CONTENT RECOMMENDATIONS

With the selection of Drupal as the Content Management System for its web site, the University of Southern Maine will provide content authors with a common user interface to create and maintain content.

Many dynamic or programmatic pages, such as Search, will be integrated into the new system as part of the baseline development process. This document focuses on the content pages to be created by content authors distributed across the University’s departments, offices, and centers.

Content Types

Content authors will primarily be granted control of text content joined with images. However, in select cases they may create image slideshows, embedded multimedia, forms, and other types of rich content.

Text and images

The Drupal WYSIWYG/TinyMCE module provides an easy-to-use interface for editing and formatting text. The IMCE module provides tools for uploading images that can be placed within the content area of pages.

Content authors will also be able to code HTML markup within the interface. This will give knowledgeable staff the ability to create and edit HTML tables that can present tabular data. In light of this, Drupal developers will want to create sample standard table formats for authors to model.

Attachments

Attachments – most commonly Adobe Acrobat PDFs but also Microsoft Office documents – can be uploaded and linked to pages through IMCE. For informational documents, PDFs are preferable to Office as they can be read by the free Adobe Acrobat Reader and retain fonts and formatting on any system. In some cases where templates or working documents are provided, Office documents may be a better format. For example, a brochure or newsletter should be in PDF format. A grant proposal template might make more sense in Microsoft Word.

PDF form technology allows the creation of PDF documents with text fields, checkboxes, drop-down menus, and other interactivity. Some small investment in software training and form design could make many standard USM forms more usable and more likely to be filled out correctly.

Image slideshows

The Drupal install will include the Views Slideshow module. This will most commonly be used for image slideshows, though the module can also present slideshows of news items or other types of Drupal nodes. Any such use would likely be set up by Drupal developers rather than content authors.
Embedded multimedia

Content authors can embed multimedia objects through the TinyMCE editor, either through its “Flash” button or by switching to HTML view and dropping in the appropriate embed code.

Computing Services will host multimedia files on request at media.usm.main.edu. This service is designed for large media files. Some authors may wish to upload files to YouTube and embed the code created by those services. The University of Southern Maine has a YouTube channel at http://www.youtube.com/user/USouthernMaine that appears to be used for marketing and official functions. Content authors at the department, office, and center level should be instructed on how to submit videos to this channel and extend its scope.

HTML forms

Custom html forms will be supported by the Drupal Webform module. This will allow content authors to add contact forms, polls, questionnaires, and other simple forms to a content page. Content authors will work with Computer Services to utilize this module on an ad hoc basis.

RSS

Drupal can automatically generate RSS feeds for different content areas, and can aggregate multiple sources of content. For example, a front-page RSS feed features content promoted to the front page of the site. Other RSS feeds can be defined by Drupal categories. If site content is categorized using the Drupal taxonomy module, Drupal can generate a feed for every active term. Once turned on by CMS developers, these feeds will automatically capture new content and relay it to subscribers.

To assist content authors, Drupal administrators may wish to create templates that have RSS already embedded.

Content migration and creation

Drupal will be rolled out to individual departments, offices, and centers on a staggered basis. This will allow CMS training, content migration and new content creation to be handled incrementally and provide a time envelope for troubleshooting any issues that arise.

Content migration

Drupal provides a number of mechanisms for migrating content. Computer Services can work with departments, offices, and centers on a case-by-case basis to determine which content, if any, is a candidate for automated migration.

At the individual level, some content authors will simply copy and paste (and edit) content from old pages into the WYSIWYG/TinyMCE interface. While this may be laborious, it offers each group the opportunity to restructure their content to match the new information architecture and improve the user experience.

For copy and paste editing, authors should remove existing formatting from the source text before pasting it into Drupal. The content can then be reformatted within the CMS using the correct styles. One way to consistently remove formatting from text is to copy and paste it to a text editor like Notepad as an intermediary stop between the source file and the WYSIWYG/TinyMCE interface.
Copy and paste editing should be part of content author training.

Content created with third-party services such as Photobucket (for example on the USM Honors Program sub-site home page at http://www.usm.maine.edu/honors/) should be evaluated for moving into Drupal. As mentioned above, image slideshows will be supported by the Views Slideshow module.

Dynamic Diagrams' content inventory deliverable will give content owners the opportunity to review their content in advance of the migration activity.

