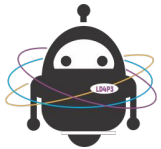
LD4P3 | Linked Data for Production: Closing the Loop

Sinopia Project Plan

Project Plan for Sinopia in LD4P3

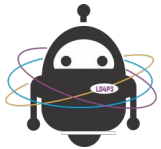
Audience for this Project Plan	**Sinopia project team, Sinopia stakeholders, LD4P3 partners**
Purpose of Project Plan	• Identify priorities for Sinopia development during the LD4P3 grant period, and for each Work Cycle • Set expectations for scope and roles • Define success criteria for each Work Cycle
Project Sponsors	• Linked Data for Production (LD4P3), funded by the Andrew W. Mellon Foundation • DLSS
Date	August 17, 2020, with new slides added for each new Work Cycle



What's LD4P?

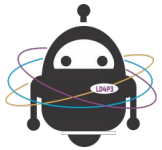
- Linked Data for Production initiative funded by Mellon Foundation
- Goal: libraries adopt linked data to describe library resources
- "Linked data": Metadata expressed in RDF instead of MARC to improve discovery by taking advantage of interoperable format and semantics of classes and properties
- "Production": Production of metadata by library technical services departments

ld4p.org



LD4P...

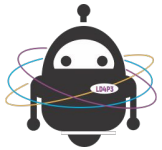
LD4P1: [Trip Planning] (2016-2018)	• Developed ontology extensions • Explored workflows • Evaluated linked data converters and editors • Connected with broader community
LD4P2: Pathway to Implementation (2018-2020)	• Built Sinopia • Supported core group of users (Cohort) • Expanded Questioning Authority • Explored discovery models • Launched Affinity Groups and expanded conference
LD4P3: Closing the Loop (2020-2022) LD4CTL	• Enhance and expand Sinopia • Make Questioning Authority robust • Implement discovery proofs-of-concept • Plan for sustainability and broader community activities



Why Sinopia?

Sinopia is a linked data creation environment developed by the LD4P (Linked Data for Production) initiative to enable librarians and other metadata creators to:

- create metadata in a linked data environment without having to set up and maintain tools
- learn best practices related to linked data creation
- explore the idea of cooperative cataloging (sharing and “reusing” (linking to) each other’s descriptions and identifiers) in a linked data environment
- contribute feedback and expertise to iterative development of tools for working in a linked data environment



What's a Sinopia?

"The **preliminary drawing** for a fresco or mural, named for the reddish-brown pigment traditionally used to draw or transfer it."*

Sinopia is a **preliminary step**, a **sketch of what's possible**, on the way to a full-fledged linked data production environment.

*http://www.lynnerutter.com/glossary.php

Image: Attributed to Matteo di Giovanetto ?; attributed to Simone Martini. 1344-45. Palais des Papes, Sinopia. Painting.
http://library.artstor.org/asset/SCALA_ARCHIVES_10310474813

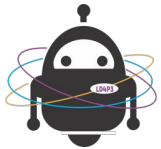
LD4P3 Priorities for Sinopia (2-year grant period)

1. Improve user experience for catalogers
2. Sinopia integration: “Closing the Loop”
3. Performance, scalability, persistence

Grant Priority 1: Cataloger Experience

Work may include

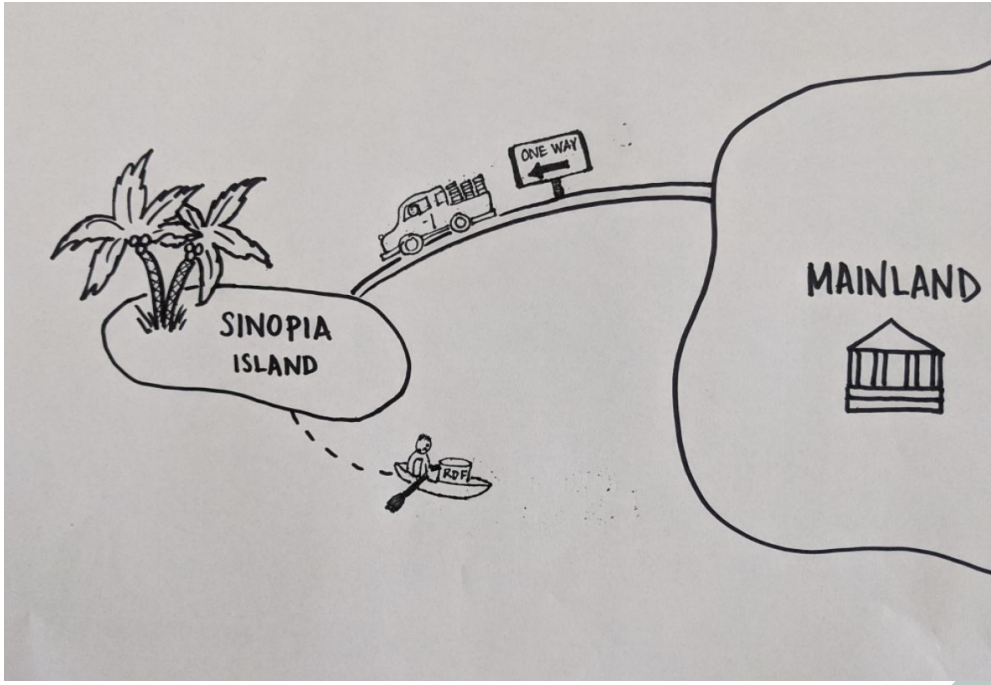
- Redesign to left nav with right panel (inspired by LC redesign)
- Lookup modal instead of dropdown
- Personalization



