` directive for port 80 (HTTP) and another one for port 443 (HTTPS); you probably want to edit both, unless you want the HTTP user experience to be different from the HTTPS user experience.

## Configuring the custom templates directory in Apache's `eg.conf`.

```
<VirtualHost *:80>
  # <snip>

  # - absorb the shared virtual host settings
  Include eg_vhost.conf
  <Location /eg>
    PerlAddVar OILSWebTemplatePath "/openils/var/templates_algoma"
  </Location>

  # <snip>
</VirtualHost>
```

Finally, reload the Apache configuration to pick up the changes:

## Reloading the Apache configuration.

```
bash# /etc/init.d/apache2 reload
```

You should now be able to see your change at <http://localhost/eg/opac/advanced>

# Defining multiple layers of overrides

You can define multiple layers of overrides, so if you want every library in your consortium to have the same basic customizations, and then apply library-specific customizations, you can define two template directories for each library.

In the following example, we define the `template_CONS` directory as the set of customizations to apply to all libraries, and `template_BR#` as the set of customizations to apply to library BR1 and BR2.

As the consortial customizations apply to all libraries, we can add the extra template directory directly to `eg_vhost.conf`:

## Apache configuration for all libraries (`eg_vhost.conf`).

```
# Templates will be loaded from the following paths in reverse order.
PerlAddVar OILSWebTemplatePath "/openils/var/templates"
PerlAddVar OILSWebTemplatePath "/openils/var/templates_CONS"
```

Then we define a virtual host for each library to add the second layer of customized templates on a per-library basis. Note that for the sake of brevity we only show the configuration for port 80.

## Apache configuration for each virtual host (`eg.conf`).

```

<VirtualHost *:80>
  ServerName br1.concat.ca
  DocumentRoot /openils/var/web/
  DirectoryIndex index.xml index.html index.xhtml
  Include eg_vhost.conf
  <Location /eg>
    PerlAddVar OILSWebTemplatePath "/openils/var/templates_BR1"
  </Location>
</VirtualHost>

<VirtualHost *:80>
  ServerName br2.concat.ca
  DocumentRoot /openils/var/web/
  DirectoryIndex index.xml index.html index.xhtml
  Include eg_vhost.conf
  <Location /eg>
    PerlAddVar OILSWebTemplatePath "/openils/var/templates_BR2"
  </Location>
</VirtualHost>

```

## Changing some text in the TPAC

Out of the box, the TPAC includes a number of placeholder text and links. For example, there is a set of links cleverly named *Link 1*, *Link 2*, and so on in the header and footer of every page in the TPAC. Let's customize that for our `templates_BR1` skin.

To begin with, we need to find the page(s) that contain the text in question. The simplest way to do that is with the handy utility `ack`, which is much like `grep` but with built-in recursion and other tricks. On Debian-based systems, the command is `ack-grep` as `ack` conflicts with an existing utility. In the following example, we search for files that contain the text "Link 1":

### Searching for text matching "Link 1".

```

bash$ ack-grep "Link 1" /openils/var/templates/opac
/openils/var/templates/opac/parts/topnav_links.tt2
4:      <a href="http://example.com">[% l('Link 1') %]</a>

```

Next, we copy the file into our overrides directory and edit it with `vim`:

### Copying the links file into the overrides directory.

```

bash$ cp /openils/var/templates/opac/parts/topnav_links.tt2 \
/openils/var/templates_BR1/opac/parts/topnav_links.tt2
bash$ vim /openils/var/templates_BR1/opac/parts/topnav_links.tt2

```

Finally, we edit the link text in `opac/parts/header.tt2`.

### Content of the `opac/parts/header.tt2` file.

```

<div id="gold-links-holder">
  <div id="gold-links">
    <div id="header-links">
      <a href="http://example.com">[% l('Link 1') %]</a>
      <a href="http://example.com">[% l('Link 2') %]</a>
      <a href="http://example.com">[% l('Link 3') %]</a>
      <a href="http://example.com">[% l('Link 4') %]</a>
      <a href="http://example.com">[% l('Link 5') %]</a>
    </div>
  </div>
</div>

```

For the most part, the page looks like regular HTML, but note the `[%_( " " )%]` that surrounds the text of each link. The `[% . . . %]` signifies a TT block, which can contain one or more TT processing instructions. `l( " . . .`

" ) ; is a function that marks text for localization (translation); a separate process can subsequently extract localized text as GNU gettext-formatted PO files.

**NOTE.** As Evergreen supports multiple languages, any customizations to Evergreen's default text must use the localization function. Also, note that the localization function supports placeholders such as [ \_1 ], [ \_2 ] in the text; these are replaced by the contents of variables passed as extra arguments to the l ( ) function.

Once we have edited the link and link text to our satisfaction, we can load the page in our Web browser and see the live changes immediately (assuming we are looking at the BR1 overrides, of course).

## Troubleshooting

If there is a problem such as a TT syntax error, it generally shows up as an ugly server failure page. If you check the Apache error logs, you will probably find some solid clues about the reason for the failure. For example, in the following example the error message identifies the file in which the problem occurred as well as the relevant line numbers:

### Example error message in Apache error logs.

```
bash# grep "template error" /var/log/apache2/error_log
[Tue Dec 06 02:12:09 2011] [warn] [client 127.0.0.1] egweb: template error:
  file error - parse error - opac/parts/record/summary.tt2 line 112-121:
  unexpected token (!=)\n [% last_cn = 0;\n          FOR copy_info IN
  ctx.copies;\n          callnum = copy_info.call_number_label;\n
```

# Chapter 24. Creating a New Skin: the Bare Minimum

When you adopt the TPAC as your catalog, you must create a new skin. This involves a combination of overriding template files and setting Apache directives to control the look and feel of your customized TPAC.

## Apache directives

There are a few Apache directives and environment variables of note for customizing TPAC behavior. These directives should generally live within a `<vhost>` section of your Apache configuration.

- `OILSWebDefaultLocale` specifies which locale to display when a user lands on a page in the TPAC and has not chosen a different locale from the TPAC locale picker. The following example shows the `fr_ca` locale being added to the locale picker and being set as the default locale:

```
PerlAddVar OILSWebLocale "fr_ca"  
PerlAddVar OILSWebLocale "/openils/var/data/locale/fr-CA.po"  
PerlAddVar OILSWebDefaultLocale "fr-CA"
```

- `physical_loc` is an Apache environment variable that sets the default physical location, used for setting search scopes and determining the order in which copies should be sorted. The following example demonstrates the default physical location being set to library ID 104:

```
SetEnv physical_loc 104
```

## Customizing templates

When you install Evergreen, the TPAC templates include many placeholder images, text, and links. You should override most of these to provide your users with a custom experience that matches your library. Following is a list of templates that include placeholder images, text, or links that you should override.



All paths are relative to `/openils/var/templates/opac`

- `parts/config.tt2`: contains many configuration settings that affect the behavior of the TPAC, including:
  - hiding the **Place Hold** button for available items
  - enabling RefWorks support for citation management
  - adding OpenURL resolution for electronic resources
  - enabling Google Analytics tracking for your TPAC
  - displaying the "Forgot your password?" prompt
  - controlling the size of cover art on the record details page
  - defining which facets to display, and in which order

- controlling basic and advanced search options
- `parts/footer.tt2` and `parts/topnav_links.tt2`: contains customizable links. Defaults like *Link 1* will not mean much to your users!
- `parts/homesearch.tt2`: holds the large Evergreen logo on the home page of the TPAC. Substitute your library's logo, or if you are adventurous, create a "most recently added items" carousel... and then share your customization with the Evergreen community.
- `parts/topnav_logo.tt2`: holds the small Evergreen logo that appears on the top left of every page in the TPAC. You will also want to remove or change the target of the link that wraps the logo and leads to the [Evergreen site](#).
- `parts/login/form.tt2`: contains some assumptions about terminology and examples that you might prefer to change to be more consistent with your own site's existing practices. For example, you may not use *PIN* at your library because you want to encourage users to use a password that is more secure than a four-digit number.
- `parts/login/help.tt2`: contains links that point to <http://example.com>, images with text on them (which is not an acceptable practice for accessibility reasons), and promises of answers to frequently asked questions that might not exist at your site.
- `parts/login/password_hint.tt2`: contains a hint about your users' password on first login that is misleading if your library does not set the initial password for an account to the last four digits of the phone number associated with the account.
- `parts/myopac/main_refund_policy.tt2`: describes the policy for refunds for your library.
- `parts/myopac/prefs_hints.tt2`: suggests that users should have a valid email on file so they can receive courtesy and overdue notices. If your library does not send out email notices, you should edit this to avoid misleading your users.
- `parts/css/fonts.tt2`: defines the font sizes for the TPAC in terms of one base font size, and all other sizes derived from that in percentages. The default is 12 pixels, but [some design sites](#) strongly suggest a base font size of 16 pixels. Perhaps you want to try *1em* as a base to respect your users' preferences. You only need to change one number in this file if you want to experiment with different options for your users.
- `parts/css/colors.tt2`: chances are your library's official colors do not match Evergreen's wall of dark green. This file defines the colors in use in the standard Evergreen template. In theory you should be able to change just a few colors and everything will work, but in practice you will need to experiment to avoid light-gray-on-white low-contrast combinations.

# Chapter 25. Auto Suggest in Catalog Search

The auto suggest feature suggestions for completing search terms as the user enters his search query. Ten suggestions are the default, but the number of suggestions is configurable at the database level. Scroll through suggestions with your mouse, or use the arrow keys to scroll through the suggestions. Select a suggestion to view records that are linked to this suggestion. This feature is not turned on by default. You must turn it on in the Admin module.

## Enabling this Feature

1. To enable this feature, click **Admin # Server Administration # Global Flags**.
2. Scroll down to item 10, OPAC.
3. Double click anywhere in the row to edit the fields.
4. Check the box adjacent to **Enabled** to turn on the feature.
5. The **Value** field is optional. If you checked **Enabled** in step 4, and you leave this field empty, then Evergreen will only suggest searches for which there are any corresponding MARC records.

note: If you checked **Enabled** in step 4, and you enter the string, **opac\_visible**, into this field, then Evergreen will suggest searches for which there are matching MARC records with copies within your search scope. For example, it will suggest MARC records with copies at your branch.

6. Click **Save**.

**Global Flags**  
[Back](#) [Next](#)

| #  | Label  | Enabled | Value        |
|----|--|---------|--------------|
| 5  | Cat: Use Internal ID for TCN Value   | True    |              |
| 6  | Historical Circulation Retention Age   | True    |              |
| 7  | Historical Circulations per Copy   | True    |              |
| 8  | Cat: Maintain 001/003/035 according to the MARC21 specification  | True    |              |
| 9  | Circ: Use original circulation library on opac renewal instead of user home library  | False   |              |
| 10 | OPAC: Show auto-completing suggestions dialog under basic search box (put 'opac_visible' into the value field to limit suggestions to OPAC-visible items, or blank the field for a possible performance improvement) | True    | opac_visible |
| 11 | Org Units Do Not Inherit Visibility  | False   |              |

## Using this Feature

1. Enter search terms into the basic search field. Evergreen will automatically suggest search terms.
2. Select a suggestion to view records that are linked to this suggestion.

Search the Catalog [Advanced Search](#)

Search All Formats  for

- Concertos (**Piano**)  
Topic Subject (Subject)
- Concertos, **piano**  
Uniform Title (Title)
- Dances (**Piano**)  
Topic Subject (Subject)
- Piano** music  
Uniform Title (Title)
- Piano** music  
Topic Subject (Subject)
- Sonatas (**Piano**)  
Topic Subject (Subject)
- Variations (**Piano**)

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# Chapter 26. Authentication Proxy

To support integration of Evergreen with organizational authentication systems, and to reduce the proliferation of user names and passwords, Evergreen offers a service called `open-ils.auth_proxy`. If you enable the service, `open-ils.auth_proxy` supports different authentication mechanisms that implement the authenticator method. You can define a chain of these authentication mechanisms to be tried in order within the `<authenticators>` element of the `opensrf.xml` configuration file, with the option of falling back to the native mode that uses Evergreen's internal method of password authentication.

This service only provides authentication. There is no support for automatic provisioning of accounts. To authenticate using any authentication system, the user account must first be defined in the Evergreen database. The user will be authenticated based on the Evergreen username and must match the user's ID on the authentication system.

In order to activate Authentication Proxy, the Evergreen system administrator will need to complete the following steps:

## 1. Edit `opensrf.xml`.

- a. Set the `open-ils.auth_proxy` app settings `enabled` tag to `true`
- b. Add the **authenticator** to the list of authenticators or edit the existing example authenticator:

```
<authenticator>
  <name>ldap</name>
  <module>OpenILS::Application::AuthProxy::LDAP_Auth</module>
  <hostname>name.domain.com</hostname>
  <basedn>ou=people,dc=domain,dc=com</basedn>
  <authid>cn=username,ou=specials,dc=domain,dc=com</authid>
  <id_attr>uid</id_attr>
  <password>my_ldap_password_for_authid_user</password>
  <login_types>
    <type>staff</type>
    <type>opac</type>
  </login_types>
  <org_units>
    <unit>103</unit>
    <unit>104</unit>
  </org_units>
</authenticator>
```

- **name** : Used to identify each authenticator.
- **module** : References to the perl module used by Evergreen to process the request.
- **hostname** : Hostname of the authentication server.
- **basedn** : Location of the data on your authentication server used to authenticate users.
- **authid** : Administrator ID information used to connect to the Authentication server.
- **id\_attr** : Field name in the authenticator matching the username in the Evergreen database.

- **password** : Administrator password used to connect to the authentication server. Password for the **authid**.
- **login\_types** : Specifies which types of logins will use this authenticator. This might be useful if staff use a different LDAP directory than general users.
- **org\_units** : Specifies which org units will use the authenticator. This is useful in a consortium environment where libraries will use separate authentication systems.

2. Restart Evergreen and Apache to activate configuration changes.

# Chapter 27. Kid's OPAC Configuration

## Configuration

### Apache

The KPAC is already included and ready to be used with new Evergreen installs. So you only need to change the apache config if you need to change template locations or if you want to use a different **kpac.xml** config file. The defaults for the KPAC are set in **/etc/apache2/eg\_vhosts.conf**.

```
<Location /eg/kpac>
    PerlSetVar OILSWebContextLoader "OpenILS::WWW::EGKPacLoader"
    PerlSetVar KPacConfigFile "/openils/conf/kpac.xml.example"
</Location>
```

### XML Configuration File

- The XML configuration file defines the layout of the kid's OPAC.
- It is read with each restart/reload of the Apache web server.
- The file lives by default at `/openils/conf/kpac.xml.example`
- There are two top-level elements: `<pages>` and `<layout>`.
- The layout defines the owning org unit and the start page, both by ID.
- At runtime, the layout is determined by the context org unit. If no configuration is defined for the context org unit, the layout for the closest ancestor is used.

```
<layout owner="1" page="1"/>
```

- The pages section is a container for `<page>` elements.
- Each page defines an ID, the number of columns to display for the page, the page name, and an icon.

```
<page id="1" columns="5" name="Home" img="/images/home.jpg">
```

- Each page is a container of cells
- Each cell defines
  - type (topic, search, link)
  - name
  - icon
  - content
- The content for type="topic" cells is the ID of the page this topic jumps to. The name and img for the referenced page is used as the display content.

```
<cell type="topic">12</cell>
```

- The content for type="search" cells is the search query. The name and img are used for the display content.

```
<cell name="Piano" img="category.png" type="search">su:piano</cell>
```

- The content for type="link" cells is the URL. The name and img are used for the display content.

```
<cell name="Clarinet" img="category.png"  
  type="link">http://en.wikipedia.org/wiki/Clarinet</cell>
```

## Skin Configuration

The following example enables you to configure the alternate skin (Monster Skin, kpac2) for the Kids Catalog.

You should be familiar with how the [???](#) before you make these changes.

If you already have a custom template directory setup you can copy the **Open-ILS/examples/web/templates/kpac** files to that directory instead, and then skip any Apache config changes.

```
% cp -r Open-ILS/examples/web/css/skin/kpac2 /openils/var/web/css/skin/  
% cp -r Open-ILS/examples/web/images/kpac/* /openils/var/web/images/kpac/ #does not clobber  
% mkdir /openils/var/templates_kpac2  
% cp -r Open-ILS/examples/web/templates/kpac /openils/var/templates_kpac2/  
% cp -r /openils/var/web/css/skin/default/kpac/fonts /openils/var/web/css/skin/kpac2/kpac
```

Then set up 443/80 vhosts for serving the alternate skin in eg.conf, something along the lines of:

```
<VirtualHost *:80>  
  ServerName xyz.dev198.esilibrary.com:80  
  DocumentRoot /openils/var/web/  
  DirectoryIndex index.xml index.html index.xhtml  
  Include eg_vhost.conf  
  <Location /eg/kpac>  
    #Point to a different kpac.xml config file if needed  
    #PerlSetVar KPacConfigFile "/openils/conf/kpac.xml.example"  
    PerlAddVar OILSWebTemplatePath "/openils/var/templates_kpac2"  
  </Location>  
</VirtualHost>
```

## Considerations for Community Adoption

The templates for the Kid's OPAC were developed long before the TPAC was integrated into Evergreen and it has many of the same limitations that were part of the TPAC.

- Fixed width elements (divs, images, etc.), which complicates the addition of new features and local customizations.
- Images with text, which prevents l10n/i18n.
- While the KPAC does not attempt to match the color scheme of any one institution, it's inconsistent with the standard Evergreen color palette. Creating an additional skin to act as the Evergreen default may be necessary.

## Outstanding Development (Unsponsored)

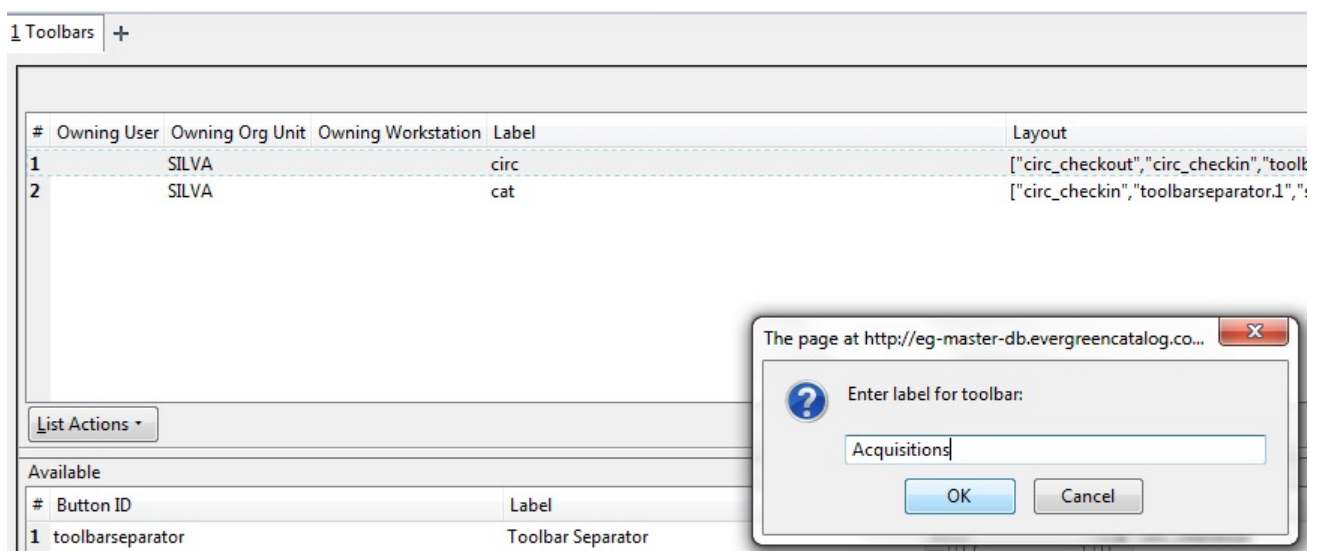
- Port the XML configuration file to a DB structure, complete with UI for managing the various components and upgrade path.

# Chapter 28. Customizable Toolbar

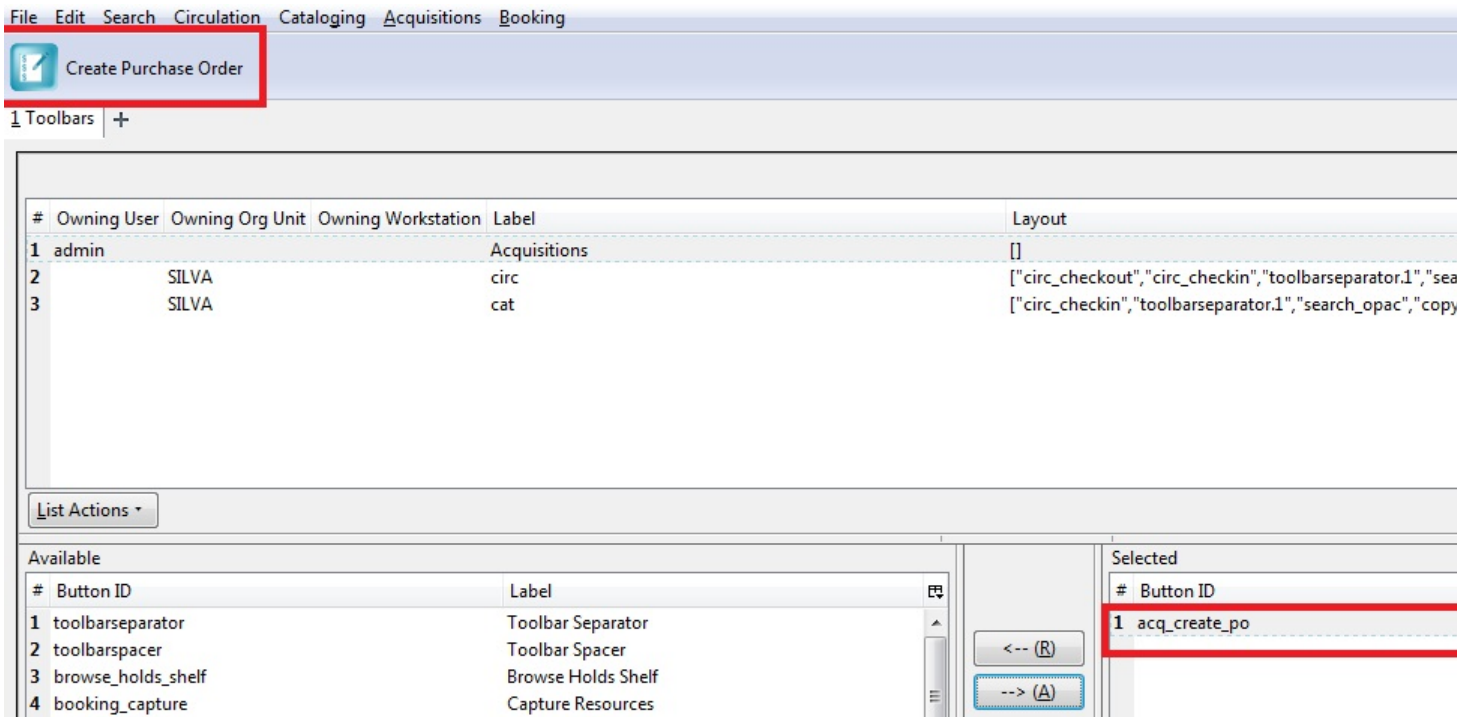
By default, two toolbars are available in the staff client: circulation and cataloging. This feature enables you to customize toolbars in the staff client. You can create toolbars for specific org unit(s), workstation(s), or login(s).

## Configure Toolbar

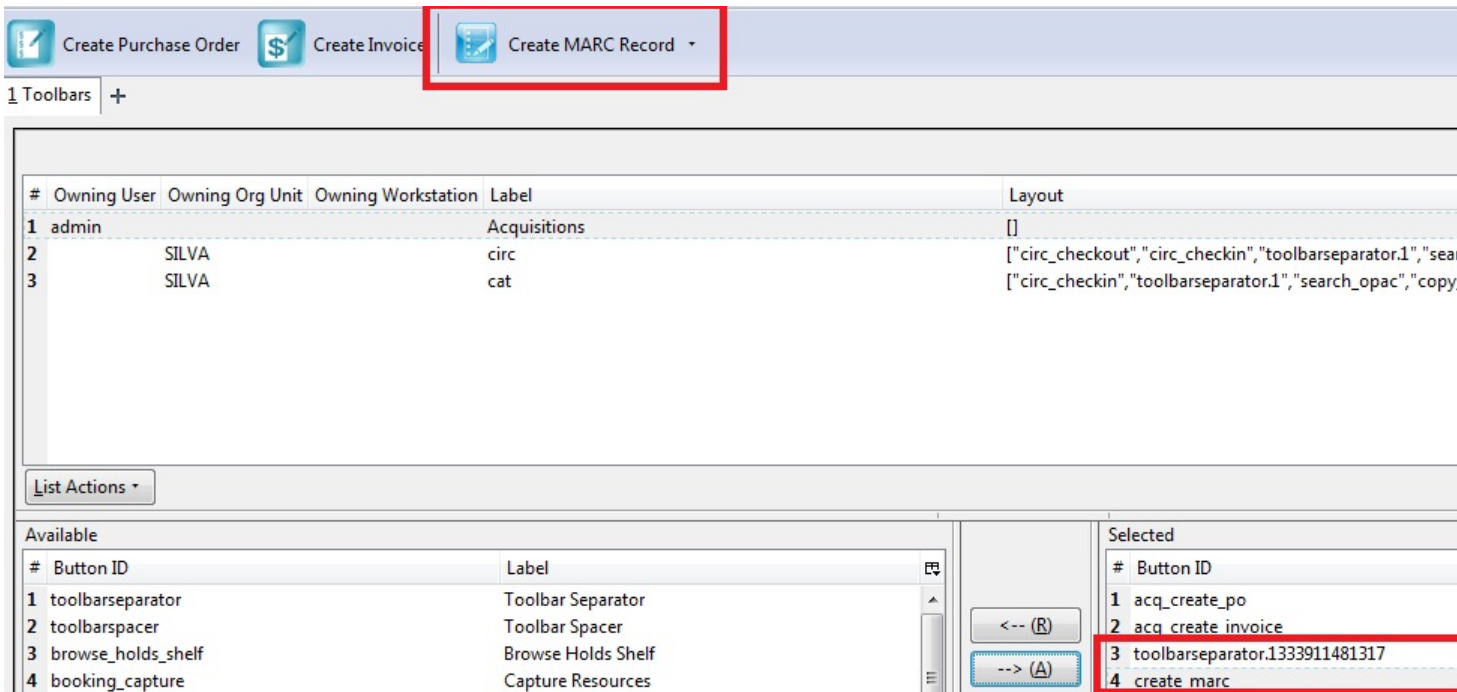
1. Click **Admin # Workstation Administration # Toolbars # Configure Toolbars**.
2. Click **New Toolbar**.
3. Enter label for toolbar.



4. Click **Ok**.
5. Select one of the buttons in the **Available** panel. The **Button ID** describes that action that the button will take, and the **Label** will display in the toolbar.
6. Click the --> (A) button to add the selected function to the **Selected** panel on the bottom right side of the screen. To remove a button, click the <-- (R) button.



- Continue adding buttons if desired. The buttons will display in the order that you add them. If you want to reorder the buttons, click the **Up** or **Down** buttons.
- To separate buttons onto left and right sides of the screen on the same toolbar, select **toolbarspacer**, and click --> (A).



- To add a dividing line between buttons that appear on the same side of the screen, select **toolbarseparator**, and click --> (A).

itions Booking

Create MARC Record ▾

Delete Toolbar

| Station      | Label | Layout  |
|--------------|-------|---|
| Acquisitions |       | []  |
|              | circ  | ["circ_checkout","circ_checkin","toolbarseparator.1","search_opac","copy_status","toolbarseparator.2","patron_s |
|              | cat   | ["circ_checkin","toolbarseparator.1","search_opac","copy_status","toolbarseparator.2","create_marc","authority  |

| Label              | Selected   |
|--------------------|--|
| Toolbar Separator  | # Button ID Label                                  |
| Toolbar Spacer     | 1 acq_create_po Create Purchase Order              |
| Browse Holds Shelf | 2 acq_create_invoice Create Invoice                |
| Capture Resources  | 3 toolbarseparator.1333911481317 Toolbar Separator |
| Check In           | 4 create_marc Create MARC Record                   |
| Check Out          | 5 toolbarspacer.1333911596014 Toolbar Spacer       |
| Conn Buckets       | 6 acq_claim_eligible Claim-Ready Items             |

10. At the bottom of the screen, choose the owner of this toolbar. If you click **Owning Org Unit**, then the owning org unit that you specify will display this toolbar. Select the owning org unit from the drop down menu. The rule of parental inheritance applies, so all child units will inherit the toolbars of their parental units. If you click **Owning Workstation**, then the workstation to which you are logged in when you created the toolbar will display this toolbar. If you select **Owning User**, then your login has access to that toolbar.

11. When you are finished creating the toolbar, click **Save Toolbar**. Any toolbar to which you have access displays under **Admin # Workstation Administration # Toolbars # Current**.

### Permissions

ADMIN\_TOOLBAR - Allow a user to create, edit, and delete custom toolbars

# Chapter 29. Patron Address City/State/County Pre-Populate by ZIP Code

This feature saves staff time and increases accuracy when entering patron address information by automatically filling in the City, State and County information based on the ZIP code entered by the staff member.

**Released:** Evergreen 0.1, available in all versions.

Please be aware of the following when using this feature.

- ZIP codes do not always match 1 to 1 with City, State and County. ZIP codes were designed for postal delivery and represent postal delivery zones that may cover more than one city, state or county.
  - It is currently only possible to have one match per ZIP code, but you can add an alert to those entries to prompt staff to double check the entered data.
- Only the first 5 digits of the ZIP are used. ZIP+4 is not currently supported.
- The zips.txt data is loaded once at service startup and stored in memory, so changes to the zips.txt data file require that Evergreen be restarted. Specifically, you need to restart the "open-ils.search" OpenSRF service.

## Scoping and Permissions

There are no staff client permissions associated with this feature since there is no staff client interface.

This feature affects all users of the system; there is no way to have separate settings per Org Unit.

## Setup Steps

### Step 1 - Setup Data File

The default location and name of the data file is `/openils/var/data/zips.txt` on your Evergreen server. You can choose a different location if needed.

The file format of your zips.txt will look like this (delimited by the .):

```
ID|StateAbb|City|ZIP|IsDefault|StateID|County|AreaCode|AlertMesg
```

The only fields that are used are **StateAbb**, **City**, **ZIP**, **IsDefault**, **County** and **AlertMesg**.

Most fields can be left blank if the information is not available and that data will not be entered.

### Data Field Descriptions

1. ID - ID field to uniquely identify this row. Not required, can be left blank.



2. **StateAbb** - State abbreviation like "MN" or "ND".
3. **City** - Name of city.
4. **ZIP** - ZIP code, only first 5 digits used.
5. **IsDefault** - Must be set to 1 for the row to be used. Easy way to disable/enable a row.
6. **StateID** - Unknown and unused.
7. **County** - County name.
8. **AreaCode** - Phone number area code, unused.
9. **AlertMesg** - Message to display to staff to alert them of any special circumstances.



The [Address Alerts](#) feature can also be used to alert staff about certain addresses.

Here is an example of what the data file should look like.

**Example zips.txt.**

```
|MN|Moorhead|56561|1||Clay||
|MN|Moorhead|56562|1||Clay||
|MN|Moorhead|56563|1||Clay||
|MN|Sabin|56580|1||Clay||
|MN|Ulen|56585|1||Clay||
|MN|Lake Itasca|56460|1||Clearwater County||
|MN|Bagley|56621|1||Clearwater||
|MN|Clearbrook|56634|1||Clearwater||
|MN|Gonvick|56644|1||Clearwater||
```

## Step 2 - Enable Feature

The next step is to tell the system to use the zips.txt file that you created. This is done by editing /openils/conf/opensrf.xml. Look about halfway into the file and you may very well see a commented section in the file that looks similar to this:

```
<!-- zip code database file -->
<!--<zips_file>/openils/var/data/zips.txt</zips_file>-->
</app_settings>
</open-ils.search>
```

Uncomment the area by . . . Change the file path if you placed your file in a different location. The file should look like this after you are done.

```
<!-- zip code database file -->
<zips_file>/openils/var/data/zips.txt</zips_file>
</app_settings>
</open-ils.search>
```

**Save and Restart.** Save your changes to the opensrf.xml file, restart Evergreen and restart Apache.



The specific opensrf services you need to restart are "opensrf.setting" and "open-ils.search".

## Step 3 - Test

Open up the staff client and try to register a new patron. When you get to the address section, enter a ZIP code that you know is in your zips.txt file. The data from the file that matches your ZIP will auto fill the city, state and county fields.

## ZIP Code Data

There are several methods you can use to populate your zips.txt with data.

### Manual Entry

If you only have a few communities that you serve, entering data manually may be the simplest approach.

### Geonames.org Data

Geonames.org provides free ZIP code to city, state and county information licensed under the Creative Commons Attribution 3.0 License, which means you need to put a link to them on your website. Their data includes primary city, state and county information only. It doesn't include info about which other cities are included in a ZIP code. Visit <http://www.geonames.org> for more info.

The following code example shows you how to download and reformat the data into the zips.txt format. You have the option to filter the data to only include certain states also.

```
## How to get a generic Evergreen zips.txt for free
wget http://download.geonames.org/export/zip/US.zip
unzip US.zip
cut -f2,3,5,6 US.txt \
| perl -ne 'chomp; @f=split(/\t/); print "|" . join("|", (@f[2,1,0], "1", "", $f[3], "")), "|\\n";' \
> zips.txt

##Optionally filter the data to only include certain states
egrep "^\\|(ND|MN|WI|SD)\\|" zips.txt > zips-mn.txt
```

### Commercial Data

There are many vendors that sell databases that include ZIP code to city, state and county information. A web search will easily find them. Many of the commercial vendors will include more information on which ZIP codes cover multiple cities, counties and states, which you could use to populate the alert field.

### Existing Patron Database

Another possibility is to use your current patron database to build your zips.txt. Pull out the current ZIP, city, state, county unique rows and use them to form your zips.txt.

**Small Sites.** For sites that serve a small geographic area (less than 30 ZIP codes), an sql query like the following will create a zips.txt for you. It outputs the number of matches as the first field and sorts by ZIP code and number of matches. You would need to go through the resulting file and deal with duplicates manually.

```
psql egdb26 -A -t -F $'|' \
-c "SELECT count(substring(post_code from 1 for 5)) as zipcount, state, \
city, substring(post_code from 1 for 5) as pc, \
'1', '', county, '', '' FROM actor.usr_address \
group by pc, city, state, county \
order by pc, zipcount DESC" > zips.txt
```

**Larger Sites.** For larger sites Ben Ostrowsky at ESI created a pair of scripts that handles deduping the results and adding in county information. Instructions for use are included in the files.

- [http://git.esilibrary.com/?p=migration-tools.git;a=blob;f=elect\\_ZIPs](http://git.esilibrary.com/?p=migration-tools.git;a=blob;f=elect_ZIPs)
- [http://git.esilibrary.com/?p=migration-tools.git;a=blob;f=enrich\\_ZIPs](http://git.esilibrary.com/?p=migration-tools.git;a=blob;f=enrich_ZIPs)

## Development

If you need to make changes to how this feature works, such as to add support for other postal code formats, here is a list of the files that you need to look at.

1. **Zips.pm** - contains code for loading the zips.txt file into memory and replying to search queries. Open-ILS / src / perlmods / lib / OpenILS / Application / Search / Zips.pm
2. **register.js** - This is where patron registration logic is located. The code that queries the ZIP search service and fills the address is located here. Open-ILS / web / js / ui / default / actor / user / register.js

# Chapter 30. Phonest.pm Module

PhoneList.pm is a mod\_perl module for Apache that works with Evergreen to generate callings lists for patron holds or overdues. It outputs a csv file that can be fed into an auto-dialer script to call patrons with little or no staff intervention. It is accessed and configured via a special URL and passing any parameters as a “Query String” on the URL. The parameters are listed in the table below.

**Table 30.1. Parameters for the phonest program:**

|           |  |
|-----------|--|
| user      | Your Evergreen login. Typically your library’s circ account. If you leave this off, you will be prompted to login.   |
| passwd    | The password for your Evergreen login. If you leave this off you will be prompted to login.  |
| ws_ou     | The ID of the system or branch you want to generate the list for (optional). If your account does not have the appropriate permissions for the location whose ID number you have entered, you will get an error.                     |
| skipemail | If present, skip patrons with email notification (optional).   |
| addcount  | Add a count of items on hold (optional). Only makes sense for holds.   |
| overdue   | Makes a list of patrons with overdues instead of holds. If an additional, numeric parameter is supplied, it will be used as the number of days overdue. If no such extra parameter is supplied, then the default of 14 days is used. |

The URL is

```
https://your.evergreen-server.tld/phonest
```

A couple of examples follow:

```
https://your.evergreen-server.tld/phonest?user=circuser&passwd=password&skipemail
```

The above example would sign in as user circuser with password of “password” and get a list of patrons with holds to call who do not have email notification turned on. It would run at whatever branch is normally associated with circuser.

```
https://your.evergreen-server.tld/phonest?skipemail
```

The above example would do more or less the same, but you would be prompted by your browser for the user name and password.

If your browser or download script support it, you may also use conventional HTTP authentication parameters.

```
https://user:password@your.evergreen-server.tld/phonest?overdue&ws_ou=2
```

The above logs in as “user” with “password” and runs overdue for location ID 2.

The following sections provide more information on getting what you want in your output.

## Adding Parameters

If you are not familiar with HTTP/URL query strings, the format is quite simple.

You add parameters to the end of the URL, the first parameter is separated from the URL page with a question mark ('?') character. If the parameter is to be given an extra value, then that value follows the parameter name after an equals sign ('='). Subsequent parameters are separated from the previous parameter by an ampersand ('&').

Here is an example with 1 parameter that has no value:

```
https://your.evergreen-server.tld/phonelist?skipemail
```

An example of 1 argument with a value:

```
https://your.evergreen-server.tld/phonelist?overdue=21
```

An example of 2 arguments, 1 with a value and 1 without:

```
https://your.evergreen-server.tld/phonelist?overdue=21&skipemail
```

Any misspelled or parameters not listed in the table above will be ignored by the program.

## Output

On a successful run, the program will return a CSV file named phone.csv. Depending on your browser or settings you will alternately be prompted to open or save the file. Your browser may also automatically save the file in your Downloads or other designated folder. You should be able to open this CSV file in Excel, LibreOffice Base, any other spread sheet program, or a text editor.

If you have made a mistake and have mistyped your user name or password, or if you supply a ws\_ou parameter with an ID where your user name does not have permission to look up holds or overdue information, then you will get an error returned in your browser.

Should your browser appear to do absolutely nothing at all. This is normal. When there is no information for you to download, the server will return a 200 NO CONTENT message to your browser. Most browsers respond to this message by doing nothing at all. It is possible for there to be no information for you to retrieve if you added the skipemail option and all of your notices for that day were sent via email, or if you ran this in the morning and then again in the afternoon and there was no new information to gather.

The program does indicate that it has already looked at a particular hold or overdue and will skip it on later runs. This prevents duplicates to the same patron in the same run. It will, however, create a “duplicate” for the same patron if a different copy is put on hold for that patron in between two runs.

The specific content of the CSV file will vary if you are looking at holds or overdue. The specific contents are described in the appropriate sections below.

# Holds

The `phonelist` program will return a list of patrons with copies on hold by default, so long as you do not use the `overdue` parameter. You may optionally get a number of items that patron currently has on hold by adding the `addcount` parameter.

As always, you can add the `skipemail` parameter to skip patrons with email notifications of their overdue, [#0.5.Skipping patrons with email notification of holds|outline as described below].

**Table 30.2. Columns in the holds CSV file:**

|         |   |
|---------|---|
| Name    | Patron's name first and last.   |
| Phone   | Patron's phone number.  |
| Barcode | Patron's barcode.   |
| Count   | Number of copies on hold, if <code>addcount</code> parameter is used, otherwise this column is not present in the file. |

# Overdues

If you add the `overdue` parameter, you can get a list of patrons with overdue copies instead of a list of patrons with copies on the hold shelf. By default, this will give you a list of patrons with copies that are 14 days overdue. If you'd like to specify a different number of days you can add the number after the parameter with an equals sign:

```
https://your.evergreen-server.tld/phonelist?overdue=21&ws_ou=2
```

The above will retrieve a list of patrons who have items that are 21 days overdue at the location with ID of 2.

The number of days is an exact lookup. This means that the program will look only at patrons who have items exactly 14 days or exactly the number of days specified overdue. It does not pull up any that are less than or greater than the number of days specified.

As always, you can add the `skipemail` parameter to skip patrons with email notifications of their overdue, [#0.5.Skipping patrons with email notification of holds|outline as described below].

**Table 30.3. Columns in the overdue CSV file:**

|         |   |
|---------|---|
| Name    | Patron's name first and last.                                 |
| Phone   | Patron's phone number.  |
| Barcode | Patron's barcode.   |
| Titles  | A colon-separated list of titles that the patron has overdue. |

# Skipping patrons with email notification of holds

Skipping patrons who have email notification for their holds or overdue is very simple. You just need to add the `skipemail` parameter on the URL query string. Doing so will produce the list without the patrons who have email

notification for overdues, or for all of their holds. Please note that if a patron has multiple holds available, and even one of these holds requests a phone-only notification, then that patron will still show on the list. For this option to exclude a patron from the holds list, the patron must request email notification on all of their current holds. In practice, we find that this is usually the case.

## Using the `ws_ou` parameter

Generally, you will not need to use the `ws_ou` parameter when using the `phonelist` program. The `phonelist` will look up the branch where your login account works and use that location when generating the list. However, if you are part of a multi-branch systems in a consortium, then the `ws_ou` parameter will be of interest to you. You can use it to specify which branch, or the whole system, you wish to search when running the program.

## Automating the download

If you'd like to automate the download of these files, you should be able to do so using any HTTP programming toolkit. Your client must accept cookies and follow any redirects in order to function.

# Chapter 31. SIP Server

SIP, standing for Standard Interchange Protocol, was developed by the 3M corporation to be a common protocol for data transfer between ILS' (referred to in SIP as an *ACS*, or *Automated Circulation System*) and a third party device. Originally, the protocol was developed for use with *3M SelfCheck* (often abbreviated *SC*, not to be confused with Staff Client) systems, but has since expanded to other companies and devices. It is now common to find SIP in use in several other vendors' SelfCheck systems, as well as other non-SelfCheck devices. Some examples include:

- Patron Authentication (computer access, subscription databases)
- Automated Material Handling (AMH)
  - The automated sorting of items, often to bins or book carts, based on shelving location or other programmable criteria

## Installing the SIP Server

This is a rough intro to installing the SIP server for Evergreen.

### Getting the code

Current SIP server code lives at in the Evergreen git repository:

```
cd /opt
git clone git://git.evergreen-ils.org/SIPServer.git SIPServer
```

### Configuring the Server

1. Type the following commands from the command prompt:

```
$ sudo su opensrf
$ cd /openils/conf
$ cp oils_sip.xml.example oils_sip.xml
```

2. Edit `oils_sip.xml`. Change the commented out `<server-params>` section to this:

```
<server-params
  min_spare_servers='1'
  max_spare_servers='2'
  min_servers='3'
  max_servers='25'
/>
```

3. `max_servers` will directly correspond to the number of allowed SIP clients. Set the number accordingly, but bear in mind that too many connections can exhaust memory. On a 4G RAM/4 CPU server (that is also running evergreen), it is not recommended to exceed 100 SIP client connections.

### Adding SIP Users



1. Type the following commands from the command prompt:

```
$ sudo su opensrf
$ cd /openils/conf
```

2. In the <accounts> section, add SIP client login information. Make sure that all <logins> use the same institution attribute, and make sure the institution is listed in <institutions>. All attributes in the <login> section will be used by the SIP client.
3. In Evergreen, create a new profile group called SIP. This group should be a sub-group of Users (not Staff or Patrons). Set *Editing Permission* as **group\_application.user.sip\_client** and give the group the following permissions:

```
COPY_CHECKIN
COPY_CHECKOUT
CREATE_PAYMENT
RENEW_CIRC
VIEW_CIRCULATIONS
VIEW_COPY_CHECKOUT_HISTORY
VIEW_PERMIT_CHECKOUT
VIEW_USER
VIEW_USER_FINES_SUMMARY
VIEW_USER_TRANSACTIONS
```

OR use SQL like:

```
INSERT INTO permission.grp_tree (name,parent,description,application_perm)
VALUES ('SIP', 1, 'SIP2 Client Systems', 'group_application.user.sip_client');
```

```
INSERT INTO
  permission.grp_perm_map (grp, perm, depth, grantable)
SELECT
  g.id, p.id, 0, FALSE
FROM
  permission.grp_tree g,
  permission.perm_list p
WHERE
  g.name = 'SIP' AND
  p.code IN (
    'COPY_CHECKIN',
    'COPY_CHECKOUT',
    'RENEW_CIRC',
    'VIEW_CIRCULATIONS',
    'VIEW_COPY_CHECKOUT_HISTORY',
    'VIEW_PERMIT_CHECKOUT',
    'VIEW_USER',
    'VIEW_USER_FINES_SUMMARY',
    'VIEW_USER_TRANSACTIONS'
  );
```

Verify:

```
SELECT *
FROM permission.grp_perm_map pgpm
  INNER JOIN permission.perm_list ppl ON pgpm.perm = ppl.id
  INNER JOIN permission.grp_tree pgt ON pgt.id = pgpm.grp
WHERE pgt.name = 'SIP';
```

4. For each account created in the <login> section of oils\_sip.xml, create a user (via the staff client user editor) that has the same username and password and put that user into the SIP group.



The expiration date will affect the SIP users' connection so you might want to make a note of this somewhere.

# Running the server

To start the SIP server type the following commands from the command prompt:

```
$ sudo su opensrf
$ oils_ctl.sh -a [start|stop|restart]_sip
```

## Logging-SIP

### Syslog

It is useful to log SIP requests to a separate file especially during initial setup by modifying your syslog config file.

1. Edit syslog.conf.

```
$ sudo vi /etc/syslog.conf # maybe /etc/rsyslog.conf
```

2. Add this:

```
local6.*                -/var/log/SIP_evergreen.log
```

3. Syslog expects the logfile to exist so create the file.

```
$ sudo touch /var/log/SIP_evergreen.log
```

4. Restart sysklogd.

```
$ sudo /etc/init.d/sysklogd restart
```

### Syslog-NG

1. Edit logging config.

```
sudo vi /etc/syslog-ng/syslog-ng.conf
```

2. Add:

```
# +SIP2+ for Evergreen
filter    f_eg_sip { level(warn, err, crit) and facility(local6); };
destination eg_sip { file("/var/log/SIP_evergreen.log"); };
log { source(s_all); filter(f_eg_sip); destination(eg_sip); };
```

3. Syslog-ng expects the logfile to exist so create the file.

```
$ sudo touch /var/log/SIP_evergreen.log
```

4. Restart syslog-ng

```
$ sudo /etc/init.d/syslog-ng restart
```

# Testing Your SIP Connection

- In the root directory of the SIPServer code:

```
$ cd SIPServer/t
```

- Edit SIPtest.pm, change the \$instid, \$server, \$username, and \$password variables. This will be enough to test connectivity. To run all tests, you'll need to change all the variables in the *Configuration* section.

```
$ PERL5LIB=./ perl 00sc_status.t
```

This should produce something like:

```
1..4
ok 1 - Invalid username
ok 2 - Invalid username
ok 3 - login
ok 4 - SC status
```

- Don't be dismayed at **Invalid Username**. That's just one of the many tests that are run.

## More Testing

1. Once you have opened up either the SIP OR SIP2 ports to be accessible from outside you can do some testing via telnet. You can try this with localhost if you so wish, but we want to prove that SIP2 works from non-localhost. Replace \$instid, \$server, \$barcode, \$username, and \$password variables below as necessary.



We are using 6001 here which is associated with SIP2 as per our configuration.

```
$ telnet $server 6001
Connected to $server.
Escape character is '^]'.
9300CN**$username**|CO**$password**|CP**$instid**
```

You should get back.

```
941
```

2. Now just copy in the following line (with variables replaced) you don't need to hit enter, just paste!

```
2300120080623 172148AO**$instid**|AA**$barcode**|AC$password|AD**$password**
```

You will get back the patron information for \$barcode (something similar to the what's below).

```
24 Y 00120100113 170738AEFirstName MiddleName LastName|AA**$barcode**|BLY|CQY
|BHUSD|BV0.00|AFOK|AO**$instid**|
```

The response declares it is a valid patron BLY with a valid password CQY and shows the user's \$name.

## SIP Communication

SIP generally communicates over a TCP connection (either raw sockets or over telnet), but can also communicate via serial connections and other methods. In Evergreen, the most common deployment is a RAW socket connection on port 6001.

SIP communication consists of strings of messages, each message request and response begin with a 2-digit “command” - Requests usually being an odd number and responses usually increased by 1 to be an even number. The combination numbers for the request command and response is often referred to as a *Message Pair* (for example, a 23 command is a request for patron status, a 24 response is a patron status, and the message pair 23/24 is patron status message pair). The table in the next section shows the message pairs and a description of them.

For clarification, the “Request” is from the device (selfcheck or otherwise) to the ILS/ACS. The response is... the response to the request ;).

Within each request and response, a number of fields (either a fixed width or separated with a | [pipe symbol] and preceded with a 2-character field identifier) are used. The fields vary between message pairs.

| Pair  | Name                | Supported?            | Details   |
|-------|---------------------|-----------------------|---|
| 01    | Block Patron        | Yes                   | <a href="#">01/Block Patron</a> - ACS responds with 24 Patron Status Response                                 |
| 09-10 | Checkin             | Yes (with extensions) | <a href="#">09/10 Checkin</a>   |
| 11-12 | Checkout            | Yes (no renewals)     | <a href="#">11/12 Checkout</a>  |
| 15-16 | Hold                | Partially supported   | <a href="#">15/16 Hold</a>  |
| 17-18 | Item Information    | Yes (no extensions)   | <a href="#">17/18 Item Information</a>  |
| 19-20 | Item Status Update  | No                    | <a href="#">19/20 Item Status Update</a> - Returns Patron Enable response, but doesn't make any changes in EG |
| 23-24 | Patron Status       | Yes                   | <a href="#">23/24 Patron Status</a> - 63/64 “Patron Information” preferred                                    |
| 25-26 | Patron Enable       | No                    | <a href="#">25/26 Patron Enable</a> - Used during system testing and validation                               |
| 29-30 | Renew               | Yes                   | <a href="#">29/30 Renew</a>   |
| 35-36 | End Session         | Yes                   | <a href="#">35/36 End Session</a>   |
| 37-38 | Fee Paid            | Yes                   | <a href="#">37/38 Fee Paid</a>  |
| 63-64 | Patron Information  | Yes (no extensions)   | <a href="#">63/64 Patron Information</a>  |
| 65-66 | Renew All           | Yes                   | <a href="#">65/66 Renew All</a>   |
| 93-94 | Login               | Yes                   | <a href="#">93/94 Login</a> - Must be first command to Evergreen ACS (via socket) or SIP will terminate       |
| 97-96 | Resend last message | Yes                   | <a href="#">97/96 Resend</a>  |
| 99-98 | SC-ACS Status       | Yes                   | <a href="#">99/98 SC and ACS Status</a>   |

# 01 Block Patron

A selfcheck will issue a **Block Patron** command if a patron leaves their card in a selfcheck machine or if the selfcheck detects tampering (such as attempts to disable multiple items during a single item checkout, multiple failed pin entries, etc).

In Evergreen, this command does the following:

- User alert message: *CARD BLOCKED BY SELF-CHECK MACHINE* (this is independent of the *AL Blocked Card Message* field).
- Card is marked inactive.

The request looks like:

```
01<card retained><date>[fields AO, AL, AA, AC]
```

*Card Retained*: A single character field of Y or N - tells the ACS whether the SC has retained the card (ex: left in the machine) or not.

*Date*: An 18 character field for the date/time when the block occurred.

*Format*: YYYYMMDDZZZZHHMMSS (*ZZZZ* being zone - 4 blanks when local time, “Z” (3 blanks and a Z) represents UTC(GMT/Zulu)

*Fields*: See [Fields](#) for more details.

The response is a 24 “Patron Status Response” with the following:

- Charge privileges denied
- Renewal privileges denied
- Recall privileges denied (hard-coded in every 24 or 64 response)
- hold privileges denied
- Screen Message 1 (AF): *blocked*
- Patron

## 09/10 Checkin

~The request looks like:

```
09<No block (Offline)><xact date><return date>[Fields AP,AO,AB,AC,CH,BI]
```

*No Block (Offline)*: A single character field of Y or N - Offline transactions are not currently supported so send N.

*xact date*: an 18 character field for the date/time when the checkin occurred. Format: YYYYMMDDZZZZHHMMSS (ZZZZ being zone - 4 blanks when local time, “Z” (3 blanks and a Z) represents UTC(GMT/Zulu))

*Fields*: See [Fields](#) for more details.

The response is a 10 “Checkin Response” with the following:

```
10<resensitize><magnetic media><alert><xact date>[Fields AO,AB,AQ,AJ,CL,AA,CK,CH,CR,CS,CT,CV,CY,DA,AF,AG]
```

Example (with a remote hold):

```
09N20100507 16593720100507 165937APCheckin Bin 5|AOBR1|AB1565921879|ACsip_01|
101YNY20100623 165731AOBR1|AB1565921879|AQBR1|AJPerl 5 desktop reference|CK001|CSQA76.73.P33V76 1996
|CTBR3|CY373827|DANicholas Richard Woodard|CV02|
```

Here you can see a hold alert for patron CY 373827, named DA *Nicholas Richard Woodard*, to be picked up at CT “BR3”. Since the transaction is happening at AO “BR1”, the alert type CV is 02 for *hold at remote library*. The possible values for CV are:

- 00: unknown
- 01: local hold
- 02: remote hold
- 03: ILL transfer (not used by EG)
- 04: transfer
- 99: other



The logic for Evergreen to determine whether the content is `magnetic_media` comes from either legacy `circ` scripts or `search_config_circ_modifier`. The default is non-magnetic. The same is true for `media_type` (default 001). Evergreen does not populate the `collection_code` because it does not really have any, but it will provide the `call_number` where available.

Unlike the `item_id` (barcode), the `title_id` is actually a title string, unless the configuration forces the return of the bib ID.

Don’t be confused by the different branches that can show up in the same response line.

- AO is where the transaction took place,
- AQ is the “permanent location”, and
- CT is the *destination location* (i.e., pickup lib for a hold or target lib for a transfer).

## 11/12 Checkout

## 15/16 Hold

Evergreen supports the Hold message for the purpose of canceling holds. It does not currently support creating hold requests via SIP2.

## 17/18 Item Information

The request looks like:

```
17<xact_date>[fields: AO,AB,AC]
```

The request is very terse. AC is optional.

The following response structure is for SIP2. (Version 1 of the protocol had only 6 total fields.)

```
18<circulation_status><security_marker><fee_type><xact_date>  
[fields: CF,AH,CJ,CM,AB,AJ,BG,BH,BV,CK,AQ,AP,CH,AF,AG,+CT,+CS]
```

Example:

```
1720060110    215612AOBR1|ABno_such_barcode|  
1801010120100609    162510ABno_such_barcode|AJ|  
1720060110    215612AOBR1|AB1565921879|  
1810020120100623    171415AB1565921879|AJPerl 5 desktop reference|CK001|AQBR1|APBR1|BGBR1  
|CTBR3|CSQA76.73.P33V76 1996|
```

The first case is with a bogus barcode. The latter shows an item with a `circulation_status` of `10` for *in transit between libraries*. The known values of `circulation_status` are enumerated in the spec.

EXTENSIONS: The CT field for *destination location* and CS *call number* are used by Automated Material Handling systems.

## 19/20 Item Status Update

## 23/24 Patron Status

Example:

```
2300120060101    084235AOUWOLS|AAbad_barcode|ACsip_01|ADbad_password|  
24YYYYY        00120100507    013934AE|AAbad_barcode|BLN|AOUWOLS|  
2300120060101    084235AOCONS|AA999999|ACsip_01|ADbad_password|  
24 Y          00120100507    022318AEDoug Fiander|AA999999|BLY|CQN|BHUSD|BV0.00|AFOK|AOCONS|  
2300120060101    084235AOCONS|AA999999|ACsip_01|ADuserpassword|LY|CQN|BHUSD|BV0.00|AFOK|AOCONS|
```

24 Y 00120100507 022803AEDoug Fiander|AA999999|BLY|CQY|BHUSD|BV0.00|AFOK|AOCONS|

1. The BL field (SIP2, optional) is *valid patron*, so the *N* value means *bad\_barcode* doesn't match a patron, the *Y* value means 999999 does.
2. The CQ field (SIP2, optional) is *valid password*, so the *N* value means *bad\_password* doesn't match 999999's password, the *Y* means *userpassword* does.

So if you were building the most basic SIP2 authentication client, you would check for */CQY/* in the response to know the user's barcode and password are correct (*|CQY|* implies *|BLY|*, since you cannot check the password unless the barcode exists). However, in practice, depending on the application, there are other factors to consider in authentication, like whether the user is blocked from checkout, owes excessive fines, reported their card lost, etc. These limitations are reflected in the 14-character *patron status* string immediately following the 24 code. See the field definitions in your copy of the spec.

## 25/26 Patron Enable

Not yet supported.

## 29/30 Renew

Evergreen supports the Renew message.

## 35/36 End Session

3520100505 115901AOBR1|AA999999|  
36Y20100507 161213AOCONS|AA999999|AFThank you!|

The *Y/N* code immediately after the 36 indicates *success/failure*. Failure is not particularly meaningful or important in this context, and for evergreen it is hardcoded *Y*.

## 37/38 Fee Paid

Evergreen supports the Fee Paid message.

## 63/64 Patron Information

Attempting to retrieve patron info with a bad barcode:

6300020060329 201700 AOBR1|AAbad\_barcode|  
64YYYY 00020100623 1411300000000000000000000000000000000000AE|AAbad\_barcode|BLN|AOBR1|



Attempting to retrieve patron info with a good barcode (but bad patron password):

```
6300020060329      201700          AOBRL|AA999999|ADbadpwd|
64 Y                00020100623    1411300000000000000000000000AA999999|AEDavid J. Fiander|BHUSD|BVO.00
|BD2 Meadowvale Dr. St Thomas, ON Canada
90210|BEdjfiander@somemail.com|BF(519) 555 1234|AQBRL|BLY|CQN|PB19640925|PCPatrons
|PIUnfiltered|AFOK|AOBR1|
```

See [23/24 Patron Status](#) for info on BL and CQ fields.

## 65/66 Renew All

Evergreen supports the Renew All message.

## 93/94 Login

Example:

```
9300CNSsip_01|CObad_value|CPBR1|
[Connection closed by foreign host.]
...
9300CNSsip_01|COSip_01|CPBR1|
941
```

*941* means successful terminal login. *940* or getting dropped means failure.

## 97/96 Resend

## 99/98 SC and ACS Status

```
99<status code><max print width><protocol version>
```

All 3 fields are required:

- 0: SC is OK
- 1: SC is out of paper
- 2: SC shutting down
- status code - 1 character
- max print width - 3 characters - the integer number of characters the client can print
- protocol version - 4 characters - x.xx

```
98<on-line status><checkin ok><checkout ok><ACS renewal policy>
<status update ok><offline ok><timeout period>

<retries allowed><date/time sync><protocol version><institution id>
<library name><supported messages><terminal
location><screen message><print line>
```

**Example:**

```
9910302.00
98YYYYNN60000320100510 1717202.00AOCONS|BXYYYYYYYYYNNNNYN|
```

The Supported Messages field BX appears only in SIP2, and specifies whether 16 different SIP commands are supported by the ACS or not.

## Fields

All fixed-length fields in a communication will appear before the first variable-length field. This allows for simple parsing. Variable-length fields are by definition delimited, though there will not necessarily be an initial delimiter between the last fixed-length field and the first variable-length one. It would be unnecessary, since you should know the exact position where that field begins already.

# **Part V. Using the Staff Client**

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# Chapter 32. Introduction

This part of the documentation deals with general Staff Client usage including logging in, navigation and shortcuts.

# Chapter 33. Logging in to Evergreen

1. Select the *Locale* to match your language preference.
2. Enter the *Hostname* of the Evergreen server you are connecting.
3. Click *Test Server* to ensure that you are able to reach the server. You should see “200 : OK” indicated in green for *Status* and *Version*.



If *Status* indicates “There was an error testing this server”, check for a typo in the *Hostname* field or ask your administrator for the correct *Hostname* to use.

IF *version* indicates “404 Not Found”, the server does not support the version of your staff client. You will need to download the correct version or contact your system administrator.

If your server has a self-signed SSL certificate, you may need to click *Add SSL Exception* in order to login.

4. Enter your *Username* and *Password* and click *Login*.
5. If this is the first time you login from the workstation, you will need to [register your workstation](#).

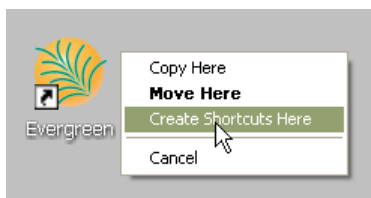
## Standalone Interface

If your connection to Evergreen is lost, click *Standalone Interface* to circulate items or register patrons while connection is down.

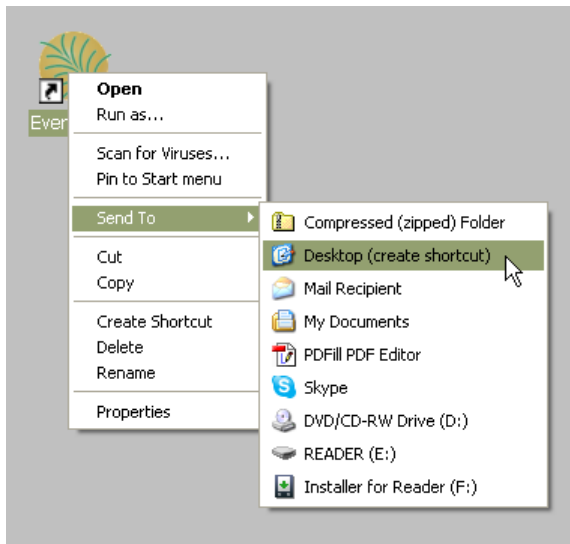
## Preset Tabs in Evergreen Client

To have preset tabs waiting when Evergreen opens you will need to modify the **Evergreen shortcut** on your desktop.

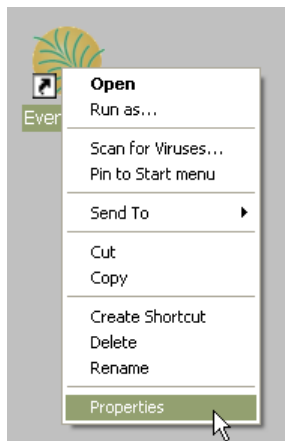
1. First, you need to copy your shortcut. There are a couple of ways to do this.
  - a. Right-mouse click and drag icon; upon release select **Create Shortcut Here**.



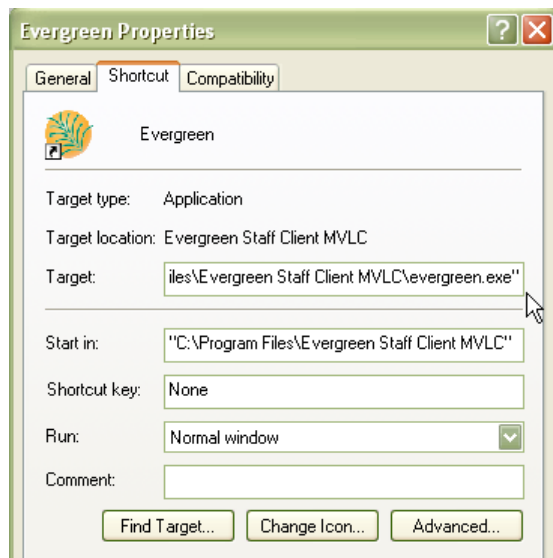
- b. Right-mouse click icon, select **Send to**, and select **Desktop (create shortcut)**.



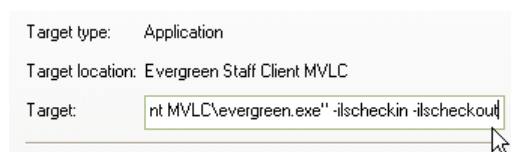
2. Right-mouse click the new shortcut and select **Properties**.



3. Listed in the **Target** box you will see something like the following path surrounded by quotation marks: "C:\Program Files\Evergreen Staff Client MVLC\evergreen.exe"



- Place your cursor after the ending quotation mark. Enter a space after the last quotation mark and then enter the tab code from the list below. Add multiple tabs with a space separating them.



For Example, to have Checkout, Checkin, Catalog Search, and a blank tab preset: "C:\Program Files\Evergreen Staff Client MVLC\evergreen.exe" -ilscheckout -ilscheckin -ilsurl XUL\_OPAC\_WRAPPER -ilstab . The following options are available:

- -ILScheckin : Opens the Check In interface
- -ILScheckout : Opens the Check Out interface
- -ILSurl <url/constant> : Opens the specified page
- -ILSnew : Opens a new "menu" window
- -ILStab : Opens a new (default) tab
- -ILSnew\_default : Opens a new "menu" window with a guaranteed default tab
- -ILSoffline/-ILSstandalone : Opens the standalone interface
- -ILSlogin : Opens the login page



### Useful Tab Codes

- -ilsurl XUL\_PATRON\_DISPLAY : Opens a Patron Search tab
- -ilsurl XUL\_HOLD\_PULL\_LIST : Opens a Pull List tab



- -ilsurl XUL\_HOLDS\_BROWSER : Opens a Browse Holds Shelf tab
- -ilsurl XUL\_OPAC\_WRAPPER : Opens an Advanced Catalog search tab
- -ilsurl XUL\_COPY\_STATUS : Opens an Item status by barcode tab
- -ilsurl XUL\_RECORD\_BUCKETS : Opens a Manage Record Buckets tab
- -ilsurl XUL\_COPY\_BUCKETS : Opens a Manage Copy Buckets tab
- -ilsurl XUL\_MARC\_NEW : Opens a Create new MARC record tab
- -ilsurl XUL\_Z3950\_IMPORT : Opens an Import record from Z39.50 tab
- To open two windows, one with checkin and checkout, one with Marc and Z39.50, use: -ilscheckin -ilscheckout -ilsnew -ilsurl XUL\_MARC\_NEW -ilsurl XUL\_Z3950\_IMPORT

5. You may want to rename your shortcut to reflect its purpose. For example, you could have one icon set to open circulation-related tabs and one icon to open cataloging-related tabs. Right-mouse click and select **Rename** to do this.

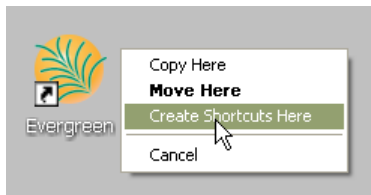
## Auto Login

To use auto login, you will need to modify the **Evergreen shortcut** on your desktop. There are three new commands which are necessary for automatic login:

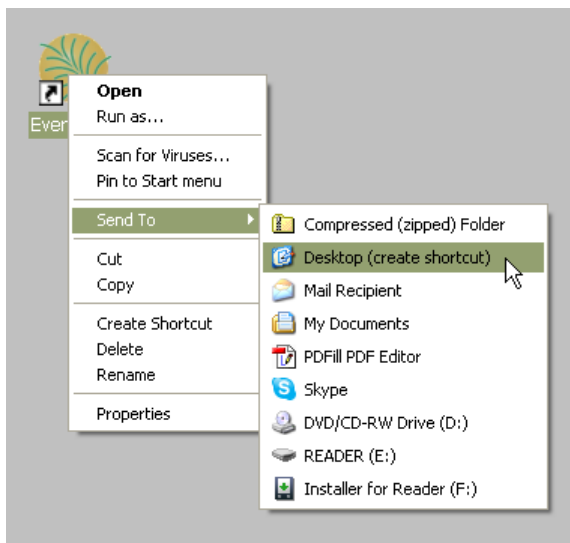
- -ilsuser
- -ilspassword
- -ilshost

You will need all three to have your client successfully login. To enable automatic login we need to modify the Evergreen shortcut on your desktop. If your shortcut already has preset tab commands, then place the automatic login commands after those commands.

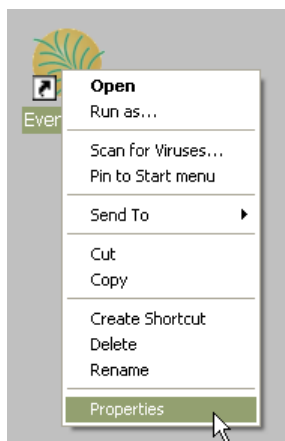
1. First, if your workstation will have multiple logins (circ, cat, admin) you need to copy a shortcut for each. There are a couple of ways to do this.
  - a. Right-mouse click and drag icon; upon release select **Create Shortcut Here**.



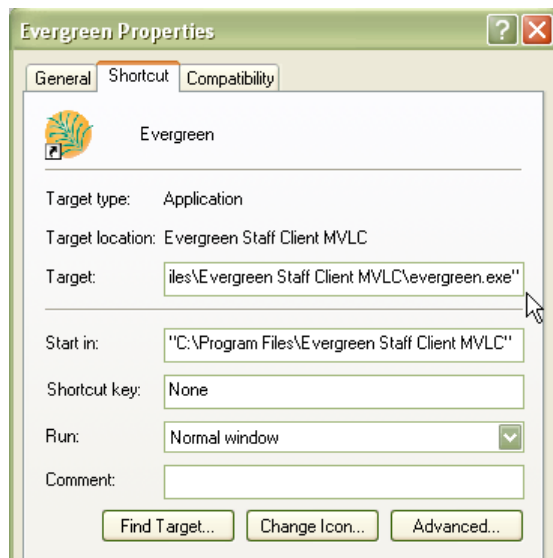
- b. Right-mouse click icon, select **Send to**, and select **Desktop (create shortcut)**.



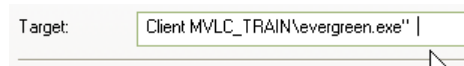
2. Right-mouse click the new shortcut and select **Properties**.



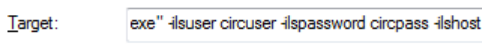
Listed in the **Target** box you will see something like the following path surrounded by quotation marks: "C:\Program Files\Evergreen Staff Client MVLC\evergreen.exe"



3. Place your cursor after the ending quotation mark and enter a space after the last quotation mark.



- a. After the space enter the login code for username followed by a space and the username `-ilsuser circuser`
- b. Enter a space and then the login code for password followed by the password `-ilspassword circpass`
- c. Finally, enter the login code for host followed by a space and the host address (this is the exact address which shows up in the Server Hostname box when you manually login to the client. `-ilshost evergreen.mvlcstaff.org`



When you double-click on the new shortcut it may seem like nothing is happening, but it really is! It takes the program a few moments to digest the new requests and to do the login.

## Logging Out

There are several ways to end your Evergreen staff client session:

- Click the **Exit Evergreen** button on the bottom of the login page.
- Click the **x** at the top left of the **login** window.
- Choose **File # Quit Program** from the menu of the application window.



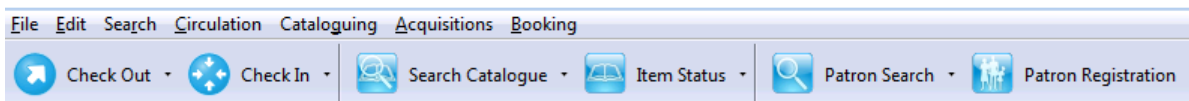
Clicking the **x** on the application window (not the login window) will not exit Evergreen, but only close the window.

A new application window can be opened by clicking *Open New Window* from the login window.

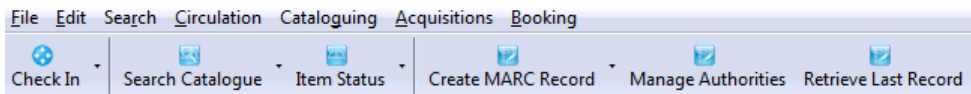
# Chapter 34. Button Bar/Toolbar

There is an optional toolbar with buttons providing quick access to commonly used staff client functions. When activated the toolbar appears below the menu bar.

Circulation Buttons



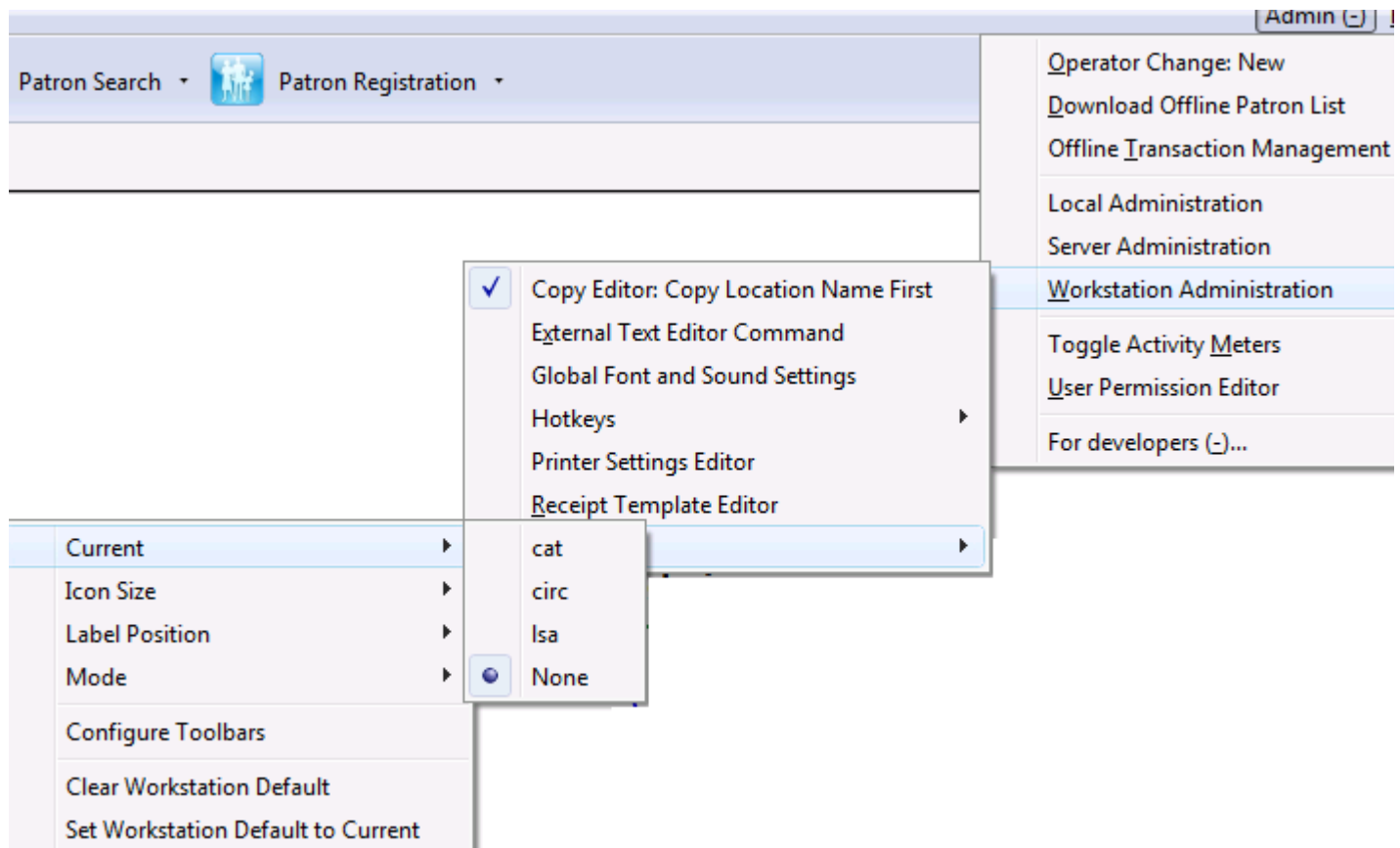
Cataloguing Buttons



The look of the buttons can be customized. Use *Mode*, *Label Position* and *Icon Size* on the *Toolbar* menu shown on the screen below to select your preference.

A group of buttons can be selected or activated by default for all workstations at a particular library (see [Library Settings](#) for details). A different default group can be set up on individual workstations by the following steps.

1. Go to **Admin # Workstation Administration # Toolbars # Current**.



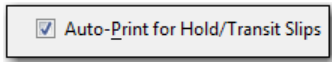
2. Choose a group from the list.
3. Go back to the above menu. Select **Set Workstation Default to Current**. The above selected toolbar group is set as default for this workstation.

To clear an existing setting click **Clear Workstation Default**.

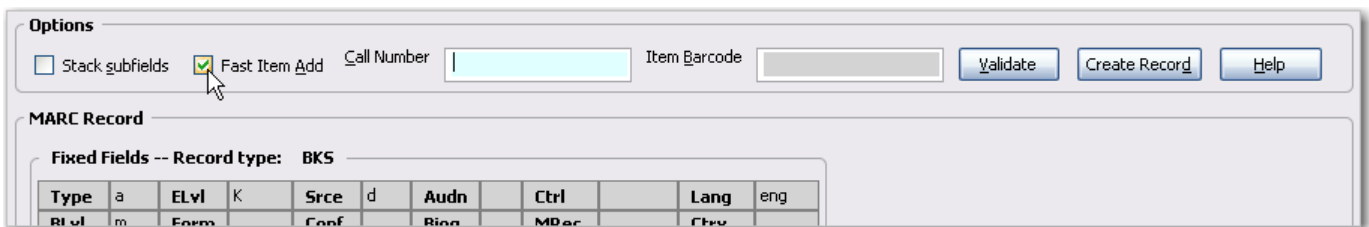
Circulation and Cataloguing are the default toolbar groups. Local system administrators can [create new groups](#) for individual accounts, workstations or all in a particular library.

# Chapter 35. Check-boxes

Most staff client check-boxes are “sticky” — if you select or deselect them, that status persists. For example, **Auto-Print**, which will print the relevant receipts automatically in certain functions, is sticky. If you select it on one login, it will persist for future logins until you uncheck the box.

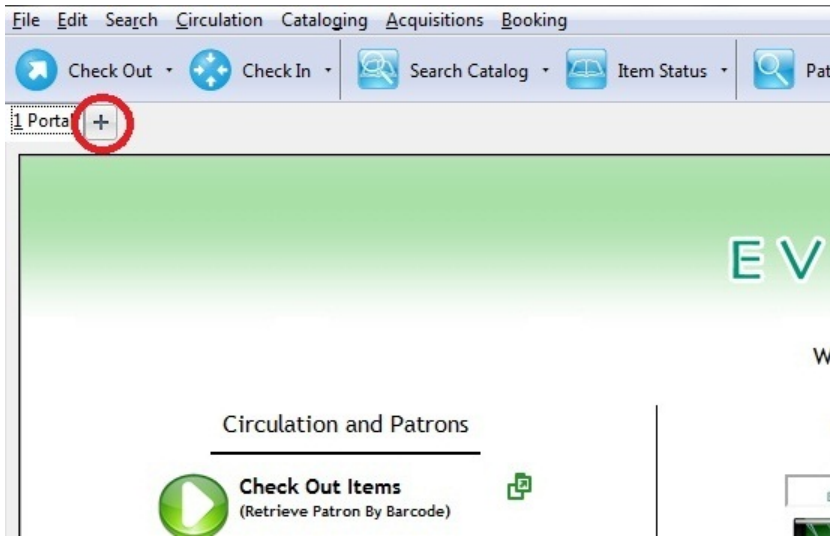


**Fast Item Add** is another “sticky” check box that makes it possible to add volume and item records from the MARC editor.



# Chapter 36. Tab Buttons

This feature enables you to add a new tab to the Evergreen staff client by clicking the + sign adjacent to the tab that you currently have opened. As in previous versions, you can also add new tabs by clicking **File # New Tab**, or use the hotkey, Ctrl+T.





# Chapter 37. New Options for Double Clicking

## Double Click to Retrieve a Patron's Record

1. Click **Search # Search for Patrons** to access a patron's record
2. Enter search terms.
3. Retrieve a list of possible matches. Double click on the record that you want to open.

The screenshot shows a library system window with a menu bar (File, Edit, Search, Circulation, Cataloging, Acquisitions, Booking) and a toolbar with icons for Check Out, Check In, Search Catalog, Item Status, Patron Search, and a group icon. Below the toolbar is a tab labeled 'Patron Search'. The main content area displays a search result for 'Smith, Cathy Cheryl', which is highlighted with a green box. To the right of the name are sections for 'Patron Info', 'Addresses', and 'Phone Numbers'. Below this is a table of search results.

| # | Barred | Date of Birth     | Last Name | First Name |
|---|--------|-------------------|-----------|------------|
| 1 | f      | 2/17/89 12:00 AM  | Smith     | Cathy      |
| 2 | f      | 12/28/65 12:00 AM | Smith     | Kevin      |
| 3 | f      | 6/21/62 12:00 AM  | Smith     | Martha     |
| 4 | f      | 6/24/87 12:00 AM  | Smith     | Robert     |
| 5 | f      | 1/13/90 12:00 AM  | Smith     | Sarah      |

## Double Click to Retrieve Item Attributes

1. Enter search terms to retrieve a bibliographic record.
2. Click **Actions for this Record # Holdings Maintenance**.
3. Double click on an item.

**Record Summary** ( [Add Volumes](#) ) ( [View MARC](#) )

**Title:** Harry Potter and the prisoner of Azkaban  
**Author:** Rowling, J. K.  
**Bib Call #:** PR6068.O94H27 2001

Record 3 of 7    [Start](#)    [Previous](#)    [Next](#)    [End](#)    [Search Results](#)

**Holdings Maintenance**

SILVA    Silva Consortium    Limit: Th

Show Volumes     Show Items     Hide Empty Libs    [Refresh](#)

| # | Location/Barcode           | Volumes | Copies | Call Number | Circulation |
|---|----------------------------|---------|--------|-------------|-------------|
| 1 | ▲SILVA : Silva Consortium  |         |        |             |             |
| 2 | ▲ARDEN : Arden University  |         |        |             |             |
| 3 | ▲MAIN : Main Campus        | 1       | <1>    |             |             |
| 4 | ▲LAW : John Ring Law Li... | 0       | <0>    |             |             |
| 5 | ▲823.92                    |         | 1      | 823.92      |             |
| 6 | 65487431                   |         |        | 823.92      | MAIN        |

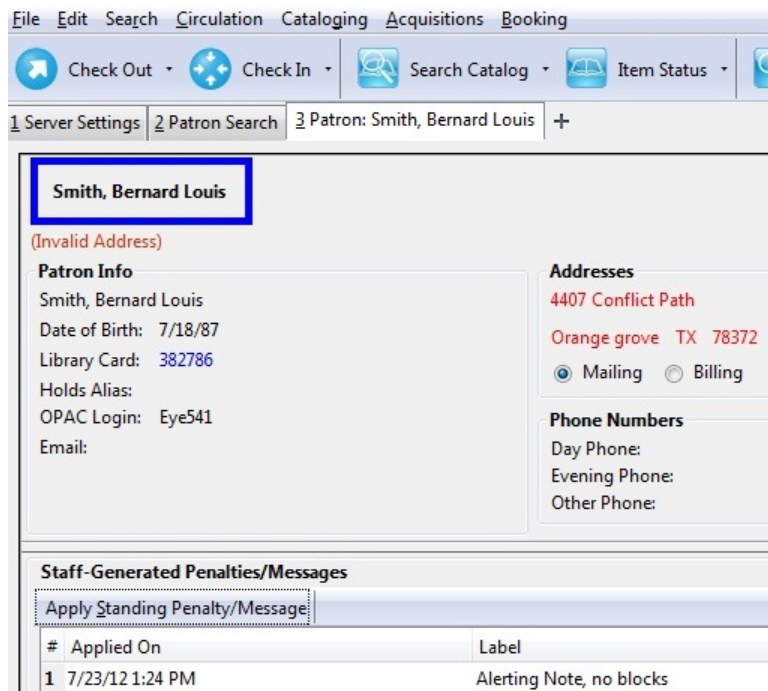
4. The copy information will appear in a new tab.

# Chapter 38. Patron Border Color Enhancement

This feature gives librarians new choices for color coding patron penalties.

In version 2.3, if the `staff_alert` column on the Standing Penalty Type is set to True and no other more serious penalty (as defined by the CSS) trumps it, then, when a patron incurs a penalty, a blue border will appear around the patron's name.

For example, by default, the standing penalty type, `ALERT_NOTE`, has the `staff_alert` value set to TRUE. If I apply an alert to a user's account, and no other penalty color takes precedence over it, then a blue border will appear around the patron's name.



In addition, librarians now can customize the color coding on custom penalty types. For example, librarians can create a penalty type and, using the CSS classname `PATRON_HAS_CUSTOM_PENALTY`, apply a custom color box to the patron's record.

# Chapter 39. Sorting Columns

This feature enables you to sort display columns so that you can find easily the information that you need on a screen that contains multiple columns. You can sort display columns on any screen that is built on a grid, such as the Check In screen or the On Shelf Pull List.

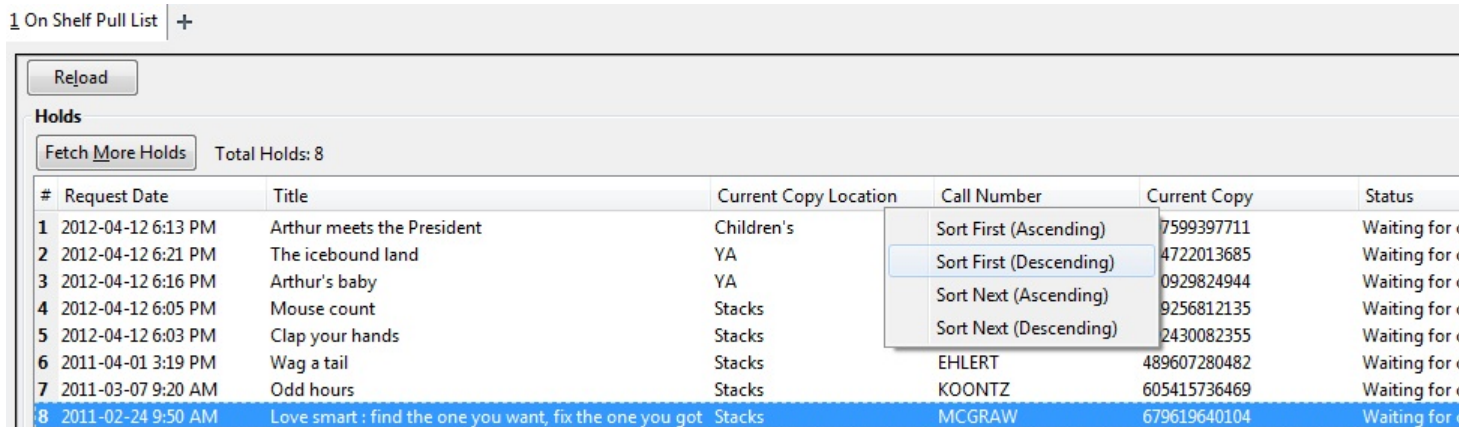
You can also sort the columns on the following Administration screens: Circulation Policies, Hold Policies, Circulation Limit Sets, Barcode Completion, Acquisitions User Request List, and Vandelay Import Errors.

You can sort items in an ascending or descending order, and you can prioritize the order in which columns will sort. The following use cases illustrate how to sort items within the Circulation and Administration interfaces.

## Sorting the On Shelf Pull List

You want to capture items that are on the shelf to fill current holds. To simplify this process, you will sort the items on the On Shelf Pull List by Copy Location and Call Number.

1. Click **Circulation # Pull List for Hold Requests**.
2. The first column that you want to sort is the column, Current Copy Location. Right click the column header, Current Copy Location.
3. Click **Sort First (Descending)**.



4. The next column that you want to sort is the column, Call Number. Right click the column header, Call Number.
5. Click **Sort Next (Ascending)**.

Reload

**Holds**

Fetch More Holds Total Holds: 8

| # | Request Date       | Title   | Current Copy Location | Call Number | Current Copy | Status      |
|---|--------------------|---|-----------------------|-------------|--------------|-------------|
| 1 | 2012-04-12 6:21 PM | The icebound land                                       | YA                    | FLANAGAN    |              | Waiting for |
| 2 | 2012-04-12 6:16 PM | Arthur's baby   | YA                    | BROWN       |              | Waiting for |
| 3 | 2012-04-12 6:05 PM | Mouse count   | Stacks                | WALSH       |              | Waiting for |
| 4 | 2012-04-12 6:03 PM | Clap your hands   | Stacks                | CAULEY      |              | Waiting for |
| 5 | 2011-04-01 3:19 PM | Wag a tail  | Stacks                | EHLERT      |              | Waiting for |
| 6 | 2011-03-07 9:20 AM | Odd hours   | Stacks                | KOONTZ      | 605415736469 | Waiting for |
| 7 | 2011-02-24 9:50 AM | Love smart : find the one you want, fix the one you got | Stacks                | MCGRAW      | 679619640104 | Waiting for |
| 8 | 2012-04-12 6:13 PM | Arthur meets the President                              | Children's            | BROWN       | 907599397711 | Waiting for |

6. The pull list has now been sorted by copy location and call number.

Reload

**Holds**

Fetch More Holds Total Holds: 8

| # | Request Date       | Title   | Current Copy Location | Call Number | Current Copy | Status           |
|---|--------------------|---|-----------------------|-------------|--------------|------------------|
| 1 | 2012-04-12 6:16 PM | Arthur's baby   | YA                    | BROWN       | 310929824944 | Waiting for capt |
| 2 | 2012-04-12 6:21 PM | The icebound land                                       | YA                    | FLANAGAN    | 234722013685 | Waiting for capt |
| 3 | 2012-04-12 6:03 PM | Clap your hands   | Stacks                | CAULEY      | 492430082355 | Waiting for capt |
| 4 | 2011-04-01 3:19 PM | Wag a tail  | Stacks                | EHLERT      | 489607280482 | Waiting for capt |
| 5 | 2011-03-07 9:20 AM | Odd hours   | Stacks                | KOONTZ      | 605415736469 | Waiting for capt |
| 6 | 2011-02-24 9:50 AM | Love smart : find the one you want, fix the one you got | Stacks                | MCGRAW      | 679619640104 | Waiting for capt |
| 7 | 2012-04-12 6:05 PM | Mouse count   | Stacks                | WALSH       | 339256812135 | Waiting for capt |
| 8 | 2012-04-12 6:13 PM | Arthur meets the President                              | Children's            | BROWN       | 907599397711 | Waiting for capt |



If you wanted to sort more columns, you could continue the process by clicking **Sort Next** for any subsequent columns.

## Sorting Circulation Policies

You want to sort the display of circulation policies in your staff client.

1. Click **Administration # Local Administration # Circulation Policies**.
2. Right click on any column header.
3. A pop-up box appears.

**Circulation Policy Configuration**

[Back](#) [Next](#)

| ✓                        | # | Active? | Permis Group | Org Unit | Copy Circ Lib | Copy Owning Lib | User Home Lib | Renewal? | Juvenile? | Circulation Modifier | MARC Type | MARC Form | MARC Bibliographic Level |
|--------------------------|---|---------|--------------|----------|---------------|-----------------|---------------|----------|-----------|----------------------|-----------|-----------|--------------------------|
| <input type="checkbox"/> | 1 | True    | Users        | CONS     |               |                 |               | Unset    | Unset     |                      |           |           |                          |
| <input type="checkbox"/> | 2 | True    | Users        | CONS     | CONS          | CONS            |               | True     | Unset     |                      |           |           |                          |
| <input type="checkbox"/> | 3 | True    | Patrons      | APEX     |               |                 |               | Unset    | Unset     |                      |           |           |                          |

**Column Picker**

| Column                   | Display                             | Auto Width                          | Sort Priority |
|--------------------------|-------------------------------------|-------------------------------------|---------------|
| ✓                        | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |               |
| #                        | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |               |
| Active?                  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 0             |
| Permission Group         | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 0             |
| Org Unit                 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 0             |
| Copy Circ Lib            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 0             |
| Copy Owning Lib          | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 0             |
| User Home Lib            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 0             |
| Renewal?                 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 0             |
| Juvenile?                | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 0             |
| Circulation Modifier     | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 0             |
| MARC Type                | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 0             |
| MARC Form                | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 0             |
| MARC Bibliographic Level | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 0             |

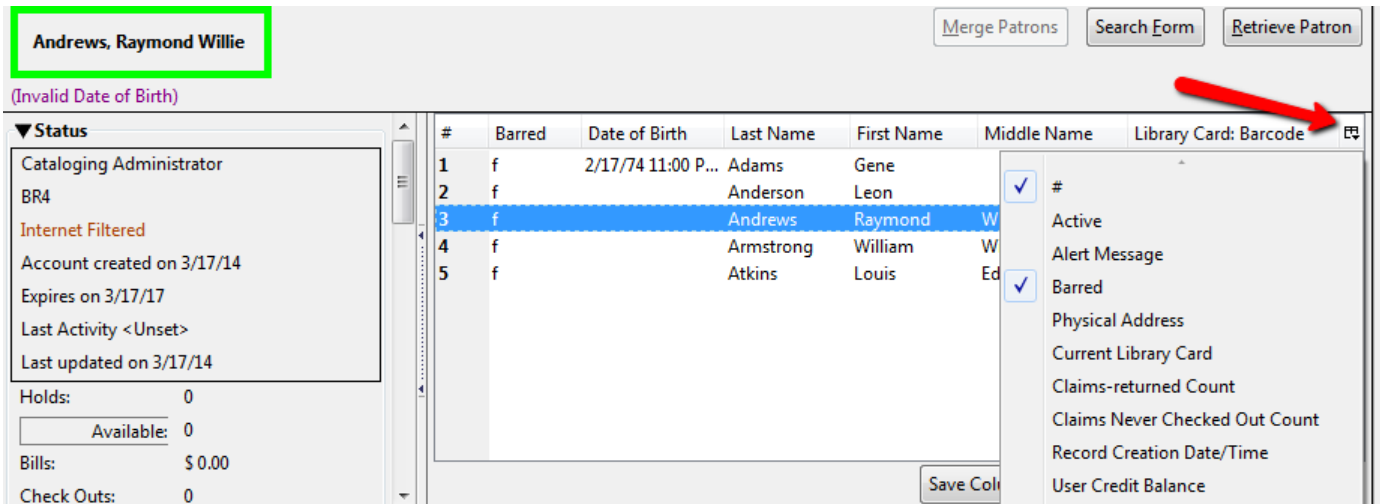
A Sort Priority of '0' means no sorting is applied.  
Apply a negative Sort Priority for descending sort.

4. Check the **Display** box if you want to display a column in the staff client.
5. Check the **Auto Width** box if you want the width of the columns to adjust to fit the staff client.
6. Select a sort priority.
  - a. A sort priority of "0" indicates that no sorting has been applied. Columns will display in their default order.
  - b. A sort priority of "1" indicates that ascending sorting should be applied to this column first. Subsequent sorts will be applied as you continue to enter increasing numbers.
  - c. A sort priority of "-1" indicates that descending sorting should be applied to this column.
7. Click **Save**. The circulation policies will now sort according to your selections each time that you log into the staff client.



# Chapter 40. Column Picker

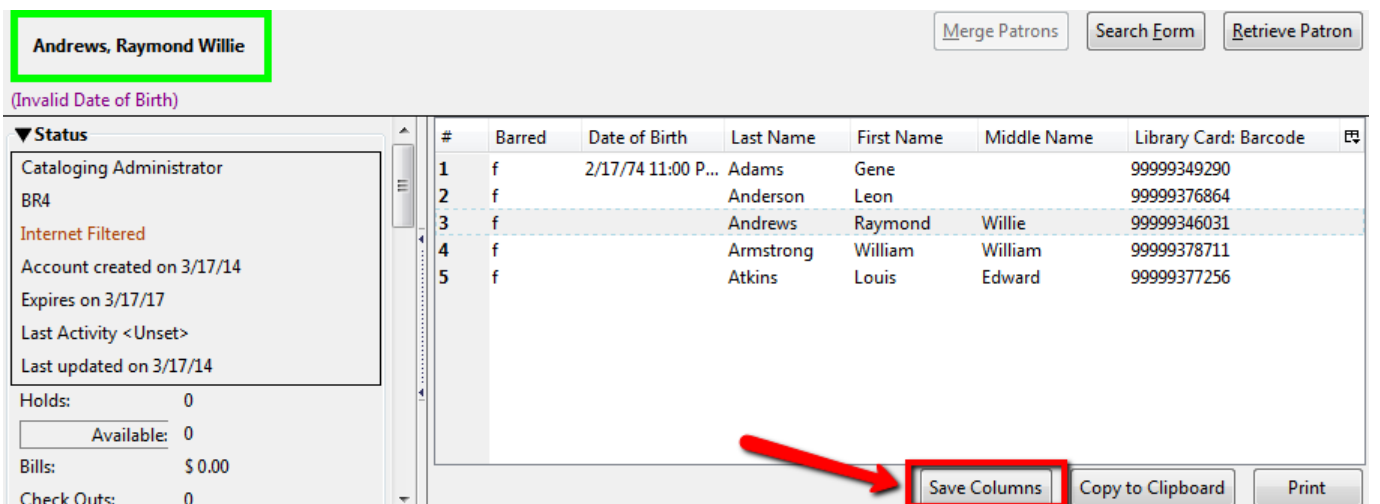
From many screens and lists, you can click on the column picker icon to change which columns are displayed.



The screenshot shows a library system interface. At the top, there is a header with the name "Andrews, Raymond Willie" in a green box, and buttons for "Merge Patrons", "Search Form", and "Retrieve Patron". Below the header, there is a status section on the left with details like "Cataloging Administrator", "BR4", "Internet Filtered", and account information. The main area is a table with columns: #, Barred, Date of Birth, Last Name, First Name, Middle Name, and Library Card: Barcode. A red arrow points to a column picker icon in the top right corner of the table. A dropdown menu is open, showing a list of columns to be displayed, with checkboxes next to them. The "Library Card: Barcode" column is currently selected.

| # | Barred | Date of Birth      | Last Name | First Name | Middle Name | Library Card: Barcode |
|---|--------|--------------------|-----------|------------|-------------|-----------------------|
| 1 | f      | 2/17/74 11:00 P... | Adams     | Gene       |             |                       |
| 2 | f      |                    | Anderson  | Leon       |             |                       |
| 3 | f      |                    | Andrews   | Raymond    | W           |                       |
| 4 | f      |                    | Armstrong | William    | W           |                       |
| 5 | f      |                    | Atkins    | Louis      | Ed          |                       |

When data is displayed in columns, you can click and drag them, add new ones, or remove them. You can also sort data in a column by clicking on the column header. After customizing the display you may save your changes for future sessions under that login by right-clicking anywhere in the display area and choosing **Save Columns** from the drop-down menu. Some libraries use generic accounts and for those who do, staff need to be aware of the implications to other staff members of any changes made to the display.



The screenshot shows the same library system interface as the previous one. The table now displays the full data for each row, including the "Library Card: Barcode" column. A red arrow points to the "Save Columns" button at the bottom of the table area. Other buttons like "Copy to Clipboard" and "Print" are also visible.

| # | Barred | Date of Birth      | Last Name | First Name | Middle Name | Library Card: Barcode |
|---|--------|--------------------|-----------|------------|-------------|-----------------------|
| 1 | f      | 2/17/74 11:00 P... | Adams     | Gene       |             | 99999349290           |
| 2 | f      |                    | Anderson  | Leon       |             | 99999376864           |
| 3 | f      |                    | Andrews   | Raymond    | Willie      | 99999346031           |
| 4 | f      |                    | Armstrong | William    | William     | 99999378711           |
| 5 | f      |                    | Atkins    | Louis      | Edward      | 99999377256           |

Some lists have a different design, and some of them can also be customized. Simply right-click the header row of any of the columns, and the column picker will appear. When you are finished customizing the display, scroll to the bottom of the Column Picker window and click **Save**.

Go Back   Reload   Go Forward

Context Org Unit BR1

[Back](#) [Next](#) [Filter](#)

| ✓ | # | Title | Author | ISxN | Article Title |
|---|---|-------|--------|------|---------------|
| ✓ |   |       |        |      |               |

**Column Picker**

| Column        | Display                             | Auto Width                          | Sort Priority          |
|---------------|-------------------------------------|-------------------------------------|------------------------|
| ✓             | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                        |
| #             | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                        |
| Title         | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 0 <input type="text"/> |
| Author        | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 0 <input type="text"/> |
| ISxN          | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 0 <input type="text"/> |
| Article Title | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 0 <input type="text"/> |



# Chapter 41. Recent Staff Searches

This feature enables you to view your recent searches as you perform them in the staff client. The number of searches that you can view is configurable. This feature is only available through the staff client; it is not available to patrons in the OPAC.

## Administrative Settings

By default, ten searches will be saved as you search the staff client. If you want to change the number of saved searches, then you can configure the number of searches that you wish to save through the **Library Settings Editor** in the **Admin** module.

To configure the number of recent staff searches:

1. Click **Admin # Local Administration # Library Settings Editor**.
2. Scroll to **OPAC: Number of staff client saved searches to display on left side of results and record details pages**
3. Click **Edit**.
4. Select a **Context** from the drop down menu.
5. Enter the number of searches that you wish to save in the **Value** field.
6. Click **Update Setting**

**Edit Setting** ✕

OPAC: Number of staff client saved searches to display on left side of results and record details pages

If unset, the OPAC (only when wrapped in the staff client!) will default to showing you your ten most recent searches on the left side of the results and record details pages. If you actually don't want to see this feature at all, set this value to zero at the top of your organizational tree.

Context

Value



To retain this setting, the system administrator must restart the web server.

If you do not want to save any searches, then you can turn off this feature.

To deactivate this feature:

1. Follow steps 1-4 (one through four) as listed in the previous section.
2. In the **value** field, enter 0 (zero).

3. Click **Update Setting**. This will prevent you from viewing any saved searches.

## Recent Staff Searches

Evergreen will save staff searches that are entered through either the basic or advanced search fields. To view recent staff searches:

1. Enter a search term in either the basic or advanced search fields.
2. Your search results for the current search will appear in the middle of the screen. The most recent searches will appear on the left side of the screen.

Search the Catalog [Advanced Search](#)

Search All Formats  for  in

[\[ Click to Refine Your Original Search \]](#)

[Another Search](#) [Advanced Search](#) Sort by  [Detailed View](#)

---


**Search Results** Results 1 - 10 of 11 (page 1 of 2)

---


**Your recent searches:**

- [bread](#)
- [spaghetti](#)
- [cooking](#)
- [recipe](#)
- [dog](#)
- [rain](#)

---

1.  [Retro kids cooking :](#)  
[Perry, Richard](#), c2004.  
Call number: ACQ14  
0 of 1 copy available

---

2.  [Retro kids cooking :](#)  
[Perry, Richard](#), c2004.  
0 of 0 copies available

# Chapter 42. Return to Search Results from MARC Record

This feature enables you to return to your title search results directly from any view of the MARC record, including the OPAC View, MARC Record, MARC Edit, and Holdings Maintenance. You can use this feature to page through records in the MARC Record View or Edit interfaces. You do not have to return to the OPAC View to access title results.

1 Bib Record: 23 2 Bib Record: 23 +

**Record Summary** ( [Add Volumes](#) ) ( [View MARC](#) )

**Title:** Complete transcriptions, cadenzas, and exercises, for solo piano  
**Author:** Brahms, Johannes  
**Bib Call #:** M22.B82M34

Record 1 of 44    [Start](#)    [Previous](#)    [Next](#)    [End](#)    [Search Results](#)

**Options**

Stack subfields     Flat-Text Editor     Fast Item Add    [Validate](#)    [Save Record](#)    [Help](#)

Call Number     Item Barcode

**MARC Record**

| BLvl | m | Form                          |                                      |      |      |      | MRec  |      | Ctry                         | 00  |
|------|---|-------------------------------|--------------------------------------|------|------|------|-------|------|------------------------------|-----|
| Desc | a |                               |                                      |      | DtSt | s    | Date1 | 1971 | Date2                        | nyu |
| TrAr |   | Part                          |                                      | LTxt |      | FMus | AccM  |      | Comp                         |     |
| LDR  |   | 01864ncm                      | a2200457                             | a    | 4500 |      |       |      |                              |     |
| 001  |   | 23                            |                                      |      |      |      |       |      |                              |     |
| 003  |   | CONS                          |                                      |      |      |      |       |      |                              |     |
| 005  |   | 19991211180904.0              |                                      |      |      |      |       |      |                              |     |
| 008  |   | 970701s1971                   | nyu                                  | 00   | eng  |      |       |      |                              |     |
| 010  |   | <a href="#">+a</a> 72-116826  |                                      |      |      |      |       |      |                              |     |
| 020  |   | <a href="#">+a</a> 0486226522 |                                      |      |      |      |       |      |                              |     |
| 050  | 0 | 0                             | <a href="#">+a</a> M22.B82           |      |      |      |       |      | <a href="#">+b</a> M34       |     |
| 100  | 1 |                               | <a href="#">+a</a> Brahms, Johannes, |      |      |      |       |      | <a href="#">+d</a> 1833-1897 |     |

# Chapter 43. Workstation Administration

## Copy Editor: Copy Location Name First

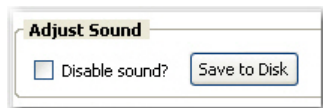
By default, when editing item records, library code is displayed in front of shelving location in *Shelving Location* field. You may reverse the order by going to **Admin # Workstation Administration # Copy Editor: Copy Location Name First**. Simply click it to make copy location name displayed first. The setting is saved on the workstation.

## Font and Sound Settings

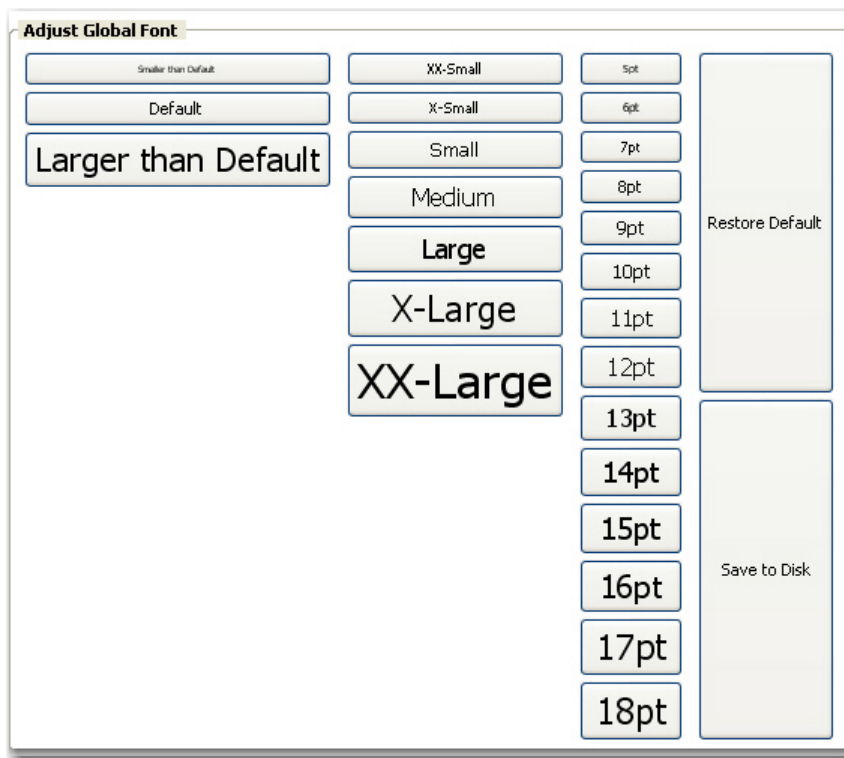
### In the Staff Client

You may change the size of displayed text or turn staff client sounds on and off. These settings are specific to each workstation and stored on local hard disk. They do not affect OPAC font sizes.

1. Select **Admin # Workstation Administration # Global Font and Sound Settings**.
2. To turn off the system sounds, like the noise that happens when a patron with a block is retrieved, check the *disable sound* box and click *Save to Disk*.



3. To change the size of the font, pick the desired option and click *Save to Disk*.



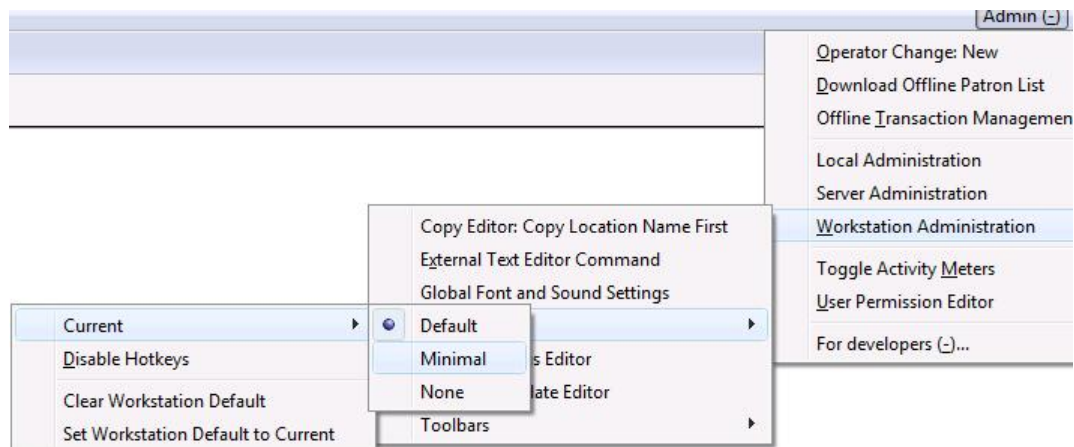
## In the OPAC

It is also possible to zoom in and zoom out when viewing the OPAC in the staff client, making the font appear larger or smaller. (This will not affect other screens.) Use **CTRL + +** (plus sign, to zoom in), **CTRL + -** (minus sign, to zoom out), and **CTRL + 0** (to restore default). The workstation will remember the setting.

## Select Hotkeys

All or partial hotkeys can be turned on or off. It can be done for a particular workstation:

1. Navigate to **Admin # Workstation Administration # Hotkeys # Current**.
2. Select *Default*, *Minimal*, and *None*.



- **Default:** including all hotkeys
- **Minimal:** including those hotkeys using CTRL key
- **None:** excluding all hotkeys

3. Go back to the above menu.

4. Click **Set Workstation Default to Current**.

To clear the existing default click **Clear Workstation Default**.

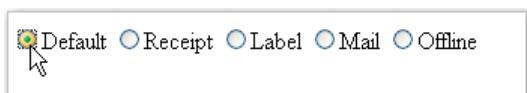
You can use the **Toggle Hotkeys** button, included in some toolbars, on top right corner, to switch your selected Hotkeys *on* or *off* for the current login session. It has the same effect as when you click **Disable Hotkeys** on the *Hotkeys* menu.

## Configure Printers

Use the Printer Settings Editor to configure printer output for each workstation. If left unconfigured Evergreen will use the default printer set in the workstation's operating system (Windows, OSX, Ubuntu, etc).

Evergreen printing works best if you are using recent, hardware-specific printer drivers.

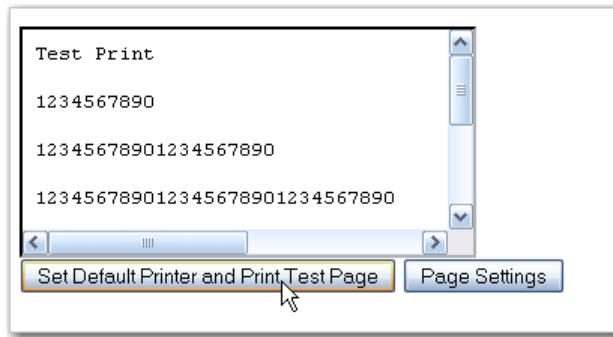
1. Select **Admin # Workstation Administration # Printer Settings Editor**.
2. Select the *Printer Context*. At a minimum set the *Default* context on each Evergreen workstation. Repeat the procedure for other contexts if they differ from the default (e.g. if spine labels should output to a different printer).



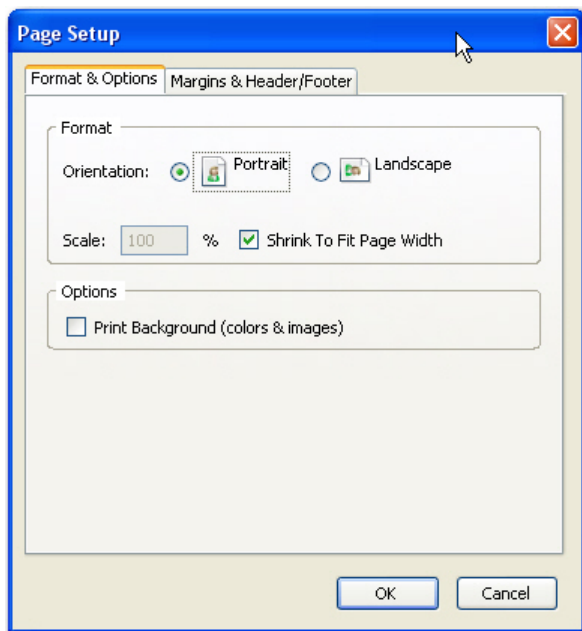
- **Default:** Default settings for staff client print functions (set for each workstation).
- **Receipt:** Settings for printing receipts.

- **Label:** Printer settings for spine and pocket labels.
- **Mail:** Settings for printing mailed notices (not yet active).
- **Offline:** Applies to all printing from the Offline Interface.

3. After choosing *Printer Context* click **Set Default Printer** and **Print Test Page** and follow the prompts. If successful, test output will print to your chosen printer.



4. (optional) To further format or customize printed output click **Page Settings** and adjust settings. When finished click **OK** and print another test page to view changes.



## Advanced Settings

If you followed the steps above and still cannot print there are two alternate print strategies:

- DOS LPTI Print (sends unformatted text directly to the parallel port)
- Custom/External Print (configuration required)

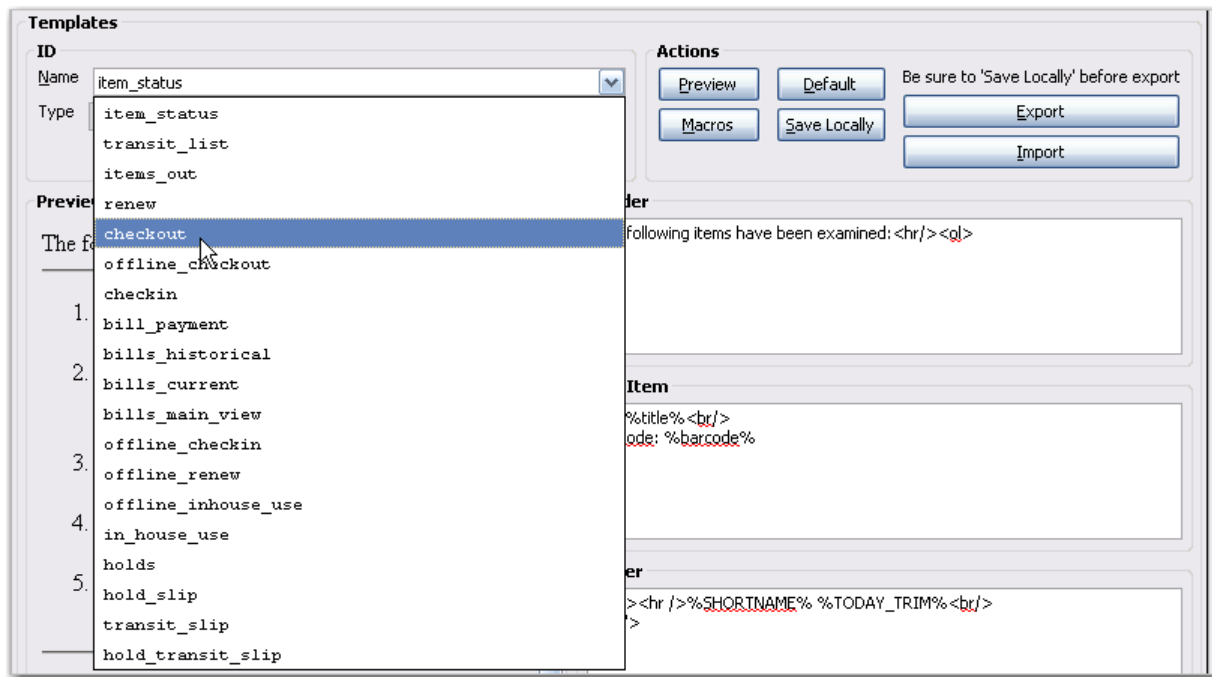


Evergreen cannot print using the Windows Generic/Text Only driver. If this driver is the only one available try one of the alternate print strategies instead.

# Receipt Template Editor

There are many default receipt templates included with the Evergreen staff client. These templates are saved on individual workstations. Customization can be done workstation by workstation or by exporting the templates to import to other workstations.

1. Select **Admin # Workstation Administration # Receipt Template Editor**.
2. Select the *checkout* template from the dropdown menu.



3. This is what the default checkout template looks like. The template preview is on the left hand side. You can edit the *Header*, *Line Item* or *Footer* on the right hand side.



**Templates**

**ID**

Name:

Type:

**Actions**

Be sure to 'Save Locally' before export

---

**Preview**

Welcome to Prince Rupert Library!  
You checked out the following items:

---

1. Peace comes to Castle Oak  
Barcode: 3635300990263 Due: 2006-08-23
2. The robber barons : the great American capitalists, 1861-1901  
Barcode: 33207002163014 Due: 2006-09-06
3. Katy no-pocket  
Barcode: 33034001434539 Due: 2006-09-06
4. King's Castle  
Barcode: 31039000791757 Due: 2006-09-06
5. Katy no-pocket  
Barcode: 33034001434539 Due: 2006-09-06

---

BPR 2009-12-02 10:54  
You were helped by Jeremy

**Header**

Welcome to %LIBRARY%!<br/>  
You checked out the following items:<hr/><ol>


**Line Item**

<li>%title%<br/>  
Barcode: %barcode% Due: %due\_date%

**Footer**

</ol><hr />%SHORTNAME% %TODAY\_TRIM%<br/>  
You were helped by %STAFF\_FIRSTNAME%<br/><br/>

4. In the upper right hand corner you can see the available macros by clicking on the **Macros** button. A macro prints a real value from the database. In this example, the macro `%LIBRARY%` prints “Prince Rupert Library”. The macros that are available vary slightly between types of receipt templates (i.e. bills, holds, items).



Receipt templates are marked up with HTML tags. You may use most HTML tags. See <http://www.w3schools.com/html/> for more information on HTML tags.

You may insert a link to an image, e.g. your library’s logo, that exists on the web. For example, to include the white Evergreen logo from this document, enter tag `<img src=http://docs.evergreen-ils.org/2.3/media/small_logo_white.jpg>`. in the receipt template.

There are several macros that can carry pre-built contents specific to individual libraries. The contents can be set up in local administration. For details see [Library Settings](#). Though text can be hard-coded in receipt templates, the pre-built contents will be automatically applied to receipts printed from all workstations without editing each template.

- %INCLUDE(notice\_text)%
- %INCLUDE(alert\_text)%
- %INCLUDE(event\_text)%
- %INCLUDE(footer\_text)%
- %INCLUDE(header\_text)%

5. Below are some example edits:

|  |  |
|--|--|
| Barcode: 33207002163014 Due: 2006-09-06<br>3. Katy no-pocket<br>Barcode: 33034001434539 Due: 2006-09-06<br>4. King's Castle<br>Barcode: 31039000791757 Due: 2006-09-06<br>5. Katy no-pocket<br>Barcode: 33034001434539 Due: 2006-09-06 | <b>Line Item</b><br><pre>&lt;i&gt;%title%&lt;br/&gt;Barcode: %barcode% Due: %due_date%</pre> |
|--|--|

The above is the default *Line Item* in Checkout template. The macro `%barcode%` prints the item barcodes of the books that were checked out. The macro `%due_date%` prints the due date for each item that was checked out. You may add a line break between them: `Barcode: %barcode% <br/> Due: %due_date%`

The receipt preview will look like this:

```
1. Peace comes to Castle Oak
Barcode: 3635300990263
Due: 2006-08-23
2. The robber barons : the great American capitalists, 1861-1901
Barcode: 33207002163014
Due: 2006-09-06
3. Katy no-pocket
Barcode: 33034001434539
Due: 2006-09-06
4. King's Castle
Barcode: 31039000791757
Due: 2006-09-06
5. Katy no-pocket
Barcode: 33034001434539
Due: 2006-09-06
```



The due date can only be printed in the *YYYY-MM-DD* format.

6. Once you have the checkout template how you want it, click **Save Locally** to save the template to your computer.

**Templates**

ID

Name checkout

Type items

**Actions**

Preview Default Be sure to 'Save Locally' before export

Macros **Save Locally** Export Import

## Print Holds Slip with Landscape Layout

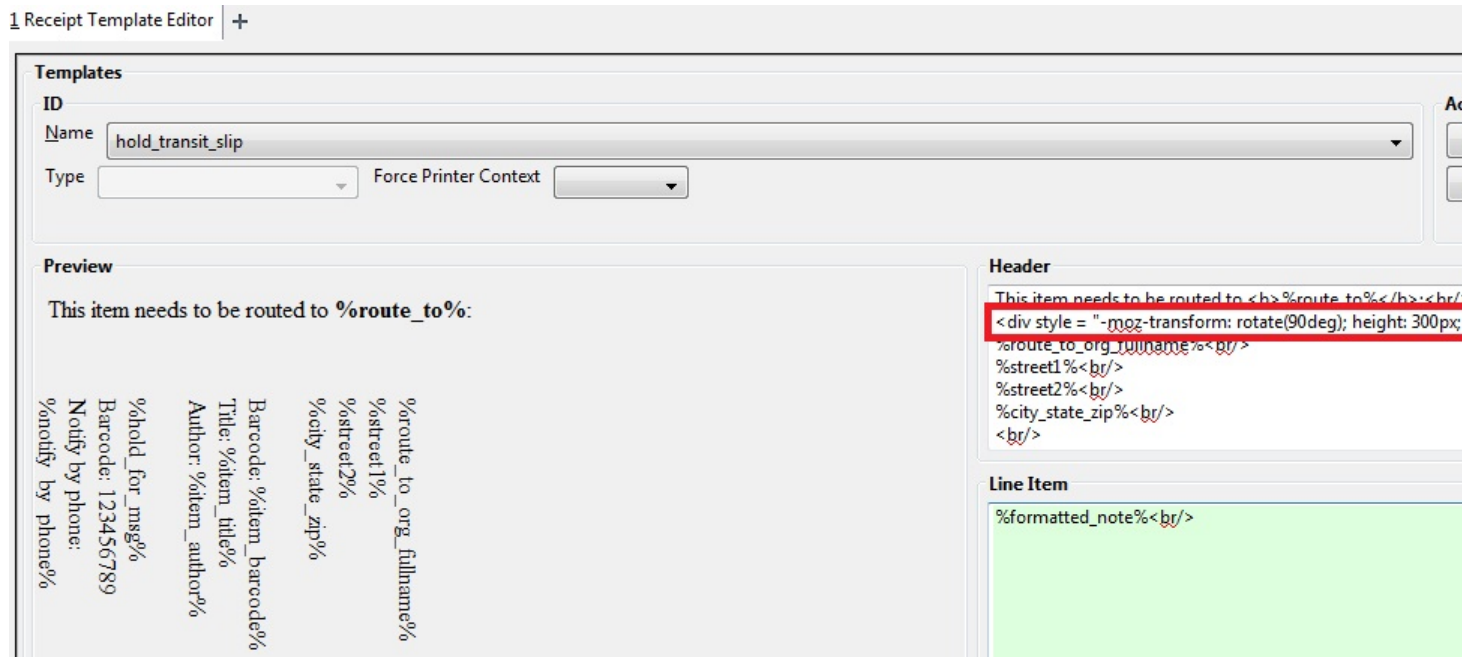
This feature enables you to use Mozilla-specific CSS to print holds with a landscape layout. To use the landscape layout:

1. Click **Admin # Workstation Administration # Receipt Template Editor**.
2. Select **hold transit slip** from the **Template Name** drop down menu.
3. Enter `<div>` before and after the block of text that you wish to rotate.
4. Enter the stylesheet text in the `<div>` bracket that appears before the block of text that you wish to rotate:

```
<div style="moz-transform: rotate(90deg);">
```

5. When you click out of this box, notice that the text in the **Preview** box on the left side of the screen has rotated 90 degrees.
6. You can further customize the look of the text by adjusting its height and width. The height and width that you specify will be unique to your printer. For example, you could add the following height and width to your rotated text:

```
<div style="moz-transform: rotate(90deg);height: 300px; width: 200px;">
```



7. The holds slip will print with the configured text in a landscape layout:

This item needs to be routed to **BD**:

Black Diamond  
We do not have a holds  
address for this library.

