

Modding Vega Discover: How I Stopped Using Defaults and Learned to Love Customization

Eduardo Loza - Web Developer - London Public Library Sarah Kasprzak - ILS Solutions Specialist - London Public Library Matt Hammermeister - Director - Pinnacle Library Cooperative Derek Brown - Director of IT - Rochester Hills Public Library





110,000

Service Population

480,336

Annual Visitors (2024)

78,246

Cardholders (2024)

1,614,592

Circulation (2024)

Polaris (Hosted) Library

Polaris 7.7 (Dedicated Hosted)
Polaris PAC Customized
Polaris Self Check Stations
Localhop Calendar
Localhop Room Reservation
LibData PC Res / Print

Vega Hosted Products

Vega Discover (Premium)

LX Starter

IPA:SMS

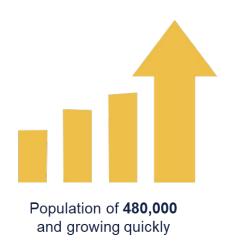
Library-Line

Vega Promote

Vega Web Builder

Derek Brown

Director of IT @ RHPL
IUG Steering Committee Member-at-Large





sierra

Vega Discover (April 2023)



Eduardo LozaWeb Developer

Sarah Kasprzak
ILS Solutions Specialist

























Matt Hammermeister

Director, Pinnacle Library Cooperative

Pinnacle Library Cooperative

 Consortium of 6 public libraries in suburbs of Chicago





400,000 Residents

1,000,000 Items

Staff Members

- Polaris ILS
- Vega Development Partner since 2020.

IUG 2025

Adding Widget for Chat Service

Unique Chat

- All six libraries have chat service provided by Unique Management Services.
 - Chat service hosted and staffed by them.
 - Library provides oversight and follow-up when necessary.

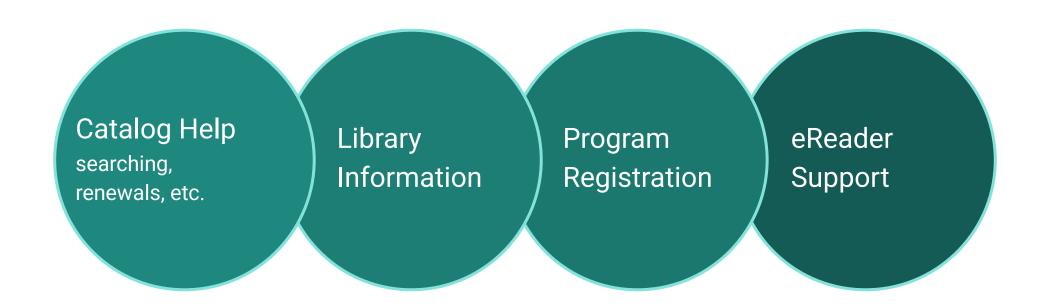


 Unique provides customer with Javascript code to place on library websites.



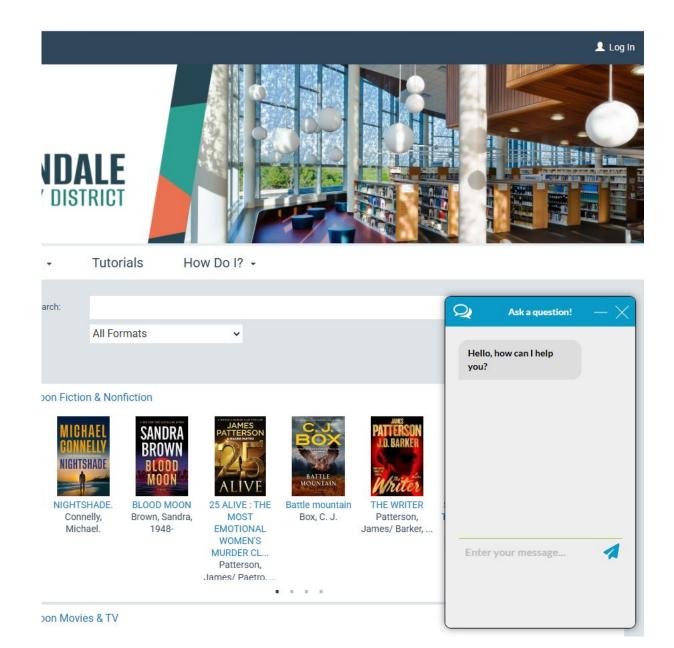
Unique Chat

Approximately 4,000 chats per year.



PowerPAC

- Currently, on PowerPAC
 - Access to root files
 - Added widget to footer of all pages.
- Wanted to mirror functionality in Vega Discover.





Vega Discover

- Added to Customized Footer Code
- Collection Site for each library
 - Different widgets for each library

New Adult Nonfiction

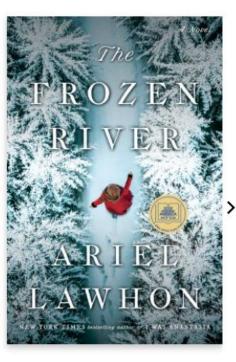
New Juvenile Fiction

New Adult Movies and TV

New Young Adult Fiction







ion

The frozen ri Need Help?