**Redundant, out-of-date, and trivial content**

The distributed content creation process will allow substantial opportunity for the University to eliminate redundant, out-of-date, and trivial (ROT) content. Quite simply, content authors will move valid content into the CMS; unnecessary content they will flag and ignore.

We recommend that content inclusion be an “opt-in” decision. If content is neither imported into Drupal nor handled as a special case, then it disappears. As each office or department instance of the CMS comes online, old content files should be identified for eventually deletion.

All content entered into the CMS should be date stamped within Drupal. A tag that pre-identifies date-sensitive content will also help content owners to periodically locate and eliminate expired content down the road.

**Writing-for-the-web training**

We recommend that content authors receive writing-for-the-web training in addition to Drupal CMS training. This will promote leaner, more readable copy and a better user experience.

The university may wish to hire (or assign) a professional web editor to aid the content migration process and ensure content consistency across departments. Such a staff member could also oversee the proper posting and removal of date-sensitive content.

**Shared resources**

The new information architecture will identify shared resources that all departments, offices, and centers may access – either as a direct link to a common page, or as a customizable module they can incorporate into their own area of the site.

For example, a link to “department events” could go to a common calendar that is filtered for the user depending on the source of the link. At the same time, users should have a link to see the full calendar if desired.

**Exception handling**

Current University of Southern Maine content includes content databases, intranets, and archives that may not qualify for easy migration into Drupal, but should not be dropped from the domain.

**Existing database-driven content**

Some departments, offices, and centers serve substantial amounts of content to the web via their own database platforms. For example, the Muskie School has its own database that serves faculty and staff profiles, and
information on projects, publications, and courses. This platform is well-integrated into the current site and will likely be maintained under Drupal.

One issue related to this use of databases is the inconsistent approach to presenting faculty and staff profiles across different departments, offices, and centers. The new information architecture will present recommendations for this content type that should cut across various delivery mechanisms.

**Intranets and extranets**

Intranets and extranets, such as the IR-HR intranet ([http://usm.maine.edu/inforeporting/hr/intranet/](http://usm.maine.edu/inforeporting/hr/intranet/)) will be handled on a case-by-case basis, depending on the way they are served and the depth of information they support. They may continue to be served on their current platforms, or they may be migrated into Drupal.

Drupal can handle most of the features generally associated with intranets including multiple-author support, file sharing, and security. For example, Drupal administrators can set up a private download area for files. Then, staff can simply use the IMCE module to upload files to that area and TinyMCE to link to them.

If desired, an intranet can be integrated with an SSL certificate to ensure a more secure connection.

User access to an intranet can be handled by a number of Drupal modules. For example, the LDAP Integration module that is part of the Drupal install will allow authentication against the University’s existing directory.

**Project and personal pages**

Project and personal pages created by individual staff and students are typically deeper-level pages not integrated into the main navigation schemes. Some pages are pertinent only to a particular class or assignment. Others are working repositories for a particular research project or lab.

Active scholars rely on project and personal pages to distribute working papers, publish in-process results, and post research materials for colleagues. By including these pages as part of search results, the university helps build interest in the research being conducted and helps interested parties to find potential collaborators at USM. We recommend that such sub-sites be included in site search results with an icon or design treatment that identifies them as research sites. Since the content of these pages is free-form (and thus unknown), they could be clearly flagged in search results as “content not maintained by USM.”

Going forward, many of these sub-sites will continue to be served to the site visitors from their current file systems. Some sub-sites will have a limited lifespan and not be worth migrating to Drupal. Others may involve customized programming or data display that makes them difficult to change. Decisions about which project and personal pages are migrated into Drupal will necessarily be made on a case-by-case basis.

**Links to external sites**

Many services used by students, faculty, and staff at the University of Southern Maine are either local applications or third-party services. Primary among these are MaineStreet, maintained by the University of Maine System (UMS), and Blackboard, a course management system. Many departments, offices, and centers also link to third-party scholarly and government sites.
Course Listings

Courses are maintained in the University of Maine System’s MaineStreet portal. Unfortunately, this system does not provide unique URLs for search results, nor can a link pass in search encoding. This makes it impossible to deep-link to specific course listings. Instead departments can only link to the search form. Users must then create their own search query to proceed.

Other problems with this system include:

- It does not tell students how full a course is
- Only matriculated students can register online
- It only lists courses currently offered, not all department listings
- Because it only lists current courses, it doesn’t tell students when courses are typically scheduled (fall/winter/other)

There is no technological solution at this time.