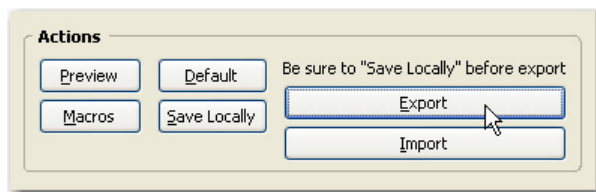
Barcode: 439851225939  
Title: The Köln concert  
Author: Jarrett, Keith

Hold for patron Smith, Bernard  
Louis  
Barcode: 382786  
Notify by phone:

## Exporting Templates

As you can only save a template on to the computer you are working on you will need to export the template if you have more than one computer that prints out receipts (e.g. more than one computers on the circulation desk, or another computer in the workroom that you use to checkin items or capture holds with).

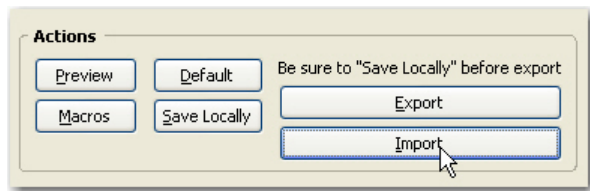
1. Click on **Export**.



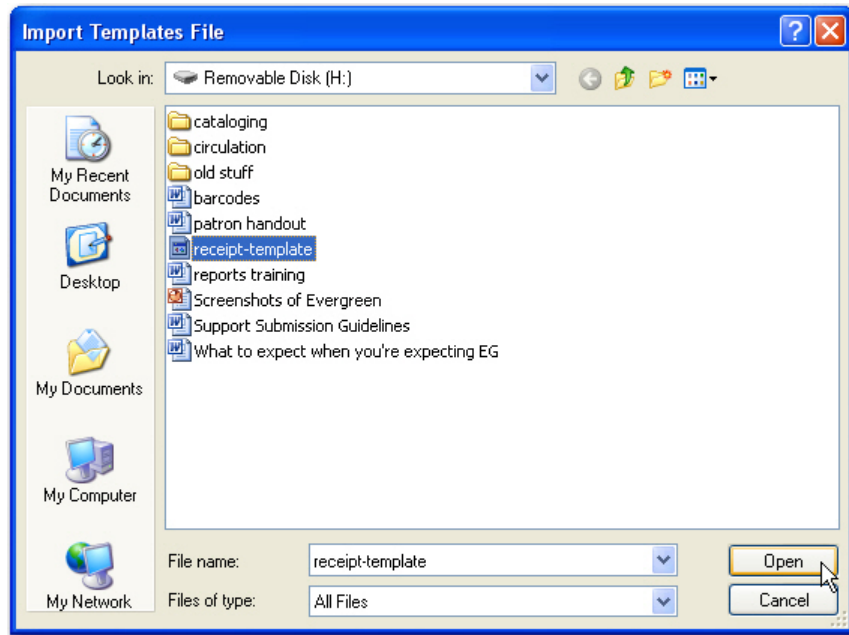
2. Select the location to save the template to, name the template, and click **Save**.
3. Click **OK** to confirm.

## Importing Templates

1. Send the exported templates file to the workstation to which you want to import the templates. You may do it using memory stick or email, etc.
2. On *Receipt Template Editor*, Click **Import**.

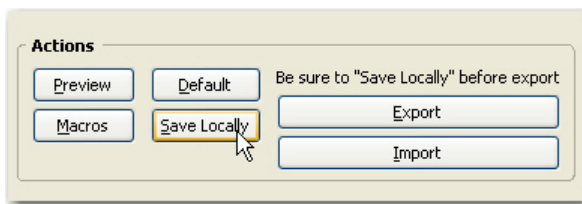


3. Navigate to and select the template file that you want to import. Click **Open**.



4. Click **OK** to confirm on the prompt.

5. Click **Save Locally**.



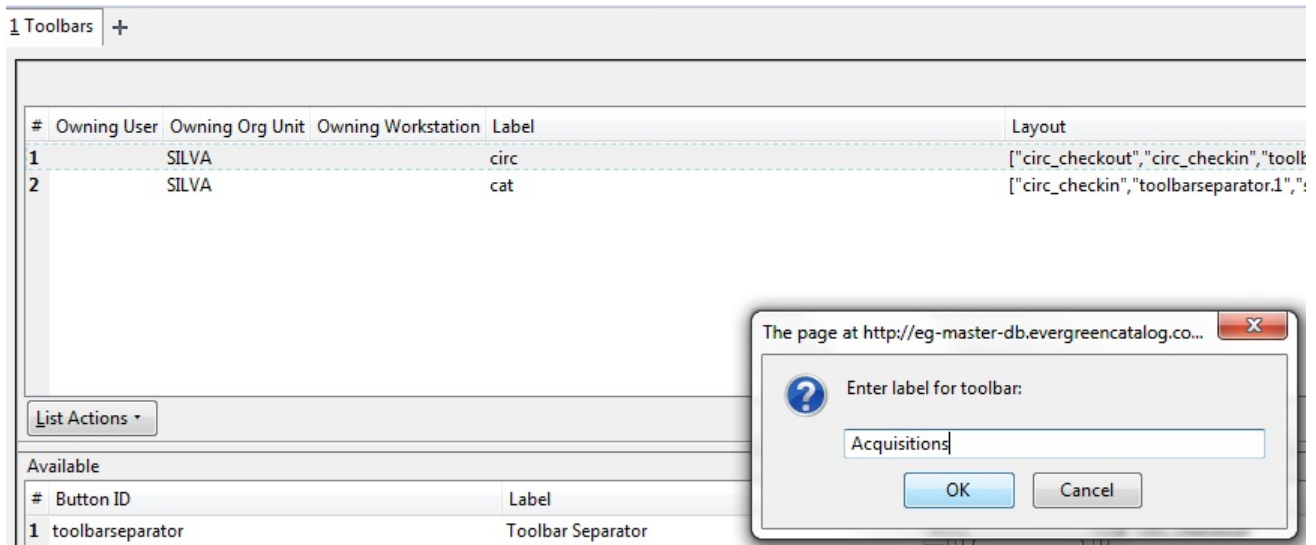
By default all libraries use shared and hard-coded templates for Hold Slip and Transit Slip. Libraries can switch to using their own templates by setting up a library setting: Use legacy hardcoded receipts/slips. Details see [Library Settings](#).

## Customizable Toolbar

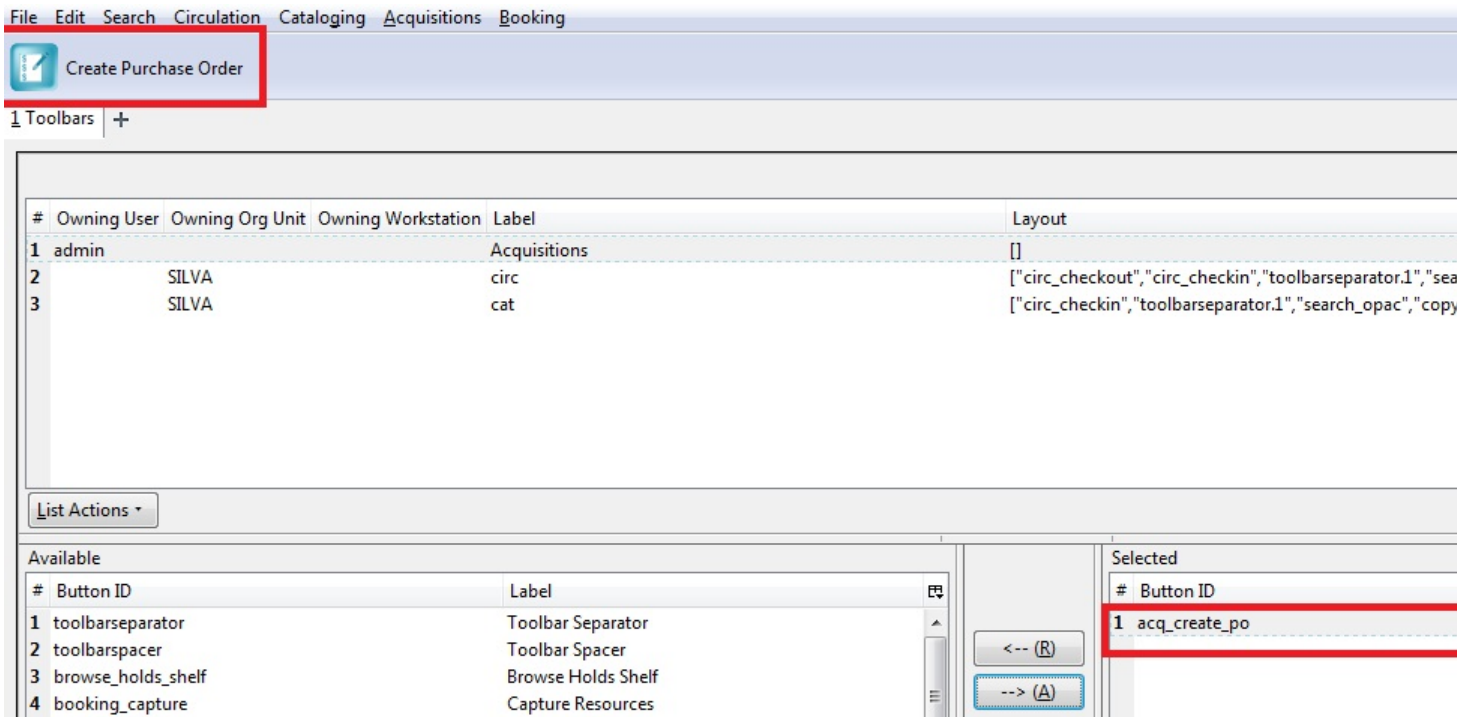
By default, two toolbars are available in the staff client: circulation and cataloging. This feature enables you to customize toolbars in the staff client. You can create toolbars for specific org unit(s), workstation(s), or login(s).

# Configure Toolbar

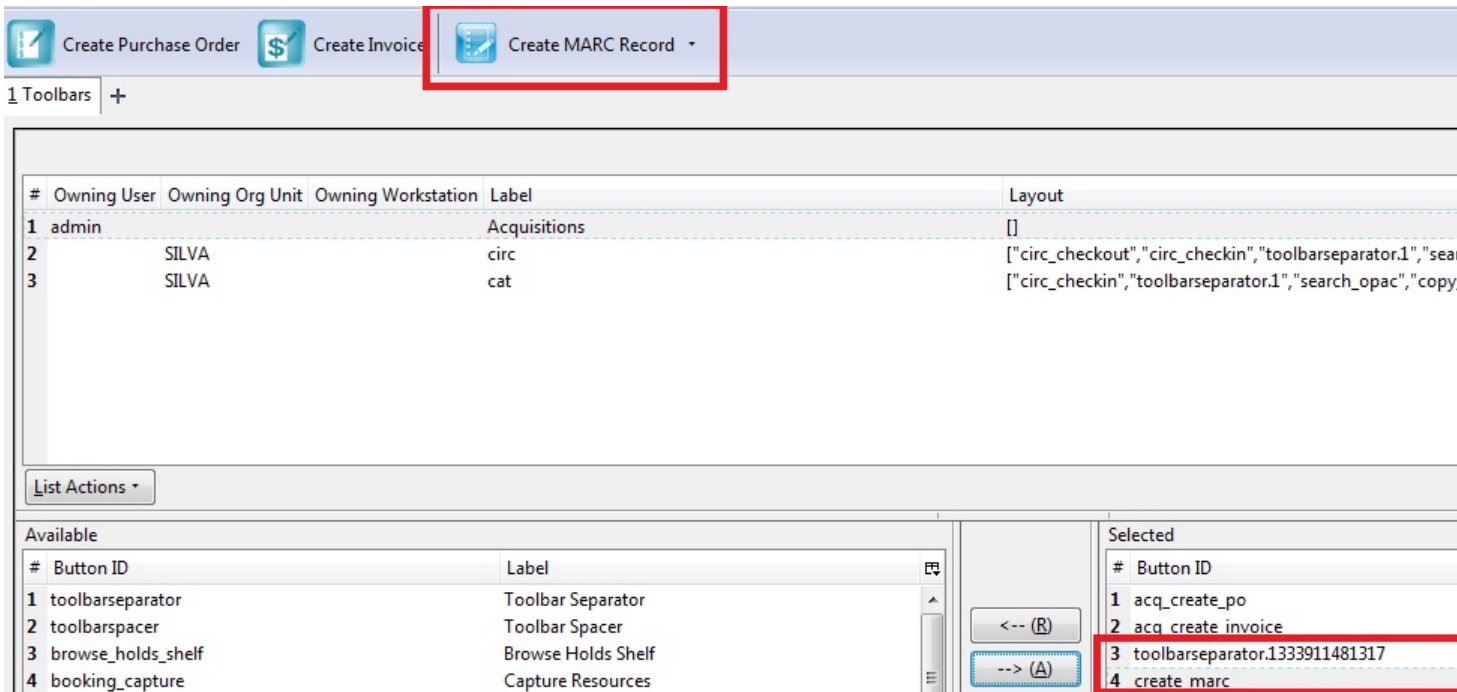
1. Click **Admin # Workstation Administration # Toolbars # Configure Toolbars**.
2. Click **New Toolbar**.
3. Enter label for toolbar.



4. Click **Ok**.
5. Select one of the buttons in the **Available** panel. The **Button ID** describes that action that the button will take, and the **Label** will display in the toolbar.
6. Click the --> (A) button to add the selected function to the **Selected** panel on the bottom right side of the screen. To remove a button, click the <-- (R) button.



- Continue adding buttons if desired. The buttons will display in the order that you add them. If you want to reorder the buttons, click the **Up** or **Down** buttons.
- To separate buttons onto left and right sides of the screen on the same toolbar, select **toolbarspacer**, and click --> (A).



- To add a dividing line between buttons that appear on the same side of the screen, select **toolbarseparator**, and click --> (A).



itions Booking

Create MARC Record ▾

Delete Toolbar

| Station      | Label | Layout  |
|--------------|-------|---|
| Acquisitions |       | []  |
|              | circ  | ["circ_checkout","circ_checkin","toolbarseparator.1","search_opac","copy_status","toolbarseparator.2","patron_s |
|              | cat   | ["circ_checkin","toolbarseparator.1","search_opac","copy_status","toolbarseparator.2","create_marc","authority  |

| Label              | Selected   |
|--------------------|--|
| Toolbar Separator  | # Button ID Label                                  |
| Toolbar Spacer     | 1 acq_create_po Create Purchase Order              |
| Browse Holds Shelf | 2 acq_create_invoice Create Invoice                |
| Capture Resources  | 3 toolbarseparator.1333911481317 Toolbar Separator |
| Check In           | 4 create_marc Create MARC Record                   |
| Check Out          | 5 toolbarspacer.1333911596014 Toolbar Spacer       |
| Conn Buckets       | 6 acq_claim_eligible Claim-Ready Items             |

10. At the bottom of the screen, choose the owner of this toolbar. If you click **Owning Org Unit**, then the owning org unit that you specify will display this toolbar. Select the owning org unit from the drop down menu. The rule of parental inheritance applies, so all child units will inherit the toolbars of their parental units. If you click **Owning Workstation**, then the workstation to which you are logged in when you created the toolbar will display this toolbar. If you select **Owning User**, then your login has access to that toolbar.

11. When you are finished creating the toolbar, click **Save Toolbar**. Any toolbar to which you have access displays under **Admin # Workstation Administration # Toolbars # Current**.

### Permissions

ADMIN\_TOOLBAR - Allow a user to create, edit, and delete custom toolbars



# **Part VI. System Administration From the Staff Client**

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# Chapter 44. Introduction

This part deals with the options in the Server Administration menu found in the staff client.

# Chapter 45. Acquisitions Administration

## Acquisitions Settings

Several settings in the Library Settings area of the Admin module pertain to functions in the Acquisitions module. You can access these settings by clicking *Admin # Local Administration # Library Settings Editor*.

- CAT: Delete bib if all copies are deleted via Acquisitions lineitem cancellation - If you cancel a line item, then all of the on order copies in the catalog are deleted. If, when you cancel a line item, you also want to delete the bib record, then set this setting to TRUE.
- Allow funds to be rolled over without bringing the money along - enables you to move a fund's encumbrances from one year to the next without moving unspent money. Unused money is not added to the next year's fund and is not available for use.
- Allows patrons to create automatic holds from purchase requests.
- Default circulation modifier - This modifier would be applied to items that are created in the acquisitions module
- Default copy location - This copy location would be applied to items that are created in the acquisitions module
- Fund Spending Limit for Block - When the amount remaining in the fund, including spent money and encumbrances, goes below this percentage, attempts to spend from the fund will be blocked.
- Fund Spending Limit for Warning - When the amount remaining in the fund, including spent money and encumbrances, goes below this percentage, attempts to spend from the fund will result in a warning to the staff.
- Rollover Distribution Formulae Funds - When set to true, during fiscal rollover, all distribution formulae will update to use new funds.
- Set copy creator as receiver - When receiving a copy in acquisitions, set the copy "creator" to be the staff that received the copy
- Temporary barcode prefix - Temporary barcode prefix for items that are created in the acquisitions module
- Temporary call number prefix - Temporary call number prefix for items that are created in the acquisitions module

## Cancel/Suspend reasons

The Cancel reasons link enables you to predefine the reasons for which a line item or a PO can be cancelled. A default list of reasons appears, but you can add custom reasons to this list. Applying the cancel reason will prevent the item from appearing in a claims list and will allow you to cancel debits associated with the purchase. Cancel reasons also enable you to suspend or delay a purchase. For example, you could create a cancel reason of *back ordered*, and you could choose to keep the debits associated with the purchase.

## Create a cancel/suspend reason

1. To add a new cancel reason, click *Administration # Server Administration # Acquisitions # Cancel reasons*.
2. Click *New Cancel Reason*.
3. Select a using library from the drop-down menu. The using library indicates the organizational units whose staff can use this cancel reason. This menu is populated with the shortnames that you created for your libraries in the organizational units tree (See *Admin # Server Administration # Organizational Units*.)
4. Create a label for the cancel reason. This label will appear when you select a cancel reason on an item or a PO.
5. Create a description of the cancel reason. This is a free text field and can be comprised of any text of your choosing.
6. If you want to retain the debits associated with the cancelled purchase, click the box adjacent to *Keep Debits#*
7. Click *Save*.

## Claiming

Currently, all claiming is manual, but the admin module enables you to build claim policies and specify the action(s) that users should take to claim items.

### Create a claim policy

The claim policy link enables you to name the claim policy and specify the organization that owns it.

1. To create a claim policy, click *Admin # Server Administration # Acquisitions # Claim Policies*.
2. Create a claim policy name. No limits exist on the number of characters that can be entered in this field.
3. Select an org unit from the drop-down menu. The org unit indicates the organizational units whose staff can use this claim policy. This menu is populated with the shortnames that you created for your libraries in the organizational units tree (See *Admin # Server Administration # Organizational Units*).



The rule of parental inheritance applies to this list.

4. Enter a description. No limits exist on the number of characters that can be entered in this field.
5. Click *Save*.

### Create a claim type

The claim type link enables you to specify the reason for a type of claim.

1. To create a claim type, click *Admin # Server Administration # Acquisitions # Claim types*.
2. Create a claim type. No limits exist on the number of characters that can be entered in this field.
3. Select an org unit from the drop-down menu. The org unit indicates the organizational units whose staff can use this claim type. This menu is populated with the shortnames that you created for your libraries in the organizational units tree (See *Admin # Server Administration # Organizational Units*).



The rule of parental inheritance applies to this list.

4. Enter a description. No limits exist on the number of characters that can be entered in this field.
5. Click *Save*.

## Create a claim event type

The claim event type describes the physical action that should occur when an item needs to be claimed. For example, the user should notify the vendor via email that the library is claiming an item.

1. To access the claim event types, click *Admin # Server Administration # Acquisitions # Claim event type*.
2. Enter a code for the claim event type. No limits exist on the number of characters that can be entered in this field.
3. Select an org unit from the drop-down menu. The org unit indicates the organizational units whose staff can use this event type. This menu is populated with the shortnames that you created for your libraries in the organizational units tree (See *Admin # Server Administration # Organizational Units*).



The rule of parental inheritance applies to this list.

4. Enter a description. No limits exist on the number of characters that can be entered in this field.
5. If this claim is initiated by the user, then check the box adjacent to *Library Initiated*.



Currently, all claims are initiated by a user. The ILS cannot automatically claim an issue.

6. Click *Save*.

## Create a claim policy action

The claim policy action enables you to specify how long a user should wait before claiming the item.

1. To access claim policy actions, click *Admin # Server Administration # Acquisitions # Claim Policy Actions*.
2. Select an Action (Event Type) from the drop-down menu.



3. Enter an action interval. This field indicates how long a user should wait before claiming the item.
4. In the Claim Policy ID field, select a claim policy from the drop-down menu.
5. Click *Save*.



You can create claim cycles by adding multiple claim policy actions to a claim policy.

## Currency Types

Currency types can be created and applied to funds in the administrative module. When a fund is applied to a copy or line item for purchase, the item will be purchased in the currency associated with that fund.

### Create a currency type

1. To create a new currency type, click *Admin # Server Administration # Acquisitions # Currency types*.
2. Enter the currency code. No limits exist on the number of characters that can be entered in this field.
3. Enter the name of the currency type in Currency Label field. No limits exist on the number of characters that can be entered in this field.
4. Click *Save*.

### Edit a currency type

1. To edit a currency type, click your cursor in the row that you want to edit. The row will turn blue.
2. Double click. The pop-up box will appear, and you can edit the fields.
3. After making changes, click *Save*.



From the currency types interface, you can delete currencies that have never been applied to funds or used to make purchases.

## Distribution Formulas

Distribution formulas allow you to specify the number of copies that should be distributed to specific branches. They can also serve as templates allowing you to predefine settings for your copies. You can create and reuse formulas as needed.

# Create a distribution formula

1. Click *Admin # Server Administration # Acquisitions # Distribution Formulas*.
2. Click *New Formula*.
3. Enter a Formula Name. No limits exist on the number of characters that can be entered in this field.
4. Choose a Formula Owner from the drop-down menu. The Formula Owner indicates the organizational units whose staff can use this formula. This menu is populated with the shortnames that you created for your libraries in the organizational units tree (See *Admin # Server Administration # Organizational Units*).



The rule of parental inheritance applies to this list.

5. Ignore the Skip Count field which is currently not used.
6. Click *Save*.
7. Click *New Entry*.
8. Select an Owning Library from the drop-down menu. This indicates the branch that will receive the items. This menu is populated with the shortnames that you created for your libraries in the organizational units tree (See *Admin # Server Administration # Organizational Units*).
9. Select/enter any of the following copy details you want to predefine in the distribution formula.
  - Copy Location
  - Fund
  - Circ Modifier
  - Collection Code
10. In the Item Count field, enter the number of items that should be distributed to the branch. You can enter the number or use the arrows on the right side of the field.
11. Click *Apply Changes*. The screen will reload.
12. To view the changes to your formula, click *Admin # Server Administration # Acquisitions # Distribution Formulas*. The `item_count` will reflect the entries to your distribution formula.



To edit the Formula Name, click the hyperlinked name of the formula in the top left corner. A pop-up box will enable you to enter a new formula name.

# Edit a distribution formula

To edit a distribution formula, click the hyperlinked title of the formula.

# Electronic Data Interchange

Many libraries use Electronic Data Interchange (EDI) accounts to send purchase orders and receive invoices from providers electronically. In Evergreen users can setup EDI accounts and manage EDI messages in the admin module. EDI messages and notes can be viewed in the acquisitions module. See also the [EDI Installation Instructions](#) because this is required for use of EDI.

## Entering SANs (Standard Address Numbers)

For EDI to work your library must have a SAN and each of your providers must each supply you with their SAN.

A SAN (Standard Address Number) is a unique 7 digit number that identifies your library.

### Entering a Library's SAN

These steps only need to be done once per library.

1. In Evergreen select *Admin # Server Administration # Organizational Units*
2. Find your library in the tree on the left side of the page and click on it to open the settings.



Multi-branch library systems will see an entry for each branch but should select their system's top organization unit.

3. Click on the *Address* tab.
4. Click on the *Mailing Address* tab.
5. Enter your library's SAN in the field labeled *SAN*.
6. Click *Save*.

A screenshot of the Evergreen web interface showing the address management settings. The 'Addresses' tab is selected, and the 'Mailing Address' sub-tab is active. The form contains the following fields: 'Type' set to 'MAILING' with a 'Valid' checkbox checked; 'Street 1' containing '1234 Main Street'; 'Street 2' which is empty; 'City' set to 'Springfield', 'State' set to 'BC', and 'Zip' set to 'V6B 5J3' with a warning icon; 'Country' set to 'Canada' and 'County' which is empty; and 'SAN' set to '7654321'. A 'Save' button is located at the bottom left of the form.

### Entering a Provider's SAN

These steps need to be repeated for every provider with which EDI is used.

1. In Evergreen select *Admin # Server Administration # Acquisitions # Providers*.
2. Click the hyperlinked name of the provider you would like to edit.

| Provider                 |   |  |          |       |                  |        |                  |                      |             |       |           |              |       |                  |     |     |
|--------------------------|---|--|----------|-------|------------------|--------|------------------|----------------------|-------------|-------|-----------|--------------|-------|------------------|-----|-----|
| Context Org Unit ZSP     |   |  |          |       |                  |        |                  |                      |             |       |           |              |       |                  |     |     |
| Back Next Filter         |   |  |          |       |                  |        |                  |                      |             |       |           |              |       |                  |     |     |
| ✓                        | # | Provider Name                          | Code     | Owner | Currency         | Active | Default # Copies | Default Claim Policy | EDI Default | Email | Fax Phone | Holdings Tag | Phone | Prepaym Required | SAN | URL |
| <input type="checkbox"/> | 1 | <a href="#">Amazon</a>                 | AMA_ZS   | ZSP-A | Canadiar Dollars | True   | 0                |                      |             |       |           |              |       | False            |     |     |
| <input type="checkbox"/> | 2 | <a href="#">Amazon</a>                 | AMA_ZS   | ZSP-B | Canadiar Dollars | True   | 0                |                      |             |       |           |              |       | False            |     |     |
| <input type="checkbox"/> | 3 | <a href="#">Fictional Bookstor</a>     | FICB-TE  | ZSP   | Canadiar Dollars | True   | 0                |                      |             |       |           |              |       | False            |     |     |
| <input type="checkbox"/> | 4 | <a href="#">New Fictional Bookstor</a> | NFICB-TE | ZSP   | Canadiar Dollars | True   | 1                |                      |             |       |           |              |       | False            |     |     |

1. Enter your provider's SAN in the field labeled *SAN*.
2. Click *Save*.

|                                       |                                     |                                     |                          |
|---------------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| Active                                | <input checked="" type="checkbox"/> | Code                                | NFICB-TEST               |
| Currency                              | Canadian Dollars                    | Default # Copies                    | 1                        |
| Default Claim Policy                  |                                     | EDI Default                         |                          |
| Email                                 |                                     | Fax Phone                           |                          |
| Holdings Tag                          |                                     | Owner                               | ZSP                      |
| Phone                                 |                                     | Prepayment Required                 | <input type="checkbox"/> |
| Provider ID                           | 773                                 | Provider Name                       | New Fictional Bookstore  |
| SAN                                   | 1234567                             | URL                                 |                          |
| <input type="button" value="Cancel"/> |                                     | <input type="button" value="Save"/> |                          |

## Create an EDI Account



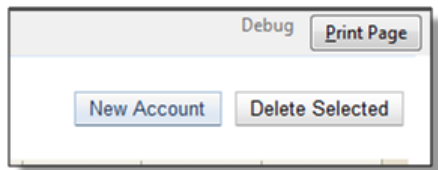
You **must** create your provider before you create an EDI account for the provider.

1. Contact your provider requesting the following information:
  - Host
  - Username
  - Password
  - Path

- Incoming Directory
- Provider's SAN

2. In Evergreen select *Admin # Server Administration # Acquisitions # EDI Accounts*.

3. Click *New Account*. A pop-up will appear.



1. Fill in the following fields:

- In the *Label* field, enter a name for the EDI account.
- In the *Host* field, enter the requisite FTP or SCP information supplied by your provider. Be sure to include the protocol (e.g. `ftp://ftp.vendorname.com`)
- In the *Username* field, enter the username supplied by your provider.
- In the *Password* field, enter the password supplied by your provider.
- Select your library as the *Owner* from the drop down menu. Multi-branch libraries should select their top level organizational unit.
- The *Last Activity* updates automatically with any inbound or outbound communication.
- In the *Provider* field, enter the code used in Evergreen for your provider.
- In the *Path* field, enter the path supplied by your provider. The path indicates a directory on the provider's server where Evergreen will deposit its outgoing order files.



If your vendor requests a specific file extension for EDI purchase orders, such as `.ord`, enter the name of the directory, followed by a slash, followed by an asterisk, followed by a period, followed by the extension. For example, if the vendor requests that EDI purchase orders be sent to a directory called `in` with the file extension `.ord`, your path would be `in/*.ord`.

- In the *Incoming Directory* field, enter the incoming directory supplied by your provider. This indicates the directory on the vendor's server where Evergreen will retrieve incoming order responses and invoices.



Don't worry if your incoming directory is named `out` or `outgoing`. From your vendor's perspective, this directory is outgoing, because it contains files that the vendor is sending to Evergreen. However, from Evergreen's perspective, these files are incoming.

|   |                    |
|---|--------------------|
| Label   | NFIC_ZSP           |
| Host  | ftp://ftp.nfic.com |
| Username  | nfic/7777          |
| Password  | password           |
| Account   |                    |
| Owner   | ZSP                |
| Last Activity   |                    |
| Provider  | NFICB-TEST         |
| Path  | ./*.fic            |
| Incoming Directory  | acq/               |
| Vendor Account Number   |                    |
| Vendor Assigned Code  |                    |
| <input type="button" value="Cancel"/> <input type="button" value="Save"/> |                    |

2. Click *Save*.
3. Click on the link in the *Provider* field.

| EDI Accounts             |   |          |                    |           |          |         |       |               |                     |         |                    |                       |                      | New Account | Delete Selected |
|--------------------------|---|----------|--------------------|-----------|----------|---------|-------|---------------|---------------------|---------|--------------------|-----------------------|----------------------|-------------|-----------------|
| ✓                        | # | Label    | Host               | Username  | Password | Account | Owner | Last Activity | Provider            | Path    | Incoming Directory | Vendor Account Number | Vendor Assigned Code |             |                 |
| <input type="checkbox"/> | 1 | NFIC_ZSP | ftp://ftp.nfic.com | nfic/7777 | password |         | ZSP   |               | <a href="#">773</a> | ./*.fic | acq/               |                       |                      |             |                 |

1. Select the EDI account that has just been created from the *EDI Default* drop down menu.

|                     |                                  |
|---------------------|----------------------------------|
| Code                | NFICB-TEST                       |
| Default # Copies    | 1                                |
| EDI Default         | <input type="button" value="v"/> |
| Fax Phone           | NFIC_ZSP                         |
| Owner               | FAKE                             |
| Prepayment Required | <input type="checkbox"/>         |
| Provider Name       | ZSP                              |
| URL                 | New Fictional Bookstore          |
|                     |                                  |

1. Click *Save*.

## EDI Messages

The EDI Messages screen displays all incoming and outgoing messages between the library and its providers. To see details of a particular EDI message, including the raw EDIFACT message, double click on a message entry. To find a specific EDI message, the Filter options can be useful. Outside the Admin interface, EDI messages that pertain to a specific purchase order can be viewed from the purchase order interface (See *Acquisitions # Purchase Orders*).

## Exchange Rates

Exchange rates define the rate of exchange between currencies. Evergreen will automatically calculate exchange rates for purchases. Evergreen assumes that the currency of the purchasing fund is identical to the currency of the provider, but it provides for two unique situations: If the currency of the fund that is used for the purchase is different from the currency of the provider as listed in the provider profile, then Evergreen will use the exchange rate to calculate the price of the item in the currency of the fund and debit the fund accordingly. When money is transferred between funds that use different currency types, Evergreen will automatically use the exchange rate to convert the money to the currency of the receiving fund. During such transfers, however, staff can override the automatic conversion by providing an explicit amount to credit to the receiving fund.

### Create an exchange rate

1. To create a new exchange rate, click *Admin # Server Administration # Acquisitions # Exchange Rates*.
2. Click New Exchange Rate.
3. Enter the From Currency from the drop-down menu populated by the currency types.
4. Enter the To Currency from the drop-down menu populated by the currency types.
5. Enter the exchange Ratio.
6. Click *Save*.

### Edit an exchange rate

Edit an exchange rate just as you would edit a currency type.

## MARC Federated Search

The MARC Federated Search enables you to import bibliographic records into a selection list or purchase order from a Z39.50 source.

1. Click *Acquisitions # MARC Federated Search*.
2. Check the boxes of Z39.50 services that you want to search. Your local Evergreen Catalog is checked by default. Click Submit.

### Search Sources

|                                     |                     |
|-------------------------------------|---------------------|
| <input checked="" type="checkbox"/> | Evergreen Catalog   |
| <input type="checkbox"/>            | OCLC                |
| <input checked="" type="checkbox"/> | Library of Congress |
| <input type="checkbox"/>            | ‡biblios.net        |

### Search Fields

|   |   |
|---|---|
| Author  | <input type="text"/>                        |
| ISBN  | <input type="text" value="978-1439164631"/> |
| ISSN  | <input type="text"/>                        |
| Item Type   | <input type="text"/>                        |
| LCCN  | <input type="text"/>                        |
| Publication Date  | <input type="text"/>                        |
| Publisher   | <input type="text"/>                        |
| Title   | <input type="text" value="left neglected"/> |
| Title Control Number  | <input type="text"/>                        |
| Hits Per Source   | <input type="text" value="10"/>             |
| <input type="button" value="Submit"/> <input type="button" value="Clear Form"/> |   |

3. A list of results will appear. Click the *Copies* link to add copy information to the line item. See [Line Item Features](#) for more information.
4. Click the Notes link to add notes or line item alerts to the line item. See [Line Item Features](#) for more information.
5. Enter a price in the *Estimated Price* field.
6. You can save the line item(s) to a selection list by checking the box on the line item and clicking *Actions # Save Items to Selection List*. You can also create a purchase order from the line item(s) by checking the box on the line item and clicking *Actions # Create Purchase Order*.

| Items                     | Notes                    | Actions                                      | Status | Estimated Price      |
|---------------------------|--------------------------|--|--------|----------------------|
| <a href="#">Copies(0)</a> | <a href="#">Notes(0)</a> | <input type="button" value="-- Actions --"/> | new    | <input type="text"/> |

## Fund Tags

You can apply tags to funds so that you can group funds for easy reporting. For example, you have three funds for children’s materials: Children’s Board Books, Children’s DVDs, and Children’s CDs. Assign a fund tag of *children’s* to each fund. When you need to report on the amount that has been spent on all children’s materials, you can run a report on the fund tag to find total expenditures on children’s materials rather than reporting on each individual fund.

### Create a Fund Tag

1. To create a fund tag, click *Admin # Server Administration # Acquisitions # Fund Tags*.



2. Click *New Fund Tag*. No limits exist on the number of characters that can be entered in this field.
3. Select a Fund Tag Owner from the drop-down menu. The owner indicates the organizational unit(s) whose staff can use this fund tag. This menu is populated with the shortnames that you created for your libraries in the organizational units tree (See Admin # Server Administration # Organizational Units).



The rule of parental inheritance applies to this list.

4. Enter a Fund Tag Name. No limits exist on the number of characters that can be entered in this field.
5. Click *Save*.

## Funding Sources

Funding sources allow you to specify the sources that contribute monies to your fund(s). You can create as few or as many funding sources as you need. These can be used to track exact amounts for accounts in your general ledger. You can then use funds to track spending and purchases for specific collections.

### Create a funding source

1. To create a new funding source, click *Admin # Server Administration # Acquisitions # Funding Source*.
2. Enter a funding source name. No limits exist on the number of characters that can be entered in this field.
3. Select an owner from the drop-down menu. The owner indicates the organizational unit(s) whose staff can use this funding source. This menu is populated with the shortnames that you created for your libraries in the organizational units tree (See Admin # Server Administration # Organizational Units).



The rule of parental inheritance applies to this list. For example, if a system is made the owner of a funding source, then users with appropriate permissions at the branches within the system could also use the funding source.

4. Create a code for the source. No limits exist on the number of characters that can be entered in this field.
5. Select a currency from the drop-down menu. This menu is populated from the choices in the Currency Types interface.
6. Click *Save*.

### Allocate credits to funding sources

1. Apply a credit to this funding source.
2. Enter the amount of money that the funding source contributes to the organization. Funding sources are not tied to fiscal or calendar years, so you can continue to add money to the same funding source over multiple years, e.g.

County Funding. Alternatively, you can name funding sources by year, e.g. County Funding 2010 and County Funding 2011, and apply credits each year to the matching source.

3. To apply a credit, click on the hyperlinked name of the funding source. The Funding Source Details will appear.
4. Click *Apply Credit*.
5. Enter an amount to apply to this funding source.
6. Enter a note. This field is optional.
7. Click *Apply*.

## Allocate credits to funds

If you have already set up your funds, then you can then click the Allocate to Fund button to apply credits from the funding sources to the funds. If you have not yet set up your funds, or you need to add a new one, you can allocate credits to funds from the funds interface. See section 1.2 for more information.

1. To allocate credits to funds, click *Allocate to Fund*.
2. Enter the amount that you want to allocate.
3. Enter a note. This field is optional.
4. Click *Apply*.

## Track debits and credits

You can track credits to and allocations from each funding source. These amounts are updated when credits and allocations are made in the Funding Source Details. Access the Funding Source Details by clicking on the hyperlinked name of the Funding Source.

## Funds

Funds allow you to allocate credits toward specific purchases. In the funds interface, you can create funds; allocate credits from funding sources to funds; transfer money between funds; and apply fund tags to funds. Funds are created for a specific year, either fiscal or calendar. These funds are owned by org units. At the top of the funds interface, you can set a contextual org unit and year. The drop-down menu at the top of the screen enables you to focus on funds that are owned by specific organizational units during specific years.

## Create a fund

1. To create a new fund, click *Admin # Server Administration # Acquisitions # Funds*.
2. Enter a name for the fund. No limits exist on the number of characters that can be entered in this field.
3. Create a code for the fund. No limits exist on the number of characters that can be entered in this field.

4. Enter a year for the fund. This can be a fiscal year or a calendar year. The format of the year is YYYY.
5. Select an org unit from the drop-down menu. The org unit indicates the organizational units whose staff can use this fund. This menu is populated with the shortnames that you created for your libraries in the organizational units tree (See Admin # Server Administration # Organizational Units).



The rule of parental inheritance applies to this list. See section

6. Select a currency type from the drop-down menu. This menu is comprised of entries in the currency types menu. When a fund is applied to a line item or copy, the price of the item will be encumbered in the currency associated with the fund.
7. Click the Active box to activate this fund. You cannot make purchases from this fund if it is not active.
8. Enter a Balance Stop Percent. The balance stop percent prevents you from making purchases when only a specified amount of the fund remains. For example, if you want to spend 95 percent of your funds, leaving a five percent balance in the fund, then you would enter 95 in the field. When the fund reaches its balance stop percent, it will appear in red when you apply funds to copies.
9. Enter a Balance Warning Percent. The balance warning percent gives you a warning that the fund is low. You can specify any percent. For example, if you want to spend 90 percent of your funds and be warned when the fund has only 10 percent of its balance remaining, then enter 90 in the field. When the fund reaches its balance warning percent, it will appear in yellow when you apply funds to copies.
10. Check the Propagate box to propagate funds. When you propagate a fund, the ILS will create a new fund for the following fiscal year with the same parameters as your current fund. All of the settings transfer except for the year and the amount of money in the fund. Propagation occurs during the fiscal year close-out operation.
11. Check the Rollover box if you want to roll over remaining funds into the same fund next year. You should also check this box if you only want to roll over encumbrances into next year's fund.
12. Click *Save*.

## Allocate credits from funding sources to funds

Credits can be applied to funds from funding sources using the fund interface. The credits that you apply to the fund can be applied later to purchases.

1. To access funds, click *Admin # Server Administration # Acquisitions # Funds*.
2. Click the hyperlinked name of the fund.
3. To add a credit to the fund, click the Create Allocation tab.
4. Choose a Funding Source from the drop-down menu.
5. Enter an amount that you want to apply to the fund from the funding source.
6. Enter a note. This field is optional.
7. Click *Apply*.

## Transfer credits between funds

The credits that you allocate to funds can be transferred between funds if desired. In the following example, you can transfer \$500.00 from the Young Adult Fiction fund to the Children's DVD fund.

1. To access funds, click *Admin # Server Administration # Acquisitions # Funds*.
2. Click the hyperlinked name of the originating fund.
3. The Fund Details screen appears. Click Transfer Money.
4. Enter the amount that you would like to transfer.
5. From the drop-down menu, select the destination fund.
6. Add a note. This field is optional.
7. Click *Transfer*.

## Track balances and expenditures

The Fund Details allows you to track the fund's balance, encumbrances, and amount spent. It also allows you to track allocations from the funding source(s), debits, and fund tags.

1. To access the fund details, click on the hyperlinked name of the fund that you created.
2. The Summary allows you to track the following:
3. Balance - The balance is calculated by subtracting both items that have been invoiced and encumbrances from the total allocated to the fund.
4. Total Allocated - This amount is the total amount allocated from the Funding Source.
5. Spent Balance - This balance is calculated by subtracting only the items that have been invoiced from the total allocated to the fund. It does not include encumbrances.
6. Total Debits - The total debits are calculated by adding the cost of items that have been invoiced and encumbrances.
7. Total Spent - The total spent is calculated by adding the cost of items that have been invoiced. It does not include encumbrances.
8. Total Encumbered - The total encumbered is calculated by adding all encumbrances.

## Fund reporting

A core source, Fund Summary, is available in the reports interface. This core source enables librarians to easily run a report on fund activity. Fields that are accessible in this interface include Remaining Balance, Total Allocated, Total Encumbered, and Total Spent.

| Database Source Browser |                | Source Specifier: Fund Summary |           |
|-------------------------|----------------|--------------------------------|-----------|
| Nullable                | Source Name    | Field Name                     | Data Type |
|                         | ▸ Fund Summary | Name                           | text      |
|                         |                | Org Unit                       | org_unit  |
|                         |                | Propagate                      | bool      |
|                         |                | Remaining Balance              | money     |
|                         |                | Rollover                       | bool      |
|                         |                | Total Allocated                | money     |
|                         |                | Total Encumbered               | money     |
|                         |                | Total Spent                    | money     |
|                         |                | Year                           | int       |

## Edit a fund

Edit a fund just as you would edit a currency type.

## Perform fiscal year close-out operation

The Fiscal Year Close-Out Operation allows you to deactivate funds for the current year and create analogous funds for the next year. It transfers encumbrances to the analogous funds, and it rolls over any remaining funds if you checked the rollover box when creating the fund.

1. To access the year end closeout of a fund, click Admin # Server Administration # Acquisitions # Funds.
2. Click *Fund Propagation and Rollover*.
3. Check the box adjacent to *Perform Fiscal Year Close-Out Operation*.
4. For funds that have the "Rollover" setting enabled, if you want to move the fund's encumbrances to the next year without moving unspent money, check the box adjacent to *Limit Fiscal Year Close-out Operation to Encumbrances*.



The *Limit Fiscal Year Close-out Operation to Encumbrances* will only display if the *Allow funds to be rolled over without bringing the money along* Library Setting has been enabled. This setting is available in the Library Setting Editor accessible via *Administration # Local Administration # Library Settings Editor*.

New Fund Delete Selected Fund Propagation & Rollover ▾

Propagation creates new funds for the subsequent fiscal year based on the funds for the selected fiscal year. Only funds with the propagate setting enabled will be affected. No money or encumbrances are altered during this process.

---

Perform Fiscal Year Close-out Operation:

The year end close out operation moves encumbrances from the selected fiscal year to the analogous funds in the subsequent fiscal year and it deactivates funds for the selected fiscal year. Additionally, for all funds that have the "Rollover" setting enabled, this process will move all unspent money to the analogous fund in the subsequent fiscal year.

Limit Fiscal Year Close-out Operation to Encumbrances:

This modifies the above described Close-out Operation, causing funds to be transferred into the void (that is, entirely removed) instead of being transferred to the analogous funds in the subsequent fiscal year.

Context Org Unit: CONS

5. Notice that the context org unit reflects the context org unit that you selected at the top of the Funds screen.
6. If you want to perform the close-out operation on the context org unit and its child units, then check the box adjacent to Include Funds for Descendant Org Units.
7. Check the box adjacent to dry run if you want to test changes to the funds before they are enacted. Evergreen will generate a summary of the changes that would occur during the selected operations. No data will be changed.
8. Click *Process*.
9. Evergreen will begin the propagation process. Evergreen will make a clone of each fund, but it will increment the year by 1.

## Invoice menus

Invoice menus allow you to create drop-down menus that appear on invoices. You can create an invoice item type or invoice payment method.

## Invoice item type

The invoice item type allows you to enter the types of additional charges that you can add to an invoice. Examples of additional charge types might include taxes or processing fees. Charges for bibliographic items are listed separately from these additional charges. A default list of charge types displays, but you can add custom charge types to this list. Invoice item types can also be used when adding non-bibliographic items to a purchase order. When invoiced, the invoice item type will copy from the purchase order to the invoice.

1. To create a new charge type, click *Admin # Server Administration # Acquisitions # Invoice Item Type*.
2. Click *New Invoice Item Type*.
3. Create a code for the charge type. No limits exist on the number of characters that can be entered in this field.

4. Create a label. No limits exist on the number of characters that can be entered in this field. The text in this field appears in the drop-down menu on the invoice.
5. If items on the invoice were purchased with the monies in multiple funds, then you can divide the additional charge across funds. Check the box adjacent to Prorate# if you want to prorate the charge across funds.
6. Click *Save*.

## Invoice payment method

The invoice payment method allows you to predefine the type(s) of invoices and payment method(s) that you accept. The text that you enter in the admin module will appear as a drop-down menu in the invoice type and payment method fields on the invoice.

1. To create a new invoice payment method, click *Admin # Server Administration # Acquisitions # Invoice Payment Method*.
2. Click *New Invoice Payment Method*.
3. Create a code for the invoice payment method. No limits exist on the number of characters that can be entered in this field.
4. Create a name for the invoice payment method. No limits exist on the number of characters that can be entered in this field. The text in this field appears in the drop-down menu on the invoice.
5. Click *Save*.

Payment methods can be deleted from this screen.

## Line Item Features

Line item alerts are predefined text that can be added to line items that are on selection lists or purchase orders. You can define the alerts from which staff can choose. Line item alerts appear in a pop-up box when the line item, or any of its copies, are marked as received.

### Create a line item alert

1. To create a line item alert, click *Administration # Server Administration # Acquisitions # Line Item Alerts*.
2. Click *New Line Item Alert Text*.
3. Create a code for the text. No limits exist on the number of characters that can be entered in this field.
4. Create a description for the text. No limits exist on the number of characters that can be entered in this field.
5. Select an owning library from the drop-down menu. The owning library indicates the organizational units whose staff can use this alert. This menu is populated with the shortnames that you created for your libraries in the organizational units tree (See *Admin # Server Administration # Organizational Units*).
6. Click *Save*.

# Line item MARC attribute definitions

Line item attributes define the fields that Evergreen needs to extract from the bibliographic records that are in the acquisitions database to display in the catalog. Also, these attributes will appear as fields in the New Brief Record interface. You will be able to enter information for the brief record in the fields where attributes have been defined.

## Providers

Providers are vendors. You can create a provider profile that includes contact information for the provider, holdings information, invoices, and other information.

### Create a provider

1. To create a new provider, click *Admin # Server Administration # Acquisitions # Providers*.
2. Enter the provider name.
3. Create a code for the provider. No limits exist on the number of characters that can be entered in this field.
4. Select an owner from the drop-down menu. The owner indicates the organizational units whose staff can use this provider. This menu is populated with the shortnames that you created for your libraries in the organizational units tree (See *Admin # Server Administration # Organizational Units*).



The rule of parental inheritance applies to this list.

5. Select a currency from the drop-down menu. This drop-down list is populated by the list of currencies available in the currency types.
6. A provider must be active in order for purchases to be made from that provider. To activate the provider, check the box adjacent to Active. To deactivate a vendor, uncheck the box.
7. Add the default # of copies that are typically ordered through the provider. This number will automatically populate the line item's *Copies* box on any PO's associated with this provider. If another quantity is entered during the selection or ordering process, it will override this default. If no number is specified, the default number of copies will be zero.
8. Select a default claim policy from the drop-down box. This list is derived from the claim policies that can be created
9. Select an EDI default. This list is derived from the EDI accounts that can be created.
10. Enter the provider's email address.
11. In the Fax Phone field, enter the provider's fax number.
12. In the holdings tag field, enter the tag in which the provider places holdings data.
13. In the phone field, enter the provider's phone number.
14. If prepayment is required to purchase from this provider, then check the box adjacent to prepayment required.



15. Enter the Standard Address Number (SAN) for your provider.
16. Enter the web address for the provider's website in the URL field.
17. Click Save.

## Add contact and holdings information to providers

After you save the provider profile, the screen reloads so that you can save additional information about the provider. You can also access this screen by clicking the hyperlinked name of the provider on the Providers screen. The tabs allow you to add a provider address and contact, attribute definitions, and holding subfields. You can also view invoices associated with the provider.

1. Enter a Provider Address, and click Save.



Required fields for the provider address are: Street 1, city, state, country, post code. You may have multiple valid addresses.

2. Enter the Provider Contact, and click Save.
3. Your vendor may include information that is specific to your organization in MARC tags. You can specify the types of information that should be entered in each MARC tag. Enter attribute definitions to correlate MARC tags with the information that they should contain in incoming vendor records. Some technical knowledge is required to enter XPath information. As an example, if you need to import the PO Name, you could set up an attribute definition by adding an XPath similar to:

```
code => purchase_order
xpath => //*[@tag="962"]/*[@code="p"]
Is Identifier => false
```

where 962 is the holdings tag and p is the subfield that contains the PO Name.

4. You may have entered a holdings tag when you created the provider profile. You can also enter holdings subfields. Holdings subfields allow you to specify subfields within the holdings tag to which your vendor adds holdings information, such as quantity ordered, fund, and estimated price.
5. Click invoices to access invoices associated with a provider.

## Edit a provider

Edit a provider just as you would edit a currency type.

You can delete providers only if no purchase orders have been assigned to them.

# Chapter 46. Authorities

## Authority Control Sets

The tags and subfields that display in authority records in Evergreen are proscribed by control sets. The Library of Congress control set is the default control set in Evergreen. In Evergreen release 2.2, you can create customized control sets for authority records. Also, you can define thesauri and authority fields for these control sets.

Patrons and staff will be able to browse authorities in the OPAC. The following fields are browsable by default: author, series, subject, title, and topic. You will be able to add custom browse axes in addition to these default fields.

You can specify the MARC tags and subfields that an authority record should contain. The Library of Congress control set exists in the staff client by default. The control sets feature enables librarians to add or customize new control sets.

To access existing control sets, click **Admin # Server Administration # Authorities # Control Sets**.

## Add a Control Set

1. Click **Admin # Server Administration # Authorities # Control Sets**.
2. Click **New Control Set**.
3. Add a **Name** to the control set. Enter any number of characters.
4. Add a **Description** of the control set. Enter any number of characters.
5. Click **Save**.

The screenshot shows the 'Control Sets' management interface. At the top, there are 'Back' and 'Next' navigation links. Below them is a table with two columns: 'Name' and 'Description'. The first row shows a checked checkbox next to 'Name' and an empty 'Description' field. The second row shows an unchecked checkbox next to 'LoC' and the description 'Library of Congress standard authority record control semantics'. A modal dialog box is open in the foreground, containing a form with two fields: 'Name' with the value 'Song Title Index' and 'Description' with the value 'Authority Record Control Semant'. At the bottom of the dialog are 'Cancel' and 'Save' buttons.

## Thesauri

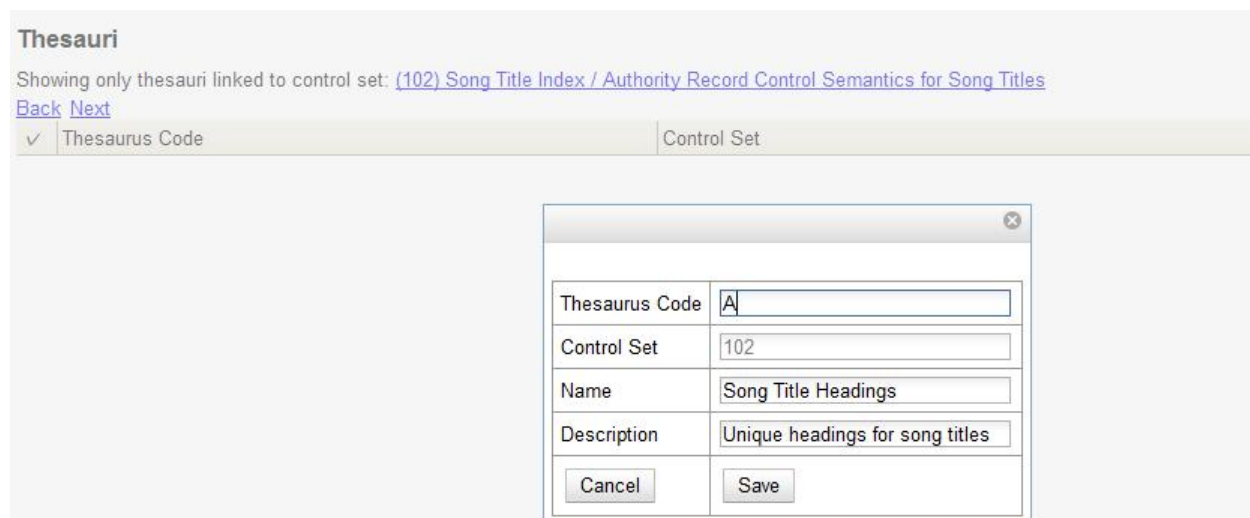
A thesaurus describes the semantic rules that govern the meaning of words in a MARC record. The thesaurus code, which indicates the specific thesaurus that should control a MARC record, is encoded in a fixed field using the

mnemonic Subj in the authority record. Eleven thesauri associated with the Library of Congress control set exist by default in the staff client.

To access an existing thesaurus, click **Admin # Server Administration # Authorities # Control Sets**, and choose the hyperlinked thesaurus that you want to access, or click **Admin # Server Administration # Authorities # Thesauri**.

## Add a Thesaurus

1. Click **Admin # Server Administration # Authorities # Control Sets**, and choose the hyperlinked thesaurus that you want to access, or click **Admin # Server Administration # Authorities # Thesauri**.
2. Click **New Thesaurus**.
3. Add a **Thesaurus Code**. Enter any single, upper case character. This character will be entered in the fixed fields of the MARC record.
4. Add a **Name** to the thesaurus. Enter any number of characters.
5. Add a **Description** of the thesaurus. Enter any number of characters.



The screenshot shows a web interface titled "Thesauri". Below the title, it says "Showing only thesauri linked to control set: [\(102\) Song Title Index / Authority Record Control Semantics for Song Titles](#)". There are "Back" and "Next" links. Below this is a table with two columns: "Thesaurus Code" and "Control Set". A modal dialog box is open in the center, containing the following fields:

|   |                                 |
|---|---------------------------------|
| Thesaurus Code  | A                               |
| Control Set   | 102                             |
| Name  | Song Title Headings             |
| Description   | Unique headings for song titles |
| <input type="button" value="Cancel"/> <input type="button" value="Save"/> |                                 |

## Authority Fields

Authority fields indicate the tags and subfields that should be entered in the authority record. Authority fields also enable you to specify the type of data that should be entered in a tag. For example, in an authority record governed by a Library of Congress control set, the 100 tag would contain a "Heading - Personal Name." Authority fields also enable you to create the corresponding tag in the bibliographic record that would contain the same data.

## Create an Authority Field

1. Click **Admin # Server Administration # Authorities # Control Sets**.
2. Click **Authority Fields**. The number in parentheses indicates the number of authority fields that have been created for the control set.

3. Click **New Authority Field**.
4. Add a **Name** to the authority field. Enter any number of characters.
5. Add a **Description** to describe the type of data that should be entered in this tag. Enter any number of characters.
6. Select a **Main Entry** if you are linking the tag(s) to another entry.
7. Add a **tag** in the authority record.
8. Add a subfield in the authority record. Multiple subfields should be entered without commas or spaces.
9. Add either a value of 1, 2, or leave empty if not applicable for the **Non-filing indicator** field to denote the which will be the non-filing indicator.
10. Click **Save**.

**Authority Fields**

Showing only authority fields linked to control set: [\(102\) Song Title Index / Authority Record Control Semantics for Song Titles](#)

[Back](#) [Next](#)

| <input checked="" type="checkbox"/> | Name       | Description | Main Entry | Control Set      | Tag |
|-------------------------------------|------------|-------------|------------|------------------|-----|
| <input type="checkbox"/>            | Song Title | Song Title  |            | Song Title Index | 660 |

|   |   |
|---|---|
| Name  | <input type="text" value="Song Title"/> |
| Description   | <input type="text" value="Song Title"/> |
| Main Entry  | <input type="text" value=""/> ▼         |
| Control Set   | <input type="text" value="102"/>        |
| Tag   | <input type="text" value="660"/>        |
| Subfield List   | <input type="text" value="abcdef"/>     |
| <input type="button" value="Cancel"/> <input type="button" value="Save"/> |   |

11. Create the corresponding tag in the bibliographic record that should contain this information. Click the **None** link in the **Controlled Bib Fields** column.
12. Click **New Control Set Bib Field**.
13. Add the corresponding tag in the bibliographic record.
14. Click **Save**.

## Control Set Bib Fields

Showing only control set bib fields linked to authority field: [Song Title \(660 †abcdef\) Song Title](#)

[Back](#) [Next](#)

✓ Tag

|                                       |                                     |
|---------------------------------------|-------------------------------------|
| Tag                                   | <input type="text" value="640"/>    |
| Controlling Authority Field           | <input type="text" value="1001"/>   |
| <input type="button" value="Cancel"/> | <input type="button" value="Save"/> |

# Browse Axes

Authority records can be browsed, by default, along five axes: author, series, subject, title, and topic. Use the **Browse Axes** feature to create additional axes.

## Create a new Browse Axis

1. Click **Admin # Server Administration # Authorities # Browse Axes**
2. Click **New Browse Axis**.
3. Add a **code**. Do not enter any spaces.
4. Add a **name** to the axis that will appear in the OPAC. Enter any number of characters.
5. Add a **description** of the axis. Enter any number of characters.
6. Add a **sorter attribute**. The sorter attribute indicates the order in which the results will be displayed.

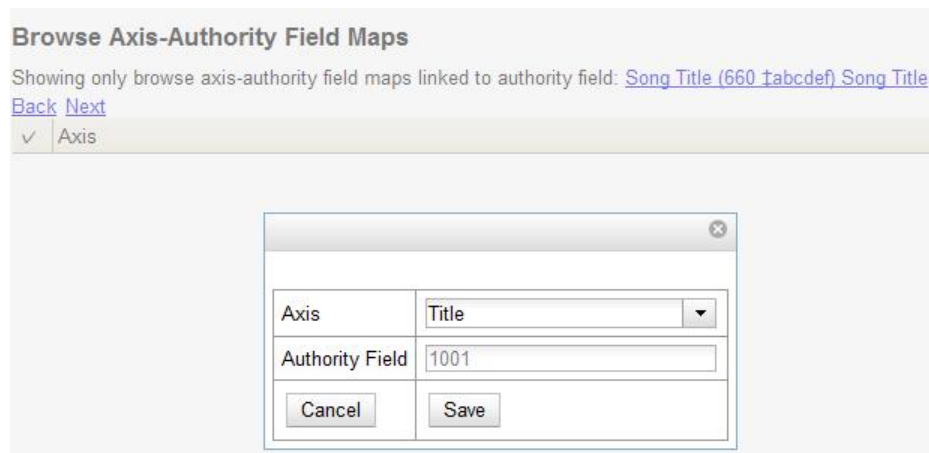
**Browse Axes**

[Back](#) [Next](#)

| ✓                        | Code      | Name       | Description        | Sorter Attribute |
|--------------------------|-----------|------------|--------------------|------------------|
| <input type="checkbox"/> | author    | Author     | Author axis        | Title            |
| <input type="checkbox"/> | songtitle | Song Title | Song title search  | Title            |
| <input type="checkbox"/> | subject   | Subject    | Subject axis       | Title            |
| <input type="checkbox"/> | title     | Title      | Title axis         | Title            |
| <input type="checkbox"/> | topic     | Topic      | Topic Subject axis | Title            |

|                                       |  |
|---------------------------------------|--|
| Code                                  | <input type="text" value="songtitle"/>         |
| Name                                  | <input type="text" value="Song Title"/>        |
| Description                           | <input type="text" value="Song title search"/> |
| Sorter Attribute                      | <input type="text" value="Title"/>             |
| <input type="button" value="Cancel"/> | <input type="button" value="Save"/>            |

7. Assign the axis to an authority so that users can find the authority record when browsing authorities. Click **Admin # Server Administration # Authorities # Control Sets**.
8. Choose the control set to which you will add the axis. Click **Authority Fields**
9. Click the link in the **Axes** column of the tag of your choice.
10. Click **New Browse Axis-Authority Field Map**.
11. Select an **Axis** from the drop down menu.
12. Click **Save**.



## OPAC Searching of Authorities

Patrons and librarians can browse authorities through the OPAC.

### Search for Authorities

1. Click **Advanced Search** in the OPAC.
2. Find the **Authority Browse** column in the left side of the screen.
3. Select a browse axis, and enter a keyword. The terms in the middle of the results list should yield the best match.

Advanced Search

My Account

Log in

---

**Quick Search**

ISBN

[Submit](#)

---

**Authority Browse**

Author

[Submit](#)

---

**MARC Expert Search**

Tag:  Subfield:

Value:

[Add Row](#) [Submit](#)

- Click **Submit**.
- A list of results will appear. The authorities with bibliographic records attached will be listed in bold with the number of attached bibliographic records in parentheses.

|                            |                                 |
|----------------------------|---------------------------------|
| Arnoldson, K.P.            | <i>Heading -- Personal Name</i> |
| Arnoldussen, Arnold        | <i>Heading -- Personal Name</i> |
| Arnoldussen, Paul          | <i>Heading -- Personal Name</i> |
| <b>Arnon, Arie (2)</b>     | <i>Heading -- Personal Name</i> |
| Berg, Em. de               | <i>Heading -- Personal Name</i> |
| Castan, A.L.               | <i>Heading -- Personal Name</i> |
| <b>Clarke, Stephen (1)</b> | <i>Heading -- Personal Name</i> |

- Click on the bolded text to view bibliographic records.

Results 1 - 1 of about 1 (page 1 of 1)

---

The kiss : a comedy, in five acts  
 Clarke, Stephen  
 | 1811 Longman, Hurst, Rees, Orme, and Brown | print viii, 61, [3] p. 21 cm.

 [Place Hold](#)

**Example Branch 1 - FIC CLA - Stacks (In process)**

Results 1 - 1 of about 1 (page 1 of 1)

### Permissions to use this Feature

To use authority control sets, you will need the following permissions:

- CREATE\_AUTHORITY\_CONTROL\_SET

- UPDATE\_AUTHORITY\_CONTROL\_SET
- DELETE\_AUTHORITY\_CONTROL\_SET



# Chapter 47. Best-Hold Selection Sort Order

Best-Hold Selection Sort Order allows libraries to configure customized rules for Evergreen to use to select the best hold to fill at opportunistic capture. When a copy is captured for a hold upon check-in, Evergreen evaluates the holds in the system that the item could fill. Evergreen uses a set of rules, or a Best-Hold Selection Sort Order, to determine the best hold to fill with the item. In previous version of Evergreen, there were two sets of rules for Evergreen to use to determine the best hold to fulfill: Traditional and FIFO (First In, First Out). Traditional uses Org Unit Proximity to identify the nearest hold to fill. FIFO follows a strict order of first-in, first-out rules. This feature allows new, custom Best-Hold Selection Sort Orders to be created. Existing Best-Hold Selection Sort Orders can also be modified.

## Preconfigured Best-Hold Orders

Evergreen comes with six preconfigured Best-Hold Selection Sort Orders to choose from:

- Traditional
- Traditional with Holds-go-home
- Traditional with Holds-always-go-home
- FIFO
- FIFO with Holds-go-home
- FIFO with Holds-always-go-home

The Holds-go-home and Holds-always-go-home options allow libraries to determine how long they want to allow items to transit outside of the item's home library, before it must return to its home library to fulfill any holds that are to be picked up there. Libraries can set this time limit in the library setting **Holds: Max foreign-circulation time**. The Library Settings Editor can be found under **Admin # Local Administration # Library Settings Editor**.

## Create a New Best-Hold Selection Sort Order

To create a new Best-Hold Selection Sort Order, go to **Admin # Server Administration # Best-Hold Selection Sort Order**.

1. Click **Create New**.
2. Assign your Best-Hold Selection Sort Order a **Name**.
3. Next, use the **Move Up** and **Move Down** buttons to arrange the fields in the order that you would like Evergreen to check when looking for the best hold to fill with a copy at opportunistic capture.
4. Click **Save Changes** to create your custom Best-Hold Selection Sort Order.

Go Back   Reload   Go Forward

## Best-Hold Selection Sort Order

Create New or Edit Existing

You are editing best-hold order #1: Traditional.

Name:

Order:

|  |               |
|--|---------------|
| [pprox] Capture Lib to Pickup Lib Proximity                | ↑ Move Up k   |
| [aprox] Adjusted Circ Lib to Pickup Lib Proximity          |               |
| [priority] Hold Priority                                   | ↓ Move Down j |
| [cut] Hold Cut-in-line State                               |               |
| [depth] Hold Selection Depth                               |               |
| [ptime] Hold Request Time                                  |               |
| [ptime] Copy Has Circulated From Home Lately               |               |
| [hprox] Circ Lib to Request Lib Proximity                  |               |
| [approx] Adjusted Capture Location to Pickup Lib Proximity |               |
| [shime] Copy Has Been Home At All Lately                   |               |

*Because ptime, a high-precision timestamp, is essentially unique among holds, no fields arranged after ptime really have any effect in determining best-hold selection.*

To choose which Best-Hold Selection Sort Order will be used by Evergreen at copy capture time, see the Library Settings interface.

Save Changes

## Edit an Existing Best-Hold Selection Sort Order

To edit an existing Best-Hold Selection Sort Order, go to **Admin # Server Administration # Best-Hold Selection Sort Order**.

1. Click **Edit Existing**.
2. Choose the Best-Hold Selection Sort Order that you would like to edit from the drop down menu.
3. Next, use the **Move Up** and **Move Down** buttons to arrange the fields in the new order that you would like Evergreen to check when looking for the best hold to fill with a copy at opportunistic capture.
4. Click **Save Changes** to save your edits.

## Choosing the Best-Hold Selection Sort Order

The Best-Hold Selection Sort Order can be set for an Org Unit in the **Library Settings Editor**.

To select the Best-Hold Selection Sort Order that your Org Unit will use:

1. Go to **Admin # Local Administration # Library Settings Editor**.
2. Locate the setting **Holds: Best-hold selection sort order**, and click **Edit**.
3. Choose the **Context** org unit for this setting.

4. Select the Best-hold selection sort order, or **Value**, from the drop down menu.
5. Click **Update Setting**.

The screenshot shows the 'Organization Unit Settings' interface. At the top, there are navigation buttons: 'Go Back', 'Reload', and 'Go Forward'. Below these, the 'Context Location' is set to 'APEX' and the filter is 'holds'. A note states: '\* Indicates the setting is not inherited from the parent org unit at run time'. The main table lists various settings. The row for 'Best-hold selection sort order' is highlighted. An 'Edit Setting' dialog is open over this row, showing the setting name, a description: 'Defines the sort order of holds when selecting a hold to fill using a given copy at capture time', the context 'APEX', and a dropdown menu for the 'Value'. The dropdown menu is open, showing options: 'Traditional', 'Traditional with Holds-always-go-home', 'Traditional with Holds-go-home', 'FIFO' (which is selected and highlighted in blue), 'FIFO with Holds-always-go-home', and 'FIFO with Holds-go-home'. There is also a 'Delete Setting' button in the dialog.

| Edit                 | History                 | Group       | Setting   |
|----------------------|-------------------------|-------------|---|
| <a href="#">Edit</a> | <a href="#">History</a> | Circulation | Block hold request if hold recipient privileges have expired  |
| <a href="#">Edit</a> | <a href="#">History</a> | Circulation | Checkout Fills Related Hold   |
| <a href="#">Edit</a> | <a href="#">History</a> | Circulation | Checkout Fills Related Hold On Valid Copy Only  |
| <a href="#">Edit</a> | <a href="#">History</a> | Circulation | Hold Shelf Status Delay   |
| <a href="#">Edit</a> | <a href="#">History</a> | Circulation | Target copies for a hold even if copy's circ lib is closed  |
| <a href="#">Edit</a> | <a href="#">History</a> | Circulation | Target copies for a hold even if copy's circ lib is closed IF the circ lib is the hold's pickup lib |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Behind Desk Pickup Supported  |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Best-hold selection sort order  |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Block Renewal of Items Needed for Holds   |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Canceled holds display age  |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Canceled  |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Clear she   |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Default Es  |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Default ho  |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Expire Ale  |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Expire Int  |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | FIFO  |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Hard bour   |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Hard stall  |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Has Local Copy Alert  |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Has Local Copy Block  |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Max foreign-circulation time  |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Maximum library target attempts   |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Minimum Estimated Wait  |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Org Unit Target Weight  |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Reset request time on un-cancel   |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Skip For Hold Targeting   |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Soft boundary   |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Soft stalling interval  |

## Permissions to use this Feature

To administer the custom Best-Hold Selection Sort Order interface, you need the following permission:

- ADMIN\_HOLD\_CAPTURE\_SORT

# Chapter 48. Call Number Prefixes and Suffixes

You can configure call number prefixes and suffixes in the Admin module. This feature ensures more precise cataloging because each cataloger will have access to an identical drop down menu of call number prefixes and suffixes that are used at his library. In addition, it may streamline cataloging workflow. Catalogers can use a drop down menu to enter call number prefixes and suffixes rather than entering them manually. You can also run reports on call number prefixes and suffixes that would facilitate collection development and maintenance.

## Configure call number prefixes

Call number prefixes are codes that precede a call number.

To configure call number prefixes:

1. Select **Admin # Server Administration # Call Number Prefixes**.
2. Click **New Prefix**.
3. Enter the **call number label** that will appear on the item.
4. Select the **owning library** from the drop down menu. Staff at this library, and its descendant org units, with the appropriate permissions, will be able to apply this call number prefix.
5. Click **Save**.

**Call Number Suffixes**

Context Org Unit

[Back](#) [Next](#)

| <input checked="" type="checkbox"/> | Label  | Owning Library |
|-------------------------------------|--------|----------------|
| <input type="checkbox"/>            | Copy 1 | APEX           |

Label

Owning Library

## Configure call number suffixes

Call number suffixes are codes that succeed a call number.

To configure call number suffixes:

1. Select **Admin # Server Administration # Call Number Suffixes**.

2. Click **New Suffix**.
3. Enter the **call number label** that will appear on the item.
4. Select the **owning library** from the drop down menu. Staff at this library, and its descendant org units, with the appropriate permissions, will be able to apply this call number suffix.
5. Click **Save**.

**Call Number Prefixes**

Context Org Unit

[Back](#) [Next](#)

| <input checked="" type="checkbox"/> | Label | Owning Library |
|-------------------------------------|-------|----------------|
| <input type="checkbox"/>            | YA    | CONS           |
| <input checked="" type="checkbox"/> | E     | CONS           |

|                                       |                                     |
|---------------------------------------|-------------------------------------|
| Label                                 | <input type="text" value="REF"/>    |
| Owning Library                        | <input type="text" value="APEX"/>   |
| <input type="button" value="Cancel"/> | <input type="button" value="Save"/> |

## Apply Call Number Prefixes and Suffixes

You can apply call number prefixes and suffixes to items from a pre-configured list in the **Unified Volume/Copy Creator**. See the document, [Unified Volume/Copy Creator](#), for an example.

# Chapter 49. Circulation Limit Sets

## Maximum Checkout by Copy Location

This feature enables you to specify the maximum number of checkouts of items by copy location and is an addition to the circulation limit sets. Circulation limit sets refine circulation policies by limiting the number of items that users can check out. Circulation limit sets are linked by name to circulation policies.

To limit checkouts by copy location:

1. Click **Admin # Local Administration # Circulation Limit Sets**.
2. Click **New** to create a new circulation limit set.
3. In the **Owning Library** field, select the library that can create and edit this limit set.
4. Enter a **Name** for the circulation set. You will select the **Name** to link the circulation limit set to a circulation policy.
5. Enter the number of **Items Out** that a user can take from this copy location.
6. Enter the **Min Depth**, or the minimum depth in the org tree that Evergreen will consider as valid circulation libraries for counting items out. The min depth is based on org unit type depths. For example, if you want the items in all of the circulating libraries in your consortium to be eligible for restriction by this limit set when it is applied to a circulation policy, then enter a zero (0) in this field.
7. Check the box adjacent to **Global Flag** if you want all of the org units in your consortium to be restricted by this limit set when it is applied to a circulation policy. Otherwise, Evergreen will only apply the limit to the direct ancestors and descendants of the owning library.
8. Enter a brief **Description** of the circulation limit set.
9. Click **Save**.

Owning Library    
Name   
Items Out   
Min Depth   
Global   
Description

**Linked Circ Modifiers**  
Name    
   
**Linked Copy Locations**  
Name    
   
**Linked Limit Groups**  
Name

To link the circulation limit set to a circulation policy:

1. Click **Admin # Local Administration # Circulation Policies**
2. Select an existing circulation policy, or create a new one.
3. Scroll down to the **Linked Limit Sets**.
4. Select the **Name** of the limit set that you want to add to the circulation policy.
5. Click **Add**.
6. Click **Save**.

|                                   |                                      |
|-----------------------------------|--------------------------------------|
| Circulate?                        | <input type="text" value="True"/>    |
| Duration Rule                     | <input type="text" value="default"/> |
| Renewals Override                 | <input type="text"/>                 |
| Hard Due Date                     | <input type="text"/>                 |
| Recurring Fine Rule               | <input type="text" value="default"/> |
| Grace Period Override             | <input type="text"/>                 |
| Max Fine Rule                     | <input type="text" value="default"/> |
| Minimum Available Copy/Hold Ratio | <input type="text"/>                 |
| Minimum Total Copy/Hold Ratio     | <input type="text"/>                 |
| Script Test                       | <input type="text"/>                 |

| Linked Limit Sets                          |                          |                          |
|--|--------------------------|--------------------------|
| Name                                       | Fallthrough              | Active Remove            |
| <input type="text" value="A/V Materials"/> | <input type="checkbox"/> | <input type="checkbox"/> |

[Add](#)



# Chapter 50. Booking Module Administration

## Creating Bookable Non-Bibliographic Resources

Staff with the required permissions (Circulator and above) can create bookable non-bibliographic resources such as laptops, projectors, and meeting rooms.

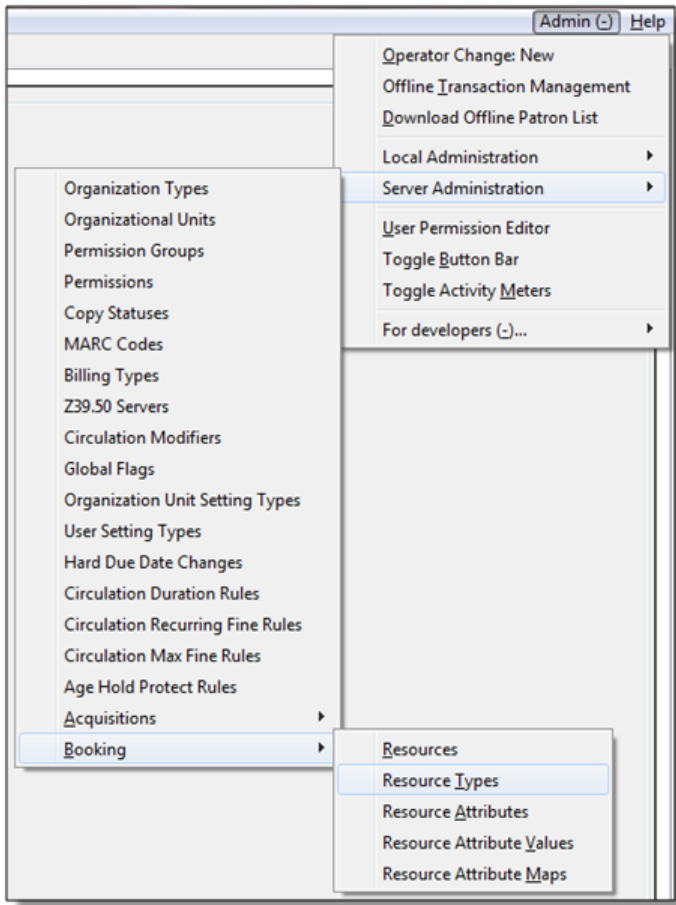
The following pieces make up a non-bibliographic resource:

- Resource Type
- Resource Attribute
- Resource Attribute Values
- Resource
- Resource Attribute Map

You need to create resource types and resource attributes (features of the resource types), and add booking items (resources) to individual resource type. Each resource attribute may have multiple values. You need to link the applicable features (resource attributes and values) to individual item (resource) through the Resource Attribute Map. Before you create resources (booking items) you need to have a resource type and associated resource attributes and values, if any, for them.

### Create New Resource Type

1) Select Admin -# Server Administration -# Booking -# Resource Types.



2) A list of current resource types will appear. Use Back and Next buttons to browse the whole list.

Server Settings

Go Back   Reload   Go Forward

### Resource Types

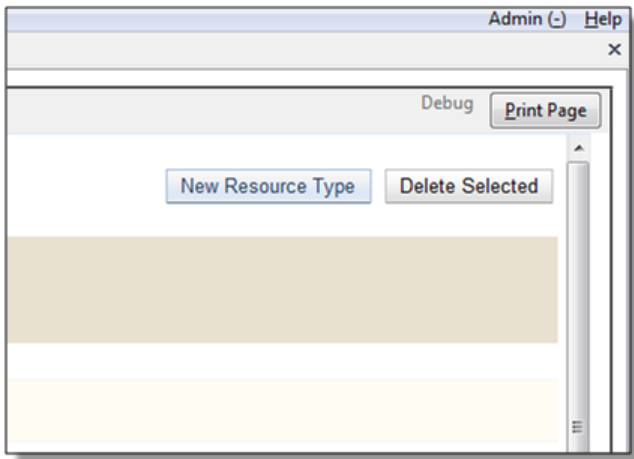
[Back](#) [Next](#)

| <input checked="" type="checkbox"/> | Resource Type Name | Fine Interval | Fine Amount | Owning Library | Catalog Item | Transferable | Inter-booking and Inter-circulation Interval | Max Fine Amount |
|-------------------------------------|--------------------|---------------|-------------|----------------|--------------|--------------|--|-----------------|
| <input type="checkbox"/>            | Dora's box         |               | 0.00        | BPR            | True         | True         |  |                 |
| <input type="checkbox"/>            | Double Fudge       |               | 0.00        | BPR            | True         | True         |  |                 |
| <input type="checkbox"/>            | Ereader            | 1 day         | 3.00        | BPR            | False        | False        | 01:00:00                                     | 10.00           |
| <input type="checkbox"/>            | Horse              |               | 0.00        | BPR            | True         | True         |  |                 |
| <input type="checkbox"/>            | Projector          | 03:00:00      | 2.00        | BPR            | False        | False        | 00:15:00                                     | 20.00           |
| <input type="checkbox"/>            | Room               |               | 0.00        | BPR            | False        | False        | 00:20:00                                     |                 |
| <input type="checkbox"/>            | Superfudge         |               | 0.00        | BPR            | True         | True         |  |                 |
| <input type="checkbox"/>            | Video Connector    | 02:00:00      | 0.50        | BPR            | False        | False        | 00:15:00                                     | 5.00            |



You may also see cataloged items in the list. Those items have been marked bookable or booked before.


3) To create a new resource type, click New Resource Type in the top right corner, .



4) A box will appear in which you create your new type of resource.

A screenshot of a dialog box for creating a new resource type. The dialog box has a title bar with a close button. It contains several input fields and checkboxes. The fields are: 'Resource Type Name' with the value 'Laptop', 'Fine Interval' with the value '2 hours', 'Fine Amount' with the value '0.50', 'Owning Library' with a dropdown menu showing 'BPR', 'Catalog Item' with an unchecked checkbox, 'Transferable' with an unchecked checkbox, 'Inter-booking and Inter-circulation Interval' with the value '15 minutes', and 'Max Fine Amount' with the value '20.00'. At the bottom of the dialog box, there are two buttons: 'Cancel' and 'Save'.

- Resource Type Name - Give your resource a name.
- Fine Interval - How often will fines be charged? This period can be input in several ways:



- second(s), minute(s), hour(s), day(s), week(s), month(s), year(s)
- sec(s), min(s)
- s, m, h
- 00:00:30, 00:01:00, 01:00:00

- Fine Amount - The amount that will be charged at each Fine Interval.
- Owning Library - The home library of the resource.

- Catalog Item - (Function not currently available.)
- Transferable - This allows the item to be transferred between libraries.
- Inter-booking and Inter-circulation Interval - The amount of time required by your library between the return of a resource and a new reservation for the resource. This interval uses \* the same input conventions as the Fine Interval.
- Max Fine Amount - The amount at which fines will stop generating.

5) Click Save when you have entered the needed information.



6) The new resource type will appear in the list.

| 1 Server Settings                         |                    |               |             |                |              |              |  |                 |
|---|--------------------|---------------|-------------|----------------|--------------|--------------|--|-----------------|
| Go Back    Reload    Go Forward           |                    |               |             |                |              |              |  |                 |
| Resource Types                            |                    |               |             |                |              |              |  |                 |
| <a href="#">Back</a> <a href="#">Next</a> |                    |               |             |                |              |              |  |                 |
| ✓   | Resource Type Name | Fine Interval | Fine Amount | Owning Library | Catalog Item | Transferable | Inter-booking and Inter-circulation Interval | Max Fine Amount |
| <input type="checkbox"/>                  | Dora's box         |               | 0.00        | BPR            | True         | True         |  |                 |
| <input type="checkbox"/>                  | Double Fudge       |               | 0.00        | BPR            | True         | True         |  |                 |
| <input type="checkbox"/>                  | Ereader            | 1 day         | 3.00        | BPR            | False        | False        | 01:00:00                                     | 10.00           |
| <input type="checkbox"/>                  | Horse              |               | 0.00        | BPR            | True         | True         |  |                 |
| <input type="checkbox"/>                  | Laptop             | 02:00:00      | 0.50        | BPR            | False        | False        | 00:15:00                                     | 20.00           |
| <input type="checkbox"/>                  | Projector          | 03:00:00      | 2.00        | BPR            | False        | False        | 00:15:00                                     | 20.00           |
| <input type="checkbox"/>                  | Room               |               | 0.00        | BPR            | False        | False        | 00:20:00                                     |                 |
| <input type="checkbox"/>                  | Superfudge         |               | 0.00        | BPR            | True         | True         |  |                 |
| <input type="checkbox"/>                  | Video Connector    | 02:00:00      | 0.50        | BPR            | False        | False        | 00:15:00                                     | 5.00            |

## Create New Resource Attribute

- 1) Select Server Administration -# Booking -# Resource Attributes.
- 2) Click New Resource Attribute in the top right corner.
- 3) A box will appear in which you can add the attributes of the resource. Attributes are categories of descriptive information that are provided to the staff member when the booking request is made. For example, an attribute of a projector may be the type of projector. Other attributes might be the number of seats available in a room, or the computing platform of a laptop.

|   |                          |
|---|--------------------------|
| Resource Attribute Name   | Computing Platform       |
| Owning Library  | BPR                      |
| Resource Type   | Laptop                   |
| Is Required   | <input type="checkbox"/> |
| <input type="button" value="Cancel"/> <input type="button" value="Save"/> |                          |

- Resource Attribute Name - Give your attribute a name.
  - Owning Library - The home library of the resource.
  - Resource Type - Type in the first letter to list then choose the Resource Type to which the Attribute is applicable.
  - Is Required - (Function not currently available.)
- 4) Click Save when the necessary information has been entered.
- 5) The added attribute will appear in the list.



One resource type may have multiple attributes. You may repeat the above procedure to add more.

## Create New Resource Attribute Value

- 1) One resource attribute may have multiple values. To add new attribute value, select Server Administration # Booking # Resource Attribute Values.
- 2) Click New Resource Attribute Value in the top right corner.
- 3) A box will appear in which you assign a value to a particular attribute. Values can be numbers, words, or a combination of them, that describe the particular aspects of the resource that have been defined as Attributes. As all values appear on the same list for selection, values should be as unique as possible. For example, a laptop may have a computing platform that is either PC or Mac.

|   |                    |
|---|--------------------|
| Owning Library  | BPR                |
| Resource Attribute  | Computing Platform |
| Valid Value   | PC                 |
| <input type="button" value="Cancel"/> <input type="button" value="Save"/> |                    |

- Owning Library - The home library of the resource.
- Resource Attribute - The attribute you wish to assign the value to.

- Valid Value - Enter the value for your attribute.

4) Click Save when the required information has been added.

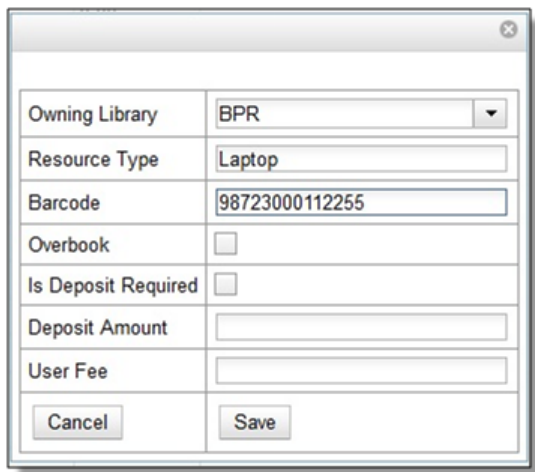
5) The attribute value will appear in the list. Each attribute should have at least two values attached to it; repeat this process for all applicable attribute values.

## Create New Resource

1) Add items to a resource type. Click Admin # Server Administration # Booking # Resources.

2) Click New Resource in the top right corner.

3) A box will appear. Add information for the resource.



|                     |                          |
|---------------------|--------------------------|
| Owning Library      | BPR                      |
| Resource Type       | Laptop                   |
| Barcode             | 98723000112255           |
| Overbook            | <input type="checkbox"/> |
| Is Deposit Required | <input type="checkbox"/> |
| Deposit Amount      |                          |
| User Fee            |                          |
| Cancel              | Save                     |

- Owning Library - The home library of the resource.
- Resource Type - Type in the first letter of the resource type's name to list then select the resource type for your item.
- Barcode - Barcode for the resource.
- Overbook - This allows a single item to be reserved, picked up, and returned by multiple patrons during overlapping or identical time periods.
- Is Deposit Required - (Function not currently available.)
- Deposit Amount - (Function not currently available.)
- User Fee - (Function not currently available.)

4) Click Save when the required information has been added.

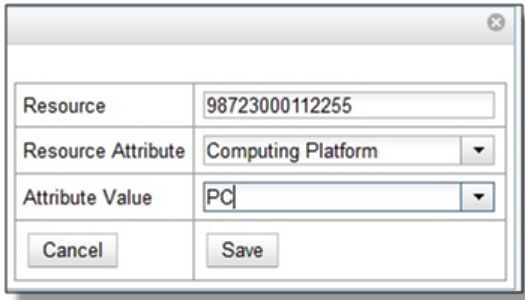
5) The resource will appear in the list.



One resource type may have multiple resources attached.

# Map Resource Attributes and Values to Resources

- 1) Use Resource Attribute Maps to bring together the resources and their attributes and values. Select Admin # Server Administration # Booking # Resource Attribute Maps.
- 2) Click New Resource Attribute Map in the right top corner.
- 3) A box will appear in which you will map your attributes and values to your resources.



The screenshot shows a dialog box with the following fields:

|                    |                    |
|--------------------|--------------------|
| Resource           | 98723000112255     |
| Resource Attribute | Computing Platform |
| Attribute Value    | PC                 |

Buttons: Cancel, Save

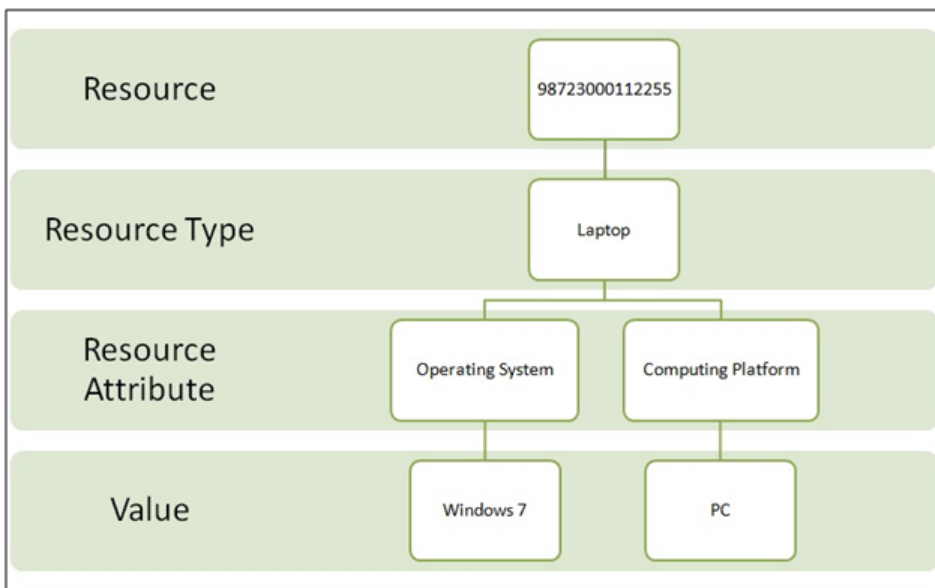
- Resource - Enter the barcode of your resource.
  - Resource Attribute - Select an attribute that belongs to the Resource Type.
  - Attribute Value - Select a value that belongs to your chosen attribute and describes your resource. If your attribute and value do not belong together you will be unable to save.
- 4) Click Save once you have entered the required information.



A resource may have multiple attributes and values. Repeat the above steps to map all.

- 5) The resource attribute map will appear in the list.

Once all attributes have been mapped your resource will be part of a hierarchy similar to the example below.



# Editing Non-Bibliographic Resources

Staff with the required permissions can edit aspects of existing non-bibliographic resources. For example, resource type can be edited in the event that the fine amount for a laptop changes from \$2.00 to \$5.00.

## Editing Resource Types

- 1) Bring up your list of resource types. Select Admin -# Server Administration -# Booking -# Resource Types.
- 2) A list of current resource types will appear.
- 3) Double click anywhere on the line of the resource type you would like to edit.
- 4) The resource type box will appear. Make your changes and click Save.
- 5) Following the same procedure you may edit Resource Attributes, Attributes Values, Resources and Attribute Map by selecting them on Admin -# Server Administration -# Booking menu.

## Deleting Non-bibliographic Resources

- 1) To delete a booking resource, go to Admin # Server Administration # Booking # Resources.
- 2) Select the checkbox in front the resource you want to delete. Click Delete Selected. The resource will disappear from the list.

Following the same procedure you may delete Resource Attributes Maps.

You may also delete Resource Attribute Values, Resource Attributes and Resource Types. But you have to delete them in the reverse order when you create them to make sure the entry is not in use when you try to delete it.

This is the deletion order: Resource Attribute Map/Resources -# Resource Attribute Values -# Resource Attributes -# Resource Types.



# Chapter 51. Floating Groups

Before floating groups copies could float or not. If they floated then they floated everywhere, with no restrictions.

After floating groups where a copy will float is defined by what group it has been assigned to.

## Floating Groups

Each floating group comes with a name and a manual flag, plus zero or more group members. The name is used solely for selection and display purposes.

The manual flag dictates whether or not the "Manual Floating Active" checkin modifier needs to be active for a copy to float. This allows for greater control over when items float. It also prevents automated checkins via SIP2 from triggering floats.

## Floating Group Members

Each member of a floating group references an org unit and has a stop depth, an optional max depth, and an exclude flag.

### Org Unit

The org unit and all descendants are included, unless max depth is set, in which case the tree is cut off at the max depth.

### Stop Depth

The stop depth is the highest point from the current copy circ library to the checkin library for the item that will be traversed. If the item has to go higher than the stop depth on the tree the member rule in question is ignored.

### Max Depth

As mentioned with the org unit, the max depth is the furthest down on the tree from the org unit that gets included. This is based on the entire tree, not just off of the org unit. So in the default tree a max depth of 1 will stop at the system level no matter if org unit is set to CONS or SYS1.

### Exclude

Exclude, if set, causes floating to not happen for the member. Excludes always take priority, so you can remove an org unit from floating without having to worry about other rules overriding it.

## Examples

### Float Everywhere

This is a default floating rule to emulate the previous floating behavior for new installs and upgrades.

One member:

- Org Unit: CONS
- Stop Depth: 0
- Max Depth: Unset
- Exclude: Off

## Float Within System

This would permit a copy to float anywhere within a system, but would return to the system if it was returned elsewhere.

One member:

- Org Unit: CONS
- Stop Depth: 1
- Max Depth: Unset
- Exclude: Off

## Float To All Branches

This would permit a copy to float to any branch, but not to sublibraries or bookmobiles.

One member:

- Org Unit: CONS
- Stop Depth: 0
- Max Depth: 2
- Exclude: Off

## Float To All Branches Within System

This would permit a copy to float to any branch in a system, but not to sublibraries or bookmobiles, and returning to the system if returned elsewhere.

One member:

- Org Unit: CONS
- Stop Depth: 1
- Max Depth: 2
- Exclude: Off

## Float Between BR1 and BR3

This would permit a copy to float between BR1 and BR3 specifically, excluding sublibraries and bookmobiles.

It would consist of two members, identical other than the org unit:

- Org Unit: BR1 / BR3
- Stop Depth: 0
- Max Depth: 2
- Exclude: Off

## Float Everywhere Except BM1

This would allow an item to float anywhere except for BM1. It accomplishes this with two members.

The first includes all org units, just like Float Everywhere:

- Org Unit: CONS
- Stop Depth: 0
- Max Depth: Unset
- Exclude: Off

The second excludes BM1:

- Org Unit: BM1
- Stop Depth: 0
- Max Depth: Unset
- Exclude: On

That works because excludes are applied first.

## Float into, but not out of, BR2

This would allow an item to float into BR2, but once there it would never leave. Why you would want to allow items to float to but not from a single library I dunno, but here it is. This takes advantage of the fact that the rules say where we can float **to**, but outside of stop depth don't care where we are floating **from**.

One member:

- Org Unit: BR2
- Stop Depth: 0
- Max Depth: Unset

- Exclude: Off

# Chapter 52. MARC Import Remove Fields

MARC Import Remove Fields allows staff to configure MARC tags to be automatically removed from bibliographic records when they are imported into Evergreen. This feature allows specific MARC tags to be removed from records that are imported through three different interfaces:

- Cataloging # Import Record from Z39.50
- Cataloging # MARC Batch Import/Export
- Acquisitions # Load MARC Order Records

## Create a MARC Import Remove Fields profile

To create a MARC Import Remove Fields profile, go to **Admin # Server Administration # MARC Import Remove Fields**.

1. Click **New Field Group**.
2. Assign the Field Group a **Label**. This label will appear in the import interfaces.
3. Assign an Org Unit **Owner**.
4. Check the box next to **Always Apply** if you want Evergreen to apply this Remove Fields profile to all MARC records that are imported through the three affected interfaces. If you do not select **Always Apply**, staff will have the option to choose which Remove Fields profile to use when importing records.
5. Click **Save**.
6. The profile that you created will now appear in the list of MARC Import Remove Fields.
7. Click on the hyperlinked **ID** number. This will bring you into the Remove Fields profile to configure the MARC tags to be removed.
8. Click **New Field**.
9. In the **Field**, enter the MARC tag to be removed.
10. Click **Save**.
11. Add **New Fields** until you have configured all the tags needed for this profile.
12. Click **Return to Groups** to go back to the list of Remove Field profiles.

Go Back   Reload   Go Forward   Debug   Print Page

**Import Bib Trash Fields**   New Field Group   Delete Selected

Filter

| ✓                        | # | ID | Short (Policy) Name | Label | Always Apply |
|--------------------------|---|----|---------------------|-------|--------------|
| <input type="checkbox"/> | 1 | 1  | APEX                | Local | f            |
| <input type="checkbox"/> | 2 | 2  | APEX                | OCLC  | f            |

Always Apply

Label

Owner

Cancel   Save

## Import Options

The Label for each of the MARC Import Remove Fields profiles will appear on the three affected import screens. To select a profile, check the box next to the desired Label before importing the records.

### Cataloging # Import Record from Z39.50

**MARC Import via Z39.50**

**Query**  
 Tip: Click a search field label and then the 'Save as Default' button to have that field focused by default.  
 Item Type:

**Service and Credentials**

| Service                                      | Username             | Password             |
|--|----------------------|----------------------|
| <input type="checkbox"/> Local Catalog       |                      |                      |
| <input type="checkbox"/> Library of Congress |                      |                      |
| <input type="checkbox"/> OCLC                | <input type="text"/> | <input type="text"/> |
| <input type="checkbox"/> #biblios.net        |                      |                      |

---

**Results**

Remove Fields on Import:  Local  OCLC No record marked for overlay.

| # | Author | Edition | ISBN | Publication Date | Publisher | Service | TCN | Title |
|---|--------|---------|------|------------------|-----------|---------|-----|-------|
|   |        |         |      |                  |           |         |     |       |

## Cataloging # MARC Batch Import/Export

## Evergreen MARC File Upload

Record Type

Create a New Upload Queue  or Add to an Existing Queue

Record Match Set

Holdings Import Profile

Select a Record Source

### Record Import Actions

Merge Profile

Import Non-Matching Records

Merge On Exact Match (901c)

Merge On Single Match

Merge On Best Match

Best/Single Match Minimum Quality Ratio  New Record Quality / Quality of Best Match

Insufficient Quality Fall-Through Profile

Remove MARC Field Groups  Local (APEX)  
 OCLC (APEX)

File to Upload:

## Acquisitions # Load MARC Order Records



## Upload

Create Purchase Order  
 Activate Purchase Order  
 Provider   
 Context Org Unit   
 Add to Selection List   
 Fiscal Year

---

Upload to Queue  Or create a new queue   
 Record Match Set   
 Merge Profile   
 Import Non-Matching Records Record Source   
 Merge On Exact Match (901c)  
 Merge On Single Match  
 Merge On Best Match  
 Best/Single Match Minimum Quality Ratio  New Record Quality / Quality of Best Match  
 Insufficient Quality Fall-Through Profile

970s (CONS)  
 Subjects (CONS)

Remove MARC Field Groups  
 Load Items for Imported Records

---

File to Upload:

## Permissions to use this Feature

The following permissions are required to use this feature:

- CREATE\_IMPORT\_TRASH\_FIELD
- UPDATE\_IMPORT\_TRASH\_FIELD
- DELETE\_IMPORT\_TRASH\_FIELD

# Chapter 53. MARC Record Attributes

The MARC Record Attribute Definitions support the ingesting, indexing, searching, filtering, and delivering of bibliographic record attributes.

To Access the MARC Record Attributes, click **Admin # Server Administration # MARC Record Attributes**

## Multi Valued Fields and Composite Record Attributes

**Multi Valued Fields** and **Composite Record Attributes** expands upon the Record Attribute Definitions feature to include capturing all occurrences of multi-valued elements in a record. **Multi Valued Fields** allows users to say that a bibliographic record contains multiple entries for a particular record attribute. **Composite Record Attributes** supports the application of a more complicated and nested form of structure to a record attribute definition.

### Multi Valued Fields

Multi Valued Fields allows for the capturing of multi-valued elements of a bibliographic record. Through the use of Multi Valued Fields, Evergreen recognizes that records are capable of storing multiple values. Multi Valued Fields are represented in the Record Attribute Definitions interface by a column named **Multi-valued?**. With **Multi-valued?** set to **True**, Evergreen will recognize the bibliographic records in the database that have multiple values mapping to the record attribute definition; it will also track and search on those values in the catalog. This feature will be particularly handy for bibliographic records representing a Blu-ray / DVD combo pack, since both format types can be displayed in the OPAC (if both formats were cataloged in the record).

#### Record Attribute Definitions

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| ✓                        | #  | Name          | Label                         | Composite attribute? | Description | Filter? | Fixed Field | Format | Joiner | MARC Subfields | MARC Tag | Multi-valued? |
|--------------------------|----|---------------|-------------------------------|----------------------|-------------|---------|-------------|--------|--------|----------------|----------|---------------|
| <input type="checkbox"/> | 1  | icon_format   | OPAC Format Icons             | True                 |             | True    |             |        |        |                |          | True          |
| <input type="checkbox"/> | 2  | ills          | Ills                          | False                |             | True    | Ills        |        |        |                |          | True          |
| <input type="checkbox"/> | 3  | indx          | Indx                          | False                |             | True    | Indx        |        |        |                |          | True          |
| <input type="checkbox"/> | 4  | item_form     | Form                          | False                |             | True    | Form        |        |        |                |          | True          |
| <input type="checkbox"/> | 5  | item_lang     | Lang                          | False                |             | True    | Lang        |        |        |                |          | True          |
| <input type="checkbox"/> | 6  | item_type     | Type                          | False                |             | True    | Type        |        |        |                |          | False         |
| <input type="checkbox"/> | 7  | language      | Language (2.0 compat version) | False                |             | True    | Lang        |        |        |                |          | True          |
| <input type="checkbox"/> | 8  | lit_form      | LitF                          | False                |             | True    | LitF        |        |        |                |          | True          |
| <input type="checkbox"/> | 9  | mr_hold_form  | Metarecord Hold Formats       | True                 |             | True    |             |        |        |                |          | True          |
| <input type="checkbox"/> | 10 | mrec          | MRec                          | False                |             | True    | MRec        |        |        |                |          | True          |
| <input type="checkbox"/> | 11 | pub_status    | DtSt                          | False                |             | True    | DtSt        |        |        |                |          | True          |
| <input type="checkbox"/> | 12 | pubdate       | Pub Date                      | False                |             | False   | Date1       |        |        |                |          | False         |
| <input type="checkbox"/> | 13 | search_format | Search Format                 | True                 |             | True    |             |        |        |                |          | True          |

To edit an existing record attribute definition and set the **Multi-valued?** field to **True**:

1. Click **Admin** on the menu bar
2. Hover over **Server Administration** and click **MARC Record Attributes**
3. Double-click on the row of the record attribute definition that needs to be edited
4. Select the **Multi-valued?** checkbox
5. Click **Save**

Record Attribute Definitions

Record Attribute Definitions

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| ✓                        | #  | Name          | Label                         | Composite attribute? | Description | Filter? | Fix  | Multi-valued? | Pl | C |
|--------------------------|----|---------------|-------------------------------|----------------------|-------------|---------|------|---------------|----|---|
| <input type="checkbox"/> | 1  | icon_format   | OPAC Format Icons             | True                 |             | True    |      | True          |    |   |
| <input type="checkbox"/> | 2  | ills          | Ills                          | False                |             | True    | Ills | True          |    |   |
| <input type="checkbox"/> | 3  | indx          | Indx                          | False                |             | True    | Indx | True          |    |   |
| <input type="checkbox"/> | 4  | item_form     | Form                          | False                |             | True    | For  | True          |    |   |
| <input type="checkbox"/> | 5  | item_lang     | Lang                          | False                |             | True    | Lar  | True          |    |   |
| <input type="checkbox"/> | 6  | item_type     | Type                          | False                |             | True    | Typ  | False         |    |   |
| <input type="checkbox"/> | 7  | language      | Language (2.0 compat version) | False                |             | True    | Lar  | True          |    |   |
| <input type="checkbox"/> | 8  | lit_form      | LitF                          | False                |             | True    | LitF | True          |    |   |
| <input type="checkbox"/> | 9  | mr_hold_form  | Metarecord Hold Formats       | True                 |             | True    |      | True          |    |   |
| <input type="checkbox"/> | 10 | mrec          | MRec                          | False                |             | True    | MR   | True          |    |   |
| <input type="checkbox"/> | 11 | pub_status    | DtSt                          | False                |             | True    | DtS  | True          |    |   |
| <input type="checkbox"/> | 12 | pubdate       | Pub Date                      | False                |             | False   | Dat  | False         |    |   |
| <input type="checkbox"/> | 13 | search_format | Search Format                 | True                 |             | True    |      | True          |    |   |

Name: icon\_format

Label: OPAC Format Icons

Composite attribute?

Description:

Filter?

Fixed Field:

Format:

Joiner:

MARC Subfields:

MARC Tag:

**Multi-valued?**

Physical Characteristic:

Sorter?

Starting Position:

String Length:

XPath:

Cancel Save

## Composite Record Attributes

Composite Record Attributes build on top of Evergreen's ability to support record attributes that contain multiple entries. The Composite Record Attributes feature enables administrators to take a record attribute definition and apply a more complicated and nested form of structure to that particular record attribute. Two new Record Attribute Definitions columns have been added to facilitate the management of the Composite Record Attributes. The **Composite attribute?** column designates whether or not a particular record attribute definition is also a composite record attribute. The **Coded Value Maps** column contains a **Manage** link in each row that allows users to manage the Coded Value Maps for the record attributes.

## Record Attribute Definitions

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| ✓                        | # | Name        | Label             | Composite attribute? | Description | Filter? | Fixed Field | Format | Joiner | MARC Subfields | MARC Tag | Multi-valued? | P | C |
|--------------------------|---|-------------|-------------------|----------------------|-------------|---------|-------------|--------|--------|----------------|----------|---------------|---|---|
| <input type="checkbox"/> | 1 | icon_format | OPAC Format Icons | True                 |             | True    |             |        |        |                |          | True          |   |   |
| <input type="checkbox"/> | 2 | ills        | Ills              | False                |             | True    | Ills        |        |        |                |          | True          |   |   |
| <input type="checkbox"/> | 3 | indx        | Indx              | False                |             | True    | Indx        |        |        |                |          | True          |   |   |
| <input type="checkbox"/> | 4 | item_form   | Form              | False                |             | True    | Form        |        |        |                |          | True          |   |   |

## Coded Value Maps

To manage the Coded Value Maps of a particular record attribute definition, click the **Manage** link located under the Coded Value Maps column for that record attribute. This will open the Coded Value Maps interface. What administrators see on the Coded Value Maps screen does not define the structure of the composite record attribute; they must go into the **Composite Attribute Entry Definitions** screen to view this information.

### Coded Value Maps

#### Coded Value Maps

Record Attribute Type:  ▼

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| ✓                        | # | SVF Attribute     | Code    | Value   | Description | OPAC Visible | Search |
|--------------------------|---|-------------------|---------|---------|-------------|--------------|--------|
| <input type="checkbox"/> | 1 | OPAC Format Icons | blu-ray | Blu-ray |             | True         | Blu-r  |
| <input type="checkbox"/> | 2 | OPAC Format Icons | book    | Book    |             | True         | Book   |

Within the Coded Value Maps screen, there is a column named **Composite Definition**. The **Composite Definition** column contains a **Manage** link that allows users to configure and to edit Composite Record Attribute definitions. In order to enable the **Manage** link (i.e. have the **Manage** link display as an option under the **Composite Definition** column), the **Composite attribute?** column (located back in the Record Attributes Definition page) must be set to **True**.

To edit an existing record attribute definition and set the **Composite attribute?** field to True:

1. Click **Admin** on the menu bar
2. Hover over **Server Administration** and click **MARC Record Attributes**
3. Double-click on the row of the record attribute definition that needs to be edited
4. Select the **Composite attribute?** checkbox
5. Click **Save**

## Record Attribute Definitions

### Record Attribute Definitions

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| ✓                        | #  | Name          | Label                         | ▼ Composite attribute? | Description | Filter? | Fixed Field |
|--------------------------|----|---------------|-------------------------------|------------------------|-------------|---------|-------------|
| <input type="checkbox"/> | 1  | icon_format   | OPAC Format Icons             | True                   |             | True    |             |
| <input type="checkbox"/> | 2  | mr_hold_form  | Metarecord Hold Formats       | True                   |             | True    |             |
| <input type="checkbox"/> | 3  | search_format | Search Formats                | True                   |             | True    |             |
| <input type="checkbox"/> | 4  | ills          | Ills                          | False                  |             | True    | Ills        |
| <input type="checkbox"/> | 5  | indx          | Indx                          | False                  |             | True    | Indx        |
| <input type="checkbox"/> | 6  | item_form     | Form                          | False                  |             | True    | Form        |
| <input type="checkbox"/> | 7  | item_lang     | Lang                          | False                  |             | True    | Lang        |
| <input type="checkbox"/> | 8  | item_type     | Type                          | False                  |             | True    | Type        |
| <input type="checkbox"/> | 9  | language      | Language (2.0 compat version) | False                  |             | True    | Lang        |
| <input type="checkbox"/> | 10 | lit_form      | LitF                          | False                  |             | True    | LitF        |
| <input type="checkbox"/> | 11 | mrec          | MRec                          | False                  |             | True    | MRec        |
| <input type="checkbox"/> | 12 | pub_status    | DtSt                          | False                  |             | True    | DtSt        |
| <input type="checkbox"/> | 13 | pubdate       | Pub Date                      | False                  |             | False   | Date1       |

|                                       |                                     |
|---------------------------------------|-------------------------------------|
| Name                                  | icon_format                         |
| Label                                 | OPAC Format Icons                   |
| Composite attribute?                  | <input checked="" type="checkbox"/> |
| Description                           |                                     |
| Filter?                               | <input checked="" type="checkbox"/> |
| Fixed Field                           |                                     |
| Format                                |                                     |
| Joiner                                |                                     |
| MARC Subfields                        |                                     |
| MARC Tag                              |                                     |
| Multi-valued?                         | <input checked="" type="checkbox"/> |
| Physical Characteristic               |                                     |
| Sorter?                               | <input type="checkbox"/>            |
| Starting Position                     |                                     |
| String Length                         |                                     |
| XPath                                 |                                     |
| <input type="button" value="Cancel"/> | <input type="button" value="Save"/> |

Now that the **Composite attribute?** value is set to **True**, click on the **Manage** link located under the **Coded Value Maps** column for the edited record attribute definition. Back in the Coded Value Maps screen, a **Manage** link should now be exposed under the **Composite Definition** column. Clicking on a specific coded value's **Manage** link will take the user into the **Composite Attribute Entry Definitions** screen for that specified coded value.

## Composite Attribute Entry Definitions

The Composite Attribute Entry Definitions screen is where administrators can locally define and edit Composite Record Attributes for specific coded values. For example: administrators can further refine and distinguish the way a “book” should be defined within their database, by bringing together the right combination of attributes together to truly define what a “book” is in their database.

The top of the Composite Attribute Entry Definitions screen shows a parenthetically defined view of the **Composite Data Expression**. Below the Composite Data Expression is the **Composite Data Tree**. The Composite Data Tree is structured off of Boolean Operators, including the support of NOT operations. This nested form can be as deeply defined as it needs to be within the site's database.



## Composite Attribute Entry Definitions

**Record Attribute: OPAC Format Icons**  
**Coded Value: book / Book**

[Return To Coded Value Maps](#)

### Composite Data Expression

( Language material OR Manuscript language material ) AND NOT ( Microfilm OR Microfiche OR Microopaque OR Large print OR Braille OR Online OR Direct  
OR Collection OR Subunit OR Monograph/Item )

**Composite Data Tree** [New Tree](#) [Delete Tree](#) [Save Changes](#)

|  |                        |                           |
|--|------------------------|---------------------------|
| AND  | <a href="#">Delete</a> | <a href="#">Add Child</a> |
| - OR   | <a href="#">Delete</a> | <a href="#">Add Child</a> |
| - - Type (item_type) => Language material (a)            | <a href="#">Delete</a> |                           |
| - - Type (item_type) => Manuscript language material (t) | <a href="#">Delete</a> |                           |
| - NOT  | <a href="#">Delete</a> | <a href="#">Add Child</a> |
| - - OR   | <a href="#">Delete</a> | <a href="#">Add Child</a> |
| - - - Form (item_form) => Microfilm (a)                  | <a href="#">Delete</a> |                           |
| - - - Form (item_form) => Microfiche (b)                 | <a href="#">Delete</a> |                           |
| - - - Form (item_form) => Microopaque (c)                | <a href="#">Delete</a> |                           |

To modify the **Composite Attribute Entry Definition**, any Boolean Operator can be deleted or have a coded value appended to it. The appended coded value can be any number of Coded Value Maps from any other Record Attribute Definition. So, administrators can choose from all the other existing record attribute definitions and create new nested structures to define entirely new data types.

To modify the **Composite Attribute Entry Definition**:

1. Click **Add Child** for the specific Boolean Operator that needs to be modified, and a new window will open
2. Select which **Record Attribute** needs to be represented in the structure under that particular Boolean Operator
3. Select the **Attribute Type** from the dropdown options
4. Select the **Value** of the Attribute Type from the dropdown options (dropdown options will be based on the Attribute Type selected)
5. Click **Submit**
6. The **Composite Data Expression** should now include the modification
7. Once all modifications have been made, click **Save Changes** on the Composite Attribute Entry Definitions page

Record Attribute: OPAC Format Icons

Coded Value: book / Book

[Return To Coded Value Maps](#)

### Composite Data Expression

( Language material OR Manuscript language material ) AND NOT ( Microfilm OR Microfiche OR Microopaque OR Large print OR Braille OR Online OR Directory OR Collection OR Subunit OR Monograph/Item )

### Composite Data Tree

[New Tree](#)

[Delete Tree](#)

[Save Changes](#)

AND

[Delete](#)

[Add Child](#)

- OR

[Delete](#)

[Add Child](#)

- - Type (item\_type) => Language material (a)

[Delete](#)

- - Type (item\_type) => Manuscript language material (t)

[Delete](#)

- NOT

[Delete](#)

[Add Child](#)

Boolean: AND

Boolean: OR

Boolean: NOT

Record Attribute

Select Attribute Type:

Select Value:





## Search and Icon Formats



















### Search and Icon Formats

The table below shows all the search and icon formats. In some cases they vary slightly, with the icon format being more restrictive. This is so that things such as a search for "All Books" will include Large Print books yet Large Print books will not show both a "Book" and "Large Print Book" icon.



In the table below "Icon Format Only" portions of the definition are italicized and in square brackets: [*Icon format only data*]

The definitions use the [fixed field types](#) at the end of this document.

| Icon  | Search Label/Icon Label | Definition  |
|---|-------------------------|---|
|  | Blu-ray                 | VR Format:s   |
|  | All books/Book          | Item Type: a,t<br>Bib Level: a,c,d,m<br>NOT: Item Form:<br>a,b,c,f,o,q,r,s [ <i>d</i> ] |
|  | Braille                 | Item Type: a<br>Item Form: f  |
|  | Cassette audiobook      | Item Type: i<br>SR Format: l  |

|   |  |  |
|---|--|--|
|    | Audiocassette music recording                    | Item Type: j<br>SR Format: l                             |
|    | CD audiobook                                     | Item Type: i<br>SR Format: f                             |
|    | CD music recording                               | Item Type: j<br>SR Format: f                             |
|    | DVD  | VR Format: v   |
|    | E-audio  | Item Type: i<br>Item Form: o,q,s                         |
|    | E-book   | Item Type: a,t<br>Bib Level: a,c,d,m<br>Item Form: o,q,s |
|    | Equipment, games, toys                           | Item Type: r   |
|    | E-video  | Item Type: g<br>Item Form: o,q,s                         |
|    | Kit  | Item Type: o,p   |
|   | Large print book                                 | Item Type: a,t<br>Bib Level: a,c,d,m<br>Item Form: d     |
|  | Map  | Item Type: e,f   |
|  | Microform  | Item Form: a,b,c   |
|  | All music/Music sound recording (unknown format) | Item Type: j<br><i>[NOT: SR Format: a,b,c,d,e,f,l]</i>   |
|  | Phonograph music recording                       | Item Type: j<br>SR Format: a,b,c,d,e                     |
|  | Phonograph spoken recording                      | Item Type: i<br>SR Format: a,b,c,d,e                     |
|  | Picture  | Item type: k   |
|  | Music score                                      | Item type: c,d   |
|  | Serials and magazines                            | Bib Level: b,s   |



|   |                          |              |
|---|--------------------------|--------------|
|  | Software and video games | Item Type: m |
|  | VHS                      | VR Format: b |

## Record Types

This table shows the record types currently used in determining elements of search and icon formats. They are based on a combination of the MARC Record Type (LDR 06) and Bibliographic Level (LDR 07) fixed fields.

| Record Type | LDR 06  | LDR 07        |
|-------------|---------|---------------|
| BKS         | a,t     | a,c,d,m       |
| MAP         | e,f     | a,b,c,d,i,m,s |
| MIX         | p       | c,d,i         |
| REC         | i,j     | a,b,c,d,i,m,s |
| SCO         | c,d     | a,b,c,d,i,m,s |
| SER         | a       | b,i,s         |
| VIS         | g,k,r,o | a,b,c,d,i,m,s |

## Fixed Field Types

This table details the fixed field types currently used for determining search and icon formats. See the [record types](#) section above for how the system determines them.

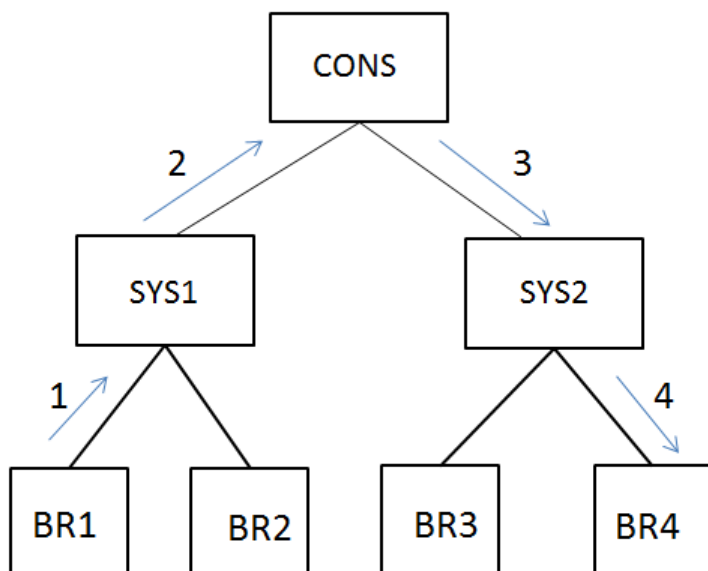
| Label       | Record Type | Tag  | Position |
|-------------|-------------|------|----------|
| Item Type   | ANY         | LDR  | 06       |
| Bib Level   | ANY         | LDR  | 07       |
| Item Format | BKS         | 006  | 06       |
|             |             | 008  | 23       |
|             | MAP         | 006  | 12       |
|             |             | 008  | 29       |
|             | MIX         | 006  | 06       |
|             |             | 008  | 23       |
|             | REC         | 006  | 06       |
|             |             | 008  | 23       |
|             | SCO         | 006  | 06       |
|             |             | 008  | 23       |
|             | SER         | 006  | 06       |
|             |             | 008  | 23       |
|             | VIS         | 006  | 12       |
|             |             | 008  | 29       |
| SR Format   | ANY         | 007s | 03       |

|           |     |      |    |
|-----------|-----|------|----|
| VR Format | ANY | 007v | 04 |
|-----------|-----|------|----|

# Chapter 54. Org Unit Proximity Adjustments

## Org Unit Proximity Adjustments

Org Unit Proximity Adjustments allow libraries to indicate lending preferences for holds between libraries in an Evergreen consortium. When a hold is placed in Evergreen, the hold targeter looks for copies that can fill the hold. One factor that the hold targeter uses to choose the best copy to fill the hold is the distance, or proximity, between the capturing library and the pickup library for the request. The proximity is based on the number of steps through the org tree that it takes to get from one org unit to another.



Org Unit Proximity between BR1 and BR4 = 4

Org Unit Proximity Adjustments allow libraries to customize the distances between org units, which provides more control over which libraries are looked at when targeting copies to fill a hold. Evergreen can also be configured to take Org Unit Proximity Adjustments into account during opportunistic capture through the creation of a custom Best-Hold Selection Sort Order. See documentation [here](#) for more information on Best-Hold Selection Sort Order.

An Org Unit Proximity Adjustment can be created to tell Evergreen which libraries to look at first for copies to fill a hold or which library to look at last. This may be useful for accounting for true transit costs or physical distances between libraries. It can also be used to identify libraries that have special lending agreements or preferences. Org Unit Proximity Adjustments can be created for all holds between two org units, or they can be created for holds on specific Copy Locations and Circulation Modifiers.

## Absolute and Relative Adjustments

Two types of proximity adjustments can be created in Evergreen: Absolute adjustments and Relative adjustments.

Absolute proximity adjustments allow you to replace the default proximity distance between two org units. An absolute adjustment could be made to tell the hold targeter to look at a specific library or library system first to find an item to fill a hold, before looking elsewhere in the consortium.

Relative proximity adjustments allows the proximity between org units to be treated as closer or farther from one another than the default distance. A relative proximity adjustment could be used to identify a library that has limited hours or slow transit times to tell the hold targeter to look at that library last for copies to fill a hold.

## Create an Org Unit Proximity Adjustment

**To create an Org Unit Proximity Adjustment between two libraries:**

1. In the Admin menu choose **Server Administration # Org Unit Proximity Adjustments**.
2. Click **New OU Proximity Adjustment**.
3. Choose an **Item Circ Lib** from the drop down menu.
4. Choose a **Hold Request Lib** from the drop down menu.
5. If this proximity adjustment applies to a specific copy location, select the appropriate **Copy Location** from the drop down menu.
6. If this proximity adjustment applies to a specific material type, select the appropriate **Circ Modifier** from the drop down menu.
7. If this is an Absolute proximity adjustment, check the box next to **Absolute adjustment?** If you leave the box blank, a relative proximity adjustment will be applied.
8. Enter the **Proximity Adjustment** between the **Item Circulating Library** and the **Request Library**.
9. Click **Save**.

**Org Unit Proximity Adjustments** New OU Proximity Adjustment

Show adjustments involving this branch or deeper:

[Back](#) [Next](#)

| ✓ | # | Item Circ Lib | Item Owning Lib | Hold Pickup Lib | Hold | Copy | Circ Modifier | Position | Absolute Adjustment? | Proximity Adjustment |
|---|---|---------------|-----------------|-----------------|------|------|---------------|----------|----------------------|----------------------|
|   |   |               |                 |                 |      |      |               |          |                      |                      |

|   |                                     |
|---|-------------------------------------|
| Item Circ Lib   | <input type="text" value="BR1"/>    |
| Item Owning Lib   | <input type="text"/>                |
| Hold Pickup Lib   | <input type="text"/>                |
| Hold Request Lib  | <input type="text" value="BR4"/>    |
| Copy Location   | <input type="text" value="Stacks"/> |
| Circ Modifier   | <input type="text"/>                |
| Position  | <input type="text"/>                |
| Absolute adjustment?  | <input checked="" type="checkbox"/> |
| Proximity Adjustment  | <input type="text" value="2"/>      |
| <input type="button" value="Cancel"/> <input type="button" value="Save"/> |                                     |

This will create a one-way proximity adjustment between Org Units. In this example this adjustment will apply to items requested at by a patron BR4 and filled at BR1. To create the reciprocal proximity adjustment, for items requested at BR1 and filled at BR4, create a second proximity adjustment between the two Org Units.