Grant Priority 2: Closing the Loop

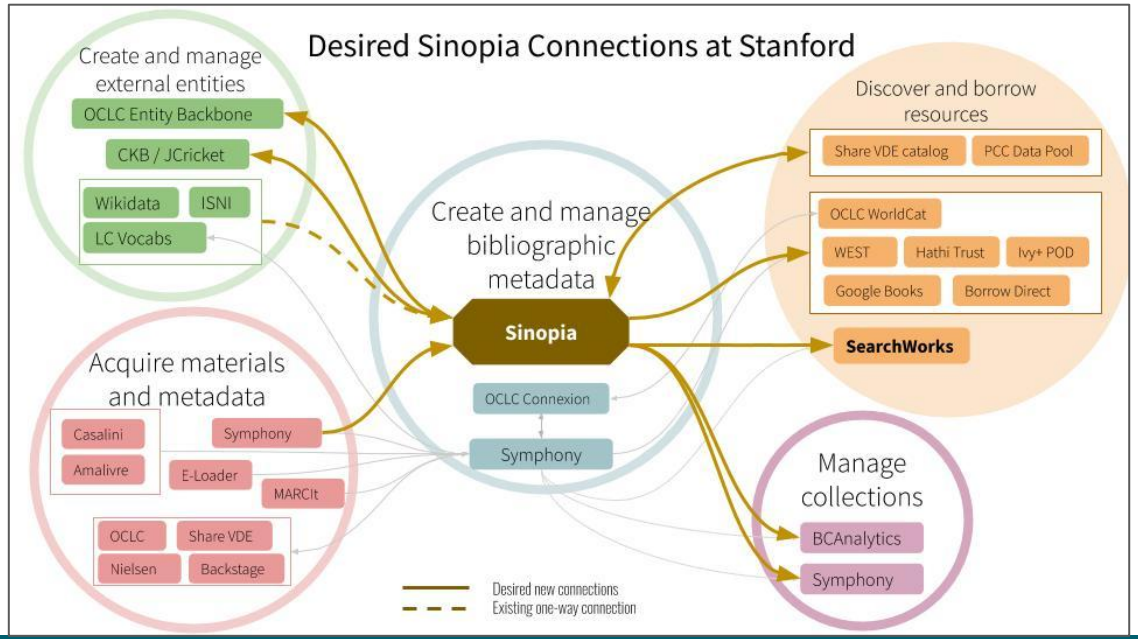
"create a working model of a complete cycle for library metadata creation, sharing, and reuse"

metadata created in Sinopia is not connected to other systems, and existing systems will be with us for some time



Grant Priority 2: Closing the Loop (cont.)

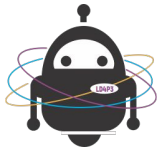
- Closing the Loop Functional Requirements and Sinopia Island Visuals
- Linked Data Cataloging Requirements for Sinopia Development in LD4P3



Grant Priority 3: Performance, Scalability, Persistence

Work may include

- Refactor codebase
- Replace data persistence layer
- Increase test coverage
- Scale to support more users
- (QA Performance handled by Cornell/Iowa)
- What happens to Sinopia after LD4P3?



