

Public User Interface Specification

Final 3/16/2006

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 XHTML 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:

1. 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 1-4
- 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 allow 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.

Chart PI-4A: Content of Specified Browsing Templates

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 identifier children: child classifications as defined by administrator;	Children in the identifier hierarchy	Current identifier and its children	Date
	and, for content children: 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

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

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

Table PI-4C: Search Results Templates

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/ Resource Components	Resources Resource Components	Exclude Components By Repository By Identifier By Date	Show component hits links as a expandable list under the parent resource
Digital Objects/ Digital Object Components		Exclude Components By Repository By Date	Show component hits under their parent digital object.
Names	Name and Name variant	By creator type	

	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 multi-repository 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.



- 1 Logo Area
 - 2 Repository/site title area
 - 3 User control area
 - 4 System-wide navigation area (tabs)
 - 5 Context-neutral search area
 - 6 Local navigation/Control Area NOT part of header. Content of this section will vary, see tempaltes
 - 7 Main Content Area: include breadcrumbs, contextual email link, and browse, search, or detail record display page
 - 8 Social network, user comment area
 - 9 Other Footer Content
- Generated by Theme Header
- Generated by Theme Footer

Browsing Resources by Title

XYZ Respository: Resources Beginning with "B" □ □ ×

Theme Logo

XYZ Repository

[Login \(public\)](#) [Your Cart](#)

[Resources](#)
[Digital Objects](#)
[Names](#)
[Subjects](#)
[Accessions](#)

Search for . . .

Resources [Resources by Title](#) → Beginning with "B" [Email us about this](#)

[Browse by Title](#) >>>
[Browse by Identifier](#)

exclude components

Filter by repository

Filter by date

View Resources Beginning with "B"

[Barton Papers, dates](#)
[Big City Council Minutes](#)
[Bowling Club Records](#)
[More Links up to config limit](#)

1
Links go to Resource Record Detail: Summary View

<prev | 1 2 3 4 5 . . . last | next >

2
These paging options also used in other templates

Browse Resources Beginning With:

[1 - A - B - C - D - E - F - G - H - I - J - K - L - M - N -](#)
[- O - P - Q - R - S - T - U - V - W - X - Y - Z](#)

3
Links go to Browse Resources by Title Page

[Link to secure login form \(staff\)](#)

Repository Contact Info
 "Powered by ArchivesSpace"

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

Browsing Resources by Identifier

XYZ Repository: Resources Relating to Business Archives

XYZ Repository

[Login \(public\)](#) [Your Cart](#)

[Resources](#) [Digital Objects](#) [Names](#) [Subjects](#) [Accessions](#)

Search for . . .

Resources

[Browse by Title](#)

[Browse by Identifier >>>](#)

Search Business Archives

exclude components

Filter by repository

Filter by date

[Resources by Identifier](#) -> 15: Business Archives -> [Email us about this](#)

View Resources under Business Archives:

[Barton Papers, dates](#)
[Big City Council Minutes](#)
[Bowling Club Records](#)
[etc. up to config limit](#)

1 Links to to Resource Record Detail: Summary View

<prev | 1 2 3 4 5 . . . last | next >

Browse for More Resources:

[15 1: Accounting Records](#)
[15 2: Finance Records](#)
[15 3: Manufacturing Records](#)
[15 4: Training](#)

2 Links to child identifiers show browse page for the child identifier

<prev | 1 2 3 4 5 . . . last | next >

[Link to secure login form \(staff\)](#)

Repository Contact Info
"Powered by ArchivesSpace"

Search Results (Non-Contextual)

XYZ Repository: Resources Relating to Business Archives

XYZ Repository

[Login \(public\)](#) [Your Cart](#)

[Resources](#) [Digital Objects](#) [Names](#) [Subjects](#) [Accessions](#)

Search for . . .

