

JISC Information Environment Architecture



Baseline Portal Functional Specification

This document provides a baseline functional specification for JISC IE portals. The intention is to provide a list of the key functionality of JISC IE portals. The following list is neither exhaustive nor mandatory, however it is anticipated that *most* JISC IE portals will provide *most* of the functionality outlined here in some form. Many portals will provide additional functionality that is not listed here.

Functionality has been separated into the high-level functional units identified in the [JISC IE Functional Model](#).

This baseline functional specification is based, in part, on the work of the [Subject Portal Project](#).

Enter

- Provide an optional login facility based on Athens (and possibly other) username/password.
- Provide a registration mechanism for new users.
- Present a view of the user's current landscape (where the 'landscape' is defined to be the set of collections currently of interest to the user).
- Present a default landscape for unauthenticated users.

Survey

- Present a browsable list of descriptions of the available collections (where 'available collections' may include nationally funded collections, institutional collections and other collections).
- Provide a searchable database of descriptions of the available collections.
- Provide assistance to the user in the construction of appropriate search requests against the collection-description database.
- Gather alerts about new collections from content providers using RSS and present to the user.
- Gather other news from content providers (optionally restricted to the collections in the user's current landscape) using RSS and present to the user.

- Obtain collection descriptions from the JISC IE collection description service (where 'collection descriptions' include details of content, coverage, timeliness and cost). Note that portals may provide additional collection descriptions, supplementing those available from the JISC IE collection description service.
- Allow the user to specify if the information about available collections should be limited by his or her access rights.
- Allow modification to the current user landscape, including modification based on selection from browsable list, search results and alerts.
- Provide mechanism for saving changes to the current user landscape across sessions.
- Provide pre-configured landscape(s) for adoption by the user.

Discover

- Allow the user to search across the collections in their current landscape using Z39.50 (Bath Profile) by searching against content providers' Z39.50 targets and/or broker services.
- Obtain protocol-level descriptions of content provider and broker Z39.50 targets from the JISC IE service description service.
- Provide assistance to the user in construction of appropriate search requests.
- Provide appropriate authentication information to content provider's Z39.50 targets on behalf of the user if required.
- Display the number of search results from each Z39.50 target.
- Display information about unavailable Z39.50 targets.
- Provide a browse interface to the collections in the user's current landscape (possibly by linking to the collection's native Web interface).
- Gather metadata from OAI repositories and/or aggregators (using the OAI Metadata Harvesting Protocol) and store it in a database that is available for searching and/or browsing.
- Obtain protocol-level information about OAI repositories from the JISC IE service description service.
- Gather alerts from content providers (about new resources in the collections in the user's current landscape) using RSS.

Detail

- If necessary, obtain information about the location of discovered resources (e.g. in the case of books, journals, journal issues, journal articles or mirrored Web resources).
- Optionally obtain any annotations pertaining to the discovered resources.

UseRecord

- Display descriptions of the discovered resources (e.g. search results), where the information about each resource may include item-level Dublin Core metadata, any annotations about the resource and location information.
- Provide mechanism(s) for ordering the lists of discovered resource descriptions based on different criteria.
- Provide mechanism to save some or all resource descriptions in various formats (including via email), for example in the form of bookmarks or reading lists.
- Embed an OpenURL into the resource descriptions if appropriate (i.e for books, journals, journal issues and journal articles).
- Present link(s) to additional (value-added) service(s) related to the discovered resources, e.g. author searches, same-keyword searches, etc.
- Provide link(s) to delivery service(s) (including those available locally to the user).

It should be noted that the functionality in the last two bullet points may not be provided directly by the portal but by the OpenURL resolver that is the target of the embedded OpenURL.

Request

In the general case, it is not anticipated that portals will provide any 'request' functionality. This functionality will be provided by external delivery services.

UseResource

In the general case, it is not anticipated that portals will provide any 'useResource' functionality. In most cases, discovered resources will be downloaded directly to the user's Web browser (or other client) and used within their desktop environment. There is one major exception to this. Where the portal is an Instructional Management System (IMS, a.k.a. VLE or MLE) and the discovered resource is a learning package, then it will be appropriate to download the resource to the IMS, unpack it and 'install' and run it within that environment.

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Last updated: 09-Apr-2003

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