Evergreen is an open source Integrated Library System (ILS) that powers a complex library database, staff application, and user catalog. The Evergreen Project celebrated its 10th release anniversary in 2016 and continued to gain adopters as the go-to ILS for library consortia, but also drew in new users from a variety of non-consortia public, academic, and special libraries around the globe.

Evergreen was originally developed at the Georgia Public Library System through a collaboration of librarians and in-house software developers. The fruits of that partnership are what set the bar for community engagement and has allowed Evergreen to rise to the top of the market so quickly. Evergreen’s incredible user satisfaction and loyalty continues to be driven by the Evergreen Project’s strong user base and engaged developer community.

At the Evergreen Project, we believe in user centered design built openly and in collaboration by our community.

Grace Dunbar
Chair Evergreen Oversight Board
Vice President, Equinox
Releases & Features

Evergreen 2.10
Released March 17th, 2016
Release Manager: Galen Charlton

Evergreen 2.11
Released September 21st, 2016
Release Manager: Mike Rylander
Build Master: Dan Wells

Maintenance
In addition to new feature releases, 19 maintenance releases were released for 2.9 - 2.11 bringing about security fixes, crushed bugs and joy to us all.

Evergreen 2.10
Number of Distinct New Features: 42
Highlights:
• Improvements to patron privacy and security, including additional layers of encryption to user passwords, a more secure, opt-in reading history with the added ability to remove individual titles, and the removal of key data from the storage of credit card transactions.
• Acquisitions improvements, including the addition of a Paid label and a change to only mark line items as paid when an invoice is closed.
• A new stock ‘welcome’ notice that can automatically be sent to patrons when they register for a library card.
• A new patron editor for the web client.

Evergreen 2.11
Number of Distinct New Features: 20
Highlights:
• A popularity boost for ranking search results.
• A new Canceled Transit status that is applied when transits are aborted outside the home library.
• The ability to email checkout receipts from the web client.
• Design improvements to several My Account screens.

We would like to recognize these first time contributors in 2016:

MARThA DRiSCOLL, NOBLE
CODEY KOLASINSKI, C/W MARS
JiM KEEnAN, C/W MARS
KYLE HUCKiNS, CATALYST DEVWORKS
BiLLy HORn, CATALYST DEVWORKS
366 Days of Code (yes, it was a leap year)

- 2,590 git commits
- 229 fixes released
- 2,320 bugs closed
- 286,947 new lines of code committed
- 176,913 deleted lines of code committed

New Bugs:
- 1 Critical
- 15 High
- 69 Medium
- 31 Low
- 87 Wishlist
- 196 Undecided
Contributors

Contributors are the lifeblood of our community, whether they are working for a library, a vendor or committing their own time. Software neither writes nor tests itself, and documentation must be coaxed into existence. With more than 67 people contributing nearly 2,600 comments to Launchpad, 46 git authors contributing 897 commits, and testers providing more than 1,300 sign offs, Evergreen is a true community effort.

**TOP 5 GIT AUTHORS**
- Galen Charlton (Equinox)
- Bill Erickson (King County Library System)
- Jason Etheridge (Equinox)
- Kathy Lussier (MassLNC)
- Mike Rylander (Equinox)

**TOP 5 LAUNCHPAD CONTRIBUTORS**
- Ben Shum (Evergreener.net)
- Galen Charlton (Equinox)
- Jason Etheridge (Equinox)
- Kathy Lussier (MassLNC)
- Jason Stephenson (C/W MARS)

**TOP 5 SIGNING OFF ON PATCHES**
- Ben Shum (Evergreener.net)
- Galen Charlton (Equinox)
- Bill Erickson (King County Library System)
- Kathy Lussier (MassLNC)
- Mike Rylander (Equinox)

**Most Valuable Newbie**

Kyle ‘khuckins’ Huckins, Catalyst DevWorks
38 Launchpad comments
2 Git Commits
2 Sign Offs

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38 Launchpad comments
2 Git Commits
2 Sign Offs
The Evergreen community descended on the City of Oaks and the “world’s first open source city” in April to attend the 2016 Evergreen International Conference in Raleigh, NC, hosted by the staff at NC Cardinal, a mixed public and government library consortium right there in North Carolina.