Creating a Branch Drop-Down

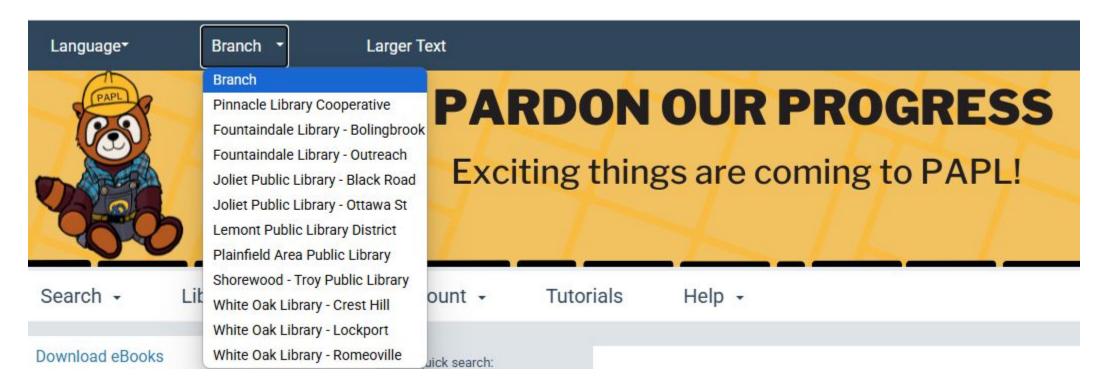
Branch Switching

- Our six public libraries are geographically close
- Try to break down as many barriers between buildings as possible.
 - Library Card Registration
 - Loan Rules
- Lots of patrons visit multiple buildings/libraries.
 - Give them a way to change which PAC branch they are on



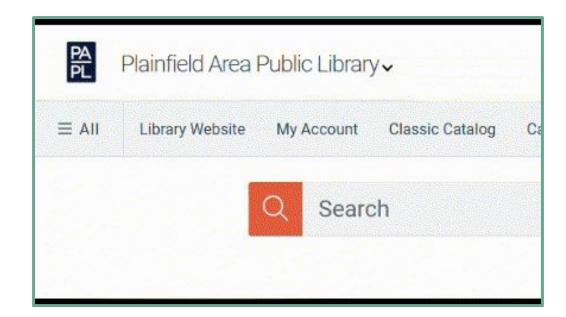
PowerPAC

- PowerPAC has ability to enable/disable branch switching.
- Patrons can browse different branches



Vega Header

- Modified the Vega Header to include Branch Drop-Down
- Requires rebuilding the entire header.
 - Create a completely custom header
 - Re-create the existing Vega header piece by piece





Clarivate Knowledgebase Solution

- Clarivate has created a solution in the Knowledgebase
 - Add the drop-down
 - Re-create the rest of the header

"Basic Vega Header Template for Consortias to Add a Collection Site Drop-Down"

https://iii.rightanswers.com/portal/app/portlets/results/viewsolution.jsp?solutionid=240201122129203





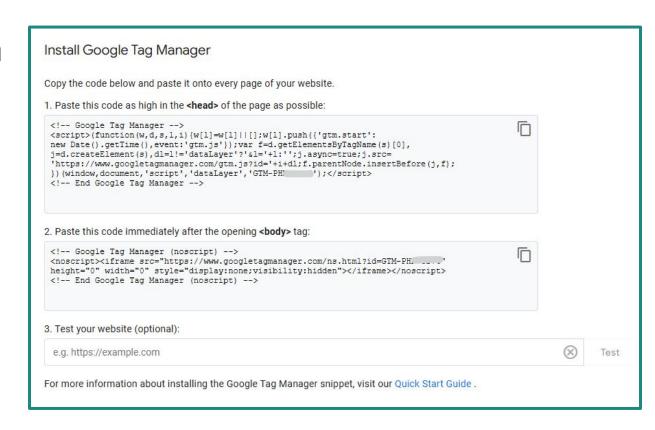
Google Analytics & Google Tag Manager

Google Analytics

- Installed Google Analytics and Google Tag Manager in PowerPAC
 - Search Terms
 - Facet Usage
 - User Devices / Browsers
 - People are clicking the tutorials we made?!
- Important to gather statistics as we migrate to a new catalog.

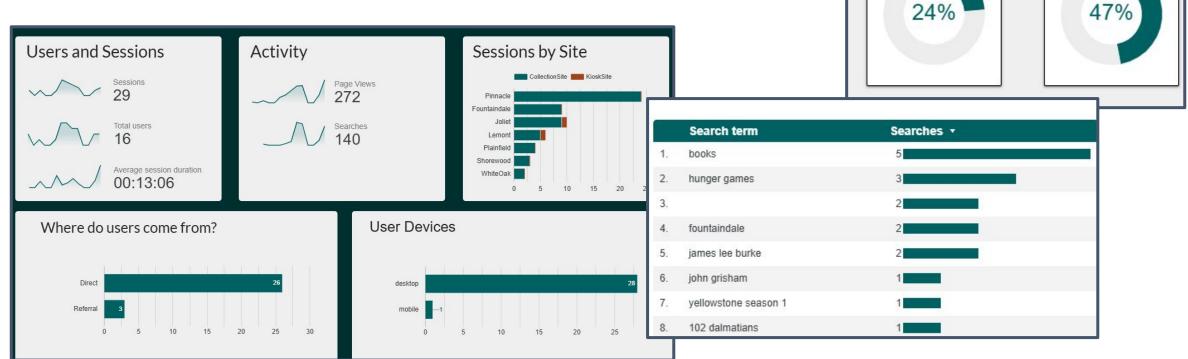
Google Tag Manager

- GTM provides code to be placed in the <head> and <body>
- Place the <head> tag in the Vega
 Header
- You can ignore the <body> code
 - Failsafe in case the user doesn't have javascript enabled.
 - If javascript isn't enabled in Vega, we have bigger problems.



Looker Studio

- Once the tag is added to Vega, test for data in GTM.
- Then report on it!
- Lots of options My preference: Looker Studio



Format

8

47.1%

Facet Usage (sessions)

Availability

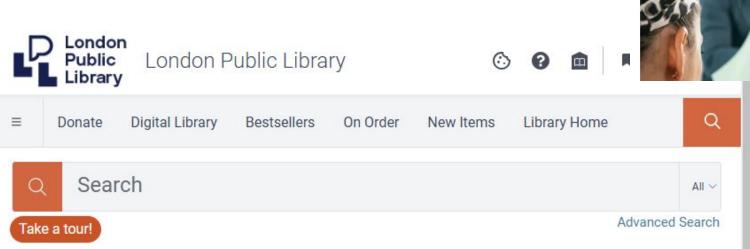
23.5%

Vega Discover Header Customizations @ London Public Library

Vega Discover launched in April 2023

- Development partner
- Vega Discover replaced encore
- New website & branding
- no customization at the time of launch

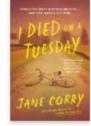






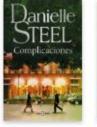
New For Adults View All -

















I died on a Tuesday Corry, Jane

Zepete, Meriene

Order of swans Deveraux, Jude.