Participants and Roles

Stanford infrastructure team
- Develop Sinopia back and front end
- Design and implement improved UX
- Integrate QA (with Cornell / Iowa dev team)
- Provide technical support and maintenance

Program for Cooperative Cataloging (PCC)
- Create and maintain approved templates and related cataloging policies
- Expand and onboard cohort of users

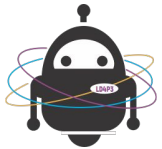
Stanford Libraries Tech Services and LibSys
- First user of Closing the Loop features

QA dev team (Cornell / Iowa)
- Develop Questioning Authority (QA)
- Integrate QA (with Stanford infrastructure team)

Share-VDE
- Develop API that Sinopia can interact with

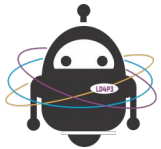
Users
- Create new data
- Create and maintain additional templates
- Provide feedback on designs and features as they are released, and on future work cycles

Cornell Libraries (*added for Fall 2021*)
- Sinolio stakeholder (FOLIO library)



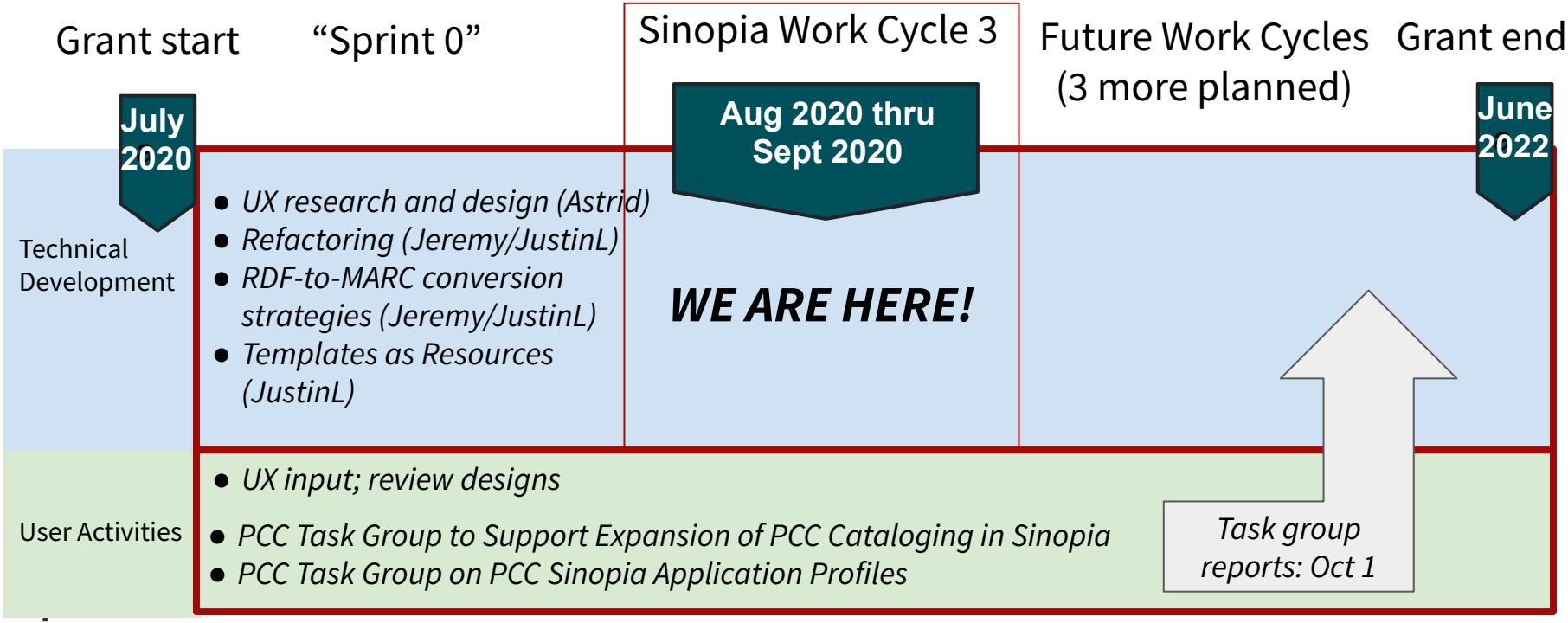
Point people

Group/Role	Point person
Stanford infrastructure team	Product Owner: Michelle Futornick Technical Leads: Justin Littman, Jeremy Nelson
QA dev team	Lynette Rayle
PCC	Jennifer Baxmeyer (-Sept 2020); Melanie Wacker (-Sept 2021); Isabel Quintana (-Sept 2022)
Users / Stakeholders	User Council Coordinator: Astrid Usong Primary Stakeholder: Nancy Lorimer LibSys: Darsi Rueda Sinopia/Symphony: Vitus Tang FOLIO: Jason Kovari (Cornell) (*added Fall 2021)*
Share-VDE	Anna Lionetti



