Public User Interface Specification

Reviewed / revised Oct. 13, 2011/bdw

Posted to BaseCamp Oct. 13, 2011/bdw

Reviewed / revised November 21, 2011/mam

PI-1: General scope / description

This specification outlines the features and functions to be included in the public user interface, as well as the relation of the public user interface to the staff user interface.

The public user interface provides a method to browse, search, and display descriptive records contained within an institution's ArchivesSpace installation.

The public user interface will be generated using a) output templates, which specify and order the individual data elements and labels that will be included on a particular type of page (e.g. a resource or digital object description page), and b) themes, which will style this output and place it within a common header and footer.

A 'default' theme and a set of output templates will be supplied with the application. In addition, system administrators must be able to implement their own themes and template sets in the system configuration panel.

The staff-side user interface will be accessible by links from the public user interface. After staff members authenticate their credentials, 'Edit' links will be added to interface. These links will provide direct access to the staff-side editing screen for the specified content record, allowing users to move seamlessly from the public output to the editing interface. In addition, non-public information will be displayed in the public interface, but only after a staff user has authenticated his or her credentials.

PI-2: Theme system: Description and Business Rules

A theme system will control the graphical appearance, display properties, and layout of the application's web-based public access interface. While a template file generates XTML output that is found in the main content section of each page (see section PI-4), a theme will style that output and place it within a header and footer.

A 'default' theme will be supplied with the application, but system administrators can customize the application's general layout and graphical elements for local use with one or more repositories, by creating, copying and modifying the existing theme and by changing configuration settings within the application.

See section PI-6 for a sample wireframe showing the main content areas of the theme system.

Each theme will include the following elements:

- 1. **Header:** Scripts or include files to generate a header. The header must include the following elements, each of which will be placed in a separate <div>.
 - a. Logo/branding area
 - b. Repository name area:
 - i. Theme will show name of specified repository
 - ii. Theme system must include a method to force display of a named repository
 - c. Public user control area
 - d. Search form
 - e. System-wide navigation area. Will provide links to browse records by a) Resource Title b) Digital Object Title, c) Accession title d) Name and e) Subject
- 2. **Footer:** Scripts or include files to generate a page footer, to include the following elements:
 - a. User comment area (content will be unique to each page).
 - b. Buttons for user to link the individual page to Facebook and other social media.
 - c. Staff login/logout form (allows access to staff interface and enables staff side-features of public interface).
 - d. Repository Name/Address, Contact Information, including email link
 - e. "Powered by ArchivesSpace" link or similar, with link back to Project Website
- 3. A single CSS stylesheet, controlling all display properties for all elements within the entire public interface, including elements in the main content section.
- 4. A "home" template, which generates a home/index page at the root web address of the application, to provide the front entry point to the public interface.
- 5. A method to generate additional static pages (similar to the index page), which local implementers can use in the context of local themes.

Business Rules for Themes System:

- 1. The default theme will be supplied as a subdirectory of the web application, in a 'publicthemes' folder.
- 2. System Administrators must be able to create new themes as subdirectories in the 'publicthemes' folder.
- 3. Once a new theme has been created and added to the public themes folder, it must be available for selection in the system configuration panel.

PI-3: Search Forms and Search Scope: Description and Business Rules

This section of the specification details the specific fields that must be queried when users execute searches. It also lists the business rules that govern the search form's scope and behaviors. Section PI-4c provides information about how the search results should be presented to the user.

Search Form Types

The application must include two types of search forms:

- A context-neutral search form. This search form will be found in the header of every page. It will search all Resources, Resource Components, Digital Objects, Digital Object Components and Accessions in the system, according to the scoping rules specified below.
- 2. Context-specific search forms. Context-specific search forms will only be available when a user is browsing records, as described in section PI-4a. They will search only those records that are of the type currently being browsed. For example, when a user is browsing name records, the user shall be provided a search form that will allow the user to search only name records. This form will be provided in the search box area of the browse screen, as shown on the wireframe in Section PI-6, and will be provided in addition to the context-neutral search form presented in the header of the page.

