RFP – CST Interoperability Project Phase 1

Summary of Request

Lyrasis is seeking proposals for a 9-month consulting project to develop a set of technical specifications. These specifications are for integrations that will be built (in a separate phase of the project) to enable interoperability workflows among the Community Supported Technologies that are part of its Organizational Home and/or between these applications and other, open-source applications in the cultural heritage and open-scholarship ecosystem.

Introduction

Lyrasis is an independent not-for-profit organization with a mission to empower libraries, archives and museums through content services, open technologies and community-based solutions that expand access to information, preserve cultural heritage, and advance the shared goals of our members and the communities we serve.

Through its Organizational Home function, Lyrasis provides a home to many collaborative communities working to develop and sustain open-source and open-access technologies, infrastructures and research practices in areas aligned with the Lyrasis mission. The Community Supported Technologies (CSTs) currently in the Lyrasis Organizational Home include: ArchivesSpace, CollectionSpace, DSpace, Fedora and VIVO.

For adopters to achieve the most value from these and other applications in the open-source ecosystem, they need to be able to interoperate to support a diverse range of scenarios and workflows. This includes things like shared discovery, shared authority, and various aspects of publication and curation workflows. While integrations do exist, these are often bespoke solutions that institutions who use these technologies need to develop on their own.

The CST Interoperability Project ("the Project"), funded by the Lyrasis CST Growth Fund, aims to increase the sustainability of the individual Community Supported Technologies, as well as the larger open-source ecosystem, by meeting the need for standard support for workflows requiring interoperability and integration across individual applications.

Objectives & Scope

This Request For Proposals ("the RFP") is for the first phase of the Project. The goal for this phase is to develop a set of technical specifications for integrations between the CST applications and each other and/or other, open-source applications in the cultural heritage and open-scholarship ecosystem that would:

1. Solve current unmet interoperability needs of existing adopters of the CST applications.
2. Increase the potential number of institutions adopting and contributing to the CST applications.
3. Be solutions that are sustainable and can be supported by each community.
4. Be achievable within the general constraints of the current application architectures of the individual components (i.e. they may require some development but not rearchitecting/rewriting the application codebase).
5. Prioritize integrations between the CST applications to the extent that there is evidence that such integrations support workflows that are important to the communities of adopters of these technologies.

The final deliverables for the Project must include each of the 5 CST technologies in at least one specification for an integration workflow.

This phase of the project is for design only. One or more separate follow-up RFPs will be issued for the implementation phase(s).

Requirements

Responses to this RFP must describe your qualifications for and the approach you will take to ensuring that the technical specifications produced as deliverables for the project meet these requirements:

1. They must be informed by:
   a. The workflow needs of current and potential adopters of each of the CST applications.
   b. The development and community contribution practices and policies of each of the CST applications as well as any other applications being considered for integration.
   c. Any existing APIs, integration endpoints, supported data standards and protocols for the applications being considered for integration.

2. They must define the requirements for:
   a. APIs and interfaces, including
      i. Protocols
      ii. Data formats
      iii. Authentication/Single Sign On
      iv. Endpoints
      v. Versioning
   b. Data exchange, including:
      i. Data formats, metadata standards, record types, etc.
      ii. Directionality (one-way, or bidirectional)
      iii. Frequency (real-time, batch, scheduled, etc.)
      iv. Volume (data load and message frequency)
   c. Data mapping and transformations
   d. Error handling, logging and monitoring

  e. Security and data privacy
  f. Performance and scalability
  g. Documentation

3. And they must include:
  a. Examples of real-world use cases
  b. Diagrams of system interactions
  c. Identification of gaps between the requirements and existing functionality with recommendations for paths to implementation.
  d. Recommendations for handling change management across applications, considering the governance structure and development practices of the participant technologies.

Deliverables & Timeline
The Project will begin by September 30, 2025, and must be completed by June 30, 2026.

Milestone 1: Identification of potential target workflows and use cases, due by December 30, 2025
Milestone 2: Selection of target workflows to be included following CST feedback, due by January 30, 2026
Milestone 3: Draft Specifications, due by April 30, 2026
Milestone 4: Final Specifications, due by June 30, 2026

Licenses
All deliverables will be published under an open-source license that is compatible with the license(s) of the participant CST applications:
- ECL 2.0 https://opensource.org/license/ecl-2-0 (CollectionSpace, ArchivesSpace)
- BSD 3-Clause https://opensource.org/license/bsd-3-clause (DSpace, VIVO)
- Apache 2.0 https://www.apache.org/licenses/LICENSE-2.0 (Fedora)

Proposal Submission Details
Proposals must be submitted to **orghome@lyrasis.org** by **August 30, 2025**.

Required submission contents (PDF, Word or Markdown):
1. Narrative, including:
  a. motivation and qualifications
  b. project plan outlining the proposed approach and timeline
  c. anticipated challenges, risks and mitigation strategy
  d. proposed structure and format of deliverables
2. CV(s) of individual(s) who will do the work
3. References (minimum 2, maximum 3)

Evaluation Criteria

Proposals will be evaluated on approach, skills, and experience, with preference given for direct experience with one or more of the target applications.

Budget & Payment Terms

The budget for this phase is $100,000 USD including any taxes or other fees.

Payment schedule:
- Signing of contract: 10%
- Milestone 1: 15%
- Milestone 2: 25%
- Milestone 3: 25%
- Milestone 4: 25%

Project Management & Reporting

The project will be overseen by Bridget Almas, Director of Operations for Community Supported Technologies at Lyrasis.   Communication will be via email, Slack and Zoom. Bi-weekly project status check-ins will be required.