Collaborative, Centralized Infrastructure for Open Access Scholarship in Maryland

Shared Governance
Configuration and customization of MD-SOAR is driven by the Governance Group, composed of one voting representative from each of the eleven colleges and universities currently participating in the project. Chuck Thomas, Executive Director of the University System of Maryland and Affiliated Institutions consortium (USMAI), serves as liaison, to the Governance Group, from the Council of Academic Library Directors. David Dahl, Director of Consortial Library Application Support (CLAS), also serves as a liaison.

During much of MD-SOAR’s pilot phase (2015-2017), the Governance Group held bi-weekly meetings to track progress on implementation, craft a takedown policy, develop a shared structure for metadata, decide which submission fields should be required, and to propose, discuss, and vote on enhancements to MD-SOAR. Group members pooled their individual expertise to improve MD-SOAR (catalysts formed a subcommittee to work on metadata standards) and each institution shared their experiences as they implemented their repository, allowing us to learn from one another.

Going forward, the Governance Group will be instrumental in suggesting technical enhancements to MD-SOAR and seeking CALD approval to use USMAI funds for those enhancements. New partners joining MD-SOAR can expect to participate in the Governance Group.

Organization
DSpace uses the concept of “communities” and “collections.” In MD-SOAR, each institution can assign its communities and collections into a useful hierarchy of resources that suits its needs.

Each community, collection, and record has a handle assigned. A handle is a permanent identifier that is expressed as a URL in MD-SOAR. Using handles ensures that the user can always get to the resource they need. For example, here’s the handle for the eScholarship@Goucher community: https://mdsoar.org/handle/11603/2. Records in MD-SOAR can also be linked to multiple collections.

Flexible, Customized Metadata
MD-SOAR uses Qualified Dublin Core metadata and has added customized fields to suit the needs of academic institutions. Dublin Core metadata is simple, extensible, and used worldwide for metadata description in a variety of disciplines. The most commonly used Dublin Core fields in MD-SOAR are:

- abstract
- contributor
- description
- format
- identifier
- subject
- title
- creator
- date
- publisher

MD-SOAR provides custom fields for electronic dissertations and theses (ETDs), reports, other documents.

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<th>Type</th>
<th>Collection</th>
<th>Date Event</th>
<th>Image</th>
<th>Interactive Resource</th>
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<th>Physical Object</th>
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The only required fields in MD-SOAR are:
- title
- type – Uses the Dublin Core metadata type terms (see right)
- relation.IsAvailableAt – A custom field in MD-SOAR to denote the institution that the record belongs to, e.g. Frostburg State University.

Files can be deposited via mediated deposit or self-deposit. In the case of self-deposit, administrators can review and, if necessary, edit submissions before approving them for ingest. Templates can also make creating records in a specific collection, e.g. electronic dissertations and theses, a breeze.

MD-SOAR provides the option of using a Creative Commons license with helpful documentation.

Other metadata is automatically generated:
- date.accessioned
- date.available
- identifier.uri - permanent link
- identifier – DOI
- format.mimetype – digital file format, e.g. PDF
- format.extant – size of digital file

Browse & Search
Users can browse and search MD-SOAR, its communities, and collections by a variety of metadata fields. Users can browse by:
- Authors
- Titles
- Subjects
- Type

There’s a simple search box. However, the advanced search allows power users to search for content across MD-SOAR or a specific community while filtering. Results can be sorted by relevance, title ascending/descending, or issue date ascending/descending.

MD-SOAR records are indexed by Google Scholar (https://scholar.google.com/), expanding the availability of records to those who do not directly access the repository site.

Ongoing Development
In Fall 2016, the MD-SOAR Governance Group developed a prioritized list of desired enhancements to guide future work on MD-SOAR:
- In-browser support for audio and video playback
- Vireo integration to streamline ETD processes
- Shibboleth integration
- Customizable submission forms (for individual institutions)
- Image viewer with pan/zoom functionality
- Integration of open-source image/document viewer
- Support for additional metadata formats

Funding approval from CALD is necessary before work can begin on these enhancements.

Analytics Partnerships
As part of the initial installation, Google Analytics was implemented to track user traffic and usage of uploaded resources and records. While the default DSpace features allowed for the tracking of actual bitstream downloads, item-specific metadata was unavailable — a serious drawback for our consortial model. In light of these failings, the Governance Group elected to pursue implementation of Google Tag Manager: a centralized analytics administration platform that supports easy analytics customization and distribution.

While this fix allowed for the capture of title, author, and campus for each downloaded item, the switch from GA to GTM invalidated custom code released with DSpace that supported the capture of metrics from in-bound traffic coming from sites such as Google Scholar and other indexed search sites. Development of better approaches to GTM usage are ongoing.

To help investigate alternate approaches to usage data collection, the MD-SOAR team has partnered with the Repository Analytics & Metrics Portal (RAMP) project, an OCLC- and IMLS-supported initiative that is developing a novel methodology for collecting and assessing analytics for institutional repository sites (http://ramp.montana.edu/). This partnership will lead to not only better approaches to analytical data for the MD-SOAR platform, but will also aid in the development of exciting new approaches to the critical assessment of institutional repository statistics and usage patterns.

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