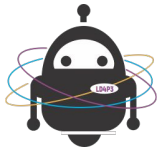
Work Cycle 3 (Fall 2020)

Work Cycle 3 (Fall 2020) in LD4P3 timeline



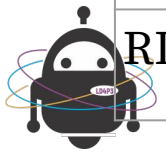
Work Cycle 3 (Fall 2020): Roles

Product Owner	Michelle Futornick	
Tech Lead	Jeremy Nelson	
Scrummaster	Josh Greben	
Developers	Aaron Collier	Justin Littman
	Jeremy Nelson	Mike Giarlo
	John Martin	Naomi Dushay
	Justin Coyne	Peter Mangiafico
	Josh Greben (part-time)	
UX Designer	Astrid Usong	
Primary Stakeholder	Nancy Lorimer	
Technical Manager	Vivian Wong	

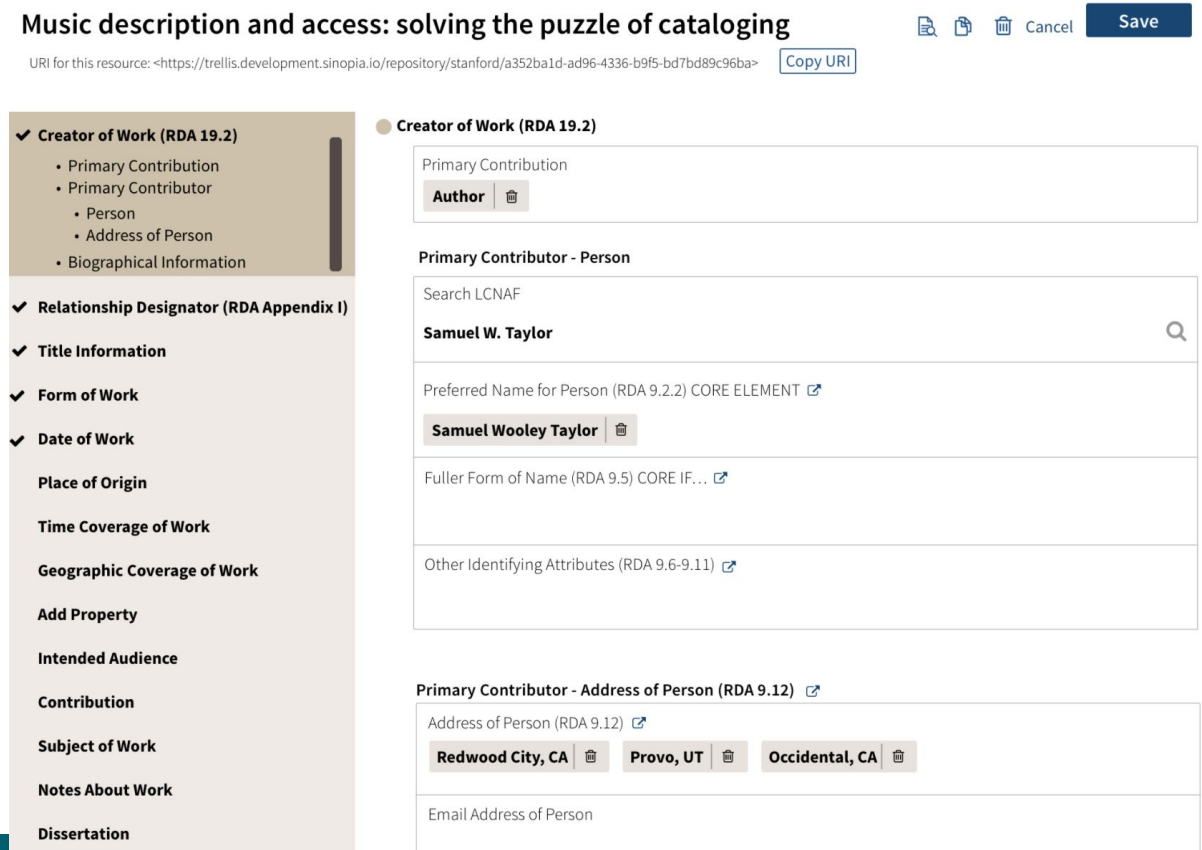


Work Cycle 3 (Fall 2020): Priorities

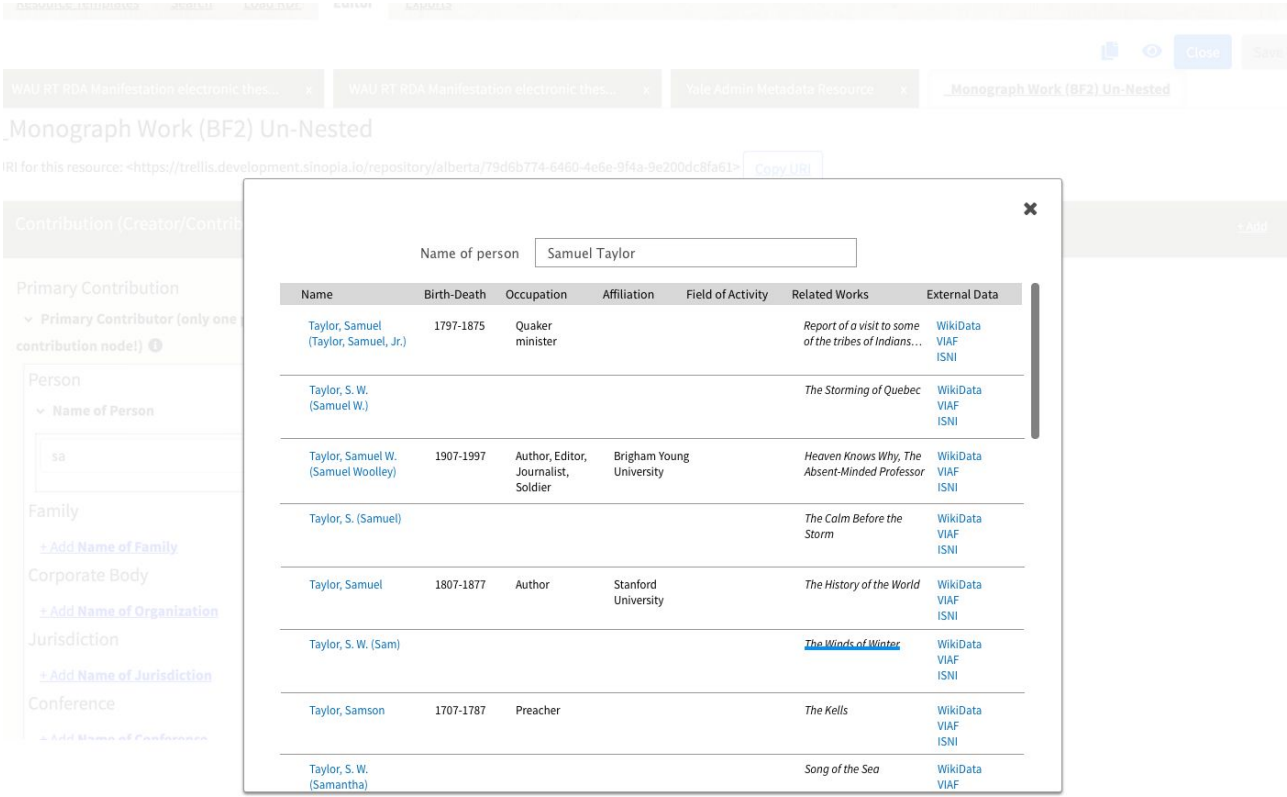
Work Cycle 3 item	Grant priority
Highest priority UX requests based on user research conducted by Astrid • *Left nav layout* • *Lookup modal*	• Improve experience for catalogers
Refactor codebase; increase test coverage; replace data persistence layer	• Performance, scalability, persistence
Treat resource templates as Sinopia resources	• Improve experience for catalogers • Performance, scalability, persistence
RDF-to-MARC **operational** conversion	• Closing the Loop



Work Cycle 3(Fall 2020): Cataloger Experience 1

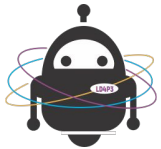


Work Cycle 3 (Fall 2020): Cataloger Experience 2



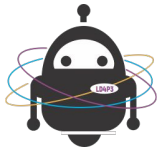
Work Cycle 3 (Fall 2020): Performance, Scalability, Persistence

- Refactor codebase
- Replace data persistence layer
- Treat templates as resources
- Increase test coverage
- *Separate meetings coming for devs re above*



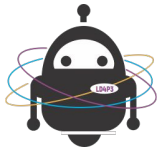
Work Cycle 3 (Fall 2020): Closing the Loop

