



A Proposed NISO Work Item:

A Recommended Practice to ILS/LSP Ecosystem
Interconnectivity Encompassing Technical Needs,
Definitions of Terms and Community Transparency; *Open
ILS Initiative (OII)*

Proposal for Consideration by the NISO Voting Membership

Approval Ballot Period: September 14 - October 15, 2023

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Approved by the NISO Information Discovery & Interchange Topic Committee August 21, 2023

Background and Problem Statement:

Libraries each have unique needs to uphold and sustain their mission. As a result, the potential combinations of software/systems evident across the library community are virtually unlimited. However, the ability to implement preferred approaches for each library, involving integrating disparate systems and tools, can be challenging when dealing with closed infrastructures, technical limitations, lack of standardization, system restrictions, unclarity about the scope of interoperability, and the potential confusion caused by lack of clarity/definition of related terms. The ILS (Integrated Library System) or LSP (Library Services Platform), hereafter referred to as the ILS, tends to be the center of these environments where interoperability and bi-directional integrations are paramount, hence the focus of this endeavor.

Given the availability of disparate solutions (created by various vendors, developed by a given library or afforded by open source tools), and the various combinations of services desired by a given library, the need exists to have generally accepted approaches to maximize the value of these resources through greater inter-connectivity flowing to and from the ILS/LSP. This includes open use of APIs and protocols, as well as transparency concerning how these tools may be used, or any restrictions associated with how they may not be used. All of these factors play a role in determining usefulness in relation to organizational goals, and potential development considerations from various parties (libraries, software vendors, open source development, service providers, etc.). This availability and transparency would relate to, but may not be limited to, areas including:

- The use of applicable APIs and any restrictions on API use related to a given application, application type or third party
- The levels of support for specific application integrations between the ILS provider and any applicable third party/service; clearly documented support contact (i.e., who do you ask, where do you start, who do you call if it breaks)

- The allowance of third-party service provider representation and utilization of APIs, documentation, service teams and any other required items that would assist in ensuring integrations on behalf of libraries
- Good faith efforts to support decisions by libraries for new and established integrations and the reasonable/sustained maintenance required to uphold these connections
- The level of and technical requirements for scalability of ILS/LSP systems interoperability to support consortial environments; including need for providers to define basic consortial implementation parameters and limitations

In general, openness can enable greater interactions across systems, giving more control to libraries to optimize their environments in accordance with their goals and needs, open the community to new entrants, support the use of library-created and open source applications, generate overall innovation, and support choice.

As we look within our community to address these issues, we should look outward toward best practices in other industries where open source items co-mingle with library vendor-created systems and nonlibrary vendor systems (such as Learning Management, Student Information, Enterprise Authentication, Financial etc.) to elevate overall value. Middleware services should be considered to play a role as the potential glue in connecting resources and opening doors for recommended practices that may eventually lead to standardization.

Statement of Work:

The OII working group would draft a recommended practice to create visibility, clarity and conformance of the areas that will optimize open interoperability around the ILS/LSP and support the various parties involved. The recommended practice will outline areas of need, propose approaches to address specific roadblocks, identify critical applications that would have the greatest impact, and generate ways to uphold and create related transparency within our community. The goal of the OII Recommended Practice would be to generate broad awareness and conformance/adoption of the principles outlined, while acting as a precursor to follow-on working groups that would offer solutions/best practices to address the specific recommended (technical and other) components within the Recommended Practice details.

This project is envisaged to work in multiple phases, with additional work to take place after the Recommended Practice is published.

The initial working group for the Open ILS Initiative Recommended Practice would analyze the existing landscape, including conducting community surveys among other types of information gathering, and consider:

- Technically-related best practices – statement on benefit of deliverable and expectations

- Availability of APIs
 - Strong, open documentation and training
 - Alignment with library agency
 - Support and on-going maintenance of integrations
 - Middleware opportunities to simplify connectivity
- The list of systems and services which require interoperability with the ILS, including but not limited to:
 - Access Services
 - Acquisitions (physical and electronic)
 - Authentication
 - Availability and location information
 - Content sharing (locally created/otherwise)
 - Discovery Services
 - Financial processes and systems
 - Resource Sharing
 - Statistical/Analytical Tools
 - Teaching and Learning Tools
 - Transparency surrounding the ILS interconnectivity – statement on benefit of deliverables and expectations
 - Definitions of terms (e.g., what is ‘open’)
 - Details on API usage allowances/disallowances
 - App integrations supported/not supported (app categories, specific apps, vendors, etc.)
 - Third-party support services
 - Community involvement
 - Financial concerns/considerations around forced bundles

Subsequent working groups would focus on:

- Development of specific best practices regarding API development and needs to support specific application integrations
 - Technical requirements
 - Scalability
 - Support consortial needs
- Outline middleware options to elevate adoption

Measures of Success to include:

- Conformance practice document (level of conformance scores)
- Conformance survey to be updated one year after release
- Surveying libraries to create a market benchmark of present conformance

Outreach to include:

- Promotion through NISO communications plan and community interest, etc.
- Showcasing the benefits of conformance to adopters
- Sharing conformance and examples with the community

Expected Outcomes/Goals:

This NISO initiative would seek to enable a larger community approach to ILS interoperability that would support library goals and desired approaches, while enabling transparency on the availability and use of APIs and the levels of allowance and support of parties/applications involved. In essence, this is a library-focused community project that enables options for libraries and promotes transparency around how systems can be used. The idea is to define terms and expectations and generate community interplay through conformance to recommended practices and terminology, and greater visibility related to these elements - with and across any systems. This can promote greater value across these platforms, break down any current obstacles that exist across systems, and work toward generating clarity of options and approaches from a library perspective, leading to standards around related interoperability.

Partners and Participation:

We expect participation from libraries representing their institutions, consortia, open source projects, and vendors who wish to engage in open systems. While most libraries, vendors and open source projects in principle support this concept, in practice libraries will benefit from a better understanding of terms that govern the extent to which a system is interoperable with others. Solutions, both open source and proprietary, have different definitions of terms that may restrict or expand their use, including licenses governing open source. The OII initial Working Group and subsequent groups should be comprised of those across the community with technical expertise, who oversee technical infrastructure in libraries, who have definitions/language understanding, negotiation expertise, API expertise and those who understand and work closely with pricing/packaging.

With recent ER&L and NISO Plus panel discussions on this topic, and much discussion of NISO involvement during these sessions, we not only see NISO as a great avenue for this initiative, but also expect a positive impact and knowledge share from/throughout the project - and great value in its eventual recommendations and subsequent conformance.

Timeline:

Considering the first phase is centered around the identification and recommended approach to achieving the larger goals of interoperability, transparency and clarity, we believe the time

frame can be condensed to achieve a published recommended practice within a 12-18 month period. Subsequent working groups would embark on more specific detail within outlined areas of need.

- October 2023: Appointment of working group
- December 2023: Approval and publication of charge and initial work plan (including final determination of scope)
- January 2024 - June 2023: Completion of information gathering
- September 2024: Completion of initial draft recommended practices document
- October 2024 – November 2023: Public comment period
- January 2025: Responses to comments and publication of final NISO Recommended Practice
- February 2025 – April 2025: Consideration and assembly of next phases of project

Funding: N/A