After a pre-conference day that featured a developers hackfest, a documentation hackfest, pre-conference sessions and a tour of Red Hat corporate headquarters, North Carolina State Library Director Cal Shepard welcomed attendees by encouraging librarians to seize the reins of their own destiny as the ultimate disruption.

Keynote speaker Jason Hibbets, Community Manager for Opensource.com, kicked off the conference with a talk about the power of community. He described Raleigh’s work using open data for citizen engagement and talked about Opensource.com, where open source communities can share their stories.

Hibbets encouraged communities to invest in their open-source advocates and to take the time to create awards and badges for contributors. “The secret ingredient to every community is passion,” he said.

The keynote address was followed by 2 ½ days of collaboration and forty presentations by everyone from core committers to front line staff. Learning topics ranged across the ecosystem of Evergreen and its community, from floating collections to developing with AngularJS, from tales of building a library consortium to encouraging participation in the community.

The community celebrated Evergreen’s 10th birthday with cake, music and clogging during the opening night reception. The daily conference sessions and festivities typically ended with spy accusations being launched at fellow community members during late-night games of Resistance. As one person said on Twitter, “learning community through paranoia and distrust.” There was even an impromptu ukulele jam session by attending librarians.

Conference attendees returned to their homes with new and strengthened relationships with other Evergreeners and new knowledge about the system and the community that supports it.

Every year the Hack-A-Way reflects the Evergreen community as well as helping drive it. With the history of the event closely tied to the development of the web based staff client, it is not surprising that was a common point of discussion. Discussion around Hatch, the new printing service, was especially active. More than one cycle of brainstorm / write code / test code / return to brainstorming happened showing off the strength of bringing the developer community together in a focused environment.

Another lively point of discussion was how to continue growing the developer community and encourage participation as widely as possible. While no definitive answers were reached, it is a topic that continues to engage everyone interested in the health of the community. Looking back on the varied experience we've had with previous mentorship programs, we discussed new ideas for improved mentorship opportunities. Although no single ideas dominated the dialogue, a lot of strong ideas emerged including a universal desire to promote diversity and embrace new talent on every level.

During the three-day event, developers worked on code as varied as improving web client printing to making the ‘group formats and editions’ search more effective. At the same time, organized discussions centered on topics such as incorporating the jQuery javascript library in places where it can enhance the catalog experience. In an ongoing discussion of how to improve the build and release process, the community decided to move away from dedicated Build Masters and towards a pool of available ones. Kathy Lussier was elected release manager for 2.12.

Also, in a first, the Evergreen Oversight Board used the gathering of the Hack-A-Way as an opportunity to have a mid-year in-person meeting between conferences.

Anyone interested in becoming involved in Evergreen development should review the wealth of information on the community wiki for new developers. https://wiki.evergreen-ils.org/
Over the past year, DIG has looked into how Evergreen users — who represent a diversity of learning styles and staff roles — prefer to access their documentation. Informed by what we learned, we developed strategies to deliver information in contexts where it will be the most useful. In 2016, 23 people made 149 distinct improvements to the official Evergreen documentation.

Lynn Floyd surveyed the Evergreen community about the current documentation’s strengths and weaknesses. 256 people responded, generally with positive things to say. However, respondents also brought up issues of jargon, appropriateness for varying learning styles, and specific sections that don’t give users the information they need.

To make the documentation more responsive to users’ needs, DIG began re-organizing the official documentation into separate books, each of which will be designed to meet the information needs of specific communities. DIG has released a proof of concept for two of these manuals, which are available at https://docs-testing.evergreen-ils.org/.

Christine Burns has begun curating a playlist of Evergreen-related YouTube videos. As it grows, this playlist will be of value to Evergreeners who learn visually or auditorily, as well as folks who prefer documentation that is delivered in a more conversational style. You can see the current playlist at https://tinyurl.com/eg-on-yt.

DIG has also been keeping pace with recent releases of Evergreen. Thanks to the leadership of Remington Steed and Kathy Lussier, we have made great strides in documenting the browser-based client interface. We also chipped away at the backlog of features that have not yet been documented, including translations management, MARC and authority import features, and SuperCat.