Complicaciones Steel, Danielle.

Sanz de Bremond.





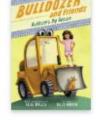


View All -

New for Children



McLechlan, Jenny



Bulldozer's big rescue Broach, Elise.





Safadi, Shife S...





Fresh start Galligan, Gale.



No purchase necessary



Middle school. Too









Non Fiction >

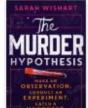
View All +

New for Teens



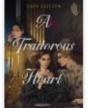














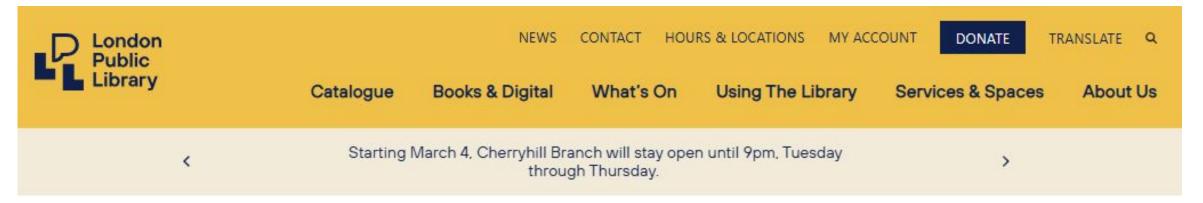
aunch

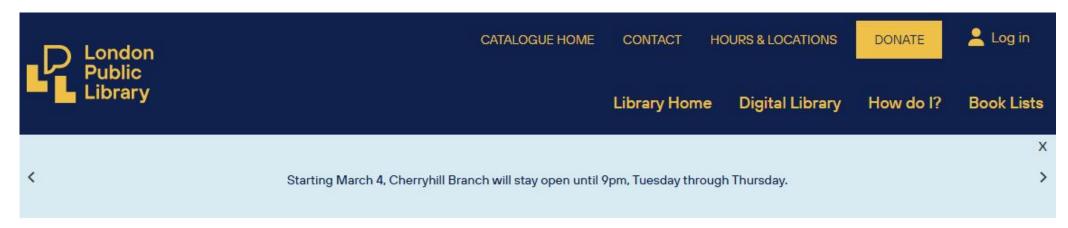
- Showcase groups & Saved Search Showcases to provide access to new items by audience/format
- Limited to 5 rows of content
- Premium allowed us to expand



Aligning Vega header to website header

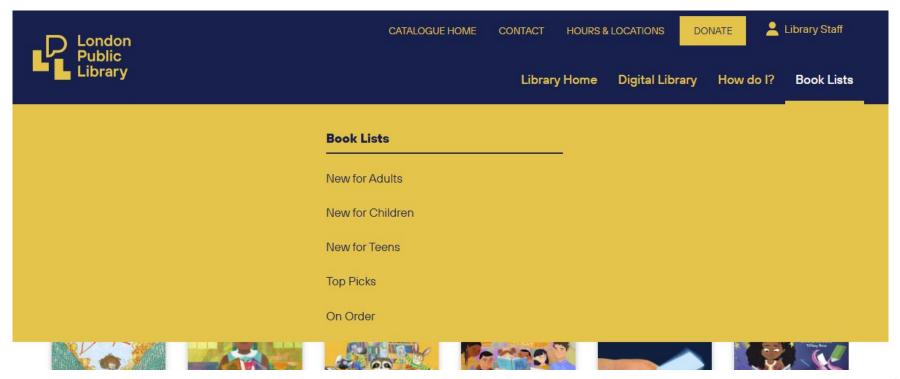
Introduce the same look and feel without duplicating





Header Links

- Link to frequently accessed information
- Provide access points for discovery
- Links are targeted intuitively







Advanced Search

View All +

🙎 Log in

Bestsellers - Popular Picks

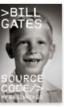




Spotlight on Black History Month



part one Cher. 1946-



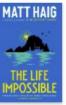
Cates, BIII, 1955-

Picks for

Adults

Picks for

Adults



The life impossible Halg, Matt, 1975-







Kimmerer, Robin Wall

Steves, Rick, 1955

Using Collection Sites for discovery

Book Lists

New for Adults

On Order

- New items
- Popular & recommended
- On Order

New for Children

New for Teens

Top Picks



Spotlight on Indigenous Reads





Spotlight on Mental Health and Wellness









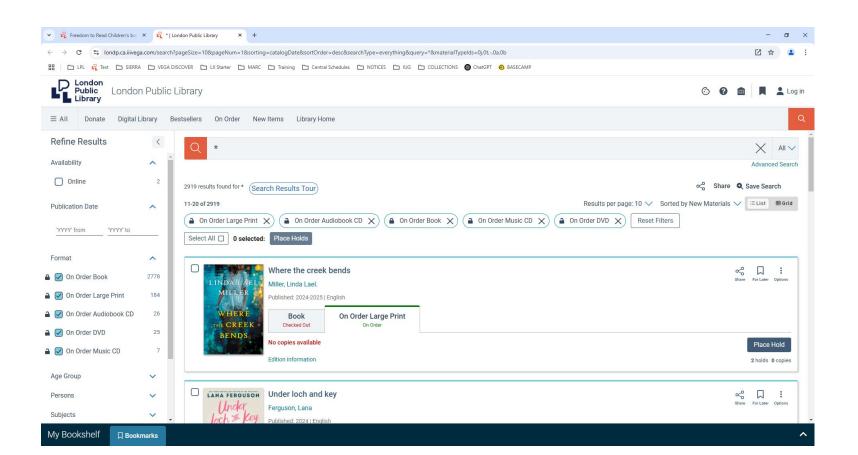








Expanded view of On Order titles



#IUG2025

On Order for Adults











Manage James V

Shettering dewn

Source code: my

More or less Maddy a novel

One day, everyone will have alway.









