

# NGLP - Web Delivery Platform - Discovery

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## Summary

The [Next Generation Library Publishing infrastructure project \(NGLP\)](#), funded by [Arcadia](#), seeks to offer open source, community-led infrastructure and services that will provide an alternative to proprietary and commercial publishing platforms. As part of this work, the NGLP is commissioning the build of a web delivery and access platform that can publish and host journal content with options to integrate content or metadata from an institutional repository content. The platform would offer flexible display and discovery functionality.

The access layer will initially be utilized by the service providers in the NGLP partnership, the California Digital Library, Longleaf Services, and LYRASIS and will be made available to the community for others to adopt.

## About NGLP

NGLP is a collaborative project to Improve the publishing pathways and choices available to authors, editors, and readers.

In this project, [Educopia](#), [California Digital Library \(CDL\)](#), and [Strategies for Open Science \(Stratos\)](#), in close partnership with [LYRASIS](#), [Confederation of Open Access Repositories \(COAR\)](#), and [Longleaf Services](#) are working to advance and integrate open source publishing infrastructure to provide robust support for library publishing.

Our project goals include:

- Creating a more balanced, effective academic publishing ecosystem that aligns with academic values and increases choice, opportunity, and innovation via compelling library publishing solutions;
- Developing tools and standards that allow better integration of campus repository systems and publishing workflows across the lifecycle of scholarly research;
- Establishing sustainable, community-governed, open solutions that rival best-of-breed commercial tools and advance scholarly communication in important ways.

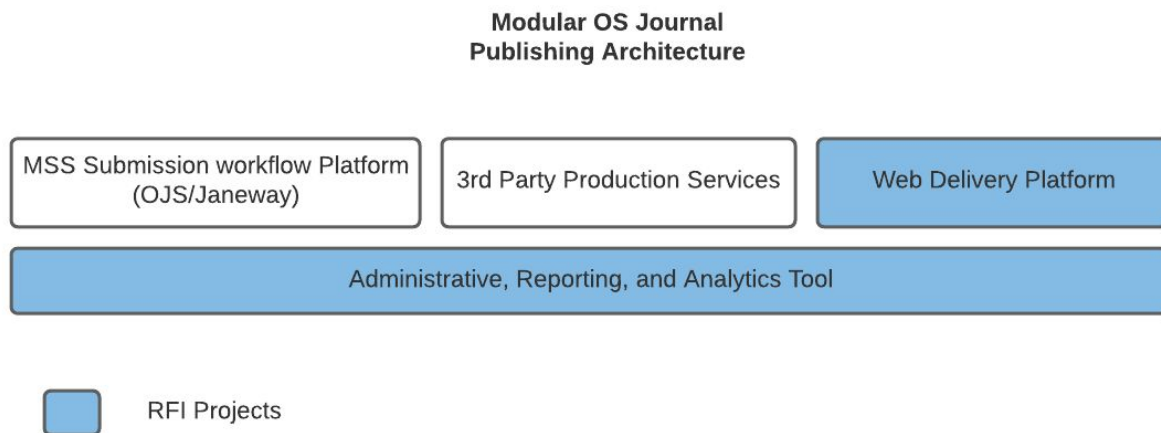
NGLP received \$2.2M in 2019 for a 2.5 year project. The work includes establishing clear values and principles to guide our work, engaging with the community to determine current and future needs, commissioning and building tools and technologies to fill gaps in the current open source publishing landscape, and investing in key platforms already in use by the community.

## NGLP Architectural Overview

Based on extensive input from the library and campus-based publishing communities as well as from the service providers who seek to offer publishing services to these communities, the NGLP team will be focusing on filling gaps in the current landscape as well as investing in current tools and services for manuscript submission (MSS) and production of journals. This RFI and the Administrative, Reporting, and Analytics tool RFI that accompanies it, seek to fill two gaps identified. These functions are often built

into existing platforms and the community seeks to decouple these functions to allow for greater flexibility in selecting MSS and production tools and services. With this goal in mind, both the Web Delivery Platform and the Administrative, Reporting, and Analytics tool need to be able to work with at least two open source MSS that are being selected at this time and a wide range of production workflows and outputs. Some integration of IR content and statistics will likely also be needed.

