

# Fermilab National Accelerator Laboratory

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## News Portal Pilot Requirements Document

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### Document Revision History

Editor	Date	Version	Action
	2015-02-22	1.0	Taken from News Center requirements 1.6
MC	2015-03-03	1.1	Begin reformatting requirement table, editing a few
MT	2015-03-31	1.3	Began merging Kevin M.'s material
MC	2015-04-02	1.5	Merged all source material and edited.

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# Introduction

The purpose of this document is to record all the requirements for a project initiative. It is not intended to design the solution, but to provide a common understanding of what is being requested between the business partners and the delivery personnel.

This document is composed of understanding the system context, identifying the candidate requirements, and capturing functional and non-functional requirements.

# Problem Statement

The Fermilab News Portal will be used by the Office of Communication to publish electronic news and distribute select news items to different Fermilab stakeholder groups by email newsletters and web syndication, and by members of the Fermilab community as a bulletin board.

The purpose of the News Portal forum is to allow a place for free-flowing discussion and sharing of resources among Fermilab staff, users, visitors and contractors.

This type of functionality is readily available for most common content management systems and requirements here should be considered guidelines. Out-of-the-box, stable solutions ought be considered first.

This document can act as a preliminary blueprint from which a high-level cost estimate can evolve.

# Requirements

*Objective:* to identify and document key requirements for an online *News Portal* and underlying content management system.

*Source:* person submitting or requesting the requirement. KM = Kevin Munday, RH = Reidar Hahn, RP = Ruth Pordes, RW = Rhianna Wisniewski, MC = Matt Crawford.

*Importance* options include: Must, Should, Nice.

No.	Requirement	Importance	Source
1	<b>Newsletter Publishing Requirements</b>		
1.1	<b>Email client compatibility</b> <ul style="list-style-type: none"> <li>a. Outlook</li> <li>b. Gmail</li> <li>c. MacMail</li> <li>d. Thunderbird</li> <li>e. Others?</li> </ul>	Must	KM
1.2	<b>Ease of use</b> <ul style="list-style-type: none"> <li>a. Assemble issues flexibly from available content</li> <li>b. One or multiple lead stories</li> <li>c. Mark content for "quick add" via newsletter interface</li> <li>d. See Symmetry model</li> </ul>	Must	KM
1.3	<b>Tracking</b> (subject to security/privacy standards) <ul style="list-style-type: none"> <li>a. Email opens</li> <li>b. Clicks</li> <li>c. Coordination with Google Analytics for quick reporting</li> </ul>	Must	KM
1.4	<b>Distribution</b> <ul style="list-style-type: none"> <li>a. At will</li> <li>b. 3–5 total distribution lists</li> </ul>	Must	KM
1.5	<b>Theming/look and feel/layouts</b> <ul style="list-style-type: none"> <li>a. 3–5 different publications/affinity lists</li> <li>b. 2–3 different layouts for each</li> </ul>	Must	KM

2	<b>Forum Requirements</b>		
2.1	<b>Access</b> The forum should be readable only by Fermilab employees, users and subcontractors.	Must	KM
2.2	<b>Permissions</b> <ul style="list-style-type: none"> <li>a. Participation  Anyone with a Fermilab Services account should be able to log in and participate in discussions. These users may: <ul style="list-style-type: none"> <li>• create new sub-topics</li> <li>• reply to posts</li> <li>• subscribe to a thread for email alerts</li> <li>• turn off email notifications at any time</li> </ul> </li> <li>b. Moderation  Editorial-level users can delete, edit or unpublish posts and threads</li> </ul>		
2.3	<b>Format</b> We imagine a threaded bulletin board format with the topmost topics created and managed by the Office of Communication. An initial list might include <ul style="list-style-type: none"> <li>1. Classified ads <ul style="list-style-type: none"> <li>a. Housing</li> <li>b. Rental</li> <li>c. For sale</li> <li>d. Etc.</li> </ul> </li> <li>2. Ride sharing</li> <li>3. Clubs</li> <li>4. Lab life</li> </ul>		
2.4	<b>Syndication</b> Content shall be exportable via Atom/RSS/XML-RPC for potential syndication on other pages/systems.	MUST	
3	<b>Compatibility</b>		
3.1	<b>Generated code</b> <ul style="list-style-type: none"> <li>a. a. W3C compliant HTML or XHTML</li> <li>b. b. Pages must be Section 508 compatible</li> </ul>	Must	KM
3.2	<b>Browser compatibility</b> (public view and admin/editorial work) <ul style="list-style-type: none"> <li>a. IE</li> <li>b. Firefox</li> <li>c. Safari</li> <li>d. Chrome</li> <li>e. Mobile: Android, iOS (public view only)</li> </ul>	Must	KM MC

