

Common business functions

Service-Oriented Levels of Metadata Adoption
List of Fields to Index for Adoption of MODS

Priorities are as follows:

P1. Mandatory: The product will not release until these requirements are met.

P2. Highly Desirable: The product will release, but these requirements must be met soon thereafter.

P3. Nice to Have: The product will release, and these requirements should be addressed as time and resources permit.

P4. Future: Not intended for this release. Assign a priority after this release is complete.

Function	Exists on Portal?	Priority	Minimum Level of Adoption for Metadata n /a= not applicable	Description	Questions/Comments	Examples
Search/Find			Owned by Kat and Steve. (We need to look at requirements for other systems – FRBRized systems, faceted browse systems – to make sure we're not missing anything)			
Keyword searching	yes	P1	level 1; just indexes whatever is there	User enters a term into an input box or boxes; system responds with Aquifer search results that match that term, regardless of where that term appears in the record.		
Fielded searching	yes	P2	level 1: creator, title, rights; level 2: subject, language, date, typeOfResource; level 3: genre, form, non-topical subjects; level 4: abstract	User enters a term into an input box and specifies which field to search that term (e.g., "title", "author"); system responds with Aquifer search results that match that term only in the field specified. (Need to itemize all fields we want to be searchable.)		
Search limits	yes	P2	level 1: rights; level 2: language, date, typeOfResource; level 3: genre, form	User enters a term and specifies to limit that search to a particular field value (e.g., just books, just records from Emory); the system responds as specified. (Need to itemize all fields we want to use as search limits.)		
Search by clustered values	no, only on DLF portal	P4	level 2 (implies some kind of controlled vocabulary as output from automated clustering process)	Users choose field values from a controlled vocabulary (usually hierarchical) to limit their searches.		
Search by selecting hyperlinked field values	yes	P2	n/a	User views search results and sees that some fields are hyperlinked. User selects a hyperlinked field value and system responds with Aquifer search results constrained to just that field value (initial search is not included in the constraint).		
Expose facet values for result sets	no	P2	various; see fielded searching /search limits	For any arbitrary result set (including a query with no constraints), the system displays one or more facets (e.g., language), facet values (e.g., English, Spanish, French) that apply to the query. Facet values should also display the number of records in which that facet value appears in the result set, recognizing that many fields in a record may have multiple values. For example, if a query for "toast" in the keyword index results in two records and the first record has values of "English" and "Spanish" in the language elements and the second record has a value of "English" in the language element, the language facet should have two facet values: English (2 records) and French (1 record). Null facet values (Spanish) should not display. (If browse is supported, need to itemize browsable facets and their facet values.)		http://flamenco.berkeley.edu/demos.html http://www.lib.ncsu.edu/catalog/ http://worldcat.org/ http://blacklight.betech.virginia.edu/
Apply constraints to a query by selecting facet values.	no	P3	various; see fielded searching /search limits	When user selects a facet value from the facet display on the results screen, the system appends this query to the existing query and displays results that match the constraint. Using the example immediately above, when the user selects the "French" facet value, the query becomes: (keyword=toast) AND (language=French).		
Indicate active constraints	no	P2	n/a	For any result page, the system should display to the user any constraints that have been applied to the query (e.g., facet value limit, search limit, query term, Boolean operators used). After selecting a facet value, that facet value should not be hyperlinked and should indicate "you are here".		
Remove facet constraints	no	P3	n/a	From the display of the active constraints, user should be able to remove any arbitrary constraint and generate new results. For (keyword=toast) AND (language=French), if a user removes the (keyword=toast) constraint, the system should display results for the (language=French) query.		
"More..." facet values	no	P2	n/a	There should be a system-defined, configurable threshold for how many facets values to display within a facet as a default. User should be able to choose to display all facet values for a given facet.		
Hierarchical facets	no	P4	TBD: date? geography? subject?	Some facet values may be hierarchical (e.g., Michigan --> Ann Arbor). Selecting "Michigan" should expose a page that lists all cities in Michigan, for example, and then the user can select "Ann Arbor". (Spec further if hierarchical facets are a go).		
Sort order facet values	no	P4	n/a	The facet values should be sorted by number of records (descending) as a default. The system should also be able to display by number of records (ascending) and display alphabetically (ascending and descending)		
Metadata analysis interface	no	P4	n/a	Aquifer metadata librarians (e.g., Kat, Jenn) should be able to see the distribution of facet values, find outlier facet values, null facet values, etc..	See attachment metadata_analysis_interface_requirements.doc	Roy's tool Rob Casson at MU-Ohio video of UNT's tool
Refine query	yes	P2	n/a	User is able to view the original search query and change it by adding or removing query values.		