Search Scope

The following fields must be included in the index that is searched when a query is submitted:

Resources/Resource Components

- Resource Identifier
- Title
- Note Sub-Records
- Linked Name Records

• Linked Subject Records

Digital Objects/Digital Object Components:

- Digital Object ID
- Title
- Note Sub-Records
- Linked Name Records
- Linked Subject Records
- File URI

Names:

- Primary/Family Name
- Variant Names (provide access to parent record via see also references)
- Description Notes
- Subordinate Names (for corporate Names)
- Fuller Form (for personal names)

Subjects:

- Subject Terms
- Subject Term Scope

Accessions:

- Accession Number
- Title
- Content Description
- Condition Description
- Inventory
- User Defined Notes with string or numeric content (i.e, not Boolean or date field types)

Fields not listed above must not be indexed for public searching.

Search Form Business Rules

- 1. The search form must support keyword searching, across multiple record types, in a single search form, using a Boolean AND operator between each term in the search.
- 2. Searches must not be case-sensitive.

- 3. Searches must be executed across the aggregated content of all fields indexed for a particular record type.
- 4. The search form must allow phrase (i.e. quoted) searching, wherein the entire quoted phrase is searched as a string, not as individual keywords.
- 5. Unless a user has submitted a phrase search, frequently occurring words (e.g. articles and conjunctions) must be excluded from the query before it is submitted against the index.
- 6. The system should use a ranking or relevance system, so that results most likely of interest to the user are presented at the top of the result sets. Full parameters for weighting will be provided later, but will include at minimum the following:
 - a. Precedence of hit
 - i. Hits on resources or digital objects must always have more precedence than hits on resource or digital object component records.
 - ii. Hits in the following fields must be granted a very high degree of weight by the ranking algorithm:
 - 1. Resource Identifier, Title and Description (Scope/contents)
 - 2. Digital Object Identifier, and Title
 - 3. Accession Identifier and Title
 - iii. Hits on the following fields must be granted increased precedence over hits in other fields in the same record.
 - 1. Resource Component Title
 - 2. Digital Object Component Title
 - b. Frequency of hits within one resource or digital object and its components. Single records with multiple hits should be weighted more heavily, in increasing proportion to the number of times a hit is found within the record.
- 7. Advanced search forms will not be supported, but users will be able to refine searches using the filtering features listed in section PI-4c.

PI-4: Output Template System Overview

Output templates specify the content of a particular type of page, listing and ordering the xhtml elements, labels, application data, and search/filtering features that will appear in the main content section of that page. This content will be styled and placed in a header and footer by the theme system (see section PI-2).

In addition to the "home" template (described in section PI2), the system will include three basic types of templates, described in more detail below: a) browsing templates, b) search results templates, c) and content display templates. The pages generated by these templates will include a contextual search form and/or filter/refining features, as specified below, In addition to the non-contextual search form supplied in the theme header.

Although a set of 'default' output templates will be supplied with the application, system administrators will have the ability to create their output templates and to enable them for particular repositories, using the system configuration panel (see section PI-5: General Business Rules).

Developers should work closely with the other members of the technical team or consult other archival and digital object interface designs to determine design and layout. Developers must design the template system to allow for rapid changes in response to usability testing, as well as to all for user-developed templates after the release of the application.

PI-4A: Browsing Output Templates: Description and Business Rules

The user interface will provide the ability to browse content records. For each of the record types in table PI-4A, users will be able to generate a clickable list of items contained within in the system. List items will appear in the specified order.

Each item in the browse list will link to the specified content, and the business rules provided after the chart will be used to determine the content and structure of the lists. In addition, each of the browse lists will include, in the left-hand column of the page, a search form and or filter/refining features, as specified in columns four and five of the table.

A wireframe/mockup, providing a non-prescriptive layout for the browsing pages, is included in section PI-6.