3.3	<b>Configuration</b> a. Minimize database hits (implement caching scheme). b. All non-media intensive pages should load in $\leq 1$ second.	a. Should b. Must	KM
3.4	<b>Authentication</b> Authentication in SERVICES domain, via LDAP, ADFS, or Shibboleth	Must	KM MC
3.5	<b>Site maps</b> c. Generate XML sitemap and submit to search engines. d. Project site maps/wire frames for review.	a. Must b. Should	KM
4	<b>Dynamic Search Capability</b>		
4.1	Searchable video archive	Must	RW
4.2	Searchable image archive	Must	RW
4.3	Separate search function for each content area, e.g. Features, Press Portal. (Ideally to appear as a search box in each content area?)	Must	RW
4.4	Ability to search archives and live content using various criteria such as tags, date range, Boolean logic, dynamic connections.	Must	RW
4.5	<i>Eventual</i> integration with lab-wide federated search function	Must	MC
5	<b>Archiving</b>		
5.1	Automatic archiving of content (not manual).	Must	RW
6	<b>Site Metrics</b>	Must	RW
6.1	General data mining capability compatible with Google analytics, for example, to track story hits.	Must	RW
7	<b>Automatic aggregation of data</b>		
7.1	Ability to automatically funnel articles from other sites via aggregation of RSS/Atom feeds, e.g. Physics Today, Quantum Diaries, etc.)	Must	RW mc
7.2	RSS/Atom feeds are automatically routed to a review queue (Reviewer can decide to publish or not)	Should	RW mc
7.3	Articles can be funneled to FNAL sister sites, e.g. Fermilab at Work's news area, project sites such as LBNE. (Reviewer can decide to publish or not)	Must	RW
8	<b>Content Management Workflow</b>		
8.1	<b>Versioning</b> a. System should maintain version information and allow roll-back. b. Version history should include time & author of changes c. System must allow previewing changes before publishing. d. System should alert users to content being edited by others.	Should Should Must Nice	KM, MC

8.2	<p><b>Scheduling</b></p> <ul style="list-style-type: none"> <li>a. All content submitted through the content management system follows an Author-Editor-Publisher workflow.</li> <li>b. News Portal <i>need not</i> provide a general editing tool for content creation.</li> <li>c. Permissions Assumptions: <ul style="list-style-type: none"> <li>o Unauthenticated clients access the system as a “Visitor.”</li> <li>o Permissions for authenticated clients increase from Author to Editor to Publisher</li> <li>o Authors do not have Editor permissions unless granted by a Publisher.</li> <li>o Editors have all permissions of Authors.</li> <li>o Publishers have all permissions of Authors and Editors.</li> <li>o Visitors have permission to share live content on social media such as Facebook and Twitter, by email, or by copying and pasting.</li> </ul> </li> <li>d. Content can be submitted by an Author and automatically entered into workflow using two possible methods: <ul style="list-style-type: none"> <li>o Email to a submissions address, e.g. newsportal-submissions@fnal.gov</li> <li>o Through a “submit content” web form.</li> </ul> </li> </ul>	Must	RW, MC
8.3	<p><b>Author Permissions</b></p> <ul style="list-style-type: none"> <li>a. Author may be any authenticated FNAL user.</li> <li>b. Can submit content including <ul style="list-style-type: none"> <li>o Headlines</li> <li>o Bylines</li> <li>o Body text, e.g. feature articles, articles</li> <li>o Public images (as opposed to Press images) <ul style="list-style-type: none"> <li>- checkbox can turn association with article on or off</li> </ul> </li> <li>o Video</li> <li>o Tags</li> </ul> </li> <li>c. Can upload content to the content management system (WYSIWIG format), save and edit until content is frozen (submission).</li> <li>d. Auto-save feature saves iterations automatically.</li> <li>e. “Submit” button freezes content, Author can no longer make changes (They can view a copy of “submitted” content, however).</li> </ul>	Must	RW
8.4	<p><b>Editor Permissions</b></p> <ul style="list-style-type: none"> <li>a. Receives email notification that content is in their “review queue”. <ul style="list-style-type: none"> <li>o Can turn email notification on or off.</li> <li>o Can manually flag content as having a higher priority in the queue.</li> </ul> </li> <li>b. Can search/sort content in their queue by: <ul style="list-style-type: none"> <li>o Date</li> <li>o Submitter</li> <li>o Title of article</li> <li>o Keywords</li> <li>o Image titles</li> <li>o Video titles</li> </ul> </li> <li>c. Documents in Edit queue can be: <ul style="list-style-type: none"> <li>o Edited</li> <li>o Locked against further changes by Author, and unlocked again</li> <li>o Archived</li> <li>o Deleted</li> <li>o Sent to Publish queue</li> </ul> </li> <li>d. Editor clicks “Publish” to go live. If they have Publisher permissions, it will go live, otherwise it enters the Publisher’s queue.</li> </ul>	Must	RW, KM