## Permissions to use this Feature

To create Org Unit Proximity Adjustments, you will need the following permission:

- ADMIN\_PROXIMITY\_ADJUSTMENT

# Chapter 55. User and Group Permissions

It is essential to understand how user and group permissions can be used to allow staff to fulfill their roles while ensuring that they only have access to the appropriate level.

Permissions in Evergreen are applied to a specific location and system depth based on the home library of the user. The user will only have that permission within the scope provided by the Depth field in relation to his/her working locations.

Evergreen provides group application permissions in order to restrict which staff members have the ability to assign elevated permissions to a user, and which staff members have the ability to edit users in particular groups.

## Staff Accounts

New staff accounts are created in much the same way as patron accounts, using *Circulation # Register Patron* or **Shift+F1**. Select one of the staff profiles from the *Profile Group* drop-down menu.

Each new staff account must be assigned a *Working Location* which determines its access level in staff client interfaces.

1. To assign a working location open the newly created staff account using **F1** (retrieve patron) or **F4** (patron search).
2. Select *Other # User Permission Editor*
3. Place a check in the box next to the desired working location, then scroll to the bottom of the display and click *Save*.



In multi-branch libraries it is possible to assign more than one working location

## Staff Account Permissions

To view a detailed list of permissions for a particular Evergreen account go to *Admin (-) # User permission editor* in the staff client.

## Granting Additional Permissions

A *Local System Administrator (LSA)* may selectively grant *LSA* permissions to other staff accounts. In the example below a *Circ +Full Cat* account is granted permission to process offline transactions, a function which otherwise requires an *LSA* login.

1. Log in as a Local System Administrator.
2. Select *Admin (-) # User Permission Editor* and enter the staff account barcode when prompted

OR

Retrieve the staff account first, then select *Other # User Permission Editor*

- The User Permission Editor will load (this may take a few seconds). Greyed-out permissions cannot be edited because they are either a) already granted to the account, or b) not available to any staff account, including LSAs.

User Name:  Barcode:   
 First Name:  Middle Name:  Last Name:

**Working Location**

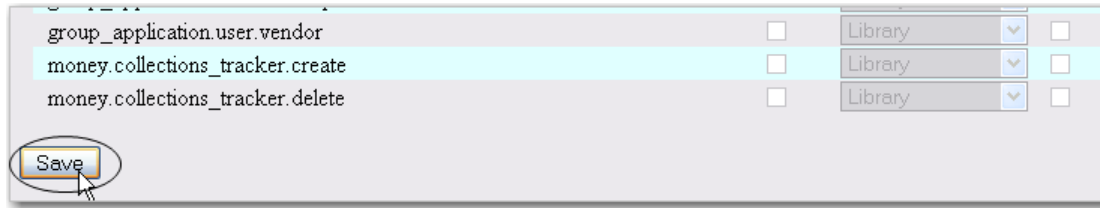
Powell River Public Library (BPRDP)

| ❶ | Permission                    | Applied                             | Depth     | Grantable                           |
|---|-------------------------------|-------------------------------------|-----------|-------------------------------------|
|   | ABORT_REMOTE_TRANSIT          | ❷ <input type="checkbox"/>          | ❸ Library | <input type="checkbox"/> ❹          |
|   | ABORT_TRANSIT                 | <input checked="" type="checkbox"/> | Library   | <input checked="" type="checkbox"/> |
|   | ADMIN_ACQ_FUND                | <input type="checkbox"/>            | Library   | <input type="checkbox"/>            |
|   | ADMIN_CIRC_MATRIX_MATCHPOINT  | <input type="checkbox"/>            | Library   | <input type="checkbox"/>            |
|   | ADMIN_CIRC_MOD                | <input type="checkbox"/>            | Library   | <input type="checkbox"/>            |
|   | ADMIN_CURRENCY_TYPE           | <input type="checkbox"/>            | Library   | <input type="checkbox"/>            |
|   | ADMIN_FUND                    | <input type="checkbox"/>            | Library   | <input type="checkbox"/>            |
|   | ADMIN_FUNDING_SOURCE          | <input type="checkbox"/>            | Library   | <input type="checkbox"/>            |
|   | ADMIN_GROUP_PENALTY_THRESHOLD | <input type="checkbox"/>            | Library   | <input type="checkbox"/>            |
|   | ADMIN_HOLD_MATRIX_MATCHPOINT  | <input type="checkbox"/>            | Library   | <input type="checkbox"/>            |
|   | ADMIN_MARC_CODE               | <input type="checkbox"/>            | Library   | <input type="checkbox"/>            |
|   | ADMIN_PROVIDER                | <input type="checkbox"/>            | Library   | <input type="checkbox"/>            |
|   | ADMIN_STANDING_PENALTY        | <input type="checkbox"/>            | Library   | <input type="checkbox"/>            |
|   | ADMIN_SURVEY                  | <input type="checkbox"/>            | Library   | <input type="checkbox"/>            |
|   | ADMIN_TRIGGER_CLEANUP         | <input type="checkbox"/>            | Library   | <input type="checkbox"/>            |
|   | ADMIN_TRIGGER_EVENT_DEF       | <input type="checkbox"/>            | Library   | <input type="checkbox"/>            |
|   | ADMIN_TRIGGER_HOOK            | <input type="checkbox"/>            | Library   | <input type="checkbox"/>            |

- List of permission names.
  - If checked the permission is granted to this account.
  - Depth limits application to the staff member's library and should be left at the default.
  - If checked this staff account will be able to grant the new privilege to other accounts (not recommended).
4. To allow processing of offline transactions check the Applied column next to *OFFLINE\_EXECUTE*.

|                               |                                     |            |                                     |
|-------------------------------|-------------------------------------|------------|-------------------------------------|
| MARK_ITEM_ON_HOLD_SHELF       | <input type="checkbox"/>            | Library    | <input type="checkbox"/>            |
| MARK_ITEM_ON_ORDER            | <input type="checkbox"/>            | Library    | <input type="checkbox"/>            |
| MARK_ITEM_RESHELVING          | <input type="checkbox"/>            | Library    | <input type="checkbox"/>            |
| MAX_RENEWALS_REACHED.override | <input checked="" type="checkbox"/> | Consortium | <input checked="" type="checkbox"/> |
| MERGE_BIB_RECORDS             | <input checked="" type="checkbox"/> | Consortium | <input checked="" type="checkbox"/> |
| MERGE_USERS                   | <input type="checkbox"/>            | Library    | <input type="checkbox"/>            |
| MR_HOLDS                      | <input checked="" type="checkbox"/> | Consortium | <input checked="" type="checkbox"/> |
| OFFLINE_EXECUTE               | <input checked="" type="checkbox"/> | Library    | <input type="checkbox"/>            |
| OFFLINE_UPLOAD                | <input checked="" type="checkbox"/> | Library    | <input checked="" type="checkbox"/> |
| OFFLINE_VIEW                  | <input checked="" type="checkbox"/> | Library    | <input checked="" type="checkbox"/> |
| OPAC_LOGIN                    | <input type="checkbox"/>            | Consortium | <input type="checkbox"/>            |

5. Scroll down and click Save to apply the changes.





# Chapter 56. SMS Text Messaging

The SMS Text Messaging feature enables users to receive hold notices via text message. Users can opt-in to this hold notification as their default setting for all holds, or they can receive specific hold notifications via text message. Users can also send call numbers and copy locations via text message.

## Administrative Setup

You cannot receive text messages from Evergreen by default. You must enable this feature to receive hold notices and copy information from Evergreen via text message.

## Enable Text Messages

1. Click **Admin # Local Admin # Library Settings Editor**.
2. Select the setting, **Enable features that send SMS text messages**.
3. Set the value to **True**, and click **Update Setting**.

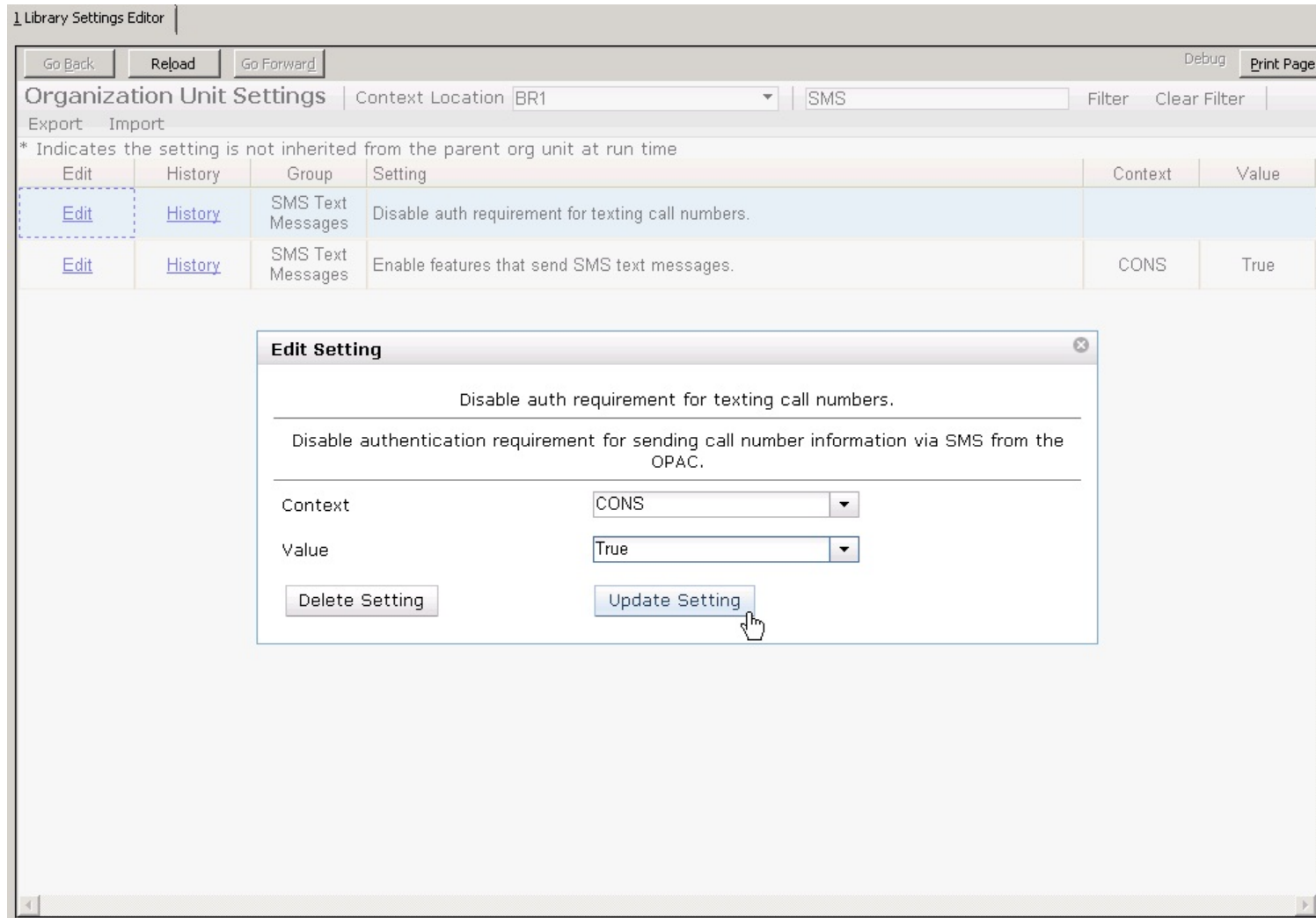
The screenshot shows the 'Library Settings Editor' interface. At the top, there are navigation buttons: 'Go Back', 'Reload', and 'Go Forward'. The main header is 'Organization Unit Settings' with a 'Context Location' dropdown set to 'BR1' and a search box containing 'SMS'. Below this, there are 'Export' and 'Import' buttons. A note states: '\* Indicates the setting is not inherited from the parent org unit at run time'. A table lists settings with columns for 'Edit', 'History', 'Group', 'Setting', 'Context', and 'Value'. The second row is highlighted, showing 'SMS Text Messages' for the group and 'Enable features that send SMS text messages.' for the setting. An 'Edit Setting' dialog box is open, displaying the setting name and description: 'Enable features that send SMS text messages. Current features that use SMS include hold-ready-for-pickup notifications and a "Send Text" action for call numbers in the OPAC. If this setting is not enabled, the SMS options will not be offered to the user.' The dialog has a 'Context' dropdown set to 'CONS' and a 'Value' dropdown set to 'True'. At the bottom of the dialog are 'Delete Setting' and 'Update Setting' buttons, with a mouse cursor pointing to 'Update Setting'.

# Authenticate Patrons

By default, you must be logged into your OPAC account to send a text message from Evergreen. However, if you disable this setting, you can text message copy information without having to login to your OPAC account.

To disable the patron login requirement:

1. Click **Admin # Local Administration # Library Settings Editor**.
2. Select the setting, **Disable auth requirement for texting call numbers**.
3. Set the value to **True**, and click **Update Setting**.



# Configure SMS Carriers

A list of SMS carriers that can transmit text messages to users is available in the staff client. Library staff can edit this list, or add new carriers.

To add or edit SMS carriers:

1. Click **Admin # Server Administration # SMS Carriers**.

- To add a new carrier, click the **New Carrier** button in the top right corner of the screen. To edit an existing carrier, double click in any white space in the carrier's row.

### SMS Carriers

[Back](#) [Next](#) 

| <input checked="" type="checkbox"/> | Region | Name                                    | Email Gateway                        | Active |
|-------------------------------------|--------|---|--------------------------------------|--------|
| <input type="checkbox"/>            | USA    | AT&T Enterprise Paging                  | \$number@page.att.net                | True   |
| <input type="checkbox"/>            | USA    | AT&T Global Smart Messaging Suite       | \$number@sms.smartmessagingsuite.com | True   |
| <input type="checkbox"/>            | USA    | AT&T Mobility/Wireless                  | \$number@txt.att.net                 | True   |
| <input type="checkbox"/>            | USA    | Alaska Communications                   | \$number@msg.acsalaska.com           | True   |
| <input type="checkbox"/>            | Canada | Aliant                                  | \$number@sms.wirefree.informe.ca     | True   |
| <input type="checkbox"/>            | USA    | Alltel (Allied Wireless)                | \$number@sms.alltelwireless.com      | True   |
| <input type="checkbox"/>            | USA    | Ameritech                               | \$number@paging.acswireless.com      | True   |
| <input type="checkbox"/>            | Canada | Bell Mobility & Solo Mobile             | \$number@txt.bell.ca                 | True   |
| <input type="checkbox"/>            | Canada | Bell Mobility & Solo Mobile (Alternate) | \$number@txt.bellmobility.ca         | True   |
| <input type="checkbox"/>            | USA    | BellSouth                               | \$number@bellsouth.com               | True   |

- Enter a (geographical) **Region**.
- Enter the carrier's **Name**.
- Enter an **Email Gateway**. The SMS carrier can provide you with the content for this field. The \$number field is converted to the user's phone number when the text message is generated.
- Check the **Active** box to use this SMS Carrier.

The screenshot shows the 'SMS Carriers' table with a modal dialog box open for editing the 'Alltel (Allied Wireless)' carrier. The modal contains the following fields:

- ID: 35
- Region: USA
- Name: Alltel (Allied Wireless)
- Email Gateway: \$number@sms.alltelwireless.com
- Active:

Buttons for 'Cancel' and 'Save' are visible at the bottom of the modal.

## Configure Text Message Templates

Library staff control the content and format of text messages through the templates in Notifications/Action Triggers. Patrons cannot add free text to their text messages.

To configure the text of the SMS text message:

1. Click **Admin # Local Administration # Notifications/Action Triggers**.
2. Create a new A/T and template, or use or modify an existing template. For example, a default template, "Hold Ready for Pickup SMS Notification," notifies users that the hold is ready for pickup.

| Trigger Event Definitions |                |   |                |         |                  |                                |                                |             |                | New             | Clone Selected | Delete Selected |
|---------------------------|----------------|---|----------------|---------|------------------|--------------------------------|--------------------------------|-------------|----------------|-----------------|----------------|-----------------|
| ✓                         | Owning Library | Name  | Hook           | Enabled | Processing Delay | Processing Delay Context Field | Processing Group Context Field | Reactor     | Validator      | Granularity     |                |                 |
| <input type="checkbox"/>  | CONS           | <a href="#">Items from Queued Bib Records</a>                         | vandelay.imp   | True    | 00:05:00         |                                | record.queue                   | ProcessTemp | NOOP_True      | on-demand       |                |                 |
| <input type="checkbox"/>  | CONS           | <a href="#">CSV Output for Queued Authority Records</a>               | vandelay.queu  | True    | 00:05:00         |                                | queue.owner                    | ProcessTemp | NOOP_True      | print-on-demand |                |                 |
| <input type="checkbox"/>  | CONS           | <a href="#">CSV Output for Queued Bib Records</a>                     | vandelay.queu  | True    | 00:05:00         |                                | queue.owner                    | ProcessTemp | NOOP_True      | print-on-demand |                |                 |
| <input type="checkbox"/>  | CONS           | <a href="#">Email Notice</a>  | aur.created    | False   | 00:05:00         |                                |                                | SendEmail   | NOOP_True      |                 |                |                 |
| <input type="checkbox"/>  | CONS           | <a href="#">Email Notice</a>  | aur.rejected   | False   | 00:05:00         |                                |                                | SendEmail   | NOOP_True      |                 |                |                 |
| <input type="checkbox"/>  | CONS           | <a href="#">Email Notice</a>  | aur.cancelled  | False   | 00:05:00         |                                |                                | SendEmail   | Acq: UserReq   |                 |                |                 |
| <input type="checkbox"/>  | CONS           | <a href="#">Email Notice</a>  | aur.ordered    | False   | 00:05:00         |                                |                                | SendEmail   | Acq: UserReq   |                 |                |                 |
| <input type="checkbox"/>  | CONS           | <a href="#">Email Notice</a>  | aur.received   | False   | 00:05:00         |                                |                                | SendEmail   | Acq: UserReq   |                 |                |                 |
| <input type="checkbox"/>  | CONS           | <a href="#">Email Output for Import Items from Queued Bib Records</a> | vandelay.imp   | True    | 00:05:00         |                                | record.queue                   | SendEmail   | NOOP_True      |                 |                |                 |
| <input type="checkbox"/>  | CONS           | <a href="#">Email Output for Queued Authority Records</a>             | vandelay.queu  | True    | 00:05:00         |                                | queue.owner                    | SendEmail   | NOOP_True      |                 |                |                 |
| <input type="checkbox"/>  | CONS           | <a href="#">Email Output for Queued Bib Records</a>                   | vandelay.queu  | True    | 00:05:00         |                                | queue.owner                    | SendEmail   | NOOP_True      |                 |                |                 |
| <input type="checkbox"/>  | CONS           | <a href="#">Hold Cancelled (No Target) Email Notification</a>         | hold_request.c | False   | 00:30:00         | cancel_time                    | usr                            | SendEmail   | HoldsCancelled |                 |                |                 |
| <input type="checkbox"/>  | CONS           | <a href="#">Hold Expires from Shelf Soon</a>                          | hold_request.e | False   | -1 days          | shelf_expire_t                 | usr                            | SendEmail   | HoldsAvailable |                 |                |                 |
| <input type="checkbox"/>  | CONS           | <a href="#">Hold Ready for Pickup Email Notification</a>              | hold.available | False   | 00:30:00         | shelf_time                     | usr                            | SendEmail   | HoldsAvailable |                 |                |                 |
| <input type="checkbox"/>  | CONS           | <a href="#">Hold Ready for Pickup SMS Notification</a>                | hold.available | True    | 00:30:00         | shelf_time                     | sms_notify                     | SendSMS     | HoldsAvailable |                 |                |                 |

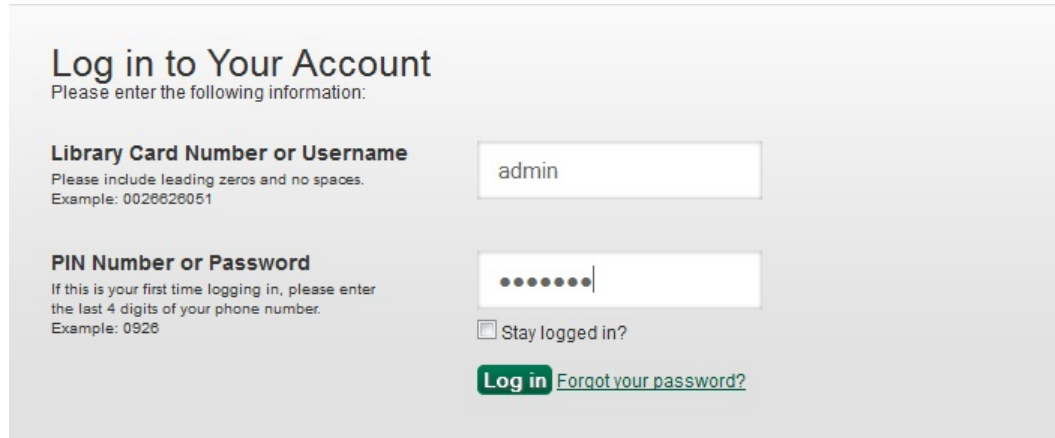
3. You can use the default template, or you can edit the template and add content specific to your library. Click the hyperlinked name to view and/or edit the hold notice.

| Trigger Event Definitions |  | New | Clone Selected |
|---------------------------|--|-----|----------------|
| Failure Cleanup           | <input type="text"/>   |     |                |
| Granularity               | <input type="text"/>   |     |                |
| Max Event Validity Delay  | <input type="text"/>   |     |                |
| Opt-In Setting Type       | <input type="text"/>   |     |                |
| Opt-In User Field         | <input type="text"/>   |     |                |
| Success Cleanup           | <input type="text"/>   |     |                |
| Template                  | <pre> [%- USE date -%] [%- user = target.O.usrc -%] From: [%- params.sender_email    default_sender %] To: [%- params.recipient_email    helpers.get_sms_gateway_email(target.O.sms_carrier,target.O.sms_notify) %] Subject: Hold Available Notification  Dear [% user.family_name %], [% user.first_given_name %] The item(s) you requested are available for pickup from the Library.  [% FOR hold IN target %]   Title: [% hold.current_copy.call_number.record.simple_record.title %]   Author: [% hold.current_copy.call_number.record.simple_record.author %]   Call Number: [% hold.current_copy.call_number.label %]   Barcode: [% hold.current_copy.barcode %]   Library: [% hold.pickup_lib.name %] [% END %] </pre> |     |                |

# Receiving Holds Notices via Text Message

You can receive notification that your hold is ready for pickup from a text message that is sent to your mobile phone.

1. Login to your account.



The screenshot shows a login form with the following elements:

- Log in to Your Account**  
Please enter the following information:
- Library Card Number or Username**  
Please include leading zeros and no spaces.  
Example: 0026626051  
Input field containing: admin
- PIN Number or Password**  
If this is your first time logging in, please enter the last 4 digits of your phone number.  
Example: 0926  
Input field containing: six dots and a cursor
- Stay logged in?
- [Log in](#) [Forgot your password?](#)

2. Search the catalog.
3. Retrieve a record, and click the **Place Hold** link.
4. Select the option to retrieve hold notification via text message.
5. Choose an SMS Carrier from the drop down menu. NOTE: You can enter your SMS carrier and phone number into your **Account Preferences** to skip steps five and six.
6. Enter a phone number.
7. Click **Submit**.

## Place Hold

Complete transcriptions, cadenzas, and exercises, for solo piano / Johannes Brahms ; edited by Eusebius Mandyczewski.

Pickup location:

Notify when hold is ready for pickup?

- Yes, by Email  
 Yes, by Phone

Phone Number:

- Yes, by Text Messaging

Mobile carrier:  Note: carrier charges may apply  
Mobile number:  Hint: use the full 10 digits of your phone #, no spaces, no dashes

# Sending Copy Locations via Text Message

You can search the catalog for an item, and, after retrieving results for the item, click a hyperlink to send the copy location in a text message.

1. Login to your account in the OPAC. NOTE: If you have disabled the setting that requires patron login, then you do not have to login to their accounts to send text messages. See **Administrative Setup** for more information.

**Log in to Your Account**  
Please enter the following information:

**Library Card Number or Username**  
Please include leading zeros and no spaces.  
Example: 0028828051

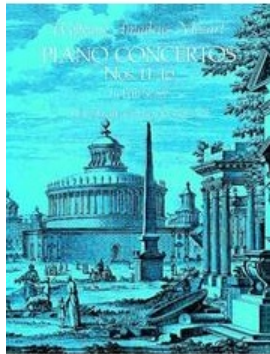
**PIN Number or Password**  
If this is your first time logging in, please enter the last 4 digits of your phone number.  
Example: 0928

Stay logged in?

[Log in](#) [Forgot your password?](#)

2. Search the catalog, and retrieve a title with copies.
3. Click the **Text** link adjacent to the call number.





### Piano concertos nos. 11-16.

[Mozart, Wolfgang Amadeus, 1756-1791 \(Author\)](#). [Mozart, Wolfgang Amadeus, 1756-1791 \(Credited\)](#).

#### Available copies

- 3 copies at Consortium.

#### Current holds

0 current holds with 3 total copies.

| LOCATION | CALL NUMBER                        | BARCODE      |
|----------|------------------------------------|--------------|
| Branch 1 | CONCERTO 33 <a href="#">(Text)</a> | CONC4000068  |
| Branch 2 | CONCERTO 33 <a href="#">(Text)</a> | CONC50000168 |
| Branch 4 | CONCERTO 33 <a href="#">(Text)</a> | CONC70000268 |

4. The text of the SMS Text Message appears.

#### Text call number

[Return to record](#)

```
From: evergreen@dev198.esilibrary.com
To:
Subject: Call Number

Call Number: CONCERTO 33
Location: Stacks
Library: Branch 4
Title: Piano concertos nos. 11-16.
Author: Mozart, Wolfgang Amadeus,
```

5. Choose an SMS Carrier from the drop down menu. NOTE: You can enter your SMS carrier and phone number into your **Account Preferences** to skip steps five and six.
6. Enter a phone number.

### Text call number

[Return to record](#)

From: evergreen@dev198.esilibrary.com  
To:   
Subject: Call Number

Call Number:   
Location:   
Library:   
Title:   
Author:

Mobile carrier:

Mobile number:  Hint: use the full 10 digits of your phone #, no spaces, no dashes

Note: carrier charges may apply

7. Click **Submit**.
8. The number and carrier are converted to an email address, and the text message is sent to your mobile phone.

### Your message has been sent!

[Return to record](#)

From: evergreen@dev198.esilibrary.com  
To: 5554443333@tmomail.net  
Subject: Call Number

Call Number: CONCERTO 33  
Location: Stacks  
Library: Branch 4  
Title: Piano concertos nos. 11-16.  
Author: Mozart, Wolfgang Amadeus,

### Permissions to use this Feature

ADMIN\_SMS\_CARRIER - Enables users to add/create/delete SMS Carrier entries.



# Chapter 57. User Activity Types

The User Activity Types feature enables you to specify the user activity that you want to record in the database. You can use this feature for reporting purposes. This function will also display a last activity date in a user's account.

## Enabling this Feature

Click **Admin # Server Administration # User Activity Types** to access the default set of user activity types and to add new ones. The default set of user activity types records user logins to the Evergreen ILS and to third party products that communicate with Evergreen.

The **Label** is a free text field that enables you to describe the activity that you are tracking.

The **Event Caller** describes the third party software or Evergreen interface that interacts with the Evergreen database and is responsible for managing the communication between the parties.

The **Event Type** describes the type of activity that Evergreen is tracking. Currently, this feature only tracks user authentication.

The **Event Mechanism** describes the framework for communication between the third party software or OPAC and the database. Enter an event mechanism if you want to track the means by which the software communicates with the database. If you do not want to track how the softwares communicate, then leave this field empty.

The **Enabled** field allows you to specify which types of user activity that you would like to track.

The **Transient** column enables you to decide how many actions you want to track. If you want to track only the last activity, then enter **True**. If you want to trace all activity by the user, enter **False**.

| User Activity Type       |                         |              |            |                 |                |         |           |
|--------------------------|-------------------------|--------------|------------|-----------------|----------------|---------|-----------|
| <a href="#">Back</a>     | <a href="#">Next</a>    |              |            |                 |                |         |           |
| ✓                        | Label                   | Event Caller | Event Type | Event Mechanism | Activity Group | Enabled | Transient |
| <input type="checkbox"/> | Apache Auth Proxy Login | authproxy    | login      | apache          | authen         | True    | False     |
| <input type="checkbox"/> | EZProxy Verification    | ezproxy      | verify     | remoteauth      | authz          | True    | False     |
| <input type="checkbox"/> | LibraryElf Login        | libraryelf   | login      | xmlrpc          | authz          | True    | False     |
| <input type="checkbox"/> | Login via Apache module |              | login      | apache          | authen         | True    | False     |
| <input type="checkbox"/> | Login via gateway-v1    |              | login      | gateway-v1      | authen         | True    | False     |
| <input type="checkbox"/> | Login via opensrf       |              | login      | opensrf         | authen         | True    | False     |
| <input type="checkbox"/> | Login via remoteauth    |              | login      | remoteauth      | authen         | True    | False     |
| <input type="checkbox"/> | Login via srfs          |              | login      | srfs            | authen         | True    | False     |
| <input type="checkbox"/> | Login via translator-v1 |              | login      | translator-v1   | authen         | True    | False     |
| <input type="checkbox"/> | Login via xmlrpc        |              | login      | xmlrpc          | authen         | True    | False     |
| <input type="checkbox"/> | OPAC Login (jspac)      | opac         | login      | gateway-v1      | authen         | True    | False     |
| <input type="checkbox"/> | OPAC Login (tpac)       | opac         | login      | apache          | authen         | True    | False     |
| <input type="checkbox"/> | SIP2 Proxy Login        |              | login      | sip2            | authen         | True    | False     |
| <input type="checkbox"/> | SIP2 User Verification  |              | verify     | sip2            | authz          | True    | False     |
| <input type="checkbox"/> | Self-Check Proxy Login  | selfcheck    | login      | translator-v1   | authen         | True    | False     |

# Using this Feature

The last activity date for user logins appears in the patron's summary.

The screenshot displays a library patron's summary for Jeanne Johnson. The name 'Johnson, Jeanne' is highlighted with a green box. The page is divided into several sections: 'Patron Info' (name, date of birth, library card, PAC login, email), 'Addresses' (9634 Tough Division Junction, Phoenix AZ 85036, with radio buttons for Mailing and Billing), and 'Phone Numbers' (Day, Evening, and Other). On the right, there are buttons for 'Refresh', 'Check Out', and 'Items' (showing 0 items). Below these are tabs for 'Account Info' and 'Identification'. The 'Account Info' section shows 'Patrons: SL1', 'Internet Filtered', 'Account created on 3/1/12', 'Expires on 3/12/15', and 'Last Activity 3/12/12', which is circled in red.

|                           |   |
|---------------------------|---|
| <b>Johnson, Jeanne</b>    | <a href="#">Refresh</a> <a href="#">Check Out</a> <a href="#">Items</a>                             |
|                           | 0   |
| <b>Patron Info</b>        | <b>Addresses</b>  |
| Johnson, Jeanne           | 9634 Tough Division Junction  |
| Date of Birth: 12/14/74   | Phoenix AZ 85036  |
| Library Card: 99999342446 | <input checked="" type="radio"/> Mailing <input type="radio"/> Billing <a href="#">(Copy/Print)</a> |
| Olds Alias:               |   |
| PAC Login: 99999342446    | <b>Phone Numbers</b>  |
| email:                    | Day Phone:  |
|                           | Evening Phone:  |
|                           | Other Phone:  |
|                           | <b>Account Info</b> <b>Identification</b>   |
|                           | Patrons   |
|                           | SL1   |
|                           | Internet Filtered   |
|                           | Account created on 3/1/12   |
|                           | Expires on 3/12/15  |
|                           | <b>Last Activity 3/12/12</b>  |

# Chapter 58. Z39.50 Servers

## Restrict Z39.50 Sources by Permission Group

In Evergreen versions preceding 2.2, all users with cataloging privileges could view all of the Z39.50 servers that were available for use in the staff client. In Evergreen version 2.2, you can use a permission to restrict users' access to Z39.50 servers. You can apply a permission to the Z39.50 servers to restrict access to that server, and then assign that permission to users or groups so that they can access the restricted servers.

### Administrative Settings

You can add a permission to limit use of Z39.50 servers, or you can use an existing permission.



You must be authorized to add permission types at the database level to add a new permission.

Add a new permission:

- 1) Create a permission at the database level.
- 2) Click **Admin # Server Administration # Permissions** to add a permission to the staff client.
- 3) In the **New Permission** field, enter the text that describes the new permission.

**Z39.50 Servers**

[Back](#) [Next](#)

| <input checked="" type="checkbox"/> | Z39.50 Source | Label               | Host              |
|-------------------------------------|---------------|---------------------|-------------------|
| <input type="checkbox"/>            | biblios       | ‡biblios.net        | z3950.biblios.net |
| <input type="checkbox"/>            | loc           | Library of Congress | z3950.loc.gov     |
| <input type="checkbox"/>            | oclc          | OCLC                | zcat.oclc.org     |

|                                       |  |
|---------------------------------------|--|
| Z39.50 Source                         | <input type="text" value="oclc"/>            |
| Label                                 | <input type="text" value="OCLC"/>            |
| Host                                  | <input type="text" value="zcat.oclc.org"/>   |
| Port                                  | <input type="text" value="210"/>             |
| DB                                    | <input type="text" value="OLUCWorldCat"/>    |
| Record Format                         | <input type="text" value="FI"/>              |
| Transmission Format                   | <input type="text" value="usmarc"/>          |
| Auth                                  | <input checked="" type="checkbox"/>          |
| Use Permission                        | <input type="text" value="RESTRICT_Z39.50"/> |
| <input type="button" value="Cancel"/> | <input type="button" value="Save"/>          |

- 4) Click **Add**.
- 5) The new permission appears in the list of permissions.

## Restrict Z39.50 Sources by Permission Group

- 1) Click **Admin # Server Administration # Z39.50 Servers**
- 2) Click **New Z39.50 Server**, or double click on an existing Z39.50 server to restrict its use.
- 3) Select the permission that you added to restrict Z39.50 use from the drop down menu.

- 4) Click **Save**.
- 5) Add the permission that you created to a user or user group so that they can access the restricted server.

- 6) Users that log in to the staff client and have that permission will be able to see the restricted Z39.50 server.



As an alternative to creating a new permission to restrict use, you can use a preexisting permission. For example, your library uses a permission group called SuperCat, and only members in this group should have access to a restricted Z39.50 source. Identify a permission that is unique to the SuperCat group (e.g. CREATE\_MARC) and apply that permission to the restricted Z39.50 server. Because these users are in the only group with the permission, they will be the only group w/ access to the restricted server.

## Storing Z39.50 Server Credentials

Staff have the option to apply Z39.50 login credentials to each Z39.50 server at different levels of the organizational unit hierarchy. Credentials can be set at the library branch or system level, or for an entire consortium. When credentials are set for a Z39.50 server, searches of the Z39.50 server will use the stored credentials. If a staff member provides alternate credentials in the Z39.50 search interface, the supplied credentials will override the stored ones. Staff have the ability to apply new credentials or clear existing ones in this interface. For security purposes, it is not possible for staff to retrieve or report on passwords.

To set up stored credentials for a Z39.50 server:

- 1) Go to **Admin # Server Administration # Z39.50 Servers**.
- 2) Select a **Z39.50 Source** by clicking on the hyperlinked source name. This will take you the Z39.50 Attributes for the source.
- 3) At the top of the screen, select the **org unit** for which you would like to configure the credentials.
- 4) Enter the **Username** and **Password**, and click **Apply Credentials**.

Go Back Reload Go Forward Debug Print Page

### Z39.50 Attributes for oclc

New Delete Selected Clone Attributes From Source

Return to Sources

Credentials for  Username  Password

Apply Credentials Clear Stored Credentials

Filter

| ✓                        | # | Z39.50 Source | Name      | Label                | Code | Format | Truncation |
|--------------------------|---|---------------|-----------|----------------------|------|--------|------------|
| <input type="checkbox"/> | 1 | oclc          | title     | Title                | 4    | 6      | 0          |
| <input type="checkbox"/> | 2 | oclc          | isbn      | ISBN                 | 7    | 6      | 0          |
| <input type="checkbox"/> | 3 | oclc          | issn      | ISSN                 | 8    | 1      | 0          |
| <input type="checkbox"/> | 4 | oclc          | lccn      | LCCN                 | 9    | 1      | 0          |
| <input type="checkbox"/> | 5 | oclc          | tcn       | Title Control Number | 12   | 1      | 0          |
| <input type="checkbox"/> | 6 | oclc          | pubdate   | Publication Date     | 31   | 1      | 0          |
| <input type="checkbox"/> | 7 | oclc          | item_type | Item Type            | 1001 | 1      | 0          |
| <input type="checkbox"/> | 8 | oclc          | author    | Author               | 1003 | 6      | 0          |
| <input type="checkbox"/> | 9 | oclc          | publisher | Publisher            | 1018 | 6      | 0          |

# **Part VII. Local Administration**

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# Chapter 59. Introduction

This part covers the options in the Local Administration menu found in the staff client.



# Chapter 60. Address Alert

The Address Alert module gives administrators the ability to notify staff with a custom message when addresses with certain patterns are entered in patron records.

This feature only serves to provide pertinent information to your library system's circulation staff during the registration process. An alert will not prevent the new patron account from being registered and the information will not be permanently associated with the patron account.

To access the Address Alert module, select **Admin # Local Administration # Address Alerts**.



You must have Local Administrator permissions or ADMIN\_ADDRESS\_ALERT permission to access the Address Alert module.

## General Usage Examples

- Alert staff when an address for a large apartment is entered to prompt them to ask for unit number.
- Alert staff when the address of a hotel or other temporary housing is entered.
- Alert staff when an address for a different country is entered.
- Alert staff when a specific city or zip code is entered if that city or zip code needs to be handled in a special way. If you have a neighboring city that you don't have a reciprocal relationship with, you could notify staff that a fee card is required for this customer.

## Access Control and Scoping

Each address alert is tied to an Org Unit and will only be matched against staff client instances of that Org Unit and its children.

When viewing the address alerts you will only see the alerts associated with the specific org unit selected in the "**Context Org Unit**" selection box. You won't see alerts associated with parent org units, so the list of alerts isn't a list of all alerts that may effect your org unit, only of the ones that you can edit.

The specific permission that controls access to configuring this feature is ADMIN\_ADDRESS\_ALERT. Local Administrator level users will already have this permission. It is possible for the Local Administrator to grant this permission to other staff.

## Adding a new Address Alert

How to add an address to the alert list:

1. Log into the Evergreen Staff Client using a Local Administrator account or another account that has been granted the proper permission.

2. Click on Admin # Local Administration # Address Alerts.
3. Click "New Address Alert."
4. A form will open with the following fields to fill out:

**Table 60.1. New Address Alert Fields**

| Field            | Description  |
|------------------|--|
| Owner            | Which Org Unit owns this alert. Set this to your system or branch.   |
| Active           | Check-box that controls if the alert is active or not. Inactive alerts are not processed.  |
| Match All Fields | Check-box that controls if all the fields need to match to trigger the alert (checked), or only at least one field needs to match (unchecked). |
| Alert Message    | Message that will be displayed to staff when this alert is triggered.  |
| Street (1)       | Street 1 field regular expression.   |
| Street (2)       | Street 2 field regular expression.   |
| City             | City regular expression.   |
| County           | County regular expression.   |
| State            | State regular expression.  |
| Country          | County regular expression.   |
| Postal Code      | Postal Code regular expression.  |
| Address Alert ID | Displays the internal database id for alert after the alert has been saved.  |
| Billing Address  | Check-box that specifies that the alert will only match a billing address if checked.  |
| Mailing Address  | Check-box that specifies that the alert will only match a mailing address if checked.  |

5. Click save once you have finished.

## Editing an Address Alert

To make changes to an existing alert, double click on the alert in the list. The editing form will appear, make your changes and click save or cancel when you are done.

If you don't see your alerts, make sure the "**Context Org Unit**" selection box has the correct Org Unit selected.

## Deleting an Address Alert

To delete an alert or many alerts, click the selection check-box for all alerts you would like to delete. Then click the "Delete Selected" button at the top of the screen.

# Staff View of Address Alerts

When an Address Alert is triggered by a matching address the staff will see the address block highlighted with a red dashed line, along with an "Address Alert" block which contains the alert message.

Here is an example of what staff would see.

The screenshot shows a form with two address blocks. The top block is highlighted with a red dashed border. It contains the following fields: Country (USA), Valid Address? (checked), Within City Limits? (checked), Address (Mailing selected, Billing unselected, X button), Type (MAILING), Postal Code (12345), Street (1) (123 example street), Street (2) (empty), City (springfield), County (Newclear), State (CO), Country (highlighted in yellow with a warning icon), Valid Address? (checked), and Within City Limits? (unchecked). To the right of the top block is a blue dashed box containing the text "Address Alert" in red and "Address Alert Triggered - Please note!". Red arrows point from the top block to the alert box and from the alert box to the top block.

## Regular Expressions / Wildcards

All of the patterns entered to match the various address fields are evaluated as case-insensitive regular expressions by default.



Address Alerts use POSIX Regular Expressions included in the PostgreSQL database engine. See the PostgreSQL documentation for full details.

If you want to do a case-sensitive match you need to prepend the pattern with "(?c)"

The simplest regular expression that acts as a wildcard is ".\*", that matches any type of character zero or more times.

## Examples

**Apartment address.** Match an apartment address to prompt for unit number.

1. Choose **Owner** Org Unit.
2. Active = Checked
3. Match All Fields = Checked
4. Alert Message = "This is a large apartment building, Please ask customer for unit number."

5. Street (1) = "1212 Evergreen Lane.\*"

6. City = "mytown"

**All addresses on street.** Match all addresses on a certain street. Matches ave and avenue because of ending wildcard.

1. Choose **Owner** Org Unit.

2. Active = Checked

3. Match All Fields = Checked

4. Alert Message = "This street is in a different county, please setup reciprocal card."

5. Street (1) = ".\* Evergreen Ave.\*"

6. City = "mytown"

**Match list of cities.** Match several different cities with one alert. Could be used if certain cities don't have reciprocal agreements. Note the use of parentheses and the | character to separate the different options.

1. Choose **Owner** Org Unit.

2. Active = Checked

3. Match All Fields = Checked

4. Alert Message = "Customer must purchase a Fee card."

5. City = "(Emeryville|San Jose|San Francisco)"

## Development

Links to resources with more information on how and why this feature was developed and where the various source files are located.

- Launchpad ticket for the feature request and development of address alerts - <https://bugs.launchpad.net/evergreen/+bug/898248>

# Chapter 61. Hold-driven recalls

*Added in Evergreen 2.1*

In academic libraries, it is common for groups like faculty and graduate students to have extended loan periods (for example, 120 days), while others have more common loan periods such as 3 weeks. In these environments, it is desirable to have a hold placed on an item that has been loaned out for an extended period to trigger a *recall*, which:

1. Truncates the loan period
2. Sets the remaining available renewals to 0
3. *Optionally*: Changes the fines associated with overdues for the new due date
4. *Optionally*: Notifies the current patron of the recall, including the new due date and fine level

## Enabling hold-driven recalls

By default, holds do not trigger recalls. To enable hold-driven recalls of circulating items, library settings must be changed as follows:

1. Click **Admin # Local Administration # Library Settings Editor**.
2. Set the **Recalls: Circulation duration that triggers a recall (recall threshold)** setting. The recall threshold is specified as an interval (for example, "21 days"); any items with a loan duration of less than this interval are not considered for a recall.
3. Set the **Recalls: Truncated loan period (return interval)** setting. The return interval is specified as an interval (for example, "7 days"). The due date on the recalled item is changed to be the greater of either the recall threshold or the return interval.
4. *Optionally*: Set the **Recalls: An array of fine amount, fine interval, and maximum fine** setting. If set, this applies the specified fine rules to the current circulation period for the recalled item.

When a hold is placed and no available copies are found by the hold targeter, the recall logic checks to see if the recall threshold and return interval settings are set; if so, then the hold targeter checks the currently checked-out copies to determine if any of the currently circulating items at the designated pickup library have a loan duration longer than the recall threshold. If so, then the eligible item with the due date nearest to the current date is recalled.

## Editing the item recall notification email template

The template for the item recall notification email is contained in the *Item Recall Email Notice* template, found under **Admin # Local Administration # Notifications / Action Triggers**.

# Chapter 62. Action Triggers

Action Triggers give administrators the ability to set up actions for specific events. They are useful for notification events such as hold notifications.

To access the Action Triggers module, select **Admin # Local Administration # Notifications / Action triggers**.



You must have Local Administrator permissions to access the Action Triggers module.

You will notice four tabs on this page: [Event Definitions](#), [Hooks](#), [Reactors](#) and [Validators](#).

## Event Definitions

Event Definitions is the main tab and contains the key fields when working with action triggers. These fields include:

**Table 1: Action Trigger Event Definitions**

| Field                          | Description   |
|--------------------------------|---|
| Owning Library                 | The shortname of the library for which the action / trigger / hook is defined.  |
| Name                           | The name of the trigger event, that links to a trigger event environment containing a set of fields that will be returned to the <a href="#">Validators</a> and/or <a href="#">Reactors</a> for processing.   |
| <a href="#">Hook</a>           | The name of the trigger for the trigger event. The underlying <code>action_trigger.hook</code> table defines the Fieldmapper class in the <code>core_type</code> column off of which the rest of the field definitions “hang”.  |
| Enabled                        | Sets the given trigger as enabled or disabled. This must be set to enabled for the Action trigger to run.   |
| Processing Delay               | Defines how long after a given trigger / hook event has occurred before the associated action (“Reactor”) will be taken.  |
| Processing Delay Context Field | Defines the field associated with the event on which the processing delay is calculated. For example, the processing delay context field on the <code>hold.capture</code> hook (which has a <code>core_type</code> of <code>ahr</code> ) is <code>capture_time</code> . |
| Processing Group Context Field | Used to batch actions based on its associated group.  |
| <a href="#">Reactor</a>        | Links the action trigger to the Reactor.  |
| <a href="#">Validator</a>      | The subroutines receive the trigger environment as an argument (see the linked Name for the environment definition) and returns either <code>1</code> if the validator is <i>true</i> or <code>0</code> if the validator returns <i>false</i> .                         |

|                           |   |
|---------------------------|---|
| Event Repeatability Delay | Allows events to be repeated after this delay interval.   |
| Granularity               | Used to group events by how often they should be run. Options are Hourly, Daily, Weekly, Monthly, Yearly, but you may also create new values. |

## Creating Action Triggers

1. From the top menu, select **Admin # Local Administration # Notifications / Action triggers**.
2. Click on the *New* button.
3. Select an *Owning Library*.
4. Create a unique *Name* for your new action trigger.
5. Select the *Hook*.
6. Check the *Enabled* check box.
7. Set the *Processing Delay* in the appropriate format. E.g. *7 days* to run 7 days from the trigger event or *00:01:00* to run 1 hour after the *Processing Delay Context Field*.
8. Set the *Processing Delay Context Field* and *Processing Group Context Field*.
9. Select the *Reactor, Validator, Failure Cleanup*.
10. Select the *Granularity*.
11. Set the *Max Event Validity Delay*.
12. Select the *Opt-In Setting Type*.
13. Set the *Opt-In User Field*.
14. Select the *Success Cleanup*.
15. Enter text in the *Template* text box if required. These are for email messages. Here is a sample template for sending 90 day overdue notices:

```
[%- USE date -%]
[%- user = target.0.usr -%]
To: [%- params.recipient_email || user.email %]
From: [%- params.sender_email || default_sender %]
Subject: Overdue Items Marked Lost

Dear [% user.family_name %], [% user.first_given_name %]
The following items are 90 days overdue and have been marked LOST.
[%- params.recipient_email || user.email %][%- params.sender_email || default_sender %]
[% FOR circ IN target %]
  Title: [% circ.target_copy.call_number.record.simple_record.title %]
  Barcode: [% circ.target_copy.barcode %]
  Due: [% date.format(helpers.format_date(circ.due_date), '%Y-%m-%d') %]
  Item Cost: [% helpers.get_copy_price(circ.target_copy) %]
  Total Owed For Transaction: [% circ.billable_transaction.summary.total_owed %]
  Library: [% circ.circ_lib.name %]
[% END %]
```

```

[% FOR circ IN target %]
  Title: [% circ.target_copy.call_number.record.simple_record.title %]
  Barcode: [% circ.target_copy.barcode %]
  Due: [% date.format(helpers.format_date(circ.due_date), '%Y-%m-%d') %]
  Item Cost: [% helpers.get_copy_price(circ.target_copy) %]
  Total Owed For Transaction: [% circ.billable_transaction.summary.total_owed %]
  Library: [% circ.circ_lib.name %]
[% END %]

```

16. Once you are satisfied with your new event trigger, click the *Save* button located at the bottom of the form.



A quick and easy way to create new action triggers is to clone an existing action trigger.

## Cloning Existing Action Triggers

1. Check the check box next to the action trigger you wish to clone.
2. Click *Clone Selected* on the top left of the page.
3. An editing window will open. Notice that the fields will be populated with content from the cloned action trigger. Edit as necessary and give the new action trigger a unique Name.
4. Click *Save*.

## Editing Action Triggers

1. Double-click on the action trigger you wish to edit.
2. The edit screen will appear. When you are finished editing, click *Save* at the bottom of the form. Or click *Cancel* to exit the screen without saving.



Before deleting an action trigger, you should consider disabling it through the editing form. This way you can keep it for future use or cloning.

## Deleting Action Triggers

1. Check the check box next to the action trigger you wish to delete
2. Click *Delete Selected* on the top-right of the page.

## Hooks

Hooks define the Fieldmapper class in the `core_type` column off of which the rest of the field definitions “hang”.

### Table 2. Hooks

| Field | Description |
|-------|-------------|
|-------|-------------|



|             |  |
|-------------|--|
| Hook Key    | A unique name given to the hook.   |
| Core Type   | Used to link the action trigger to the IDL class in fm_IDL.xml                           |
| Description | Text to describe the purpose of the hook.  |
| Passive     | Indicates whether or not an event is created by direct user action or is circumstantial. |

You may also create, edit and delete Hooks but the Core Type must refer to an IDL class in the fm\_IDL.xml file.

## Reactors

Reactors link the trigger definition to the action to be carried out.

**Table 3. Action Trigger Reactors**

| Field       | Description  |
|-------------|--|
| Module Name | The name of the Module to run if the action trigger is validated. It must be defined as a subroutine in /openils/lib/perl5/OpenILS/Application/Trigger/Reactor.pm or as a module in /openils/lib/perl5/OpenILS/Application/Trigger/Reactor/*.pm. |
| Description | Description of the Action to be carried out.   |

You may also create, edit and delete Reactors. Just remember that there must be an associated subroutine or module in the Reactor Perl module.

## Validators

Validators set the validation test to be preformed to determine whether the action trigger is executed.

**Table 4. Action Trigger Validators**

| Field       | Description   |
|-------------|---|
| Module Name | The name of the subroutine in /openils/lib/perl5/OpenILS/Application/Trigger/Reactor.pm to validate the action trigger. |
| Description | Description of validation test to run.  |

You may also create, edit and delete Validators. Just remember that their must be an associated subroutine in the Reactor.pm Perl module.

## Processing Action Triggers

To run the action triggers, an Evergreen administrator will need to run the trigger processing script. This should be set up as a cron job to run periodically. To run the script, use this command:

```
/openils/bin/action_trigger_runner.pl --process-hooks --run-pending
```

You have several options when running the script:

- `--run-pending`: Run pending events to send emails or take other actions as specified by the reactor in the event definition.
- `--process-hooks`: Create hook events
- `--osrf-config=[config_file]`: OpenSRF core config file. Defaults to: `/openils/conf/opensrf_core.xml`
- `--custom-filters=[filter_file]`: File containing a JSON Object which describes any hooks that should use a user-defined filter to find their target objects. Defaults to: `/openils/conf/action_trigger_filters.json`
- `--max-sleep=[seconds]`: When in process-hooks mode, wait up to [seconds] for the lock file to go away. Defaults to 3600 (1 hour).
- `--hooks=hook1[,hook2,hook3,...]`: Define which hooks to create events for. If none are defined, it defaults to the list of hooks defined in the `--custom-filters` option. Requires `--process-hooks`.
- `--granularity=[label]`: Limit creating events and running pending events to those only with [label] granularity setting.
- `--debug-stdout`: Print server responses to STDOUT (as JSON) for debugging.
- `--lock-file=[file_name]`: Sets the lock file for the process.
- `--verbose`: Show details of script processing.
- `--help`: Show help information.

Examples:

- Run all pending events that have no granularity set. This is what you tell CRON to run at regular intervals.

```
perl action_trigger_runner.pl --run-pending
```

- Batch create all "checkout.due" events

```
perl action_trigger_runner.pl --hooks=checkout.due --process-hooks
```

- Batch create all events for a specific granularity and to send notices for all pending events with that same granularity.

```
perl action_trigger_runner.pl --run-pending --granularity=Hourly --process-hooks
```

# Chapter 63. Recent Staff Searches

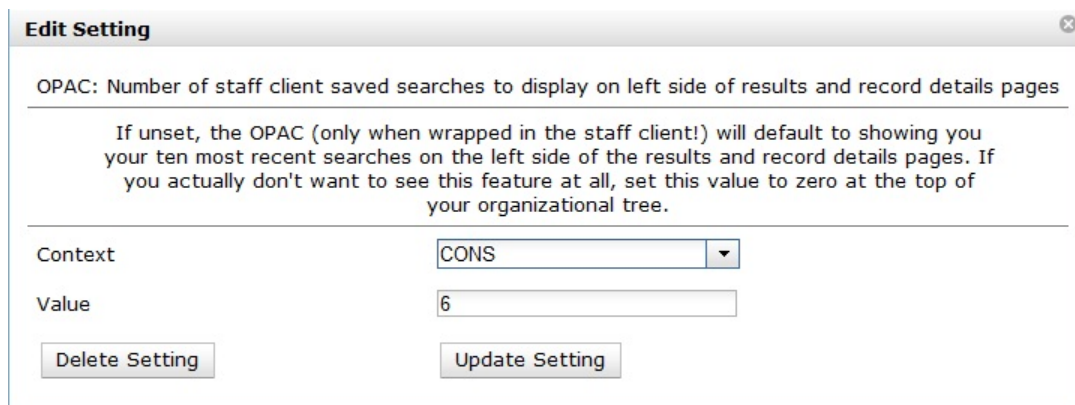
This feature enables you to view your recent searches as you perform them in the staff client. The number of searches that you can view is configurable. This feature is only available through the staff client; it is not available to patrons in the OPAC.

## Administrative Settings

By default, ten searches will be saved as you search the staff client. If you want to change the number of saved searches, then you can configure the number of searches that you wish to save through the **Library Settings Editor** in the **Admin** module.

To configure the number of recent staff searches:

1. Click **Admin # Local Administration # Library Settings Editor**.
2. Scroll to **OPAC: Number of staff client saved searches to display on left side of results and record details pages**
3. Click **Edit**.
4. Select a **Context** from the drop down menu.
5. Enter the number of searches that you wish to save in the **Value** field.
6. Click **Update Setting**



To retain this setting, the system administrator must restart the web server.

If you do not want to save any searches, then you can turn off this feature.

To deactivate this feature:

1. Follow steps 1-4 (one through four) as listed in the previous section.
2. In the **value** field, enter 0 (zero).
3. Click **Update Setting**. This will prevent you from viewing any saved searches.

## Recent Staff Searches

Evergreen will save staff searches that are entered through either the basic or advanced search fields. To view recent staff searches:

1. Enter a search term in either the basic or advanced search fields.
2. Your search results for the current search will appear in the middle of the screen. The most recent searches will appear on the left side of the screen.

Search the Catalog [Advanced Search](#)  
Search All Formats  for  Keyword  in   
[\[ Click to Refine Your Original Search \]](#)

[Another Search](#) [Advanced Search](#) Sort by  [Detailed View](#)

**Search Results** Results 1 - 10 of 11 (page 1 of 2)

### Your recent searches:

- [bread](#)
- [spaghetti](#)
- [cooking](#)
- [recipe](#)
- [dog](#)
- [rain](#)

1.  [Retro kids cooking :](#)  
[Perry, Richard](#) c2004.  
Call number: ACQ14  
0 of 1 copy available

---

2.  [Retro kids cooking :](#)  
[Perry, Richard](#) c2004.  
0 of 0 copies available

# Chapter 64. Library Settings Editor

## Fine Accrual on Closed Dates

By default, fines accrue only on dates that the library is open. This feature enables you to charge patrons fines on dates the library is closed. Fines accrue during scheduled closings as well as during normal weekly closed dates.

To enable this feature:

1. Click **Admin # Local Administration # Library Settings Editor # Charge fines on overdue circulations when closed**
2. Click **Edit**.
3. Set the value to **True**.
4. Click **Update Setting**.

## Target Copies for Holds at Closed Libraries

By default, when a patron places a hold on a title, the hold targeter will search for copies to fill the hold only at circulating libraries that are open. Copies at closed libraries are not targeted to fill holds. When turned on, this feature enables Evergreen to target copies that have closed circulating libraries to fill holds. Two new org unit settings control this feature.

Use the following setting to target copies for holds at closed circulating libraries:

1. Click **Admin # Local Administration # Library Settings Editor # Target copies for a hold even if copy's circ lib is closed** . Set the value to **True** if you want to target copies for holds at closed circulating libraries. Set the value to **False**, or leave it unset, if you do not want to enable this feature.
2. Click **Update Setting**.

**Organization Unit Settings** | Context Location BR1 | target

\* Indicates the setting is not inherited from the parent org unit at run time

| Edit                 | History                 | Group       | Setting   |
|----------------------|-------------------------|-------------|---|
| <a href="#">Edit</a> | <a href="#">History</a> | Circulation | Checkout Fills Related Hold   |
| <a href="#">Edit</a> | <a href="#">History</a> | Circulation | Target copies for a hold even if copy's circ lib is closed                                      |
| <a href="#">Edit</a> | <a href="#">History</a> | Circulation | Target copies for a hold even if copy's circ lib is closed IF the circ lib is the hold's pickup |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Maximum library target attempts   |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Ora Unit Target Weight  |

**Edit Setting**

Target copies for a hold even if copy's circ lib is closed IF the circ lib is the hold's pickup lib

If this setting is true at a given org unit or one of its ancestors, the hold targeter will target copies from this org unit even if the org unit is closed (according to the actor.org\_unit.closed\_date table) IF AND ONLY IF the copy's circ lib is the same as the hold's pickup lib.

Context: BR1

Value:   ▼

Use the following setting to target copies for holds IF AND ONLY IF the circulating library is the hold's pickup library.

1. Click **Admin # Local Administration # Library Settings Editor # Target copies for a hold even if copy's circ lib is closed IF the circ lib is the hold's pickup lib** . Set the value to **True** if you want to target copies for holds at closed circulating libraries when the circulating library of the item and the pickup library of the hold are the same. Set the value to **False**, or leave it unset, if you do not want to enable this feature.
2. Click **Update Setting**.

**Organization Unit Settings** | Context Location BR1 | target

\* Indicates the setting is not inherited from the parent org unit at run time

| Edit                 | History                 | Group       | Setting   |
|----------------------|-------------------------|-------------|---|
| <a href="#">Edit</a> | <a href="#">History</a> | Circulation | Checkout Fills Related Hold   |
| <a href="#">Edit</a> | <a href="#">History</a> | Circulation | Target copies for a hold even if copy's circ lib is closed                                      |
| <a href="#">Edit</a> | <a href="#">History</a> | Circulation | Target copies for a hold even if copy's circ lib is closed IF the circ lib is the hold's pickup |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Maximum library target attempts   |
| <a href="#">Edit</a> | <a href="#">History</a> | Holds       | Ora Unit Target Weight  |

**Edit Setting**

Target copies for a hold even if copy's circ lib is closed IF the circ lib is the hold's pickup lib

If this setting is true at a given org unit or one of its ancestors, the hold targeter will target copies from this org unit even if the org unit is closed (according to the actor.org\_unit.closed\_date table) IF AND ONLY IF the copy's circ lib is the same as the hold's pickup lib.

Context: BR1

Value:   ▼

# Auto Override Patron Hold Events

In previous versions of Evergreen, you can assign patrons a permission that enables them to manually override a failed hold. In version 2.3, when a patron places a hold in the OPAC that fails, and the patron has the permission to override the failed hold, a new org unit setting automatically overrides the failed hold rather than requiring the patron to manually override the hold.

In version 2.3, a new org unit setting exists so that the hold override occurs automatically, and the patron does not have to choose to override it. To enable this org unit setting:

1. Click **Admin # Local Administration # Library Settings Editor**.
2. Scroll or search to find *Auto-Override Permitted Hold Blocks (Patrons)*.
3. Set the value to *True*.

## Use Case

A patron has placed a hold in the OPAC on a title that he has currently checked out. The patron permission group contains the permission, *HOLD\_ITEM\_CHECKED\_OUT.override*. In versions prior to 2.3, a hold failure message appears, and the patron must click *Submit* to override the hold.

In version 2.3, with the appropriate org unit setting enabled, the hold success message appears automatically, and the patron is not required to take further action.

# Org Unit Hiding in TPAC

This feature enables you to hide specific org units from patron view in the OPAC. Org units that have not inherited this setting will display in patron-facing dropdowns.

## To enable Org Unit Hiding in TPAC:

- 1) Click **Admin # Local Administration # Library Settings Editor # Org Unit Hiding Depth**. Note: This setting is inherited.
- 2) Enter a value of 0, 1, or 2 as appropriate. Values are described in the setting description. To view the setting description, click the **Edit** link in the first column on the **Library Settings** interface.
- 3) Click **Update Setting**.

# Accepting payments with Stripe

Stripe (<https://stripe.com>) is a payment processing service that lets sites take credit card payments without payment card information ever touching the sites' own servers.



Using Stripe as a payment processor means that clients **must** have Javascript enabled in order to submit fine payments through your OPAC.

# Library Settings

The following settings need to be set at the appropriate org level for sites wanting to use Stripe. These settings can be found by clicking **Admin # Local Administration # Library Settings Editor**

- "Allow Credit Card Payments" (should be *true*)
- "Enable Stripe payments" (should be *true*)
- "Stripe publishable key" (value provided by Stripe)
- "Stripe secret key" (value provided by Stripe)
- "Name default credit processor" (should be *Stripe*)

## Add granular settings for requiring staff initials for notes

There are now three separate library settings for controlling whether staff are required to input their initials when creating different types of notes. These settings can be found by clicking **Admin # Local Administration # Library Settings Editor**

### Library Settings

- Require staff initials for entry/edit of patron standing penalties and messages.
- Require staff initials for entry/edit of patron notes.
- Require staff initials for entry/edit of copy notes.



# Chapter 65. Standing Penalties

In versions of Evergreen prior to 2.3, the following penalty types were available by default. When applied to user accounts, these penalties prevented users from completing the following actions:

- **CIRC** - Users cannot check out items
- **HOLD** - Users cannot place holds on items
- **RENEW** - Users cannot renew items

In version 2.3, two new penalty types are available in Evergreen:

- **CAPTURE** - This penalty prevents a user's holds from being captured. If the *HOLD* penalty has not been applied to a user's account, then the patron can place a hold, but the targeted item will not appear on a pull list and will not be captured for a hold if it is checked in.
- **FULFILL** - This penalty prevents a user from checking out an item that is on hold. If the *HOLD* and *CAPTURE* penalties have not been applied to a user's account, then the user can place a hold on an item, and the item can be captured for a hold. However, when he tries to check out the item, the circulator will see a pop up box with the name of the penalty type, *FULFILL*. The circulator must correct the problem with the account or must override the penalty to check out the item.

# Chapter 66. Statistical Categories Editor

This is where you configure your statistical categories (stat cats). Stat cats are a way to save and report on additional information that doesn't fit elsewhere in Evergreen's default records. It is possible to have stat cats for copies or patrons.

1. Click **Admin # Local Administration # Statistical Categories Editor**.
2. To create a new stat cat, enter the name of the category and select either *patron* or *copy* from the **Type** dropdown menu. Each category type has a number of options you may set.

## Copy Statistical Categories

Copy stat cats appear in the *Copy Editor*, also known as the *Edit Item Attributes* screen. You might use copy stat cats to track books you have bought from a specific vendor, or donations.

An example of the *Create a new statistical category* controls for copies:

| Statistical Category Editor                                    |   |                    |   | Welcome egadmin |
|--|---|--------------------|---|-----------------|
| Create a new statistical category                              |   |                    |   |                 |
| Enter the name:  | <input type="text"/>  | Owning Library:    | CONS ▾  |                 |
| OPAC Visibility:   | On <input type="radio"/> Off <input checked="" type="radio"/> | Type:              | Copy ▾  |                 |
| Required:  | On <input type="radio"/> Off <input checked="" type="radio"/> | Archive with Circs | On <input type="radio"/> Off <input checked="" type="radio"/> |                 |
| SIP Field:   | No SIP Export ▾   | SIP Format:        | <input type="text"/>  |                 |
| <input type="button" value="Create new statistical category"/> |   |                    |   |                 |

- *OPAC Visibility*: Should the category be displayed in the OPAC?
- *Required*: Must the category be assigned a value when editing the item attributes?
- *Archive with Circs*: Should the category and its values for the copy be archived with aged circulation data?
- *SIP Field*: Select the SIP field identifier that will contain the category and its value
- *SIP Format*: Specify the SIP format string

Some sample copy stat cats:

Focus Location: BR1

[Copy Statistical Categories](#)      [Patron Statistical Categories](#)

\* To edit or view information about an entry, click on the entry in the drop-down menu  
 \*\* Some sip fields may only be valid on one stat cat. Entries using them may not save.

| Statistical Category Name | Owning Library     | OPAC Visibility | Required | SIP Field | SIP Format | Circ Archive | Entries | Add Entry           | Edit                 |
|---------------------------|--------------------|-----------------|----------|-----------|------------|--------------|---------|---------------------|----------------------|
| <b>Gift Item</b>          | Example Consortium | Off             | Off      | No SIP    |            | Off          | No      | <a href="#">Add</a> | <a href="#">Edit</a> |
| <b>Kids Books</b>         | Example Consortium | Off             | Off      | No SIP    |            | Off          | (none)  | <a href="#">Add</a> | <a href="#">Edit</a> |
| <b>Vendor</b>             | Example Consortium | Off             | Off      | No SIP    |            | Off          | Amazon  | <a href="#">Add</a> | <a href="#">Edit</a> |

To add an entry, select *Add*. To edit an entry, select the entry you wish to edit from the drop-down list for the category.

This is how the copy stat cats appear in the *Copy Editor*:

**Copy Editor**

Templates:

| Identification                     | Location (1)  | Circulation (2)                                    | Miscellaneous (3)                      | Statistics (4)                             |
|------------------------------------|---|--|--|--|
| <b>Status</b><br>In process 1 copy | <b>Location/Collection</b><br>Stacks 1 copy         | <b>Circulate?</b><br>Yes 1 copy                    | <b>Alert Message</b><br><Unset> 1 copy | Library Filter                             |
| <b>Barcode</b><br>9999999 1 copy   | <b>Circulation Library</b><br>BR1 1 copy            | <b>Holdable?</b><br>Yes 1 copy                     | <b>Deposit?</b><br>No 1 copy           | <b>CONS : Gift Item</b><br><Unset> 1 copy  |
| <b>Creation Date</b><br>1 copy     | <b>Owning Lib : Call Number</b><br>BR1 : 814 1 copy | <b>Age-based Hold Protection</b><br><Unset> 1 copy | <b>Deposit Amount</b><br>0.00 1 copy   | <b>CONS : Kids Books</b><br><Unset> 1 copy |
| <b>Active Date</b><br>1 copy       | <b>Copy Number</b><br><Unset> 1 copy                | <b>Floating?</b><br><Unset> 1 copy                 | <b>Price</b><br>0.00 1 copy            | <b>CONS : Vendor</b><br><Unset> 1 copy     |

### Patron Statistical Categories

Patron stat cats can be used to keep track of information such as the high school a patron attends, or the home library for a consortium patron, e.g. Interlink, or patron preferences. They appear in the fifth section of the *Patron Registration* or *Edit Patron* screen.

An example of the *Create a new statistical category* controls for patrons:


**Statistical Category Editor** Welcome **egadmin**

---

Create a new statistical category

|                  |   |                    |   |
|------------------|---|--------------------|---|
| Enter the name:  | <input type="text"/>  | Owning Library:    | <input type="text" value="CONS"/>                             |
| OPAC Visibility: | On <input type="radio"/> Off <input checked="" type="radio"/> | Type:              | <input type="text" value="Patron"/>                           |
| Required:        | On <input type="radio"/> Off <input checked="" type="radio"/> | Archive with Circs | On <input type="radio"/> Off <input checked="" type="radio"/> |
| Allow Free Text: | On <input checked="" type="radio"/> Off <input type="radio"/> | Show in Summary:   | On <input type="radio"/> Off <input checked="" type="radio"/> |
| SIP Field:       | <input type="text" value="No SIP Export"/>                    | SIP Format:        | <input type="text"/>  |

- *OPAC Visibility*: Should the category be displayed in the OPAC?
- *Required*: Must the category be assigned a value when registering a new patron or editing an existing one?
- *Archive with Circs*: Should the category and its values for the patron be archived with aged circulation data?
- *Allow Free Text*: May the person registering/editing the patron information supply their own value for the category?
- *Show in Summary*: Display the category and its value in the patron summary view?
- *SIP Field*: Select the SIP field identifier that will contain the category and its value
- *SIP Format*: Specify the SIP format string



### WARNING

If you make a category **required** and also **disallow free text**, make sure that you populate an entry list for the category so that the user may select a value. Failure to do so will result in an unsubmitable patron registration/edit form!

Some sample patron stat cats:

Focus Location:

[Copy Statistical Categories](#)

[Patron Statistical Categories](#)

\* To edit or view information about an entry, click on the entry in the drop-down menu  
 \*\* Some sip fields may only be valid on one stat cat. Entries using them may not save.

| Statistical Category Name   | Owning Library     | OPAC Visibility | Required | Show in Summary | Allow Free Text | SIP Field | SIP Format | Circ Archive | Entries             | Add Entry           | Edit                 |
|-----------------------------|--------------------|-----------------|----------|-----------------|-----------------|-----------|------------|--------------|---------------------|---------------------|----------------------|
| High School                 | Example System 1   | Off             | Off      | Off             | Off             | No SIP    |            | Off          | West High School* ▼ | <a href="#">Add</a> | <a href="#">Edit</a> |
| Preferred Library           | Example System 1   | Off             | Off      | Off             | Off             | No SIP    |            | Off          | Main Library ▼      | <a href="#">Add</a> | <a href="#">Edit</a> |
| Preferred Transportation    | Example Consortium | Off             | Off      | Off             | On              | No SIP    |            | Off          | (none) ▼            | <a href="#">Add</a> | <a href="#">Edit</a> |
| Proof of residence document | Example Branch 1   | Off             | On       | Off             | On              | No SIP    |            | Off          | (none) ▼            | <a href="#">Add</a> | <a href="#">Edit</a> |
| Provide due date slip       | Example Consortium | Off             | On       | Off             | Off             | No SIP    |            | Off          | No* ▼               | <a href="#">Add</a> | <a href="#">Edit</a> |

To add an entry, click on *Add* in the category row under the *Add Entry* column:

| Statistical Category Name | Owning Library   | OPAC Visibility | Required | Show in Summary | Allow Free Text | SIP Field | SIP Format | Circ Archive | Entries             | Add Entry           | Edit                 |
|---------------------------|------------------|-----------------|----------|-----------------|-----------------|-----------|------------|--------------|---------------------|---------------------|----------------------|
| High School               | Example System 1 | Off             | Off      | Off             | Off             | No SIP    |            | Off          | West High School* ▼ | <a href="#">Add</a> | <a href="#">Edit</a> |

Enter the value of the new entry:    Default entry for

To edit an entry, select the entry you wish to edit from the drop-down list for the category:

| Statistical Category Name   | Owning Library   | OPAC Visibility | Required | Show in Summary | Allow Free Text | SIP Field | SIP Format | Circ Archive | Entries               | Add Entry           | Edit                 |
|---|------------------|-----------------|----------|-----------------|-----------------|-----------|------------|--------------|-----------------------|---------------------|----------------------|
| High School   | Example System 1 | Off             | Off      | Off             | Off             | No SIP    |            | Off          | Central High School ▼ | <a href="#">Add</a> | <a href="#">Edit</a> |
| Owned By <b>Example Branch 1</b> <input type="text" value="Central High School"/> <input type="checkbox"/> Default entry for <input type="text" value="BR1"/> |                  |                 |          |                 |                 |           |            |              |                       |                     |                      |
| <input type="button" value="Update Entry Value"/> <input type="button" value="Delete Entry"/> <input type="button" value="Cancel"/>                           |                  |                 |          |                 |                 |           |            |              |                       |                     |                      |


An **organizational unit** (consortium, library system branch library, sub library, etc.) may create their own categories and entries, or supplement categories defined by a higher-level org unit with their own entries.

An entry can be set as the **default** entry for a category and for an org unit. If an entry is set as the default, it will be automatically selected in the patron edit screen, provided no other value has been previously set for the patron. Only one default may be set per category for any given org unit.

Lower-level org unit defaults override defaults set for higher-level org units; but in the absence of a default set for a given org unit, the nearest parent org unit default will be selected.

Default entries for the focus location org unit are marked with an asterisk in the entry dropdowns.

This is how patron stat cats appear in the patron registration/edit screen:

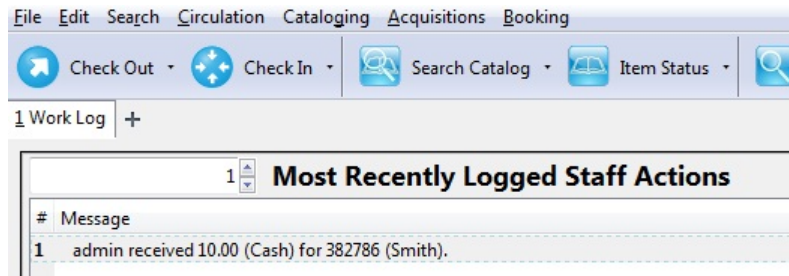
| Statistical Categories      |   |
|-----------------------------|---|
| High School                 | West High School ▼  |
| Preferred Library           | ▼   |
| Preferred Transportation    | ▼   |
| Proof of residence document | ▼  |
| Provide due date slip       | No ▼  |

# Chapter 67. Work Log

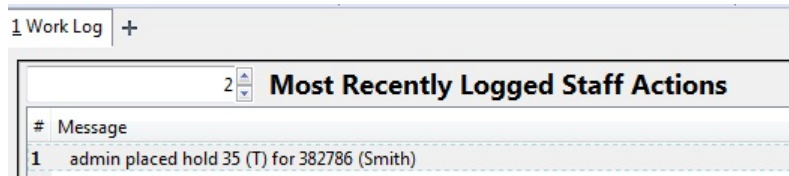
## Expanding the Work Log

In versions of Evergreen prior to 2.3, the work log recorded check ins, checkouts, patron registration, patron editing, and renewals. In version 2.3, the work log also records holds that have been placed and payments that have been received.

In this example, a staff member has collected a fine from a patron. To view this action in the work log, click **Admin # Local Administration # Work Log**. By default, the work log will record the staff member's username, the amount that was received, the payment type, the patron's barcode, and the patron's last name.



In this example, a staff member has placed a hold for a patron. To view this action in the work log, click **Admin # Local Administration # Work Log**. By default, the work log will record the staff member's username, the hold type, the patron's barcode, and the patron's last name.



# Part VIII. Acquisitions

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# Chapter 68. Acquisitions

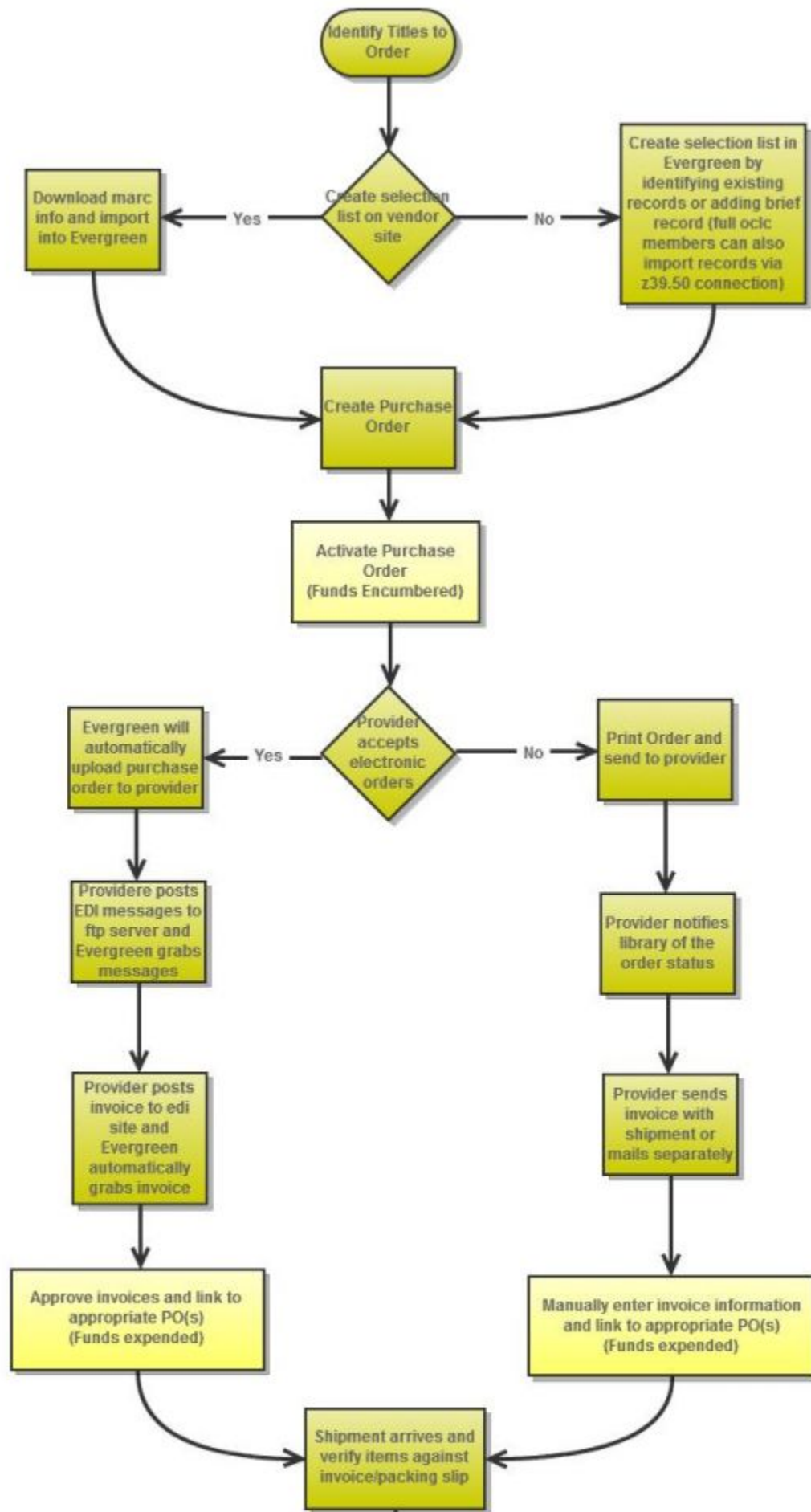
This section is intended for those who are responsible for managing and processing acquisitions.

Before beginning to use Acquisitions, the following must be configured by an administrator:

- Cancel/Suspend Reasons (optional)
- Claiming (optional)
- Currency Types (defaults exist)
- Distribution Formulas (optional)
- EDI Accounts (optional) (see [Setting Up EDI Acquisitions](#) under Software Installation)
- Exchange Rates (defaults exist)
- Funds and Fund Sources
- Invoice Types (defaults exist) and Invoice Payment Methods
- Line Item Features (optional)
- Merge Overlay Profiles and Record Match Sets (see [Batch Importing MARC Records](#) in Cataloging)
- Providers

## Acquisitions Workflow

The following diagram shows how the workflow functions in Evergreen. One of the differences in this process you should notice is that when creating a selection list on the vendor site, libraries will be downloading and importing the vendor bibs and item records.



# Chapter 69. Selection Lists and Purchase Orders

## Selection Lists

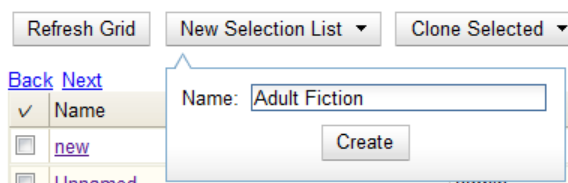
Selection lists allow you to create, manage, and save lists of items that you may want to purchase. To view your selection list, click Acquisitions # My Selection Lists. Use the general search to view selection lists created by other users.

### Create a selection list

Selection lists can be created in four areas within the module. Selection lists can be created when you [Add Brief Records](#), Upload MARC Order Records, or find records through the [MARC Federated Search](#). In each of these interfaces, you will find the Add to Selection List field. Enter the name of the selection list that you want to create in that field.

Selection lists can also be created through the My Selection Lists interface:

1. Click Acquisitions # My Selection Lists.
2. Click the New Selection List drop down arrow.
3. Enter the name of the selection list in the box that appears.
4. Click Create.



### Add items to a selection list

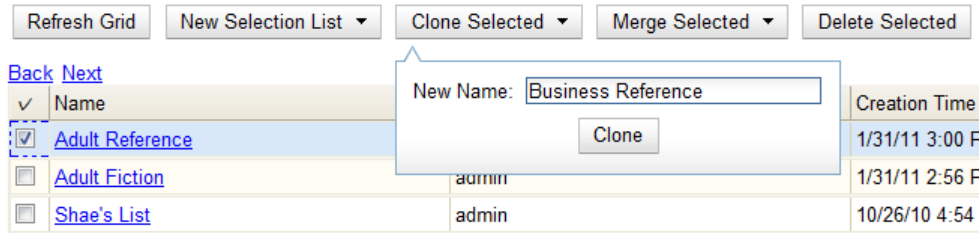
You can add items to a selection list in one of three ways: [add a brief record](#); upload MARC order records; add records through a [federated search](#); or use the View/Place Orders menu item in the catalog.

### Clone selection lists

Cloning selection lists enables you to copy one selection list into a new selection list. You can maintain both copies of the list, or you can delete the previous list.

1. Click Acquisitions # My Selection Lists.
2. Check the box adjacent to the list that you want to clone.

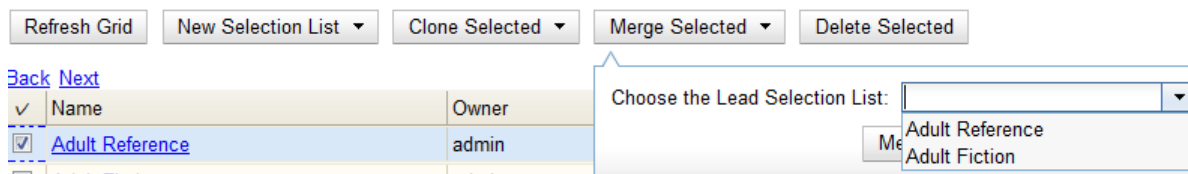
3. Click Clone Selected.
4. Enter a name into the box that appears, and click Clone.



## Merge selection lists

You can merge two or more selection lists into one selection list.

1. Click Acquisitions # My Selection Lists.
2. Check the boxes adjacent to the selection lists that you want to merge, and click Merge Selected.
3. Choose the Lead Selection List from the drop down menu. This is the list to which the items on the other list(s) will be transferred.
4. Click Merge.



## Delete selection lists

You can delete selection lists that you do not want to save. You will not be able to retrieve these items through the General Search after you have deleted the list. You must delete all line items from a selection list before you can delete the list.

1. Click Acquisitions # My Selection Lists.
2. Check the box adjacent to the selection list(s) that you want to delete.
3. Click Delete Selected.

## Mark Ready for Selector

After an item has been added to a selection list or purchase order, you can mark it ready for selector. This step is optional but may be useful to individual workflows.

1. If you want to mark part of a selection list ready for selector, then you can check the box(es) of the line item(s) that you wish to mark ready for selector. If you want to mark the entire list ready for selector, then skip to step 2.

2. Click Actions # Mark Ready for Selector.
3. A pop up box will appear. Choose to mark the selected line items or all line items.
4. Click Go.
5. The screen will refresh. The marked line item(s) will be highlighted pink, and the status changes to selector~ready.

| Actions       | Status         |
|---------------|----------------|
| -- Actions -- | selector-ready |

## Convert selection list to purchase order

Use the Actions menu to convert a selection list to a purchase order.

1. From a selection list, click Actions ~> Create Purchase Order.
2. A pop up box will appear.
3. Select the ordering agency from the drop down menu.
4. Enter the provider.
5. Check the box adjacent to prepayment required if prepayment is required.
6. Choose if you will add All Lineitems or Selected Lineitems to your purchase order.
7. Check the box if you want to Import Bibs and Create Copies in the catalog.
8. Click Submit.

## Purchase Orders

### Activate Purchase Order with Zero Copies

In previous versions, by default, a purchase order could be activated with or without copies attached to line items.

In versions 2.3 and above, by default, a purchase order cannot be activated if a line item on the purchase order has zero copies. A new feature enables you to activate a purchase order that lacks copies.

To activate a purchase order with line items that have zero copies, check the box **Allow activation with zero-copy lineitems**.

Purchase Order (pending)

|                  |                                       |                      |   |
|------------------|---------------------------------------|----------------------|---|
| ID               | 2                                     | Prepayment Required? | No  |
| Name             | 2                                     | Activatable?         | Yes. <a href="#">Activate Order</a>   |
| Provider         | <a href="#">Baker and Taylor (BT)</a> | Notes                | <a href="#">(0)</a>   |
| Total Lineitems  | 1                                     | EDI Messages         | <a href="#">(0)</a>   |
| Total Estimated  | \$0.00                                | History              | <a href="#">View</a>  |
| Total Encumbered | \$0.00                                | Invoicing            | <a href="#">View Invoices (0)</a> <a href="#">Create Invoice</a> <a href="#">Link Invoice</a> ▼ |
| Total Spent      | \$0.00                                | Cancel               | <a href="#">Cancel order</a> ▼  |

Allow activation with zero-copy lineitems

--Actions-- ▼

✓ Line Items

Items Notes

|   |  |   |
|---|--|---|
|  | <a href="#">Isaac's storm : a man, a time, and the deadliest hurricane in history / Erik Larson.</a><br>Larson, Erik. 0609602330 1st ed. c1999. Crown Publishers, Inc<br># 42   <a href="#">link to catalog</a>   <a href="#">worksheet</a>   <a href="#">requests</a> | <a href="#">Copies(0)</a> <a href="#">Notes</a> |
|---|--|---|

## Brief Records

Brief records are short bibliographic records with minimal information that are often used as placeholder records until items are received. Brief records can be added to selection lists or purchase orders and can be imported into the catalog. You can add brief records to new or existing selection lists. You can add brief records to new, pending or on-order purchase orders.

### Add brief records to a selection list

1. Click Acquisitions # New Brief Record. You can also add brief records to an existing selection list by clicking the Actions menu on the selection list and choosing Add Brief Record.
2. Choose a selection list from the drop down menu, or enter the name of a new selection list.
3. Enter bibliographic information in the desired fields.
4. Click Save Record.

## New Brief Record

|  |                                 |
|--|---------------------------------|
| Add To Selection List                      | Business Reference ▾            |
| Title of work                              | Business Grammar, Style & Usage |
| Author of work                             | Abell, Alicia                   |
| Language of work                           |                                 |
| Pagination                                 |                                 |
| ISBN                                       | 9781587620263                   |
| ISSN                                       |                                 |
| Price                                      |                                 |
| Identifier                                 |                                 |
| Publisher                                  |                                 |
| Publication Date                           | 2003                            |
| Edition                                    |                                 |
| UPC  |                                 |
| <input type="button" value="Save Record"/> |                                 |

## Add brief records to purchase orders

You can add brief records to new or existing purchase orders.

1. Open or create a purchase order. See the section on [purchase orders](#) for more information.
2. Click Add Brief Record.
3. Enter bibliographic information in the desired fields. Notice that the record is added to the purchase order that you just created.
4. Click Save Record.

## New Brief Record

|                          |   |
|--------------------------|---|
| Adding to Purchase Order | <input type="text" value="49"/>                         |
| Title of work            | <input type="text" value="Small Business for Dummies"/> |
| Author of work           | <input type="text" value="Tyson, Eric"/>                |
| Language of work         | <input type="text"/>                                    |
| Pagination               | <input type="text"/>                                    |
| ISBN                     | <input type="text" value="978-0470177471"/>             |
| ISSN                     | <input type="text"/>                                    |
| Price                    | <input type="text"/>                                    |
| Identifier               | <input type="text"/>                                    |
| Publisher                | <input type="text"/>                                    |
| Publication Date         | <input type="text" value="2008"/>                       |
| Edition                  | <input type="text"/>                                    |
| UPC                      | <input type="text"/>                                    |

# MARC Federated Search

The MARC Federated Search enables you to import bibliographic records into a selection list or purchase order from a Z39.50 source.

1. Click Acquisitions # MARC Federated Search.
2. Check the boxes of Z39.50 services that you want to search. Your local Evergreen Catalog is checked by default. Click Submit.

image::media/acq\_marc\_search.png[search form]

3. A list of results will appear. Click the "Copies" link to add copy information to the line item. See the [section on Line Items](#) for more information.
4. Click the Notes link to add notes or line item alerts to the line item. See the [section on Line Items](#) for more information.
5. Enter a price in the "Estimated Price" field.
6. You can save the line item(s) to a selection list by checking the box on the line item and clicking Actions # Save Items to Selection List. You can also create a purchase order from the line item(s) by checking the box on the line item and clicking Actions ~> Create Purchase Order.

| Items                     | Notes                    | Actions                                    | Status | Estimated Price      |
|---------------------------|--------------------------|--|--------|----------------------|
| <a href="#">Copies(0)</a> | <a href="#">Notes(0)</a> | <input type="text" value="-- Actions --"/> | new    | <input type="text"/> |



# Line Items

## Return to Line Item

This feature enables you to return to a specific line item on a selection list, purchase order, or invoice after you have navigated away from the page that contained the line item. This feature is especially useful when you must identify a line item in a long list. After working with a line item, you can return to your place in the search results or the list of line items.


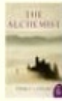


To use this feature, select a line item, and then, depending on the location of the line item, click **Return** or **Return to search**. Evergreen will take you back to the specific line item in your search and highlight the line item with a colored box.

For example, you retrieve a selection list, find a line item to examine, and click the **Copies** link. After editing the copies, you click **Return**. Evergreen takes you back to your selection list and highlights the line item that you viewed.

Selection list *Popular Fiction*  
Create date: 8/23/12  
Last updated: 8/23/12  
Selector: admin  
Entry Count: 7

--Actions--

### ✓ Line Items

|                          |   |
|--------------------------|---|
| <input type="checkbox"/> |  <b>A Thousand Splendid Suns</b><br>Khaled Hosseini 9781594483851<br># 55   <a href="#">link to catalog</a>   <a href="#">worksheet</a>   <a href="#">requests</a> |
| <input type="checkbox"/> |  <b>The Alchemist</b><br>Paul Coelho 9780061122415<br># 50   <a href="#">link to catalog</a>   <a href="#">worksheet</a>   <a href="#">requests</a>                |
| <input type="checkbox"/> |  <b>The Help</b><br>Kathryn Stockett 9780425245132<br># 53   <a href="#">link to catalog</a>   <a href="#">worksheet</a>   <a href="#">requests</a>                |
| <input type="checkbox"/> |  <b>The Litigators</b><br>John Grisham 9780385535137<br># 52   <a href="#">link to catalog</a>   <a href="#">worksheet</a>   <a href="#">requests</a>              |

This feature is available in *General Search Results*, *Purchase Orders*, and *Selection Lists*, whenever any of the following links are available:

- Selection List
- Purchase Order
- Copies
- Notes
- Worksheet

This feature is available in Invoices whenever any of the following links are available:

- Title
- Selection List
- Purchase Order

# Chapter 70. Invoices

You can create invoices for purchase orders, individual line items, and blanket purchases. You can also link existing invoices to purchase order.

You can invoice items before you receive the items if desired. You can also reopen closed invoices, and you can print all invoices.

## Creating invoices and adding line items

You can add specific line items to an invoice from the PO or acquisitions search results screen. You can also search for relevant line items from within the invoice interface. In addition, you can add all line items from an entire Purchase order to an invoice or you can create a blanket invoice for items that are not attached to a purchase order.

### Creating a blanket invoice

You can create a blanket invoice for purchases that are not attached to a purchase order.

1. Click **Acquisitions # Create invoice**.
2. Enter the invoice information in the top half of the screen.
3. To add charges for materials not attached to a purchase order, click *Add Charge...* This functionality may also be used to add shipping, tax, and other fees.
4. Select a charge type from the drop-down menu.



New charge types can be added via *Admin # Server Administration # Acquisitions # Invoice Item Type*.

5. Select a fund from the drop-down menu.
6. Enter a *Title/Description* of the resource.
7. Enter the amount that you were billed.
8. Enter the amount that you paid.
9. Save the invoice.

## Invoice

|                   |                                       |              |                                       |
|-------------------|---------------------------------------|--------------|---------------------------------------|
| Vendor Invoice ID | <input type="text" value="11111111"/> | Invoice Date | <input type="text" value="2/1/2011"/> |
| Receive Method    | <input type="text" value="Paper"/>    | Invoice Type | <input type="text"/>                  |
| Provider          | <input type="text" value="STAPLES"/>  | Shipper      | <input type="text" value="STAPLES"/>  |
| Note              | <input type="text"/>                  | Payment Auth | <input type="text"/>                  |
| Payment Method    | <input type="text" value="Credit"/>   | Receiver     | <input type="text" value="APEX"/>     |

### Direct Charges, Taxes, Fees, etc.

| Charge Type                                   | Fund                                       | Title/Description                            | Billed                             | Paid                               | Delete                 |
|---|--|--|------------------------------------|------------------------------------|------------------------|
| <input type="text" value="Non-library Item"/> | <input type="text" value="OFFICE (2011)"/> | <input type="text" value="Office Supplies"/> | <input type="text" value="50.00"/> | <input type="text" value="50.00"/> | <a href="#">Delete</a> |

[Add Charge...](#)

|   | Total                              | Total                              | Balance                           |
|---|------------------------------------|------------------------------------|-----------------------------------|
| <input type="text" value="Save"/> <input type="text" value="Save &amp; Prorate"/> <input type="text" value="Save &amp; Close"/> | <input type="text" value="50.00"/> | <input type="text" value="50.00"/> | <input type="text" value="0.00"/> |

## Adding line items from a Purchase Order or search results screen to an invoice

You can create an invoice or add line items to an invoice directly from a Purchase Order or an acquisitions search results screen.

1. Place a checkmark in the box for selected line items from the Purchase Order' or acquisitions search results page.
2. If you are creating a new invoice, click *Actions # Create Invoice From Selected Line Items*. Enter the invoice information in the top half of the screen.
3. If you are adding the line items to an existing invoice, click *Actions # Link Selected Line Items to Invoice*. Enter the Invoice # and Provider and then click the *Link* button.
4. Evergreen automatically enters the number of items that was ordered in the # Invoiced and # Paid fields. Adjust these quantities as needed.
5. Enter the amount that the organization was billed. This entry will automatically propagate to the Paid field.
6. You have the option to add charge types if applicable. Charge types are additional charges that can be selected from the drop-down menu. Common charge types include taxes and handling fees.
7. You have four options for saving an invoice.
  - Click *Save* to save the changes you have made while staying in the current invoice.
  - Click *Save & Clear* to save the changes you have made and to replace the current invoice with a new invoice so that you can continue invoicing items.
  - Click *Prorate* to save the invoice and prorate any additional charges, such as taxes, across funds, if multiple funds have been used to pay the invoice.



Prorating will only be applied to charge types that have the *Prorate?* flag set to true. This setting can be adjusted via *Admin # Server Administration # Acquisitions # Invoice Item Type*.

- Click *Close*. Choose this option when you have completed the invoice. This option will also save any changes that have been made.
8. You can re-open a closed invoice by clicking the link, *Re-open invoice*. This link appears at the bottom of a closed invoice.

## Search for line items from an invoice

You can open an invoice, search for line items from the invoice, and add your search results to a new or existing invoice. This feature is especially useful when you want to populate an invoice with line items from multiple purchase orders.

In this example, we'll add line items to a new invoice:

1. Click *Acquisitions # Create Invoice*.
2. An invoice summary appears at the top of the invoice and includes the number of line items on the invoice and the expected cost of the items. This number will change as we add line items to the invoice.
3. Enter the invoice details (optional). If you do not enter the invoice details, then Evergreen will populate the *Provider* and *Receiver* fields with information from the line items.



If you do not want to display the details, click *Hide Details*.

**Invoice**  
Lineitems: 0  
Expected Cost: 0.00

|                   |  |              |  |
|-------------------|--|--------------|--|
| Vendor Invoice ID | <input type="text" value="ABCD1234"/>    | Invoice Date | <input type="text" value="8/23/2012"/> |
| Receive Method    | <input type="text" value="Paper"/>       | Invoice Type | <input type="text"/>                   |
| Provider          | <input type="text" value="BT"/>          | Shipper      | <input type="text" value="BT"/>        |
| Note              | <input type="text"/>                     | Payment Auth | <input type="text"/>                   |
| Payment Method    | <input type="text" value="Credit Card"/> | Receiver     | <input type="text" value="BR1"/>       |

4. Click the *Search* tab to add line items to an invoice.
5. Select your search criteria from the drop-down menu.

6. On the right side of the screen, *Limit to Invoiceable Items* is checked by default. Invoiceable items are those that are on order, have not been cancelled, and have not yet been invoiced. Evergreen also filters out items that have already been added to an invoice. Finally, if this box is checked, and if you entered the invoice details at the top of the screen, then Evergreen will filter your search for items that have the same provider as the one that you entered. If you have not entered the invoice details, then Evergreen removes this limit.
7. Sort by title (optional). By default, results are listed by line item number. Check this box to sort by ascending title.
8. Building the results list progressively (optional). By default, new search results will replace previous results on the screen. Check this box for the search results list to build with each subsequent search. This option is useful for libraries that might search for line items by scanning an ISBN. Several ISBNs can be scanned and then the entire result set can be selected and moved to the invoice in a batch.
9. Click *Search*.

The screenshot shows the search interface with the following elements:

- Buttons: Invoice, Search
- Search criteria: Search for **line items** matching **all** of the following terms (  building the results list progressively )
- Search term: PO - Name is 20121120
- Buttons: Add Search Term, Search, Add Selected Items to Invoice, Next
- Options:  Sort by title,  Limit to Invoiceable Items
- Results list:
  - Big Nate : the boy with the biggest head in the world / Lincoln Peirce., by Peirce, Lincoln. (9780007355167)**  
1 Ordered, 0 Received, 0 Invoiced, 0 Claimed, 0 Cancelled  
Estimated \$10.00, Encumbered \$10.00, Paid \$0.00  
# 663 [20121120 11/20/12](#)
  - Diary of a Wimpy Kid: The Third Wheel, by (9781419705847)**  
1 Ordered, 0 Received, 0 Invoiced, 0 Claimed, 0 Cancelled  
Estimated \$15.00, Encumbered \$15.00, Paid \$0.00  
# 662 [20121120 11/20/12](#)
  - Diary of a wimpy kid / .., by ()**  
1 Ordered, 0 Received, 0 Invoiced, 0 Claimed, 0 Cancelled  
Estimated \$25.00, Encumbered \$25.00, Paid \$0.00  
# 660 [20121120 11/20/12](#)

10. Use the *Next* button to page through results, or select a line item(s), and click *Add Selected Items to Invoice*. The rows that you selected are highlighted, and the invoice summary at the top of the screen updates.

## Invoice

Lineitems: 2

Expected Cost: 40.99

Show Details ABCD1234

Invoice Search

Search for  matching  of the following terms:

PO - Purchase Order ID  is

Add Search Term

Search  Next

---

|                          |  |
|--------------------------|--|
| <input type="checkbox"/> | <b><a href="#">A Thousand Splendid Suns</a>, by Khaled Hosseini (9781594483851)</b><br>1 Ordered, 0 Received, 0 Invoiced, 0 Claimed, 0 Cancelled<br>Estimated \$10.99, Encumbered \$10.99, Paid \$0.00<br># 55 <a href="#">4 8/23/12</a> <a href="#">Popular Fiction</a> |
| <input type="checkbox"/> | <b><a href="#">The Alchemist</a>, by Paul Coelho (9780061122415)</b><br>2 Ordered, 0 Received, 0 Invoiced, 0 Claimed, 0 Cancelled<br>Estimated \$30.00, Encumbered \$30.00, Paid \$0.00<br># 50 <a href="#">4 8/23/12</a> <a href="#">Popular Fiction</a>                |

11. Click the *Invoice* tab to see the updated invoice.

12. Evergreen automatically enters the number of items that was ordered in the # Invoiced and # Paid fields. Adjust these quantities as needed.

13. Enter the amount that the organization was billed. This entry will automatically propagate to the Paid field. The *Per Copy* field calculates the cost of each copy by dividing the amount that was billed by the number of copies for which the library paid.

Invoice Search

**Bibliographic Items**

| Title Details  | # Invoiced / # Paid | Billed | Per Copy | Paid | Detach                 |
|--|---------------------|--------|----------|------|------------------------|
| <a href="#">A Thousand Splendid Suns</a> , by Khaled Hosseini (9781594483851)<br>1 Ordered, 0 Received, 0 Invoiced, 0 Claimed, 0 Cancelled<br>Estimated \$10.99, Encumbered \$10.99, Paid \$0.00<br># 55 # 4 8/23/12 Popular Fiction | 1 / 1               |        | 0.00     |      | <a href="#">Detach</a> |
| <a href="#">The Alchemist</a> , by Paul Coelho (9780061122415)<br>2 Ordered, 0 Received, 0 Invoiced, 0 Claimed, 0 Cancelled<br>Estimated \$30.00, Encumbered \$30.00, Paid \$0.00<br># 50 # 4 8/23/12 Popular Fiction                | 2 / 2               |        | 0.00     |      | <a href="#">Detach</a> |

**Direct Charges, Taxes, Fees, etc.**

| Charge Type | Fund | Title/Description | Billed | Paid | Delete                 |
|-------------|------|-------------------|--------|------|------------------------|
|             |      |                   |        |      | <a href="#">Delete</a> |

[Add Charge...](#)

| Total | Total | Balance |
|-------|-------|---------|
| 0.00  | 0.00  | 0.00    |

Save Save & Clear Prorate Close

## Create an invoice for a purchase order

You can create an invoice for all of the line items on a purchase order. With the exception of fields with drop-down menus, no limitations on the data that you enter exist.

1. Open a purchase order.
2. Click *Create Invoice*.
3. Enter a Vendor Invoice ID. This number may be listed on the paper invoice sent from your vendor.
4. Choose a Receive Method from the drop-down menu. The system will default to *Paper*.
5. The Provider is generated from the purchase order and is entered by default.
6. Enter a note (optional).
7. Select a payment method from the drop-down menu (optional).
8. The Invoice Date is entered by default as the date that you create the invoice. You can change the date by clicking in the field. A calendar drops down.
9. Enter an Invoice Type (optional).
10. The Shipper defaults to the provider that was entered in the purchase order.
11. Enter a Payment Authorization (optional).
12. The Receiver defaults to the branch at which your workstation is registered. You can change the receiver by selecting an org unit from the drop-down menu.





The bibliographic line items are listed in the next section of the invoice. Along with the *title* and *author* of the line items is a *summary of copies ordered, received, invoiced, claimed, and cancelled*. You can also view the *amounts estimated, encumbered, and paid* for each line item. Finally, each line item has a *line item ID* and links to the *selection list* (if used) and the *purchase order*.

13. Evergreen automatically enters the number of items that was ordered in the # Invoiced and # Paid fields. Adjust these quantities as needed.

14. Enter the amount that the organization was billed. This entry will automatically propagate to the Paid field. The *Per Copy* field calculates the cost of each copy by dividing the amount that was billed by the number of copies for which the library paid.

15. You have the option to add charge types if applicable. Charge types are additional charges that can be selected from the drop-down menu. Common charge types include taxes and handling fees.

16. You have four options for saving an invoice.

- Click *Save* to save the changes you have made while staying in the current invoice.
- Click *Save & Clear* to save the changes you have made and to replace the current invoice with a new invoice so that you can continue invoicing items.
- Click *Prorate* to save the invoice and prorate any additional charges, such as taxes, across funds, if multiple funds have been used to pay the invoice.



Prorating will only be applied to charge types that have the Prorate? flag set to true. This setting can be adjusted via *Admin # Server Administration # Acquisitions # Invoice Item Type*.

- Click *Close*. Choose this option when you have completed the invoice. This option will also save any changes that have been made.

17. You can re-open a closed invoice by clicking the link, *Re-open invoice*. This link appears at the bottom of a closed invoice.

## Link an existing invoice to a purchase order

You can use the link invoice feature to link an existing invoice to a purchase order. For example, an invoice is received for a shipment with items on purchase order #1 and purchase order #2. When the invoice arrives, purchase order #1 is retrieved, and the invoice is created. To receive the items on purchase order #2, simply link the invoice to the purchase order. You do not need to recreate it.

1. Open a purchase order.
2. Click *Link Invoice*.
3. Enter the Invoice # and the Provider of the invoice to which you wish to link.
4. Click *Link*.

Incumbered \$0.00      Invoicing    View Invoices (1)    Create Invoice    Link Invoice ▾  
 Total Spent \$40.00      Cancel    Cancel order ▾

---

ns-- ▾

**Choose invoice**

Invoice #

Provider

# Electronic Invoicing

Evergreen can receive electronic invoices from providers. To access an electronic invoice, you must:

1. Configure EDI for your provider.
2. Evergreen will receive invoices electronically from the provider.
3. Click *Acquisitions # Open Invoices* to view a list of open invoices, or use the *General Search* to retrieve invoices. Click a hyperlinked invoice number to view the invoice.

## Acquisitions Search

[Back](#) [Next](#)

| ✓                        | # | Vendor Invoice ID        | Receiver | Provider | Shipper | Complete | Invoice Date     |
|--------------------------|---|--------------------------|----------|----------|---------|----------|------------------|
| <input type="checkbox"/> | 1 | <a href="#">ABCD1234</a> | BR1      | BT       | BT      | False    | 8/23/12 12:00 AM |

# View an invoice

You can view an invoice in one of four ways: view open invoices; view invoices on a purchase order; view invoices by searching specific invoice fields; view invoices attached to a line item.

1. To view open invoices, click *Acquisitions # Open invoices*. This opens the Acquisitions Search screen. The default fields search for open invoices. Click *Search*.

## Acquisitions Search

Search for  matching  of the following terms:

is

is

2. To view invoices on a purchase order, open a purchase order and click the *View Invoices* link. The number in parentheses indicates the number of invoices that are attached to the purchase order.

|                  |                                 |              |  |
|------------------|---------------------------------|--------------|--|
| Provider         | <a href="#">Ingram (Ingram)</a> | Notes        | <a href="#">(0)</a>                              |
| Total Lineitems  | 2                               | EDI Messages | <a href="#">(0)</a>                              |
| Total Estimated  | \$45.00                         | History      | <a href="#">View</a>                             |
| Total Encumbered | \$0.00                          | Invoicing    | <input type="button" value="View Invoices (1)"/> |
| Total Spent      | \$40.00                         | Cancel       | <input type="button" value="Cancel order ▼"/>    |

- To view invoices by searching specific invoice fields, see the section on searching the acquisitions module.
- To view invoices for a line item, see the section on line item invoices.

## Receive Items From an Invoice

This feature enables users to receive items from an invoice. Staff can receive individual copies, or they can receive items in batch.

### Receive Items in Batch (List Mode)

In this example, we have created a purchase order, added line items and copies, and activated the purchase order. We will create an invoice from the purchase order, receive items, and invoice them. We will receive the items in batch from the invoice.

- Retrieve a purchase order.
- Click **Create Invoice**.

Purchase Order (on-order) Activated 11/2/11 6:01 AM

|                  |                                  |                      |  |
|------------------|----------------------------------|----------------------|--|
| ID               | 10                               | Prepayment Required? | No   |
| Name             | <a href="#">10</a>               | Activatable?         | No   |
| Provider         | <a href="#">Books R Us (BRU)</a> | Notes                | <a href="#">(0)</a>  |
| Total Lineitems  | 3                                | EDI Messages         | <a href="#">(0)</a>  |
| Total Estimated  | \$30.00                          | History              | <a href="#">View</a>   |
| Total Encumbered | \$30.00                          | Invoicing            | <input type="button" value="View Invoices (0)"/> <input type="button" value="Create Invoice"/> <input type="button" value="Link Invoice"/> |
| Total Spent      | \$0.00                           | Cancel               | <input type="button" value="Cancel order"/>  |

--Actions--

Line Items

| Items  | Notes   |
|--|---|
| <input type="checkbox"/> <a href="#">Started Early, Took My Dog</a><br>Atkinson, Kate 9780385608022 2010<br># 34   <a href="#">→ catalog</a>   <a href="#">↗ worksheet</a>   <a href="#">requests</a>    | <a href="#">Copies(2)</a> <a href="#">Notes</a> |
| <input type="checkbox"/> <a href="#">When Will There Be Good News?</a><br>Atkinson, Kate 9780552772457 2009<br># 35   <a href="#">→ catalog</a>   <a href="#">↗ worksheet</a>   <a href="#">requests</a> | <a href="#">Copies(2)</a> <a href="#">Notes</a> |
| <input type="checkbox"/> <a href="#">One Good Turn</a><br>Atkinson, Kate 9780552772440 2007<br># 36   <a href="#">→ catalog</a>   <a href="#">↗ worksheet</a>   <a href="#">requests</a>                 | <a href="#">Copies(2)</a> <a href="#">Notes</a> |

3) The blank invoice appears. In the top half of the invoice, enter descriptive information about the invoice. In the bottom half of the invoice, enter the number of items for which you were invoiced, the amount that you were billed, and the amount that you paid.


Invoice

|                   |   |              |  |
|-------------------|---|--------------|--|
| Vendor Invoice ID | <input type="text" value="ABCD1234"/>       | Invoice Date | <input type="text" value="11/2/2011"/> |
| Receive Method    | <input type="text" value="Paper"/>          | Invoice Type | <input type="text"/>                   |
| Provider          | <input type="text" value="BRU"/>            | Shipper      | <input type="text" value="BRU"/>       |
| Note              | <input type="text"/>                        | Payment Auth | <input type="text"/>                   |
| Payment Method    | <input type="text" value="Purchase Order"/> | Receiver     | <input type="text" value="BR1"/>       |

Bibliographic Items

| Title Details   | # Invoiced / # Paid | Billed | Paid | Detach                 |
|---|---------------------|--------|------|------------------------|
| <a href="#">One Good Turn</a> , by Atkinson, Kate (9780552772440)<br>2 Ordered, 0 Received, 0 Invoiced, 0 Claimed, 0 Cancelled<br>Estimated \$10.00, Encumbered \$10.00, Paid \$0.00<br># 36 <a href="#">↻</a> <a href="#">10</a> <a href="#">11/2/11</a>                 | 2 / 2               | 10     | 10   | <a href="#">Detach</a> |
| <a href="#">When Will There Be Good News?</a> , by Atkinson, Kate (9780552772457)<br>2 Ordered, 0 Received, 0 Invoiced, 0 Claimed, 0 Cancelled<br>Estimated \$10.00, Encumbered \$10.00, Paid \$0.00<br># 35 <a href="#">↻</a> <a href="#">10</a> <a href="#">11/2/11</a> | 2 / 2               | 10     | 10   | <a href="#">Detach</a> |
| <a href="#">Started Early, Took My Dog</a> , by Atkinson, Kate (9780385608022)<br>2 Ordered, 0 Received, 0 Invoiced, 0 Claimed, 0 Cancelled<br>Estimated \$10.00, Encumbered \$10.00, Paid \$0.00<br># 34 <a href="#">↻</a> <a href="#">10</a> <a href="#">11/2/11</a>    | 2 / 2               | 10     | 10   | <a href="#">Detach</a> |

- 4) Click **Save**. You must choose a save option before you can receive items.
- 5) The screen refreshes. In the top right corner of the screen, click **Receive Items**.
- 6) The **Acquisitions Invoice Receiving** screen opens. By default, this screen enables users to receive items in batch, or **Numeric Mode**. You can select the number of copies that you want to receive; you are not receiving specific copies in this mode.
- 7) Select the number of copies that you want to receive. By default, the number that you invoiced will appear. In this example, we will receive one copy of each title.



You cannot receive fewer items than 0 (zero) or more items than the number that you ordered.

- 8) Click **Receive Selected Copies**.

Acquisitions Invoice Receiving

Invoice #ABCD1234

[\[ Use List Mode \]](#)

Receive Selected Copies

|   |
|---|
| <a href="#">One Good Turn</a> , by Atkinson, Kate (9780552772440)<br>2 Ordered, 0 Received, 2 Invoiced, 0 Claimed, 0 Cancelled<br>Estimated \$10.00, Encumbered \$0.00, Paid \$10.00<br># 36 # 10 11/2/11                 |
| Number of copies to receive: <input style="width: 80px;" type="text" value="1"/>  |
| <a href="#">When Will There Be Good News?</a> , by Atkinson, Kate (9780552772457)<br>2 Ordered, 0 Received, 2 Invoiced, 0 Claimed, 0 Cancelled<br>Estimated \$10.00, Encumbered \$0.00, Paid \$10.00<br># 35 # 10 11/2/11 |
| Number of copies to receive: <input style="width: 80px;" type="text" value="1"/>  |
| <a href="#">Started Early. Took My Dog</a> , by Atkinson, Kate (9780385608022)<br>2 Ordered, 0 Received, 2 Invoiced, 0 Claimed, 0 Cancelled<br>Estimated \$10.00, Encumbered \$0.00, Paid \$10.00<br># 34 # 10 11/2/11    |
| Number of copies to receive: <input style="width: 80px;" type="text" value="1"/>  |

Receive Selected Copies

- 9) When you are finished receiving items, close the screen. You can repeat this process as you receive more copies.

## Receive Specific Copies (Numeric Mode)

In this example, we have created a purchase order, added line items and copies, and activated the purchase order. We will create an invoice from the purchase order, receive items, and invoice them. We will receive specific copies from the invoice. This function may be useful to libraries who purchase items that have been barcoded by their vendor.

- 1) Complete steps 1-5 in the previous section.
- 2) The **Acquisitions Invoice Receiving** screen by default enables user to receive items in batch, or **Numeric Mode**. Click **Use List Mode** to receive specific copies.

3) Select the check boxes adjacent to the copies that you want to receive. Leave unchecked the copies that you do not want to receive.

4) Click **Receive Selected Copies**.

Acquisitions Invoice Receiving

Invoice #ABCD1234

[ [Use Numeric Mode](#) ]

| Receive Selected Copies   |                          | Select All                          | Owning Branch | Shelving Location | Collection Code | Fund | Circ Modifier |
|---|--------------------------|-------------------------------------|---------------|-------------------|-----------------|------|---------------|
| <input checked="" type="checkbox"/>   | <input type="checkbox"/> | <input checked="" type="checkbox"/> |               |                   |                 |      |               |
| <b>One Good Turn, by Atkinson, Kate (9780552772440)</b><br>2 Ordered, 1 Received, 2 Invoiced, 0 Claimed, 0 Cancelled<br>Estimated \$10.00, Encumbered \$0.00, Paid \$10.00<br># 36 <a href="#"># 10 11/2/11</a>                 |                          |                                     |               |                   |                 |      |               |
| <input checked="" type="checkbox"/>   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | BR1           | Stacks            |                 | Book | PF            |
| <b>When Will There Be Good News?, by Atkinson, Kate (9780552772457)</b><br>2 Ordered, 1 Received, 2 Invoiced, 0 Claimed, 0 Cancelled<br>Estimated \$10.00, Encumbered \$0.00, Paid \$10.00<br># 35 <a href="#"># 10 11/2/11</a> |                          |                                     |               |                   |                 |      |               |
| <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/>            | BR1           | Stacks            |                 | Book | PF            |
| <b>Started Early, Took My Dog, by Atkinson, Kate (9780385608022)</b><br>2 Ordered, 1 Received, 2 Invoiced, 0 Claimed, 0 Cancelled<br>Estimated \$10.00, Encumbered \$0.00, Paid \$10.00<br># 34 <a href="#"># 10 11/2/11</a>    |                          |                                     |               |                   |                 |      |               |
| <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/>            | BR1           | Stacks            |                 | Book | PF            |

The screen will refresh. Copies that have not yet been received remain on the screen so that you can receive them when they arrive.

5) When all copies on an invoice have been received, a message confirms that no copies remain to be received.

6) The purchase order records that all items have been received.

| Items                     | Notes                    | Actions       | Status   |
|---------------------------|--------------------------|---------------|----------|
| <a href="#">Copies(2)</a> | <a href="#">Notes(0)</a> | -- Actions -- | received |
| <a href="#">Copies(2)</a> | <a href="#">Notes(0)</a> | -- Actions -- | received |
| <a href="#">Copies(2)</a> | <a href="#">Notes(0)</a> | -- Actions -- | received |

# Chapter 71. Load MARC Order Records

The Acquisitions Load MARC Order Record interface enables you to add MARC records to selection lists and purchase orders and upload the records into the catalog. You can both create and activate purchase orders in one step from this interface. You can also load bibs and items into the catalog.

Leveraging the match sets available in the cataloging MARC batch Import interface, you can also utilize record matching mechanisms to prevent the creation of duplicate records.

For detailed instructions on record matching and importing, see [Batch Importing MARC Records](#).

## Basic Upload Options

1. Click **Acquisitions # Load MARC Order Records**.
2. If you want to upload the MARC records to a new purchase order, then check *Create Purchase Order*.
3. If you want to activate the purchase order at the time of creation, then check *Activate Purchase Order*.
4. Enter the name of the **Provider**. The text will auto-complete.
5. Select an org unit from the drop down menu. The context org unit is the org unit responsible for placing and managing the order. It defines what org unit settings (eg copy locations) are in scope, what fiscal year to use, who is allowed to view/modify the PO, where the items should be delivered and the EDI SAN. In the case of a multi-branch system uploading records for multiple branches, choosing the system is probably best. Single branch libraries or branches responsible for their own orders should probably select the branch.
6. If you want to upload the records to a selection list, you can select a list from the drop down menu, or type in the name of the selection list that you want to create.
7. Select a **Fiscal Year** from the dropdown menu that matches the fiscal year of the funds that will be used for the order. If no fiscal year is selected, the system will use the organizational unit's default fiscal year stored in the database. If not fiscal year is set, the system will default to the current calendar year.

## Record Matching Options

Use the options below the horizontal rule for the system to check for matching records before importing an order record.

1. Create a queue to which you can upload your records, or add you records to an existing queue
2. Select a **Record Match Set** from the drop-down menu.
3. Select a **Merge Profile**. Merge profiles enable you to specify which tags should be removed or preserved in incoming records.
4. Select a **Record Source** from the drop-down menu.
5. If you want to automatically import records on upload, select one or more of the following options.
  - a. **Import Non-Matching Records** - import any records that don't have a match in the system.



- b. **Merge on Exact Match (901c)** - use only for records that will match on the 901c field.
  - c. **Merge on Single Match** - import records that only have one match in the system.
  - d. **Merge on Best Match** - If more than one match is found in the catalog for a given record, Evergreen will attempt to perform the best match as defined by the match score.
6. To only import records that have a quality equal to or greater than the existing record, enter a **Best/Single Match Minimum Quality Ratio**. Divide the incoming record quality score, as determined by the match set's quality metrics, by the record quality score of the best match that exists in the catalog. If you want to ensure that the inbound record is only imported when it has a higher quality than the best match, then you must enter a ratio that is higher than 1, such as 1.1. If you want to bypass all quality restraints, enter a 0 (zero) in this field.
  7. Select an **Insufficient Quality Fall-Through Profile** if desired. This field enables you to indicate that if the inbound record does not meet the configured quality standards, then you may still import the record using an alternate merge profile. This field is typically used for selecting a merge profile that allows the user to import holdings attached to a lower quality record without replacing the existing (target) record with the incoming record. This field is optional.
  8. If your order records contain holdings information, by default, Evergreen will load them as acquisitions copies. (Note: These can be overlaid with real copies during the MARC batch importing process.) Or you can select **Load Items for Imported Records** to load them as live copies that display in the catalog.

## Default Upload Settings

You can set default upload values by modifying the following settings in **Admin # Local Administration # Library Settings Editor**:

- Upload Activate PO
- Upload Create PO
- Upload Default Insufficient Quality Fall-Thru Profile
- Upload Default Match Set
- Upload Default Merge Profile
- Upload Upload Default Min. Quality Ratio
- Upload Default Provider
- Upload Import Non Matching by Default
- Upload Load Items for Imported Records by Default
- Upload Merge on Best Match by Default
- Upload Merge on Exact Match by Default
- Upload Merge on Single Match by Default



# Sticky Settings

If the above default settings are not implemented, the selections/values used in the following fields will be sticky and will automatically populate the fields the next time the **Load MARC Order Records** screen is pulled up:

- Create Purchase Order
- Activate Purchase Order
- Context Org Unit
- Record Match Set
- Merge Profile
- Import Non-Matching Records
- Merge on Exact Match (901c)
- Merge on Single Match
- Merge on Best Match
- Best/Single Match Minimum Quality Ratio
- Insufficient Quality Fall-Through Profile
- Load Items for Imported Records

## Use Cases for MARC Order Upload form

You can add items to a selection list or purchase order and ignore the record matching options, or you can use both acquisitions and cataloging functions. In these examples, you will use both functions.

**Example 1** Using the Acquisitions MARC Batch Load interface, upload MARC records to a selection list and import queue, and match queued records with existing catalog records.

In this example, an acquisitions librarian has received a batch of MARC records from a vendor. She will add the records to a selection list and a Vandelay record queue.

A cataloger will later view the queue, edit the records, and import them into the catalog.

1. Click **Acquisitions # Load MARC Order Records**
2. Add MARC order records to a **Selection list** and/or a **Purchase Order**. Check the box to create a purchase order if desired.
3. Select a **Provider** from the drop-down menu, or begin typing the code for the provider, and the field will auto-fill.
4. Select a **Context Org Unit** from the drop down-menu, or begin typing the code for the context org unit, and the field will auto-fill.

5. Select a **Selection List** from the drop down menu, or begin typing the name of the selection list. You can create a new list, or the field will auto-fill.
6. Create a new record import queue, or upload the records to an existing queue.
7. Select a **Record Match Set**.
8. Browse your computer to find the MARC file, and click **Upload**.

## Upload

|                         |   |  |
|-------------------------|---|--|
| Create Purchase Order   | <input type="checkbox"/>                            |  |
| Activate Purchase Order | <input type="checkbox"/>                            |  |
| Provider                | <input type="text" value="APhony"/>                 |  |
| Context Org Unit        | <input type="text" value="MAR"/>                    |  |
| Add to Selection List   | <input type="text" value="Popular Fiction - 2013"/> |  |
| Fiscal Year             | <input type="text" value="2013"/>                   |  |

---

|   |                                   |  |   |
|---|-----------------------------------|--|---|
| Upload to Queue                           | <input type="text"/>              | Or create a new queue                      | <input type="text" value="Popular Fiction - 2013"/> |
| Record Match Set                          | <input type="text" value="isbn"/> |  |   |
| Merge Profile                             | <input type="text"/>              |  |   |
| Import Non-Matching Records               | <input type="checkbox"/>          | Record Source                              | <input type="text"/>                                |
| Merge On Exact Match (901c)               | <input type="checkbox"/>          |  |   |
| Merge On Single Match                     | <input type="checkbox"/>          |  |   |
| Merge On Best Match                       | <input type="checkbox"/>          |  |   |
| Best/Single Match Minimum Quality Ratio   | <input type="text" value="0.0"/>  | New Record Quality / Quality of Best Match |   |
| Insufficient Quality Fall-Through Profile | <input type="text"/>              |  |   |
| Load Items for Imported Records           | <input type="checkbox"/>          |  |   |

---

File to Upload:

9. The processed items appear at the bottom of the screen.

```

Lineitems Processed      7
Vandelay Records Processed 7
Bib Records Merged/Imported 0
ACQ Copies Processed    0
Debits Encumbered      0
Real Copies Processed   0
Upload Complete!