As a result, students and prospective students face a huge gap in information access and usability for a key resource. Departments must maintain this time-sensitive and rapidly-changing content by hand, or devolve to the MaineStreet offering.

Ideally, the user experience of researching courses should be a seamless one that either pulls UMS course content into the USM site, or sends the user to a page pertaining to the specific course without requiring additional sign-in and searching.

In the short term a clear and clean way to link from the USM site to MaineStreet should be incorporated into the information architecture and design. Department exit pages could provide users with tailored guidelines for how to start their search after they link.

In the long term, MaineStreet should be rebuilt.

Online Applications

The University of Maine System handles a number of other transactional functions, including online applications. The Admissions page (http://usm.maine.edu/admit/apply.html) provides two different links, one for undergraduates and one for graduate students. These links go to two different domains with completely different interfaces. This makes it difficult to create an integrated, consistent user experience. Since undergraduate and graduate students represent (mostly) different user groups, it is less important that these two domains mirror each other than that they offer a consistent user experience with their common parent – the new University of Southern Maine site.

USM Giving

The USM Giving site is supported by the University of Maine System on the third-party Touchnet.com domain (https://secure.touchnet.com/C22921_ustores/web/store_main.jsp?STOREID=3&SINGLESTORE=true). This online store functionality will not be ported into Drupal. It will continue to be linked from the main site.
Alumni site

The alumni office uses a third party web site to maintain their membership database. This site and database will not be ported into Drupal. It will continue to be linked from the main site.

Offsite links

Third-party sites will continue to be referenced by content pages. Currently many offsite links open in a new window or tab. Some are prefaced by a “you are leaving USM” page. Few have any graphical treatment that identifies them.

The information architecture and user interface design should create a consistent experience for offsite links. Such links should consistently open in the same tab or in a new one. They could be identified by a representative icon. Once such standards are determined, content authors will need to follow through in consistently applying them.

Given their importance, links to Blackboard and MaineStreet could receive special UI treatment. For example, links to these sites could be identified by a special icon, or consistently handled with an image or button.

If Drupal provides separate options for creating internal vs. external links, applying these standards can be simplified for content authors.

Summary of recommendations and decision points

As described above, the introduction of the new Drupal CMS creates a number of key decision points for content handling. Some of these will be global. Some will be ad hoc, based on the needs of specific departments, offices, and centers. The list below summarizes our findings. Where appropriate we provide a recommended course of action. Other decisions will be determined during the information architecture and user interface design phases of the project:

- Identify and integrate extant applications and databases into CMS-driven content (for example, Search, Muskie School Databases)
- Map existing content (based on the content inventory) to the new content organization and structure framed by the new Information Architecture
  - This will start with high level pages and shared resources
  - Most departments, offices, and centers have common page types (i.e. home, staff, courses) that will fit a common model
  - Unique page types can be handled on a case-by-case basis
- Identify deep or archival content to maintain outside of Drupal such as personal student and staff pages, research and project sites, and so forth.
  - Some research and project sites should be maintained in their current file system while others can be imported into Drupal or abandoned if out-of-date; this should be determined on a case-by-case basis
  - Research and project sites should be indexed by the search engine but could be flagged to make clear their distinct purpose
• Identify existing intranets to be imported into Drupal
  o What levels of access are required?
  o What level of file sharing is required?

• Roll out Drupal to individual departments, offices, and centers
  o Identify content to eliminate (ROT)
  o Identify content for automated conversion and import it
  o Identify content to be added and/or edited by content authors
    ▪ Automated conversion may be a first step, followed by manual copy editing
  o Identify and upload multimedia and image libraries for linking/embedding by content authors
  o Provide Drupal training
    ▪ Include training for multimedia and image slideshow handling based on the content
  o Provide writing-for-the-web training (this could be done earlier; authors can begin editing content before porting it into Drupal)

• Determine treatment for offsite links – in each case, a common user interface approach should be adopted and maintained across all departments, offices, and centers
  o Links to University of Maine System sites (i.e. Course Listings, Online Application)
  o Links to hosted applications with University of Southern Maine branding (i.e. Alumni Database)
  o Links to true third-party sites (i.e. Scholarly Publishers, Regional Guides, Grant Providers)