

## ResearchSpace

### Content Management Systems – Evaluation Considerations

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#### Evaluation Shortlist

**Nuxeo** – used by the CollectionSpace

**Alfresco** – proposed by the Bamboo project

**Jahia** – or other contender? (**Drupal**)

(Note: All Java based systems)

#### Initial Notes

Research Tools themselves will have to incorporate functionality regardless of whether it is provided in the CMS and they relate to the RDF data source not the CMS data source. However to what extent the CMS functionality is relevant to the research tools may vary. Is it more important that the collaboration applications are effective and it is easy to integrate the research tools into them? Elements like workflow are more likely to be important in the CMS for orchestrating the use of the toolkit as workflow is closely associated with the CMS collaboration tools into which the research tools fit.

- **High Resolution Image Support (Zoom).**
- **Image Manipulation Features (Image Comparison / Annotation / Scaling / Overlay)**

These requirements may be issues for the specification of the research tools rather than CMS functionality. Current stakeholders require the ability to zoom in on high resolution images online. Many use the IIP tool which is based on the open source project OpenZoom. Building these as separate plugins may also make upgrades easier. However, any high resolution support the CMS may have could be useful. Annotation at various levels of zoom is also a user requirement.

- **Image Metadata standards (XMP / MPEG 7 / EXIF)**

Question over where some meta data will be stored. For example annotations on images will be about the object but will be referenced to a particular point or region in the image. Where is the best place to store this and how is it referenced when searching the main RDF store.

- **Security Model**

Important that project administrators are able to achieve fine control over user rights but have tools to make this administration easier. Role based templates etc.

- **Multi-lingual**

The ability to store and publish multi-lingual content is important.

- **Security System detailed access control – Some project will need to control users to particular content and at particular levels.**

While research is in progress some project may require different degrees of access both in terms of functionality and access to data and images. For example, a partner may allow the use of an image but for use by a particular organisation. If the project involves other organisations then access rights would need to be different.

Note: A user searches for an image but their security means that they cannot view a particular image. Search results may indicate that an image exists but the user cannot view it. If a research tool is used this must also use the same security instructions, i.e. security within the CMS and the research tools must be in unity.

- **Indexing (Multi-lingual)**
- **Searching Functionality**

The main research tool would be the semantic search facility.

- **Intuitive User Interface (Suitable for non-technical users)**
- **Web based User Interface (No client installs necessary)**
- **Non-technical workflow set up (parallel and consecutive)**

The author has noticed the use of JBoss and other BPM systems integrated into the CMS. The ability for project owners to define simple human centric workflows would support requirements out of the box.

- **Business Process and Workflow Control**
- **Open Source Functionality (What's missing)**

What's the difference between the community version and the commercial version? How limited is the open source version.

- **Synergy with CollectionSpace**

CollectionSpace uses Nuxeo. How important is this?

- **Quality of Collaborative Software**

Since everything revolves around these tools (wiki's, forums, blogs, chat) the quality and ease of use of these applications is paramount. The ability to interface the research tools with them without major upgrade issues is also important.

- **Use of standards and SOA**
- **XML Compliance (and RDF)**
- **Browser Compatibility**

Particularly Firefox but generally be able to work with different browsers.

- **WYSIWYG Editing**

Ease of use and professional formatting etc.

- **LDAP Support and SSO**
- **Quality of DAM and DM**

Most CMS systems come with a DAM and Document management module. However, will ResearchSpace need to use a dedicated DAM system?

- **Versioning and Compare**
- **Page Templates (open standards)**
- **Database Support**

The ability to use a wide variety of different database systems

- **Administrative Controls**

Ease of use and functionality available. Control over the environment by the project manager.

- Ability to integrate without upgrade issues (Plugins)

Does the architecture allow features to be built in that won't affect the core product?

- **Internet Security Features**

Some research material will be sensitive. CMS must provide adequate security over and beyond hosting security.

- **Adherence to HTML standards**
- **HTML 5.0**

This might be a roadmap issue.

- **Suitability for RDF database integration**

Possible issues for building RDF support into the CMS.

- **Taxonomy (hierarchical) support**
- **Semantic Services**
- **Overall Suitability for ResearchSpace**
- **Roadmap and Longevity**