```

[View Selection List](#)

[View Import Queue](#)

10. You can click the link(s) to access the selection list or the import queue. Click the link to **View Selection List**.
11. Look at the first line item. The line item has not yet been linked to the catalog, but it is linked to a record import queue. Click the link to the **queue** to examine the MARC record.

--Actions--

Line Items

 [Elevan on top / Janet Evanovich.](#)  
 Evanovich, Janet. 0312985347 St. Martin's Paperbacks ed. 2006. St. Martin's Paperbacks, BAB  
 # 1 | [link to catalog](#) | [worksheet](#) | [requests](#) | [queue](#)

12. The batch import interface opens in a new tab. The bibliographic records appear in the queue. Records that have matches are identified in the queue. You can edit these records and/or import them into the catalog, completing the process.

Queue Popular Fiction - 2012

| Queue Actions           | Queue Summary                   | Queue Filters  |
|-------------------------|---------------------------------|--|
| Import Selected Records | Records in Queue: <b>7</b>      | Limit to Records with Matches <input type="checkbox"/>       |
| Import All Records      | Records Imported: <b>0</b>      | Limit to Non-Imported Records <input type="checkbox"/>       |
| View Import Items       | Record Import Failures <b>0</b> | Limit to Records with Import Errors <input type="checkbox"/> |
| Delete Queue            | Items in Queue <b>0</b>         |  |
| Copy To Bucket          | Items Imported <b>0</b>         |  |
|                         | Item Import Failures <b>0</b>   |  |

[Export](#)

| <input type="checkbox"/> | View MARC | Matches     | Import Failures | Import Time | Title of work                         | Author of work    | Language of work | Pagination | ISBN        |
|--------------------------|-----------|-------------|-----------------|-------------|---------------------------------------|-------------------|------------------|------------|-------------|
| <input type="checkbox"/> | View MARC | Matches (1) |                 |             | Elevan on top / Janet Evanovich.      | Evanovich, Janet. |                  | 349 p. ;   | 0312985347  |
| <input type="checkbox"/> | View MARC |             |                 |             | Explosive eighteen / Janet Evanovich. | Evanovich, Janet. |                  | 305 p. ;   | 97803455277 |

**Example 2:** Using the Acquisitions MARC Batch Load interface, upload MARC records to a selection list, and use the Vandelay options to import the records directly into the catalog. The Vandelay options will enable you to match incoming records with existing catalog records.

In this example, a librarian will add MARC records to a selection list, create criteria for matching incoming and existing records, and import the matching and non-matching records into the catalog.

1. Click **Acquisitions # Load MARC Order Records**
2. Add MARC order records to a **Selection list** and/or a **Purchase Order**. Check the box to create a purchase order if desired.
3. Select a **Provider** from the drop down menu, or begin typing the code for the provider, and the field will auto-fill.
4. Select a **Context Org Unit** from the drop down menu, or begin typing the code for the context org unit, and the field will auto-fill.

5. Select a **Selection List** from the drop down menu, or begin typing the name of the selection list. You can create a new list, or the field will auto-fill.
6. Create a new record import queue, or upload the records to an existing queue.
7. Select a **Record Match Set**.
8. Select **Merge Profile # Match-Only Merge**.
9. Check the boxes adjacent to **Import Non-Matching Records** and **Merge on Best Match**.
10. Browse your computer to find the MARC file, and click **Upload**.

## Upload

|                         |  |   |
|-------------------------|--|---|
| Create Purchase Order   | <input type="checkbox"/>                       |   |
| Activate Purchase Order | <input type="checkbox"/>                       |   |
| Provider                | <input type="text" value="APhony"/>            |   |
| Context Org Unit        | <input type="text" value="MAR"/>               | ▼ |
| Add to Selection List   | <input type="text" value="Popular Mysteries"/> | ▼ |
| Fiscal Year             | <input type="text" value="2013"/>              | ▼ |

---

|   |   |  |  |
|---|---|--|--|
| Upload to Queue                           | <input type="text"/>                          | Or create a new queue                      | <input type="text" value="Popular Mysteries"/> |
| Record Match Set                          | <input type="text" value="isbn"/>             |  |  |
| Merge Profile                             | <input type="text" value="Match-Only Merge"/> |  |  |
| Import Non-Matching Records               | <input checked="" type="checkbox"/>           | Record Source                              | <input type="text"/>                           |
| Merge On Exact Match (901c)               | <input type="checkbox"/>                      |  |  |
| Merge On Single Match                     | <input type="checkbox"/>                      |  |  |
| Merge On Best Match                       | <input checked="" type="checkbox"/>           |  |  |
| Best/Single Match Minimum Quality Ratio   | <input type="text" value="0.0"/>              | New Record Quality / Quality of Best Match |  |
| Insufficient Quality Fall-Through Profile | <input type="text"/>                          |  | ▼  |
| Load Items for Imported Records           | <input type="checkbox"/>                      |  |  |


---

File to Upload:

11. Click the link to **View Selection List** Line items that do not match existing catalog records on title and ISBN contain the link, **link to catalog**. This link indicates that you could link the line item to a catalog record, but currently, no match exists between the line item and catalog records. Line items that do have matching records in the catalog contain the link, **catalog**.

---

✓ Line Items

|                          |   |
|--------------------------|---|
| <input type="checkbox"/> | <a href="#">Apple turnover murder / Joanne Fluke.</a><br>Fluke, Joanne, 1943- 9780758247452 c2010. Kensington Books, BAB<br># 21   <a href="#">⇒ link to catalog</a>   <a href="#">↗ worksheet</a>   <a href="#">requests</a>   <a href="#">⇒ queue</a>   |
| <input type="checkbox"/> |  <a href="#">Blueberry muffin murder : a Hannah Swensen mystery / Joanne Fluke.</a><br>Fluke, Joanne, 1943- 157566707X c2002. Kensington Books, BAB<br># 22   <a href="#">→ catalog</a>   <a href="#">↗ worksheet</a>   <a href="#">requests</a>   <a href="#">⇒ queue</a> |
| <input type="checkbox"/> |  <a href="#">Candy cane murder.</a><br>9780758221988 2007. Kensington Books, BAB<br># 20   <a href="#">→ catalog</a>   <a href="#">↗ worksheet</a>   <a href="#">requests</a>   <a href="#">⇒ queue</a>  |
| <input type="checkbox"/> | <a href="#">Carrot cake murder : a Hannah Swensen mystery with recipes / Joanne Fluke.</a><br>Fluke, Joanne, 1943- 9780758210203 2008. Kensington Books, BAB<br># 23   <a href="#">⇒ link to catalog</a>   <a href="#">↗ worksheet</a>   <a href="#">requests</a>   <a href="#">⇒ queue</a>   |

12. Click the **catalog** link to view the line item in the catalog.

### Permissions to use this Feature

IMPORT\_MARC - Using batch importer to create new bib records requires the IMPORT\_MARC permission (same as open-ils.cat.biblio.record.xml.import). If the permission fails, the queued record will fail import and be stamped with a new "import.record.perm\_failure" import error

IMPORT\_ACQ\_LINEITEM\_BIB\_RECORD\_UPLOAD - This allows interfaces leveraging the batch importer, such as Acquisitions, to create a higher barrier to entry. This permission prevents users from creating new bib records directly from the ACQ vendor MARC file upload interface.

# Part IX. Cataloging

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# Chapter 72. Introduction

Cataloguers should use this part for understanding the cataloguing procedures used in Evergreen.



# Chapter 73. MARC Fixed Field Editor Right-Click Context Menu Options

The MARC Fixed Field Editor provides suggested values for select fixed fields based on the record type being edited. Users can right-click on the value control for a fixed field and choose the appropriate value from the menu options. The Evergreen database contains information from the Library of Congress's MARC 21 format standards that includes possible values for select fixed fields. The right-click context menu options are available for fixed fields whose values are already stored in the database. For the fixed fields that do not already contain possible values in the database, the user will see the basic clipboard operation options (such as cut, copy, paste, etc.).

## To Access the MARC Fixed Field Editor Right-Click Context Menu Options:

1. Within the bibliographic record that needs to be edited, select **Actions for this Record**.
2. Click **MARC Edit**.
3. Make sure that the Flat-Text Editor checkbox is not selected and that you are not using the Flat-Text Editor interface.
4. Right-click on the value control for the fixed field that needs to be edited.

| Type | a | ELvl | l | Srce | Audn | Ctrl | Lang | eng              |
|------|---|------|---|------|------|------|------|------------------|
| BLvl | m | Form |   | Conf | 0    | Biog | MRec | Ctry nyu         |
|      |   | Cont |   | GPub | LitF | 1    | Indx | 0                |
| Desc | a | Ills | # | Fest | 0    | DtSt | s    | Date1 2012 Date2 |

5. Select the appropriate value for the fixed field from the menu options.

| Type | a | ELvl | l | Srce | Audn | Ctrl | Lang | eng              |
|------|---|------|---|------|------|------|------|------------------|
| BLvl | m | Form |   | Conf | 0    | Biog | MRec | Ctry nyu         |
|      |   | Cont |   | GPub | LitF | 1    | Indx | 0                |
| Desc | a | Ills | # | Fest | 0    | DtSt | s    | Date1 2012 Date2 |

a: Microfilm  
b: Microfiche  
c: Microopaque  
d: Large print  
f: Braille  
o: Online  
q: Direct electronic  
**r: Regular print reproduction**  
s: Electronic

6. Continue editing the MARC record, as needed. Once you are finished editing the record, click **Save Record**.

Changing the values in the fixed fields will also update the appropriate position in the Leader or 008 Field and other applicable fields (such as the 006 Field).

| MARC Record                      |   |                          |      |      |   |      |   |       |      |       |     |
|----------------------------------|---|--------------------------|------|------|---|------|---|-------|------|-------|-----|
| Fixed Fields -- Record type: BKS |   |                          |      |      |   |      |   |       |      |       |     |
| Type                             | a | ELvl                     | l    | Src  |   | Audn |   | Ctrl  |      | Lang  | eng |
| Blvl                             | m | Form                     | r    | Conf | 0 | Biog |   | MRec  |      | Ctry  | nyu |
|                                  |   | Cont                     |      | GPub |   | LitF | 1 | Indx  | 0    |       |     |
| Desc                             | a | Ills                     | #    | Fest | 0 | DtSt | s | Date1 | 2012 | Date2 |     |
| LDR                              |   | 00895cam a2200289Ia 4500 |      |      |   |      |   |       |      |       |     |
| 001                              |   | 223                      |      |      |   |      |   |       |      |       |     |
| 003                              |   | CONS                     |      |      |   |      |   |       |      |       |     |
| 005                              |   | 20140402175013.0         |      |      |   |      |   |       |      |       |     |
| 008                              |   | 120125a2012              | nyu# | r    |   | 000  | 1 | eng   |      |       |     |

MARC Editor users retain the option of leaving the fixed field value blank or entering special values (such as # or |).



It may be necessary for MARC Editor users to first correctly pad the fixed fields to their appropriate lengths before making further modifications to the fixed field values.

**Administration** The Evergreen database already contains information from the Library of Congress's MARC 21 format standards that includes possible values for select fixed fields. Users may also add values to these and other fixed fields through the MARC Coded Value Maps interface. Once new values are added, the right-click context menu for the selected fixed field will display those values in the MARC Editor for any Record Type that utilizes that fixed field. There are three relevant tables that contain the values that display in the fixed field context menu options:

1. **config.marc21\_ff\_pos\_map** describes, for the given record type, where a fixed field is located, its start position, and its length.
2. **config.coded\_value\_map** defines the set of valid values for many of the fixed fields and the translatable, human-friendly labels for them.
3. **config.record\_attr\_definition** links together the information from the **config.marc21\_ff\_pos\_map** and **config.coded\_value\_map** tables.

# Chapter 74. MARC 007 Field Physical Characteristics Wizard

The MARC 007 Field Physical Characteristics Wizard enables catalogers to interact with a database wizard that leads the user step-by-step through the MARC 007 field positions. The wizard displays the significance of the current position and provides dropdown lists of possible values for the various components of the MARC 007 field in a more user-friendly way.

**To Access the MARC 007 Field Physical Characteristics Wizard for a Record that Does Not Already Contain the 007 Field (i.e. Creating the 007 Field from Scratch):**

1. Within the bibliographic record that needs to be edited, select **Actions for this Record**.
2. Click **MARC Edit**.
3. Make sure that the Flat-Text Editor checkbox is not selected and that you are not using the Flat-Text Editor interface.
4. Right-click in the MARC field column.

MARC Record  
Fixed Fields -- Record type: REC

| Type | j | Elvl |   | Srce | d | Audn |   | Ctrl  |      | Lang  |     |
|------|---|------|---|------|---|------|---|-------|------|-------|-----|
| Blvl | m | Form | u |      |   |      |   | MRec  |      | Ctry  | 00  |
| Desc | a |      |   |      |   | DtSt | s | Date1 | 1982 | Date2 | mnu |
| TrAr | n | Part | g | Ltxt |   | FMus | n | AccM  |      | Comp  | e   |

|     |     |   |
|-----|-----|---|
| LDR |     | 01053njm a2200265 a 4500                  |
| 001 |     | 56  |
| 003 |     | CONS                                      |
| 005 |     | 20140408161252.0                          |
| 008 |     | 970701s1982 mnu 00 eng u                  |
| 050 | 0 0 | +a 1134                                   |
| 100 | 1   | +a Mozart, Wolfgang Amadeus, +d 1756-1791 |

5. Click **Add/Replace 007**. The 007 row will appear in the record.
6. Right-click in the 007 textbox field.

MARC Record  
Fixed Fields -- Record type: REC

| Type | j | Elvl |   | Srce | d | Audn |   | Ctrl  |      | Lang  |     |
|------|---|------|---|------|---|------|---|-------|------|-------|-----|
| Blvl | m | Form | u |      |   |      |   | MRec  |      | Ctry  | 00  |
| Desc | a |      |   |      |   | DtSt | s | Date1 | 1982 | Date2 | mnu |
| TrAr | n | Part | g | Ltxt |   | FMus | n | AccM  |      | Comp  | e   |

|     |  |                          |
|-----|--|--------------------------|
| LDR |  | 01053njm a2200265 a 4500 |
| 001 |  | 56                       |
| 003 |  | CONS                     |
| 005 |  | 20140408161252.0         |
| 007 |  |                          |

7. Click **Physical Characteristics Wizard**.

| MARC Record                      |   |      |   |       |   |      |   |       |      |           |
|----------------------------------|---|------|---|-------|---|------|---|-------|------|-----------|
| Fixed Fields -- Record type: REC |   |      |   |       |   |      |   |       |      |           |
| Type                             | j | Elvl |   | Srcce | d | Audn |   | Ctrl  |      | Lang      |
| Blvl                             | m | Form | u |       |   |      |   | MRec  |      | Ctry 00   |
| Desc                             | a |      |   |       |   | DtSt | s | Date1 | 1982 | Date2 mnu |
| TrAr                             | n | Part | g | Ltxt  |   | FMus | n | AccM  |      | Comp e    |

|     |     |                          |
|-----|-----|--------------------------|
| LDR |     | 01053njm a2200265 a 4500 |
| 001 |     | 56                       |
| 003 |     | CONS                     |
| 005 |     | 20140408161252.0         |
| 007 |     |                          |
| 008 |     | 970701s1982 mnu 00 es    |
| 050 | 0 0 | #a 1134                  |
| 100 | 1   | #a Mozart, Wolfgang A    |
| 245 | 0 0 | #a Violin concerto no    |
| 260 |     | #a Minneapolis, MN :     |
| 300 |     | #a 1 sound disc (54 m    |
| 349 |     | #a COMPACT DISC(S)       |
| 500 |     | #a Christian Altenbur    |
| 650 | 0   | #a Violin and viola w    |

The MARC 007 Field Physical Characteristics Wizard will open.

### Using the Physical Characteristics Wizard:

As the user navigates through the wizard, each position will display its corresponding label that describes the significance of that position. Each position contains a selection of dropdown choices that list the possible values for that particular position. When the user makes a selection from the dropdown options, the value for that position will also change.

The first value defines the **Category of Material**. Users select the Category of Material for the given record by choosing an option from the **Category of Material?** dropdown menu. The choices within the remaining character positions will be appropriate for the Category of Material selected.

Once the Category of Material is selected, click **Next**.

Evergreen will display the pipe symbol (vertical bar) for each position that represents a potential value for the selected Category of Material and will skip obsolete values.

The screenshot shows the MARC 007 field with a red box around the first character 's'. Below the field, there is a dropdown menu labeled 'SMD?' with a downward arrow. To the right of the dropdown are 'OK' and 'Cancel' buttons. Below the dropdown are 'Previous' and 'Next' buttons.

By clicking either the **Previous** or **Next** buttons, the user may step forward and backward, as needed, through the various positions in the 007 field.

This screenshot is identical to the previous one, but the 'Previous' and 'Next' buttons are highlighted with a red box.

As a visual reference, the position that the wizard is displaying will appear in bold font. That way, users know which position they are working on at any given point within the wizard.

The screenshot shows the MARC 007 field with a red box around the second character 'b'. Below the field, there is a dropdown menu labeled 'Speed?' with a downward arrow. To the right of the dropdown are 'OK' and 'Cancel' buttons. Below the dropdown are 'Previous' and 'Next' buttons. The dropdown menu shows the value 'b: 33 1/3 rp'.

Once the user enters all of the applicable values for the 007 field and is ready to exit the wizard, click **OK**.

All of the values selected will be stored and displayed within the 007 field of the bibliographic record.

**MARC Record**

Fixed Fields -- Record type: REC

| Type | j | Elvl |   | Srcce | d | Audn |   | Ctrl  |      | Lang  |     |
|------|---|------|---|-------|---|------|---|-------|------|-------|-----|
| BLvl | m | Form | u |       |   |      |   | MRec  |      | Ctry  | 00  |
| Desc | a |      |   |       |   | DtSt | s | Date1 | 1982 | Date2 | mnu |
| TrAr | n | Part | g | Ltxt  |   | FMus | n | AccM  |      | Comp  | e   |

```

LDR | 01053njm a2200265 a 4500
001 | 56
003 | CONS
005 | 20140408161252.0
007 | sd bumbnn nd
008 | 970701s1982 mnu 00 eng u
050 0 0 | #a 1134
100 1 | #a Mozart, Wolfgang Amadeus, #d 1756-1791
  
```

Continue editing the MARC record, as needed. Once the user is finished editing the record, click **Save Record**.

**Options**

Stack subfields  Flat-Text Editor  Fast Item Add

**MARC Record**

Fixed Fields -- Record type: REC

| Type | j | Elvl |   | Srcce | d | Audn |   | Ctrl  |      | Lang  |     |
|------|---|------|---|-------|---|------|---|-------|------|-------|-----|
| BLvl | m | Form | u |       |   |      |   | MRec  |      | Ctry  | 00  |
| Desc | a |      |   |       |   | DtSt | s | Date1 | 1982 | Date2 | mnu |
| TrAr | n | Part | g | Ltxt  |   | FMus | n | AccM  |      | Comp  | e   |

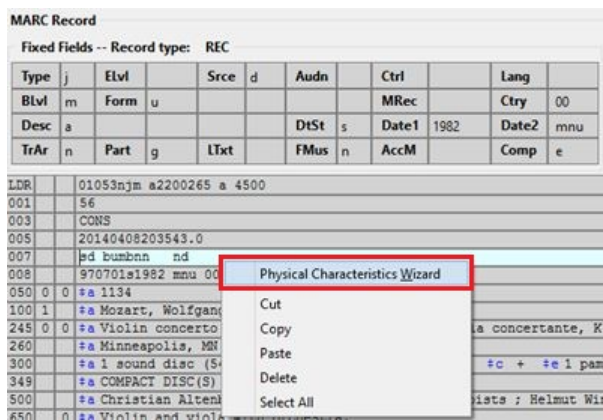
**Bibliographic source**

```

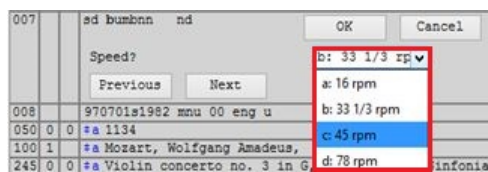
LDR | 01053njm a2200265 a 4500
001 | 56
003 | CONS
005 | 20140408161252.0
007 | sd bumbnn nd
008 | 970701s1982 mnu 00 eng u
050 0 0 | #a 1134
100 1 | #a Mozart, Wolfgang Amadeus, #d 1756-1791
  
```

**To Access the MARC 007 Field Physical Characteristics Wizard for a Record that Already Contains the 007 Field (i.e. Edit an Existing 007 Field):**

1. Within the bibliographic record that needs to be edited, select **Actions for this Record**.
2. Click **MARC Edit**.
3. Right-click in the 007 textbox field.
4. Click **Physical Characteristics Wizard**.



5. Click the **Previous** and **Next** buttons to navigate forward and backward through the various positions. The current position that the wizard is on will be indicated by bold font.
6. Each position will display a label that describes the significance of that position. For the position that needs to be edited, choose its appropriate value from the dropdown options.



7. Once all edits of the 007 field are made, click **OK**.
8. After finishing all other edits to the MARC record, click **Save Record**.



If the user edits an existing 007 field that does not already account for the skipped positions, then Evergreen will not automatically generate where the skipped positions should be in the 007 field. It is recommended that users delete the existing 007 field and start with a new 007 field, to ensure that Evergreen appropriately accounts for the obsolete positions for the Category of Material selected.

**Administration** The information driving the MARC 007 Field Physical Characteristics Wizard is already a part of the Evergreen database. This data can be customized by individual sites and / or updated when the Library of Congress dictates new values or positions in the 007 field. There are three relevant tables where the information that drives the wizard is stored: `.config.marc21_physical_characteristic_type_map` contains the list of materials, or values, for the positions of the 007 field. `.config.marc21_physical_characteristic_subfield_map` contains rows that list the meaning of the various positions in the 007 field for each Category of Material. `.config.marc21_physical_characteristic_value_map` lists all of the values possible for all of the positions in the `config.marc21_physical_characteristic_subfield_map` table.

# Chapter 75. Batch Importing MARC Records

The cataloging module includes an enhanced MARC Batch Import interface for loading MARC records. In general, it can handle batches up to 5,000 records without a problem. This interface allows you to specify match points between incoming and existing records, to specify MARC fields that should be overlaid or preserved, and to only overlay records if the incoming record is of higher quality than the existing record. Records are added to a queue where you can apply filters that enable you to generate any errors that may have occurred during import. You can print, email or export your queue as a CSV file.

## Permissions

To use match sets to import records, you will need the following permission:

ADMIN\_IMPORT\_MATCH\_SET

## Record Display Attributes

This feature enables you to specify the tags and subfields that will display in records that appear in the import queue.

## Record Match Sets

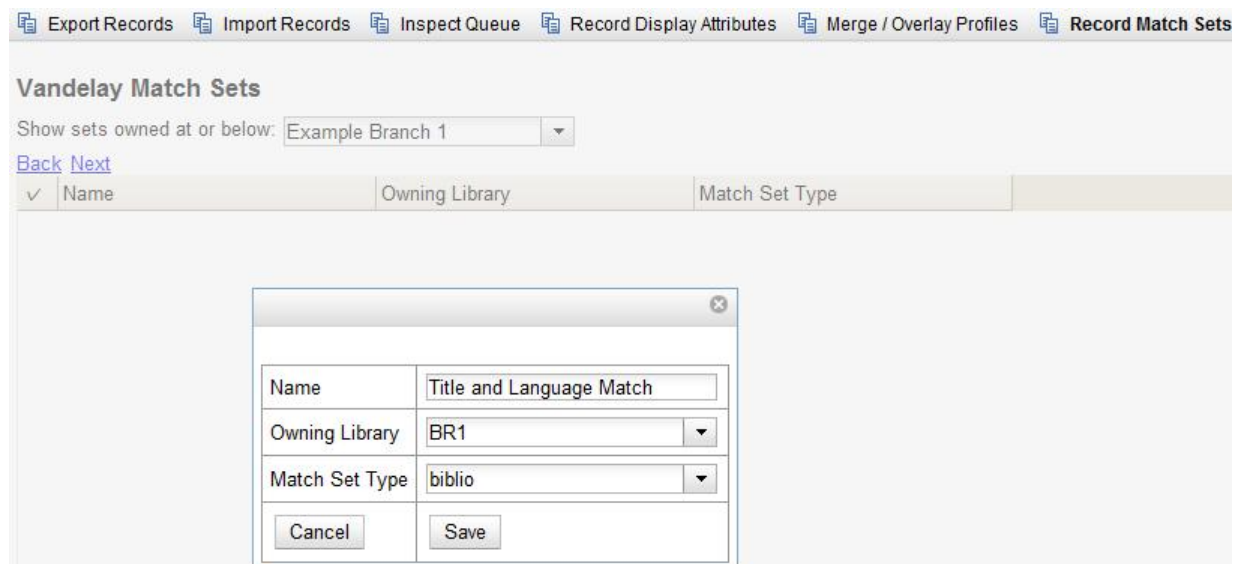
This feature enables you to create custom match points that you can use to accurately match incoming records with existing catalog records.

## Creating a Match Set

In this example, to demonstrate matching on record attributes and MARC tags and subfields, we will create a record match set that defines a match based on the title of the record, in either the 240 or 245, and the fixed field, Lang. You can add multiple record attributes and MARC tags to customize a record match set.

1. Click **Cataloging # MARC Batch Import/Export**.
2. Create a new record match set. Click **Record Match Sets # New Match Set**.
3. Enter a name for the record match set.
4. Select an **Owning Library** from the drop down menu. Staff with permissions at this location will be able to use this record match set.
5. Select a **Match Set Type** from the drop down menu. You can create a match set for authority records or bibliographic records.
6. Click **Save**.





7. The screen will refresh to list the record match set that you created. Click the link to the record match set.
8. Create an expression that will define the match points for the incoming record. You can choose from two areas to create a match: **Record Attribute** or **MARC Tag and Subfield**. You can use the Boolean operators AND and OR to combine these elements to create a match set.
9. Select a **Record Attribute** from the drop-down menu.
10. Enter a **Match Score**. The **Match Score** indicates the relative importance of that match point as Evergreen evaluates an incoming record against an existing record. You can enter any integer into this field. The number that you enter is only important as it relates to other match points. Recommended practice is that you create a match score of one (1) for the least important match point and assign increasing match points to the power of 2 to working points in increasing importance.
11. Check the **Negate?** box if you want to negate the match point. Checking this box would be the equivalent of applying a Boolean operator of NOT to the match point.



## Vandelay Match Set Editor

Match set name: **Title and Language Match**  
 Owing Library: Example Branch 1  
 Type: biblio

Your Expression: **( )**

Add new Record Attribute MARC Tag and Subfield Boolean Operator

### Working Match Point

Record Attribute:

Match Score:

Negate?

Your Expression  
 ...  AND

- Define this match point using the above fields, then drag me to the tree on the right.

12. Click **Ok**.

13. Drag the completed match point under the folder with the appropriately-named Boolean folder under the Expression tree.

## Vandelay Match Set Editor

Match set name: **Title and Language Match**  
 Owing Library: Example Branch 1  
 Type: biblio

Your Expression: **( )**

Add new Record Attribute MARC Tag and Subfield Boolean Operator

### Working Match Point

Record Attribute:

Match Score:

Negate?

Your Expression  
 ...  AND

- item\_lang / Lang | Match score 1
  - item\_lang / Lang | Match score 1

The match point will nest underneath the folder in the Expression tree.

## Vandelay Match Set Editor

Match set name: **Title and Language Match**  
Owning Library: Example Branch 1  
Type: biblio

Your Expression: **(item\_lang)**

Add new

### Working Match Point

Choose from among the three buttons above to add a new match point.

Your Expression

AND  
 item\_lang / Lang |

14. Enter another **Boolean Operator** to further refine your match set.

15. Click **Boolean Operator**.

16. Select the **OR** operator from the drop down menu.

17. Click **Ok**.

18. Drag the operator to the expression tree.

Your Expression

- AND
  - item\_lang / Lang | Match score 1
    - OR

19. Click **MARC Tag and Subfield**.

20. Enter a **MARC tag** on which you want the records to match.

21. Enter a **subfield** on which you want the records to match.

22. Enter a **Match Score**. The **Match Score** indicates the relative importance of that match point as Evergreen evaluates an incoming record against an existing record. You can enter any integer into this field. The number that you enter is only important as it relates to other match points. Recommended practice is that you create a match score of one (1) for the least important match point and assign increasing match points to the power of 2 to working points in increasing importance.

23. Check the **Negate?** box if you want to negate the match point. Checking this box would be the equivalent of applying a Boolean operator of NOT to the match point.

24. Click **Ok**.

## Vandelay Match Set Editor

Match set name: **Title and Language Match**  
Owning Library: Example Branch 1  
Type: biblio

Your Expression: `(item lang AND ())`

Add new

### Working Match Point

Tag:

Subfield: †

Match Score

Negate?

### Your Expression

AND  
   item\_lang / Lang | M  
   OR

- Define this match point using the above fields, then drag me to the tree on the right.

25. Drag the completed match point under the folder with the appropriately-named Boolean folder under the Expression tree. The Expression will build across the top of the screen.

26. Add additional MARC tags or record attributes to build the expression tree.

27. Click **Save Changes to Expression**.

## Vandelay Match Set Editor

Match set name: **Title and Language Match**  
Owning Library: Example Branch 1  
Type: biblio

Your Expression: `(item lang AND (240 †a OR 245 †a))`

Add new

### Working Match Point

Choose from among the three buttons above to add a new match point.

### Your Expression

AND  
   item\_lang / Lang | M  
   OR  
     240 †a | Match  
     245 †a | Match

## Replace Mode

Replace Mode enables you to replace an existing part of the expression tree with a new record attribute, MARC tag, or Boolean operator. For example, if the top of the tree is AND, in replace mode, you could change that to an OR.

1. Create a working match point.

2. Click **Enter replace mode**.
3. Highlight the piece of the tree that you want to replace.
4. Drag the replacement piece over the highlighted piece.
5. Click **Exit Replace Mode**.

## Quality Metrics

1. Set the **Quality Metrics for this Match Set**. Quality metrics are used to determine the overall quality of a record. Each metric is given a weight and the total quality value for a record is equal to the sum of all metrics that apply to that record. For example, a record that has been cataloged thoroughly and contains accurate data would be more valuable than one of poor quality. You may want to ensure that the incoming record is of the same or better quality than the record that currently exists in your catalog; otherwise, you may want the match to fail. The quality metric is optional.
2. You can create quality metrics based on the record attribute or the MARC Tag and Subfield.
3. Click **Record Attribute**.
4. Select an attribute from the drop down menu.
5. Enter a value for the attribute.
6. Enter a match score. You can enter any integer into this field. The number that you enter is only important as it relates to other quality values for the current configuration. Higher scores would indicate increasing quality of incoming records. You can, as in the expression match score, increase the quality points by increasing subsequent records by a power of 2 (two).
7. Click **Ok**.

Quality Metrics for this Match Set

Record Attribute:

Value:

Match Score

## Import Records

The **Import Records** interface incorporates record match sets, quality metrics, more merging options, and improved ways to manage your queue. In this example, we will import a batch of records. One of the records in the queue will contain a matching record in the catalog that is of lower quality than the incoming record. We will import the record according to the guidelines set by our record match set, quality metrics, and merge/overlay choices that we will select.

1. Select a **Record Type** from the drop down menu.
2. Create a queue to which you can upload your records, or add you records to an existing queue. Queues are linked to match sets and a holdings import profile. You cannot change a holdings import or record match set for a queue.

3. Select a **Record Match Set** from the drop down menu.
4. Select a **Holdings Import Profile** if you want to import holdings that are attached to your records.
5. Select a **Record Source** from the drop down menu.
6. Select a **Merge Profile**. Merge profiles enable you to specify which tags should be removed or preserved in incoming records.
7. Choose one of the following import options if you want to auto-import records:
  - a. **Merge on Single Match** - Using the Record Match Set, Evergreen will only attempt to perform the merge/overlay action if only one match was found in the catalog.
  - b. **Merge on Best Match** - If more than one match is found in the catalog for a given record, Evergreen will attempt to perform the merge/overlay action with the best match as defined by the match score and quality metric.



Quality ratio affects only the **Merge on Single Match** and **Merge on Best Match** options.

8. Enter a **Best/Single Match Minimum Quality Ratio**. Divide the incoming record quality score by the record quality score of the best match that might exist in the catalog. By default, Evergreen will assign any record a quality score of 1 (one). If you want to ensure that the inbound record is only imported when it has a higher quality than the best match, then you must enter a ratio that is higher than 1. For example, if you want the incoming record to have twice the quality of an existing record, then you should enter a 2 (two) in this field. If you want to bypass all quality restraints, enter a 0 (zero) in this field.
9. Select an **Insufficient Quality Fall-Through Profile** if desired. This field enables you to indicate that if the inbound record does not meet the configured quality standards, then you may still import the record using an alternate merge profile. This field is typically used for selecting a merge profile that allows the user to import holdings attached to a lower quality record without replacing the existing (target) record with the incoming record. This field is optional.
10. Under **Copy Import Actions**, choose *Auto-overlay In-process Acquisitions Copies* if you want to overlay temporary copies that were created by the Acquisitions module. The system will attempt to overlay copies that:
  - have associated lineitem details (that is, they were created by the acquisitions process),
  - that lineitem detail has the same `owning_lib` as the incoming copy's `owning_lib`, and
  - the current copy associated with that lineitem detail is *In process*.
11. **Browse** to find the appropriate file, and click **Upload**. The files will be uploaded to a queue.

## Evergreen MARC File Upload

Record Type

Create a New Upload Queue  or Add to an Existing Queue

Record Match Set  Limit matches to bucket

Holdings Import Profile

Select a Record Source

### Record Import Actions

Merge Profile

Import Non-Matching Records

Merge On Exact Match (901c)

Merge On Single Match

Merge On Best Match

Best/Single Match Minimum Quality Ratio  New Record Quality / Quality of Best Match

Insufficient Quality Fall-Through Profile

### Copy Import Actions

Auto-overlay In-process Acquisitions Copies

File to Upload:

12.The screen will display records that have been uploaded to your queue.

| Queue Actions                           |                          | Queue Summary            |                                     | Queue Filters            |  |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|--|
| <a href="#">Import Selected Records</a> | Records in Queue: 4      | <input type="checkbox"/> | Limit to Records with Matches       | <input type="checkbox"/> |  |
| <a href="#">Import All Records</a>      | Records Imported: 0      | <input type="checkbox"/> | Limit to Non-Imported Records       | <input type="checkbox"/> |  |
| <a href="#">View Import Items</a>       | Record Import Failures 0 | <input type="checkbox"/> | Limit to Records with Import Errors | <input type="checkbox"/> |  |
| <a href="#">Delete Queue</a>            | Items in Queue 0         |                          |                                     |                          |  |
|   | Items Imported 0         |                          |                                     |                          |  |
|   | Item Import Failures 0   |                          |                                     |                          |  |

| <input type="checkbox"/> | View MARC                 | Matches                     | Import Failures | Import Time | Title of work   | Author of work    | Language of work |
|--------------------------|---------------------------|-----------------------------|-----------------|-------------|---|-------------------|------------------|
| <input type="checkbox"/> | <a href="#">View MARC</a> |                             |                 |             | Gregor and the Code of Claw / Suzanne Collins.            | Collins, Suzanne. |                  |
| <input type="checkbox"/> | <a href="#">View MARC</a> |                             |                 |             | Gregor and the curse of the warmbloods / Suzanne Collins. | Collins, Suzanne. |                  |
| <input type="checkbox"/> | <a href="#">View MARC</a> |                             |                 |             | Gregor and the marks of secret / Suzanne Collins.         | Collins, Suzanne. |                  |
| <input type="checkbox"/> | <a href="#">View MARC</a> | <a href="#">Matches (2)</a> |                 |             | Gregor and the Prophecy of Bone / Suzanne Collins.        | Collins, Suzanne. |                  |

13.If Evergreen indicates that matching records exist, then click the **Matches** link to view the matching records. Check the box adjacent to the existing record that you want to merge with the incoming record.

### Import Matches

[Back To Import Queue](#)

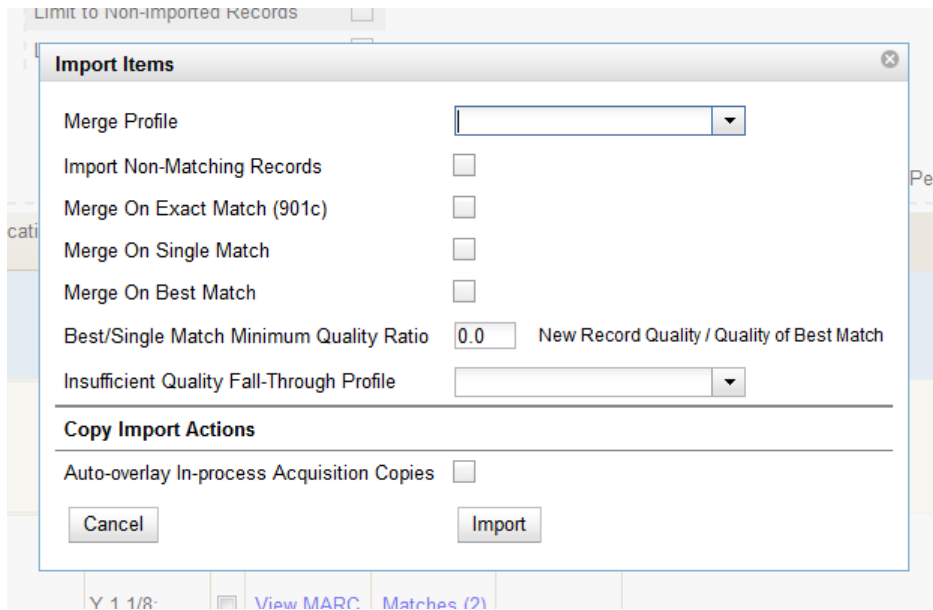
| Merge Target                        | ID   | View MARC                 | Match Score | Queued Record Quality | Matched Record Quality | Creator | Create Date | Last Edit Date | Source | TCN Source | TCN V |
|-------------------------------------|------|---------------------------|-------------|-----------------------|------------------------|---------|-------------|----------------|--------|------------|-------|
| <input checked="" type="checkbox"/> | 1387 | <a href="#">View MARC</a> | 2           | 0                     | 1                      | admin   | 11/7/11     | 11/7/11        | 2      |            | 13    |
| <input type="checkbox"/>            | 1386 | <a href="#">View MARC</a> | 2           | 0                     | 1                      | admin   | 11/4/11     | 11/4/11        | 2      |            | 13    |

14.Click **Back to Import Queue**.

15.Check the boxes of the records that you want to import, and click **Import Selected Records**, or click **Import All Records**.

16.A pop up window will offer you the same import choices that were present on the **Import Records** screen. You can choose one of the import options, or click **Import**.





17. The screen will refresh. The **Queue Summary** indicates that the record was imported. The **Import Time** column records the date that the record was imported.

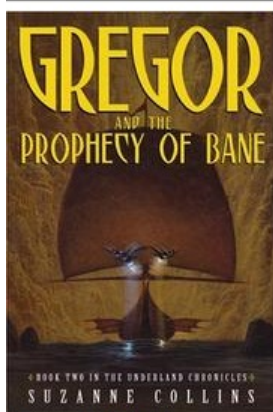
| Queue Actions                           |                          | Queue Summary            |                                     | Queue Filters |  |  |
|---|--------------------------|--------------------------|-------------------------------------|---------------|--|--|
| <a href="#">Import Selected Records</a> | Records in Queue: 4      | <input type="checkbox"/> | Limit to Records with Matches       |               |  |  |
| <a href="#">Import All Records</a>      | Records Imported: 1      | <input type="checkbox"/> | Limit to Non-Imported Records       |               |  |  |
| <a href="#">View Import Items</a>       | Record Import Failures 0 | <input type="checkbox"/> | Limit to Records with Import Errors |               |  |  |
| <a href="#">Delete Queue</a>            | Items in Queue 0         |                          |                                     |               |  |  |
|   | Items Imported 0         |                          |                                     |               |  |  |
|   | Item Import Failures 0   |                          |                                     |               |  |  |

| <input type="checkbox"/> | View MARC                 | Matches     | Import Failures | Import Time | Title of work   | Author of work    | Language of work |
|--------------------------|---------------------------|-------------|-----------------|-------------|---|-------------------|------------------|
| <input type="checkbox"/> | <a href="#">View MARC</a> |             |                 |             | Gregor and the Code of Claw / Suzanne Collins.            | Collins, Suzanne. |                  |
| <input type="checkbox"/> | <a href="#">View MARC</a> |             |                 |             | Gregor and the curse of the warmbloods / Suzanne Collins. | Collins, Suzanne. |                  |
| <input type="checkbox"/> | <a href="#">View MARC</a> |             |                 |             | Gregor and the marks of secret / Suzanne Collins.         | Collins, Suzanne. |                  |
| <input type="checkbox"/> | <a href="#">View MARC</a> | Matches (2) |                 | 11/7/11     | Gregor and the Prophecy of Bane /                         | Collins, Suzanne. |                  |

18. Search the catalog to confirm that the record was imported.





Gregor and the Prophecy of Bane  
/Suzanne Collins.

[Collins, Suzanne](#). (Author). [Collins, Suzanne](#). (Credited).

#### Record details

- ISBN: 0439650755 (hardcover : alk. paper)
- Physical Description: 312 p. ;21 cm.
- Edition: 1st ed.
- Publisher: Scholastic Press, 2004.

#### Search for related items by subject

Subject: [Friendship](#) — [Fiction](#).  
[Brothers and sisters](#) — [Fiction](#).

## Default Values for Item Import

Evergreen now supports additional functionality for importing items through **Cataloging # MARC Batch Import/Export**. When items are imported via a **Holdings Import Profile** in **Cataloging # MARC Batch Import/Export**, Evergreen will create an item-level record for each copy. If an item barcode, call number, copy location, or circulation modifier is not set in the embedded holdings, Evergreen will apply a default value based on the configured Library Settings. A default prefix can be applied to the auto-generated call numbers and item barcodes.

The following **Library Settings** can be configured to apply these default values to imported items:

- **Vandelay: Generate Default Barcodes** —Auto-generate default item barcodes when no item barcode is present
- **Vandelay: Default Barcode Prefix** —Apply this prefix to any auto-generated item barcodes
- **Vandelay: Generate Default Call Numbers** —Auto-generate default item call numbers when no item call number is present
- **Vandelay: Default Call Number Prefix** —Apply this prefix to any auto-generated item call numbers
- **Vandelay: Default Copy Location** —Default copy location value for imported items
- **Vandelay: Default Circulation Modifier** —Default circulation modifier value for imported items

## Importing Authority Records from the Staff Client

For an alternate method of importing authority records, read [Importing Authority Records from Command Line](#).

To import a set of MARC authority records from the *MARC Batch Import/Export* interface:

1. From the Evergreen staff client, select **Cataloging # MARC Batch Import/Export**. The *Evergreen MARC File Upload* screen opens, with *Import Records* as the highlighted tab.
2. From the **Record Type** drop-down menu, select **Authority Records**.
3. Enter a name for the queue (batch import job) in the **Create a New Upload Queue** field.
4. Select the **Import Non-Matching Records** checkbox.
5. Click the **Browse** button to select the file of MARC authorities to import.
6. Click the **Upload** button to begin importing the records.

The screen displays "Uploading... Processing..." to show that the records are being transferred to the server, then displays a progress bar to show the actual import progress. When the staff client displays the progress bar, you can disconnect your staff client safely. Very large batches of records might time out at this stage.

7. Once the import is finished, the staff client displays the results of the import process. You can manually display the import progress by selecting the *Inspect Queue* tab of the *MARC Batch Import/Export* interface and selecting the queue name. By default, the staff client does not display records that were imported successfully; it only shows records that conflicted with existing entries in the database. The screen shows the overall status of the import process in the top right-hand corner, with the Total and Imported number of records for the queue.

# Chapter 76. Overlay Existing Catalog Record via Z39.50 Import

This feature enables you to replace a catalog record with a record obtained through a Z39.50 search. No new permissions or administrative settings are needed to use this feature.

## To Overlay an Existing Record via Z39.50 Import:

- 1) Click **Cataloging # Import Record from Z39.50**
- 2) Select at least one **Service** in addition to the **Local Catalog** in the **Service and Credentials** window in the top right panel.
- 3) Enter search terms in the **Query** window in the top left panel.
- 4) Click **Search**.

- 5) The results will appear in the lower window.
- 6) Select the record in the local catalog that you wish to overlay.
- 7) Click **Mark Local Result as Overlay Target**

**Results**  
Showing 9 of 43

Fetch More Results   List Actions ▾   **Mark Local Result as Overlay Target**   Show in Catalog   MARC View    MARC

| Author               | Edition      | ISBN                    | Publication Date | Publisher                | Service                  |
|----------------------|--------------|-------------------------|------------------|--------------------------|--------------------------|
| Elgin, Kathy.        |              | 9781607542216 (hard)    | c2009            | Skyview Books            | loc                      |
| Donoghue, Emma       | 1st U.S. ed. | 9780151015498           | c2008            | Harcourt                 | loc                      |
| Heins, Marjorie.     | 1st ed.      | 0374175454 (alk. paper) | 2001             | Hill and Wang            | biblios                  |
| Horowitz, Michael E. |              | 1402404328              | c2004            | Practising Law Institute | biblios                  |
| Donoghue, Emma       | 1st U.S. ed. | 9780151015498           | c2008            | Harcourt                 | biblios                  |
| Muggleton, Lodowick  |              |                         | 1663             | [s.n.]                   | biblios                  |
| Donoghue, Emma.      |              | 9781554680368           | 2008             | Harper Collins           | native-evergreen-catalog |

- 8) A confirmation message appears. Click **OK**.
- 9) Select the record that you want to replace the existing catalog record.
- 10) Click **Overlay**.

| Publication Date        | Publisher     | Service | TCN      |
|-------------------------|---------------|---------|----------|
| 17542216 (hard) c2009   | Skyview Books | loc     | 15861600 |
| 1015498 c2008           | Harcourt      | loc     | 15239539 |
| 15454 (alk. paper) 2001 | Hill and Wang | biblios | 8725398  |

- 11) The record that you selected will open in the MARC Editor. Make any desired changes to the record, and click **Overlay Record**.

**Options**

Stack subfields  
  Flat-Text Editor  
  Fast Item Add  
   

---

**MARC Record**

Fixed Fields -- Record type: BKS

| Type  | a | ELvl | Srcce | d | Audn | Ctrl | Lang  | eng  |
|-------|---|------|-------|---|------|------|-------|------|
| BLvl  | m | Form | Conf  | 0 | Biog | MRec | Ctry  | flu  |
|       |   | Cont | GPub  |   | LitF | 1    | Indx  | 0    |
| Desc  | a | Ills | Fest  | 0 | DtSt | s    | Date1 | 2008 |
| Date2 |   |      |       |   |      |      |       |      |

---

```

LDR      | 01685cam a2200385 a 4500
001      | 15239539
005      | 20111021160900.0
008      | 080329s2008 flu 000 1 eng
906      | #a 7 #b cbc #c orignew #d 1 #e ecip #f 20 #g y-gencatlg
925 0    | #a acquire #b 2 shelf copies #x policy default
955      | #a lh03 2008-03-29 #i lh03 2008-03-29 #e lh03 2008-03-29 to CIP
010      | #a 2008014677
020      | #a 9780151015498
020      | #a 015101549X
035      | #a (OCoLC)213451577
035      | #a (OCoLC)ocn213451577
040      | #a DLC #c DLC #d BTCTA #d BAKER #d YDXCP #d OCLCG #d C#P #c
043      | #a e-uk---
050 0 0  | #a PR6054.0547 #b S43 2008
082 0 0  | #a 823/.914 #2 22
100 1    | #a Donoghue, Emma, #d 1969-
245 1 4  | #a The sealed letter / #c Emma Donoghue.
    
```

- 12) The catalog record that you want to overlay will appear in a new window. Review the MARC record to verify that you are overlaying the correct catalog record.
- 13) If the correct record appears, click **Overlay**.

Overlay this record?

**Record Summary ( [View MARC](#) )**

Title:           Edition:           TCI  
 Author:        Pub Date: 2008        Dat  
 Bib Call #:                            Rec

---

**MARC View**

LDR 00620cam a2200205Ka 4500  
 005 20111021154702.0  
 008 070101s eng d  
 020        †a 9781554680368  
 020        †a 1554680360  
 100        †a Donoghue, Emma.  
 245 1 4   †a The sealed letter  
 260        †a Toronto   †b Harper Collins  
           †c 2008  
           †d 1200   †e 1200

14) A confirmation message will appear to confirm that you have overlaid the record. Click **Ok**.

15) The screen will refresh in the OPAC View to show that the record has been overlaid.

---

## The sealed letter /Emma Donoghue.

[Donoghue, Emma, 1969-](#) (Author). [Donoghue, Emma, 1969-](#) (Credited).

### Record details

- ISBN: 9780151015498
- ISBN: 015101549X
- Physical Description: 396 p. ;24 cm.
- Edition: 1st U.S. ed.
- Publisher: Harcourt, c2008.

### Search for related items by subject

Subject: [Codrington, Henry John, Sir, 1808-1877](#) — [Fiction](#).  
[Codrington, Helen, d. 1876](#) — [Fiction](#).  
[Faithfull, Emily, 1836?-1895](#) — [Fiction](#).  
[Triangles \(Interpersonal relations\)](#) — [Fiction](#).  
[Divorce](#) — [Great Britain](#) — [Fiction](#).

Genre: [Domestic fiction](#).

# Chapter 77. Z39.50 Search Enhancements

## Abstract

In Evergreen version 2.5, you will be able to search multiple Z39.50 sources simultaneously from record buckets. Using this feature, you can match records from Z39.50 sources to catalog records in your bucket and import the Z39.50 records via Vandelay.

## Administration

The following administrative interfaces will enable you to configure Z39.50 search parameters.

### Z39.50 Index Field Maps

Click **Admin # Server Administration # Z39.50 Index Field Maps** to map bib record indexes (metabib fields and record attributes) in your catalog records to Z39.50 search attributes. Metabib fields are typically free form fields found in the body of a catalog record while record attributes typically have only one value and are often found in the leader.

You can map a metabib field or a record attribute to a Z39.50 attribute or a Z39.50 attribute type. To map a specific field in your catalog record to a specific field in a chosen Z39.50 source, you should map to a Z39.50 attribute. For example, if you want the Personal Author in your catalog record to map to the Author field when searching the Library of Congress, then you should do the following:

1. Click **New** or double-click to edit an existing map.
2. Select the **Metabib Field** from the drop down menu.
3. Select the appropriate source and field from the **Z39.50 Attribute** drop down menu.
4. Click **Save**.

Alternatively, if you want the Personal Author in your catalog record to map to the generic author field of any Z39.50 source, then you should do the following:

1. Click **New** or double-click to edit an existing map.
2. Select the **Metabib Field** from the drop down menu.
3. Select the appropriate heading from the **Z39.50 Attribute Type** drop down menu.
4. Click **Save**.

### Z39.50 servers

Click **Admin # Server Admin # Z39.50 Servers** to input your Z39.50 server. Click the hyperlinked name of any server to view the Z39.50 search attribute types and settings. These settings describe how the search values (from a metabib field or record attribute) are translated into Z39.50 searches.

### Apply Quality Sets to Z30.50 Sources

From this interface, you can rank the quality of incoming search results according to the match set that you have established and their Z39.50 point of origin. By applying a quality score, you tell Evergreen to merge the highest quality records into the catalog.

1. Click **Cataloging # MARC Batch Import/Export**.



2. Click **Record Match Sets**. Match Sets specify the MARC attributes, tags, and subfields that you want Evergreen to use to identify matches between catalog and incoming records.
3. Rank the quality of the records from Z39.50 sources by adding quality metrics for the match set. Click **MARC Tag and Subfield**, and enter the 901z tag and subfield, specify the Z39.50 source, and enter a quality metric. Source quality increases as the numeric quality increases.

## Vandelay Match Set Editor

Match set name: Title  
 Owing Library: Example Branch 1  
 Type: biblio

Your Expression: (100 +a)

Add new

### Working Match Point

Choose from among the three buttons above to add a new match point.

Your Expres  
 AND  
 10

Delete Se

Save Changes To Expressi

### Quality Metrics for this Match Set

Use buttons above and to the right to add new quality metrics.

[Back](#) [Next](#)

| ✓                        | # | Quality | Record Attribute | Tag |
|--------------------------|---|---------|------------------|-----|
| <input type="checkbox"/> | 1 | 1       |                  | 901 |
| <input type="checkbox"/> | 2 | 2       |                  | 901 |
| <input type="checkbox"/> | 3 | 3       |                  | 901 |

## Org Unit Settings

Org Unit settings can be set for your local branch, your system, or your consortium. To access these settings, click **Admin # Local Administration # Library Settings Editor # Maximum Parallel Z39.50 Batch Searches**.

Two new settings control the Z39.50 search enhancements.

1. Maximum Parallel Z39.50 Batch Searches - This setting enables you to set the maximum number of Z39.50 searches that can be in-flight at any given time when performing batch Z39.50 searches. The default value is five (5), which means that Evergreen will perform 5 searches at a given time regardless of the number of sources selected. The searches will be divided between the sources selected. Thus, if you maintain this default and perform a search using two Z39.50 sources, Evergreen will conduct five searches, shared between the two sources.
2. Maximum Z39.50 Batch Search Results - This setting enables you to set the maximum number of search results to retrieve and queue for each record + Z39 source during batch Z39.50 searches. The default value is five (5).

## Matching Records in Buckets with Records from Z39.50 Sources

1. Add records to a bucket.
2. Click **Bucket Actions # Locate Z39.50 Matches**. A pop up window will appear.
3. Select a **Z39.50 Server(s)**.
4. Select a **Z39.50 Search Index(es)**. Note that selecting multiple checkboxes will AND the search indexes.

5. Select a Vandelay queue from the drop down menu to which you will add your results, or create a queue by typing its name in the empty field.
6. Select a **Match Set**. The Match Set is configured in Vandelay and, in this instance, will only be used to compare the Z39.50 results with the records in your bucket.
7. Click **Perform Search**.

The screenshot shows a dialog box titled "Bucket Z39.50 Search Dialog" with a dark blue header that reads "Locate Z39.59 Matches". The dialog is divided into several sections:

- Z39.50 Servers:** A list of checkboxes for server selection. "Library of Congress" is checked. Other options include Massachusetts Institute of Technology (ALEPH), Ohio State U, Penn State, #biblios.net, OCLC, and repository.
- Z39.50 Search Indexes:** A list of checkboxes for search criteria. "Title(LC)" is checked. Other options include Author, ISBN, ISSN, Item Type, LCCN, Pubdate, Subject(LC), Subject(generic), and TCN.
- Add Results to Queue:** A dropdown menu currently set to "Stub Records 4/16/2013".
- Match Set:** A dropdown menu currently set to "Title".

At the bottom of the dialog are two buttons: "Cancel" and "Perform Search".

1. Status information will appear, including the number of records in the bucket that were searched, the matches that were found, and the progress of the search. When the search is complete, click **Open Queue**.

This screenshot shows the same dialog box after the search is complete. The header remains "Locate Z39.59 Matches". The configuration options in the previous section are still visible. Below the configuration section, the following information is displayed:

- Add Results to Queue:** "Stub Records 4/16/2013"
- Match Set:** "Title"
- Bib Records to Search:** 3
- Matches Found:** 13
- Search Progress:** A green progress bar is shown, indicating the search is complete.

At the bottom of the dialog are two buttons: "Close" and "Open Queue".



1. The Vandelay Queue will display. Matching records are identified in the **Matches** column. From this interface, import records according to your normal procedure. It is suggested that to merge the incoming records with the catalog records, you should choose an option to import the records. Next, select either merge option from the drop down menu, click **Merge on Best Match**, and then click **Import**.

**Import Items**

Merge Profile: Match-Only Merge

Import Non-Matching Records:

Merge On Exact Match (901c):

Merge On Single Match:

Merge On Best Match:

Best/Single Match Minimum Quality Ratio: 0.0 New Record Quality / Quality of Best Match

Insufficient Quality Fall-Through Profile: [Dropdown]

Buttons: Cancel, Import

1. The records from the Z39.50 search will merge with the catalog records. NOTE: A new column has been added to this interface to identify the Z39.50 source. When records are imported to the Vandelay queue via a record bucket, Evergreen tags the Z39.50 source and enters the data into the \$901z.

# Chapter 78. Monograph Parts

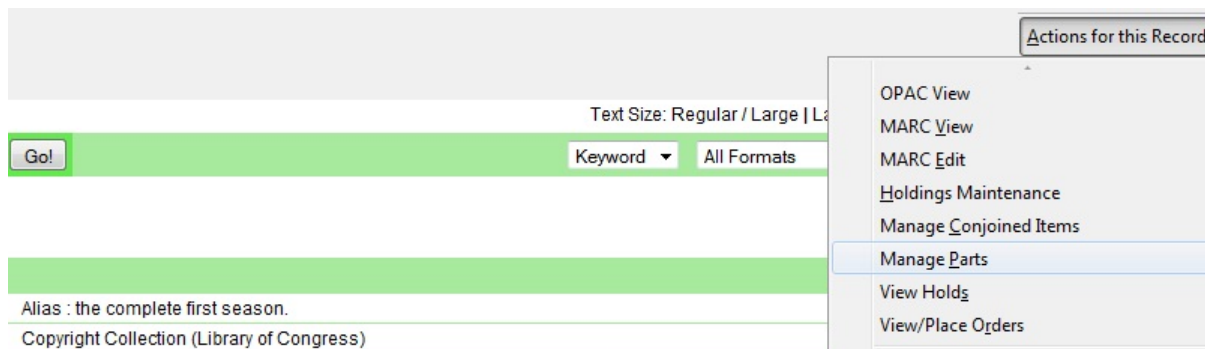
**Monograph Parts** enables you to differentiate between parts of monographs or other multi-part items. This feature enables catalogers to describe items more precisely by labeling the parts of an item. For example, catalogers might identify the parts of a monograph or the discs of a DVD set. This feature also allows patrons more flexibility when placing holds on multi-part items. A patron could place a hold on a specific disc of a DVD set if they want to access a specific season or episode rather than an entire series.

Four new permissions are used by this functionality: CREATE\_MONOGRAPH\_PART, UPDATE\_MONOGRAPH\_PART, DELETE\_MONOGRAPH\_PART and MAP\_MONOGRAPH\_PART. These permissions should be assigned at the consortial level to those groups or users that will make use of the features described below.

## Add a monograph part to an existing record

To add a monograph part to an existing record in the catalog:

- 1) Retrieve a record.
- 2) Click **Actions for this Record # Manage Parts**



- 3) Click **New Monograph Part**
- 4) Enter the **label** that you want to appear to the user in the catalog, and click **Save**. This will create a list of monograph parts from which you can choose when you create a volume and copy.

**Record Summary** ( [Add Volumes](#) ) ( [View MARC](#) )

**Title:** Alias : the complete first s **Edition:** TCN: 15526052 **Created By:** admin  
**Author:** Copyright Collection (Libr **Pub Date:** 2003-09-02 **Record ID:** 695033 **Last Edited By:** admin  
**Bib Call #:** **Record Owner:** **Last Edited On:** 2011-09-02 3:28 PM

Record 1 of 1

### Monograph Parts

[Back](#) [Next](#)

|   |       |
|---|-------|
| ✓ | label |
|---|-------|

|                                       |   |
|---------------------------------------|---|
| label                                 | <input type="text" value="Episodes 1-6"/> |
| record                                | <input type="text" value="695033"/>       |
| <input type="button" value="Cancel"/> | <input type="button" value="Save"/>       |

5) Add a volume and copy. To add a volume and copy to your workstation library, click the **Add Volumes** link in the **Record Summary** at the top of the bibliographic record, or click **Actions for this Record # Add Volumes**.

To add a volume and copy to your workstation library or other libraries, click **Actions for this Record # Holdings Maintenance # Add Volumes**.

**Record Summary** ( [Add Volumes](#) )

**Title:** Alias : the complete first s **Edi**  
**Author:** Copyright Collection (Libr  **Pul**  
**Bib Call #:**

Record 1 of 1

**Holdings Maintenance**

CONS Equinox Consortium

Show Volumes  Show Items

| Location/Barcode              | Volun |
|-------------------------------|-------|
| ▲CONS : Equinox Consortium    |       |
| ▲CASEY : Casey Library System |       |
| ▲APEX : Apex Branch           | 0     |

- Show Last Few Circulations
- Edit Items
- Transfer Items to Previous
- Link as Conjoined Items to
- Add Volumes
- Mark Library as Volume Tr
- Add Items
- Edit Volumes
- Mark Volume as Item Tran
- Transfer Volumes to Previo
- Delete Items
- Delete Volumes

6) The **Unified Volume/Copy Creator** opens. Enter the number of volumes that you want to add to the catalog and the volume description.

7) Enter the number of copies and barcode(s) of each item.

8) Select the **part designation** from the drop down menu adjacent to the barcode field.

9) Apply a template to the copies, or edit fields in the **Copy Editor**.

| Call Number | Suffix | # of Copies | Barcode / Part Designation |
|-------------|--------|-------------|----------------------------|
| ALIAS 1:1-6 |        | 1           | 093837377223               |
|             |        |             | Episodes 1-6               |

---

|                 |                   |
|-----------------|-------------------|
| Circulation (2) | Miscellaneous (3) |
|-----------------|-------------------|

10) Click **Create Volumes/Items**.

11) The **Holdings Maintenance** screen will refresh to demonstrate the addition of the volume, copy, and part. These fields also appear in the OPAC View.

Casey Library System

|             |           |        |   |   |
|-------------|-----------|--------|---|---|
| Apex Branch | ALIAS 1-6 | Stacks | <a href="#">Copy Details</a><br><a href="#">Browse Call Numbers</a><br><a href="#">Place Hold</a> | 0 |
|-------------|-----------|--------|---|---|

[print these details](#)

| Barcode   | Status     | Location | Part         |
|---|------------|----------|--------------|
| 09876767888 <a href="#">place hold</a> <a href="#">book now</a> | In process | Stacks   | Episodes 1-6 |

# Chapter 79. Conjoined Items

Prior to Evergreen version 2.1, items could be attached to only one bibliographic record. The Conjoined Items feature in Evergreen 2.1 enables catalogers to link items to multiple bibliographic records. This feature will enable more precise cataloging. For example, catalogers will be able to indicate items that are printed back to back, are bilingual, are part of a bound volume, are part of a set, or are available as an e-reader pre-load. This feature will also help the user retrieve more relevant search results. For example, a librarian catalogs a multi-volume festschrift. She can create a bibliographic record for the festschrift and a record for each volume. She can link the items on each volume to the festschrift record so that a patron could search for a volume or the festschrift and retrieve information about both works.

In the example below, a librarian has created a bibliographic record for two bestselling items. These books are available as physical copies in the library, and they are available as e-reader downloads. The librarian will link the copy of the Kindle to the bibliographic records that are available on the e-reader.

## Using the Conjoined Items Feature

The Conjoined Items feature was designed so that you can link items between bibliographic records when you have the item in hand, or when the item is not physically present. Both processes are described here. The steps are fewer if you have the item in hand, but both processes accomplish the same task. This document also demonstrates the process to edit or delete links between items and bibliographic records. Finally, the permission a cataloger needs to use this feature is listed.

**Scenario 1: I want to link an item to another bibliographic record, but I do not have the item in hand.** 1) Retrieve the bibliographic record to which you would like to link an item.

2) Click **Actions for this Record # Mark as Target for Conjoined Items**.

The screenshot shows a library catalog interface. At the top, there is a search bar with a "Go!" button and a "Keyword" dropdown menu. Below the search bar, there is a "Text Size: Regu" option. The main content area is titled "Record Summary" and displays the following information:

|                      |                  |
|----------------------|------------------|
| Title                | The troubled man |
| Author               | Henning, Mankell |
| ISBN                 | 9780307593498    |
| Edition              |                  |
| Publication Date     |                  |
| Publisher            |                  |
| Physical Description | print            |
| Format               | text             |
| Abstract             |                  |
| Subjects             |                  |

Below the record summary, there are several tabs: "Copy Summary", "Shelf Browser", "Preview", and "MARC Record".

3) A confirmation message will appear. Click **OK**.

4) In a new tab, retrieve the bibliographic record with the item that you want to link to the other record.

5) Click **Actions for this Record # Holdings Maintenance**.

6) Select the copy that you want to link to the other bibliographic record. Right-click, or click **Actions for Selected Rows # Link as Conjoined Items to Previously Marked Bib Record**.

**Maintenance**

Example Branch 1 Limit: This Specialized Library / Your Bookmobile

Volumes  Show Items Refresh Show Libraries With Items

| /Barcode                   | Volumes | Copies | Call Number | Circulation Library | Due Date | Location |
|----------------------------|---------|--------|-------------|---------------------|----------|----------|
| Example Consortium         |         |        |             |                     |          |          |
| : Example System 1         |         |        |             |                     |          |          |
| L : Example Branch 1       | 1       | <1>    |             |                     |          |          |
| L1 : Example Sub-library 1 | 0       | <0>    |             |                     |          |          |
| INDLE                      |         | 1      | KINDLE      |                     |          |          |
| 00001111                   |         |        | KINDLE      | BR1                 |          | Stacks   |

7) The **Manage Conjoined Items** interface opens in a new tab. This interface enables you to confirm the success of the link, and to change the peer type if desired. The **Result** column indicates that you created a successful link between the item and the bib record.

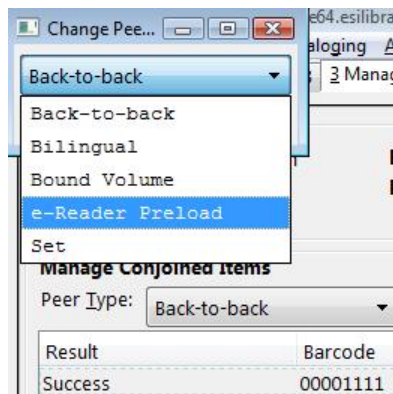
**Manage Conjoined Items**

Peer Type: Back-to-back Barcode: Link to Bib (Submit)

| Result  | Barcode  | Is Holdable | OPAC Visible | title  |
|---------|----------|-------------|--------------|--------|
| Success | 00001111 | t           | t            | KINDLE |

Show in Catalog  
Change Peer Type  
Remove from Bib

The default peer type, **Back-to-back**, was set as the peer type for our item. To change a peer type after the link has been created, right-click or click **Actions for Selected Items # Change Peer Type**. A drop down menu will appear. Select the desired peer type, and click **OK**.



8) The **Result** column will indicate that the **Peer Type [has been] Updated**.



**Manage Conjoined Items**

Peer Type: Back-to-back Barcode:  Link to Bib (Submit)

| Result            | Barcode  | Is Holdable | OPAC Visible | title  |
|-------------------|----------|-------------|--------------|--------|
| Peer Type updated | 00001111 | t           | t            | KINDLE |

9) To confirm the link between the item and the desired bib record, reload the tab containing the bib record to which you linked the item. Click the link for **Linked Titles**.

**Record Summary**

|                      |                  |
|----------------------|------------------|
| Title                | The troubled man |
| Author               | Henning, Mankell |
| ISBN                 | 9780307593498    |
| Edition              |                  |
| Publication Date     |                  |
| Publisher            |                  |
| Physical Description | print            |
| Format               | text             |
| Abstract             |                  |
| Subjects             |                  |

[Copy Summary](#) [Shelf Browser](#) [Preview](#) [MARC Record](#) [Linked Titles](#)

10) To view the copy details, including the peer type, click **Copy Details**.

[Copy Summary](#) [Shelf Browser](#) [Preview](#) [MARC Record](#) [Linked Titles](#)

| Title  |            |
|--|------------|
| KINDLE   |            |
| Barcode  | Status     |
| 00001111 :: e-Reader Preload <a href="#">place hold</a> <a href="#">book now</a> <a href="#">linked titles</a> | In process |

Items can be linked to multiple bibliographic records simultaneously. If you click the linked titles button in the copy details, then you will retrieve a list of bibliographic records to which this item is linked.

|  |  |  |
|--|--|--|
|  | The troubled man<br>Henning, Mankell<br>   print<br> | <a href="#">Place Hold</a> <a href="#">Browse in Google Books Search</a> |
|  | Firewall<br>Mankell, Henning.<br>   print<br>        | <a href="#">Place Hold</a> <a href="#">Browse in Google Books Search</a> |

**Scenario 2: I want to link an item to another bibliographic record, and I do have the item in hand.** 1)

Retrieve the bibliographic record to which you would like to add the item.

2) Click **Actions for this Record # Manage Conjoined Items**.



End

Text Size: Regu

Go!

Keyword

Advanced

Simple Branch 1

Record Summary



|                      |                   |
|----------------------|-------------------|
| Title                | Firewall          |
| Author               | Mankell, Henning. |
| ISBN                 | 9781400031535     |
| Edition              |                   |
| Publication Date     |                   |
| Publisher            |                   |
| Physical Description | print             |
| Format               | text              |
| Abstract             |                   |
| Subjects             |                   |

3) A note in the bottom left corner of the screen will confirm that the record was targeted for linkage with conjoined items, and the **Manage Conjoined Items** screen will appear.

4) Select the peer type from the drop down menu, and scan in the barcode of the item that you want to link to this record.

5) Click **Link to Bib (Submit)**.

**Manage Conjoined Items**

Peer Type:  Barcode:

| Result | Barcode | Is Holdable | OPAC Vi |
|--------|---------|-------------|---------|
|--------|---------|-------------|---------|

6) The linked item will appear in the screen. The **Result** column indicates Success.

7) To confirm the linkage, click **Actions for this Record # OPAC View**.

8) When the bibliographic record appears, click **Reload. Linked Titles** will show the linked title and item.

**Scenario 3: I want to edit or break the link between a copy and a bibliographic record.** 1) Retrieve the bibliographic record that has a copy linked to it.

2) Click **Actions for this Record # Manage Conjoined Items**.

3) Select the copy that you want to edit, and right-click or click **Actions for Selected Items**.

4) Make any changes, and click **OK**.

UPDATE\_COPY - Link items to bibliographic records



# Chapter 80. Cataloging Electronic Resources — Finding Them in Catalog Searches

There are two ways to make electronic resources visible in the catalog without adding copies to the record:

1. Adding a Located URI to the record
2. Attaching the record to a bib source that is transcendent

The Located URI approach is useful for Evergreen sites where libraries have access to different electronic resources. The transcendent bib source approach is useful if all libraries have access to the same electronic resources.

Another difference between the two approaches is that electronic resources with Located URI's never appear in results where the search is limited to a specific copy location(s). In contrast, transcendent electronic resources will appear in results limited to any copy location.

## Adding a Located URI to the Record

A Located URI allows you to add the short name for the owning library to the 856 field to indicate which organizational units should be able to find the resource. The owning organizational unit can be a branch, system, or consortium.

A global flag called *When enabled, Located URIs will provide visibility behavior identical to copies* will determine where these resources will appear in search results. This flag is available through **Admin # Server Administration # Global Flags**.

If the *When enabled, Located URIs will provide visibility behavior identical to copies* flag is set to False (default behavior):

- When the user's search scope is set at the owning organizational unit or to a child of the owning organizational unit, the record will appear in search results.
- When a logged-in user's preferred search library is set to the owning organizational unit or to a child of that owning organizational unit, the record will appear regardless of search scope.

If the *When enabled, Located URIs will provide visibility behavior identical to copies* flag is set to True:

- When the user's search scope is set at the owning organizational unit, at a child of the owning organizational unit, or at a parent of the owning organizational unit, the record will appear in search results.
- When a logged-in user's preferred search library is set to the owning organizational unit, to a child of the owning organizational unit, or to a parent (with the exception of the consortium) of the owning organizational unit, the record will appear regardless of search scope.

To add a located URI to the record:

1. Open the record in *MARC Edit*

2. Add a subfield 9 to the 856 field of the record and enter the short name of the organizational unit for the value. Make sure there is a 4 entered as the first indicator and a 0 entered as the second indicator. For example:

856 40 \$u <http://lwn.net> \$y Linux Weekly News \$9 BR1

would make this item visible to people searching in a library scope of BR1 or to logged-in users who have set BR1 as their preferred search library.



If multiple organizational units own the resource, you can enter more than one subfield 9 to the 856 field or you can enter multiple 856 fields with a subfield 9 to the record

3. Save the record

## Located URI Example 1

The *When enabled, Located URIs will provide visibility behavior identical to copies* flag is set to False (default behavior)

The Record has two 856 fields: one with SYS1 in subfield 9 and the other with BR4 in subfield 9

- Any user searching SYS1 or any of its children (BR1, BR2, SL1) will find the record. These users will only see the URL belonging to SYS1.
- Any user searching BR4 will find the record. These users will only see the URL belonging to BR4.
- A user searching SYS2 will NOT find the record because SYS2 is a parent of an owning org unit, not a child. The same thing happens if the user is searching the consortium. In this case, the system assumes the user is unlikely to have access to this resource and therefore does not retrieve it.
- A logged-in user with a preferred search library of BR4 will find the record at any search scope. This user will see the URL belonging to BR4. Because this user previously identified a preference for using this library, the system assumes the user is likely to have access to this resource.
- A logged-in user with a preferred search library of BR4 who is searching SYS1 or any of its children will also retrieve the record. In this case, the user will see both URLs, the one belonging to SYS1 because the search library matches or is a child of the owning organizational unit and the one belonging to BR4 because it matches or is a child of the preferred search library. The URL belonging to the search library (if it is an exact match, not a child) will sort to the top.

## Located URI Example 2

The *When enabled, Located URIs will provide visibility behavior identical to copies* flag is set to True

The Record has two 856 fields: one with SYS1 in subfield 9 and the other with BR4 in subfield 9

- Any user searching SYS1 or any of its children (BR1, BR2, SL1) will find the record. These users will only see the URL belonging to SYS1.
- Any user searching BR4 will find the record. These users will only see the URL belonging to BR4.

- Any user searching the consortium will find the record. These users will see both URLs in the record. In this case, the system sees this user as a potential user of SYS2 or BR4 and therefore offers them the option of accessing the resource through either URL.
- A user searching SYS2 will find the record because SYS2 is a parent of an owning org unit. The user will see the URL belonging to BR4. Once again, the system sees this user as a potential user of BR4 and therefore offers them the option of accessing this resource.
- A user searching BR3 will NOT find the record because BR3 is neither a child nor a parent of an owning organizational unit.
- A logged-in user with a preferred search library of BR4 who is searching BR3 will find the record. This user will see the URL belonging to BR4. Because this user previously identified a preference for using this library, the system assumes the user is likely to have access to this resource.
- A logged-in user with a preferred search library of BR4 who is searching SYS1 or any of its children will also retrieve the record. In this case, the user will see both URLs, the one belonging to SYS1 because the search library matches or is a child of the owning organizational unit and the one belonging to BR4 because it matches or is a child of the preferred search library. The URL belonging to the search library (if it is an exact match, not a child) will sort to the top.

## Using Transcendent Bib Sources for Electronic Resources

Connecting a bib record to a transcendent bib source will make the record visible in search results regardless of the user's search scope.

To start, you need to create a transcendent bib source by adding it to *config.bib\_source* in the Evergreen database and setting the *transcendant* field to true. For example:

```
# INSERT INTO config.bib_source(quality, source, transcendant,
can_have_copies) VALUES (50, 'ebooks', TRUE, FALSE);
```



If you want to allow libraries to add copies to these records, set the *can\_have\_copies* field to *TRUE*. If you want to prevent libraries from adding copies to these records, set the *can\_have\_copies* field to *FALSE*.

When adding or uploading bib records for electronic resources, set the bibliographic source for the record to the newly-created transcendent bibliographic source. Using the staff client, the bibliographic source can be selected in the *MARC Batch Import* interface when importing new, non-matching records or in the *MARC Edit* interface when editing existing records.

# Chapter 81. MARC Batch Edit

This function is used to batch edit MARC records either adding a field, removing a field or changing the contents of a field.

**Record Source** This includes options to batch edit identifying MARC records in a record bucket, CSV file or by record id.

**Go! (button)** This button runs the action defined by the rule template(s).

## Action (Rule Type)

**Replace** Replaces the value in a MARC field for a batch of records.

**Delete** Removes a MARC field and its contents from the batch of records.

**Add** Use this to add a field and its contents to a batch of records.

## Other Template Fields

**MARC Tag** This is used to identify the field for adding, replacing, or deleting.

**Subfield (optional)** Indicates which subfield is being edited.

**MARC Data** Use this to indicate the data to add or used in replacing the existing data.

## Advanced Matching Restrictions (Optional)

**Subfield Regular Expression::** Using PERL syntax for a regular expression to identify the data to be removed or replaced.

### Running a Template to Add, Delete, or Replace MARC data

1. Click Cataloging#MARC Batch Edit
2. Select **Record source**
3. Select the appropriate bucket, load the CSV file or enter record id depending on **Record source** selected
4. Select the **Action Rule**
5. Enter the **MARC Tag** with no indicators (eg. 245)
6. Enter the **subfields** with no spaces. Subfields are optional. Multiple subfield can be entered such as *auz*.
7. Enter the **MARC Data** which is the value in the fields
8. Enter optional **Advanced Matching Restrictions**
  - a. Subfield

b. Regular Expression (using PERL syntax)

9. Click **Go!**

10. Results page will display indicating the number of records successfully edited

# Chapter 82. Link Checker

The Link Checker enables you to verify the validity of URLs stored in MARC records. The ability to verify URLs would benefit locations with large electronic resource collections.

## Search for URLs

Search for MARC records that contain URLs that you want to verify.

1. Click **Cataloging # Link Checker**.
2. Click **New Link Checker Session**.
3. Create a session name. Note that each session must have a unique name.
4. Select a search scope from the drop down menu. Records that would be retrieved by searching Example Branch 1 (BR1) in an OPAC search would also be retrieved here. For example, a record that describes an electronic resource with a URL in the 856 \$u and an org unit code, such as BR1, in the 856 \$9, would be retrieved by a search of relevant keywords. Also, records that contain a URL without the \$9 subfield, but also have physical copies at BR1, would be retrieved. Note that you can skip this step if you enter the org unit code of the location that you want to search in the **Search** field.
5. Enter search terms to retrieve records with URLs that you want to verify. You can also add a location filter, such as BR1.
6. You may further limit your search by selecting a saved search. Saved searches are filters made up of specific criteria, such as shelving location or audience. Adding a saved search to your keyword search will narrow your search for records with URLs. This step is optional.
7. Enter tags and subfields that contain URLs in the appropriate boxes. Click **Add** after you enter the data in the fields. You can add multiple tags and subfields by repeating this process. Evergreen will search for records that match your search terms, and then, from the set that it retrieves, it will extract any URLs from all of the tag/subfield locations you have specified for the session.
8. To view and manually verify the URLs that Evergreen retrieves, leave the **Process Immediately** button unchecked. If you want Evergreen to automatically verify the URLs that it retrieves, then check the box to **Process Immediately**.
9. Click **Begin** to process your search.

### Link Checker - Create Session

|  |   |
|--|---|
| Session name:                          | <input type="text" value="Jan2013"/>  |
| Search scope:                          | <input type="text" value="Example Branch 1"/>   |
| Search:                                | <input type="text" value="earth sciences"/>   |
| Saved searches:                        | <div style="border: 1px solid gray; padding: 2px;"><ul style="list-style-type: none"><li>Children's Materials</li><li>General/Adult Materials</li><li>Young Adult Materials</li></ul></div> |
| Tags and subfields to search for URLs: | <input type="text" value="859 \$u"/> <input type="text" value="X"/>   |
|  | Tag <input type="text" value="859"/> Subfield(s) <input type="text" value="u"/> <input type="button" value="Add"/>  |
| Process immediately?                   | <input type="checkbox"/>  |
| <input type="button" value="Begin"/>   |   |

*This will only be used if your search doesn't contain an explicit filter such as site(BR1)*

*Optionally select one or more to combine with 'Search' field above.*

# View Your Results

If you do not click **Process Immediately**, then you must select the links that you want to verify, and click **Verify Selected URLs**. If you click **Process Immediately**, then you skip this step, and Evergreen jumps directly to the results of the verification attempts as seen in the next step.

**Link Checker - Select URLs - Session 'Jan2013'**

Filter

| ✓                                   | # | Title Proper (normalized)          | Author (normalized) | URL ID | Tag | Subfield | Ordinal Position | URL  | Scheme | Host              | Domain        | TLD | P      |
|-------------------------------------|---|------------------------------------|---------------------|--------|-----|----------|------------------|--|--------|-------------------|---------------|-----|--------|
| <input checked="" type="checkbox"/> | 1 | geodiversitas                      |                     | 19     | 859 | u        | 1                | http://www.mnhn.fr/publication/geodiv/geodiv.html            | http   | www.mnhn.fr       | mnhn.fr       | fr  | /p/g/s |
| <input checked="" type="checkbox"/> | 2 | geodiversitas                      |                     | 20     | 859 | u        | 2                | http://bibpurl.oclc.org/web/10400                            | http   | bibpurl.oclc.org  | oclc.org      | org | /v     |
| <input checked="" type="checkbox"/> | 3 | current research in earth sciences |                     | 15     | 859 | u        | 1                | http://www.kgs.ukans.edu/Current/                            | http   | www.kgs.ukans.edu | kgs.ukans.edu | edu | /k     |
| <input checked="" type="checkbox"/> | 4 | current research in earth sciences |                     | 16     | 859 | u        | 2                | http://ej.lib.umn.edu/?url=http://www.kgs.ukans.edu/Current/ | http   | ej.lib.umn.edu    | lib.umn.edu   | edu | /      |
| <input checked="" type="checkbox"/> | 5 | current research in earth sciences |                     | 17     | 859 | u        | 3                | http://books.google.com/books?id=1s...                       | http   | books.google.com  | google.com    | com | /b     |
| <input checked="" type="checkbox"/> | 6 | current research in earth sciences |                     | 18     | 859 | u        | 4                | http://books.google.com/books?id=z8...                       | http   | books.google.com  | google.com    | com | /b     |

Evergreen displays the results of the verification attempts, including the tags that you searched, the URLs that Evergreen retrieved, the Bib Record ID, the request and result time, and the result code and text.

## Link Checker - Review Verification Attempt - [Session 'Jan2013'](#)

| Filter                   |   | Redirected From | Tag | Subfield | Ordinal Position | URL   | Title Proper (normalized)          | Record ID                     | Request Time | Result Time | Result Code | Result Text  |
|--------------------------|---|-----------------|-----|----------|------------------|---|------------------------------------|-------------------------------|--------------|-------------|-------------|--|
| <input type="checkbox"/> | 1 |                 | 859 | u        | 1                | <a href="http://www.mnhn.fr/publication/geodiv/geodiv.html">http://www.mnhn.fr/publication/geodiv/geodiv.html</a>   | geodiversitas                      | 104<br><a href="#">[Edit]</a> | 2013-01-08   | 2013-01-08  | 200         | OK   |
| <input type="checkbox"/> | 2 |                 | 859 | u        | 2                | <a href="http://bibpurl.oclc.org/web/10400">http://bibpurl.oclc.org/web/10400</a>   | geodiversitas                      | 104<br><a href="#">[Edit]</a> | 2013-01-08   | 2013-01-08  | 302         | Moved Temporarily  |
| <input type="checkbox"/> | 3 |                 | 859 | u        | 1                | <a href="http://www.kgs.ukans.edu/Current/">http://www.kgs.ukans.edu/Current/</a>   | current research in earth sciences | 103<br><a href="#">[Edit]</a> | 2013-01-08   | 2013-01-08  | 500         | Can't connect to www.kgs.ukans.edu:80 (Bad hostname 'www.kgs.ukans.edu') |
| <input type="checkbox"/> | 4 |                 | 859 | u        | 2                | <a href="http://ej.lib.umn.edu/?url=http://www.kgs.ukans.edu/Current/">http://ej.lib.umn.edu/?url=http://www.kgs.ukans.edu/Current/</a>                             | current research in earth sciences | 103<br><a href="#">[Edit]</a> | 2013-01-08   | 2013-01-08  | 301         | Moved Permanently  |
| <input type="checkbox"/> | 5 |                 | 859 | u        | 3                | <a href="http://books.google.com/books?id=1swOAQAAM/">http://books.google.com/books?id=1swOAQAAM/</a>   | current research in earth sciences | 103<br><a href="#">[Edit]</a> | 2013-01-08   | 2013-01-08  | 200         | OK   |
| <input type="checkbox"/> | 6 |                 | 859 | u        | 4                | <a href="http://books.google.com/books?id=z8wOAQAAM/">http://books.google.com/books?id=z8wOAQAAM/</a>   | current research in earth sciences | 103<br><a href="#">[Edit]</a> | 2013-01-08   | 2013-01-08  | 200         | OK   |
| <input type="checkbox"/> | 7 | 16              |     |          |                  | <a href="http://www.lib.umn.edu/about/contact?url=http://www.kgs.ukans.edu/Current/">http://www.lib.umn.edu/about/contact?url=http://www.kgs.ukans.edu/Current/</a> |                                    |                               | 2013-01-08   | 2013-01-08  | 302         | Found  |

# Manage Your Sessions

## Edit Columns

You can use the **Column Picker** to add and remove columns on any of the **Link Checker** interfaces. To access the **Column Picker**, right click on any of the column headings. The columns are saved to your user account.

## Clone Sessions

You can clone sessions that you run frequently or that have frequently-used parameters that need only minor adjustments to create new searches. To clone a session:

1. Click **Cataloging # Link Checker**.
2. In the Session ID column, click **Clone**. A copy of the parameters of that search will appear.

## View Verification Attempts

To view the results of a verification attempt after you have closed the session, click **Cataloging # Link Checker**. Your link checker sessions appear in a list. To view the results of a session, click the **Open** link in the Session ID column.

Click **Filter** to refine the results on this page. To add a filter:

1. Select a column from the first drop down menu.



2. Select an operator from the second drop down menu.
3. A third field will appear. Enter the appropriate text.
4. Click **Apply** to apply the filter to your current results. Click **Save Filters** to save the filter to your user account for later use.

# Part X. Serials

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# Chapter 83. Serials

This documentation is intended for users who will be ordering subscriptions, distributing issues, and receiving issues in Evergreen.

## Serial Control View vs. Alternate Serial Control View

Serial Control View and Alternate Serial Control View offer you two views of Serials. Both views enable you to create subscriptions, add distributions, define captions, predict future issues, and receive items. Serial Control View was designed for users who work with a smaller number of issues and was designed to accommodate workflows in academic and special libraries. Alternate Serial Control View was designed for users who receive a larger number of issues and was designed for use in public libraries.

In version 2.4, the two interfaces have taken a big step toward unification. Now in the Serial Control View, within the Subscription editor, you will find an embedded version of the Alternate Serial Control View. This new unified interface tries to provide the best features of both views, giving full access to the Alternate view functions from within the tabbed Serial Control View. One exception is that you cannot predict new issues from within the embedded Alternate view; instead you should use the standard Serial Control View method of predicting issues, [explained here](#). Also, some improvements were made to the embedded Alternate view to prevent losing features that were available in the old Serial Control View editors. These changes include: new "Edit Notes" buttons on the subscriptions and distributions editors; labeled dropdown for distribution summary options ("Add to record entry", "Use record entry only", etc.); new legacy record entry linkage (allows one to tie a distribution's information to a particular serial record entry (i.e. a MFHD record)).

Outside of the Subscription Editor, the two views maintain their previous looks and usage. You are encouraged to use the new combination view and provide feedback to the [Evergreen general discussion list](#).

The views are interoperable, but because they were designed for different purposes, some differences emerge. For example, Serial Control View enables you to create and edit serials in a single tabbed interface while Alternate Serial Control View leads you through a series of steps on multiple screens. In addition, receiving functions vary between views. Both receiving interfaces enable you to batch receive issues. However, the Serials Batch Receive interface, which is associated with Alternate Serial Control View, allows for more customization of each receiving unit while the Items tab in Serial Control View allows for greater flexibility in creating multi-issue units, such as in binding serials.



The new combination view tries to provide the best of both views in one place. Try it out and send your feedback to the [Evergreen general discussion list](#).

**Table 83.1. Serials Control View and Alternate Serials Control View Comparison**

| Function                | Serials Control View   | Alternate Serials Control View | Combination View            |
|-------------------------|------------------------|--------------------------------|-----------------------------|
| Menu Style              | Menu driven            | Wizard oriented                | Both                        |
| Setting Up subscription | No calendar drop downs | Includes calendar drop down    | Includes calendar drop down |

| <b>Function</b>                | <b>Serials Control View</b>   | <b>Alternate Serials Control View</b> | <b>Combination View</b>       |
|--------------------------------|-------------------------------|---------------------------------------|-------------------------------|
| Creating streams               | No setup required             | Requires streams                      | No setup required             |
| Creating captions and patterns | Wizard available              | Wizard available                      | Wizard available              |
| Adding Starting Issue          | Includes holdings code wizard | Includes holdings code wizard         | Includes holdings code wizard |
| Generate Predictions           | Make predictions              | Generate predictions                  | Make predictions              |
| Add items for special issue    | No functionality              | New items on issuances tab            | New items on issuances tab    |
| Receiving issues               | Multiple modes in Items tab   | Batch Receive                         | Both                          |

## MFHD Records

MARC Format for Holdings Display (MFHD) display in the OPAC in addition to holding statements generated by Evergreen from subscriptions created in the Serials Control View or the Alternate Serials Control View. The MFHDs are editable as MARC but the holdings statements generated from the control view are system generated. Multiple MFHDs can be created and are tied to Organizational Units.

# Chapter 84. Copy Template for Serials

A copy template enables you to specify item attributes that should be applied by default to copies of serials. You can create one copy template and apply it to multiple serials. You can also create multiple copy templates. Templates will be used in the Alternate Serial Control View or the Serial Control View.

## Create a copy template

To create a copy template, click **Admin # Local Administration # Copy Template Editor**.

1. Enter a Name for the template.
2. Select an owning library from the *Owning Lib* drop down menu. This organization owns the copy template. A staff member with permissions at that organization can modify the copy template. The menu is populated from the organizations that you created in **Admin # Server Administration # Organizational Units**.
3. Check *Circulate?* if you want the item to circulate.
4. Check *Holdable?* if patrons can place holds on the item.
5. Check *OPAC Visible?* if you want patrons to be able to see the item in the OPAC after you receive it.
6. Select a *Loan Duration* rule from the drop down menu. This field is required.
7. Select a *Fine Level* for the item from the drop down menu. This field is required.
8. Select a copy location from the *Location* drop down menu. The menu is populated from the copy locations that you created in **Admin # Local Administration # Copy Locations**.
9. Select a *Circ Modifier* from the drop down menu. The menu is populated from the modifiers that you created in **Admin # Server Administration # Circulation Modifiers**.
10. Select a *Floating Group* if the item is part of a floating collection. For more information, see the chapter on [Floating Groups](#).
11. Check *Deposit?* if patrons must place a deposit on the copy before they can use it.
12. Check *Reference?* if the item is a reference item.
13. Check *Mint Condition?* if the item is in mint condition.
14. Enter age protection rules in the *Age Protect* field. Age protection allows you to control the extent to which an item can circulate after it has been received. For example, you may want to protect new copies of a serial so that only patrons who check out the item at your branch can use it.
15. Enter a message in the *Alert Message* field. This message will appear every time the item is checked out to a patron.
16. Enter a code from the MARC fixed fields into the *Circ as Type* field if you want to control the circulation based on the item type.
17. Enter a *Deposit Amount* if patrons must place a deposit on the copy before they can use it.

18. Enter the *Price* of the item.

19. Select a copy status from the *Status* drop down menu. The copy statuses can be managed in **Admin # Server Administration # Copy Statuses**.

20. Click **Save**.

## Edit a copy template

You can make changes to an existing copy template. Changes that you make to a copy template will apply to any items that you receive after you edited the template.

1. Double-click the row you want to edit. The copy template will appear, and you can edit the fields.
2. After making changes, click **Save**.



From the copy template interface, you can delete copy templates that have never been used. First check the box for the template you wish to delete, then click **Delete Selected**.

# Chapter 85. Serials Control View

As of Evergreen 2.4, the Serial Control View incorporates the Alternate Serial Control interface in the Subscription editor. Serial Control View enables you to manage serials in a single tabbed interface. This view also enables you to bind units. Serial Control View consists of five tabs: Items, Units, Distributions, Subscriptions, and Claims. Units and Claims are not functional in 2.4.

## Create a Subscription

A subscription is designed to hold all information related to a single serial title. Therefore, each library is likely to have only one subscription per serial title.

The screenshot shows the Evergreen Serial Control View interface. At the top, there is a menu bar with options: File, Edit, Search, Circulation, Cataloging, Acquisitions, and Booking. Below the menu bar is a toolbar with icons for Check Out, Check In, Search Catalog, Item Status, Patron Search, and Patron Registration. A status bar indicates 'Bib Record: 14'. The main content area is titled 'Record Summary ( Add Volumes ) ( View MARC )' and displays metadata for the record: Title: Africana library journal, Author: , Bib Call #: Z3503.A37, Edition: , Pub Date: 1970, TCN: 14, Database ID: 14, Record Owner: , Created By: a, Last Edited By: a, Last Edited On: 3. Below the metadata are navigation buttons: Start, Previous, Next, End, and Search Results. The 'Serial Control' section has tabs for Items, Units, Distributions, Subscriptions, and Claims. The 'Subscriptions' tab is active, showing a tree view on the left with a selected row for 'SL1: Example Sub-library 1'. The 'Subscription Details' section on the right has tabs for View/Edit, Distributions, Captions and Patterns, and Issuances. The 'Subscriptions' table is displayed with the following data:

| ✓                        | # | ID | Owning Library | Start Date      | End Date         | Expected Date Offset |
|--------------------------|---|----|----------------|-----------------|------------------|----------------------|
| <input type="checkbox"/> | 1 | 13 | SL1            | 3/6/13 12:00 AM | 7/30/14 12:00 AM | 00:01:05             |

1. Click the **Subscriptions** tab.
2. In the tree on the left, select the branch that will own the subscription.
3. Right-click to show the **Actions** menu, or click **Actions for Selected Row**, and click **Add Subscription**.
4. Enter the date that the subscription begins in the Start Date field.
5. Enter the date that the subscription ends in the End Date field. This field is optional.
6. Enter the difference between the nominal publishing date of an issue and the date that you expect to receive your copy in the Expected Date Offset field. For example, if an issue is published the first day of each month, but you receive the copy two days prior to the publication date, then enter -2 days into this field.



7. When finished, click **Save**. Or to exit the editor without saving, click **Cancel**.



You can add notes to the subscription by clicking **View/Edit Notes**. These notes can also be accessed from the Items tab by right-clicking on an item and choosing **View Sub. Notes**. Also, the Notes column in the Items tab displays the total notes of each kind (Item notes, then Distribution notes, then Subscription notes).

## Create a Distribution

Distributions indicate the branches that should receive copies of a serial. Distributions work together with streams to indicate the number of copies that should be sent to each branch.

# From the new combination Serial Control View

The screenshot displays the Serial Control View interface. At the top, there is a navigation bar with tabs for 'Check Out', 'Check In', 'Search Catalog', 'Item Status', 'Patron Search', and 'Patron Registration'. Below this, a 'Bib Record: 14' is shown. The main content area is divided into two sections: 'Record Summary' and 'Serial Control'.

**Record Summary:**

- Title: Africana library journal
- Author:
- Bib Call #: Z3503.A37
- Edition: 14
- Pub Date: 1970
- TCN: 14
- Database ID: 14
- Record Owner:
- Created By:
- Last Edited By:
- Last Edited On:

**Serial Control:**

The 'Serial Control' section has tabs for 'Items', 'Units', 'Distributions', 'Subscriptions', and 'Claims'. The 'Subscriptions' tab is active, showing a list of subscriptions for 'SL1 Example Sub-library 1'. The list includes:

| #  | Location                    | Subscriptions |
|----|-----------------------------|---------------|
| 1  | CONS : Example Consortium   | 0             |
| 2  | SYS1 : Example System 1     | 0             |
| 3  | BR1 : Example Branch 1      | 2             |
| 4  | SL1 : Example Sub-library 1 | 3             |
| 5  | Subscription : # 13         |               |
| 6  | Distributions               |               |
| 7  | Issuances                   |               |
| 21 | Captions/Patterns           |               |
| 22 | Subscription : # 15         |               |
| 26 | Subscription : # 35         |               |
| 30 | Subscription : # 14         |               |
| 34 | Subscription : # 31         |               |

The 'Subscription Details' panel on the right shows the 'Distributions' tab. It contains a table of distributions:

| ✓                        | # | Label                   | Holding Lib | Display Grouping | Legacy Record Entry | Receive Unit Template | Summary Method |
|--------------------------|---|-------------------------|-------------|------------------|---------------------|-----------------------|----------------|
| <input type="checkbox"/> | 1 | Branch A<br>0 stream(s) | SL1         | chron            |                     |                       | add_to_        |
| <input type="checkbox"/> | 2 | Branch B<br>0 stream(s) | SL1         | chron            |                     |                       | add_to_        |
| <input type="checkbox"/> | 3 | Default<br>1 stream(s)  | SL1         | chron            | 5                   | Serials - Weekly BR2  | add_to_        |

1. Choose a subscription from the list on the left
2. In the panel on the right, click the **Distributions** tab
3. Click the **New Distribution** button
4. Enter your desired label in the Label field. It may be useful to identify the branch to which you are distributing these issues in this field. This field is not publicly visible and only appears when an item is received. There are no limits on the number of characters that can be entered in this field.
5. Select a Holding Library from the drop down menu. The holding library is the branch that will receive the copies.

6. Select a Display Grouping
7. Choose a Legacy Record Entry to attach to this serial record. The Legacy Record Entry contains the MFHD records that are attached to the bib record if the owning library is identical to the distribution's holding library. A distribution can thus be an extension of an MFHD record.
8. Select a copy template from the Receive Unit Template drop down menu. This menu is populated with the copy templates that you created in Copy Template Editor.
9. Select a Summary method. This determines how the Holdings Summary will treat the Legacy Record Entry (i.e. MFHD record) in relation to the Serial Control holdings data.
  - Add to record entry - Displays the MFHD holdings summary first, followed by the summary generated from the Serial Control received issues
  - Use record entry only - Displays only the MFHD holdings summary
  - Do not use record entry - Displays only the holdings summary generated from Serial Control received issues
  - Merge with record entry - Merges the two holdings summaries into a single statement
10. Enter a Unit label prefix. This information will display in Serial Control View when the items are received, but it does not print in the Spine Label printing interface.
11. Enter a Unit label suffix. This information will display in Serial Control View when the items are received, but it does not print in the Spine Label printing interface.
12. Click the **Save** button to finish.



Label, Holding Library, and Receive Unit Template are required fields when creating a distribution.



Streams are created automatically in the Serial Control View. For information on using Streams in the combination Serial Control View, see [Creating a Stream](#).

# From the original Serial Control View

The screenshot displays the Serial Control View interface. At the top, there is a menu bar with options: File, Edit, Search, Circulation, Cataloging, Acquisitions, and Booking. Below the menu bar are several icons and labels: Check Out, Check In, Search Catalog, Item Status, Patron Search, and Patron Registration. A status bar indicates '1 Bib Record: 14' and '2 Subscriptions +'. The main content area is titled 'Record Summary ( Add Volumes ) ( View MARC )' and contains fields for Title (Africana library journal), Author, Bib Call #: Z3503.A37, Edition, Pub Date: 1970, TCN: 14, Database ID: 14, Record Owner, Created By, Last Edited By, and Last Edited On. Below the record summary are buttons for Start, Previous, Next, End, and Search Results. The 'Serial Control' section has tabs for Items, Units, Distributions, Subscriptions, and Claims. The 'Distributions' tab is active, showing a tree view of locations and a table of distributions. The table has columns for #, Location, and Distributions. The 'Distribution' panel on the right shows fields for ID (6), Label (Default), Summary Method (Add to record entry), Unit Label Prefix (<Unset>), and Unit Label Suffix (<Unset>). The 'Holding Lib' panel shows SL1. The 'Library Specific Options' panel includes a note about changing the 'Holding Lib', a Legacy Record Entry (Example Sub-library 1! (3)), Receive Call Number (<Unset>), Bind Call Number (<Unset>), Receive Unit Template (Serials - Weekly BR2), and Bind Unit Template (<Unset>). At the bottom right, there are buttons for Distribution Notes and Mo...

1. Click **Distributions** beneath the subscription from the tree on the left. Right click to show the **Actions** menu, or click **Actions for Selected Rows**, and click **Add distribution**.
2. Apply a new label to the distribution. It may be useful to identify the branch to which you are distributing these issues in this field. This field is not publicly visible and only appears when an item is received. There are no limits on the number of characters that can be entered in this field.
3. Select a Summary method. This determines how the Holdings Summary will treat the Legacy Record Entry (i.e. MFHD record) in relation to the Serial Control holdings data.
  - Add to record entry - Displays the MFHD holdings summary first, followed by the summary generated from the Serial Control received issues

- Use record entry only - Displays only the MFHD holdings summary
  - Do not use record entry - Displays only the holdings summary generated from Serial Control received issues
  - Merge with record entry - Merges the two holdings summaries into a single statement
4. Apply a prefix to the spine label if desired. This information will display in Serial Control View when the items are received, but it does not print in the Spine Label printing interface.
  5. Apply a suffix to the spine label if desired. This information will display in Serial Control View when the items are received, but it does not print in the Spine Label printing interface.
  6. The holding library is filled in by default and is the library to which you attached the subscription.
  7. The Legacy Record Entry contains the MFHD records that are attached to the bib record if the owning library is identical to the distribution's holding library. A distribution can thus be an extension of an MFHD record. Select the MFHD record from the drop down menu.
  8. The Receive Call Number field is empty until you receive the first item. When you receive the first item, you are prompted to enter a call number. That call number will populate this drop down menu.
  9. The Bind Call Number field is empty until you bind the first item. When you receive the first item, you are prompted to enter a call number. That call number will populate this drop down menu.
  10. Receive Unit Template - The template that should be applied to copies when they are received. Select a template from the drop down menu.
  11. Bind Unit Template - The template that should be applied to copies when they are bound. Select a template from the drop down menu.
  12. When finished, click **Create Distribution(s)** in the bottom right corner of the screen.
  13. A confirmation message appears. Click **OK**.



You can add notes to the distribution by clicking **Distribution Notes**. These notes can also be accessed from the Items tab by right-clicking on an item and choosing **View Dist. Notes**. Also, the Notes column in the Items tab displays the total notes of each kind (Item notes, then Distribution notes, then Subscription notes).

## Create Captions and Patterns

### From the new combination Serial Control View

The Captions and Patterns wizard allows you to enter caption and pattern data as it is described by the 853, 854, and 855 MARC tags. These tags allow you to define how issues will be captioned, and how often the library receives issues of the serial.

1. In the panel on the right, click the **Captions and Patterns** tab.
2. Click **Add New**.
3. In the Type drop down menu, select the MARC tag to which you would like to add data.

4. In the Pattern Code text box, you can enter a JSON representation of the 85X tag by hand, or you can click the **Wizard** to enter the information in a user-friendly format.
5. The Caption and Pattern is Active by default. You can deactivate it at any time by unchecking the box and clicking **Save Changes**. Only one active caption and pattern is allowed per type.
6. Click **Save Changes** to finish.
7. To delete a pattern, simply click the red X button.

## From the original Serial Control View

1. Click **Captions and patterns** beneath the subscription from the tree on the left. Right click to the show the **Actions** menu, or click **Actions for Selected Rows**, and click **Add Caption/Pattern**.
2. Apply a type, which can be for basic subscription, supplements, or indices
3. Apply active. Only one active caption and pattern is allowed per type
4. In the Pattern Code box, you can enter a JSON representation of the 85X tag by hand, or you can click the Pattern Code Wizard to enter the information in a user-friendly format.

## Use the Pattern Code Wizard

The Pattern Code Wizard enables you to create the caption of the item and add its publication information. The Wizard is composed of five pages of questions. You can use the Next and Previous navigation buttons in the top corners to flip between pages.

To add a pattern code, click **Wizard**.

### Page 1: Enumerations

Pattern Code Wizard

Previous Next

Use enumerations?  
*"v." and "no." are common first and second level enumeration captions.*

| Enumeration Caption | Units Per Higher Level  | Numbering Continuity                  |
|---------------------|---|---------------------------------------|
| First level:<br>v.  |   |                                       |
| Second level:<br>i. | <input checked="" type="radio"/> Number 4<br><input type="radio"/> Varies<br><input type="radio"/> Undetermined | Restarts at unit completion<br>Remove |

Add Enumeration Add Alternate Enumeration

1. To add an enumeration, check the box adjacent to Use enumerations.. The enumerations conform to \$a-\$h of the 853,854, and 855 MARC tags.
2. A field for the First level will appear. Enter the enumeration for the first level. A common first level enumeration is volume, or "v."
3. Click **Add Enumeration**.
4. A field for the Second level will appear. Enter the enumeration for the second level. A common first level enumeration is number, or "no."
5. Enter the number of bibliographic units per next higher level. This conforms to \$u in the 853, 854, and 855 MARC tags.
6. Choose the enumeration scheme from the drop down menu. This conforms to \$v in the 853, 854, and 855 MARC tags.



You can add up to six levels of enumeration.

7. Add Alternate Enumeration if desired.
8. When you have completed the enumerations, click **Next**.

## Page 2: Calendar

Pattern Code Wizard

**Pattern Code Wizard**

Previous Next

Use calendar changes?

*Identify any points during the year at which the highest level enumeration caption changes.*

Type Point

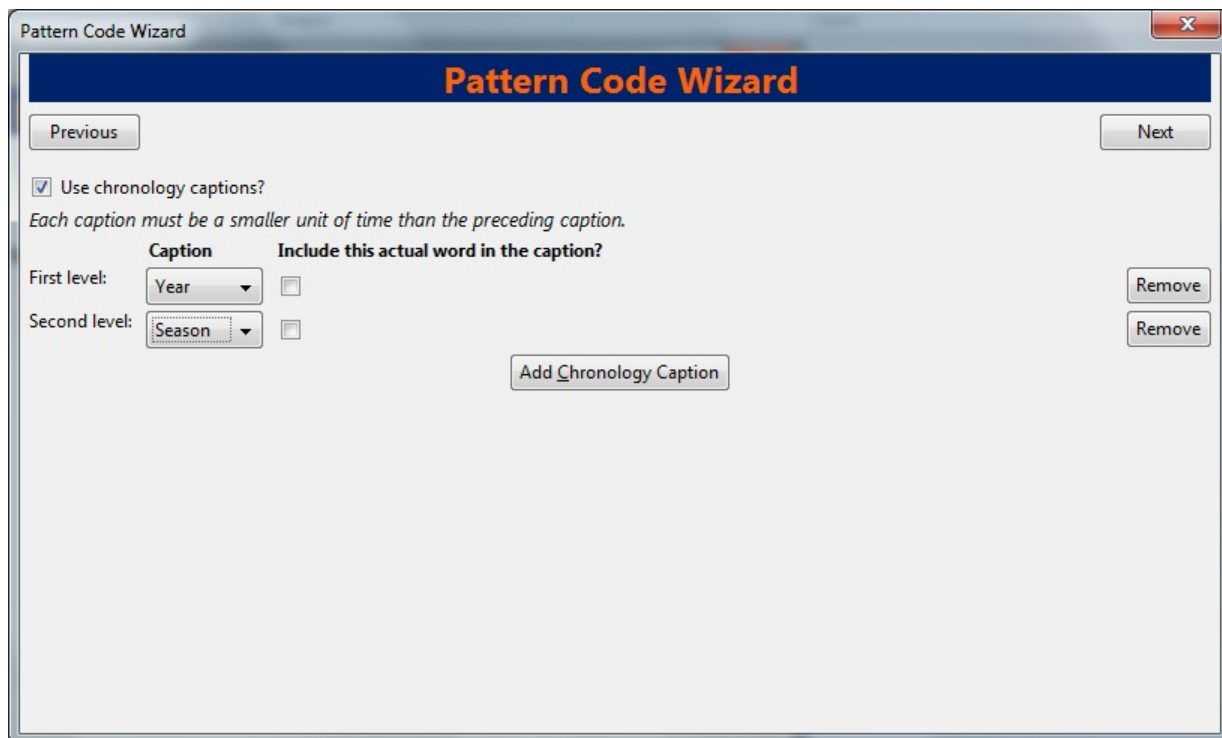
At start of a month June Remove

Add Calendar Change

1. To use months, seasons, or dates in your caption, check the box adjacent to Use calendar changes.

2. Identify the point in the year at which the highest level enumeration caption changes.
3. In the Type drop down menu, select the points during the year at which you want the calendar to restart.
4. In the Point drop down menu, select the specific time at which you would like to change the calendar
5. To add another calendar change, click **Add Calendar Change**. There are no limits on the number of calendar changes that you can add.
6. When you have finished the calendar changes, click **Next**.

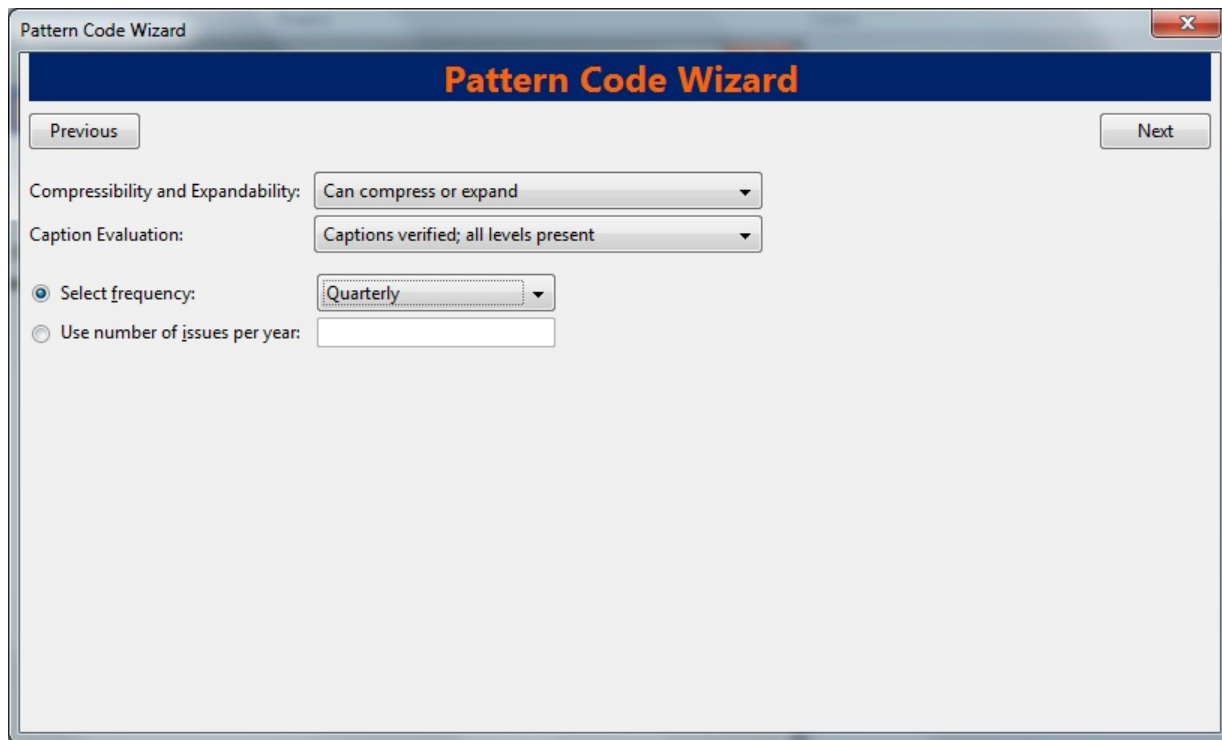
## Page 3: Chronology



1. To add chronological units to the captions, check the box adjacent to Use chronology captions.
2. Choose a chronology for the first level. If you want to display the terms such as "year" and "month" next to the chronology caption in the catalog, then check the box beneath Display in holding field.
3. To include additional levels of chronology, click **Add Chronology Caption**. Each level that you add must be smaller than the previous level.
4. After you have completed the chronology caption, click **Next**.



## Page 4: Compress and Expand Captions



The screenshot shows a window titled "Pattern Code Wizard" with a close button (X) in the top right corner. The window has a blue header bar with the text "Pattern Code Wizard" in orange. Below the header, there are two buttons: "Previous" on the left and "Next" on the right. The main area contains the following fields:

- "Compressibility and Expandability:" followed by a dropdown menu showing "Can compress or expand".
- "Caption Evaluation:" followed by a dropdown menu showing "Captions verified; all levels present".
- A radio button selected next to "Select frequency:" followed by a dropdown menu showing "Quarterly".
- An unselected radio button next to "Use number of issues per year:" followed by an empty text input field.

1. Select the appropriate option for compressing or expanding your captions in the catalog from the compressibility and expandability drop down menu. The entries in the drop down menu correspond to the indicator codes and the subfield \$w in the 853 tag. Compressibility and expandability correspond to the first indicator in the 853 tag.
2. Choose the appropriate caption evaluation from the drop down menu.
3. Choose the frequency of your publication from the drop down menu. For irregular frequencies, you may wish to select use number of issues per year, and enter the total number of issues that you receive each year. However, recommended practice is that you use only regular frequencies. Planned development will create an additional step to aid in the creation of irregular frequencies.
4. Click **Next**.

## Page 5: Regularity Information

Pattern Code Wizard

Previous Next

Use specific regularity information (published, omitted, and/or combined issues)?

Omitted Season Spring X Add sub-row Remove whole row

Add More Regularity Information

1. If needed, check box for Use specific regularity information
2. Choose the appropriate information for combined, omitted or published issues
3. Choose the appropriate frequency and issue
4. Add additional rows as required

## Page 5: Finish Captions and Patterns

1. To complete the wizard, click **Create Pattern Code**.
2. Return to Subscription Details.
3. Confirm that the box adjacent to Active is checked. Click **Save Changes**. The row is now highlighted gray instead of orange.

## Creating an Issuance

The Issuances function enables you to manually create an issue. Evergreen will use the initial issue that you manually create to predict future issues.

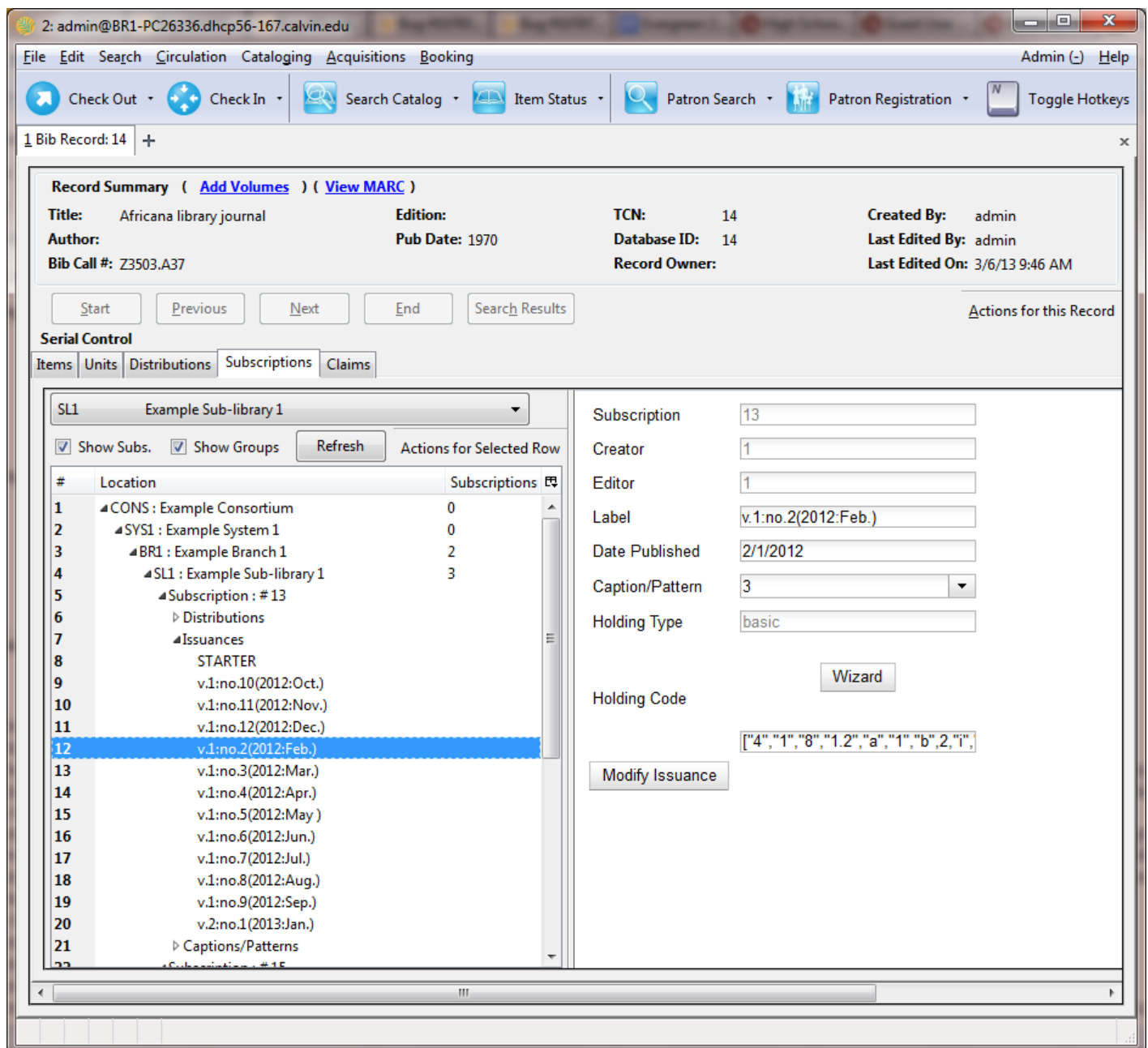
# From the new combination Serial Control View

The screenshot shows a web application interface for managing serials. At the top, there's a navigation bar with menus like 'File', 'Edit', 'Search', 'Circulation', 'Cataloging', 'Acquisitions', and 'Booking'. Below this are icons for 'Check Out', 'Check In', 'Search Catalog', 'Item Status', 'Patron Search', and 'Patron Registration'. A breadcrumb trail shows '1 Bib Record: 14'. The main content area is titled 'Record Summary ( Add Volumes ) ( View MARC )' and contains fields for 'Title: Africana library journal', 'Author:', 'Bib Call #: Z3503.A37', 'Edition:', 'Pub Date: 1970', 'TCN: 14', 'Database ID: 14', 'Record Owner:', 'Created By:', and 'Last Edited By:'. Below the record summary are navigation buttons: 'Start', 'Previous', 'Next', 'End', and 'Search Results'. The 'Serial Control' section has tabs for 'Items', 'Units', 'Distributions', 'Subscriptions', and 'Claims'. The 'Subscriptions' tab is active, showing a tree view of sub-libraries under 'SL1 Example Sub-library 1'. The tree includes 'CONS: Example Consortium' (0 subs), 'SYS1: Example System 1' (0 subs), 'BR1: Example Branch 1' (2 subs), and 'SL1: Example Sub-library 1' (3 subs). The 'SL1' sub-library is expanded to show 'Subscription: # 13' (3 subs), 'Distributions', 'Issuances', 'Captions/Patterns', and other subscriptions. The 'Subscription Details' panel is open, showing a form for 'Subscription: 13'. The form fields include 'Creator: 1', 'Editor: 1', 'Label: v.1.no.2(2012:Feb.)', 'Date Published: 2/1/2012', 'Caption/Pattern: 3', 'Holding Type: basic', and 'Holding Code'. A 'Wizard' button is visible. Below the form is a table of 'Issuances' with columns for '#', 'Label', and 'Actions'. The table lists 10 issues from 'v.1.no.2(2012:Feb.)' to 'v.1.no.11(2012:Nov.)'.

1. In the panel on the right, click the **Issuances** tab.
2. Click **New Issuance**.
3. The Subscription, Creator, and Editor fields contain subscription and user IDs, respectively. These fields are disabled because Evergreen automatically fills in these fields.
4. Enter a name for this issuance in the Label field. There are no limits on the number of characters that can be entered in this field. You may want to enter the month and year of the publication in hand.
5. Enter the Date Published of the issuance. If you are creating one manual issue before automatically predicting more issues, then this date should be the date of the most current issue before the prediction starts.

6. Select a Caption/Pattern from the drop down menu. The numbers in the drop down menu correspond to the IDs of the caption/patterns that you created.
7. The Holding Type appears by default and corresponds to the Type that you selected when you created the Caption/Pattern.
8. In the holding code area of the New Issuance dialog, click **Wizard**. The Wizard enables you to add holdings information.
9. Enter the volume of the item in hand in the v. field.
10. Enter the number of the item in hand in the no. field.
11. Enter the year of publication in the Year field.
12. Enter the month of publication in the Month field if applicable. You must enter the calendar number of the month rather than the name of the month. For example, enter 12 if the item in hand was published in December.
13. Enter the day of publication in the day field if applicable.
14. Click **Compile** to generate the holdings code.
15. Click **Save** to finish.

# From the original Serial Control View



1. Click **Issuances** beneath the subscription from the tree on the left. Right click to show the **Actions** menu, or click **Actions for Selected Rows**, and click **Add Issuance**.
2. As of Evergreen 2.2, the Issuance editor is the same as mentioned above in the new combination view.

## Generate Prediction

1. Select the Subscription in the tree on the left.
2. Right-click to show the **Actions** menu, or click **Actions for Selected Row**, then click **Make predictions**.

3. A pop up box will ask you how many items you want to predict. Enter the number, and click **OK**.
4. A confirmation message will appear. Click **OK**.
5. To view the predicted issues, select a Subscription from the tree on the left, then click the **Issuances** tab in the panel on the right.

# Chapter 86. Alternate Serial Control View

Using the Alternate Serial Control View, you can create a subscription, a distribution, a stream, and a caption and pattern, and you can generate predictions and receive issues. To access Alternate Serial Control View, open a serials record, and click **Actions for this Record # Alternate Serial Control**. This opens the Subscriptions interface

1. Create a subscription
2. Create a distribution
3. Create a a stream (within the distribution)
4. Create a caption and pattern (or import from bibliographic or legacy serial records)
5. Create at least the first issuance and generate predictions

## Creating a Subscription

A subscription is designed to hold all information related to a single serial title. Therefore, each library is likely to have only one subscription per serial title.