- **RDF-to-MARC conversion** so that items cataloged in Sinopia can be managed in ILS, for reporting and discovery
- Two strategies explored: code-driven and template-driven
- Success criteria
  - *Sinopia can convert a Work/Instance/Item into a single MARC record with a minimum set of MARC fields as defined by Stanford Tech Services*
- Out of scope for this Work Cycle
  - *UX for cataloger to launch and manage conversion*
  - *Conversion launching automatically*
  - *Batch conversion*
  - *Conversion to any other MARC fields not in minimum operational set*



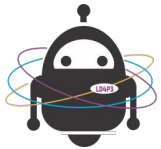
Work Cycle 3 (Fall 2020): Logistics

- Time bound! Ends September 25, 2020
- Daily standup: 10:30 AM PST *works for everyone?*
- Bi-Weekly demo + retro: *need to schedule (was Thurs 11 am PST)*
- Story Time/Planning: Mondays, 1 pm PST, *works for everyone?*
- Running notes for retro and story time and planning
- Zenhub board: https://tinyurl.com/Sinopia-WC3
- Slack: #dlss-sinopia-dev
- Releases
  - Dependency releases on Mondays
  - Feature releases at end of every sprint on Thurs



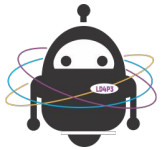
Work Cycle 3 (Fall 2020): Communication and user input

- Dev team shares designs and features with stakeholders frequently
- Primary Stakeholder role: Nancy Lorimer
- Astrid coordinates User Council for getting feedback
- Sinopia User Group weekly meeting: currently every 4th Monday at 11 am pacific, TBD: meet more often during work cycles?
- Users submit bug reports and feature requests via Github (links in Sinopia)
- Slack channel #sinopia in LD4 Workspace
- PCC TG1 list will close; will create new email dist list



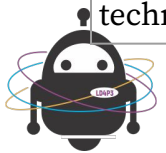
Work Cycle 3: Sprint 1 (Aug 17 - 27, 2020)

1. Controlled Digital Lending (CDL) (not related to Sinopia; a high-priority Stanford item for the team that works on Sinopia)
2. Onboarding to Sinopia infrastructure changes already in progress
    a. Redux state (Wed Aug 19)
    b. Testing philosophy (Tues Aug 18)
    c. Migrating from Trellis to Mongo-DB (TBD, Thurs?)
    d. RDF-to-MARC (TBD week of Aug 24)
    e. Templates as Resources (TBD week of Aug 24)
3. Improve test coverage
    a. Complete existing test tickets
    b. Ticket new tests needed for Trellis to Mongo-DB and Template as Resources work
4. Migrate Stage and PRD to 3.0.0



Work Cycle 3 Risks (from WC1!)

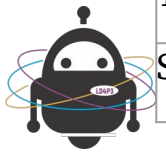
Risk	Mitigation Plan
Imperfect understanding of stakeholder requirements	Project team will share designs and prototypes with Stakeholders for feedback as early as possible and get user input via the weekly user group meeting and the Product Owner; and make project documentation transparent
Adoption slowed by time and resources required to create profiles; role of profiles more critical than originally estimated	Profile editor released early in work cycle so that experimentation/training can begin; Stakeholders devote adequate resources to profile creation
Features are there, but it's hard to use	Project team will show UX designs to users as early as possible and get feedback; Stakeholders will make training readily available and add training for tasks that prove difficult
Not enough time to build everything	Stakeholders will provide input on priority of each feature; Project team will identify simple vs "full-feature" implementation of features so that there is some aspect of each feature that can be delivered
Project team needs to ramp up on new technologies	Learn from other Stanford DLSS teams that know these technologies