On Order DVDs











& Small, Sess...

On Order Music CDs















On Order for Children







Wings, January



Baided Karbeine



Naplegate, Kjath

Wire All -

Hoffman, Allice On Order for Teens

Away A Novel of











A court of mist and

Ween, Savat J.

MIST

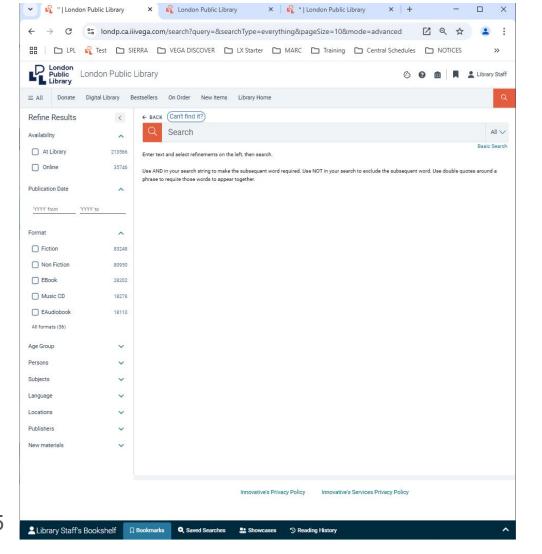
A coast of thoms and roses Manufacture.

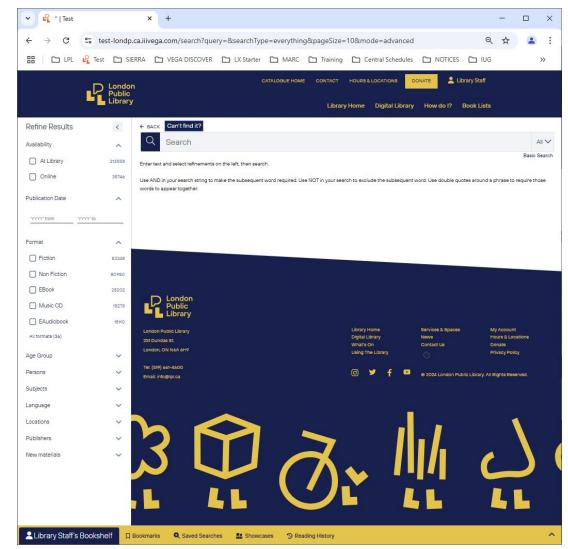
Table Sabset

The grandest game Barries, perceite.

Colos Suceros

Custom Footer





Brand colours applied to icons and buttons



More in this Series



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Related Resources



Subjects



About the Author



Contributors



Freedom To Read
Library List | 20 Items



More in this Series



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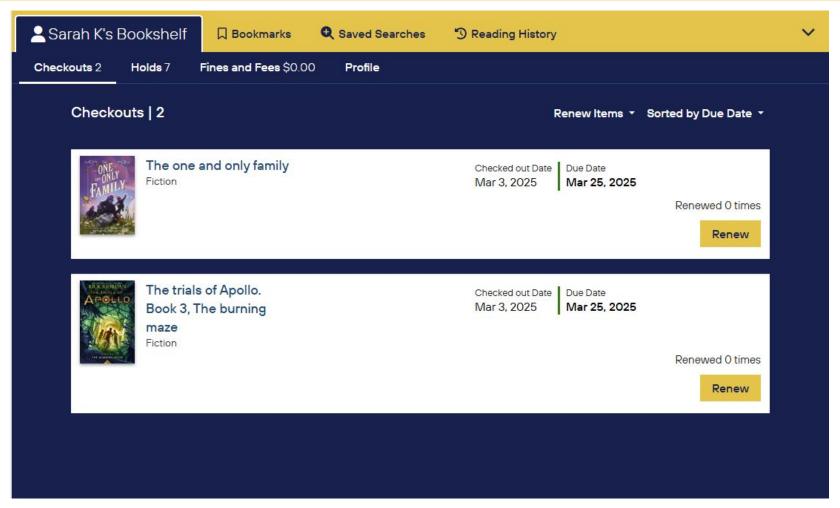


Freedom To Read

Library List | 20 Items

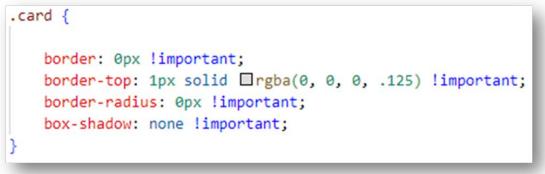
```
.icon-related-resources {
               background-color: var(--yellow) !important;
               color: var(--blue) !important;
           .icon-topics {
               background-color: var(--yellow) !important;
               color: var(--blue) !important;
← BACK
           .icon-contributors {
               background-color: var(--yellow) !important;
               color: var(--blue) !important;
240000+ re
          .books-icon {
               background-color: var(--yellow) !important;
1-10 of 2400
               color: var(--blue) !important;
 Select Al
           .custom-showcase-icon {
               background-color: var(--yellow) !important;
               color: var(--blue) !important;
           .library-list-icon {
               background-color: var(--yellow) !important;
               color: var(--blue) !important;
           .showcase-icon {
               background-color: var(--yellow) !important;
               color: var(--blue) !important;
```