The screenshot displays the 'Subscriptions' interface. At the top, there is a navigation bar with menus for File, Edit, Search, Circulation, Cataloging, Acquisitions, and Booking. Below this is a toolbar with icons for Check Out, Check In, Search Catalog, Item Status, Patron Search, and Patron Registration. The main content area shows a table of subscriptions with columns for ID, Owning Library, Start Date, End Date, and Expected Date Offset. A modal dialog is open, allowing the user to create a new subscription. The dialog contains the following fields:

|                            |          |
|----------------------------|----------|
| Owning Library             | BOYLSTON |
| Start Date                 | 3/1/2012 |
| End Date                   |          |
| Bibliographic Record Entry | 219635   |
| Expected Date Offset       | 5        |
| Cancel                     | Save     |

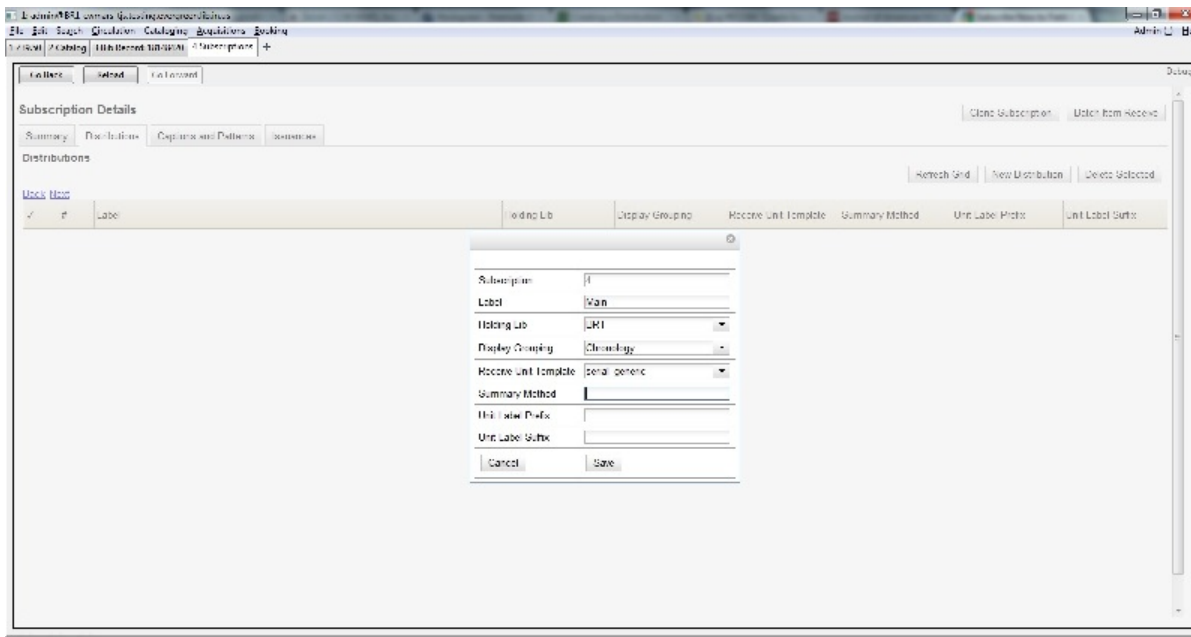
1. Add new subscriptions to a serials record that exists in the catalog.
2. Create a subscription

3. Click New Subscription.
4. Select an owning library. The owning library indicates the organizational unit(s) whose staff can use this subscription. This menu is populated with the shortnames that you created for your libraries in the organizational units tree in Admin # Server Administration # Organizational Units. The rule of parental inheritance applies to this list. For example, if a system is made the owner of a subscription, then users, with appropriate permissions, at the branches within the system could also use this subscription.
5. Enter the date that the subscription begins in the start date. Recommended practice is that you select the date from the drop down calendar although you can manually enter a date. Owning library and start date are required fields in the new subscription pop up box.
6. Enter the date that the subscription ends in the end date. Recommended practice is to select a date from the drop down calendar, but you can manually enter a date, also.
7. Enter the difference between the nominal publishing date of an issue and the date that you expect to receive your copy in the Expected Date Offset. For example, if an issue is published the first day of each month, but you receive the copy two days prior to the publication date, then enter -2 days into this field.
8. Click Save.

After you save the subscription, it will appear in a list with a hyperlinked ID number. Use the drop down menu at the top of the screen to view subscriptions at other organizations.

## Creating a Distribution

Distributions indicate the branches that should receive copies of a serial. Distributions work together with streams to indicate the number of copies that should be sent to each branch.



1. Click the Distributions tab.
2. Click New Distribution.



3. Enter a name for the distribution in the Label field. It may be useful to identify the branch to which you are distributing these issues in this field. This field is not publicly visible and only appears when an item is received. There are no limits on the number of characters that can be entered in this field.
4. Select a holding library from the drop down menu. The holding library is the branch that will receive the copies.
5. Select a copy template from the Receive Unit Template drop down menu. This menu is populated with the copy templates that you created in Copy Template Editor.



Label, Holding Library, and Receive Unit Template are required fields in the new distribution pop up box.

6. Ignore the fields, Unit Label Prefix and Unit Label Suffix. These fields are not functional in Alternate Serial Control View.
7. Click Save. The distribution will appear in a list in the Distributions tab in the Subscription Details.

## Creating a Stream

Distributions work together with streams to indicate the number of copies that should be sent to each branch. Distributions identify the branches that should receive copies of a serial. Streams identify how many copies should be sent to each branch. Streams are intended for copies that are received on a recurring, even if irregular, basis.

1. Click the hyperlinked title of the distribution. The number of streams that have already been created for this distribution displays adjacent to the title. You can choose one of two ways to create a stream: New Stream or Create Many Streams. The New Stream button allows you to create one new stream and assign it a routing label.
2. Click New Stream
3. Enter a routing label so that the copy could be read by specific users or departments before the copy is shelved. The routing label appears during receiving and could be added to routing lists; it is not viewable by the public. Routing lists do not print from in 2.0. This field is optional.
4. Click Save.



The "Create Many Streams button" allows you to create multiple streams at once, but it does not allow you to add a routing label when you create the stream.

5. Click Create Many Streams.
6. Enter the number of streams that you want to create in the How many. Field.
7. Click Create.

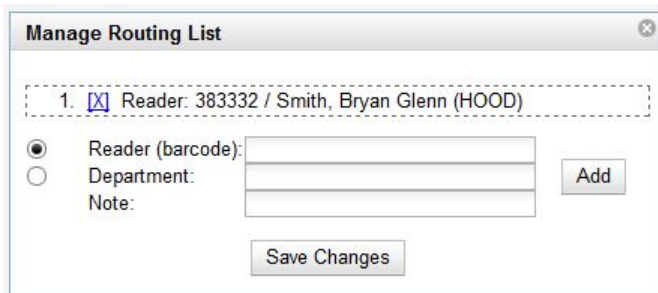
## Creating a Routing List

Within Alternate Serial Control View, you have the option to create routing lists for selected streams. Routing lists enable you to designate specific users and/or departments that serial items need to be routed to upon receiving.

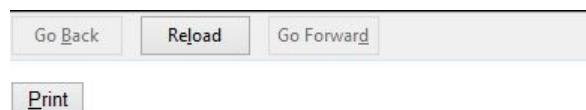
These routing lists can now display user addresses when you receive the items. This feature is particularly useful for working with homebound patrons.

Create a Routing List in Alternate Serial Control View that will display the User's Address:

1. Select the checkbox for the stream that needs a routing list
2. Click **Routing List for Selected Stream**
3. Click the **Reader (barcode):** radio button and enter the user's barcode into the field
4. Click **Add**
5. Click **Save Changes**



When you receive the item in **Serials Batch Receive** or from within Alternate Serial Control's **Batch Item Receive**, the routing list will print the user's address. For more information, see the chapter on Batch Receiving.



## Urban farm

v2:n2

(MAIN) Distribute to LAW / 383332

1. Reader: 383332 / Smith, Bryan Glenn (HOOD)  
9076 Relation Union  
Wagner, SD 57380  
USA  
9076 Relation Union  
Wagner, SD 57380  
USA

The default template can be configured to not include the user's mailing or billing address on the routing list. Libraries already using customized templates will not be affected.

# Creating a Caption and Pattern

The Captions and Patterns wizard allows you to enter caption and pattern data as it is described by the 853, 854, and 855 MARC tags. These tags allow you to define how issues will be captioned, and how often the library receives issues of the serial.

1. Open the Subscription Details.
2. Click the Captions and Patterns tab.
3. Click Add Caption and Pattern.
4. In the Type drop down box, select the MARC tag to which you would like to add data.
5. In the Pattern Code drop down box, you can enter a JSON representation of the 85X tag by hand, or you can click the Wizard to enter the information in a user-friendly format.
6. The Caption and Pattern that you create is Active by default, but you can deactivate a caption and pattern at a later time by unchecking the box.



A subscription may have multiple captions and patterns listed in the subscription details, but only one Caption and Pattern can be active at any time. If you want to add multiple patterns, e.g. for Basic and Supplement, Click Add Caption and Pattern.

## Use the Pattern Code Wizard

The Pattern Code Wizard enables you to create the caption of the item and add its publication information. The Wizard is composed of five pages of questions. You can use the Next and Previous navigation buttons in the top corners to flip between pages.

To add a pattern code, click Wizard.

### Page 1: Enumerations

The screenshot shows the 'Pattern Code Wizard' window. At the top, there is a title bar with 'Pattern Code Wizard' and a close button. Below the title bar is a dark blue header with 'Pattern Code Wizard' in orange text. The main area contains a 'Previous' button on the left and a 'Next' button on the right. A checkbox labeled 'Use enumerations?' is checked. Below it, a note states: '"v." and "no." are common first and second level enumeration captions.' There are three columns: 'Enumeration Caption', 'Units Per Higher Level', and 'Numbering Continuity'. Under 'Enumeration Caption', there is a text input field containing 'v.' and a 'Remove' button. Under 'Units Per Higher Level', there is a radio button selected for 'Number' with a text input field containing '4', and another radio button for 'Varies'. Under 'Numbering Continuity', there is a dropdown menu showing 'Restarts at unit completion' and a 'Remove' button. At the bottom, there are two buttons: 'Add Enumeration' and 'Add Alternate Enumeration'.

1. To add an enumeration, check the box adjacent to Use enumerations. The enumerations conform to \$a-\$h of the 853,854, and 855 MARC tags.
2. A field for the First level will appear. Enter the enumeration for the first level. A common first level enumeration is volume, or "v."
3. Click Add Enumeration.
4. A field for the Second level will appear. Enter the enumeration for the second level. A common first level enumeration is number, or "no."
5. Enter the number of bibliographic units per next higher level. This conforms to \$u in the 853, 854, and 855 MARC tags.
6. Choose the enumeration scheme from the drop down menu. This conforms to \$v in the 853, 854, and 855 MARC tags.



You can add up to six levels of enumeration.

7. Add Alternate Enumeration if desired.
8. When you have completed the enumerations, click Next.

## Page 2: Calendar

Pattern Code Wizard

**Pattern Code Wizard**

Previous Next

Use calendar changes?

*Identify any points during the year at which the highest level enumeration caption changes.*

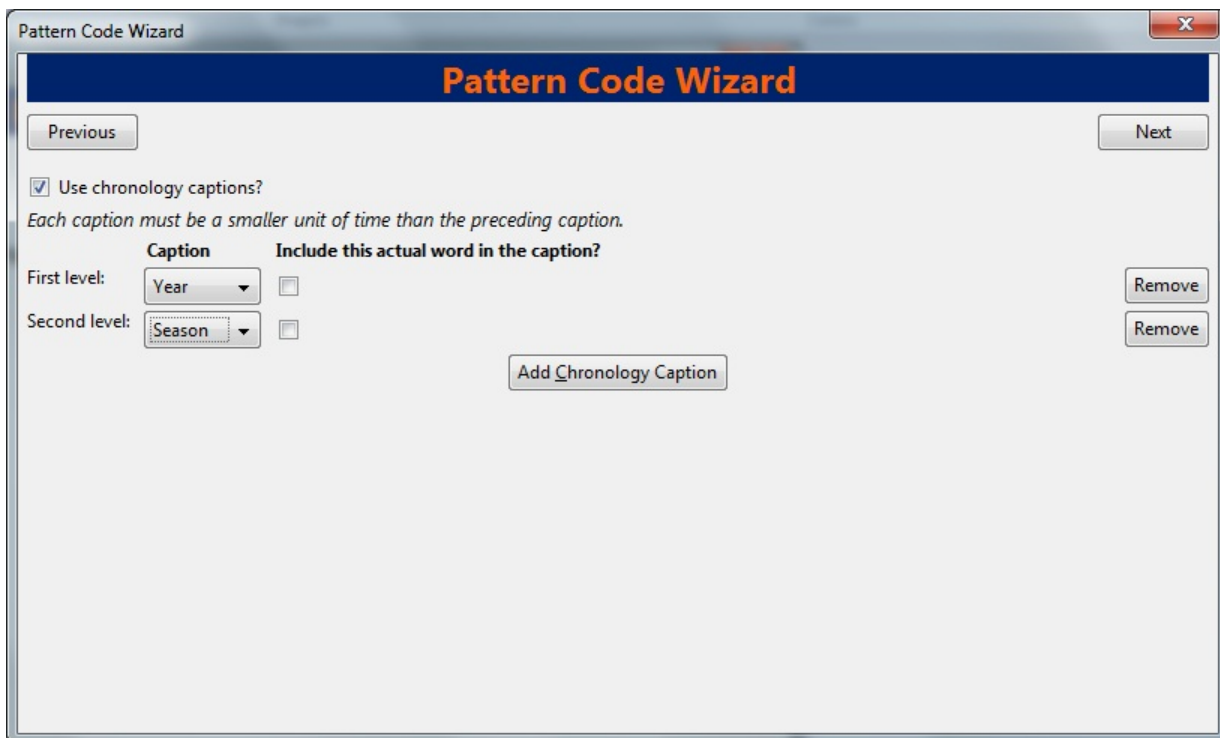
| Type                | Point |
|---------------------|-------|
| At start of a month | June  |

Add Calendar Change Remove

1. To use months, seasons, or dates in your caption, check the box adjacent to Use calendar changes.

2. Identify the point in the year at which the highest level enumeration caption changes.
3. In the Type drop down menu, select the points during the year at which you want the calendar to restart.
4. In the Point drop down menu, select the specific time at which you would like to change the calendar
5. To add another calendar change, click Add Calendar Change. There are no limits on the number of calendar changes that you can add.
6. When you have finished the calendar changes, click Next.

## Page 3: Chronology

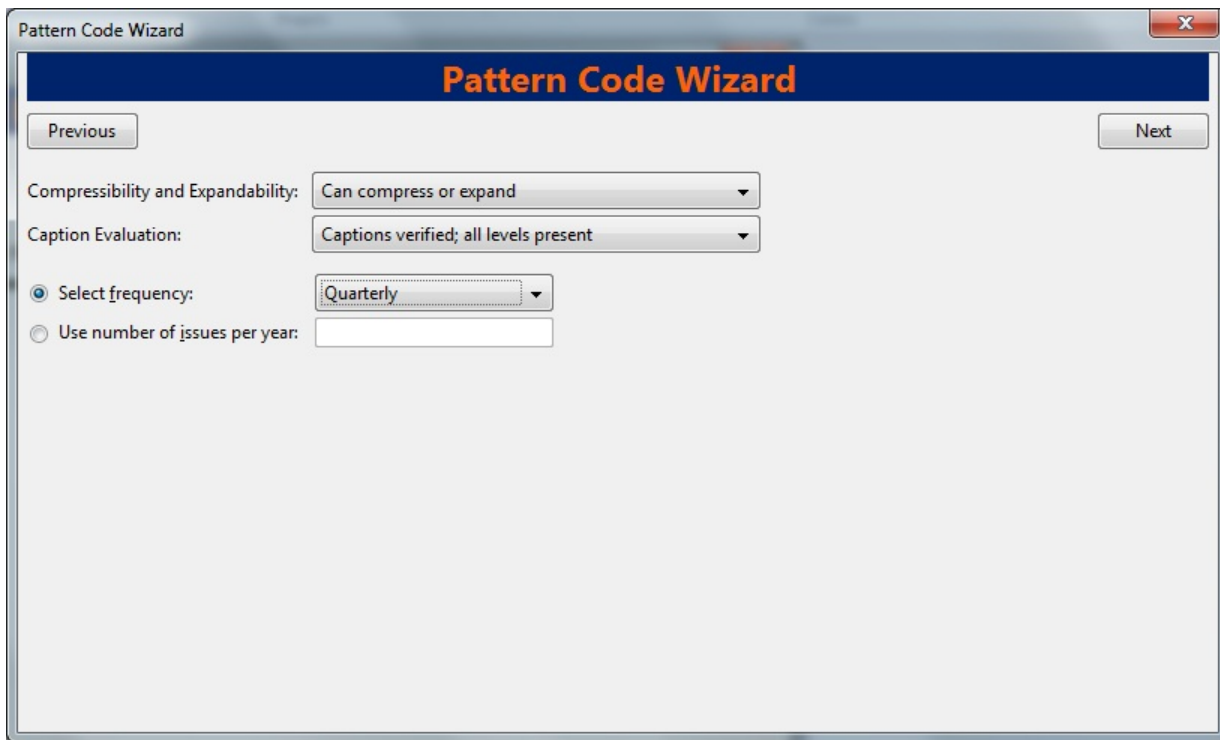


The screenshot shows a window titled "Pattern Code Wizard" with a blue header bar containing the text "Pattern Code Wizard" in orange. Below the header, there are "Previous" and "Next" buttons. A checked checkbox labeled "Use chronology captions?" is present, followed by the instruction "Each caption must be a smaller unit of time than the preceding caption." Below this, there is a table with two columns: "Caption" and "Include this actual word in the caption?". The first row shows "Year" in a dropdown menu and an unchecked checkbox. The second row shows "Season" in a dropdown menu and an unchecked checkbox. To the right of the table are two "Remove" buttons. At the bottom center, there is an "Add Chronology Caption" button.

|               | Caption | Include this actual word in the caption? |
|---------------|---------|--|
| First level:  | Year    | <input type="checkbox"/>                 |
| Second level: | Season  | <input type="checkbox"/>                 |

1. To add chronological units to the captions, check the box adjacent to Use chronology captions.
2. Choose a chronology for the first level. If you want to display the terms, "year" and "month" next to the chronology caption in the catalog, then check the box beneath Display in holding field.
3. To include additional levels of chronology, click Add Chronology Caption. Each level that you add must be smaller than the previous level.
4. After you have completed the chronology caption, click Next.

## Page 4: Compress and Expand Captions



The screenshot shows a dialog box titled "Pattern Code Wizard" with a close button (X) in the top right corner. The dialog has a blue header bar with the title "Pattern Code Wizard" in orange text. Below the header, there are two buttons: "Previous" on the left and "Next" on the right. The main area contains three rows of controls:

- Row 1: "Compressibility and Expandability:" followed by a dropdown menu showing "Can compress or expand".
- Row 2: "Caption Evaluation:" followed by a dropdown menu showing "Captions verified; all levels present".
- Row 3: "Select frequency:" with a radio button selected, followed by a dropdown menu showing "Quarterly".

Below the radio button for "Select frequency:", there is another radio button labeled "Use number of issues per year:" followed by an empty text input field.

1. Select the appropriate option for compressing or expanding your captions in the catalog from the compressibility and expandability drop down menu. The entries in the drop down menu correspond to the indicator codes and the subfield \$w in the 853 tag. Compressibility and expandability correspond to the first indicator in the 853 tag.
2. Choose the appropriate caption evaluation from the drop down menu.
3. Choose the frequency of your publication from the drop down menu. For irregular frequencies, you may wish to select use number of issues per year, and enter the total number of issues that you receive each year. However, recommended practice is that you use only regular frequencies. Planned development will create an additional step to aid in the creation of irregular frequencies.
4. Click Next.

## Page 5: Regularity Information

Pattern Code Wizard

Previous Next

Use specific regularity information (published, omitted, and/or combined issues)?

Omitted Season Spring X Add sub-row Remove whole row

Add More Regularity Information

1. If needed, check box for Use specific regularity information
2. Choose the appropriate information for combined, omitted or published issues
3. Choose the appropriate frequency and issue
4. Add additional rows as required

## Page 5: Finish Captions and Patterns

1. To complete the wizard, click Create Pattern Code.
2. Return to Subscription Details.
3. Confirm that the box adjacent to Active is checked. Click Save Changes. The row is now highlighted gray instead of orange.

## Creating an Issuance

The Issuances tab enables you to manually create an issue. Evergreen will use the initial issue that you manually create to predict future issues.

## Subscription Details

|         |               |                       |           |
|---------|---------------|-----------------------|-----------|
| Summary | Distributions | Captions and Patterns | Issuances |
|---------|---------------|-----------------------|-----------|

**Issuances**

[Back](#) [Next](#)

Subscription

Creator

Editor

Label

Date Published

Caption/Pattern

Holding Type

v.

i.

Holding Code Year

Season

1. Click the Issuances tab in the Subscription Details.
2. Click New Issuance.
3. The Subscription, Creator, and Editor fields contain subscription and user IDs, respectively. These fields are disabled because Evergreen automatically fills in these fields.
4. Enter a name for this issuance in the Label field. There are no limits on the number of characters that can be entered in this field. You may want to enter the month and year of the publication in hand.
5. Enter the Date Published of the issuance that you are editing. Recommended practice is that you select the date from the drop down calendar although you can manually enter a date. If you are creating one manual issue before automatically predicting more issues, then this date should be the date of the most current issue before the prediction starts.
6. Select a Caption/Pattern from the drop down menu. The numbers in the drop down menu correspond to the IDs of the caption/patterns that you created.
7. The Holding Type appears by default and corresponds to the Type that you selected when you created the Caption/Pattern.
8. In the holding code area of the New Issuance dialog, click Wizard. The Wizard enables you to add holdings information.



9. Enter the volume of the item in hand in the v. field.
10. Enter the number of the item in hand in the no. field.
11. Enter the year of publication in the Year field.
12. Enter the month of publication in the Month field if applicable. You must enter the calendar number of the month rather than the name of the month. For example, enter 12 if the item in hand was published in December.
13. Enter the day of publication in the day field if applicable.
14. Click Compile to generate the holdings code.

## Generate Item Predictions

After you manually create the first issue, Evergreen will predict future issuances. Use the Generate Predictions functionality to predict future issues.

1. Click **Subscription Details # Issuances # Generate Predictions**.
2. Choose the length of time for which you want to predict issues. If you select the radio button to predict until end of subscription, then Evergreen will predict issues until the end date that you created when you created the subscription. See [creating a subscription](#) for more information. If you do not have an end date, select the radio button to predict a certain number of issuances, and enter a number in the field.
3. Click Generate.
4. Evergreen will predict a run of issuances and copies. The prediction will appear in a list.
5. You can delete the first, manual issuance by clicking the check box adjacent to the issuance and clicking Delete Selected.

# Chapter 87. Edit Subscriptions

Subscriptions can be edited to change the caption and pattern and other information.

## Serials Control View

1. To access Serial Control View, open a serials record, and click **Actions for this Record # Serial Control**. This opens the Subscriptions interface
2. Click the subscriptions tab
3. Click on the appropriate link to edit

## Alternate Serials Control View

1. To access Alternate Serial Control View, open a serials record, and click **Actions for this Record # Alternate Serial Control**. This opens the Subscriptions interface
2. Click the hyperlinked ID number to edit the subscription.
3. Click on the appropriate tab to edit the information

# Chapter 88. Receiving

You can receive either through the Serials Control View or in Batch Receive with the simple or advanced interface.

## Serials Control View Receiving

**Record Summary ( Add Volumes ) ( View MARC )**

Title: Africana library journal      Edition:      TCN: 3      Created By: admin  
Author:      Pub Date: 1970      Database ID: 3      Last Edited By: admin  
Bib Call #: Z3503.A37      Record Owner:      Last Edited On: 10/4/1

Start    Previous    Next    End    Search Results

**Serial Control**

Items    Units    Distributions    Subscriptions    Claims

Subscriber: BR1    Example Branch 1    Mode:  Receive     Adv. Receive     Bind     Show All    Refresh    Actions

| # | Item ID | Issuance Label | Distribution  | Holder | Stream ID | Date Published | Date Expected | Date Received | Notes (Item/Dist/Sub) | Call Number | Unit ID / Contents | Date |
|---|---------|----------------|---------------|--------|-----------|----------------|---------------|---------------|-----------------------|-------------|--------------------|------|
| 1 | 11      | (2013:Sep.23)  | New Period... | BR1    | 1         | 2013-09-23     | 2013-09-23    |               | 0 / 1 / 1             |             |                    | 201  |
| 2 | 12      | (2013:Sep.30)  | New Period... | BR1    | 1         | 2013-09-30     | 2013-09-30    |               | 3 / 1 / 1             |             |                    | 201  |
| 3 | 13      | (2013:Oct.07)  | New Period... | BR1    | 1         | 2013-10-07     | 2013-10-09    |               | 0 / 1 / 1             |             |                    | 201  |
| 4 | 14      | (2013:Oct.14)  | New Period... | BR1    | 1         | 2013-10-14     | 2013-10-16    |               | 0 / 1 / 1             |             |                    | 201  |
| 5 | 15      | (2013:Oct.21)  | New Period... | BR1    | 1         | 2013-10-21     | 2013-10-23    |               | 0 / 1 / 1             |             |                    | 201  |
| 6 | 16      | (2013:Oct.28)  | New Period... | BR1    | 1         | 2013-10-28     | 2013-10-30    |               | 0 / 1 / 1             |             |                    | 201  |
| 7 | 17      | (2013:Nov.04)  | New Period... | BR1    | 1         | 2013-11-04     | 2013-11-06    |               | 0 / 1 / 1             |             |                    | 201  |
| 8 | 18      | (2013:Nov.11)  | New Period... | BR1    | 1         | 2013-11-11     | 2013-11-13    |               | 0 / 1 / 1             |             |                    | 201  |
| 9 | 19      | (2013:Nov.18)  | New Period... | BR1    | 1         | 2013-11-18     | 2013-11-20    |               | 0 / 1 / 1             |             |                    | 201  |

Showing: Recently Received    0 Alerts    **Receive**

Current Working Unit: \*\*Auto per Item\*\*

| # | Item ID | Issuance Label | Distribution  | Holder | Stream ID | Date Published | Date Expected | Date Received | Notes (Item/Dist/Sub) | Call Number | Unit ID / Contents | Date |
|---|---------|----------------|---------------|--------|-----------|----------------|---------------|---------------|-----------------------|-------------|--------------------|------|
| 1 | 10      | (2013:Sep.16)  | New Period... | BR1    | 1         | 2013-09-16     | 2013-09-16    | 2013-10-04    | 0 / 1 / 1             | 11111       | [11] (2013:Sep.16) | 201  |
| 2 | 9       | (2013:Sep.09)  | New Period... | BR1    | 1         | 2013-09-09     | 2013-09-09    | 2013-09-30    | 0 / 1 / 1             | 11111       | [6] (2013:Sep.09)  | 201  |

1. To receive items, click the **Receive** radio button. In the top pane, the items that have yet to be received are displayed. In the bottom pane, recently received items are displayed with the most recent at the top.
2. Select the branch that will receive the items from the drop down box.
3. Select the item that you want to receive.
4. Select the current working unit. Click **Set Current Unit**, located in the lower right corner of the screen. A drop down menu will appear.
  - If you want to barcode each item individually, select **Auto per item**. This setting is recommended for most receiving processes.

- If you want each item within a unit to share the same barcode, then select **New Unit**. This setting is advised for most binding processes.
- If you want the item to be received or bound into an existing item, select **Recent** and select the desired item from the menu. To make a change in bound items, receive or bind the items into an already existing unit.

5. Click **Receive/Move Selected**.

6. Enter a barcode and call number if prompted to do so.

7. A message confirming receipt of the item appears. Click **OK**.

8. The screen refreshes. Now the item has moved from the top pane to the bottom pane. (If you have checked "Show all", the item also remains in the top pane, with a received date added to it.) In the bottom pane, the item that you have just received is now at the top of the list of the received items.

After receiving items, you can view the updated holdings in the OPAC.

## Notes in the Receiving Interface

The screenshot displays the library's receiving interface. At the top, there is a navigation bar with options like 'Check Out', 'Check In', 'Search Catalog', 'Item Status', 'Patron Search', and 'Patron Registration'. Below this, a 'Record Summary' for 'Africana library journal' is shown, including details like 'Edition: 1970', 'TCN: 3', and 'Database ID: 3'. A 'Serial Control' section is active, showing a table of items with columns for Item ID, Issuance Label, Distribution, Holder, Stream ID, Date Published, Date Expected, Date Received, Notes, Call Number, and Unit ID. A 'Serial Alerts' dialog box is overlaid on the table, listing three alert types: 'Item Notes -- (ID 12)', 'Distribution Notes -- New Periodicals -- BR1 (ID 1)', and 'Subscription Notes -- BR1 (ID 1)'. Each alert has a 'Sample' note, a date, a privacy setting (Private or Public), and 'Edit' and 'Delete' buttons. A '3 Alerts' notification badge is located in the bottom right corner of the interface.

The total number of notes for each item is displayed in the "Notes" column in the Items tab. The column header says "Notes (Item/Dist/Sub)" to explain how the numbers are organized in the column: First is the total number of Item Notes on that item, second is the number of Distribution Notes for that item's distribution, and last is the number of Subscription Notes on that item's subscription. To view and modify any of these notes, right-click on an item and click **View Sub. Notes**, **View Dist. Notes** or **View Item Notes**.

## Serial Alerts At Receive Time

In the Serial Control View, you can now flag a note as an "alert" to make it more visible on the receiving interface. This flag is available as a checkbox on subscription, distribution and item notes. The new **Alerts** button on the Items tab displays the number of alert notes that are available for the selected items, and clicking this button opens a window which displays all applicable alert notes, sorted by type. Notes can also be edited or deleted from this window.

## Set Special Statuses

The screenshot shows the Serial Control interface for a record titled "Africana library journal". The interface includes a menu bar (File, Edit, Search, Circulation, Cataloging, Acquisitions, Booking) and a toolbar with buttons for Check Out, Check In, Search Catalog, Item Status, Patron Search, and Patron Registration. Below the toolbar, there are buttons for Start, Previous, Next, End, and Search Results. The main area is titled "Serial Control" and has tabs for Items, Units, Distributions, Subscriptions, and Claims. The "Items" tab is active, showing a table of serial items. The table has columns for #, Item ID, Issuance Label, Distribution, Holder, Stream ID, Date Published, Date Expected, Date Received, Notes (Item/Dist/Sub), Call Number, and Unit ID / Contents. Item 6 is selected, and a context menu is open over it. The menu options are: Edit Item Attributes, Reset Items to Expected, Claim Item, Set 'Not Published', Set 'Not Held', Delete Items, View Item Notes, View Dist. Notes, and View Sub. Notes. The "Claim Item", "Set 'Not Published'", and "Set 'Not Held'" options are highlighted with a red box. Below the table, there are buttons for "0 Alerts" and "Receive".

| # | Item ID | Issuance Label | Distribution  | Holder | Stream ID | Date Published | Date Expected | Date Received | Notes (Item/Dist/Sub) | Call Number | Unit ID / Contents | Date       |
|---|---------|----------------|---------------|--------|-----------|----------------|---------------|---------------|-----------------------|-------------|--------------------|------------|
| 1 | 9       | (2013:Sep.09)  | New Period... | BR1    | 1         | 2013-09-09     | 2013-09-09    | 2013-09-30    | 0 / 1 / 1             | 11111       | [6] (2013:Sep.09)  | 2013-09-30 |
| 2 | 10      | (2013:Sep.16)  | New Period... | BR1    | 1         | 2013-09-16     | 2013-09-16    | 2013-10-04    | 0 / 1 / 1             | 11111       | [11] (2013:Sep.16) | 2013-09-16 |
| 3 | 11      | (2013:Sep.23)  | New Period... | BR1    | 1         | 2013-09-23     | 2013-09-23    |               | 0 / 1 / 1             |             |                    | 2013-09-23 |
| 4 | 12      | (2013:Sep.30)  | New Period... | BR1    | 1         | 2013-09-30     | 2013-09-30    |               | 3 / 1 / 1             |             |                    | 2013-09-30 |
| 5 | 13      | (2013:Oct.07)  | New Period... | BR1    | 1         | 2013-10-07     | 2013-10-09    |               | 0 / 1 / 1             |             |                    | 2013-10-09 |
| 6 | 14      | (2013:Oct.14)  | New Period... | BR1    | 1         | 2013-10-14     | 2013-10-16    |               | 0 / 1 / 1             |             |                    | 2013-10-16 |
| 7 | 15      | (2013:Oct.21)  | New Period... | BR1    | 1         | 2013-10-21     | 2013-10-23    |               |                       |             |                    | 2013-10-23 |
| 8 | 16      | (2013:Oct.28)  | New Period... | BR1    | 1         | 2013-10-28     | 2013-10-30    |               |                       |             |                    | 2013-10-30 |
| 9 | 17      | (2013:Nov.04)  | New Period... | BR1    | 1         | 2013-11-04     | 2013-11-06    |               |                       |             |                    | 2013-11-06 |

The Serial Control interface prevents direct editing of serial item statuses for data integrity reasons. As an alternative to direct control, the interface offers menu options for setting items to *claimed*, *not held*, and *not published*. Note that these statuses are still currently useful for reporting and display purposes only. The *claimed* status changes the

display but does not yet connect with the Acquisitions module in any way. Also note that, once you set an item to *not held* or *not published*, that item will be hidden from the list unless you check the **Show All** checkbox.

## Batch Receiving

You can batch receive items through a simple or an advanced interface. The simple interface does not allow you to add barcodes or use the copy template. These items are also not visible in the OPAC. The advanced interface enables you to use the copy templates that you created, add barcodes, and make items OPAC visible and holdable.

You can access both Batch Receive interfaces from two locations in the ILS. From the Subscription Details screen, you can click **Batch Item Receive**. You can also access these interfaces by opening the catalog record for the serial, and clicking **Actions for this Record # Serials Batch Receive**.

## Simple Batch Receiving

Follow these steps to receive items in batch in a simple interface.

Title: The journal of American history  
Author: Organization of American Historians  
Fulfilling Subscription: 8: (BOYLSTON) 3/1/12 -  
Issuance: v.99:i.3(2012:Autumn)

| Org Unit | Note | Routing List                        | Receive?                            |
|----------|------|-------------------------------------|-------------------------------------|
|          |      | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| BOYLSTON |      | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

Apply

Receive Selected Items

1. The Batch Receive interface displays issues that have not yet been received. The earliest expected issue appears at the top of the list.
2. In the right lower corner, you see a check box to **Create Units for Received Items**. If you do not check this box, then you will receive items in simple mode.
3. Click **Next**.
4. In simple mode, the distributions that you created are displayed. They are marked received by default. If you hover over the branch name, you can view the name of the distribution and its stream.
5. You can receive and add a note to each item individually, or you can perform these actions on all of the distributions and streams at once. To do so, look above the line, and enter the note that you want to apply to all copies and confirm that the box to **Receive** is checked.
6. Click **Apply**. The note should appear in the note field in each distribution.
7. Then click **Receive Selected Items**.
8. The received items are cleared from the screen.

# Advanced Batch Receiving

Follow these steps to receive items in batch in a simple interface.

Title: The journal of American history  
Author: Organization of American Historians  
Fulfilling Subscription: 8: (BOYLSTON) 3/1/12 -  
Issuance: v.99:i.3(2012:Autumn)

| Org Unit | Note                 | Routing List                        | Receive?                            |
|----------|----------------------|-------------------------------------|-------------------------------------|
|          | <input type="text"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| BOYLSTON | <input type="text"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

Apply

Receive Selected Items

1. The Batch Receive interface displays issues that have not yet been received. The earliest expected issue appears at the top of the list.
2. If you want to barcode each copy, display it in the catalog, and make it holdable, then check the box adjacent to **Create Units for Received Items** in the lower right side of the screen.
3. This will allow you to utilize the copy templates and input additional information about the copy:
4. Barcode - You can scan printed barcodes into the barcode field for each copy, or you can allow the system to auto-generate barcodes. To auto-generate barcodes, check the box adjacent to **Auto-generate**, and enter the first barcode into the barcode field in the first row of the table. Then press the **Tab** key. The remaining barcode fields will automatically populate with the next barcodes in sequence, including check digits.
5. Circ Modifiers - The circ modifiers drop down menu is populated with the circulation modifiers that you created in **Admin # Server Administration # Circulation Modifiers**. If you entered a circ modifier in the copy template that you created for this subscription, then it will appear by default in the distributions.
6. Call Number - Enter a call number. Any item with a barcode must also have a call number.
7. Note - Add a note. There are no limits on the number of characters that can be entered in this field. The note only displays in this screen.
8. Copy Location - The copy location drop down menu is populated with the copy locations that you created in **Admin # Local Administration # Copy Location Editor**. If you entered a copy location in the copy template that you created for this subscription, then it will appear by default in the distributions.
9. Price - If you entered a price in the copy template that you created for this subscription, then it will appear by default in the distributions. You can also manually enter a price if you did not include one in the copy template.
10. Receive - The boxes in the Receive column are checked by default. Uncheck the box if you do not want to receive the item. Evergreen will retain the unreceived copies and will allow you to receive them at a later time.
11. When you are ready to receive the items, click **Receive Selected Items**.
12. The items that have been received are cleared from the Batch Receive interface. The remaining disabled item is an unreceived item.

13.If the items that you received have a barcode, a copy template that was set to OPAC Visible, and are assigned a shelving location that is OPAC Visible, then you can view the received items in the catalog. Notice that the Holdings Summary has been updated to reflect the most recent addition to the holdings.

## Duplicate Barcode Alert

Evergreen will now display an alert if a duplicate barcode is entered in the Serials Batch Receive interface. If a staff member enters a barcode that already exists in the database while receiving new serials items in the Serials Batch Receive interface, an alert message will pop up letting the staff member know that the barcode is a duplicate. After the staff member clicks OK to clear the alert, he or she can enter a new barcode.

The screenshot displays the 'Batch Receive' interface. At the top, the title 'Batch Receive' is shown in orange. Below the title, the following information is displayed: Title: Time, Author: Hadden, Briton, Fulfilling Subscription: 2: (BR1) 3/31/14 - Issuance: Vol.183:No.14(2014:Apr.14). The main area contains a table with columns: Org Unit, Barcode, Circ Modifier, Call Number, Note, Copy Location, Price, Routing List, and Receive?. A 'Receive Selected Items' button is located below the table. A modal dialog box titled '[JavaScript Application]' is overlaid on the interface, displaying a warning icon and the message: 'Serial unit barcode '12345' collides with an existing barcode.' An 'OK' button is present at the bottom of the dialog box.

| Org Unit | Barcode | Circ Modifier           | Call Number   | Note | Copy Location | Price | Routing List                        | Receive?                            |
|----------|---------|-------------------------|---------------|------|---------------|-------|-------------------------------------|-------------------------------------|
| BR1      | 12345   | SER : Serials : Serials | 2014 April 14 |      | Stacks        |       | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |



# Chapter 89. Special Issues

Currently, creating a special issue can only be done through the Alternate Serials Control View.

1. Create an issuance in the Serials Control View or the Alternate Serials Control View
2. In the Alternate Serials Control View, click on the name of your special issue in the list of issuances.
3. Click the New Items button
4. Enter the appropriate information
5. The item is now ready to receive. If you complete the Date Received field and change the status to received then it will receive the issue but it won't create the associated copy record whereas if you leave it blank and receive the item through the Serials Control View or Batch Receive function you can create the Copy Record at that time.

# Chapter 90. Holdings

## System Generated Holdings Statement

As issues are received, Evergreen creates a holding statement in the OPAC based on what is set up in the Caption and Patterns of the subscription. The systems generated holdings can only be edited by changing caption and pattern information and there is no ability to edit the statement as free text.

## MARC Format for Holdings Display (MFHD)

Evergreen users can create, edit and delete their own MFHD.

### Create an MFHD record

1. Open a serial record, and in the bottom right corner above the copy information, click **Add MFHD Record**. You can also add the MFHD statement by clicking **Actions for this Record # MFHD Holdings # Add MFHD Record**.
2. A message will confirm that you have created the MFHD Record. Click **OK**.
3. Click **Reload** in the top left corner of the record.
4. The Holdings Summary will appear. Click **Edit Holdings** in the right corner.
5. Click **Edit Record**.
6. The MFHD window will pop up. Enter holdings information. Click **Save MFHD**.
7. Close the MFHD window.
8. Click **Reload** in the top left corner of the record. The Holdings Summary will reflect the changes to the MFHD statement.

### Edit a MFHD record

1. Open a serial record, click **Actions for this Record # MFHD Record # Edit MFHD Record** and select the appropriate MFHD.
2. Edit the MFHD
3. Click **Save MFHD**

### Delete a MFHD Record

1. Open a serial record, click **Actions for this Record # MFHD Record # Delete MFHD Record** and select the appropriate MFHD.
2. Click to confirm the deletion of the MFHD

# Chapter 91. Group Serials Issues in the Template Toolkit OPAC

In previous versions of Evergreen, issues of serials displayed in a list ordered by publication date. The list could be lengthy if the library had extensive holdings of a serial. Using the Template Toolkit OPAC that is available in version 2.2, you can group issues of serials in the OPAC by chronology or enumeration. For example, you might group issues by date published or by volume. Users can expand these hyperlinked groups to view holdings of specific issues. The result is a clean, easy-to-navigate interface for viewing holdings of serials with a large quantity of issues.



This feature is only available in the Template Toolkit OPAC.

## Administration

Enable the following organizational unit settings to use this feature:

1. Click **Admin # Local Administration # Library Settings Editor**.
2. Search or scroll to find **Serials: Default display grouping for serials distributions presented in the OPAC**.
3. Click **Edit**.
4. Enter **enum** to display issues by enumeration, or enter **chron** to display issues in chronological order. This value will become your default setting for display issues in the OPAC.
5. Click **Update Setting**.
6. Search or scroll to find **OPAC: Use fully compressed serials holdings**.
7. Select the value, **True**, to view a compressed holdings statement.
8. Click **Update Setting**.

## Displaying Issues in the OPAC

Your library system has a subscription to the periodical, *Bon Appetit*. The serials librarian has determined that the issues at the Forest Falls branch should display in the OPAC by month and year. The issues at the McKinley branch should display by volume and number. The serials librarian will create two distributions for the serial that will include these groupings.

1. Retrieve the bibliographic record for the serial, and click **Actions for this Record # Alternate Serial Control**.
2. Create a **New Subscription** or click on the hyperlinked ID of an existing subscription.
3. Click **New Distribution**.

4. Create a label to identify the distribution.
5. Select the holding library from the drop down menu that will own physical copies of the issues.
6. Select a display grouping. Select **chronology** from the drop down menu.
7. Select a template from the drop down menu to receive copies.
8. Click **Save**.

**Subscription Details**

Summary | Distributions | Captions and Patterns | Issuances

**Distributions**

[Back](#) [Next](#)

| ✓ | # | Label |
|---|---|-------|
|   |   |       |

|   |  |
|---|--|
| Subscription  | <input type="text" value="9"/>                             |
| Label   | <input type="text" value="Issues to Forest Falls Branch"/> |
| Holding Lib   | <input type="text" value="FOREST FALLS"/>                  |
| Display Grouping  | <input type="text" value="Chronology"/>                    |
| Receive Unit Template   | <input type="text" value="New Periodicals"/>               |
| Summary Method  | <input type="text"/>                                       |
| Unit Label Prefix   | <input type="text"/>                                       |
| Unit Label Suffix   | <input type="text"/>                                       |
| <input type="button" value="Cancel"/> <input type="button" value="Save"/> |  |

9. Click **New Distribution** and repeat the process to send issues to the McKinley Branch. Choose **enumeration** in the **Display Grouping** field to display issues by volume and number.
10. Complete the creation of your subscription.
11. Retrieve the record from the catalog.
12. Scroll down to and click the **Issues Held** link. The issues label for each branch appears.
13. Click the hyperlinked issues label.

The issues owned by the Forest Falls branch are grouped by chronology:

[Check Out](#) | [Check In](#) | [Search Catalog](#) | [Item Status](#) | [Patron Search](#) | [Patron Registration](#)

1 Bib Record: 2688 +

---

**Record Summary** ( [Add Volumes](#) ) ( [View MARC](#) )

**Title:** Martha Stewart living **Edition:** 268  
**Author:** Stewart, Martha. **Pub Date:** 1990  
**Bib Call #:** 640/5 **Database ID:** 268  
**Record Owner:**

Record 2 of 2    [Start](#)    [Previous](#)    [Next](#)    [End](#)    [Search Results](#)

[Go Back](#)    [Reload](#)    [Go Forward](#)

[AWARDS, REVIEWS, & SUGGESTED READS](#)  
[ISSUES HELD](#)

Silva Consortium  
 Sierra Public Library System  
 McKinley Grove Public Library  
   ▶ [v.50: no.2\(2012:Feb.\) - v.51: no.3\(2013:Mar.\)](#)  
 Forest Falls Public Library  
   ▼ [v.50: no.2\(2012:Feb.\) - v.51: no.3\(2013:Mar.\)](#)

| ISSUE LABEL           | CALL NUMBER | BARCODE                       | SHELVING LOCATION | AGE HOLD PROTECTION | CREATE DATE | HOLDING |
|-----------------------|-------------|-------------------------------|-------------------|---------------------|-------------|---------|
| v.51: no.1(2013:Jan.) | PER         | <a href="#">300023983289</a>  | Periodicals       | None                | 05/11/2012  | Place o |
| v.51: no.2(2013:Feb.) | PER         | <a href="#">30030439498</a>   | Periodicals       | None                | 05/11/2012  | Place o |
| v.51: no.3(2013:Mar.) | PER         | <a href="#">3000238398389</a> | Periodicals       | None                | 05/11/2012  | Place o |

▶ [2012](#)

[SHELF BROWSER](#)

The issues owned by the McKinley branch are grouped by enumeration:

1 Bib Record: 2688 +

Record Summary ( [Add Volumes](#) ) ( [View MARC](#) )

**Title:** Martha Stewart living  
**Author:** Stewart, Martha.  
**Bib Call #:** 640/5

**Edition:**  
**Pub Date:** 1990

**TCN:** 268  
**Database ID:** 268  
**Record Owner:**

Record 2 of 2

[Start](#) | 
 [Previous](#) | 
 [Next](#) | 
 [End](#) | 
 [Search Results](#)

[Go Back](#) | 
 [Reload](#) | 
 [Go Forward](#)

**Subject:** [Home economics](#) > [Periodicals](#).

[AWARDS, REVIEWS, & SUGGESTED READS](#)

[ISSUES HELD](#)

Silva Consortium  
 Sierra Public Library System  
 McKinley Grove Public Library  
 ▼ [v.50: no.2\(2012:Feb.\) - v.51: no.3\(2013:Mar.\)](#)

▼ [v. 51](#)

| ISSUE LABEL           | CALL NUMBER | BARCODE                        | SHELVING LOCATION | AGE HOLD PROTECTION | CREATE DATE | HOLD  |
|-----------------------|-------------|--------------------------------|-------------------|---------------------|-------------|-------|
| v.51: no.1(2013:Jan.) | PER         | <a href="#">300023983290</a>   | Periodicals       | None                | 05/11/2012  | Place |
| v.51: no.2(2013:Feb.) | PER         | <a href="#">30030439499</a>    | Periodicals       | None                | 05/11/2012  | Place |
| v.51: no.3(2013:Mar.) | PER         | <a href="#">30002383983905</a> | Periodicals       | None                | 05/11/2012  | Place |

▶ [v. 50](#)

Forest Hills Public Library  
 ▶ [v.50: no.2\(2012:Feb.\) - v.51: no.3\(2013:Mar.\)](#)

# Part XI. Circulation

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# Chapter 92. Introduction

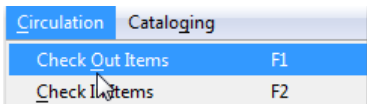
Use this section for understanding the circulation procedures in the Evergreen system.

# Chapter 93. Circulating Items

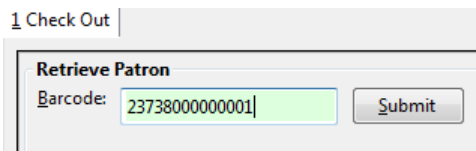
## Check Out (F1)

### Regular Items

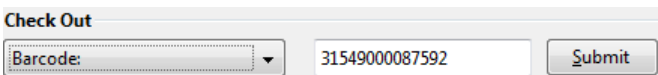
1) To check out an item press **F1**, click **Check Out** on the Circulation toolbar, or select **Circulation # Check Out Items**.



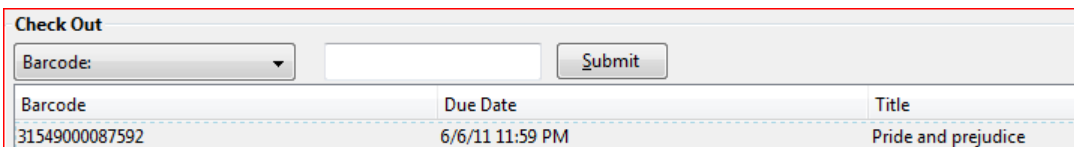
2) Scan or enter patron's barcode and click **Submit** if entering barcode manually. If scanning, number is submitted automatically.



3) Scan or enter item barcode manually, clicking **Submit** if manual.



4) Due date is now displayed.



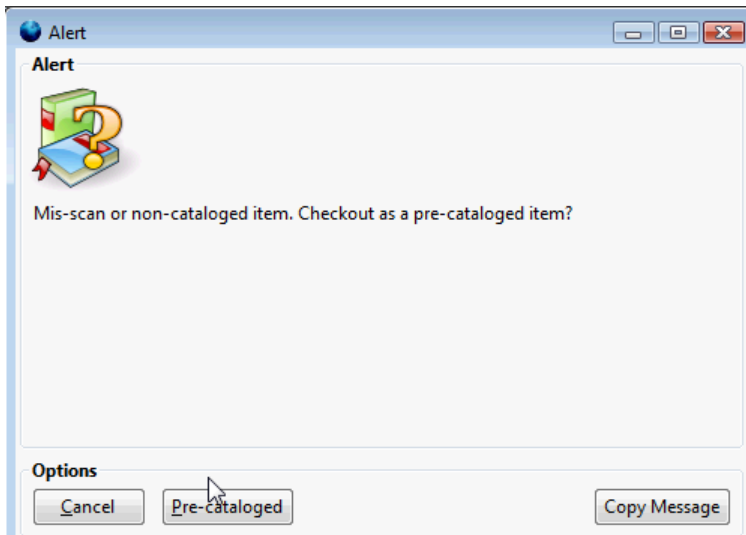
5) When all items are scanned, hit the **F1** key or click the **Check Out** button on the Circulation toolbar to generate slip receipt or to exit patron record if not printing slip receipts.

### Pre-cataloged Items

1) Go to patron's **Check Out** screen by clicking **Circulation # Check Out Items**.

2) Scan the item barcode.

3) At prompt, click **Pre-Cataloged**.



4) Enter required information and click **Check Out**.

**Pre-Catalog Field Entry**


Title: Ghosts of Massachusetts

Author: Standish, Myles

ISBN: 123456789123

Circ Modifier: <Unset>

Buttons: Cancel, Check Out

 On check-in, Evergreen will prompt staff to re-route the item to cataloging.

## Due Dates

Circulation periods are pre-set. When items are checked out, due dates are automatically calculated and inserted into circulation records if the **Specific Due Date** checkbox is not selected on the Check Out screen. The **Specific Due Date** checkbox allows you to set a different due date to override the pre-set loan period.

Before you scan the item, select the **Specific Due Date** checkbox. Use the calendar widget to select a date. Or click in day, month or year, then use the up or down arrows to make the change or simply delete the data, then enter again. Time is used for hourly loan only. This date applies to all items until you change the date, de-select the **Specific Due Date** checkbox, or quit the patron record.

**Check Out**

Barcode: [dropdown] [input] [Submit]  Specific Due Date 05/ 16/ 2011

| Barcode | Due Date | Title |
|---------|----------|-------|
|         |          |       |

May 2011

|    |    |    |    |    |    |
|----|----|----|----|----|----|
| S  | M  | T  | W  | T  | F  |
| 1  | 2  | 3  | 4  | 5  | 6  |
| 8  | 9  | 10 | 11 | 12 | 13 |
| 15 | 16 | 17 | 18 | 19 | 20 |
| 22 | 23 | 24 | 25 | 26 | 27 |
| 29 | 30 | 31 |    |    |    |

Check Out

Barcode:    Specific Due Date 06/16/2011

# Check In (F2)

## Regular check in

1) To check in an item, select **Circulation # Check In Items**, click **Check In** on the Circulation toolbar, or press **F2**.

| Circulation          | Cataloging |
|----------------------|------------|
| Check Out Items      | F1         |
| Check In Items       | F2         |
| Register Patron      | Shift+F1   |
| Retrieve Last Patron | F8         |

2) Scan item barcode or enter manually and click **Submit**.

1 Item Check In 2 Bib Record: 307881

**Check In or Process Item**  
**Auto-Print Hold and Transit Slips**

Check In

Enter Barcode: 32114000771270  Effective Date: 05/19/2011

| Alert Message | Balance Owed | Barcode | Bill # | Checkin Date | Family Name | Finish | Location | Route To |
|---------------|--------------|---------|--------|--------------|-------------|--------|----------|----------|
|---------------|--------------|---------|--------|--------------|-------------|--------|----------|----------|

3) If there is an overdue fine associated with the checkin, an alert will appear at the top of the screen with a fine tally for the current checkin session. To immediately handle fine payment, click the alert to jump to the patron's bill record.

Transaction for 333001 billable \$2.10 Fine Tally: \$2.10

| Alert Message | Balance Owed | Barcode | Bill # | Checkin Date    | Family Name |
|---------------|--------------|---------|--------|-----------------|-------------|
|               | 2.10         | 333001  | 8      | 5/19/11 4:28 PM | Lussier     |

## Backdated check in

This is useful for clearing a book drop.

1) To change effective check-in date, select **Circulation # Check In Items**, or press **F2**. Use the calendar widget to choose the effective date.

Check In

Enter Barcode:   Effective Date: 05/19/2011 | Alert Message | Balance Owed | Barcode | Bill # | Checkin Date | Family Name | Finish |
| --- | --- | --- | --- | --- | --- | --- |

May 2011

| S  | M  | T  | W  | T  | F  | S  |
|----|----|----|----|----|----|----|
| 1  | 2  | 3  | 4  | 5  | 6  | 7  |
| 8  | 9  | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 |    |    |    |    |

2) The top green bar changes to red. The new effective date is now displayed in the header.

**Backdated 2011-05-16 Check In**

Check In  
Enter Barcode:  Submit Effective Date: 05/ 16/ 2011

| Alert Message | Balance Owed | Barcode | Bill # | Checkin Date | Family Name | Finish | Location | Route To |
|---------------|--------------|---------|--------|--------------|-------------|--------|----------|----------|
|               |              |         |        |              |             |        |          |          |

3) Move the cursor to the **Barcode** field. Scan the items. When finishing backdated check-in, change the **Effective Date** back to today's date.

## Backdate Post-Checkin

After an item has been checked in, you may use the Backdate Post-Checkin function to backdate the check-in date.

1) Select the item on the Check In screen, click Actions for Selected Items # Backdate Post-Checkin.

Check In  
Enter Barcode:  Submit Effective Date: 05/ 19/ 2011

32114001901769 was already checked in.

| Alert Message          | Balance Owed | Barcode | Bill # | Checkin Date | Family Name | Finish | Location | Route To | Start |
|------------------------|--------------|---------|--------|--------------|-------------|--------|----------|----------|-------|
| b1 was either mis-s... |              | b1      |        |              |             |        | Stacks   | Stacks   |       |

Actions for Selected Items # Backdate Post-Checkin

2) Use the calendar widget to select an effective check-in date. Click Apply. Overdue fines, if any, will be adjusted according to the new effective check-in date.

Cancel Hold

**Backdate** Backdate Already-Checked-In Circulation

Number of circulations selected: 1

Effective Date: 05/ 19/ 2011 Cancel Apply

 Checkin Modifiers

At the right bottom corner there is a **Checkin Modifiers** pop-up list. The options are:

- Ignore Pre-cat Items: no prompt when checking in a pre-cat item. Item will be routed to Cataloging with Cataloging status.
- Suppress Holds and Transit: item will not be used to fill holds or sent in transit. Item has Reshelving status.
- Amnesty Mode/Forgive Fines: overdue fines will be voided if already created or not be inserted if not yet created (e.g. hourly loans).
- Auto-Print Hold and Transit Slips: slips will be automatically printed without prompt for confirmation.

These options may be selected simultaneously. The selected option is displayed in the header area.

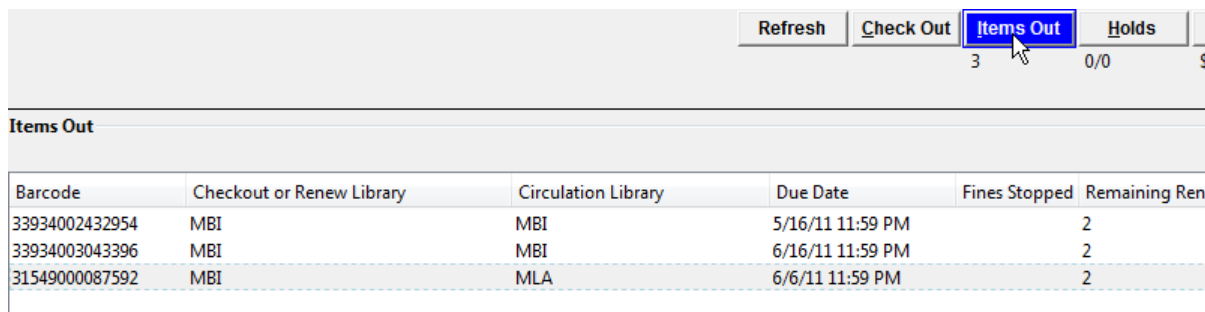


## Renewal and Editing the Item's Due Date

Checked-out items can be renewed if your library's policy allows it. The new due date is calculated from the renewal date. Existing loans can also be extended to a specific date by editing the due date or renewing with a specific due date.

### Renewing via a Patron's Account

1) Retrieve the patron record and go to the **Items Out** screen.



| Barcode        | Checkout or Renew Library | Circulation Library | Due Date         | Fines Stopped | Remaining Ren |
|----------------|---------------------------|---------------------|------------------|---------------|---------------|
| 33934002432954 | MBI                       | MBI                 | 5/16/11 11:59 PM | 2             |               |
| 33934003043396 | MBI                       | MBI                 | 6/16/11 11:59 PM | 2             |               |
| 31549000087592 | MBI                       | MLA                 | 6/6/11 11:59 PM  | 2             |               |

2) Select the item you want to renew. **Click on Actions for Selected Items # Renew**. If you want to renew all items in the account, click **Renew All** instead.



| Barcode        | Checkout or Renew Library | Circulation Library | Due Date         | Fines Stopped | Remaining Renewals | Title      | Actions        |
|----------------|---------------------------|---------------------|------------------|---------------|--------------------|------------|----------------|
| 33934002432954 | MBI                       | MBI                 | 5/16/11 11:59 PM |               | 2                  | E.T. the E | Copy to Clippi |
| 33934003043396 | MBI                       | MBI                 | 6/16/11 11:59 PM |               | 2                  | The new    | Add to Item l  |
| 31549000087592 | MBI                       | MLA                 | 6/6/11 11:59 PM  |               | 2                  | Pride and  | Show in Cata   |

Show Non-Cataloged Circulations in List Above
  Auto-Print Hold and Transit S

**Lost, Claimed Returned, Long Overdue, Has Unpaid Billings**


3) If you want to specify the due date, click **Renew with Specific Due Date**. You will be prompted to select a due date. Once done, click **Apply**.

Select Date or Timestamp: [Close]

**Renew with Due Date**
Renew with Due Date

Enter a new due date for these items to be renewed: 33934002432954

Date: 05/16/2011 11:25:06 AM [Cancel] [Apply]

 Renewal can also be done on the **Item Status** screen. See the section called [Item Status \(F5\)](#) for more information.

## Renewing by Item Barcode

- 1) To renew items by barcode, select **Circulation # Renew Items** or press **CTRL-F2**.
- 2) Scan or manually entire the item barcode.

**Renew Item**

**Renew**

Enter Barcode:  [Submit]

Specific Due Date 05/20/2011

3) If you want to specify the due date, click **Specific Due Date** and select a new due date from the calendar.

### Renew Item

Specific Due Date 06/ 20/ 2011 8: 53: 29 AM

| Due Date        | Family Name | Finis | Renewals |
|-----------------|-------------|-------|----------|
| 6/20/11 11:5... | Dickinson   | 5/20  | 5/       |

June 2011

|    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|
| S  | M  | T  | W  | T  | F  | S  |
|    |    |    | 1  | 2  | 3  | 4  |
| 5  | 6  | 7  | 8  | 9  | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 |    |    |

## Editing Due Date

- 1) Retrieve the patron record and go to the **Items Out** screen.
- 2) Select the item you want to renew. Click on **Actions for Selected Items # Edit Due Date**.


**Items Out**


| Barcode        | Checkout or Renew Library | Circulation Library | Due Date         | Fines Stopped | Remaining Renewals | Title      |
|----------------|---------------------------|---------------------|------------------|---------------|--------------------|------------|
| 33934002432954 | MBI                       | MBI                 | 6/6/11 11:59 PM  |               | 1                  | E.T. the E |
| 33934003043396 | MBI                       | MBI                 | 6/16/11 11:59 PM |               | 2                  | The new    |
| 31549000087592 | MBI                       | MLA                 | 6/6/11 11:59 PM  |               | 2                  | Pride and  |

**Actions**

- Copy to Clipboard
- Add to Item List
- Show in Catalog
- Show Item Details
- Show Last Fines
- Show Triggered
- Edit Item Attributes
- Edit Due Date**
- Mark Lost (by Patron)

- 3) Select a new due date in the pop-up window, then click **Apply**.

 You can select multiple items by pressing down the CTRL key on your keyboard and clicking each items you want to edit.

 Editing a due date is not included in the renewal count.

## Marking Items Lost and Claimed Returned

### Lost Items

- 1) To mark items Lost, retrieve patron record and click **Items Out**.
- 2) Select the item. Click on **Actions for Selected Items # Mark Lost (by Patron)**.

**Items Out**

| Barcode        | Checkout or Renew Library | Circulation Library | Due Date         | Fines Stopped | Remaining Renewals | Title      |
|----------------|---------------------------|---------------------|------------------|---------------|--------------------|------------|
| 33934002432954 | MBI                       | MBI                 | 6/6/11 11:59 PM  |               | 1                  | E.T. the E |
| 33934003043396 | MBI                       | MBI                 | 6/16/11 11:59 PM |               | 2                  | The new    |
| 31549000087592 | MBI                       | MLA                 | 6/6/11 11:59 PM  |               | 2                  | Pride and  |

- Actions
- Copy to Clipboard
  - Add to Item List
  - Show in Catalog
  - Show Item Details
  - Show Last Fees
  - Show Triggers
  - Edit Item Attributes
  - Edit Due Date
  - Mark Lost (by)
  - Mark Claimed

3) The lost item now displays in the **Lost/Claimed Returned/Long Overdue, Has Unpaid Billings** section of the patron record.

**Lost, Claimed Returned, Long Overdue, Has Unpaid Billings**

| Barcode        | Checkin Date | Checkout or Renew Library | Circulation Library | Fines Stopped | Title                                 |
|----------------|--------------|---------------------------|---------------------|---------------|---------------------------------------|
| 33934003043396 |              | MBI                       | MBI                 | LOST          | The new solar system : ice worlds, mo |
| 31549000087592 |              | MBI                       | MLA                 | CLAIMSRET...  | Pride and prejudice                   |

4) The lost item also adds to the count of **Lost** items in the patron summary on the left (or top) of the screen.

**Dickinson, Emily**

(Has Overdues) (Invalid Date of Birth)

---

**Status**

Patrons

BR1

Internet Filtered

Expires on 1/27/15

---

Holds: 0

Available: 0

Bills: \$ 0.00

Check Outs: 4

Overdue: 1

Long Overdue: 0

Claimed Returned: 1

Lost: 2

Non Cataloged: 0


Lost Item Billing

- Marking an item Lost will automatically bill the patron the replacement cost of the item as recorded in the price field in the item record, and a processing fee as determined by your local policy. If the lost item has overdue charges, the overdue charges may be voided or retained based on local policy.
- A lost-then-returned item will disappear from the Items Out screen only when all bills linked to this particular circulation have been resolved. Bills may include replacement charges, processing fees, and manual charges added to the existing bills.
- The replacement fee and processing fee for lost-then-returned items may be voided if set by local policy. Overdue fines may be reinstated on lost-then-returned items if set by local policy.

## Refunds for Lost Items

If an item is returned after a lost bill has been paid and the library's policy is to void the replacement fee for lost-then-returned items, there will be a negative balance in the bill. A refund needs to be made to close the bill and the circulation record. Once the outstanding amount has been refunded, the bill and circulation record will be closed and the item will disappear from the Items Out screen.

If you need to balance a bill with a negative amount and close the linked lost circulation record without making a refund (removing the item from the **Lost, Claimed Returned, Long Overdue, Has Unpaid Bills** panel on the **Items Out** screen), you need to add two dummy bills to the existing bills. The first one can be of any amount (e.g. \$0.01), while the second should be of the absolute value of the negative amount. Then you need to void the first dummy bill. The reason for using a dummy bill is that Evergreen will check and close the circulation record only when payment is applied or bills are voided.

## Claimed Returned Items

- 1) To mark an item Claimed Returned, retrieve the patron record and go to the **Items Out** screen.
- 2) Select the item, then select **Actions for Selected Items # Mark Claimed Returned** from the dropdown menu.

| Barcode        | Checkout or Renew Library | Circulation Library | Due Date        | Fines Stopped | Remaining Renewals | Title      |
|----------------|---------------------------|---------------------|-----------------|---------------|--------------------|------------|
| 33934002432954 | MBI                       | MBI                 | 6/6/11 11:59 PM | 1             |                    | E.T. the E |
| 31549000087592 | MBI                       | MLA                 | 6/6/11 11:59 PM | 2             |                    | Pride and  |

- 3) Select a date and click **Apply**.

4) The Claimed Returned item now displays in the **Lost/Claimed Returned/Long Overdue, Has Unpaid Billings** section of the patron record.

| Lost, Claimed Returned, Long Overdue, Has Unpaid Billings |              |                           |                     |               |                                       | Actions f |
|---|--------------|---------------------------|---------------------|---------------|---------------------------------------|-----------|
| Barcode   | Checkin Date | Checkout or Renew Library | Circulation Library | Fines Stopped | Title                                 |           |
| 33934003043396  |              | MBI                       | MBI                 | LOST          | The new solar system : ice worlds, mo |           |
| 31549000087592  |              | MBI                       | MLA                 | CLAIMSRET...  | Pride and prejudice                   |           |

5) The Claimed Returned item adds to the count of Check Outs that are Claimed Returned in the patron summary on the left (or top) of the screen. It also adds to the total **Claims-returned Count** (including those that are current Check Outs and those that have since been returned) that is displayed when editing the patron's record.

**Dickinson, Emily**

(Has Overdues) (Invalid Date of Birth)

---

**Status**

Patrons

BR1

Internet Filtered

Expires on 1/27/15

---

Holds: 0

Available: 0

Bills: \$ 0.00

Check Outs: 4

Overdue: 1

Long Overdue: 0

Claimed Returned: 1

Lost: 2

Non Cataloged: 0

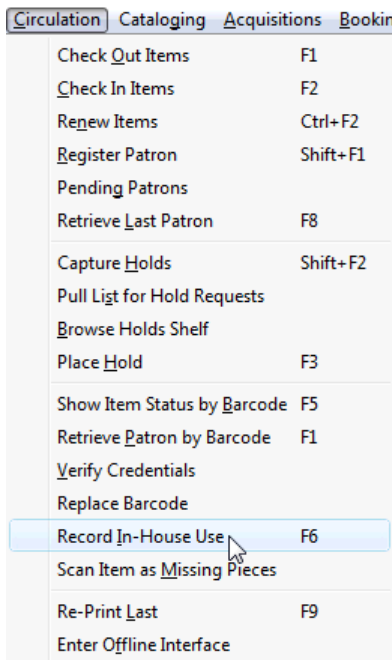


More on Claimed Returned Items

- The date entered for a Claimed Returned item establishes the fine. If the date given has passed, bills will be adjusted accordingly.
- When a Claimed Returned item is returned, if there is an outstanding bill associated with it, the item will not disappear from the **Items Out** screen. It will disappear when the outstanding bills are resolved.
- When an item is marked Claimed Returned, the value in **Claims-returned Count** field in the patron record is automatically increased. Staff can manually adjust this count by editing the patron record.


## In-house Use (F6)

1) To record in-house use, select **Circulation # Record-In House Use**, click **Check Out # Record In-House Use** on the circulation toolbar , or press **F6**.



2) To record in-house use for cataloged items, enter number of uses, scan barcode or type barcode and click **Submit**.

 A screenshot of a web form titled 'Record In-House Use'. The form has a purple header. Below the header, there is a section labeled 'In-House Use'. It contains a text input field for '# of uses' with the value '1', a dropdown menu for 'Barcode', and a text input field containing the barcode '33934000576075'. A 'Submit' button is located to the right of the barcode field.

 The statistics of in-house use are separated from circulation statistics. The in-house use count of cataloged items is not included in the items' total use count.

## Item Status (F5)

The Item Status screen is very useful. Many actions can be taken by either circulation staff or catalogers on this screen. Here we will cover some circulation-related functions, namely checking item status, viewing past circulations, inserting item alert messages, marking items missing or damaged, etc.

### Checking item status

1) To check the status of an item, select **Search # Search for copies by Barcode** or **Circulation # Show Item Status by Barcode**; click the **Item Status button** on the circulation or cataloging toolbar; or press **F5**.

|                             |            |              |       |
|-----------------------------|------------|--------------|-------|
| Circulation                 | Cataloging | Acquisitions | Booki |
| Check Out Items             | F1         |              |       |
| Check In Items              | F2         |              |       |
| Renew Items                 | Ctrl+F2    |              |       |
| Register Patron             | Shift+F1   |              |       |
| Pending Patrons             |            |              |       |
| Retrieve Last Patron        | F8         |              |       |
| Capture Holds               | Shift+F2   |              |       |
| Pull List for Hold Requests |            |              |       |
| Browse Holds Shelf          |            |              |       |
| Place Hold                  | F3         |              |       |
| Show Item Status by Barcode | F5         |              |       |
| Retrieve Patron by Barcode  | F1         |              |       |

2) Scan the barcode or type it and click **Submit**. The current status of the item is displayed with selected other fields. You can use the column picker to select more fields to view.

**Item Status**

**Scan Item**

Barcode:

3) Click the **Alternate View** button, and the item summary and circulation history will be displayed.

**Item Status**

33934002432954 --

**Scan Item**

Barcode:

**Alternate View**

**Title:** E.T. the Extra-Terrestrial di **Edition:** **TCN:** 932961 **Created By:** admin  
**Author:** Graham, Ian **Pub Date:** 2002 **Record ID:** 932961 **Last Edited By:** admin  
**Bib Call #:** 523.2 **Item Call #:** J 523.2/GRA **Record Owner:** **Last Edited On:** 5/14/11 6:10 PM

Quick Summary | Circulation History | Holds/Transit | Cataloging Info

|                |  |                |                                     |                            |  |                      |                                      |
|----------------|--|----------------|-------------------------------------|----------------------------|--|----------------------|--------------------------------------|
| Barcode        | <input type="text" value="33934002432954"/>    | Circ Library   | <input type="text" value="MBI"/>    | Item Call #                | <input type="text" value="J 523.2/GRA"/>     | Status               | <input type="text" value="Reshelv"/> |
| Price          | <input type="text" value="6.00"/>              | Owning Library | <input type="text" value="MBI"/>    | Renewal Type               | <input type="text" value="Desk"/>            | Due Date             | <input type="text" value="6/6/11"/>  |
| ISBN           | <input type="text" value="0753455153"/>        | Copy Location  | <input type="text" value="Stacks"/> | Total Circs                | <input type="text" value="28"/>              | Checkout Date        | <input type="text" value="5/16/11"/> |
| Date Created   | <input type="text" value="11/12/04 12:00 AM"/> | Loan Duration  | <input type="text" value="Normal"/> | Total Circs - Current Year | <input type="text" value="2"/>               | Checkout Workstation | <input type="text" value="MBI-Co"/>  |
| Status Changed | <input type="text" value="5/16/11 1:20 PM"/>   | Fine Level     | <input type="text" value="Normal"/> | Total Circs - Prev Year    | <input type="text" value="0"/>               | Duration Rule        | <input type="text"/>                 |
| Copy ID        | <input type="text" value="8070492"/>           | Reference      | <input type="text" value="No"/>     | Renewal Workstation        | <input type="text" value="MBI-Coordinator"/> | Recurring Fine Rule  | <input type="text"/>                 |
| TCN            | <input type="text" value="932961"/>            | OPAC Visible   | <input type="text" value="Yes"/>    | Remaining Renewals         | <input type="text" value="1"/>               | Max Fine Rule        | <input type="text"/>                 |
| Floating       | <input type="text" value="No"/>                | Holdable       | <input type="text" value="Yes"/>    |                            |  | Checkin Time         | <input type="text" value="5/16/11"/> |
|                |  | Circulate      | <input type="text" value="Yes"/>    |                            |  | Checkin Scan Time    | <input type="text" value="5/16/11"/> |
|                |  | Circ Modifier  | <input type="text"/>                |                            |  | Checkin Workstation  | <input type="text" value="MBI-Co"/>  |


Alert


4) Click **List View** to go back.

**Item Status**  
33934002432954 --

**Scan Item**  
Barcode:

| Alert Message | Barcode        | Call Number | Due Date        | Location |
|---------------|----------------|-------------|-----------------|----------|
|               | 33934002432954 | J 523.2/GRA | 6/6/11 11:59 PM | Stacks   |

 If the item's status is "Available", the displayed due date refers to the previous circulation's due date.

 Upload From File allows you to load multiple items saved in a file on your local computer. The file contains a list of the barcodes in text format. To ensure smooth uploading and further processing on the items, it is recommended that the list contains no more than 100 items.

## Viewing past circulations

- 1) To view past circulations, retrieve the item on the **Item Status** screen as described above.
- 2) Select **Actions for Selected Items # Show Last Few Circulations**.

**Item Status**  
33934002432954 --

|      | Location | Status     | Title                          |
|------|----------|------------|--------------------------------|
| 9 PM | Stacks   | Reshelving | E.T. the Extra-Terrestrial dis |

- Copy to Clipboard
- Add to Item Bucket
- Add to Record Bucket
- Show in Catalog
- Show Item Details
- Show Last Few Circulations
- Show Triggered Events

- 3) The item's recent circulation history is displayed.



**Record Summary ( [View MARC](#) )**

**Title:** The new solar system : ice    **Edition:**    **TCN:** 1193733    **Created By:**  
**Author:** Daniels, Patricia    **Pub Date:** 2009    **Record ID:** 1193733    **Last Edited By:**  
**Bib Call #:** 523.2    **Record Owner:**    **Last Edited On:**

---

**Item Summary**

| Alert Message | Barcode       | Call Number | Circulation Library | Location | Owning Library | Total Circs |
|---------------|---------------|-------------|---------------------|----------|----------------|-------------|
|               | 3393400304... | 523.2/DANI  | MBI                 | Stacks   | MBI            | 5           |

List Actions ▾    Show in Catalog     Alternate View

---

**Last Few Circulations**

Dickinson, Emily : 1234    Circulation ID: 550737

Check Out Time 5/16/11 1:43 PM    Due Date 6/6/11 11:59 PM    Stop Fines Time 5/16/11 1:43 PM    Check In Time 5/16/11 1:43 PM

---

Bennett, Elizabeth : 2373800000001    Circulation ID: 550736

Check Out Time 5/16/11 1:42 PM    Due Date 6/6/11 11:59 PM    Stop Fines Time 5/16/11 1:42 PM    Check In Time 5/16/11 1:42 PM

---

Dickinson, Emily : 1234    Circulation ID: 550735

Check Out Time 5/16/11 1:41 PM    Due Date 6/6/11 11:59 PM    Stop Fines Time 5/16/11 1:41 PM    Check In Time 5/16/11 1:41 PM

---

Bennett, Elizabeth : 2373800000001    Circulation ID: 55069

Check Out Time 5/16/11 10:47 AM    Due Date 6/16/11 11:59 PM    Stop Fines Time 5/16/11 12:31 PM    Check In Time 5/16/11 12:31 PM

Retrieve Last Patron    Retrieve All These Patrons    Done

4) To retrieve the patron(s) of the last circulations, click the **Retrieve Last Patron** or the **Retrieve All These Patrons** button at the bottom of the above screen. Patron record(s) will be displayed in new tab(s).



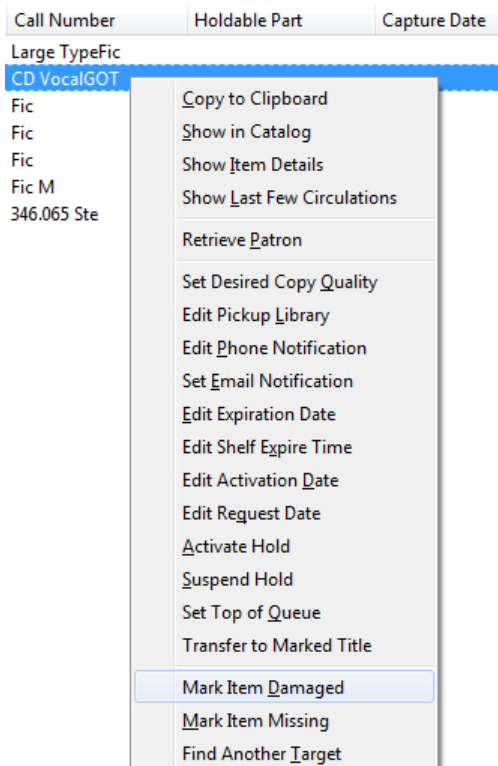
The number of items that displays in the circulation history can be set in Local **Administration # Library Settings Editor**.



You can also retrieve the past circulations on the patron's **Items Out** screen and from the **Check In** screen.

## Marking items damaged or missing and other functions

- 1) To mark items damaged or missing, retrieve the item on the **Item Status** screen.
- 2) Select the item. Click on **Actions for Selected Items # Mark Item Damaged** or **Mark Item Missing**.



[NOTE] Depending on the library's policy, when marking an item damaged, bills (cost and/or processing fee) may be inserted into the last borrower's account.

3) Following the above procedure, you can check in and renew items by using the **Check in Items** and **Renew Items** on the dropdown menu.

## Item alerts

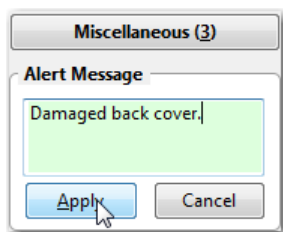
The **Edit Item Attributes** function on the **Actions for Selected Items** dropdown list allows you to edit item records. Here, we will show you how to insert item alert messages by this function. See cataloging instructions for more information on item editing. 1) Retrieve record on **Item Status** screen.

2) Once item is displayed, highlight it and select **Actions for Selected Items # Edit Item Attributes**.

3) The item record is displayed in the **Copy Editor**.

| Circulation (2)                                    | Miscellaneous (3)                      | Statistics (4)   |
|--|--|--|
| <b>Circulate?</b><br>Yes 1 copy                    | <b>Alert Message</b><br><Unset> 1 copy | Library Filter ▶<br><b>MVLC : Collection</b><br>167 - ADULT FICTION 1 copy |
| <b>Holdable?</b><br>Yes 1 copy                     | <b>Deposit?</b><br>No 1 copy           | <b>MVLC : Horizon Itype</b><br>B - Book 1 copy                             |
| <b>Age-based Hold Protection</b><br><Unset> 1 copy | <b>Deposit Amount</b><br>0.00 1 copy   | <b>MVLC : Purchase Source</b><br><Unset> 1 copy                            |
| <b>Floating?</b><br>No 1 copy                      | <b>Price</b><br>22.00 1 copy           |  |

4) Click **Alert Message** in the **Miscellaneous** column. The background color of the box changes. Type in the message then click **Apply**.



5) Click **Modify Copies**, then confirm the action.

## Mark an Item Long Overdue

### Marking an item Long Overdue

Once an item has been overdue for a configurable amount of time, Evergreen will mark the item long overdue in the borrowing patron's account. This will be done automatically through a Notification/Action Trigger. When the item is marked long overdue, several actions will take place:

1. The item will go into the status of "Long Overdue"
2. The item will be moved to the "Lost, Claimed Returned, Long Overdue, Has Unpaid Billings" section of the Items Out screen in the patron's account
3. The accrual of overdue fines will be stopped

Optionally the patron can be billed for the item price, a long overdue processing fee, and any overdue fines can be voided from the account. Patrons can also be sent a notification that the item was marked long overdue.

File Edit Search Circulation Cataloging Acquisitions Booking Admin (E)

Check Out Check In Search Catalog Item Status Patron Search Patron Registration Toggle

1 Server Settings 2 Patron Search 3 Patron: Johnson, Jeremy Mark +

**Johnson, Jeremy Mark II** Refresh Check Out **Items Out** Holds Bills Edit Messages Other

6 0/4 \$ 32.60

(Maximum Bills) (Has Bills) (Has Overdues)

**▼ Status**

Catalogers  
BM1  
Internet Filtered  
Account created on 4/26/13  
Expires on 4/26/16  
Last Activity <Unset>  
Last updated on 4/26/13

Holds: 4  
Available: 0  
Bills: \$ 32.60  
Check Outs: 6  
Overdue: 4  
Long Overdue: 1  
Claimed Returned: 0  
Lost: 0  
Non Cataloged: 0

**▼ ID and Contact Information**  
Library Card: [99999397850](#)  
ID 1: Drivers License  
ID 2:  
Holds Alias:

**Items Out**

| # | Barcode  | Checkout or Renew Library | Circulation Library | Due Date     | Fines Stopped | Remaining Renewals | Title    |
|---|----------|---------------------------|---------------------|--------------|---------------|--------------------|----------|
| 1 | CONC7... | BR4                       | BR4                 | 4/19/13 ...  | 0             |                    | Piano c  |
| 2 | CONC7... | BR4                       | BR4                 | 4/26/13 ...  | 2             |                    | Violin c |
| 3 | CONC7... | BR4                       | BR4                 | 5/3/13 7:... | 0             |                    | Double   |
| 4 | CONC7... | BR4                       | BR4                 | 4/26/13 ...  | 2             |                    | Piano c  |
| 5 | CONC7... | BR4                       | BR4                 | 5/10/13 ...  | 2             |                    | Compo    |

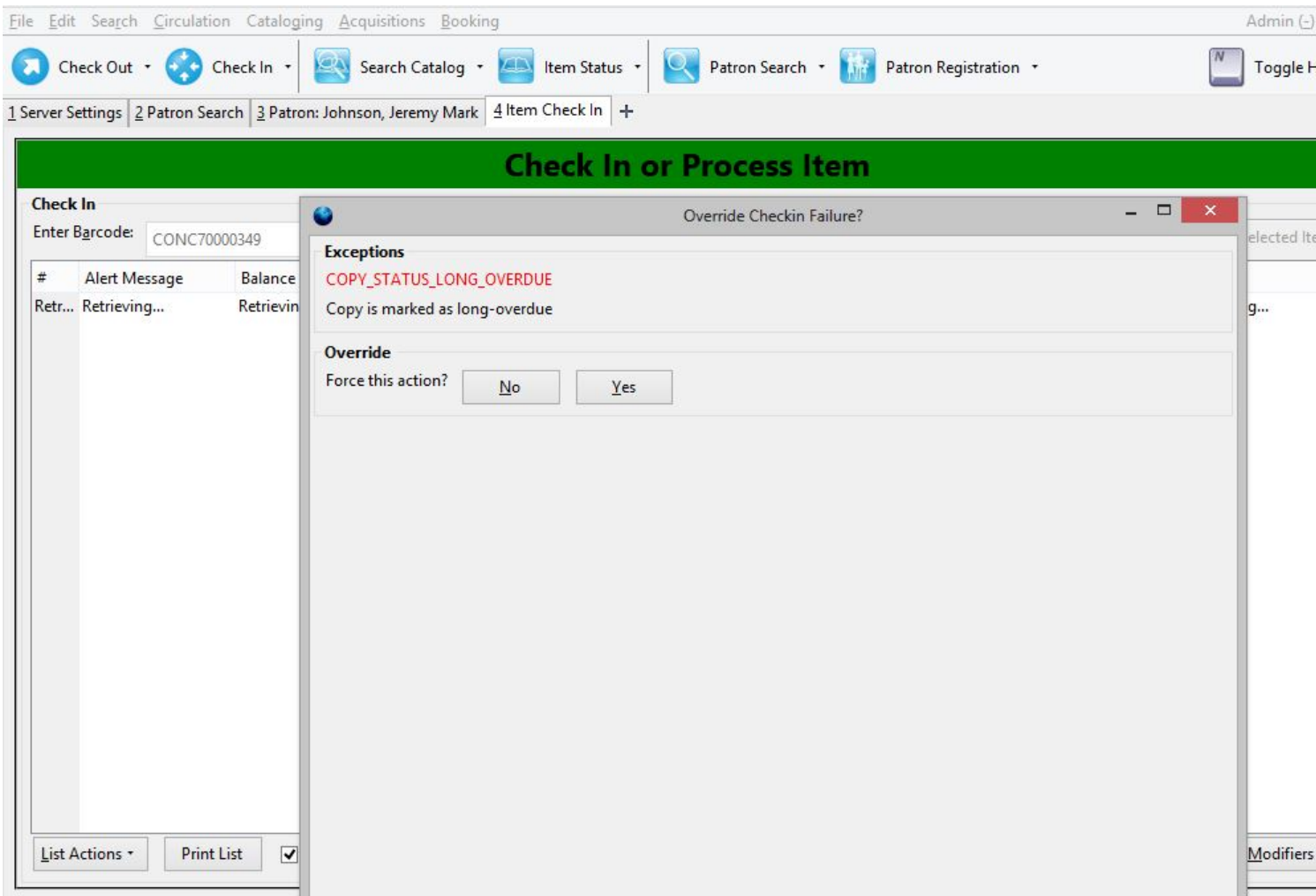
Show Non-Cataloged Circulations in List Above  Auto-Print Hold and Transit Slips

**Lost, Claimed Returned, Long Overdue, Has Unpaid Billings**

| # | Barcode    | Checkin Date | Checkout or Renew Library | Circulation Libr... | Fines Stopped | Title        |
|---|------------|--------------|---------------------------|---------------------|---------------|--------------|
| 1 | CONC700... |              | BR4                       | BR4                 | LONGOVERDUE   | Trombone con |

## Checking in a Long Overdue item

If an item that has been marked long overdue is checked in, an alert will appear on the screen informing the staff member that the item was long overdue. Once checked in, the item will go into the status of “In process”. Optionally, the item price and long overdue processing fee can be voided and overdue fines can be reinstated on the patron’s account. If the item is checked in at a library other than its home library, a library setting controls whether the item can immediately fill a hold or circulate, or if it needs to be sent to its home library for processing.



## Notification/Action Triggers

Evergreen has two sample Notification/Action Triggers that are related to marking items long overdue. The sample triggers are configured for 6 months. These triggers can be configured for any amount of time according to library policy and will need to be activated for use.

- Sample Triggers
  - 6 Month Auto Mark Long-Overdue—will mark an item long overdue after the configured period of time
  - 6 Month Long Overdue Notice—will send patron notification that an item has been marked long overdue on their account

## Library Settings

The following Library Settings enable you to set preferences related to long overdue items:

- **Circulation: Long-Overdue Check-In Interval Uses Last Activity Date** —Use the long-overdue last-activity date instead of the due\_date to determine whether the item has been checked out too long to perform long-overdue check-in processing. If set, the system will first check the last payment time, followed by the last billing time, followed by the due date. See also circ.max\_accept\_return\_of\_longoverdue

- **Circulation: Long-Overdue Items Usable on Checkin** —Long-overdue items are usable on checkin instead of going "home" first
- **Circulation: Long-Overdue Max Return Interval** —Long-overdue check-in processing (voiding fees, reinstating overdues, etc.) will not take place for items that have been overdue for (or have last activity older than) this amount of time
- **Circulation: Restore Overdues on Long-Overdue Item Return**
- **Circulation: Void Long-Overdue item Billing When Returned**
- **Circulation: Void Processing Fee on Long-Overdue Item Return**
- **Finances: Leave transaction open when long overdue balance equals zero** —Leave transaction open when long-overdue balance equals zero. This leaves the lost copy on the patron record when it is paid
- **Finances: Long-Overdue Materials Processing Fee**
- **Finances: Void Overdue Fines When Items are Marked Long-Overdue**

#### **Permissions to use this Feature**

The following permissions are related to this feature:

- `COPY_STATUS_LONGOVERDUE.override`
  - Allows the user to check-in long-overdue items thus removing the long-overdue status on the item

# Chapter 94. Holds Management

## Placing Holds

Holds can be placed by staff in the *Staff Client* and by patrons in the OPAC. In this chapter we demonstrate placing holds in the *Staff Client*.

## Holds Levels

Evergreen has different levels of holds. Library staff can place holds at all levels, while patrons can only place title-level holds, and parts-level holds. The chart below summarizes the levels of holds.

| Hold level | Abbreviation | When to use   | How to use   | Who can use     | Hold tied to  |
|------------|--------------|---|--|-----------------|---|
| Title      | T            | Patron wants first available copy of a title                            | Staff or patron click on <i>Place Hold</i> next to title.  | Patron or staff | Holdings attached to a single MARC (title) record                       |
| Parts      | P            | Patron wants a particular part of title (e.g. volume or disk number)    | Staff or patron selects part on the create/edit hold screen when setting holds notification options. | Patron or staff | Holdings with identical parts attached to a single MARC (title) record. |
| Volume     | V            | Patron or staff want any title associated with a particular call number | In the staff client, click on <i>Volume Hold</i> under <i>Holdable?</i>                              | Staff only      | Holdings attached to a single call number (volume)                      |
| Copy       | C            | Patron or staff want a specific copy of an item                         | In the staff client, click on <i>Copy Hold</i> under <i>Holdable?</i>                                | Staff only      | A specific copy (barcode)   |

## Title Level Hold



A default hold expiration date will be displayed if the library has set up a default holds expiration period in their library settings. Uncaptured holds will not be targeted after the expiration date.

If you select the *Suspend this Hold* checkbox, the hold will be suspended and not be captured until you activate it.

1. To place a title level hold, retrieve the title record on the catalog and click the *Place Hold* link beside the title on the search results list, or click the *Place Hold* link on the title summary screen.

### Boston Red Sox trivia

Corbett, Bernard M.

| c1986 Quinlan Press | print p. cm.



[Place Hold](#)

G.A.R. Memorial Library - J 796.357 - Stacks (Available)



### Goodbye Dearie

Harris, Daniel

| c1999 America House | print 383 p. ; 23 cm.



[Place Hold](#)

Lawrence Public Library - FIC HAR - Stacks (Available)



### Green monster

Shefchik, Rick

1st ed. | c2008 Poisoned Pen Press | print 297 p. ; 23 cm.



[Place Hold](#)

Flint Public Library - F Shefchik - Stacks (Available)

Salisbury Public Library - FIC - Stacks (Available)

Memorial Hall Library - Fic - Stacks (Available)

Rockport Public Library - FIC MYS SHE - Stacks (Available)

... more copies listed in full record

2. Scan or type patron's barcode into *Enter recipient barcode* then click *Submit*.
3. Edit patron hold notification and expiration date fields as required and click *Place Hold*. Confirm your action in the pop-up window.

| Create / Edit a Hold                       |  |
|--|--|
| Recipient:                                 | Everdeen, Katniss  |
| Title:                                     | The good, the bad, and the ugly New England Patriots : heart-pounding, jaw-gut-wrenching moments from New England Patriots history |
| Author:                                    | Glennon, Sean  |
| Format:                                    | Books  |
| Physical Description:                      | print 201 p. : ill. ; 22 cm.   |
| Contact telephone number:                  | <input type="text"/> (XXX-YYY-ZZZZ)  |
| Enable phone notifications for this hold?  | <input type="checkbox"/>   |
| Contact email address:                     | klussier@massInc.org   |
| Enable email notifications for this hold?  | <input checked="" type="checkbox"/>  |
| Pickup location:                           | Billerica Public Library ▼   |
| Expiration date:                           | <input type="text"/>   |
| Suspend this hold ( <a href="#">Help</a> ) | <input type="checkbox"/>   |

[Advanced Hold Options](#)

## Parts Level Hold

1. To place a parts level hold, retrieve a record with parts-level items attached to the title, such as a multi-disc DVD, an annual travel guide, or a multi-volume book set.
2. Place the hold as you would for a title-level hold.



3. Scan or type patron's barcode into *Enter recipient barcode* then click *Submit*.
4. Select the applicable part from the *Parts* dropdown menu.

|                           |   |
|---------------------------|---|
| Physical Description:     | videorecording videodisc 7 videodiscs (1068 min.) : sd., col. ; 4 3/4 in. |
| Parts:                    | Disc 01 ▼   |
| Contact telephone number: | 508-555-1212 (XXX-YYY-ZZZZ)   |

5. Click *Place Hold*.



Requested formats are listed in the *Holdable Part* column in hold records. Use the *Column Picker* to display it when the hold record is displayed.

## Placing Holds in Patron Records

1. Holds can be placed from patron records too. In the patron record on the *Holds* screen, click the *Place Hold* button on the left top corner.
2. The catalog is displayed in the *Holds* screen to search for the title on which you want to place a hold.
3. Search for the title and click the *Place Hold* link.
4. The patron's account information is retrieved automatically. Set up the notification and expiration date fields. Click *Place Hold* and confirm your action in the pop-up window.
5. You may continue to search for more titles. Once you are done, click the *Holds* button on the top to go back to the *Holds* screen. Click the *Refresh* button to display your newly placed holds.

## Managing Holds

Holds can be cancelled at any time by staff or patrons. Before holds are captured, staff or patrons can suspend them or set them as inactive for a period of time without losing the hold queue position, activate suspended holds, change notification method, phone number, pick-up location (for multi-branch libraries only), expiration date, activation date for inactive holds, etc. Once a hold is captured, staff can change the pickup location and extend the hold shelf time if required.

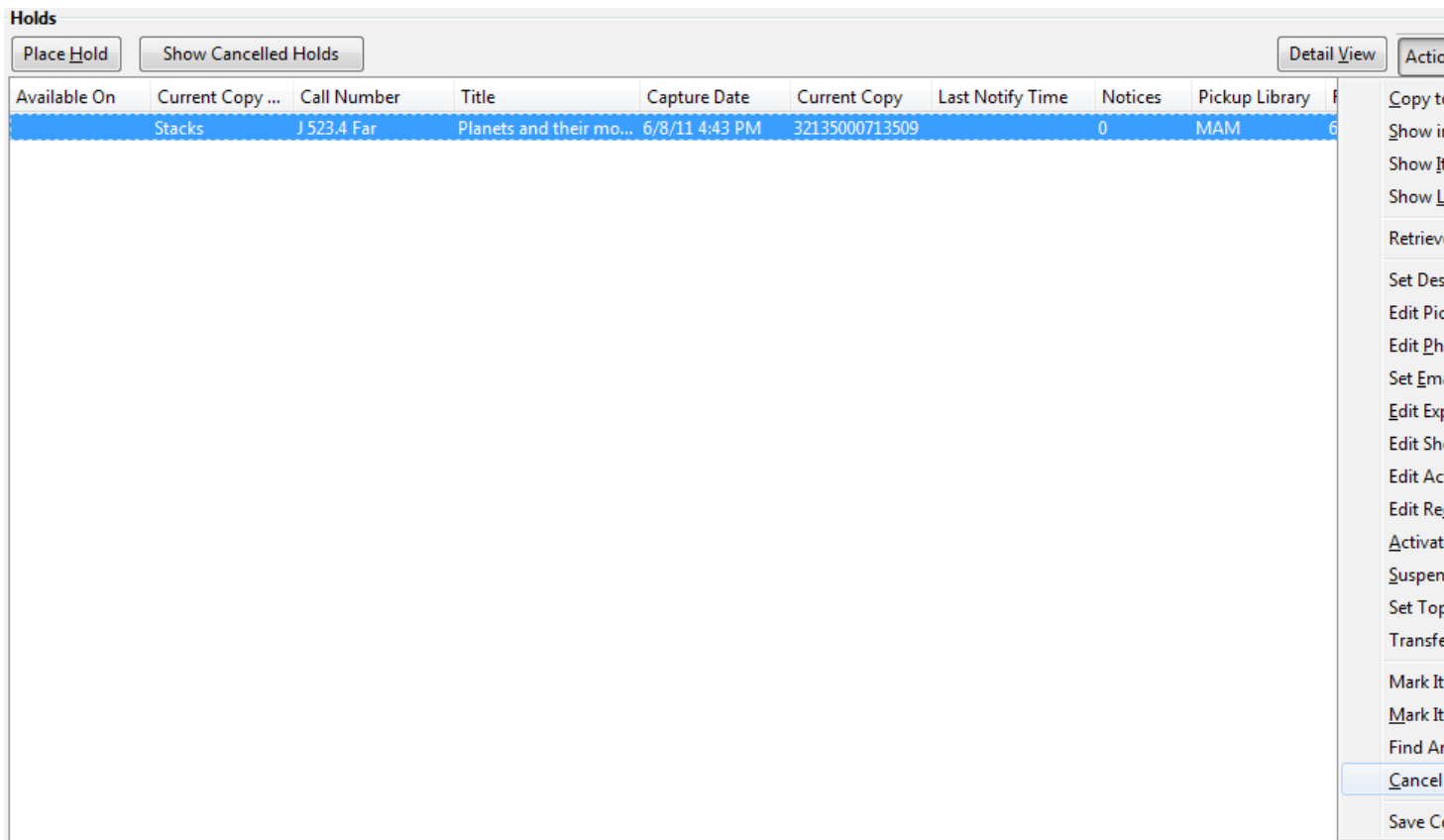
Staff can edit holds in either patron's records or the title records. Patrons can edit their holds in their account on the OPAC.



If you use the column picker to change the holds display from one area of the staff client (e.g. the patron record), it will change the display for all parts of the staff client that deal with holds, including the title record holds display, the holds shelf display, and the pull list display.

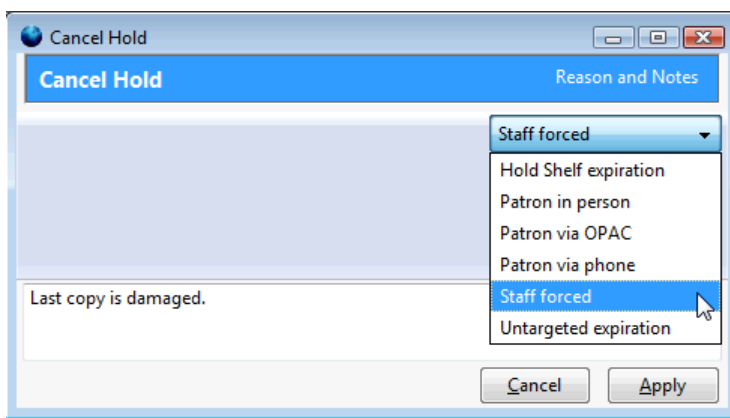
## Actions for Selected Holds


1. Retrieve the patron record and go to the *Holds* screen.
2. Highlight the hold record, then select *Actions for Selected Holds*.



3. Manage the hold by choosing an action on the list.

- a. If you want to cancel the hold, click *Cancel Hold* from the menu. You are prompted to select a reason and put in a note if required. To finish, click *Apply*.



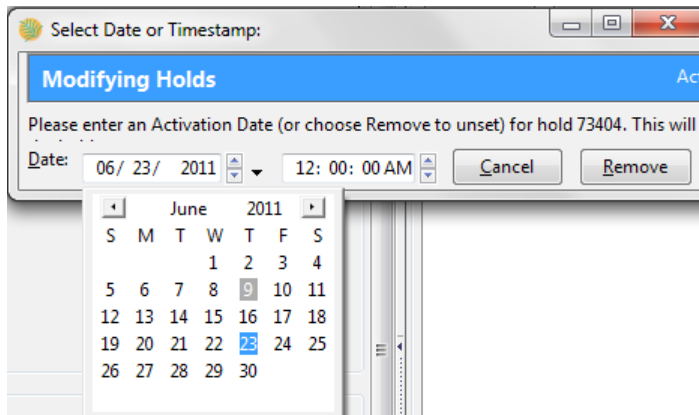
 A captured hold with a status of *On Hold Shelf* can be cancelled by either staff or patrons. But the status of the item will not change until staff check it in.

- b. If you want to suspend a hold or activate a suspended hold, click the appropriate action on the list. You will be prompted to confirm your action. Suspended holds have a *No* value in the *Active?* column.

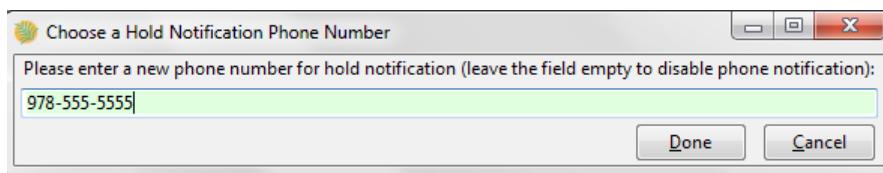


Suspended holds will not be filled but its hold position will be kept. They will automatically become active on the activation date if there is an activation date in the record. Without an activation date, the holds will remain inactive until staff or a patron activates them manually.

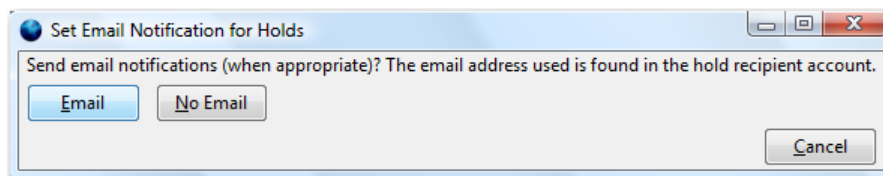
- c. You may edit the *Activation Date* and *Expiration Date* by using the corresponding action on the *Action for Selected Holds* dropdown menu. You will be prompted to enter the new date. Use the calendar widget to choose a date, then click *Apply*. Use the *Remove* button to unset the date.



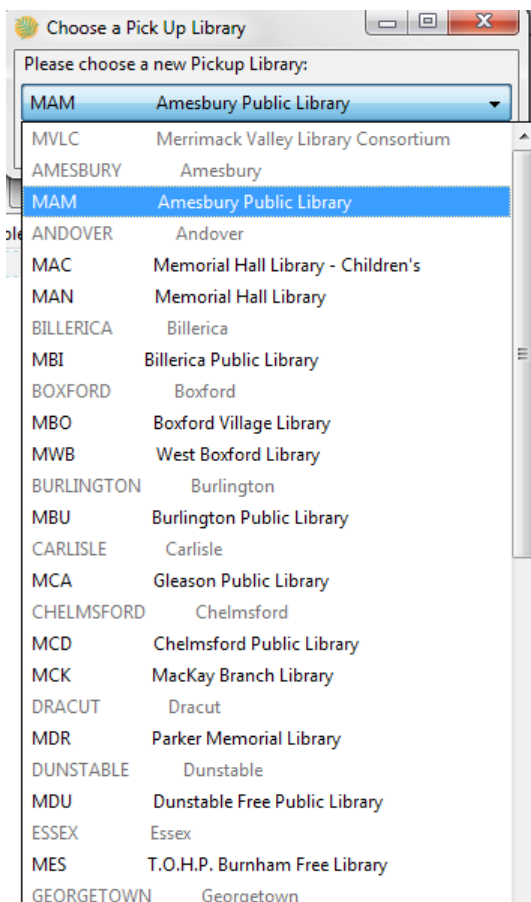
- d. Hold shelf expire time is automatically recorded in the hold record when a hold is filled. You may edit this time by using the *Edit Shelf Expire Time* on the *Action for Selected Holds* dropdown menu. You will be prompted to enter the new date. Use the calendar widget to choose a date, then click *Apply*.
- e. If you want to enable or disable phone notification or change the phone number, click *Edit Phone Notification*. You will be prompted to enter the new phone number. Make sure you enter a valid and complete phone number. The phone number is used for this hold only and can be different from the one in the patron account. It has no impact on the patron account. If you leave it blank, no phone number will be printed on the hold slip.




- f. If you want to enable or disable email notification for the hold, click *Set Email Notification*. Click *Email* or *No Email* on the prompt screen.

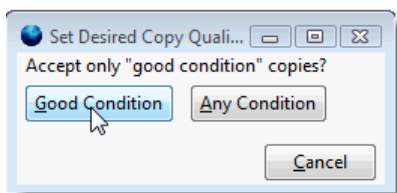


- g. Pickup location can be changed by clicking *Edit Pickup Library*. Click the dropdown list of all libraries and choose the new pickup location. Click *Done*.



 Staff can change the pickup location for holds with in-transit status. Item will be sent in transit to the new destination. Staff cannot change the pickup location once an item is on the holds shelf.

- h. The item's physical condition is recorded in the copy record as *Good* or *Mediocre* in the *Quality* field. You may request that your holds be filled with copies of good quality only. Click *Set Desired Copy Quality* on the *Actions for Selected Holds* list. Make your choice in the pop-up window.



## Transferring Holds

1. Holds on one title can be transferred to another with the hold request time preserved. To do so, you need to find the destination title and click *Actions for this Record # Mark as Title Hold Transfer Destination*.

Text Size: Regular / Large

Keyword All Formats

|  |
|--|
| One red sun : a counting book / Ezra Jack Keats. |
| Keats, Ezra Jack                                 |
| 0670884782                                       |
| 1999   |
| Viking   |
| print [12] p. : col. ill. ; 20 cm.               |
| text   |

Actions for this Record

- OPAC View
- MARC View
- MARC Edit
- Holdings Maintenance
- Manage Conjoined Items (E)
- Manage Parts
- View Holds
- View/Place Orders
- Add to Bucket
- Mark for Overlay
- Delete Record
- Undelete Record
- Add Volumes
- Mark as Title Hold Transfer Destination
- Transfer Title Holds

- Select the hold you want to transfer. Click *Actions for Selected Holds # Transfer to Marked Title*.

Detail View Actions for Selected Holds

| Capture Date | Current Copy    | Last Notify Time | Notices | Pickup Library | Request Date   |
|--------------|-----------------|------------------|---------|----------------|----------------|
|              | 321140010573... |                  | 0       | MAM            | 6/9/11 1:50 PM |

- Copy to Clipboard
- Show in Catalog
- Show Item Details
- Show Last Few Circulations
- Retrieve Patron
- Set Desired Copy Quality
- Edit Pickup Library
- Edit Phone Notification
- Set Email Notification
- Edit Expiration Date
- Edit Shelf Expire Time
- Edit Activation Date
- Edit Request Date
- Activate Hold
- Suspend Hold
- Set Top of Queue
- Transfer to Marked Title
- Mark Item Damaged
- Mark Item Missing
- Find Another Target

## Cancelled Holds

- Cancelled holds can be displayed. Click the *Show Cancelled Holds* button on the *Holds* screen.

**Hold**

Place Hold Show Cancelled Holds

| Available On | Current Cop... | Call Number    | Title               | Capture Date | Current Copy    | Last Notify Time |
|--------------|----------------|----------------|---------------------|--------------|-----------------|------------------|
|              | Stacks         | JJ KEA (BOARD) | Songs for Japan     |              | 315500010554... |                  |
|              |                |                | The girl who kic... |              | No Copy         |                  |

2. You can un-cancel holds.

**Hold**

Place Hold Show Un-Cancelled Holds

| Available On    | Current Co... | Call Number | Cancel Ca... | Cancel Note | Title   | Capture Date     | Current Co... |
|-----------------|---------------|-------------|--------------|-------------|---------|------------------|---------------|
| 6/9/11 3:03 ... | Stacks        | BB          | Staff forced | Test        | Song... | 6/9/11 3:03 P... | 3211400105... |

- Copy to Clipboard
- Show in Catalog
- Show Item Details
- Show Last Few Circulations
- Retrieve Patron
- Set Desired Copy Quality
- Edit Pickup Library
- Edit Phone Notification
- Set Email Notification
- Edit Expiration Date
- Edit Shelf Expire Time
- Edit Activation Date
- Edit Request Date
- Activate Hold
- Suspend Hold
- Set Top of Queue
- Transfer to Marked Title
- Mark Item Damaged
- Mark Item Missing
- Find Another Target
- Un-cancel Hold

Based on your library's setting, hold request time can be reset when a hold is un-cancelled.

## Viewing Details & Adding Notes to Holds

1. You can view details of a hold by selecting a hold then clicking the *Detail View* button on the *Holds* screen.

**Hold**

Place Hold Show Cancelled Holds Detail View Actions for Selected Holds

| Avai... | Curr... | Call ... | Ca... | Canc... | Curr... | Last N... | Pickup Library | Request Date   | Shelf Expire Time | Type |
|---------|---------|----------|-------|---------|---------|-----------|----------------|----------------|-------------------|------|
|         | Stacks  | CD P...  |       |         | 3212... | 0         | MAM            | 6/9/11 1:50 PM |                   | T    |
|         |         |          |       |         | No C... | 0         | MAM            | 6/9/11 3:13 PM |                   | T    |
|         | Stacks  | JJ KE... |       |         | 3155... | 0         | MAM            | 6/9/11 3:21 PM |                   | T    |

2. You may add a note to a hold in the *Detail View*.

**Holds**

Place Hold    Show Cancelled Holds    List View    Action

**Record Summary ( View MARC )**

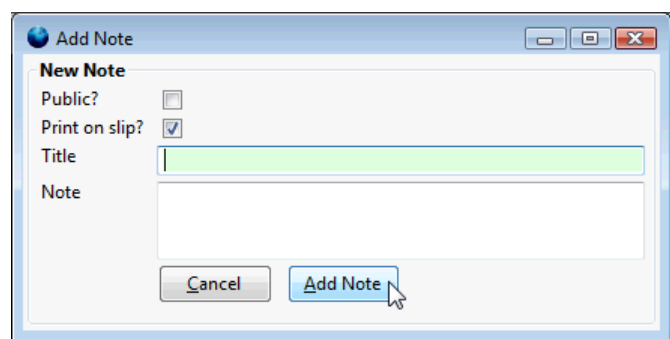
**Title:** Songs for Japan    **Edition:**    **TCN:** 1290952    **Created By:** admin  
**Author:**    **Pub Date:** 2011    **Record ID:** 1290952    **Last Edited By:** admin  
**Bib Call #:** 781.66    **Record Owner:**    **Last Edited On:** 5/26/11 4:25 PM

| Available On | Current Cop... | Call Number     | Title           | Capture Date | Current Copy   | Last Notify Time | Notices | Pickup Library | Request Date   | Shelf Expire T |
|--------------|----------------|-----------------|-----------------|--------------|----------------|------------------|---------|----------------|----------------|----------------|
|              | Stacks         | CD POPULAR S... | Songs for Japan |              | 32127000913... |                  | 0       | MAM            | 6/9/11 1:50 PM |                |

Notes    Notifications

Add Note

3. Notes can be printed on the hold slip if the *Print on slip?* checkbox is selected. Key in the message then click *Add Note*.



## Displaying Queue Position

Using the Column Picker, you can display *Queue Position* and *Total number of Holds*.

**Holds**

Place Hold Show Cancelled Holds Detail View Actions for Selected Holds

| Available On | Capture Date | Current Copy    | Request Date    | Queue Position | Title               | Type | Status             | Top of Queue | Total Number... |
|--------------|--------------|-----------------|-----------------|----------------|---------------------|------|--------------------|--------------|-----------------|
|              |              | No Copy         | 2011-03-09 1... | 1              | new record for ...  | T    | Waiting for copy   | Yes          | 2               |
|              |              | 351802001333... | 2011-03-07 1... | 2              | The girl who kic... | T    | Waiting for cap... | No           | 2               |
|              |              | No Copy         | 2011-03-02 0... | 4              | Dora's big birth... | T    | Waiting for copy   | No           | 7               |
|              |              | No Copy         | 2011-02-21 0... | 2              | FATAL ERROR         | T    | Waiting for copy   | No           | 3               |

## Managing Holds in Title Records

1. Retrieve and display the title record in the catalog.
2. Click *Actions for this Record # View Holds*.

Next End

ard

Text Size: Regular / Large | Language: English (Car

Go! Keyword All Formats Cho

Advanced

Record Summary Place Hold More

|                      |   |
|----------------------|---|
| Title                | The girl who kicked the hornet's nest / Stieg Larsson ; translated from the Swedish by Reg Keelar |
| Author               | Larsson, Stieg  |
| ISBN                 | 9780670069033   |
| Edition              |   |
| Publication Date     | 2010  |
| Publisher            | Alfred A. Knopf   |
| Physical Description | print 563 p. ; 24 cm.   |

NO

Actions for this Record

- OPAC View
- MARC View
- MARC Edit
- Holdings Maintenance
- View Holds
- View/Place Orders
- Add to Bucket
- Mark for Overlay
- Delete Record
- Undelete Record
- Add Volumes
- Mark as Title Hold
- Transfer Title Hold

3. All holds on this title to be picked up at your library are displayed. Use the *Filter* checkbox and *Pickup Library* to view holds to be picked up at other libraries.

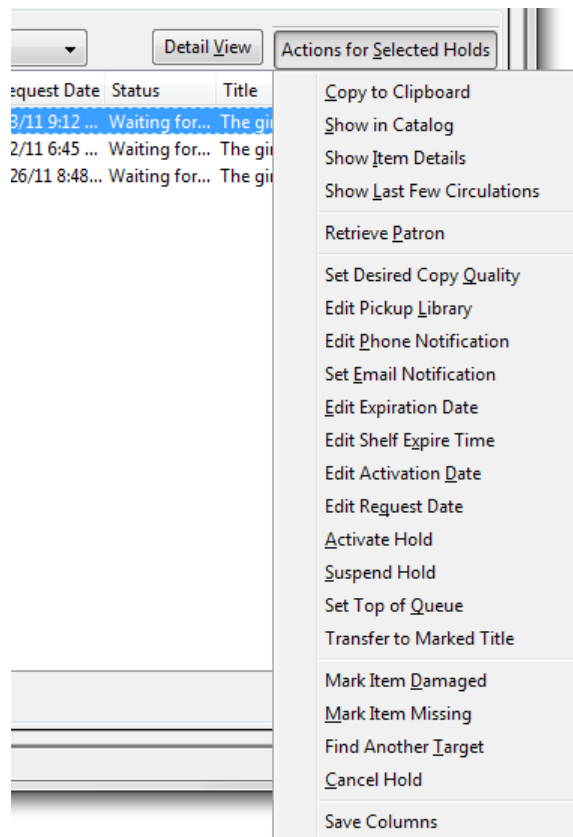
**Holds**

Filter: Pickup Library MCD Chelmsford Public Library

| Available On | Capture Date | Current Copy | Last Notify Time | Notices |
|--------------|--------------|--------------|------------------|---------|
|              |              | No Copy      |                  | 0       |
|              |              | No Copy      |                  | 0       |
|              |              | No Copy      |                  | 0       |

4. Highlight the hold you want to edit. Choose an action from the *Actions for Selected Holds* menu. For more information see the [Actions for Selected Holds](#) section.





5. You can retrieve the hold requestor's account by selecting *Retrieve Patron* on the above dropdown menu.

## Retargeting Holds

Holds need to be retargeted whenever a new item is added to a record, or after some types of item status changes, for instance when an item is changed from *On Order* to *In Process*. The system does not automatically recognize the newly added items as available to fill holds.

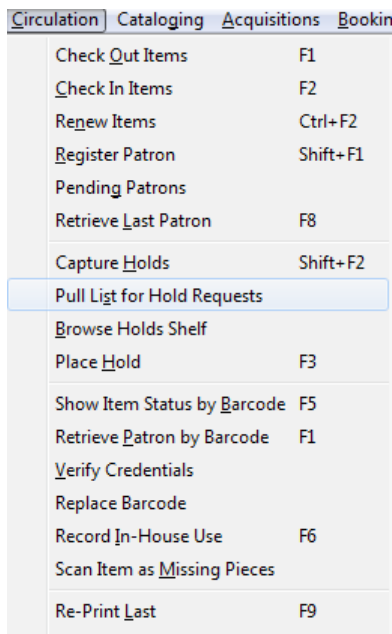
1. View the holds for the item.
2. Highlight all the holds for the record, which have a status of *Waiting for Copy*. If there are a lot of holds, it may be helpful to sort the holds by *Status*.
3. Click on the head of the status column.
4. Under *Actions for Selected Holds* (Alt+S), select *Find Another Target* (Alt+T)
5. A window will open asking if you are sure you would like to reset the holds for these items.
6. Click *Yes* (Alt+Y). Nothing may appear to happen, or if you are retargeting a lot of holds at once, your screen may go blank or seem to freeze for a moment while the holds are retargeted.
7. When the screen refreshes, the holds will be retargeted. The system will now recognize the new items as available for holds.

# Pulling & Capturing Holds

## Holds Pull List

There are usually four statuses a hold may have: *Waiting for Copy*, *Waiting for Capture*, *In Transit* and *Ready for Pickup*.

1. **Waiting-for-copy:** all holdable copies are checked out or not available.
2. **Waiting-for-capture:** an available copy is assigned to the hold. The item shows up on the *Holds Pull List* waiting for staff to search the shelf and capture the hold.
3. **In Transit:** holds are captured at a non-pickup branch and on the way to the pick-up location.
4. **Ready-for-pick-up:** holds are captured and items are on the *Hold Shelf* waiting for patrons to pick up. Besides capturing holds when checking in items, Evergreen matches holds with available items in your library at regular intervals. Once a matching copy is found, the item's barcode number is assigned to the hold and the item is put on the *Holds Pull List*. Staff can print the *Holds Pull List* and search for the items on shelves.
5. To retrieve your *Holds Pull List*, select *Circulation # Pull List for Hold Requests*.



6. The *Holds Pull List* is displayed. You may re-sort it by clicking the column labels, e.g. *Title*. You can also add fields to the display by using the column picker.

**Holds**

Fetch More Holds Total Holds: 11

| Available On | Call Number             | Capture Date | Current Copy   | Last Notify Time | Notices | Pic |
|--------------|-------------------------|--------------|----------------|------------------|---------|-----|
|              | DVD LOST                |              | and1           |                  | 0       | MA  |
|              | CD BiographySWAYZE, PA. |              | 31330006720456 |                  | 0       | MA  |
|              | DVD DIR /Feature        |              | 31330004660423 |                  | 0       | MA  |
|              | CD VocalGOT             |              | 31330003588393 |                  | 0       | MA  |
|              | Fic                     |              | 31330006749398 |                  | 0       | MA  |
|              | Fic                     |              | 31330004260430 |                  | 0       | MA  |
|              | PB/A                    |              | 31330006731693 |                  | 0       | MA  |
|              | Fic                     |              | 31330006492353 |                  | 0       | MN  |
|              | Fic M                   |              | 31330006928257 |                  | 0       | ME  |
|              | 346.065 Ste             |              | 31330005777036 |                  | 0       | MH  |
|              | CD PopularNOW           |              | 31330006246197 |                  | 0       | MC  |



Column adjustments will only affect the screen display and the CSV download for the holds pull list. It will not affect the printable holds pull list.

- The maximum number of holds initially displayed on the pull list is about 100. Use *Fetch More Holds* to retrieve more records. You may have to click *Reload* for those records to appear in the display.

Reload

**Holds**

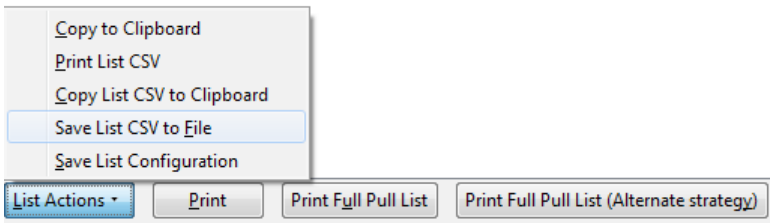
Fetch More Holds Total Holds: 11

| Available On | Call Number         | Holdable Part | Capture Date | Current Copy   |   |
|--------------|---------------------|---------------|--------------|----------------|---|
|              | DVD LOST            |               |              | and1           | ! |
|              | CD BiographySWAY... |               |              | 31330006720456 | ! |
|              | DVD DIR /Feature    |               |              | 31330004660423 | ! |
|              | CD VocalGOT         |               |              | 31330003588393 | ! |
|              | Fic                 |               |              | 31330006749398 | ! |
|              | Fic                 |               |              | 31330004260430 | ! |
|              | PB/A                |               |              | 31330006731693 | ! |
|              | Fic                 |               |              | 31330006492353 | ! |
|              | Fic M               |               |              | 31330006928257 | ! |
|              | 346.065 Ste         |               |              | 31330005777036 | ! |
|              | CD PopularNOW       |               |              | 31330006246197 | ! |

- The following options are available for printing the pull list:

- Print Full Pull List* prints *Title, Author, Shelving Location, Call Number* and *Item Barcode*. This method uses less paper than the alternate strategy.
- Print Full Pull List (Alternate Strategy)* prints the same fields as the above option but also includes a patron barcode. This list will also first sort by copy location, as ordered under *Admin # Local Administration # Copy Location Order*.

- *Save List CSV to File* – This option is available from the *List Actions* button and saves all fields in the screen display to a CSV file. This file can then be opened in Excel or another spreadsheet program. This option provides more flexibility in identifying fields that should be printed.



With the CSV option, if you are including barcodes in the holds pull list, you will need to take the following steps to make the barcode display properly: in Excel, select the entire barcode column, right-click and select *Format Cells*, click *Number* as the category and then reduce the number of decimal places to 0.

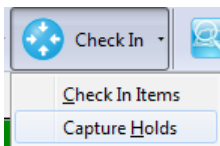
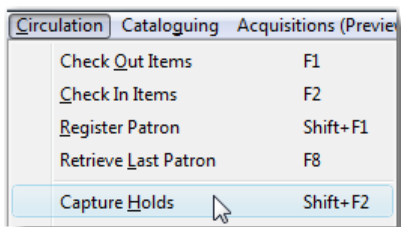
9. You may perform hold management tasks by using the *Actions for Selected Holds* dropdown list.

The *Holds Pull List* is updated constantly. Once an item on the list is no longer available or a hold on the list is captured, the items will disappear from the list. The *Holds Pull List* should be printed at least once a day.

## Capturing Holds

Holds can be captured when a checked-out item is returned (checked in) or an item on the *Holds Pull List* is retrieved and captured. When a hold is captured, the hold slip will be printed and if the patron has chosen to be notified by email, the email notification will be sent out. The item should be put on the hold shelf.

1. To capture a hold, select *Circulation # Capture Holds*; click *Check In # Capture Holds* on the circulation toolbar; or hit *Shift-F2*.



2. Scan or type barcode and click *Submit*.

## Check In or Process Item

### Auto-Print Hold and Transit Slips

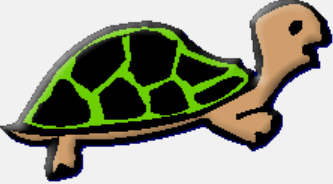
**Hold Capture**

Enter Barcode:

| Alert Message | Balance Owed | Barcode | Bill # | Checkin Date | Family Name | Finish | Location |
|---------------|--------------|---------|--------|--------------|-------------|--------|----------|
|---------------|--------------|---------|--------|--------------|-------------|--------|----------|

- The following hold slip is automatically printed. (This slip will not display on the *Capture Holds* screen, but will display on a *Check In* screen not set to automatically print slips.)

**Hold Slip**



This item needs to be routed to HOLD SHELF

Barcode: 31330006834075  
 Title: Tattoos & tequila : to hell and back with

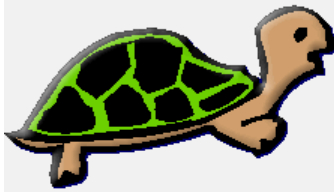
Hold for patron Dickinson, Emily  
 Barcode: 1234

Request Date: 2011-05-27  
 Slip Date: 2011-05-27

Options

- If the item should be sent to another location, a hold transit slip will be printed. (This slip will not display on the *Capture Holds* screen, but may display on a *Check In* screen that is not set to automatically print slips.)

Transit Slip



Destination: MAM.

Amesbury Public Library

Barcode: 31330006867760

Title: The spiritual life of water : its power and purpose

Author: Bartholomew, Alick

Hold for patron Dickinson, Emily

Barcode: 1234

Request Date: 2011-05-27

Slip Date: 2011-05-27

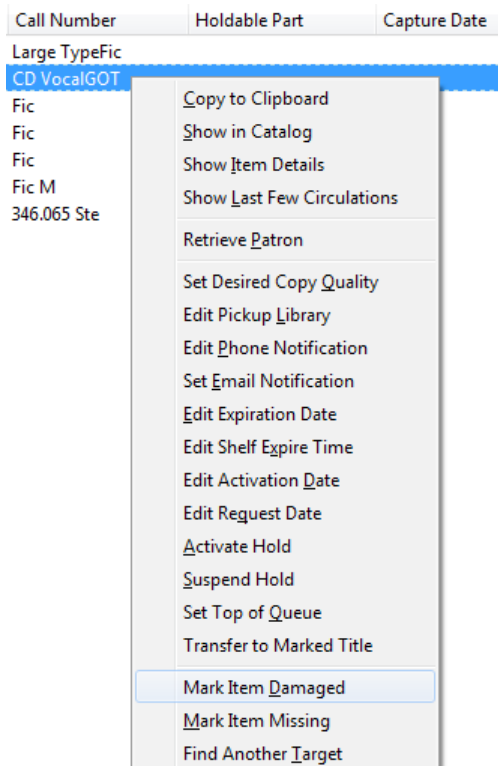


If a patron has an *OPAC/Staff Client Holds Alias* in his/her account, it will be used on the hold slip instead of the patron's name. Holds can also be captured on the *Circulation # Check In Items* screen where you have more control over automatic slip printing.

