ATTENTION: Mary Caldera
Head of Arrangement and Description
Manuscripts and Archives
Yale University Library

DATE: October 17, 2014
PROJECT: ArchivesSpace Development - Phase 2

Dear Mary,

Hudson Molonglo is pleased to provide this quote for proposed ArchivesSpace development work. This constitutes the second phase following previous work on accessioning with the Beinecke Library.

Services: Development of new features to satisfy the requirements, described below, for container management within ArchivesSpace at Yale. Additions and refinements to the phase one accessions development work.

Duration: 18 weeks (October 2014 - February 2015)

Resources: Hudson Molonglo ArchivesSpace developers and technical project manager.

Deliverables: Code, tests, technical documentation - see below

Sincerely,

James Bullen
Director, Hudson Molonglo
ArchivesSpace Development - Phase 2 Work Plan

The project will be run according to a Scrum-like project management methodology. It will be organized into nine sprints. Each sprint will last two weeks. The scheduling of work is determined by the sprint planning process described below. Consequently, there is no predetermined project timeline.

The Hudson Molonglo (HM) ArchivesSpace development team will work remotely to implement the deliverables outlined below. Yale will appoint a Product Owner who will provide prioritization, detailed specification, clarification, and acceptance testing as required on the work as it proceeds.

HM will appoint a Scrum Master (technical project manager) from the development team. The Scrum Master will convene a sprint planning call at the start of each sprint. The sprint planning call will include at least the Scrum Master, the Product Owner, and members of the development team. The Product Owner may wish to include other staff on the call. The purpose of the sprint planning call is to plan the upcoming sprint. This involves prioritizing, assigning and scoring stories, and discussing and resolving any outstanding issues or concerns. Pivotal Tracker will be used, as in Phase 1, to document stories and manage their lifecycle.

The Scrum Master will also convene a sprint review call at the end of each sprint. This call will include the Scrum Master and the Product Owner. The purpose of this call is to confirm the stories delivered for the sprint, ensure the documentation on the stories accurately reflects their state, and discuss any issues related to acceptance testing for the delivered stories. The Scrum Master will then prepare a release that includes the delivered stories.

Once a release has been made available, the Product Owner will coordinate acceptance testing. Each newly delivered story will be tested. The results of the test will be entered into the documentation for the story. The results will either indicate that the story has been accepted, or that the story has been rejected for a reason. The development team will give priority to fixing rejected stories. The acceptance process should be completed within one week of the release.

The HM team will develop the deliverables including code, tests and technical documentation in a public code repository on Github under the hudmol organization. Tagged releases will be built from this repository for each sprint. HM will not be responsible for merging these releases with other ArchivesSpace repositories.

James Bullen will be HM’s primary business contact for the project. Yale will appoint a primary business contact. We expect this will be Mary Caldera. Mary and James will consult on an as needed basis, and will consider whether a weekly call is required.

The Development Scope section describes the scope of the development work broken into development areas. Each development area will be broken down into stories as required as part of the sprint planning process.
Deliverables

The deliverables for each development area are: the code that implements the requirements, a set of unit tests for the code, and technical documentation where required. Each development area will be developed as a plug-in or as a modification to the core codebase. Preference will be given to plug-in development. The decision for each development area will be made during the sprint planning process.

At the end of each two week development sprint a packaged release of ArchivesSpace will be made available for acceptance testing. Revised releases will be made available if changes are required following testing.

Development Scope

The 11 development areas described here comprise the scope of development. In keeping with the agile approach, implementation details will be determined as development proceeds. Each development area has a number of story points (shown in parens), assigned on a fibonacci scale. These are included to give an indication of the relative effort we estimate will be required for each of the areas.

Note struck out development areas have been removed from the development scope and will not be implemented as part of this project.

Container Management

1. Container Profile Record (8)

Add Container Profile as a new top level record to model Container subtypes. In this first round of development, only subtypes of ‘box’ will be implemented. A Container record can have one Container Profile record associated with it. A Container Profile record defines the kind of container, its dimensions and its extent dimension. It has the following fields:

- name - string (unique)
- url - string (optional)
- dimension_units - enum (default ‘inches’)
- extent_dimension - enum (‘height’, ‘width’, ‘depth’)
- height - string (validates as float)
width - string (validates as float)
depth - string (validates as float)

A management interface, available to Repository Managers, will support creating and editing Container Profile records.

2. **Container Profile Linker (3)**

Add a linker to the Container form to associate a Container Profile record with a Container record. It is expected that there will be up to a few hundred Container Profile records in the system. The linker will provide a means for the user to quickly find Container Profiles that are commonly used in their Repository.

3. **Extent Calculator (5)**

Add a facility to calculate the extent of a Resource or Resource Component based on the profiles of the Containers that comprise it. The following information will be presented in a summary report:

- Count and total extent for each Container Profile used in the Resource
- Total extent for the Resource

The user may choose to create extent records based on this information, but for the first round of development, this will be a manual process - the extent calculator is only a reporting function.

4. **Add ILS Bib Id field to Resource Record (1)**

Add the following field to Resource records:

Bib Id - string

This may be implemented using a User Defined field, or as an external_id.

Note that this development area and the next, 5, are required to support the ‘Export to Voyager’ function which will be implemented by Yale. HM will provide the fields described and make them available via endpoints on the ArchivesSpace backend API. Yale will be responsible for implementing the integration.

5. **Add ILS export sub-record to Instance Records (3)**

A new one-to-one sub-record on Instance records that has the following fields:

Holding Id - string
Exported flag - boolean (default ‘false’)

6. Bulk operations on Container Records (13)

Add the ability to select an arbitrary set of Containers and then to perform bulk operations on the set, as follows:

- Set location
- Set Container Profile
- Set Holding Id on the ILS Export sub-records of the Containers’ Instance records.
- Set the restricted flag on the associated Resource Component records.
- Rapidly edit barcodes on individual Containers within the set.
- Delete the Containers and their associated Instance records.

7. Container Barcode Validation (2)

Add two validation rules for barcodes on Containers

- Container barcodes must be unique
- Container barcodes must have a length within a range defined in a system or repository level default

Note that there is an unresolved issue related to the uniqueness constraint. HM’s understanding of current practice and preferred future practice is that when many Instances share a Container, the Container is represented in the system by one Container record per Instance (rather than having all of the Instances pointing to a single Container record). We understand the motivation for doing it this way, but it means that the uniqueness constraint must be relaxed in these cases to allow the many Container records being used to represent a single actual container to have the same barcode.

Accessions

8. Edit Department Code Permission (2)

As an administrator of the ArchivesSpace application I want to be able to restrict the ability to edit department codes (as supplied in the yale_accessions plugin) to repository administrators.
9. Default Material Types User Preference (3)

A user with permission to edit accession records will be able to set one or more default material type values. When user x creates a material types sub-record, default values are set to true by default.

10. OCLC Plugin Refinements (3)

Make changes necessary to improve performance and address connection errors. Also add a confirmation of successful import.

11. Extend MARCXML > Accessions import mapping (2)

The MARCXML > Accessions import added in the first phase of HM development was limited to mappings that could be merged into the core application. A plugin will extend the import mapping to include additional fields as necessary to populate user defined fields.