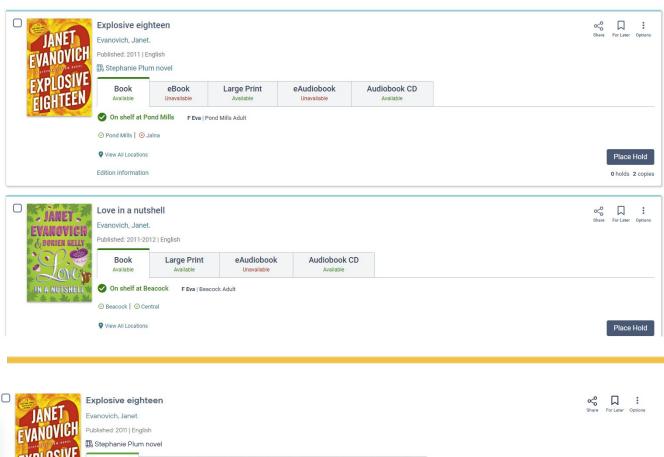
Apply brand colours to My Bookshelf

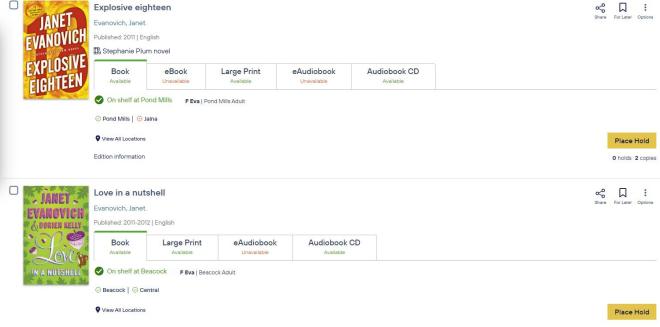


Simplified Search display

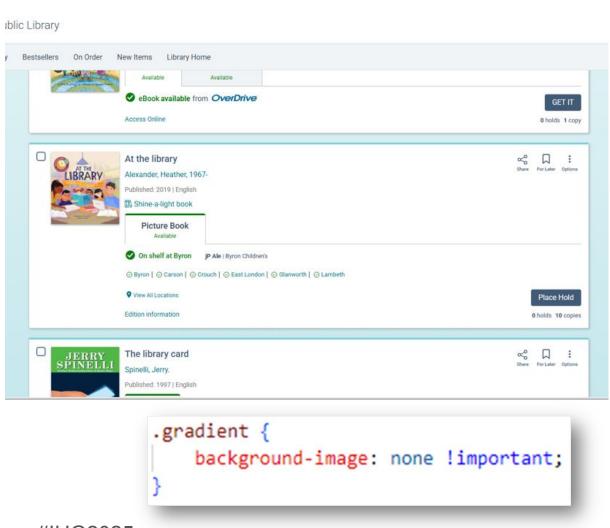
- remove lines
- remove shading
- match brand colours & font

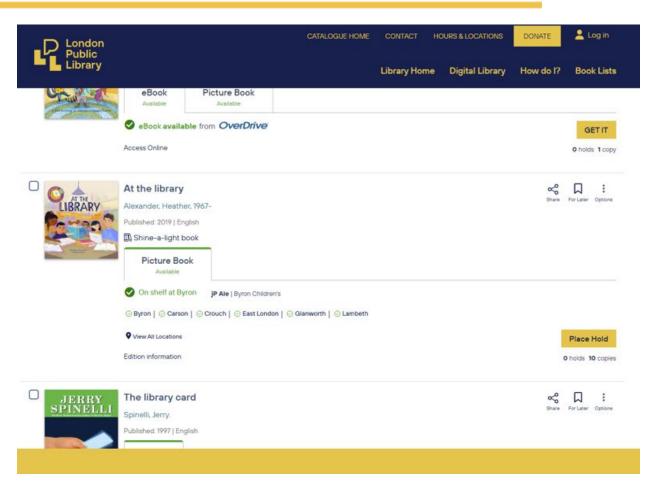






Remove gradient background from Showcase List View





Decrease font size on image pills



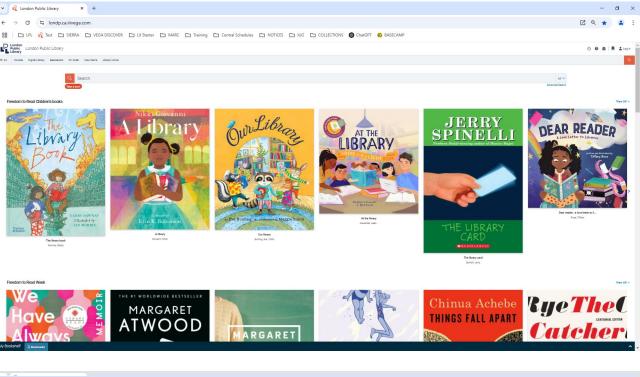
Limit max width of home page

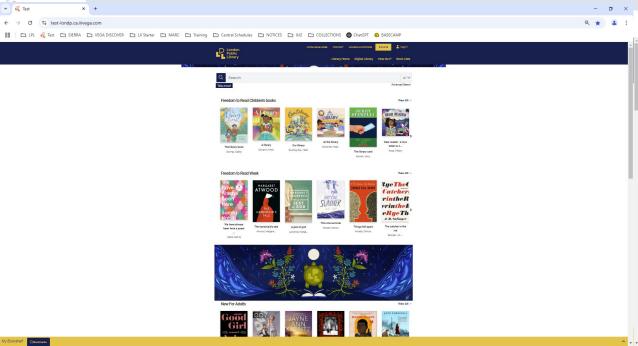
- lots of patron feedback about scrolling
- images are very large on a high resolution screen
- zoom issue



```
.MuiBox-root {
    max-width: 1200px;
    margin: 0 auto;
}

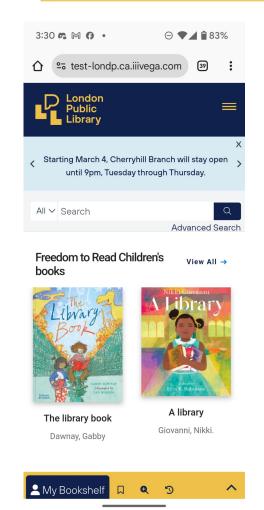
.search-bar {
    max-width: 1200px;
    margin: 0 auto;
}
```