## Handling Missing and Damaged Item

If an item on the holds pull list is missing or damaged, you can change its status directly from the holds pull list.

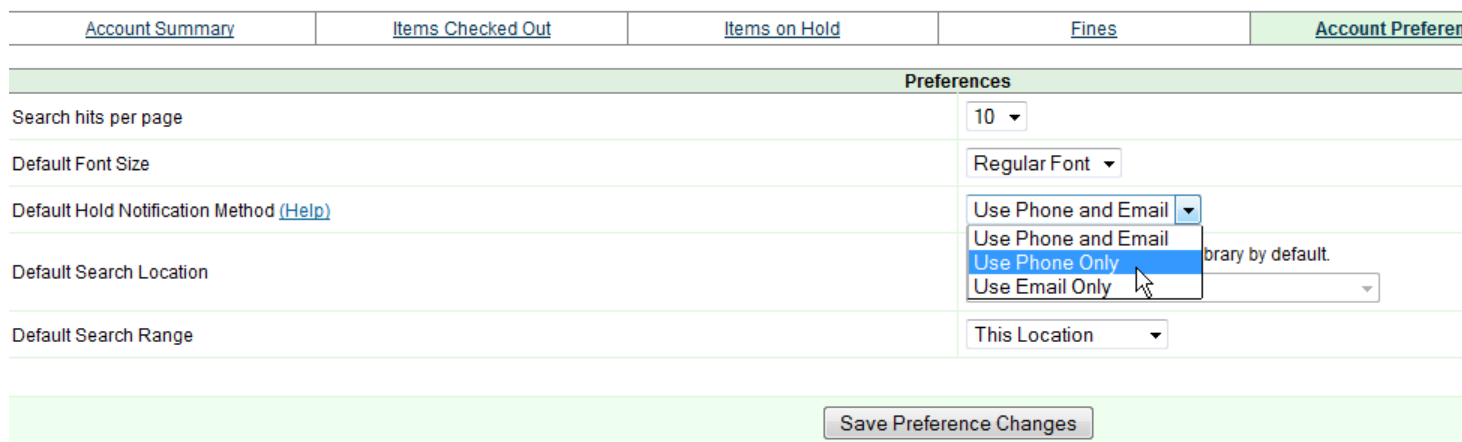
1. From the *Holds Pull List*, right-click on the item and either select *Mark Item Missing* or *Mark Item Damaged*.



2. Evergreen will update the status of the item and will immediately retarget the hold.


## Holds Notification Methods

1. In Evergreen, patrons can set up their default holds notification method in the *Account Preferences* area of *My Account*. Staff cannot set these preferences for patrons; the patrons must do it when they are logged into the public catalog.




The “Default Phone Number” option is the default for those users who have not yet set a preference.

2. Patrons with a default notification preference for phone will see their phone number at the time they place a hold. The checkboxes for email and phone notification will also automatically be checked.

| Create / Edit a Hold  |   |
|---|---|
| Recipient:  | Everdeen, Katniss   |
| Title:  | The girl who kicked the hornet's nest   |
| Author  | Larsson, Stieg  |
| Format  |  Books |
| Physical Description:   | print 746 p. ; 18 cm.   |
| Contact telephone number:   | 508-555-1212 (xxx-yyy-zzzz)   |
| Enable phone notifications for this hold?                                       | <input checked="" type="checkbox"/>   |
| Contact email address:  | 123@mail.ext  |
| Enable email notifications for this hold?                                       | <input checked="" type="checkbox"/>   |
| Pickup location   | Billerica Public Library ▼  |
| Expiration date   | <input type="text"/>  |
| Suspend this hold ( <a href="#">Help</a> )                                      | <input type="checkbox"/>  |
| <a href="#">Advanced Hold Options</a>   |   |
| <input type="button" value="Place Hold"/> <input type="button" value="Cancel"/> |   |

3. The patron can remove these checkmarks at the time they place the hold or they can enter a different phone number if they prefer to be contacted at a different number. The patron cannot change their e-mail address at this time.

| Create / Edit a Hold  |   |
|---|---|
| Recipient   | Everdeen, Katniss   |
| Title:  | The girl who kicked the hornet's nest   |
| Author  | Larsson, Stieg  |
| Format  |  Books |
| Physical Description:   | print 746 p. ; 18 cm.   |
| Contact telephone number:   | 999-999-9 (xxx-yyy-zzzz)  |
| Enable phone notifications for this hold?                                       | <input checked="" type="checkbox"/>   |
| Contact email address:  | 123@mail.ext  |
| Enable email notifications for this hold?                                       | <input type="checkbox"/>  |
| Pickup location   | Billerica Public Library ▼  |
| Expiration date   | <input type="text"/>  |
| Suspend this hold ( <a href="#">Help</a> )                                      | <input type="checkbox"/>  |
| <a href="#">Advanced Hold Options</a>   |   |
| <input type="button" value="Place Hold"/> <input type="button" value="Cancel"/> |   |

4. When the hold becomes available, the holds slip will display the patron's e-mail address only if the patron selected the *Notify by Email by default when a hold is ready for pickup?* checkbox. It will display a phone number only if the patron selected the *Notify by Phone by default when a hold is ready for pickup?* checkbox.

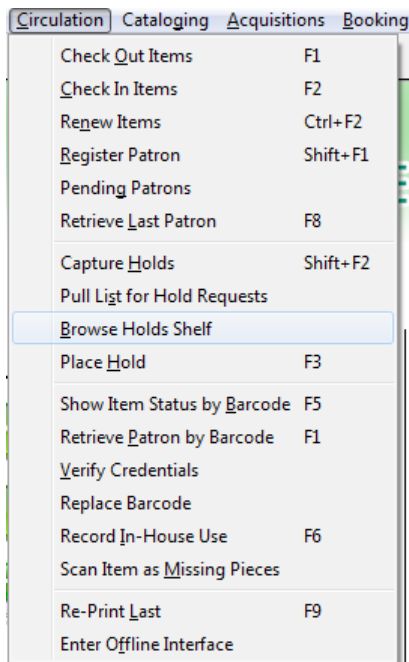




If the patron changes their contact telephone number when placing the hold, this phone number will display on the holds slip. It will not necessarily be the same phone number contained in the patron's record.

## Clearing Shelf-Expired Holds

1. Items with *Ready-for-Pickup* status are on the *Holds Shelf List*. The *Holds Shelf List* can help you manage items on the holds shelf. To see the holds shelf list, select *Circulation # Browse Holds Shelf*.



2. The *Holds Shelf List* is displayed. Note the *Actions for Selected Holds* are available, as in the patron record.

You can cancel stale holds here.

**Holds**

Pickup Library: MAN Memorial Hall Library  View Shelf-Expired Holds

| Available On     | Call Number             | Capture Date     | Current Copy   | Current Copy Location | Last Notify Time | Notices |
|------------------|-------------------------|------------------|----------------|-----------------------|------------------|---------|
| 5/27/11 11:59 AM | Biography NEIL, VI.     | 5/27/11 11:59 AM | 31330006834075 | Stacks                |                  | 0       |
| 5/27/11 10:52 AM | CD BiographySWAYZE, ... | 5/27/11 10:52 AM | 31330006720456 | Stacks                |                  | 0       |
| 5/27/11 10:49 AM | DVD LOST                | 5/27/11 10:49 AM | and1           | Stacks                |                  | 0       |
| 5/27/11 10:56 AM | DVD DIR /Feature        | 5/27/11 10:56 AM | 31330004660423 | Stacks                |                  | 0       |
| 5/25/11 8:39 PM  | DVD TRU / TV            | 5/25/11 8:39 PM  | 31330006776508 | Stacks                |                  | 0       |
| 5/24/11 8:59 AM  | Biography CHABON, MI.   | 5/24/11 8:59 AM  | 31330006536571 | Stacks                |                  | 0       |
| 5/24/11 8:59 AM  | Book Club / Fic         | 5/24/11 8:59 AM  | 31330006178515 | Stacks                |                  | 0       |
| 5/24/11 8:38 AM  | Large TypeFic W         | 5/24/11 8:38 AM  | 31330003967621 | Stacks                |                  | 0       |
| 5/23/11 4:15 PM  | 956.92 Fri              | 5/23/11 4:15 PM  | 31330005220219 | Stacks                |                  | 0       |
| 5/23/11 4:06 PM  | Large Type 363.7 Fri    | 5/23/11 4:06 PM  | 31330006553014 | Display               |                  | 0       |
| 5/23/11 4:02 PM  | 363.7 Fri               | 5/23/11 4:02 PM  | 31330006403400 | Stacks                |                  | 0       |
| 5/20/11 12:00 AM | Teen CD GLE             | 5/20/11 12:00 AM | 31330006876340 | Stacks                |                  | 0       |
| 5/19/11 12:00 AM | FIC ATK                 | 5/19/11 12:00 AM | 32124001445832 | Stacks                |                  | 0       |
| 5/17/11 12:00 AM | Fic                     | 5/17/11 12:00 AM | 31330006889186 | Stacks                |                  | 0       |
| 5/19/11 12:00 AM | FICTION/MARTIN          | 5/19/11 12:00 AM | 33934003146827 | Stacks                |                  | 0       |
| 5/19/11 12:00 AM | F McC                   | 5/19/11 12:00 AM | 32135001073994 | Stacks                |                  | 0       |
| 5/19/11 12:00 AM | FIC CHE                 | 5/19/11 12:00 AM | 32124001446277 | Stacks                |                  | 0       |
| 5/19/11 12:00 AM | 006.754/ELAD            | 5/19/11 12:00 AM | 33934003274280 | Stacks                |                  | 0       |
| 5/20/11 12:00 AM | MP3-CD M Harris         | 5/20/11 12:00 AM | 39965001635944 | Stacks                |                  | 0       |
| 5/19/11 12:00 AM | DVD SOU / TV            | 5/19/11 12:00 AM | 31330007058641 | Stacks                |                  | 0       |

3. Use the column picker to add and remove fields from this display. Two fields you may want to display are *Shelf Expire Time* and *Shelf Time*.

**Holds**

| Active? | Available On | Current Copy ... | Call Number | Title                 | Capture Date   | Current Copy   |
|---------|--------------|------------------|-------------|-----------------------|----------------|----------------|
| Yes     |              | Stacks           | J 523.4 Far | Planets and their ... | 6/8/11 4:43 PM | 32135000713509 |

4. Check the *View Shelf-Expired Holds* checkbox to list expired holds only. Click the *Print* button if you need a printed list.

5. The *Clear These Holds* button is lit up. Click it and the expired holds will be canceled.

**Holds**

Pickup Library: MAN Memorial Hall Library  View Shelf-Expired Holds

| Available On       | Call Number    | Capture Date     | Current Copy   | Current Copy Location | Last Notify Time | Notices | Pickup Library | Request Date    | Shelf Time   | Status |
|--------------------|----------------|------------------|----------------|-----------------------|------------------|---------|----------------|-----------------|--------------|--------|
| 5/20/11 12:00 A... | Teen CD GLE    | 5/20/11 12:00 AM | 31330006876340 | Stacks                |                  | 0       | MAN            | 3/16/11 6:58... | 5/20/11 1... | Ready  |
| 5/19/11 12:00 A... | FIC ATK        | 5/19/11 12:00 AM | 32124001445832 | Stacks                |                  | 0       | MAN            | 3/17/11 8:00... | 5/19/11 1... | Ready  |
| 5/17/11 12:00 A... | Fic            | 5/17/11 12:00 AM | 31330006889186 | Stacks                |                  | 0       | MAN            | 3/28/11 8:17... | 5/17/11 1... | Ready  |
| 5/19/11 12:00 A... | FICTION/MAR... | 5/19/11 12:00 AM | 33934003146827 | Stacks                |                  | 0       | MAN            | 5/20/10 6:44... | 5/19/11 1... | Ready  |

6. Bring items down from the hold shelf and check them in.



If you cancel a ready-for-pickup hold, you must check in the item to make it available for circulation or trigger the next hold in line.

Hold shelf expire time is inserted when a hold achieves on-hold-shelf status. It is calculated based on the interval entered in *Local Admin # Library Settings # Default hold shelf expire interval*.



The clear-hold-shelf function cancels shelf-expired holds only. It does not include holds canceled by patron. Staff needs to trace these items manually according to the hold slip date.

# Alternate Hold Pick up Location

## Abstract

This feature enables libraries to configure an alternate hold pick up location. The alternate pick up location will appear in the staff client to inform library staff that a patron has a hold waiting at that location. In the stock Evergreen code, the default alternate location is called "Behind Desk". This label can be changed to accommodate a library's specific hold pick up location. For example, if a library has a drive thru window for hold pick up, the alternate location can be changed to display as "Drive Thru".

## Configuration

The alternate pick up location is disabled in Evergreen by default. It can be enabled by setting **Holds: Behind Desk Pickup Supported** to *True* in the Library Settings Editor. Server side changes to configuration files are required to enable this feature and edit the alternate pick up location label. The following files and labels need to be changed:

- Open-ILS/src/templates/opac/myopac/prefs\_settings.tt2

```
<td><label for='[% setting %]%'>[% l('Pickup holds from the drive-thru when possible?') %]</label></td>
```

- Open-ILS/web/opac/locale/en-US/lang.dtd

```
<!ENTITY staff.patron_display.holds_available_behind_desk.label 'Drive-Thru:' >
```

- Open-ILS/xul/staff\_client/server/locale/en-US/circ.properties

```
staff.circ.utils.hold.behind_desk=Drive-Thru
```

- Open-ILS/xul/staff\_client/server/locale/en-US/patron.properties

```
staff.patron.summary.hold_counts_behind_desk=Available / Total (Drive-Thru)
```

Libraries can also choose to give patrons the ability to opt-in to pick up holds at the alternate location through their OPAC account. To add this option, set the **OPAC/Patron Visible** field in the User Setting Type **Hold is behind Circ Desk** to *True*. The User Setting Types can be found under **Admin # Server Administration # User Setting Types**.

## Display

When enabled, the alternate pick up location will appear in several places in the staff client. The alternate pick up location and the number of items that are ready for pick up at that location will be displayed in the Patron Account Summary and under the Holds button in the patron account. Staff will also see the general number of holds available and holds placed by the patron.

File Edit Search Circulation Cataloging Acquisitions Booking

Check Out Check In Search Catalog Item Status Patron Search Patron Registration

1 Patron Search 2 Patron: Clark, Monty Daniel +

**Clark, Monty Daniel II** Refresh Check Out Items Out **Holds** Bill

0 1/3 (1) \$ 0.00

**▼ Status**

Cataloging Administrator  
BR1  
Internet Filtered  
Account created on 6/6/13  
Expires on 6/6/16  
Last Activity 6/6/13  
Last updated on 6/6/13

Holds: 3  
Available: 1  
Drive-Thru: 1

Bills: \$ 0.00  
Check Outs: 0  
Overdue: 0  
Long Overdue: 0  
Claimed Returned: 0  
Lost: 0  
Non Cataloged: 0

**▼ ID and Contact Information**

Library Card: [99999381970](#)  
ID 1: Drivers License  
ID 2:  
Holds Alias:  
Date of Birth: 5/18/84  
Day Phone:  
Evening Phone:  
Other Phone:  
OPAC Login: br1mclark  
Email:

**Holds**

Place Hold Show Cancelled Holds

| # | Available On   | Capture Date   | Current Copy | Drive-Thru | Last Notify Time | Notices | Pickup Libra |
|---|----------------|----------------|--------------|------------|------------------|---------|--------------|
| 1 |                |                | CONC40000598 | Yes        |                  | 0       | BR1          |
| 2 |                |                | CONC4400059  | Yes        |                  | 0       | BR1          |
| 3 | 6/6/13 2:05 PM | 6/6/13 2:05 PM | CONC4200074  | Yes        |                  | 0       | BR1          |

List Actions Print

If configured, patrons will see the option to opt-in to the alternate location in the *Account Preferences* section of their OPAC Account.

The screenshot shows the Evergreen Administrator System interface. At the top, there is a green header with the Evergreen logo and the text "Administrator System". Below the header, there is a navigation bar with links "Link 1", "Link 2", "Link 3", "Link 4", and "Link 5". The main content area is titled "Search the Catalog" and includes a search bar with a dropdown menu for "All Formats", a text input field, a dropdown menu for "Keyword", and a dropdown menu for "Example Consortium". A "Search" button is located to the right of the search bar. Below the search bar, there is a navigation bar with tabs for "Account Summary", "Items Checked Out", "Holds", "Account Preferences", and "My Lists". Under "Account Preferences", there are sub-tabs for "Personal Information", "Notification Preferences", and "Search and History Preferences". The "Account Information and Preferences" section contains several settings: "Search hits per page" (set to 10), "Preferred search location" (set to Example Consortium), "Preferred pickup location" (set to Example Branch 1), "Keep history of checked out items?" (checkbox), "Keep history of holds?" (checkbox), "Skip warning when adding to temporary book list?" (checkbox), and "Pickup holds from the drive-thru when possible?" (checkbox). A red box highlights the "Pickup holds from the drive-thru when possible?" checkbox. Below the settings is a "Save" button. At the bottom of the page, there is a footer with the text "Ensure your account has a valid email address so that we can notify you about available holds, items that are about to be overdue, and overdue items!" and a navigation bar with links "Dynamic catalog", "Bottom Link 2", "Bottom Link 3", "Bottom Link 4", and "Bottom Link 5".

## Display Hold Types on Pull Lists

This feature ensures that the hold type can be displayed on all hold interfaces.

You will find the following changes to the hold type indicator:

1. The hold type indicator will display by default on all XUL-based hold interfaces. XUL-based hold interfaces are those that number the items on the interface. This can be overridden by saving column configurations that remove the *Type* column.
2. The hold type indicator will display by default on the HTML-based pull list. To access, click *Circulation # Pull List for Hold Requests # Print Full Pull List (Alternate Strategy)*.
3. The hold type indicator can be added to the Simplified Pull List. To access, click *Circulation # Pull List for Hold Requests # Simplified Pull List Interface*.

To add the hold type indicator to the simplified pull list, click *Simplified Pull List Interface*, and right click on any of the column headers. The Column Picker appears in a pop up window. Click the box adjacent to *Hold Type*, and Click *Save*. The *Simplified Pull List Interface* will now include the hold type each time that you log into the staff client.

The screenshot shows the 'Hold Pull List' interface with a 'Column Picker' dialog box overlaid. The 'Column Picker' dialog has a table with the following columns: Column, Display, Auto Width, and Sort Priority. The 'Hold Type' row is highlighted with a red box.

| Column            | Display                             | Auto Width               | Sort Priority |
|-------------------|-------------------------------------|--------------------------|---------------|
| #                 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |               |
| Shelving Location | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 0             |
| Call Number Label | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 0             |
| Author            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 0             |
| Title             | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 0             |
| Barcode           | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 0             |
| Parts             | <input checked="" type="checkbox"/> | <input type="checkbox"/> |               |
| Hold Type         | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 0             |
| Hold Notes        | <input type="checkbox"/>            | <input type="checkbox"/> |               |

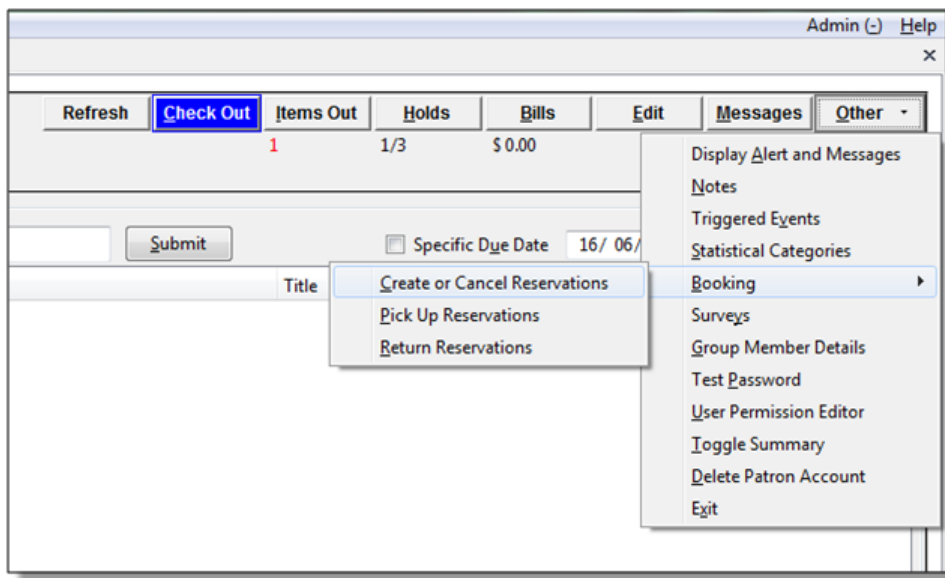
# Chapter 95. Booking Module

## Creating a Booking Reservation

Only staff members may create reservations. A reservation can be started from a patron record, or a booking resource. To reserve catalogued items, you may start from searching the catalogue, if you do not know the booking item's barcode.

### To create a reservation from a patron record

- 1) Retrieve the patron's record.
- 2) Select Other -# Booking -# Create or Cancel Reservations. This takes you to the Reservations Screen.



- 3) For non-catalogued items, choose a Bookable Resource Type and click Next. For catalogued items, enter the barcode in Enter the barcode of a catalogued, bookable resource box, then click Next beside the box.

1 Patron: Pringle, Jennifer 2 Reservations

Go Back Reload Go Forward

### Choose a Bookable Resource Type

- Ereader
- Laptop
- Projector
- Room
- Video Connector

Next

- Or -

Enter the barcode of a cataloged, bookable resource:  Next

To reserve an item that is not yet registered as a bookable resource, find it in the catalog or under *Display Item*, and select *Make Item Bookable* or *Book Item Now* there.

**Existing reservations for Pringle, Jennifer:**

This user has no existing reservations at this time.

Cancel selected

4) For non-catalogued resources, the Bookable Resource Type and the items associated with the type will appear.

1 Patron: Pringle, Jennifer 2 Reservations

Go Back Reload Go Forward

### Laptop

- 98723000112235
- 98723000112234
- 98723000112233
- 98723000112244
- 98723000112236

Choose the pickup library for this reservation: BPR

Reserve Selected Reserve Any

**I need this resource...**

Between 6/16/2011 16:19

and 6/16/2011 16:19

**With these attributes:**

Operating System ANY

Computing Platform ANY

**Existing reservations for Pringle, Jennifer:**

This user has no existing reservations at this time.

Cancel selected

For catalogued items, the title and the item will display in the box.

5) Select the date and time for the reservation in **I need this resource...** area. Click the date field. A calendar widget will be displayed for you to choose a date. Click the time field to choose time from the dropdown list.



**I need this resource...**

Between

and

**With these attributes:**

Operating System

Computing Platform

15:15  
 15:30  
 15:45  
 16:00  
 16:15  
 16:30



If incorrect date and time is selected, the date/time boxes will appear in red. For example, if the time for which the reservation is set has already passed, the boxes will appear in red. There must be at least 15 minutes between the creation of the reservation and the start time of the reservation.

6) For non-catalogued resources, patrons may specify special feature(s), if any, of the resource. With these attributes: allows you to do so. For example, if a patron is booking a laptop he/she can choose between PC and Mac and even choose a specific operating system if they need to. Click the drop down arrow to select your option from the list.

**With these attributes:**

Operating System

Computing Platform

ANY  
 PC  
 Mac

7) Select the pickup location from the dropdown list.

Choose the pickup library for this reservation:

**Existing reservations for Pringle, Jen**

This user has no existing reservations at this t

BPR  
 SITKA  
 BNCLF  
 BPR  
 BTE  
 BNELF  
 BFN  
 BTR

8) If there are multiple copies of the resource and any item listed is acceptable, click Reserve Any. To choose a specific item, select it and then click Reserve Selected.

Go Back   Reload   Go Forward

### Laptop

98723000112235  
 98723000112234  
 98723000112233  
 98723000112244  
 98723000112236

Choose the pickup library for this reservation: BPR

Reserve Selected   Reserve Any

9) A message will confirm that the action succeeded. Click OK on the prompt.

10) The screen will refresh and the reservation will appear below the patron's name at the bottom of the screen.

1 Patron: Pringle, Jennifer   2 Reservations

Go Back   Reload   Go Forward

### Laptop

98723000112235  
 98723000112234  
 98723000112244  
 98723000112236

Choose the pickup library for this reservation: BPR

Reserve Selected   Reserve Any

**I need this resource...**

*Between*  
 6/16/2011   17:30

*and*  
 6/16/2011   18:45

**With these attributes:**

Operating System   ANY

Computing Platform   ANY

**Existing reservations for Pringle, Jennifer:**

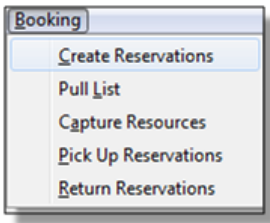
| Type   | Resource       | Start time       |
|--------|----------------|------------------|
| Laptop | 98723000112233 | 2011-06-16 17:30 |

Cancel selected

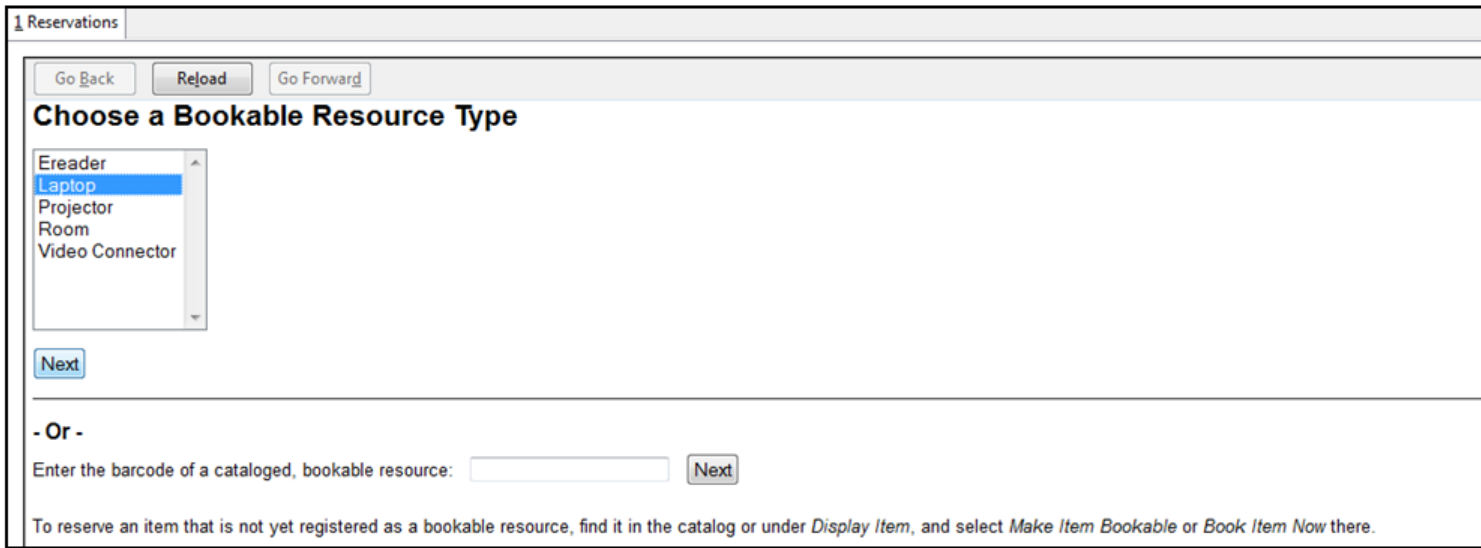
## To create a reservation from a booking resource

You need to know the barcode of the patron when you create a reservation for him/her from a booking resource.

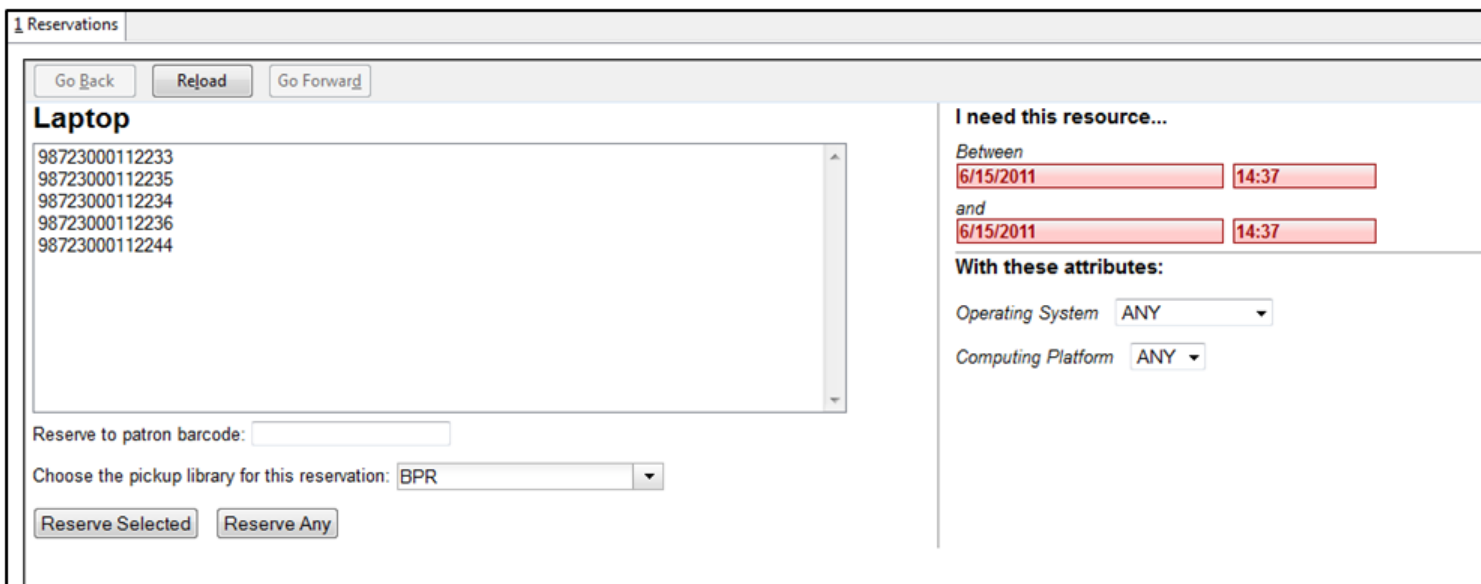
1) From the Booking menu, select Create Reservations



2) Choose a Bookable Resource Type and click Next or enter the barcode of a catalogued resource and click Next.

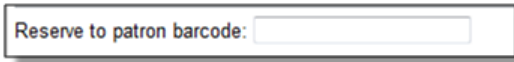


3) For non-catalogued resources, a screen showing the Bookable Resource Type and the items associated with the type will appear.



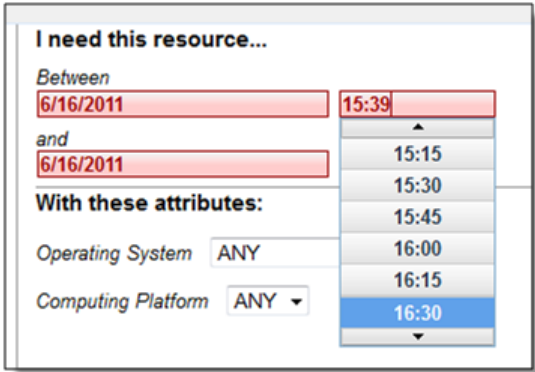
For catalogued resources, the title and item will appear.

4) Enter the user's barcode in the Reserve to patron barcode box. The user's existing reservations, if any, will appear at the bottom of the screen.



Reserve to patron barcode:

5) Select the date and time for the reservation in **I need this resource...** area. Click the date field. A calendar widget will be displayed for you to choose a date. Click the time field to choose time from the dropdown list.



**I need this resource...**

Between


and

**With these attributes:**

Operating System

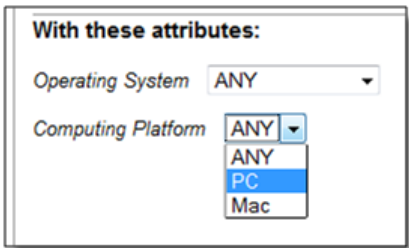
Computing Platform

Time selection dropdown:  
15:15  
15:30  
15:45  
16:00  
16:15  
16:30



If incorrect date and time is selected, the date/time boxes will appear in red. For example, if the time for which the reservation is set has already passed, the boxes will appear in red. The times must be set correctly for the reservation to be created. There must be at least 15 minutes between the creation of the reservation and the start time of the reservation.

6) For non-catalogued resources, patrons may specify special feature(s), if any, of the resource. The With these attributes: allows you to do so. For example, if a patron is booking a laptop they can choose between PC and Mac and even choose a specific operating system if they need to. Click the dropdown arrow to select your option from the list.



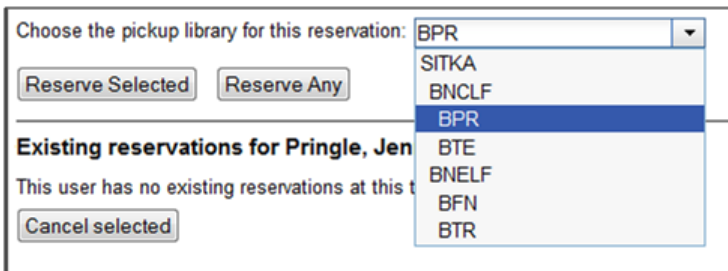
**With these attributes:**

Operating System

Computing Platform

Computing Platform dropdown list:  
ANY  
PC  
Mac

7) Select the pickup location from the dropdown list.



Choose the pickup library for this reservation:

**Existing reservations for Pringle, Jen**

This user has no existing reservations at this time

Pickup location dropdown list:  
SITKA  
BNCLF  
BPR  
BTE  
BNELF  
BFN  
BTR

8) If there are multiple copies of the resource and any item listed is acceptable, click Reserve Any. To choose a specific item, select it and then click Reserve Selected.

Go Back   Reload   Go Forward

### Laptop

98723000112235  
98723000112234  
98723000112233  
98723000112244  
98723000112236

Choose the pickup library for this reservation: BPR

Reserve Selected   Reserve Any

9) A message will confirm that the action succeeded. Click OK on the prompt.

10) The screen will refresh and the reservation will appear below the patron's name at the bottom of the screen.

1 Patron: Pringle, Jennifer   2 Reservations

Go Back   Reload   Go Forward

### Laptop

98723000112235  
98723000112234  
98723000112244  
98723000112236

Choose the pickup library for this reservation: BPR

Reserve Selected   Reserve Any

**I need this resource...**

Between 6/16/2011 17:30  
and 6/16/2011 18:45

**With these attributes:**

Operating System ANY  
Computing Platform ANY

**Existing reservations for Pringle, Jennifer:**

| Type   | Resource       | Start time       |
|--------|----------------|------------------|
| Laptop | 98723000112233 | 2011-06-16 17:30 |

Cancel selected

## Search the catalogue to create a reservation

If you would like to reserve a catalogued item but do not know the item barcode, you may start with a catalogue search.

1) In the staff client, select Cataloguing -# Search the Catalogue or keyboard shortcut F3 to search for the item you wish to reserve. You may search by any bibliographic information.

- 2) Click the title to display the record summary. In the Copy Summary, select Copy Details in Actions column.
- 3) The Copy Details will appear in a new row. In the barcode column, click the book now link.
- 4) A screen showing the title and barcodes of available copies will appear.
- 5) Enter the user's barcode in the Reserve to patron barcode box. The user's existing reservations, if any, will appear at the bottom of the screen.
- 6) Select the date and time in **I need this resource...** section. If the date and time set is incorrect the boxes appear in red. For example, if the time for which the reservation is set has already passed, the boxes will appear in red.
- 7) Select pickup location. If there are multiple copies and any of the listed items is acceptable, click Reserve Any. To choose a specific item, select it and then click Reserve Selected.
- 8) A message will confirm that the action succeeded. Click OK on the prompt.
- 9) The screen will refresh, and the reservation will appear below the user's name.

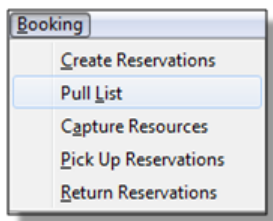


Reservations on catalogued items can be created on Item Status (F5) screen. Select the item, then Actions for Selected Items # Book Item Now.

## Reservation Pull List

Reservation pull list can be generated dynamically on the Staff Client.

- 1) To create a pull list, select Booking -# Pull List.



- 2) You can decide how many days in advance you would like to pull reserved items. Enter the number of days in the box adjacent to Generate list for this many days hence. For example, if you would like to pull items that are needed today, you can enter 1 in the box, and you will retrieve items that need to be pulled today.
- 3) Click Fetch to retrieve the pull list.



4) The pull list will appear. Click Print to print the pull list.

| Title or name | Barcode        | Call number | Copy location | Reservation details   |
|---------------|----------------|-------------|---------------|---|
| Laptop        | 98723000112233 | -           | -             | 2011-06-17 17:30 - 2011-06-17 18:45<br>at BPR for Pringle, Jennifer |
| Laptop        | 98723000112236 | -           | -             | 2011-06-17 13:00 - 2011-06-17 14:00<br>at BPR for Marple, Jane      |
| Ereader       | 98723000223345 | -           | -             | 2011-06-17 14:15 - 2011-06-17 15:30<br>at BPR for Wimsey, Peter     |

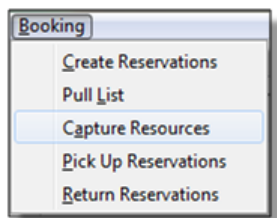
## Capturing Items for Reservations

Reservations must be captured before they are ready to be picked up by the patron.



Always capture reservations in Booking Module. Check In function in Circulation does not function the same as Capture Resources.

1) In the staff client, select Booking -# Capture Resources.



2) Scan the item barcode or type the barcode then click Capture.

Enter barcode: 98723000112233

3) The message Capture succeeded will appear to the right. Information about the item will appear below the message. Click Print button to print a slip for the reservation.

Booking Capture

Go Back   Reload   Go Forward

### Capture Reserved Resources

Enter barcode: 98723000112233   Capture   Capture succeeded

**Capture Information**   Print

---

This item need to be routed to **RESERVATION SHELF:**  
 Barcode: 98723000112233  
 Title: Laptop

**Reserved for patron** Pringle, Jennifer  
 Barcode: 998723000123456

Request time: 2011-06-17 11:50  
 Reserved from: 2011-06-17 17:30 - 2011-06-17 18:45

Slip date: Fri Jun 17 13:54:25 2011  
 Printed by System Account, Administrator at BPR

## Picking Up Reservations

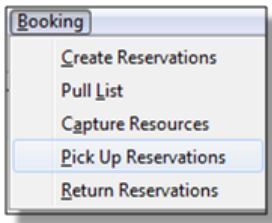


Always use the dedicated Booking Module interfaces for tasks related to reservations. Items that have been captured for a reservation cannot be checked out using the Check Out interface, even if the patron is the reservation recipient.

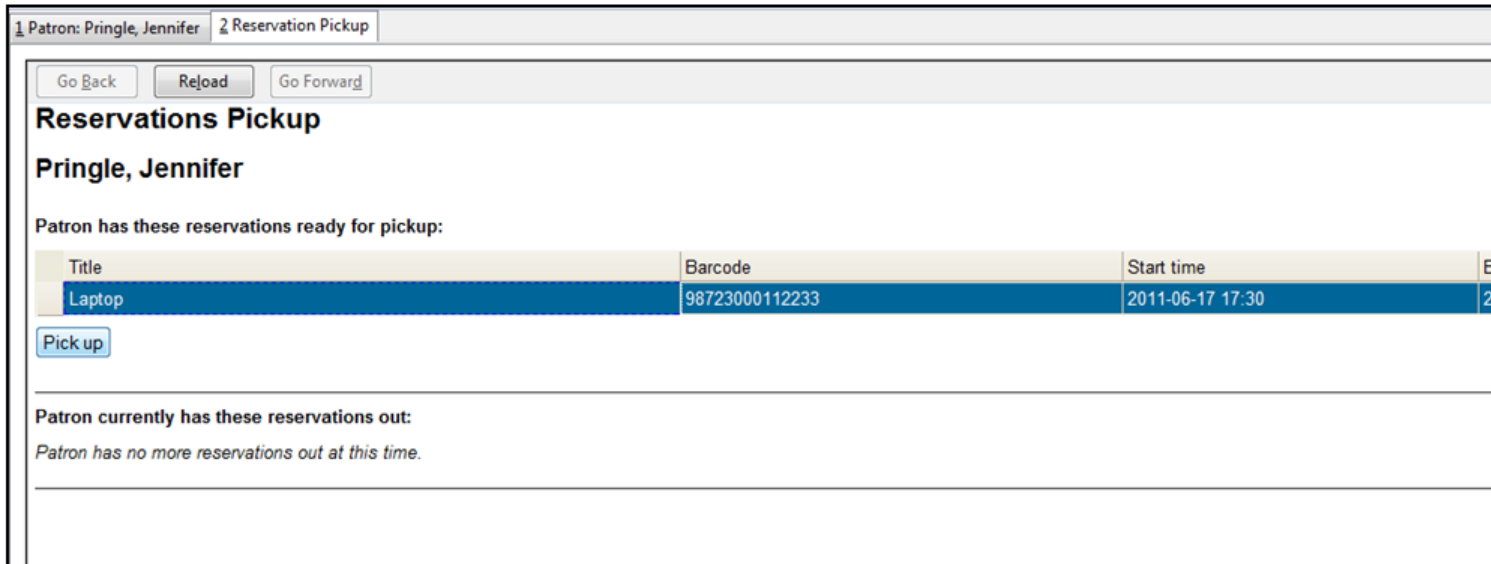
1) Ready-for-pickup reservations can be listed from Other -# Booking -# Pick Up Reservations within a patron record or Booking -# Pick Up Reservations.

The screenshot shows a web application window titled 'Admin (-) Help'. The main menu includes 'Refresh', 'Check Out', 'Items Out', 'Holds', 'Bills', 'Edit', 'Messages', and 'Other'. Below the menu, there are statistics: '0' items out, '0/0' holds, and '\$ 0.00' in bills. A 'Submit' button is visible. A dropdown menu is open under 'Other', listing various administrative functions. The 'Booking' option is highlighted, and its sub-menu is also open, showing 'Create or Cancel Reservations', 'Pick Up Reservations', and 'Return Reservations'. The 'Pick Up Reservations' option is currently selected.

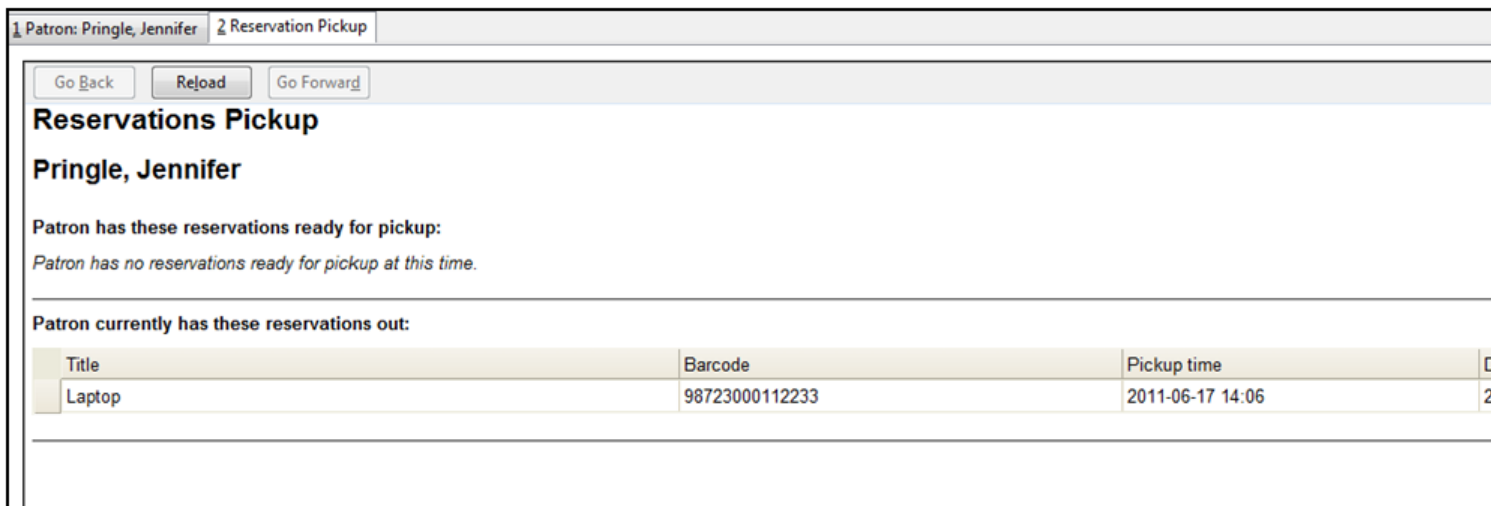




- 2) Scan the patron barcode if using Booking -# Pick Up Reservations.
- 3) The reservation(s) available for pickup will display. Select those you want to pick up and click Pick Up.



- 4) The screen will refresh to show that the patron has picked up the reservation(s).

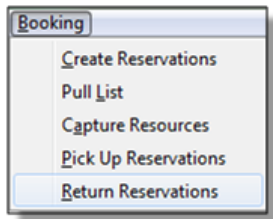


# Returning Reservations

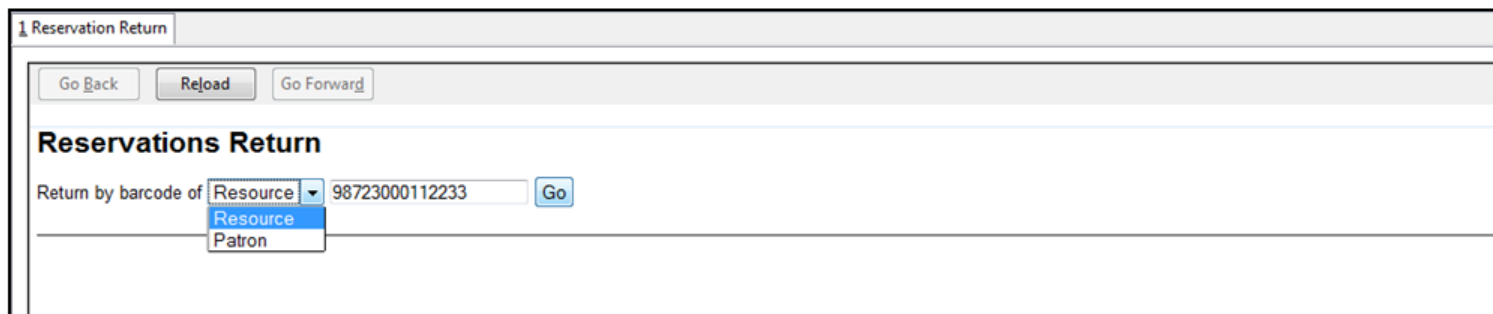


When a reserved item is brought back, staff must use the Booking Module to return the reservation.

1) To return reservations, select Booking -# Return Reservations

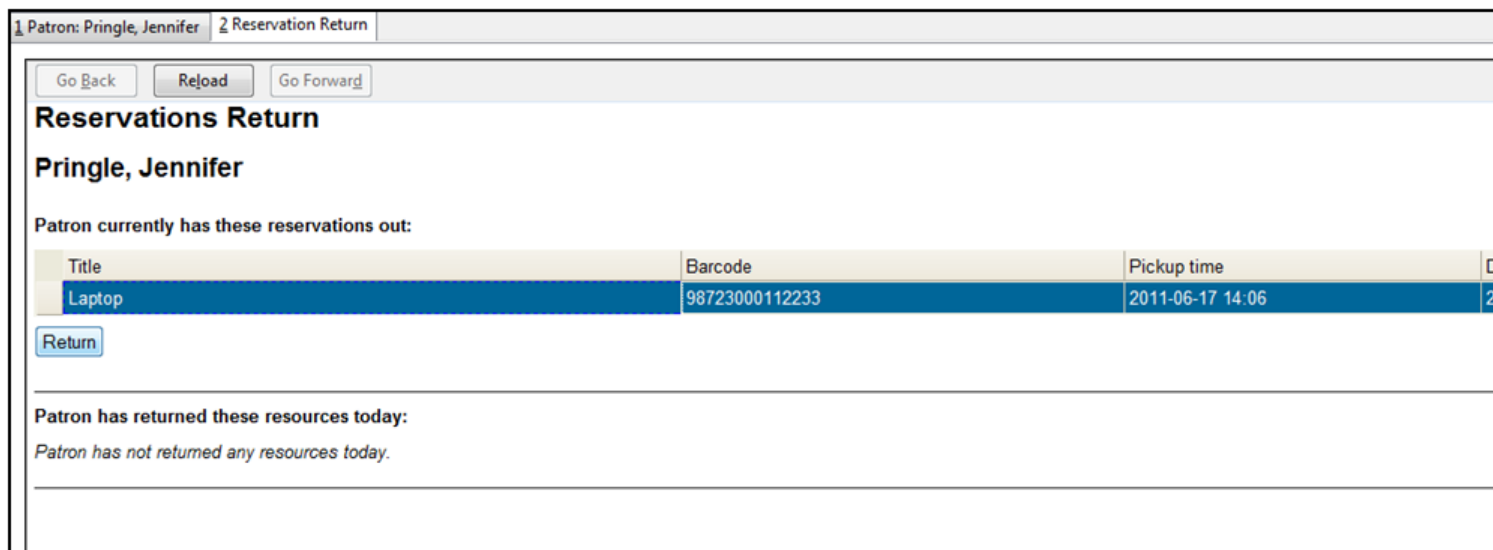


2) You can return the item by patron or item barcode. Here we choose Resource to return by item barcode. Scan or enter the barcode, and click Go.



3) A pop up box will tell you that the item was returned. Click OK on the prompt.

4) If we select Patron on the above screen, after scanning the patron's barcode, reservations currently out to that patron are displayed. Highlight the reservations you want to return, and click Return.



5) The screen will refresh to show any resources that remain out and the reservations that have been returned.

Reservations Return

Return by barcode of Resource 98723000112233 Go

**Pringle, Jennifer**

Patron currently has these reservations out:  
*Patron has no more reservations out at this time.*

Patron has returned these resources today:

| Title  | Barcode        | Due time         |
|--------|----------------|------------------|
| Laptop | 98723000112233 | 2011-06-17 18:45 |



Reservations can be returned from within patron records by selecting Other -# Booking -# Return Reservations

## Cancelling a Reservation

A reservation can be cancelled in a patron's record or reservation creation screen.

### Cancel a reservation from the patron record

- 1) Retrieve the patron's record.
- 2) Select Other -# Booking -# Create or Cancel Reservations.

Admin (-) Help

Refresh Check Out Items Out Holds Bills Edit Messages Other

1 1/3 \$ 0.00

Submit

Specific Due Date 16/ 06/

Title

- Display Alert and Messages
- Notes
- Triggered Events
- Statistical Categories
- Booking
  - Create or Cancel Reservations
  - Pick Up Reservations
  - Return Reservations
- Surveys
- Group Member Details
- Test Password
- User Permission Editor
- Toggle Summary
- Delete Patron Account
- Exit

3) The existing reservations will appear at the bottom of the screen.

Patron: Pringle, Jennifer | Reservations

Go Back | Reload | Go Forward

### Choose a Bookable Resource Type

Ereader  
Laptop  
Projector  
Room  
Video Connector

Next

- Or -

Enter the barcode of a cataloged, bookable resource:  Next

To reserve an item that is not yet registered as a bookable resource, find it in the catalog or under *Display Item*, and select *Make Item Bookable* or *Book Item Now* there.

#### Existing reservations for Pringle, Jennifer:

| Type    | Resource       | Start time       |   |
|---------|----------------|------------------|---|
| Laptop  | 98723000112233 | 2011-06-16 17:30 | 2 |
| Ereader | 98723000223356 | 2011-06-17 10:30 | 2 |

Cancel selected

4) Highlight the reservation that you want to cancel. Click Cancel Selected.

#### Existing reservations for Pringle, Jennifer:

| Type    | Resource       | Start time       |   |
|---------|----------------|------------------|---|
| Laptop  | 98723000112233 | 2011-06-16 17:30 | 2 |
| Ereader | 98723000223356 | 2011-06-17 10:30 | 2 |

Cancel selected



Use Shift or Ctrl on keyboard and mouse click to select multiple reservations if needed.

5) A pop-up window will confirm the cancellation. Click OK on the prompt.

6) The screen will refresh, and the cancelled reservation(s) will disappear.

Patron: Pringle, Jennifer    Reservations

Go Back    Reload    Go Forward

### Choose a Bookable Resource Type

- Ereader
- Laptop
- Projector
- Room
- Video Connector

Next

**- Or -**

Enter the barcode of a cataloged, bookable resource:  Next

To reserve an item that is not yet registered as a bookable resource, find it in the catalog or under *Display Item*, and select *Make Item Bookable* or *Book Item Now* there.

**Existing reservations for Pringle, Jennifer:**

| Type   | Resource       | Start time       | E |
|--------|----------------|------------------|---|
| Laptop | 98723000112233 | 2011-06-16 17:30 | 2 |

Cancel selected

## Cancel a reservation on reservation creation screen

- 1) Access the reservation creation screen by selecting Booking -# Create Reservations.
- 2) Select any Bookable Resource Type, then click Next.
- 3) Scan or type in the patron barcode in Reserve to Patron box then hit Enter.
- 4) Patron's existing reservations will display at the bottom of the screen.
- 5) Select those that you want to cancel, then click Cancel Selected.

# Chapter 96. Circulation - Patron Record

## Searching Patrons

To search for a patron, select the Patron Search option from the toolbar, *Search # Search for Patrons* from the menu bar, or **F4**.

The Patron Search screen will display. The orientation of the search pane may be vertical or horizontal, depending on your library's configuration. It will contain options to search on the following fields:

- Last Name
- First Name
- Middle Name
- Alias
- Address 1
- Address 2
- City
- Zip
- Phone
- Email
- State
- Barcode
- OPAC Login ID

Use the options above the search fields to include patrons marked “inactive” in your search results or to limit results to patrons in a specific library branch or in a specific permission group.

The screenshot shows the Patron Search interface. At the top, there are tabs: "1 Patron Search", "2 Register Patron", and "3 Patron: Turner, Margaret Lynda". Below the tabs, there are buttons: "Merge Patrons", "Search Form", and "Retrieve Patron". The main area is titled "No Patron Selected". Below this, there is a "Search for Patron" section. A red box highlights the search options: "Include inactive patrons?" (checkbox), "Limit results to patrons in" (dropdown menu showing "Example Consortium"), and "Filter by Permission Profile:" (dropdown menu). Below these options are search fields for: Last Name, First Name, Middle Name, Alias, Address 1, Address 2, City, ZIP, Phone, Email, State, Barcode, OPAC Login, and ID. There are "Search" and "Clear Form" buttons on the right side.



## Tips for searching

- Search one field or combine fields for more precise results.
- Truncate search terms for more search results.

Once you have located the desired patron, highlight the entry for this patron in the results screen. A summary for this patron will display in place of the search fields.

The screenshot shows a web browser window with the URL `1: admin@BR1-JTpals.testing.evergreen.lib.in.us`. The navigation menu includes **Check Out**, **Check In**, **Search Catalog**, **Item Status**, **Patron Search**, and **Patron Registration**. The breadcrumb trail shows **1 Patron Search**, **2 Register Patron**, and **3 Patron: Turner, Margaret Lynda**.

The main content area displays the profile for **Taylor, Amanda Yvonne**, which is highlighted with a green box. The profile includes the following information:

- Patron Info:** Taylor, Amanda Yvonne; Date of Birth: Oct 16, 1985; Library Card: 102008362059888; Holds Alias: OPAC Login: Assessment65; Email:
- Addresses:** 6804 Careful Influence Pines, Donaldson IN 46513. Options:  Mailing,  Billing. [\(Copy/Print\)](#)
- Phone Numbers:** Day Phone, Evening Phone, Other Phone.
- Account Info:** BR3, Internet Filtered, Account created on Mar 12, 2012, Expires on Jan 8, 2014, Last Activity <Unset>

Below the profile is a table of search results:

| # | Barred | Date of Birth         | Last Name | First Name | Middle Name | Library Card: Barcode |
|---|--------|-----------------------|-----------|------------|-------------|-----------------------|
| 1 | f      | Aug 9, 1980 11:00 PM  | Tatum     | Arturo     | Donald      | 102773508455023       |
| 2 | f      | Oct 16, 1985 11:00 PM | Taylor    | Amanda     | Yvonne      | 102008362059888       |
| 3 | f      | Jun 21, 1979 11:00 PM | Taylor    | Clay       | Thomas      | 108202517015760       |
| 4 | f      | Aug 2, 1989 11:00 PM  | Taylor    | Joanne     | Caroline    | 101767839309978       |
| - | f      | Apr 2, 1984 12:00 AM  | Taylor    | Kelly      | Marianne    | 106911041286207       |
| - | f      | Nov 27, 1967 11:00 PM | Taylor    | Michael    | Ross        | 107837102762911       |
| - | f      | May 5, 1964 11:00 PM  | Taylor    | Rosie      | Opal        | 100653267428288       |
| 8 | f      | Sep 18, 1970 11:00 PM | Taylor    | Sally      | Edna        | 106737406425394       |
| - | f      | May 15, 1997 11:00 PM | Taylor    | Virginia   | Karen       | 105079041800123       |

Use the *Retrieve Patron* button to retrieve the patron for circulation or editing.

This close-up screenshot shows the **Retrieve Patron** button, which is circled in red. Other buttons visible include **Merge Patrons** and **Search Form**. The interface also shows **Account Info**, **Identification**, **Group: 0.00**, and **Stat Cats**.

The *Search Form* button may be used to resume searching for patrons.

# Registering New Patrons

To register a new patron, select *Patron Registration* from the toolbar, *Circulation # Register Patron* from the menu bar, or **shift + F1**. The Patron Registration form will display.

|                                 |   |  |                    |
|---------------------------------|---|--|--------------------|
| Barcode                         | <input type="text" value=""/>                   |  | Replace Barcode    |
| OPAC/Staff Client User Name     | <input type="text" value=""/>                   |  |                    |
| Password                        | <input type="text" value="3975"/>               |  | Generate Password  |
| Verify Password                 | <input type="text" value="3975"/>               |  |                    |
| Prefix/Title                    | <input type="text" value=""/>                   |  |                    |
| First Name                      | <input type="text" value=""/>                   |  |                    |
| Middle Name                     | <input type="text" value=""/>                   |  |                    |
| Last Name                       | <input type="text" value=""/>                   |  |                    |
| Suffix                          | <input type="text" value=""/>                   |  |                    |
| OPAC/Staff Client Holds Alias   | <input type="text" value=""/>                   |  |                    |
| Date of Birth                   | <input type="text" value=""/>                   |  | Example: 1/31/1970 |
| Juvenile                        | <input type="checkbox"/>                        |  |                    |
| Primary Identification Type     | <input type="text" value=""/>                   |  |                    |
| Primary Identification          | <input type="text" value=""/>                   |  |                    |
| Parent/Guardian                 | <input type="text" value=""/>                   |  |                    |
| Email Address                   | <input type="text" value=""/>                   |  |                    |
| Daytime Phone                   | <input type="text" value=""/>                   |  |                    |
| Evening Phone                   | <input type="text" value=""/>                   |  |                    |
| Other Phone                     | <input type="text" value=""/>                   |  |                    |
| Home Library                    | <input type="text" value="General Collection"/> |  |                    |
| Main (Profile) Permission Group | <input type="text" value=""/>                   |  |                    |
| Privilege Expiration Date       | <input type="text" value=""/>                   |  | Update Expire Date |

[Show Only Required Fields](#)  
[Show Suggested Fields](#)

Mandatory fields display in yellow.

|                             |                               |  |
|-----------------------------|-------------------------------|--|
| Barcode                     | <input type="text" value=""/> |  |
| OPAC/Staff Client User Name | <input type="text" value=""/> |  |

The *Show Only Required Fields* and *Show Suggested Fields* may be used to limit the options on this page.

[Show Only Required Fields](#)  
[Show Suggested Fields](#)

When one of these options is selected, it is possible switch to the other limited view or to revert to the original view by selecting *Show All Fields*.

[Show Only Required Fields](#)  
[Show All Fields](#)



When finished entering the necessary information, select *Save* to save the new patron record or *Save & Clone* to register a patron with the same address. When *Save & Clone* is selected, the address information is copied into the resulting patron registration screen. It is linked to the original patron. Address information may only be edited through the original record.

The screenshot shows a web form for adding a patron. At the top, there are checkboxes for 'Phone' and 'Email', both of which are checked. Below this is a section for 'Address' with radio buttons for 'Mailing' (selected) and 'Billing'. A red 'X' button is next to the 'Billing' option. A message states: 'This address is owned by another user: [Jenny Pals](#)'. Below the message is a table of address fields:

|             |         |
|-------------|---------|
| Type        | MAILING |
| Postal Code | 56001   |
| Street (1)  | ML 3022 |
| Street (2)  |         |
| City        | Mankato |
| County      |         |
| State       | MN      |
| Country     | USA     |



- Requested fields may be configured in the *Library Settings Editor (Admin # Local Admin # Library Settings Editor)*.
- Statistical categories may be created for information tracked by your library that is not in the default patron record.
- These may be configured in the *Statistical Categories Editor (Admin # Local Admin # Statistical Categories Editor)*.
- Staff accounts may also function as patron accounts.
- You must select a *Main (Profile) Permission Group* before the *Update Expire Date* button will work, since the permission group determines the expiration date.

## Patron Self-Registration

### Abstract

Patron Self-Registration allows patrons to initiate registration for a library account through the OPAC. Patrons can fill out a web-based form with basic information that will be stored as a “pending patron” in Evergreen. Library staff can review pending patrons in the staff-client and use the pre-loaded account information to create a full patron account. Pending patron accounts that are not approved within a configurable amount of time will be automatically deleted.

### Patron Self-Registration

1. In the OPAC, click on the link to **Request Library Card**
2. Fill out the self-registration form to request a library card, and click **Submit Registration**.
3. Patrons will see a confirmation message: “Registration successful! Please see library staff to complete your registration.”

## Request a Library Card

|                    |   |                         |
|--------------------|---|-------------------------|
| Home Library       | <input type="text" value="Example Branch 1"/>   |                         |
| First Name         | <input type="text" value="Mary"/>               | *                       |
| Middle Name        | <input type="text" value="Frances"/>            |                         |
| Last Name          | <input type="text" value="Nolan"/>              | *                       |
| Street Address     | <input type="text" value="240 Division Ave."/>  | *                       |
| Street Address (2) | <input type="text"/>                            |                         |
| City               | <input type="text" value="Brooklyn"/>           | *                       |
| County             | <input type="text"/>                            |                         |
| State              | <input type="text" value="NY"/>                 |                         |
| Zip Code           | <input type="text" value="11211"/>              | *                       |
| Date of Birth      | <input type="text" value="05-08-1995"/>         |                         |
| Phone Number       | <input type="text" value="555-555-5555"/>       | (Example: 111-222-3333) |
| Email Address      | <input type="text" value="fnolan@example.com"/> |                         |
| Requested Username | <input type="text" value="francienolan"/>       |                         |

[Go Back](#)
[Submit Registration](#)

## Managing Pending Patrons

1. In the staff client select **Circulation # Pending Patrons**.
2. Select the patron you would like to review. In this screen you have the option to **Delete** a pending patron account or **Load** the pending patron information to create a permanent library account.
3. To create a permanent library account for the patron, click on the patron's row, right-click and select **Load Patron** or click on the **Load Patron** button at the top of the screen. This will load the patron self-registration information into the main **Patron Registration** form.
4. Fill in the necessary patron information for your library, and click **Save** to create the permanent patron account.

## Library Settings

Three new Library Settings have been created to manage patron self-registration:

- **OPAC: Allow Patron Self-Registration** must be set to 'True' to enable use of this feature.
- **OPAC: Patron Self-Reg. Expire Interval** allows each library to set the amount of time after which pending patron accounts should be deleted.

- **OPAC: Patron Self-Reg. Display Timeout** allows each library to set the amount of time after which the patron self-registration screen will timeout in the OPAC. The default is 5 minutes.

Several existing Library Settings can be used to determine if a field should be required or hidden in the self-registration form:

- **GUI: Require day\_phone field on patron registration**
- **GUI: Show day\_phone on patron registration**
- **GUI: Require dob (date of birth) field on patron registration**
- **GUI: Show dob field on patron registration**
- **GUI: Require email field on patron registration**
- **GUI: Show email field on patron registration**
- **GUI: Require State field on patron registration**
- **GUI: Show State field on patron registration**
- **GUI: Require county field on patron registration**
- **GUI: Show county field on patron registration** [New Setting]

Several existing Library Settings can be used to verify values in certain fields and provide examples for data format on the registration form:

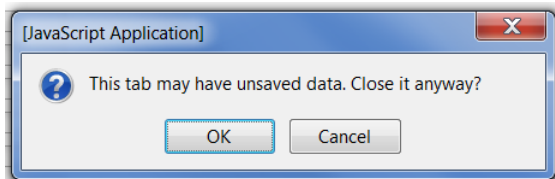
- **Global: Patron username format**
- **GUI: Regex for phone fields on patron registration** OR **GUI: Regex for day\_phone field on patron registration**
- **GUI: Regex for email field on patron registration**
- **GUI: Regex for post\_code field on patron registration**
- **GUI: Example for email field on patron registration**
- **GUI: Example for post\_code field on patron registration**
- **GUI: Example for day\_phone field on patron registration** OR **GUI: Example for phone fields on patron registration**

## Updating Patron Information

Retrieve the patron record as described in the section [Searching Patrons](#).


Select *Edit* from the options that display at the top of the patron record.

Edit information as required. When finished, select *Save*. If you attempt to close out of the patron account before the information is received, an alert will display.



Select *OK* to continue or *Cancel* to return to the editing form.

After selecting *Save*, the page will refresh. The edited information will be reflected in the patron summary pane.

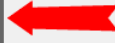


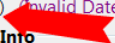
- You can resize the patron summary pane, or collapse and expand it using the button on the right border of the pane.
- To quickly renew an expired patron, click the *Update Expire Date* button. You will need a *Main (Profile) Permission Group* selected for this to work, since the permission group determines the expiration date.

## Renewing Library Cards


Expired patron accounts display with a black box around the patron's name, a note that the patron is expired, and – when initially retrieved – an alert stating that the “Patron account is EXPIRED.”

1 Patron Search | 2 Library Settings Editor | 3 Patron: Turner, Margaret Lynda | 4 Register Patron | 5 Statistical Categories

**Pals, Test**  Refresh Check Out Items Out 0

(Expired)  Invalid Date of Birth

|   |  |  |
|---|--|--|
| <b>Patron Info</b><br>Pals, Test<br>Date of Birth: <Unset><br>Library Card: pals124<br>Holds Alias: test<br>OPAC Login: pals124<br>Email:<br>School Departments Economics | <b>Addresses</b><br>ML 3022<br>Mankato MN 56001<br><input checked="" type="radio"/> Mailing <input type="radio"/> Billing <a href="#">(Copy/Print)</a> | <b>Phone Numbers</b><br>Day Phone: 123-456-7890<br>Evening Phone: 987-654-3210<br>Other Phone: |
|---|--|--|

 **Alert**

Patron account is EXPIRED.

Press a navigation button above (for example, Check Out) to clear this alert.

Open the patron record in edit mode as described in the section [Updating Patron Information](#).

Navigate to the information field labeled *Privilege Expiration Date*. Enter a new date in this box. When you place your cursor in the *Patron Expiration Date box*, a calendar widget will display to help you easily navigate to the desired date.

|                                 |   |                       |         |
|---------------------------------|---|-----------------------|---------|
| Barcode                         | <input type="text" value="pals124"/>      | Replace Barcode       | See All |
| OPAC/Staff Client User Name     | <input type="text" value="pals124"/>      |                       |         |
| Password                        | <input type="password"/>                  | Reset Password        |         |
| Verify Password                 | <input type="password"/>                  |                       |         |
| First Name                      | <input type="text"/>                      |                       |         |
| Last Name                       | <input type="text"/>                      |                       |         |
| Primary Identification Type     | <input type="text"/>                      |                       |         |
| Home Library                    | <input type="text"/>                      |                       |         |
| Main (Profile) Permission Group | 2010 2011 2012                            |                       |         |
| Privilege Expiration Date       | <input type="text" value="Jun 13, 2011"/> | Example: Jan 31, 1970 |         |
| Internet Access Level           | <input type="text" value="Filtered"/>     |                       |         |

Select the date using the calendar widget or key the date in manually. Click the *Save* button. The screen will refresh and the “expired” alerts on the account will be removed.

# Lost Library Cards

Retrieve the patron record as described in the section [Searching Patrons](#).

Open the patron record in edit mode as described in the section [Updating Patron Information](#).

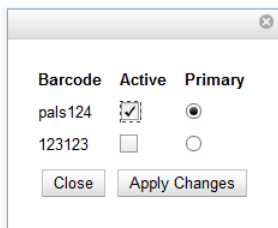
Next to the *Barcode* field, select the *Replace Barcode* button.



This will clear the barcode field. Enter a new barcode and *Save* the record. The screen will refresh and the new barcode will display in the patron summary pane.

If a patron's barcode is mistakenly replaced, the old barcode may be reinstated. Retrieve the patron record as described in the section [Searching Patrons](#). Open the patron record in edit mode as described in the section [Updating Patron Information](#).

Select the *See All* button next to the *Replace Barcode* button. This will display the current and past barcodes associated with this account.



Check the box(es) for all barcodes that should be “active” for the patron. An “active” barcode may be used for circulation transactions. A patron may have more than one “active” barcode. Only one barcode may be designated “primary.” The “primary” barcode displays in the patron's summary information in the *Library Card* field.

Once you have modified the patron barcode(s), *Save* the patron record. If you modified the “primary” barcode, the new primary barcode will display in the patron summary screen.

## Resetting Patron's Password

A patron's password may be reset from the OPAC or through the staff client. To reset the password from the staff client, retrieve the patron record as described in the section [Searching Patrons](#).

Open the patron record in edit mode as described in the section [Updating Patron Information](#).

Select the *Reset Password* button next to the *Password* field.

|                 |                      |                |
|-----------------|----------------------|----------------|
| Password        | <input type="text"/> | Reset Password |
| Verify Password | <input type="text"/> |                |



The existing password is not displayed in patron records for security reasons.

A new number will populate the *Password* and *Verify Password* text boxes. Make note of the new password and *Save* the patron record. The screen will refresh and the new password will be suppressed from view.



If you need to change a patron or staff account password without using the staff client, here is how you can reset it with SQL.

Connect to your Evergreen database using *psql* or similar tool, and retrieve and verify your admin username:

```
psql -U <user-name> -h <hostname> -d <database>
```

```
SELECT id, usrname, passwd from actor.usr where usrname = 'admin';
```

If you do not remember the username that you set, search for it in the *actor.usr* table, and then reset the password.

```
UPDATE actor.usr SET passwd = <password> WHERE id=<id of row to be updated>;
```

The new password will automatically be hashed.

## Barring a Patron

A patron may be barred from circulation activities. To bar a patron, retrieve the patron record as described in the section [Searching Patrons](#).

Open the patron record in edit mode as described in the section [Updating Patron Information](#).

Check the box for *Barred* in the patron account.

|                       |                                     |   |
|-----------------------|-------------------------------------|---|
| Internet Access Level | Filtered                            | ▼ |
| Active                | <input checked="" type="checkbox"/> |   |
| Barred                | <input type="checkbox"/>            |   |
| Is Group Lead Account | <input type="checkbox"/>            |   |
| Claims-returned Count | 0                                   | ▼ |

*Save* the user. The screen will refresh.

The patron account will now display an alert stating that the patron account is **BARRED**.

Additionally a red box and note will indicate the patron's barred status.

|                                  |
|----------------------------------|
| <b>Pals, Test</b>                |
| (Barred) (Invalid Date of Birth) |



Barring a patron from one library bars that patron from all consortium member libraries.

To unbar a patron, uncheck the Barred checkbox.

## Barred vs. Blocked

**Barred:** Stops patrons from using their library cards; alerts the staff that the patron is banned/barred from the library. The “check-out” functionality is disabled for barred patrons (NO option to override – the checkout window is unusable and the bar must be removed from the account before the patron is able to checkout items). These patrons may still log in to the OPAC to view their accounts.

**Blocked:** Often, these are system-generated blocks on patron accounts.

Some examples:

- Patron exceeds fine threshold
- Patron exceeds max checked out item threshold

A notice appears when a staff person tries to checkout an item to blocked patrons, but staff may be given permissions to override blocks.

## Staff-Generated Messages

There are several types of messages available for staff to leave notes on patron records.

**Patron Notes:** These notes are added via *Other # Notes* in the patron record, and create a clickable (See Notes) message beneath the patron name on the patron record screen. These notes can be viewable by staff only or shared with the patron. Staff initials can be required. (See the section [Patron Notes](#) for more.)

**Patron Alerts:** This type of alert is added via *Edit* button in the patron record. It creates a non-blocking alert message which displays when the patron is retrieved. It also creates a clickable (Alert) message beneath the patron name on the patron record screen. There is currently no way to require staff initials for this type of alert. (See the section [Patron Alerts](#) for more.)

**Staff-Generated Penalties/Messages:** These messages are added via the *Messages* button in the patron record. They can be a note, alert or block. Staff initials can be required. (See the section [Staff-Generated Penalties/Messages](#) for more.)

## Patron Alerts

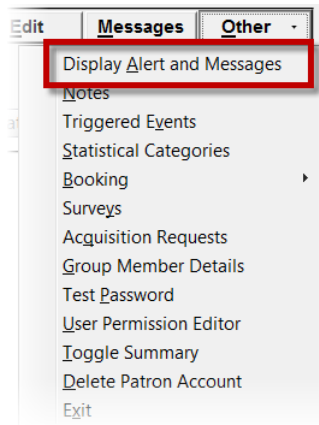


When an account has an alert on it, a Stop sign is displayed when the record is retrieved.



Navigating to an area of the patron record using the navigation buttons at the top of the record (for example, Edit or Bills) will clear the message from view.

If you wish to view these alerts after they are cleared from view, they may be retrieved. Use the Other menu to select *Display Alert and Messages*.



There are two types of Patron Alerts:

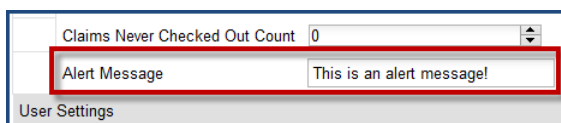
**System-generated alerts:** Once the cause is resolved (e.g. patron's account has been renewed), the message will disappear automatically.

**Staff-generated alerts:** Must be added and removed manually.

To add an alert to a patron account, retrieve the patron record as described in the section [Searching Patrons](#).

Open the patron record in edit mode as described in the section [Updating Patron Information](#).

Enter the alert text in the Alert Message field.



Save the record. The screen will refresh and the alert will display.

Additionally, the patron name will be highlighted in yellow and a note will indicate that there is an alert on the account.



To remove the alert, retrieve the patron record as described in the section [Searching Patrons](#).

Open the patron record in edit mode as described in the section [Updating Patron Information](#).

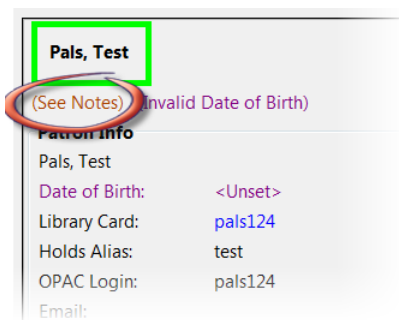
Delete the alert text in the *Alert Message* field.

Save the record.

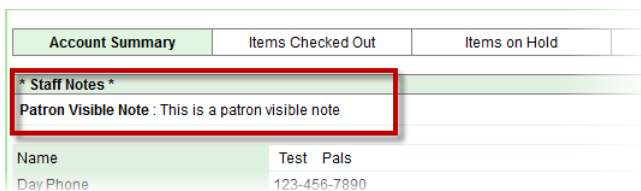
The screen will refresh and the indicators for the alert will be removed from the account.

## Patron Notes

When a patron account contains a note, a *See Notes* message appears beneath the patron's name in the patron summary pane.



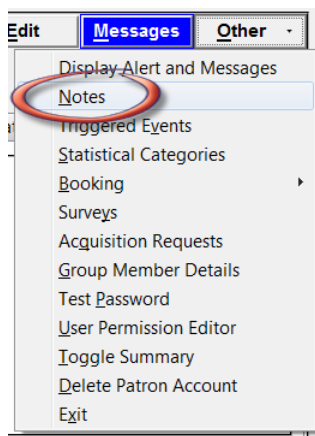
Notes are strictly communicative and may be made visible to the patron via their account on the OPAC. In the JSPAC, these notes display on the account summary screen in the OPAC.



To insert or remove a note, retrieve the patron record as described in the section [Searching Patrons](#).

Open the patron record in edit mode as described in the section [Updating Patron Information](#).

Use the Other menu to navigate to *Notes*.



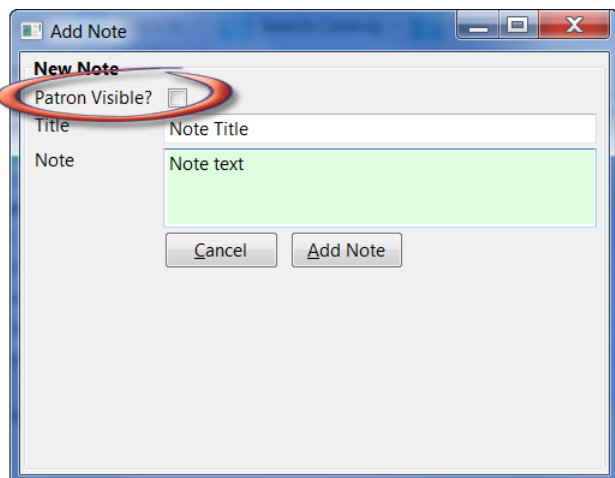
Select the *Add New Note* button. An *Add Note* window displays.



To add a box in the *Add Note* window for staff initials and require their entry, see the section [Granular Settings for Staff Initials](#).

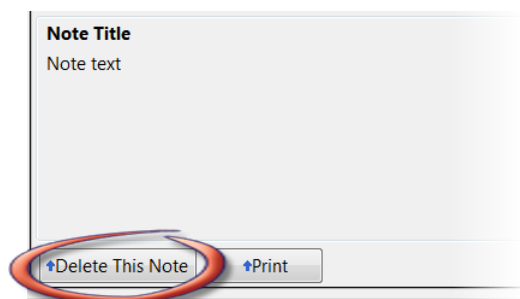
Enter note information.

Select the check box for *Patron Visible* to display the note in the OPAC.



Select *Add Note* to save the note to the patron account.

To delete a note, go to *Other # Notes* and use the *Delete This Note* button under each note.



An alert will display. Click *Yes* to delete the note or *No* to retain the note. A confirmation box will display; click *OK*.

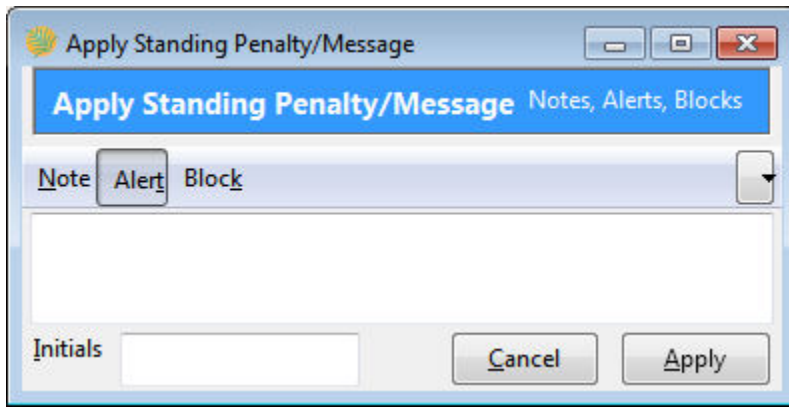
# Staff-Generated Penalties/Messages

To access this feature, use the *Messages* button in the patron record.

The screenshot shows a web-based library system interface. At the top, the user is logged in as 'admin@RODGERS-kate-home.evergreen.rodgerslibrary.org'. The navigation bar includes 'File', 'Edit', 'Search', 'Circulation', 'Cataloging', 'Acquisitions', and 'Booking'. Below this are icons for 'Home', 'Pull List for Hold Requests', 'Browse Holds Shelf', 'Check In', 'Check Out', and 'Renew It'. The main content area shows a patron record for 'Mouse, Minnie', which is highlighted with a green box. The record includes a note '(Invalid Date of Birth)'. The 'Patron Info' section lists 'Mouse, Minnie', 'Date of Birth: <Unset>', 'Library Card: 30156688', 'OPAC Login: 30156688', 'Email: mmouse@yahoo.com', and 'Gender'. The 'Addresses' section has 'Mailing' selected and a '(Copy/Print)' link. The 'Phone Numbers' section lists 'Day Phone: 6038866030'. To the right, an 'Account Info' panel shows 'Adult Resident', 'RODGERS', 'Internet Unfiltered', 'Account created on 2/20/08', 'Expires on 2/19/20', and 'Last Activity 11/23/13'. Below the patron info is a section titled 'Staff-Generated Penalties/Messages' with a button 'Apply Standing Penalty/Message'. Underneath is a table with columns '#', 'Applied On', 'Label', and 'Library'. Below that is an 'Archived Penalties/Messages' section with a date range filter (Start Date: 09/ 12/ 2013, End Date: 09/).

## Add a Message

Click **Apply Standing Penalty/Message** to begin the process of adding a message to the patron.



There are three options: Notes, Alerts, Blocks

- **Note:** This will create a non-blocking, non-alerting note visible to staff. Staff will be alerted to the message by the light-blue framing around the patron name, and can view the message by clicking the *Messages* button on the patron record. (Notes created in this fashion will not display via *Other # Notes*, and cannot be shared with the patron. See the [Patron Notes](#) section for notes which can be shared with the patron.)
- **Alert:** This will create a non-blocking alert which appears when the patron record is first retrieved. The alert will generate a dark-blue frame around the patron name. Alerts may be viewed by clicking the *Messages* button on the patron record or by selecting *Other # Display Alerts and Messages*.
- **Block:** This will create a blocking alert which appears when the patron record is first retrieved, and which behaves much as the non-blocking alert described previously. The patron will be also blocked from circulation, holds and renewals until the block is cleared by staff.

After selecting the type of message to create, enter the message body into the box. If Staff Initials are required, they must be entered into the *Initials* box before the message can be added. Otherwise, fill in the optional *Initials* box and click **Apply**

The message should now be visible in the *Staff-Generated Penalties/Messages* list. If a blocking or non-blocking alert, the message will also display immediately when the patron record is retrieved.

| Staff-Generated Penalties/Messages |                  |  |         |
|------------------------------------|------------------|--|---------|
| Apply Standing Penalty/Message     |                  |  |         |
| #                                  | Applied On       | Label                                  | Library |
| 1                                  | 9/12/14 12:44 PM | Alerting block on Circ, Hold and Renew | RODGERS |
| 2                                  | 9/12/14 12:44 PM | Alerting Note, no blocks               | RODGERS |
| 3                                  | 9/12/14 12:43 PM | Note, no blocks                        | RODGERS |

## Modify a Message

Messages can be edited by staff after they are created.

OPAC Login: 50130000 Evening Phone: Expires on 2/19/20

**Staff-Generated Penalties/Messages**

Apply Standing Penalty/Message

| # | Applied On       | Label                                  | Library |
|---|------------------|--|---------|
| 1 | 9/12/14 12:44 PM | Alerting block on Circ, Hold and Renew | RODGERS |
| 2 | 9/12/14 12:44 PM | Alerting Note, no blocks               | RODGERS |
| 3 | 9/12/14 12:43 PM | Note, no blocks                        | RODGERS |

Click to select the message to be modified, then click *Actions for these Penalties/Messages # Modify Penalty/Message*. This menu can also be accessed by right-clicking in the message area.

Modify Standing Penalty/Message

**Modify Standing Penalty/Message** Notes, Alerts, Blocks

Note Alert Block

A Block [ ABC 2014-09-12 @ RODGERS ]  
No longer blocked

Initials ABC

Cancel Modify

To change the type of message, click on **Note**, **Alert**, **Block** to select the new type. Edit or add new text in the message body. Enter Staff Initials into the *Initials* box (may be required.) and click **Modify** to submit the alterations.

**Staff-Generated Penalties/Messages**

Apply Standing Penalty/Message

| # | Applied On       | Label                    | Library |
|---|------------------|--------------------------|---------|
| 1 | 9/12/14 12:44 PM | Note, no blocks          | RODGERS |
| 2 | 9/12/14 12:44 PM | Alerting Note, no blocks | RODGERS |
| 3 | 9/12/14 12:43 PM | Note, no blocks          | RODGERS |

## Archive a Message

Messages which are no longer current can be archived by staff. This action will remove any alerts or blocks associated with the message, but retains the information contained there for future reference.



OPAC Login: 50130000 Evening Phone: Expires on 2/10/20

**Staff-Generated Penalties/Messages**

Apply Standing Penalty/Message

| # | Applied On       | Label                                  | Library |
|---|------------------|--|---------|
| 1 | 9/12/14 12:44 PM | Alerting block on Circ, Hold and Renew | RODGERS |
| 2 | 9/12/14 12:44 PM | Alerting Note, no blocks               | RODGERS |
| 3 | 9/12/14 12:43 PM | Note, no blocks                        | RODGERS |

Click to select the message to be archived, then click *Actions for these Penalties/Messages # Archive Penalty/Message*. This menu can also be accessed by right-clicking in the message area.

**Archived Penalties/Messages**

Start Date: 09/ 12/ 2013 End Date: 09/ 12/ 2013

| # | Applied On       | Label                    | Library |
|---|------------------|--------------------------|---------|
| 1 | 9/12/14 11:13 AM | Alerting Note, no blocks | RODGERS |
| 2 | 9/12/14 12:44 PM | Note, no blocks          | RODGERS |

Archived messages will be shown in the section labelled *Archived Penalties/Messages*. To view messages, click **Retrieve Archived Penalties**. By default, messages archived within the past year will be retrieved. To retrieve messages from earlier dates, change the start date to the desired date before clicking **Retrieve Archived Penalties**.

## Remove a Message

Messages which are no longer current can be removed by staff. This action removes any alerts or blocks associated with the message and deletes the information from the system.

OPAC Login: 50130000 Evening Phone: Expires on 2/10/20

**Staff-Generated Penalties/Messages**

Apply Standing Penalty/Message

| # | Applied On       | Label                                  | Library |
|---|------------------|--|---------|
| 1 | 9/12/14 12:44 PM | Alerting block on Circ, Hold and Renew | RODGERS |
| 2 | 9/12/14 12:44 PM | Alerting Note, no blocks               | RODGERS |
| 3 | 9/12/14 12:43 PM | Note, no blocks                        | RODGERS |

Click to select the message to be removed, then click *Actions for these Penalties/Messages # Remove Penalty/Message*. This menu can also be accessed by right-clicking in the message area.

# Merging Patron Records

When patron records are erroneously duplicated, they may be merged into one record. As described in the section [Searching Patrons](#), search for the term(s) shared by the two records.

Select the two records to merge by pressing down the CTRL key and clicking each record.

Click the *Merge Patrons* button next to the *Search Form* and *Retrieve Patron* buttons on the top of the screen.

**Pals, Jenny**  
(Invalid Date of Birth)

**Patron Info**  
Pals, Jenny  
Date of Birth: <Unset>  
Library Card: pals123  
Holds Alias:  
OPAC Login: pals123  
Email:  
School Departments History

**Addresses**  
ML 3022  
Mankato MN 56001  
 Mailing  Billing [\(Copy/Print\)](#)

**Phone Numbers**  
Day Phone:  
Evening Phone:  
Other Phone:

Account Info Identification Group: 0.00 Stat Cats

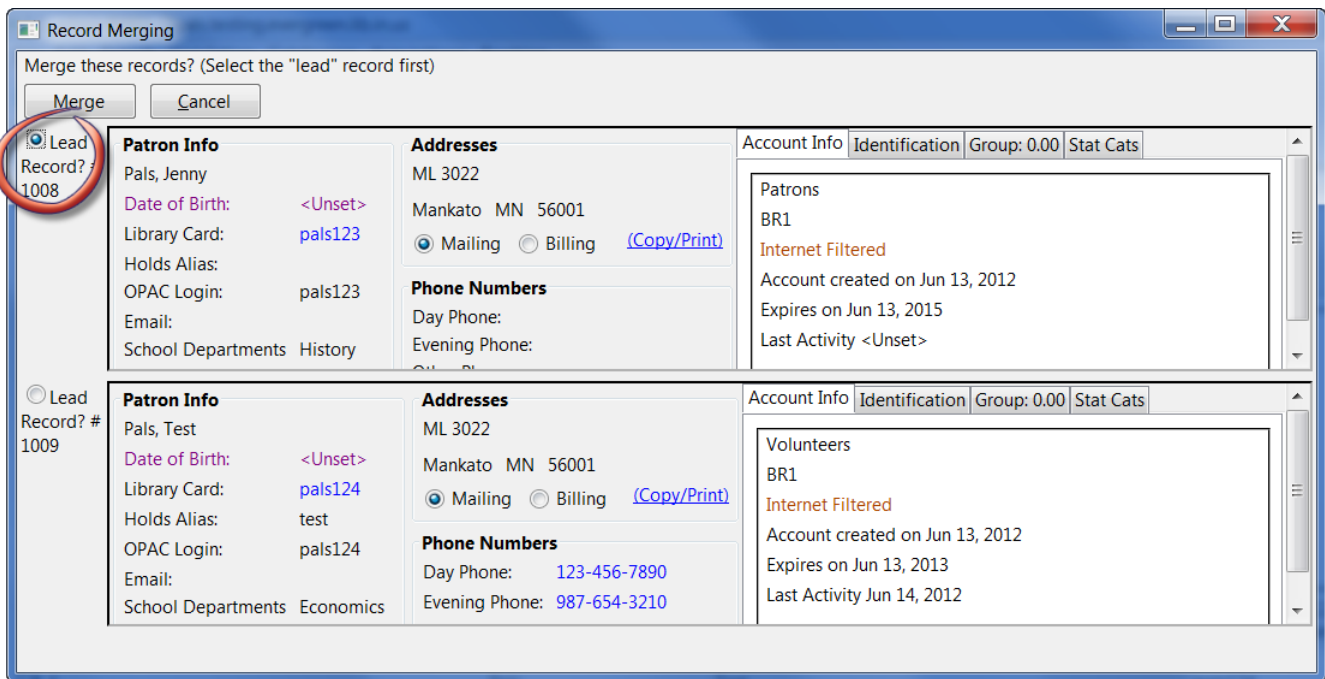
Patrons  
BR1  
Internet Filtered  
Account created on Jun 13, 2012  
Expires on Jun 13, 2015  
Last Activity <Unset>

| # | Barred | Date of Birth | Last Name | First Name | Middle Name | Library Card: Barcode |
|---|--------|---------------|-----------|------------|-------------|-----------------------|
| 1 | f      |               | Pals      | Jenny      |             | pals123               |
| 2 | f      |               | Pals      | Test       |             | pals124               |


A Record Merging window will display. Compare the two records.

Select the record you want to keep by checking the radio button *Lead Record* next to the appropriate record.





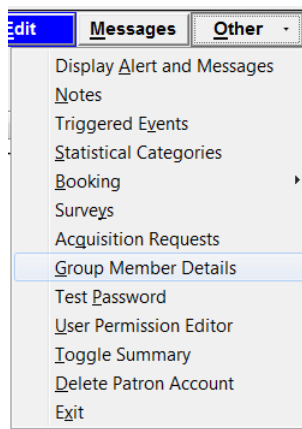
After making your selection, click the *Merge* button. The screen will refresh. Only one of the two patron names will display.



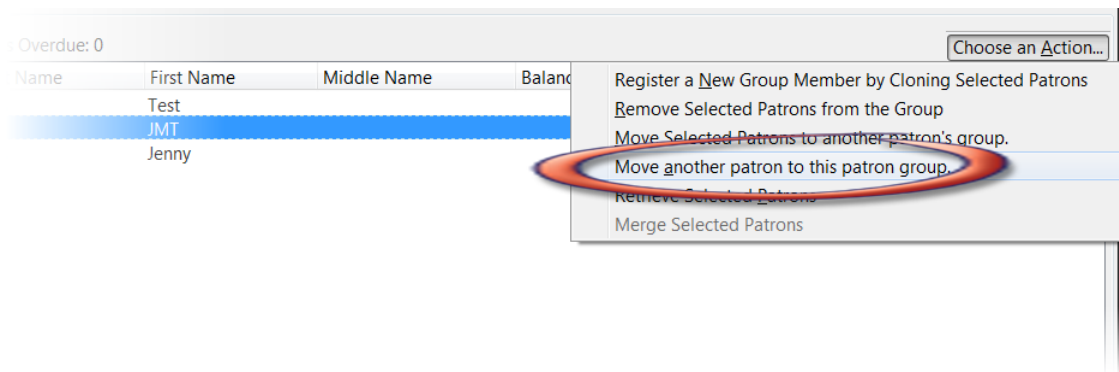
Once two records have been merged, the notes, bills, holds and outstanding items under the non-lead record are brought to the lead record. Staff-inserted alert messages are not transferred from the non-lead record; lead record alerts are retained.

Patron records may also be merged from the *Patron Group* screen Retrieve one of the two patron records you want to merge.

Go to *Other # Group Member Details*.



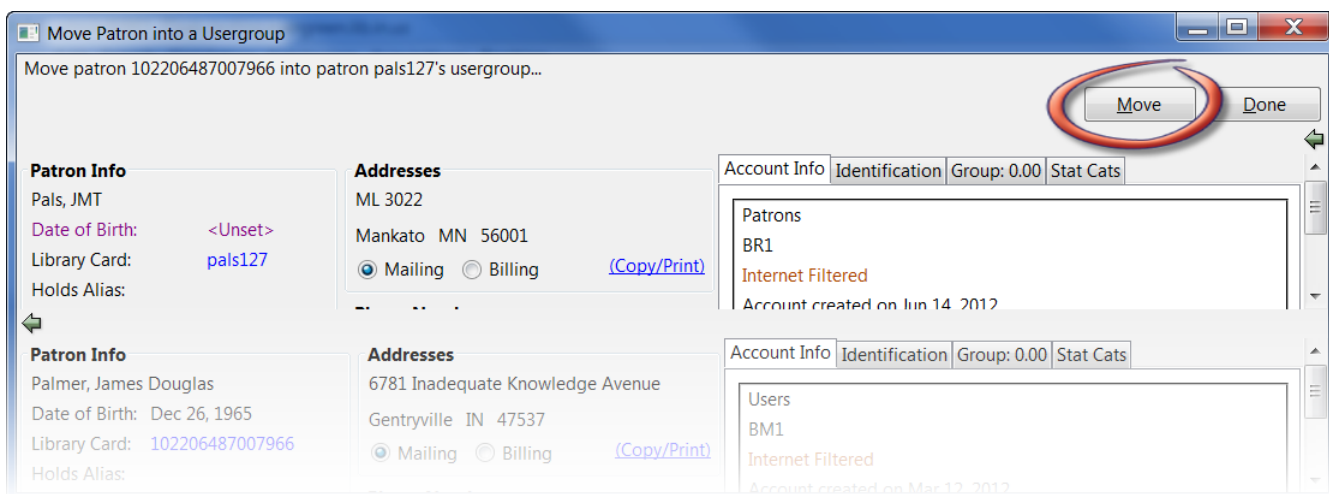
The patron records are displayed as group members. If both patron records are not already displayed on this screen, click *Choose an Action # Move another patron to this patron group*.



At the prompt, scan or type the patron's barcode.

Click *OK*.

Confirm the move by clicking the *Move* button on top of the screen.




Click *OK* on the confirmation pop-up window.

Both records are displayed as group members.

Select both records by pressing **CTRL** key and clicking each record.

Click *Choose an Action # Merge Selected Patrons*. The merging records window pops up.

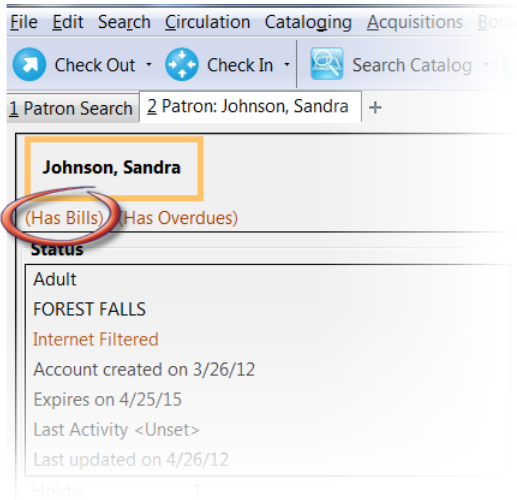
Choose the lead record and continue to merge records as described in the above.



The merged record will still show under group members. Both members point to the same patron record.

## Bills and Payments

When a patron account has bills attached to it, a note displays under the patron name in the patron summary panel.



To view more information about the patron’s bills, or to make payments on or edit the bills, click on the Bills button from the patron account screen.



**Circulation bills:** system-generated (overdue fines, lost item cost, processing fees, etc.).

- Overdue fines are added daily once an item is overdue. When an item is marked
- as lost, bills may be automatically generated to cover the item’s cost and a
- processing fee, according to library policy.

**Grocery bills:** staff-applied to patron accounts.

- One default grocery bill, Misc, exists in an unmodified Evergreen
- installation. Additional grocery bills may be configured through the Admin
- settings. Admin # Server Administration # Billing Types.

To view more information about a bill, highlight the bill and right-click or use the *Actions for Selected Transactions* menu to select *Full Details*.

**Current Bills**

**Total Owed: 9.74**      **Refunds Available: 0.00**  
**Total Checked: 9.74**      **Credit Available: 0.00**

**Pay Bill**  
**Payment Type:** Cash  
**Payment Received:**   
 Annotate Payment       

       Red Items are still Checked Out    **Actions for Selected Transaction**

| # | Balance Owed | Bill # | Start            | Total Billed | Total Paid | Type        | Title                |
|---|--------------|--------|------------------|--------------|------------|-------------|----------------------|
| 1 | 5.99         | 3      | Apr 19, 2012 ... | 5.99         | 0.00       | circulation | My panda book [LUCE- |
| 2 | 3.75         | 13     | May 29, 2012 ... | 3.75         | 0.00       | grocery     |                      |

**Voided this session: 0.00**

**Change Due Upon Payment: 0.00**

Convert Change to Patron Credit

| Payment       | Change | Owed          | Billed | Paid |
|---------------|--------|---------------|--------|------|
| Pending: 0.00 | 0.00   | Total: 9.74   | 9.74   | 0.00 |
|               |        | Checked: 9.74 | 9.74   | 0.00 |

A window will display additional information about the bill, including a record of any payments that have been made on the bill.

**Johnson, Sandra : 30000929292992**

**Summary**  
**MAIN : Main Campus**

|               |                |                     |      |                    |  |
|---------------|----------------|---------------------|------|--------------------|--|
| <b>Bill #</b> | 1              | <b>Total Billed</b> | 4.30 | <b>Title</b>       | Encyclopedia Brown and the Case of the Sleeping Do |
| <b>Type</b>   | circulation    | <b>Total Paid</b>   | .30  | <b>Checked Out</b> | 4/8/12 8:41 PM                                     |
| <b>Start</b>  | 4/8/12 8:41 PM | <b>Balance Owed</b> | 4.00 | <b>Due Date</b>    | 4/23/12 6:59 PM                                    |
| <b>Finish</b> |                | <b>Renewal?</b>     | No   | <b>Checked In</b>  | 6/7/12 6:09 PM                                     |

**Item Summary**

| # | Alert Message | Barcode   | Call Number | Circulation Library | Location | Owning Library | Total Circs |
|---|---------------|-----------|-------------|---------------------|----------|----------------|-------------|
| 1 |               | 345987231 | J SOB       | FOREST FALLS        | Stacks   | FOREST FALLS   | 1           |

**Bills**

| # | Amount | Billing Type      | Note                          | Voided | When           |
|---|--------|-------------------|-------------------------------|--------|----------------|
| 1 | .10    | Overdue materials | System Generated Overdue Fine | No     | 6/6/12 6:59 PM |
| 2 | .10    | Overdue materials | System Generated Overdue Fine | No     | 6/5/12 6:59 PM |
| 3 | .10    | Overdue materials | System Generated Overdue Fine | No     | 6/4/12 6:59 PM |

**Payments**

| # | Amount | Note | Payment Type | Staff               | When             | Workstation              |
|---|--------|------|--------------|---------------------|------------------|--------------------------|
| 1 | .30    |      | cash_payment | System Account (... | 4/26/12 11:13 AM | FOREST FALLS-esi-4wh93q1 |

From the *Full Details* screen, portions of the bill may be voided (e.g. an erroneous daily overdue charge) by using the *Void selected billings* button. Notes may be added to payments or line items by using the *Edit note* button.

**Bills**

| # | Amount | Billing Type      | Note                          | Voided | When           |
|---|--------|-------------------|-------------------------------|--------|----------------|
| 1 | .10    | Overdue materials | System Generated Overdue Fine | No     | 6/6/12 6:59 PM |
| 2 | .10    | Overdue materials | System Generated Overdue Fine | No     | 6/5/12 6:59 PM |
| 3 | .10    | Overdue materials | System Generated Overdue Fine | No     | 6/4/12 6:59 PM |

List Actions · Edit note Void selected billings

---

**Payments**

| # | Amount | Note | Payment Type | Staff                | When             | Workstation              |
|---|--------|------|--------------|----------------------|------------------|--------------------------|
| 1 | .30    |      | cash_payment | System Account (...) | 4/26/12 11:13 AM | FOREST FALLS-esi-4wh93q1 |

List Actions · Edit note Close Window

## Making Payments

To collect payments, retrieve the patron record. Navigate to the *Bills* screen as described in [Bills and Payments](#).

When bills are paid, the money applied starts at the top of the list of bills. To pay specific bills, uncheck the bills that you do not wish to pay at this time. The amount displayed in *Total Checked:* will change to reflect the appropriate amount.

**Current Bills**

**Total Owed: 13.50**    Refunds Available: 0.00

**Total Checked: 13.50**    Credit Available: 0.00

---

Bill Patron   History   Red Items are

| # | Balance Owed | Bill # | Start        | Total Billed | Total Paid |
|---|--------------|--------|--------------|--------------|------------|
| 1 | 5.00         | 48     | 6/20/12 ...  | 5.00         | 0.00       |
| 2 | 1.50         | 2      | 4/8/12 8:... | 1.80         | .30        |
| 3 | 1.50         | 3      | 4/8/12 8:... | 1.80         | .30        |
| 4 | 1.50         | 4      | 4/8/12 8:... | 1.80         | .30        |
| 5 | 4.00         | 1      | 4/8/12 8:... | 4.30         | .30        |



the presence of the *Uncheck All* and *Check All* options below the list of bills.

Bill Patron   History   Red Items are

| # | Balance Owed | Bill # | Start        | Total Billed | Total Paid |
|---|--------------|--------|--------------|--------------|------------|
| 1 | 5.00         | 48     | 6/20/12 ...  | 5.00         | 0.00       |
| 2 | 1.50         | 2      | 4/8/12 8:... | 1.80         | .30        |
| 3 | 1.50         | 3      | 4/8/12 8:... | 1.80         | .30        |
| 4 | 1.50         | 4      | 4/8/12 8:... | 1.80         | .30        |
| 5 | 4.00         | 1      | 4/8/12 8:... | 4.30         | .30        |

List Actions · Check All Uncheck All Check All Refunds Print Bills

Voided this session: 0.00    **Payment**    **Change**

**Change Due Upon Payment: 0.00**    Pending: 0.00    0.00

When you are ready to make a payment, select a payment type from the dropdown menu in the *Pay Bill* portion of the screen.

The screenshot shows the 'Pay Bill' section of a software interface. At the top, there are tabs for 'Holds', 'Bills', 'Edit', 'Messages', and 'Other'. Below these, it shows '0/1' holds and a balance of '\$ 8.50'. The 'Pay Bill' form has a 'Payment Type' dropdown menu open, showing options: Cash, Check (selected), Credit Card, Patron Credit, Work, Forgive, and Goods. There is a 'Payment Received:' field with 'Cash' entered, an 'Annotate Payment' checkbox, and an 'Apply Payment!' button. Below the form, a table lists transactions with columns 'Type' and 'Title'. Some items are highlighted in red, including 'Encyclopedia', 'Harry Potter and the prisoner of...', and 'Harry Potter and the Order of th...'. A red banner above the table says 'Red Items are still Check'.

Enter the amount of payment in the *Payment received* field.

If you would like to add a note to the payment, check the box for *Annotate Payment*.

Click *Apply Payment!* to make the payment.

If you have selected *Annotate Payment*, a box will display for the annotation.

The screen will refresh to display the updated bill information for the patron. If change is due, the bottom portion of the screen, *Change Due Upon Payment:* will briefly reflect the amount due to the patron.



if you need more time to review the amount due, click outside the *Payment Received* box before selecting *Apply Payment!* This will cause the screen to refresh and display the amount due.

It is possible to convert change due to a patron credit by selecting the *Convert Change to Patron Credit* checkbox.

The screenshot shows a summary box for 'Change Due Upon Payment'. It includes the text 'Voided this session: 0.00' and 'Change Due Upon Payment: 1.00'. Below this is a table with columns 'Payment', 'Change', 'Total', and 'Owed'. The 'Payment' and 'Change' columns both show '1.00'. The 'Total' column shows '1.00' and the 'Owed' column shows '1.00'. There is a checkbox labeled 'Convert Change to Patron Credit' which is circled in red.



- Items marked with red are still checked out. It is possible for a patron to
- pay a bill while the item is still out and accruing fines. When Check is
- selected as the payment type, it is not necessary to select *\_Annotate*
- *Payment\_*, as a box for the check number and a note displays automatically.

## Void vs. Forgive

Void clears all history of the bill, while forgive retains the history.

# Forgiving Bills

Choose forgive as the payment type as described in the section [Making Payments](#).

Enter the amount to be forgiven. Choose *Annotate Payment* as required by local policy.

Apply Payment. Annotate, if prompted.

The screen will refresh to display the payment.

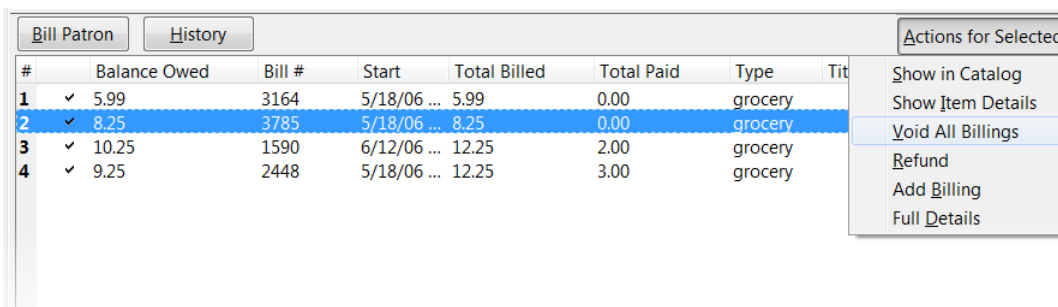
# Voiding Bills

Bills under one transaction are grouped in one bill line. Bills may be voided in part or in whole.

## To void the full billing amount:

Select the bill(s) to be voided from the list in the patron account.

Right click or use the *Actions for Selected Transactions* menu to select *Void All Billings*.



Confirm the action.

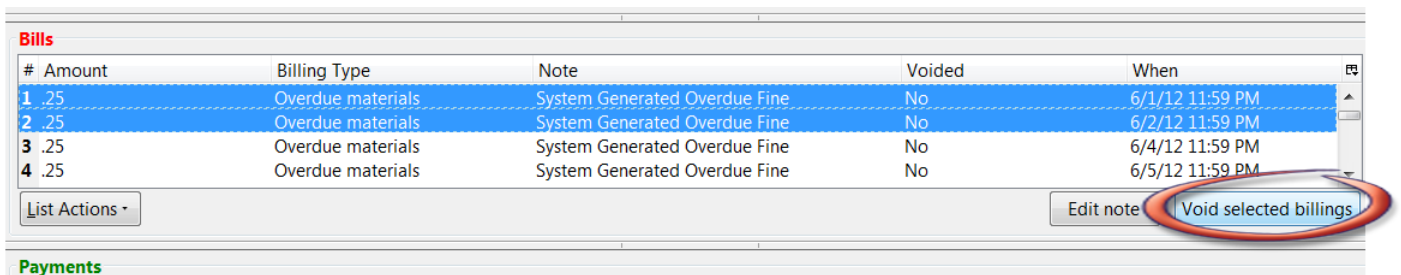
## To void a partial amount:

Select a billing and choose Full Details for the transaction, as described in the section [<circ\\_vs\\_grocery,Circulation vs. Grocery Bills>>](#)

The bill details screen displays.

Select the specific bill to void.

Void Selected Billings and confirm the action.



# Adding New “Grocery” Bills

A grocery bill can be added as a new bill or to an existing bill.

## To add a as a new bill:

1. Retrieve the patron record.
2. Navigate to the Bills screen.
3. Click the Bill Patron button above the list of current bills.

**Current Bills**

**Total Owed: 33.74**      **Refunds Available: 0.00**  
**Total Checked: 33.74**      **Credit Available: 0.00**

**Pay Bill**  
Payment Type: Forgive  
Payment Received: 0.00  
 Annotate Payment    See Distribution    Apply

**Bill Patron**    History    Actions for Selected

| # | Balance Owed | Bill # | Start       | Total Billed | Total Paid | Type    | Title | Payment |
|---|--------------|--------|-------------|--------------|------------|---------|-------|---------|
| 1 | 5.99         | 3164   | 5/18/06 ... | 5.99         | 0.00       | grocery |       | 0.00    |
| 2 | 8.25         | 3785   | 5/18/06 ... | 8.25         | 0.00       | grocery |       | 0.00    |
| 3 | 10.25        | 1590   | 6/12/06 ... | 12.25        | 2.00       | grocery |       | 0.00    |
| 4 | 9.25         | 2448   | 5/18/06 ... | 12.25        | 3.00       | grocery |       | 0.00    |

Choose appropriate *Billing Type* from the drop down menu. (“Grocery” is the only available transaction type.) . Enter the Amount and Note (as required) . *Submit this Bill* and confirm this action.

Bill Patron Wizard

████████████████████

**Create Bill**

Location: East Grand Forks Campbell Library

Transaction Type: Grocery

Billing Type: Non-Print Lost Materials Processing Fee

Amount: 1.00

Note: Test note

Cancel    Submit this Bill

## To add bill to an existing bill line:

1. Retrieve the patron record.
2. Navigate to the Bills screen.

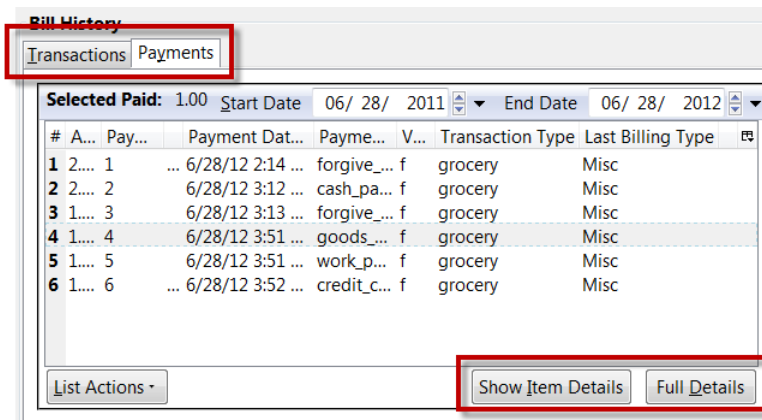


3. Highlight the desired bill.
4. Use the *Actions for Selected Transactions* to select *Add Billing*. Confirm this action.
5. Follow steps 4 through 6 above. There is no confirmation message after clicking *Submit this Bill*.
6. The *Money Summary* will adjust accordingly.

## Bill History

### To view a patron's bill history:

1. Retrieve the patron record.
2. From the *Bills* screen, click *History*.
3. A *Bill History* screen with two tabs will display. One for *Transactions* and one for *Payments*.



4. For more information about a specific billing, select the bill and click *Full Details*. A screen detailing item information, billings, and payments will display.

Johnson, Sandra : 3000092929292992

**Summary**

**MAIN : Main Campus**

|               |                 |                     |      |                    |  |
|---------------|-----------------|---------------------|------|--------------------|--|
| <b>Bill #</b> | 1               | <b>Total Billed</b> | 4.30 | <b>Title</b>       | Encyclopedia Brown and the Case of the Sleeping Do |
| <b>Type</b>   | circulation     | <b>Total Paid</b>   | 4.30 | <b>Checked Out</b> | 4/8/12 8:41 PM                                     |
| <b>Start</b>  | 4/8/12 8:41 PM  | <b>Balance Owed</b> | 0.00 | <b>Due Date</b>    | 4/23/12 6:59 PM                                    |
| <b>Finish</b> | 7/2/12 10:38 AM | <b>Renewal?</b>     | No   | <b>Checked In</b>  | 6/7/12 6:09 PM                                     |

**Item Summary**

| # | Alert Message | Barcode   | Call Number | Circulation Library | Location | Owning Library | Total Circs |
|---|---------------|-----------|-------------|---------------------|----------|----------------|-------------|
| 1 |               | 345987231 | J SOB       | FOREST FALLS        | Stacks   | FOREST FALLS   | 1           |

**Bills**

| # | Amount | Billing Type      | Note                          | Voided | When           |
|---|--------|-------------------|-------------------------------|--------|----------------|
| 1 | .10    | Overdue materials | System Generated Overdue Fine | No     | 6/6/12 6:59 PM |
| 2 | .10    | Overdue materials | System Generated Overdue Fine | No     | 6/5/12 6:59 PM |

List Actions - Edit note Void selected billings

**Payments**

| # | Amount | Note | Payment Type | Staff              | When             | Workstation              |
|---|--------|------|--------------|--------------------|------------------|--------------------------|
| 1 | 4.00   |      | cash_payment | System Account ... | 7/2/12 10:38 AM  | MAIN-MSU1382389          |
| 2 | .30    |      | cash_payment | System Account ... | 4/26/12 11:13 AM | FOREST FALLS-esi-4wh93q1 |

List Actions - Edit note Close Window

Items may be deleted from the catalog even if a charge for that item is still attached to the patron's record. The charge will remain on the patron's account after the deletion.

## Sorting Money Columns in Billing Interface

This enhancement enables Evergreen to sort money columns numerically in the billing interface. You can perform an ascending or descending sort on these columns.

To view and sort patron bills, retrieve the patron's account, and click the **Bills** tab in the top right corner of the screen. You can view the money that is owed or paid in the "Total Billed" and **Total Paid** columns. Simply click on the headers of these columns to sort the columns numerically.

## Disable Patron Credit in Billing Interface

The Library Setting, **Disable Patron Credit**, allows staff to disable the Patron Credit payment type and to hide patron credit payment actions within the billing interface of a patron's account.

By default, the payment type **Patron Credit** is enabled in the staff client. Within the Bills interface of a patron's account, the Patron Credit payment type, the Credit Available, and the option to Convert Change to Patron Credit are exposed by default in the staff client.

Current Bills

**Total Owed: 12.80**      Refunds Available: 0.00  
**Total Checked: 12.80**      Credit Available: 0.00

Pay Bill  
Payment Type: Cash  
Payment Received: Cash  
 Annotate Payment      Apply Payment!

Cash  
Check  
Credit Card  
**Patron Credit**  
Work  
Forgive  
Goods

| # | Balance Owed | Bill # | Start            | Total Billed | Total Paid | Type        | Title                              | Payment Pending |
|---|--------------|--------|------------------|--------------|------------|-------------|------------------------------------|-----------------|
| 1 | 3.10         | 277    | 8/19/13 10:00... | 3.10         | 0.00       | circulation | Violin concerto no. 1, in G min... | 0.00            |
| 2 | 4.50         | 278    | 8/19/13 10:00... | 4.50         | 0.00       | circulation | Piano concerto in A minor, op...   | 0.00            |
| 3 | 5.20         | 282    | 8/5/13 10:04...  | 5.20         | 0.00       | circulation | Virtuoso wind concertos            | 0.00            |

Voided this session: 0.00

**Change Due Upon Payment: 0.00**

Convert Change to Patron Credit

| Payment       | Change | Owed           | Billed | Paid |
|---------------|--------|----------------|--------|------|
| Pending: 0.00 | 0.00   | Total: 12.80   | 12.80  | 0.00 |
|               |        | Checked: 12.80 | 12.80  | 0.00 |

When the Library Setting, **Disable Patron Credit**, is set to **True**, the patron credit payment type will be disabled. Patron Credit will not be an option within the payment type dropdown menu. The Convert Change to Patron Credit and the summary of Credit Available will be hidden from the patron billing interface in the staff client.

Current Bills

**Total Owed: 12.80**      Refunds Available: 0.00  
**Total Checked: 12.80**

Pay Bill  
Payment Type: Cash  
Payment Received: Cash  
 Annotate Payment      Apply Payment!

Cash  
Check  
Credit Card  
Work  
Forgive  
Goods

| # | Balance Owed | Bill # | Start            | Total Billed | Total Paid | Type        | Title                                     | Payment Pending |
|---|--------------|--------|------------------|--------------|------------|-------------|---|-----------------|
| 1 | 3.10         | 277    | 8/19/13 10:04 AM | 3.10         | 0.00       | circulation | Violin concerto no. 1, in G minor, op. 26 | 0.00            |
| 2 | 4.50         | 278    | 8/19/13 10:04 AM | 4.50         | 0.00       | circulation | Piano concerto in A minor, op. 54         | 0.00            |
| 3 | 5.20         | 282    | 8/5/13 10:04 AM  | 5.20         | 0.00       | circulation | Virtuoso wind concertos                   | 0.00            |

Voided this session: 0.00

**Change Due Upon Payment: 0.00**

| Payment       | Change | Owed           | Billed | Paid |
|---------------|--------|----------------|--------|------|
| Pending: 0.00 | 0.00   | Total: 12.80   | 12.80  | 0.00 |
|               |        | Checked: 12.80 | 12.80  | 0.00 |

To set the new Library Setting:

1. Click **Admin # Local Administration # Library Settings Editor**
2. Search for **Disable Patron Credit**
3. Click **Edit**
4. Set the value to **True**
5. Click **Update Setting**

**Edit Setting** ✕

---

Disable Patron Credit


---

Do not allow patrons to accrue credit or pay fines/fees with accrued credit

---

Context:  ▼

Value:  ▼

 After applying changes to this library setting, it is necessary to restart the staff client to see the changes take effect.

## Lost and Long Overdue Bill Colors

This stylization enhancement distinguishes Lost and Long Overdue circulations that appear within the billed transactions of a patron’s account from other items that are still checked out.

Within the patron’s list of billed transactions, Lost or Long Overdue items, which have not yet been returned, display differently from other items that are still checked out. The color distinctions are applied to the entire row of the billed transaction (previous to version 2.5, only the title of the billed transaction was highlighted). These color enhancements are accompanied by helpful indicators that define the meaning of the colors for staff.

By default, Lost circulations will appear in dark red. The default indicator reads, “Dark Red Items are Lost.”

When the 6 Month Overdue Mark Long-Overdue trigger event definition is enabled, Long Overdue circulations will appear in orange, by default. The default indicator reads, “Orange Items are Long Overdue.”

**Current Bills**

|                             |                                |
|-----------------------------|--------------------------------|
| <b>Total Owed: 40.35</b>    | <b>Refunds Available: 0.00</b> |
| <b>Total Checked: 40.35</b> | <b>Credit Available: 0.00</b>  |

**Pay Bill**

Payment Type:

Payment Received:

Annotate Payment

|  |                                 |  |  |  |  |  |  |  |
|--|---------------------------------|--|--|--|--|--|--|--|
|  |                                 |  |  |  |  |  |  |  |
|  | Red Items are still Checked Out |  |  |  |  |  |  |  |
|  | Orange Items are Long Overdue   |  |  |  |  |  |  |  |
|  | Dark Red Items are Lost         |  |  |  |  |  |  |  |

| # | Balance Owed | Bill # | Start           | Total Billed | Total Paid | Type        | Title                               |
|---|--------------|--------|-----------------|--------------|------------|-------------|-------------------------------------|
| 1 | ✓ .15        | 459    | 10/3/13 3:40 PM | .15          | 0.00       | circulation | Music and politics : collected writ |
| 2 | ✓ 35.00      | 460    | 10/3/13 3:42 PM | 35.00        | 0.00       | circulation | A companion to Mozart's piano c     |
| 3 | ✓ 5.20       | 108    | 8/5/13 10:04 AM | 5.20         | 0.00       | circulation | Critical entertainments : music ol  |

Both the color distinctions and indicators are customizable. To customize, a change to circ.css (for the color) and lang.dtd (for the indicator) are required.

# Chapter 97. Triggered Events and Notices

Improvements to the Triggered Events interface enables you to easily filter, sort, and print triggered events from the patron's account or an item's details. This feature is especially useful when tracking notice completion from a patron's account.

## Access and View

You can access **Triggered Events** from two Evergreen interfaces: a patron's account or an item's details.

To access this interface in the patron's account, open the patron's record and click **Other # Triggered Events**.

To access this interface from the item's details, enter the item barcode into the **Item Status** screen, and click **Actions for Selected Items # Triggered Events**.

Information about the patron, the item, and the triggered event appear in the center of the screen. Add or delete columns to the display by right clicking on any column. The **Column Picker** appears in a pop up box and enables you to select the columns that you want to display.

**Triggered Event Log (patron specific)**

Show events at and below:

| ✓                        | # | Event Name                               | Reactor     | Event Run Time    |
|--------------------------|---|--|-------------|-------------------|
| <input type="checkbox"/> | 1 | Hold Ready for Pickup Email Notification | ProcessTemp | 2012-07-27T11:... |
| <input type="checkbox"/> | 2 | Hold Ready for Pickup SMS Notification   | SendSMS     | 2012-07-27T11:... |
| <input type="checkbox"/> | 3 | Hold Ready for Pickup Email Notification | ProcessTemp | 2012-07-27T11:... |
|                          |   | Hold Ready                               |             |                   |

**Column Picker**

| Column                            | Display                             |
|-----------------------------------|-------------------------------------|
| ✓                                 | <input checked="" type="checkbox"/> |
| #                                 | <input checked="" type="checkbox"/> |
| Event Name                        | <input checked="" type="checkbox"/> |
| Reactor                           | <input checked="" type="checkbox"/> |
| Event Run Time                    | <input checked="" type="checkbox"/> |
| Event State                       | <input checked="" type="checkbox"/> |
| Target Circulation - Copy Barcode | <input checked="" type="checkbox"/> |
| Target Circulation - Title        | <input checked="" type="checkbox"/> |
| Target Circulation - Author       | <input checked="" type="checkbox"/> |
| -                                 | <input type="checkbox"/>            |

## Filter

The triggered events that display are controlled by the filters on the right side of the screen. By default, Evergreen displays completed circulation events. Notice that the default filters display **Event State is Complete** and **Core Type is Circ**.

To view completed hold-related events, such as hold capture or hold notice completion, choose **Event State is Complete** and **Core Type is Hold** from the drop down menu.

You can also use the **Event State** filter to view circs and holds that are **pending** or have an **error**.

