

The authoring environment is the most important aspect of a content management system (CMS), for without content authors, there would be nothing to manage or publish.

It is important to recognise, however, that there is no single best authoring environment provided by a content management system. Instead, the authoring tools must be matched to the job at hand, to ensure they are easy and efficient to use.

This article explores the diverse range of authoring tools available on the market and provides criteria for choosing between them. The role of scenarios in documenting requirements is also discussed, along with a view of the current state of the market.

Selecting an authoring tool

Before looking at the authoring tools that are provided by content management systems, it is important to identify the business needs within the organisation.

Three key criteria drive the selection of an authoring environment:

- **Type of content**

The characteristics of the content being created is a major criteria for selecting a tool, including: whether the pages are large or small, highly structured or unstructured, complex or simple in page layout.

Issues such as whether paragraph and character styles are required must also be considered when selecting a tool, along with the need for tables and images.



James Robertson is the managing director of Step Two Designs, a knowledge management and content management consultancy based in Sydney, Australia. James specialises in intranets, content management strategy, information architecture and usability.

- **Nature of authors**

A range of users may be creating content, including skilled and unskilled authors, as well as both frequent and infrequent users. The number of authors is also significant, as well as the amount of time they have to devote to learning and using the CMS.

- **Final usage**

The ways in which the content will be used and published must also be considered when selecting an authoring tool. This includes the formats that will be published (web, paper, wireless, etc), how the content will be assembled, as well as any need for content reuse.

Specific requirements must be identified on a case-by-case basis, recognising that a mix of tools may be needed to meet all needs throughout the organisation.

By using these three criteria, it then becomes possible to select an appropriate authoring tool. For example:

- Standard web pages with relatively simple page layouts and limited structure may be best authored using an HTML editing tool.
- Highly structured and complex documentation may be best suited to an XML authoring environment.
- Simple but highly structured content such as job adverts or news items may be authored using a very constrained template-based authoring tool.
- Project reports, meeting agendas and other business documents will most likely be created in word processing software, and then imported into the CMS.

Three key criteria will determine the most suitable authoring environment

Authoring options

There are a wide range of possible authoring environments that can be used with a content management system, including:

- WYSIWYG authoring
- Markup-based authoring
- Template-based authoring
- Authoring using desktop application
- XML-based authoring
- Importing from data sources

Each of these is discussed in the following sections.

WYSIWYG authoring is the most widely implemented approach

WYSIWYG authoring

The may CMS provide a seamless and powerful WYSIWYG ('what you see is what you get') authoring environment for content creators. The central concept of such an interface is the 'topic', which equates to a single published page on the site. These topics are then structured in the form of a hierarchy, which forms the basis for website navigation.

Editing features may include:

- enforced structure
- separation of presentation and content
- integration with repository features
- paragraph and character styles
- support for WYSIWYG table editing
- creation of hypertext links and related topics
- metadata creation
- instant preview of topic
- overall functionality comparable to commercial word-processing software

This authoring environment is more powerful than other approaches (such as template-based authoring), as it provides both flexibility and structure without restricting the author to a pre-defined set of fields.

The authoring tool may be custom-developed by the vendor, or built on top of third-party solutions (such as an XML or HTML editor).

Markup-based authoring

This is a more basic variation of WYSIWYG authoring, in which authors use special text 'markup' within the content to indicate structure and formatting.

This may involve directly creating HTML tags, or some more simpler markup. This allows for a technically-simpler authoring environment, but requires greater knowledge on the part of the authors.

This interface is often seen in weblog and wiki tools, and some of the lower-end content management systems.

Template-based authoring

Templates are an effective way of authoring relatively simple and highly structured topics. They work particularly well when there are a large number of topics that have an identical page layout and design, but different text (such as a product catalogue).

The templates provide fields to enter information, which are mapped to specific locations on the final published pages.

The template-based editing may offer:

- spell-checking within the editing fields
- creation hypertext-links to other topics
- facility for managing a large collection of templates
- controlled access to templates, based on user profiles

A toolkit should be provided for creating templates, which supports elements such as drop-down lists, radio buttons, check boxes, and other interface elements.

Templates are suitable for entering many similar pages

Authoring using desktop applications

Business documents are typically created using applications such as Word or Excel. The CMS may allow authors to continue using these tools when entering this type of material.

The following features are desirable:

- tight integration between the CMS and desktop application
- menu items for checking-in and checking-out of documents
- built-in authoring templates

- enforced style-based authoring
- integrated validation of documents
- support for metadata creation
- ability to create hypertext links to other documents
- browsing of documents in the repository from within the desktop application
- integrated workflow
- integrated version control and archiving

XML-based authoring

Very complex and highly-structured content is difficult to edit in template-based environments, or via the web. To manage this information, a powerful editing tool should be provided to authors.

With many content management systems storing the content as XML in the repository, it is useful to be able to directly edit the material in this format.

The CMS may therefore provide integration with a number of third-party XML editors. These should have access to both the content of the topics, and the supporting meta-data.

For more on the issues surrounding XML adoption in relation to CMS products, see our article *XML and content management systems*.

Importing from data sources

Some information may not need to be authored by business users at all, instead residing in existing databases and other structured sources.

The content management system then provides tools for importing this information directly into the repository, where it can be integrated with other content, or published straight to the site.