When Browsing:	Order by:	Link items to:	Search Form Limit:	Filter/Refine Controls:
Resources, by title	Alpha by sort title	Record detail display* for resource	Resources and Resource Components	Exclude Components By Repository By Identifier By Date
Resources, by identifier	For <i>identifier</i> children: child classifications as defined by administrator;	Children in the identifier hierarchy	Current identifier and its children	Date
	and, for <i>content</i> children <i>:</i> by type (resource or digital object or accession), then alphabetical	Record detail display for resource or digital content output record	_	
Digital Resource Title	Alpha by sort title and numeric by ID when no title given.	Record detail display for digital content record	Digital Objects and Digital Object Components	Exclude Components By Repository By Object Type By Date
Subject	Alpha by subject term 1	Subject record detail pages	Subject Records Only	By those used in a named repository
Name	Alpha by sort name	Name record detail pages	Name Records Only	By those used in a named repository
Accession	Alpha by title; by ID if title not supplied	Accession record detail pages	Accession Records Only	By repository

Chart PI-4A: Content of Specified Browsing Templates

*See section PI-4B for a description of summary display pages.

Business Rules for Browsing Templates:

- 1. The browsing templates will present lists for only one type of content (e.g. Resources, Digital Objects or Accessions) on a single page.
- The interface must present a method to browse list items either by letter (i.e. "A" "B" "C" links to the content beginning with that letter) or in their entirely (e.g. 'view all').
- 3. If a staff user is not authenticated, the system must display **only** records, or those parts of them, for which the public-enabled display property is set to 'true'.
- 4. When a user is authenticated as staff for a repository, the system must display:
 - a. all records for that repository, including those for which the public-enabled property is set to false, and
 - b. an 'edit' link, pointing to the staff side interface for the specified content record, but **only** if the staff user has authority to update the linked record.
- 5. The system configuration panel must include configuration settings that allow system administrators to:
 - a. Set a 'browse limit' value. This will limit the number of items presented in browsing lists. After the specified number is reached, a list of additional browse pages, a 'next page' link, and numeric list of links to each subsequent page will be presented at the bottom of the list.
 - b. Enable or disable generation of alphabetical divisions for browsing content, for resources, digital objects, names, subjects and accessions.
 - c. Enable or disable 'browsing by identifier' for Resources and Digital Objects, in the system configuration panel. When browsing by identifier is enabled, the user will be provided an option to browse a hierarchy of identifier string values, under which relevant accessions, resources or digital objects will be presented.

PI-4B: Record Detail Display Templates: Description and Business Rules

The user interface will provide the ability to display detailed information for the content records within the system. For each of the content record types listed below in table PI-4B, users of the public interface will be able to view all information in the system, except that which is listed in column three, "Mask from Public View."

The business rules provided after the chart will determine the content and structure of the detailed display pages. A wireframe/mockup, providing a non-prescriptive layout for content areas in the browsing pages, is included in section PI-6.

Table PI-4B: Content of Record Detail Display Pages

NOTE: Unless excluded in the "mask from public view" column or otherwise stated, all content, sub-records, and linked records related to a particular record type must be included on the Record Detail Display Page for each of the following record types.

Template for:	Mask from public view:	Provide links to record detail pages for:	Notes/Other content to include:	
Resources:	Linked location records	Finding Aid View of the Resource	Search form for current resource and	
Summary View		Associated Digital Objects (for resource	its resource components	
(does not include	Anything not permitted for	record and all child resource	EAD (XML) View	
resource	public view	component records)	MARC (XML) View	
component		Associated Subjects	PDF/printable view	
records)		Associated Name Records		
		Associated Accessions		
Resources:	Linked location records	Summary View of the Resource	Search form for current resource and	
Finding Aid View	Anything not permitted for	Resource Component Detail Records	its resource components	
(includes resource	public view		EAD (XML) View	
component			PDF/printable view	
records)				
Resource	Linked location records	Parent Resource or Resource component	PDF/Printable view	
Components	Anything not permitted for	Record		
Detail	public view	Linked Subjects		
		Linked Name Records		
Digital Object	Anything not permitted for	Linked Resources	METS (XML) View	
Records	public view	Linked resource components	MODS (XML) View	
		Linked Subjects	Dublin Core (XML)	
	Linked Names		MARC (XML)	
		Linked Accessions		