Add and delete filters to customize the list of triggered events that displays. To add another filter, click **Add Row**. To delete a filter, click the red X adjacent to a row.

acific ▼

| Event Run Time | ▼ Event State | Target Circulation - Copy Barcode | Target Circulation - Title | Target Circulation - Author | Target Circulation - Patron Barcode | Target Hold - Patron Barcode |
|----------------|---------------|-----------------------------------|----------------------------|-----------------------------|-------------------------------------|------------------------------|
| 2012-07-27T1   | complete      |                                   |                            |                             |                                     |                              |
| 2012-07-27T1   | complete      |                                   |                            |                             |                                     |                              |

|  |   |                                      |
|--|---|--------------------------------------|
| Event State                            | ▼ | X                                    |
| is                                     | ▼ |                                      |
| Complete                               | ▼ |                                      |
| Core Type                              | ▼ | X                                    |
| is                                     | ▼ |                                      |
| Hold                                   | ▼ |                                      |
| <input type="button" value="Add Row"/> |   | <input type="button" value="Apply"/> |

## Sort

You can sort your results by clicking the column name.

### Triggered Event Log (patron specific)

Show events at and below:  ▼

| ✓                        | # | Event Name                               | Reactor     | Event Run Time | ▼ Event State |
|--------------------------|---|--|-------------|----------------|---------------|
| <input type="checkbox"/> | 1 | Hold Ready for Pickup Email Notification | ProcessTemp | 2012-07-27T1   | complete      |
| <input type="checkbox"/> | 2 | Hold Ready for Pickup SMS Notification   | SendSMS     | 2012-07-27T1   | complete      |
| <input type="checkbox"/> | 3 | Hold Ready for Pickup Email Notification | ProcessTemp | 2012-07-27T1   | complete      |

## Print

You can select the events that you want to print, or you can print all events. To print selected events, check the boxes adjacent to the events that you want to print, and click **Print Selected Events**. To print all events, simply click **Print All Events**.

## Reset

If the triggered event does not complete or the notice is not sent and the trigger needs to be run again, then select the event, and click **Reset Selected Events**.

# Chapter 98. Offline Transactions

Evergreen's *Standalone Interface / Offline Interface* is designed to log transactions during network outage, which can be uploaded and processed once network operations are restored.

The terms *Offline Interface* and *Standalone Interface* mean the same thing: a separate program to handle simple circulation tasks while the network is down.

To access the **Offline Interface**, navigate to the **Staff Client login screen** and click **Standalone Interface**. The **Evergreen Standalone Interface** window opens.

## Patron Registration

Patron registration on the *Evergreen Offline Interface* records the minimum patron information necessary to register a new patron.

All of the fields, except for Line 2 of Billing Address, on the **Patron Registration** screen are required. If your library does not record information for any field, you need to work out a standard fake value for it, for example, 1900-01-01 for **Date of Birth**.

The account password is automatically generated. Patrons can access their account with the password after the offline transactions are uploaded and processed.

To register a patron:

1. Click **Register Patron** on the top menu bar. The **Patron Registration** window opens.
2. Fill in the form with patron information, using the drop down list if available.
3. Click **Save patron registration**. A confirmation dialog opens.
4. Click **OK** to finish registering the patron.

## Checking Out Items

To circulate items from the **Evergreen standalone interface**:

1. Click **Check Out** on the top menu bar. The **Standalone Check Out** screen opens.
2. Ensure that the date on the left-hand side of the menu bar is correct.
3. Enter the patron's library card barcode in the **Enter the patron's barcode** field by scanning or typing the barcode.
4. Ensure that the due date is correct in the **Enter the item due date** field. You may enter a different due date manually, or select a different duration from the dropdown list to select a relative due date based on the loan period.
5. Check out items:
  - For cataloged items, scan each item's barcode in **Enter the item barcode** field. The barcode appears on the right side of the screen.

- For non-cataloged items:
  - i. Click **Choose a non-barcode option** to select a non-catalogued category from the drop-down list.
  - ii. Enter the number of items you want to check out, then click OK on the prompt window.
- 6. Scan all items, changing the due date if necessary.
- 7. To print a receipt, select the **Print receipt?** checkbox.
- 8. Click **Save these transactions**.

The default dates are based on your computer settings.

Pre-catalogued item circulation is not available on Offline Interface. If an existing pre-cat barcode happens to be used, it is checked out with the previous author and title. If a new pre-cat barcode is attempted, an error of ASSET NOT FOUND (item not found) is returned upon processing offline transactions.

## Renew

To renew an item, you must know the item's barcode number. The patron's barcode is optional.

To renew items from the **Evergreen standalone interface**:

1. Click **Renew** on the top menu bar.



The **Renew** window is very similar to the **Check Out** window. The differences are that a patron's barcode is optional on the **Renew** window, and the non-barcoded option is not available on the **Renew** window, as non-barcoded items can not be renewed.

2. Ensure that the date on the left-hand side of the menu bar is correct.
3. *(Optional)*: Enter the patron's library card barcode in the **Enter the patron's barcode** field by scanning or typing the barcode.
4. Ensure that the due date is correct in the **Enter the item due date** field. You may enter a different due date manually, or select a different duration from the dropdown list to select a relative due date based on the loan period.
5. For each item to be renewed, enter the item's barcode in the **Enter the item barcode** field. The barcode appears on the right side of the screen.
6. To print a receipt, select the **Print receipt?** checkbox.
7. Click **Save these transactions**.

## In-house Use

To record in-house use transactions from the **Evergreen standalone interface**:

1. Click **In House Use** on the top menu bar.



2. Ensure the date is correct.
3. Enter the number of uses to record for the item in the **Enter the number of uses of the item** field.
4. Enter the item barcode number in the **Enter the item barcode** field.
5. Repeat the previous 2 steps until all items have been scanned.
6. To print a receipt, select the **Print receipt?** checkbox.
7. Click **Save these transactions**.

## Check In

To check in items from the **Evergreen standalone interface**:

1. Click **Check In** on the top menu bar. The **Check In** screen opens.
2. Ensure the date is correct.
3. For each item you want to check in, enter the item's barcode in the **Enter item barcode** field. The number is displayed on the right side of the screen.
4. To print a receipt, select the **Print receipt?** checkbox.
5. Click **Save these transactions**.



Without access to Evergreen database, items on holds or with special status will not be captured in offline mode.

## Uploading Offline Transactions

Once you are able to connect to the server, you need to upload the offline transactions. To avoid confusion for patrons and in the system, you should upload the offline transactions as soon as possible.

Once you can connect to the server, there are 3 steps to uploading offline transactions:

1. Create a session: to be done by local system administrators at an administration workstation.
2. Upload transactions to a session: to be done by circulation staff at circulation workstations.
3. Process the uploaded transactions: to be done by local system administrators at an administration workstation.

Once network connectivity has been restored, a local system administrator must create an offline transaction session. Then, staff can upload transactions from each of the workstations used in offline circulation mode to that session. Once all of the branch workstations have uploaded their transactions to the session, the manager processes all the transactions from all the workstations at once.

Uploading transactions to the session does **not** put the transactions into the Evergreen database. The transactions will not be sent to the Evergreen database until the manager processes the session.

# Creating an Offline Session

In the Evergreen staff client:

1. Log into Evergreen using an account with local system administrator privileges.
2. Select **Admin (-) # Offline Transaction Management** from the menu. The **Offline Transactions** screen opens. Previously created sessions are listed in the **Offline Sessions** section.
3. In the upper **Offline Sessions** section, click **Create** to create a new session.
4. Enter a name for the session, like `Internet Down 2012-12-02`. Click **OK**.
5. In the **Offline Sessions** section, highlight the session you created. An **Uploaded Transactions** section appears in the bottom of the screen. Initially, this section is empty.
6. Inform library staff that the session has been created and tell them the name of the session.

# Uploading Workstation Transactions to a Session

Wait until the local system administrator has created a session and told you that it's ready for your upload. There may be several sessions shown on the **Offline Transaction Management** screen, so you will need the name of the correct session from your local system administrator.

Each workstation used to perform offline circulation during the outage must upload its transactions to the offline transaction session.

To upload offline transaction from a workstation to a session, perform the following steps in the Evergreen staff client:

1. Log into Evergreen with your regular username and password.
2. Select **Admin (-) # Offline Transaction Management** from the menu. The **Offline Transactions** screen opens. You should see at least one session in the **Offline Sessions** section. You may also see older sessions.
3. In the upper **Offline Sessions** section, highlight the correct session, then click **Upload**. The transactions are transferred to the Evergreen server.
4. When the transactions have been uploaded, select the session in the **Offline Sessions** section. The value in the **Upload Count** column has increased by 1 and your workstation is now listed in the **Uploaded Transactions** section.
5. Inform your local system administrator that your transaction has been uploaded to the session.

# Processing the Transactions

When all of the participating staff workstations have uploaded their transactions to the offline session, the workstation names are listed in the **Uploaded Transactions** section. To process the offline transactions and make them live on the Evergreen server:

1. Log into Evergreen using an account with local system administrator privileges.

2. Select **Admin (-) # Offline Transaction Management** from the menu. The **Offline Transactions** screen opens. Previously created sessions are listed in the **Offline Sessions** section.
3. Highlight the correct session and, if necessary, click **Refresh** to verify all the participating workstations have uploaded their transactions to your session.
4. Click **Process**. The processing may take some time to complete, depending on how many transactions you have done. Click **Refresh** to see the updated status of the processing step. Processing is complete when the **Processing?** column shows **Completed**.

The number in the **Transactions Processed** column is equal to the number of items checked out or checked in. For example, 5 transactions processed could mean that:

- 5 items were checked out, or
- 3 items were checked in and 2 items were checked out, or
- 5 items were checked in.

## Exceptions

Exceptions are problems that were encountered during processing. For example, a mis-scanned patron barcode, an open circulation, or an item that was not checked in before it was checked out to another patron would be listed as an exception. Those transactions causing exceptions may not be loaded into Evergreen database. Staff should examine the exceptions and take necessary action.

These are a few notes about possible exceptions. It is not an all-inclusive list.

- Checking out a DVD with the wrong date (leaving due date set at +2 weeks instead of +1 week) does not cause an exception.
- Overdue books are not flagged as exceptions.
- Checking out a reference book does not cause an exception.
- Checking out an item belonging to another library does not cause an exception.
- The **Standalone Interface** does not recognize books on hold, so no exceptions will be generated when matching items are checked in or checked out.
- The **Standalone Interface** can recognize blocked, barred, and expired patrons, as well as lost cards, *if* you have recently run an **Admin (-) # Download Offline Patron List** action on the workstation on which you are using the **Standalone Interface**. You will get an error message indicating the patron status from within the **Standalone Interface** at check-out time.

## Common error messages

- **ROUTE-ITEM** - Indicates the book should be routed to another branch or library system. You'll need to find the book and re-check it in (online) to get the Transit Slip to print.
- **COPY\_STATUS\_LOST** - Indicates a book previously marked as lost was found and checked in.
- **CIRC\_CLAIMS\_RETURNED** - Indicates a book previously marked as claimed-returned was found and checked in.

- ASSET\_COPY\_NOT\_FOUND - Indicates the item barcode was mis-scanned/mis-typed.
- ACTOR\_CARD\_NOT\_FOUND - Indicates the patron's library barcode was mis-scanned/ mis-typed.
- OPEN\_CIRCULATION\_EXISTS - Indicates a book was checked out that had never been checked in.
- MAX\_RENEWALS\_REACHED - Indicates the item has already been renewed the maximum times allowed (or it's a video/DVD).

# Chapter 99. Self checkout

Evergreen includes a self check interface designed for libraries that simply want to record item circulation without worrying about security mechanisms like magnetic strips or RFID tags.

## Initializing the self check

The self check interface runs in a web browser. Before patrons can use the self check station, a staff member must initialize the interface by logging in.

1. Open your self check interface page in a web browser. By default, the URL is `https://[hostname]/eg/circ/selfcheck/main`, where `[hostname]` represents the host name of your Evergreen web server.
2. Log in with a staff account with circulation permissions.

## Setting library hours of operation

When the self check prints a receipt, the default template includes the library's hours of operation in the receipt. If the library has no configured hours of operation, the attempt to print a receipt fails and the browser hangs.

## Configuring self check behavior

Several library settings control the behavior of the self check:

- **Audio Alerts:** Plays sounds when events occur in the self check. These events are defined in the `templates/circ/selfcheck/audio_config.tt2` template. To use the default sounds, you could run the following command from your Evergreen server as the **root** user (assuming that `/openils/` is your install prefix):

```
cp -r /openils/var/web/xul/server/skin/media/audio /openils/var/web/.
```

- **Block copy checkout status:** Prevent the staff user's permission override from enabling patrons to check out items that they would not normally be able to check out, such as the "On reservation shelf" status. The status IDs are found in the `config.copy_status` database table.
- **Patron Login Timeout:** Automatically logs the patron out of the self check after a certain period of inactivity. **NOT CURRENTLY SUPPORTED**
- **Pop-up alert for errors:** In addition to displaying an alert message on the screen, this setting raises patron awareness of possible problems by raising an alert box that the patron must dismiss before they can check out another item.
- **Require Patron Password:** By default, users can enter either their user name or barcode, without having to enter their password, to access their account. This setting requires patrons to enter their password for additional security.
- **Workstation Required:** If set, the URL must either include a `?ws=[workstation]` parameter, where `[workstation]` is the name of a registered Evergreen workstation, or the staff member must register a new workstation when they login. The workstation parameter ensures that check outs are recorded as occurring at the correct library.

# Checking out or renewing items in the self check

After a staff user has logged into the self check interface, the interface is ready for patrons to log in and check out or renew items.

1. The patron logs in by entering either their patron barcode or their user name.
2. The patron enters the barcode for each item. If the patron types the barcode, they need to press the <Enter> key to check out the item. The item details, including due date, appear below the barcode field.
3. When the patron is finished, they can click **Logout** if they want a receipt for their items, or **Logout (no receipt)** if they prefer no receipt.

# Chapter 100. RFID Product Integration

## Evergreen Integration with PV Supa GoodStuff RFID Reader

This feature enables the Evergreen staff client to "talk" to the PV Supa Goodstuff RFID reader so that libraries can utilize PV Supa Goodstuff's RFID technology when checking items in and out.

### Administration

To use PV Supa Goodstuff, you must add code to the Admin module that Evergreen can use to identify the reader.

1. Click **Admin # Workstation Admin # Server Add-ons**.
2. Enter the code, `pv_supa_goodstuff`, to identify PV Supa Goodstuff in the **Active Server Add-Ons** field.
3. Click **Update Active Add-Ons**.
4. Look at the next field, **Add-on Preferences**. Enter information in the **GoodStuff** tab.
5. Check the **Enabled** check box to enable this add-on.
6. Enter the **IP/Hostname** of the hardware.
7. Enter the **port**.
8. Click **Update**.

### Using RFID at the Circulation Desk

RFID functionality is available in the Circulation module via the check-out interface, the check-out function in the patron account, and the check-in interface.

From the **Check-Out** interface (F1):

1. Check the RFID checkbox if your library cards have embedded RFID chips that Evergreen can use to retrieve the patron barcode. RFID check boxes appear only if appropriate code words have been added in the Server Add-Ons.
2. Place the patron's library card and/or item(s) on the PV Supa Goodstuff Reader. Evergreen will take you to the patron's account. If item(s) with RFID chips have also been placed on the reader, and the corresponding checkbox is checked, then Evergreen will scan the item(s) into the patron's account.



RFID check boxes are sticky, so if you have checked an RFID box once, then it will continue to be checked when you re-open the interface.



If you do not use RFID chips to retrieve patrons' accounts, then leave the RFID box unchecked. You can scan a patron barcode with a barcode scanner, and Evergreen will retrieve the patron data without using the RFID feature. From the patron's account, Evergreen can check out items using the RFID reader. See the next section for details.

1. Click **Done** to complete the transaction, or close the window.

From the Check-Out tab in a patron's record:

1. Open a patron's record, and stack the item(s) to be checked out on the RFID reader. To retrieve item data using the RFID chips embedded in the item barcodes, click the **RFID** check box at the bottom of the patron account. When this box is checked, Evergreen will read the item(s) that are stacked on the RFID reader, check out the item(s), and disable the security bits.
2. Click **Done** to complete the transaction, or close the window.



Evergreen pop-up messages, such as an Alert Message or Item Already Circulating may appear during transactions. Two new dialogs specific to PV Supa Goodstuff may also appear. One dialog, Incomplete Sets, allows you to continue checking out an incomplete set, such as a CD collection, or you can ask the hardware to rescan the RFID tags to look again for a full set. The second dialog allows you to manually attempt to set or unset the security bit on an item if the automatic attempt failed.

From the **Check In** interface:

1. Click the **RFID** check box.
2. Place the items on the PV Supa Goodstuff Reader.
3. Evergreen will tell the reader to check in the item(s) and enable the security bits. The item(s) appear in a list on the screen.



# Part XII. Reports

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# Chapter 101. Introduction

Learn how to create and use reports in Evergreen.

# Chapter 102. Starting and Stopping the Reporter Daemon

Before you can view reports, the Evergreen administrator must start the reporter daemon from the command line of the Evergreen server.

The reporter daemon periodically checks for requests for new reports or scheduled reports and gets them running.

## Starting the Reporter Daemon

To start the reporter daemon, run the following command as the opensrf user:

```
clark-kent.pl --daemon
```

You can also specify other options:

- **sleep=interval**: number of seconds to sleep between checks for new reports to run; defaults to 10
- **lockfile=filename**: where to place the lockfile for the process; defaults to /tmp/reporter-LOCK
- **concurrency=integer**: number of reporter daemon processes to run; defaults to 1
- **bootstrap=filename**: OpenSRF bootstrap configuration file; defaults to /openils/conf/opensrf\_core.xml



The open-ils.reporter process must be running and enabled on the gateway before the reporter daemon can be started.

Remember that if the server is restarted, the reporter daemon will need to be restarted before you can view reports unless you have configured your server to start the daemon automatically at start up time.

## Stopping the Reporter Daemon

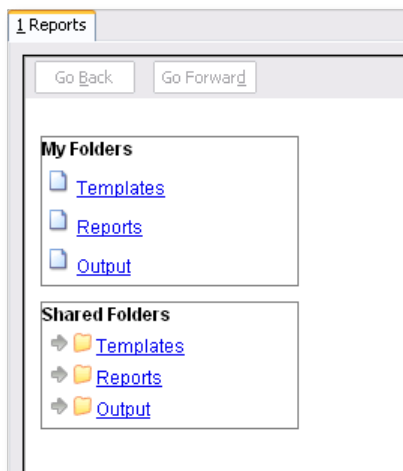
To stop the reporter daemon, you have to kill the process and remove the lockfile. Assuming you're running just a single process and that the lockfile is in the default location, perform the following commands as the opensrf user:

```
kill `ps wax | grep "Clark Kent" | grep -v grep | cut -b1-6`  
rm /tmp/reporter-LOCK
```

# Chapter 103. Folders

There are three main components to reports: *Templates*, *Reports*, and *Output*. Each of these components must be stored in a folder. Folders can be private (accessible to your login only) or shared with other staff at your library, other libraries in your system or consortium. It is also possible to selectively share only certain folders and/or subfolders.

There are two parts to the folders pane. The *My Folders* section contains folders created with your Evergreen account. Folders that other users have shared with you appear in the *Shared Folders* section under the username of the sharing account.



## Creating Folders

Whether you are creating a report from scratch or working from a shared template you must first create at least one folder.

The steps for creating folders are similar for each reporting function. It is easier to create folders for templates, reports, and output all at once at the beginning, though it is possible to do it before each step. This example demonstrates creating a folder for a template.

1. Click on *Templates* in the *My Folders* section.
2. Name the folder. Select *Share* or *Do not share* from the dropdown menu.
3. If you want to share your folder, select who you want to share this folder with from the dropdown menu.
4. Click *Create Sub Folder*.
5. Click *OK*.
6. Next, create a folder for the report definition to be saved to. Click on *Reports*.
7. Repeat steps 2-5 to create a Reports folder also called *Circulation*.

8. Finally, you need to create a folder for the report's output to be saved in. Click on *Output*.
9. Repeat steps 2-5 to create an Output folder named *Circulation*.



Using a parallel naming scheme for folders in Templates, Reports, and Output helps keep your reports organized and easier to find

The folders you just created will now be visible by clicking the arrows in *My Folders*. Bracketed after the folder name is whom the folder is shared with. For example, *Circulation (BNCLF)* is shared with the North Coast Library Federation. If it is not a shared folder there will be nothing after the folder name. You may create as many folders and sub-folders as you like.

## Managing Folders

Once a folder has been created you can change the name, delete it, create a new subfolder, or change the sharing settings. This example demonstrates changing a folder name; the other choices follow similar steps

1. Click on the folder that you wish to rename.
2. Click *Manage Folder*.
3. Select *Change folder name* from the dropdown menu and click *Go*.
4. Enter the new name and click *Submit*.
5. Click *OK*.
6. You will get a confirmation box that the *Action Succeeded*. Click *OK*.

# Chapter 104. Creating Templates

Once you have created a folder, the next step in building a report is to create or clone a template. Templates allow you to run a report more than once without building it anew every time, by changing definitions to suit current requirements. For example, you can create a shared template that reports on circulation at a given library. Then, other libraries can use your template and simply select their own library when they run the report.

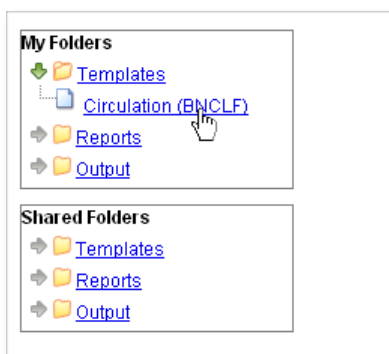
It may take several tries to refine a report to give the output that you want. It can be useful to plan out your report on paper before getting started with the reporting tool. Group together related fields and try to identify the key fields that will help you select the correct source.

It may be useful to create complex queries in several steps. For example, first add all fields from the table at the highest source level. Run a report and check to see that you get results that seem reasonable. Then clone the report, add any filters on fields at that level and run another report. Then drill down to the next table and add any required fields. Run another report. Add any filters at that level. Run another report. Continue until you've drilled down to all the fields you need and added all the filters. This might seem time consuming and you will end up cloning your initial report several times. However, it will help you to check the correctness of your results, and will help to debug if you run into problems because you will know exactly what changes caused the problem. Also consider adding extra fields in the intermediate steps to help you check your results for correctness.

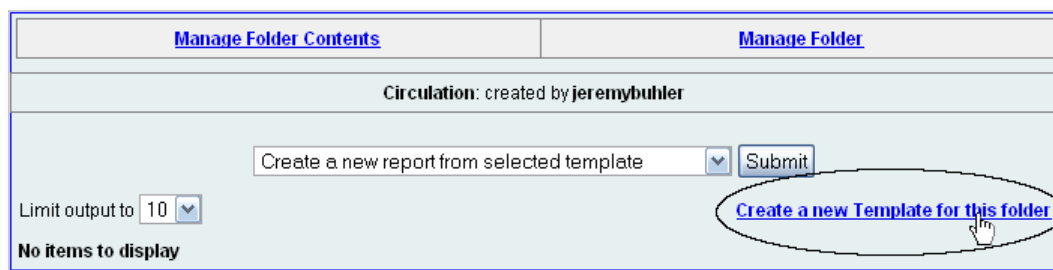
This example illustrates creating a template for circulation statistics. This is an example of the most basic template that you can create. The steps required to create a template are the same every time, but the tables chosen, how the data is transformed and displayed, and the filters used will vary depending on your needs.

## Choosing Report Fields

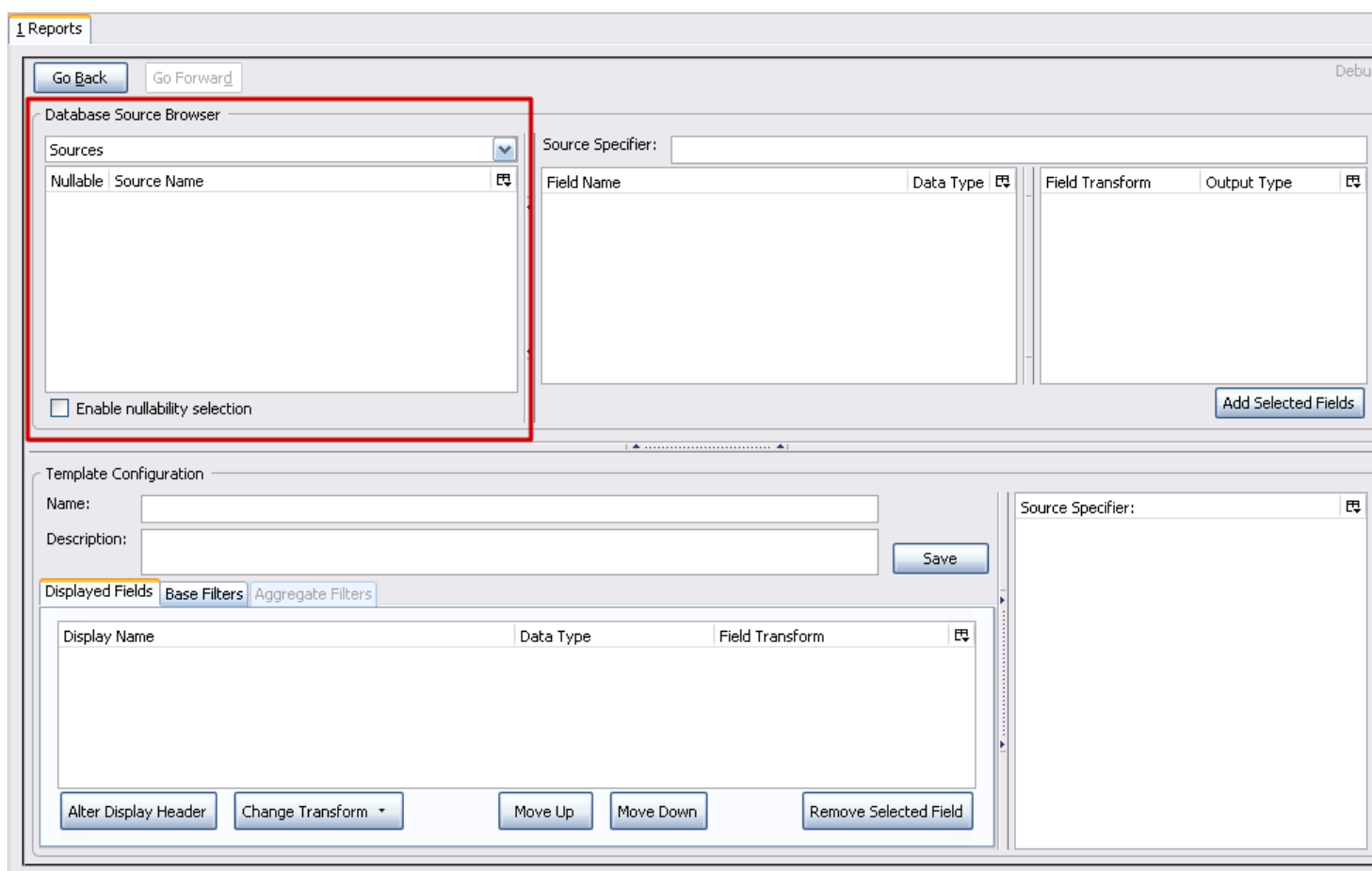
1. Click on the My Folder template folder where you want the template to be saved.



2. Click on Create a new Template for this folder.



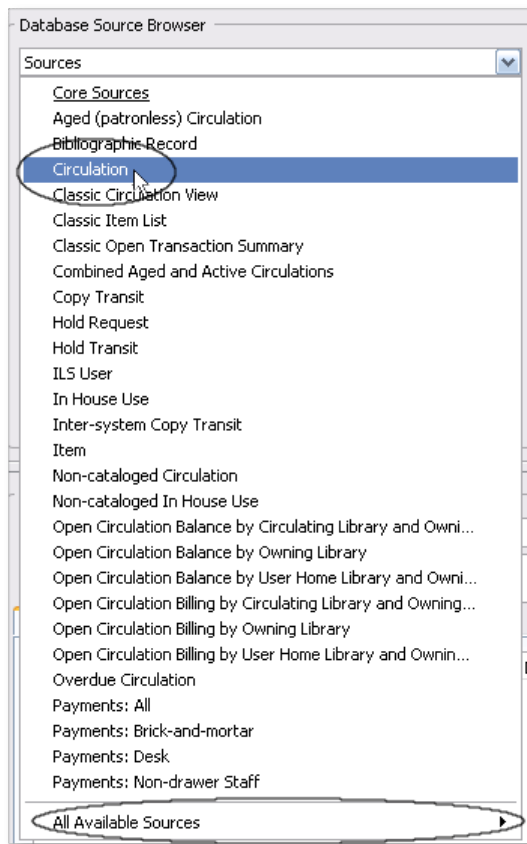
- You can now see the template creating interface. The upper half of the screen is the *Database Source Browser*. The top left hand pane contains the database *Sources* drop-down list. This is the list of tables available as a starting point for your report. Commonly used sources are *Circulation* (for circ stats and overdue reports), *ILS User* (for patron reports), and *Item* (for reports on a library's holdings).



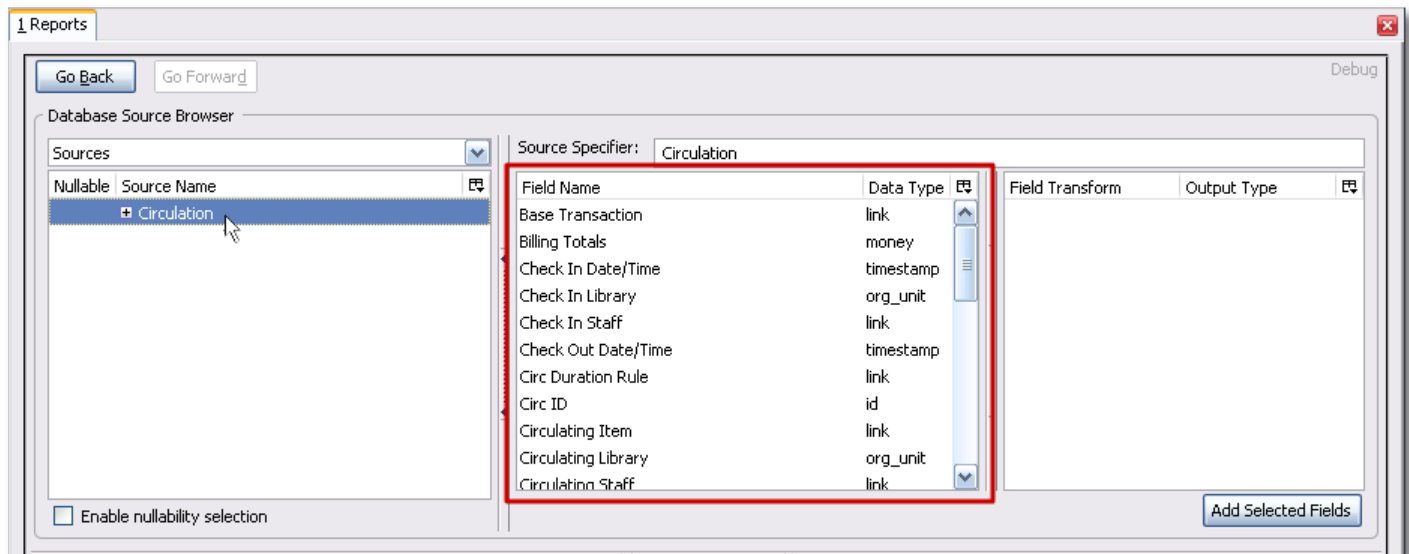
The Enable source nullability checkbox below the sources list is for advanced reporting and should be left unchecked by default.

- Select *Circulation* in the *Sources* dropdown menu. Note that the *Core Sources* for reporting are listed first, however it is possible to access all available sources at the bottom of this dropdown menu. You may only specify one source per template.

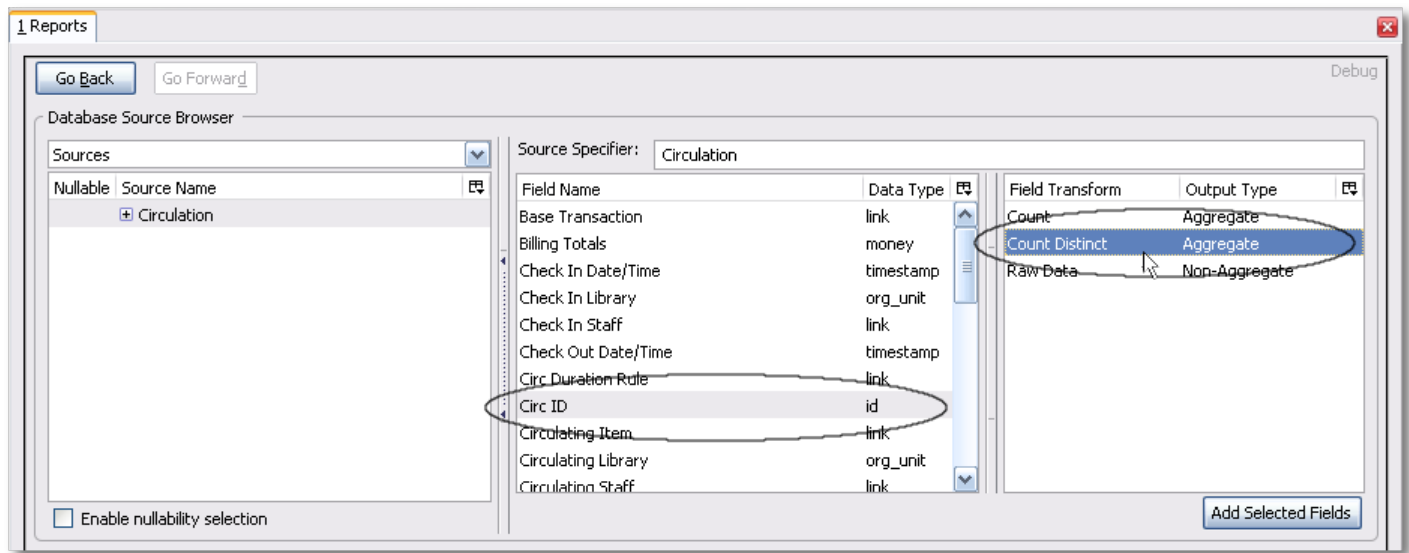




- Click on *Circulation* to retrieve all the field names in the Field Name pane. Note that the *Source Specifier* (above the middle and right panes) shows the path that you took to get to the specific field.

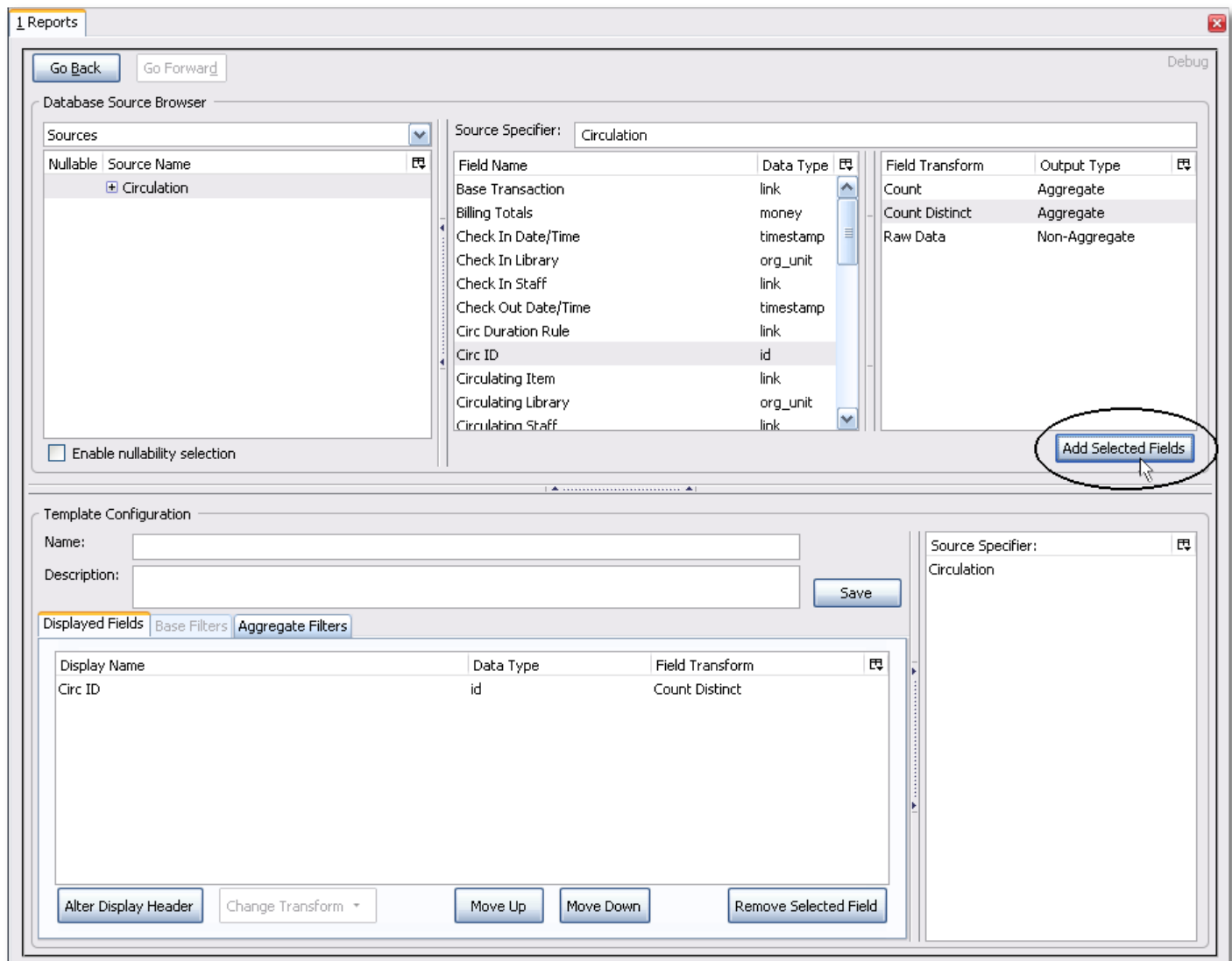


- Select *Circ ID* in the middle *Field Name* pane, and *Count Distinct* from the right *Field Transform* pane. The *Field Transform* pane is where you choose how to manipulate the data from the selected fields. You are counting the number of circulations.

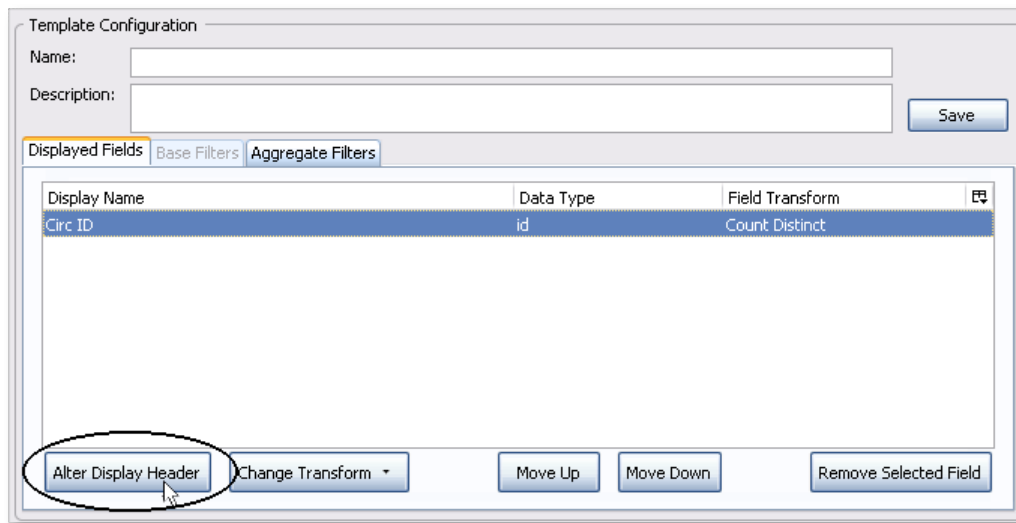


*Field Transforms* have either an *Aggregate* or *Non-Aggregate* output type. See the section called [Field Transforms](#) for more about *Count*, *\_Count Distinct*, and other transform options.

7. Click *Add Selected Fields* underneath the *Field Transform* pane to add this field to your report output. Note that *Circ ID* now shows up in the bottom left hand pane under the *Displayed Fields* tab.

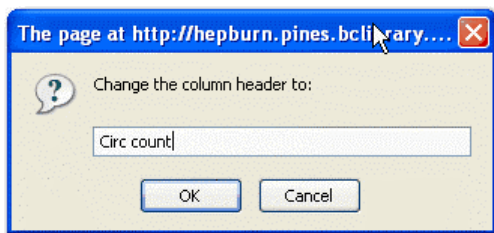


- Circ ID* will be the column header in the report output. You can rename default display names to something more meaningful. To do so in this example, select the *Circ ID* row and click *Alter Display Header*.



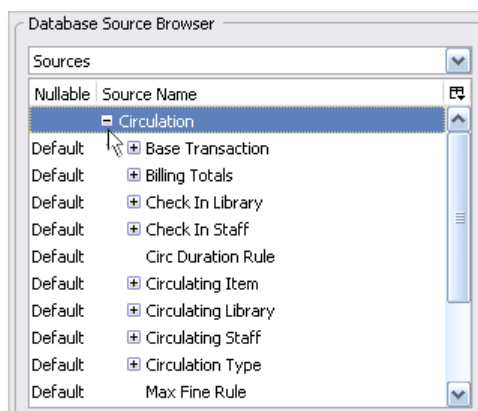
Double-clicking on the displayed field name is a shortcut to altering the display header.

9. Type in the new column header name, for example *Circ count* and click *OK*.

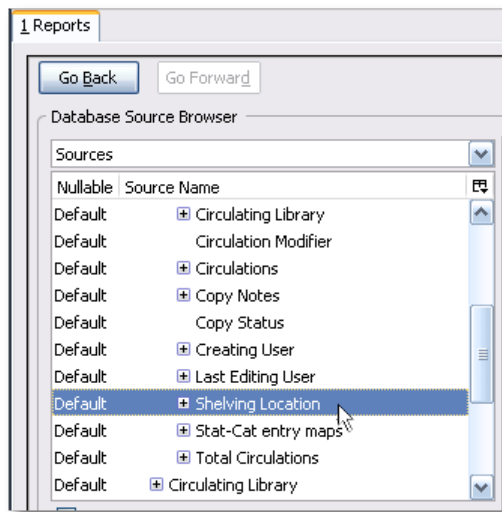


10. Add other data to your report by going back to the *Sources* pane and selecting the desired fields. In this example, we are going to add *Circulating Item -# Shelving Location* to further refine the circulation report.

In the top left hand *Sources* pane, expand *Circulation*. Depending on your computer you will either click on the + sign or on an arrow to expand the tree.

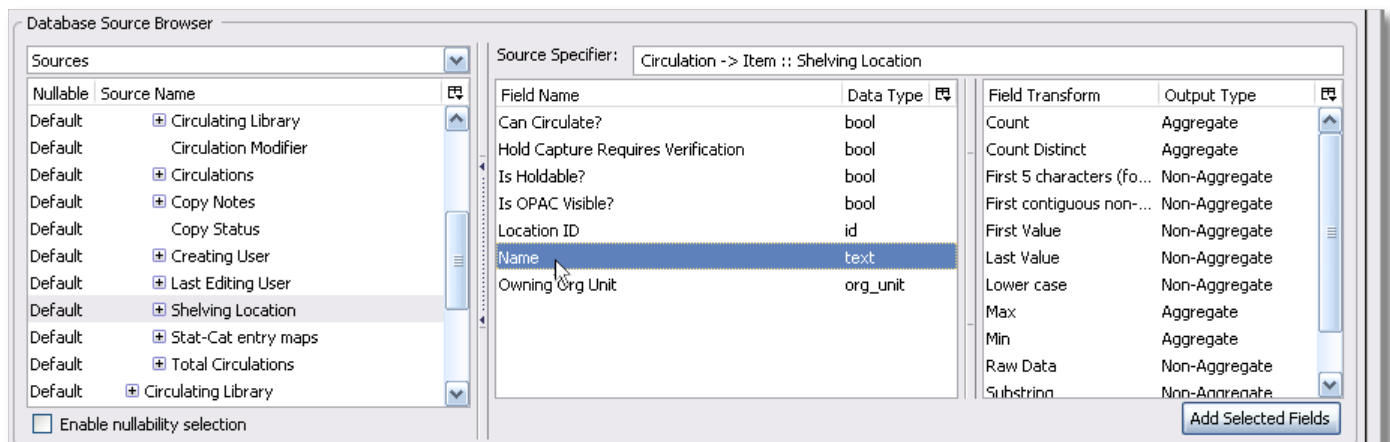


Click on the + or arrow to expand *Circulating Item*. Select *Shelving Location*.

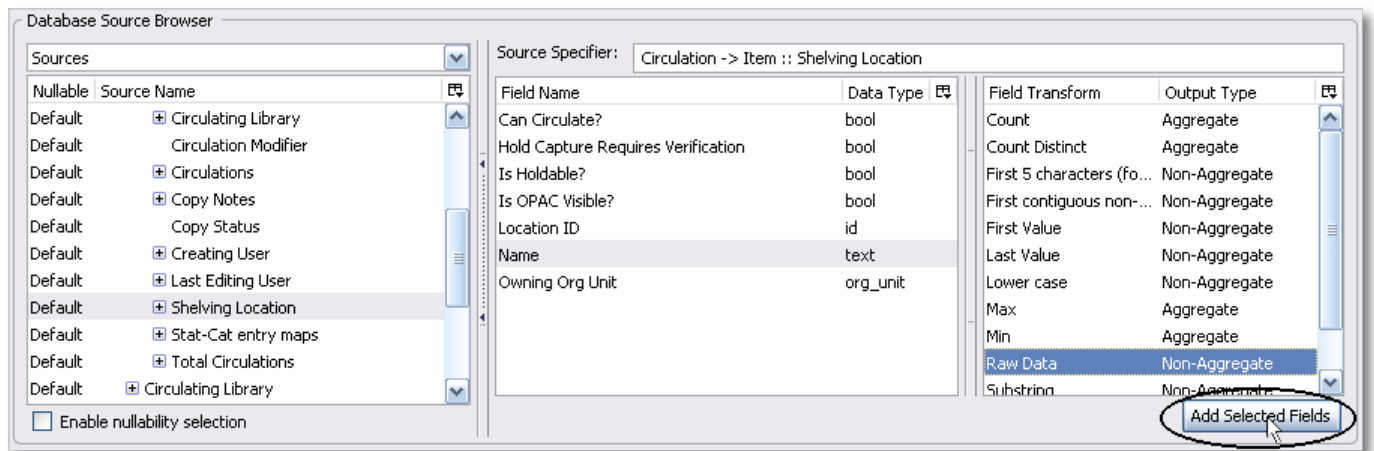


When you are creating a template take the shortest path to the field you need in the left hand Sources pane. Sometimes it is possible to find the same field name further in the file structure, but the shortest path is the most efficient.

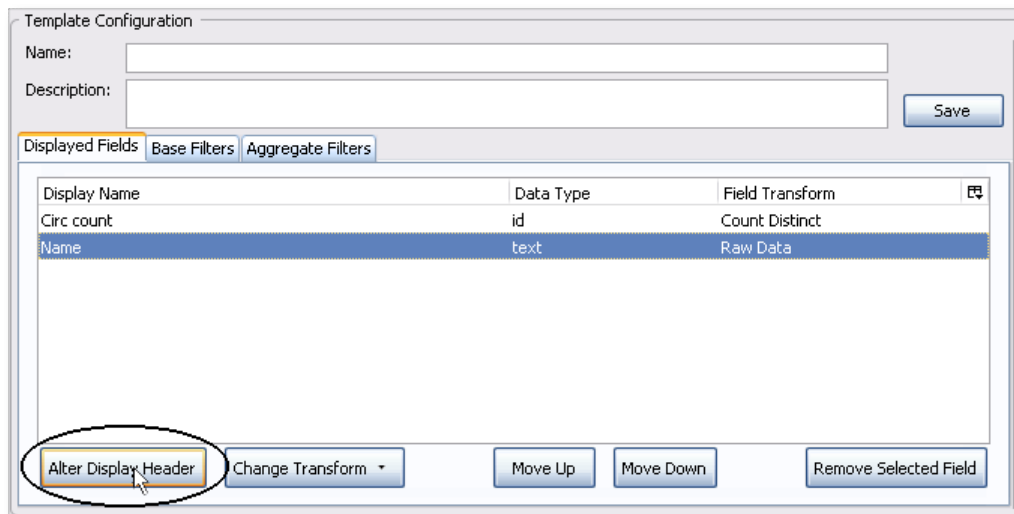
In the Field Name pane select Name.



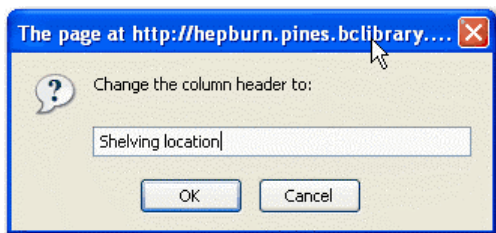
In the upper right *Field Transform* pane, select *Raw Data* and click *Add Selected Fields*. Use *Raw Data* when you do not wish to transform field data in any manner.



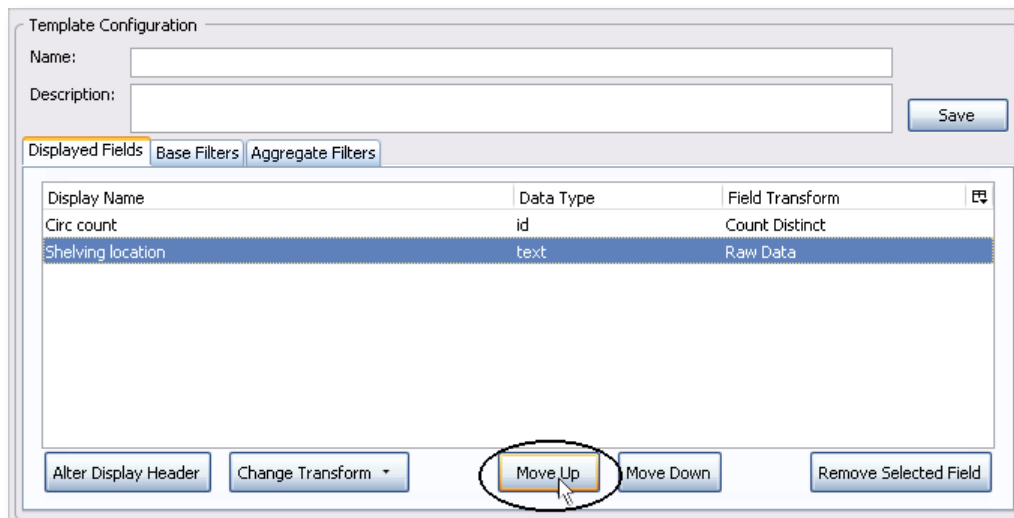
Name will appear in the bottom left pane. Select the Name row and click *Alter Display Header*.



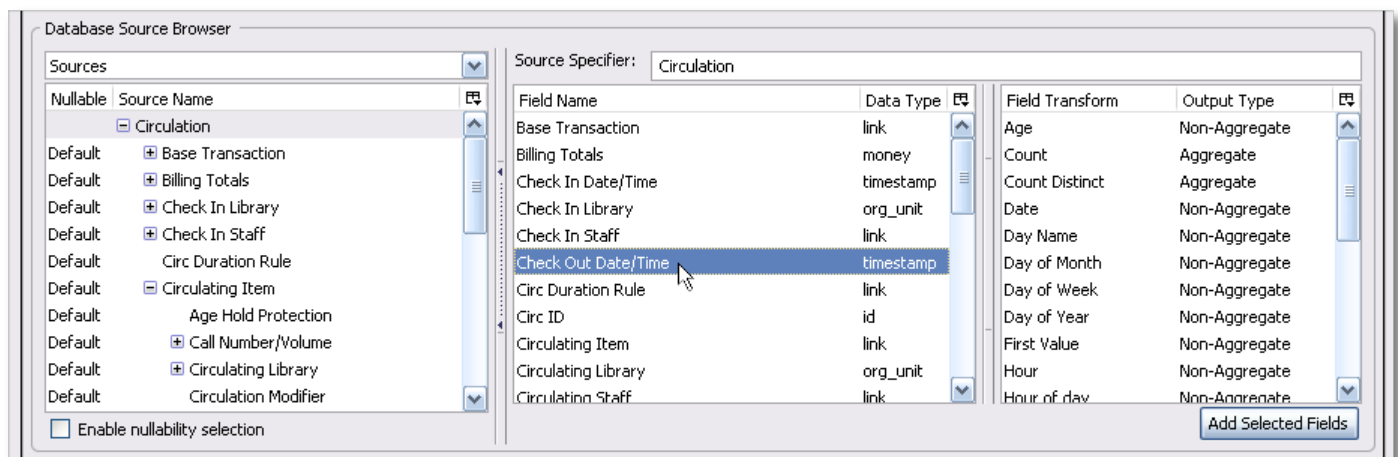
11. Enter a new, more descriptive column header, for example, *Shelving location*. Click *OK*.



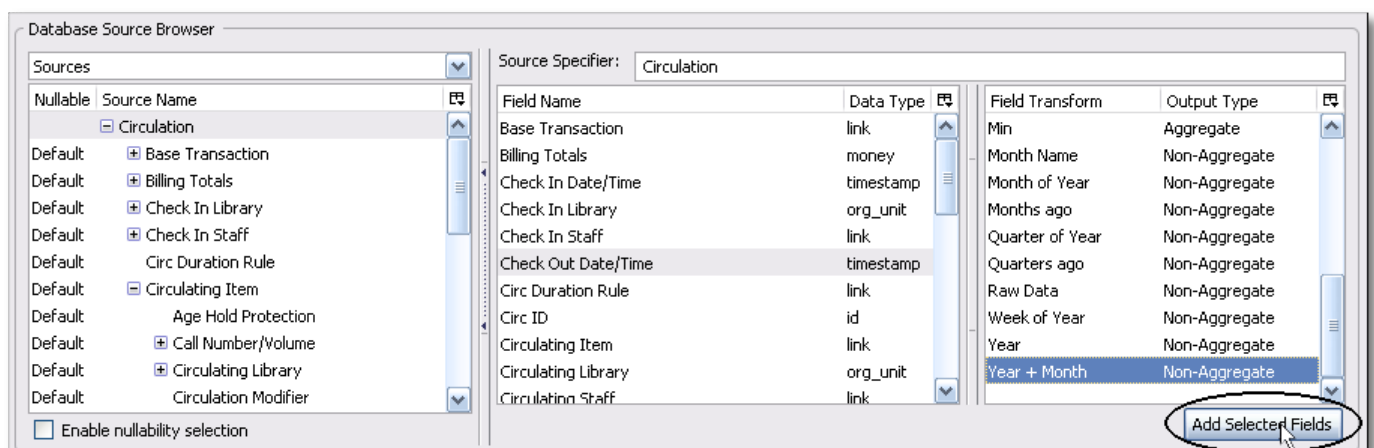
12. Note that the order of rows (top to bottom) will correspond to the order of columns (left to right) on the final report. Select *Shelving location* and click on *Move Up* to move *Shelving location* before *Circ count*.



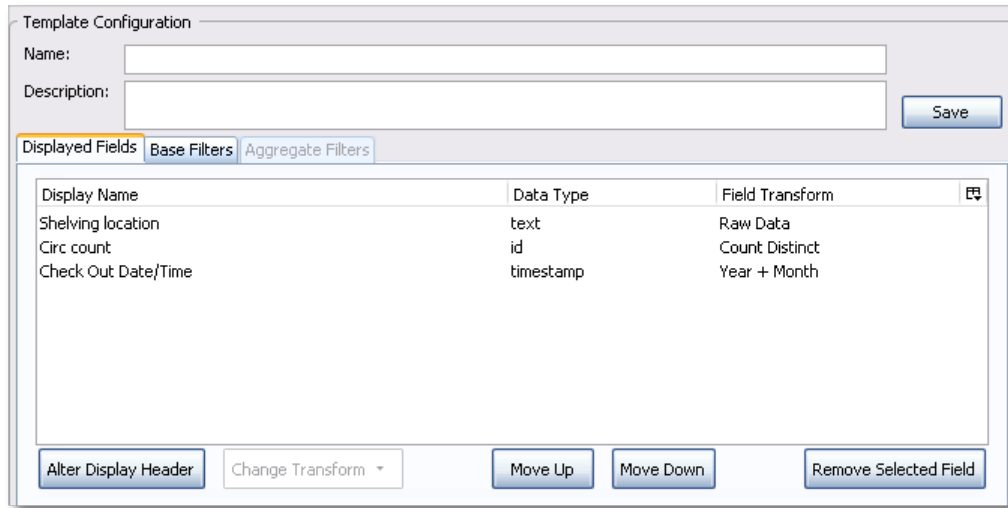
13. Return to the *Sources* pane to add more fields to your template. Under *Sources* click *Circulation*, then select *Check Out Date/Time* from the middle *Field Name* pane.



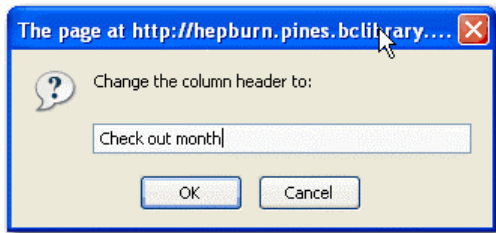
14. Select *Year + Month* in the right hand *Field Transform* pane and click *Add Selected Fields*



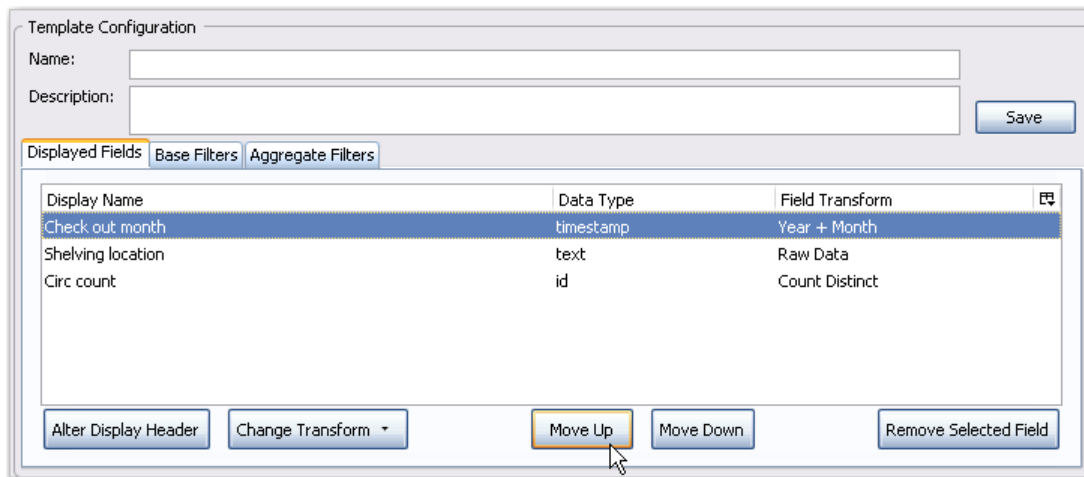
15. *Check Out Date/Time* will appear in the *Displayed Fields* pane. In the report it will appear as a year and month (YYYY-MM) corresponding to the selected transform.



16. Select the *Check Out Date/Time* row. Click *Alter Display Header* and change the column header to *Check out month*.

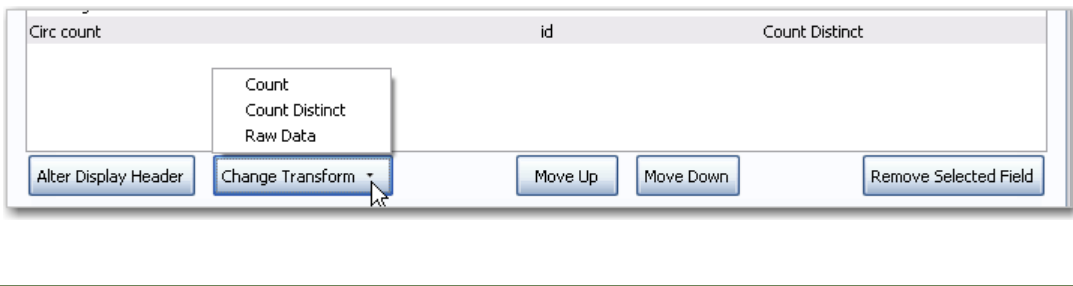


17. Move *Check out month* to the top of the list using the *Move Up* button, so that it will be the first column in an MS Excel spreadsheet or in a chart. Report output will sort by the first column.



Note the *Change Transform* button in the bottom left hand pane. It has the same function as the upper right *Field Transform* pane for fields that have already been added.





## Applying Filters

Evergreen reports access the entire database, so to limit report output to a single library or library system you need to apply filters.

After following the steps in the previous section you will see three fields in the bottom left hand *Template Configuration* pane. There are three tabs in this pane: *Displayed Fields* (covered in the previous section), *Base Filters* and *Aggregate Filters*. A filter allows you to return only the results that meet the criteria you set.

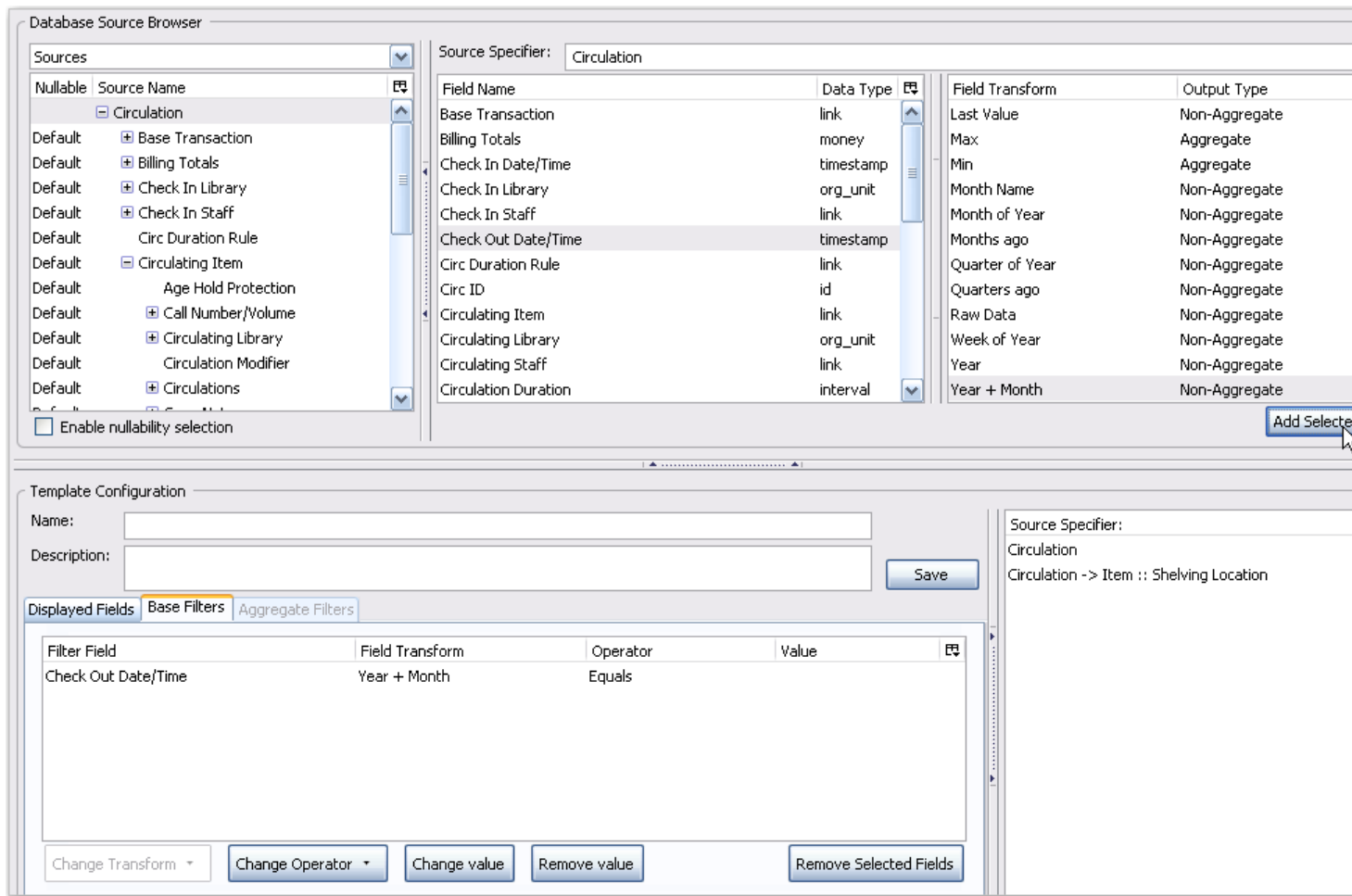
*Base Filters* apply to non-aggregate output types, while *Aggregate Filters* are used for aggregate types. In most reports you will be using the *Base Filters* tab. For more information on aggregate and non-aggregate types see the section called “Field Transforms”.

There are many available operators when using filters. Some examples are *Equals*, *In list*, *is NULL*, *Between*, *Greater than* or *equal to*, and so on. *In list* is the most flexible operator, and in this case will allow you flexibility when running a report from this template. For example, it would be possible to run a report on a list of timestamps (in this case will be trimmed to year and month only), run a report on a single month, or run a report comparing two months. It is also possible to set up recurring reports to run at the end of each month.

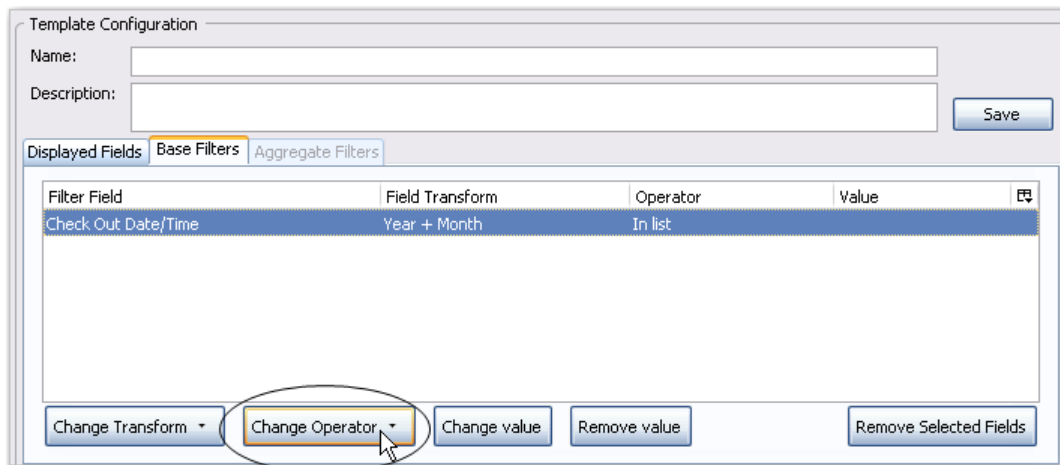
In this example we are going to use a Base Filter to filter out one library’s circulations for a specified time frame. The time frame in the template will be configured so that you can change it each time you run the report.

## Using Base Filters

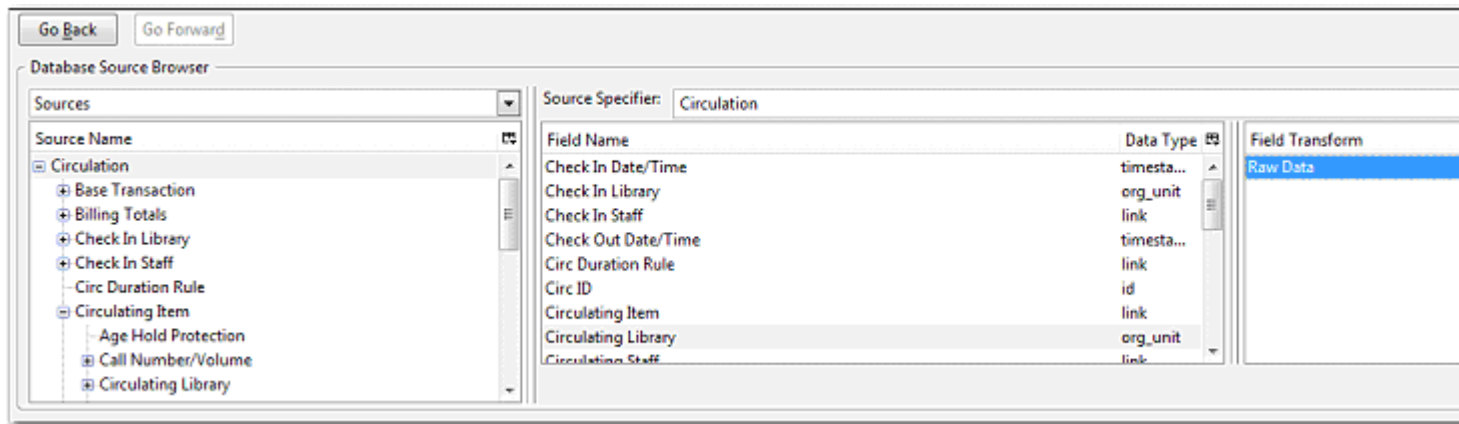
1. Select the *Base Filters* tab in the bottom *Template Configuration* pane.
2. For this circulation statistics example, select *Circulation -# Check Out Date/Time -# Year + Month* and click on *Add Selected Fields*. You are going to filter on the time period.



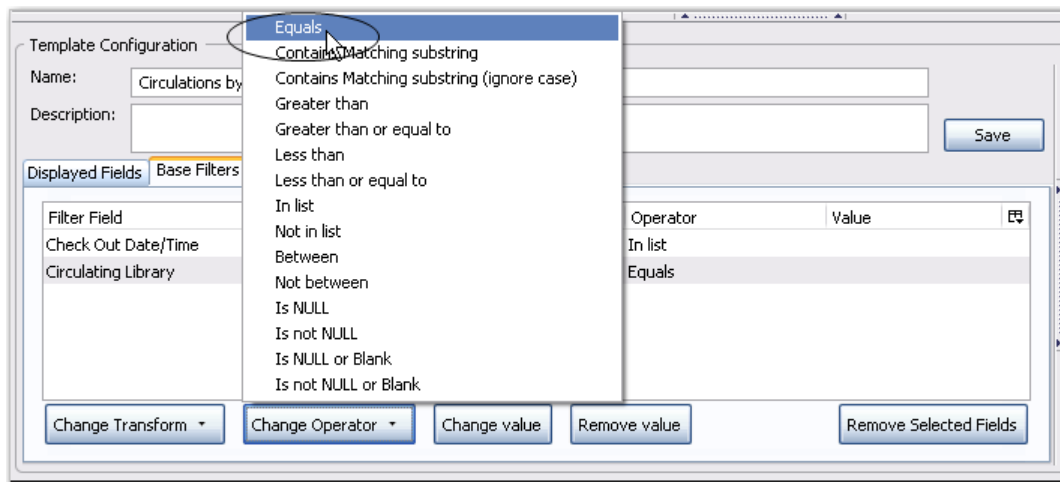
3. Select *Check Out Date/Time*. Click on *Change Operator* and select *In list* from the dropdown menu.



4. To filter on the location of the circulation select *Circulation -# Circulating library -# Raw Data* and click on *Add Selected Fields*.

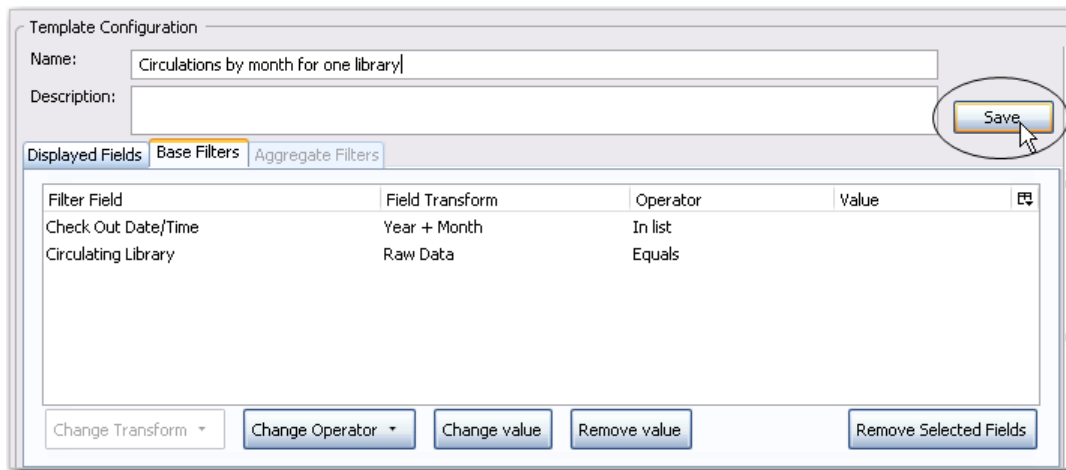


5. Select *Circulating Library* and click on *Change Operator* and select *Equals*. Note that this is a template, so the value for *Equals* will be filled out when you run the report.

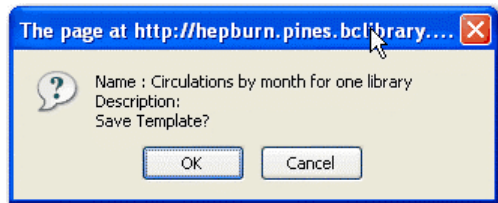


For multi-branch libraries, you would select *Circulating Library* with *In list* as the operator, so you could specify the branch(es) when you run the report. This leaves the template configurable to current requirements. In comparison, sometimes you will want to hardcode true/false values into a template. For example, deleted bibliographic records remain in the database, so perhaps you want to hardcode *deleted=false*, so that deleted records don't show up in the results. You might want to use *deleted=true*, for a template for a report on deleted items in the last month.

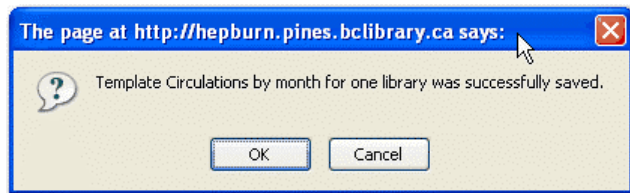
6. Once you have configured your template, you must name and save it. Name this template *Circulations by month for one library*. You can also add a description. In this example, the title is descriptive enough, so a description is not necessary. Click *Save*.



7. Click *OK*.



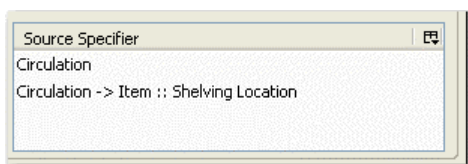
8. You will get a confirmation dialogue box that the template was successfully saved. Click *OK*.



After saving it is not possible to edit a template. To make changes you will need to clone it and edit the clone



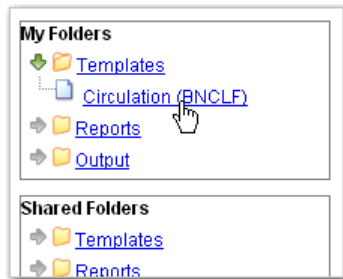
The bottom right hand pane is also a source specifier. By selecting one of these rows you will limit the fields that are visible to the sources you have specified. This may be helpful when reviewing templates with many fields. Use **Ctrl+Click** to select or deselect items.



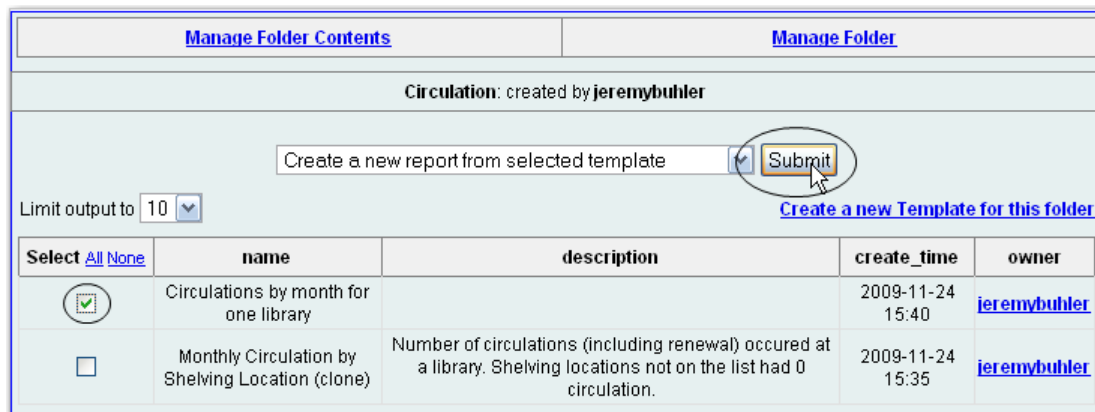
# Chapter 105. Generating Reports from Templates

Now you are ready to run the report from the template you have created.

1. In the My Folders section click the arrow next to *Templates* to expand this folder and select *circulation*.



2. Select the box beside *Circulations by month for one library*. Select *Create a new report from selected template* from the dropdown menu. Click *Submit*.



3. Complete the first part of report settings. Only *Report Name* and *Choose a folder...* are required fields.

|  |  |
|--|--|
| Template Name: ❶                                   | Circulations by month for one library  |
| Template Creator:                                  | jeremybuhler   |
| Template Description:                              |  |
| Report Name: ❷                                     | October 2009 circ  |
| Report Description: ❸                              | Prince Rupert circulation stats by shelving location for October 2009                                |
| Report Columns: ❹                                  | Check out month<br>Shelving location<br>Circ count   |
| Pivot Label Column:                                | - Select One (optional) -  |
| Pivot Data Column: ❺                               | Circ count   |
| Choose a folder to store this report definition: ❻ | Selected Folder: <b>Circulation</b><br><a href="#">Report Folders</a><br><a href="#">Circulation</a> |

1) *Template Name*, *Template Creator*, and *Template Description* are for informational purposes only. They are hard coded when the template is created. At the report definition stage it is not possible to change them.

2) *Report Name* is required. Reports stored in the same folder must have unique names.

3) *Report Description* is optional but may help distinguish among similar reports.

4) *Report Columns* lists the columns that will appear in the output. This is derived from the template and cannot be changed during report definition.

5) *Pivot Label Column* and *Pivot Data Column* are optional. Pivot tables are a different way to view data. If you currently use pivot tables in MS Excel it is better to select an Excel output and continue using pivot tables in Excel.

6) You must choose a report folder to store this report definition. Only report folders under My Folders are available. Click on the desired folder to select it.

4. Select values for the *Circulation > Check Out Date/Time*. Use the calendar widget or manually enter the desired dates, then click Add to include the date on the list. You may add multiple dates.

|  |        |
|--|--------|
| Pivot Label Column:                              | - Sel  |
| Pivot Data Column:                               | Circ   |
| Choose a folder to store this report definition: | Select |

| Column                             | Transfor     | In list | Params  |
|------------------------------------|--------------|---------|---|
| Circulation -> Check Out Date/Time | Year + Month | In list | Real Date <input type="text" value="2009-10"/><br><input type="button" value="Add"/> <input type="button" value="Del"/><br><input type="text" value="2009-10"/> |

The Transform for this field is Year + Month, so even if you choose a specific date (2009-10-20) it will appear as the corresponding month only (2009-10).

It is possible to select **relative dates**. If you select a relative date 1 month ago you can schedule reports to automatically run each month. If you want to run monthly reports that also show comparative data from one year ago, select a relative date 1 month ago, and 13 months ago.

5. Select a value for the *Circulating Library*.
6. Complete the bottom portion of the report definition interface, then click *Save*.

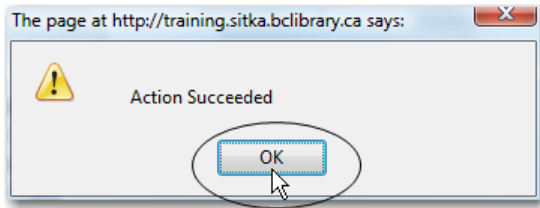
1) Select one or more output formats. In this example the report output will be available as an Excel spreadsheet, an HTML table (for display in the staff client or browser), and as a bar chart.

2) If you want the report to be recurring, check the box and select the *Recurrence Interval* as described in [Recurring Reports](#). In this example, as this is a report that will only be run once, the *Recurring Report* box is not checked.

3) Select *Run* as soon as possible for immediate output. It is also possible to set up reports that run automatically at future intervals.

4) It is optional to fill out an email address where a completion notice can be sent. The email will contain a link to password-protected report output (staff login required). If you have an email address in your Local System Administrator account it will automatically appear in the email notification box. However, you can enter a different email address or multiple addresses separated by commas.

7. Select a folder for the report's output.
8. You will get a confirmation dialogue box that the Action Succeeded. Click *OK*.



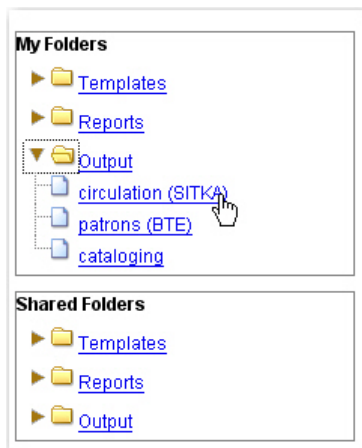
Once saved, reports stay there forever unless you delete them.



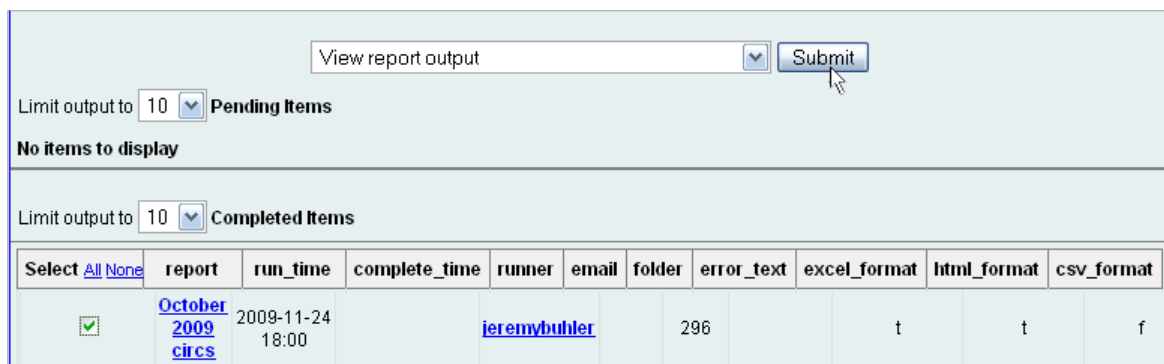
# Chapter 106. Viewing Report Output

When a report runs Evergreen sends an email with a link to the output to the address defined in the report. Output is also stored in the specified Output folder and will remain there until manually deleted.

1. To view report output in the staff client, open the reports interface from *Admin (-) -# Local Administration -# Reports*
2. Click on Output to expand the folder. Select *Circulation* (where you just saved the circulation report output).



3. View report output is the default selection in the dropdown menu. Select *Recurring Monthly Circ by Location* by clicking the checkbox and click *Submit*.



4. A new tab will open for the report output. Select either *Tabular Output* or *Excel Output*. If Bar Charts was selected during report definition the chart will also appear.
5. Tabular output looks like this:

| Check out month | Shelving location               | Circ count |
|-----------------|---------------------------------|------------|
| 2009-10         | Adult Fiction                   | 10         |
| 2009-10         | Adult Fiction - Second Floor    | 1125       |
| 2009-10         | Adult Non-Fiction               | 1188       |
| 2009-10         | Adult Non-fiction               | 12         |
| 2009-10         | Adult Paperbacks - Mystery      | 1          |
| 2009-10         | Adult Videos                    | 368        |
| 2009-10         | Adult Videos - Educational      | 66         |
| 2009-10         | Biographies                     | 34         |
| 2009-10         | CD-ROMs                         | 3          |
| 2009-10         | CDs                             | 144        |
| 2009-10         | Children's Videos               | 232        |
| 2009-10         | Children's Videos - Educational | 2          |
| 2009-10         | Christmas Storage               | 5          |
| 2009-10         | DVDs                            | 981        |
| 2009-10         | JP Basement Storage             | 56         |
| 2009-10         | Juvenile Easy Readers           | 152        |
| 2009-10         | Juvenile Fiction                | 476        |
| 2009-10         | Juvenile Non-Fiction            | 199        |
| 2009-10         | Juvenile Picture Books          | 634        |
| 2009-10         | Large Print                     | 73         |

6. If you want to manipulate, filter or graph this data, Excel output would be more useful. Excel output looks like this in Excel:

|    | A               | B                             | C          | D | E |
|----|-----------------|-------------------------------|------------|---|---|
| 1  | Check out month | Shelving location             | Circ count |   |   |
| 2  | 2009-10         | Adult Fiction                 | 10         |   |   |
| 3  | 2009-10         | Adult Fiction - Second Floor  | 1125       |   |   |
| 4  | 2009-10         | Adult Non-Fiction             | 1188       |   |   |
| 5  | 2009-10         | Adult Non-fiction             | 12         |   |   |
| 6  | 2009-10         | Adult Paperbacks - Mystery    | 1          |   |   |
| 7  | 2009-10         | Adult Videos                  | 368        |   |   |
| 8  | 2009-10         | Adult Videos - Educational    | 66         |   |   |
| 9  | 2009-10         | Biographies                   | 34         |   |   |
| 10 | 2009-10         | CD-ROMs                       | 3          |   |   |
| 11 | 2009-10         | CDs                           | 144        |   |   |
| 12 | 2009-10         | Children's Videos             | 232        |   |   |
| 13 | 2009-10         | Children's Videos - Education | 2          |   |   |
| 14 | 2009-10         | Christmas Storage             | 5          |   |   |
| 15 | 2009-10         | DVDs                          | 981        |   |   |
| 16 | 2009-10         | JP Basement Storage           | 56         |   |   |
| 17 | 2009-10         | Juvenile Easy Readers         | 152        |   |   |
| 18 | 2009-10         | Juvenile Fiction              | 476        |   |   |
| 19 | 2009-10         | Juvenile Non-Fiction          | 199        |   |   |
| 20 | 2009-10         | Juvenile Picture Books        | 634        |   |   |
| 21 | 2009-10         | Large Print                   | 73         |   |   |
| 22 | 2009-10         | Literacy Collection           | 4          |   |   |
| 23 | 2009-10         | Multilingual Collection       | 32         |   |   |
| 24 | 2009-10         | Multilingual Juvenile French  | 22         |   |   |

# Chapter 107. Cloning Shared Templates

This chapter describes how to make local copies of shared templates for routine reports or as a starting point for customization. When creating a new template it is a good idea to review the shared templates first: even if the exact template you need does not exist it is often faster to modify an existing template than to build a brand new one. A Local System Administrator account is required to clone templates from the *Shared Folders* section and save them to *My Folders*.

The steps below assume you have already created at least one *Templates* folder. If you haven't done this, please see [Creating Folders](#).

1. Access the reports interface from the *Admin (-)* menu under *Local Administration -# Reports*
2. Under *Shared Folders* expand the *Templates* folder and the subfolder of the report you wish to clone. To expand the folders click on the grey arrow or folder icon. Do not click on the blue underlined hyperlink.
3. Click on the subfolder.
4. Select the template you wish to clone. From the dropdown menu choose *Clone selected templates*, then click *Submit*.



By default Evergreen only displays the first 10 items in any folder. To view all content, change the Limit output setting from 10 to All.

5. Choose the folder where you want to save the cloned template, then click *Select Folder*. Only template folders created with your account will be visible. If there are no folders to choose from please see [Creating Folders](#).
6. The cloned template opens in the template editor. From here you may modify the template by adding, removing, or editing fields and filters as described in [Creating Templates](#). *Template Name* and *Description* can also be edited. When satisfied with your changes click *Save*.
7. Click *OK* in the resulting confirmation windows.

Once saved it is not possible to edit a template. To make changes, clone a template and change the clone.

# Chapter 108. Adding Data Sources to Reporter

You can further customize your Evergreen reporting environment by adding additional data sources.

The Evergreen reporter module does not build and execute SQL queries directly, but instead uses a data abstraction layer called **Fieldmapper** to mediate queries on the Evergreen database. Fieldmapper is also used by other core Evergreen DAO services, including cstore and permacrud. The configuration file *fm\_IDL.xml* contains the mapping between *Fieldmapper* class definitions and the database. The *fm\_IDL.xml* file is located in the */openils/conf* directory.

There are 3 basic steps to adding a new data source. Each step will be discussed in more detail in the

1. Create a PostgreSQL query, view, or table that will provide the data for your data source.
2. Add a new class to *fm\_IDL.xml* for your data source.
3. Restart the affected services to see the new data source in Reporter.

There are two possible sources for new data sources:

- An SQL query built directly into the class definition in *fm\_IDL.xml*. You can use this method if you are only going to access this data source through the Evergreen reporter and/or cstore code that you write.
- A new table or view in the Evergreen PostgreSQL database on which a class definition in *fm\_IDL.xml*. You can use this method if you want to be able to access this data source through directly through SQL or using other reporting tool.

## Create a PostgreSQL query, view, or table for your data source

You need to decide whether you will create your data source as a query, a view, or a table.

1. Create a query if you are planning to access this data source only through the Evergreen reporter and/or cstore code that you write. You will use this query to create an IDL only view.
2. Create a view if you are planning to access this data source through other methods in addition to the Evergreen reporter, or if you may need to do performance tuning to optimize your query.
3. You may also need to use an additional table as part of your data source if you have additional data that's not included in the base Evergreen, or if you need to use a table to store the results of a query for performance reasons.

To develop and test queries, views, and tables, you will need

- Access to the Evergreen PostgreSQL database at the command line. This is normally the psql application. You can access the Postgres documentation at the [Official Postgres documentation](#) for more information about PostgreSQL.
- Knowledge of the Evergreen database structure for the data that you want to access. You can find this information by looking at the Evergreen schema [Evergreen schema](#)

If the views that you are creating are purely local in usage and are not intended for contribution to the core Evergreen code, create the Views and Tables in the `extend_reporter` schema. This schema is intended to be used for local customizations and will not be modified during upgrades to the Evergreen system.

You should make that you have an appropriate version control process for the SQL used to create you data sources.

Here's an example of a view created to incorporate some locally defined user statistical categories:

### example view for reports.

```
create view extend_reporter.patronstats as
select u.id,
       grp.name as "ptype",
       rl.stat_cat_entry as "reg_lib",
       gr.stat_cat_entry as "gender",
       ag.stat_cat_entry as "age_group",
       EXTRACT(YEAR FROM age(u.dob)) as "age",
       hl.id as "home_lib",
       u.create_date,
       u.expire_date,
       ms_balance_owed
from actor_usr u
join permission.grp_tree grp
  on (u.profile = grp.id and (grp.parent = 2 or grp.name = 'patron'))
join actor.org_unit hl on (u.home_ou = hl.id)
left join money.open_usr_summary ms
  on (ms.usr = u.id)
left join actor.stat_cat_entry_usr_map rl
  on (u.id = rl.target_usr and rl.stat_cat = 4)
left join actor.stat_cat_entry_usr_map bt
  on (u.id = bt.target_usr and bt.stat_cat = 3)
left join actor.stat_cat_entry_usr_map gr
  on (u.id = gr.target_usr and gr.stat_cat = 2)
left join actor.stat_cat_entry_usr_map gr
  on (u.id = gr.target_usr and gr.stat_cat = 2)
left join actor.stat_cat_entry_usr_map ag
  on (u.id = ag.target_usr and ag.stat_cat = 1)
where u.active = 't' and u.deleted <> 't';
```

## Add a new class to `fm_IDL.xml` for your data source

Once you have your data source, the next step is to add that data source as a new class in `fm_IDL.xml`.

You will need to add the following attributes for the class definition:

- **id.** You should follow a consistent naming convention for your class names that won't create conflicts in the future with any standard classes added in future upgrades. Evergreen normally names each class with the first letter of each word in the schema and table names. You may want to add a local prefix or suffix to your local class names.
- **controller="open-ils.cstore"**
- **oils\_obj:fieldmapper="extend\_reporter::long\_name\_of\_view"**
- **oils\_persist.readonly="true"**
- **reporter:core="true"** (if you want this to show up as a "core" reporting source)
- **reporter:label.** This is the name that will appear on the data source list in the Evergreen reporter.
- **oils\_persist:source\_definition.** If this is an IDL-only view, add the SQL query here. You don't need this attribute if your class is based on a PostgreSQL view or table.
- **oils\_persist:tablename="schemaname.viewname or tablename"** If this class is based on a PostgreSQL view or table, add the table name here. You don't need this attribute if your class is an IDL-only view.

For each column in the view or query output, add field element and set the following attributes. The fields should be wrapped with `<field> </field>`:

- **reporter:label.** This is the name that appears in the Evergreen reporter.
- **name.** This should match the column name in the view or query output.
- **reporter:datatype** (which can be id, bool, money, org\_unit, int, number, interval, float, text, timestamp, or link)

For each linking field, add a link element with the following attributes. The elements should be wrapped with `<link> </link>`:

- **field** (should match field.name)
- **reltype** ("has\_a", "might\_have", or "has\_many")
- **map** ("")
- **key** (name of the linking field in the foreign table)
- **class** (ID of the IDL class of the table that is to be linked to)

The following example is a class definition for the example view that was created in the previous section.

#### **example class definition for reports.**

```

<class id="erpstats" controller="open-ils.reporter-store"
oils_obj:fieldmapper="extend_reporter::patronstats"
oils_persist:tablename="extend_reporter.patronstats" oils_persist:readonly="true"
reporter:label="Patron Statistics" reporter:core="true">
  <fields oils_persist:primary="id">
    <field reporter:label="Patron ID" name="id" reporter:datatype="link" />
    <field reporter:label="Patron Type" name="ptype" reporter:datatype="text" />
    <field reporter:label="Reg Lib" name="reg_lib" reporter:datatype="text" />
    <field reporter:label="Boro/Twp" name="boro_twp" reporter:datatype="text" />
    <field reporter:label="Gender" name="gender" reporter:datatype="text" />
    <field reporter:label="Age Group" name="age_group" reporter:datatype="text" />
    <field reporter:label="Age" name="age" reporter:datatype="int" />
    <field reporter:label="Home Lib ID" name="home_lib_id"
      reporter:datatype="link" />
    <field reporter:label="Home Lib Code" name="home_lib_code"
      reporter:datatype="text" />
    <field reporter:label="Home Lib" name="home_lib" reporter:datatype="text" />
    <field reporter:label="Create Date" name="create_date"
      reporter:datatype="timestamp" />
    <field reporter:label="Expire Date" name="expire_date"
      reporter:datatype="timestamp" />
    <field reporter:label="Balance Owed" name="balance_owed"
      reporter:datatype="money" />
  </fields>
<links>
  <link field="id" reltype="has_a" key="id" map="" class="au"/>
  <link field="home_lib_id" reltype="has_a" key="id" map="" class="aou"/>
</links>
</class>

```



*fm\_IDL.xml* is used by other core Evergreen DAO services, including *cstore* and *permacrud*. So changes to this file can affect the entire Evergreen application, not just *reporter*. After making changes *fm\_IDL.xml*, it is a good idea to ensure that it is valid XML by using a utility such as **xmllint** – a syntax error can render much of Evergreen nonfunctional. Set up a good change control system for any changes to *fm\_IDL.xml*. You will need to keep a separate copy of you local class definitions so that you can reapply the changes to *fm\_IDL.xml* after Evergreen upgrades.

## Restart the affected services to see the new data source in the reporter

The following steps are needed to for Evergreen to recognize the changes to *fm\_IDL.xml*

1. Copy the updated *fm\_IDL.xml* into place:

```
cp fm_IDL.xml /openils/conf/.
```

2. (Optional) Make the reporter version of *fm\_IDL.xml* match the core version. Evergreen systems supporting only one interface language will normally find that */openils/var/web/reports/fm\_IDL.xml* is a symbolic link pointing to */openils/conf/fm\_IDL.xml*, so no action will be required. However, systems supporting multiple interfaces will have a different version of *fm\_IDL.xml* in the */openils/var/web/reports* directory. The *right* way to update this is to go through the Evergreen internationalization build process to create the entity form of *fm\_IDL.xml* and the updated *fm\_IDL.dtd* files for each supported language. However, that is outside the scope of this document. If you can accept the reporter interface supporting only one language, then you can simply copy your updated version of *fm\_IDL.xml* into the */openils/var/web/reports* directory:

```
cp /openils/conf/fm_IDL.xml /openils/var/web/reports/.
```

3. As the **opensrf** user, run *Autogen* to to update the Javascript versions of the fieldmapper definitions.

```
/openils/bin/autogen.sh
```

4. As the **opensrf** user, restart services:

```
osrf_control --localhost --restart-services
```

5. As the **root** user, restart the Apache web server:

```
service apache2 restart
```

6. As the **opensrf** user, restart the Evergreen reporter. You may need to modify this command depending on your system configuration and PID path:

```
opensrf-perl.pl -l -action restart -service open-ils.reporter \  
-config /openils/conf/opensrf_core.xml -pid-dir /openils/var/run
```

7. Restart the Evergreen staff client, or use **Admin -# For Developers -# Clear Cache**



# Chapter 109. Running Recurring Reports

Recurring reports are a useful way to save time by scheduling reports that you run on a regular basis, such as monthly circulation and monthly patron registration statistics. When you have set up a report to run on a monthly basis you'll get an email informing you that the report has successfully run. You can click on a link in the email that will take you directly to the report output. You can also access the output through the reporter interface as described in [Viewing Report Output](#).

To set up a monthly recurring report follow the procedure in [Generating Reports from Templates](#) but make the changes described below.

1. Select the Recurring Report check-box and set the recurrence interval to 1 month.
2. Do not select Run ASAP. Instead schedule the report to run early on the first day of the next month. Enter the date in *YYYY-MM-DD* format.
3. Ensure there is an email address to receive completion emails. You will receive an email completion notice each month when the output is ready.
4. Select a folder for the report's output.
5. Click Save Report.
6. You will get a confirmation dialogue box that the Action Succeeded. Click OK.

You will get an email on the 1st of each month with a link to the report output. By clicking this link it will open the output in a web browser. It is still possible to login to the staff client and access the output in Output folder.

**How to stop or make changes to an existing recurring report?** Sometimes you may wish to stop or make changes to a recurring report, e.g. the recurrence interval, generation date, email address to receive completion email, output format/folder or even filter values (such as the number of days overdue). You will need to delete the current report from the report folder, then use the above procedure to set up a new recurring report with the desired changes. Please note that deleting a report also deletes all output associated with it.



Once you have been on Evergreen for a year, you could set up your recurring monthly reports to show comparative data from one year ago. To do this select relative dates of 1 month ago and 13 months ago.

# Chapter 110. Template Terminology

## Data Types

The central column of the *Database Source Browser* lists *Field Name* and *Data Type* for the selected database table.

The screenshot shows a web interface for viewing report output. At the top, there is a search box containing "View report output" and a "Submit" button. Below this, there are two sections for limiting output: "Pending Items" and "Completed Items", both with a dropdown menu set to "10". The "Completed Items" section is active, showing a table with the following data:

| Select                              | All                     | None | report               | run_time            | complete_time | runner                       | email | folder | error_text | excel_format | html_format | csv_format |
|-------------------------------------|-------------------------|------|----------------------|---------------------|---------------|------------------------------|-------|--------|------------|--------------|-------------|------------|
| <input checked="" type="checkbox"/> | <a href="#">October</a> |      | <a href="#">2009</a> | 2009-11-24<br>18:00 |               | <a href="#">jeremybuhler</a> |       | 296    |            | t            | t           | f          |

Each data type has its own characteristics and uses:

| Data Type | Description  | Notes  |
|-----------|--|--|
| id        | Unique number assigned by the database to identify a record    | A number that is a meaningful reference for the database but not of much use to a human user. Use in displayed fields when counting records or in filters.   |
| text      | Text field   | Usually uses the Raw Data transform.   |
| timestamp | Exact date and time  | Select appropriate date/time transform. Raw Data includes second and timezone information, usually more than is required for a report.   |
| bool      | True or False  | Commonly used to filter out deleted item or patron records.  |
| org_unit  | A number representing a library, library system, or federation | When you want to filter on a library, make sure that the field name is on an org_unit or id data type.   |
| link      | A link to another database table                               | Link outputs a number that is a meaningful reference for the database but not of much use to a human user. You will usually want to drill further down the tree in the Sources pane and select fields from the linked table. However, in some instances you might want to use a link field. For example, to count the number of patrons who borrowed items you could do a count on the Patron link data. |
| int       | Integer  | money  |

# Field Transforms

A *Field Transform* tells the reporter how to process a field for output. Different data types have different transform options.

**Raw Data.** To display a field exactly as it appears in the database use the *Raw Data* transform, available for all data types.

**Count and Count Distinct.** These transforms apply to the *id* data type and are used to count database records (e.g. for circulation statistics). Use *Count* to tally the total number of records. Use *Count Distinct* to count the number of unique records, removing duplicates.

To demonstrate the difference between *Count* and *Count Distinct*, consider an example where you want to know the number of active patrons in a given month, where "active" means they borrowed at least one item. Each circulation is linked to a *Patron ID*, a number identifying the patron who borrowed the item. If we use the *Count Distinct* transform for Patron IDs we will know the number of unique patrons who circulated at least one book (2 patrons in the table below). If instead, we use *Count*, we will know how many books were circulated, since every circulation is linked to a *patron ID* and duplicate values are also counted. To identify the number of active patrons in this example the *Count Distinct* transform should be used.

| Title   | Patron ID  | Patron Name     |
|---|------------|-----------------|
| Harry Potter and the Chamber of Secrets         | 001        | John Doe        |
| Northern Lights                                 | 001        | John Doe        |
| <b>Harry Potter and the Philosopher's Stone</b> | <b>222</b> | <b>Jane Doe</b> |

**Output Type.** Note that each transform has either an *Aggregate* or *Non-Aggregate* output type.

Selecting a *Non-Aggregate* output type will return one row of output in your report for each row in the database. Selecting an *Aggregate* output type will group together several rows of the database and return just one row of output with, say, the average value or the total count for that group. Other common aggregate types include minimum, maximum, and sum.

When used as filters, non-aggregate and aggregate types correspond to *Base* and *Aggregate* filters respectively. To see the difference between a base filter and an aggregate filter, imagine that you are creating a report to count the number of circulations in January. This would require a base filter to specify the month of interest because the month is a non-aggregate output type. Now imagine that you wish to list all items with more than 25 holds. This

would require an aggregate filter on the number of holds per item because you must use an aggregate output type to count the holds.

# Chapter 111. Exporting Report Templates Using phpPgAdmin

Once the data is exported. Database Administrators/Systems Administrators can easily import this data into the templates folder to make it available in the client.

## Dump the Entire Reports Template Table

The data exported in this method can create issues importing into a different system if you do not have a matching folder and owner. This is going to export report templates created in your system. The most important fields for importing into the new system are *name*, *description*, and *data*. Data defines the actual structure of the report. The *owner* and *folder* fields will unique to the system they were exported from and will have to be altered to ensure they match the appropriate owner and folder information for the new system.

1. Go to the **Reporter** schema. Report templates are located in the **Template** table
2. Click on the link to the **Template** table
3. Click the **export** button at the top right of the phpPgAdmin screen
4. Make sure the following is selected
  - a. *Data Only* (checked)
  - b. *Format*: Select *CSV* or *Tabbed* did get the data in a text format
  - c. *Download* checked
5. Click *export* button at the bottom
6. A text file will download to your local system

## Dump Data with an SQL Statement

The following statement could be used to grab the data in the folder and dump it with admin account as the owner and the first folder in your system.

```
SELECT 1 as owner, name, description, data, 1 as folder FROM reporter.template
```

or use the following to capture your folder names for export

```
SELECT 1 as owner, t.name, t.description, t.data, f.name as folder
FROM reporter.template t
JOIN reporter.template_folder f ON t.folder=f.id
```

1. Run the above query
2. Click the **download** link at the bottom of the page
3. Select the file format (*CSV* or *Tabbed*)

4. Check *download*
5. A text file with the report template data will be downloaded.

# **Part XIII. Using the Public Access Catalog**

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# Chapter 112. Introduction

Evergreen has a public OPAC that meets WCAG guidelines (<http://www.w3.org/WAI/intro/wcag>), which helps make the OPAC accessible to users with a range of disabilities. This part of the documentation explains how to use the Evergreen public OPAC. It covers the basic catalog and more advanced search topics. It also describes the “My Account” tools users have to find information and manage their personal library accounts through the OPAC. This section could be used by staff and patrons but would be more useful for staff as a generic reference when developing custom guides and tutorials for their users.

# Chapter 113. Using the Public Access Catalog

## Basic Search

From the OPAC home, you can conduct a basic search of all materials owned by all libraries in your Evergreen system.

This search can be as simple as typing keywords into the search box and clicking the *Search* button. Or you can make your search more precise by limiting your search by fields to search, material type or library location.

The *Homepage* contains a single search box for you to enter search terms. You can get to the *Homepage* at any time by clicking the *Another Search* link from the leftmost link on the bar above your search results in the catalogue, or you can enter a search anywhere you see a search box.

You can select to search by:

- **Keyword:** finds the terms you enter anywhere in the entire record for an item, including title, author, subject, and other information.
- **Title:** finds the terms you enter in the title of an item.
- **Journal Title:** finds the terms you enter in the title of a serial bib record.
- **Author:** finds the terms you enter in the author of an item.
- **Subject:** finds the terms you enter in the subject of an item. Subjects are categories assigned to items according to a system such as the Library of Congress Subject Headings.
- **Series:** finds the terms you enter in the title of a multi-part series.
- **Bib Call Number:** finds the terms you enter in the call number field of a bib record.



To search an item copy call number, if different from *Bib Call Number*, use [\*Advanced Search: Numeric\*](#)

## Formats

You can limit your search by formats based on MARC fixed field type:

- **All Books**
- **All Music**
- **Audiocassette music recording**
- **Blu-ray**
- **Braille**
- **Cassette audiobook**
- **CD Audiobook**
- **CD Music recording**
- **DVD**
- **E-audio**
- **E-book**
- **E-video**
- **Equipment, games, toys**
- **Kit**
- **Large Print Book**
- **Map**
- **Microform**
- **Music Score**
- **Phonograph music recording**
- **Phonograph spoken recording**
- **Picture**
- **Serials and magazines**
- **Software and video games**
- **VHS**

## **Libraries**

If you are using a catalogue in a library or accessing a library's online catalogue from its homepage, the search will return items for your local library. If your library has multiple branches, the result will display items available at your branch and all branches of your library system separately.

# Advanced Search

Advanced searches allow users to perform more complex searches by providing more options. Many kinds of searches can be performed from the *Advanced Search* screen. You can access by clicking *Advanced Search* on the catalogue *Homepage* or search results screen.

The available search options are the same as on the basic search. But you may use one or many of them simultaneously. If you want to combine more than three search options, use *Add Search Row* button to add more search input rows. Clicking the *X* button will close the search input row.

## Sort Results

By default, the search results are in order of greatest to least relevance, see [Order of Results](#). In the sort results menu you may select to order the search results by relevance, title, author, or publication date.

## Search Library

The current search library is displayed under *Search Library* drop down menu. By default it is your library. The search returns results for your local library only. If your library system has multiple branches, use the *Search Library* box to select different branches or the whole library system.

## Limit to Available

This checkbox is at the bottom line of *Search Library*. Select *Limit to Available* to limit results to those titles that have items with a circulation status of "available" (by default, either *Available* or *Reshelving*).

## Search Filter

You can filter your search by *Item Type*, *Item Form*, *Language*, *Audience*, *Video Format*, *Bib Level*, *Literary Form*, *Search Library*, and *Publication Year*. Publication year is inclusive. For example, if you set *Publication Year* Between 2005 and 2007, your results can include items published in 2005, 2006 and 2007.

For each filter type, you may select multiple criteria by holding down the *CTRL* key as you click on the options. If nothing is selected for a filter, the search will return results as though all options are selected.

## Numeric Search

If you have details on the exact item you wish to search for, use the *Numeric Search* tab on the advanced search page. Use the drop-down menu to select your search by *ISBN*, *ISSN*, *Bib Call Number*, *Call Number (Shelf Browse)*, *LCCN*, *TCN*, or *Item Barcode*. Enter the information and then click the *Search* button.

# Expert Search

If you are familiar with MARC cataloging, you may search by MARC tag in the *Expert Search* option on the left of the screen. Enter the three-digit tag number, the subfield if relevant, and the value or text that corresponds to the tag. For example, to search by publisher name, enter 260 b Random House. To search several tags simultaneously, use the *Add Row* option. Click *Submit* to run the search.



Use the MARC Expert Search only as a last resort, as it can take much longer to retrieve results than by using indexed fields. For example, rather than running an expert search for "245 a Gone with the wind", simply do a regular title search for "Gone with the wind".

## Boolean operators

Classic search interfaces (that is, those used primarily by librarians) forced users to learn the art of crafting search phrases with Boolean operators. To a large extent this was due to the inability of those systems to provide relevancy ranking beyond a "last in, first out" approach. Thankfully, Evergreen, like most modern search systems, supports a rather sophisticated relevancy ranking system that removes the need for Boolean operators in most cases.

By default, all terms that have been entered in a search query are joined with an implicit AND operator. Those terms are required to appear in the designated fields to produce a matching record: a search for *golden compass* will search for entries that contain both *golden* **and** *compass*.

Words that are often considered Boolean operators, such as *AND*, *OR*, and *NOT*, are not special in Evergreen: they are treated as just another search term. For example, a title search for `golden and compass` will not return the title *Golden Compass*.

However, Evergreen does support Boolean searching for those rare cases where you might require it, using symbolic operators as follows:

**Table 113.1. Boolean symbolic operators**

| Operator | Symbol | Example |
|----------|--------|---------|
| AND      | &&     | a && b  |
| OR       |        | a    b  |
| NOT      | -term  | a -b    |

## Search Tips

Evergreen tries to approach search from the perspective of a major search engine: the user should simply be able to enter the terms they are looking for as a general keyword search, and Evergreen should return results that are most relevant given those terms. For example, you do not need to enter author's last name first, nor do you need

to enter an exact title or subject heading. Evergreen is also forgiving about plurals and alternate verb endings, so if you enter *dogs*, Evergreen will also find items with *dog*.

The search engine has no *stop words* (terms are ignored by the search engine): a title search for `to be or not to be` (in any order) yields a list of titles with those words.

- Don't worry about white space, exact punctuation, or capitalization.
  1. White spaces before or after a word are ignored. So, a search for `[ golden compass ]` gives the same results as a search for `[golden compass]`.
  2. A double dash or a colon between words is reduced to a blank space. So, a title search for *golden:compass* or *golden — compass* is equivalent to *golden compass*.
  3. Punctuation marks occurring within a word are removed; the exception is `_`. So, a title search for *gol\_den com\_pass* gives no result.
  4. Diacritical marks and solitary `&` or `|` characters located anywhere in the search term are removed. Words or letters linked together by `.` (dot) are joined together without the dot. So, a search for *gol|lden & comp.ass* is equivalent to *golden compass*.
  5. Upper and lower case letters are equivalent. So, *Golden Compass* is the same as *golden compass*.
- Enter your search words in any order. So, a search for *compass golden* gives the same results as a search for *golden compass*. Adding more search words gives fewer but more specific results.
  - This is also true for author searches. Both *David Suzuki* and *Suzuki, David* will return results for the same author.
- Use specific search terms. Evergreen will search for the words you specify, not the meanings, so choose search terms that are likely to appear in an item description. For example, the search *luxury hotels* will produce more relevant results than *nice places to stay*.
- Search for an exact phrase using double-quotes. For example “golden compass”.
  - The order of words is important for an exact phrase search. *golden compass* is different than *compass golden*.
  - White space, punctuation and capitalization are removed from exact phrases as described above. So a phrase retains its search terms and its relative order, but not special characters and not case.
  - Two phrases are joined by and, so a search for *"golden compass" "dark materials"* is equivalent to *golden compass and dark materials*.
- **Truncation** Words may be right-hand truncated using an asterisk. Use a single asterisk `*` to truncate any number of characters. (example: *environment\* agency*)

## Search Methodology

### Stemming

A search for *dogs* will also return hits with the word *dog* and a search for *parenting* will return results with the words *parent* and *parental*. This is because the search uses stemming to help return the most relevant results. That is, words are reduced to their stem (or root word) before the search is performed.

The stemming algorithm relies on common English language patterns - like verbs ending in *ing* - to find the stems. This is more efficient than looking up each search term in a dictionary and usually produces desirable results. However, it also means the search will sometimes reduce a word to an incorrect stem and cause unexpected results. To prevent a word or phrase from stemming, put it in double-quotes to force an exact search. For example, a search for *parenting* will also return results for *parental*, but a search for "parenting" will not.

Understanding how stemming works can help you to create more relevant searches, but it is usually best not to anticipate how a search term will be stemmed. For example, searching for *gold compass* does not return the same results as *golden compass*, because *-en* is not a regular suffix in English, and therefore the stemming algorithm does not recognize *gold* as a stem of *golden*.

## Order of Results

By default, the results are listed in order of relevance, similar to a search engine like Google. The relevance is determined using a number of factors, including how often and where the search terms appear in the item description, and whether the search terms are part of the title, subject, author, or series. The results which best match your search are returned first rather than results appearing in alphabetical or chronological order.

In the *Advanced Search* screen, you may select to order the search results by relevance, title, author, or publication date before you start the search. You can also re-order your search results using the *Sort Results* dropdown list on the search result screen.

## Search URL

When performing a search or clicking on the details links, Evergreen constructs a GET request url with the parameters of the search. The url for searches and details in Evergreen are persistent links in that they can be saved, shared and used later.

Here is a basic search URL structure:

```
[hostname]/eg/opac/results?query=[search term]&qtype=keyword&fi%3Aitem_type=&locg=[location id]
```

### locg Parameter

This is the id of the search location. It is an integer and matches the id of the location the user selected in the location drop down menu.

### qtype Parameter

The *qtype* parameter in the URL represents the search type values and represent one of the following search or request types:



- Keyword
- Title
- Journal Title
- Author
- Subject
- Series
- Bib Call Number

These match the options in the search type drop-down box.

## Sorting

The *sort* parameter sorts the results on one of these criteria.

- `sort=pubdate` (publication date) - chronological order
- `sort=titlesort` - Alphabetical order
- `sort=authorsort` - Alphabetical order on family name first

To change the sort direction of the results, the *sort* parameter value has the ".descending" suffix added to it.

- `sort=titlesort.descending`
- `sort=authorsort.descending`
- `sort=pubdate.descending`

In the absence of the *sort* parameter, the search results default to sorting by relevance.

## Search Results

The search results are a list of relevant works from the catalogue. If there are many results, they are divided into several pages. At the top of the list, you can see the total number of results and go back and forth between the pages by clicking the links that say *Previous* or *Next* on top or bottom of the list. You can also click on the adjacent results page number listed. These page number links allow you to skip to that results page, if your search results needed multiple pages to display. Here is an example:



## Search Results Results 1 - 10

| Personal Author                       | More |
|---------------------------------------|------|
| <a href="#">Bartók, Béla</a>          | (2)  |
| <a href="#">1881-1945</a>             |      |
| <a href="#">Beethoven, Ludwig</a>     | (2)  |
| <a href="#">van 1770-1827</a>         |      |
| <a href="#">Brahms, Johannes</a>      | (2)  |
| <a href="#">1833-1897</a>             |      |
| <a href="#">Carter, Elliott 1908-</a> | (2)  |
| <a href="#">Mozart, Wolfgang</a>      | (2)  |
| <a href="#">Amadeus 1756-1791</a>     |      |

| Topic Subject                      | More |
|------------------------------------|------|
| <a href="#">Concertos (Violin)</a> | (15) |
| <a href="#">Concertos (Piano)</a>  | (2)  |
| <a href="#">Music</a>              | (2)  |
| <a href="#">Suites (Orchestra)</a> | (2)  |
| <a href="#">Ballets</a>            | (1)  |

| Series Title                                    |     |
|---|-----|
| <a href="#">Columbia Masterworks</a>            | (1) |
| <a href="#">Digital Classics</a>                | (1) |
| <a href="#">Great recordings of the century</a> | (1) |
| <a href="#">Hawkes Pocket Scores</a>            | (1) |
| <a href="#">:710</a>                            |     |
| <a href="#">Student composers' concert</a>      | (1) |



## Availability

The number of available copies and total copies are displayed under each search result's call number. If you are using a catalogue inside a library or accessing a library's online catalogue from its homepage, you will see how many copies are available in the library under each title, too. If the library belongs to a multi-branch library system you will see an extra row under each title showing how many copies are available in all branches.

▼ for violin Keyword ▼ in Example Consortium Search

Advanced Search Sort by Sort by Relevance Show More Details Limit to available items



1 - 10 of 25 (page 1 of 3) 1 2 3 Next ▶

- More
1. **Violin concerto**  
Penderecki, Krzysztof, 1933- 1979.  
Call number: 780 B92  
27 of 31 copies available at Example Consortium. 
  2. **Violin concerto no. 2 ; Six duos (from 44 Duos)**  
Bartók, Béla, 1881-1945. 1966  
Call number: 780 B15  
27 of 32 copies available at Example Consortium. 

▼ for violin Keyword ▼ in Example Branch 1 Search

Advanced Search Sort by Sort by Relevance Show More Details Limit to available items

1 - 10 of 25 (page 1 of 3) 1 2 3 Next ▶

- More
1. **Violin concerto**  
Penderecki, Krzysztof, 1933- 1979.  
Call number: 780 B92  
27 of 31 copies available at Example Consortium.  
12 of 14 copies available at Example System 1.  
6 of 7 copies available at Example Branch 1. 
  2. **Violin concerto no. 2 ; Six duos (from 44 Duos)**  
Bartók, Béla, 1881-1945. 1966  
Call number: 780 B15  
27 of 32 copies available at Example Consortium.  
13 of 15 copies available at Example System 1.  
7 of 8 copies available at Example Branch 1. 

You may also click the *Show More Details* link at the top of the results page, next to the *Limit to available items* check box, to view each search result's copies' individual call number, status, and shelving location.

## Viewing a record

Click on a search result's title to view a detailed record of the title, including descriptive information, location and availability, current holds, and options for placing holds, add to my list, and print/email.

## Violin concerto

[Penderecki, Krzysztof, 1933-](#) (Author).

### Electronic resources

- [Link text here](#) - Public note here
- [Link text here](#) - Public note here

### Available copies

- 27 copies at Example Consortium. ([Show](#))
- 12 copies at Example System 1. ([Show](#))
- 6 copies at Example Branch 1.

### Current holds

1 current hold with 31 total copies.

| LOCATION         | CALL NUMBER     | BARCODE      | SHELVING LOCATION |
|------------------|-----------------|--------------|-------------------|
| Example Branch 1 | 780 B92         | CONC40000628 | Stacks            |
| Example Branch 1 | 780 B92         | CONC41000628 | Stacks            |
| Example Branch 1 | ML 2533 B34 C92 | CONC43000128 | Stacks            |
| Example Branch 1 | ML 2533 B34 C92 | CONC41000128 | Stacks            |
| Example Branch 1 | ML 2533 B34 C92 | CONC44000128 | Stacks            |
| Example Branch 1 | ML 2533 B34 C92 | CONC42000128 | Stacks            |
| Example Branch 1 | ML 2533 B34 C92 | CONC40000128 | Stacks            |

### Record details

- **Physical Description:** 1 sound disc (37 min.) : 33 1/3 rpm, stereo.
- **Publisher:** New York, NY : Columbia [Records], 1979.

### Content descriptions

**General Note:** Program notes by M.A. Feldman.

### Search for related items by subject

**Subject:** [Concertos \(Violin\)](#)

### Search for related items by series

- [Columbia Masterworks](#)

## Details

The record shows details such as the cover image, title, author, publication information, and an abstract or summary, if available.

Near the bottom of the record, the copy summary shows how many copies are at the library or libraries you have selected, and whether they are available or checked out. It also displays the *Call Number* and *Shelving Location* for locating the item on the shelves. You can click *Shelf Browser* to view items appearing near the current item on the library shelves. Often this is a good way to browse for similar items. You can select *Table of Contents* to see the book's table of contents online (if available). You can select *MARC Record* to display the record in MARC format. You can also select *Awards, Reviews, & Suggested Reads* and *Additional Content* to see more details (if available).

## Placing Holds

Holds can be placed on either title results or search results page. If the item is available, it will be pulled from the shelf and held for you. If all copies at your local library are checked out, you will be placed on a waiting list and you will be notified when items become available.

On title details page, you can select the *Place Hold* link in the upper right corner of the record to reserve the item. You will need your library account user name and password. You may choose to be notified by phone or email.

In the example below, the phone number in your account will automatically show up. Once you select the Enable phone notifications for this hold checkbox, you can supply a different phone number for this hold only. The notification method will be selected automatically if you have set it up in your account references. But you still have a chance to re-select on this screen. You may also suspend the hold temporarily by checking the Suspend box. Click the *Help* beside it for details.

You can view and cancel a hold at anytime. Before your hold is captured, which means an item has been held waiting for you to pick up, you can edit, suspend or activate it. You need log into your patron [My Account](#) to do it. From your account you can also set up an *Cancel if not filled by date* for your hold. *Cancel if not filled by date* means after this date, even though your hold has not been fulfilled you do not need the item anymore.

### Place Hold

Harry Potter and the goblet of fire / by J.K. Rowling ; illustrations by Mary GrandPré.

Pickup location:

Notify when hold is ready for pickup?

Yes, by Email

Email Address: jane@yahoo.com

Yes, by Phone

Phone Number:

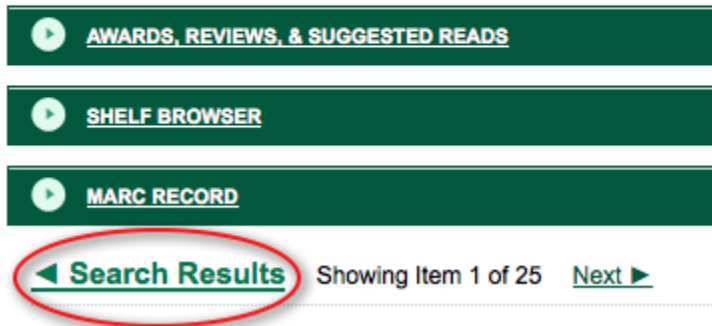
# Going back

When you are viewing a specific record, you can always go back to your title list by clicking the link *Search Results* on the top right or left bottom of the page.

**Subject:** [Concertos \(Violin\)](#)

## Search for related items by series

- [Columbia Masterworks](#)



You can start a new search at any time by entering new search terms in the search box at the top of the page, or by selecting the *Another Search* or *Advanced Search* links in the left-hand sidebar.

# My Account

## Logging In

Logging into your account from the online catalog:

1. Open a web browser and navigate to your Evergreen OPAC.
2. Click *My Account* .
3. Enter your *Username* and *Password*.
  - By default, your username is your library card number.
  - Your password is a 4 digit code provided when your account was created. If you have forgotten your password, contact your local library to have it reset or use the the section called [Password Reset](#) tool.
4. Click Login.

- At the first login, you may be prompted to change your password.
- If you updated your password, you must enter your *Username* and *Password* again.

5. Your *Account Summary* page displays.

To view your account details, click one of the *My Account* tabs.

To start a search, enter a term in the search box at the top of the page and click *Search!*



If using a public computer be sure to log out!

## Password Reset

To reset your password:

1. click on the *Forgot your password?* link located beside the login button.
2. Fill in the *Barcode* and *User name* text boxes.
3. A message should appear indicating that your request has been processed and that you will receive an email with further instructions.
4. An email will be sent to the email addressed you have registered with your Evergreen library. You should click on the link included in the email to open the password reset page. Processing time may vary.



You will need to have a valid email account set up in Evergreen for you to reset your password. Otherwise, you will need to contact your library to have your password reset by library staff.

5. At the reset email page you should enter the new password in the *New password* field and re-enter it in the *Re-enter new password* field.
6. Click *Submit*.
7. A message should appear on the page indicating that your password has been reset.
8. Login to your account with your new password.

## Account Summary

In the *My Account, Account Summary* you can see your total number of items checked out, items on hold, and items ready for pickup. In addition item summary lists your current fines and payment history are listed there, too.



# Items Checked Out

Users can manage items currently checked out, like renew specific items. Users can also view overdue items and see how many renewals they have remaining for specific item.