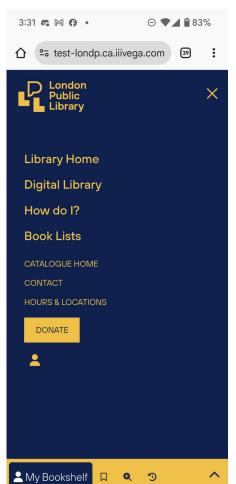


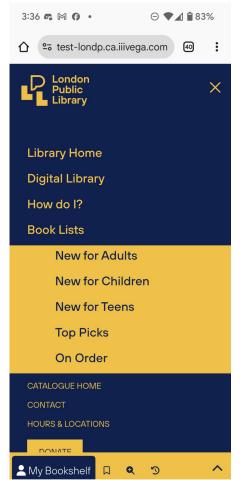


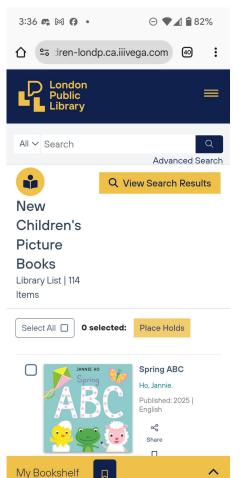
Considering mobile views

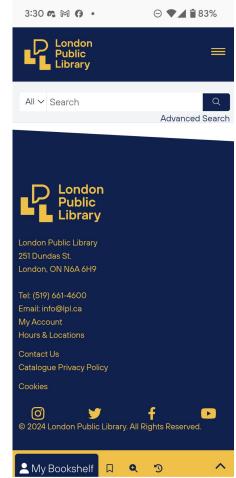










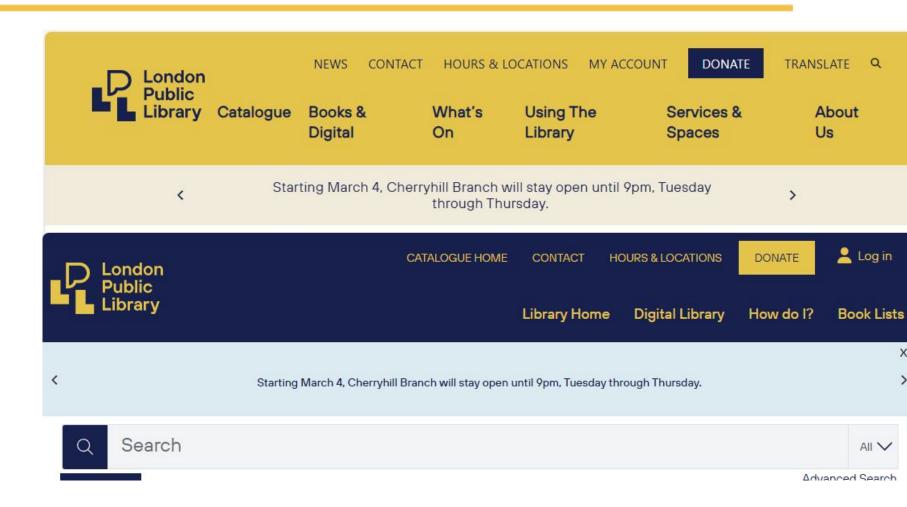


Using REST API calls to synchronize with website

Website alerts display in catalogue

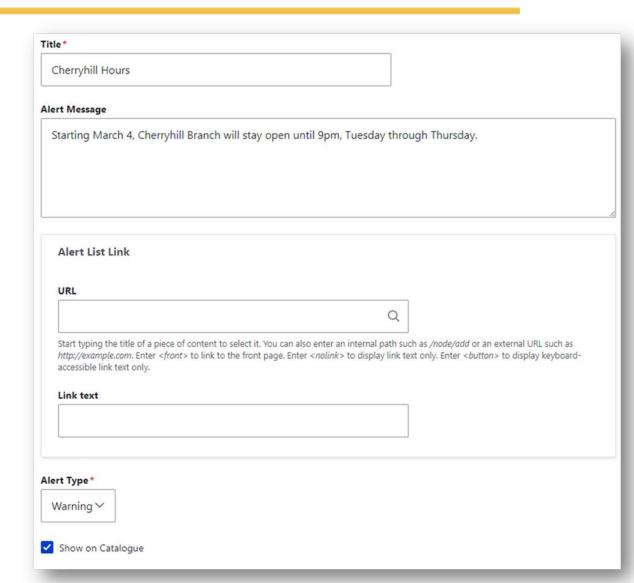
- Alerts maintained in one place
- scheduling
- multiple alerts
- custom colour





Website alerts display in catalogue

- Exposes a GET-based REST API from Drupal for centralized alerts
- Provides a single control point for all notifications
- Simplifies external integrations through a standard interface



Website alerts display in catalogue

- Use JavaScript fetch to consume the REST API
- Avoid cache to ensure fresh alerts
- Uses localStorage to keep alerts closed for 2 hours

```
fetch('https://www.lpl.ca/jsonapi/node/alert', {
    method: "GET",
    cache: "no-cache"
})
    .then(response => response.json())
    .then(data => {
        let alerts = data.data;
    }
}
```

```
const closedTimestamp = localStorage.getItem(CLOSED_FOR_HOURS_KEY);
const currentTime = getCurrentTimestamp();

if (closedTimestamp && (currentTime - closedTimestamp) < HOURS_TO_WAIT * 60 * 60 * 1000) {</pre>
```



Website alerts display in catalogue

- Loop through alerts using forEach or map
- Display each alert dynamically on the page

```
alerts.forEach(alert => {
    const slide = document.createElement('div');
    slide.className = 'slide';

const content = document.createElement('div');
    content.className = 'alert-content';
    content.textContent = alert.attributes.field_alert_message;

    slide.appendChild(content);
    sliderInner.appendChild(slide);
});
```





Adding custom content using JavaScript

Going beyond the limits of home page layout options

- Add elements that don't fit available component templates
- Using MutationObserver to select where we want to add the elements

```
const observer = new MutationObserver((mutations, obs) => {
  const elementos = document.querySelectorAll('.MuiBox-root');
```

```
const secondBox = muiBoxItems[1];
const newDiv = document.createElement("div");
newDiv.classList.add("custom-lpl-content");
const img = document.createElement("img");
img.src = "https://www.lpl.ca/sites/default/files/2023-04/resizeXl-min.webp";
img.alt = "Art Image";
newDiv.appendChild(img);
secondBox.insertAdjacentElement("afterend", newDiv);
```

Going beyond the limits of home page layout options



We have always been here a queer

Habib, Samra



The handmaid's tale Atwood, Margare...