Subject Records		Linked Resources	
		Linked Resource components	
		Linked Digital Objects	
		Linked Digital Object components	
		Linked Accessions	
Name Records	Name contact records	Name Variant Records	EAC (XML) view
		Linked Name Records	PDF/Printable View
		Linked Resources	
		Linked Resource components	
		Linked Digital Objects	
		Linked Digital Object components	
		Linked Accessions	
Accession	Retention schedule / rule	Linked Resources	
Records	Provenance/Custodial	Linked Digital Objects	
	history	Linked Name Records	
	Disposition note	Linked Subject Records	
	Processing note	-	
	Linked location records		
	Anything not permitted for		
	public view		
	Name contact records		

Business Rules for Record Detail Templates:

- 1. If a user is not authenticated as repository staff:
 - a. the system must display **only** records whose public enabled display property is set to 'true'.
 - b. The system must **NOT** display the information listed in the column "mask from public view" in table PI-4B.
- 2. When a staff user is authenticated, the system must display:
 - a. all records, including those whose public enabled property is set to 'false'. These records must be marked as non-public, for the reference of authenticated staff.
 - b. Information listed in the column 'mask from public view.' This information must be placed in a "staff information" section, as per the provided wireframe.
 - c. an 'edit' link, pointing to the staff-side interface for the specified content record, but **only** if the staff user has authority the update the linked record.
- 3. Relationships/Linking: The display of record detail pages must include links to all data, sub-records, and linked records that are attached to the object being displayed, except for those, such as linked location records, that are always masked from public view. For example, the record detail page for a resource must provide bibliographic information (e.g., repository, collection title, resource ID, extent, arrangement, scope and content, creators, subjects, forms of materials, and usage restrictions) as well as access to component resources and detailed collection information (i.e., a finding aid). In addition, the resource display record must provide links to associated digital content, name records, and subject records. Similarly, whenever digital object records are associated with a specific resource or resource component, the digital object record detail page must provide dynamic hyperlinks to the related resource or resource component.

PI-4c: Search Results Templates: Description and Business Rules

When a user executes a query against the database, the application will return a set of results, limited to the scope of the search as executed (see Section PI-3). Templates for search results will then order those results on the page and will provide access to associated detail record display pages via dynamic links that will take a user directly to the specific level of content that is relevant to their query.

Results will be grouped by type of content, and users will be able to filter/narrow the search results that matches that specific query (e.g., resource records, resource sub-records, digital object records, subject records, name records, accession records.

Search Type	Records To display	Filtering Features to Provide	Search Features/Other Notes
Context Neutral	Resources/Components Digital Objects/ Components Accessions	Exclude Components By Repository By Identifier By Date	Results for each of the three listed record types must be grouped by type. See wireframe.Include a form to search within result.List of record types searched must be configurable by
	_		system administrator
Resources/	Resources	Exclude	Show component hits
Resource Components	Resource Components	Components By Repository By Identifier By Date	links as a expandable list under the parent resource
Digital		Exclude	Show component hits
Objects/		Components	under their parent
Digital Object		By Repository	digital object.
Components		By Date	
Names	Name and Name variant	By creator type	

Table PI-4C: Search Results Templates

	records		
Subjects	Subject Term records	By subject type	
Accessions	Accession Records	By Repository	

A wireframe/mockup providing a suggested layout for content areas in the search results pages is included in section PI-6.