The stage is set for even more exciting, user-centered innovation in 2017, but DIG faces some challenges. As DIG’s work touches more community members in a variety of settings, we will hopefully see even more of the participation that has provided so much value to the Evergreen community over the past year.
Evergreen International

Almost 1,000 Organizations Using Evergreen

at over 2,000 service locations!

Over 20,000,000 users

Over 100,000,000 circulations

The information is based on data gathered during our second annual survey conducted in early 2017 for the 2016 calendar year. Since Evergreen can be downloaded and used without any central registry, it’s impossible to know everywhere it is used. Therefore, these numbers are conservative and don’t reflect the true size of the user base. We expect Evergreen is used more broadly than we know.
Europe

The Czech Republic is home to multiple Evergreen installations who have been active community members and translators of Evergreen as well as adding features for Czech language specific content providers.

North America

Evergreen’s largest user base is in the United States and some regions, such as the East Coast, boast so many user libraries there is no practical way to place all the pins needed. Pins may represent more than one installation and locations are approximate.

India

As one of the fastest growing populations in the world we’re thrilled to see Evergreen growing in India as well. With a technically sophisticated population and strong cultural history of libraries there are wonderful opportunities for open source library technologies in India.
Happy 10th Birthday Evergreen!

The Georgia Public Library Service (GPLS) in 2005 decided to create a system for the Public Information Network for Electronic Services (PINES) consortium. At that time, PINES provided services for 252 public libraries throughout the state of Georgia. GPLS believed it could develop a system customized to fit its needs better at a lower cost than the fees being paid to vendors.

Software projects, open source or otherwise, are not a sure thing. Most attempts fail or have a very limited shelf life. It’s very gratifying that 10 years later, Evergreen is still going strong. I attribute this to the fervor with which it was implemented, and the emphasis on community that was inculcated from the very beginning. Evergreen’s open source license is a legal guarantee of certain freedoms, but it is the culture and the people that make it work. Happy Birthday!

JASON ETHERIDGE, COMMUNITY AND MIGRATION MANAGER/FOUNDER OF EQUINOX, ORIGINAL DEVELOPER FOR EVERGREEN

What has struck me the most about watching the software and community evolve over the past 10 years is what a serendipitous match an open source solution has been for libraries. Librarians and developers around the world embraced and contributed to the Evergreen project. This has been our stronghold from day one. It is exciting to see what has evolved during the past 10 years. The increase in partnerships and development resources are very exciting. I look forward to seeing where we go in the next 10 years.

ELIZABETH MCKINNEY, PINES PROGRAM DIRECTOR, GEORGIA PUBLIC LIBRARY SERVICE
Watching the community sustain itself, and broaden its mission from just writing code to all the various activities we do today is fairly rare, even in the open source world. As for the software itself, deploying and seeing others deploy Evergreen in so many different ways for libraries (and some non-libraries) of vastly different types, sizes, and needs still amazes me.

I think a large part of the project’s success is due to an increasing and evolving commitment to code and documentation quality and stability. When it was just three of us writing code at GPLS, we had an unofficial motto of “working code wins.” Over the years, as the contributor community has grown, we’ve recognized the need for, and implemented, the structure required to both keep code quality high and pull in new long-term contributors.

From the beginning the code has been architecturally ahead of the curve. We were using micro-services and message queues, building SaaS and PaaS infrastructure before some of those terms existed. I feel confident that because of that we’ve been able to adapt and enhance Evergreen much more quickly and painlessly than we otherwise could have done.

**Mike Rylander, President and Founder of Equinox, Original Developer for Evergreen**
Focus on Search

Search is one of the most important pieces of the ILS for patrons and staff, allowing our users to find resources and critical to the user experience. Because search is such a critical piece of Evergreen, it became the focal point of community discussion in 2016. Focus groups were held in IRC where community members shared feedback and collaborated on potential improvements. There were several existing features that Evergreen users liked, but there were even more improvements to build.