A jest of god Laurence, Marga....



Tamaki, Mariko.



Things fall apart Achebe, Chinua.



The catcher in the

Sellinger, J.D. ...















View All +







What's next...

pulling in featured content from the website





Thank you!

www.lpl.ca

catalogue.lpl.ca



Eduardo Loza

Web Developer eduardo.loza@lpl.ca

Sarah Kasprzak

ILS Solutions Specialist sarah.kasprzak@lpl.ca























Vega Discover Header Customizations @ RHPL

Vega Discover Homepage Customization at RHPL

Premium Customization: RHPL uses Vega Discover Premium for advanced header and footer code injections.

Kids' Catalog Experience: Configured with:

- Children Audience Theme
- Grid layouts with collection-specific content
- Unique homepages for each landing page (e.g., series grids, subject-based imagery, new items)

Distinct Homepages by Collection: Separate landing pages for different audiences and services, rather than a single catalog view.

Future Expansions: Applying this approach to:

- Books on Board (Bookmobiles)
- Innovative Item Collection (Library of Things)
- Local History Collection





Vega Discover Premium Header Customizations @ RHPL (Default)









Log in

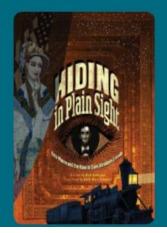
Search

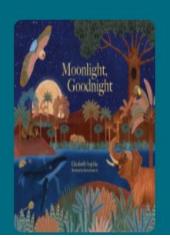


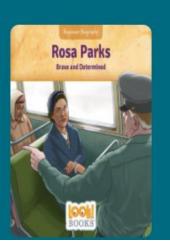
All 🗸

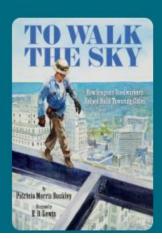
New Books View All>









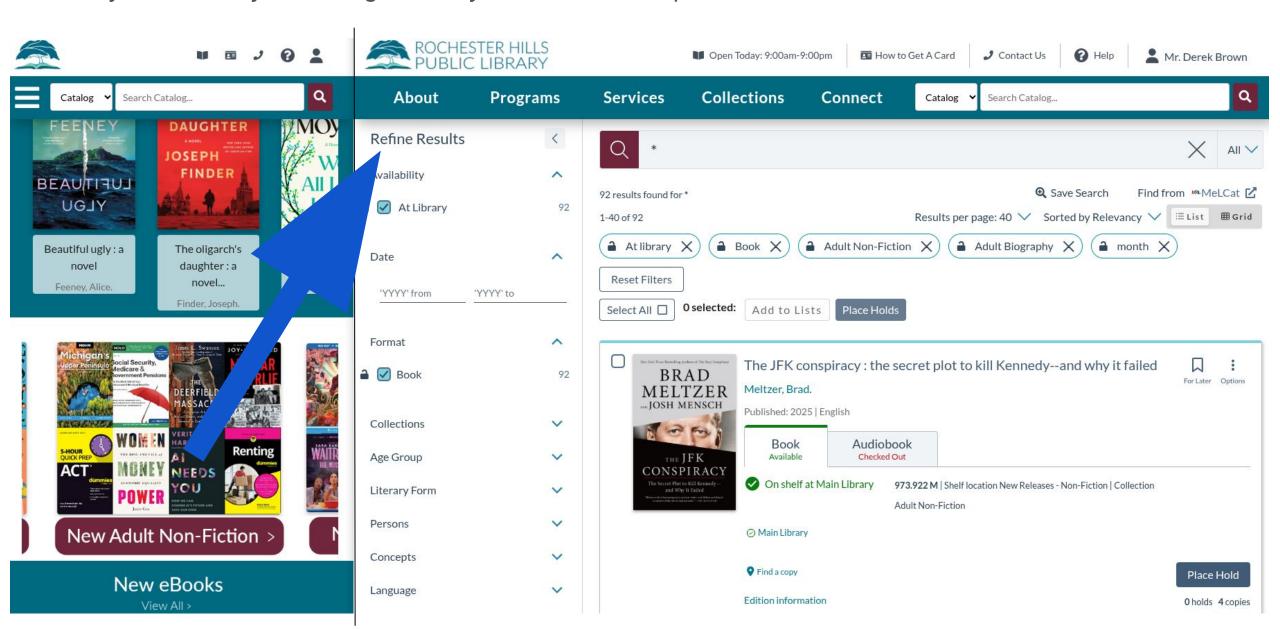




Vega Discover Premium Header Customizations @ RHPL (Kids)

Vega Discover Refined Search on Homepage

Why move away from Vega Library Lists? Ensures patrons have refined search embedded!



Vega Discover Refined Search on Homepage

```
//*Remove View All
button*/
button [data-automation-id=
"btn-view-more"] {
   display: none;
//*Remove built in title
(Your css codes may be
different!)*/
.MuiBox-root.css-u0bycj {
display: none;
```

Hiding the showcase title and view all button: Vega by default forces their inept lists on their cover carousels.

Solution: Added custom CSS to the header to hide all showcase group titles as well as their "view all" button. As well as create showcase groups that hold images with direct links to your catalog.

Select Showcase 1 New Books **Edit Homepage** Pick your background Upload image (2) Change Image Edit, add, remove or rearrange a component to create a draft **New Books** View All > New Books (Text) Showcase Group Use URL or showcase? Showcase URL New Adult Books Cover Carousel n / Link to webpage New Adult Material Block Showcase Group https://discover.rhpl.org/search?query=*&s New eBooks (Text) Showcase Group Add another showcase New eBooks Cover Carousel **Showcase Block Settings** Showcase Block Title

VEGaoogle Kiosks @ RHPL



Vega Kids' Catalog with Google Kiosks

Simplified Deployment & Management: Moved from Windows 11 with third-party tools to Google Chrome OS Enterprise, leveraging Vega Discover, Google Kiosks, and Google Guest Management.