Search Results Pages Business Rules

- 1. If a staff user is not authenticated, the system must include in the query results **only** records whose public enabled display property is set to 'true'.
- 2. If a staff user is authenticated, the system must include **all** records in the query results, including those whose public enable display property is set to 'false'.
- 3. The list of record types (Resources, Digital Objects, Names, Subjects and Accessions) to be available for public searching and display must be configurable at a repository, repository-group, and system level, using the system configuration panel.
- 4. When a context neutral search has been submitted, all records must be searched, the search results page must group hits by record type, in the following order: Resources, Digital Objects, and Accessions, using tabs or another grouping mechanism
- 5. 'Hits' for resource and digital object components must be grouped under their parent resource. The application will provide a link both to the parent resource record display page as a hard link and will provide an expandable section underneath that link providing direct access to child content.
- 6. The system administrator must be able to set a "search display limit" value, using the system configuration panel. When search results are displayed, the interface will mask results over this limit (in each category) from immediate view. The end user will be able to expand the result set, in order to view all results within a single display output.
- 7. The system must highlight the matching search term or terms when displaying the associated record on the results page and on subsequent pages linked from the results page.
- 8. When providing result sets, the application will provide links to the specific record content (e.g., a link to specific box and folder within a finding aid, or a name in a biographical/historical note, or a digital image).

9. If a repository has configured the application, using the system configuration panel, to group search results by identifier, resources will be grouped under their parent identifier string value or values in the search results screen.

PI-5: General Business rules

- 1) The public interface must be accessible using any standard web browser using an http connection.
- 2) If a staff user is not authenticated, the system must show **only** records whose public enabled display property is set to 'true'.
- 3) System administrators must be provided a method to enable https, for authentication of staff users.
- 4) Research Functions: The interface must provide users the ability to mark/tag resource, resource component, digital object, and digital object component records. Marked content can then be stored in a user cart or basket function. For example, the user will be able to send the list of marked content to the repository, via email, to submit a reference query regarding the items.
- 5) **Staff User Access Interface**: The public user interface must provide archival repository staff with the ability to log into the application's staff-side user interface from any place within the public interface (i.e., via the footer)
- 6) **Multi-Repository Applications:** If the application is configured for a multirepository implementation, the public interface must support the following features:
 - a. Configuration of separate public interfaces for each repository (e.g. by forcing a theme/view for a particular repository, where search limits will be limited to the defined repository.
 - b. Ability to restrict searches associated with a particular theme to one particular repository, some repositories, or all repositories, in a single instance.
 - c. Searching across instances will not be supported.

PI-6: Wireframes/Mockups

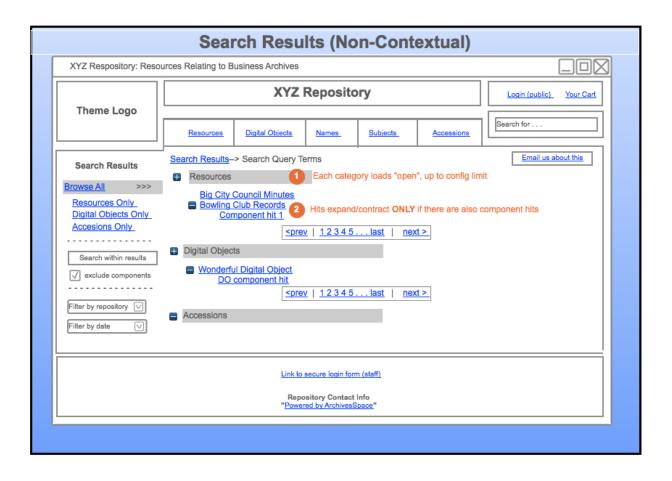
The following non-prescriptive wireframes are provided to illustrate potential interface features, layout and design; the actual interface must be subjected to an iterative design process and usability testing.

Theme System								
[XYZ Respository							3
	1 XYZ Repository					3 Login (public) Your Cart		
		4 Resources	Digital Objects	Names_	Subjects	Accessions	Search for 5	
	Contextual->Bread-> Crumbs							
	Context Menu Browse link Browse link G Main Content Area: See Template Wireframes Denver link							
	Browse link Expands to fill w/ content							
	Contextual Search							
	Go				voordoblo 💻	_		
		8	Trunca	ted but user e	xpandable			
	9 Repository Contact Info "Powered by ArchivesSpace"							
l								
	Logo Area							
0	Repository/site title area							
3	User control area		Generate	d by Theme	Header			
4	System-wide navigation	area (tabs)						
5	Context-neutral search a	area						
6	Local navigation/Contro ot this section will vary,		f header. Conten	it				
7	Main Content Area: inclu link, and browse, search							
8	Social network, user cor Other Footer Content	mment area	Generate	ed by Theme	Footer			