[Email us about this](#)

Search Results [Search Results](#) -> Search Query Terms

[Browse All](#) >>>

[Resources Only](#)

[Digital Objects Only](#)

[Accessions Only](#)

Search within results

exclude components

Filter by repository

Filter by date

Resources 1 Each category loads "open", up to config limit

- [Big City Council Minutes](#)
- [Bowling Club Records](#) 2 Hits expand/contract ONLY if there are also component hits
 - [Component hit 1](#)

<prev | 1 2 3 4 5 . . . last | next >

Digital Objects

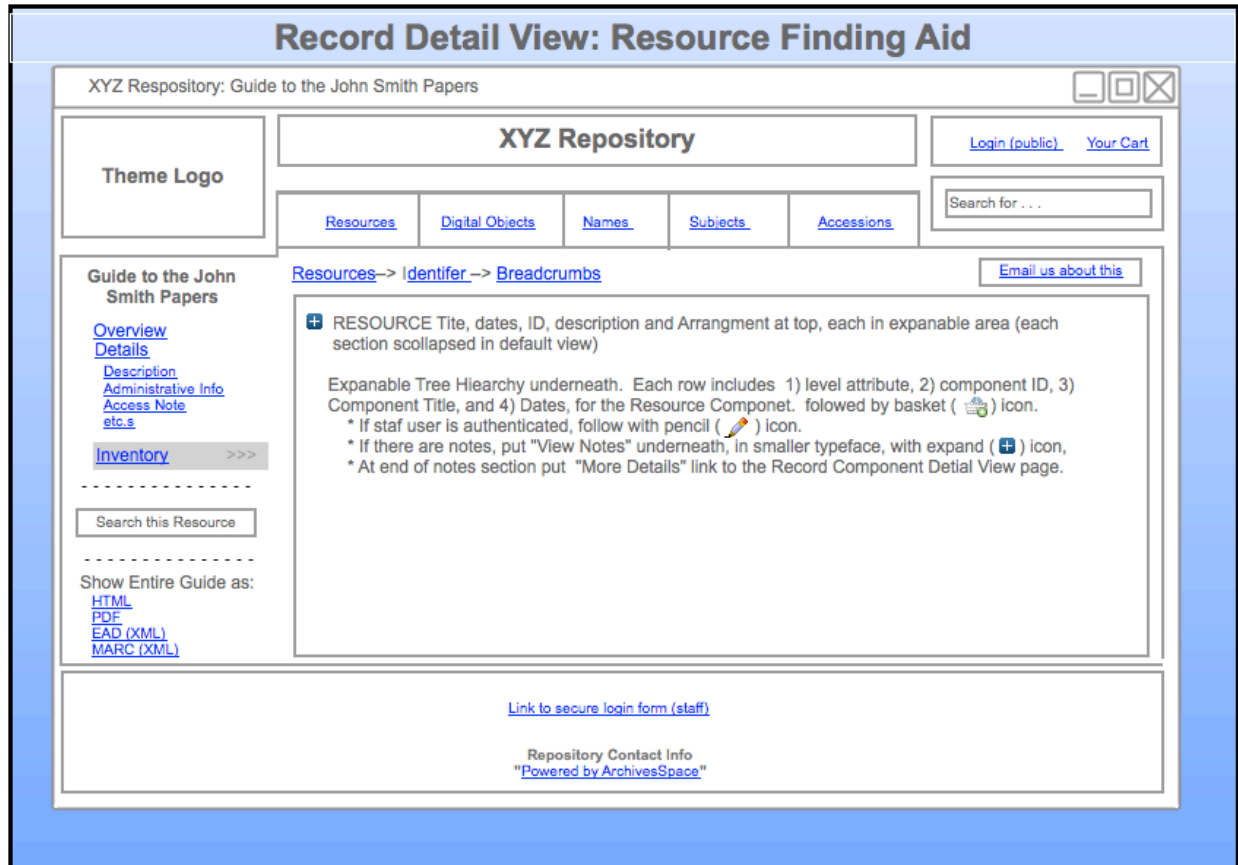
- [Wonderful Digital Object](#)
 - [DO component hit](#)

<prev | 1 2 3 4 5 . . . last | next >

Accessions

[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.