- Better performance when retrieving search results
- Improved relevance ranking
- Did you Mean? functionality
- New facets
- Better balance between fuzziness and precision
- New ways of presenting grouped records
- Using authority cross-references creatively in keyword searches by providing disambiguation information or related search terms

Where We Are Now

By the end of 2016, community members had taken substantial steps to start improving the existing, PostgreSQL-based search. Additionally, under a contract with MassLNC, developers from Equinox studied the feasibility of removing two-stage search from Evergreen and evaluated the performance improvements that will be seen as Evergreen moves to subsequent versions of PostgreSQL.

The results of this evaluation were positive, and Equinox found that implementing the development to remove two-stage search will allow Evergreen to retrieve the full breadth of search results, no matter how large the result set, and will also improve search performance, particularly for more selective searches. When this project is complete, estimated counts on the search results page should also be accurate.

Another long-awaited search improvement came to Evergreen in release 2.11 when popularity ranking was introduced in the catalog. The ability to highlight more popular items was raised several times during the earlier focus group discussions. Evergreen sites can now add an option to sort results strictly by popularity or by a method that combines relevance and popularity in one sort.

Other search improvements that came in 2016 include the ability to quickly and easily change the search scope to the entire consortium, the ability to exclude all electronic resources from a search, the addition of a new genre search and facet index, and the ability to identify which statuses should be included in a 'limit to available' search.

The Future

During a meeting between MassLNC and Equinox, a roadmap was built for continuing search improvements in the existing PostgreSQL-based search.

- Proceed with development to remove two-stage search. (Funded, expected to be complete in June 2017)
- Proceed with a search and display infrastructure development project. This project will provide better field weighting for keyword search, change the way we display MARC fields, and result in highlighted search terms on the results and record pages. (Funded, expected to be complete in December 2017)
- Implement a project that uses string proximity in relevance ranking. When implemented, the records with fields that look the most like the entered search terms would be seen as more relevant. (Unfunded at this time)
- Implement 'Did You Mean?' functionality in the catalog. (Unfunded at this time)

This project would leverage the string proximity functionality mentioned above.
The Evergreen 2016 Annual Report was created by the Evergreen Outreach Committee including...

**GRACE DUNBAR**, EQUINOX  
**KATHY LUSSIER**, MASSLNC  
**ROGAN HAMBY**, EQUINOX  
**AMY TERLAGA**, BIBLIOMATION  
**MEME MARLOW**, WORCH MEMORIAL PUBLIC LIBRARY  
**RON GAGNON**, NOBLE

**EVERGREEN***

We would like to recognize those who served on the Oversight Board in 2016:

**AMY TERLAGA**, BIBLIOMATION (VICE-CHAIR)  
**SHARON HERBERT**, BRITISH COLUMBIA LIBRARIES COOPERATIVE  
**GRACE DUNBAR**, EQUINOX (CHAIR)  
**RUTH FRASUR**, HAGERSTOWN - JEFFERSON TOWNSHIP LIBRARY  
**TIM SPINDLER**, C/W MARS

Congratulations to the new board members elected in 2016:

**GARRY COLLUM**, KENTON COUNTY PUBLIC LIBRARY  
**MIKE RYLANDER**, EQUINOX  
**RON GAGNON**, NOBLE  
**TERRAN MCCANNA**, GEORGIA PUBLIC LIBRARY SERVICE

Thank you to the following Oversight Board members whose terms ended in 2016:

**ANDREA BUNTZ NEIMAN**, KENT COUNTY, MD  
**CHAUNCY MONTGOMERY**, THE COMMUNITY LIBRARY, SUNBURY, OH  
**CHRIS SHARP**, GEORGIA PUBLIC LIBRARY SERVICE (SECRETARY, SFC REP)  
**YAMIL SUAREZ**, BERKLEE COLLEGE OF MUSIC (VICE-CHAIR)

ALL CLIPART USED IN PRODUCING THE ANNUAL REPORT IS IN THE PUBLIC DOMAIN.  
PHOTOS USED:  
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KATHY LUSSIER (VARIOUS)  
GRACE DUNBAR (VARIOUS)  
EVERGREEN CAKE P.11 NÁRODNÍ KNIHOVNA  
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