	Br	owsing l	Resou	rces by	Title			
XYZ Respository: Resources Beginning with "B"								
Theme Logo		XYZ Repository Login (public) Your Cart						
Theme Logo	Resources	Digital Objects	Names_	Subjects	Accessions	Search for		
Resources	Resources by T	i <u>tle</u> >Beginning w	ith "B"			Email us about this		
Browse by Title >>> Browse by Identifer Search Resources ✓ exclude components Filter by repository ✓ Filter by date ✓	Browse by Title >>> Browse by Title >>> Browse by Identifer Barton Papers, dates Big City Council Minutes Big City Council Minutes Bowling Club Records Image: Club Records More Links up to config limit Image: Club Records Image: Search Resources Search Resources Image: Search Resources Image: Club Records Image: Search Resources Search Resources Image: Search Resources Search Resources Image: Search Resources Browse Resources Beginning With: Image: Search Resources Browse Resources Beginning With:							
Link to secure login form (staff) Repository Contact Info " <u>Powered by ArchivesSpace</u> "								

Note: Browsing by title is also possible for digital objects, accessions, names and subjects, according to the same principles

	Browsing Resources by Identifier						
XYZ Respository: Reso	purces Relating to Business Archives						
Theme Logo	XYZ Repository						
	Resources Digital Objects Names Subjects Accessions Search for						
Resources Browse by Title Browse by Idntifier Search Business Archives ✓ exclude components Filter by repository Filter by date	Resources by Identifer-> 15: Business Archives -> Email us about this View Resources under Business Archives: Barton Papers, dates Big City Council Minutes 1 Links to to Resource Record Detail: Summary View getc. up to config limit 1 Links to to Resource Record Detail: Summary View street 1 12 3 4 5 last next > Browse for More Resources: 1 12 3 4 5 last next > 15 1: Accounting Records 2 Links to child identifiers show browse page for the child identifier 15 3: Manufacturing Records 1 Links to child identifier 15 4: Training sprev 1 2 3 4 5 last next >						
	Link to secure login form (staff) Repository Contact Info "Powered by ArchivesSpace"						



	Record Detail View: Resource Summary						
XYZ Respository: John Smith Papers, dates							
Theme Logo	XYZ Repository Login (public) Your Cart						
	Resources Digital Objects Names Subjects Accessions						
Guide to the John Smith Papers	Resources-> Identifer -> Breadcrumbs						
Overview >>> Details Description Administrative Info Access Note Digital Content etc Inventory Inventory	View >>> John Smith Papers, dates Image: Content of the second secon						
Link to secure login form (staff) Repository Contact Info "Powered by ArchivesSpace"							

Note: Resource Component Summary View is similar, but will not require links to "Inventory" and "Show Entire Guide as."

Record Detail View: Resource Finding Aid							
XYZ Respository: Guide to the John Smith Papers							
XYZ Repository					Login (public) Your Cart		
Theme Logo	Resources	Digital Objects	Names_	Subjects	Accessions	Search for	
Guide to the John Smith Papers	Resources-> Id	entifer -> Breadcru	umbs			Email us about this	
Overview Details Description Administrative Info Access Note etc.s Inventory Search this Resource Show Entire Guide as: HTML PDE EAD (XML)	 RESOURCE Tite, dates, ID, description and Arrangment at top, each in expanable area (each section scollapsed in default view) Expanable Tree Hiearchy underneath. Each row includes 1) level attribute, 2) component ID, 3) Component Title, and 4) Dates, for the Resource Componet. folowed by basket () icon. * If staf user is authenticated, follow with pencil () icon. * If there are notes, put "View Notes" underneath, in smaller typeface, with expand () icon, * At end of notes section put "More Details" link to the Record Component Detial View page. 						
Link to secure login form (staff) Repository Contact Info "Powered by ArchivesSpace"							

Note: Digital Object and Digital Object Component display should be discussed at time of development. Wireframes can be supplied upon request.