For a particular record, find "more records like this"	no	P3	n/a	User identifies a record as input for a subsequent search; system responds with Aquifer search results that are similar ("query-by-example").		
For a particular work, find "more works like this"	no	P4	n/a	While viewing search results that are grouped by FRBR-ized work sets, user identifies a work and indicates s/he wants to find similar works; the system responds with search results grouped by work sets, of works that are most similar to the one the user indicated.		
For a particular work, find all versions of that work	no	P4	n/a	While viewing search results that are grouped by FRBR-ized work sets, users identifies a work and indicates s/he wants to find all expressions/manifestations of that work; the system responds with the master work record and all records in that work set.		
View results	yes	P1	n/a	System shows user brief and/or expanded metadata (including thumbnails) for Aquifer records that match a query. Brief display can be thought of as the "Google model".		
View faceted results	no, only on DLF portal	P4	various; see fielded search /search limits	System shows user one or more facets and facet values (with counts) for all the records (works?) that match the query.		
Sort search results	yes	P2	n/a	User is able to sort record results by relevance (which algorithm(s)?), author/title, date, provider, etc.		
Group all versions of a work in a single search result	no	P4	n/a	System groups all versions of work on a results page (assumes FRBRish work sets). A specific task that takes advantage of this functionality is to "Find related works".		
Results per page	yes	P2	n/a	System returns a certain number of results per page, and the option to decrease, increase or show all results.		
Pagination	yes	P1	n/a	System provides the ability to proceed to the first, last, next, previous, and any arbitrary results page.		
View search history	no	P3	n/a	System allows users to return to a set of results from previous search(es), to view and/or to refine.		
Saved searches	no	P4	n/a	User can choose which queries in their search history they want to save across sessions (assumes user accounts). (Also see <i>Obtain</i> for the ability to download saved searches/records and /or subscribe to saved searches via email/RSS.)		
Search in multiple languages	yes, can enter CJK, etc.	P4	level 2	(What is this: entering non-English text as a search term? providing a UI that is non-English? translating records from English to non-English in the display?) (Additionally: searching using language codes or plaintext? mapping from codes to text?)		
Identify				Owned by Katherine (help is welcome)		
Determine relevance	yes	P2	n/a	User is able to clearly see relevance score. User may also click on that score to see a description of how "relevance" is ranked by the system (a verbal description of the ranking algorithm's components).		
Aquifer /Institution branding	yes	P2	n/a	System includes prominent branding (icons?) on every record. That branding identifies the record's institutional origin.		
Display foreign language (from metadata)	yes	P3	n/a	System can handle and display properly all basic foreign languages.		
Translate metadata into foreign languages	no	P4	n/a	System can translate metadata into other languages, especially translating English to Spanish and vice-versa		
Obtain				Started by JV - any help here welcome!	Implementation of Asset Actions would solve many of the requirements in this section.	
Link to content	yes	P1	level 1	Important to have a persistent link directly the item (MD + digital object), not to collection level.		
Select object	not sure	P1	n/a	SET: What does this mean? ability to cognitively select it in your mind or is this a UI widget to add it to your basket?		
Metadata	yes, descriptive metadata	P1	level 1? various?	Need both descriptive MD about intellectual content and tech MD about the digital object.	SET: need to itemize fields at a future date.	
Obtain full or partial citation	yes, obtain full citation		level 1? various?	SET: need to itemize fields at a future date.		
Export metadata	yes, but only fielded BibClass	P1	n/a	Export in standard bibliographic formats: Zotero RDF, BibTeX, MODS, Endnote, RIS, Unqualified Dublic Core RDF, Wikipedia Citation Templates (above, taken from Zotero list).	SET: is each of these formats P1? My guesses: are that RIS might be P1 but the rest are P3	
Make metadata openURL friendly	sorta, there is a hack		TBD; see question		SET: what does this mean: ability to generate a valid OpenURL (0.1 or 1.0?) or are there certain fields that are required?	
Show viewers supported	no	P2	Not sure which MODS field this is!	Inform user what viewer needed and, ideally, point user to viewer download site.		
Show rights /permissions	yes, if is in metadata	P1	level 1	Self explanatory?	SET: is rightsMD required on ingest; if not required, what do we do for records that lack: do we insert anything?	
Show size /extent	yes, if is in metadata	P1	level 3?	So user can determine how long download of digital object will take. Ideally would provide info about download speed based on bandwidth.	SET: P3?	
Manage/Use				Owned by Jennifer and Deb		

Bookmark/bookbag	yes	P1	n/a	Mark items for later use such as exporting metadata or downloading files. Group files into 'sets' for either personal or group use, similar to collection feature in ArtStor	SET: ability to relabel sets, annotate sets, or export set-level metadata?	
Manipulate object	no, because only pointing to the object	P2	n/a	User can change the object in some way. Manipulation may be dependent on file types for example, zooming in on a detail and cropping the picture to save that detail would be available for image files.	To what extent is manipulation dependent on external software? What capability comes with the objects themselves and what is stored on a server. --Is the ability to store objects post manipulation important?. If so, where?	
Remix/Reuse	no	P4	n/a	Take content of an object and reorder so different meaning may be inferred/derived. For example, take a set of images, select a subset and change the order of that set and submit the new set in the new order or take the scenes in a video and reorganize them and resubmit.	SET: if this one stays in, need to break it down further for each format.	
Annotate object	no	P2	n/a	Add text to item. This could be tags or lengthy text. The annotation could be kept in personal space on server linked to an account and accessible to that account, or available to a group or be in public space. Some tools annotate content within a system and other tools allow users to annotate content from anywhere.	need to think about whether we want to provide annotation tool or annotate through external systems like flickr or del.icio.us. If annotation could be placed in a wrapper that can be downloaded and transported with the file keeping everything as an object, how would it be edited?	Examples of annotation tools: Delicious, Library Thing, ArtStor, Aluka.
Translate object	no	P4	n/a	For text, providing it in different languages. The assumption is that this happens on the fly through translation software. Translation could also be changing file types for example changing file from MSWord into PDF or tiff into jpeg	Would we want to store translations to facilitate multilingual search?	
Asses sment			Owned by Katie and Chris			
Portal reporting usage statistics, sources, partner institutions from search partners				Transaction logs		
"				Queries		
"				Clickthroughs		
"				Search Terms		
Reporting from search partners (Google, Sakai, etc.) usage logs						
Aquife r archite cture						
Clustering by Subject						
Aquifer – Subscribe to updates						
Aquifer – Find more in Aquifer						
Export normalized controlled vocabularies to search engines						
Aquifer – Translate into another language						
Assu mptio ns						
Support SRU Level one						
UTF 8 compliant						
xml 1.1 compliant						
must use persistent URL using OAI id field						
support real time query of aquifer server						