## Hold

From *My Account*, patrons can see *Items on hold* and *Hold History* and manage items currently being requested.

Actions include:

- Suspend - set a period of time during which the hold will not become active, such as during a vacation
- Activate - manually remove the suspension
- Cancel - remove the hold request

Edit options include:

- Change pick up library
- Change the *Cancel unless filled by* date, also known as the hold expiration date
- Change the status of the hold to either active or suspended.
- Change the *If suspended, activate on* date, which reactivates a suspended hold at the specified date

To edit items on hold:

1. Login to *My Account*, click the *Hold* tab.
2. Select the hold to modify.
3. Click *Edit* for selected holds.
4. Select the change to make and follow the instructions.

## Account Preferences

From here you can manage display preferences including your *Personal Information*, *Notification Preferences*, and *Search and History Preferences*.

For example:

- Personal Information
  - change password - allows patrons to change their password

- change email address - allows patrons to change their email address.
- Notification Preferences
  - *Notify by Email* by default when a hold is ready for pickup?
  - *Notify by Phone* by default when a hold is ready for pickup?
  - *Default Phone Number*
- Search and History Preferences
  - Search hits per page
  - Preferred pickup location
  - Keep history of checked out items?
  - Keep history of holds?

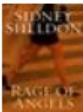

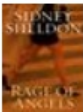


After changing any of these settings, you must click *Save* to store your preferences.

# Chapter 114. My Lists

The **My Lists** feature replaces the bookbag feature that was available in versions prior to 2.2. The **My Lists** feature is a part of the Template Toolkit OPAC that is available in version 2.2. This feature enables you to create temporary and permanent lists; create and edit notes for items in lists; place holds on items in lists; and share lists via RSS feeds and CSV files.

## Create New Lists

- 1) Log in to your account in the OPAC.
- 2) Search for titles.
- 3) Choose a title to add to your list. Click **Add to My List**.

|    |  |   |  |
|----|--|---|--|
| 4. | <br><a href="#">Justice denied</a><br><a href="#">Tanenbaum, Robert</a> 2010, c1994.<br>0 of 0 copies available |    | <input type="checkbox"/> Place Hold<br><input type="checkbox"/> Add to my list |
| 5. | <br><a href="#">Rage of angels</a><br><a href="#">Sheldon, Sidney</a> 2010.<br>0 of 0 copies available          |    | <input type="checkbox"/> Place Hold<br><input type="checkbox"/> Add to my list |
| 6. | <a href="#">Irresistible impulse</a><br><a href="#">Tanenbaum, Robert</a> 2010, c1997.<br>0 of 0 copies available  |  | <input type="checkbox"/> Place Hold<br><input type="checkbox"/> Add to my list |

- 4) Scroll up to the gray row on top of the **Search Results**. Click **View My List**
- 5) Items are added to a temporary list. Your temporary list appears at the bottom of the screen.
- 6) The **Actions for these items** menu on the right side of the screen demonstrates the actions that you can apply to this list. You can place holds on items in your temporary list; remove items from the list; or move selected items to a permanent list.

To place a hold or remove items from the list, check the box adjacent to the title of the item, and select the desired function.

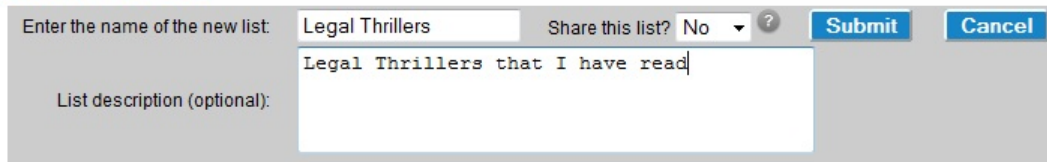
To move selected items into an existing list, check the box adjacent to the title, and highlight the list in which you will store the item.

## Temporary List

| <input type="checkbox"/> TITLE                                | AUTHOR(S)                         |  |
|---|-----------------------------------|--|
| <input type="checkbox"/> <a href="#">Rage of angels</a>       | <a href="#">Sheldon, Sidney</a>   | <input type="checkbox"/> -- Actions for these items --<br>Place hold<br>Remove from list<br><b>Move selected items to</b><br>Book Club |
| <input type="checkbox"/> <a href="#">Justice denied</a>       | <a href="#">Tanenbaum, Robert</a> |  |
| <input type="checkbox"/> <a href="#">Irresistible impulse</a> | <a href="#">Tanenbaum, Robert</a> |  |

7) If you do not want to place the item into an existing list, you can create a new list to contain the item. Enter the name of the new list, and, if desired, enter a description.

### Create new list



Enter the name of the new list:  Share this list?

List description (optional):

8) Click **Submit**.

9) The new list appears beneath the temporary list.

10) Select the title(s) of the items that you want to add to the list, and click **Actions for these items**. Select the permanent list that you created from the drop down menu.

### Temporary List



| <input type="checkbox"/> TITLE                                     | AUTHOR(S)                         |
|--|-----------------------------------|
| <input checked="" type="checkbox"/> <a href="#">Rage of angels</a> | <a href="#">Sheldon, Sidney</a>   |
| <input checked="" type="checkbox"/> <a href="#">Justice denied</a> | <a href="#">Tanenbaum, Robert</a> |
| <input type="checkbox"/> <a href="#">Irresistible impulse</a>      | <a href="#">Tanenbaum, Robert</a> |

-- Actions for these items --  
-- Actions for these items --  
Place hold  
Remove from list  
**Move selected items to**  
Book Club  
**Legal Thrillers**

11) Click **Go**.

12) Your existing lists appear. Click on a list to view the items in the list. You can sort the items in the permanent list. You can also add, edit, and remove notes.

13) Click **Edit** to add or edit a note.

14). Enter desired notes, and click **Save Notes**.



**Legal Thrillers**  
Legal Thrillers that I have read

Sort list items by:

| <input type="checkbox"/> TITLE                          | AUTHOR(S)                         | NOTES  |
|---|-----------------------------------|--|
| <input type="checkbox"/> <a href="#">Rage of angels</a> | <a href="#">Sheldon, Sidney</a>   | <input type="button" value="Recommend to Sarah"/>      |
| <input type="checkbox"/> <a href="#">Justice denied</a> | <a href="#">Tanenbaum, Robert</a> | <input type="button" value="Favorite legal thriller"/> |

15) You can keep your list private, or you can share it. To share your list, click **Share**, and click the orange RSS icon to share through an RSS reader. You can also click **HTML View** to share your list as an HTML link.

You can also download your list into a CSV file by clicking **Download CSV**.

16) When you no longer need a list, click **Delete List**.

### **Local Call Number in My Lists**

As of Evergreen version 2.4, when a title is added to a list in the TPAC, a local call number will be displayed in the list to assist patrons in locating the physical item. Evergreen will look at the following locations to identify the most relevant call number to display in the list:

- 1) Physical location - the physical library location where the search takes place
- 2) Preferred library - the Preferred Search Location, which is set in patron OPAC account Search and History Preferences, or the patron's Home Library
- 3) Search library - the search library or org unit that is selected in the OPAC search interface

The call number that is displayed will be the most relevant call number to the searcher. If the patron is searching at the library, Evergreen will display a call number from that library location. If the patron is not searching at a library, but is logged in to their OPAC account, Evergreen will display a call number from their Home Library or Preferred Search Location. If the patron is not searching at the library and is not signed in to their OPAC account, then Evergreen will display a call number from the org unit, or library, that they choose to search in the OPAC search interface.

The local call number and associated library location will appear in the list:

Search the Catalog [Advanced Search](#)

Search  for  Keyword  in

[\[ Refine My Original Search \]](#)

Account Summary

Items Checked Out

Holds

Account Preferences

My Lists

### Create New List

Enter the name of the new list:

Share this list? No

List description (optional):

### My Existing Lists

Sort list items by:

### Temporary List

| <input type="checkbox"/> | TITLE   | AUTHOR(S)                   | LOCAL CALL NUMBER        | -- Actions for these items -- | <input type="button" value="Go"/> |
|--------------------------|---|-----------------------------|--------------------------|-------------------------------|-----------------------------------|
| <input type="checkbox"/> | <a href="#">Game of thrones. The complete first season</a>      |                             | DVD GAME (Apex Branch)   |                               |                                   |
| <input type="checkbox"/> | <a href="#">World War Z : an oral history of the zombie war</a> | <a href="#">Brooks, Max</a> | FIC BROOKS (Apex Branch) |                               |                                   |

# Chapter 115. Kids OPAC

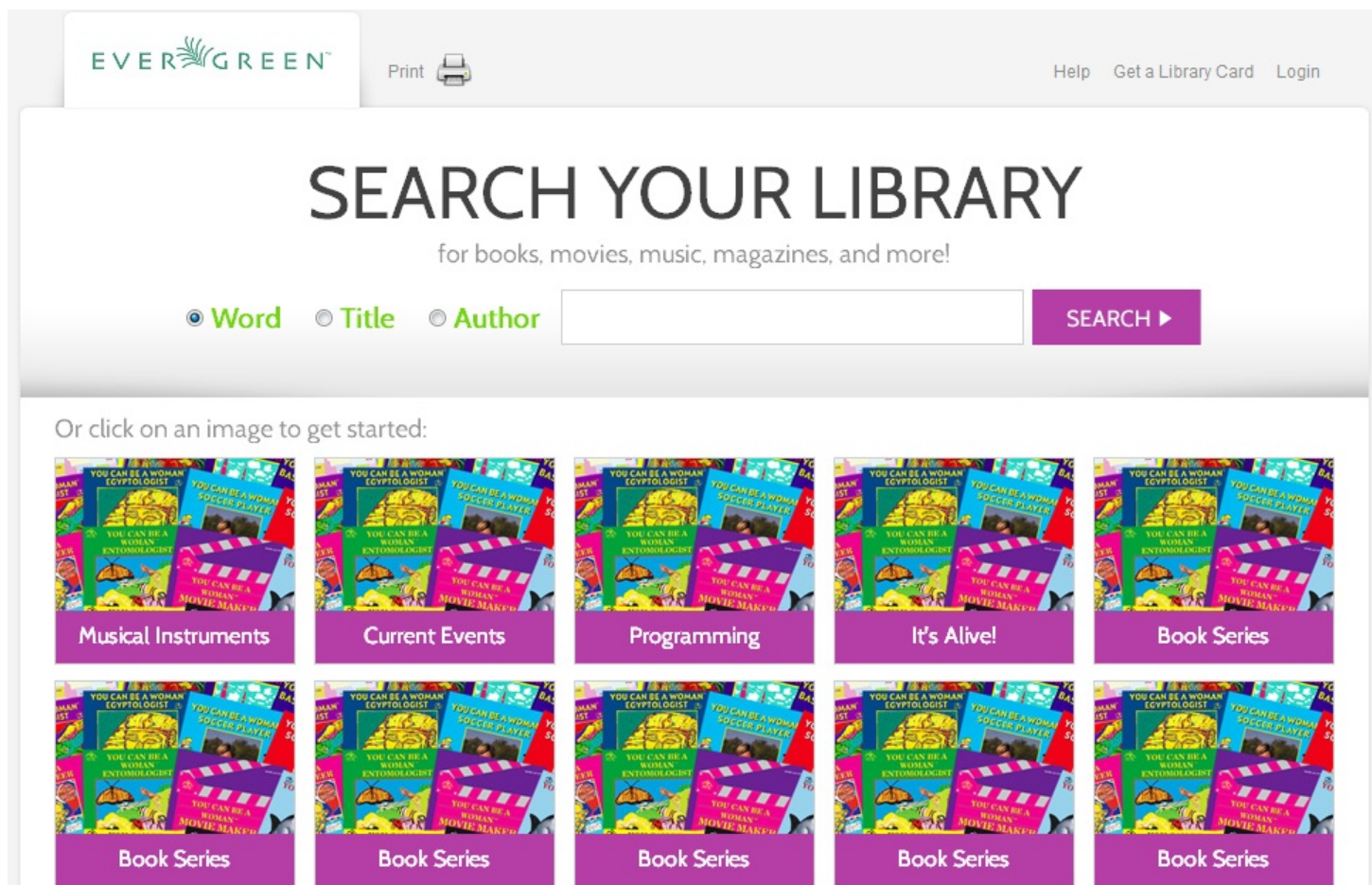
The Kids OPAC (KPAC) is a public catalog search that was designed for children and teens. Colorful menu items, large buttons, and simple navigation make this an appealing search interface for kids. Librarians will appreciate the flexible configuration of the KPAC. Librarians can create links to canned search results for kids and can apply these links by branch. The KPAC uses the same infrastructure as the Template Toolkit OPAC (TPAC), the adult catalog search, so you can easily extend the KPAC using the code that already exists in the TPAC. Finally, third party content, such as reader reviews, can be integrated into the KPAC.

## Choose a Skin

Two skins, or design interfaces, have been created for the KPAC. The KPAC was designed to run multiple skins on a single web server. A consortium, then, could allow each library system to choose a skin for their patrons.

### Default Skin:

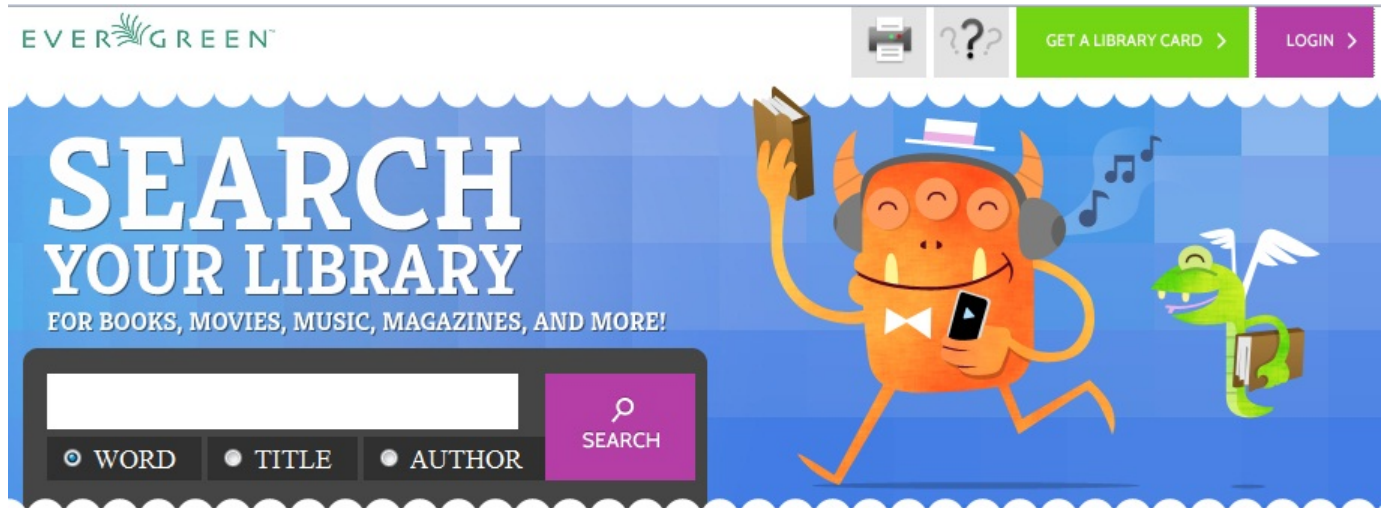
In this skin, the search bar is the focal point of the top panel and is centered on the screen. The search grid appears beneath the search bar. Help and Login links appear at the top right of the interface. You can customize the appearance and position of these links with CSS. After you login, the user name is displayed in the top right corner, and the Login link becomes an option to Logout.





## Alternate Monster Skin:

In this skin, the search bar shares the top panel with a playful monster. The search grid appears beneath the search bar. Help and Login links appear in bold colors at the top right of the interface although you can customize these with CSS. After you login, the Login button disappears.



OR [click on an image to get started:](#)



## Search the Catalog

You can search the catalog using only the search bar, the search grid, or the search bar and the collection drop down menu.

### Search using the Search Bar

To search the catalog from the home page, enter text into the search bar in the center of the main page, or enter text into the search bar to the right of the results on a results page. Search indices are configurable, but the default search indices include author, title and (key)word.


You can use this search bar to search the entire catalog, or, using the configuration files, you can apply a filter so that search queries entered here retrieve records that meet specific criteria, such as child-friendly copy locations or MARC audience codes.

### Search using the Grid

From the home page, you can search the catalog by clicking on the grid of icons. An icon search can link to an external web link or to a canned search. For example, the icon, Musical Instruments, could link to the results of a catalog search on the subject heading, Musical instruments.



The labels on the grid of icons and the content that they search are configurable by branch. You can use the grid to search the entire catalog, or, using the configuration files, you can apply a filter so that search queries entered here retrieve records associated with specific criteria, such as child-friendly copy locations or MARC audience codes.

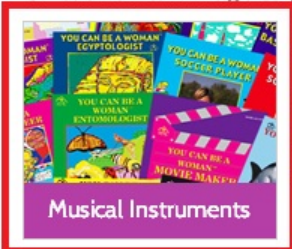
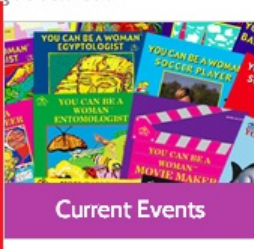








EVERGREEN™ Print  Help [Get a Library Card](#) [Logout \(Suz Equinox\)](#)

# SEARCH YOUR LIBRARY

for books, movies, music, magazines, and more!

Word  Title  Author

Or click on an image to get started:

|  |   |   |   |   |
|--|---|---|---|---|
| <br>Musical Instruments | <br>Current Events | <br>Programming  | <br>It's Alive!  | <br>Book Series  |
| <br>Book Series        | <br>Book Series   | <br>Book Series | <br>Book Series | <br>Book Series |

You can add multiple layers of icons and searches to your grid:



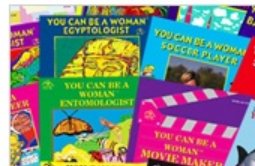
# MUSICAL INSTRUMENTS



Piano



Guitar



Trumpet



Drums



Bass



Clarinet

## Search using the Search Bar and the Collection Drop Down Menu

On the search results page, a search bar and drop down menu appear on the right side of the screen. You can enter a search term and into the search bar and select a collection from the drop down menu to search these configured collections. Configured collections might provide more targeted searching for your audience than a general catalog search. For example, you could create collections by shelving location or by MARC audience code.

SEARCH RESULTS

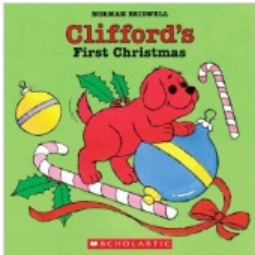
# SEARCH RESULTS

Page 1 of 12 [NEXT >](#)

NEW SEARCH


Word
  Title
  Author

Full Collection 
 Full Collection  
 Children's Materials  
 Young Adult Materials  
 General/Adult Materials





**Clifford's first Christmas**  
by Bridwell, Norman.  
XLSMPOCR-JB60  
Scholastic, c1994.  
1 v. (unpaged) :col. ill. ;21 cm.

[MORE INFO >](#) [GET IT >](#)



Language material

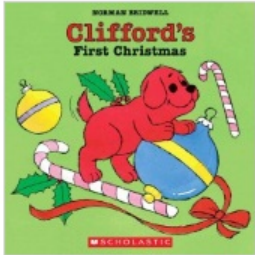
Using any search method, the search results display in the center of the screen. Brief information displays beneath each title in the initial search result. The brief information that displays, such as title, author, or publication information, is configurable.

EVERGREEN  

SEARCH RESULTS


# SEARCH RESULTS

Page 1 of 12 [NEXT >](#)




**Clifford's first Christmas**  
by Bridwell, Norman.  
XLSMPOCR-JB60  
Scholastic, c1994.  
1 v. (unpaged) :col. ill. ;21 cm.


[MORE INFO >](#) [GET IT >](#)



Language material



**James Herriot's dog stories.**  
by Herriot, James.  
17PL7WP2-XRYM  
St. Martin's Press., c1986.  
xxiii, 426 p. :ill. ;24 cm.



Language material

For full details on a title, click **More Info**. The full details displays the configured fields from the title record and copy information. Click **Show more copies** to display up to fifty results. Use the breadcrumbs at the top to trace your search history.

EVERGREEN™

SEARCH RESULTS > CLIFFORD'S FIRS... > GET IT

**Clifford's first Christmas**  
by Bridwell, Norman.

[Rate or review](#) | XLSMPOCR-JB60  
Scholastic,, c1994.  
1 v. (unpaged) :col. ill. ;21 cm.

Language material

GET IT >

< GO BACK

You can find this item at these locations:

| LOCATION |                                   | STATUS    | CALL NUMBER   |
|----------|-----------------------------------|-----------|---------------|
| Bothell  | <a href="#">View Library Info</a> | Available | XLSMPOCR-JB60 |
| Foster   | <a href="#">View Library Info</a> | Available | 5XMDVN34-FNZF |
| Foster   | <a href="#">View Library Info</a> | Available | 5XMDVN34-FNZF |
| Foster   | <a href="#">View Library Info</a> | Available | 5XMDVN34-FNZF |

## Place a Hold

From the search results, click the **Get it!** link to place a hold.

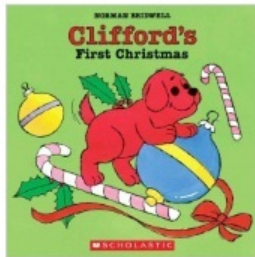


SEARCH RESULTS

# SEARCH RESULTS

Page 1 of 12

NEXT &gt;



## Clifford's first Christmas

by Bridwell, Norman.

XLSMPOCR-JB60

Scholastic, c1994.

1 v. (unpaged) : col. ill. ; 21 cm.



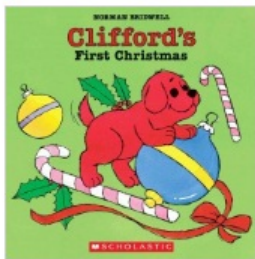
Language material

MORE INFO &gt;

GET IT &gt;

The brief information about the title appears, and, if you have not yet logged in, the **Get It!** panel appears with fields for username and password. Enter the username and password, and select the pick up library. Then click **Submit**. If you have already logged into your account, you need only to select the pick up location, and click **Submit**.





### Clifford's first Christmas

by Bridwell, Norman.

XLSMPOCR-JB60

Scholastic, c1994.

1 v. (unpaged) : col. ill. ; 21 cm.

## GET IT!

If you would like to place a hold on this item, please enter the following information and click Submit below:

Library Card Number without spaces:



Password



Choose a Pickup Library:



SUBMIT >

If you  
requ



A confirmation of hold placement appears. You can return to the previous record or to your search results.



## HOLD SUCCESSFUL!

Your request for **Clifford's first Christmas** was successful.

You will be notified when your item is ready for pickup. You will be able to pick your item up at Algona-Pacific.

< BACK TO SEARCH RESULTS

< BACK TO CLIFFORD'S FIRST C...

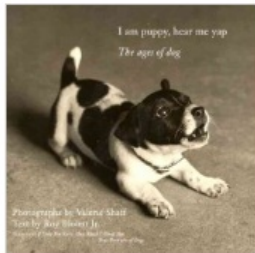
## Save Items to a List

You can save items to a temporary list, or, if you are logged in, you can save to a list of your own creation. To save items to a list, click the **Get it** button on the Search Results page.

# SEARCH RESULTS

Page 1 of 2

NEXT >



## I am puppy, hear me yap : the ages of a dog

by Shaff, Valerie.

47KU05MG-X84J

HarperCollinsPublishers., c2000.

1 v. (unpaged) :chiefly ill. ;21 cm.

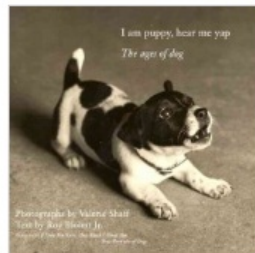


Language material

MORE INFO >

GET IT >

Select a list in the **Save It!** panel beneath the brief information, and click **Submit**.



## I am puppy, hear me yap : the ages of a dog

by Shaff, Valerie.

47KU05MG-X84J

HarperCollinsPublishers., c2000.

1 v. (unpaged) :chiefly ill. ;21 cm.



Language material

## GET IT!

If you would like to place a hold on this item, please enter the following information and click Submit below.

Choose a Pickup Library:

Renton

SUBMIT >

## SAVE IT!

If you would like to save this item to a list to be requested later, please choose a location and click Submit below.

Add to one of your lists?

-- Temporary List --

SUBMIT >

A confirmation of the saved item appears. To save the item to a list or to manage the lists, click the **My Lists** link to return to the list management feature in the TPAC.

# YOU SAVED IT!

You successfully saved I am puppy, hear me yap : the ages of a dog .

To manage your lists, go to [My Lists](#)

## Third Party Content

Third party content, such as reader reviews, can be viewed in the Kids OPAC. The reviews link appears adjacent to the brief information.

EVERGREEN

SEARCH RESULTS HARRY POTTER AN... GET IT



**Harry Potter and the deathly hallows**  
by Rowling, J. K.

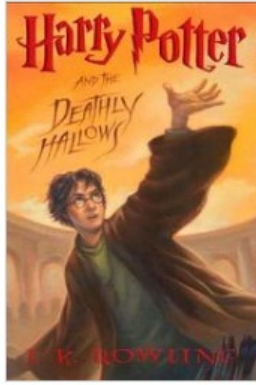
 Language material

**User rating**  
★★★★★  
[183 reviews](#)

PP1YCPQN-ODXD  
Arthur A. Levine Books., 2007.  
x, 759 p. :ill. ;24 cm.

Click the Reviews link to view reader reviews from a third party source. The reader reviews open beneath the brief information.





## Harry Potter and the deathly hallows

by Rowling, J. K.



Language material

[Close reviews](#)

PP1YCPQN-ODXD

Arthur A. Levine Books., 2007.  
x, 759 p. :ill. ;24 cm.

[Add a review for this!](#)

Reader rating: 4.55 out of 5 (183 reviews, 234 ratings)

### Harry Potter and the deathly hallows /

Author: J. K. Rowling ; illustrations by Mary GrandPré.

-sort by-

Rate this item: ★★★★★

0 out of 183 users would recommend this to a friend.

★★★★★

**The best one yet**

July 14, 2010

By:

[memyselfandi](#)

Issaquah, Washington (US)

The Deathly Hallows is by far, the best one yet. Full of action, adventure, and well timed comic relief. Loved the series so much I'm now reading it to my daughter. She's gone up 2 1/2 grade levels in reading in one year and I have to give some

Summaries and reviews from other publications appear in separate tabs beneath the copy information.

Just in Time

[View Library Info](#)

Available

KPAHXPXO-MPTP

Just in Time

[View Library Info](#)

Available

KPAHXPXO-MPTP

About this item:

Burdened with the dark, dangerous, and seemingly impossible task of locating and destroying Voldemort's remaining Horcruxes, Harry, feeling alone and uncertain about his future, struggles to find the inner strength he needs to follow the path set out before him.

Summary

Reviews

• **Baker & Taylor**

Burdened with the dark, dangerous, and seemingly impossible task of locating and destroying Voldemort's remaining Horcruxes, Harry, feeling alone and uncertain about his future, struggles to find the inner strength he needs to follow the path set out before him. At a time when the forces of evil seem to be gaining the upper hand, Harry comes of age in the wizarding world, and must take on and defeat Voldemort—or be killed himself.

• **Baker & Taylor**

The seventh and final book of the blockbuster Harry Potter series follows the wizard's last year at Hogwarts School of Witchcraft and Wizardry. 12,000,000 first printing.

# Configuration Files

Configuration files allow you to define labels for canned searches in the icon grid, determine how icons lead users to new pages, and define whether those icons are canned searches or links to external resources. Documentation describing how to use the configuration files is available in the Evergreen repository.

# Chapter 116. Catalog Browse

## Abstract

Catalog Browse enables you to browse bibliographic headings available in your catalog. You can click the hyperlinked bibliographic headings to retrieve catalog records that contain these headings. Also, if a given bibliographic heading is linked to an authority record, and if that authority is linked to another one via the first authority's See and See Also tags, the additional variants of (e.g.) an author's name will appear in your search results.

## Use Catalog Browse

1. To access this feature, navigate to the catalog search page, and click the link, **Browse the Catalog**. By default, you can browse by title, author, subject, or series. System administrators can revise this list by editing the file at the location *opac/parts/qtype\_selector.tt2*, and they can even make use of custom indices based on definitions in the database's *config.metabib\_field* table.
2. Enter a term or part of a term to browse. Evergreen will retrieve a list of bibliographic headings that match your query. Click the **Back** and **Forward** buttons to page through your results. To limit your browse results to a specific branch or copy location group, select the appropriate unit from the drop down menu, and click **Go**.
3. Select a link from the search results. Each linked heading displays the number of bibliographic records associated with the heading. Appropriate information from linked authority records, if any, appears below the main entry heading.
4. To return to your list of results, click the browser's back button or **Browse the Catalog**. Evergreen will return you to your previous position in your list of results.

## Administration

A new global flag warns users when they are entering a browse term that begins with an article. Systems administrators can create a regular expression to configure articles matched with specific indices that would prompt a warning for the user. By default, this setting is not enabled.

1. To enable this feature, click **Admin # Server Administration # Global Flags**.
2. Double click **Map of search classes to regular expressions to warn user about leading articles**.
3. Make changes, and click **Save**.

# Chapter 117. Bibliographic Search Enhancements

Enhancements to the bibliographic search function enable you to search for records that were created, edited, or deleted within a date range. You can use the catalog interface or the record feed to search for records with specific date ranges.

Note that all dates should be formatted as YYYY-MM-DD and should be included in parentheses.

## Use the Catalog to Retrieve Records with Specified Date Ranges:

### Search by Create Date or Range

To find records that were created on or after a specific date, enter the term, `create_date`, and the date in the catalog search field. For example, to find records that were created on or after April 1, 2013, enter the following into the catalog search field:

```
create_date(2013-04-01)
```

To find records that were created within a specific date range, enter the term, `create_date`, followed by comma-separated dates in parentheses. For example, to find records that were created between April 1, 2013 and April 8, 2013, enter the following into the catalog search field:

```
create_date(2013-04-01,2013-04-08)
```

### Search by Edit Date or Range

To find records that were edited on or before a specific date, enter the term, `edit_date`, and the date in the catalog search field. The date should be preceded by a comma. For example, to find records that were edited on or before April 1, 2013, enter the following into the catalog search field:

```
edit_date(,2013-04-01)
```

To find records that were edited on or after a specific date, enter the term, `edit_date`, and the date in the catalog search field. For example, to find records that were edited on or after April 1, 2013, enter the following into the catalog search field:

```
edit_date(2013-04-01)
```

To find records that were edited within a specific range, enter the term, `edit_date`, followed by comma-separated dates in parentheses. For example, to find records that were edited between April 1, 2013 and April 8, 2013, enter the following into the catalog search field:

```
edit_date(2013-04-01,2013-04-08)
```

## Search by Deleted Status

To search for deleted records, enter in your catalog search field the term, `edit_date`, the date that you want to search, and the term, `#deleted`. For example, to find records that were deleted on or after April 1, 2013, enter the following into the catalog search field:

```
edit_date(2013-04-01)#deleted
```

To find records that were deleted within a specific range, enter the term, `edit_date`, followed by comma-separated dates in parentheses. For example, to find records that were deleted between April 1, 2013 and April 8, 2013, enter the following into the catalog search field:

```
edit_date(2013-04-01,2013-04-08)#deleted
```

## Use a Feed to Retrieve Records with Specified Date Ranges:

You can use a feed to retrieve records that were created, edited, or deleted within specific date ranges by adding the dates to the catalog's URL. You can do this manually, or you can write a script that would automatically retrieve this information.

To manually retrieve records that were created, edited, or deleted within a specific date, enter the terms and dates as specified above within the search terms in the URL. For example, to retrieve records created on or after April 1, 2013, enter the following in your URL:

```
http://test.esilibrary.com/opac/extras/opensearch/1.1/-/html-full?searchTerms=create\_date\(2013-04-01\)&searchClass=keyword
```



To retrieve deleted records, replace the `#` with `%23` in your URL.

# Chapter 118. Binary MARC21 Feeds

Evergreen's OpenSearch service can return search results in many formats, including HTML, MARCXML, and MODS. As of version 2.4, it can also return results in binary MARC21 format.

When making an HTTP request to an Evergreen system using the OpenSearch API, you must include the term "marc21" in the appropriate location within the URL to retrieve a feed of MARC21 records in a binary format. The following example demonstrates the appropriate form of the URL:

[http://test.esilibrary.com/opac/extras/opensearch/1.1/-/marc21?searchTerms=create\\_date%282013-04-01%29&searchClass=keyword](http://test.esilibrary.com/opac/extras/opensearch/1.1/-/marc21?searchTerms=create_date%282013-04-01%29&searchClass=keyword)

You can add this term manually to the URL produced by a catalog search, or you can create a script that would retrieve this information automatically.

# Chapter 119. TPAC Metarecord Search and Metarecord Level Holds

Metarecords are compilations of individual bibliographic records that represent the same work. This compilation allows for several records to be represented on a single line on the TPAC search results page, which can help to reduce result duplications.

## Advanced Search Page

Selecting the **Group Formats and Editions** checkbox on the Advanced Search page allows the user to perform a metarecord search.

The screenshot displays the TPAC Advanced Search interface. At the top, there is a green header with the 'EVERGREEN' logo and a 'My Account' button. Below the header, there are navigation links for 'Link 1' through 'Link 5', and search options: 'Search the Catalog', 'Basic Search', and 'Browse the Catalog'. The main search area features three tabs: 'Advanced Search' (selected), 'Numeric Search', and 'Expert Search'. Under 'Search Input', there are three search rows. The first row has 'Keyword' selected, 'Contains' as the operator, and an empty text box. The second row has 'And' selected, 'Title' as the field, 'Contains' as the operator, and 'Harry Potter and the...' entered. The third row has 'And' selected, 'Author' as the field, 'Contains' as the operator, and an empty text box. Below the search rows are 'Add Search Row', 'Search', and 'Clear Form' buttons. The 'Search Filters' section contains several filter categories: 'Item Type' (Cartographic material, Computer file, Kit, Language material), 'Item Form' (Braille, Direct electronic, Electronic, Large print), 'Language' (Abkhaz, Achinese, Acoli, Adangme), 'Audience' (Adolescent, Adult, General, Juvenile), 'Video Format' (8 mm., Beta, Betacam, Betacam SP), 'Bib Level' (Collection, Integrating resource, Monograph/Item, Monographic component p), 'Literary Form' (Comic strips, Dramas, Essays, Fiction (not further specifie)), and 'Shelving Location' (Quick Read, Stacks). At the bottom, there are 'Search Library' (Example Branch 1), 'Publication Year' (Is), and 'Sort Results' (Sort by Relevance) dropdowns. A checkbox labeled 'Group Formats and Editions' is checked and highlighted with a red box.

## Search Results Page

Within the Search Results page, users can also refine their searches and filter on metarecord search results by selecting the **Group Formats and Editions** checkbox.


Search the Catalog [Advanced Search](#) [Browse the Catalog](#)

Search:  Type: Keyword Format: All Formats Library: Example Branch 1

[Refine My Original Search](#)

Sort by: Sort by Relevance   Limit to available items  Group Formats

Search Results Results 1 - 1 of about 1 (page 1 of 1)

| <table border="1"> <tr><th>Personal Author</th></tr> <tr><td><a href="#">Rowling, J. K.</a> (1)</td></tr> <tr><th>Topic Subject</th></tr> <tr><td><a href="#">Granger, Hermione (Fictitious character)</a> (1)</td></tr> </table> | Personal Author | <a href="#">Rowling, J. K.</a> (1) | Topic Subject | <a href="#">Granger, Hermione (Fictitious character)</a> (1) | <p>1.  <a href="#">Harry Potter and the goblet of fire</a> (3)<br/><i>Rowling, J. K.</i></p> <p><input type="checkbox"/> Book <input type="checkbox"/> CD Audiobook <input type="checkbox"/> Musical Sound Recording (Unknown Format) (2002.)</p> <p><b>Call number:</b> AUD ROW<br/>15 of 15 copies available at Example Consortium.<br/>6 of 6 copies available at Example System 1.<br/>4 of 4 copies available at Example Branch 1.</p> | <p><input checked="" type="checkbox"/> Place Hold <input type="checkbox"/> Add to my list</p> |
|---|-----------------|------------------------------------|---------------|--|--|---|
| Personal Author   |                 |                                    |               |  |  |   |
| <a href="#">Rowling, J. K.</a> (1)  |                 |                                    |               |  |  |   |
| Topic Subject   |                 |                                    |               |  |  |   |
| <a href="#">Granger, Hermione (Fictitious character)</a> (1)  |                 |                                    |               |  |  |   |

The metarecord search results will display both the representative metarecord bibliographic data and the combined metarecord holdings data (if the holdings data is OPAC visible).

The number of records represented by the metarecord are displayed in parenthesis next to the title.

The formats contained within the metarecord are displayed under the title.


Search the Catalog [Advanced Search](#) [Browse the Catalog](#)

Search:  Type: Keyword Format: All Formats Library: Example Consortium

[Refine My Original Search](#)

Sort by: Sort by Relevance   Limit to available items  Group Formats


Search Results Results 1 - 1 of about 1 (page 1 of 1)

| <table border="1"> <tr><th>Personal Author</th></tr> <tr><td><a href="#">Rowling, J. K.</a> (1)</td></tr> <tr><th>Topic Subject</th></tr> <tr><td><a href="#">Granger, Hermione (Fictitious character)</a> (1)</td></tr> </table> | Personal Author | <a href="#">Rowling, J. K.</a> (1) | Topic Subject | <a href="#">Granger, Hermione (Fictitious character)</a> (1) | <p>1.  <a href="#">Harry Potter and the goblet of fire</a> (5)<br/><i>Rowling, J. K.</i></p> <p><input type="checkbox"/> Book <input type="checkbox"/> CD Audiobook <input type="checkbox"/> Large Print Book <input type="checkbox"/> Musical Sound Recording (Unknown Format) <input type="checkbox"/> Blu-ray (2002.)</p> <p><b>Call number:</b> AUD ROW<br/>15 of 15 copies available at Example Consortium.</p> | <p><input checked="" type="checkbox"/> Place Hold <input type="checkbox"/> Add to my list</p> |
|---|-----------------|------------------------------------|---------------|--|---|---|
| Personal Author   |                 |                                    |               |  |   |   |
| <a href="#">Rowling, J. K.</a> (1)  |                 |                                    |               |  |   |   |
| Topic Subject   |                 |                                    |               |  |   |   |
| <a href="#">Granger, Hermione (Fictitious character)</a> (1)  |                 |                                    |               |  |   |   |

For the metarecord search result, the **Place Hold** link defaults to a metarecord level hold.



**Search Results** Results 1 - 1 of about 1 (page 1 of 1)

| <table border="1"> <thead> <tr> <th colspan="2">Personal Author</th> </tr> </thead> <tbody> <tr> <td><a href="#">Rowling, J. K.</a></td> <td>(1)</td> </tr> </tbody> </table><br><table border="1"> <thead> <tr> <th>Topic Subject</th> <th>More</th> </tr> </thead> <tbody> <tr> <td><a href="#">Granger, Hermione (Fictitious character)</a></td> <td>(1)</td> </tr> </tbody> </table> | Personal Author |  | <a href="#">Rowling, J. K.</a> | (1) | Topic Subject | More | <a href="#">Granger, Hermione (Fictitious character)</a> | (1) | <p>1.  <b>Harry Potter and the goblet of fire</b> (5)<br/> <a href="#">Rowling, J. K.</a></p> <p> <input type="checkbox"/> Book              <input type="checkbox"/> CD Audiobook              <input type="checkbox"/> Large Print Book              <input type="checkbox"/> Musical              <input type="checkbox"/> Sound Recording (Unknown Format)              <input type="checkbox"/> Blu-ray (2002.)         </p> <p><b>Call number:</b> AUD ROW<br/>             15 of 15 copies available at Example Consortium.</p> | <div style="border: 2px solid red; padding: 5px; display: inline-block;"> <input checked="" type="checkbox"/> <a href="#">Place Hold</a> </div> <input type="button" value="Add to my list"/> |
|--|-----------------|--|--------------------------------|-----|---------------|------|--|-----|---|---|
| Personal Author  |                 |  |                                |     |               |      |  |     |   |   |
| <a href="#">Rowling, J. K.</a>   | (1)             |  |                                |     |               |      |  |     |   |   |
| Topic Subject  | More            |  |                                |     |               |      |  |     |   |   |
| <a href="#">Granger, Hermione (Fictitious character)</a>   | (1)             |  |                                |     |               |      |  |     |   |   |

To place a metarecord level hold:

1. Click the **Place Hold** link.
2. Users who are not logged into their accounts will be directed to the **Log in to Your Account** screen, where they will enter their username and password. Users who are already logged into their accounts will be directed to the **Place Hold** screen.
3. Within the **Place Hold** screen, users can select the multiple formats and/or languages that are available.
4. Continue to enter any additional hold information (such as Pickup Location), if needed.
5. Click **Submit**.

**Place Hold**

Harry Potter and the goblet of fire / by J.K. Rowling ; illustrations by Mary GrandPré.

|   |   |
|---|---|
| <p>Select your desired format(s).<br/>                 If none are selected, any available formats may be used.</p> <div style="border: 1px solid gray; padding: 5px;"> <p>Blu-ray</p> <p>Book</p> <p>CD Audiobook</p> <p>Large Print Book</p> </div> | <p>Select your desired language(s).<br/>                 If none are selected, any available languages may be used.</p> <div style="border: 1px solid gray; padding: 5px;"> <p>English</p> </div> |
|---|---|

Selecting multiple formats will not place all of these formats on hold for the user. For example, a user cannot select CD Audiobook and Book and expect to place both the CD and book on hold at the same time. Instead, the user is implying that either the CD format or the book format is the acceptable format to fill the hold. If no format is selected, then any of the available formats may be used to fill the hold. The same holds true for selecting multiple languages.

**Advanced Hold Options**

When users place a hold on an individual bibliographic record they will see an **Advanced Hold Options** link within the Place Hold screen. Clicking the **Advanced Hold Options** link will take the users into the metarecord level hold feature, enabling them to select multiple formats and/or languages.

## Place Hold

Harry Potter and the goblet of fire [video recording]/ J.K. Rowling.

[Advanced Hold Options](#)

Pickup location:

Notify when hold is ready for pickup?

Yes, by Email

No configured Email address. See "My Account" for setting your Email address.

Yes, by Phone

Phone Number:

## Metarecord Constituent Records Page

The TPAC now includes a Metarecord Constituent Records page, which displays a listing of the individual bibliographic records grouped within the metarecord. Access the Metarecord Constituent Records page by clicking on the metarecord title on the Search Results page.

The screenshot shows the Evergreen library catalog interface. At the top, there's a green header with the 'EVERGREEN' logo. Below it, navigation links for 'Link 1' through 'Link 5' are visible. The main search area includes a search bar with the text 'title:Harry Potter and the G...', a 'Type' dropdown set to 'Keyword', a 'Format' dropdown set to 'All Formats', and a 'Library' dropdown set to 'Example Consortium'. A 'Search' button is on the right. Below the search bar, there are options to 'Refine My Original Search', 'Another Search', 'Advanced Search', 'Sort by' (set to 'Sort by Relevance'), 'Show More Details', 'Limit to available items', and 'Group Format'. The search results section shows 'Search Results' with 'Results 1 - 1 of about 1 (page 1 of 1)'. The first result is 'Harry Potter and the goblet of fire (5)' by Rowling, J. K., with a book cover image. The title is highlighted with a red box. To the right of the title are 'Place Hold' and 'Add to my list' buttons. Below the title, there are icons for 'Book', 'CD Audiobook', 'Large Print Book', and 'Musical'. The text below the icons reads 'Sound Recording (Unknown Format) Blu-ray (2002.)' and 'Call number: AUD ROW'. At the bottom of the result, it says '15 of 15 copies available at Example Consortium.' On the left side of the result, there are two green boxes: 'Personal Author' with 'Rowling, J. K. (1)' and 'Topic Subject' with 'Granger, Hermione (Fictitious character) (1)'. A 'More' link is next to the topic subject.

This will allow the user to view the results for grouped records.

Search the Catalog [Advanced Search](#) [Browse the Catalog](#)

Search:  Type: Keyword Format: All Formats Library: Exan


[Refine My Original Search](#) ]

[Return to Grouped Search Results](#)

Viewing Results for Grouped Record:


**Search Results** Results 1 - 5 of about 5 (page 1 of 1)

1.




**[Harry Potter and the goblet of fire](#)**  
[Rowling, J. K.](#)  
 Book (2002.)  
**Call number:** G880 210  
 10 of 10 copies available at Example Consortium.

[Place Hold](#) [Add to my list](#)
2.




**[Harry Potter and the goblet of fire](#)**  
[Rowling, J. K.](#)  
 CD Audiobook (p2000.)  
**Call number:** AUD ROW  
 1 of 1 copy available at Example Consortium.

[Place Hold](#) [Add to my list](#)
3.




**[Harry Potter and the goblet of fire](#)**  
[Rowling, J. K.](#)  
 Large Print Book (2002.)  
**Call number:** LGPRINT FIC ROW  
 2 of 2 copies available at Example Consortium.

[Place Hold](#) [Add to my list](#)
4.



**[Harry Potter and the goblet of fire](#)**  
[Rowling, J. K.](#)  
 Blu-ray  
**Call number:** dvd  
 1 of 1 copy available at Example Consortium.

[Place Hold](#) [Add to my list](#)
5.



**[Harry Potter and the goblet of fire](#)**  
[Rowling, J. K.](#)  
 Musical Sound Recording (Unknown Format)  
**Call number:** quickread  
 1 of 1 copy available at Example Consortium.

[Add to my list](#)

**Search Results** Results 1 - 5 of about 5 (page 1 of 1)

### Show Holds on Bib

Within the staff client, **Show Holds on Bib** for a metarecord level hold will take the staff member into the Metarecord Constituent Records page.

### Global Flag: OPAC Metarecord Hold Formats Attribute

To utilize the metarecord level hold feature, the Global Flag: OPAC Metarecord Hold Formats Attribute must be enabled and its value set at mr\_hold\_format, which is the system's default configuration.

#### Global Flags

[Back](#) [Next](#) [Filter](#)

| # | Label                                  | Enabled | Value          |
|---|--|---------|----------------|
| 1 | OPAC Metarecord Hold Formats Attribute | True    | mr_hold_format |

# Chapter 120. Library Information Pages

The branch name displayed in the copy details section of the search results page, the record summary page, and the kids catalog record summary page will link to a library information page. This page is located at <http://hostname/eg/opac/library/<SHORTNAME>> and at <http://hostname/eg/opac/library/<ID>>.

Evergreen automatically generates this page based on information entered in **Admin # Server Administration # Organizational Units** (actor.org\_unit). The library information pages publish schema.org structured data, which can enable search engines and other systems to better understand your libraries and their resources.

The library information page displays:

- The name of the library
- Opening hours
- E-mail address
- Phone number
- Mailing address
- The branch's parent library system

An Evergreen site can also display a link to the library's web site on the information page.

To display a link:

1. Go to **Admin # Local Administration # Library Settings Editor**.
2. Edit the **Library Information URL** setting for the branch.



If you set the URL at the system level, that URL will be used as the link for the system and for all child branches that do not have its own URL set. . Enter the URL in the following format: <http://example.com/about.html>.

An Evergreen site may also opt to link directly from the copy details section of the catalog to the library web site, bypassing the automatically-generated library information page. To do so:

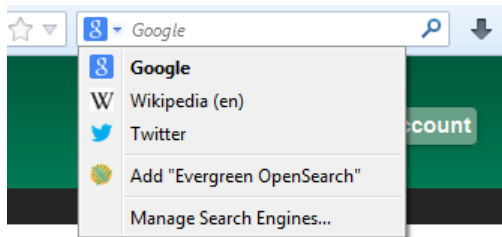
1. Add the library's URL to the **Library Information URL** setting as described above.
2. Go to **Admin # Local Administration # Library Settings Editor**.
3. Set the **Use external "library information URL" in copy table, if available** setting to true.

# Chapter 121. Adding OpenSearch to Firefox browser

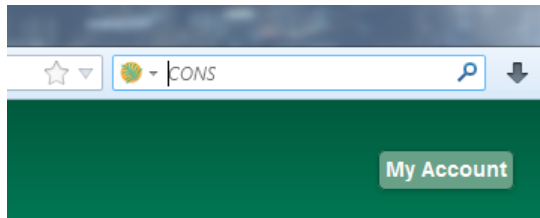
OpenSearch is a collection of simple formats for the sharing of search results. More information about OpenSearch can be found on their [website](#).

The following example illustrates how to add an OpenSearch source to the list of search sources in a Firefox browser:

1. Navigate to any catalog page in your Firefox browser and click on the top right box's dropdown and select the option for **Add "Evergreen OpenSearch"**.



2. At this point, it will add a new search option for the location the catalog is currently using. In this example, that is CONS (searching the whole consortium).



3. Enter search terms to begin a keyword search using this source. The next image illustrates an example search for "mozart" using the sample bib record set.



Catalog - Search Results: mozart - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Catalog - Search Results: mozart

https://theory.biblio.org/eg/opac/results?locg=CONS;query=mozart;page=;startIndex=;count=;searchLang=en-l

EVERGREEN

Link 1 Link 2 Link 3 Link 4 Link 5

Search the Catalog [Advanced Search](#) [Browse the Catalog](#)

Search:  Type: Keyword Format: All Formats Library: Example Consortium

Another Search **Advanced Search** Sort by: Sort by Relevance Show More Details Limit to available items Group F

**Search Results** Results 1 - 10 of about 17 (page 1 of 2) 1 2 Next ▶

| Personal Author   | More |   |
|---|------|---|
| <a href="#">Mozart, Wolfgang</a><br><a href="#">Amadeus 1756-1791</a>     | (11) | 1. <a href="#">A companion to Mozart's piano concertos</a><br><i>Hutchings, Arthur, 1906-</i><br>Book (1950.)<br>Call number: 780 B27<br>27 of 31 copies available at Example Consortium.       |
| <a href="#">Brahms, Johannes</a><br><a href="#">1833-1897</a>             | (1)  | 2. <a href="#">Mozart and his piano concertos</a><br><i>Girdlestone, Cuthbert Morton, 1895-1975.</i><br>Book (1964.)<br>Call number: 780 B3<br>26 of 31 copies available at Example Consortium. |
| <a href="#">Bruch, Max 1838-1920</a>                                      | (1)  | 3. <a href="#">Piano concertos nos. 17-22 : in full score, with</a>   |
| <a href="#">Girdlestone, Cuthbert</a><br><a href="#">Morton 1895-1975</a> | (1)  |   |
| <a href="#">Hopkins, Anthony 1921-</a>                                    | (1)  |   |

4. You can select which search source to use by clicking on the dropdown picker.

Catalog - Search Results: mozart - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Catalog - Search Results: mozart

https://theory.biblio.org/eg/opac/results?locg=CONS;query=mozart;page=;startIndex=;count=;searchLang=en-L

EVERGREEN

Link 1 Link 2 Link 3 Link 4 Link 5

Search the Catalog [Advanced Search](#) [Browse the Catalog](#)

Search:  Type:  Format:  Library:

Another Search **Advanced Search** Sort by  Show More Details  Limit to available items  Group F

**Search Results** Results 1 - 10 of about 17 (page 1 of 2) 1 2 Next ▶

| Personal Author  | More |    |  |
|--|------|----|--|
| <a href="#">Mozart, Wolfgang Amadeus 1756-1791</a>     | (11) | 1. | <p><b><a href="#">A companion to Mozart's piano concertos</a></b><br/> <a href="#">Hutchings, Arthur, 1906-</a></p> <p>Book (1950.)</p> <p><b>Call number:</b> 780 B27<br/>           27 of 31 copies available at Example Consortium.</p> <p><input checked="" type="checkbox"/> Place Hold <input type="checkbox"/> Add to</p>       |
| <a href="#">Brahms, Johannes 1833-1897</a>             | (1)  | 2. | <p><b><a href="#">Mozart and his piano concertos</a></b><br/> <a href="#">Girdlestone, Cuthbert Morton, 1895-1975.</a></p> <p>Book (1964.)</p> <p><b>Call number:</b> 780 B3<br/>           26 of 31 copies available at Example Consortium.</p> <p><input checked="" type="checkbox"/> Place Hold <input type="checkbox"/> Add to</p> |
| <a href="#">Bruch, Max 1838-1920</a>                   | (1)  | 3. | <p><b><a href="#">Piano concertos nos. 17-22 : in full score, with</a></b></p> <p><input checked="" type="checkbox"/> Place Hold <input type="checkbox"/> Add to</p>   |
| <a href="#">Girdlestone, Cuthbert Morton 1895-1975</a> | (1)  |    |  |
| <a href="#">Hopkins, Anthony 1921-</a>                 | (1)  |    |  |

# Chapter 122. Adding an Evergreen search form to a web page

To enable users to quickly search your Evergreen catalog, you can add a simple search form to any HTML page. The following code demonstrates how to create a quick search box suitable for the header of your web site:

## Sample search form.

```
<form action="http://example.com/eg/opac/results" method="get">      <!-- ❶ -->
  <input type="search" alt="Catalog Search" maxlength="200"
    size="20" name="query"
    placeholder="Search catalog for..." />
  <input type="hidden" name="qtype" value="keyword" />          <!-- ❷ -->
  <input type="hidden" name="locg" value="4" />                 <!-- ❸ -->
  <input type="submit" value="Search" />
</form>
```

- ❶ Replace *'example.com'* with the hostname for your catalog. To link to the Kid's OPAC instead of the TPAC, replace *'opac'* with *'kpac'*.
- ❷ Replace *'keyword'* with *'title'*, *'author'*, *'subject'*, or *'series'* if you want to provide more specific searches. You can even specify *'identifier/isbn'* for an ISBN search.
- ❸ Replace *'4'* with the ID number of the organizational unit at which you wish to anchor your search. This is the value of the *'locg'* parameter in your normal search.



# Part XIV. Developer Resources

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# Chapter 123. Introduction

Developers can use this part to learn more about the programming languages, communication protocols and standards used in Evergreen.

# Chapter 124. Support Scripts

Various scripts are included with Evergreen in the `/openils/bin/` directory (and in the source code in `Open-ILS/src/support-scripts` and `Open-ILS/src/extras`). Some of them are used during the installation process, such as `eg_db_config`, while others are usually run as cron jobs for routine maintenance, such as `fine_generator.pl` and `hold_targeter.pl`. Others are useful for less frequent needs, such as the scripts for importing/exporting MARC records. You may explore these scripts and adapt them for your local needs. You are also welcome to share your improvements or ask any questions on the [Evergreen IRC channel](#) or [email lists](#).

Here is a summary of the most commonly used scripts. The script name links to more thorough documentation, if available.

- [action\\_trigger\\_runner.pl](#) — Useful for creating events for specified hooks and running pending events
- [authority\\_authority\\_linker.pl](#) — Links reference headings in authority records to main entry headings in other authority records. Should be run at least once a day (only for changed records).
- [authority\\_control\\_fields.pl](#) — Links bibliographic records to the best matching authority record. Should be run at least once a day (only for changed records).
- `autogen.sh` — Generates web files used by the OPAC, especially files related to organization unit hierarchy, fieldmapper IDL, locales selection, facet definitions, compressed JS files and related cache key
- `clark-kent.pl` — Used to start and stop the reporter (which runs scheduled reports)
- [eg\\_db\\_config](#) — Creates database and schema, updates config files, sets Evergreen administrator username and password
- `fine_generator.pl`
- `hold_targeter.pl`
- [marc2are.pl](#) — Converts authority records from MARC format to Evergreen objects suitable for importing via `pg_loader.pl` (or `parallel_pg_loader.pl`)
- `marc2bre.pl` — Converts bibliographic records from MARC format to Evergreen objects suitable for importing via `pg_loader.pl` (or `parallel_pg_loader.pl`)
- `marc2sre.pl` — Converts serial records from MARC format to Evergreen objects suitable for importing via `pg_loader.pl` (or `parallel_pg_loader.pl`)
- [marc\\_export](#) — Exports authority, bibliographic, and serial holdings records into any of these formats: USMARC, UNIMARC, XML, BRE, ARE
- `osrf_control` — Used to start, stop and send signals to OpenSRF services
- `parallel_pg_loader.pl` — Uses the output of `marc2bre.pl` (or similar tools) to generate the SQL for importing records into Evergreen in a parallel fashion

# marc\_export: Exporting Bibliographic Records into MARC files

The following procedure explains how to export Evergreen bibliographic records into MARC files using the **marc\_export** support script. All steps should be performed by the `opensrf` user from your Evergreen server.



Processing time for exporting records depends on several factors such as the number of records you are exporting. It is recommended that you divide the export ID files (`records.txt`) into a manageable number of records if you are exporting a large number of records.

1. Create a text file list of the Bibliographic record IDs you would like to export from Evergreen. One way to do this is using SQL:

```
SELECT DISTINCT bre.id FROM biblio.record_entry AS bre
  JOIN asset.call_number AS acn ON acn.record = bre.id
 WHERE bre.deleted='false' and owning_lib=101 \g /home/opensrf/records.txt;
```

This query creates a file called `records.txt` containing a column of distinct IDs of items owned by the organizational unit with the id 101.

2. Navigate to the support-scripts folder

```
cd /home/opensrf/Evergreen-ILS*/Open-ILS/src/support-scripts/
```

3. Run **marc\_export**, using the ID file you created in step 1 to define which files to export. The following example exports the records into MARCXML format.

```
cat /home/opensrf/records.txt | ./marc_export --store -i -c /openils/conf/opensrf_core.xml \
-x /openils/conf/fm_IDL.xml -f XML --timeout 5 > exported_files.xml
```



`marc_export` was updated in Evergreen 2.6 and now does not output progress as it executes.



You can use the `--since` option to export records modified after a certain date and time.



By default, `marc_export` will use the reporter storage service, which should work in most cases. But if you have a separate reporter database and you know you want to talk directly to your main production database, then you can set the `--store` option to `cstore` or `storage`.



For more information, run `marc_export` with the `-h` option:

```
./marc_export -h
```

# Importing Authority Records from Command Line

The major advantages of the command line approach are its speed and its convenience for system administrators who can perform bulk loads of authority records in a controlled environment. For alternate instructions, see [Importing Authority Records from the Staff Client](#).

1. Run **marc2are.pl** against the authority records, specifying the user name, password, MARC type (USMARC or XML). Use `STDOUT` redirection to either pipe the output directly into the next command or into an output file for inspection. For example, to process a file with authority records in MARCXML format named `auth_small.xml` using the default user name and password, and directing the output into a file named `auth.are`:

```
cd Open-ILS/src/extras/import/  
perl marc2are.pl --user admin --pass open-ils --marctype XML auth_small.xml > auth.are
```



The MARC type will default to USMARC if the `--marctype` option is not specified.

2. Run **parallel\_pg\_loader.pl** to generate the SQL necessary for importing the authority records into your system. This script will create files in your current directory with filenames like `pg_loader-output.are.sql` and `pg_loader-output.sql` (which runs the previous SQL file). To continue with the previous example by processing our new `auth.are` file:

```
cd Open-ILS/src/extras/import/  
perl parallel_pg_loader.pl --auto are --order are auth.are
```



To save time for very large batches of records, you could simply pipe the output of **marc2are.pl** directly into **parallel\_pg\_loader.pl**.

3. Load the authority records from the SQL file that you generated in the last step into your Evergreen database using the `psql` tool. Assuming the default user name, host name, and database name for an Evergreen instance, that command looks like:

```
psql -U evergreen -h localhost -d evergreen -f pg_loader-output.sql
```

# Chapter 125. Developing with pgTAP tests

## Setting up pgTAP on your development server

Currently, Evergreen pgTAP tests expect a version of pgTAP (0.93) that is not yet available in the packages for most Linux distributions. Therefore, you will have to install pgTAP from source as follows:

1. Download, make, and install pgTAP on your database server. pgTAP can be downloaded from <http://pgxn.org/dist/pgtap/> and the instructions for building and installing the extension are available from <http://pgtap.org/documentation.html>
2. Create the pgTAP extension in your Evergreen database. Using `psql`, connect to your Evergreen database and then issue the command:

```
CREATE EXTENSION pgtap;
```

## Running pgTAP tests

The pgTAP tests can be found in subdirectories of `Open-ILS/src/sql/Pg/` as follows:

- `t`: contains pgTAP unit tests that can be run on a freshly installed Evergreen database
- `live_t`: contains pgTAP unit tests meant to be run on an Evergreen database that also has had the "concerto" sample data loaded on it

To run the pgTAP unit and regression tests, use the `pg_prove` command. For example, from the Evergreen source directory, you can issue the command: `pg_prove -U evergreen Open-ILS/src/sql/Pg/t Open-ILS/src/sql/Pg/t/regress`

# Chapter 126. Easing gently into OpenSRF

## Abstract

The Evergreen open-source library system serves library consortia composed of hundreds of branches with millions of patrons - for example, [the Georgia Public Library Service PINES system](#). One of the claimed advantages of Evergreen over alternative integrated library systems is the underlying Open Service Request Framework (OpenSRF, pronounced "open surf") architecture. This article introduces OpenSRF, demonstrates how to build OpenSRF services through simple code examples, and explains the technical foundations on which OpenSRF is built.

## Introducing OpenSRF

OpenSRF is a message routing network that offers scalability and failover support for individual services and entire servers with minimal development and deployment overhead. You can use OpenSRF to build loosely-coupled applications that can be deployed on a single server or on clusters of geographically distributed servers using the same code and minimal configuration changes. Although copyright statements on some of the OpenSRF code date back to Mike Rylander's original explorations in 2000, Evergreen was the first major application to be developed with, and to take full advantage of, the OpenSRF architecture starting in 2004. The first official release of OpenSRF was 0.1 in February 2005 (<http://evergreen-ils.org/blog/?p=21>), but OpenSRF's development continues a steady pace of enhancement and refinement, with the release of 1.0.0 in October 2008 and the most recent release of 1.2.2 in February 2010.

OpenSRF is a distinct break from the architectural approach used by previous library systems and has more in common with modern Web applications. The traditional "scale-up" approach to serve more transactions is to purchase a server with more CPUs and more RAM, possibly splitting the load between a Web server, a database server, and a business logic server. Evergreen, however, is built on the Open Service Request Framework (OpenSRF) architecture, which firmly embraces the "scale-out" approach of spreading transaction load over cheap commodity servers. The [initial GPLS PINES hardware cluster](#), while certainly impressive, may have offered the misleading impression that Evergreen is complex and requires a lot of hardware to run.

This article hopes to correct any such lingering impression by demonstrating that OpenSRF itself is an extremely simple architecture on which one can easily build applications of many kinds – not just library applications – and that you can use a number of different languages to call and implement OpenSRF methods with a minimal learning curve. With an application built on OpenSRF, when you identify a bottleneck in your application's business logic layer, you can adjust the number of the processes serving that particular bottleneck on each of your servers; or if the problem is that your service is resource-hungry, you could add an inexpensive server to your cluster and dedicate it to running that resource-hungry service.

## Programming language support

If you need to develop an entirely new OpenSRF service, you can choose from a number of different languages in which to implement that service. OpenSRF client language bindings have been written for C, Java, JavaScript, Perl, and Python, and server language bindings have been written for C, Perl, and Python. This article uses Perl examples as a lowest common denominator programming language. Writing an OpenSRF binding for another language is a relatively small task if that language offers libraries that support the core technologies on which OpenSRF depends:

- [Extensible Messaging and Presence Protocol](#) (XMPP, sometimes referred to as Jabber) - provides the base messaging infrastructure between OpenSRF clients and servers



- [JavaScript Object Notation \(JSON\)](#) - serializes the content of each XMPP message in a standardized and concise format
- [memcached](#) - provides the caching service
- [syslog](#) - the standard UNIX logging service

Unfortunately, the [OpenSRF reference documentation](#), although augmented by the [OpenSRF glossary](#), blog posts like [the description of OpenSRF and Jabber](#), and even this article, is not a sufficient substitute for a complete specification on which one could implement a language binding. The recommended option for would-be developers of another language binding is to use the Python implementation as the cleanest basis for a port to another language.

## OpenSRF communication flows over XMPP

The XMPP messaging service underpins OpenSRF, requiring an XMPP server such as [ejabberd](#). When you start OpenSRF, the first XMPP clients that connect to the XMPP server are the OpenSRF public and private *routers*. OpenSRF routers maintain a list of available services and connect clients to available services. When an OpenSRF service starts, it establishes a connection to the XMPP server and registers itself with the private router. The OpenSRF configuration contains a list of public OpenSRF services, each of which must also register with the public router. Services and clients connect to the XMPP server using a single set of XMPP client credentials (for example, `opensrf@private.localhost`), but use XMPP resource identifiers to differentiate themselves in the Jabber ID (JID) for each connection. For example, the JID for a copy of the `opensrf.simple-text` service with process ID 6285 that has connected to the `private.localhost` domain using the `opensrf` XMPP client credentials could be `opensrf@private.localhost/opensrf.simple-text_drone_at_localhost_6285`.

## OpenSRF communication flows over HTTP

Any OpenSRF service registered with the public router is accessible via the OpenSRF HTTP Translator. The OpenSRF HTTP Translator implements the [OpenSRF-over-HTTP proposed specification](#) as an Apache module that translates HTTP requests into OpenSRF requests and returns OpenSRF results as HTTP results to the initiating HTTP client.

### Issuing an HTTP POST request to an OpenSRF method via the OpenSRF HTTP Translator.

```
# curl request broken up over multiple lines for legibility
curl -H "X-OpenSRF-service: opensrf.simple-text" \ # ❶
  --data 'osrf-msg=[ \ # ❷
    { "__c": "osrfMessage", "__p": { "threadTrace": 0, "locale": "en-CA", \ # ❸
      "type": "REQUEST", "payload": { "__c": "osrfMethod", "__p": \
        { "method": "opensrf.simple-text.reverse", "params": [ "foobar" ] } \
      } \
    } \
  ]]' \
http://localhost/osrf-http-translator \ # ❹
```

- ❶ The `X-OpenSRF-service` header identifies the OpenSRF service of interest.
- ❷ The POST request consists of a single parameter, the `osrf-msg` value, which contains a JSON array.
- ❸ The first object is an OpenSRF message (`"__c": "osrfMessage"`) with a set of parameters (`"__p": { }`) containing:
  - the identifier for the request (`"threadTrace": 0`); this value is echoed back in the result
  - the message type (`"type": "REQUEST"`)

- the locale for the message; if the OpenSRF method is locale-sensitive, it can check the locale for each OpenSRF request and return different information depending on the locale
  - the payload of the message ("payload":{ }) containing the OpenSRF method request ("\_\_c": "osrfMethod") and its parameters ("\_\_p": { }), which in turn contains:
    - the method name for the request ("method": "osrf.simple-text.reverse")
    - a set of JSON parameters to pass to the method ("params": [ "foobar "]); in this case, a single string "foobar"
- ④ The URL on which the OpenSRF HTTP translator is listening, /osrf-http-translator is the default location in the Apache example configuration files shipped with the OpenSRF source, but this is configurable.

### Results from an HTTP POST request to an OpenSRF method via the OpenSRF HTTP Translator.

```
# HTTP response broken up over multiple lines for legibility
[{"__c": "osrfMessage", "__p":                                \ # ❶
  {"threadTrace": 0, "payload":                               \ # ❷
    {"__c": "osrfResult", "__p":                             \ # ❸
      {"status": "OK", "content": "raboof", "statusCode": 200} \ # ❹
    }, "type": "RESULT", "locale": "en-CA"                   \ # ❺
  },
],
{"__c": "osrfMessage", "__p":                                \ # ❻
  {"threadTrace": 0, "payload":                               \ # ❼
    {"__c": "osrfConnectStatus", "__p":                       \ # ❽
      {"status": "Request Complete", "statusCode": 205}      \ # ❾
    }, "type": "STATUS", "locale": "en-CA"                   \ # ❿
  },
}]
```

- ❶ The OpenSRF HTTP Translator returns an array of JSON objects in its response. Each object in the response is an OpenSRF message ("\_\_c": "osrfMessage") with a collection of response parameters ("\_\_p": ).
- ❷ The OpenSRF message identifier ("threadTrace": 0) confirms that this message is in response to the request matching the same identifier.
- ❸ The message includes a payload JSON object ("payload": ) with an OpenSRF result for the request ("\_\_c": "osrfResult").
- ❹ The result includes a status indicator string ("status": "OK"), the content of the result response - in this case, a single string "raboof" ("content": "raboof") - and an integer status code for the request ("statusCode": 200).
- ❺ The message also includes the message type ("type": "RESULT") and the message locale ("locale": "en-CA").
- ❻ The second message in the set of results from the response.
- ❼ Again, the message identifier confirms that this message is in response to a particular request.
- ❽ The payload of the message denotes that this message is an OpenSRF connection status message ("\_\_c": "osrfConnectStatus"), with some information about the particular OpenSRF connection that was used for this request.
- ❾ The response parameters for an OpenSRF connection status message include a verbose status ("status": "Request Complete") and an integer status code for the connection status ("statusCode": 205).
- ❿ The message also includes the message type ("type": "RESULT") and the message locale ("locale": "en-CA").

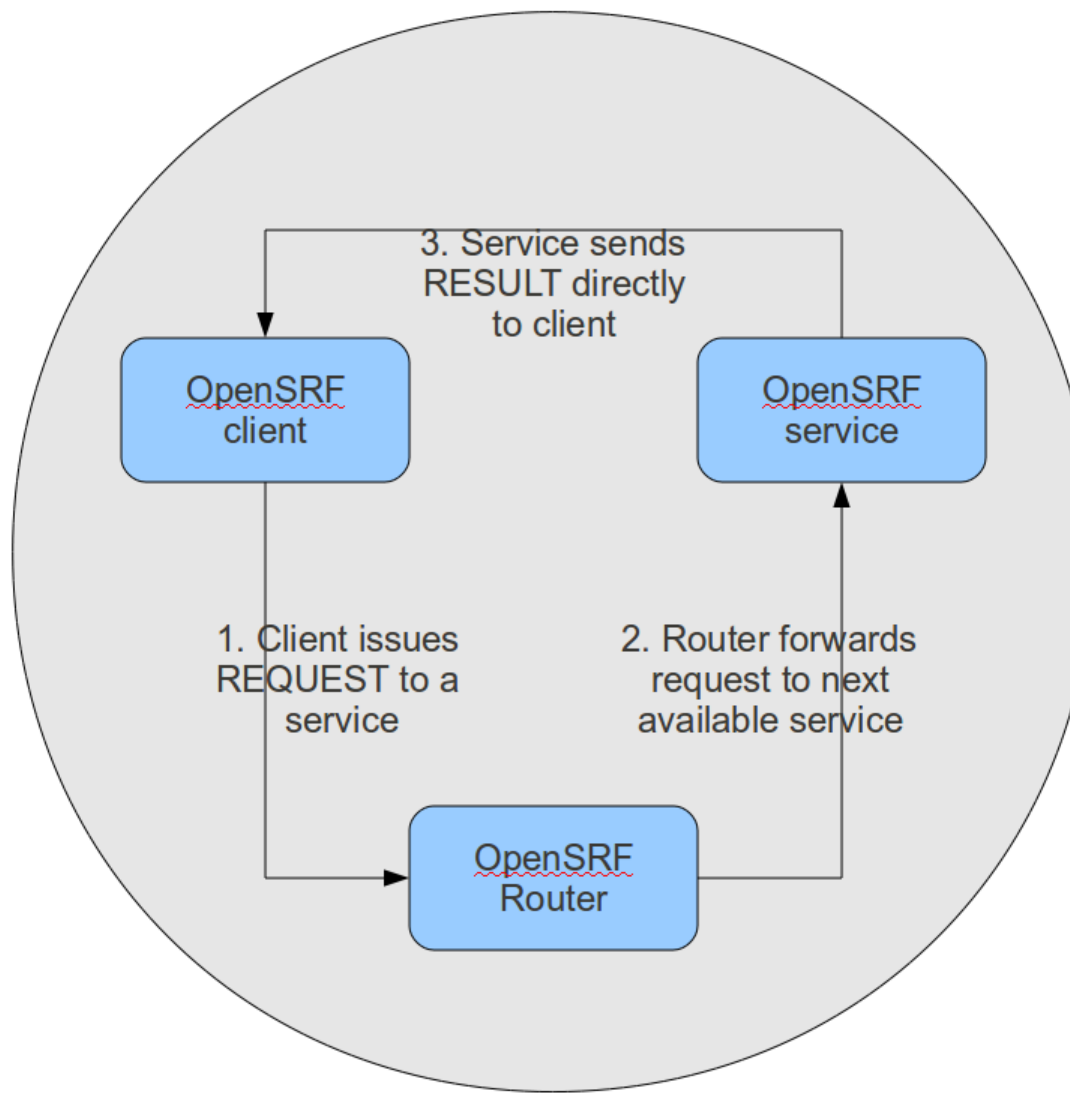


Before adding a new public OpenSRF service, ensure that it does not introduce privilege escalation or unchecked access to data. For example, the Evergreen `open-ils.cstore` private service is an object-relational mapper that provides read and write access to the entire Evergreen database, so it would be catastrophic to expose that service publicly. In comparison, the Evergreen `open-ils.pcrud` public service offers the same functionality as `open-ils.cstore` to any connected HTTP client or OpenSRF client, but the additional authentication and authorization layer in `open-ils.pcrud` prevents unchecked access to Evergreen's data.

## Stateless and stateful connections

OpenSRF supports both *stateless* and *stateful* connections. When an OpenSRF client issues a REQUEST message in a *stateless* connection, the router forwards the request to the next available service and the service returns the result directly to the client.

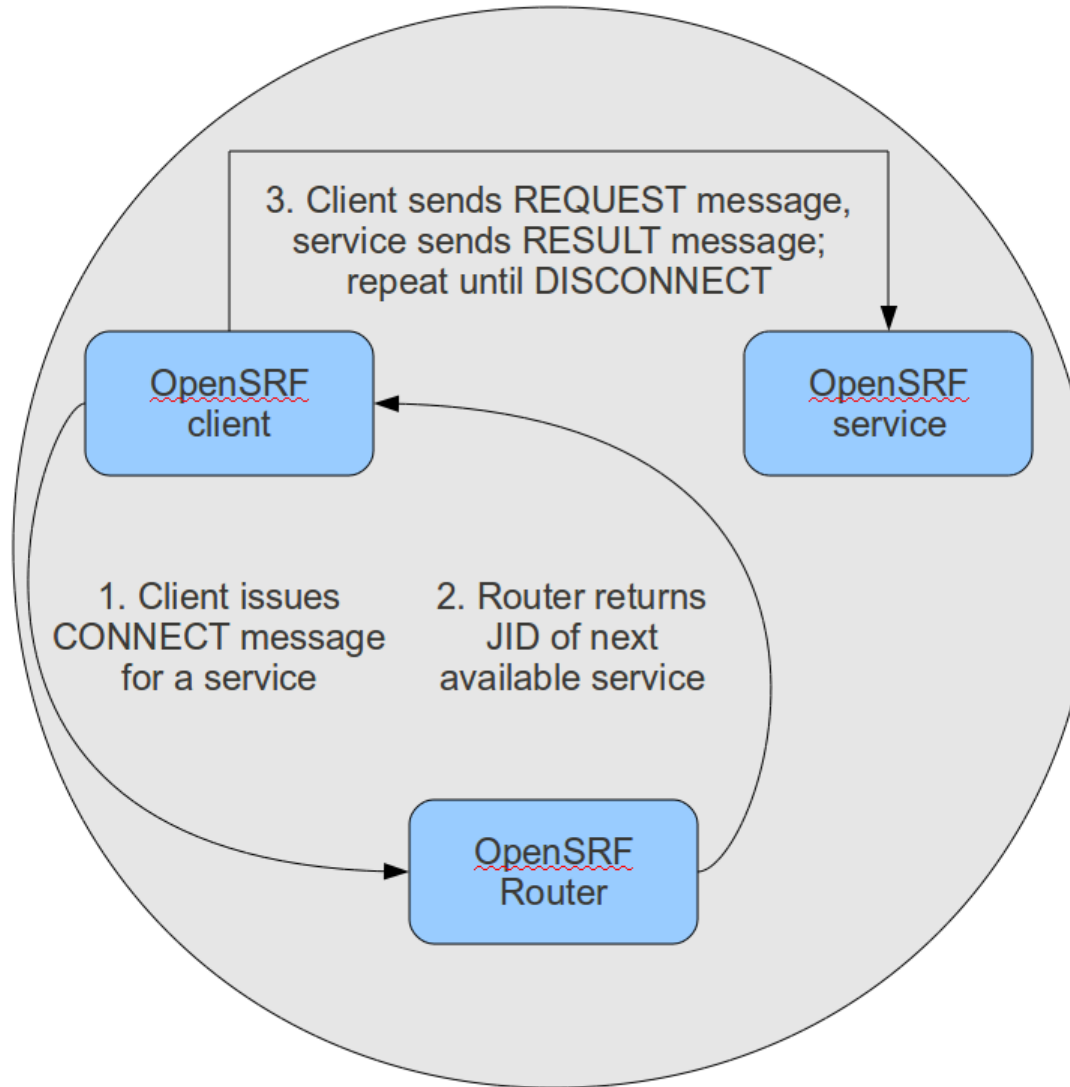
**REQUEST**                      **flow**                      **in**                      **a**                      **stateless**



**connection.**

When an OpenSRF client issues a `CONNECT` message to create a *stateful* connection, the router returns the Jabber ID of the next available service to the client so that the client can issue one or more `REQUEST` message directly to that particular service and the service will return corresponding `RESULT` messages directly to the client. Until the client issues a `DISCONNECT` message, that particular service is only available to the requesting client. Stateful connections are useful for clients that need to make many requests from a particular service, as it avoids the intermediary step of contacting the router for each request, as well as for operations that require a controlled sequence of commands, such as a set of database `INSERT`, `UPDATE`, and `DELETE` statements within a transaction.

**CONNECT, REQUEST, and DISCONNECT flow in a stateful**



connection.

## Enough jibber-jabber: writing an OpenSRF service

Imagine an application architecture in which 10 lines of Perl or Python, using the data types native to each language, are enough to implement a method that can then be deployed and invoked seamlessly across hundreds

of servers. You have just imagined developing with OpenSRF – it is truly that simple. Under the covers, of course, the OpenSRF language bindings do an incredible amount of work on behalf of the developer. An OpenSRF application consists of one or more OpenSRF services that expose methods: for example, the `opensrf.simple-text` [demonstration service](#) exposes the `opensrf.simple-text.split()` and `opensrf.simple-text.reverse()` methods. Each method accepts zero or more arguments and returns zero or one results. The data types supported by OpenSRF arguments and results are typical core language data types: strings, numbers, booleans, arrays, and hashes.

To implement a new OpenSRF service, perform the following steps:

1. Include the base OpenSRF support libraries
2. Write the code for each of your OpenSRF methods as separate procedures
3. Register each method
4. Add the service definition to the OpenSRF configuration files

For example, the following code implements an OpenSRF service. The service includes one method named `opensrf.simple-text.reverse()` that accepts one string as input and returns the reversed version of that string:

```
#!/usr/bin/perl

package OpenSRF::Application::Demo::SimpleText;

use strict;

use OpenSRF::Application;
use parent qw/OpenSRF::Application/;

sub text_reverse {
    my ($self, $conn, $text) = @_;
    my $reversed_text = scalar reverse($text);
    return $reversed_text;
}

__PACKAGE__->register_method(
    method    => 'text_reverse',
    api_name  => 'opensrf.simple-text.reverse'
);
```

Ten lines of code, and we have a complete OpenSRF service that exposes a single method and could be deployed quickly on a cluster of servers to meet your application's ravenous demand for reversed strings! If you're unfamiliar with Perl, the `use OpenSRF::Application; use parent qw/OpenSRF::Application/;` lines tell this package to inherit methods and properties from the `OpenSRF::Application` module. For example, the call to `__PACKAGE__->register_method()` is defined in `OpenSRF::Application` but due to inheritance is available in this package (named by the special Perl symbol `__PACKAGE__` that contains the current package name). The `register_method()` procedure is how we introduce a method to the rest of the OpenSRF world.

## Registering a service with the OpenSRF configuration files

Two files control most of the configuration for OpenSRF:

- `opensrf.xml` contains the configuration for the service itself as well as a list of which application servers in your OpenSRF cluster should start the service

- `opensrf_core.xml` (often referred to as the "bootstrap configuration" file) contains the OpenSRF networking information, including the XMPP server connection credentials for the public and private routers; you only need to touch this for a new service if the new service needs to be accessible via the public router

Begin by defining the service itself in `opensrf.xml`. To register the `opensrf.simple-text` service, add the following section to the `<apps>` element (corresponding to the XPath `/opensrf/default/apps/`):

```
<apps>
  <opensrf.simple-text>                                <!-- ❶ -->
    <keepalive>3</keepalive>                            <!-- ❷ -->
    <stateless>1</stateless>                            <!-- ❸ -->
    <language>perl</language>                          <!-- ❹ -->
    <implementation>OpenSRF::Application::Demo::SimpleText</implementation> <!-- ❺ -->
    <max_requests>100</max_requests>                   <!-- ❻ -->
    <unix_config>
      <max_requests>1000</max_requests>                 <!-- ❼ -->
      <unix_log>opensrf.simple-text_unix.log</unix_log> <!-- ❽ -->
      <unix_sock>opensrf.simple-text_unix.sock</unix_sock> <!-- ❾ -->
      <unix_pid>opensrf.simple-text_unix.pid</unix_pid> <!-- ❿ -->
      <min_children>5</min_children>                   <!-- ⓫ -->
      <max_children>15</max_children>                  <!-- ⓬ -->
      <min_spare_children>2</min_spare_children>       <!-- ⓭ -->
      <max_spare_children>5</max_spare_children>       <!-- ⓮ -->
    </unix_config>
  </opensrf.simple-text>

  <!-- other OpenSRF services registered here... -->
</apps>
```

- ❶ The element name is the name that the OpenSRF control scripts use to refer to the service.
- ❷ Specifies the interval (in seconds) between checks to determine if the service is still running.
- ❸ Specifies whether OpenSRF clients can call methods from this service without first having to create a connection to a specific service backend process for that service. If the value is 1, then the client can simply issue a request and the router will forward the request to an available service and the result will be returned directly to the client.
- ❹ Specifies the programming language in which the service is implemented
- ❺ Specifies the name of the library or module in which the service is implemented
- ❻ (C implementations): Specifies the maximum number of requests a process serves before it is killed and replaced by a new process.
- ❼ (Perl implementations): Specifies the maximum number of requests a process serves before it is killed and replaced by a new process.
- ❽ The name of the log file for language-specific log messages such as syntax warnings.
- ❾ The name of the UNIX socket used for inter-process communications.
- ❿ The name of the PID file for the master process for the service.
- ⓫ The minimum number of child processes that should be running at any given time.
- ⓬ The maximum number of child processes that should be running at any given time.
- ⓭ The minimum number of child processes that should be available to handle incoming requests. If there are fewer than this number of spare child processes, new processes will be spawned.
- ⓮ The minimum number of child processes that should be available to handle incoming requests. If there are more than this number of spare child processes, the extra processes will be killed.

To make the service accessible via the public router, you must also edit the `opensrf_core.xml` configuration file to add the service to the list of publicly accessible services:

### Making a service publicly accessible in `opensrf_core.xml`.

```

<router>
  <!-- This is the public router. On this router, we only register applications
  which should be accessible to everyone on the opensrf network -->
  <name>router</name>
  <domain>public.localhost</domain>
  <services>
    <service>opensrf.math</service>
    <service>opensrf.simple-text</service>
  </services>
</router>

```

- ❶ This section of the `opensrf_core.xml` file is located at XPath `/config/opensrf/routers/`.
- ❷ `public.localhost` is the canonical public router domain in the OpenSRF installation instructions.
- ❸ Each `<service>` element contained in the `<services>` element offers their services via the public router as well as the private router.

Once you have defined the new service, you must restart the OpenSRF Router to retrieve the new configuration and start or restart the service itself.

## Calling an OpenSRF method

OpenSRF clients in any supported language can invoke OpenSRF services in any supported language. So let's see a few examples of how we can call our fancy new `opensrf.simple-text.reverse()` method:

### Calling OpenSRF methods from the `srfsh` client

`srfsh` is a command-line tool installed with OpenSRF that you can use to call OpenSRF methods. To call an OpenSRF method, issue the `request` command and pass the OpenSRF service and method name as the first two arguments; then pass a list of JSON objects as the arguments to the method being invoked.

The following example calls the `opensrf.simple-text.reverse` method of the `opensrf.simple-text` OpenSRF service, passing the string `"foobar"` as the only method argument:

```

$ srfsh
srfsh # request opensrf.simple-text opensrf.simple-text.reverse "foobar"

Received Data: "raboof"

-----
Request Completed Successfully
Request Time in seconds: 0.016718
-----

```

### Getting documentation for OpenSRF methods from the `srfsh` client

The `srfsh` client also gives you command-line access to retrieving metadata about OpenSRF services and methods. For a given OpenSRF method, for example, you can retrieve information such as the minimum number of required arguments, the data type and a description of each argument, the package or library in which the method is implemented, and a description of the method. To retrieve the documentation for an `opensrf` method from `srfsh`, issue the `introspect` command, followed by the name of the OpenSRF service and (optionally) the name of the OpenSRF method. If you do not pass a method name to the `introspect` command, `srfsh` lists all of the methods offered by the service. If you pass a partial method name, `srfsh` lists all of the methods that match that portion of the method name.





The quality and availability of the descriptive information for each method depends on the developer to register the method with complete and accurate information. The quality varies across the set of OpenSRF and Evergreen APIs, although some effort is being put towards improving the state of the internal documentation.

```
srfsh# introspect opensrf.simple-text "opensrf.simple-text.reverse"
--> opensrf.simple-text

Received Data: {
  "__c": "opensrf.simple-text",
  "__p": {
    "api_level": 1,
    "stream": 0, \ # ❶
    "object_hint": "OpenSRF_Application_Demo_SimpleText",
    "remote": 0,
    "package": "OpenSRF::Application::Demo::SimpleText", \ # ❷
    "api_name": "opensrf.simple-text.reverse", \ # ❸
    "server_class": "opensrf.simple-text",
    "signature": { \ # ❹
      "params": [ \ # ❺
        {
          "desc": "The string to reverse",
          "name": "text",
          "type": "string"
        }
      ],
      "desc": "Returns the input string in reverse order\n", \ # ❻
      "return": { \ # ❼
        "desc": "Returns the input string in reverse order",
        "type": "string"
      }
    },
    "method": "text_reverse", \ # ❸
    "argc": 1 \ # ❾
  }
}
```

- ❶ `stream` denotes whether the method supports streaming responses or not.
- ❷ `package` identifies which package or library implements the method.
- ❸ `api_name` identifies the name of the OpenSRF method.
- ❹ `signature` is a hash that describes the parameters for the method.
- ❺ `params` is an array of hashes describing each parameter in the method; each parameter has a description (`desc`), name (`name`), and type (`type`).
- ❻ `desc` is a string that describes the method itself.
- ❼ `return` is a hash that describes the return value for the method; it contains a description of the return value (`desc`) and the type of the returned value (`type`).
- ❸ `method` identifies the name of the function or method in the source implementation.
- ❾ `argc` is an integer describing the minimum number of arguments that must be passed to this method.

## Calling OpenSRF methods from Perl applications

To call an OpenSRF method from Perl, you must connect to the OpenSRF service, issue the request to the method, and then retrieve the results.



```

#!/usr/bin/perl
use strict;
use OpenSRF::AppSession;
use OpenSRF::System;

OpenSRF::System->bootstrap_client(config_file => '/openils/conf/opensrf_core.xml'); # ❶

my $session = OpenSRF::AppSession->create("opensrf.simple-text"); # ❷

print "substring: Accepts a string and a number as input, returns a string\n";
my $result = $session->request("opensrf.simple-text.substring", "foobar", 3); # ❸
my $request = $result->gather(); # ❹
print "Substring: $request\n\n";

print "split: Accepts two strings as input, returns an array of strings\n";
$request = $session->request("opensrf.simple-text.split", "This is a test", " "); # ❺
my $output = "Split: [";
my $element;
while ($element = $request->recv()) { # ❻
    $output .= $element->content . ", "; # ❼
}
$output =~ s/, $/]/;
print $output . "\n\n";

print "statistics: Accepts an array of strings as input, returns a hash\n";
my @many_strings = [
    "First I think I'll have breakfast",
    "Then I think that lunch would be nice",
    "And then seventy desserts to finish off the day"
];

$result = $session->request("opensrf.simple-text.statistics", @many_strings); # ❽
$request = $result->gather(); # ❾
print "Length: " . $result->{'length'} . "\n";
print "Word count: " . $result->{'word_count'} . "\n";

$session->disconnect(); # ❿

```

- ❶ The `OpenSRF::System->bootstrap_client()` method reads the OpenSRF configuration information from the indicated file and creates an XMPP client connection based on that information.
- ❷ The `OpenSRF::AppSession->create()` method accepts one argument - the name of the OpenSRF service to which you want to want to make one or more requests - and returns an object prepared to use the client connection to make those requests.
- ❸ The `OpenSRF::AppSession->request()` method accepts a minimum of one argument - the name of the OpenSRF method to which you want to make a request - followed by zero or more arguments to pass to the OpenSRF method as input values. This example passes a string and an integer to the `opensrf.simple-text.substring` method defined by the `opensrf.simple-text` OpenSRF service.
- ❹ The `gather()` method, called on the result object returned by the `request()` method, iterates over all of the possible results from the result object and returns a single variable.
- ❺ This `request()` call passes two strings to the `opensrf.simple-text.split` method defined by the `opensrf.simple-text` OpenSRF service and returns (via `gather()`) a reference to an array of results.
- ❻ The `opensrf.simple-text.split()` method is a streaming method that returns an array of results with one element per `recv()` call on the result object. We could use the `gather()` method to retrieve all of the results in a single array reference, but instead we simply iterate over the result variable until there are no more results to retrieve.
- ❼ While the `gather()` convenience method returns only the content of the complete set of results for a given request, the `recv()` method returns an OpenSRF result object with `status`, `statusCode`, and `content` fields as we saw in [the HTTP results example](#).

- ⑧ This `request()` call passes an array to the `opensrf.simple-text.statistics` method defined by the `opensrf.simple-text` OpenSRF service.
- ⑨ The result object returns a hash reference via `gather()`. The hash contains the `length` and `word_count` keys we defined in the method.
- ⑩ The `OpenSRF::AppSession->disconnect()` method closes the XMPP client connection and cleans up resources associated with the session.

## Accepting and returning more interesting data types

Of course, the example of accepting a single string and returning a single string is not very interesting. In real life, our applications tend to pass around multiple arguments, including arrays and hashes. Fortunately, OpenSRF makes that easy to deal with; in Perl, for example, returning a reference to the data type does the right thing. In the following example of a method that returns a list, we accept two arguments of type string: the string to be split, and the delimiter that should be used to split the string.

### Text splitting method - streaming mode.

```
sub text_split {
    my $self = shift;
    my $conn = shift;
    my $text = shift;
    my $delimiter = shift || ' ';

    my @split_text = split $delimiter, $text;
    return \@split_text;
}

__PACKAGE__->register_method(
    method => 'text_split',
    api_name => 'opensrf.simple-text.split'
);
```

We simply return a reference to the list, and OpenSRF does the rest of the work for us to convert the data into the language-independent format that is then returned to the caller. As a caller of a given method, you must rely on the documentation used to register to determine the data structures - if the developer has added the appropriate documentation.

## Accepting and returning Evergreen objects

OpenSRF is agnostic about objects; its role is to pass JSON back and forth between OpenSRF clients and services, and it allows the specific clients and services to define their own semantics for the JSON structures. On top of that infrastructure, Evergreen offers the fieldmapper: an object-relational mapper that provides a complete definition of all objects, their properties, their relationships to other objects, the permissions required to create, read, update, or delete objects of that type, and the database table or view on which they are based.

The Evergreen fieldmapper offers a great deal of convenience for working with complex system objects beyond the basic mapping of classes to database schemas. Although the result is passed over the wire as a JSON object containing the indicated fields, fieldmapper-aware clients then turn those JSON objects into native objects with setter / getter methods for each field.

All of this metadata about Evergreen objects is defined in the fieldmapper configuration file (`/openils/conf/fm_IDL.xml`), and access to these classes is provided by the `open-ils.cstore`, `open-ils.pcrud`, and `open-ils.reporter-store` OpenSRF services which parse the fieldmapper configuration file and dynamically register OpenSRF methods for creating, reading, updating, and deleting all of the defined classes.

### Example fieldmapper class definition for "Open User Summary".

```

<class id="mous" controller="open-ils.cstore open-ils.pcrud"
  oils_obj:fieldmapper="money::open_user_summary"
  oils_persist:tablename="money.open_usr_summary"
  reporter:label="Open User Summary">                                <!-- ❶ -->
  <fields oils_persist:primary="usr" oils_persist:sequence="">      <!-- ❷ -->
    <field name="balance_owed" reporter:datatype="money" />        <!-- ❸ -->
    <field name="total_owed" reporter:datatype="money" />
    <field name="total_paid" reporter:datatype="money" />
    <field name="usr" reporter:datatype="link"/>
  </fields>
  <links>
    <link field="usr" reltype="has_a" key="id" map="" class="au"/>    <!-- ❹ -->
  </links>
  <permacrud xmlns="http://open-ils.org/spec/opensrf/IDL/permacrud/v1"> <!-- ❺ -->
    <actions>
      <retrieve permission="VIEW_USER">                               <!-- ❻ -->
        <context link="usr" field="home_ou"/>                         <!-- ❼ -->
      </retrieve>
    </actions>
  </permacrud>
</class>

```

❶ The `<class>` element defines the class:

- The `id` attribute defines the *class hint* that identifies the class both elsewhere in the fieldmapper configuration file, such as in the value of the `field` attribute of the `<link>` element, and in the JSON object itself when it is instantiated. For example, an "Open User Summary" JSON object would have the top level property of `"__c" : "mous"`.
- The `controller` attribute identifies the services that have direct access to this class. If `open-ils.pcrud` is not listed, for example, then there is no means to directly access members of this class through a public service.
- The `oils_obj:fieldmapper` attribute defines the name of the Perl fieldmapper class that will be dynamically generated to provide setter and getter methods for instances of the class.
- The `oils_persist:tablename` attribute identifies the schema name and table name of the database table that stores the data that represents the instances of this class. In this case, the schema is `money` and the table is `open_usr_summary`.
- The `reporter:label` attribute defines a human-readable name for the class used in the reporting interface to identify the class. These names are defined in English in the fieldmapper configuration file; however, they are extracted so that they can be translated and served in the user's language of choice.

❷ The `<fields>` element lists all of the fields that belong to the object.

- The `oils_persist:primary` attribute identifies the field that acts as the primary key for the object; in this case, the field with the name `usr`.
- The `oils_persist:sequence` attribute identifies the sequence object (if any) in this database provides values for new instances of this class. In this case, the primary key is defined by a field that is linked to a different table, so no sequence is used to populate these instances.

❸ Each `<field>` element defines a single field with the following attributes:

- The `name` attribute identifies the column name of the field in the underlying database table as well as providing a name for the setter / getter method that can be invoked in the JSON or native version of the object.

- The `reporter:datatype` attribute defines how the reporter should treat the contents of the field for the purposes of querying and display.
- The `reporter:label` attribute can be used to provide a human-readable name for each field; without it, the reporter falls back to the value of the `name` attribute.
- ④ The `<links>` element contains a set of zero or more `<link>` elements, each of which defines a relationship between the class being described and another class.
  - The `field` attribute identifies the field named in this class that links to the external class.
  - The `reltype` attribute identifies the kind of relationship between the classes; in the case of `has_a`, each value in the `usr` field is guaranteed to have a corresponding value in the external class.
  - The `key` attribute identifies the name of the field in the external class to which this field links.
  - The rarely-used `map` attribute identifies a second class to which the external class links; it enables this field to define a direct relationship to an external class with one degree of separation, to avoid having to retrieve all of the linked members of an intermediate class just to retrieve the instances from the actual desired target class.
  - The `class` attribute identifies the external class to which this field links.
- ⑤ The `<permacrud>` element defines the permissions that must have been granted to a user to operate on instances of this class.
- ⑥ The `<retrieve>` element is one of four possible children of the `<actions>` element that define the permissions required for each action: create, retrieve, update, and delete.
  - The `permission` attribute identifies the name of the permission that must have been granted to the user to perform the action.
  - The `contextfield` attribute, if it exists, defines the field in this class that identifies the library within the system for which the user must have privileges to work. If a user has been granted a given permission, but has not been granted privileges to work at a given library, they can not perform the action at that library.
- ⑦ The rarely-used `<context>` element identifies a linked field (`link` attribute) in this class which links to an external class that holds the field (`field` attribute) that identifies the library within the system for which the user must have privileges to work.

When you retrieve an instance of a class, you can ask for the result to *flesh* some or all of the linked fields of that class, so that the linked instances are returned embedded directly in your requested instance. In that same request you can ask for the fleshed instances to in turn have their linked fields fleshed. By bundling all of this into a single request and result sequence, you can avoid the network overhead of requiring the client to request the base object, then request each linked object in turn.

You can also iterate over a collection of instances and set the automatically generated `isdeleted`, `isupdated`, or `isnew` properties to indicate that the given instance has been deleted, updated, or created respectively. Evergreen can then act in batch mode over the collection to perform the requested actions on any of the instances that have been flagged for action.

## Returning streaming results

In the previous implementation of the `opensrf.simple-text.split` method, we returned a reference to the complete array of results. For small values being delivered over the network, this is perfectly acceptable, but for

large sets of values this can pose a number of problems for the requesting client. Consider a service that returns a set of bibliographic records in response to a query like "all records edited in the past month"; if the underlying database is relatively active, that could result in thousands of records being returned as a single network request. The client would be forced to block until all of the results are returned, likely resulting in a significant delay, and depending on the implementation, correspondingly large amounts of memory might be consumed as all of the results are read from the network in a single block.

OpenSRF offers a solution to this problem. If the method returns results that can be divided into separate meaningful units, you can register the OpenSRF method as a streaming method and enable the client to loop over the results one unit at a time until the method returns no further results. In addition to registering the method with the provided name, OpenSRF also registers an additional method with `.atomic` appended to the method name. The `.atomic` variant gathers all of the results into a single block to return to the client, giving the caller the ability to choose either streaming or atomic results from a single method definition.

In the following example, the text splitting method has been reimplemented to support streaming; very few changes are required:

### Text splitting method - streaming mode.

```
sub text_split {
    my $self = shift;
    my $conn = shift;
    my $text = shift;
    my $delimiter = shift || ' ';

    my @split_text = split $delimiter, $text;
    foreach my $string (@split_text) { # ❶
        $conn->respond($string);
    }
    return undef;
}

__PACKAGE__->register_method(
    method => 'text_split',
    api_name => 'opensrf.simple-text.split',
    stream => 1 # ❷
);
```

- ❶ Rather than returning a reference to the array, a streaming method loops over the contents of the array and invokes the `respond()` method of the connection object on each element of the array.
- ❷ Registering the method as a streaming method instructs OpenSRF to also register an atomic variant (`opensrf.simple-text.split.atomic`).

## Error! Warning! Info! Debug!

As hard as it may be to believe, it is true: applications sometimes do not behave in the expected manner, particularly when they are still under development. The server language bindings for OpenSRF include integrated support for logging messages at the levels of ERROR, WARNING, INFO, DEBUG, and the extremely verbose INTERNAL to either a local file or to a syslogger service. The destination of the log files, and the level of verbosity to be logged, is set in the `opensrf_core.xml` configuration file. To add logging to our Perl example, we just have to add the `OpenSRF::Utils::Logger` package to our list of used Perl modules, then invoke the logger at the desired logging level.

You can include many calls to the OpenSRF logger; only those that are higher than your configured logging level will actually hit the log. The following example exercises all of the available logging levels in OpenSRF:

```

use OpenSRF::Utils::Logger;
my $logger = OpenSRF::Utils::Logger;
# some code in some function
{
    $logger->error("Hmm, something bad DEFINITELY happened!");
    $logger->warn("Hmm, something bad might have happened.");
    $logger->info("Something happened.");
    $logger->debug("Something happened; here are some more details.");
    $logger->internal("Something happened; here are all the gory details.")
}

```

If you call the mythical OpenSRF method containing the preceding OpenSRF logger statements on a system running at the default logging level of INFO, you will only see the INFO, WARN, and ERR messages, as follows:

### Results of logging calls at the default level of INFO.

```

[2010-03-17 22:27:30] opensrf.simple-text [ERR :5681:SimpleText.pm:277:] Hmm, something bad DEFINITELY happened!
[2010-03-17 22:27:30] opensrf.simple-text [WARN:5681:SimpleText.pm:278:] Hmm, something bad might have happened.
[2010-03-17 22:27:30] opensrf.simple-text [INFO:5681:SimpleText.pm:279:] Something happened.

```

If you then increase the the logging level to INTERNAL (5), the logs will contain much more information, as follows:

### Results of logging calls at the default level of INTERNAL.

```

[2010-03-17 22:48:11] opensrf.simple-text [ERR :5934:SimpleText.pm:277:] Hmm, something bad DEFINITELY happened!
[2010-03-17 22:48:11] opensrf.simple-text [WARN:5934:SimpleText.pm:278:] Hmm, something bad might have happened.
[2010-03-17 22:48:11] opensrf.simple-text [INFO:5934:SimpleText.pm:279:] Something happened.
[2010-03-17 22:48:11] opensrf.simple-text [DEBG:5934:SimpleText.pm:280:] Something happened; here are some more deta
[2010-03-17 22:48:11] opensrf.simple-text [INTL:5934:SimpleText.pm:281:] Something happened; here are all the gory d
[2010-03-17 22:48:11] opensrf.simple-text [ERR :5934:SimpleText.pm:283:] Resolver did not find a cache hit
[2010-03-17 22:48:21] opensrf.simple-text [INTL:5934:Cache.pm:125:] Stored opensrf.simple-text.test_cache.masaa => "1
[2010-03-17 22:48:21] opensrf.simple-text [DEBG:5934:Application.pm:579:] Coderef for [OpenSRF::Application::Demo::S
[2010-03-17 22:48:21] opensrf.simple-text [DEBG:5934:Application.pm:586:] A top level Request object is responding d
[2010-03-17 22:48:21] opensrf.simple-text [DEBG:5934:Application.pm:190:] Method duration for [opensrf.simple-text.t
[2010-03-17 22:48:21] opensrf.simple-text [INTL:5934:AppSession.pm:780:] Calling queue_wait(0)
[2010-03-17 22:48:21] opensrf.simple-text [INTL:5934:AppSession.pm:769:] Resending...0
[2010-03-17 22:48:21] opensrf.simple-text [INTL:5934:AppSession.pm:450:] In send
[2010-03-17 22:48:21] opensrf.simple-text [DEBG:5934:AppSession.pm:506:] AppSession sending RESULT to opensrf@privat
[2010-03-17 22:48:21] opensrf.simple-text [DEBG:5934:AppSession.pm:506:] AppSession sending STATUS to opensrf@privat
...

```

To see everything that is happening in OpenSRF, try leaving your logging level set to INTERNAL for a few minutes - just ensure that you have a lot of free disk space available if you have a moderately busy system!

## Caching results: one secret of scalability

If you have ever used an application that depends on a remote Web service outside of your control-say, if you need to retrieve results from a microblogging service-you know the pain of latency and dependability (or the lack thereof). To improve response time in OpenSRF applications, you can take advantage of the support offered by the `OpenSRF::Utils::Cache` module for communicating with a local instance or cluster of memcache daemons to store and retrieve persistent values.

```

use OpenSRF::Utils::Cache; # ❶
sub test_cache {
    my $self = shift;
    my $conn = shift;
    my $test_key = shift;
    my $cache = OpenSRF::Utils::Cache->new('global'); # ❷
    my $cache_key = "opensrf.simple-text.test_cache.$test_key"; # ❸
    my $result = $cache->get_cache($cache_key) || undef; # ❹
    if ($result) {
        $logger->info("Resolver found a cache hit");
        return $result;
    }
    sleep 10; # ❺
    my $cache_timeout = 300; # ❻
    $cache->put_cache($cache_key, "here", $cache_timeout); # ❼
    return "There was no cache hit.";
}

```

This example:

- ❶ Imports the `OpenSRF::Utils::Cache` module
- ❷ Creates a cache object
- ❸ Creates a unique cache key based on the OpenSRF method name and request input value
- ❹ Checks to see if the cache key already exists; if so, it immediately returns that value
- ❺ If the cache key does not exist, the code sleeps for 10 seconds to simulate a call to a slow remote Web service, or an intensive process
- ❻ Sets a value for the lifetime of the cache key in seconds
- ❼ When the code has retrieved its value, then it can create the cache entry, with the cache key, value to be stored ("here"), and the timeout value in seconds to ensure that we do not return stale data on subsequent calls

## Initializing the service and its children: child labour

When an OpenSRF service is started, it looks for a procedure called `initialize()` to set up any global variables shared by all of the children of the service. The `initialize()` procedure is typically used to retrieve configuration settings from the `opensrf.xml` file.

An OpenSRF service spawns one or more children to actually do the work requested by callers of the service. For every child process an OpenSRF service spawns, the child process clones the parent environment and then each child process runs the `child_init()` process (if any) defined in the OpenSRF service to initialize any child-specific settings.

When the OpenSRF service kills a child process, it invokes the `child_exit()` procedure (if any) to clean up any resources associated with the child process. Similarly, when the OpenSRF service is stopped, it calls the `DESTROY()` procedure to clean up any remaining resources.

## Retrieving configuration settings

The settings for OpenSRF services are maintained in the `opensrf.xml` XML configuration file. The structure of the XML document consists of a root element `<opensrf>` containing two child elements:

- `<default>` contains an `<apps>` element describing all OpenSRF services running on this system — see [the section called “Registering a service with the OpenSRF configuration files”](#) --, as well as any other arbitrary XML descriptions required for global configuration purposes. For example, Evergreen uses this section for email notification and inter-library patron privacy settings.



- `<hosts>` contains one element per host that participates in this OpenSRF system. Each host element must include an `<activeapps>` element that lists all of the services to start on this host when the system starts up. Each host element can optionally override any of the default settings.

OpenSRF includes a service named `opensrf.settings` to provide distributed cached access to the configuration settings with a simple API:

- `opensrf.settings.default_config.get`: accepts zero arguments and returns the complete set of default settings as a JSON document
- `opensrf.settings.host_config.get`: accepts one argument (hostname) and returns the complete set of settings, as customized for that hostname, as a JSON document
- `opensrf.settings.xpath.get`: accepts one argument (an [XPath](#) expression) and returns the portion of the configuration file that matches the expression as a JSON document

For example, to determine whether an Evergreen system uses the opt-in support for sharing patron information between libraries, you could either invoke the `opensrf.settings.default_config.get` method and parse the JSON document to determine the value, or invoke the `opensrf.settings.xpath.get` method with the XPath `/opensrf/default/share/user/opt_in` argument to retrieve the value directly.

In practice, OpenSRF includes convenience libraries in all of its client language bindings to simplify access to configuration values. C offers `osrfConfig.c`, Perl offers `OpenSRF::Utils::SettingsClient`, Java offers `org.opensrf.util.SettingsClient`, and Python offers `osrf.set`. These libraries locally cache the configuration file to avoid network roundtrips for every request and enable the developer to request specific values without having to manually construct XPath expressions.

## Getting under the covers with OpenSRF

Now that you have seen that it truly is easy to create an OpenSRF service, we can take a look at what is going on under the covers to make all of this work for you.

### Get on the messaging bus - safely

One of the core innovations of OpenSRF was to use the Extensible Messaging and Presence Protocol (XMPP, more colloquially known as Jabber) as the messaging bus that ties OpenSRF services together across servers. XMPP is an "XML protocol for near-real-time messaging, presence, and request-response services" (<http://www.ietf.org/rfc/rfc3920.txt>) that OpenSRF relies on to handle most of the complexity of networked communications. OpenSRF achieves a measure of security for its services through the use of public and private XMPP domains; all OpenSRF services automatically register themselves with the private XMPP domain, but only those services that register themselves with the public XMPP domain can be invoked from public OpenSRF clients.

In a minimal OpenSRF deployment, two XMPP users named "router" connect to the XMPP server, with one connected to the private XMPP domain and one connected to the public XMPP domain. Similarly, two XMPP users named "opensrf" connect to the XMPP server via the private and public XMPP domains. When an OpenSRF service is started, it uses the "opensrf" XMPP user to advertise its availability with the corresponding router on that XMPP domain; the XMPP server automatically assigns a Jabber ID (JID) based on the client hostname to each service's listener process and each connected drone process waiting to carry out requests. When an OpenSRF router receives a request to invoke a method on a given service, it connects the requester to the next available listener in the list of registered listeners for that service.



The opensrf and router user names, passwords, and domain names, along with the list of services that should be public, are contained in the `opensrf_core.xml` configuration file.

## Message body format

OpenSRF was an early adopter of JavaScript Object Notation (JSON). While XMPP is an XML protocol, the Evergreen developers recognized that the compactness of the JSON format offered a significant reduction in bandwidth for the volume of messages that would be generated in an application of that size. In addition, the ability of languages such as JavaScript, Perl, and Python to generate native objects with minimal parsing offered an attractive advantage over invoking an XML parser for every message. Instead, the body of the XMPP message is a simple JSON structure. For a simple request, like the following example that simply reverses a string, it looks like a significant overhead: but we get the advantages of locale support and tracing the request from the requester through the listener and responder (drone).

### A request for `opensrf.simple-text.reverse("foobar")`:

```
<message from='router@private.localhost/opensrf.simple-text'
  to='opensrf@private.localhost/opensrf.simple-text_listener_at_localhost_6275'
  router_from='opensrf@private.localhost/_karmic_126678.3719_6288'
  router_to='' router_class='' router_command='' osrf_xid=''
>
<thread>1266781414.366573.12667814146288</thread>
<body>
[
  { "__c": "osrfMessage", "__p":
    { "threadTrace": "1", "locale": "en-US", "type": "REQUEST", "payload":
      { "__c": "osrfMethod", "__p":
        { "method": "opensrf.simple-text.reverse", "params": [ "foobar" ] }
      }
    }
  }
]
</body>
</message>
```

### A response from `opensrf.simple-text.reverse("foobar")`.

```
<message from='opensrf@private.localhost/opensrf.simple-text_drone_at_localhost_6285'
  to='opensrf@private.localhost/_karmic_126678.3719_6288'
  router_command='' router_class='' osrf_xid=''
>
<thread>1266781414.366573.12667814146288</thread>
<body>
[
  { "__c": "osrfMessage", "__p":
    { "threadTrace": "1", "payload":
      { "__c": "osrfResult", "__p":
        { "status": "OK", "content": "raboof", "statusCode": 200 }
      } , "type": "RESULT", "locale": "en-US" }
    } ,
  { "__c": "osrfMessage", "__p":
    { "threadTrace": "1", "payload":
      { "__c": "osrfConnectStatus", "__p":
        { "status": "Request Complete", "statusCode": 205 }
      } , "type": "STATUS", "locale": "en-US" }
    }
  }
]
</body>
</message>
```

The content of the `<body>` element of the OpenSRF request and result should look familiar; they match the structure of the [OpenSRF over HTTP examples](#) that we previously dissected.

# Registering OpenSRF methods in depth

Let's explore the call to `__PACKAGE__->register_method()`; most of the elements of the hash are optional, and for the sake of brevity we omitted them in the previous example. As we have seen in the results of the [introspection call](#), a verbose registration method call is recommended to better enable the internal documentation. So, for the sake of completeness here, is the set of elements that you should pass to `__PACKAGE__->register_method()`:

- `method`: the name of the procedure in this module that is being registered as an OpenSRF method
- `api_name`: the invocable name of the OpenSRF method; by convention, the OpenSRF service name is used as the prefix
- `api_level`: (optional) can be used for versioning the methods to allow the use of a deprecated API, but in practical use is always 1
- `argc`: (optional) the minimal number of arguments that the method expects
- `stream`: (optional) if this argument is set to any value, then the method supports returning multiple values from a single call to subsequent requests, and OpenSRF automatically creates a corresponding method with ".atomic" appended to its name that returns the complete set of results in a single request; streaming methods are useful if you are returning hundreds of records and want to act on the results as they return
- `signature`: (optional) a hash describing the method's purpose, arguments, and return value
  - `desc`: a description of the method's purpose
  - `params`: an array of hashes, each of which describes one of the method arguments
    - `name`: the name of the argument
    - `desc`: a description of the argument's purpose
    - `type`: the data type of the argument: for example, string, integer, boolean, number, array, or hash
  - `return`: a hash describing the return value of the method
    - `desc`: a description of the return value
    - `type`: the data type of the return value: for example, string, integer, boolean, number, array, or hash

## Evergreen-specific OpenSRF services

Evergreen is currently the primary showcase for the use of OpenSRF as an application architecture. Evergreen 2.6.0 includes the following set of OpenSRF services:

- `open-ils.acq`: Supports tasks for managing the acquisitions process
- `open-ils.actor`: Supports common tasks for working with user accounts and libraries.
- `open-ils.auth`: Supports authentication of Evergreen users.

- `open-ils.auth_proxy`: Support using external services such as LDAP directories to authenticate Evergreen users
- `open-ils.cat`: Supports common cataloging tasks, such as creating, modifying, and merging bibliographic and authority records.
- `open-ils.circ`: Supports circulation tasks such as checking out items and calculating due dates.
- `open-ils.collections`: Supports tasks to assist collections services for contacting users with outstanding fines above a certain threshold.
- `open-ils.cstore`: Supports unrestricted access to Evergreen fieldmapper objects. This is a private service.
- `open-ils.fielder`
- `open-ils.justintime`: Support tasks for determining if an action/trigger event is still valid
- `open-ils.pcrud`: Supports access to Evergreen fieldmapper objects, restricted by staff user permissions. This is a private service. objects.
- `open-ils.penalty`: Supports the calculation of penalties for users, such as being blocked from further borrowing, for conditions such as having too many items checked out or too many unpaid fines.
- `open-ils.permacrud`: Supports access to Evergreen fieldmapper objects, restricted by staff user permissions. This is a private service.
- `open-ils.reporter`: Supports the creation and scheduling of reports.
- `open-ils.reporter-store`: Supports access to Evergreen fieldmapper objects for the reporting service. This is a private service.
- `open-ils.resolver` Support tasks for integrating with an OpenURL resolver.
- `open-ils.search`: Supports searching across bibliographic records, authority records, serial records, Z39.50 sources, and ZIP codes.
- `open-ils.serial`: Support tasks for serials management
- `open-ils.storage`: A deprecated method of providing access to Evergreen fieldmapper objects. Implemented in Perl, this service has largely been replaced by the much faster C-based `open-ils.cstore` service.
- `open-ils.supercat`: Supports transforms of MARC records into other formats, such as MODS, as well as providing Atom and RSS feeds and SRU access.
- `open-ils.trigger`: Supports event-based triggers for actions such as overdue and holds available notification emails.
- `open-ils.url_verify`: Support tasks for validating URLs
- `open-ils.vandelay`: Supports the import and export of batches of bibliographic and authority records.

- `opensrf.settings`: Supports communicating `opensrf.xml` settings to other services.

Of some interest is that the `open-ils.reporter-store` and `open-ils.cstore` services have identical implementations. Surfacing them as separate services enables a deployer of Evergreen to ensure that the reporting service does not interfere with the performance-critical `open-ils.cstore` service. One can also direct the reporting service to a read-only database replica to, again, avoid interference with `open-ils.cstore` which must write to the master database.

There are only a few significant services that are not built on OpenSRF, such as the SIP and Z39.50 servers. These services implement different protocols and build on existing daemon architectures (Simple2ZOOM for Z39.50), but still rely on the other OpenSRF services to provide access to the Evergreen data. The non-OpenSRF services are reasonably self-contained and can be deployed on different servers to deliver the same sort of deployment flexibility as OpenSRF services, but have the disadvantage of not being integrated into the same configuration and control infrastructure as the OpenSRF services.

## Evergreen after one year: reflections on OpenSRF

[Project Conifer](#) has been live on Evergreen for just over a year now, and as one of the primary technologists I have had to work closely with the OpenSRF infrastructure during that time. As such, I am in a position to identify some of the strengths and weaknesses of OpenSRF based on our experiences.

### Strengths of OpenSRF

As a service infrastructure, OpenSRF has been remarkably reliable. We initially deployed Evergreen on an unreleased version of both OpenSRF and Evergreen due to our requirements for some functionality that had not been delivered in a stable release at that point in time, and despite this risky move we suffered very little unplanned downtime in the opening months. On July 27, 2009 we moved to a newer (but still unreleased) version of the OpenSRF and Evergreen code, and began formally tracking our downtime. Since then, we have achieved more than 99.9% availability - including scheduled downtime for maintenance. This compares quite favourably to the maximum of 75% availability that we were capable of achieving on our previous library system due to the nightly downtime that was required for our backup process. The OpenSRF "maximum request" configuration parameter for each service that kills off drone processes after they have served a given number of requests provides a nice failsafe for processes that might otherwise suffer from a memory leak or hung process. It also helps that when we need to apply an update to a Perl service that is running on multiple servers, we can apply the updated code, then restart the service on one server at a time to avoid any downtime.

As promised by the OpenSRF infrastructure, we have also been able to tune our cluster of servers to provide better performance. For example, we were able to change the number of maximum concurrent processes for our database services when we noticed that we were seeing a performance bottleneck with database access. Making a configuration change go live simply requires you to restart the `opensrf.setting` service to pick up the configuration change, then restart the affected service on each of your servers. We were also able to turn off some of the less-used OpenSRF services, such as `open-ils.collections`, on one of our servers to devote more resources on that server to the more frequently used services and other performance-critical processes such as Apache.

The support for logging and caching that is built into OpenSRF has been particularly helpful with the development of a custom service for SFX holdings integration into our catalogue. Once I understood how OpenSRF works, most of the effort required to build that SFX integration service was spent on figuring out how to properly invoke the SFX API to display human-readable holdings. Adding a new OpenSRF service and registering several new methods

for the service was relatively easy. The support for directing log messages to syslog in OpenSRF has also been a boon for both development and debugging when problems arise in a cluster of five servers; we direct all of our log messages to a single server where we can inspect the complete set of messages for the entire cluster in context, rather than trying to piece them together across servers.

## Weaknesses

The primary weakness of OpenSRF is the lack of either formal or informal documentation for OpenSRF. There are many frequently asked questions on the Evergreen mailing lists and IRC channel that indicate that some of the people running Evergreen or trying to run Evergreen have not been able to find documentation to help them understand, even at a high level, how the OpenSRF Router and services work with XMPP and the Apache Web server to provide a working Evergreen system. Also, over the past few years several developers have indicated an interest in developing Ruby and PHP bindings for OpenSRF, but the efforts so far have resulted in no working code. Without a formal specification, clearly annotated examples, and unit tests for the major OpenSRF communication use cases that could be ported to the new language as a base set of expectations for a working binding, the hurdles for a developer new to OpenSRF are significant. As a result, Evergreen integration efforts with popular frameworks like Drupal, Blacklight, and VuFind result in the best practical option for a developer with limited time — database-level integration — which has the unfortunate side effect of being much more likely to break after an upgrade.

In conjunction with the lack of documentation that makes it hard to get started with the framework, a disincentive for new developers to contribute to OpenSRF itself is the lack of integrated unit tests. For a developer to contribute a significant, non-obvious patch to OpenSRF, they need to manually run through various (undocumented, again) use cases to try and ensure that the patch introduced no unanticipated side effects. The same problems hold for Evergreen itself, although the [Constrictor](#) stress-testing framework offers a way of performing some automated system testing and performance testing.

These weaknesses could be relatively easily overcome with the effort through contributions from people with the right skill sets. This article arguably offers a small set of clear examples at both the networking and application layer of OpenSRF. A technical writer who understands OpenSRF could contribute a formal specification to the project. With a formal specification at their disposal, a quality assurance expert could create an automated test harness and a basic set of unit tests that could be incrementally extended to provide more coverage over time. If one or more continual integration environments are set up to track the various OpenSRF branches of interest, then the OpenSRF community would have immediate feedback on build quality. Once a unit testing framework is in place, more developers might be willing to develop and contribute patches as they could sanity check their own code without an intense effort before exposing it to their peers.

## Summary

In this article, I attempted to provide both a high-level and detailed overview of how OpenSRF works, how to build and deploy new OpenSRF services, how to make requests to OpenSRF method from OpenSRF clients or over HTTP, and why you should consider it a possible infrastructure for building your next high-performance system that requires the capability to scale out. In addition, I surveyed the Evergreen services built on OpenSRF and reflected on the strengths and weaknesses of the platform based on the experiences of Project Conifer after a year in production, with some thoughts about areas where the right application of skills could make a significant difference to the Evergreen and OpenSRF projects.

## Appendix: Python client

Following is a Python client that makes the same OpenSRF calls as the Perl client:

```

#!/usr/bin/env python
"""OpenSRF client example in Python"""
import osrf.system
import osrf.ses

def osrf_substring(session, text, sub):
    """substring: Accepts a string and a number as input, returns a string"""
    request = session.request('opensrf.simple-text.substring', text, sub)

    # Retrieve the response from the method
    # The timeout parameter is optional
    response = request.recv(timeout=2)

    request.cleanup()
    # The results are accessible via content()
    return response.content()

def osrf_split(session, text, delim):
    """split: Accepts two strings as input, returns an array of strings"""
    request = session.request('opensrf.simple-text.split', text, delim)
    response = request.recv()
    request.cleanup()
    return response.content()

def osrf_statistics(session, strings):
    """statistics: Accepts an array of strings as input, returns a hash"""
    request = session.request('opensrf.simple-text.statistics', strings)
    response = request.recv()
    request.cleanup()
    return response.content()

if __name__ == "__main__":
    file = '/openils/conf/opensrf_core.xml'

    # Pull connection settings from <config><opensrf> section of opensrf_core.xml
    osrf.system.System.connect(config_file=file, config_context='config.opensrf')

    # Set up a connection to the opensrf.settings service
    session = osrf.ses.ClientSession('opensrf.simple-text')

    result = osrf_substring(session, "foobar", 3)
    print(result)
    print

    result = osrf_split(session, "This is a test", " ")
    print("Received %d elements: [" % len(result)),
    print(', '.join(result)), ')'

    many_strings = (
        "First I think I'll have breakfast",
        "Then I think that lunch would be nice",
        "And then seventy desserts to finish off the day"
    )
    result = osrf_statistics(session, many_strings)
    print("Length: %d" % result["length"])
    print("Word count: %d" % result["word_count"])

    # Cleanup connection resources
    session.cleanup()

```



Python's `dnspython` module refuses to read `/etc/resolv.conf`, so to access hostnames that are not served up via DNS, such as the extremely common case of `localhost`, you may need to install a package like `dnsmasq` to act as a local DNS server for those hostnames.

# Chapter 127. Updating translations using Launchpad

This document describes how to update the translations in an Evergreen branch by pulling them from Launchpad, as well as update the files to be translated in Launchpad by updating the POT files in the Evergreen master branch.

## Prerequisites

You must install all of the Python prerequisites required for building translations, per <http://evergreen-ils.org/dokuwiki/doku.php?id=evergreen-admin:customizations:i18n>

- [polib](#)
- [translate-toolkit](#)
- [levenshtein](#)
- [setuptools](#)
- [simplejson](#)
- [lxml](#)

## Updating the translations

1. Check out the latest translations from Launchpad by branching the Bazaar repository:

```
bzr branch lp:~denials/evergreen/translation-export
```

This creates a directory called "translation-export".

2. Ensure you have an updated Evergreen release branch.
3. Run the `build/i18n/scripts/update_pofiles` script to copy the translations into the right place and avoid any updates that are purely metadata (dates generated, etc).
4. Commit the lot! And backport to whatever release branches need the updates.
5. Build updated POT files:

```
cd build/i18n
make newpot
```

This will extract all of the strings from the latest version of the files in Evergreen.

6. (This part needs automation): Then, via the magic of `git diff` and `git add`, go through all of the changed files and determine which ones actually have string changes. Recommended approach is to re-run `git diff` after each `git add`.
7. Commit the updated POT files and backport to the pertinent release branches.

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# Appendix C. Admonitions

- Note



- warning



- caution



- tip



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