8.5	<b>Publisher Permissions</b> <ul style="list-style-type: none"> <li>a. Editor can turn compare versions of the document. If enabled, any changes to previous versions are highlighted as “different” from most recent version.</li> <li>b. Go live includes any links, tags, photos or video associated with the article via Content Management (tags, flags, checkboxes?).</li> <li>c. Publisher can edit live documents and instantly re-publish.</li> <li>d. Publisher has option to submit content, e.g. from Press Portal, to an email distribution list or social media outlet such as Facebook or Google+.</li> </ul>	Must	RW
9	<b>Article types</b> The document FNAL_portal_taxonomies-types.vX.Y.doc is incorporated by reference. See the appendix.	Must	RW
9.1	<b>Feature articles</b> <ul style="list-style-type: none"> <li>a. One or two features (limit)</li> <li>b. Headlines as links.</li> <li>c. Segregate Features with color or other design element.</li> <li>d. Ability to rank articles- aggregated star system?</li> <li>e. Moderated comments section? Comments feature can be turned on or off for a particular article.</li> <li>f. Views for different audiences, e.g. Fermi at Work, Scientist, Users etc.</li> <li>g. Searchable, tag-able glossary</li> <li>h. Do NOT include details for author.</li> <li>i. Ability to tag articles.</li> </ul>		
9.2	<b>Milestones</b> <ul style="list-style-type: none"> <li>a. Short content area, e.g. birth, death, recognition notices.</li> <li>b. Approved Author(s) can publish this content: (A FNAL I.D. is required).</li> </ul>		
9.3	<b>Meeting and Event, Calendar</b> <ul style="list-style-type: none"> <li>a. Can appear on Fermilab at Work site also?</li> <li>b. Searchable archives</li> <li>c. Authors can submit content but only Editors or Publishers can publish.</li> <li>d. NALCAL notices: can archive and search, easier way to post than current hard coding solution.</li> </ul>		
9.4	<b>Press Portal</b> <ul style="list-style-type: none"> <li>a. Should not mimic news story format, can appear in a smaller section (does not need front page space). &lt;See SLAC example&gt;</li> <li>b. Photo gallery specific to press w/ ability to tag &amp; search images i.e. image area visitors can scroll through &lt;LBNL ex.&gt;</li> <li>c. Twitter feed and Fact Sheet area (ability to search)</li> <li>d. Visitors can subscribe to archives, RSS feed(s)</li> <li>e. Publisher can send to an (easy to maintain) email distribution list.</li> <li>f. Searchable, tag-able glossary.</li> <li>g. Easy to update press contact details area</li> <li>h. Ability to view, search, share press images</li> </ul>		



## ***Limitations***

Issues with the current news solution, the FNAL landing page and Fermilab Today, will be addressed in this document. These issues include but are not limited to:

- Landing page links to articles (instead of a visual solution with teaser sentences plus an image)
- Past issues with Fermilab Today include search restrictions- cannot search for videos, by image.