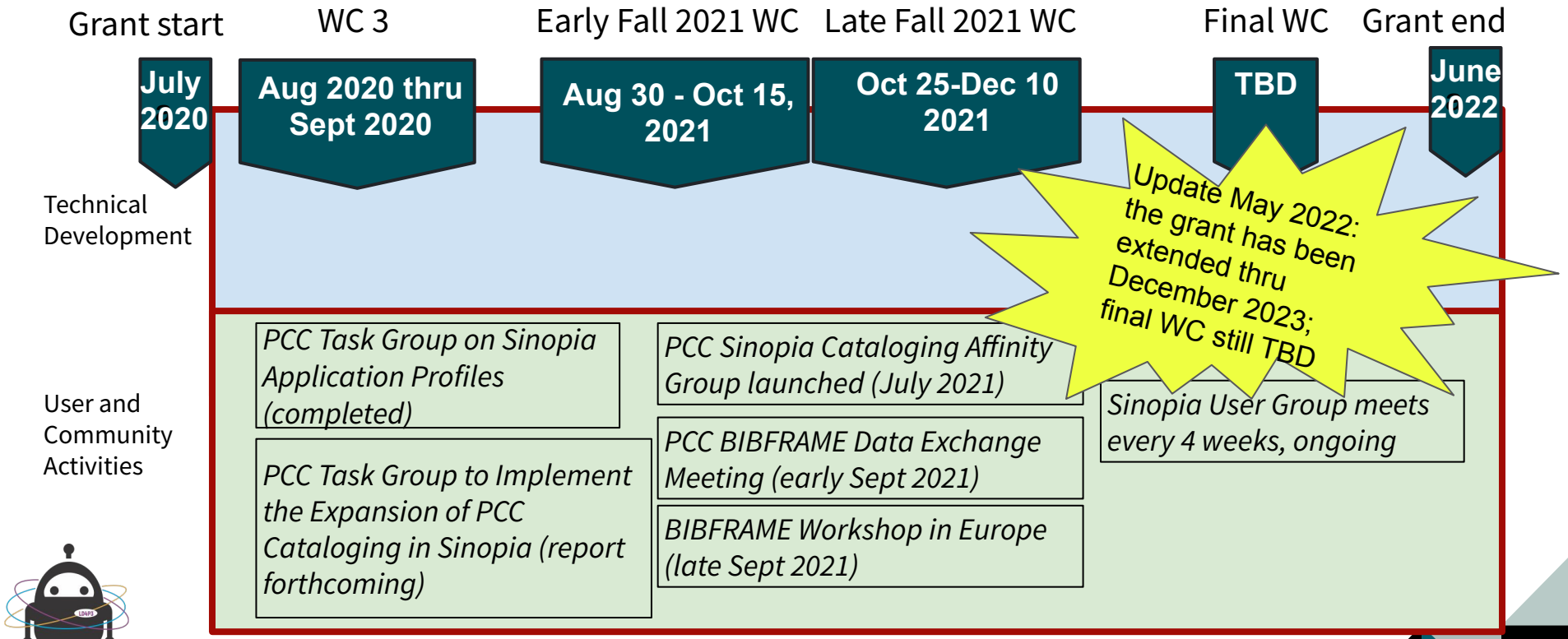
Fall 2021 Work Cycles

Fall 2021 Work Cycles: Project team

Role	Team members
Tech Lead: Sinopia	Justin Littman
Tech Lead: Sinolio	Jeremy Nelson
Developers	Infrastructure: Aaron Collier, John Martin, Justin Coyne, Mike Giarlo (from October), Naomi Dushay, Peter Mangiafico; Library Systems: Josh Greben
UX Designer	Astrid Usong
Product Owner	Michelle Futornick
Stakeholders	Primary: Nancy Lorimer LibSys: Darsi Rueda Sinopia/Symphony: Vitus Tang FOLIO: Jason Kovari (Cornell)
Technical Manager	Vivian Wong
Scrum Master	Jeremy Nelson

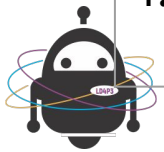


Fall 2021 Work Cycles in LD4P3 timeline



Fall 2021 Work Cycles: Priorities

Work Cycle item, in order of priority	Grant priority
1. Support original cataloging in production setting / integration with Symphony ILS	• Closing the Loop
2. Permissions to control editing	• Performance, **scalability**, persistence
3. Integration proof-of-concept with FOLIO	• Closing the Loop • Performance, **scalability**, **persistence**
4. Improve UX, especially for working with multiple resources	• Improve experience for catalogers



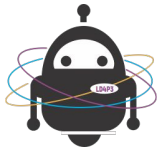
Priority 1: Integration with Symphony

Scope:

- User manually initiates process (“Send to ILS” button) that converts Sinopia description, creates corresponding record in Symphony, and saves Symphony record identifier in Sinopia description
- Sinopia’s BF-to-MARC conversion creates an operational record that enables MARC-based discovery and collection management

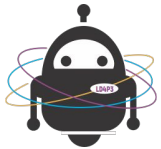
Out of scope:

- Copying data from external sources (Share-VDE; acquisitions process)
- Automated pushing of changed records



Priority 2: Permissions

- What you can do based on who you are
- Actions to be subject to permissions are changing a resource and initiating record transfer to ILS
- Use an existing permissions and authorization module
- As simple as possible