Below is the high level architecture NGLP seeks to offer and the placement of the two projects with RFIs:



## Web Delivery Platform - High-Level Goals

- Interface with existing MSS and IR platforms
- Provide an intuitive user experience with clean and modern base design and offer templating options for customizing the look and feel across journal and IR content
- Support collections of content by different forms of metadata - discoverability and text-data mining as well as portability of content and metadata (no lock in)
- Offer editors and curators tools to collect content (articles, books, etc) and assign templates and branding
- Offer readers tools to work with and interact with content post-publication
- Facilitate research in new ways through research data-driven publications, embedded research data visualization, rich media, digital humanities projects, and other content enhancements
  - SOC and/or GDPR compliance (?)
- Collect and store usage data for third party analytics and the [Administration Tool](#)
  
- Offer clear navigability and discoverability of content
- Follow guidelines/best practices for open-source software development
- Provide good documentation to allow others to maintain the code later
- Build the underlying infrastructure needed to support cloud-based hosting
- A need for multi-tenancy with multi-level branding of content

## **Web Delivery Platform - Scope**

### **User and Content management admin tools**

Content Management admin tools for library/publishing staff that allows them to manage editable sections of the access layer pages, manage users and access, assign roles and permissions, create communities or groups of users, and to create and manage content collections. The admin tools should allow for addition of logos and other branding elements in collection and journal display.

### **Seamless admin experience**

Most or all administrative tasks for MMS and IR platforms should be handled through the web delivery platform. Through the development of shared terminology, cohesive UX and consistent theming, users should not feel as though they are using separate IR and journal platforms.

### **Site pages**

Designated sections of dynamic and static pages that admin users can edit, for example text on homepages or about pages, instructions for authors.

### **Branding by collection or journal**

Admin has the ability to add branding elements to collections of journals, journals, and collections of content including logo and, for example, button/line colors.

### **Access control**

Ability for users to set up accounts for personalization options. Authentication should be available through third parties such as ORCID and OpenID. And single sign on integration will be needed with several selected open source third party platforms .

### **Role based authorization**

Ability configure granular permissions based on personas to permit or deny specific product functions. A user may be granted one or more roles.

### **Content production pipeline for publication**

Managing a queue of items to be published individually or by batch, validate and edit metadata, and publish to the selected journal site or collection. Ability to set embargoes and unpublish if needed.

### **Content dissemination**

All publications receive a DOI and minimum required metadata. Content should be able to be shared through an API and OAI-PMH. Third party search services need to have robot access to index content accessible to them, including following Google Scholar requirements for site map structure.

### **Archiving**

Offer archiving through LOCKSS, Portico, or local solution

### **Usage data and statistics**

Data will be collected from platform usage for a separate reporting system.

For web delivery of journal and IR content, page, article, and content unit, usage is collected and stored. Includes, at a minimum:

- Pageviews
- Downloads (PDFs)
- Search stats
- Search terms
- Items published, deposited
- Uploaded to reference management systems
- Top referring sites
- Article-level metrics such as number of social media, blog, and news mentions

Usage data from individual platforms will be fed into the Admin Tool where reporting and data mining can occur.

#### Pages that will generate usage data

- Homepages and landing pages
- Collection pages (with flexible branding)
- Journal home pages
- Journal Table of Contents pages
- Journal Issue page
- Journal Article pages in HTML
- Inline PDF display for articles
- Search
- Search results
- Browse
- Static pages (About, For Authors, For Readers, privacy policy, etc)
- Login and user account management pages
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Usage data will be imported into the Admin Tool where reporting and data mining can occur. Google Analytics can be also used, configurable for individual journals, imprints, depts., etc. In addition, the site allows for third party metrics to be displayed from Altmetric or CrossRef's DOI event tracking tool.

## Content Display

Content can be presented in more than one place (it's listed in more than one place without being duplicated)

#### Pages and functions to design and deliver

- Homepages and landing pages
- Collection pages (with flexible branding)
- Journal home pages
- Journal Table of Contents pages
- Journal Issue page
- Option for both HTML and PDF display of article
- Search and discovery tools across content and collections as well as within collections
- Search results
- Static pages (About, For Authors, For Readers, privacy policy, etc)
- Login and user account management pages
- Hypothesis plug in for annotation on publications and content units
- DOAJ seal able to be displayed

### **Content functions**

Search (simple and advanced) with filters and sort as well as a browse function are all needed. The ability to search within a journal, collection, or other grouping is also needed.

Users should be able to submit records to a third party reference management system. And users should be able to share through email, twitter, and other social media tools.

### **New media support and content enhancement**

Tools to associate media (e.g. video, podcasts, slide presentations, live data sets) with publications.

### **Visual Design (UX)**

Establish clear UX conventions for site design with clear and simple user pathways and clean and beautiful design. Create a set of general visual designs with templates to customize look and feel by content collection that can allow for branding based on collection, publication, or imprint. Templates should adhere to the latest standards and best practices (e.g. CSS3, structured HTML, adaptive web design, accessibility).

### **Platform interoperability**

Discovery, retrieval, deposit, and update of content in multiple MSS and IR platforms is accomplished via API calls, pipelines, or other programmatic interfaces. The discovery platform will combine retrieval sets for manipulation by the display component.

### **Advertising**

Static web display ads, such as banner, leaderboard, rectangle and tower ad have possible space available and an ad management tool to populate and control ads. Metrics on ad usage is collected and available for the Admin Tool, including at a minimum:

- Impressions served
- Domains served
- Clicks
- Clickthrough rate