# Appendix: FNAL\_portal\_taxonomies-types (v1.2)



Xeno Media, Inc.  
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Oakbrook Terrace, IL 60181  
www.xenomedia.com

16 March, 2015

## News Portal—Content types and taxonomies

### Taxonomies

1. Author/Photographer
  - a. Name
  - b. Affiliation (optional, for management columns)
  - c. Email address
  - d. FermiID
2. Topics
  - a. Neutrinos
  - b. High-energy physics
  - c. Dark energy, dark matter
  - d. Etc.... (parse list from last project)
3. Media contact (maintained centrally for press release general contact)
  - a. Name
  - b. Email
  - c. Phone number
4. Announcement type
  - a. All hands
  - b. Wellness
  - c. Conference, workshop, meeting, seminar
  - d. Program application deadline
  - e. Training
  - f. Benefits
  - g. Retirement
  - h. Personnel change or lower-level promotion
  - i. Death
  - j. Fellowships, scholarships, internships, appointments
  - k. VIP visit
  - l. Contest
  - m. Cultural event
  - n. Website change
  - o. Computing
  - p. Housing
  - q. Proposal call
  - r. Information session, question-and-answer booth,
  - s. Education event
  - t. Scientific report
  - u. Fermilab-related outside event (AAAS, Year of Light, Lab-Corps, LDRD, HEPAP meeting)
  - v. Employee processes and procedures
  - w. Emergency
  - x. Inclement weather
  - y. On-air event (appearing in PBS special)
  - z. Road closure and construction
  - aa. Sports event
  - bb. Labwide initiative (Pace bus, One lab)
  - cc. Celebration
  - dd. Health (flu vaccines)

## Content types

1. Press release
  - a. Headline
  - b. Associated images
  - c. Associated links
  - d. Body content
  - e. Press contact (references Media contact taxonomy)
  - f. Science/Other contacts (up to 5)
    - i. Name
    - ii. Phone
    - iii. Email
  - g. Topics (references Topic taxonomy)
  - h. Related content (pick links)
  - i. For newsletter (Makes available for quickpublish)
  - j. Internal only (Y/N)
  - k. Publish time/date
2. Article/feature
  - a. Headline
  - b. Deck
  - c. Author (choose from Author taxonomy)
  - d. Associated images
  - e. Associated links
  - f. Body content
  - g. Topics (references Topic taxonomy)
  - h. Related content (pick links)
  - i. For newsletter (Makes available for quickpublish)
  - j. Internal only (Y/N)
  - k. Publish time/date
3. Event
  - a. Date/time start
  - b. Date/time stop
  - c. Title
  - d. Description
  - e. Contact name
  - f. Contact email
  - g. Link
  - h. For newsletter (Makes available for quickpublish)
  - i. Internal only (Y/N)
  - j. Publish time/date
4. Image
  - a. Headline
  - b. Deck
  - c. Author/Photographer (choose from Author taxonomy)
  - d. Associated links
  - e. Body content
  - f. Topics (references Topic taxonomy)
  - g. Related content (pick links)
  - h. For newsletter (Makes available for quickpublish)
  - i. Internal only (Y/N)
  - j. Publish time/date
  - k. Publish time/date
5. Video
  - a. Headline
  - b. Deck
  - c. Author/Photographer (choose from Author taxonomy)
  - d. Associated links
  - e. Body content
  - f. Topics (references Topic taxonomy)
  - g. Related content (pick links)
  - h. For newsletter (Makes available for quickpublish)

- i. Internal only (Y/N)
- j. Publish time/date

6. Announcement

- a. Type (from Announcement type taxonomy)
- b. Title
- c. Image (optional)
- d. Body
- e. Link
- f. For newsletter (Makes available for quickpublish)
- g. Internal only (Y/N)
- h. Publish time/date