Not all content needs to be created by a human

Mix and match

In practice, the authoring tools outlined above are just a few of the possible options. Vendors are constantly exploring new designs and features, and many content management systems offer authoring tools which provide a blend of characteristics.

With innovation amongst CMS vendors still running strong, it is expected that authoring tools will continue to evolve.

Market realities

While a number of different authoring tools have been explored in the previous sections, it is important to consider the current state of the market.

The reality is that at present, most content management systems only offer a single authoring tool. Typically, this is a WYSIWYG authoring environment that allows HTML content to be entered. (In technical terms, this is most often based on the IE RichEdit component.)

This single environment reflects the current market focus on *web* content management. While this has led to the creation of a range of easy-to-use systems, the emphasis on HTML authoring limits the range of formats that can be published.

Despite the overall state of the market, there are a number of products which offer alternative authoring tools, and not all of these are in the top price bracket.

Simplicity and usability are the most important criteria

Usability

Regardless of authoring features and capabilities, the most important issue is the *usability* and *simplicity* of the authoring environment as a whole.

With general office staff being major users of content management systems, the authoring environment must be straightforward and simple.

The general rule is this: the more users that will be using the authoring tool, the simpler it needs to be.

Using scenarios

The best way to navigate through the myriad of authoring options is through the use of scenarios.

By focusing on the 'day in the life' of a content item, a clear and concise picture can be built up of how the content management system must operate.

This will clarify which authoring features will be needed, the nature of the required tools, and how simple they will need to be.

Scenarios are particularly effective when detailing more challenging areas, such as single-source publishing, the management of structured information, or the creation of complex documentation.

Scenarios also ensure that all the issues have been identified and resolved, as well as making it easier for stakeholders to ensure that their needs have been accurately recorded.

Conclusion

There are many different options for authoring environments provided as part of a con-

tent management system, each with their strengths and weaknesses.

Determine the business requirements relating to each content type or group of users, and select a tool that matches those needs. This may involve implementing a number of different authoring tools within an organisation.

Regardless of the option chosen, the usability and simplicity of the authoring environment is paramount.



More articles!

Find out when new papers are published:
www.steptwo.com.au/papers/subscribe



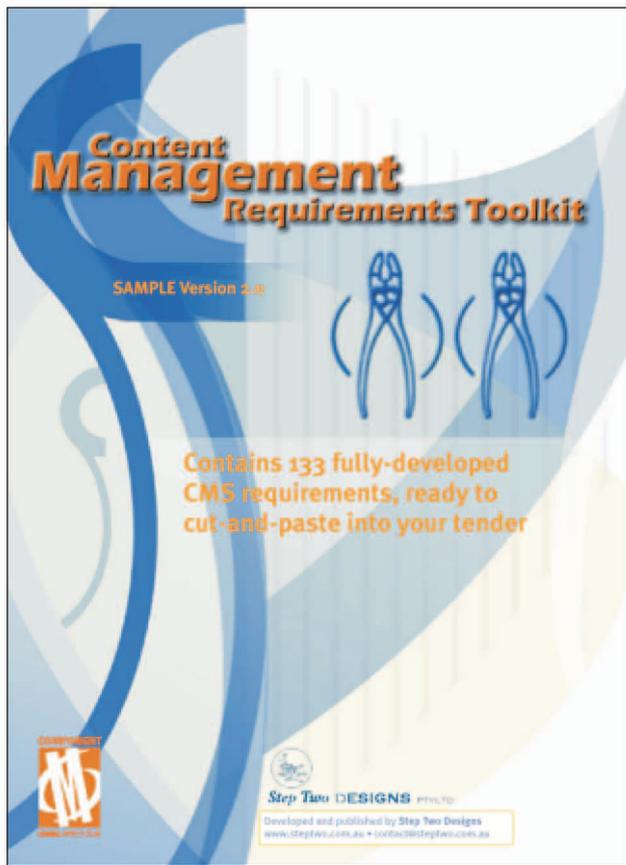
Did you like this article?

Send your thoughts and feedback to:
jamesr@steptwo.com.au



Step Two DESIGNS

www.steptwo.com.au • contact@steptwo.com.au
knowledge management • content management • intranets



The single best resource for rapidly creating an effective tender, and selecting the right CMS.



Produced and published by **Step Two Designs**

Content Management Requirements Toolkit

Fully-revised, and almost twice the size, the new version of the Content Management Requirements Toolkit captures the latest thinking in the content management industry. In addition to the expanded range of requirements, the Toolkit now provides a comprehensive guide to writing CMS scenarios, as well as a detailed overview of the whole selection process.

Choose a content management system (CMS) is not easy. There are hundreds of products in the marketplace, all with highly-variable capabilities. In this rapidly-evolving environment, the challenge is to find the CMS that best matches your business needs.

The Content Management Requirements Toolkit provides a comprehensive starting point for identifying the business and technical requirements that will drive your selection process.

It contains **133 fully-developed requirements**, across five main categories.

- **content creation**
- **content management**
- **publishing**
- **presentation**
- **contract & business**

These ready to use requirements can be cut-and-pasted directly into your tender document. This will save you days of work, and is an invaluable checklist to ensure that no critical requirements are missed.

Clear and concise, these requirements have been distilled from real-world experience, and reflect actual business needs.

Version 2.0
Fully-downloadable package
123 pages, August 2004
Only US\$ 550

For more information on the Requirements Toolkit, sample pages, and secure online ordering, visit:
www.steptwo.com.au