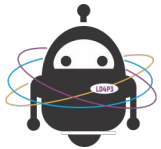


Priority 3: Integration proof-of-concept with FOLIO

- FOLIO: open-source ILS, does not have its own RDF cataloging tool
- Parallel development project to Sinopia enhancements
- Draw on same middleware plan as Sinopia-Symphony integration
- FOLIO community as stakeholder

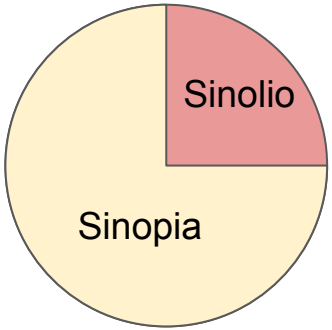
Priority 4: UX Improvements

- Improve UX when working with multiple resources
  - Current state: Eleven multi-part steps to catalog something
  - Design work in progress
- Lookup UX improvements
- Input interaction overhaul
  - More like H2
  - More consistency among inputs

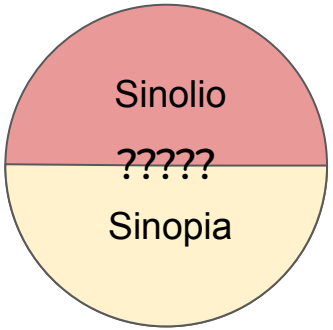


2 Projects x 2 Work Cycles =

Early Fall Work Cycle
August 30 - October 15



Late Fall Work Cycle
October 25 - December 10



Early Fall: Sinopia Sprint Plan

(subject to change)

Sprint 0 (Aug 30-Sept 3)

- Implementation plan:
  - transfer of MARC records
  - permissions
- Input component UI design review
- Epic React training
- Clean stage
- Tech prep

Sprint 1 (Sept 6-17)

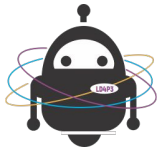
- Permissions epic
- MARC conversion epic
- High priority bugs

Sprint 2 (Sept 20-Oct 1)

- Transfer of MARC records epic
- Input interaction overhaul epic

Sprint 3 (Oct 4-15)

- Lookup experience improvements epic
- Validation epic
- Visual design improvements



Early Fall: Sinolio Sprint Plan

(subject to change)

Sprint 0 (Aug 30-Sept 3)

- Orientation to FOLIO
- Investigate use of FOLIO for Sinopia permissions
- Investigate use of Apache Airflow for ILS Middleware epic

Sprint 1 (Sept 6-17)

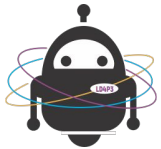
- AWS SNS/SQS setup and testing
- UI and Datastore Changes to the Editor and API epic
- Apache Airflow DAGs for Symphony

Sprint 2 (Sept 20-Oct 1)

- FOLIO for Sinopia authentication and permissions (if decided)
- Sinopia RDF-to-FOLIO Mapping epic
- Apache Airflow DAGs for FOLIO

Sprint 3 (Oct 4-15)

- FOLIO Inventory Module Changes



Late Fall: Sinopia and Sinolio Sprint Plans

(subject to change)

Sinopia

Sprint 1 (Oct 25 - Nov 5)

- API changes for Sinolio
- Referenceable resources
- Bugs and cleanup
- Input validation epic
- Support QA local authorities
- Visual design improvements
- Versions and diffs

Sprint 2 (Nov 8-19)

- UX improvements for working with multiple resources
- Enable choice of property when cataloging

Sprint 3 (Oct 4-15)

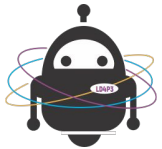
- Language tagging improvements
- Bugs and cleanup

Sinolio

- Finish Symphony tasks
- Finish AWS deployment

- Start FOLIO-side tasks
- Deploy dedicated FOLIO environment

- Finish FOLIO-side tasks



Fall 2021 Work Cycles: Risks

Risk	Mitigation Plan
Infrastructure team simultaneously working on hiring two new developers, supporting SRT, lending Mike to Access: less time for Sinopia development	Do not plan for 100% of developer time devoted to Sinopia
Not leaving enough time for user testing	Give users range of dates in advance when their participation will be needed
Hitting a wall with React/Redux with limits of expertise and complexity of application	React developer training happening in Sprint 0, which includes performance component
Developers needing to address emergencies in other systems; there are some system upgrades coming that might have an impact	First responder rotation system
Sinolio proof-of-concept could fail; this is okay because it's a proof-of-concept	Make sure all parties know it's a proof-of-concept
Miscommunication to FOLIO community around expectations	See above re proof-of-concept