Enhanced Security: Chrome OS updates automatically, eliminating the weekly update gaps experienced with Windows 11.

Kid Friendly: User tested by our service population and developed based on their feedback and recommendations.

Limitations of Vega Discover Homepages & Our Solutions

New Tab Issue: Vega Homepage links open in a new tab, disrupting Google Kiosk navigation.

Solution: Added custom JavaScript to keep clicks in the same window.

Cookie Banner Problem: Cookie prompts reappear after every session on wiped devices, confusing young users.

Solution: Blocked the cookie banner to prevent recurring prompts.

Login & Bookshelf Removal: Kiosks are for discovery, not checkout.

Solution: Hid login and bookshelf features for a streamlined experience.

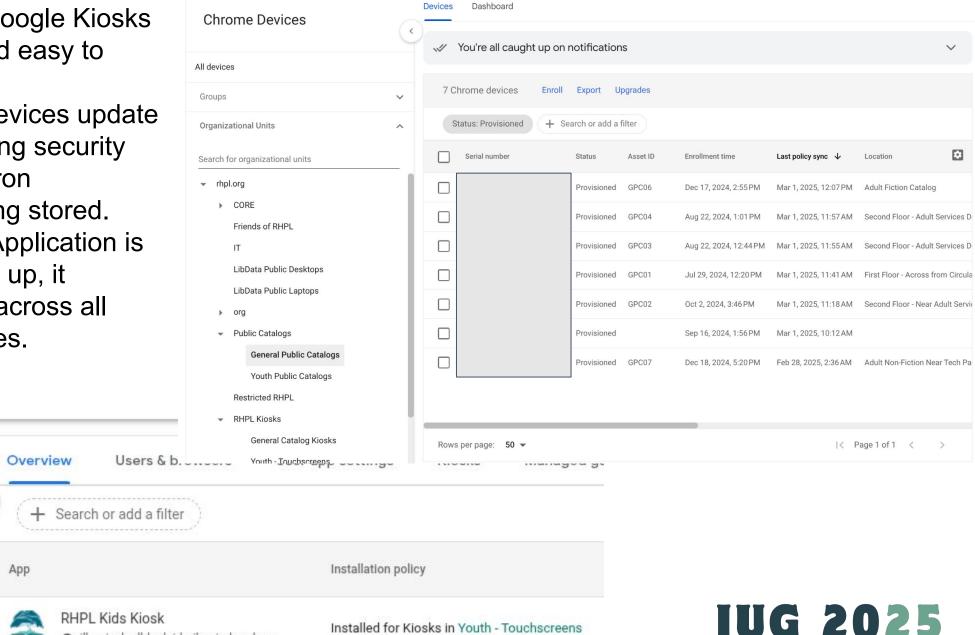
```
/*Add more subjects here. Goes by file name (case sensitive)*/
function addClickListenerToImage() {
   const imqnewkidsbooksoldteal = document.querySelector( 'div[aria-label*="New"]');
   const imgkidsdvdnewfont = document.querySelector( 'img[src*="kidsdvdnewfont"]');
   const imgnewpicturebooksoldtealfont = document.querySelector( 'img[src*="newpicturebook"]');
   const appBookshelf =
document.querySelector('div[data-automation-id*="bookshelf-container"]' );
                                  SCAN
/*Cookie banner removal options*/
body [id*='onetrust'] {
   display: none;
body [class*='onetrust'] {
   display: none;
.ot-sdk-container {
   display: none !important;
```

```
/*Removing bookshelf*/
app-root > app-bookshelf {
display: none !important;
height: Opx !important;
width: 0px !important;
```



Google Kiosks

- Deploying through Google Kiosks is straightforward and easy to manage.
- Chrome OS (Flex) devices update automatically, ensuring security while preventing patron information from being stored.
- Creating a Chrome Application is simple, and once set up, it seamlessly deploys across all Chrome Kiosk devices.



Devices > Chrome > Apps & extensions **Apps & Extensions** Group and organizational unit selection is unavailable in this view. Installed for Kiosks in Youth - Touchscreens ilbpgicekcdldcolgjdmilmajmkombeo

Devices > Chrome > Devices

All devices > rhpl.org > Public Catalogs > General Public Catalogs

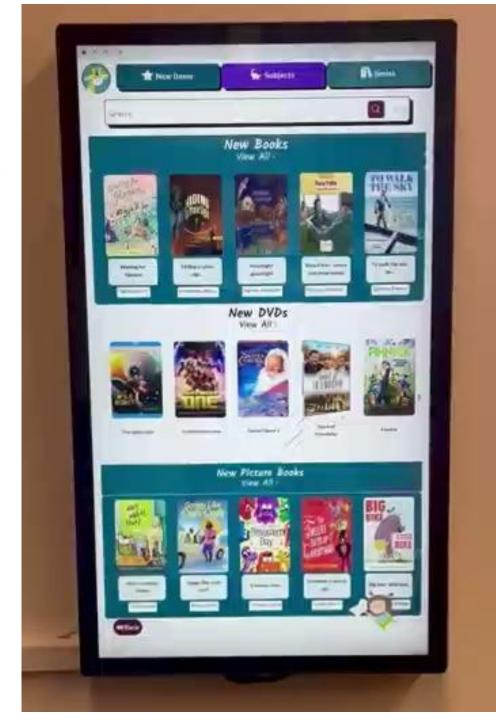
Fun Facts

The top five most popular subjects in order: Monsters, Dinosaurs, Planes, Princesses, & Dogs!

Individual Kids' Kiosk subjects have more clicks in 90 days than our library's contact us link and all departmental pages.

We can leverage all of our customized themes for simple at-home browsing.

Let's see it in action!





Questions?